

## CEILING MOUNTED LIGHTING

### FORM AND FUNCTION

- Sleek, low profile housing
- Economy performance
- Engineered for optimum thermal management
- Low depreciation rate
- Reduces energy consumption and costs up to 65%
- Optical system designed for Parking Structures

### CONSTRUCTION

- Spun Aluminum
- Corrosion resistant external hardware
- One-piece silicone gasket ensures IP65 seal for electronics compartment
- Two-piece silicone Micro Optic system ensures IP67 level seal around each PCB

### FINISH

- 5 mils electrostatic powder coat.
- NLS' standard high-quality finishes prevent corrosion protects against extreme environmental conditions

### WARRANTY

Five-year limited warranty for drivers and LEDs.



### LISTINGS

- Certified to UL 1598
- CSA C22.2 No. 250.0
- IP65 / IP67 Rated



### LED WATTAGE CHART

	16L	32L
350 milliamps	18w	-
530 milliamps	28w	-
700 milliamps	36w	71w
1050 milliamps	56w	106w

Project Name:

Type:

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Cat#	Light Dist.	# of LEDs	Milliamps	Kelvin	Volts	Mounting	Color	Options
Value Series Round Small (VSR-S)	Type 2 (T2)	16 (16L)	350 (35) <sup>1</sup>	2700K, 70 CRI (27K7) <sup>2</sup>	120-277 (UNV)	Ceiling Mount (CM)	Bronze Textured (BRZ)	Marine Grade Finish (MGF)
	Type 3 (T3)	32 (32L)	530 (53) <sup>1</sup>	2700K, 80 CRI (27K8) <sup>2,4</sup>	347-480 (HV)		White Textured (WHT)	FSP-211 with Motion Sensor (FSP-8) <sup>5</sup> 8'+ Below (FSP-20) <sup>5</sup> 9'-20' heights
	Type 4 (T4)		700 (7)	3000K, 70 CRI (30K7) <sup>2</sup>			Smooth White Gloss (SWT)	Emergency Battery Back-Up (EB)
	Type 5 (T5)		1050 (1)	3000K, 80 CRI (30K8) <sup>2,4</sup>			Silver (SVR)	Dual Feed Load Control Bypass Relay (LCBR) <sup>5</sup>
				3500K, 80 CRI (35K8)			Black Textured (BLK)	
				4000K, 70 CRI (40K7)			Smooth Black Gloss (SBK)	
			4000K, 80 CRI (40K8) <sup>2</sup>			Graphite Textured (GPH)		
			5000K, 70 CRI (50K7)			Grey Textured (GRY)		
			5000K, 80 CRI (50K8) <sup>2</sup>			Custom (CS)		

#### Notes:

- 1 16L Only
- 2 Consult Factory for Lead Time. Consult Factory for 90 CRI Requests.
- 3 Universal Voltage 120-277
- 4 3000K or lower must be selected to meet International Dark Sky Association certification
- 5 Consult Factory

## ELECTRICAL

- 120-277 Volts (UNV) or 347-480 Volts (HV)
- 0-10V dimming driver
- Driver power factor at maximum load is  $\geq .95$ , THD maximum load is 15%
- Led Drivers Ambient Temp. Min (degC) is -40c and Ambient Temp. Max (degC) ranges from 50c to 55c and in some cases, even higher. Consult factory for revalidation by providing fixture catalog string before quoting and specifying it.
- All internal wiring UL certified for 600 VAC and 105°C
- All drivers, controls, and sensors housed in enclosed IP-65 compartment
- CRI 70, 80 or 90
- Color temperatures: 2700K, 3000K, 3500K, 4000K, 5000K
- Surge Protection: 20KA supplies as standard.

## OPTIONS

- **MARINE GRADE FINISH (MGF)** A multi-step process creating protective finishing coat against harsh environments.
  - Chemically washed in a 5 stage cleaning system.
  - Pre-baked
  - Powder coated 3-5 mils of Zinc Rich Super Durable Polyester Primer.
  - Oven Baked.
  - Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mil thickness.
- **EMERGENCY BATTERY BACK-UP (EB)**
  - 100-277 VAC $\pm$  10%, 50/60 Hz Input Voltage
  - 43mA Max. Input Current
  - 2.82W Max. Input Power
  - 24-48 Hours Recharge Time
  - Battery Type NiCd 9.6VDC or LiFePO4 9.6VDC
  - 90 Minutes Min. Illumination Time
  - 20W Total Max. LED Powered
  - Class 2 Output Classification

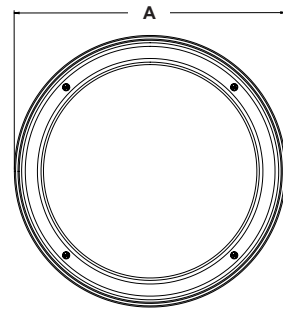
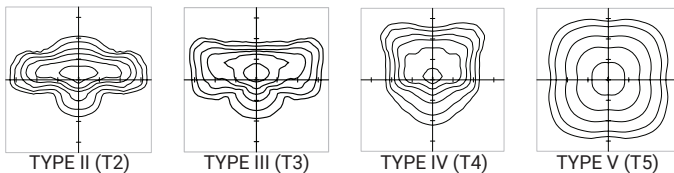
## CONTROLS

- **FSP-211 (FSP-X)** Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.
  - All control parameters adjustable via wireless configuration remote storing and transmitting sensor profiles.
  - FSP-8 mounting heights 8 feet and below.
  - FSP-20 mounting heights 9' feet to 20'.
  - Includes 5 dimming event cycles, 0-10V dimming with motion sensing, re-programmable in the field.
  - FSIR-100 commissioning remote is required to change sensor settings. Please contact factory for ordering.

## OPTICS

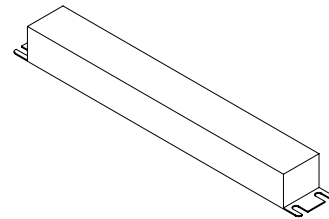
Silicone optics high photo-thermal stability and light output provides higher powered LEDs with minimized lumen depreciation LED life. UV and thermal stability with scratch resistance increases exterior application durability.

- IES Types

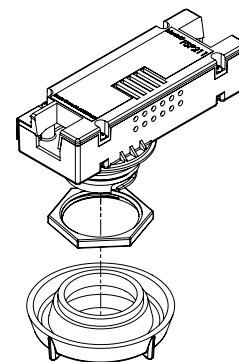


DIMENSION	VSR-S
<b>A</b>	14 in.
<b>B</b>	4.83 in.
<b>C</b>	4 in.
<b>Weight</b>	9lbs

## EMERGENCY BATTERY BACK-UP (EB)

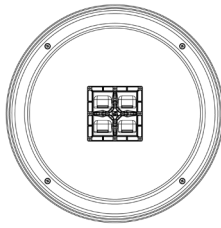


## FSP-211

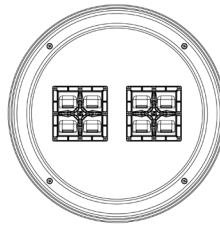


The information and specifications on this document are subject to change without any notification. All values are design, nominal, or typical or prorated values when measured under internal and external laboratory conditions.

## OPTICAL CONFIGURATIONS7



VSR-S / 16L



VSR-S / 32L

LUMENS									
PART NUMBER	T2 LUMENS	T2 LM/W	T3 LUMENS	T3 LM/W	T4 LUMENS	T4 LM/W	T5 LUMENS	T5 LM/W	WATTS
VSR-S-16L-35-30K7	2231	119	2188	116	2154	115	2255	120	18
VSR-S-16L-35-40K7	2305	128	2247	125	2227	124	2324	129	18
VSR-S-16L-35-50K7	2356	131	2297	128	2277	127	2376	132	18
VSR-S-16L-53-30K7	3275	117	3155	114	3165	113	3302	118	28
VSR-S-16L-53-40K7	3524	126	3435	123	3406	122	3553	127	28
VSR-S-16L-53-50K7	3603	129	3511	125	3482	124	3633	130	28
VSR-S-16L-7-30K7	4100	114	4115	111	4003	111	4177	116	36
VSR-S-16L-7-40K7	4411	123	4300	119	4308	120	4495	125	36
VSR-S-16L-7-50K7	4510	125	4396	122	4404	122	4595	128	36
VSR-S-16L-1-30K7	5858	105	5606	102	5661	101	5907	105	56
VSR-S-16L-1-40K7	6303	113	6146	110	6091	109	6356	113	56
VSR-S-16L-1-50K7	6443	115	6283	112	6227	111	6497	116	56
VSR-S-32L-7-30K7	8086	114	7881	111	7896	111	8239	116	71
VSR-S-32L-7-40K7	8700	123	8480	119	8496	120	8865	125	71
VSR-S-32L-7-50K7	8894	125	8669	122	8685	122	9063	128	71
VSR-S-32L-1-30K7	11088	105	10812	102	10715	101	11181	105	106
VSR-S-32L-1-40K7	11930	113	11634	110	11529	109	12030	113	106
VSR-S-32L-1-50K7	12196	115	11893	112	11787	111	12299	116	106

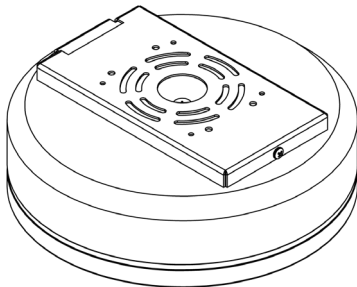
EMERGENCY OPERATION LUMENS									
PART NUMBER	T2 LUMENS	T2 LM/W	T3 LUMENS	T3 LM/W	T4 LUMENS	T4 LM/W	T5 LUMENS	T5 LM/W	WATTS
VSR-X-16L-35-30K7	2231	119	2188	116	2154	115	2255	120	18
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LUMEN MAINTENANCE DATA							
Ambient Temperature	Drive Current	L90 Hours*	L70 Hours**	30,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours**
25°C	Up to 700mA	58,000	173,000	95.7%	91.6%	89.6%	82.1%
	1050mA	48,000	143,000	94.3%	89.5%	87.2%	78.5%
*Reported extrapolations per IESNA TM-21				**Projected extrapolations per IESNA TM-21			



EPA	SGL
VSR-S-CM	0.38

## MOUNTING OPTIONS



### CEILING MOUNT (CM)

Rapid mounting system installation built into Ceiling Mount (CM). Easy steps—Ceiling Bracket mounts to Junction Box, providing easy handling of wiring connections before hooking and fastening fixture into Ceiling Bracket.