

**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).



**LED WATTAGE CHART**

	<b>80L</b>	<b>96L</b>
<b>1050 milliamps</b>	263w	316w

Project Name:

Type:

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Cat#	Light Dist.	# of LEDs	Milliamps	Kelvin	Volts	Mounting	Color	Options
Value Series Square 2 <b>(VSS-2)</b>	Type 2 <b>(T2)</b>	80 <b>(80L)</b>	1050 <b>(1)</b>	Amber 585-600nm <b>(AMBER)</b> ① ②	120-277 <b>(UNV)</b>	Direct Pole 6" Arm Single, D180 <b>(DPS6)</b> ③	Bronze Textured <b>(BRZ)</b>	Bird Spikes <b>(BS)</b> Marine Grade Finish <b>(MGF)</b> Photocell <b>(PC)</b> ④ Nema 7-Pin Receptacle <b>(PE7)</b> Photocell + Receptacle <b>(PCR)</b> Receptacle + Shorting Cap <b>(PER)</b> FSP-211 with Motion Sensor <b>(FSP-8)</b> ⑤ 8'+ Below <b>(FSP-20)</b> ⑤ 9'-20' Heights <b>(FSP-40)</b> ⑤ 21'-40' Heights Quick Mount Bracket <b>(QMB)</b> Retrofit Mount Bracket <b>(RQMB)</b> Round Pole Adaptor 3"- 4" Pole <b>(RPA4)</b> Round Pole Adaptor 5"- 6" Pole <b>(RPA5)</b> Rotated Optic Left <b>(ROL)</b> Rotated Optic Right <b>(ROR)</b> Automotive House Side Shield <b>(AHS)</b> House Side Shield <b>(HSS)</b> Buy American <b>(BAA)</b> ⑥ Trade American <b>(TAA)</b> ⑥ Build America Buy American <b>(BABA)</b> ⑥ Custom Controls Integration <b>(CCI)</b> ⑥
	Type 3 <b>(T3)</b>	96 <b>(96L)</b>		2700K, 70 CRI <b>(27K7)</b> ① ⑤	347-480 <b>(HV)</b>	Direct Pole 10" Arm D90, T90, T120, Quad <b>(DPS10)</b> ③	White Textured <b>(WHT)</b>	
	Type 4 <b>(T4)</b>			2700K, 80 CRI <b>(27K8)</b> ① ⑤		Knuckle Mount <b>(KM)</b>	Smooth White Gloss <b>(SWT)</b>	
	Type 5 <b>(T5)</b>			3000K, 70 CRI <b>(30K7)</b> ① ⑤		Wall Mount <b>(WM)</b> ③	Silver <b>(SVR)</b>	
				3000K, 80 CRI <b>(30K8)</b> ① ⑤		Trunnion Mount <b>(TM)</b>	Black Textured <b>(BLK)</b>	
				3500K, 80 CRI <b>(35K8)</b>		Tennis Arm Mount <b>(TA)</b>	Smooth Black Gloss <b>(SBK)</b>	
			4000K, 70 CRI <b>(40K7)</b>			Graphite Textured <b>(GPH)</b>		
			4000K, 80 CRI <b>(40K8)</b> ①			Grey Textured <b>(GRY)</b>		
			5000K, 70 CRI <b>(50K7)</b>			Custom <b>(CS)</b>		
			5000K, 80 CRI <b>(50K8)</b> ①					

**Notes:**

- ① Consult Factory for Lead Time. Consult Factory for 90 CRI Requests.
- ② For Round Pole Specify RPA4 or RPA5
- ③ Includes 6" Bolt On Arm
- ④ Universal Voltage 120-277
- ⑤ 3000K or lower must be selected to meet International Dark Sky Association certification
- 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

# 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  $-40^{\circ}\text{C}$  and Ambient Temp. Max ranges from  $50^{\circ}\text{C}$  to  $55^{\circ}\text{C}$  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  $105^{\circ}\text{C}$
- 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.

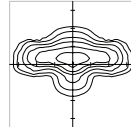
## CONTROLS

- **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)

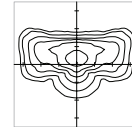
## OPTICS

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.

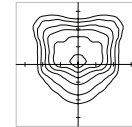
- IES Types



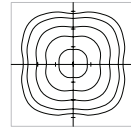
TYPE II (T2)



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/wp-content/uploads/cs/NLS\\_BuyAmerica\(n\).pdf](https://nslighting.com/wp-content/uploads/cs/NLS_BuyAmerica(n).pdf)



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.

**NLS**  
LIGHTING

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

[nslighting.com](http://nslighting.com)

# PRODUCT SPECIFICATIONS

## LUMENS

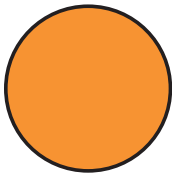
PART NUMBER	T2	LM/W	BUG	T3 HSS	LM/W	BUG	T3	LM/W	BUG	T4 AHS	LM/W	T4 HSS	LM/W	BUG	T4	LM/W	BUG	T5	LM/W	BUG	Watts
VSS-2-80L-1-30K7	27878	106	B3-U0-G3	15254	58	B1-U0-G3	27089	103	B3-U0-G3	18936	72	14991	57	B1-U0-G3	26826	102	B3-U0-G4	28404	108	B5-U0-G3	263
VSS-2-80L-1-40K7	29456	112	B3-U0-G3	16306	62	B1-U0-G3	29193	111	B3-U0-G4	19988	76	16043	61	B1-U0-G3	28930	110	B3-U0-G4	30771	117	B5-U0-G4	263
VSS-2-80L-1-50K7	31823	121	B3-U0-G4	17358	66	B1-U0-G3	31560	120	B3-U0-G4	21040	80	17095	65	B1-U0-G3	31034	118	B3-U0-G4	33138	126	B5-U0-G4	263
VSS-2-96L-1-30K7	33496	106	B3-U0-G4	18328	58	B1-U0-G3	32548	103	B3-U0-G4	22752	72	18012	57	B1-U0-G3	32232	102	B3-U0-G4	34128	108	B5-U0-G4	316
VSS-2-96L-1-40K7	35392	112	B3-U0-G4	19592	62	B1-U0-G3	35076	111	B4-U0-G4	24016	76	19276	61	B1-U0-G4	34760	110	B4-U0-G4	36972	117	B5-U0-G4	316
VSS-2-96L-1-50K7	38236	121	B4-U0-G4	20856	66	B1-U0-G4	37920	120	B4-U0-G4	25280	80	20540	65	B1-U0-G4	37288	118	B4-U0-G4	39816	126	B5-U0-G4	316

### Lumen Maintenance Data

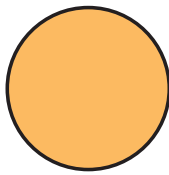
Ambient Temperature	Drive Current	L90 Hours*	L70 Hours**	30,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours**
25°C	1050mA	38,000	96,000	93.0%	85.4%	81.8%	68.8%

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

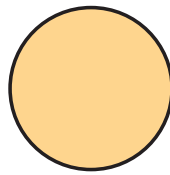
## LED KELVIN RANGE



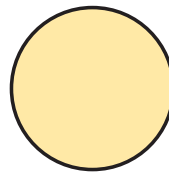
AMBER  
585-600 nm



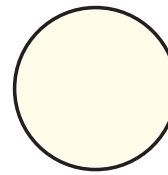
2700K 70 CRI



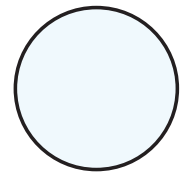
3000K 70 CRI



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-2
A	21.5 in SQ
B	8 in.
Weight	34 lbs

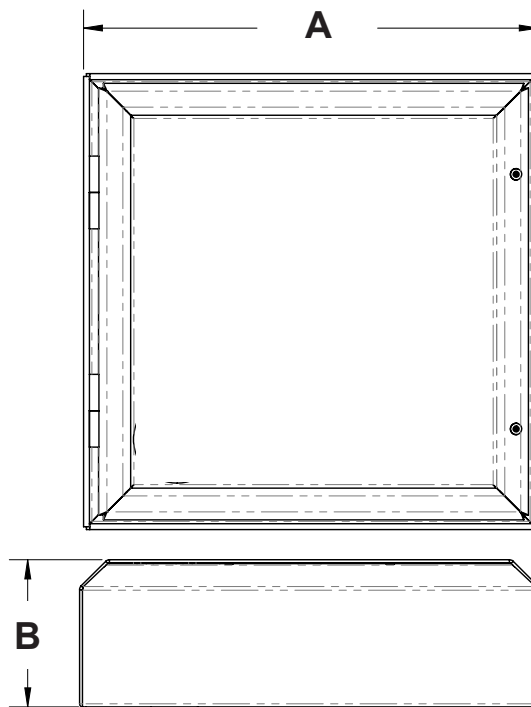
## DPX ARM LENGTH

DPX ARM LENGTH	SGL	D90	D180	T90	T120	QD
VSS-2	6"	10"	6"	10"	10"	10"

6" - DPX6 | 10" - DPX10

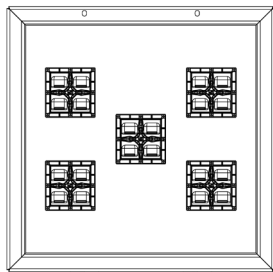
## EPA

EPA	SGL	D90	D180	T90	T120	QD
VSS-2	1.49	2.36	2.98	3.56	3.72	3.56

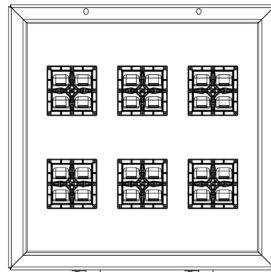


## OPTICAL CONFIGURATIONS

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



VSS-2 / 80L



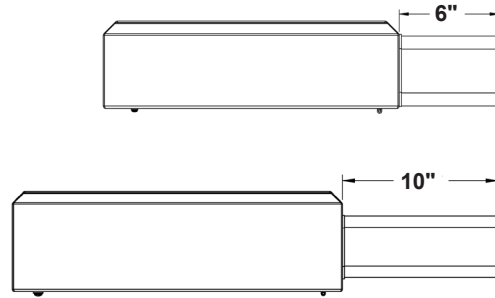
VSS-2 / 96L

# PRODUCT SPECIFICATIONS

## DIRECT POLE (DP)

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

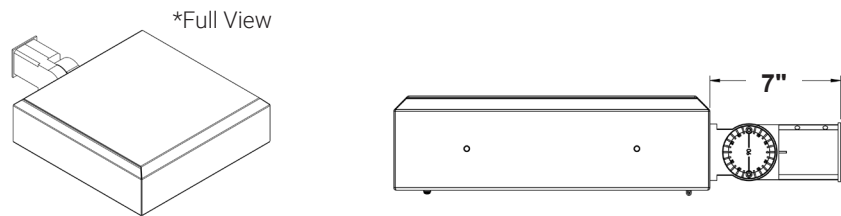
\*Arm lengths may vary depending on configuration



## KNUCKLE MOUNT (KM)

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

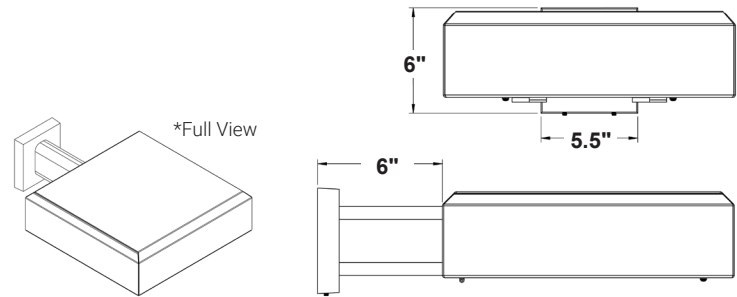
- Max Uplift of 110 degrees
- Adjustable in 5 degree increments



## WALL MOUNT (WM)

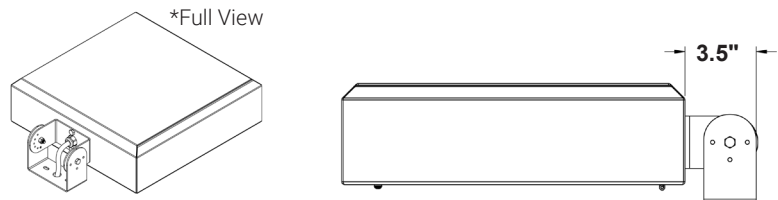
Cast Aluminum Plate for direct wall mount.

6" extruded aluminum arm mounts directly to a cast wall mount box.



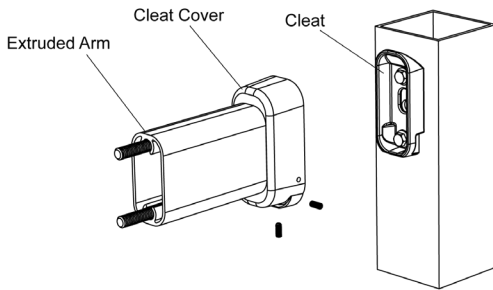
## TRUNNION MOUNT (TM)

Steel bolt-on-mounting for adjustable installation with a maximum uplift of 90°.

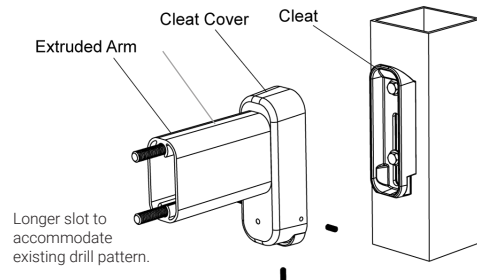
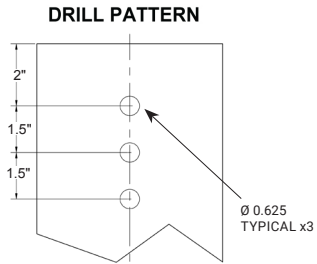


# PRODUCT SPECIFICATIONS

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

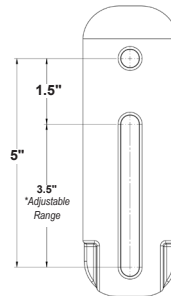


**QUICK MOUNT BRACKET (QMB)  
DIRECT POLE (DP6/DP10)**

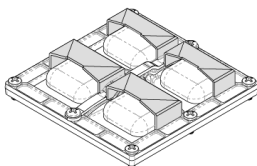


**RETROFIT QUICK MOUNT BRACKET (RQMB)**

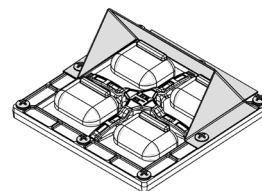
**RQMB DRILL PATTERN**



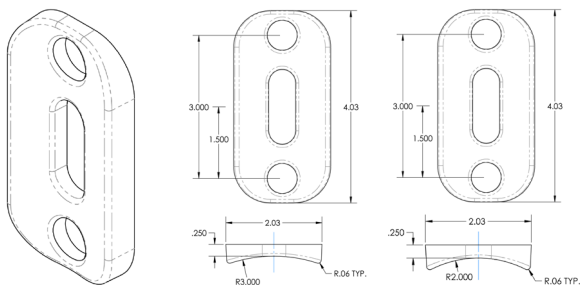
## HOUSE SIDE SHIELD



## AUTOMOTIVE HOUSE SIDE SHIELD



## RPA4 / RPA5



## FSP-211

