KIRLIN
ARCHITECTURAL LIGHTING

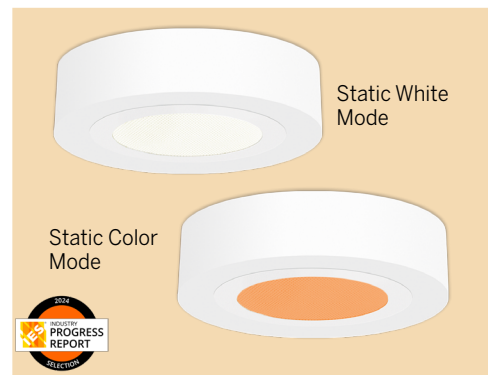| CATALOG #		TYPE	
JOB NAME		WATTAGE	VOLTAGE

Latitudes Series

LSR-12493

Ambient+ Super Shallow 12" x 4" Cylinder Downlight
• Two Color Switchable or Static Color LED
Six Static Colors Available • Up to 60,000 Hour Rated Life
Wet Listed • LM-80 and LM-79 Certified

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 -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
- All aluminum heat sink and components for cool operation, long life, 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
- White flat seamless aluminum, one piece self-flanged
- Tempered microprismatic spread distribution lens or see optional lenses
- For vandal-resistant version, see Options -13, -26

Aluminum Housing
- Seamless white acrylic enameled finish
- Rustproof: Exceeds 1000 hour ASTM 5% salt spray test
- Water-tight construction with weatherproof closed cell top gasket for wet location use
- No visible cylinder hardware
- Cool operation: Extends life of all components
- Fully sustainable: Entire luminaire is modular, easily visible, and serviced through aperature
- Lightweight: minimizes ceiling load

Installation
- Direct mount to any J-box pattern
- Indoor or outdoor
- See Option -NAT for natatorium use
- Option -PM for pendant mount

UL, C-UL (Canada) Listings
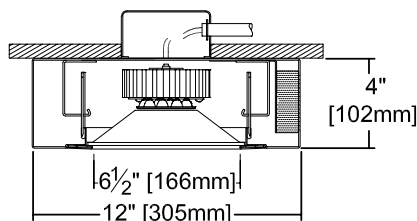- Wet lised in surface of pendant mount

IEC & FCC Compliance
- Meets IEC/EN 60601-1-2 electromagnetic compatibility standard for medical electrical equipment
- FCC Part 15 certified for EMI/RFI emissions

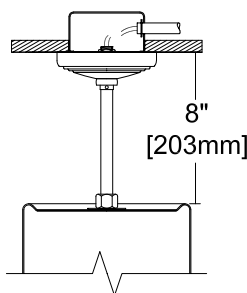### FIVE YEAR Limited Warranty
- Complete standard fixture

A+ Ambient+ *Two Color Switchable*	SC Static Color *6 Options*	USA Made in the USA *BABAA Compliant*	VR Vandal Resistant *See Option -13*	Natatorium *See Option -NAT*	FC FCC Part 15 Certified	UL Listed Wet, Damp, Dry

Dimensions

4" [102mm]

6½" [166mm]
12" [305mm]

Representative View:

With optional pendant mount (Option -PM)

8" [203mm]

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: LSR-12493-1000L-UNV-27K-590-D2-80)

Must Specify					Optional				
Model	**Lumens**	**Volts**	**White CCT**	**Static Color**	**Driver Options**	**Housing Options**	**Mounting Options**	**Emergency Options**	**Other Options**
LSR-12493									
	-1000L	-UNV -120 -97†: Other Voltage †Consult factory	**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 white enamel **Housing Finishes** -35: Silver enamel finish -37: Dark bronze enamel finish -38: Black enamel finish -94: Custom color/finish; specify; consult factory **Trim Features** -46: Gasket between lens and trim **Lens Options** -13: Vandal resistant clear flat polycarbonate below with microprismatic flat lens above -23: Frosted microprismatic lens instead -26: Tamper resistant button head screw with center pin; 1 key/10 fixtures -WA: White acrylic diffuser instead; will produce wide flood distribution	**(Blank):** Standard surface mount -80: 2" collar for mounting beneath surface outlet box; ½" T.S. KO's; covered ceilings only -87: Custom length pendant; for -PM -88: Swivel canopy for sloped ceilings to 40°; with -PM -PM: Pendant stem; 8" stem or see -87	**(Blank):** None -EI: Remote emergency inverter for 100% rated lumens; Run time: 90+ minutes; N/A for options -FS, -97	**(Blank):** None -99: Special modification; consult factory -FS: Single in-line fuse; N/A for option -EI

Static Color Options and Ordering Configuration

(Example: LSR-12493-1000L-UNV-465-D2-80)

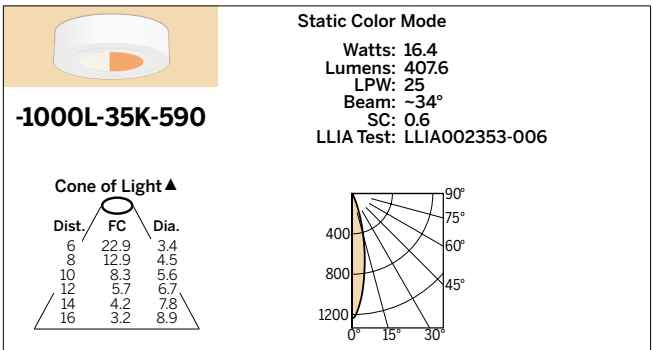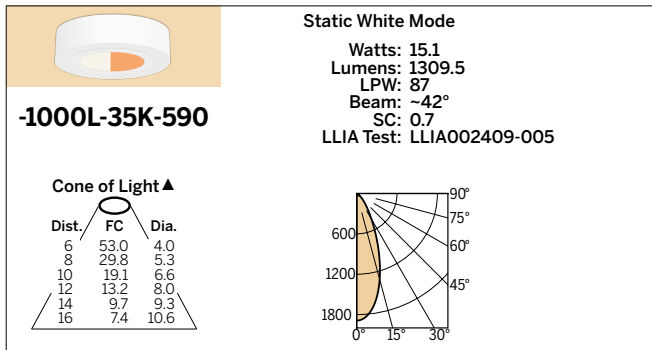| Must Specify				Optional				
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LSR-12493								
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Photometry - Ambient+ Two Color Switchable - Installed Complete Fixture

LM-79 IESNA Certified Photometry from Independent Lab

Ambient+ Two Color

CCT-STATIC COLOR	COLOR LUMENS	COLOR LUMEN FACTOR	MAXIMUM WATTAGE[†]
-CCT-465	941.6	2.31	21.3
-CCT-521	1520.3	3.73	20.5
-CCT-590	407.6	1.00	17.0
-CCT-617	745.9	1.83	17.5
-CCT-634	676.6	1.66	16.6
-CCT-660	317.9	0.78	16.8

-1000L-35K-590

Static White Mode
Watts: 15.1
Lumens: 1309.5
LPW: 87
Beam: ~42°
SC: 0.7
LLIA Test: LLIA002409-005

Cone of Light ▲

Dist.	FC	Dia.
6	53.0	4.0
8	29.8	5.3
10	19.1	6.6
12	13.2	8.0
14	9.7	9.3
16	7.4	10.6

-1000L-35K-590

Static Color Mode
Watts: 16.4
Lumens: 407.6
LPW: 25
Beam: ~34°
SC: 0.6
LLIA Test: LLIA002353-006

Cone of Light ▲

Dist.	FC	Dia.
6	22.9	3.4
8	12.9	4.5
10	8.3	5.6
12	5.7	6.7
14	4.2	7.8
16	3.2	8.9

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

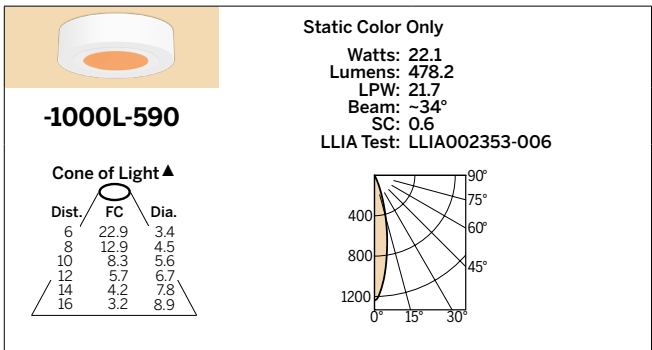* *See notes on page 1 for additional info on Lumen Factors*

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	1028.1	2.15	2.58	22.1	46.6
-521	1578.1	3.30	3.96	22.1	71.5
-590	478.2	1.00	1.20	22.1	21.7
-617	875.1	1.83	2.20	22.1	39.7
-634	793.8	1.66	1.99	22.1	36.0
-660	373.0	0.78	0.94	22.1	16.9

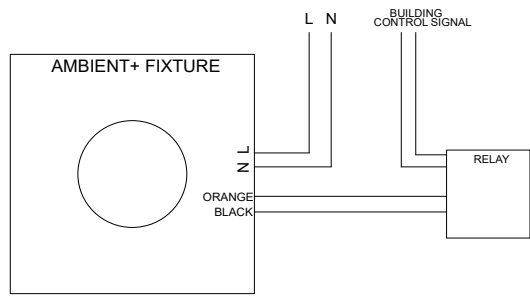[+] *IES file are based on Ambient+ Static Color light output. Use this lumen factor for lighting calculations.*

-1000L-590

Static Color Only
Watts: 22.1
Lumens: 478.2
LPW: 21.7
Beam: ~34°
SC: 0.6
LLIA Test: LLIA002353-006

Cone of Light ▲

Dist.	FC	Dia.
6	22.9	3.4
8	12.9	4.5
10	8.3	5.6
12	5.7	6.7
14	4.2	7.8
16	3.2	8.9

LED manufacturers maintain a tolerance of +/-7% on flux (lumens) and power (electrical) measurements.

DUE TO CONTINUING PRODUCT IMPROVEMENTS, KIRLIN LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE. VISIT WWW.KIRLINLIGHTING.COM FOR THE MOST CURRENT DATA.

Ambient+ Two Color Switchable - Example Wiring Diagrams

Basic Color Selection

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
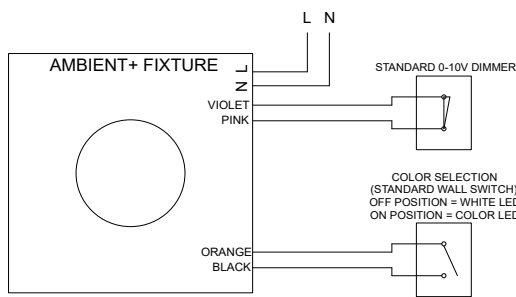
Building Control of White vs. Color

AMBIENT+ FIXTURE
L N
BUILDING CONTROL SIGNAL
RELAY
ORANGE
BLACK

Photocell Control of White vs. Color

AMBIENT+ FIXTURE
L N
PHOTO CELL
L N C
RELAY
L N
ORANGE
BLACK
L NO NC

Timer Control of White vs. Color

AMBIENT+ FIXTURE
L N
L N C
RELAY
L N
ORANGE
BLACK
L NO NC
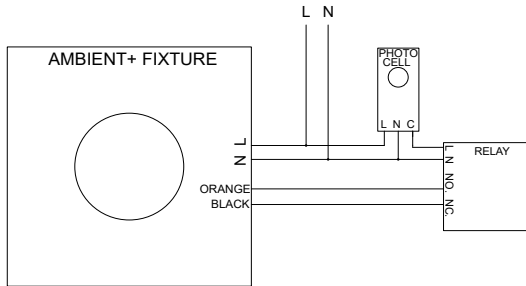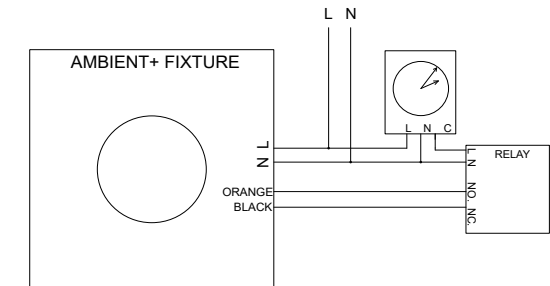
Room Example with a Mix of Fixture Types

AMBIENT+ FIXTURE
N L
L N
ORANGE
BLACK

SWITCH: INSIDE ROOM ON/OFF
SPDT

SWITCH: OUTSIDE ROOM ON/OFF
SPDT

SWITCH: COLOR VS. WHITE COLOR MODE
DPDT

STANDARD FIXTURE
L N