



LED WATTAGE CHART

	16L	32L
400 milliamps	21w	-
530 milliamps	28w	56w
700 milliamps	36w	71w
1050 milliamps	56w	106w

FORM AND FUNCTION

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

CONSTRUCTION

- Die Formed heavy duty 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

BUY AMERICAN

To ensure the latest BAA/TAA/BABA Standards are being met, please select BAA, TAA, or BABA in the options section. Please contact the factory before placing an order for any NLS products requesting BAA (Buy American Act), TAA (Trade American Act), or BABA (Build America, Buy America).



Project Name:

Type:

VSS-S ORDERING GUIDE

Cat#	Light Dist.	# of LEDs	Milliamps	Kelvin	Volts
Value Series Square Small (VSS-S)	Type 2 (T2)	16 (16L)	400 (40) ⑤	Amber 586-600nM (AMBER) ② ④	120-277 (UNV)
	Type 3 (T3)	32 (32L)	530 (53)	2700K, 70 CRI (27K7) ④	347-480 (HV)
	Type 4 (T4)		700 (7)	2700K, 80 CRI (27K8) ① ④	
	Type 5 (T5)		1050 (1)	3000K, 70 CRI (30K7) ④	
				3000K, 80 CRI (30K8) ① ④	
				3500K, 80 CRI (35K8)	
				4000K, 70 CRI (40K7)	
				4000K, 80 CRI (40K8) ①	
				5000K, 70 CRI (50K7)	
				5000K, 80 CRI (50K8) ①	

Mounting	Color	Controls Options	Options
Direct Pole 6" Arm Single D180 (DPS6) ②	Bronze Textured (BRZ)	Nema 7-Pin Receptacle (PE7)	Bird Spikes (BS)
Direct Pole 10" Arm D90, T90, T120, Quad (DPS10) ②	White Textured (WHT)	Photocell + Receptacle (PCR)	Marine Grade Finish (MGF)
Knuckle Mount (KM)	Smooth White Gloss (SWT)	Receptacle + Shorting Cap (PER)	Quick Mount Bracket (QMB)
Wall Mount (WM)	Silver Metallic (SVR)	FSP-211 with Motion Sensor 8' + Below Heights (FSP-8) ⑤	Retrofit Mount Bracket (RQMB)
Tennis Arm Mount (TA)	Black Textured (BLK)	9'-20' Heights (FSP-20) ⑤	Round Pole Adaptor 3'-4" Pole (RPA4)
	Smooth Black Gloss (SBK)	21'-40' Heights (FSP-40) ⑤	Round Pole Adaptor 5"-6" Pole (RPA5)
	Graphite Textured (GPH)	Custom Controls Integration (CCI) ⑥	Rotated Optic Left (ROL)
	Grey Textured (GRY)	Button Type Photocell (PC) ⑤	Rotated Optic Right (ROR)
	Green Textured (GRN)		Automotive House Side Shield (AHS)
	Hunter Green Textured (HGN)		House Side Shield (HSS)
	Custom (CS)		Buy American (BAA) ⑦
			Trade American (TAA) ⑦
			Build America Buy American (BABA) ⑧

Notes:

- ① Consult Factory for Lead Time. Consult Factory for 90 CRI Requests.
- ② For Round Pole Specify RPA4 or RPA5
- ③ Universal Voltage 120-277
- ④ 3000K or lower, with fixed mounting options only, must be selected to meet International Dark-Sky Association certification.
- ⑤ 16L Only
- ⑥ Please contact Factory for Custom Control Integration requests (nLight, NX, WaveLinx, Crestron, DMX/RDM, Synapse, Casambi, Dali II, Avi-On, or other control systems)
- ⑦ Turtle Safe
- ⑧ Consult factory for all BAA/TAA/BABA requests



701 Kingshill Place, Carson, CA 90746
Call Us Today (310) 341-2037

nlsighting.com

PRODUCT SPECIFICATIONS

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: Amber, 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 mils 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 mil 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.
- **ROUND POLE ADAPTER (RPA)**— When using round poles, specify Round Pole Adapter (RPA). Specify RPA4 when installing on 3"-4" round poles, and RPA5 when installing on 5"-6" round poles.

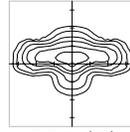
CONTROLS

- **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, re-programmable in the field.
 - FSIR-100 commissioning remote is required to change sensor settings. Please contact factory for ordering.
- **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.
- Controls Agnostic: Please contact factory for your preferred controls option. (nLight, NX, WaveLinx, Crestron, DMX/RDM, Synapse, Casambi, DALI II, Avi-On, or other control systems)

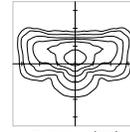
OPTICS

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.

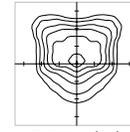
- IES Types



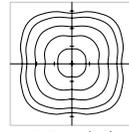
TYPE II (T2)



TYPE III (T3)



TYPE IV (T4)



TYPE V (T5)

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
- Dark Sky Approved
- IK10 Rated

BUY AMERICAN OPTION

While all of the NLS Lighting products listed in this document qualify for the Buy America(n) Act of 1933, we reserve the right to change our listings without notice.

The information provided above is for general informational purposes only. We encourage you to consult legal professionals for advice particular to your projects concerning BAA, TAA, BABA or Buy America.

Additional NLS Products that meet BAA, TAA standards can be found at the following link:

<https://nslighting.com/buy-american/>



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.



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PRODUCT SPECIFICATIONS

LUMENS

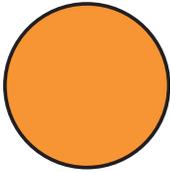
PART NUMBER	T2	LM/W	BUG	T3 HSS	LM/W	BUG	T3	LM/W	BUG	T4 AHS	LM/W	T4 HSS	LM/W	BUG	T4	LM/W	BUG	T5	LM/W	BUG	Watts
VSS-S-16L-40-27K7	2254	107					2219	106							2416	115		2356	112		21
VSS-S-16L-40-27K8	2110	100					2077	99							2263	108		2206	105		21
VSS-S-16L-40-30K8	2263	108					2227	106							2426	116		2365	113		21
VSS-S-16L-40-30K7	2437	116					2399	114							2613	124		2547	121		21
VSS-S-16L-40-35K8	2263	108					2227	106							2426	116		2365	113		21
VSS-S-16L-40-40K8	2437	116					2399	114							2613	124		2547	121		21
VSS-S-16L-40-40K7	2633	125					2592	123							2823	134		2752	131		21
VSS-S-16L-40-50K8	2437	116					2399	114							2613	124		2547	121		21
VSS-S-16L-40-50K7	2633	125					2592	123							2823	134		2752	131		21
VSS-S-16L-53-30K7	2968	106	B1-U0-G1	1624	58	B0-U0-G0	2940	105	B1-U0-G1	2016	72	1596	57	B0-U0-G1	3080	110	B1-U0-G1	3192	114	B2-U0-G1	28
VSS-S-16L-53-40K7	3220	115	B1-U0-G1	1736	62	B0-U0-G1	3192	114	B1-U0-G1	2128	76	1708	61	B0-U0-G1	3332	119	B1-U0-G1	3332	119	B2-U0-G1	28
VSS-S-16L-53-50K7	3472	124	B1-U0-G1	1848	66	B0-U0-G1	3416	122	B1-U0-G1	2240	80	1820	65	B0-U0-G1	3584	128	B1-U0-G1	3472	124	B2-U0-G1	28
VSS-S-16L-7-30K7	3672	102	B1-U0-G1	2088	58	B0-U0-G1	3636	101	B1-U0-G1	2592	72	2052	57	B0-U0-G1	3816	106	B1-U0-G1	3960	110	B3-U0-G1	36
VSS-S-16L-7-40K7	3996	111	B1-U0-G1	2232	62	B0-U0-G1	3924	109	B1-U0-G1	2736	76	2196	61	B0-U0-G1	4104	114	B1-U0-G1	4140	115	B3-U0-G1	36
VSS-S-16L-7-50K7	4284	119	B1-U0-G1	2376	66	B0-U0-G1	4248	118	B1-U0-G1	2880	80	2340	65	B0-U0-G1	4428	123	B1-U0-G1	4392	122	B3-U0-G1	36
VSS-S-16L-1-30K7	5544	99	B1-U0-G1	3248	58	B0-U0-G1	5488	98	B1-U0-G1	4032	72	3192	57	B0-U0-G1	5408	96	B1-U0-G1	5992	107	B3-U0-G1	56
VSS-S-16L-1-40K7	6048	108	B1-U0-G1	3472	62	B0-U0-G1	5936	106	B1-U0-G1	4256	76	3416	61	B0-U0-G1	5992	107	B1-U0-G2	6496	116	B3-U0-G1	56
VSS-S-16L-1-50K7	6496	116	B1-U0-G1	3696	66	B0-U0-G1	6384	114	B1-U0-G1	4480	80	3640	65	B0-U0-G1	6440	115	B1-U0-G2	6608	118	B3-U0-G2	56
VSS-S-32L-53-30K7	5936	106	B1-U0-G1	3248	58	B0-U0-G1	5880	105	B1-U0-G1	4032	72	3192	57	B0-U0-G1	6160	110	B1-U0-G2	6440	115	B3-U0-G2	56
VSS-S-32L-53-40K7	6440	115	B1-U0-G1	3472	62	B0-U0-G1	6384	114	B1-U0-G1	4256	76	3416	61	B0-U0-G1	6664	119	B2-U0-G2	6664	119	B3-U0-G2	56
VSS-S-32L-53-50K7	6944	124	B1-U0-G1	3696	66	B0-U0-G1	6832	122	B2-U0-G2	4480	80	3640	65	B0-U0-G1	7168	128	B2-U0-G2	6888	123	B3-U0-G2	56
VSS-S-32L-7-30K7	7242	102	B1-U0-G1	4118	58	B0-U0-G1	7171	101	B2-U0-G2	5112	72	4047	57	B0-U0-G1	7455	105	B2-U0-G2	7810	110	B3-U0-G2	71
VSS-S-32L-7-40K7	7881	111	B2-U0-G2	4402	62	B0-U0-G1	7739	109	B2-U0-G2	5396	76	4331	61	B0-U0-G1	8094	114	B2-U0-G2	8165	115	B3-U0-G2	71
VSS-S-32L-7-50K7	8520	120	B2-U0-G2	4686	66	B0-U0-G1	8378	118	B2-U0-G2	5680	80	4615	65	B0-U0-G2	8733	123	B2-U0-G2	8449	119	B3-U0-G2	71
VSS-S-32L-1-30K7	10494	99	B2-U0-G2	6148	58	B0-U0-G2	10265	97	B2-U0-G2	7632	72	6042	57	B0-U0-G2	10494	99	B2-U0-G2	11342	107	B4-U0-G2	106
VSS-S-32L-1-40K7	11448	108	B2-U0-G2	6572	62	B0-U0-G2	11342	107	B2-U0-G2	8056	76	6466	61	B0-U0-G2	11342	107	B2-U0-G2	12296	116	B4-U0-G2	106
VSS-S-32L-1-50K7	12402	117	B2-U0-G2	6996	66	B0-U0-G2	12190	115	B2-U0-G2	8480	80	6890	65	B0-U0-G2	12190	115	B2-U0-G2	12508	118	B4-U0-G2	106

Lumen Maintenance Data

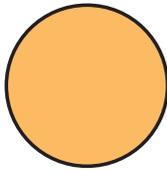
Ambient Temperature	Drive Current	L90 Hours*	L70 Hours**	30,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours**
25°C	Up to 700mA	58,000	173,000	95.7%	91.6%	89.6%	82.1%
	1050mA	48,000	143,000	94.3%	89.5%	87.2%	78.5%

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

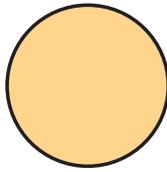
LED KELVIN RANGE



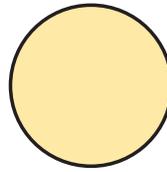
AMBER
585-600 nm



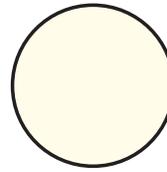
2700K 70 CRI



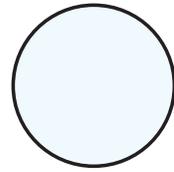
3000K 70 CRI



3500K 80 CRI



4000K 70 CRI



5000K 70 CRI

Color	Dominant or Peak Wavelength Range (nm)	
	Minimum	Maximum
Amber	585	600

PRODUCT SPECIFICATIONS

DIMENSION	VSS-S
A	12.5 in. SQ
B	4 in.
Weight	13 lbs

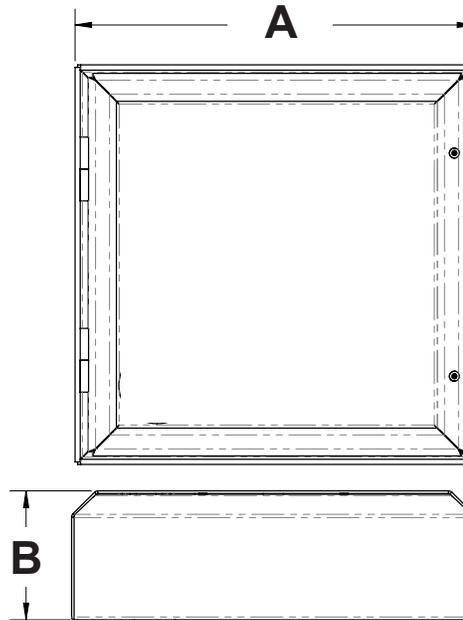
EPA

EPA	SGL	D90	D180	T90	T120	QD
VSS-S	0.40	0.80	0.80	1.20	1.10	1.60

DPX ARM LENGTH

DPX ARM LENGTH	SGL	D90	D180	T90	T120	QD
VSS-S	6"	10"	6"	10"	10"	10"

6" - DPX6 | 10" - DPX10

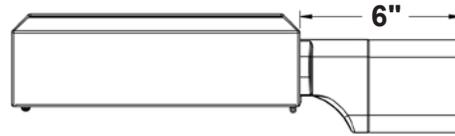


PRODUCT SPECIFICATIONS

DIRECT POLE (DP)

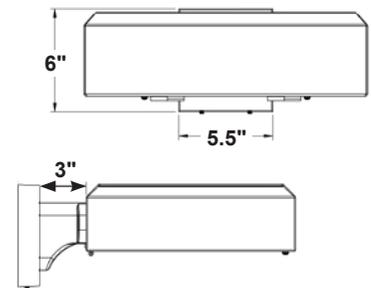
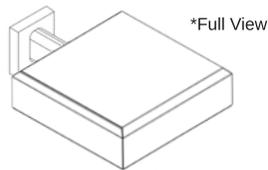
Standard mounting arm is extruded aluminum in lengths of 6", And 10"

*Arm lengths may vary depending on configuration



WALL MOUNT (WM)

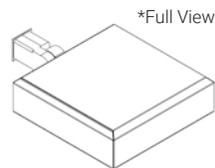
Cast Aluminum Plate for direct wall mount. 3" die cast arm mounts directly to a cast wall mount box.



KNUCKLE MOUNT (KM)

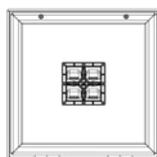
Die Cast Knuckle great for adjustable installation on 2-3/8" OD vertical or horizontal tenon.

- Max Uptilt of 110 degrees
- Adjustable in 5 degree increments

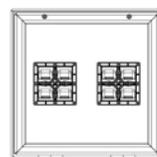


OPTICAL CONFIGURATIONS

Rotatable Optics (ROR) Rotated Right, (ROL) Rotated Left options available. Optics field and factory rotatable.



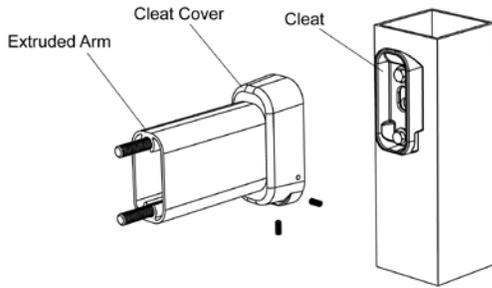
VSS-S / 16L



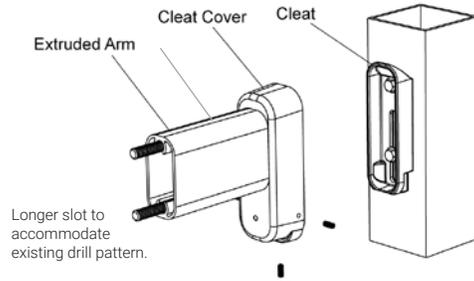
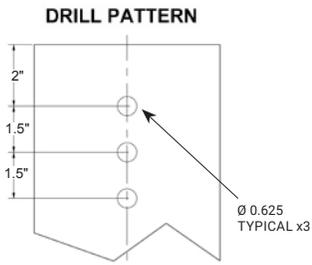
VSS-S / 32L

PRODUCT SPECIFICATIONS

Optional Cast Aluminum Bracket designed for quick mounting on Direct Square or Round Poles. Cleat mounts directly to pole for easily hung fixtures.

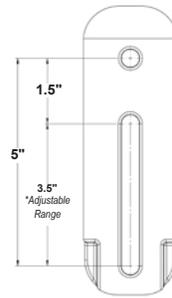


**QUICK MOUNT BRACKET (QMB)
DIRECT POLE (DP6/DP10)**

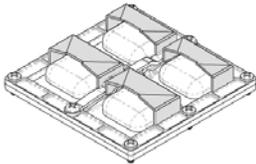


RETROFIT QUICK MOUNT BRACKET (RQMB)

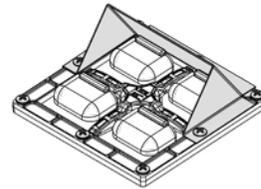
RQMB DRILL PATTERN



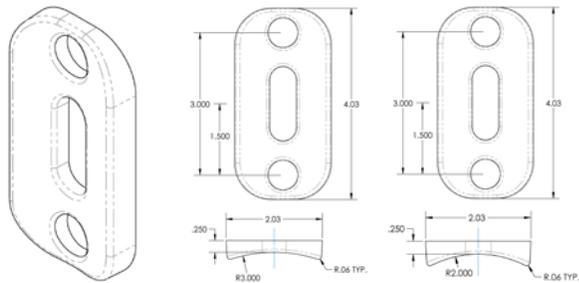
HOUSE SIDE SHIELD



AUTOMOTIVE HOUSE SIDE SHIELD



RPA4 / RPA5



FSP-211

