KIRLIN
Since 1895

CATALOG #		TYPE	
JOB NAME		VOLTAGE	

MRS-04770-1300L

RADIANCE™ 4″ Square Downlight Tunable† White LED • 1650-8000 CCT

†Circadian Rhythm Automated Control Versions Available
(See Option -LWC)

Up to 50,000 Hour Life
Open Appearance

Specifications

Delivered System Performance*
- Lumen Series:
  -1300L: 1300 nominal lumens.
- Distribution: WFL.
- 30 watts nominal power consumption.

araya⁵ Logic Module (ALM) - Included
- <2 MacAdam ellipse color consistency over 50,000 hours.
- On board thermal turndown.
- Inline spectral capture and storage gives consistent CRI and CCT across all arrays.
- Scene set (by others) allows up to 5 scenes to be pre-programmed and recalled using either 0-10V dimmer or Bluetooth.

Dimming & Color Control Interface Included (Also see Options):
- 0-10V with Bluetooth BLE included or see Options. Dims to 1%.

5 Color LED Array
- Tunable range: 1650 - 8000°K.
- CRI: 90+ standard.
- Dimmable to 1% at constant CCT
- L70 of 50,000 hours.

LED Power Supply - INTERNAL
- 120-277V / 50-60Hz input. Load insensitive.
- Suitable for outdoor / indoor use: -30°C (-22°F) to 50°C (122°F)..

Trim (Also see Options)
- Low brightness clear SofTex™ aluminum self-flanged downlight trim with tempered glass lens above.

Acrylic Enameled Aluminum Housing
- Rustproof and corrosion resistant: Exceeds 1000 hour ASTM 5% salt spray test.
- Shallow depth fits restricted plenums.
- Cool operation: Extends life of all components.
- Fully sustainable: Entire luminaire, including LED light engine, is modular, easily visible and serviced through aperture.
- Built-in plaster flange.

Outlet Box
- UL listed J-box with insulated removable cover. Prewired 14 GA (NEC) with ½" and ¾" knockouts.

Installation
- Recess indoor or outdoor.
- Accommodates ceilings up to 1¼" thick.
- Compatible with fire rated enclosures (by others).
- 27" galvanized hanger bars with adjustable mounting brackets (2) supplied.

UL, C-UL (Canada) Listings
- Wet, damp or dry locations, covered ceilings.
- Type Non-IC: Not for direct contact with insulation.
- Through-branch conductors (4 #12 AWG 90°C).

IEC & FCC Compliance
- Meets IEC/EN 61000-3-2 electromagnetic compatibility standard.
- FCC Part 15 certified for EMI/RFI emissions.

5 Year — FIVE YEAR Limited Warranty
- Complete standard fixture.

MUST SPECIFY	OPTIONAL		
Product Number	**Dimming & Color Control Options**	**Options**	
MRS-04770-1300L	**-DMX** (DMX512A-RDM) **-LWC** (Legrand Wattstopper)	See "Options" below	**Ordering Example:** **MRS-04770-1300L-**DMX-30

Options

Input Power
-97   Specify other voltage. Consult factory.

Dimming & Color Control Interface: Specify One (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.

Trims
-30   All white acrylic enameled trim.
-31   White acrylic enameled trim flange.
-32   White oversize trim ring. Specify O.D.
-37   Dark Bronze acrylic enameled trim.
-38   Black acrylic enameled trim.
-37F Dark Bronze acrylic enameled trim flange.
-38F Black acrylic enameled trim flange.
-45   Gasket between trim flange and ceiling.
-62   Clear specular self-flanged trim.
-94   Custom color/finish. Specify. Consult factory.
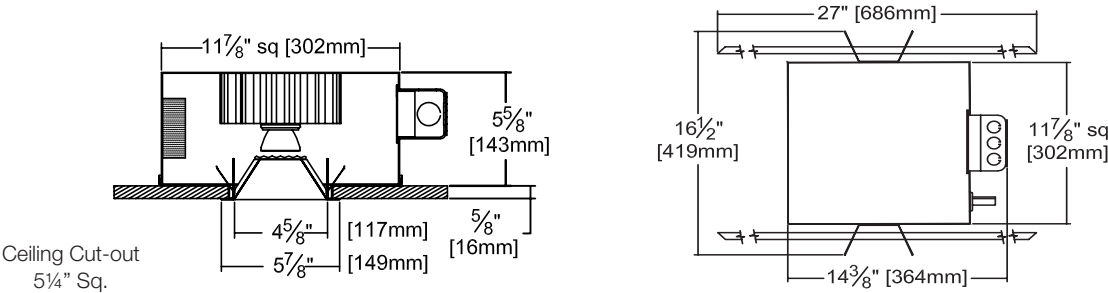
Other
-79   Extension collar for ceilings up to 2" thick.
-99   Special modification. Consult factory.
-FS   Single in-line fuse.
-SH   Sealed housing and junction box.

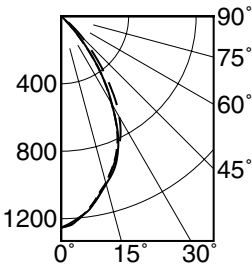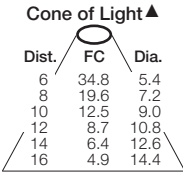Also see MCD-04010 for 0-10V wall control

INTENSITY   COLOR
BRIGHT   COOL
DIM   WARM
KIRLIN
Lighting Innovators Since 1895
313-259-6400 • www.kirlinlighting.com • Detroit, MI USA

MEDICAL
LED LIGHTING

*See note next page

IEC   FC

MRS-04770-1300L
PERFORMANCE

Dimensions

11⅞" sq [302mm]

5⅝" [143mm]

Ceiling Cut-out 5¼" Sq.

4⅝" [117mm]
5⅞" [149mm]
⅝" [16mm]

27" [686mm]

16½" [419mm]

11⅞" sq [302mm]

14⅜" [364mm]

Detailed Photometry - Installed Fixture

Photometry from I.T.L., Boulder, CO

Photometric testing done in accordance with IESNA LM-79

Lumens: 1142
Beam: ~48°
SC: 0.9
LPW: 31
Efficiency: 57.1%
ITL Test: 91527

EEE

Total System Watts 37.5

Cone of Light ▲

Dist.	FC	Dia.
6	34.8	5.4
8	19.6	7.2
10	12.5	9.0
12	8.7	10.8
14	6.4	12.6
16	4.9	14.4

400 — 90° / 75° / 60° / 45°
800
1200
0° 15° 30°

CANDLEPOWER DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1253	1253	1253	1253	1253
5	1206	1204	1204	1212	1199
15	1022	1022	1018	1021	1030
25	790	800	822	803	801
35	410	443	509	448	407
45	56	94	180	93	57
55	2	4	9	4	2
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

Multiplier Values (non-dimmed)

Tested with circadian module set at 3500°K

CCT	LUMEN FACTOR	WATTAGE FACTOR	LPW FACTOR
1650	0.550	0.651	0.84
2000	0.724	0.739	0.98
2500	0.947	0.900	1.05
3000	1.004	1.007	1.00
3500	1.000	1.000	1.00
4000	0.984	0.992	0.99
4500	0.972	1.006	0.97
5000	0.950	1.021	0.93
5500	0.905	0.974	0.93
6000	0.839	0.884	0.95
6500	0.782	0.834	0.94
7000	0.723	0.793	0.91
7500	0.680	0.765	0.89
8000	0.641	0.739	0.87

LM-79 Certified Photometry

* LED manufacturers maintain a tolerance of ±7% on flux (lumens) and power (electrical) measurements. Kirlin photometrics are actual test data from Independent Testing Laboratories (ITL) where photometry was measured from 2000 lumen (-1300L) light engines (within the established tolerance).

▲Cone of Light Key
Dia. (in ft.) shown is where FC value is half the FC at nadir.

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

SUBMITTAL DATA

JOB NAME

TYPE

VOLTAGE

CATALOG NUMBER

APPROVAL STAMP

RECOVERY.GOV

ARRA QUALIFIED