

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

- Die formed heavy duty 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 Square Small (VSS-S)	Type 2 (T2)	16 (16L)	350 (35) ¹	2700K, 70 CRI (27K7) ²	120-277 (UNV)	Ceiling Mount (CM)	Bronze Textured (BRZ)	Marine Grade Finish (MGF)
	Type 3 (T3)	32 (32L)	530 (53) ¹	2700K, 80 CRI (27K8) ^{2,4}	347-480 (HV)		White Textured (WHT)	FSP-211 with Motion Sensor (FSP-8) ⁵ 8'+ Below (FSP-20) ⁵ 9'-20' heights
	Type 4 (T4)		700 (7)	3000K, 70 CRI (30K7) ²			Smooth White Gloss (SWT)	Emergency Battery Back-Up (EB)
	Type 5 (T5)		1050 (1)	3000K, 80 CRI (30K8) ^{2,4}			Silver (SVR)	Dual Feed Load Control Bypass Relay (LCBR) ⁵
				3500K, 80 CRI (35K8)			Black Textured (BLK)	
				4000K, 70 CRI (40K7)			Smooth Black Gloss (SBK)	
			4000K, 80 CRI (40K8) ²			Graphite Textured (GPH)		
			5000K, 70 CRI (50K7)			Grey Textured (GRY)		
			5000K, 80 CRI (50K8) ²			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

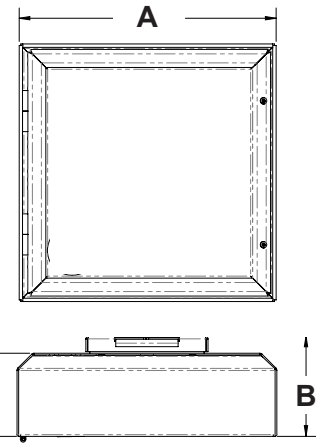
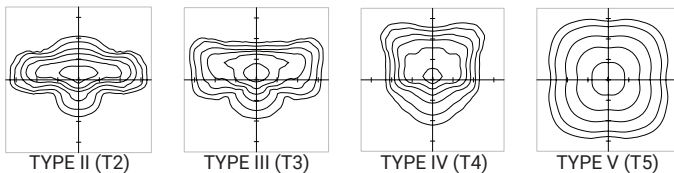
CONTROLS

- **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

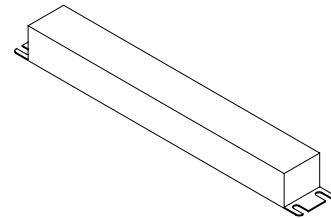
Silicone optics high photo-thermal stability and light output provides higher powered LEDs with minimized lumen depreciation LED life. UV and thermal stability with scratch resistance increases exterior application durability.

- IES Types

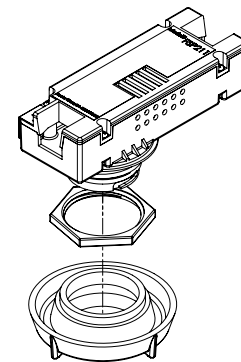


DIMENSION	VSS-S
A	12.5 in. SQ
B	4.83 in.
C	4.00 in.
WEIGHT	11 lbs.

EMERGENCY BATTERY BACK-UP (EB)

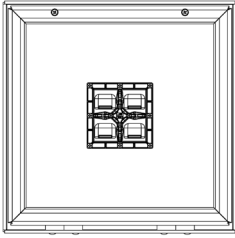


FSP-211

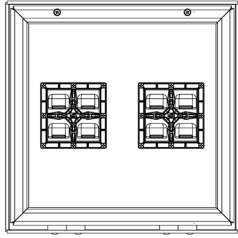


The information and specifications on this document are subject to change without any notification. All values are design, nominal, or typical or prorated values when measured under internal and external laboratory conditions.

OPTICAL CONFIGURATIONS



VSS-S / 16L



VSS-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
VSS-S-16L-35-30K7	1980	110	1944	108	2034	113	2220	123	18
VSS-S-16L-35-40K7	2142	119	2106	117	2196	122	2304	128	18
VSS-S-16L-35-50K7	2304	128	2268	126	2470	137	2408	133	18
VSS-S-16L-53-30K7	2968	106	2940	105	3080	110	3192	114	28
VSS-S-16L-53-40K7	3220	115	3192	114	3332	119	3332	119	28
VSS-S-16L-53-50K7	3472	124	3416	122	3584	128	3472	124	28
VSS-S-16L-7-30K7	3672	102	3636	101	3816	106	3960	110	36
VSS-S-16L-7-40K7	3996	111	3924	109	4104	114	4140	115	36
VSS-S-16L-7-50K7	4284	119	4248	118	4428	123	4392	122	36
VSS-S-16L-1-30K7	5544	99	5488	98	5408	96	5992	107	56
VSS-S-16L-1-40K7	6048	108	5936	106	5992	107	6496	116	56
VSS-S-16L-1-50K7	6496	116	6384	114	6440	115	6608	118	56
VSS-S-32L-7-30K7	7242	102	7171	101	7455	105	7810	110	71
VSS-S-32L-7-40K7	7881	111	7739	109	8094	114	8165	115	71
VSS-S-32L-7-50K7	8520	120	8378	118	8733	123	8449	119	71
VSS-S-32L-1-30K7	10494	99	10265	97	10494	99	11342	107	106
VSS-S-32L-1-40K7	11448	108	11342	107	11342	107	12296	116	106
VSS-S-32L-1-50K7	12402	117	12190	115	12190	115	12508	118	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
VSS-X-16L-35-30K7	1980	110	1944	108	2034	113	2220	123	18
VSS-X-16L-35-40K7	2142	119	2106	117	2196	122	2304	128	18
VSS-X-16L-35-50K7	2304	128	2268	126	2470	137	2408	133	18

EPA	SGL
VSS-S-CM	0.59

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

CEILING MOUNT (CM)

Rapid mounting system quick installation built into the Ceiling Mount (CM) design. Easy steps—Ceiling Bracket mounts to the Junction Box, where proper handling for wiring connections can be made before hooking and fastening fixture into Ceiling Bracket.

