## 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

PROUDLY MADE IN THE U.S.A.

| | | | |
|---|---|---|---|
| BAA COMPLIANT | 5 YEAR | MGF | ida DARK SKY APPROVED | IK10 RATED | RoHS COMPLIANT | POWDER COATED TOUGH | MICROPTICS | c UL us LISTED | | IP65 | IP67 |

| LED WATTAGE CHART | | | |
|---|---|---|---|
| | **32L** | **48L** | **64L** |
| **700 milliamps** | 71w | 104w | 136w |
| **1050 milliamps** | 106w | 156w | 205w |

Project Name: _____          Type: _____

| Cat# | Light Dist. | # of LEDs | Milliamps | Kelvin | Volts | Mounting | Color | Options |
|---|---|---|---|---|---|---|---|---|
| Value Series Square 1 **(VSS-1)** | Type 2 **(T2)** | 32 **(32L)** | 530 **(53)** ❶ | 2700K, 70 CRI **(27K7)** ❹ | 120-277 **(UNV)** | Ceiling Mount **(CM)** | Bronze Textured **(BRZ)** | Marine Grade Finish **(MGF)** |
| | Type 3 **(T3)** | 48 **(48L)** | 700 **(7)** | 2700K, 80 CRI **(27K8)** ❷❹ | 347-480 **(HV)** | | White Textured **(WHT)** | FSP-211 with Motion Sensor **(FSP-8)** ❸ 8'+ Below **(FSP-20)** ❸ 9'-20'Heights |
| | Type 4 **(T4)** | 64 **(64L)** | 1050 **(1)** | 3000K, 70 CRI **(30K7)** ❹ | | | Smooth White Gloss **(SWT)** | |
| | Type 5 **(T5)** | | | 3000K, 80 CRI **(30K8)** ❷❹ | | | Silver **(SVR)** | Emergency Battery Back-Up **(EB)** |
| | | | | 3500K, 80 CRI **(35K8)** | | | Black Textured **(BLK)** | Dual Feed Load Control Bypass Relay **(LCBR)** ❺ |
| | | | | 4000K, 70 CRI **(40K7)** | | | Smooth Black Gloss **(SBK)** | |
| | | | | 4000K, 80 CRI **(40K8)** ❷ | | | Graphite Textured **(GPH)** | |
| | | | | 5000K, 70 CRI **(50K7)** | | | Grey Textured **(GRY)** | |
| | | | | 5000K, 80 CRI **(50K8)** ❷ | | | Custom **(CS)** | |

**Notes:**
❶ 32L Only
❷ Consult Factory for Lead Time. Consult Factory for 90 CRI Requests.
❸ Universal Voltage 120-277
❹ 3000K or lower must be selected to meet International Dark Sky Association certification
❺ Consult Factory

## 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 (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± 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
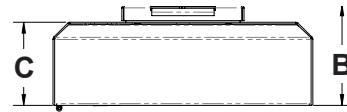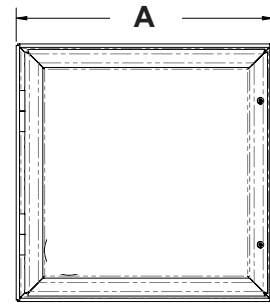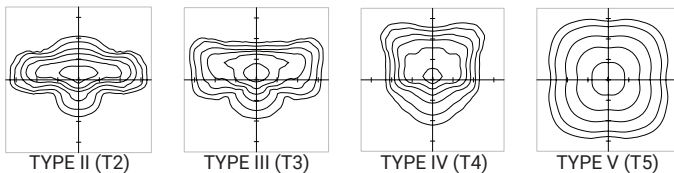  - Class 2 Output Classification

### 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.
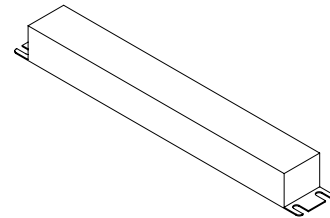
## OPTICS

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.
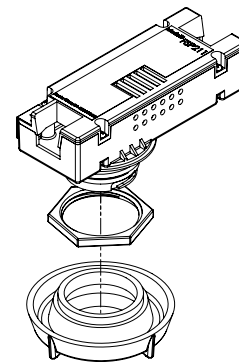
- IES Types



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



| DIMENSION | VSS-1 |
|-----------|-----------|
| A | 17 in. SQ |
| B | 5.83 in. |
| C | 5.00 in. |
| WEIGHT | 23 lbs. |

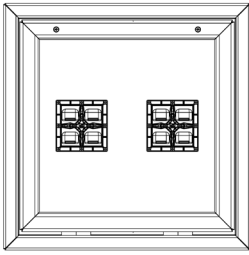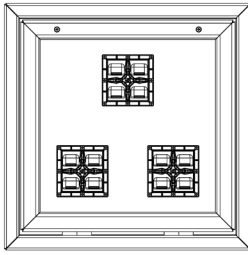### EMERGENCY BATTERY BACK-UP (EB)



### 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.
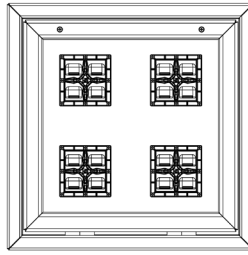
## OPTICAL CONFIGURATIONS

**VSS-1 / 32L**　　　**VSS-1 / 48L**　　　**VSS-1 / 64L**

| PART NUMBER | T2 LUMENS | T2 LM/W | T3 LUMENS | T3 LM/W | T4 LUMENS | T4 LM/W | T5 LUMENS | T5 LM/W | WATTS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | **LUMENS** | | | | | |
| VSS-1-32L-7-30K7 | 7384 | 104 | 7242 | 102 | 7668 | 108 | 8179 | 115 | 71 |
| VSS-1-32L-7-40K7 | 8023 | 113 | 7952 | 112 | 8307 | 117 | 8946 | 126 | 71 |
| VSS-1-32L-7-50K7 | 8662 | 122 | 8520 | 120 | 8946 | 126 | 9585 | 135 | 71 |
| VSS-1-32L-1-30K7 | 10706 | 101 | 10600 | 100 | 10812 | 102 | 11125 | 105 | 106 |
| VSS-1-32L-1-40K7 | 11660 | 110 | 11554 | 109 | 11766 | 111 | 12190 | 115 | 106 |
| VSS-1-32L-1-50K7 | 12508 | 118 | 12402 | 117 | 12508 | 118 | 13144 | 124 | 106 |
| VSS-1-48L-7-30K7 | 10816 | 104 | 10712 | 103 | 11232 | 108 | 12272 | 118 | 104 |
| VSS-1-48L-7-40K7 | 11752 | 113 | 11648 | 112 | 12168 | 117 | 13312 | 128 | 104 |
| VSS-1-48L-7-50K7 | 12688 | 122 | 12480 | 120 | 13104 | 126 | 14248 | 137 | 104 |
| VSS-1-48L-1-30K7 | 16559 | 106 | 15756 | 101 | 15912 | 102 | 16536 | 106 | 156 |
| VSS-1-48L-1-40K7 | 17160 | 110 | 17004 | 109 | 17316 | 111 | 17940 | 115 | 156 |
| VSS-1-48L-1-50K7 | 18408 | 118 | 18252 | 117 | 18408 | 118 | 19188 | 123 | 156 |
| VSS-1-64L-7-30K7 | 14144 | 104 | 13736 | 101 | 14688 | 108 | 16048 | 118 | 136 |
| VSS-1-64L-7-40K7 | 15368 | 113 | 14824 | 109 | 15912 | 117 | 17408 | 128 | 136 |
| VSS-1-64L-7-50K7 | 16592 | 122 | 16048 | 118 | 17136 | 126 | 18632 | 137 | 136 |
| VSS-1-64L-1-30K7 | 21730 | 106 | 20705 | 101 | 20910 | 102 | 21730 | 106 | 205 |
| VSS-1-64L-1-40K7 | 22550 | 110 | 22345 | 109 | 22755 | 111 | 23575 | 115 | 205 |
| VSS-1-64L-1-50K7 | 24190 | 118 | 23780 | 116 | 24190 | 118 | 25215 | 123 | 205 |

### 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-1-CM | 0.90 |

### 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 | | | | |

## 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.