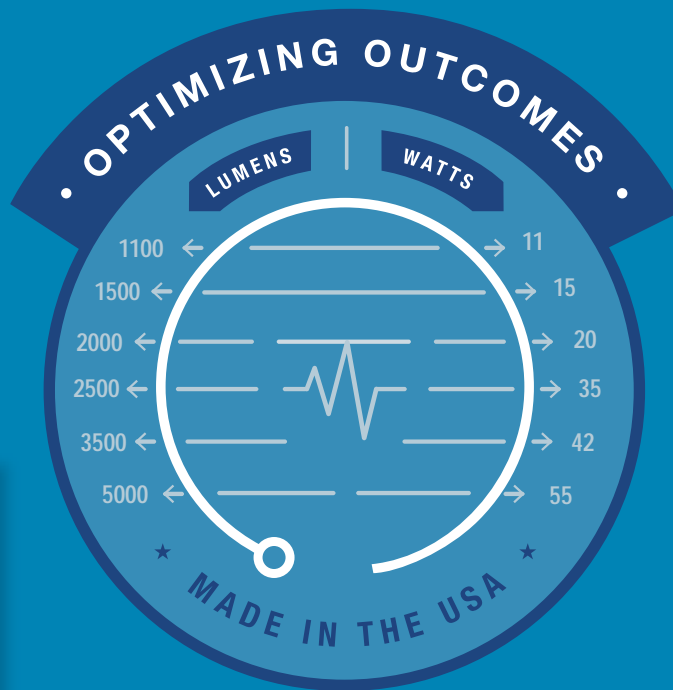*Since 1895*

KIRLIN

Lighting Innovators

LED Medical Lighting
Patient & Facility

OPTIMIZING OUTCOMES

LUMENS		WATTS
1100		11
1500		15
2000		20
2500		35
3500		42
5000		55

MADE IN THE USA

**MRI • EXAM • TUNABLE WHITE • CLEAN ROOM • LIGATURE RESISTANT
WARMING • SHOWER • NIGHTLIGHTS • COLOR SPECIFIC**

INFRALED® • INFRALED® 60 • OPTeMED®

3401 East Jefferson Avenue, Detroit MI 48207-4232
313-259-6400 • FAX: 313-259-3121 • www.kirlinlighting.com • info@kirlinlighting.com

SEARCH BY DESIGN AND APPLICATION

Footcandles to Lux Conversion: Fc x 10.7639 = Lux

LUMINAIRE NUMBERING LOGIC
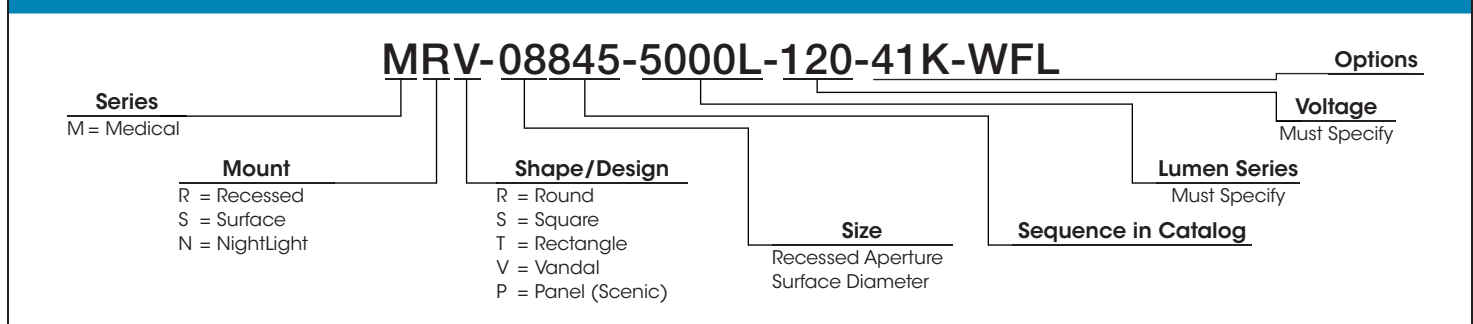
MRV-08845-5000L-120-41K-WFL

Series
M = Medical

Mount
R = Recessed
S = Surface
N = NightLight

Shape/Design
R = Round
S = Square
T = Rectangle
V = Vandal
P = Panel (Scenic)

Size
Recessed Aperture
Surface Diameter

Sequence in Catalog

Lumen Series
Must Specify

Voltage
Must Specify

Options

Product #	Description	Pg
EMI-21220	Backup Power MRI	17
EMI-21220	Backup Power MRI	26
EMI-21220	Backup Power Exam	37
LPS-0700A	Remote Driver MRI	26
LPS-1220A	Remote Driver MRI	17
MNR-05900	NightLight	68
MNR-05920	StepLight	70
MNS-05904	NightLight	68
MNS-05924	StepLight	70
MNT-03906	NightLight	68
MNT-03908	NightLight	68
* MNT-03910	ChartLight	68
MNT-03926	StepLight	70
MNT-03928	StepLight	70
MNT-07912	NightLight	69
MNT-07914	NightLight	69
MNV-07916	NightLight	69
* MRP-22275-2500L	MRI White Panel	15
* MRP-22285-1500L	MRI White Panel	23
* MRP-22290	MRI Scenic Panel	23
* MRP-22295	Scenic Panel	64
MRR-04200-1500L	MRI	12
MRR-04220-1500L	MRI	12
MRR-04225-1500L	MRI	12
* MRR-04414-2500L	MRI	13
* MRR-04416-2500L	MRI	14
* MRR-04418-2500L	MRI	14
MRR-04700-2500L	Shower	48

Product #	Description	Pg
MRR-04720-1500L	Shower	48
MRR-04720-1000L	Shower	48
* MRR-04752-1300L	Tunable White	51
* MRR-04754-1300L	Tunable White	51
* MRR-04756-1300L	Tunable White	52
MRR-04800-1500L	Patient Room	55
MRR-04800-1000L	Patient Room	55
MRR-04802-1500L	Patient Room	55
MRR-04802-1000L	Patient Room	55
MRR-04820-1500L	Patient Room	56
MRR-04820-1000L	Patient Room	56
MRR-05725-2500L	Shower	48
MRR-05730-1500L	Shower	49
MRR-05730-1000L	Shower	49
MRR-05735-2500L	Shower	49
MRR-05825-2500L	Patient Room	56
MRR-06205-1500L	MRI	12
* MRR-06222-1500L	MRI	12
* MRR-06227-1500L	MRI	13
MRR-06230-1500L	MRI	13
MRR-06235-1500L	MRI	13
MRR-06420-2500L	MRI	14
MRR-06422-2500L	MRI	14
MRR-06424-2500L	MRI	14
MRR-06426-2500L	MRI	14
MRR-06427-2500L	MRI	15
MRR-06705-2000L	Shower	48
MRR-06705-1500L	Shower	48
MRR-06705-1000L	Shower	48

Product #	Description	Pg
MRR-06710-2500L	Shower	48
MRR-06805-5000L	Patient Room	56
MRR-06805-3500L	Patient Room	56
MRR-06805-2500L	Patient Room	56
MRR-06810-5000L	Patient Room	56
MRR-06810-3500L	Patient Room	56
MRR-06810-2500L	Patient Room	56
MRR-06815-5000L	Patient Room	56
MRR-06815-3500L	Patient Room	56
MRR-06815-2500L	Patient Room	56
* MRR-06847-2000L	Patient Room	57
* MRR-06847-1500L	Patient Room	57
* MRR-06847-1100L	Patient Room	57
* MRR-06848-2000L	Patient Room	58
* MRR-06848-1500L	Patient Room	58
* MRR-06848-1000L	Patient Room	58
* MRR-06849-2500L	Patient Room	58
MRR-07240-1500L	MRI	13
MRR-07500-5000L	Patient Exam	32
MRR-07500-3500L	Patient Exam	32
MRR-07505-5000L	Patient Exam	32
MRR-07505-3500L	Patient Exam	32
MRR-07550-2000L	Patient Exam	34
MRR-07550-1500L	Patient Exam	34
MRR-07830-1500L	Patient Room	57
MRR-07850-1500L	Patient Room	58
MRR-08428-2500L	MRI	15
MRR-08530-5000L	Patient Exam	33
MRR-08530-3500L	Patient Exam	33

* = New

www.kirlinlighting.com

Product #	Description	Pg
MRR-08535-5000L	Patient Exam	33
MRR-08535-3500L		
MRR-08555-5000L	Patient Exam	34
MRR-08555-3500L		
MRR-08558-5000L		
MRR-08558-3500L		
MRR-08835-5000L	Patient Room	57
MRR-08835-3500L		
MRR-08835-2500L		
MRR-08855-5000L	Patient Room	58
MRR-08855-3500L		
MRR-08855-2500L		
* MRR-08870-521	Color Specific	62
* MRR-08870-617		
* MRR-08870-634		
* MRR-08875-521		
* MRR-08875-617		
* MRR-08875-634		
* MRR-08880-521	Color Specific	63
* MRR-08880-617		
* MRR-08880-634		
* MRR-09740	Warming	49
* MRR-09742		
* MRR-12620	Motorized Exam INFRALED® With Controls	42
* MRR-12622		
* MRR-12640	Motorized Exam OPTeMED® With Wall Control	44
* MRR-12642		

Product #	Description	Pg
MRS-04245-1500L	MRI	13
* MRS-04770-1300L	Tunable White	52
* MRS-04772-1300L		
* MRS-04774-1300L		
MRS-04803-2000L	Patient Room	55
MRS-04803-1500L		
MRS-04803-1000L		
MRS-04804-2000L	Patient Room	56
MRS-04804-1500L		
MRS-04804-1000L		
* MRS-06247-1500L	MRI	13
* MRS-06465-2500L	MRI	15
MRS-08470-2500L		
* MRS-17600	Motorized Birthing INFRALED® 60 With Controls	40
* MRT-04511-5000L	Patient Exam	32
* MRT-05512-5000L		
* MRV-06857-2000L	Behavioral Health	60
* MRV-06857-1500L		
* MRV-06857-1100L		
* MRV-06858-2000L		
* MRV-06858-1500L		
* MRV-06858-1000L		
* MRV-06859-2500L	Behavioral Health	61
* MRV-06861-2000L		
* MRV-06861-1500L		
* MRV-06861-1100L		

Product #	Description	Pg
* MRV-06862-2000L	Behavioral Health	61
* MRV-06862-1500L		
* MRV-06862-1000L		
* MRV-06863-2500L		
MRV-07560-2000L	Patient Exam	34
MRV-07560-1500L		
MRV-07715-2000L	Shower	48
MRV-07715-1500L		
MRV-07715-1000L		
MRV-07840-1500L	Patient Room	57
MRV-08540-5000L	Patient Exam	33
MRV-08540-3500L		
MRV-08545-5000L		
MRV-08545-3500L	Patient Exam	34
MRV-08565-5000L		
MRV-08565-3500L		
MRV-08845-5000L	Patient Room	57
MRV-08845-3500L		
MRV-08845-2500L		
MSR-12440-2500L	MRI Cylinder	15
MSR-14250	MRI Sconce	16
MSS-10255		
RFI-3100D	RFI/EMI MRI Filter	17
		26

* = New

MAGNIFYING GLASS ICON (FOUND THROUGHOUT CATALOG) INDICATES SECTION TABLE OF CONTENTS

KIRLIN EXPERTISE AND DEPENDABILITY SINCE 1895

A **SAFER** ENVIRONMENT FOR PATIENTS AND STAFF

- Fully recessed fixtures provide an open work space.
- Aimable series avoids contamination from alternative arm mounted units.
- IP66 and IP65 rated sealed trims and Cleanroom ISO 5 Class 100 rated sealed fixtures protect against transmission of infectious agents through luminaires (from plenum or patient space).
- BioGard™ antimicrobial trim finish inhibits survival of pathogens.
- Smooth trims, lenses and controls are easy to clean and disinfect. Isopropyl alchohol safe for use.
- Dead-front (non-conductive) shower trims protect patients and staff.
- Attractive, inconspicuous vandal and ligature resistant designs are ideal solutions for ER, Behavioral Health and public spaces.

BioGard™ antimicrobial finish inhibits the growth of infectious microbes on luminaire trims.

IP65 and IP66 rated sealed and gasketed trims prevent contaminated dust and sprayed liquids from entering the fixture through the trim/lens assembly.

Cleanroom ISO 5 Class 100 rated sealed fixtures prevent particles larger than 5 microns from passing through the fixture, protecting both patient spaces and plenums from infectious agents.

LEVEL 1 PROTECTION
LENSED, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 1+ PROTECTION
VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 2 PROTECTION
IP65/66 SEALED TRIM, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 2+ PROTECTION
IP65/66 SEALED TRIM, VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 3 PROTECTION
CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 3+ PROTECTION
CLEANROOM ISO 5/CLASS 100 SEALED, VANDAL RESIST, BIOGARD™ ANTIMICROBIAL FINISH

Common CRI   High CRI

KIRLIN OPTeCOLOR™ LED

HIGHER **QUALITY** LIGHT FOR MORE ACCURATE DIAGNOSIS AND IMPROVED VISUAL ACUITY

- High color rendering LEDs assure accurate tissue color rendering: 95+ CRI with excellent R9 (Red), R13 and R15 (Skin Colors)
- Cyanosis Observation Index (COI): Meets $\leq$ 3.3 AS/NZS 1680.2.5 Interior Lighting Part 2.5 Hospital and Medical Tasks standard, for 3500°K-5000°K sources. Also see website "Technical Notes".
- Up to 9000 footcandles are provided for the most demanding and intricate medical procedures.

- Ideal color temperatures for specific tasks: 2700K, 3000K, 3500K, 4100K or 5000K.
- -SPT, -NFL, -MFL and -WFL distributions available.

    © 2019 The Kirlin Company   www.kirlinlighting.com

GREATER CONTROL FOR IMPROVED CARE

- Kirlin delivers dimmable LED at proper and adjustable angles, with optimal light levels to reduce shadows and illuminate clinicians' line of site.
- Intuitive and responsive controls for our motorized, aimable lighting systems, provide quick and accurate adjustment of direction and intensity of light.
- Dimming down to 0.1% (and 0% for MRI lighting systems) permits staff to finely tune light levels for time of day, specific tasks, and clinicians' preferences.
- SmartSupply™ MRI remote driver controls up to twelve fixtures with 3 zones of dimming. SmartFilter™ completes the fully integrated, turnkey MRI lighting system for assurance of accurate MRI scan results the first time, every time.

GREATER COMFORT FOR PATIENT AND STAFF

- LED does not project heat toward the room environment, assuring patient and practitioner comfort while avoiding tissue desiccation.
- SmartLED™ Scenic Panels create a decorative and soothing environment to reduce patient stress and promote healing.
- Fully recessed, small aperture fixtures provide a residential and hospitality-like atmosphere; motorized lighting systems' controls (remote and wall) protect and respect the patient's personal space.
- INFRALED® Series' remote controls use invisible infrared signals to prevent unintended consequences, such as migraines and photosensitive epileptic seizures.
- Red/Amber (Option -RA) NightLights maintain patients' melatonin levels and proper circadian rhythm, ensuring restful nights and time for healing.

REDUCED OPERATING COSTS AND DEPENDABLE PERFORMANCE & QUALITY

- Long LED life, up to 90,000 hours (L70), eliminates maintenance costs, replacement parts costs and downtime costs.
- Published photometrics for each luminaire and corresponding beam spread ensure reliable installed performance every time.
- Fully sustainable. Modular components are accessed through the aperture, enabling future upgrades inexpensively.
- Luminaires are designed for multiple lumen packages, allowing the specifier to select the most energy efficient solution for each application.
- Corrosion resistant all-aluminum construction results in cooler operation, extending every component life by 50%.
- Power savings of up to 80% versus traditional light sources.
- LEDs produce little heat, significantly reducing HVAC load.
- Shallow and super shallow recessed housings fit easily into crowded plenums.
- Type IC standard on most models including all MRI luminaires, all -2000L (and lower) luminaires and all NightLights, StepLights and ChartLight.

ARRA QUALIFIED

IC

Designed and Produced in U.S.A. • UL, C-UL (Canada) Listed

SmartLED™ NON FERROMAGNETIC LUMINAIRES

- Award winning **1500** lumen and **2500** lumen ambient downlights, adjustable task lighting and wall washes. Wall sconces and surface mount available.
- Up to 4 spacing criteria available: From 0.3 (SPT) for task lighting to 1.1 (WFL) for ambient lighting.

2011 Architectural SSL
Product Innovation Award

SmartLED™ SCENIC PANELS

- Beautiful photography or custom art with soothing back lighting in 2 x 2 recessed panels with flared reveal.
- Creates a calming environment to reduce patient stress and assist in the healing process.
- Limitless configurations available to maximize impact and match the unique dimensions of each suite.

SmartSupply™ REMOTE DRIVER

2011 IES Progress
Report Selections

- Controls up to twelve fixtures (**1500L** Series) or twelve Scenic Panels or six fixtures (**2500L** Series).
- Dims to 0% permitting finely tuned light levels.
- 3 zones of dimming for luminaires.
- Conveniently mounted outside the shield

SmartFilter™ RFI/EMI FILTER

- **PROVEN** to work with MRI equipment (up to 7 Tesla) from all of the major manufacturers.
- Industry leading RFI/EMI protection.
- Superior insertion loss of 100dB (minimum)
- Easily installed on exterior surface of shield
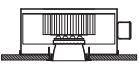
SECTION I: SmartLED™ MRI LUMINAIRE SYSTEM 🔍
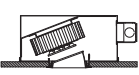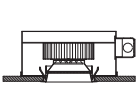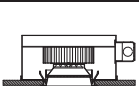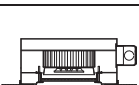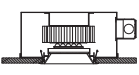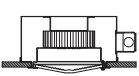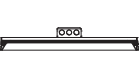
		Design	Function	Aperture (Inches)	Product #	Performance		Page
						Lumens	Watts	
1500 LUMEN MRI DOWNLIGHT, ADJUSTABLE AND WALL WASH LUMINAIRES								10-11
		Open Appearance	Downlight	4	MRR-04200-1500L	1500	20	12
		Open Appearance	Downlight	6	MRR-06205-1500L	1500	20	
		Open Appearance	Adjustable	4	MRR-04220-1500L	1500	20	
		Open Appearance	Adjustable	6	✳ MRR-06222-1500L	1500	20	
		Open Appearance	Wall Wash	4	MRR-04225-1500L	1500	20	
		Open Appearance	Wall Wash	6	✳ MRR-06227-1500L	1500	20	
		Flare with Regressed Lens	Downlight	6	MRR-06230-1500L	1500	20	13
		Flare with Regressed Lens	Downlight	6	MRR-06235-1500L	1500	20	
		IP65 Infection Control **IP**65	Downlight	7	MRR-07240-1500L	1500	20	
		Square Flare with Regressed Lens	Downlight	4	MRS-04245-1500L	1500	20	
		Square Flare with Regressed Lens	Downlight	6	✳ MRS-06247-1500L	1500	20	
MRI SCONCES - ADA COMPLIANT - ONLY 2½" PROTRUSION FROM WALL								16
		Round Center Field Edge Glow	Sconce	14	MSR-14250		20	16
		Square Center Field Edge Glow	Sconce	10	MSS-10255		20	

✳ = New Product

SmartLED™ MRI TABLE OF CONTENTS - CONTINUED ON PAGES 10-11

SECTION I: SmartLED™ MRI LUMINAIRE SYSTEM

		Design	Function	Aperture (Inches)	Product #	Performance		Page
						Lumens	Watts	
2500 LUMEN MRI DOWNLIGHT, ADJUSTABLE AND WALL WASH LUMINAIRES								13-15
		Open Appearance Lensed	Downlight	4	✳ MRR-04414-2500L	2500	35	**13**
		Open Appearance Lensed	Adjustable	4	✳ MRR-04416-2500L	2500	35	**14**
		Open Appearance Lensed	Wall Wash	4	✳ MRR-04418-2500L	2500	35	
		Open Appearance Lensed	Downlight	6	MRR-06420-2500L	2500	35	
		Open Appearance Lensed	Adjustable	6	MRR-06422-2500L	2500	35	
		Open Appearance Lensed	Wall Wash	6	MRR-06424-2500L	2500	35	
		Flare with Regressed Lens	Downlight	6	MRR-06426-2500L	2500	35	
		Flare with Regressed Lens	Downlight	6	MRR-06427-2500L	2500	35	**15**
		IP65 Infection Control **IP65**	Downlight	8	MRR-08428-2500L	2500	35	
		Surface Mount Flat Trim	Downlight	12	MSR-12440-2500L	2500	35	
		Regressed Lens Square	Downlight	6	✳ MRS-06465-2500L	2500	35	
		K-Lens Recessed Square	Downlight	8	MRS-08470-2500L	2500	35	
		2' x 2' White Panel	Downlight	22"	✳ MRP-22275-2500L	2500	35	

✳ = New Product

SECTION I: SmartLED™ MRI LUMINAIRE SYSTEM

		Design	Function	Product #		Page
LUMINAIRE AND SCONCE OPTIONS						16
LUMINAIRE AND SCONCE SYSTEM COMPONENTS						17
	Required For Luminaires	SmartSupply™ (1400mA)	Remote Driver	LPS-1220A		17
	Required For Luminaires	SmartFilter™	RFI/EMI Filter	RFI-3100D		
	Optional For Luminaires	SmartPower™ (Optional)	Emergency Power Supply	EMI-21220		
DOWNLIGHTING TYPICAL SYSTEM CONFIGURATION AND PHOTOMETRIC PERFORMANCE						18
TYPICAL SYSTEM CONFIGURATIONS FOR DOWNLIGHTING						19
TYPICAL WIRING OVERVIEW AND WIRING DIAGRAM FOR LUMINAIRES						20-21
DOWNLIGHTING LUMINAIRE SYSTEM DESIGN GUIDE AND CHECKLIST						22

SECTION I: SmartLED™ MRI WHITE / SCENIC PANEL SYSTEM

		Design	Aperture (Inches)	Product #	Performance	Page
					Watts	
		White Panel: 2' x 2' Building Block Configuration	24	MRP-22285-1500L	20	23
		Scenic Panel: 2' x 2' Building Block Configuration	24	✳ MRP-22290	20	
SCENIC PANEL IMAGES						24
SCENIC PANEL CONFIGURATIONS & PRODUCT SPECIFICATION GUIDE						25
	Required For Scenic Panels	SmartSupply™ (700mA)	Remote Driver	LPS-0700A		26
	Required For Scenic Panels	SmartFilter™	RFI/EMI Filter	RFI-3100D		
TYPICAL SYSTEM CONFIGURATION FOR SCENIC PANELS & SCENIC PANEL CHECKLIST						26-27
TYPICAL WIRING OVERVIEW AND WIRING DIAGRAM FOR SCENIC PANELS						28-29

✳ = New Product
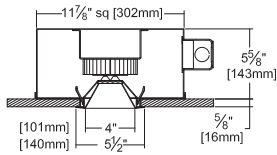
Downlights

4"

MRR-04200-1500L

11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
[101mm] 4"
[140mm] 5½"
⅝" [16mm]
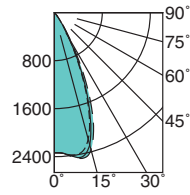
PERFORMANCE (-1500L SERIES)

1538 LUMENS
20W
MFL (STD)
SC: 0.8
LPW: 74

Dist.	FC	Dia.
6	64.9	4.9
8	36.5	6.6
10	23.4	8.2
12	16.2	9.9
14	11.9	11.5
16	9.1	13.2

Cone of Light ▲

800 / 1600 / 2400
90° 75° 60° 45°
0° 15° 30°
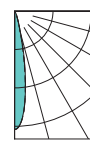
-SPT
Lm: 1629
SC: 0.3
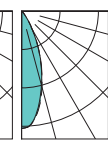
-NFL
Lm: 1428
SC: 0.6

6"

MRR-06205-1500L

11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
6" [152mm]
7⅞" [181mm]
⅝" [16mm]
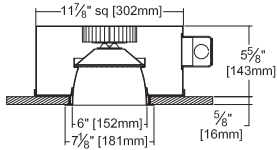
PERFORMANCE (-1500L SERIES)

1670 LUMENS
20W
MFL (STD)
SC: 0.8
LPW: 80
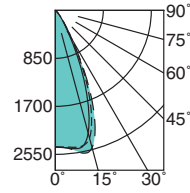
Dist.	FC	Dia.
6	67.2	5.0
8	37.8	6.7
10	24.2	8.3
12	16.8	10.0
14	12.3	11.6
16	9.4	13.3

Cone of Light ▲

850 / 1700 / 2550
90° 75° 60° 45°
0° 15° 30°
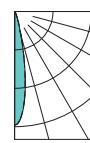
-SPT
Lm: 1706
SC: 0.3
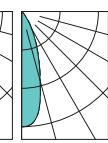
-NFL
Lm: 1588
SC: 0.6

Adjustables

4"

MRR-04220-1500L

11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
[101mm] 4"
[140mm] 5½"
⅝" [16mm]

2011 Architectural SSL
Product Innovation Award

PERFORMANCE (-1500L SERIES)

1564 LUMENS
20W
NFL (STD)
SC: 0.5
LPW: 75

2000 / 4000 / 6000
90° 75° 60° 45°
0° 15° 30°
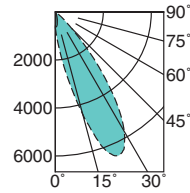
-SPT
Lm: 1566
SC: 0.4

-MFL
Lm: 1557
SC: 0.8

6"

MRR-06222-1500L

11⁷⁄₈" [302mm]
6⅛" [156mm]
6" [152mm]
7⅞" [181mm]
⅝" [16mm]
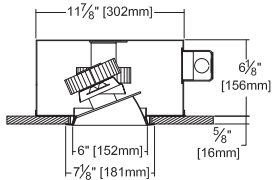
PERFORMANCE (-1500L SERIES)

1508 LUMENS
20W
NFL (STD)
SC: 0.6
LPW: 72

900 / 1800 / 2700
90° 75° 60° 45°
0° 15° 30°
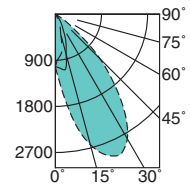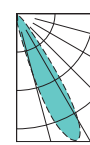
-SPT
Lm: 1581
SC: 0.3

-MFL
Lm: 1559
SC: 0.8

Wall Washes

4"
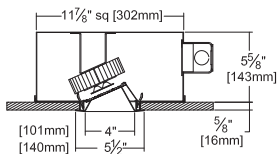
MRR-04225-1500L

11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
[101mm] 4"
[140mm] 5½"
⅝" [16mm]
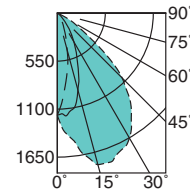
PERFORMANCE (-1500L SERIES)

1375 LUMENS
20W
LPW: 66

550 / 1100 / 1650
90° 75° 60° 45°
0° 15° 30°

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

6"

MRR-06227-1500L

11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
6" [152mm]
7⅞" [181mm]
⅝" [16mm]

PERFORMANCE (-1500L SERIES)

1508 LUMENS
20W
LPW: 72

550 / 1100 / 1650
90° 75° 60° 45°
0° 15° 30°

Use of both Kirlin SmartSupply™ LPS-1220A (1400mA) and SmartFilter™ RFI-3100D are required to maintain Kirlin warranty.

Lensed Downlights

6"

MRR-06230-1500L

11⅞" sq [302mm]
5⅝" [143mm]
[143mm] [181mm]
5⅝"
7⅞"
⅝" [16mm]
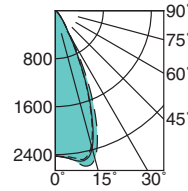
PERFORMANCE (-1500L SERIES)

1721 LUMENS

20W

MFL (STD)

SC: 0.8

LPW: 83

Cone of Light ▲

Dist.	FC	Dia.
6	67.3	4.9
8	37.8	6.6
10	24.2	8.2
12	16.8	9.9
14	12.4	11.5
16	9.5	13.2
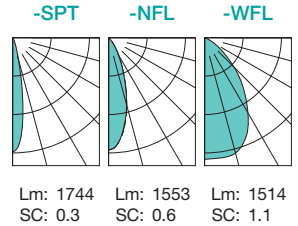
-SPT	-NFL	-WFL
Lm: 1744 SC: 0.3	Lm: 1553 SC: 0.6	Lm: 1514 SC: 1.1

6"

MRR-06235-1500L
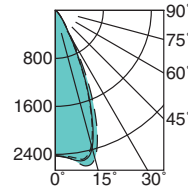
2011 Architectural SSL Product Innovation Award

11⅞" sq [302mm]
5⅝" [143mm]
[143mm] [181mm]
5⅝"
7⅞"
⅝" [16mm]

PERFORMANCE (-1500L SERIES)

1721 LUMENS

20W

MFL (STD)

SC: 0.8

LPW: 83

Cone of Light ▲

Dist.	FC	Dia.
6	67.3	4.9
8	37.8	6.6
10	24.2	8.2
12	16.8	9.9
14	12.4	11.5
16	9.5	13.2
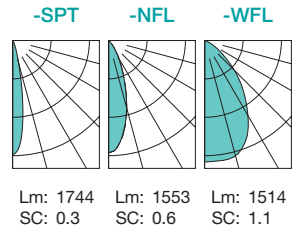
-SPT	-NFL	-WFL
Lm: 1744 SC: 0.3	Lm: 1553 SC: 0.6	Lm: 1514 SC: 1.1

IP65 Downlight

7"
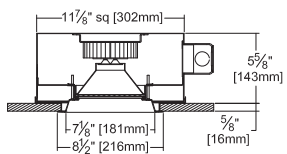
MRR-07240-1500L

IP65

11⅞" sq [302mm]
5⅝" [143mm]
7⅞" [181mm]
8½" [216mm]
⅝" [16mm]

PERFORMANCE (-1500L SERIES)

1721 LUMENS

20W

MFL (STD)

SC: 0.8

LPW: 83
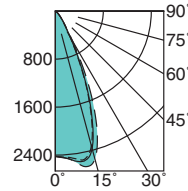
Cone of Light ▲

Dist.	FC	Dia.
6	67.3	4.9
8	37.8	6.6
10	24.2	8.2
12	16.8	9.9
14	12.4	11.5
16	9.5	13.2
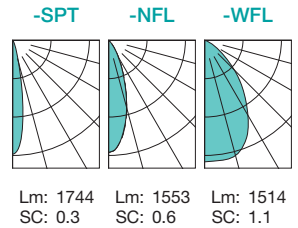
-SPT	-NFL	-WFL
Lm: 1744 SC: 0.3	Lm: 1553 SC: 0.6	Lm: 1514 SC: 1.1

Lensed Downlights

4"
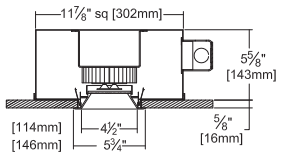
MRS-04245-1500L

11⅞" sq [302mm]
5⅝" [143mm]
[114mm] [146mm]
4½"
5¾"
⅝" [16mm]
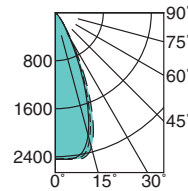
PERFORMANCE (-1500L SERIES)

1606 LUMENS

20W

MFL (STD)

SC: 0.8

LPW: 76

Cone of Light ▲

Dist.	FC	Dia.
6	67.8	4.7
8	38.1	6.3
10	24.4	7.8
12	16.9	9.4
14	12.4	11.0
16	9.5	12.5
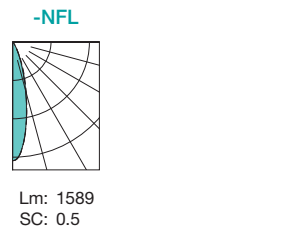
-NFL
Lm: 1589 SC: 0.5

6"

MRS-06247-1500L

11⅞" sq [302mm]
5⅝" [143mm]
[152mm] [184mm]
6"
7¼"
⅝" [16mm]
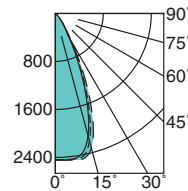
PERFORMANCE (-1500L SERIES)

1606 LUMENS

20W

MFL (STD)

SC: 0.8

LPW: 76

Cone of Light ▲

Dist.	FC	Dia.
6	67.8	4.7
8	38.1	6.3
10	24.4	7.8
12	16.9	9.4
14	12.4	11.0
16	9.5	12.5
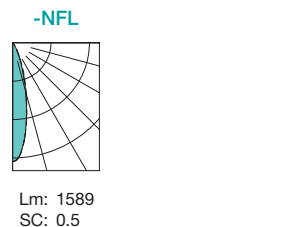
-NFL
Lm: 1589 SC: 0.5

Downlight

4"

MRR-04414-2500L

11⅞" sq [302mm]
5⅝" [143mm]
[101mm] [140mm]
4"
5½"
⅝" [16mm]
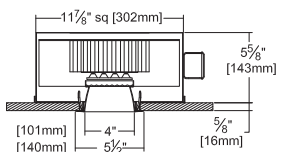
PERFORMANCE (-2500L SERIES)

2838 LUMENS

35W

MFL (STD)

SC: 0.7

LPW: 78
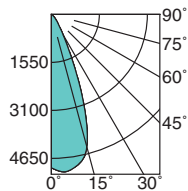
Cone of Light ▲

Dist.	FC	Dia.
6	138.0	4.4
8	77.4	5.9
10	49.5	7.3
12	34.4	8.8
14	25.3	10.3
16	19.4	11.7
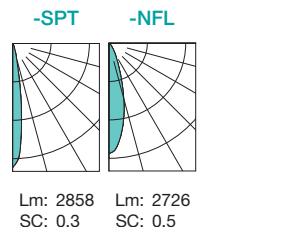
-SPT	-NFL
Lm: 2858 SC: 0.3	Lm: 2726 SC: 0.5

Use of both Kirlin SmartSupply™ LPS-1220A (1400mA) and SmartFilter™ RFI-3100D are required to maintain Kirlin warranty.

IC

Adjustable — 4"

MRR-04416-2500L

— 11⅞" sq [302mm] —
9½" [243mm]
[101mm] 4" [140mm] 5½"
⅝" [16mm]

PERFORMANCE (-2500L SERIES)

1952 LUMENS

35W

NFL (STD)

SC: 0.5

LPW: 57
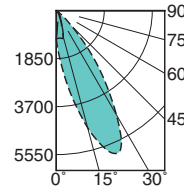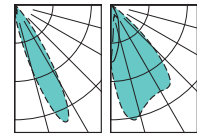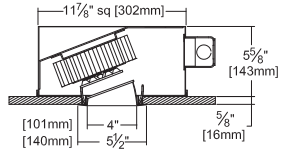
90° / 75° / 60° / 45°
1850
3700
5550
0° 15° 30°

-SPT — Lm: 2286 / SC: 0.3

-MFL — Lm: 2233 / SC: 0.8

Wall Wash — 4"

MRR-04418-2500L

— 11⅞" sq [302mm] —
5⅝" [143mm]
[101mm] 4" [140mm] 5½"
⅝" [16mm]

PERFORMANCE (-2500L SERIES)

2560 LUMENS

35W

LPW: 76

90° / 75° / 60° / 45°
1000
2000
3000
0° 15° 30°

Downlight — 6"

MRR-06420-2500L

— 11⅞" sq [302mm] —
5⅝" [143mm]
6" [152mm]
7⅛" [181mm]
⅝" [16mm]
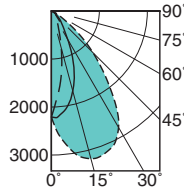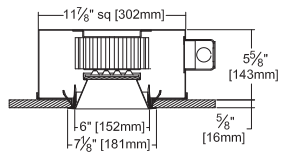
PERFORMANCE (-2500L SERIES)

3058 LUMENS

35W

MFL (STD)

SC: 0.8

LPW: 87

90° / 75° / 60° / 45°
1500
3000
4500
0° 15° 30°
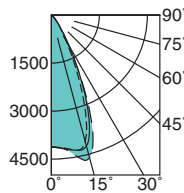
Cone of Light ▲

Dist.	FC	Dia.
6	114.3	5.1
8	64.3	6.8
10	41.2	8.5
12	28.6	10.2
14	21.0	11.9
16	16.1	13.6

-SPT — Lm: 3168 / SC: 0.3

-NFL — Lm: 2922 / SC: 0.6

Adjustable — 6"

MRR-06422-2500L

— 11⅞" sq [302mm] —
9½" [243mm]
6" [152mm]
7⅛" [181mm]
⅝" [16mm]
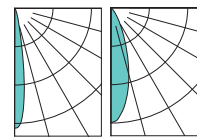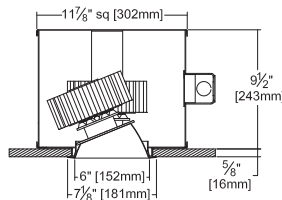
PERFORMANCE (-2500L SERIES)

2732 LUMENS

35W

NFL (STD)

SC: 0.6

LPW: 78
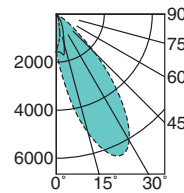
90° / 75° / 60° / 45°
2000
4000
6000
0° 15° 30°

-SPT — Lm: 3008 / SC: 0.3

-MFL — Lm: 2997 / SC: 0.8

Wall Wash — 6"

MRR-06424-2500L

— 11⅞" sq [302mm] —
5⅝" [143mm]
6" [152mm]
7⅛" [181mm]
⅝" [16mm]
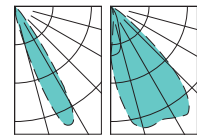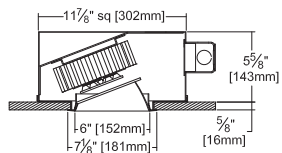
PERFORMANCE (-2500L SERIES)

2772 LUMENS

35W

LPW: 79

90° / 75° / 60° / 45°
1000
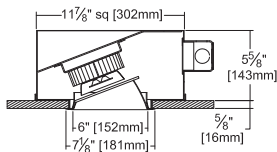2000
3000
0° 15° 30°

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC
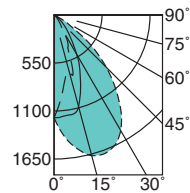
Dia. (in ft.) shown is where FC value is half the FC at nadir.

Lensed Downlight — 6"

MRR-06426-2500L

— 11⅞" sq [302mm] —
5⅝" [143mm]
[143mm] 5⅝" [181mm] 7⅛"
⅝" [16mm]

PERFORMANCE (-2500L SERIES)

2993 LUMENS

35W

MFL (STD)

SC: 0.8

LPW: 81

90° / 75° / 60° / 45°
1250
2500
3750
0° 15° 30°

Cone of Light ▲

Dist.	FC	Dia.
6	109.0	5.0
8	61.6	6.7
10	39.4	8.4
12	27.4	10.0
14	20.1	11.7
16	15.4	13.4

-NFL — Lm: 2888 / SC: 0.5

-WFL — Lm: 2379 / SC: 1.0

Use of both Kirlin SmartSupply™ LPS-1220A (1400mA) and SmartFilter™ RFI-3100D are required to maintain Kirlin warranty.

Lensed Downlight

6"

MRR-06427-2500L

Dimensions: 11⅞" sq [302mm], 5⅝" [143mm], [143mm] [181mm], 5⅝" [143mm], 7⅛", ⅝" [16mm]

PERFORMANCE (-2500L SERIES)

2993 LUMENS

35W

MFL (STD)

SC: 0.8

LPW: 81

Cone of Light ▲

Dist.	FC	Dia.
6	109.0	5.0
8	61.6	6.7
10	39.4	8.4
12	27.4	10.0
14	20.1	11.7
16	15.4	13.4

-NFL: Lm: 2888 SC: 0.5

-WFL: Lm: 2379 SC: 1.0

1250 / 2500 / 3750 — 0° 15° 30° — 90° 75° 60° 45°

IP65 Downlight

8"

MRR-08428-2500L

IP65

Dimensions: 11⅞" [300mm], 5⅝" [143mm], 8⅜" [213mm], 9¾" [248mm], ⅝" [16mm]

PERFORMANCE (-2500L SERIES)

3030 LUMENS

35W

MFL (STD)

SC: 0.8

LPW: 82

Cone of Light ▲

Dist.	FC	Dia.
6	110.0	4.9
8	61.7	6.6
10	39.5	8.2
12	27.4	9.9
14	20.2	11.5
16	15.4	13.1

-NFL: Lm: 3010 SC: 0.5
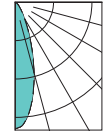
1250 / 2500 / 3750 — 0° 15° 30° — 90° 75° 60° 45°

Surface Downlight

12"

MSR-12440-2500L

Dimensions: 4" [102mm], 6½" [166mm], 12" [305mm]

PERFORMANCE (-2500L SERIES)
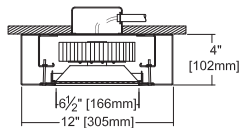
3147 LUMENS

35W

MFL

SC: 0.8

LPW: 89
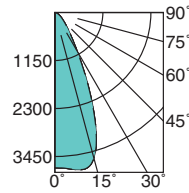
Cone of Light ▲

Dist.	FC	Dia.
6	103.0	4.9
8	58.1	6.6
10	37.2	8.2
12	25.8	9.7
14	19.0	11.5
16	14.5	13.2

1150 / 2300 / 3450 — 0° 15° 30° — 90° 75° 60° 45°

Lensed Downlights

6"

MRS-06465-2500L

Dimensions: 11⅞" sq [302mm], 5⅝" [143mm], [152mm] [184mm], 6", 7¼", ⅝" [16mm]

PERFORMANCE (-2500L SERIES)
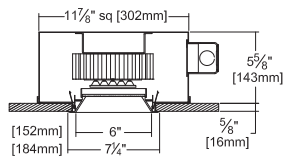
3085 LUMENS

35W

MFL

SC: 0.8

LPW: 95
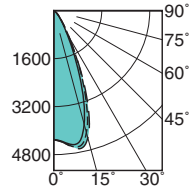
Cone of Light ▲

Dist.	FC	Dia.
6	119.	4.8
8	67.1	6.4
10	43.0	8.0
12	29.8	9.6
14	21.9	11.2
16	16.8	12.8

1600 / 3200 / 4800 — 0° 15° 30° — 90° 75° 60° 45°

8"

MRS-08470-2500L

Dimensions: 11⅞" sq [302mm], 5⅝" [143mm], 7⅞" [200mm], 10¼" [259mm], ⅝" [16mm]

PERFORMANCE (-2500L SERIES)
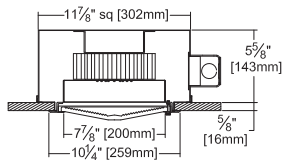
2693 LUMENS

35W

WFL (STD)

SC: 1.2

LPW: 76
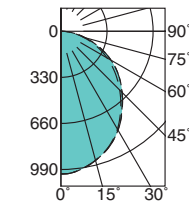
Cone of Light ▲

Dist.	FC	Dia.
6	28.4	7.1
8	16.0	9.5
10	10.2	11.9
12	7.1	14.3
14	5.2	16.6
16	4.0	19.0

0 / 330 / 660 / 990 — 0° 15° 30° — 90° 75° 60° 45°

▲ Cone of Light Key

Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

2' x 2' Panel

2' x 2'

MRP-22275-2500L

Dimensions: 23⅜" [595mm], 4⅛" [105mm], 3¾" [96mm], 2⅛" [55mm], 23" [585mm], ⅝" [15mm], 23¾" [603mm]
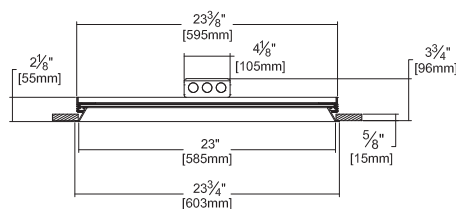
PERFORMANCE (-2500L SERIES)

3049 LUMENS

30W

WFL (STD)

SC: 1.2

LPW: 102
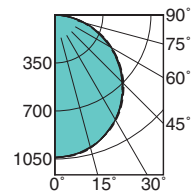
350 / 700 / 1050 — 0° 15° 30° — 90° 75° 60° 45°
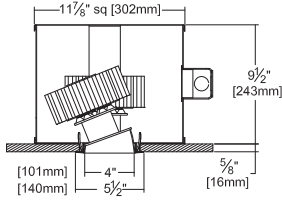
Use of both Kirlin SmartSupply™ LPS-1220A (1400mA) and SmartFilter™ RFI-3100D are required to maintain Kirlin warranty.

MRI SCONCE SYSTEM: ADA COMPLIANT - 2½" FROM THE WALL

7¼"
[184mm]

14"
[356mm]

2½"
[64mm]

MSR-14250

7¼"
[184mm]

10" sq
[254mm]

2½"
[64mm]
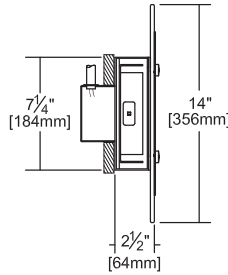
MSS-10255
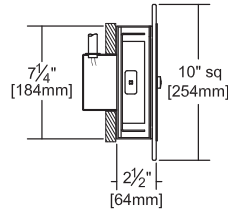
LED Light Engine

- 20 watt LED array
- 3500°K CCT standard
- 90,000 hours (L70)
- Fully sustainable: Removable for servicing

Sconce Assembly

- Decorative brushed aluminum faceplate and housing with clear ¼" acrylic diffuser
- Illuminated center field and edge glow.

Brushed Anodized Aluminum Housing

- 2½" depth meets all ADA requirements
- All aluminum construction maximizes cool operation and component life
- Optional housing and faceplate finishes

Installation

- Wall or ceiling mount
- Universal back plate mounts to any non-ferromagnetic octagon or 4" square J-box (provided by others).

ADA COMPLIANT

Red Wing Red Option -RE	Circadian Red / Amber Option -RA	Tiger Orange Option -OR	Wolverine Maize Option -YE	Spartan Green Option -GN	Lion Blue Option -BL	Custom Image / Logo Option -CI

Use of both Kirlin SmartSupply™ LPS-1220A (1400mA) and SmartFilter™ RFI-3100D are required to maintain Kirlin warranty.

POPULAR LUMINAIRE AND SCONCE OPTIONS

DOWNLIGHTS

Color Temperature (CCT)

-27K Color temperature 2700°K instead. 80+ CRI.
-30K Color temperature 3000°K instead. 80+ CRI.
-41K Color temperature 4100°K instead. 80+ CRI.
-50K Color temperature 5000°K instead. 80+ CRI.
-HC   90+ CRI instead.

Optics

-MFL Medium flood distribution.
-NFL Narrow flood distribution.
-SPT Spot distribution.
-WFL Wide flood distribution.

Lenses & Trims

-13   Vandal resistant dual lens system: prismatic high strength acrylic above, clear poly below, instead of standard lens.
-17   .187" prismatic high strength acrylic lens instead. Also see Option -26.
-21   White translucent flat poly diffuser instead.
-23   Frosted microprismatic lens instead.
-26   Tamper-resistant button head recessed hex screw with center pin and 1 key / 10 fixtures.

-30   All white acrylic enameled cone.
-31   White acrylic enameled flange (only) on cone.
-32   White oversize trim ring. Specify O.D.
-45   Gasket between trim flange and ceiling.
-46   Gasket between trim and lens.
-70   SofTex Clear self-flanged cone. (CP x .95)
-94   Custom color/finish. Specify. Consult factory.
-BG   Antimicrobial Kirlin BioGard™ white (only) trim finish.
-LL   Tempered glass lens converts beam to oval.
-WA   White acrylic (flat) diffuser instead; will provide wide flood distribution.

Surface Housing Finishes (White Standard)

-35   Natural aluminum (silver) acrylic enamel.
-38   Black acrylic enamel.
-94   Custom color. Specify. Consult factory.

Other

-79   Extension collar for up to 2" thick ceilings.
-99   Special modification. Consult factory.

SCONCES

Faceplate & Housing

-30   White baked enamel finish instead.
-38   Black baked enamel finish instead.
-94   Custom color/finish. Specify. Consult factory.
-BG   Antimicrobial Kirlin BioGard™ white (only) finish.

Colors: Center Field & Edge Glow

-BL   Blue (filter).
-CF   Custom (filter) color (Rosco). Specify.
-GN   Green (filter).
-OR   Orange (filter).
-RA   Red amber (filter).
-RE   Red (filter).
-YE   Yellow (filter).

Other

-CI   Custom image (color/logo) in center field of sconce.

(See specification sheets for availability and details.)

© 2019 The Kirlin Company   **www.kirlinlighting.com**

MRI SmartSupply™ REMOTE DIMMING DRIVER - REQUIRED

LPS-1220A

2011 IES Progress
Report Selection

- Full range 100% to 0% dimming and 3 dimming zones. See page 20 or consult factory for compatible controls.
- Over wattage, cross channel, and electrical fast transient (EFT) protection.
- Mounted outside MRI shield (not directly to shield).
- Input: 115-277VAC / 50-60Hz rated. Dedicated 120VAC input recommended. 277VAC not recommended for use with building generator systems. See SmartPower™ Emergency Backup System below. Proper line filtering and surge protection required (by others). **Maximum continuous input: 290VAC.**
- **Requires 16 AWG (minimum) twisted pair shielded wire from SmartSupply™ to luminaires.**

	With 1500 Lumen Series (-1500L) SmartLED™ Luminaires	With 2500 Lumen Series (-2500L) SmartLED™ Luminaires
(6) Channels (Circuits)	Up to (2) luminaires / channel	(1) luminaire / channel
	Up to (12) luminaires / SmartSupply™	**Up to (6) luminaires / SmartSupply™**
Maximum Distance Per Channel	(1) luminaire / channel: 150 feet	(1) luminaire / channel: 150 feet
	(2) luminaires / channel: 50 feet *	

*Distance to the farthest fixture

SmartFilter™ DC RFI / EMI FILTER - REQUIRED

RFI-3100D

2011 IES Progress
Report Selection

- Industry leading RFI and EMI protection
- Superior insertion loss of 100 dB (min.)
- Fully protects 20 kHz to 1.0 GHz
- **One filter protects up to three SmartSupply™ channels**
- Up to two filters required per SmartSupply™
- Mounted on outside surface of MRI shield
- FIVE YEAR Limited Warranty

SmartPower™ EMERGENCY BACKUP SYSTEM - OPTIONAL

EMI-21220

- High efficiency pure sine wave inverter
- Operates up to two fully loaded SmartSupply™ drivers
- 100% light output for up to 2 hours
- 120 / 277V, 60Hz input
- May be mounted up to 1000 feet from load

- Less than 50 milliseconds transfer time
- UL 924 Listed. Meets or exceeds all NEC and Life Safety Code Emergency Lighting Requirements
- THREE YEAR Limited Warranty. SEVEN YEAR pro-rata battery warranty

MRI SYSTEM ORDERING EXAMPLE

Quantity	Product	Description
12	MRR-06205-1500L-41K-NFL	Luminaires
1	LPS-1220A	SmartSupply™ (1400mA) driver (required)
2	RFI-3100D	SmartFilter™ DC RFI/EMI filter (required)

MRI LUMINAIRE SYSTEM: TYPICAL CONFIGURATION

Photo courtesy of Haselden Construction

Typical MRI Suite Lighting Zones and Component Locations
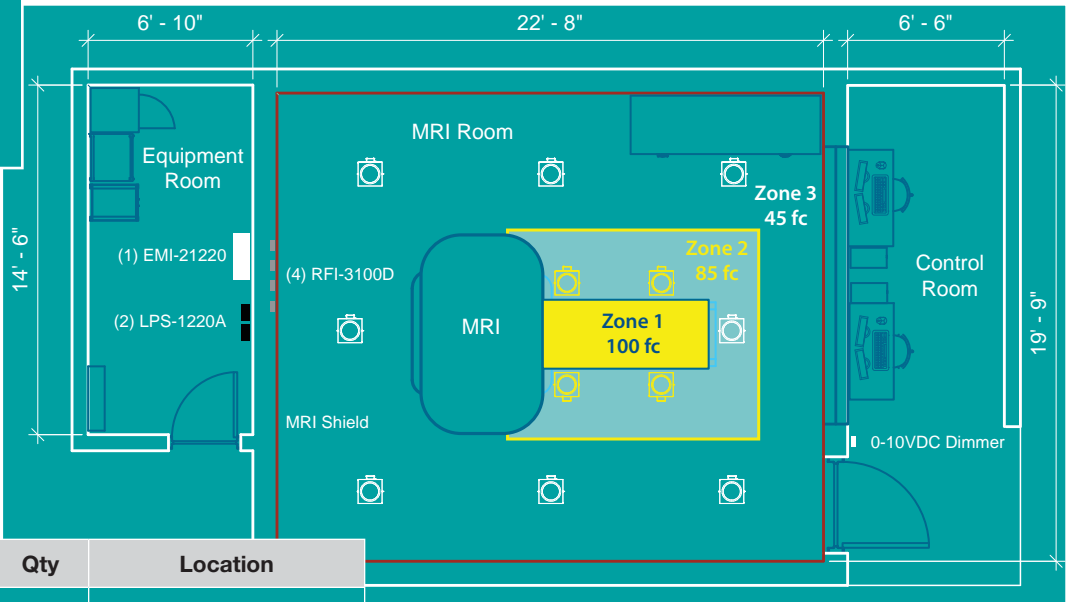
PRODUCTS

Product Type	Product #	Qty	Location
Adjustable Task Lighting	MRR-06422	4	Over the transfer table
Fixed Ambient Downlights	MRR-06420	8	Perimeter of MRI room
Remote Drivers	LPS-1220A	2	Outside the MRI shield
EMI/RFI Filters	RFI-3100D	4	On the MRI shield
Emergency Inverter	EMI-21220 (Optional)	1	Outside the MRI shield
0-10VDC Dimmers	See page 20	2	In the control room

PHOTOMETRIC PERFORMANCE

Zone	Location	fc	Luminaires	
			Product #	Qty
1	Transfer Table	100	MRR-06422	4
2	Near Transfer Table	85		
3	MRI Perimeter	45	MRR-06420	8

 www.kirlinlighting.com

MRI LUMINAIRE SYSTEM: TYPICAL CONFIGURATIONS

1500 LUMEN (20W) LUMINAIRES
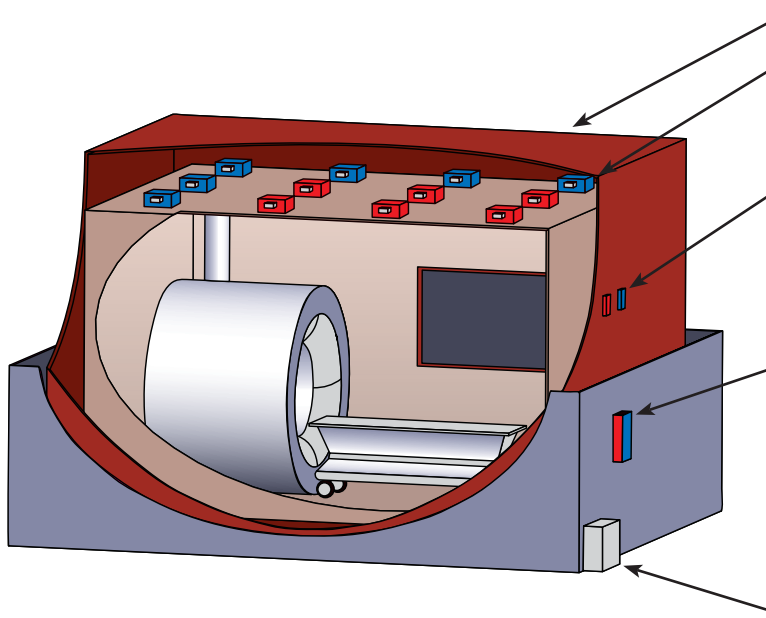
RFI / EMI Shield

Kirlin SmartLED™ Luminaire
- Up to (12) 1500L luminaires per SmartSupply
- Up to (2) luminaires per SmartSupply channel (circuit).
- Each color represents (1) set of (3) channels

Kirlin SmartFilter™ **RFI-3100D** (Required)
- (1) filter protects up to (3) SmartSupply channels. Each color represents (1) set of (3) channels
- Up to (2) filters required per SmartSupply
- Mounted on outside surface of MRI shield

Kirlin SmartSupply™ **LPS-1220A** (Required)
- (6) channels
  - Up to (2) luminaires per channel
  - Up to (12) luminaires per SmartSupply
- Max distance per channel
  - 150' with (1) luminaire per channel
  - 50' with (2) luminaires per channel
- Mounted outside MRI shield (not directly to shield)

Kirlin SmartPower™ **EMI-21220** (Optional)
- Max distance from load: 1000'
- Mounted outside MRI shield (not directly to shield)

2500 LUMEN (35W) LUMINAIRES
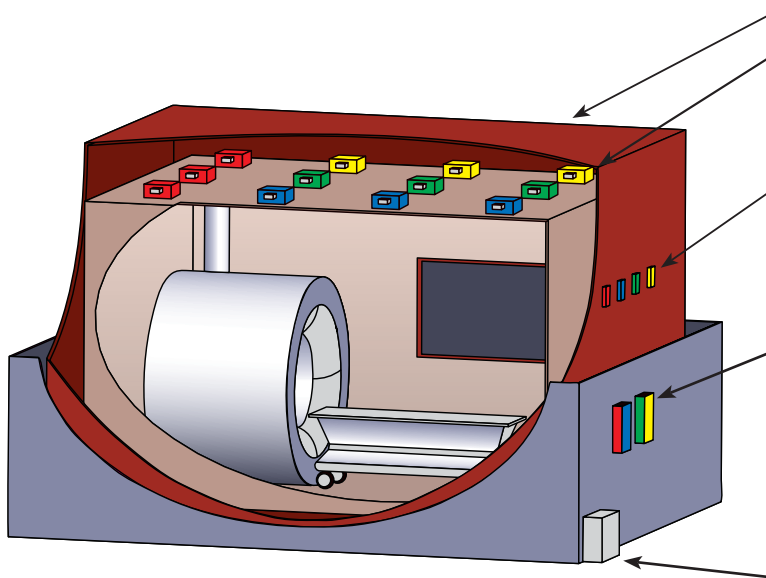
RFI / EMI Shield

Kirlin SmartLED™ Luminaire
- Up to (6) 2500L luminaires per SmartSupply
- (1) luminaire per SmartSupply channel (circuit).
- Each color represents (1) set of (3) channels

Kirlin SmartFilter™ **RFI-3100D** (Required)
- (1) filter protects up to (3) SmartSupply channels. Each color represents (1) set of (3) channels
- Up to (2) filters required per SmartSupply
- Mounted on outside surface of MRI shield

Kirlin SmartSupply™ **LPS-1220A** (Required)
- (6) channels
  - Up to (1) luminaire per channel
  - Up to (6) luminaires per SmartSupply
- Max distance per channel:
  - 150' with (1) luminaire per channel
- Mounted outside MRI shield (not directly to shield)

Kirlin SmartPower™ **EMI-21220** (Optional)
- Max distance from load: 1000'
- Mounted outside MRI shield (not directly to shield)

MRI LUMINAIRE SYSTEM: TYPICAL WIRING OVERVIEW

This wiring overview provides dimming control for zones 1, 2 and 3 simultaneously with a 0-10V DC dimmer* connected to the master 0-10V DC input of the SmartSupply™.

Shown with:
- (1) SmartSupply™ **LPS-1220A**
- (2) SmartFilters™ **RFI-3100D**
- (6) 1500 Lumen Series (20W) Luminaires
- (3) 2500 Lumen Series (35W) Luminaires
- (1) Wall Box Dimmer*

Use of both Kirlin SmartSupply (1400mA) and SmartFilter are required to maintain Kirlin warranty.

Requires 16 AWG (minimum) twisted pair shielded wire from SmartSupply (1400mA) to luminaires.

CHANNELS 5, 6

JUNCTION BOX

SmartSupply™ LPS-1220A (Output)

ZONE 4
ZONE 3
DIMMING
POWER
ZONE 1
ZONE 2

CHANNELS 1, 2
CHANNELS 3, 4

CHANNELS 1, 2
CHANNELS 3, 4
CHANNELS 5, 6

GREY
PURPLE

SmartFilter™ RFI-3100D

SmartFilter™ RFI-3100D

CHANNEL 1
CHANNEL 2
CHANNEL 3
CHANNEL 4
CHANNEL 5
CHANNEL 6

SmartSupply™ LPS-1220A (Input)

L N ⏚

2500L (35W) Luminaires

1500L (20W) Luminaires

WALL BOX DIMMER*

LINE
NEUTRAL

AC INPUT

Wall dimmer must be mounted OUTSIDE of room shield. Dimming control wires MUST NOT connect through the filter.

* Kirlin recommends using the following compatible 0-10V DC dimmers:

Leviton	IP710-DLX	
Lightolier	ZP600FAM-XXX	Sunrise
	MP1500FAM-XXX	Momentum
	V2000FAMU	Vega
Acuity	ISD BC	

	NFTV **		Nova
	NTSTV-DV **		Nova T
Lutron	DVTV		Diva
	DVSTV **		Diva
	V-600	w/GRX-TVI	Vareo

** WARNING! WHEN USING LUTRON NFTV OR NTSTV-DV LOW-VOLTAGE 0-10V DIMMERS, DO NOT SPECIFY OR INSTALL LUTRON PP-SERIES POWER PACKS. USE OF PP-SERIES POWER PACKS MAY CAUSE DAMAGE TO THE SMARTSUPPLY™ THAT IS NOT COVERED UNDER WARRANTY.

Two 1500 Lumen Series (20W) Luminaires on One Circuit

DO NOT CONNECT
LED luminaires to energized driver.

Use of both Kirlin SmartSupply (1400mA) and SmartFilter are required to maintain Kirlin warranty.

Requires 16 AWG twisted pair shielded wire from SmartSupply (1400mA) to luminaires.

One 1500 or 2500 Lumen Series (20W or 35W) Luminaire on One Circuit

BLUE (-)   RED (+)

RED (+)   BLUE (-)

RED (+)   BLUE (-)

DO NOT CONNECT
wire shields to the luminaires.

Wire shields INSIDE room MUST be connected to room shield grounding bar.

RED (+) CH 4   BLACK (−) CH 4   RED (+) CH 5   BLACK (−) CH 5   RED (+) CH 6   BLACK (−) CH 6

RED (+) CH 1   BLACK (−) CH 1   RED (+) CH 2   BLACK (−) CH 2   RED (+) CH 3   BLACK (−) CH 3

INSIDE MRI ROOM

ROOM SHIELD GROUNDING BAR

SmartFilter™
RFI-3100D

ROOM SHIELD

OUTSIDE MRI ROOM

Requires 16 AWG twisted pair shielded wire from SmartSupply (1400mA) to luminaires.

SmartFilter™
RFI-3100D

RED (+) CH 4   BLACK (−) CH 4   WHITE (+) CH 5   GREEN (−) CH 5   RED (+) CH 6   BLACK (−) CH 6

WHITE (+) CH 1   GREEN (−) CH 1   RED (+) CH 2   BLACK (−) CH 2   WHITE (+) CH 3   GREEN (−) CH 3

DO NOT CONNECT
wire shields OUTSIDE room to room shield grounding bar.

Electrical Input: 115-277VAC / 50-60Hz isolated circuit only.
Maximum input voltage 290V.

ZONE 4 (NOT USED)

ZONE 1

ZONE 3

ZONE 2

ANALOG DIMMER INPUT 0-10V, CLASS 2

DC CONSTANT CURRENT OUTPUT:
ISOLATED, CLASS 2, LPS
MAX POWER 240W,6-27VDC,   1400mA

SmartSupply™
LPS-1220A*

* DO NOT MOUNT OR CONNECT
SmartSupply (1400mA) to room shield.

FOR MORE INFORMATION ON KIRLIN'S SMARTLED™ MRI LIGHTING SYSTEMS, INCLUDING SPECIFICATION SHEETS AND OWNER'S MANUALS (INCLUDING INSTALLATION INSTRUCTIONS AND WIRING DIAGRAMS), PLEASE VISIT **www.kirlinlighting.com** AND GO TO YOUR PORTALS.

MRI LUMINAIRE SYSTEM: DESIGN GUIDE

Recommended Luminaires		Ceiling Height		Recessed					Surface
				Ambient		Task	Accent		Ambient
		Lower Ceilings (8'-9')	Higher Ceilings (8'-12')	Wide Distribution	Specifiable Distribution	Patient Table (Aimable)	Wall Wash	Infection Control *	Wide Distribution
1500 Lumen Series (20W)	MRR-04200	■		■	■			○	
	MRR-06205	■		■	■			○	
	MRR-04220	■		■	■	■		○	
	MRR-06222	■		■	■	■		○	
	MRR-04225	■					■	○	
	MRR-06227	■					■	○	
	MRR-06230	■		■	■			○	
	MRR-06235	■		■	■			○	
	MRR-07240	■		■	■			○	
	MRS-04245	■		■	■			○	
	MRS-06247	■		■	■			○	
2500 Lumen Series (35W)	MRP-22275		■	■				○	
	MRR-04414		■	■	■			○	
	MRR-04416		■	■	■	■		○	
	MRR-04418		■				■	○	
	MRR-06420		■	■	■			○	
	MRR-06422		■	■	■	■		○	
	MRR-06424		■				■	○	
	MRR-06426		■	■	■			○	
	MRR-06427		■	■	■			○	
	MRR-08428		■	■	■			○	
	MSR-12440		■	■				○	■
	MRS-06465		■	■	■			○	
	MRS-08470		■	■				○	

* Infection Control Key

○ BioGard™ antimicrobial white finish (Option -BG) optional.

MRI LUMINAIRE / SCONCE SYSTEM: CHECK LIST

☐ 1. Select the type and quantity of SmartLED™ Luminaires. See pages 12-16 for available models.
☐ 2. Determine the quantity and remote location of the SmartSupply(s). See page 17.
☐ 3. Determine the quantity of SmartFilters™. See page 17.
☐ 4. Select dimming controls. See page 20.
☐ 5. Determine the quantity and remote location (outside MRI shield) of the dimming controls.

SEE THE LPS-1220A (MRI 1400mA SmartSupply™) AND RFI-3100D (MRI SmartFilter™) OWNER'S MANUALS
FOR INSTALLATION INSTRUCTIONS AND WIRING DIAGRAMS AT **www.kirlinlighting.com** PORTALS.

MRI WHITE PANEL OR SCENIC PANEL SYSTEM

IC

- MRP-22285-1500L: Smooth White Panel downlight
- MRP-22290: Selection of beautiful Scenic Panel artwork attractively and uniformly illuminated
- Wave guide lens provides superior uniform illumination
- Driverless, 20 watt, low voltage, Class II, DC powered
- Regressed trim provides architectural "skylight" effect
- Ultra-shallow recessed aluminum housing

- Image easily updated in the field
- Lays into 2' x 2' grid ceiling
- 100-0% full range dimming
- 60,000 hours (L70) life
- Requires remote SmartSupply™ LPS-0700A and SmartFilter™ RFI-3100D. See page 26 for quantities required

MRP-22285-1500L: White Panel

MRP-22290: Scenic Panel

Regressed bevel provides architectural "skylight" effect.

Use multiple 2'x2' Scenic Panels to create a soothing and attractive luminous ceiling.

23¾" sq [603mm]

23⅜" [595mm]

4⅛" [105mm]

3¾" [96mm]

2⅛" [55mm]

23" [585mm]

⅝" [15mm]

23¾" [603mm]
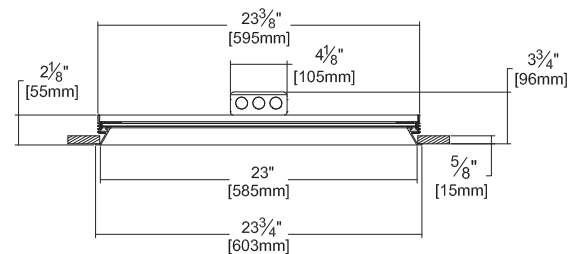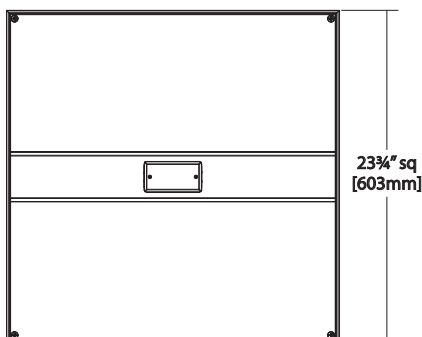
Ultra-shallow aluminum housing requires minimal plenum space.

Use of both Kirlin SmartSupply™ LPS-0700A (700mA) and SmartFilter™ RFI-3100D are required to maintain Kirlin warranty.

ARTWORK

Select artwork by adding the option code (i.e., -A01) of the respective artwork. For custom artwork, use Option -A99.

-A01

-A02

-A03

-A04

-A05

-A06

Custom Artwork

(Customer supplied*)

-A99

**Custom Artwork
Preferred Image Resolution**

1800 x 1800 pixels (or greater)
<u>per</u> 24" x 24" panel.

See "Overall Size and Orientation" table
on page 25 for preferred image resolution
for each configuration.

* For custom artwork, customer is responsible for supplying the artwork and obtaining the appropriate usage rights.

DIVIDING AND CROPPING ARTWORK

When specifying size, orientation and artwork, consider how the image will be divided and cropped.

For example:

-4x4	-6x4	-4x6

To see how your artwork will divided and cropped, consult factory.

 www.kirlinlighting.com

MRI SCENIC PANEL SYSTEM: PANEL CONFIGURATIONS

1. Use MRP-22290 as base catalog number, then add configurations and selections as follows.
2. Choose overall size and orientation of the display using the "Overall Size and Orientation" table below.
3. Select artwork with option codes (i.e., -A01). Consider how the artwork will be displayed. See "Dividing and Cropping Artwork".
4. Add appropriate quantity of SmartSupply™ LPS-0700A and SmartFilter™ RFI-3100D (details follow).
5. Following the submission of your order, and before production, you will receive a proof for your review and approval.

Nominal Dimensions	Fixture Qty	Overall Size and Orientation					
		Landscape			Portrait		
		Arrangement	Option	Preferred Resolution (Pixels)	Arrangement	Option	Preferred Resolution (Pixels)
2' x 2'	1		-2x2	1800 x 1800			
2' x 4'	2		-4x2	3600 x 1800		-2x4	1800 x 3600
4' x 4'	4		-4x4	3600 x 3600			
4' x 6'	6		-6x4	5400 x 3600		-4x6	3600 x 5400
6' x 6'	9		-6x6	5400 x 5400			
6' x 8'	12		-8x6	7200 x 5400		-6x8	5400 x 7200
8' x 8'	16		-8x8	7200 x 7200			
Custom Size		-9x9 Specify number of panels and orientation of artwork.					

SCENIC PANEL PRODUCT SPECIFICATION EXAMPLE

Example:

MRP-22290 -4x6* -A01

Scenic Panel Product Number

Size and Orientation Option*

Artwork Option
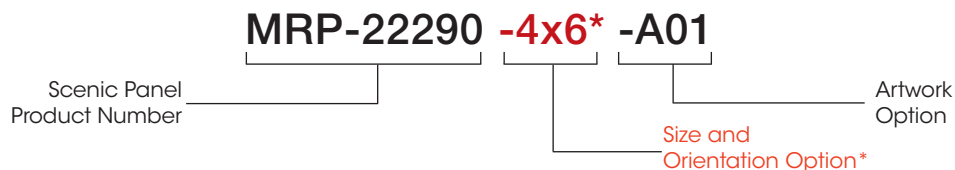
*-4x6 is not the same as -6x4, see above.

MRI PANELS: SmartSupply™ DRIVER - REQUIRED

LPS-0700A

- Full range 100% to 0% dimming and 3 dimming zones. See page 28 or consult factory for compatible controls.
- Over wattage, cross channel, and electrical fast transient (EFT) protection.
- Mounted outside MRI shield (not directly to shield).
- Input: 115-277VAC / 50-60Hz rated. Dedicated 120VAC input recommended. 277VAC not recommended for use with building generator systems. Proper line filtering and surge protection required (by others). See SmartPower™ Emergency Backup System below. **Maximum continuous input: 290VAC.**
- **Requires 16 AWG (minimum) twisted pair shielded wire from SmartSupply™ to luminaires.**

	With Scenic Panels (20W)
(12) Channels (Circuits)	(1) white or scenic panel / channel
	Up to (12) panels / SmartSupply™
Maximum Distance Per Channel	150 feet

277VAC not recommended for use with building generator systems. See EMI-21220 SmartPower™ below

SmartFilter™ DC RFI / EMI FILTER - REQUIRED

RFI-3100D

2011 IES Progress Report Selection

- Industry leading RFI and EMI protection
- Superior insertion loss of 100 dB (min.)
- Fully protects 20 kHz to 1.0 GHz
- One filter protects up to three Scenic/White Panel SmartSupply™ channels
- Up to four filters required per Scenic/White Panel SmartSupply™
- Mounted on outside surface of MRI shield
- FIVE YEAR Limited Warranty

SmartPower™ EMERGENCY BACKUP SYSTEM - OPTIONAL

EMI-21220

- High efficiency pure sine wave inverter
- Operates up to two fully loaded SmartSupply™ drivers
- 100% light output for up to 2 hours
- 120 / 277V, 60Hz input
- May be mounted up to 1000 feet from load

- Less than 50 milliseconds transfer time
- UL 924 Listed. Meets or exceeds all NEC and Life Safety Code Emergency Lighting Requirements
- THREE YEAR Limited Warranty. SEVEN YEAR pro-rata battery warranty

MRI WHITE / SCENIC PANEL SYSTEM: CHECK LIST

☐ 1. Select the quantity and layout of SmartLED™ white or scenic (page 25) panels. Also see page 27.

☐ 2. For Scenic: Select the image. Consider image orientation, cropping and division. See page 24.

☐ 3. Determine the quantity and remote location of the SmartSupply(s). See above.

☐ 4. Determine the quantity of SmartFilters™. See above.

☐ 5. Select dimming controls. See page 28.

☐ 6. Determine the quantity and remote location (outside MRI shield) of the dimming controls.

© 2019 The Kirlin Company

WHITE / SCENIC PANELS (1500L / 20W)

RFI / EMI Shield

Kirlin SmartLED™ White/Scenic Panels
- Up to (12) panels per SmartSupply
- (1) panel per SmartSupply channel (circuit).
- Each color represents (1) set of (3) channels

Kirlin SmartFilter™ RFI-3100D (Required)
- (1) filter protects up to (3) SmartSupply channels. Each color represents (1) set of (3) channels
- Up to (4) filters required per SmartSupply
- Mounted on outside surface of MRI shield

Kirlin SmartSupply™ LPS-0700A (Required)
- (12) channels
    - (1) white/scenic panel per channel
    - Up to (12) panels per SmartSupply
- Max distance per channel
    - 150' with (1) panel per channel
- Mounted outside MRI shield (not directly to shield)

Kirlin SmartPower™ EMI-21220 (Optional)
- Max distance from load: 1000'
- Mounted outside MRI shield (not directly to shield)

Typical MRI Suite and Component Locations
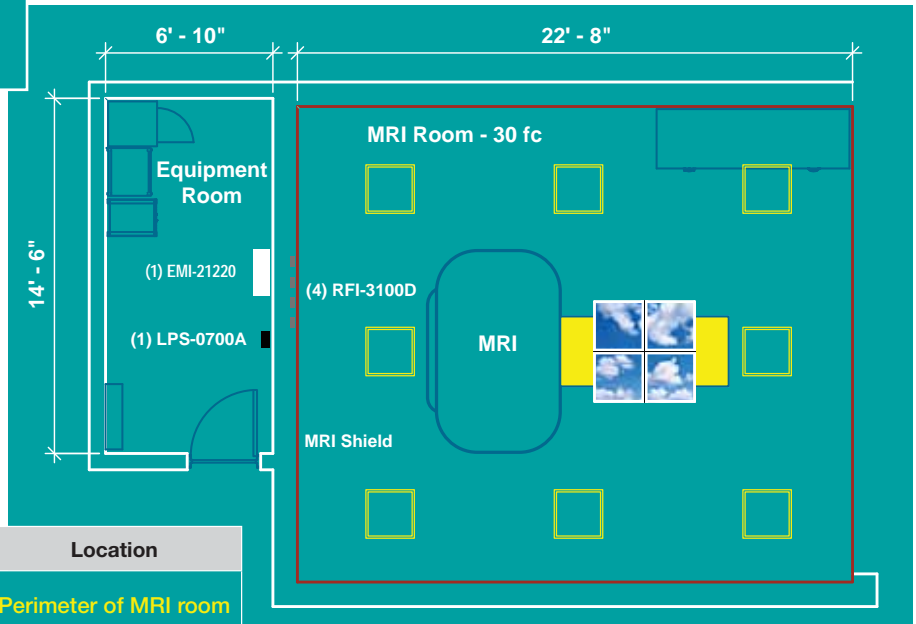
PRODUCTS

Product Type	Product #	Qty	Location
White 2' x 2' Panels	MRP-22285	8	Perimeter of MRI room
Scenic 2' x 2' Panels	MRP-22290	4	Over patient table
Remote Driver	LPS-0700A	1	Outside the MRI shield
EMI/RFI Filters	RFI-3100D	4	On the MRI shield
Emergency Inverter	EMI-21220 (Optional)	1	Outside the MRI shield
0-10VDC Dimmers	See page 28	2	In the control room

SEE THE LPS-0700A (MRI WHITE / SCENIC PANEL SmartSupply™) AND RFI-3100D (MRI SmartFilter™) OWNER'S MANUALS FOR INSTALLATION INSTRUCTIONS AND WIRING DIAGRAMS AT **www.kirlinlighting.com** PORTALS.
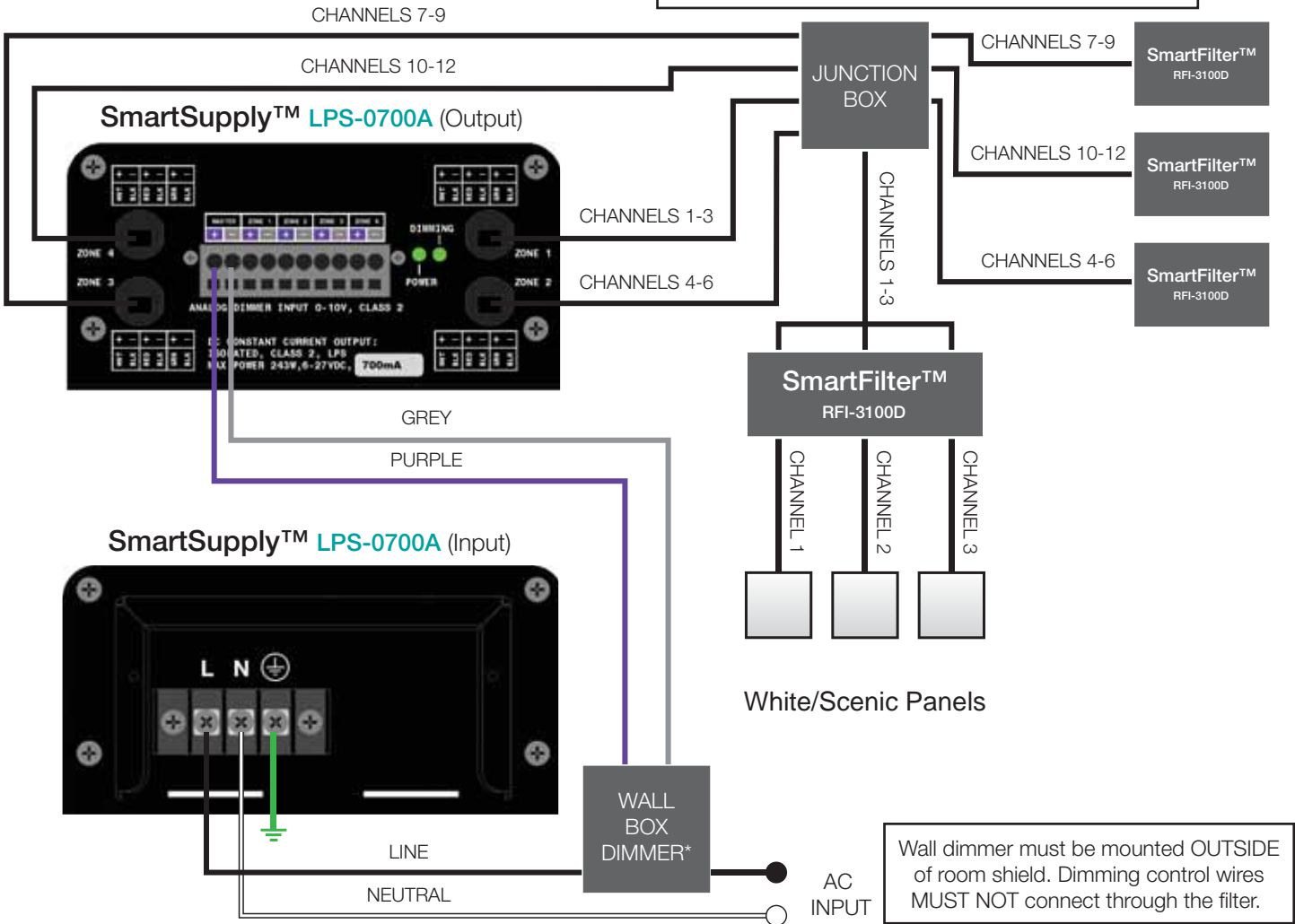
MRI PANELS SYSTEM: TYPICAL WIRING OVERVIEW

This wiring overview provides dimming control for zones 1, 2 and 3 simultaneously with a 0-10V DC dimmer* connected to the master 0-10V DC input of the SmartSupply™.

Shown with:
- (1) SmartSupply™ LPS-0700A
- (4) SmartFilters™ RFI-3100D
- (3) SmartLED™ Panels
- (1) Wall Box Dimmer*

Use of both Kirlin SmartSupply (700mA) and SmartFilter are required to maintain Kirlin warranty.

Requires 16 AWG (minimum) twisted pair shielded wire from SmartSupply (700mA) to luminaires.

CHANNELS 7-9

CHANNELS 10-12

SmartSupply™ LPS-0700A (Output)

JUNCTION BOX

CHANNELS 7-9 — SmartFilter™ RFI-3100D

CHANNELS 10-12 — SmartFilter™ RFI-3100D

CHANNELS 4-6 — SmartFilter™ RFI-3100D

CHANNELS 1-3

CHANNELS 4-6

CHANNELS 1-3

GREY

PURPLE

SmartFilter™ RFI-3100D

CHANNEL 1   CHANNEL 2   CHANNEL 3

SmartSupply™ LPS-0700A (Input)

White/Scenic Panels

L N ⏚

WALL BOX DIMMER*

LINE

NEUTRAL

AC INPUT

Wall dimmer must be mounted OUTSIDE of room shield. Dimming control wires MUST NOT connect through the filter.

* Kirlin recommends using the following compatible 0-10V DC dimmers:

Leviton	IP710-DLX	
Lightolier	ZP600FAM-XXX	Sunrise
	MP1500FAM-XXX	Momentum
	V2000FAMU	Vega
Acuity	ISD BC	

	NFTV **		Nova
	NTSTV-DV **		Nova T
Lutron	DVTV		Diva
	DVSTV **		Diva
	V-600	w/GRX-TVI	Vareo

** WARNING! WHEN USING LUTRON NFTV OR NTSTV-DV LOW-VOLTAGE 0-10V DIMMERS, DO NOT SPECIFY OR INSTALL LUTRON PP-SERIES POWER PACKS. USE OF PP-SERIES POWER PACKS MAY CAUSE DAMAGE TO THE SmartSupply™ THAT IS NOT COVERED UNDER WARRANTY.

MRI PANELS SYSTEM: WIRING DIAGRAM

One **SmartLED™**
White/Scenic Panel
Per Circuit

RED (+)

BLACK (-)

DO NOT CONNECT
LED luminaires to energized driver.

Use of both Kirlin SmartSupply
(700mA) and SmartFilter are
required to maintain Kirlin warranty.

**Requires 16 AWG (minimum)
twisted pair shielded wire from
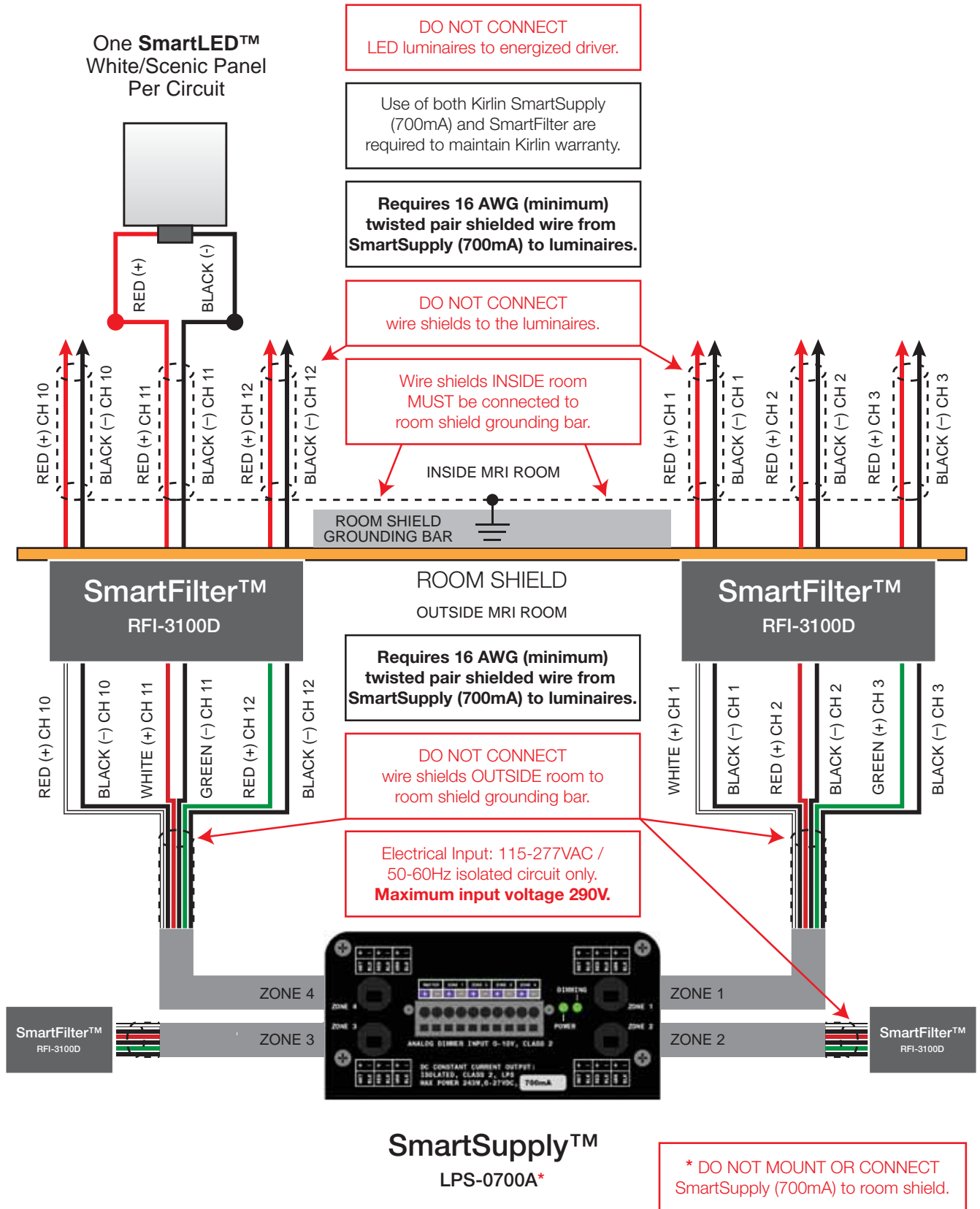SmartSupply (700mA) to luminaires.**

DO NOT CONNECT
wire shields to the luminaires.

Wire shields INSIDE room
MUST be connected to
room shield grounding bar.

RED (+) CH 10
BLACK (–) CH 10
RED (+) CH 11
BLACK (–) CH 11
RED (+) CH 12
BLACK (–) CH 12

RED (+) CH 1
BLACK (–) CH 1
RED (+) CH 2
BLACK (–) CH 2
RED (+) CH 3
BLACK (–) CH 3

INSIDE MRI ROOM

ROOM SHIELD
GROUNDING BAR

SmartFilter™
RFI-3100D

ROOM SHIELD

OUTSIDE MRI ROOM

SmartFilter™
RFI-3100D

**Requires 16 AWG (minimum)
twisted pair shielded wire from
SmartSupply (700mA) to luminaires.**

RED (+) CH 10
BLACK (–) CH 10
WHITE (+) CH 11
GREEN (–) CH 11
RED (+) CH 12
BLACK (–) CH 12

WHITE (+) CH 1
BLACK (–) CH 1
RED (+) CH 2
BLACK (–) CH 2
GREEN (+) CH 3
BLACK (–) CH 3

DO NOT CONNECT
wire shields OUTSIDE room to
room shield grounding bar.

Electrical Input: 115-277VAC /
50-60Hz isolated circuit only.
Maximum input voltage 290V.

ZONE 4

ZONE 1

SmartFilter™
RFI-3100D

ZONE 3

ZONE 2

SmartFilter™
RFI-3100D

SmartSupply™
LPS-0700A*

* DO NOT MOUNT OR CONNECT
SmartSupply (700mA) to room shield.

FOR MORE INFORMATION ON KIRLIN'S SmartLED™ MRI LIGHTING SYSTEMS, INCLUDING SPECIFICATION SHEETS AND OWNER'S MANUALS (INCLUDING INSTALLATION INSTRUCTIONS AND WIRING DIAGRAMS), PLEASE VISIT **www.kirlinlighting.com** AND GO TO YOUR PORTALS.

SECTION II: EXAM LIGHTING (RECESSED DOWNLIGHT / ADJUSTABLE)

THREE LEVELS OF INFECTION CONTROL PROTECTION

HIGHER QUALITY LIGHT

- Select delivered lumens from 1500-5000 in downlight or adjustable designs.
- Choose the color of your light: 2700K (very warm white), 3000K (warm white), 3500K (neutral white, standard), 4100K (cool white) or 5000K (daylight white).
- High CRI available (Option -HC) for accurate tissue color rendering: CRI 90+ with high R9 (Red), R13 and R15 (Skin Colors).

A SAFER ENVIRONMENT

- Fully recessed fixtures provide an open work space.
- Compact and smooth trim and lens are easy to clean and disinfect.
- BioGard™ antimicrobial finish inhibits the growth of pathogens.
- IP65 sealed trims minimize the likelihood of pathogens passing through the fixture.
- Cleanroom Rated ISO 5 Class 100 sealed fixtures for applications.
- Impact resistant lenses available (ideal for emergency departments and psychiatric units).

GREATER PERFORMANCE

- Dimming down to 0.1% permits staff to finely tune light levels for specific tasks, each clinician and time of day.
- Higher delivered lumens and 80% energy savings over traditional sources.

LEVEL 1 PROTECTION
LENSED, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 2 PROTECTION
IP65 SEALED TRIM, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 2+ PROTECTION
IP65 SEALED TRIM, VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 3 PROTECTION
CLEANROOM RATED ISO 5/CLASS 100 SEALED, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 3+ PROTECTION
CLEANROOM ISO 5/CLASS 100 SEALED, VANDAL RESIST, BIOGARD™ ANTIMICROBIAL FINISH

SECTION II: EXAM LIGHTING (RECESSED DOWNLIGHT / ADJUSTABLE)

		Infection Control	Application	Function	Aperture (Inches)	Product #	Performance		Page
							Lumens	Watts	
		Level 1 Protection	Antimicrobial BioGard™ Finish Regressed Lens	Downlight	7	MRR-07500-5000L	5000	55	
						MRR-07500-3500L	3500	42	
		Level 1 Protection	Antimicrobial BioGard™ Finish Regressed Lens	Adjustable	7	MRR-07505-5000L	5000	55	32
						MRR-07505-3500L	3500	42	
		Level 1 Protection	Antimicrobial BioGard™ Finish Regressed Lens	Downlight	4 x 9	✱ MRT-04511-5000L	5000	70	
		Level 1 Protection	Antimicrobial BioGard™ Finish Regressed Lens	Downlight	5 x 10	✱ MRT-05512-5000L	5000	70	
		Level 2 Protection	IP65 Rated BioGard™ Finish Regressed Lens	Downlight	8	MRR-08530-5000L	5000	55	
						MRR-08530-3500L	3500	42	33
		Level 2 Protection		Adjustable	8	MRR-08535-5000L	5000	55	
						MRR-08535-3500L	3500	42	
		Level 2+ Protection	IP65 Rated BioGard™ Tamper Resistant Psychiatric/ER VR	Downlight	8	MRV-08540-5000L	5000	55	
						MRV-08540-3500L	3500	42	33
		Level 2+ Protection		Adjustable	8	MRV-08545-5000L	5000	55	
						MRV-08545-3500L	3500	42	
		Level 3 Protection	Cleanroom Class 100 BioGard™ Finish OR/Hybrid OR IP65	Downlight	7	MRR-07550-2000L	2000	25	
						MRR-07550-1500L	1500	20	
		Level 3 Protection		Downlight	8	MRR-08555-5000L	5000	55	34
						MRR-08555-3500L	3500	42	
		Level 3 Protection		Adjustable	8	MRR-08558-5000L	5000	55	
						MRR-08558-3500L	3500	42	
		Level 3+ Protection	Cleanroom Class 100 Tamper Resistant BioGard™ Finish Psychiatric/OR IP65 VR	Downlight	7	MRV-07560-2000L	2000	25	
						MRV-07560-1500L	1500	20	
		Level 3+ Protection		Downlight	8	MRV-08565-5000L	5000	55	34
						MRV-08565-3500L	3500	42	

INSTALLATIONS, OPTIONS AND ORDERING	35-37

✱ = New Product

LEVEL 1 PROTECTION
LENSED, BIOGARD™ ANTIMICROBIAL FINISH

Downlight

7"

11⅞" sq [302mm]
5⅝" [143mm]
7⅞" [181mm]
8½" [216mm]
⅝" [16mm]
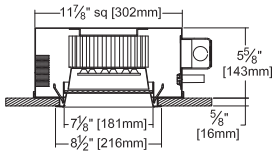
MAXIMUM PERFORMANCE (-5000L SERIES)

4827 LUMENS
55W

Cone of Light ▲

Dist.	FC	Dia.
6	247.0	3.5
8	139.0	4.7
10	89.1	5.9
12	61.9	7.1
14	45.5	8.3
16	34.8	9.4

439 405 305 195
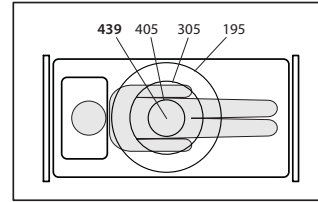
fc on Task: 8' Ceiling   3'6" Work Plane

MRR-07500-5000L
MRR-07500-3500L

Narrow Flood (Standard) Shown. Medium Flood (-MFL) Optional

Applications:

Patient Room
Cardiac Cath
Labor and Delivery
Radiology
PreOp / PostOp
Veterinary
Autopsy

Adjustable

7"

11⅞" sq [302mm]
9½" [243mm]
7⅞" [181mm]
8½" [216mm]
⅝" [16mm]

MAXIMUM PERFORMANCE (-5000L SERIES)

4623 LUMENS
55W

740 614 375 210
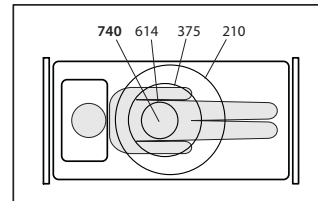
fc on Task: 8' Ceiling   3'6" Work Plane

MRR-07505-5000L
MRR-07505-3500L

Narrow Flood (Standard) Shown

Downlights

4" x 9"

11⅞" [302mm]
5⅝" [143mm]
8⅞" X 4⅝" [222mm] X [117mm]
10" X 5⅞" [254mm] X [149mm]
⅝" [16mm]
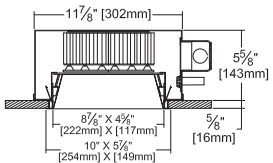
PERFORMANCE (-5000L SERIES)

4985 LUMENS
2 x 35W

Cone of Light ▲

Dist.	FC	Dia.
6	303.3	3.4
8	170.6	4.5
10	109.2	5.6
12	75.8	6.8
14	55.7	7.9
16	42.7	9.0

382 370 300 215
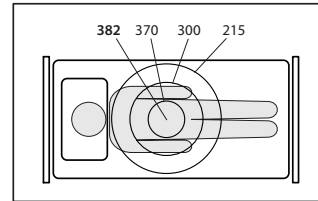
fc on Task: 8' Ceiling   3'6" Work Plane

MRT-04511-5000L

Narrow Flood Shown

▲ **Cone of Light Key**
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

Applications:

Patient Room
ICU / NICU
Labor and Delivery
PreOp / PostOp
Veterinary
Autopsy

5" x 10"

11⅞" [302mm]
5⅝" [143mm]
9¾" X 5⅝" [248mm] X [143mm]
11" X 6⅞" [279mm] X [175mm]
⅝" [16mm]
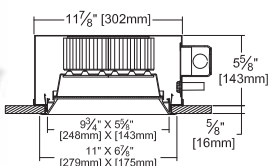
PERFORMANCE (-5000L SERIES)

5257 LUMENS
2 x 35W

Cone of Light ▲

Dist.	FC	Dia.
6	255.9	3.7
8	144.0	5.0
10	92.1	6.2
12	64.0	7.4
14	47.0	8.7
16	36.0	9.9

379 367 300 218
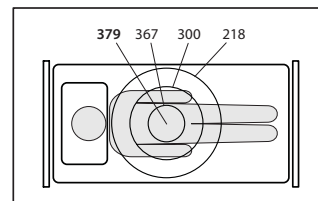
fc on Task: 8' Ceiling   3'6" Work Plane

MRT-05512-5000L

Narrow Flood Shown
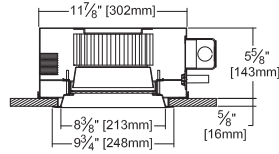
SECTION II: EXAM LIGHTING

LEVEL 2 PROTECTION
IP65 SEALED TRIM, BIOGARD™ ANTIMICROBIAL FINISH

Downlight

8"

MAXIMUM PERFORMANCE (-5000L SERIES)

Cone of Light ▲

5298 LUMENS

55W

Dist.	FC	Dia.
6	298.0	3.4
8	168.0	4.5
10	107.0	5.7
12	74.6	6.8
14	54.8	7.9
16	42.0	9.1

11⁷⁄₈" [302mm] · 5⁵⁄₈" [143mm] · 8³⁄₈" [213mm] · 9³⁄₄" [248mm] · ⁵⁄₈" [16mm]

530   484   357   220

fc on Task: 8' Ceiling   3'6" Work Plane

MRR-08530-5000L
MRR-08530-3500L

Narrow Flood (Standard) Shown. Medium Flood (-MFL) Optional
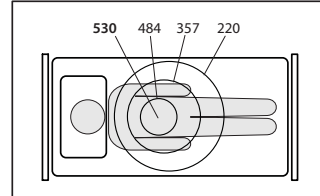
Applications:

ICU / NICU
PreOp / PostOp
Autopsy
Veterinary
PT / CT Scan
Infection Control
Areas

Adjustable

8"

MAXIMUM PERFORMANCE (-5000L SERIES)

4796 LUMENS

55W

11⁷⁄₈" sq [302mm] · 9¹⁄₂" [243mm] · 8³⁄₈" [213mm] · 9³⁄₄" [248mm] · ⁵⁄₈" [16mm]

1143   969   513   220
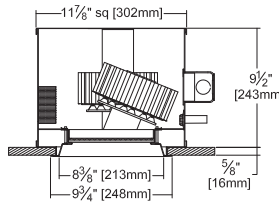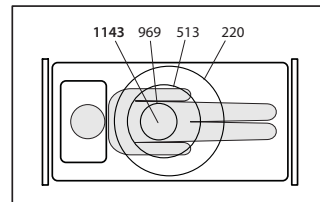
fc on Task: 8' Ceiling   3'6" Work Plane

MRR-08535-5000L
MRR-08535-3500L

Narrow Flood Shown

LEVEL 2+ PROTECTION
IP65 SEALED TRIM, VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH   VR

Downlight

8"

MAXIMUM PERFORMANCE (-5000L SERIES)

Cone of Light ▲

4749 LUMENS

55W

Dist.	FC	Dia.
6	243.0	3.5
8	137.0	4.7
10	87.6	5.8
12	60.8	7.0
14	44.7	8.1
16	34.2	9.3

11⁷⁄₈" sq [302mm] · 5⁵⁄₈" [143mm] · 8³⁄₈" [213mm] · 9³⁄₄" [248mm] · ⁵⁄₈" [16mm]

432   396   295   187
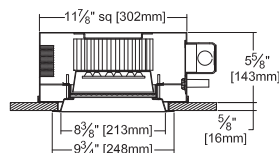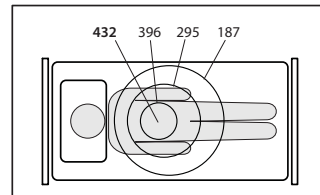
fc on Task: 8' Ceiling   3'6" Work Plane

MRV-08540-5000L
MRV-08540-3500L

Narrow Flood (Standard) Shown. Medium Flood (-MFL) Optional

Applications:

Emergency
Psychiatric
Prison / Jail
PreOp / PostOp
Veterinary
Patient Room

Adjustable

8"

MAXIMUM PERFORMANCE (-5000L SERIES)

4185 LUMENS

55W

11⁷⁄₈" sq [302mm] · 9¹⁄₂" [243mm] · 8³⁄₈" [213mm] · 9³⁄₄" [248mm] · ⁵⁄₈" [16mm]

1169   963   441   162

fc on Task: 8' Ceiling   3'6" Work Plane

MRV-08545-5000L
MRV-08545-3500L

Narrow Flood Shown

▲ Cone of Light Key
Dist.   Distance (Ft.) from fixture
FC   Footcandles at nadir (0°)
Dia.   Circle of light at 50% of FC

Dia. (in ft.) shown is where FC
value is half the FC at nadir.

LEVEL 3 PROTECTION
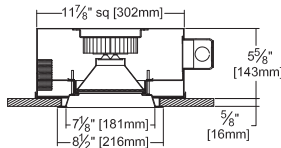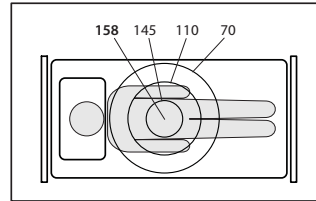### CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, BIOGARD™ ANTIMICROBIAL FINISH

Downlights

7"

MRR-07550-2000L
MRR-07550-1500L

PERFORMANCE (-1500L SERIES)

1553 LUMENS

20W

Cone of Light ▲

Dist.	FC	Dia.
6	89.3	3.5
8	50.2	4.7
10	32.1	5.9
12	22.3	7.1
14	16.4	8.2
16	12.6	9.4

158 145 110 70

fc on Task: 8' Ceiling   3'6" Work Plane

Narrow Flood (Standard) Shown. Medium Flood (-MFL) Optional

11⅞" sq [302mm] · 5⅝" [143mm] · 7⅛" [181mm] · 8½" [216mm] · ⅝" [16mm]

8"

MRR-08555-5000L
MRR-08555-3500L

2013 IES Progress Report Selection

MAXIMUM PERFORMANCE (-5000L SERIES)
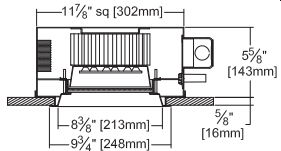
5298 LUMENS

55W

Cone of Light ▲

Dist.	FC	Dia.
6	298.0	3.4
8	168.0	4.5
10	107.0	5.7
12	74.6	6.8
14	54.8	7.9
16	42.0	9.1

530 484 357 220

fc on Task: 8' Ceiling   3'6" Work Plane

Narrow Flood (Standard) Shown. Medium Flood (-MFL) Optional

11⅞" sq [302mm] · 5⅝" [143mm] · 8⅜" [213mm] · 9¾" [248mm] · ⅝" [16mm]

Adjustable

8"

MRR-08558-5000L
MRR-08558-3500L

MAXIMUM PERFORMANCE (-5000L SERIES)

4796 LUMENS

55W

1143 969 513 220

fc on Task: 8' Ceiling   3'6" Work Plane

Narrow Flood Shown

11⅞" sq [302mm] · 9½" [243mm] · 8⅜" [213mm] · 9¾" [248mm] · ⅝" [16mm]

Applications:

Operating Room
Hybrid OR
Intraoperative OR
CCU
Cleanroom
Cardiac Cath
Interventional
Radiology
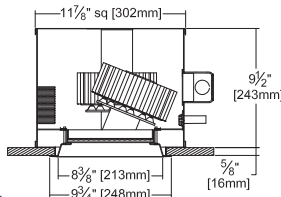
LEVEL 3+ PROTECTION
CLEANROOM ISO 5/CLASS 100 SEALED, VANDAL RESIST, BIOGARD™ ANTIMICROBIAL FINISH   VR

Downlights

7"

MRV-07560-2000L
MRV-07560-1500L
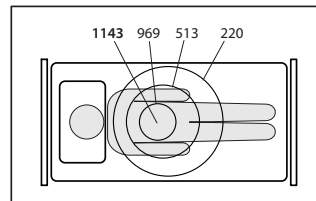
PERFORMANCE (-1500L SERIES)
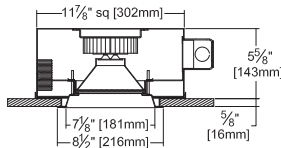
1468 LUMENS

20W

Cone of Light ▲

Dist.	FC	Dia.
6	70.8	3.8
8	39.8	5.0
10	25.5	6.3
12	17.7	7.5
14	13.0	8.8
16	10.0	10.0

125 117 92 61

fc on Task: 8' Ceiling   3'6" Work Plane

Narrow Flood (Standard) Shown. Medium Flood (-MFL) Optional

11⅞" sq [302mm] · 5⅝" [143mm] · 7⅛" [181mm] · 8½" [216mm] · ⅝" [16mm]

8"

MRV-08565-5000L
MRV-08565-3500L

MAXIMUM PERFORMANCE (-5000L SERIES)
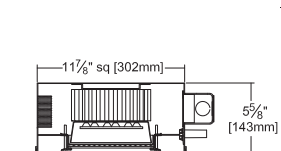
4749 LUMENS

55W

Cone of Light ▲

Dist.	FC	Dia.
6	243.0	3.5
8	137.0	4.7
10	87.6	5.8
12	60.8	7.0
14	44.7	8.1
16	34.2	9.3
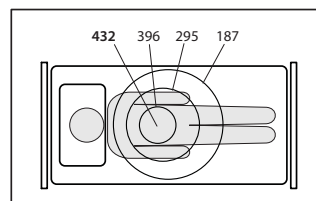
432 396 295 187

fc on Task: 8' Ceiling   3'6" Work Plane

Narrow Flood (Standard) Shown. Medium Flood (-MFL) Optional

11⅞" sq [302mm] · 5⅝" [143mm] · 8⅜" [213mm] · 9¾" [248mm] · ⅝" [16mm]

▲ **Cone of Light Key**
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

Applications:

Emergency
Psychiatric
Prison / Jail
PreOp / PostOp
Veterinary
Patient Room

© 2019 The Kirlin Company

www.kirlinlighting.com

Performance

- Over 50% energy savings
- Higher delivered lumens
- Fewer luminaires, lower cost
- Exceeds IES recommended light levels
- Better illumination uniformity; no glare
- Instant on, reliable dimming

Infection Control

- BioGard™ antimicrobial finish
- Smaller lens and trim for faster cleaning
- Award winning Cleanroom Rated
  (ISO 5 Class 100) versions offered

2013 IES Progress
Report Selection

Installation and Maintenance

- Maintenance-free LEDs
- Smaller size for easier installation
- Shallow depth housings fit anywhere

Reliability

- IEC/EN 60601-1-2 medical listing
- FCC Part 15 EMI/RFI emissions
- Internal emergency battery packs available.
  Deliver 500 or 1000 lumens. Run time 90+ minutes.
  See options -EM and -EMH.
- SmartPower™ emergency inverter (EMI-21220)
  available. Provides 100% lumen output for up to
  two hours. See page 37.

LIGHTING PERFORMANCE
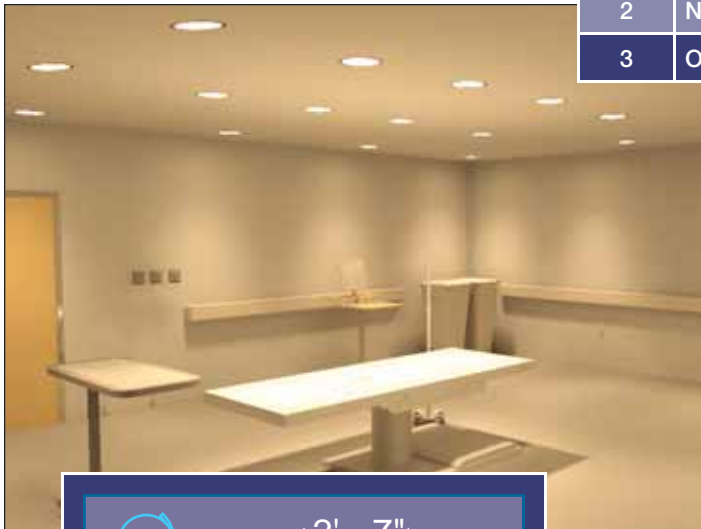
Zone	Location	fc	Luminaires*	Fixture Qty
1	OR Table	800	Adjustable MRR-08558-5000L	6
2	Near OR Table	200		
3	OR Perimeter	100	MRR-08555-5000L	15

* See www.kirlinlighting.com for specification sheets.

Footcandles on
Operating Table

531	710	531
633	821	633
734	880	734
734	880	734
633	821	633
531	710	531

2' - 7"

6' - 0"

Zone 2
200 fc

Operating
Room Zones

Zone 1
800 fc

Zone 2
200 fc

Zone 3
100 fc

5' - 6"

2' - 7"

30' - 0"

6' - 0"

6' - 0"

24' - 0"
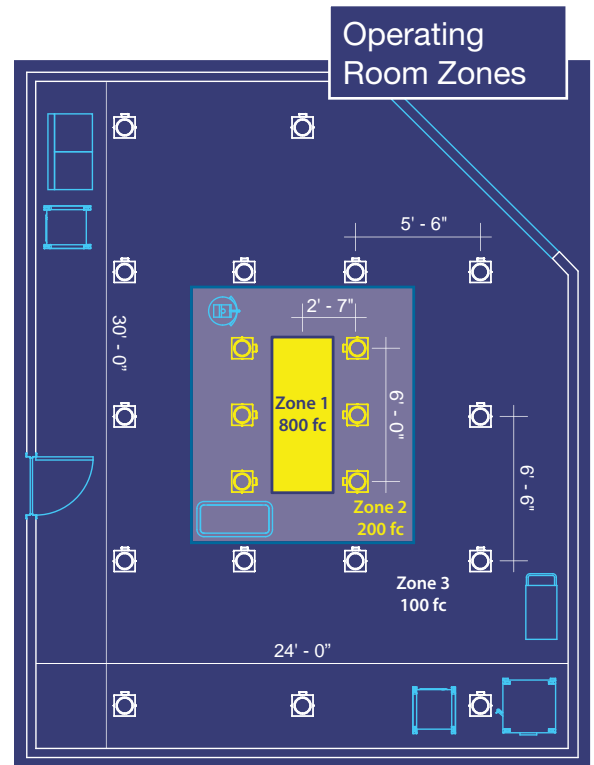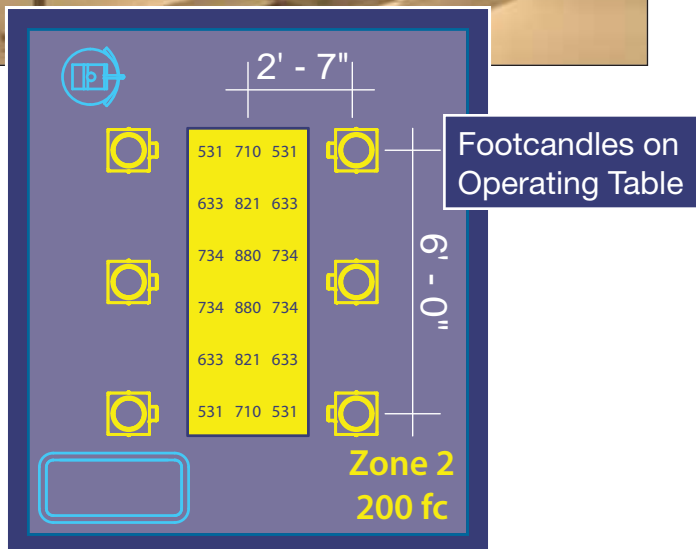
Two Adjustable Exam Lights

Placed 4' apart on centers over the head and foot of the bed.

LUMINAIRE

4'
[112cm]

22°
(35° Max)

SITE

8'
[244cm]

3'
[91cm]
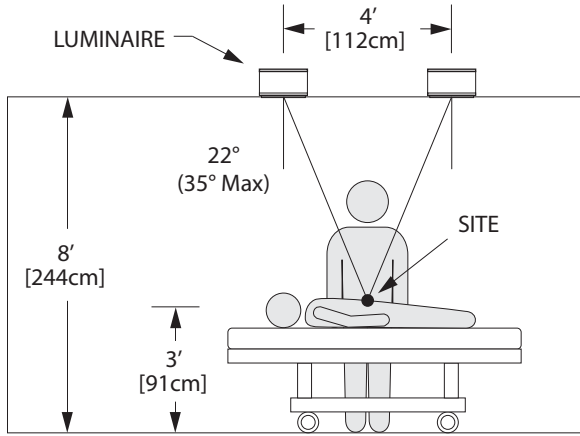
Two Adjustable Exam Lights in NICU

Placed over the foot corners of the bed.

LUMINAIRES

4'
[112cm]

2' 8''
[81cm]

23°
(35° Max)

30°

SITE

8'
[244cm]

3' 4''
[101cm]

Front View

Side View
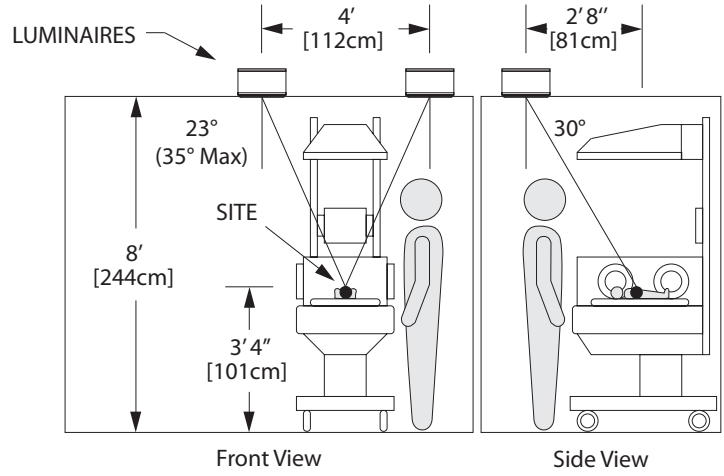
One Adjustable Exam Light

Placed over the head (or foot) of the bed to avoid obstructions in ceiling.

LUMINAIRE

22°
(35° Max)

SITE

8'
[244cm]

3'
[91cm]
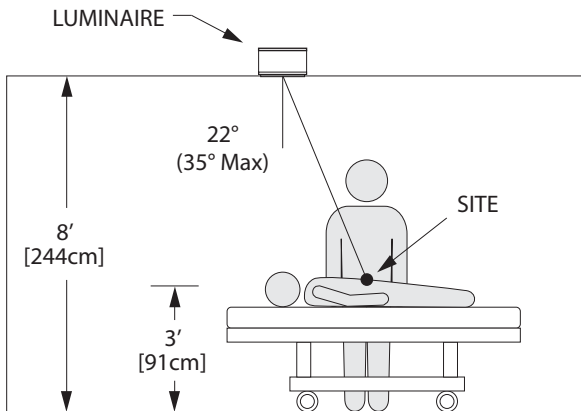
One Fixed Exam Light

Placed over center of the bed.
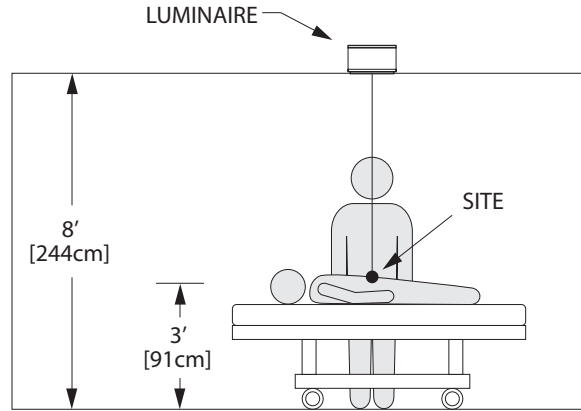
LUMINAIRE

SITE

8'
[244cm]

3'
[91cm]

Input Power: SPECIFY

-120   120V (50-60Hz) input and thermal protector.
-277   277V (50-60Hz) input and thermal protector.
-97   Specify other voltage. Consult factory.

LED Power Supply

-29   Two wire full range (100-1%) PWM dimming instead (Lutron). 120V only. Not available with Option -EI.
-D1   0-10V 1.0% dimming instead.
-D2   0-10V 0.1% dimming instead.
-D3   DALI 1.0% dimming instead.
-D4   DALI 0.1% dimming instead.
-D5   DMX512A 0% dimming instead.
-ECO   Digital driver for Lutron EcoSystem controls. Dims to 1% or consult factory.

-EI   REMOTE emergency inverter for 45% of rated lumens for -5000L, 55% for -3500L or 100% for -2000L or -1500L. Run time: 90+ minutes. 120 or 277V, 60 Hz input only. Specify voltage. Not for use with -29 or -FS.
-EM   INTERNAL emergency battery pack. Delivers 500 lumens. Run time: 90+ minutes.
-EMH   INTERNAL emergency battery pack. Delivers 1000 lumens. Run time: 90+ minutes. Marked spacings installation may be required; refer to specification sheet.
-ER   REMOTE emergency battery pack. Delivers 500 lumens. Run time: 90+ minutes.
-ERH   REMOTE emergency battery pack. Delivers 1000 lumens. Run time: 90+ minutes.

Color Temperature (CCT)

-27K   Color temperature 2700°K instead. 80+ CRI.
-30K   Color temperature 3000°K instead. 80+ CRI.
-41K   Color temperature 4100°K instead. 80+ CRI.
-50K   Color temperature 5000°K instead. 80+ CRI.
-HC   90+ CRI instead.

Optics (-NFL Standard)

-MFL   Medium flood distribution instead.

Trims

-32   White oversize trim ring. Specify O.D.
-45   Gasket between trim flange and ceiling.
-46   Gasket between trim and lens.

Other

-99   Special modification. Consult factory.
-FS   In-line fusing. Not for use with Option -EI.

(See specification sheets for availability and details.)

SmartPower™ EMERGENCY BACKUP SYSTEM - OPTIONAL

EMI-21220

- High efficiency pure sine wave inverter
- Operates up to (6) -5000L series fixtures
- 100% light output for up to 2 hours
- 120 / 277V, 60Hz input
- Less than 50 milliseconds transfer time
- May be mounted up to 1000 feet from load
- UL 924 Listed. Meets or exceeds all NEC and Life Safety Code Emergency Lighting Requirements
- THREE YEAR Limited Warranty. SEVEN YEAR pro-rata battery warranty

LUMINAIRE ORDERING

EXAMPLE

MUST SPECIFY		OPTIONAL	
Product Number	**Voltage**	**Options**	
MRV-08565-5000L **MRV-08565-3500L**	**-120** (120 volts) **-277** (277 volts) **-97** (Specify other)	See "Options" on prior page	**Ordering Example:** **MRV-08565-5000L-120**-30K-MFL

LUMEN SERIES AVAILABLE

Lumen Series Code	Nominal Lumens
-5000L	5000 Lumens
-3500L	3500 Lumens
-2000L	2000 Lumens
-1500L	1500 Lumens

HIGHER QUALITY LIGHT WITH OPTeCOLOR™

- Choose the color of your light: 3500K (Neutral white: Standard), 4100K (Cool white: Option -41K) or 5000K (Daylight white: Option -50K).
- Ultra-high 95+ CRI with high R9 (Red), R13 and R15 (Skin Colors) for accurate tissue color rendering.
- Cyanosis Observation Index (COI): Meets $\leq$ 3.3 AS/NZS 1680.2.5 Interior Lighting Part 2.5 Hospital and Medical Tasks standard, for 3500°K-5000°K sources. Also see website "Technical Notes".
- High illuminance for deep cavities or challenging positions. Up to 9000 delivered footcandles from 5 feet, dimmable to 10%.

Common CRI   High CRI

GREATER CONTROL

- Independent control of each lighthead permits adjustable pattern of light and dual task illumination.
- Intuitive and responsive controls allow for quick and accurate adjustment of direction and intensity of the light.
- Angles of illumination up to 60° ensure the task is properly illuminated regardless of the task location or clinicians' position.
- Dimming down to 10% permits staff to finely tune levels, as needed.

A SAFER ENVIRONMENT

- Recessed fixtures provide an open work space. The light remains recessed, protecting the patient from contaminants near or above the ceiling.
- IP65 trims with BioGard™ antimicrobial finish protect against pathogens.
- Multiple fixture systems eliminate shadows, enhancing visual acuity.
- Fusing (standard) protects electronic components.

GREATER COMFORT

- Cool LED illumination does not project heat toward the room, assuring patient and practitioner comfort and avoiding tissue desiccation.
- Inconspicuous: Fully recessed fixtures provide a more residential atmosphere; Remote control does not need to be used near the patient.
- Remote control technology employs invisible infrared signal, preventing the triggering of photosensitive conditions (migraines, epileptic seizures, stress).

IES Progress
Report Selections

DEPENDABILITY

- Redundancy of lightheads ensures illumination at all times. Redundancy of controls (wall or remote) ensures 24/7 adjustability of illumination intensity and position.
- Impact resistant design protects remote control.
- Loss deterring beeper feature on the remote control reminds staff to return the remote to its "home plate" on the wall control panel.

Exclusive Three Year Warranty • Designed and Produced in U.S.A. • UL, C-UL (Canada) Listed

INFRALED® 60 • INFRALED® • OPTeMED®

		Name	Application	Design	Delivered Lumens	Total Watts	Aperture (Inches)	Product #	Page
REMOTE CONTROL AND WALL CONTROL WITH RECESSED MOTORIZED LUMINAIRE(S)									**40-43**
		INFRALED® 60	LDRP/OB	Pair	8000	280	17	MRS-17600	**40-41**
		INFRALED®	Intraoperative OR Hybrid OR ICU/CCU Cardiac Cath EP Lab	Pair	6000	140	12	MRR-12620	**42-43**
		INFRALED®	ICU ER Patient Room	Single	3000	70	12	MRR-12622	
WALL CONTROL WITH RECESSED MOTORIZED LUMINAIRE(S)									**44-45**
		OPTeMED®	PICU/NICU ER Trauma	Pair	6000	140	12	MRR-12640	**44-45**
		OPTeMED®	PICU/NICU Patient Room Autopsy	Single	3000	70	12	MRR-12642	

THE BIRTHING LIGHTING SYSTEM / SOLUTION

LED Remote Controlled Motorized 60° High Angle Recessed Patient Low Voltage Lighting System

MRS-17600 (Two Light System)

2015 IES Progress
Report Selection

FEATURES

- Light delivered at angles up to 60° to match the clinician's line of site for superior illumination of the birthing canal.
- Four OPTeCOLOR™ LED light heads per system deliver up to 6000 fc with no heat in the beam.
- OPTeCOLOR™ LEDs provide 95+ CRI (with high R9, R13 and R15) for excellent color rendering of blood, tissue and skin tones. 60,000 hour life (L70) dramatically reduces maintenance frequency and cost.
- Cyanosis Observation Index (COI): Meets ≤ 3.3 AS/NZS 1680.2.5 Interior Lighting Part 2.5 Hospital and Medical Tasks standard, for 3500°K-5000°K sources.
- Redundancy of controls and electronic components ensures illumination and operation of fixtures.
- Fully recessed fixtures with BioGard™ antimicrobial trims are unobtrusive and inconspicuous, providing a safe and open space for staff and a home-like atmosphere for patients.
- Full control of lighting system (direction, intensity, power) from low voltage, Class 2 remote and wall controls.
- Remote control uses invisible and safe infrared signals. Impact resistant design protects remote from common mishaps. Loss deterring beeper reminds staff to return the remote to the wall control when finished.
- Smooth surfaces and minimal surface areas (both fixtures and controls) are easy to clean and disinfect.
- Kirlin's exclusive three year limited warranty (one year remote control).
- Includes 2' x 2' ceiling pan for easy installation in T-bar ceiling or see Option -47.

APPLICATIONS

- Birthing Suites
- Post-partum
- Labor & Delivery
- OB/GYN/LDRP
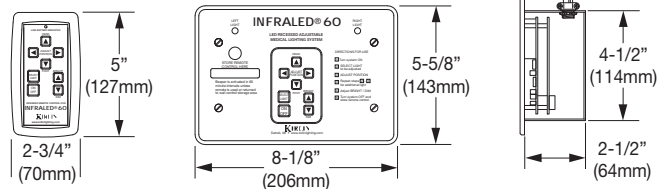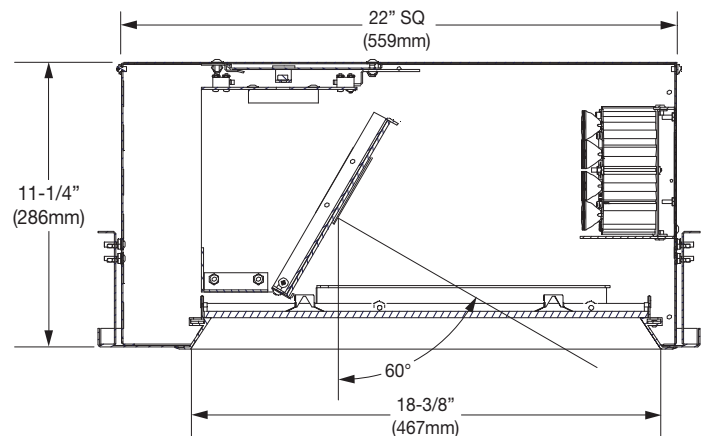
22" SQ
(559mm)

11-1/4"
(286mm)

60°

18-3/8"
(467mm)

5"
(127mm)

2-3/4"
(70mm)

INFRALED® 60

8-1/8"
(206mm)

5-5/8"
(143mm)

4-1/2"
(114mm)

2-1/2"
(64mm)

POPULAR OPTIONS

Input Power: SPECIFY

-120 120V (50-60Hz) input and thermal protector.
-58   277/120 volt stepdown transformer for 277 volt line input, prewired into each fixture; with 277 volt thermal protector.
-97   For other input supply voltages, consult factory.
-98   347/120 volt stepdown transformer for 347 volt line input, prewired into each fixture; with 120 volt thermal protector. Adds 10 watts to each fixture load.

Color Temperature (CCT)

-41K 4100°K instead of 3500°K. 95+ CRI.
-50K 5000°K instead of 3500°K. 95+ CRI.

Trim and Other

-47   Plaster frame bottom pan. For installation in hard ceilings.
-87   Custom length (> 35 feet) plenum rated wall control cables (4). Consult factory.
-94   Custom color self-flanged flare trim instead. Consult factory.

-99   Special modification. Consult factory.
-BI   Beeper (remote control) inactivated by factory.
-RC   Extra remote control.
-RS   Remote infrared sensor with 35' cable. Ceiling mount typical.
-SE   Fixtures modified for seismic anchorage (by others). Meets California OSHPD and International Building Codes.

(See specification sheets for availability and details.)

THE BIRTHING LIGHTING SYSTEM / SOLUTION

Recommendations for Typical Installation

- Fixtures placed 4' apart (on centers) to project light on either side of practitioner's head and over practitioner's shoulders.

- Fixture setback from break in bed determined by ceiling height, and position and height of practitioners.

- Ideal angle of illumination should be between 50°-55° for sitting practitioners which provides future flexibility should task location change. Consult factory for assistance in determining ideal location of fixtures.

- Wall control placed in unobstructed location and within line of sight from practitioner's location.

Typical Side View: 8' Ceiling Height
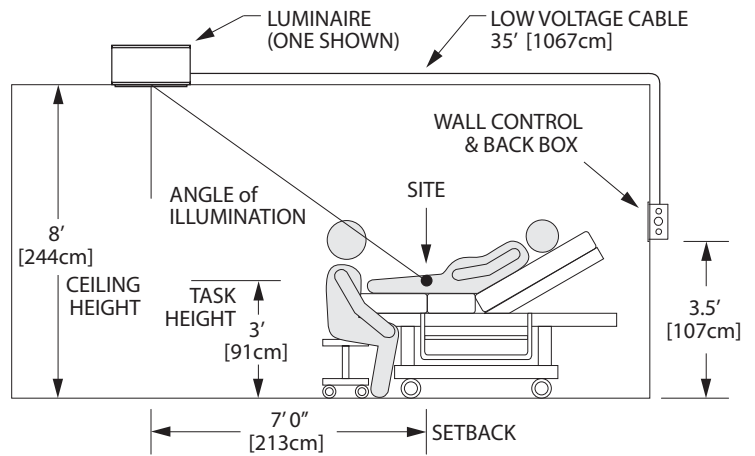
Recommended Fixture Setback / Location
with Angle of Illumination and Light Levels

Sitting Practitioners   Photometric testing by ITL (Boulder, CO) ITL Test No. 84926

Ceiling Height	Setback from Break in Bed		Angle of Illumination	Footcandles* on Task
8	**7.0**	**OPTIMAL**	**54.5**	**5105**
	6.0	Alternative	50.2	6052
8.5	**8.0**	**OPTIMAL**	**55.5**	**4080**
	7.0	Alternative	51.8	4851
9	**8.0**	**OPTIMAL**	**53.1**	**3850**
	7.0	Alternative	49.4	4515
9.5	**9.0**	**OPTIMAL**	**54.2**	**3163**
	8.0	Alternative	50.9	3622
10	**9.0**	**OPTIMAL**	**52.1**	**2997**

Alternative setback provided for room configurations that do not allow fixture placement in optimal setback location. For additional setback locations, consult factory.

*LUX = fc x 10.7639

Typical Top View: 8' Ceiling Height
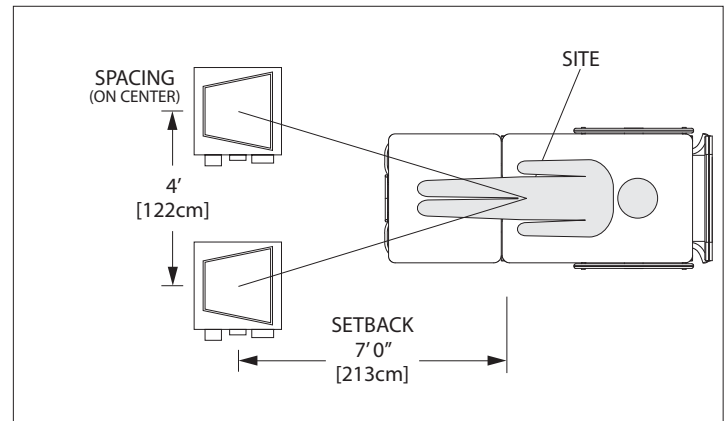
Sitting Practitioners
4' Spacing • 3' Work Plane • 53° Angle of Illumination

Typical Top View: 9' Ceiling Height
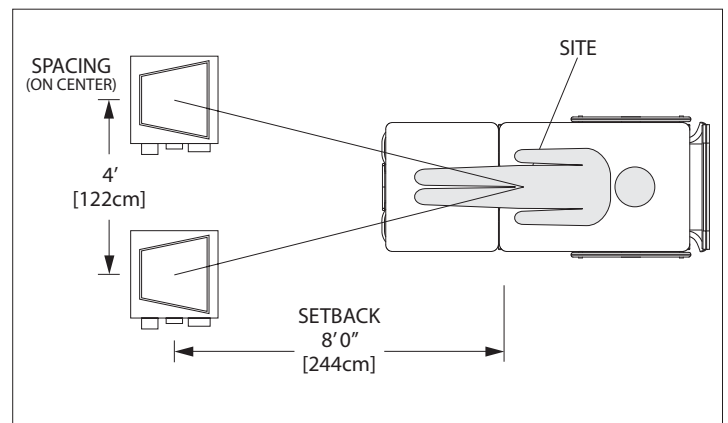
Sitting Practitioners
4' Spacing • 3' Work Plane • 53° Angle of Illumination

LED Remote Controlled Motorized Recessed Patient Low Voltage Lighting System

MRR-12620 (Two Light System)
MRR-12622 (One Light System)

FEATURES

- OPTeCOLOR™ LEDs deliver up to 10,000 fc with no heat in the beam.
- OPTeCOLOR™ LEDs provide 95+ CRI (with high R9, R13 and R15) for excellent color rendering of blood, tissues and skin tones. 60,000 hour life (L70) dramatically reduces maintenance frequency and cost.
- Cyanosis Observation Index (COI): Meets ≤ 3.3 AS/NZS 1680.2.5 Interior Lighting Part 2.5 Hospital and Medical Tasks standard, for 3500°K-5000°K sources.
- Light delivered at angles up to 35° (50° with Option -81) with full 360° rotation to provide coverage of the patient.
- Fully recessed fixtures with BioGard™ antimicrobial trims are unobtrusive and inconspicuous, providing a safe and open space for staff and a home-like atmosphere for patients.
- Full control of lighting system (direction, intensity, power) from low voltage, Class 2 remote and wall controls. Independent direction control of each light. Light beams may be aimed at 2 separate sites or superimposed.
- Remote control uses invisible and safe infrared signals. Impact resistant design protects remote from common mishaps. Loss deterring beeper reminds staff to return the remote to the wall control when finished.
- Smooth surfaces and minimal surface areas (both fixtures and controls) are easy to clean and disinfect.
- Kirlin's exclusive three year limited warranty (one year remote control).
- Easily installs in T-bar or drywall ceiling with mounting hardware provided.

APPLICATIONS

• ICU/CCU	• ER
• NICU/PICU	• CATH LAB
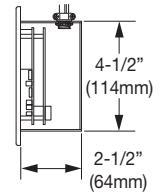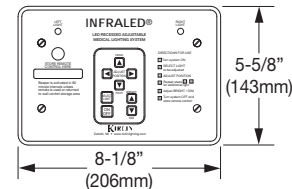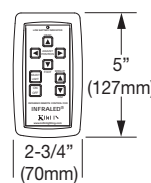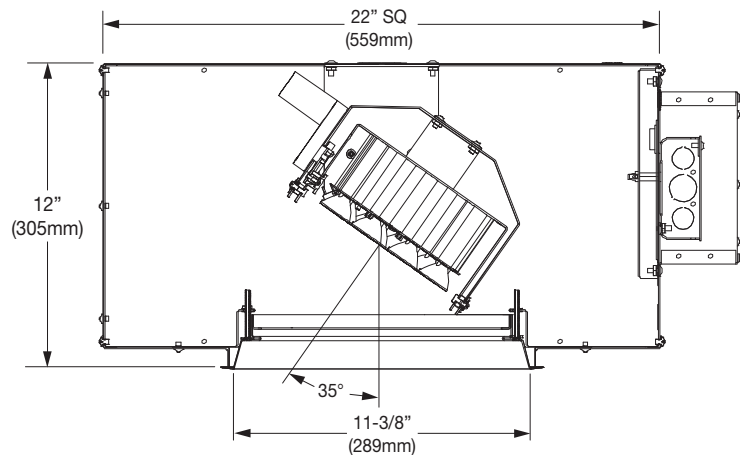
POPULAR OPTIONS

Input Power: SPECIFY

- **-120** 120V (50-60Hz) input and thermal protector.
- **-58** 277/120V stepdown transformer for 277V line input, prewired into each fixture; with 277V thermal protector.
- **-97** For other input supply voltages, consult factory.
- **-98** 347/120V stepdown transformer for 347V line input, prewired into each fixture; with 120V thermal protector. Adds 10 watts to each fixture load.

Color Temperature (CCT)

- **-41K** 4100°K instead of 3500°K. 95+ CRI.
- **-50K** 5000°K instead of 3500°K. 95+ CRI.

Trim and Other

- **-32** White oversize trim ring. Specify O.D.
- **-81** 15° bottom pan achieves 50° high angle illumination in one direction. Maximum recessed depth 15-1/8".
- **-87** Custom length (> 35 feet) plenum rated wall control cables (4 for MRR-12620; 2 for MRR-12622). Specify length.
- **-94** Custom color self-flanged flare trim instead. Consult factory.
- **-99** Special modification. Consult factory.
- **-BI** Beeper (remote control) inactivated by factory.
- **-IP** IP65 rated trim and lens.
- **-RC** Extra remote control.
- **-RS** Remote infrared sensor with 35' cable. Ceiling mount typical.
- **-SE** Fixtures modified for seismic anchorage (by others). Meets California OSHPD and International Building Codes.

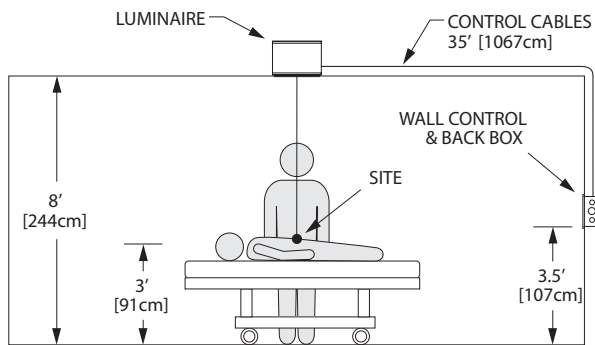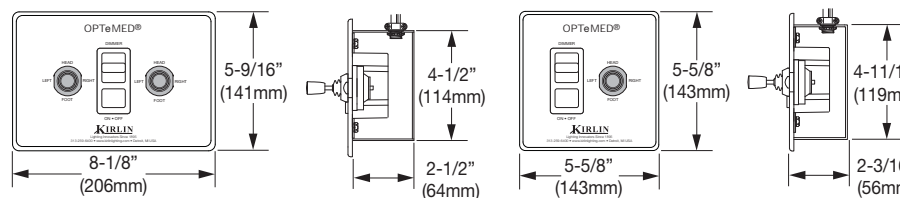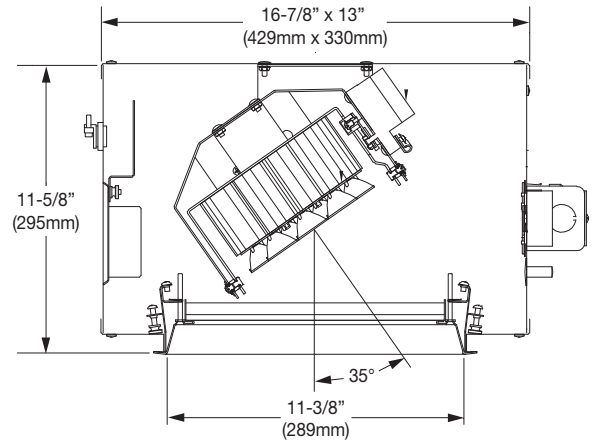(See specification sheets for availability and details.)

Typical Side View: MRR-12620 in Patient Room

LUMINAIRES
4' [112cm]
CONTROL CABLE 35' [1067cm]
22° (35° Max)
WALL CONTROL & BACK BOX
SITE
8' [244cm]
3' [91cm]
3'6" [107cm]

Typical Side View: MRR-12620 in NICU

4' [112cm]
2'8" [81cm]
23° (35° Max)
30°
8' [244cm]
3'6" [107cm]
3'4" [101cm]
Front View
Side View
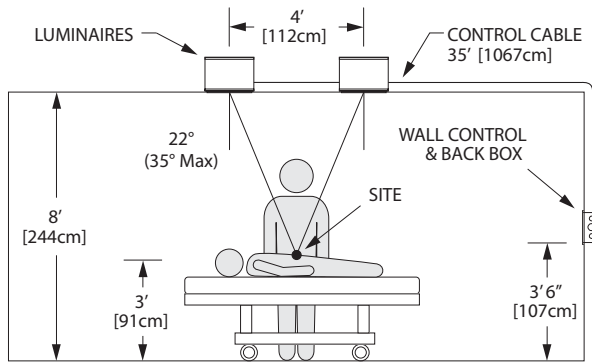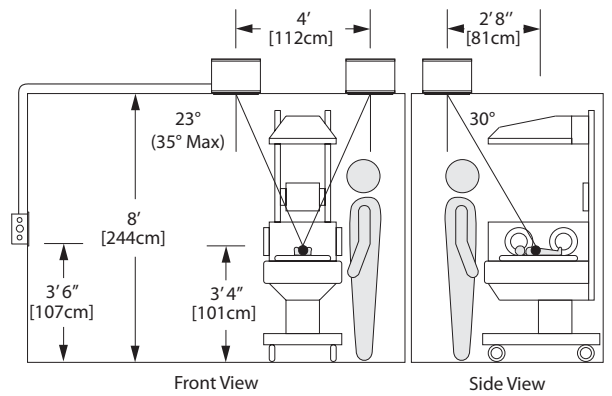
Typical Side View: MRR-12622 in Patient Room

LUMINAIRE
CONTROL CABLES 35' [1067cm]
WALL CONTROL & BACK BOX
SITE
8' [244cm]
3' [91cm]
3.5' [107cm]

OPTeCOLOR™ LEDs

Optional 15° bottom pan (Option -81) allows lighthead to be **tilted up to 50° for high angle illumination** or to accommodate fixture location further from the bed.

Footcandle* Distribution Data: MRR-12620 (Two Light System) 4' Spacing

Photometric testing by ITL (Boulder, CO)
I.T.L. Test No. 83197

8990 2150 160 60

6670 2460 200 60

5110 2550 240 60
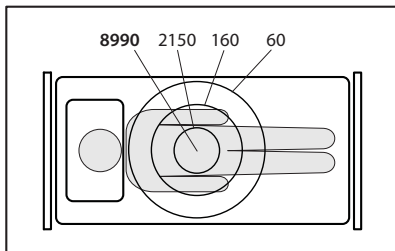
| 8' Ceiling: | 3' Work Plane | 8990 fc |
| | 3'4" Work Plane | 10000 fc |

| 9' Ceiling: | 3' Work Plane | 6670 fc |
| | 3'4" Work Plane | 7330 fc |

| 10' Ceiling: | 3' Work Plane | 5110 fc |
| | 3'4" Work Plane | 5570 fc |
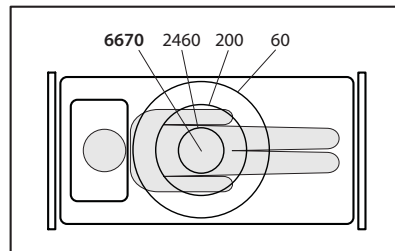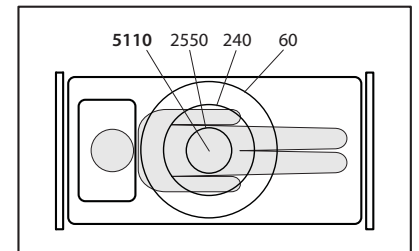
Footcandle* Distribution Data: MRR-12622 (One Light System)

5610 920 70 30

3900 1150 90 30

2870 1250 110 30
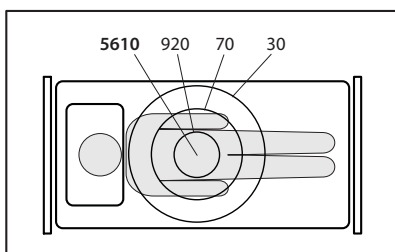
| 8' Ceiling: | 3' Work Plane | 5610 fc |
| | 3'4" Work Plane | 6420 fc |

| 9' Ceiling: | 3' Work Plane | 3900 fc |
| | 3'4" Work Plane | 4370 fc |

| 10' Ceiling: | 3' Work Plane | 2870 fc |
| | 3'4" Work Plane | 3160 fc |
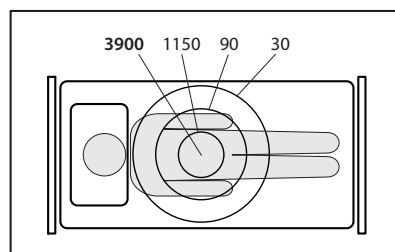
*LUX = fc x 10.7639

OPTeMED®
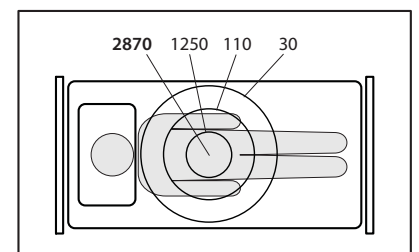
LED Motorized High CRI / R9 Recessed Patient Low Voltage Lighting System

2014 IES Progress Report Selection

MRR-12640 (Two Light System)
MRR-12642 (One Light System)

MRR-12640   MRR-12642

FEATURES

- OPTeCOLOR™ LEDs deliver up to 10,000 fc with no heat in the beam.
- OPTeCOLOR™ LEDs provide 95+ CRI (with high R9, R13 and R15) for excellent color rendering of blood, red tissues and skin tones. 60,000 hour life (L70) dramatically reduces maintenance frequency and cost.
- Cyanosis Observation Index (COI): Meets ≤ 3.3 AS/NZS 1680.2.5 Interior Lighting Part 2.5 Hospital and Medical Tasks standard, for 3500°K-5000°K sources.
- Light delivered at angles up to 35° (and 50° with Option -81) with full 360° rotation to provide coverage of the patient.
- One hand operation of wall control: joystick (360°) for direction; slide dimmer for intensity (100-10%); push button for power on-off.
- Independent direction control of each light. Light beams may be aimed at 2 separate sites or superimposed.
- Fully recessed fixtures with BioGard™ antimicrobial trims are unobtrusive and inconspicuous, providing a safe and open space for staff and a home-like atmosphere for patients. Easily installs in T-bar or drywall ceilings with mounting hardware provided.
- Smooth surfaces and minimal surface areas (both fixtures and controls) are easy to clean and disinfect.
- Kirlin's exclusive three year limited warranty.

APPLICATIONS

- ICU/CCU
- ER
- NICU/PICU
- PATIENT ROOM

16-7/8" x 13" (429mm x 330mm)
11-5/8" (295mm)
35°
11-3/8" (289mm)

5-9/16" (141mm)
8-1/8" (206mm)
4-1/2" (114mm)
2-1/2" (64mm)
5-5/8" (143mm)
5-5/8" (143mm)
4-11/16" (119mm)
2-3/16" (56mm)

POPULAR OPTIONS

Input Power: SPECIFY
-120   120V (50-60Hz) input and thermal protector.
-58   277/120 volt stepdown transformer for 277 volt line input, prewired into each fixture; with 277 volt thermal protector.
-97   For other input supply voltages, consult factory.
-98   347/120 volt stepdown transformer for 347 volt line input, prewired into each fixture; with 120 volt thermal protector. Adds 10 watts to each fixture load.

Color Temperature (CCT)
-41K   4100°K instead of 3500°K. 95+ CRI.
-50K   5000°K instead of 3500°K. 95+ CRI.

Trim and Other
-32   White oversize trim ring. Specify O.D.
-81   15° bottom pan achieves 50° high angle illumination in one direction. Maximum recessed depth 15-1/8".
-87   Custom length (> 35 feet) plenum rated wall control cables (4 for MRR-12640; 2 for MRR-12642). Specify length in feet.

-94   Custom color self-flanged flare trim instead. Consult factory.
-99   Special modification. Consult factory.
-IP   IP65 rated trim and lens.
-SE   Fixtures modified for seismic anchorage (by others). Meets California OSHPD and International Building Codes. Consult factory.

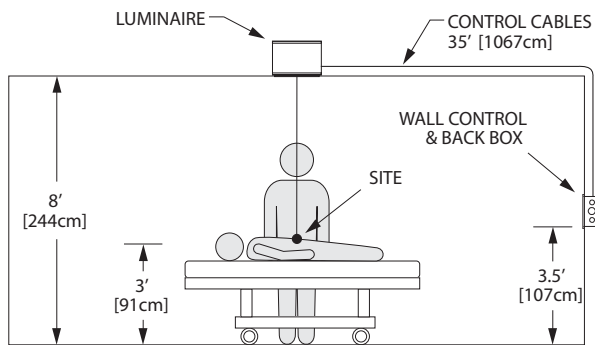(See specification sheets for availability and details.)

Typical Side View: MRR-12640 in Patient Room

LUMINAIRES
4' [112cm]
CONTROL CABLE 35' [1067cm]
22° (35° Max)
WALL CONTROL & BACK BOX
8' [244cm]
SITE
3' [91cm]
3'6" [107cm]

Typical Side View: MRR-12640 in NICU

4' [112cm]
2'8" [81cm]
23° (35° Max)
30°
8' [244cm]
3'6" [107cm]
3'4" [101cm]
Front View
Side View

Typical Side View: MRR-12642 in Patient Room

LUMINAIRE
CONTROL CABLES 35' [1067cm]
WALL CONTROL & BACK BOX
8' [244cm]
SITE
3' [91cm]
3.5' [107cm]

OPTeCOLOR™ LEDs

IEC FC

Optional 15° bottom pan (Option -81) allows lighthead to be **tilted up to 50° for high angle illumination** or to accommodate fixture location further from the bed.

Footcandle* Distribution Data: MRR-12640 (Two Light System) 4' Spacing

Photometric testing by I.T.L. (Boulder, CO)
I.T.L. Test No. 83197

8990 2150 160 60

6670 2460 200 60

5110 2550 240 60
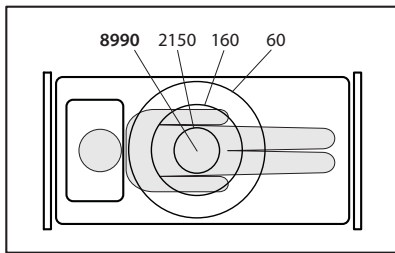
| 8' Ceiling: | 3' Work Plane | 8990 fc | 9' Ceiling: | 3' Work Plane | 6670 fc | 10' Ceiling: | 3' Work Plane | 5110 fc |
| | 3'4" Work Plane | 10000 fc | | 3'4" Work Plane | 7330 fc | | 3'4" Work Plane | 5570 fc |
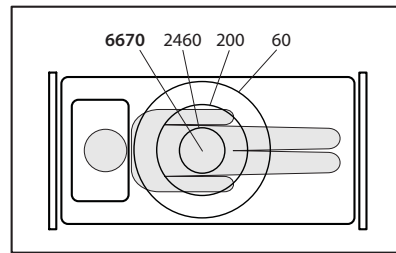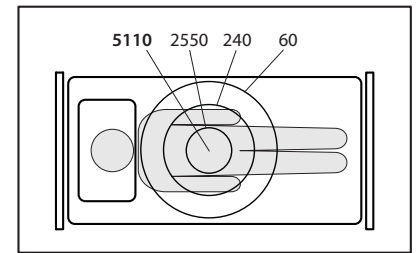
Footcandle* Distribution Data: MRR-12642 (One Light System)

5610 920 70 30

3900 1150 90 30

2870 1250 110 30

| 8' Ceiling: | 3' Work Plane | 5610 fc | 9' Ceiling: | 3' Work Plane | 3900 fc | 10' Ceiling: | 3' Work Plane | 2870 fc |
| | 3'4" Work Plane | 6420 fc | | 3'4" Work Plane | 4370 fc | | 3'4" Work Plane | 3160 fc |

*LUX = fc x 10.7639

SHOWER: A SAFER ENVIRONMENT

- Dead-front electrically non-conductive trims standard.
- Higher light levels provided, ensuring effective patient bathing and shower cleaning/maintenance.
- Impact resistant lenses and reinforced trims provide safety for patient and staff.
- Fully gasketed trims reduce moisture intrusion into recessed housing.

DESIGNED SPECIFICALLY FOR THE DEMANDS OF SHOWERS
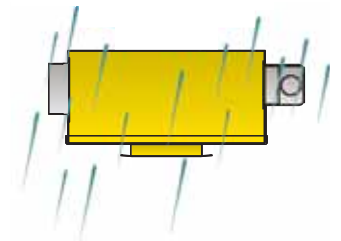
- Wet, damp or dry locations (covered ceilings) listing.
- Corrosion resistant all-aluminum construction results in cooler operation, extending every component life by 50%.
- KIRLIN exclusive acrylic enamel finish protects aluminum from corrosion and exceeds ASTM 1000 hour salt spray test.
- LEDs produce less heat than traditional light sources, significantly reducing the load on hospital HVAC systems.
- Shallow and super shallow housings for easier installation into crowded plenums.

IP65 trims protect against pathogens passing through the trim, either into the plenum or into the room environment.

DEPENDABILITY and REDUCED OPERATING COSTS

- Long LED life, up to 90,000 hours (L70), eliminates lamp changes over the life of the system.
- Power savings of up to 80% versus traditional light sources.
- Fully sustainable. Modular internal components are visible and easily accessed through the aperture of the fixture. Simple lighthead / trim component change available to modify spacing criteria, if desired, anytime. Replacement components are available years into the future.

WARMING LIGHTS:

- For shower, burn, trauma, C-section, PICU, NICU, oncology, dialysis and LDRP areas.
- Tempered lens for safety; narrow or medium distribution of heat from choice of lamp source.

Exclusive Five Year Warranty • Designed and Produced in U.S.A. • UL, C-UL (Canada) Listed

SECTION IV: SHOWER & WARMING LIGHTS

		Design	Function	Aperture (Inches)	Product #	Performance		Page
						Lumens	Watts	
SHOWER LIGHTS (RECESSED DEADFRONT)								48-49
		Flare Regressed Lens	Downlight	4	MRR-04700-2500L	2500	35	
		Flare Regressed Lens	Downlight	6	MRR-06705-2000L	2000	25	48
					MRR-06705-1500L	1500	20	
					MRR-06705-1000L	1000	11	
		Flare Regressed Lens	Downlight	6	MRR-06710-2500L	2500	35	
		IP65 Tamper Resistant	Downlight	7	MRV-07715-2000L	2000	25	48
					MRV-07715-1500L	1500	20	
					MRV-07715-1000L	1000	11	
		Flare Super Shallow	Downlight	4	MRR-04720-1500L	1500	20	48
					MRR-04720-1000L	1000	11	
		Flare Super Shallow	Downlight	5	MRR-05725-2500L	2500	35	
		Drop Polycarbonate Trim	Downlight	5	MRR-05730-1500L	1500	20	49
					MRR-05730-1000L	1000	11	
		Drop Polycarbonate Trim	Downlight	5	MRR-05735-2500L	2500	35	
WARMING LIGHTS								49
		Regressed Borosilicate Fresnel Lens	Downlight	9	✱ MRR-09740	175W PAR38 or 250W R40 Tungsten Halogen		49
		Regressed Tempered Glass Lens	Downlight	9	✱ MRR-09742	250 T4Q Tungsten Halogen		
POPULAR OPTIONS								49

✱ = New Product

ALL KIRLIN SHOWER & WARMING LIGHTS ARE U.L. LISTED WET LOCATIONS

SECTION IV: SHOWER LIGHTS - FLARE REGRESSED LENS
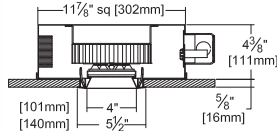
4"

MRR-04700-2500L

Dimensions: 11⅞" sq [302mm], 4⅜" [111mm], [101mm], 4", [140mm], 5½", ⅝" [16mm]

PERFORMANCE (-2500L SERIES)

2800 LUMENS
35W
MFL (STD)
SC: 0.8
LPW: 77
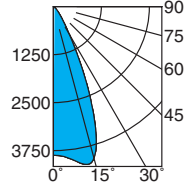
Cone of Light ▲

Dist.	FC	Dia.
6	107.0	5.0
8	60.5	6.6
10	38.7	8.3
12	26.9	9.9
14	19.7	11.6
16	15.1	13.2
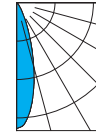
-NFL
Lm: 2390
SC: 0.5

6"
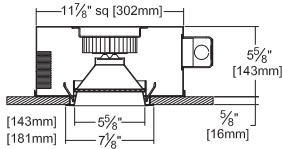
MRR-06705-2000L
MRR-06705-1500L
MRR-06705-1000L
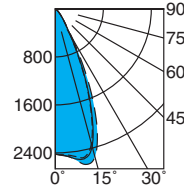
IC

Dimensions: 11⅞" sq [302mm], 5⅝" [143mm], [143mm], 5⅝", [181mm], 7⅛", ⅝" [16mm]

PERFORMANCE (-1500L SERIES)

1721 LUMENS
20W
MFL (STD)
SC: 0.8
LPW: 83

Cone of Light ▲

Dist.	FC	Dia.
6	67.3	4.9
8	37.8	6.6
10	24.2	8.2
12	16.8	9.9
14	12.4	11.5
16	9.5	13.2
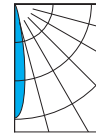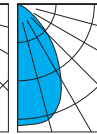
-SPT — Lm: 1744 SC: 0.3
-NFL — Lm: 1553 SC: 0.6
-WFL — Lm: 1514 SC: 1.1

6"
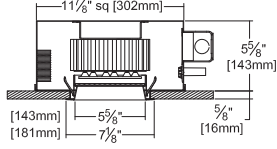
MRR-06710-2500L
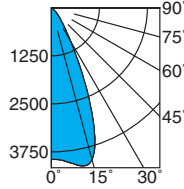
Dimensions: 11⅞" sq [302mm], 5⅝" [143mm], [143mm], 5⅝", [181mm], 7⅛", ⅝" [16mm]

PERFORMANCE (-2500L SERIES)

2993 LUMENS
35W
MFL (STD)
SC: 0.8
LPW: 81

Cone of Light ▲

Dist.	FC	Dia.
6	109.0	5.0
8	61.6	6.7
10	39.4	8.4
12	27.4	10.0
14	20.1	11.7
16	15.4	13.4
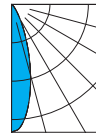
-NFL — Lm: 2888 SC: 0.5
-WFL — Lm: 2379 SC: 1.0

SHOWER LIGHTS - IP65 & TAMPER RESISTANT REGRESSED LENS

7"
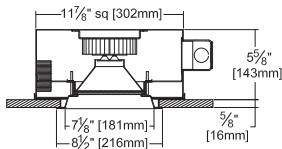
MRV-07715-2000L
MRV-07715-1500L
MRV-07715-1000L

IC

Dimensions: 11⅞" sq [302mm], 5⅝" [143mm], 7⅛" [181mm], 8½" [216mm], ⅝" [16mm]

PERFORMANCE (-1500L SERIES)

1495 LUMENS
20W
MFL (STD)
SC: 0.8
LPW: 72
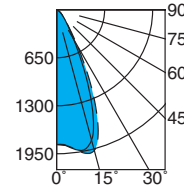
Cone of Light ▲

Dist.	FC	Dia.
6	50.7	5.1
8	28.5	6.8
10	18.2	8.5
12	12.7	10.2
14	9.3	11.9
16	7.1	13.6
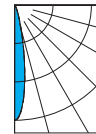
-SPT — Lm: 1581 SC: 0.3
-NFL — Lm: 1468 SC: 0.6
-WFL — Lm: 1321 SC: 1.0

SHOWER LIGHTS - SUPER SHALLOW FLARE REGRESSED LENS

4"
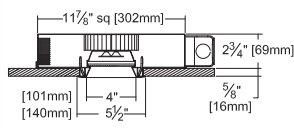
MRR-04720-1500L
MRR-04720-1000L
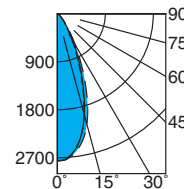
IC

Dimensions: 11⅞" sq [302mm], 2¾" [69mm], [101mm], 4", [140mm], 5½", ⅝" [16mm]

MAXIMUM PERFORMANCE (-1500L SERIES)

1685 LUMENS
20W
MFL (STD)
SC: 0.7
LPW: 80

Cone of Light ▲

Dist.	FC	Dia.
6	76.6	4.1
8	43.1	5.5
10	27.6	6.8
12	19.2	8.2
14	14.1	9.6
16	10.8	11.0
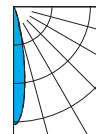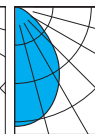
-NFL — Lm: 1800 SC: 0.4
-WFL — Lm: 1363 SC: 1.1

5"

MRR-05725-2500L

Dimensions: 11⅞" sq [302mm], 2¾" [69mm], [145mm], 5¾", [178mm], 7", ⅝" [16mm]
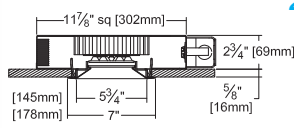
PERFORMANCE (-2500L SERIES)

2753 LUMENS
35W
MFL
SC: 0.7
LPW: 75
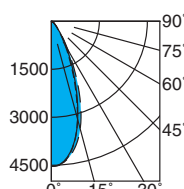
Cone of Light ▲

Dist.	FC	Dia.
6	126.1	4.1
8	70.9	5.4
10	45.4	6.8
12	31.5	8.1
14	23.2	9.5
16	17.7	10.8

www.kirlinlighting.com

SECTION IV: SHOWER LIGHTS - DROP POLYCARBONATE TRIM

5"

MRR-05730-1500L
MRR-05730-1000L

11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
[127mm] 5"
[203mm] 8"
⅝" [16mm]

🏠 IC

MAXIMUM PERFORMANCE (-1500L SERIES)
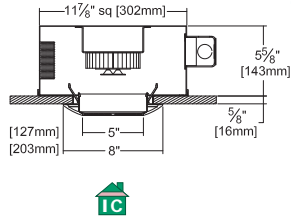
1078 LUMENS

20W

MFL

SC: 0.7

LPW: 52

Cone of Light ▲

225
450
675

90°
75°
60°
45°
0° 15° 30°
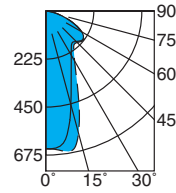
Dist.	FC	Dia.
6	17.9	4.5
8	10.1	5.9
10	6.5	7.4
12	4.5	8.9
14	3.3	10.4
16	2.5	11.9

5"

MRR-05735-2500L

11⁷⁄₈" sq [302mm]
4⅜" [111mm]
[127mm] 5"
[203mm] 8"
⅝" [16mm]

PERFORMANCE (-2500L SERIES)
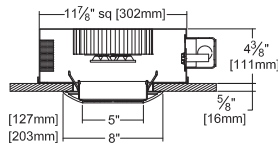
1878 LUMENS

35W

WFL

SC: 0.9

LPW: 54

Cone of Light ▲

300
600
900

90°
75°
60°
45°
0° 15° 30°
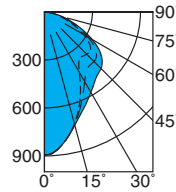
Dist.	FC	Dia.
6	24.9	5.4
8	14.0	7.2
10	9.2	8.9
12	6.2	10.7
14	4.6	12.5
16	3.5	14.3

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

WARMING LIGHTS

9"

MRR-09740

13¾" [349mm]
8⅜" [213mm]
9¾" [248mm]
⅝" [17mm]

250W R40 PERFORMANCE

250W

R40

SC: 0.6

Cone of Light ▲

850
1700
2550

90°
75°
60°
45°
0° 15° 30°
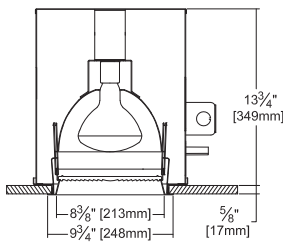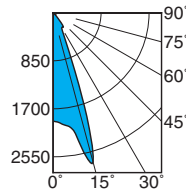
Dist.	FC	Dia.
6	53.3	4.5
8	30.0	6.0
10	19.2	7.5
12	13.3	8.9
14	9.8	10.4
16	7.5	11.9

For Patient Comfort

9"

MRR-09742

11⁷⁄₈" sq [302mm]
9½" [240mm]
8½" [216mm]
9¾" [248mm]
⅝" [17mm]

250W T4Q PERFORMANCE

250W

T4Q

SC: 0.4

Cone of Light ▲

4000
8000
12000

90°
75°
60°
45°
0° 15° 30°
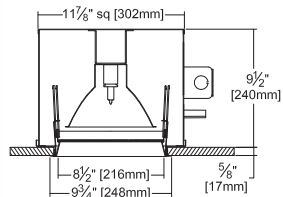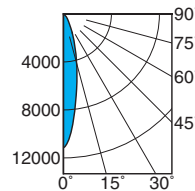
Dist.	FC	Dia.
6	309.8	2.3
8	174.3	3.1
10	111.5	3.9
12	77.5	4.6
14	56.9	5.4
16	43.6	6.2

C-Section Burn Unit Trauma Oncology Dialysis

POPULAR OPTIONS

Input Power: SPECIFY

-120 120V (50-60Hz) input and thermal protector.
-277 277V (50-60Hz) input and thermal protector.
-97 Specify other voltage. Consult factory.

LED Power Supply

-EI REMOTE emergency inverter. 100% for -2000L and lower. Not available for -2500L. Run time: 90+ minutes. 120 or 277V, 60Hz input only. Specify voltage. Not for use with Option -FS.

Color (CCT and CRI)

-27K Color temperature 2700°K instead.
-30K Color temperature 3000°K instead.

-41K Color temperature 4100°K instead.
-50K Color temperature 5000°K instead.
-HC 90+ CRI instead.

Optics

-NFL Narrow flood distribution instead.
-SPT Spot distribution instead.
-WFL Wide flood distribution instead.

Lenses and Trims

-13 Vandal resistant dual lens system: prismatic high strength acrylic above, clear poly below.
-17 Prismatic high strength acrylic lens instead.
-21 White translucent flat poly diffuser instead.
-23 Frosted tempered microprismatic lens instead.

-32 White oversize trim ring. Specify O.D.
-94 Custom color/finish. Specify. Consult factory.
-BG Antimicrobial Kirlin BioGard™ white (only) trim finish.
-WA White acrylic (flat) diffuser instead; will provide wide flood distribution.

Other

-79 Extension collar for ceilings up to 2-5/8" thick.
-99 Special modification. Consult factory.
-FS In-line fusing. Not for use with Option -EI.

(See specification sheets for availability and details.)

RADIANCE by KIRLIN: TUNABLE WHITE LIGHTING THAT REPLICATES FULL SPECTRUM SUNLIGHT

There is strong evidence that light is critical to human physiology and can be extremely beneficial to patients as well as staff in healthcare settings. Proper lighting impacts the performance of visual tasks, supports the body's circadian system, affects mood and perception, and enables critical chemical reactions in the body. In general, light impacts patient outcomes by reducing depression, decreasing length of stay, improving sleep and circadian rhythm, and improving adjustment to night-shift work among staff. Here at Kirlin, we are solution-based providers of quality lighting products that help optimize patient outcomes. Leave the passive, artificial environment behind, with dynamic, tunable white **RADIANCE** luminaires from Kirlin.

RADIANCE: Change the Color, Change the Intensity, Change Your Mood

RADIANCE by Kirlin offers these benefits:
- Full Range: 1650°K to 8000°K, which replicates health-promoting sunlight
- Accurate color: 90+ CRI on all models (standard)
- Consistent Color: 2 step binning controls color throughout life
- Dim to Dark: Intensity variability down to 0.1%

RADIANCE: We Don't Pick the Controls, You Do

Natural sunlight varies throughout the day in both color and intensity, and now your lighting in critical wellness areas can too. Whether you wish to provide the ability to instantaneously alter the lighting environment "on demand", or to provide an "automated" circadian-like system, **RADIANCE** delivers.

You specify your control methodology, choosing from:

Simple to operate:
1. 0-10V controls (iOS Bluetooth compatible)
2. DMX control protocol with remote device management
3. DALI Systems

Circadian-supportive, automated, programmable controls:
1. Legrand Wattstopper DLM
2. Lutron EcoSystem

RADIANCE has been certified for these controls:

RADIANCE: Deliver the Sun – Anywhere

Many hospital areas benefit from **RADIANCE**. In the NICU, premature infants require help in developing their diurnal sleep cycle. In Patient Rooms and ICUs, a more natural lighting environment improves well-being, sleep and healing. In Behavioral Health, the ability to calm patients with warm lighting can improve mood stabilization. Patient, staff and visitor alike will reap the benefits of full range chromaticity with superior CRI from Kirlin **RADIANCE** Series.

RADIANCE is also being used in many other applications:

Residential ☀ Exterior Architecture ☀ Landscape ☀ Law Firms
Merchandising ☀ Hospitality ☀ Grocery Store Aisles ☀ Retail
Museums ☀ Classrooms ☀ Offices

www.kirlinlighting.com

		Design	Function	Aperture (Inches)	Product #	Performance		Page
						Lumens	Watts	
		Downlight Round Open Appearance	NICU, PICU, ICU Patient Room Behavioral Health Recovery Cafeteria Areas of Respite Lobby Patient Registration / Admissions Waiting Rooms Nurse Stations	4	✳ MRR-04752-1300L	1300	38	51
		Adjustable Round Open Appearance		4	✳ MRR-04754-1300L	1300	38	
		Wall Wash Round Lens / Open Appear.		4	✳ MRR-04756-1300L	1300	38	52
		Downlight Square Open Appearance		4	✳ MRS-04770-1300L	1300	38	
		Adjustable Square Open Appearance		4	✳ MRS-04772-1300L	1300	38	
		Wall Wash Square Lens / Open Appear.		4	✳ MRS-04774-1300L	1300	38	
POPULAR OPTIONS - SECTIONS V - VIII								63
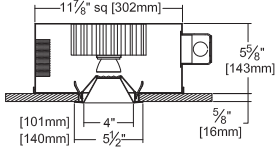
✳ = New Product

4"

Downlight

MRR-04752-1300L

11⅞" sq [302mm]
5⅝" [143mm]
[101mm] [140mm] 4" 5½" ⅝" [16mm]

PERFORMANCE (-1300L SERIES)
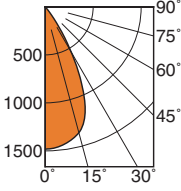
1096 LUMENS

38W

MFL

SC: 0.8

LPW: 29
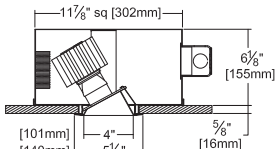
Cone of Light ▲

Dist.	FC	Dia.
6	41.2	5.4
8	23.2	7.2
10	14.8	9.0
12	10.3	10.7
14	7.6	12.5
16	5.8	14.3

TEST RESULTS AT 3500°K

4"

Adjustable

MRR-04754-1300L

11⅞" sq [302mm]
6⅛" [155mm]
[101mm] [140mm] 4" 5½" ⅝" [16mm]
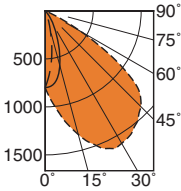
PERFORMANCE (-1300L SERIES)

1261 LUMENS

38W

LPW: 33

TEST RESULTS AT 3500°K

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

Wall Wash

4"

PERFORMANCE (-1300L SERIES)
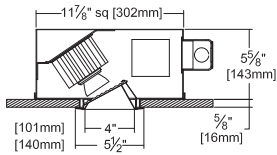
1271 LUMENS

38W

LPW: 33
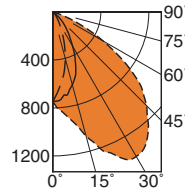
TEST RESULTS
AT 3500°K

MRR-04756-1300L

Downlight

4"

PERFORMANCE (-1300L SERIES)
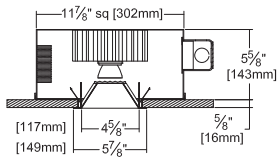
1210 LUMENS

38W

WFL

SC: 0.9

LPW: 32
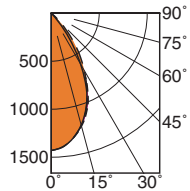
Cone of Light ▲

Dist.	FC	Dia.
6	39.7	5.3
8	22.3	7.1
10	14.3	8.8
12	9.9	10.6
14	7.3	12.3
16	5.6	14.1

TEST RESULTS
AT 3500°K

MRS-04770-1300L

Adjustable

4"

PERFORMANCE (-1300L SERIES)
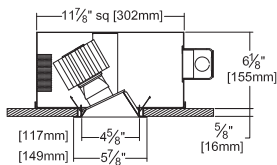
1249 LUMENS

38W

LPW: 33
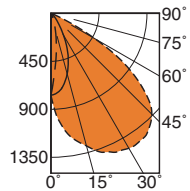
TEST RESULTS
AT 3500°K

MRS-04772-1300L

Wall Wash

4"

PERFORMANCE (-1300L SERIES)

1227 LUMENS

38W

LPW: 32

TEST RESULTS
AT 3500°K

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC
value is half the FC at nadir.

MRS-04774-1300L

KIRLIN QUALITY & VALUE THROUGHOUT

Inconspicuous downlights with matching wall washes in round and square designs are available in four distributions from spot (-SPT) to wide flood (-WFL) and many color temperatures. Super Shallow downlights offer uniform illumination scaled down to fit in healthcare facilities' crowded plenums. IP65 and IP66 rated sealed trims and Cleanroom Rated ISO 5 Class 100 sealed fixtures provide protection against infection while maintaining a sophisticated architectural aesthetic from various apertures with matching LookALike™ regressed lens trims.

LEVEL 1+ PROTECTION
VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 2 PROTECTION
IP65/66 SEALED TRIM, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 2+ PROTECTION
IP65/66 SEALED TRIM, VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

LEVEL 3 PROTECTION
CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP65/66 BIOGARD™ ANTIMICROBIAL FINISH

SECTION VI: PUBLIC & CLINICAL AREAS

		Design	Function	Aperture (Inches)	Product #	Performance		Page
						Lumens	Watts	
DOWNLIGHTING AND WALL WASHING								
		Downlight Open Appearance	Nurse Station Admissions	4	MRR-04800-2000L	2000	25	
					MRR-04800-1500L	1500	20	
					MRR-04800-1000L	1000	11	
		Wall Wash Open Appearance	Lobby Cafeteria	4	MRR-04802-2000L	2000	25	**55**
					MRR-04802-1500L	1500	20	
					MRR-04802-1000L	1000	11	
		Downlight Open Appearance	Conference Room Waiting Room	4	MRS-04803-2000L	2000	25	
					MRS-04803-1500L	1500	20	
					MRS-04803-1000L	1000	11	

CONTINUED NEXT PAGE

		Design	Function	Aperture (Inches)	Product #	Performance		Page
						Lumens	Watts	
DOWNLIGHTING AND WALL WASHING								
		Wall Wash Open Appearance	Corridor Auditorium	4	MRS-04804-2000L	2000	25	56
					MRS-04804-1500L	1500	20	
					MRS-04804-1000L	1000	11	
		Downlight Open Appearance	Conference Room Lobby	6	MRR-06805-5000L	5000	55	
					MRR-06805-3500L	3500	42	
					MRR-06805-2500L	2500	35	
		Wall Wash Open Appearance	Hallway Registration	6	MRR-06810-5000L	5000	55	
					MRR-06810-3500L	3500	42	
					MRR-06810-2500L	2500	35	
		Downlight Regressed Lens	Dining Room Auditorium	6	MRR-06815-5000L	5000	55	
					MRR-06815-3500L	3500	42	
					MRR-06815-2500L	2500	35	
		Downlight Super Shallow	Canopy Nurse Station	4	MRR-04820-1500L	1500	20	
					MRR-04820-1000L	1000	11	
		Downlight Super Shallow	Entrance Kitchen	5	MRR-05825-2500L	2500	35	
LEVEL 2 PROTECTION: IP65 SEALED TRIM, BIOGARD™ ANTIMICROBIAL FINISH								
		Downlight IP65 BioGard™	Soffit Locker Room IP65	7	MRR-07830-2000L	2000	25	57
					MRR-07830-1500L	1500	20	
		Downlight IP65 BioGard™	Wet Location Canopy IP65	8	MRR-08835-5000L	5000	55	
					MRR-08835-3500L	3500	42	
					MRR-08835-2500L	2500	35	
LEVEL 2+ PROTECTION: IP65 SEALED TRIM, VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH								
		Downlight IP65 Tamper Resistant BioGard™	Psychiatric ER IP65 VR	7	MRV-07840-2000L	2000	25	57
					MRV-07840-1500L	1500	20	
		Downlight IP65 Tamper Resistant BioGard™	Psychiatric Trauma IP65 VR	8	MRV-08845-5000L	5000	55	
					MRV-08845-3500L	3500	42	
					MRV-08845-2500L	2500	35	
LEVEL 3 PROTECTION: CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP66, BIOGARD™ ANTIMICROBIAL FINISH								
		IP66 Downlight ISO 5/Class 100 Cleanroom BioGard™	NICU PICU ICU OR IP66 ISO 5 CLASS 100 CLEANROOM	6	✱ MRR-06847-2000L	2000	20	57
					✱ MRR-06847-1500L	1500	15	
					✱ MRR-06847-1100L	1100	11	

✱ = New Product

www.kirlinlighting.com
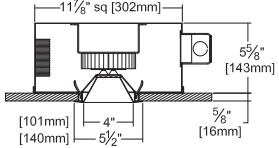
	Design	Function	Aperture (Inches)	Product #	Performance		Page
					Lumens	Watts	
LEVEL 3 PROTECTION: CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP66, BIOGARD™ ANTIMICROBIAL FINISH							
	IP66 Downlight ISO 5/Class 100 Cleanroom BioGard™	NICU PICU ICU OR	IP66 ISO 5 CLASS 100 CLEANROOM	6	✱ MRR-06848-2000L	2000	25	58
					✱ MRR-06848-1500L	1500	20	
					✱ MRR-06848-1000L	1000	11	
	IP66 Downlight ISO 5/Class 100 Cleanroom BioGard™	NICU/PICU ICU Hybrid OR/OR	IP66 ISO 5 CLASS 100 CLEANROOM	6	✱ MRR-06849-2500L	2500	35	
LEVEL 3 PROTECTION: CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP65, BIOGARD™ ANTIMICROBIAL FINISH							
	Downlight ISO 5/Class 100 Cleanroom BioGard™	OR/ICU NICU/PICU	IP65 ISO 5 CLASS 100 CLEANROOM	7	MRR-07850-2000L	2000	25	58
					MRR-07850-1500L	1500	20	
	Downlight ISO 5/Class 100 Cleanroom BioGard™	Hybrid OR/OR	IP65 ISO 5 CLASS 100 CLEANROOM	8	MRR-08855-5000L	5000	55	
					MRR-08855-3500L	3500	42	
					MRR-08855-2500L	2500	35	
POPULAR OPTIONS - SECTIONS V - VIII							63

✱ = New Product

Downlight

4"

MRR-04800-1500L
MRR-04800-1000L

IC

11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
[101mm] [140mm] 4" 5½" 5⁄₈" [16mm]

PERFORMANCE (-1500L SERIES)
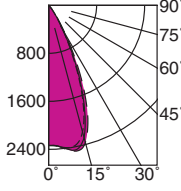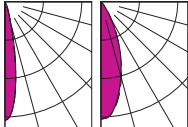
1538 LUMENS
20W
MFL (STD)
SC: 0.8
LPW: 74

Cone of Light ▲

Dist.	FC	Dia.
6	64.9	4.9
8	36.5	6.6
10	23.4	8.2
12	16.2	9.9
14	11.9	11.5
16	9.1	13.2
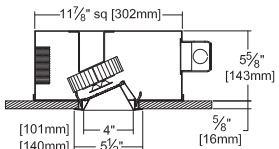
-SPT -NFL
Lm: 1629 Lm: 1428
SC: 0.3 SC: 0.6

Wall Wash

4"

MRR-04802-1500L
MRR-04802-1000L

IC
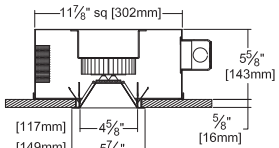
11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
[101mm] [140mm] 4" 5½" 5⁄₈" [16mm]

PERFORMANCE (-1500L SERIES)

1375 LUMENS
20W
LPW: 66

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

Square Downlight

4"

MRS-04803-2000L
MRS-04803-1500L
MRS-04803-1000L

IC

11⁷⁄₈" sq [302mm]
5⁵⁄₈" [143mm]
[117mm] [149mm] 4⁵⁄₈" 5⁷⁄₈" 5⁄₈" [16mm]

MAXIMUM PERFORMANCE (-1500L SERIES)
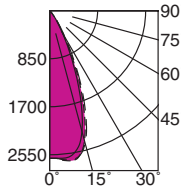
1579 LUMENS
20W
MFL (STD)
SC: 0.8
LPW: 75
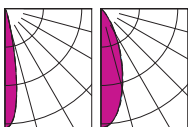
Cone of Light ▲

Dist.	FC	Dia.
6	72.6	4.6
8	40.8	6.1
10	26.1	7.7
12	18.1	9.2
14	13.3	10.7
16	10.2	12.3

-SPT -NFL
Lm: 1704 Lm: 1434
SC: 0.3 SC: 0.6

Square Wall Wash

4"

MAXIMUM PERFORMANCE (-1500L SERIES)

1385 LUMENS

20W
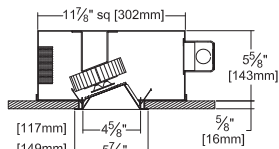
LPW: 66

MRS-04804-2000L
MRS-04804-1500L
MRS-04804-1000L

IC

Downlight

6"

MAXIMUM PERFORMANCE (-5000L SERIES)

4746 LUMENS

55W
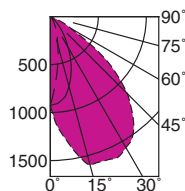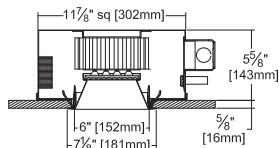
MFL (STD)

SC: 0.8

LPW: 82

MRR-06805-5000L
MRR-06805-3500L
MRR-06805-2500L
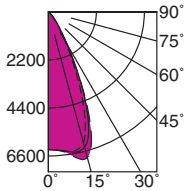
Cone of Light ▲

Dist.	FC	Dia.
6	175.1	5.2
8	98.5	6.9
10	63.1	8.6
12	43.8	10.3
14	32.2	12.0
16	24.6	13.7

-SPT
Lm: 4893
SC: 0.3

-NFL
Lm: 4892
SC: 0.5
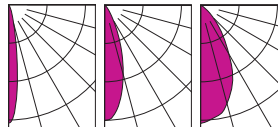
-WFL
Lm: 4009
SC: 0.9

Wall Wash

6"

MAXIMUM PERFORMANCE (-5000L SERIES)

4141 LUMENS

55W
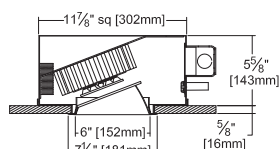
LPW: 72

MRR-06810-5000L
MRR-06810-3500L
MRR-06810-2500L

Downlight

6"

MAXIMUM PERFORMANCE (-5000L SERIES)

4897 LUMENS

55W
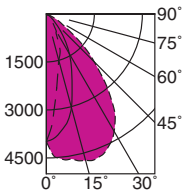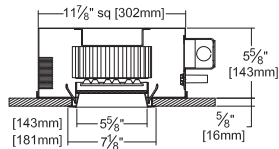
MFL (STD)

SC: 0.8

LPW: 82

MRR-06815-5000L
MRR-06815-3500L
MRR-06815-2500L
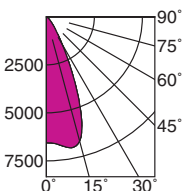
Cone of Light ▲

Dist.	FC	Dia.
6	182.0	5.0
8	102.0	6.6
10	65.5	8.3
12	45.5	9.9
14	33.4	11.6
16	25.6	13.3

-NFL
Lm: 4989
SC: 0.6
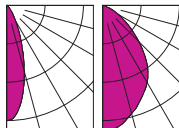
-WFL
Lm: 4161
SC: 1.1

Super Shallow Downlights

4"

MAXIMUM PERFORMANCE (-1500L SERIES)

1685 LUMENS

20W
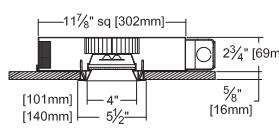
MFL (STD)

SC: 0.7

LPW: 80

MRR-04820-1500L
MRR-04820-1000L
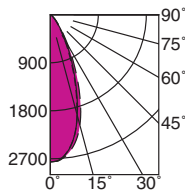
FLARE TRIM

IC

Cone of Light ▲

Dist.	FC	Dia.
6	76.6	4.1
8	43.1	5.5
10	27.6	6.8
12	19.2	8.2
14	14.1	9.6
16	10.8	11.0

-NFL
Lm: 1800
SC: 0.4

-WFL
Lm: 1363
SC: 1.1

5"

PERFORMANCE (-2500L SERIES)

2409 LUMENS

35W

WFL
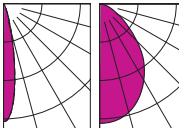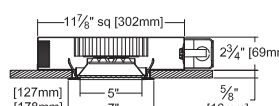
SC: 1.2

LPW: 66

MRR-05825-2500L

FLAT TRIM
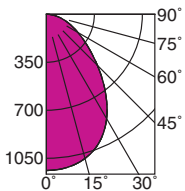
Cone of Light ▲

Dist.	FC	Dia.
6	31.6	6.9
8	17.8	9.3
10	11.4	11.3
12	7.9	13.9
14	5.8	16.2
16	4.5	18.5

▲ **Cone of Light Key**
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

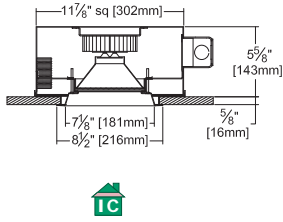Dia. (in ft.) shown is where FC
value is half the FC at nadir.

 www.kirlinlighting.com

LEVEL 2 PROTECTION
IP65 SEALED TRIM, BIOGARD™ ANTIMICROBIAL FINISH

IP65 Downlights

7"

MRR-07830-1500L
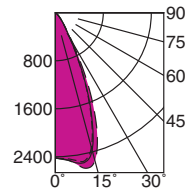
IC

PERFORMANCE (-1500L SERIES)

1721 LUMENS

20W

MFL (STD)

SC: 0.8

LPW: 83

800 / 1600 / 2400

Cone of Light ▲

Dist.	FC	Dia.
6	67.3	4.9
8	37.8	6.6
10	24.2	8.2
12	16.8	9.9
14	12.4	11.5
16	9.5	13.2
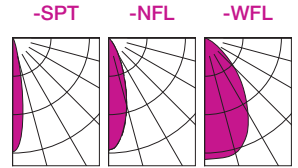
-SPT	-NFL	-WFL
Lm: 1744 SC: 0.3	Lm: 1553 SC: 0.6	Lm: 1514 SC: 1.1

8"
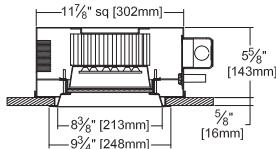
MRR-08835-5000L
MRR-08835-3500L
MRR-08835-2500L

MAXIMUM PERFORMANCE (-5000L SERIES)

5310 LUMENS

55W

MFL (STD)

SC: 0.8

LPW: 94

2500 / 5000 / 7500
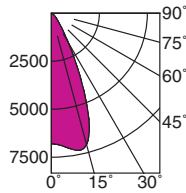
Cone of Light ▲

Dist.	FC	Dia.
6	188.0	5.1
8	106.0	6.7
10	67.8	8.4
12	47.1	10.1
14	34.6	11.8
16	26.5	13.5
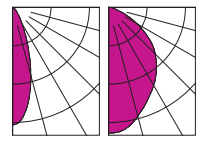
-NFL	-WFL
Lm: 5298 SC: 0.5	Lm: 4416 SC: 1.1

LEVEL 2+ PROTECTION
IP65 SEALED TRIM, VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

IP65 and Tamper Resistant Downlights

7"
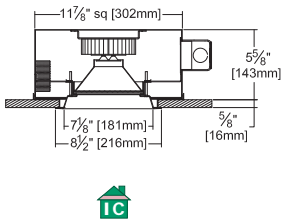
MRV-07840-1500L
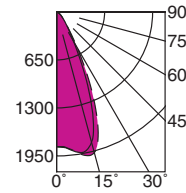
IC

PERFORMANCE (-1500L SERIES)

1495 LUMENS

20W

MFL (STD)

SC: 0.8

LPW: 72

650 / 1300 / 1950

Cone of Light ▲

Dist.	FC	Dia.
6	50.7	5.1
8	28.5	6.8
10	18.2	8.5
12	12.7	10.2
14	9.3	11.9
16	7.1	13.6
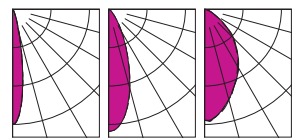
-SPT	-NFL	-WFL
Lm: 1581 SC: 0.3	Lm: 1468 SC: 0.6	Lm: 1321 SC: 1.0

8"
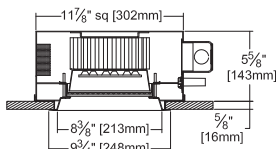
MRV-08845-5000L
MRV-08845-3500L
MRV-08845-2500L

MAXIMUM PERFORMANCE (-5000L SERIES)

4857 LUMENS

55W

MFL (STD)

SC: 0.8

LPW: 81

1800 / 3600 / 5400
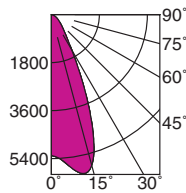
Cone of Light ▲

Dist.	FC	Dia.
6	147.0	5.1
8	82.5	6.8
10	52.8	8.5
12	36.7	10.2
14	26.9	11.9
16	20.6	13.6
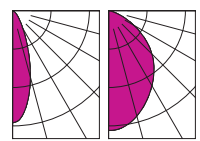
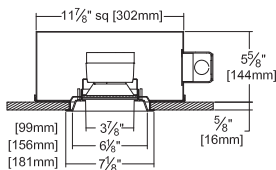| -NFL	-WFL
Lm: 4749 SC: 0.5	Lm: 4432 SC: 1.1

LEVEL 3 PROTECTION
CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP66 RATED, BIOGARD™ ANTIMICROBIAL FINISH

IP66 Cleanroom Rated Downlight
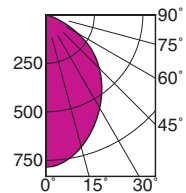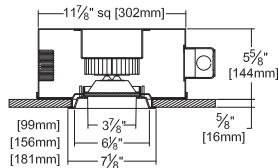
6"

MRR-06847-2000L
MRR-06847-1500L
MRR-06847-1100L

IC

MAXIMUM PERFORMANCE (-2000L SERIES)

1555 LUMENS

20W

WFL

SC: 1.1

LPW: 77

250 / 500 / 750

Cone of Light ▲

Dist.	FC	Dia.
6	21.8	6.4
8	12.3	8.6
10	7.8	10.7
12	5.4	12.9
14	4.0	15.0
16	3.1	17.2

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

LEVEL 3 PROTECTION
CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP66 RATED, BIOGARD™ ANTIMICROBIAL FINISH

IP66 Cleanroom Rated Downlights

6"

MRR-06848-2000L
MRR-06848-1500L
MRR-06848-1000L
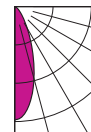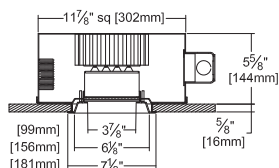
IC

PERFORMANCE (-1500L SERIES)

1555 LUMENS

20W

WFL (STD)

SC: 1.1

LPW: 77
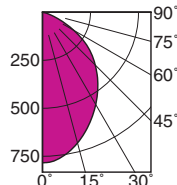
Cone of Light ▲

Dist.	FC	Dia.
6	21.8	6.4
8	12.3	8.6
10	7.8	10.7
12	5.4	12.9
14	4.0	15.0
16	3.1	17.2

-MFL

Lm: 1273
SC: 0.6

▲ **Cone of Light Key**
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

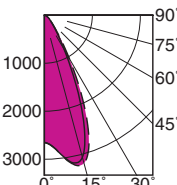---

6"

MRR-06849-2500L
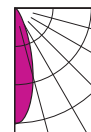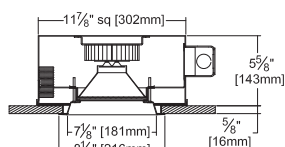
PERFORMANCE (-2500L SERIES)

2590 LUMENS

35W

WFL (STD)

SC: 0.9

LPW: 78

Cone of Light ▲

Dist.	FC	Dia.
6	73.7	5.5
8	41.4	7.3
10	26.5	9.1
12	18.4	11.0
14	13.5	12.8
16	10.4	14.6

-MFL

Lm: 2264
SC: 0.6

LEVEL 3 PROTECTION
CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP65 RATED BIOGARD™ ANTIMICROBIAL FINISH

IP65 Cleanroom Rated Downlights
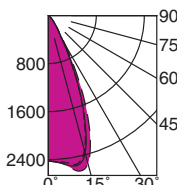
7"

MRR-07850-1500L
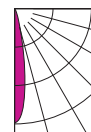
IC

PERFORMANCE (-1500L SERIES)

1721 LUMENS

20W

MFL (STD)

SC: 0.8

LPW: 83

Cone of Light ▲

Dist.	FC	Dia.
6	67.3	4.9
8	37.8	6.6
10	24.2	8.2
12	16.8	9.9
14	12.4	11.5
16	9.5	13.2

-SPT

Lm: 1744
SC: 0.3

-NFL

Lm: 1553
SC: 0.6

8"
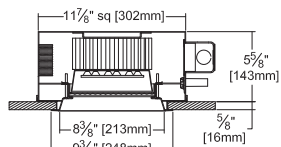
MRR-08855-5000L
MRR-08855-3500L
MRR-08855-2500L

2013 IES Progress Report Selection

MAXIMUM PERFORMANCE (-5000L SERIES)

5310 LUMENS

55W

MFL (STD)

SC: 0.8

LPW: 94
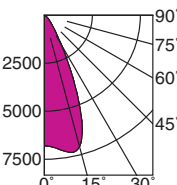
Cone of Light ▲

Dist.	FC	Dia.
6	188.0	5.1
8	106.0	6.7
10	67.8	8.4
12	47.1	10.1
14	34.6	11.8
16	26.5	13.5

-NFL
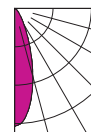
Lm: 5298
SC: 0.5

-WFL
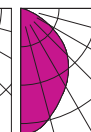
Lm: 4416
SC: 1.1

www.kirlinlighting.com

SECTION VII: PSYCHIATRIC / BEHAVIORAL HEALTH

Kirlin Lighting supports the specific requirements of Behavioral Health facilities, with state-of-the-art, high integrity, ligature resistant products. For many years Kirlin has met the needs of Behavioral Health facilties by providing quality luminaires, offering low glare, and unobtrusive design. Today's Behavioral Health design trends include a more comfortable, residential character, while maintaining a safe environment by preventing patient self-harm, and harm to caregivers or guests. Clinical benefits and superior performance from Kirlin ~ without the clinical appearance.

IESNA Guidelines for Behavioral Health Facilities (Luminaires):

- Limit patient access (glass and electrical)
- Vandal resistant; poly lens

- Tamper resistant
- No sharp corners
- Ligature resistant
- Sealed housing
- Dimmable with controls that may or may not be accessible only by staff
- UL Listed Wet; minimum IP65 rated
- Tunable white, especially when natural light is not present

KIRLIN Benefits: Behavioral Health Lighting Series

- Recessed, glass free, tamperproof luminaires
- Vandal resistant; unbreakable .220" poly lens; prismatic HSA above
- Captive center pin hex screws
- Round seamless durable cast trim
- Ligature resistant
- Cleanroom Rated Class 100, ISO 5
- Dimmable standard to 1% or 10%; controls location as specified
- UL Listed Wet; IP66 rated
- Kirlin **RADIANCE** Series (see pages 50-52)

Patient Safety Risk Assessment - Per ANSI / IES RP-29-16   (with Lighting Requirements)

LEVEL I	**Staff and Service Areas**	Areas where patients are not allowed or are under constant supervision	**No special requirements in these spaces**
LEVEL II	**Corridors, Counseling and Interview Rooms**	Areas that are behind self-locking doors where patients are highly supervised and not left alone for periods of time	**Vandal, tamper-resistant luminaires preferred**
LEVEL III	**Corridors, Lounges and Activity Rooms**	Areas that are not behind self-locking doors where patients may spend time alone with minimal supervision such as lounges, dayrooms and corridors that are not fully visible	**Similar to Level II, vandal, tamper resistant**
LEVEL IV	**Patient and Toilet Rooms**	Areas where patients spend a great deal of time alone with minimal or no supervision	**Security Type, vandal, ligature resistant (Patient Rooms)** **Security Type, vandal, ligature resistant, Wet Location, IP66 (Toilet Rooms)**
LEVEL V	**Admission and Seclusion Rooms**	Areas where staff interact with newly admitted patients who present potential unknown risks or where patients may be in a highly agitated condition. Due to this, these areas fall outside the parameters of the risk map and require special considerations for patient and staff safety	**Similar to Level IV, vandal, ligature resistant**

|	Design	Function	Aperture (Inches)	Product #	Performance		Page
					Lumens	Watts	
LEVEL 1+ PROTECTION: LIGATURE & VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH							
	Downlight Ligature & Vandal Resistant BioGard™	Patient Room VR	6	✱ MRV-06857-2000L	2000	20	60
				✱ MRV-06857-1500L	1500	15	
				✱ MRV-06857-1100L	1100	11	
	Downlight Ligature & Vandal Resistant BioGard™	Nursing Stations VR	6	✱ MRV-06858-2000L	2000	25	
				✱ MRV-06858-1500L	1500	20	
				✱ MRV-06858-1000L	1000	11	
	Downlight, Ligature & Vandal Resistant BioGard™	Patient Treatment Areas VR	6	✱ MRV-06859-2500L	2500	35	61
LEVEL 2+ PROTECTION: LIGATURE & VANDAL RESISTANT, IP66, BIOGARD™ ANTIMICROBIAL FINISH							
	Downlight IP66, Ligature & Vandal Resistant BioGard™	Isolation Rooms IP66 VR	6	✱ MRV-06861-2000L	2000	20	61
				✱ MRV-06861-1500L	1500	15	
				✱ MRV-06861-1100L	1100	11	
	Downlight IP66, Ligature & Vandal Resistant BioGard™	Patient Room IP66 VR	6	✱ MRV-06862-2000L	2000	25	
				✱ MRV-06862-1500L	1500	20	
				✱ MRV-06862-1000L	1000	11	
	Downlight IP66 Ligature & Vandal Resistant BioGard™	Common Areas IP66 VR	6	✱ MRV-06863-2500L	2500	35	
POPULAR OPTIONS - SECTIONS V - VIII							63

✱ = New Product

LEVEL 1+ PROTECTION
LIGATURE & VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

VR

6"

Ligature & Vandal Resistant Downlights

−11⁷⁄₈" sq [302mm]−
5⁵⁄₈" [144mm]
[99mm] 3⁷⁄₈"
[156mm] 6⁵⁄₈"
[181mm] 7⁷⁄₈"
⁵⁄₈" [16mm]
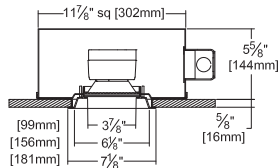
MRV-06857-2000L
MRV-06857-1500L
MRV-06857-1100L

IC

MAXIMUM PERFORMANCE (-2000L SERIES)

1555 LUMENS

20W

WFL

SC: 1.1

LPW: 77

Cone of Light ▲

Dist.	FC	Dia.
6	21.8	6.4
8	12.3	8.6
10	7.8	10.7
12	5.4	12.9
14	4.0	15.0
16	3.1	17.2

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

6"

−11⁷⁄₈" sq [302mm]−
5⁵⁄₈" [144mm]
[99mm] 3⁷⁄₈"
[156mm] 6⁵⁄₈"
[181mm] 7⁷⁄₈"
⁵⁄₈" [16mm]

MRV-06858-2000L
MRV-06858-1500L
MRV-06858-1000L

IC

MAXIMUM PERFORMANCE (-2000L SERIES)

1366 LUMENS

20W

WFL (STD)

SC: 0.9

LPW: 75

Cone of Light ▲

Dist.	FC	Dia.
6	35.7	5.6
8	20.1	7.5
10	12.9	9.4
12	8.9	11.2
14	6.6	13.1
16	5.0	15.0

-MFL

Lm: 1273
SC: 0.6

LEVEL 1+ PROTECTION
LIGATURE & VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

VR

6"

Downlight

11⅞" sq [302mm]

5⅝" [144mm]

[99mm]
[156mm]
[181mm]

3⅞"
6⅛"
7⅛"

⅝" [16mm]

PERFORMANCE (-2500L SERIES)

2590 LUMENS

35W

WFL (STD)

SC: 0.9

LPW: 78

90°
75°
60°
45°

1000
2000
3000

0° 15° 30°

Cone of Light ▲

Dist.	FC	Dia.
6	73.7	5.5
8	41.4	7.3
10	26.5	9.1
12	18.4	11.0
14	13.5	12.8
16	10.4	14.6

-MFL

Lm: 2264
SC: 0.6

MRV-06859-2500L

LEVEL 2+ PROTECTION
IP66 SEALED TRIM, LIGATURE & VANDAL RESISTANT, BIOGARD™ ANTIMICROBIAL FINISH

IP66 VR

IP66 Rated Ligature & Vandal Resistant Downlights
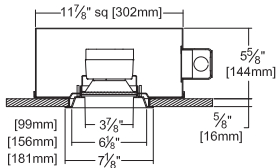
6"

11⅞" sq [302mm]

5⅝" [144mm]

[99mm]
[156mm]
[181mm]

3⅞"
6⅛"
7⅛"

⅝" [16mm]

MAXIMUM PERFORMANCE (-2000L SERIES)

1555 LUMENS

20W

WFL

SC: 1.1

LPW: 77

90°
75°
60°
45°

250
500
750

0° 15° 30°
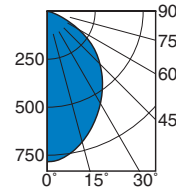
Cone of Light ▲

Dist.	FC	Dia.
6	21.8	6.4
8	12.3	8.6
10	7.8	10.7
12	5.4	12.9
14	4.0	15.0
16	3.1	17.2

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.
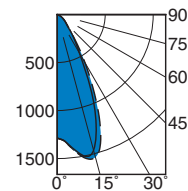
MRV-06861-2000L
MRV-06861-1500L
MRV-06861-1100L
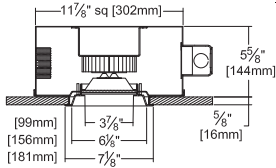
IC

6"

11⅞" sq [302mm]

5⅝" [144mm]

[99mm]
[156mm]
[181mm]

3⅞"
6⅛"
7⅛"

⅝" [16mm]

MAXIMUM PERFORMANCE (-2000L SERIES)

1366 LUMENS

20W

WFL (STD)

SC: 0.9

LPW: 75

90°
75°
60°
45°

500
1000
1500

0° 15° 30°

Cone of Light ▲

Dist.	FC	Dia.
6	35.7	5.6
8	20.1	7.5
10	12.9	9.4
12	8.9	11.2
14	6.6	13.1
16	5.0	15.0

-MFL

Lm: 1273
SC: 0.6

MRV-06862-2000L
MRV-06862-1500L
MRV-06862-1000L
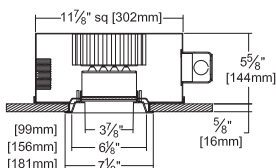
IC

6"

11⅞" sq [302mm]

5⅝" [144mm]

[99mm]
[156mm]
[181mm]

3⅞"
6⅛"
7⅛"

⅝" [16mm]

PERFORMANCE (-2500L SERIES)

2590 LUMENS

35W

WFL (STD)

SC: 0.9

LPW: 78

90°
75°
60°
45°

1000
2000
3000

0° 15° 30°

Cone of Light ▲

Dist.	FC	Dia.
6	73.7	5.5
8	41.4	7.3
10	26.5	9.1
12	18.4	11.0
14	13.5	12.8
16	10.4	14.6

-MFL
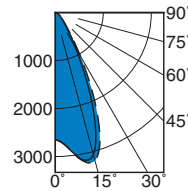
Lm: 2264
SC: 0.6

MRV-06863-2500L

SECTION VIII: COLOR SPECIFIC (OR, VIVARIUM, CIRCADIAN)

	Design	Function / Application	Aperture (Inches)	Product #	LED Color (nm)	Page
LEVEL 1 PROTECTION: BIOGARD™ ANTIMICROBIAL FINISH						
	Downlight BioGard™	Operating Room	8	✳ MRR-08870-521	521nm	62
		Vivarium		✳ MRR-08870-617	617nm	
		Circadian		✳ MRR-08870-634	634nm	
LEVEL 2 PROTECTION: IP65, BIOGARD™ ANTIMICROBIAL FINISH						
	Downlight IP65 BioGard™ IP65	Operating Room	8	✳ MRR-08875-521	521nm	62
		Vivarium		✳ MRR-08875-617	617nm	
		Circadian		✳ MRR-08875-634	634nm	
LEVEL 3 PROTECTION: CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP65, BIOGARD™ ANTIMICROBIAL FINISH						
	Downlight IP65 ISO 5/Class 100 BioGard™ ISO 5 CLASS 100 CLEANROOM IP65	Operating Room	8	✳ MRR-08880-521	521nm	63
		Vivarium		✳ MRR-08880-617	617nm	
		Circadian		✳ MRR-08880-634	634nm	
POPULAR OPTIONS - SECTIONS V - VIII						63

✳ = New Product

LEVEL 1 PROTECTION
BIOGARD™ ANTIMICROBIAL FINISH

8"

Downlight

—11⅞" sq [302mm]—
5⅝" [143mm]
—8⅜" [213mm]—
—9¾" [248mm]—
⅝" [16mm]

MRR-08870-521
MRR-08870-617
MRR-08870-634

PERFORMANCE (-521 Green: Operating Rooms 521nm)

1552 LUMENS

30W

WFL

SC: 0.9

LPW: 52

Dist.	FC	Dia.
6	43.3	5.5
8	24.3	7.3
10	15.6	9.1
12	10.8	10.9
14	7.9	12.7
16	6.1	14.6

Cone of Light ▲

-521 Green (521nm) Operating Theater
-617 Red/Orange (617nm) Vivarium
-634 Red/Amber (634nm) Circadian

LEVEL 2 PROTECTION
IP65 SEALED TRIM, BIOGARD™ ANTIMICROBIAL FINISH

8"

IP65 Downlight

—11⅞" sq [302mm]—
5⅝" [143mm]
—8⅜" [213mm]—
—9¾" [248mm]—
⅝" [16mm]

MRR-08875-521
MRR-08875-617
MRR-08875-634

PERFORMANCE (-521 Green: Operating Rooms 521nm)

1552 LUMENS

30W

WFL

SC: 0.9

LPW: 52

Dist.	FC	Dia.
6	43.3	5.5
8	24.3	7.3
10	15.6	9.1
12	10.8	10.9
14	7.9	12.7
16	6.1	14.6

Cone of Light ▲

-521 Green (521nm) Operating Theater
-617 Red/Orange (617nm) Vivarium
-634 Red/Amber (634nm) Circadian

▲ **Cone of Light Key**
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC
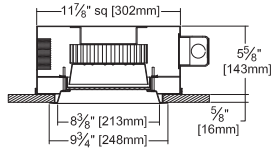
Dia. (in ft.) shown is where FC value is half the FC at nadir.

LEVEL 3 PROTECTION
CLEANROOM RATED ISO 5/CLASS 100 SEALED FIXTURE, IP65, BIOGARD™ ANTIMICROBIAL FINISH
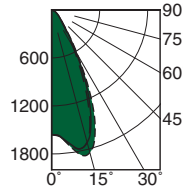
IP65 Cleanroom Downlight

8"

MRR-08880-521
MRR-08880-617
MRR-08880-634

11⅞" sq [302mm]
5⅝" [143mm]
8⅜" [213mm]
9¾" [248mm]
⅝" [16mm]

PERFORMANCE (-521 Green: Operating Rooms 521nm)

1552 LUMENS

30W

WFL

SC: 0.9

LPW: 52

Cone of Light ▲

Dist.	FC	Dia.
6	43.3	5.5
8	24.3	7.3
10	15.6	9.1
12	10.8	10.9
14	7.9	12.7
16	6.1	14.6

-521	Green	(521nm)	Operating Theater
-617	Red/Orange	(617nm)	Vivarium
-634	Red/Amber	(634nm)	Circadian

▲ Cone of Light Key
Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Dia. (in ft.) shown is where FC value is half the FC at nadir.

SECTIONS V - VIII: POPULAR OPTIONS

Input Power
-120   120V (50-60Hz) input and thermal protector.
-277   277V (50-60Hz) input and thermal protector.
-97   Specify other voltage. Consult factory.

LED Power Supply
-29   Two wire full range (100-1%) PWM dimming instead (Lutron). 120V only. Not available with Option -EI.
-D1   0-10V 1.0% dimming instead.
-D2   0-10V 0.1% dimming instead.
-D3   DALI 1.0% dimming instead.
-D4   DALI 0.1% dimming instead.
-D5   DMX512A 0% dimming instead.
-ECO   Digital driver for Lutron EcoSystem controls.
-EI   REMOTE emergency inverter for 45% of rated lumens for -5000L, 55% for -3500L, or 100% for -2000L and lower. Not available for -2500L. Run time: 90+ minutes. 120 or 277V, 60 Hz input only. Specify voltage. Not for use with Option -29 or -FS.
-EM   INTERNAL emergency battery pack. Delivers 500 lumens. Run time: 90+ minutes.
-EMH   INTERNAL emergency battery pack. Delivers 1000 lumens. Run time: 90+ minutes. Marked spacings installation may be required; refer to individual specification sheet.
-ER   REMOTE emergency battery pack. Delivers 500 lumens. Run time: 90+ minutes.
-ERH   REMOTE emergency battery pack. Delivers 1000 lumens. Run time: 90+ minutes.

RADIANCE Dimming & Color Control Interface: Specify 1 (controls by others)
-DAL   For DALI system controls. Consult factory.
-DMX   For DMX512A-RDM controls. Dim to black.
-ECO   For Lutron EcoSystem controls. Dim to black. Consult factory.
-LWC   For Legrand Wattstopper controls. Dim to black.

Color   (CCT and CRI)
-27K   Color temperature 2700°K instead. 80+ CRI.
-30K   Color temperature 3000°K instead. 80+ CRI.
-41K   Color temperature 4100°K instead. 80+ CRI.
-50K   Color temperature 5000°K instead. 80+ CRI.
-HC   90+ CRI instead.

Optics
-MFL   Medium flood distribution.
-NFL   Narrow flood distribution.
-SPT   Spot distribution.
-WFL   Wide flood distribution.

Lenses and Trims
-13   Vandal resistant dual lens system: prismatic high strength acrylic above, clear poly below with tamperproof hardware, instead of standard lens and hardware.
-17   Prismatic high strength acrylic lens instead.
-21   White translucent flat poly diffuser instead.
-23   Frosted microprismatic lens instead.

-25   Vandal resistant trim, hardware and lensing. Provides ligature and vandal resistance.
-30   All white acrylic enameled cone.
-31   White acrylic enameled flange (only).
-32   White oversize trim ring. Specify O.D.
-35T   Natural aluminum acrylic (silver) enameled trim.
-45   Gasket between trim flange and ceiling.
-70   SofTex Clear self-flanged cone.
-94   Custom color/finish. Specify. Consult factory.
-BG   Antimicrobial Kirlin BioGard™ white (only) trim finish.
-BN   Brushed nickel cast trim instead (non BioGard™).
-DF   Electrically isolated "dead front" gasketed trim.
-WA   White acrylic (flat) diffuser instead; will produce wide flood distribution.

Filter
-CF   Custom color filter (Rosco). Specify.

Other
-79   Extension collar for ceilings up to 2" thick.
-99   Special modification. Consult factory.
-FS   In-line fusing. Not for use with Option -EI.

(See specification sheets for availability and details.)

LUMINAIRE ORDERING

EXAMPLE

MUST SPECIFY		OPTIONAL	
Product Number	**Voltage**	**Options**	
MRR-06805-5000L	**-120** (120 volts)	See "Options" above	**Ordering Example:**
MRR-06805-3500L	**-277** (277 volts)		**MRR-06805-5000L-120**-30K-NFL
MRR-06805-2500L	**-97** (Specify other)		

- Selection of beautiful smooth panel artwork attractively and uniformly illuminated
- 100-10% dimming from integral driver
- Wave guide lens provides superior uniform illumination
- Regressed trim provides architectural "skylight" effect

- Ultra-shallow recessed aluminum housing
- Image easily updated in the field
- Lays into 2' x 2' grid ceiling; full recessed depth 3½"
- 60,000 hours (L70) life
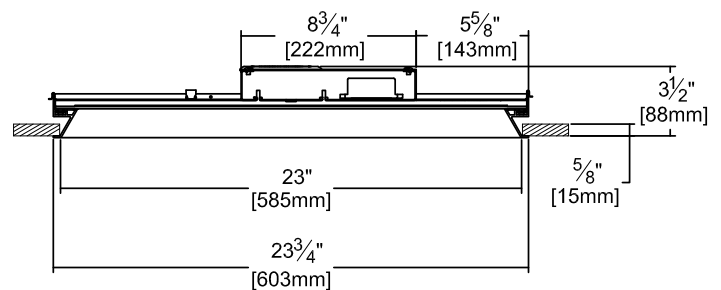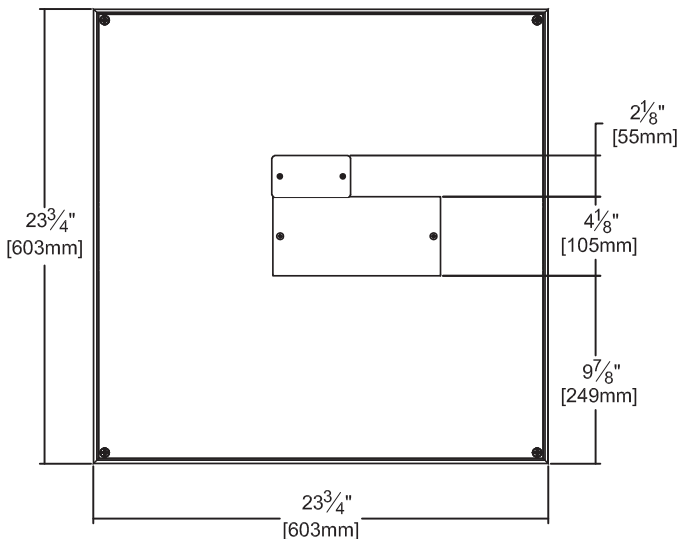- For remote driver version use MRP-22290, page 23

MRP-22295

Regressed bevel provides architectural "skylight" effect.

2' x 2' Scenic Panels create a soothing and attractive luminous ceiling.

23¾" [603mm]

2⅛" [55mm]

4⅛" [105mm]

9⅞" [249mm]

23¾" [603mm]

8¾" [222mm]

5⅝" [143mm]

3½" [88mm]

23" [585mm]

⅝" [15mm]

23¾" [603mm]

Ultra-shallow aluminum housing requires minimal plenum space.

*Not for use in MRI applications. See Section I: MRI Lighting Systems MRP-22290 for MRI compatible Scenic Panel systems.

ARTWORK

Select artwork by adding the option code (i.e., -A01) of the respective artwork. For custom artwork, use Option -A99.

-A01

-A02

-A03

-A04

-A05

-A06

Custom Artwork

(Customer supplied*)

-A99

**Custom Artwork
Preferred Image Resolution**

1800 x 1800 pixels (or greater) per 24" x 24" panel.

See "Overall Size and Orientation" table on page 25 for preferred image resolution for each configuration.

* For custom artwork, customer is responsible for supplying the artwork and obtaining the appropriate usage rights.

DIVIDING AND CROPPING ARTWORK

When specifying size, orientation and artwork, consider how the image will be divided and cropped. For example:

-4x4	**-6x4**	**-4x6**

To see how your artwork will divided and cropped, consult factory.

POPULAR SCENIC PANEL OPTIONS

LED Power Supply

-ECO Digital driver for Lutron EcoSystems controls. Dims to 1% or consult factory.
-D1 0-10V 1.0% dimming instead.
-D2 0-10V 0.1% dimming instead.
-D3 DALI 1.0% dimming instead

-D4 DALI 0.1% dimming instead.
-D5 DMX512A 0% dimming instead.

Trim

-94 Custom color/finish. Specify. Consult factory.
-BG Antimicrobial Kirlin BioGard™ white (only) trim finish.

Other

-99 Special modification. Consult factory.

SCENIC PANEL PRODUCT SPECIFICATION EXAMPLE

Example: MRP-22295 **-4x6** -A01

Scenic Panel Product Number

Size and Orientation Option*

Artwork Option
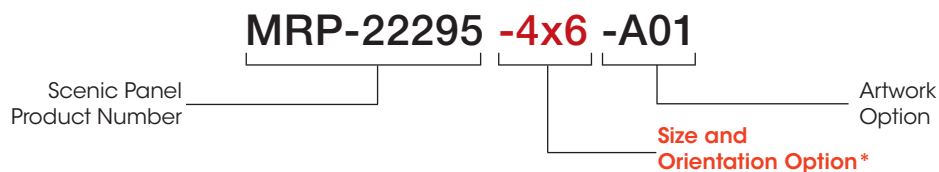
*-4x6 is not the same as -6x4, see above and page 25.

The most comprehensive collection of NightLights, ChartLight, StepLights and options available.

Type IC standard on all models.

Full spectrum of optional colors, including Red/Amber (Option -RA) to maintain melatonin levels and circadian rhythm.

Fastener-free faceplate (Option -FF) available on most models.

ChartLight with narrow distribution and Red/Amber filter does not disturb patient

5⅞" [149mm]   7" [178mm]

4⅜" - 5¼" [111mm - 133mm]

Double faced (thru-the-wall) NightLight illuminates two adjoining spaces. Adjustable to fit various wall thicknesses. Lenses optional instead of louvers.

Applications:
Patient Room / Patient Room
Corridor / Patient Room
Bathroom / Patient Room

Maximum security NightLight.

Optional tamper resistant designs (Option -26) available on most other models.

Applications: Public spaces and psychiatric wards.

Exclusive Five Year Warranty • Designed and Produced in U.S.A. • UL, C-UL (Canada) Listed

		Design		Function	Aperture (Inches)	Product #	Watts	Page
NightLights - TYPE IC								
		Round	Lensed	NightLight	5	MNR-05900	4	68
		Square	Lensed	NightLight	5 x 5	MNS-05904	5	
		Rectangle	Lensed	NightLight	3 x 5	MNT-03906	4	
		Bricklight (Wet Location)	Louvered	NightLight	3 x 8	MNT-03908	6	
ChartLight - TYPE IC								
		Rectangle	Lensed	ChartLight	3 x 5	✳ MNT-03910	4	68
NightLights - TYPE IC								
		Single Face (Wet Location)	Louvered	NightLight	7 x 10	MNT-07912	6	69
		Double Face	Louvered	NightLight	7 x 10	MNT-07914	12	
		Maximum Security	Louvered	NightLight	7 x 9	MNV-07916	6	69
StepLights - TYPE IC								
		Round	Lensed	StepLight	5	MNR-05920	4	70
		Square	Lensed	StepLight	5 x 5	MNS-05924	4	
		Rectangle	Lensed	StepLight	3 x 5	MNT-03926	4	
		Bricklight	Lensed	StepLight	3 x 8	MNT-03928	6	
POPULAR OPTIONS AND LUMINAIRE ORDERING								71

✳ = New Product

NightLight Lensed

5"

MNR-05900

3⅝" sq [92mm]

2¼" [56mm]

4½" [114mm]

Popular Trim Options	Option Code
Fastener Free Face	-FF
Tamper Resistant Fasteners	-26

5" x 5"

MNS-05904

3⅝" sq [92mm]

2¼" [56mm]

4¾" sq [121mm]

Popular Trim Options	Option Code
Fastener Free Face	-FF
Tamper Resistant Fasteners	-26
Photo Cell	-PC

3" x 5"

MNT-03906

2" x 3" [51mm x 76mm]

3½" [89mm]

2¾" [70mm]

5" [127mm]
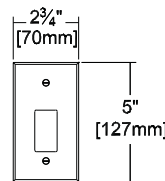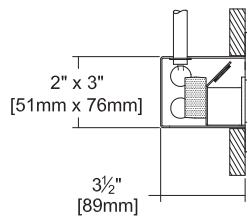
Popular Trim Options	Option Code
Tamper Resistant Fasteners	-26
Custom Color Faceplate	-94

NightLight Louvered

3" x 8"

MNT-03908

WET LOCATION

2⅝" x 7⅝" [67mm x 194mm]

2½" [65mm]

8⁵⁄₃₂" [207mm]

3⅜" [85mm]
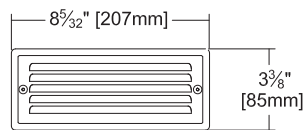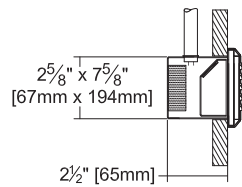
Popular Trim Options	Option Code
Tamper Resistant Fasteners	-26
Black Finish Faceplate	-38
Higher Light Output	-HW

ChartLight

3" x 5"

MNT-03910

2" x 3" [51mm x 76mm]

3½" [89mm]

2¾" [70mm]

5" [127mm]
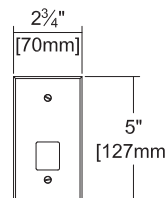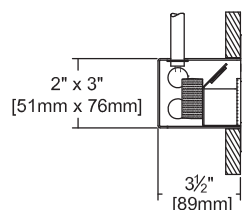
Popular Trim Options	Option Code
Tamper Resistant Fasteners	-26
Silver Finish Faceplate	-35

7" x 10"

Single Face Louvered

MNT-07912

5⅞" x 8⅝"
[149mm x 219mm]

7"
[178mm]

3"
[76mm]

WET LOCATION

7"
[178mm]

9¾" [248mm]
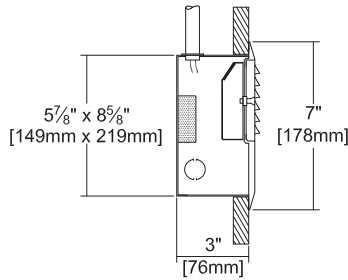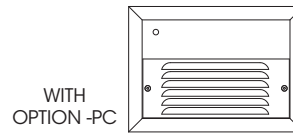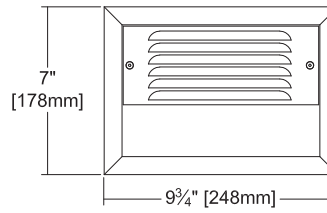
WITH
OPTION -PC

Popular Trim Options	Option Code
Prismatic Lens Instead	-17
Tamper Resistant Fasteners	-26
On-Off Switch	-34
GFCI Outlet	-GF
Photo Cell	-PC

7" x 10"

Double Face Louvered

MNT-07914

5⅞"
[149mm]

7"
[178mm]

4⅜" - 5¼"
[111mm – 133mm]

7"
[178mm]

9¾" [248mm]
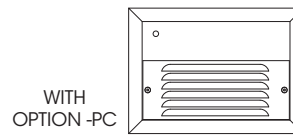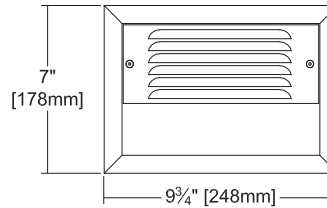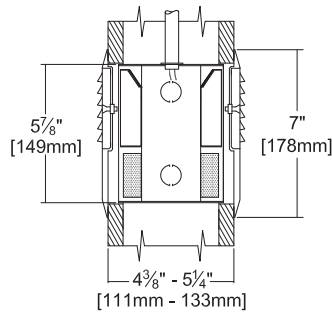
WITH
OPTION -PC

Popular Trim Options	Option Code
Tamper Resistant Fasteners	-26
Prismatic Lens on One Side Louver on Other Side	-L1
Prismatic Lens on Both Sides	-L2
On-Off Switch on One Side	-S1
On-Off Switch on Both Sides	-S2
GFCI Outlet on One Side	-G1
GFCI Outlet on Both Sides	-G2
Photo Cell on One Side	-PC1
Photo Cell on Both Sides	-PC2

NightLight - MAXIMUM SECURITY

7" x 9"

Single Face Louvered

MNV-07916

6" x 8½"
[152mm x 216mm]

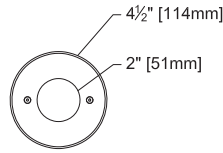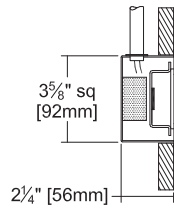7"
[178mm]

3"
[76mm]

7"
[178mm]

9½" [241mm]
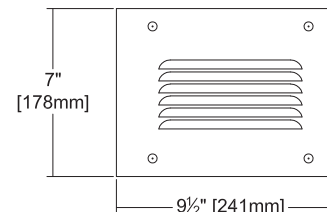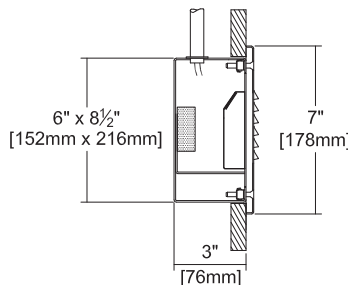
Popular Trim Options	Option Code
Dual Lens - Polycarbonate Lens Plus High Strength Acrylic Prismatic Lens Instead	-17

StepLight Lensed

5"

3⅝" sq [92mm]

2¼" [56mm]

4½" [114mm]

2" [51mm]

Popular Trim Options	Option Code
Fastener Free Face	-FF
Tamper Resistant Fasteners	-26

MNR-05920

5" x 5"

3⅝" sq [92mm]

2¼" [56mm]

4¾" sq [121mm]
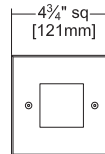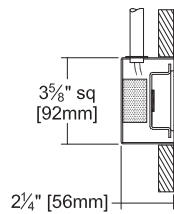
Popular Trim Options	Option Code
Fastener Free Face	-FF
Tamper Resistant Fasteners	-26

MNS-05924

3" x 5"

2" x 3" [51mm x 76mm]

3½" [89mm]

2¾" [70mm]

5" [127mm]
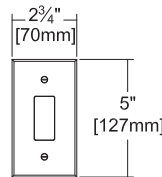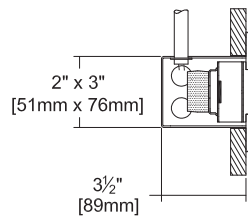
Popular Trim Options	Option Code
Tamper Resistant Fasteners	-26

MNT-03926

3" x 8"

2⅝" x 7⅝" [67mm x 194mm]

2½" [65mm]

8¼" [211mm]

3½" [89mm]

Popular Trim Options	Option Code
Tamper Resistant Fasteners	-26

MNT-03928

 www.kirlinlighting.com
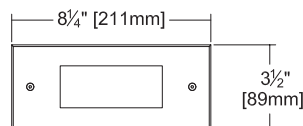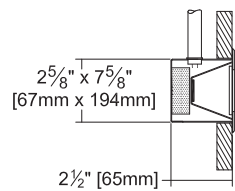
Input Power: SPECIFY

-120   120V (50-60Hz) input. (Required for Options -34, -G1, G2, -GF, -H1, -H2, -HD, -S1 or -S2)

-277   277V (50-60Hz) input.

LED Power Supply

-EI   Remote emergency inverter for 100% of rated lumens. Run time: 90+ minutes. 120 or 277V, 60 Hz input only. Specify voltage.

-HW   Higher light output. Approximately doubles light output.

Filter Colors

-BL   Blue filter.
-GE   Green filter.
-OR   Orange filter.
-RA   Red/Amber filter.
-YE   Yellow filter.
-CF   Custom color filter (Rosco). Specify.

Lenses and Faceplate

-17   .187" high strength prismatic acrylic lens with door instead of louvers. For MNV-07916 .25" clear polycarbonate with .187" high strength acrylic prismatic lensed faceplate instead.

-26   Faceplate secured to housing with two center pin tamper resistant screws. Tamper resistant tool included.

-34   With hospital grade push button on-off switch. Indoor use. Rated 120V only. Must add Option -120.

-G1   With duplex hospital grade GFCI installed on one side. White. Indoor use. Rated 120V only. Must add Option -120.

-G2   With duplex hospital grade GFCI installed on both sides. White. Indoor use. Rated 120V only. Must add Option -120.

-GF   With duplex hospital grade GFCI installed. Indoor use. Rated 120V only. Must add Option -120.

-H1   With duplex hospital grade receptacle on one side. White. Indoor use. Rated 120V only. Must add Option -120.

-H2   With duplex hospital grade receptacle on both sides. White. Indoor use. Rated 120V only. Must add Option -120.

-HD   With duplex hospital grade receptacle installed. Indoor use. Rated 120V only. Must add Option -120.

-L1   .187" high strength acrylic prismatic lens and door instead on one side. Louvers on other side.

-L2   .187" high strength acrylic prismatic lens and door instead on both sides.

-S1   With hospital grade push button on-off switch installed on one side. Controls both lamps. Indoor use. Rated 120V only. Must add Option -120.

-S2   With one hospital grade push button on-off switch installed on each side. Controls each side separately. Use with -84. Indoor use. Rated 120V only. Must add Option -120.

Faceplate Finishes

-35   Natural aluminum (silver) acrylic enamel.
-37   Dark Bronze acrylic enamel.
-38   Black acrylic enamel.
-94   Custom color/finish. Specify. Consult factory.
-BG   Antimircrobial Kirlin BioGard™ white (only).

Other

-84   Wired for two circuits.
-99   Special modification. Consult factory.
-FF   Fastener free faceplate / trim. No visible hardware. (UL Damp listed only)
-PC   Photocell. NightLight illuminates when room is dark.
-PC1   Photocell on one side. Not available with -L1, -L2 and switch or receptacle options.
-PC2   Photocell on both sides. Not available with -L1, -L2 and switch or receptacle options.

(See specification sheets for availability and details.)

OPTIONAL FILTER COLORS

| Circadian Red / Amber Option -RA | Tiger Orange Option -OR | Wolverine Maize Option -YE | Spartan Green Option -GE | Lion Blue Option -BL | Custom Color Filter Option -CF |

(See specification sheets for availability and details.)

NightLight, ChartLight & StepLights: ORDERING

MUST SPECIFY		OPTIONAL	
Product Number	**Voltage**	**Options**	**Ordering Example:**
MNT-07912	**-120** (120 volts) **-277** (277 volts)	See "Options" above	MNT-07912-120-34-GF

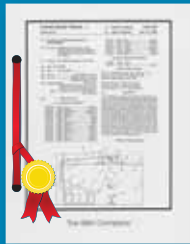# Our Legacy of Leadership in Healthcare Lighting

1970's
With the assistance of Dr. Michael DeBakey of the Baylor College of Medicine, Kirlin pioneers recessed motorized medical lighting.

1980's
Kirlin takes the lead in MRI lighting, utilizing our exclusive aluminum housings and trims

1990's
Kirlin patents the INFRALITE® Motorized Remote Controlled Lighting Systems.

2000's
Kirlin introduces our first sealed & gasketed (IP65) downlights and exam lights and LED NightLights

2011
Kirlin pioneers the first and only turn-key LED lighting system for MRI suites called SmartLED™ MRI Lighting.

2015
Kirlin introduces OPTeLED™, the first high-performance motorized LED lighting system.

2016
Award winning INFRALED® 60 launched, taking LDR lighting to the next level... Delivering cool light at angles up to 60° utilizing Kirlin's exclusive OPTeCOLOR™ medical grade LEDs. INFRALED® for ICU, cardiac cath, patient exams also introduced and specified globally.

2018
Color Tuning and Ligature Resistant Series address lighting ability to advance healing and well being in all areas of medical facilities.

IES Illuminating ENGINEERING SOCIETY Sustaining Member

Certified WBENC Women's Business Enterprise

NAWBO® Member

ARRA QUALIFIED RECOVERY.GOV

KIRLIN EPAct COMPLIANT

PURE MICHIGAN®

Designed, Manufactured and Assembled in the United States of America

THE KIRLIN COMPANY
3401 East Jefferson Avenue, Detroit MI 48207-4232
313-259-6400 • FAX: 313-259-3121 • www.kirlinlighting.com • info@kirlinlighting.com