

DESCRIPTION

Lanterra 9002-W1 (Up or Down) and 9002-W2 (Up and Down) are small 2.5" O.D., line voltage cylinder fixtures with dimmable LED. The luminaire comes in various mountings, surface mount with integral driver in the housing, remote driver mount with round and square wall plates and square wall integral driver, all of which can be mounted over standard 4 inch j-box. The luminaire also comes with various field replaceable optics. It also comes with various lens, louvers and colors or dichroic filters, which can combine up to two at once to create multiple lighting effects. The fixture may be used indoors or outdoors and carries IP66 rating.

SPECIFICATION FEATURES

Material

Housing and hood are precision-machined from corrosion resistant billet stock 6061-T6 aluminum, C360 brass, C932 bronze*, C110 copper or 303/304 stainless steel.

Finish

Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS* chemical film undercoating and polyester powder coat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available.

Natural Metals

Fixtures constructed from brass, bronze, copper or stainless steel are left unpainted to reveal the natural beauty of the material. Brass, bronze* and copper will patina naturally over time.

Hood

Hood is removable and accepts up to two internal accessories at once (lenses, louvers and filters) to achieve multiple lighting effects. Weep holes prevents water and mineral stains from collecting on the lens, even in

the straight up position. The flush lens design reduces fixture length, minimizes debris collection and prevents water and mineral stains from collecting on the lens.

Gasket

Housing and hood are sealed with a high temperature silicone O-ring gasket to prevent water intrusion.

Lens

Tempered glass lens, factory sealed with high temperature silicone O-ring to prevent water intrusion and breakage due to thermal shock.

Hardware

Stainless steel hardware is standard to provide maximum corrosion resistance.

Electrical

Long life LED system coupled with electronic driver (120-277V/50-60Hz) is compatible with TRIAC (Leading Edge Dimming), ELV (Trailing Edge Dimming) and 0-10V dimming to deliver optical performance. Light can be dimmed from 100-1% while maintaining constant CCT. It will operate in -30°C to 50°C unless noted otherwise. The driver incorporates

Catalog #		Type	
Project		Date	
Comments			
Prepared by			

surge protection. LED's are available in 2700K, 3000K, 3500K at 90CRI and 97CRI, 4000K at 80CRI and 97CRI, 5000K at 80CRI and are industry leading high output with 86% lumen maintenance at 60,000hrs.

Compliance

Components are UL recognized and luminaires are cULus listed for 50°C ambient environments unless noted otherwise, wet location listed, and ROHS* compliant. IP66 Rated. Options to meet Buy American Act requirements.

Warranty

Lumiere warrants the Lanterra series of fixtures against defects in material and workmanship for five (5) years. Auxiliary equipment such as LED drivers carries the original manufacturer's warranty.



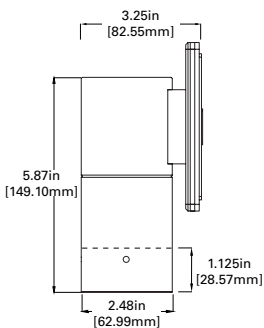
Lanterra 9002

LED
 INTERIOR / EXTERIOR
 CYLINDER FLOOD LIGHT
 CERTIFICATION DATA
 cULus - 1598
 Wet Location Listed - IP66
 LM79/LM80 Compliant
 ROHS* Compliant
 10W LED, L70/90,000@ 25° Celcius

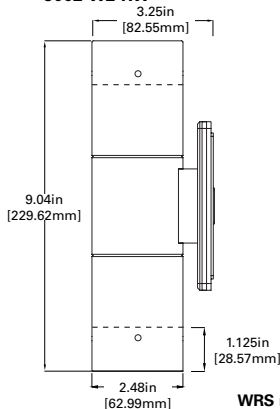


DIMENSIONS

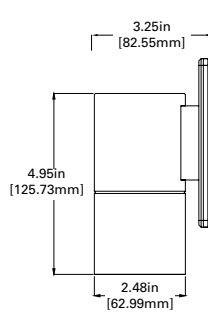
9002-W1-RW



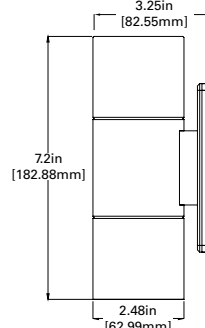
9002-W2-RW



9002-W1-FL



9002-W2-FL



ORDERING INFORMATION

DOMESTIC PREFERENCES ⁶	SERIES	DIRECTION	HOOD	LED CCT & CRI	FIELD REPLACEABLE OPTIC 1	FIELD REPLACEABLE OPTIC 2	FINISH ⁸	LIGHT LEVEL	VOLTAGE	MOUNTING	OPTIONS
[Blank]=Standard BAA=Buy American Act	9002	W1 Up or Down W2 ⁴ Up and Down	RW Standard-Recessed Lens with weep holes - Outdoor RI Recessed Lens with no weep holes - Indoor FL Flush lens hood	Standard CRI LED2790 - 2700K, 90 CRI LED 3090 - 3000K, 90 CRI LED 3590 - 3500K, 90 CRI LED 4080 - 4000K, 80 CRI LED 5080 - 5000K, 80 CRI Premium CRI LED 2797 - 2700K, 97 CRI LED 3097 - 3000K, 97 CRI LED 3597 - 3500K, 97 CRI LED 4097 - 4000K, 97 CRI	S Spot M Medium F Flood W Wide	S Spot M Medium F Flood W Wide	Standard Paint Finish BK Black BZ Bronze CS City Silver WT White	L1 Light Level 1 (10W)	UNV 120-277V	Surface Mount - Wall, Ceiling, Ground RSM Round Surface Mount- mounts directly to junction box Remote Driver Housing WRR ⁵ Remote Driver Housing - Round Wall Plate WRS ⁵ Remote Driver Housing - Square Wall Plate Integral Driver Mount WIS Wall Integral Driver Plate Thermal Limitations (unless otherwise noted 45C) 9002-(W1,W2)-xx-L1-xx-WIS (50C)	SVPD2 ² Stand-alone integral sensor

Notes: 1. Only available for double head option (W2)
 2. Premium metal not available for RSM option
 3. Only available for Single head, Up or down (W1) with RSM only.
 4. W2 doubles input wattage listed with RSM only
 5. Remote Driver up to 60°

6. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAAI). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
 7. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

8. Consult factory for premium/natural metals material finish.
 * ROHS Compliant - For Natural materials consult factory

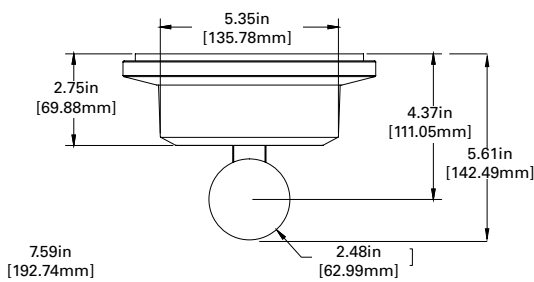
ACCESSORIES - ORDER SEPARATELY

		ACCESSORIES 7			OPTICS	
ISHH01LUM	Programming Remote for sensor	Filters		Lens	Louwer	LLR-S-2 15° Spot
ISHH02LUM	Personal Control Remote for sensor	F71-2 Peach Dichroic		LSL-2 Linear Spread Lens	LVR-2 45° Hex Cell Louwer	LLR-M-2 25° Medium
		F72-2 Amber Dichroic		DIF-2 Diffused Lens		LLR-F-2 40° Flood
		F73-2 Green Dichroic		OSL-2 Overall Spread Lens		LLR-W-2 55° Wide Flood
		F74-2 Medium Blue				LLR-K-2 Spot, Medium, Flood, Wide Flood kit
		F75-2 Yellow Dichroic				
		F76-2 Red Dichroic				LLR-F-LC-2 40° Flood color tuning optic
		F77-2 Dark Blue Dichroic				LLR-W-LC-2 55° Wide Flood color tuning optic
		F78-2 Light Blue Dichroic				LLR-K-LC-2 Flood, Wide Flood tuning optic kit
		F79-2 Neutral Density Dichroic				
		F80-2 Magenta Dichroic				
		F22-2 Red Color				
		F33-2 Blue Color				
		F44-2 Green Color				
		F55-2 Yellow Color				
		F66-2 Mercury Color				

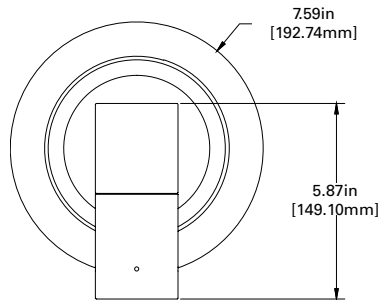
MOUNTINGS

ROUND SURFACE MOUNT (RSM)

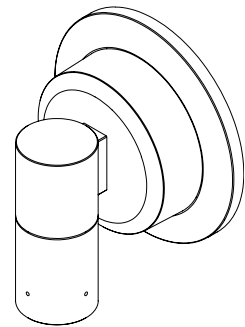
RSM-W1 (Up or down)



TOP VIEW



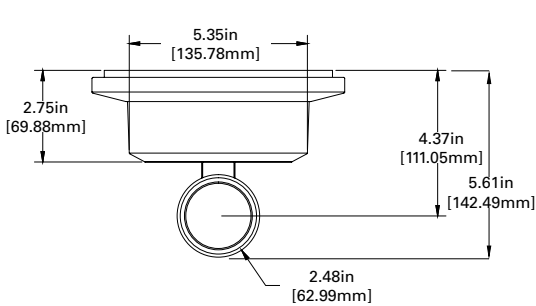
FRONT VIEW



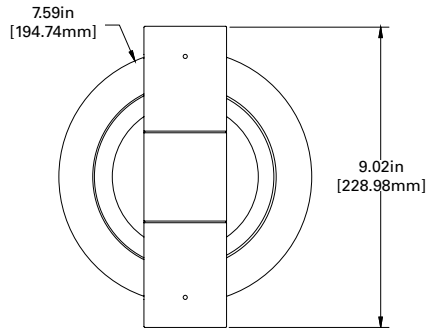
ISO VIEW

ROUND SURFACE MOUNT (RSM)

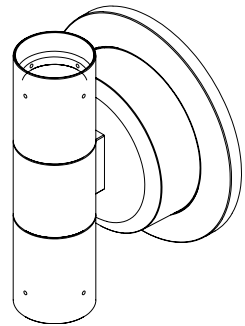
RSM-W2 (Up and down)



TOP VIEW



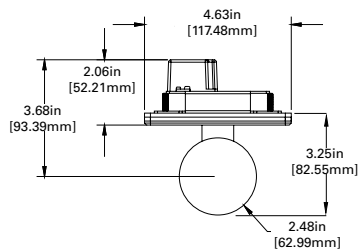
FRONT VIEW



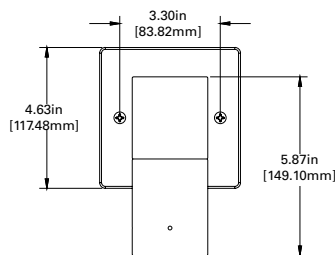
ISO VIEW

WALL INTEGRAL DRIVER PLATE (WIS)

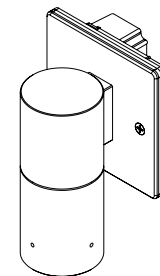
WIS-W1 (Up or down)



TOP VIEW



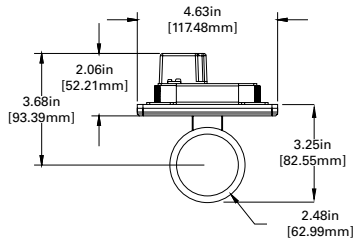
FRONT VIEW



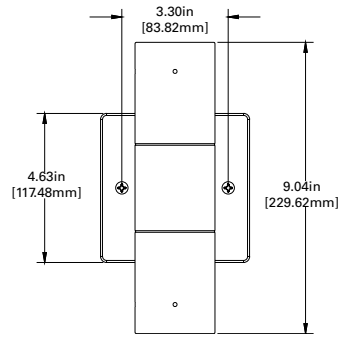
ISO VIEW

WALL INTEGRAL DRIVER PLATE (WIS)

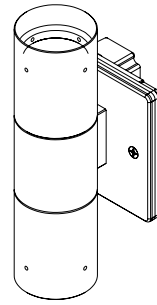
WIS-W2 (Up and down)



TOP VIEW



FRONT VIEW

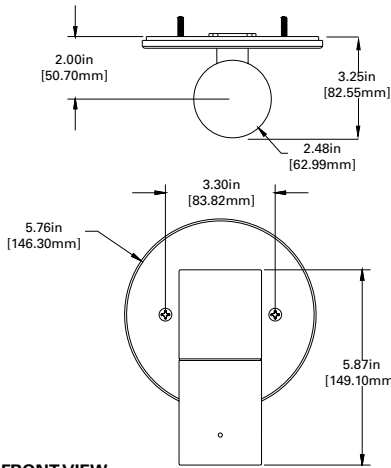


ISO VIEW

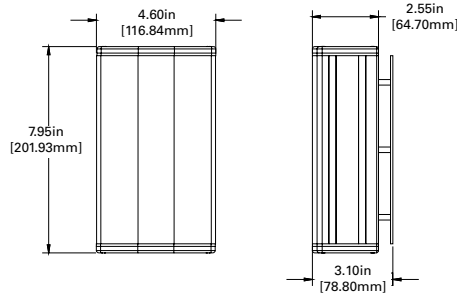
REMOTE DRIVER HOUSING ROUND WALL (WRR)

WRR-W1 (Up or down), as shown
WRS-W1 (Square option also available)

TOP VIEW

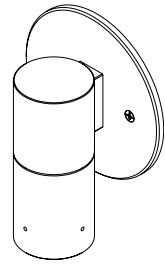


FRONT VIEW



Remote Driver distance up to 60'

REMOTE BOX

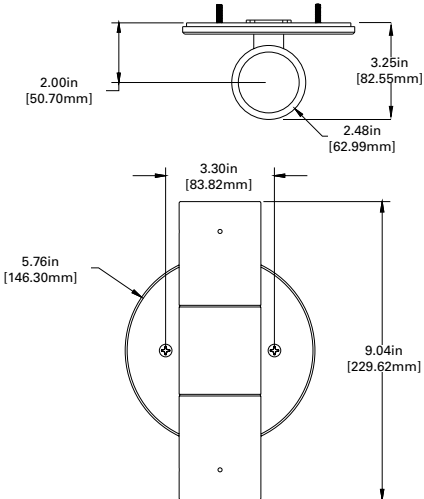


ISO VIEW

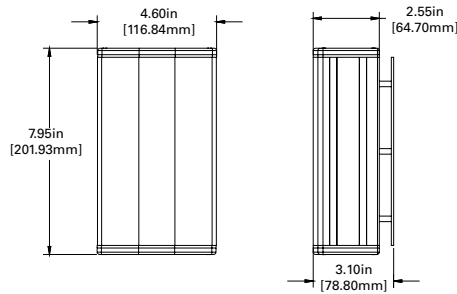
REMOTE DRIVER HOUSING ROUND WALL (WRR)

WRR-W2 (Up and down), as shown
WRS-W2 (Square option also available)

TOP VIEW

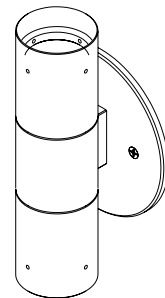


FRONT VIEW



Remote Driver distance up to 60'

REMOTE BOX

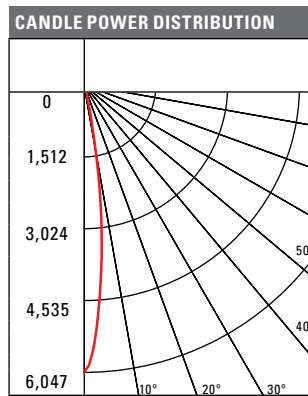
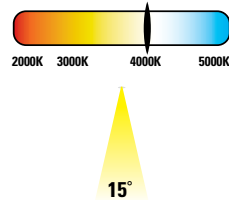


ISO VIEW

PHOTOMETRICS

Test Number	P29421
Lumcat	9002-[A1, P1, S1, SU1, W1]-X-FL-LED4080-S-BK-L1-UNV
Lumens	458 Lm
Watts	10 W
LPW	45.8 Lm/W
CCT	4000K
SC (0/90/45)	0.24 / 0.24 / 0.24
Beam Angle	14°

COLOR METRIC SUMMARY	
TM-30-15	Rf = 82.6 Rg = 93.8
CRI/CIE	Ra = 84.2 R9 = 15.1

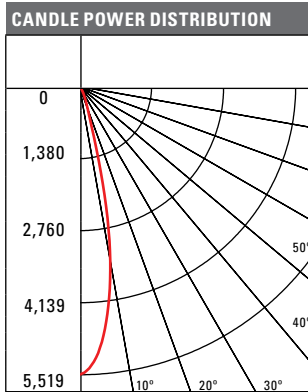
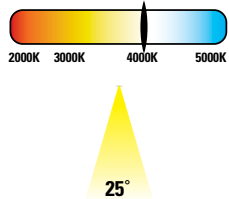


CONE OF LIGHT			
Horizontal Illuminance on Floor			
MH	FC	L	W
2'	1511.8	0.4	0.4
4'	377.9	0.8	0.8
6'	168	1.4	1.4
8'	94.5	1.8	1.8
10'	60.5	2.4	2.4
15'	26.9	3.6	3.6
20'	15.1	4.8	4.8
30'	6.7	7.2	7.2
40'	3.8	9.6	9.6

CANDELA TABLE	
Angle	0-deg
0	6047
5	4064
10	1430
15	292
20	137
30	21
40	7
50	3
60	2
70	1
80	0
90	0

Test Number	P29422
Lumcat	9002-[W1]-X-FL-LED4080-M-BK-L1-UNV
Lumens	985 Lm
Watts	10 W
LPW	98.5 Lm/W
CCT	4000K
SC (0/90/45)	0.4 / 0.4 / 0.36
Beam Angle	23.1°

COLOR METRIC SUMMARY	
TM-30-15	Rf = 82.6 Rg = 93.8
CRI/CIE	Ra = 84.2 R9 = 15.1

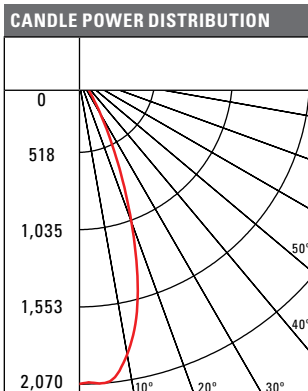
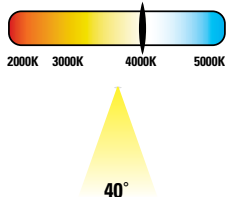


CONE OF LIGHT			
Horizontal Illuminance on Floor			
MH	FC	L	W
2'	1379.8	0.6	0.6
4'	344.9	1.4	1.4
6'	153.3	2.2	2.2
8'	86.2	3	3
10'	55.2	3.8	3.8
15'	24.5	5.8	5.8
20'	13.8	7.8	7.8
30'	6.1	11.8	11.8
40'	3.4	15.8	15.8

CANDELA TABLE	
Angle	0-deg
0	5519
5	4909
10	3391
15	1302
20	457
30	133
40	22
50	6
60	2
70	1
80	0
90	0

Test Number	P29423
Lumcat	9002-[W1]-X-FL-LED4080-F-BK-L1-UNV
Lumens	1015 Lm
Watts	10W
LPW	101.5 Lm/W
CCT	4000K
SC (0/90/45)	0.66 / 0.66 / 0.63
Beam Angle	40.3°

COLOR METRIC SUMMARY	
TM-30-15	Rf = 82.6 Rg = 93.8
CRI/CIE	Ra = 84.2 R9 = 15.1

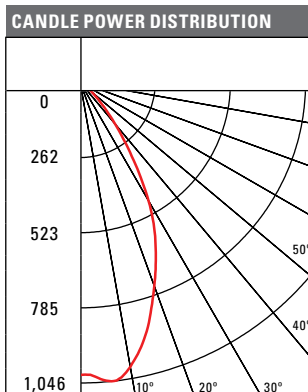
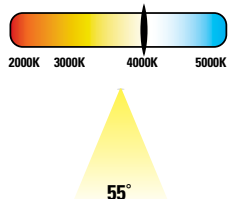


CONE OF LIGHT			
Horizontal Illuminance on Floor			
MH	FC	L	W
2'	517.5	1.2	1.2
4'	129.4	2.6	2.6
6'	57.5	3.8	3.8
8'	32.3	5.2	5.2
10'	20.7	6.6	6.6
15'	9.2	9.8	9.8
20'	5.2	13.2	13.2
30'	2.3	19.8	19.8
40'	1.3	26.4	26.4

CANDELA TABLE	
Angle	0-deg
0	2070
5	2070
10	1900
15	1547
20	1048
30	306
40	60
50	11
60	3
70	2
80	0
90	0

Test Number	P29424
Lumcat	9002-[W1]-X-FL-LED4080-W-BK-L1-UNV
Lumens	947 Lm
Watts	10 W
LPW	94.7 Lm/W
CCT	4000K
SC (0/90/45)	0.87 / 0.87 / 0.88
Beam Angle	57.1°

COLOR METRIC SUMMARY	
TM-30-15	Rf = 82.6 Rg = 93.8
CRI/CIE	Ra = 84.2 R9 = 15.1



CONE OF LIGHT			
Horizontal Illuminance on Floor			
MH	FC	L	W
2'	257.5	1.6	1.6
4'	64.4	3.4	3.4
6'	28.6	5	5
8'	16.1	6.8	6.8
10'	10.3	8.6	8.6
15'	4.6	12.8	12.8
20'	2.6	17.2	17.2
30'	1.1	25.8	25.8
40'	0.6	34.4	34.4

CANDELA TABLE	
Angle	0-deg
0	1018
5	1042
10	1005
15	896
20	754
30	477
40	189
50	56
60	13
70	2
80	0
90	0

CCT/CRI	LED2790	LED3090	LED3590	LED4080	LED5080	LED2797	LED3097	LED3597	LED4097
FC Multiplier	0.757	0.802	0.869	1.000	1.092	0.722	0.773	0.813	0.833

Note: Photometric tables show lumen output for W1 only. For W2 (Up and Down) option, uplight and downlight both match lumen output as W1.

LUMEN TABLE

		9002-[W1] Regressed Hood - Black L1 - 10W		
		CBCP	Lumens	LPW
S Spot 15°	LED2790	4566	358	35.8
	LED3090	4837	379	37.9
	LED3590	5236	411	41.1
	LED4080	6028	473	47.3
	LED5080	6581	516	51.6
	LED2797	4350	341	34.1
	LED3097	4657	365	36.5
	LED3597	4898	384	38.4
	LED4097	5022	394	39.4
	M Medium Flood 25°	LED2790	4252	724
LED3090		4505	767	76.7
LED3590		4877	831	83.1
LED4080		5614	956	95.6
LED5080		6129	1044	104.4
LED2797		4051	690	69.0
LED3097		4337	739	73.9
LED3597		4562	777	77.7
LED4097		4677	797	79.7
F Flood 40°		LED2790	1604	746
	LED3090	1699	791	79.1
	LED3590	1840	856	85.6
	LED4080	2118	985	98.5
	LED5080	2312	1076	107.6
	LED2797	1528	711	71.1
	LED3097	1636	761	76.1
	LED3597	1721	801	80.1
	LED4097	1764	821	82.1
	W Wide Flood 55°	LED2790	798	685
LED3090		846	726	72.6
LED3590		916	785	78.5
LED4080		1054	904	90.4
LED5080		1151	987	98.7
LED2797		761	653	35
LED3097		814	699	69.9
LED3597		856	735	73.5
LED4097		878	753	75.3

TM30 DATA

9002	CCT/CRI	Rf	Rg	Ra	R9
	2790	91.8	100	93.8	66.3
	3090	91.3	99.1	92.1	62.6
	3590	90.4	98.7	92.5	65.5
	4080	82.6	93.8	84.2	15.1
	5080	81.4	93.3	83.8	14
	2797	94.7	100.3	98.2	92.7
	3097	94	100.1	98.6	94.2
	3597	93	99.6	98.2	95.3
	4097	91.1	97.8	95.9	87.7

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C, 40°C, 40°C	> 86%	> 90,000

POWER TABLE

Number of Heads	Light Level	Input Current (A) at 120 VAC	Input Current (A) at 277 VAC	Input Power (W)
W1	L1	0.08	0.03	10
W2	L1	0.16	0.06	20

INTEGRATED SENSOR - SVPD2

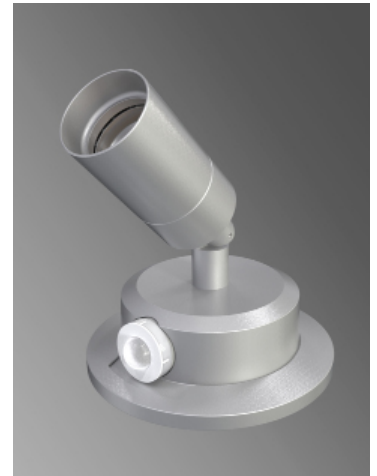
The Lanterra Cylinder 9002 with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally, these types of energy savings required coordination between the luminaire and a lighting control system. The Lanterra Cylinder 9002 delivers superior lighting with integrated PIR occupancy sensing and daylighting controls.

Capture the benefits of traditional lighting controls, without complicated circuit planning or special wiring. The Lanterra Cylinder 9002 delivers automatic ON to an energy saving light level, while ensuring lighting is turned OFF when the space is unoccupied.

The SVPD2 sensor is configured for outdoor use, so the integral daylight sensor will enable the luminaire to automatically adjust to daylight conditions by turning off when sufficient sunlight is present. Consult factory for indoor configuration.

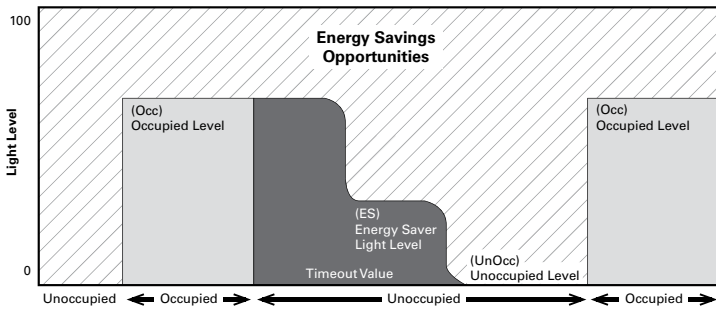
Occupied light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH01LUM). While the default unoccupied level is OFF, a lower light level can be saved instead using the programming remote. The integrated sensor personal remote (Catalog Number: ISHH02LUM) provides code compliant manual raise, lower, ON, OFF control.

The Lanterra Cylinder 9002 with Integrated Sensor is easy to install with no special wiring and ensures energy savings out-of-the-box with default control settings.



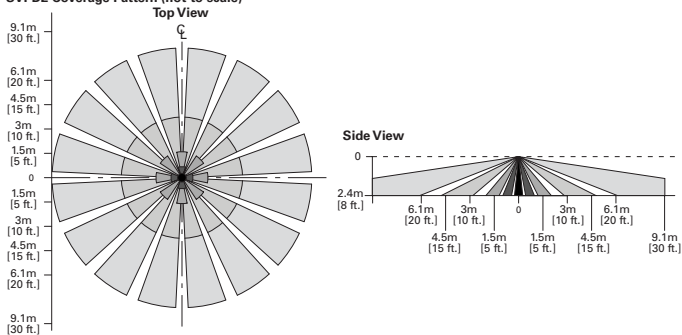
HOW IT WORKS

- As the user enters the space controlled by the integral sensor, the lighting turns ON to the occupied light level.
- Lighting will remain at the occupied level until the space is unoccupied. This will start the occupancy timeout period (default 20 minutes).
- If the space remains unoccupied for half of the timeout period, the lighting will automatically reduce to the Energy Saver light level (default matches occupied level). This adjustable light level is often set to half of the occupied daylight level using the programming remote.
- At the end of the timeout period the lighting will go to the unoccupied light level. This adjustable light level uses the OFF default setting.
- If sufficient sunlight is present, the luminaire will remain OFF, regardless of occupancy.

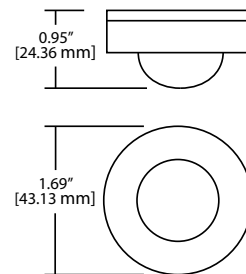


Coverage

SVPD2 Coverage Pattern (not to scale)



Sensor Dimensions



Optional Remote Controls



ISHH01LUM Programming Remote



ISHH02LUM Personal Control Remote