KIRLIN
ARCHITECTURAL LIGHTING

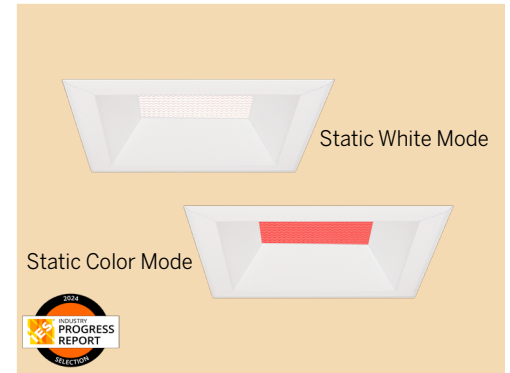| CATALOG #		TYPE
JOB NAME	WATTAGE	VOLTAGE

Latitudes Series

Ambient+ Lensed 4" Square Downlight • Two Color Switchable or Static Color
Six Static Colors Available • Up to 60,000 Hour Rated Life
Wet Listed • LM-79 Certified • LM-80 Qualified

LRS-04504

Static White Mode

Static Color Mode

Specifications

Delivered System Performance
- Nominal Lumens in static white mode, see page 3 for static color output: **Must Specify**
  Type IC
  -1000L
- Select trim: see chart
- Beam distribution: WFL
- Select static white color (CCT): see chart; 80+ CRI standard; Option -HC for 90+ (15% lumen loss)
- Select static color: see chart
- 60,000 hour rated life (L70)

Thermal Management System
- Aluminum heat sink and components for cool operation, long life, and low maintenance

LED Driver - INTERNAL
- Indoor/Outdoor: -30°C to 60°C (-22°F to 140°F)
- 0-10V CCR 1.0% dimming standard
- 120-277V / 50-60 Hz standard; load insensitive

Trim Assembly
- Tapered aluminum all white smooth self-flanged trim (field paintable)
- Regressed microprismatic spread lens

Acrylic Enameled Aluminum Housing
- Rustproof and corrosion resistant: exceeds 1000 hour ASTM 5% salt spray test
- Shallow depth fits restricted plenums
- Cool operation extends component life
- Modular design; visible and fully serviceable through aperture
- Built-in plaster flange

Outlet Box (Galvanized)
- UL Listed, 14GA, insulated, removable cover
- ½" and ¾" knockouts

Installation & Hardware
- Indoor/outdoor in ceilings up to 1¼" thick or see option -79
- Compatible with fire rated enclosures (by others)
- 27" hanger bars & adjusting brackets (2) supplied

UL, C-UL (Canada) Compliance
- UL Listed: wet, damp or dry locations, covered ceilings
- Through-branch conductors (4 #12 AWG 90°C)
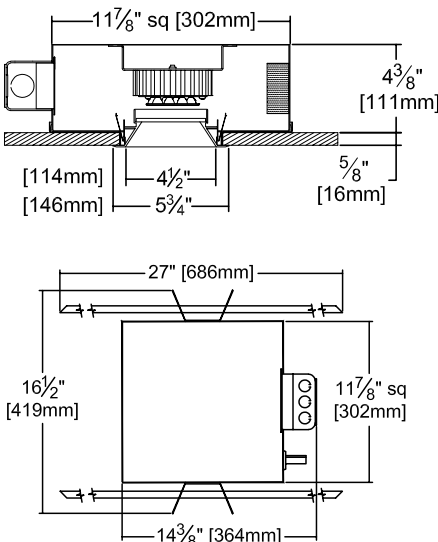
IEC & FCC Compliance
- Meets IEC/EN 60601-1-2 electromagnetic compatibility standard for medical electrical equipment
- FCC Part 15 certified for EMI/RFI emissions

FIVE YEAR Limited Warranty
- Complete standard fixture

A+ Ambient+ *Two Color Switchable*	SC Static Color *6 Options*	Made in the USA *BABAA Compliant*	FCC Part 15 Certified	UL Listed Wet, Damp, Dry

Dimensions

11⅞" sq [302mm]
4⅜" [111mm]
[114mm] [146mm]
4½"
5¾"
⅝" [16mm]

27" [686mm]
16½" [419mm]
11⅞" sq [302mm]
14⅜" [364mm]

Static Color Options

OPTION	LED COLOR		TYPICAL APPLICATION
-465	Blue	(465nm)	Backstage Theater, Public Safety
-521	Green	(521nm)	Operating Rooms
-590	Yellow / Amber	(590nm)	Turtle Friendly, Sleep-Supporting Circadian
-617	Amber	(617nm)	Vivarium, Sleep-Supporting Circadian
-634	Red / Amber	(634nm)	Sleep-Supporting Circadian
-660	Red	(660nm)	Darkroom, Laboratories

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Ambient+ Two Color Options and Ordering Configuration

(Example: LRS-04504-1000L-UNV-30K-465-38T)

Must Specify					Optional			
Model	**Lumens**	**Volts**	**White CCT**	**Static Color**	**Driver Options**	**Trim Options**	**Emergency Options**	**Other Options**
LRS-04504								
	-1000L	**-UNV** **-97**[†]: Other Voltage	**80+ CRI*** **-27K:** 2700°K **-30K:** 3000°K **-35K:** 3500°K **-41K:** 4000°K **-50K:** 5000°K ***Note:** Lumen Factor = 0.93 for -27K **90+ CRI**** **-27K-HC:** 2700°K **-30K-HC:** 3000°K **-35K-HC:** 3500°K **-41K-HC:** 4000°K **-50K-HC:** 5000°K ****Note:** Lumen Factor = 0.79 for -27K-HC; All Others = 0.85; Consult Factory	**-465:** 465nm Blue; Theater and Public Safety **-521:** 521nm Green; Operating Rooms **-590:** 590nm Yellow/Amber; Turtle-friendly **-617:** 617nm Amber; Vivarium **-634:** 634nm Red/Amber; Circadian **-660:** 660nm Red; Darkrooms, Labs	**(Blank):** 0-10V 1.0% dim; 2 outputs - Static White and Static Color **-D2:** 0-10V 0.1% dim; 2 outputs - Static White and Static Color	**(Blank):** Standard all-white self-flanged trim with lens above **Trim Finishes** **-35T:** Silver (natural aluminum) acrylic enameled trim **-37T:** Dark bronze enamel trim **-38T:** Black enamel trim **-94:** Custom color; consult factory **Other Trim Features** **-13:** Clear poly lens below lens. Photometric distribution unaffected **-23:** Frosted microprismatic lens **-32:** White trim extender, specify OD **-33:** Decorative Glow Ring; see last page for details **-45:** Gasket between trim & ceiling **-46:** Gasket between trim & lens **-WA:** White acrylic lens	**(Blank):** None **-EI:** Remote emergency inverter for 100% rated lumens; Run time: 90+ minutes; N/A for options -FS, -97	**(Blank):** None **Mounting** **-79:** Extension collar for ceilings up to 2" thick **-RH:** Joist mounting hardware instead **Other Options** **-99:** Special modification; consult factory **-FS:** Fused primary; One per fixture; N/A for option -EI
		[†]Consult factory						

Static Color Options and Ordering Configuration

(Example: LRS-04504-1000L-UNV-660-D2-13)

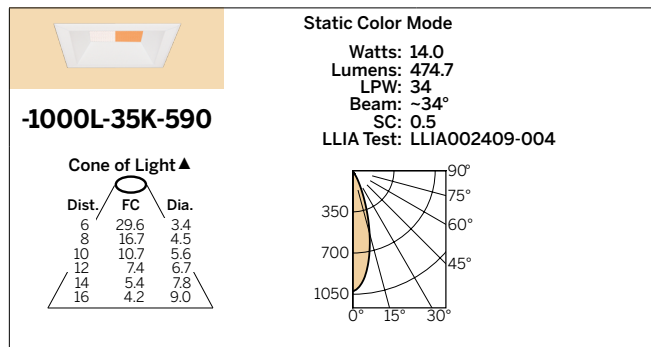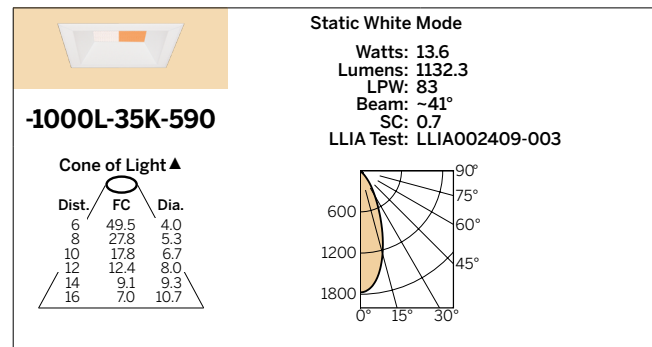| Must Specify				Optional			
Model	**Lumens**	**Volts**	**Static Color**	**Driver Options**	**Trim Options**	**Emergency Options**	**Other Options**
LRS-04504							
	-1000L	**-UNV** **-97**[†]: Other Voltage	**-465:** 465nm Blue; Theater and Public Safety **-521:** 521nm Green; Operating Rooms **-590:** 590nm Yellow/Amber; Turtle-friendly **-617:** 617nm Amber; Vivarium **-634:** 634nm Red/Amber; Circadian **-660:** 660nm Red; Darkrooms, Labs	**(Blank):** 0-10V 1.0% dim **-D2:** 0-10V 0.1% dim; Static Color	**(Blank):** Standard all-white self-flanged trim with lens above **Trim Finishes** **-35T:** Silver (natural aluminum) acrylic enameled trim **-37T:** Dark bronze enamel trim **-38T:** Black enamel trim **-94:** Custom color; consult factory **Other Trim Features** **-13:** Clear poly lens below lens. Photometric distribution unaffected **-23:** Frosted microprismatic lens **-32:** White trim extender, specify OD **-33:** Decorative Glow Ring; see last page for details **-45:** Gasket between trim & ceiling **-46:** Gasket between trim & lens **-WA:** White acrylic lens	**(Blank):** None **-EI:** Remote emergency inverter for 100% rated lumens; Run time: 90+ minutes; N/A for options -FS, -97 **-ERH:** Remote emergency battery pack; Delivers 1000 lumens; CEC Compliant; Run time: 90+ minutes	**(Blank):** None **Mounting** **-79:** Extension collar for ceilings up to 2" thick **-RH:** Joist mounting hardware instead **Other Options** **-99:** Special modification; consult factory **-AWN:** Athena Wireless Node; Consult Factory **-FS:** Fused primary; One per fixture; N/A for option -EI ***Note:** For other integrated control solutions, such as nLight, contact factory
		[†]Consult factory					

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Photometry - Ambient+ Two Color Switchable - Installed Complete Fixture

LM-79 IESNA Certified Photometry from Independent Lab

Ambient+ Two Color

CCT-STATIC COLOR	COLOR LUMENS	COLOR LUMEN FACTOR	MAXIMUM WATTAGE†
-CCT-465	1096.6	2.31	17.5
-CCT-521	1770.6	3.73	16.8
-CCT-590	474.7	1.00	14.0
-CCT-617	868.7	1.83	14.4
-CCT-634	788.0	1.66	13.7
-CCT-660	370.3	0.78	13.9

-1000L-35K-590

Cone of Light ▲

Dist.	FC	Dia.
6	49.5	4.0
8	27.8	5.3
10	17.8	6.7
12	12.4	8.0
14	9.1	9.3
16	7.0	10.7

Static White Mode
Watts: 13.6
Lumens: 1132.3
LPW: 83
Beam: ~41°
SC: 0.7
LLIA Test: LLIA002409-003

-1000L-35K-590

Cone of Light ▲

Dist.	FC	Dia.
6	29.6	3.4
8	16.7	4.5
10	10.7	5.6
12	7.4	6.7
14	5.4	7.8
16	4.2	9.0

Static Color Mode
Watts: 14.0
Lumens: 474.7
LPW: 34
Beam: ~34°
SC: 0.5
LLIA Test: LLIA002409-004

† *Maximum wattage is in static color mode. For static white wattage, please see photometry details.*

* *See notes on page 1 for additional info on Lumen Factors*

Photometry - Static Color - Installed Complete Fixture

LM-79 IESNA Certified Photometry from Independent Lab

Static Color

STATIC COLOR	COLOR LUMENS	COLOR LUMEN FACTOR	IES LUMEN FACTOR +	NOMINAL WATTS	LPW
-465	1197.3	2.15	2.58	22.1	54.3
-521	1837.8	3.30	3.96	22.1	83.3
-590	556.9	1.00	1.20	22.1	25.2
-617	1019.1	1.83	2.20	22.1	46.2
-634	924.5	1.66	1.99	22.1	41.9
-660	434.4	0.78	0.94	22.1	19.7

+ *IES file are based on Ambient+ Static Color light output. Use this lumen factor for lighting calculations.*

-1000L-590

Cone of Light ▲

Dist.	FC	Dia.
6	29.6	3.3
8	16.7	4.4
10	10.7	5.5
12	7.4	6.6
14	5.4	7.7
16	4.2	8.8

Static Color Only
Watts: 22.1
Lumens: 556.9
LPW: 25.2
Beam: ~34°
SC: 0.5
LLIA Test: LLIA002409-004
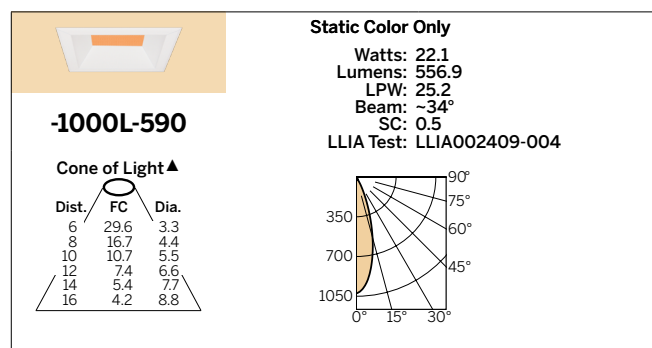
LED manufacturers maintain a tolerance of +/-7% on flux (lumens) and power (electrical) measurements.

Ambient+ Two Color Switchable - Example Wiring Diagrams

Basic Color Selection

L N

AMBIENT+ FIXTURE
L
N
VIOLET
PINK

STANDARD 0-10V DIMMER

COLOR SELECTION
(STANDARD WALL SWITCH)
OFF POSITION = WHITE LED
ON POSITION = COLOR LED

ORANGE
BLACK
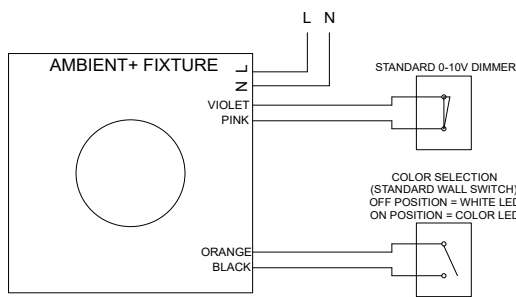
Building Control of White vs. Color

L N   BUILDING CONTROL SIGNAL

AMBIENT+ FIXTURE
L
N
ORANGE
BLACK

RELAY
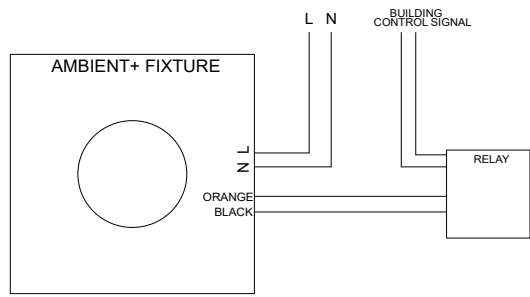
Photocell Control of White vs. Color

L N

AMBIENT+ FIXTURE

PHOTO CELL
L N C

L
N
ORANGE
BLACK

RELAY
L
N
NO.
NC.

Timer Control of White vs. Color

L N

AMBIENT+ FIXTURE

L N C

L
N
ORANGE
BLACK

RELAY
N
NO.
NC.
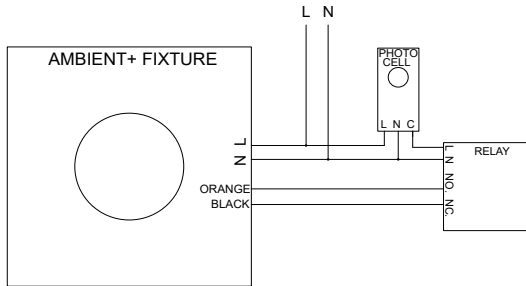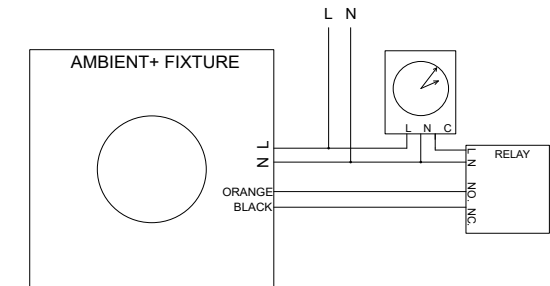
Room Example with a Mix of Fixture Types

N L

SWITCH:
INSIDE ROOM
ON/OFF

SWITCH:
OUTSIDE ROOM
ON/OFF

AMBIENT+ FIXTURE
L
N
ORANGE
BLACK

SPDT   SPDT

SWITCH:
COLOR VS. WHITE
COLOR MODE

STANDARD FIXTURE
L
N

DPDT

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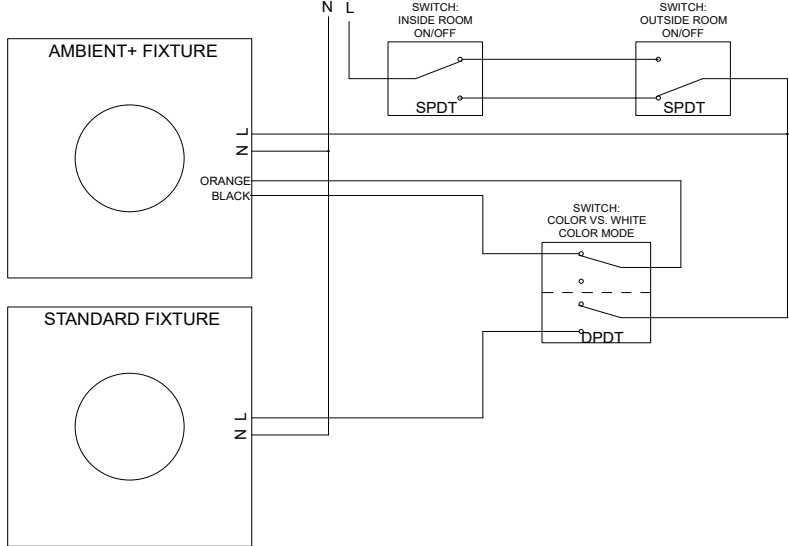
Classic Glow Rings:
Option -33 for Latitudes

To order a Kirlin Glow Ring, begin by adding -33 to the product number. Then, configure your Glow Ring by selecting each of the 7 design elements listed below:

(**Example:** LRS-04503-2500L-120-MFL-30K-**33-GLM-1L-FRR-ROF-SIF-ROS-SIS**)
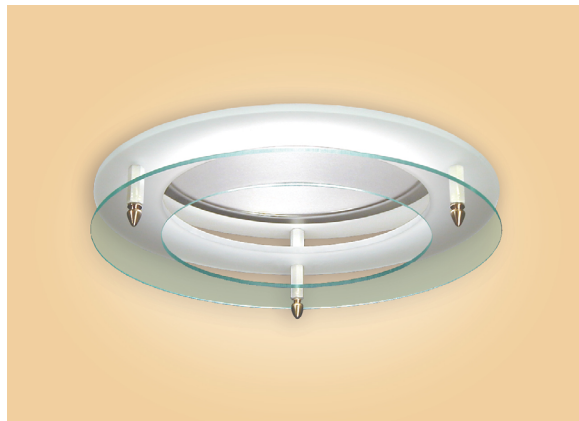
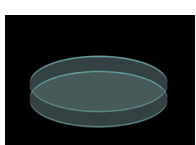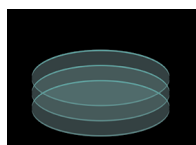**1. Ring Material (choose one)**

| Glass (-GLM) | Acrylic (-ACM) | Custom (-CUM) |

2. # of Rings (choose one)
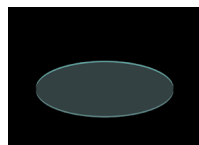
| 1 Ring (1L) | 2 Rings (-2L) | 3 Rings (-3L) |

3. Ring Design (choose one)

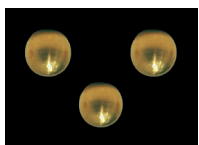| Frosted Ring (-FRR) | Clear Ring (-CRR) | Solid Disk (-SDR) | Frosted Center (-FCR) | Frosted Disk (-FDR) |
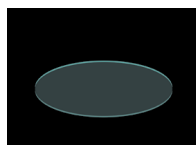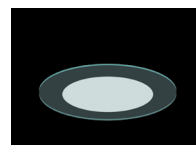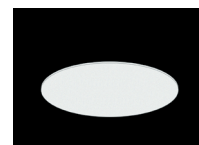
4. Finial Design (choose one)

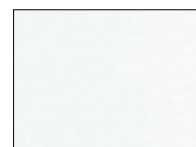| Round (-ROF) | Knurled (-KNF) | Cone (-COF) |

5. Finial Color (choose one)

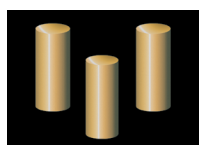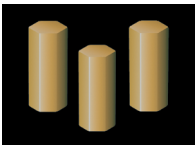| Brass (-BRF) | Silver (-SIF) | Black (-BLF) | White (-WHF) | Custom (-CUF) |

6. Standoff Design (choose one)

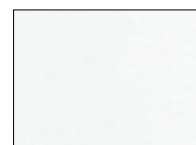| Round (-ROS) | Hexagonal (-HOS) |

7. Standoff Color (choose one)

| Brass (-BRS) | Silver (-SIS) | Black (-BLS) | White (-WHS) | Custom (-CFS) |

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