

FORM AND FUNCTION

- Sleek, low profile housing
- Engineered for optimum thermal management
- Low depreciation rate
- Optical system designed for:
 - Parking Lots
 - Commercial Applications

CONSTRUCTION

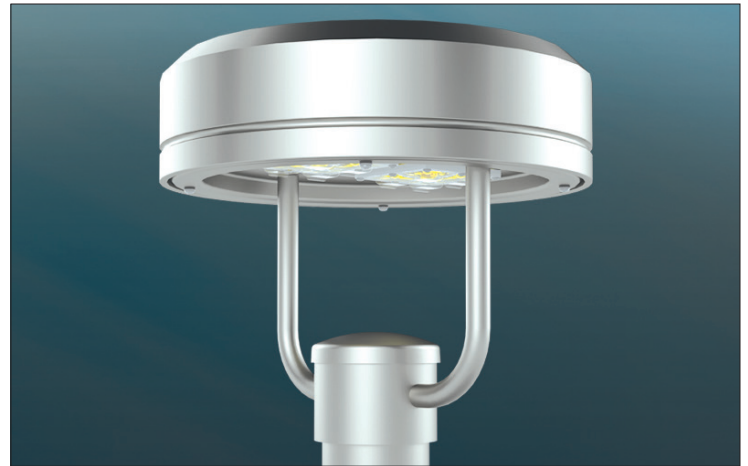
- Spun Aluminum
- Corrosion resistant external hardware
- One-piece silicone gasket ensures IP-65 seal for electronics compartment
- Two-piece silicone Micro Optic system ensures IP-67 level seal around each PCB

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. 250.8
- IP65/ IP67 Rated
- Dark Sky Approved
- IK10 Rated



LED WATTAGE CHART

	16L	32L
350 milliamps	18w	-
530 milliamps	28w	56w
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) ¹	2700K, 70 CRI (27K7) ²	120-277 (UNV)	Yoke Mount (2-Bar) Over 2 3/8" Tenon (YM2)	Bronze Textured (BRZ)	Bird Spikes (BS) Marine Grade Finish (MGF) Photocell (PC) ³ Nema 7-Pin Receptacle (PET) Photocell + Receptacle (PCR) Receptacle + Shorting Cap (PER) FSP-211 with Motion Sensor (FSP-8) ⁴ 8'+ Below (FSP-20) ⁴ 9'-20' Heights (FSP-40) ⁴ 21'-40' Heights Rotated Optic Left (ROL) Rotated Optic Right (ROR) Automotive House Side Shield (AHS) House Side Shield (HSS)
	Type 3 (T3)	32 (32L)	530 (53)	2700K, 80 CRI (27K8) ^{2,4}	347-480 (HV)	Yoke Mount (2-Bar) Over 3" Tenon (YM3)	White Textured (WHT)	
	Type 4 (T4)		700 (7)	3000K, 70 CRI (30K7) ⁴			Smooth White Gloss (SWT)	
	Type 5 (T5)		1050 (1)	3000K, 80 CRI (30K8) ²			Silver (SVR)	
				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

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 is -40°C and Ambient Temp. Max ranges from 50°C to 55°C and, in some cases, even higher. Consult the factory for revalidation by providing the 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

- **BIRD SPIKES (BS)**—Offers effective and humane deterrent for larger bird species and provides cost-effective long-term solution to nuisance bird infestations and protect your property.
- **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 mills of Zinc Rich Super Durable Polyester Primer.
 - 1-2 feet inside pole coverage top and bottom.
 - Oven Baked.
 - Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mill thickness.
- **SHIELDS (HSS, AHS)**—House Side Shield (HSS) is designed for full property line cut-off. Automotive House Side Shield (AHS) is a single-sided shield allowing partial cut-off on either side or front of luminaire.

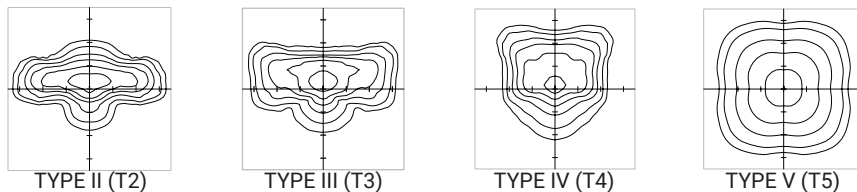
CONTROLS

- **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-20 mounting heights 9-20 feet
 - FSP-40 mounting heights 21-40 feet.
 - Includes 5 dimming event cycles, 0-10V dimming with motion sensing, reprogrammable in the field.
- **NEMA 7-PIN RECEPTACLE (PE7)**—An ANSI C136.41-2013 receptacle provides electrical and mechanical interconnection between photo control cell and luminaire. Dimming receptacle available two or four dimming contacts supports 0-10 VDC dimming methods or Digital Addressable Lighting Interface (DALI), providing reliable power interconnect.

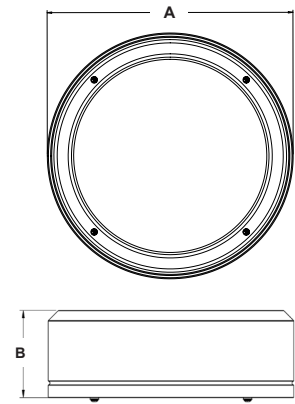
OPTICS

Silicone optics high photothermal 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.

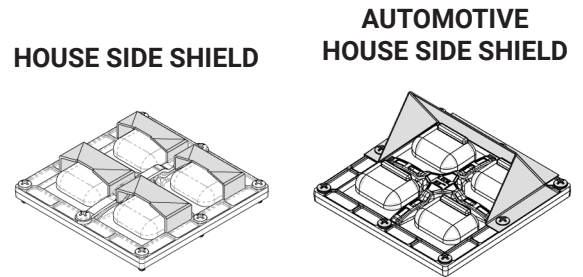
- IES Types



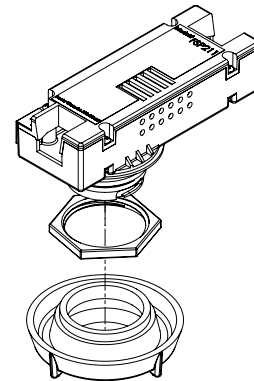
The information and specifications on this document are subject to change without any notification. All values are design, nominal, typical or prorated values when measured under internal and external laboratory conditions.



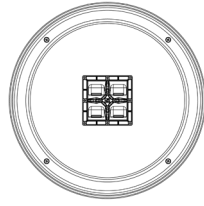
DIMENSION	VSR-S
A	14 in.
B	4 in.
Weight	9lbs



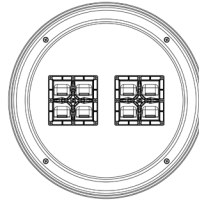
FSP-211



OPTICAL CONFIGURATIONS



VSR-S / 16L



VSR-S / 32L

LUMENS

PART NUMBER	T2	LM/W	BUG	T3	HSS	LM/W	BUG	T3	LM/W	BUG	T4	AHS	LM/W	T4	HSS	LM/W	BUG	T4	LM/W	BUG	T5	LM/W	BUG	W
VSR-S-16L-35-30K7	2142	119	B1-U0-G1	1044	58	B1-U0-G0	2088	116	B1-U0-G1	1296	72	1026	57	B0-U0-G0	2070	115	B1-U0-G1	2160	120	B2-U0-G1	18			
VSR-S-16L-35-40K7	2305	128	B1-U0-G1	1116	62	B1-U0-G0	2247	125	B1-U0-G1	1368	76	1098	61	B0-U0-G0	2227	124	B1-U0-G1	2322	129	B2-U0-G1	18			
VSR-S-16L-35-50K7	2356	131	B1-U0-G1	1188	66	B1-U0-G0	2297	128	B1-U0-G1	1440	80	1170	65	B0-U0-G0	2277	127	B1-U0-G1	2376	132	B2-U0-G1	18			
VSR-S-16L-53-30K7	3275	117	B1-U0-G1	1624	58	B0-U0-G0	3192	114	B1-U0-G1	2016	72	1596	57	B0-U0-G1	3165	113	B1-U0-G1	3304	118	B2-U0-G1	28			
VSR-S-16L-53-40K7	3524	126	B1-U0-G1	1736	62	B0-U0-G0	3435	123	B1-U0-G1	2128	76	1708	61	B0-U0-G1	3406	122	B1-U0-G1	3556	127	B2-U0-G1	28			
VSR-S-16L-53-50K7	3603	129	B1-U0-G1	1848	66	B0-U0-G1	3511	125	B1-U0-G1	2240	80	1820	65	B0-U0-G1	3482	124	B1-U0-G1	3640	130	B2-U0-G1	28			
VSR-S-16L-7-30K7	4100	114	B1-U0-G1	2088	58	B0-U0-G1	3996	111	B1-U0-G1	2592	72	2052	57	B0-U0-G1	4003	111	B1-U0-G1	4176	116	B3-U0-G1	36			
VSR-S-16L-7-40K7	4411	123	B1-U0-G1	2232	62	B0-U0-G1	4300	119	B1-U0-G1	2736	76	2196	61	B0-U0-G1	4308	120	B1-U0-G1	4500	125	B3-U0-G1	36			
VSR-S-16L-7-50K7	4510	125	B1-U0-G1	2376	66	B0-U0-G1	4396	122	B1-U0-G1	2880	80	2340	65	B0-U0-G1	4404	122	B1-U0-G1	4608	128	B3-U0-G1	36			
VSR-S-16L-1-30K7	5858	105	B1-U0-G1	3248	58	B0-U0-G1	5712	102	B1-U0-G1	4032	72	3192	57	B0-U0-G1	5661	101	B1-U0-G2	5880	105	B3-U0-G1	56			
VSR-S-16L-1-40K7	6303	113	B1-U0-G1	3472	62	B0-U0-G1	6146	110	B1-U0-G1	4256	76	3416	61	B0-U0-G1	6091	109	B1-U0-G2	6328	113	B3-U0-G1	56			
VSR-S-16L-1-50K7	6443	115	B1-U0-G1	3696	66	B0-U0-G1	6283	112	B1-U0-G2	4480	80	3640	65	B0-U0-G1	6227	111	B1-U0-G2	6496	116	B3-U0-G1	56			
VSR-S-32L-53-30K7	5858	105	B1-U0-G1	3248	58	B0-U0-G1	5712	102	B1-U0-G1	4032	72	3192	57	B0-U0-G1	5661	101	B1-U0-G2	5880	105	B3-U0-G1	56			
VSR-S-32L-53-40K7	6303	113	B1-U0-G1	3472	62	B0-U0-G1	6146	110	B1-U0-G1	4256	76	3416	61	B0-U0-G1	6091	109	B1-U0-G2	6328	113	B3-U0-G1	56			
VSR-S-32L-53-50K7	6443	115	B1-U0-G1	3696	66	B0-U0-G1	6283	112	B1-U0-G2	4480	80	3640	65	B0-U0-G1	6227	111	B1-U0-G2	6496	116	B3-U0-G1	56			
VSR-S-32L-7-30K7	8086	114	B2-U0-G2	4118	58	B0-U0-G1	7881	111	B2-U0-G2	5112	72	4047	57	B0-U0-G1	7896	111	B2-U0-G2	8236	116	B3-U0-G2	71			
VSR-S-32L-7-40K7	8700	123	B2-U0-G2	4402	62	B0-U0-G1	8480	119	B2-U0-G2	5396	76	4331	61	B0-U0-G1	8496	120	B2-U0-G2	8875	125	B3-U0-G2	71			
VSR-S-32L-7-50K7	8894	125	B2-U0-G2	4686	66	B0-U0-G1	8669	122	B2-U0-G2	5680	80	4615	65	B0-U0-G2	8685	122	B2-U0-G2	9088	128	B3-U0-G2	71			
VSR-S-32L-1-30K7	11088	105	B2-U0-G2	6148	58	B0-U0-G2	10812	102	B2-U0-G2	7632	72	6042	57	B0-U0-G2	10715	101	B2-U0-G2	11130	105	B3-U0-G2	106			
VSR-S-32L-1-40K7	11930	113	B2-U0-G2	6572	62	B0-U0-G2	11634	110	B2-U0-G2	8056	76	6466	61	B0-U0-G2	11529	109	B2-U0-G2	11978	113	B3-U0-G2	106			
VSR-S-32L-1-50K7	12196	115	B2-U0-G2	6996	66	B0-U0-G2	11893	112	B2-U0-G2	8480	80	6890	65	B0-U0-G2	11787	111	B2-U0-G2	12296	116	B3-U0-G2	106			

Lumen Maintenance Data

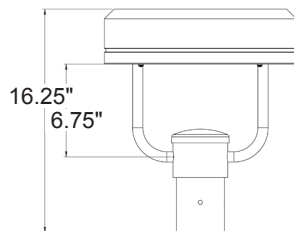
Ambient Temperature	Drive Current	L90 Hours*	L70 Hours**	30,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours**
25°C	Up to 700mA	58,000	173,000	95.7%	91.6%	89.6%	82.1%
	1050mA	48,000	143,000	94.3%	89.5%	87.2%	78.5%

*Reported extrapolations per IESNA TM-21 **Projected extrapolations per IESNA TM-21

EPA

EPA	SGL	D90	D180	T90	T120	QD
VSR-S	0.65	0.99	1.3	1.5	1.39	1.5

MOUNTING OPTIONS



YOKE MOUNT (YMX)

Aluminum, 2-bar arms mount over round tenon at two outer dimensions:

- Over 2-3/8" (YM2)
- Over 3" (YM3)