NLS LIGHTING

HORIZON MA

SITE LIGHTING

LED WATTAGE CHART				
	16L	32L	48L	64L
400 milliamps	21w	-	-	-
530 milliamps	28w	56w	-	-
700 milliamps	36w	71w	104w	136w
1050 milliamps	56w	106w	156w	205w

Horizon Post Top luminaire is a blend of beautiful luminaire design which is a compliment to commercial or recreational pathways. It is named the Horizon because the luminaire is intended to be a vehicle of which the horizon can be viewed through the inside and around the luminaire without obstruction.

This Dark Sky Friendly Full Cutoff luminaire utilizes silicone Micro Optics to distribute light uniformly as its LEDs are recessed and hidden. Its performance exceeds IES minimum foot candle levels at lower wattage and extends maintenance cycles throughout its lifetime. Horizon PT is available in Amber, 2700, 3000K, 3500K, 4000K, 5000K Kelvin temperatures and a range of 21 to 205 watts.

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:

HORIZON MA ORDERING GUIDE

Cat#	Light Dist.	# of LEDs	Miliamps	Kelvin	Volts
Horizon 1 **(HRZ-1)**	Type 2 **(T2)** Type 3 **(T3)** Type 4 **(T4)** Type 5 **(T5)**	16 **(16L)** 32 **(32L)** 48 **(48L)** 64 **(64L)**	400 **(40)** [1] 530 **(53)** [2] 700 **(7)** 1050 **(1)**	Amber 586-600nM **(AMBER)** [7, 9, 10] Amber LED Phosphor Converted **(AMBER/PC)** [9, 10] 2700K, 70 CRI **(27K7)** 2700K, 80 CRI **(27K8)** [3] 3000K, 70 CRI **(30K7)** 3000K, 80 CRI **(30K8)** [3] 3500K, 80 CRI **(35K8)** [3] 4000K, 70 CRI **(40K7)** 4000K, 80 CRI **(40K8)** [3] 5000K, 70 CRI **(50K7)** 5000K, 80 CRI **(50K8)** [3]	120-277 **(UNV)** 347-480 **(HV)**

Mounting	Color	Controls Options	Options
Mast Arm Over 2-3/8" OD **(MA)** [4]	Bronze Textured **(BRZ)** White Textured **(WHT)** Smooth White Gloss **(SWT)** Silver Metallic **(SVR)** Black Textured **(BLK)** Smooth Black Gloss **(SBK)** Graphite Textured **(GPH)** Grey Textured **(GRY)** Green Textured **(GRN)** Hunter Green Textured **(HGN)** Custom **(CS)**	Nema 7-Pin Receptacle **(PE7)** Photocell + Receptacle **(PCR)** Receptacle + Shorting Cap **(PER)** FSP-211 with Motion Sensor/Photocell 8' and Below Heights **(FSP211-8)** [5, 11] 9'-20' Heights **(FSP211-20)** [5, 11] 21'-40' Heights **(FSP211-40)** [5, 11] FSP-221 with Motion Sensor/Photocell 9'-20' Heights **(FSP221-20)** [12] 21'-40' Heights **(FSP221-40)** [12] Custom Controls Integration **(CCI)** [6] Button Type Photocell **(PC)** [5]	Bird Spikes **(BS)** Marine Grade Finish **(MGF)** Dome Top **(DT)** House Side Shield **(HSS)** Buy American Act **(BAA)** [8] Trade Agreement Act **(TAA)** [8] Build America Buy American **(BABA)** [8] FSP Remote **(FSIR)** [13]

NOTES:

1. 16L Only
2. 16L-32L Only
3. Consult Factory for Lead Time. Consult Factory for 90 CRI Requests.
4. Standard
5. Universal Voltage 120-277
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
9. Consult Factory for Lead Time
10. Not Available above 530mA
11. FSP-211, 120V/277VAC (800W/1200W Max), 230-240VAC (300W Max), 50/60Hz Single Phase. Field/Site line voltage must be disclosed for project validation.
12. FSP-221, 100-347VAC 50/60Hz Single Phase, 208/230/480VAC 50/60Hz Phase-to-Phase. 120VAC (800W Max), 230-240VAC (300W Max), 277/347/480VAC (1200W Max). Field/Site line voltage must be disclosed for project validation.
13. Projects with sensors require Qty. 1 FSIR per project

PRODUCT SPECIFICATIONS

ELECTRICAL

- 120-277 Volts (UNV) or 347-480 Volts (HV)
- 0-10V dimming driver
- Driver power factor at maximum load is ≥ .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
- CRI 70, 80 or 90
- Color temperatures: Amber, 2700K, 3000K, 3500K, 4000K, 5000K
- Surge Protection: 20KA supplied as standard.

CONSTRUCTION

- Cast Aluminum

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.
- Dome Top - Optional decorative dome top.
- House Side Shield (HSS) - Designed for full property line cutoff.
- BIRD SPIKES - Offers effective and humane deterrent for larger bird species and provides cost-effective long-term solution to nuisance bird infestations and protects your property.

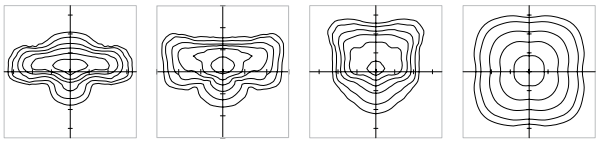
CONTROL OPTIONS

- **FSP-211 w/Motion Sensor/Photocell (120/277VAC, 230-240VAC)** (FSP-X) - Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution. Standard white finish.
- **FSP-221 w/Motion Sensor/Photocell (100-347VAC, 208/230/480VAC)** (FSP-HV-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 9-20 feet.
  - FSP-40 mounting heights 21-40 feet.
  - Can maintain constant foot candles over time. Consult Factory
  - 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.
- 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)
- PHOTOCELL - Button type photocell.
- 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.
- PHOTOCELL + RECEPTACLE (PCR)–7-Pin Receptacle and Electronic Twist Lock Photocell for dusk to dawn operation.
- RECEPTACLE + SHORTING CAP (PER)–7-Pin Receptacle and Shorting Cap.

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



TYPE II (T2) TYPE III (T3) TYPE IV (T4) TYPE V (T5)

FINISH

- 3-5 mils electrostatic powder coat.
- NLS Light's standard high-quality finishes prevent corrosion protects against and extreme environmental conditions
- 10 Standard Finishes, Custom Finish and Marine Grade Finish Available

WARRANTY

Five-year limited warranty for drivers and LEDs.

LISTINGS

- UL Listed in compliance with UL 1598, the Standard for Safety of Luminaires, including the applicable wet location requirements
- Compliant with UL 8750 LED driver design and test safety standards
- CSA C22.2 No. 250.0

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:

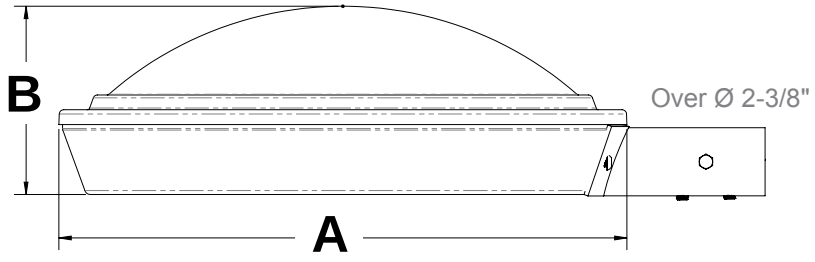
https://nlslighting.com/buy-american/

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.

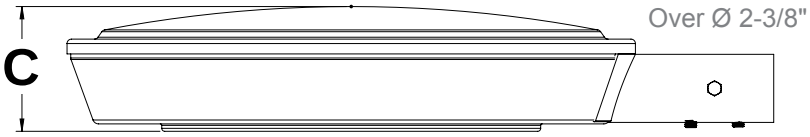
NLS LIGHTING
701 Kingshill Place, Carson, CA 90746
Call Us Today (310) 341-2037
nlslighting.com

PRODUCT SPECIFICATIONS

*OPTIONAL DOME TOP (DT)



*STANDARD FLAT TOP



DIMENSION	HRZ-1
A	24.00 in
B	8.00 in
C	5.27 in

HRZ-1
Weight: 25 lbs

EPA	STD TOP	DOME TOP
HRZ-1	.92	1.17

Lumen Maintenance Data							
Ambient Temperature	Drive Current	L90 Hours*	L70 Hours**	30,000 Hours*	50,000 Hours*	60,00 Hours*	100,000 Hours**
25°C	Up to 700mA	58,000	173,000	95.7%	91.6%	89.6%	82.1%
	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							

PRODUCT SPECIFICATIONS

LUMEN DATA CHART													
PART NUMBER	T2 LUMENS	T2 LM/W	T3 LUMENS	T3 LM/W	T3-HSS LUMENS	T3-HSS LM/W	T4 LUMENS	T4 LM/W	T4-HSS LUMENS	T4-HSS LM/W	T5 LUMENS	T5 LM/W	Watts
HRZ-1-16L-40-27K7	2305	110	2247	107			2227	106			2324	111	21
HRZ-1-16L-40-27K8	2158	103	2104	100			2085	99			2176	104	21
HRZ-1-16L-40-30K8	2314	110	2256	107			2236	106			2333	111	21
HRZ-1-16L-40-30K7	2492	119	2429	116			2408	115			2513	120	21
HRZ-1-16L-40-35K8	2314	110	2256	107			2236	106			2333	111	21
HRZ-1-16L-40-40K8	2492	119	2429	116			2408	115			2513	120	21
HRZ-1-16L-40-40K7	2693	128	2625	125			2602	124			2715	129	21
HRZ-1-16L-40-50K8	2492	119	2429	116			2408	115			2513	120	21
HRZ-1-16L-40-50K7	2693	128	2625	125			2602	124			2715	129	21
HRZ-1-16L-53-30K7	3275	117	3192	114	1624	58	3165	113	1596	57	3304	118	28
HRZ-116L-53-40K7	3524	126	3435	123	1736	62	3406	122	1708	61	3556	127	28
HRZ-1-16L-53-50K7	3603	129	3511	125	1848	66	3482	124	1820	65	3640	130	28
HRZ-1-16L-7-30K7	4100	114	4115	111	2088	58	4003	111	2052	57	4176	116	36
HRZ-1-16L-7-40K7	4411	123	4300	119	2232	62	4308	120	2196	61	4500	125	36
HRZ-1-16L-7-50K7	4510	125	4396	122	2376	66	4404	122	2340	65	4608	128	36
HRZ-1-16L-1-30K7	5858	105	5712	102	3248	58	5661	101	3192	57	5880	105	56
HRZ-1-16L-1-40K7	6303	113	6146	110	3472	62	6091	109	3416	61	6328	113	56
HRZ-1-16L-1-50K7	6443	115	6283	112	3696	66	6227	111	3640	65	6496	116	56
HRZ-1-32L-53-30K7	5858	105	5712	102	3248	58	5661	101	3192	57	5880	105	56
HRZ-1-32L-53-40K7	6303	113	6146	110	3472	62	6091	109	3416	61	6328	113	56
HRZ-1-32L-53-50K7	6443	115	6283	112	3696	66	6227	111	3640	65	6496	116	56
HRZ-1-32L-7-30K7	7427	105	7881	111	4118	58	7896	111	4047	57	8236	116	71
HRZ-1-32L-7-40K7	7991	113	8480	119	4402	62	8496	120	4331	61	8875	125	71
HRZ-1-32L-7-50K7	8169	115	8669	122	4686	66	8685	122	4615	65	9088	128	71
HRZ-1-32L-1-30K7	11088	105	10812	102	6148	58	10715	101	6042	57	11130	105	106
HRZ-1-32L-1-40K7	11930	113	11634	110	6572	62	11529	109	6466	61	11978	113	106
HRZ-1-32L-1-50K7	12196	115	11893	112	6996	66	11787	111	6890	65	12296	116	106
HRZ-1-48L-7-30K7	11844	114	11544	111	6032	58	11648	112	5928	57	12068	116	104
HRZ-1-48L-7-40K7	12744	123	12421	119	6448	62	12444	120	6344	61	12985	125	104
HRZ-1-48L-7-50K7	13028	125	12698	122	6864	66	12792	123	6760	65	13275	128	104
HRZ-1-48L-1-30K7	16318	105	15912	102	9048	58	15769	101	8892	57	16455	105	156
HRZ-1-48L-1-40K7	17558	113	17121	110	9672	62	16968	109	9516	61	17705	113	156
HRZ-1-48L-1-50K7	17950	115	17503	112	10296	66	17346	111	10140	65	18100	116	156
HRZ-1-64L-7-30K7	15488	114	15096	111	7888	58	15124	111	7752	57	15781	116	136
HRZ-1-64L-7-40K7	16665	123	16243	119	8432	62	16273	120	8296	61	16981	125	136
HRZ-1-64L-7-50K7	17037	125	16606	122	8976	66	16728	123	8840	65	17359	128	136
HRZ-1-64L-1-30K7	23346	114	22755	111	11890	58	20722	101	11685	57	23780	116	205
HRZ-1-64L-1-40K7	25120	123	24484	119	12710	62	22297	109	12505	61	25625	125	205
HRZ-1-64L-1-50K7	25681	125	25031	122	13530	66	22795	111	13325	65	26240	128	205

PRODUCT SPECIFICATIONS

B.U.G DATA CHART							
PART NUMBER	**T2**	**T3**	**T3-HSS**	**T4**	**T4-HSS**	**T5**	**Watts**
HRZ-1-16L-400-30K	B1-U0-G1	B1-U0-G1	B0-U0-G0	B1-U0-G1	B0-U0-G0	B2-U0-G1	21
HRZ-1-16L-400-40K	B1-U0-G1	B1-U0-G1	B0-U0-G0	B1-U0-G1	B0-U0-G0	B2-U0-G1	21
HRZ-1-16L-400-50K	B1-U0-G1	B1-U0-G1	B0-U0-G0	B1-U0-G1	B0-U0-G0	B2-U0-G1	21
HRZ-1-16L-530-30K	B1-U0-G1	B1-U0-G1	B0-U0-G0	B1-U0-G1	B0-U0-G1	B2-U0-G1	28
HRZ-1-16L-530-40K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G1	B0-U0-G1	B2-U0-G1	28
HRZ-1-16L-530-50K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G1	B0-U0-G1	B2-U0-G1	28
HRZ-1-16L-700-30K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G1	B0-U0-G1	B3-U0-G1	36
HRZ-1-16L-700-40K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G1	B0-U0-G1	B3-U0-G1	36
HRZ-1-16L-700-50K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G1	B0-U0-G1	B3-U0-G1	36
HRZ-1-16L-1050-30K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G2	B0-U0-G1	B3-U0-G1	56
HRZ-1-16L-1050-40K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G2	B0-U0-G1	B3-U0-G1	56
HRZ-1-16L-1050-50K	B1-U0-G1	B1-U0-G2	B0-U0-G1	B1-U0-G2	B0-U0-G1	B3-U0-G1	56
HRZ-1-32L-530-30K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G2	B0-U0-G1	B3-U0-G1	54
HRZ-1-32L-530-40K	B1-U0-G1	B1-U0-G1	B0-U0-G1	B1-U0-G2	B0-U0-G1	B3-U0-G1	54
HRZ-1-32L-530-50K	B1-U0-G1	B1-U0-G2	B0-U0-G1	B1-U0-G2	B0-U0-G1	B3-U0-G1	54
HRZ-1-32L-700-30K	B2-U0-G2	B2-U0-G2	B0-U0-G1	B2-U0-G2	B0-U0-G1	B3-U0-G2	71
HRZ-1-32L-700-40K	B2-U0-G2	B2-U0-G2	B0-U0-G1	B2-U0-G2	B0-U0-G1	B3-U0-G2	71
HRZ-1-32L-700-50K	B2-U0-G2	B2-U0-G2	B0-U0-G1	B2-U0-G2	B0-U0-G2	B3-U0-G2	71
HRZ-1-32L-1050-30K	B2-U0-G2	B2-U0-G2	B0-U0-G2	B2-U0-G2	B0-U0-G2	B4-U0-G2	106
HRZ-1-32L-1050-40K	B2-U0-G2	B2-U0-G2	B0-U0-G2	B2-U0-G2	B0-U0-G2	B4-U0-G2	106
HRZ-1-32L-1050-50K	B2-U0-G2	B2-U0-G2	B0-U0-G2	B2-U0-G2	B0-U0-G2	B4-U0-G2	106
HRZ-1-48L-700-30K	B2-U0-G2	B2-U0-G2	B0-U0-G2	B2-U0-G2	B0-U0-G2	B4-U0-G2	104
HRZ-1-48L-700-40K	B2-U0-G2	B2-U0-G2	B0-U0-G2	B2-U0-G2	B0-U0-G2	B4-U0-G2	104
HRZ-1-48L-700-50K	B2-U0-G2	B2-U0-G2	B0-U0-G2	B2-U0-G2	B0-U0-G2	B4-U0-G2	104
HRZ-1-48L-1050-30K	B3-U0-G3	B3-U0-G3	B0-U0-G2	B3-U0-G3	B1-U0-G2	B4-U0-G2	156
HRZ-1-48L-1050-40K	B3-U0-G3	B3-U0-G3	B0-U0-G2	B3-U0-G3	B1-U0-G2	B4-U0-G2	156
HRZ-1-48L-1050-50K	B3-U0-G3	B3-U0-G3	B1-U0-G2	B3-U0-G3	B1-U0-G2	B4-U0-G2	156
HRZ-1-64L-700-30K	B3-U0-G3	B3-U0-G3	B0-U0-G2	B3-U0-G3	B0-U0-G2	B4-U0-G2	137
HRZ-1-64L-700-40K	B3-U0-G3	B3-U0-G3	B0-U0-G2	B3-U0-G3	B1-U0-G2	B4-U0-G2	137
HRZ-1-64L-700-50K	B3-U0-G3	B3-U0-G3	B0-U0-G2	B3-U0-G3	B1-U0-G2	B4-U0-G2	137
HRZ-1-64L-1050-30K	B3-U0-G3	B3-U0-G3	B1-U0-G2	B3-U0-G3	B1-U0-G2	B5-U0-G3	205
HRZ-1-64L-1050-40K	B3-U0-G3	B3-U0-G3	B1-U0-G2	B3-U0-G4	B1-U0-G3	B5-U0-G3	205
HRZ-1-64L-1050-50K	B3-U0-G3	B3-U0-G3	B1-U0-G2	B3-U0-G4	B1-U0-G3	B5-U0-G3	205

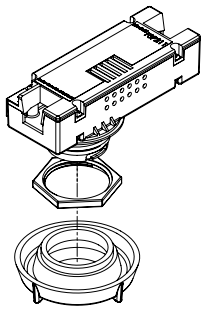
CONTROL OPTIONS

- DIMMING CONTROL (FSP)—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 9-20 feet.
- FSP-40 mounting heights 21-40 feet.
- Includes 5 dimming event cycles, 0-10V dimming with motion sensing, re-programmable in the field.

FSP-211 WITH MOTION SENSOR (FSP-XX)

- FSP-211(FSP-X)—Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.
- 120/277VAC, 230-240VAC
- 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 9-20 feet.
- FSP-40 mounting heights 21-40 feet.
- Includes 5 dimming event cycles, 0-10V dimming with motion sensing, re-programmable in the field.
- Standard white finish.

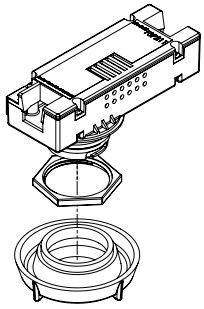
FSP-211



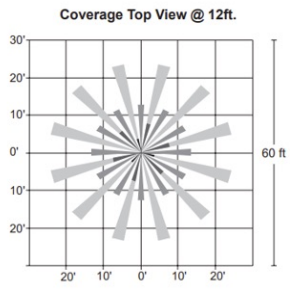
FSP-221 WITH MOTION SENSOR (FSP-HV-XX)

- FSP-221 (FSP-HV-X)—Passive infrared (PIR) sensor providing multi-level control based on motion/daylight contribution.
- 100-347VAC 208/230/480VAC
- 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 9-20 feet.
- FSP-40 mounting heights 21-40 feet.
- Includes 5 dimming event cycles, 0-10V dimming with motion sensing, re-programmable in the field.

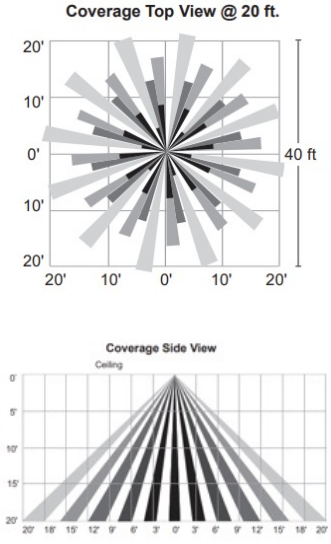
FSP-221



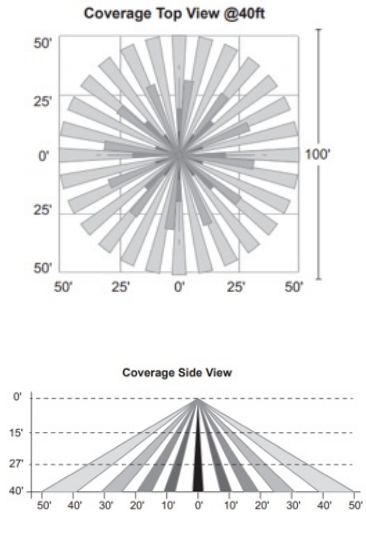
FSP-8



FSP-20

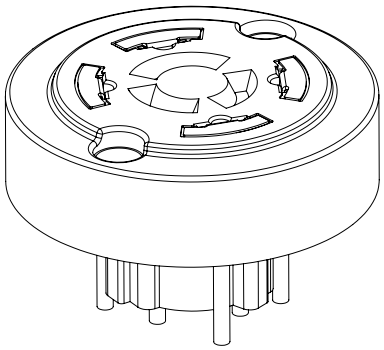


FSP-40



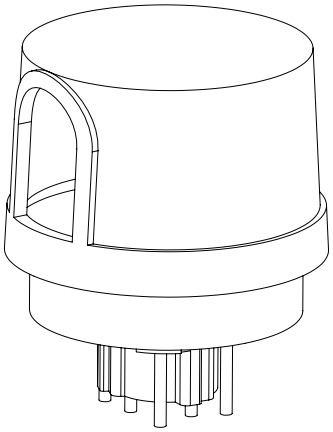
NEMA 7-PIN RECEPTACLE (PE7)

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.



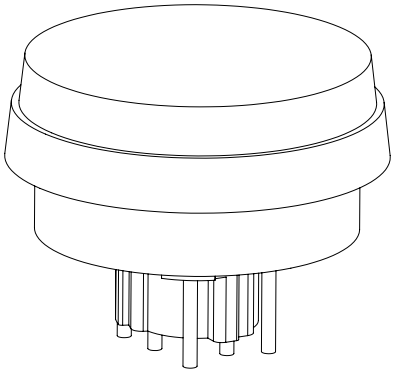
PHOTOCELL + RECEPTACLE (PCR)

7-Pin Receptacle and Electronic Twist Lock Photocell for dusk to dawn operation.



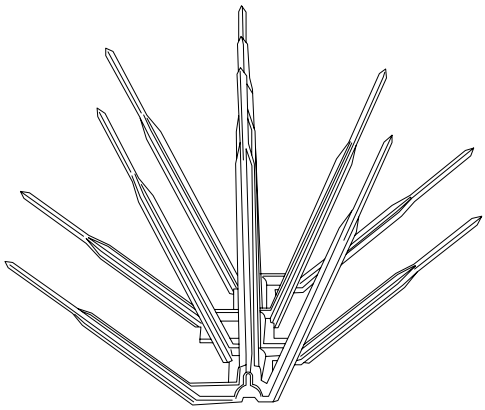
RECEPTACLE + SHORTING CAP (PER)

7-Pin Receptacle and Shorting Cap.



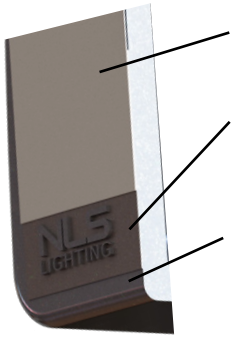
BIRD SPIKES (BS)

Bird Spikes 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)

The (MGF) is a multi step process. 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.



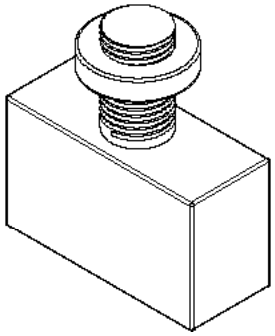
Powder Coat Finish
3-5 mil Powder Coat

Primer Layer
3-5 mil Zinc Rich Super Durable Polyester Primer

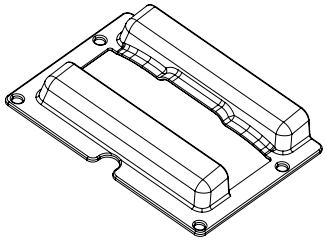
Prepared Casting
Chemically washed in multi Step 5 stage cleaning process

BUTTON PHOTOCELL (PC)

Photocell for dusk to dawn operation.
Consult Factory.



SHIELDING OPTIONS (HSS)

SHIELDS (HSS)—House Side Shield (HSS) is designed for full property line cut-off.

HOUSE SIDE SHIELD