

RATIO Wall

RWL1/RWL2 LED WALLPACK

FEATURES

- Low profile LED wall luminaire with a variety of IES distributions for lighting applications such as retail, commercial and industrial building mount
- Featuring Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual comfort standard
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, Wiscap and 7-Pin with networked controls
- Battery Backup options available for emergency code compliance
- Quick-mount adapter allows easy installation/maintenance
- 347V and 480V versions for industrial applications and Canada



CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
- Powder paint finish provides durability in outdoor environments. Tested to meet 1000 hour salt spray rating

OPTICS

- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 48 or 160 midpower LEDs
- 3000K, 4000K or 5000K (70 CRI/80 CRI) CCT
- Zero uplight distributions
- LED optics provide IES type II, III and IV distributions. Type II only available in RWL2 configurations

INSTALLATION

- Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box)
- Designed for direct j-box mount.
- Integral back box contains 1/2" conduit hubs
- Integral back box standard with Dual Driver, Dual Power Feed, NX, Wiscap and battery versions (battery versions for RWL1 only)

ELECTRICAL

- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option for all wattages above 35W
- Ambient operating temperature -40°C to 40°C
- Driver RoHS and IP66

SERVICE PROGRAM

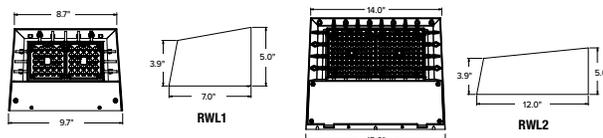


ELECTRICAL (CONTINUED)

- 10kV Surge Protector optional
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options can not be included in one same fixture.
- Dimming drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than 6" standard.

CONTROLS

- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- Button photocontrol is suitable for 120-277V operation
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Battery Backup suitable for operating temperatures -25°C to 40°C. RWL1 battery is 12.5W RWL2 battery is 18W



	Weight
RWL1	6.5 lbs / 2.95 kg
RWL2	16.5 lbs / 7.48 kg

CONTROLS (CONTINUED)

- Dual Driver and Dual Power Feed options creates product configuration with 2 internal drivers for code compliance
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application.
- LightGRID+ available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin configuration

CERTIFICATIONS

- Listed to UL1598 and CSAC22.2#250.0-24 for wet locations
- IP65 rated housing
- Not all product variations listed in this document are DLC™ ((DesignLights Consortium Qualified). Refer to designlights.org for most up-to-date list.
- Emergency battery backup options are California Energy Commission (CEC) Title 20 Compliant

WARRANTY

- 5 year limited warranty

RATIO Wall

RWL1/RWL2 LED WALLPACK

 Gray Shading = Service Program Limit of 15 luminaires 

ORDERING GUIDE

Example: RWL1-48L-10-3K7-2-UNV-BLS-E

 CATALOG #

Series	# LEDs - Wattage	CCT/CRI	Distribution	Voltage	Color
RWL1 Ratio Wall 1	48L-10 1,000 Lumens ⁴	3K7 3000K, 70 CRI	2 IES TYPE II ¹	UNV 120-277V	BLT Black Matte Textured
	48L-15 2,000 Lumens ⁴	4K7 4000K, 70 CRI	3 IES TYPE III	120 120V	BLS Black Gloss Smooth
	48L-20 2,500 Lumens ⁴	5K7 5000K, 70 CRI	4F IES TYPE IV Forward ¹	208 208V	DBT Dark Bronze Matte Textured
	48L-25 3,500 Lumens	3K8 3000K, 80 CRI	4K8 4000K, 80 CRI	240 240V	DBS Dark Bronze Gloss Smooth
	48L-35 4,500 Lumens	4K8 4000K, 80 CRI	5K8 5000K, 80 CRI	277 277V	GTT Graphite Matte Textured
	48L-45 5,500 Lumens ⁴			347 347V	LGS Light Grey Gloss Smooth
RWL2 Ratio Wall 2	160L-45 6,500 Lumens			480 480V	LGT Light Grey Matte Textured
	160L-50 7,500 Lumens				PSS Platinum Silver Smooth
	160L-65 9,500 Lumens				WHT White Matte Textured
	160L-80 11,000 Lumens				WHS White Gloss Smooth
	160L-95 13,000 Lumens				VGT Verde Green Textured
	160L-115 15,000 Lumens				Color Option
	160L-135 17,500 Lumens				CC Custom Color
	160L-155 19,500 Lumens				

Control Options Network	Options*	Notes:
NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	F Fusing ³	1 Only available with RWL2
NXWS16F NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	E Emergency Battery Backup ^{7,8,9}	2 Networked Controls cannot be combined with other control options
NXWS40F NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	EH Emergency Battery w/ Heater Option ^{7,8}	3 Must specify voltage, 120V or 277V only
WIR LightGRID+ In-Fixture Module ^{2,6}	2DR Dual Driver ^{4,6,11}	4 Not available with 347/480V
Stand Alone Sensors	2PF Dual Power Feed ^{4,6,11}	5 Replace " " with "14" for up to 14' mounting height, "40" for up to 40' mounting height
SCP-8F Remote control programmable line voltage sensor ^{3,4}	PC Button Photocontrol ^{6,12}	6 This item is located in the integral backbox which will be automatically added onto the fixture if chosen.
SCP-20F Remote control programmable line voltage sensor ^{3,4}	SP 10kA Surge Protector ¹²	7 For E and EH, an integral backbox is added to the RWL1 configuration
BTS-14F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ¹⁰		8 Option only available at 120 or 277V
BTS-40F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor ¹⁰		9 2DR and 2PF can't be combined with E and EH due to space limitations
BTSO-12F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height ¹⁰		10 Not available in RWL1 or 2 PF
Control Options		11 Available only in UNV in 25, 35 and 45 Watt in RWL1; Not available in RWL1 10, 15 and 20 Watt.
7PR_ 7-Pin Receptacle ⁵		12 SP and PC cannot be in the same fixture due to space constraints
		* Based on space limitations, some options may not be able to be combined

CONTROLS

Control Options

Standalone
SCPREMOTE Order at least one per project location to program and control

ACCESSORIES AND REPLACEMENT PARTS - MADE TO ORDER

Catalog Number	Description
<input type="checkbox"/> WP-BB-XXX	Accessory for conduit entry ¹

Notes:
 1 replace "xxx" with color option

RATIO Wall

RWL1/RWL2 LED WALLPACK

CONTROLS FUNCTIONALITY

OUTDOOR LIGHTING CONTROLS OPTIONS

LIGHTGRID⁺

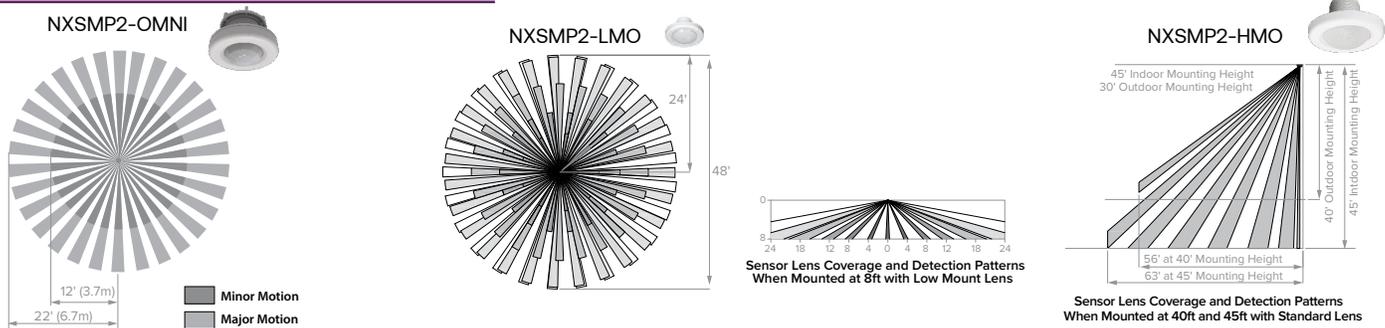

Control Option Ordering Logic & Description	Control Option Functionality										Control Option Components
	Networkable	Grouping	Scheduling	Occupancy/Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
NX Wireless NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	✓	✓	✓	-	-	✓	✓	✓	-		 NXRM2-H
NXWS16F NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	16ft		 NXSMP2-LMO
NXWS40F NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	40ft		 NXSMP2-HMO
LightGRID+ WIR LightGRID+ In-Fixture Module	✓	-	✓	-	-	✓	✓	Gateway	-	 WIR	
Independent BTSO-12F Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	-	-	-	✓	✓	✓	✓	✓	12ft		 BTSMP-OMNI-O
BTS-14F Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	-	-	-	✓	✓	✓	✓	✓	14ft		 BTSMP-LMO
BTS-40F Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	-	-	-	✓	✓	✓	✓	✓	40ft		 BTSMP-HMO

DEFAULT SETTINGS

NX Wireless	Occupancy Sensor	Enabled
	Occupancy Sensor Sensitivity	7
	Occupancy Sensor Timeout	15 Minutes
	Occupied Dim Level	100%
	Unoccupied Dim Level	0%
	Daylight Sensor	Disabled
	Bluetooth	Enabled
	2.4GHz Wireless Mesh	On
	*Passcode Factory Passcode: HubbN3T!	Enabled

Stand Alone	Occupancy Sensor	Enabled
	Occupancy Sensor Sensitivity	7
	Occupancy Sensor Timeout	8 Minutes
	Occupied Dim Level	100%
	Unoccupied Dim Level	50%
	Daylight Sensor	Disabled

NX WIRELESS COVERAGE PATTERNS



NX LIGHTING CONTROLS FREE APP

CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)



The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enable luminaires and program NX system settings.

Apple App: <https://apps.apple.com/us/app/nx-lighting-controls/id962112904>

Google Play: https://play.google.com/store/apps/details?id=io.cordova.NXBTR&hl=en_US&gl=US



Apple App



Google Play

RATIO Wall

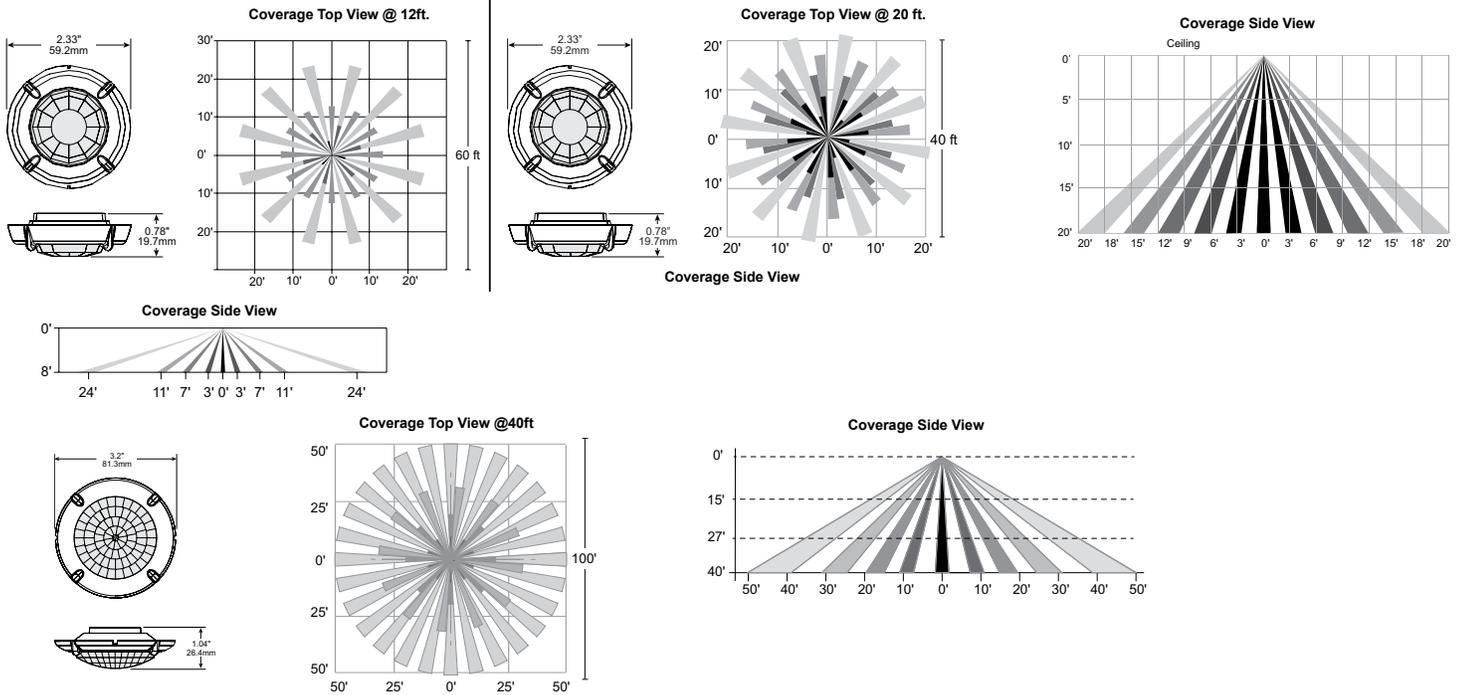
RWL1/RWL2 LED WALLPACK

OUTDOOR LIGHTING CONTROLS OPTIONS

CONTROLS FUNCTIONALITY

	Control Option Ordering Logic & Description	Control Option Functionality									Control Option Components
		Networkable	Grouping	Scheduling	Occupancy/Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height	
Independent	SCP_F Sensor Control Programmable, sensor range, reference product specification for height selections	-	-	-	✓	✓	✓	✓	-	8ft or 40ft	SCP_F
	7PR 7-Pin Receptacle	-	-	Paired with external control	-	Paired with external control	-	Paired with external control	-	-	7PR

COVERAGE PATTERNS FOR SCP_F



RATIO Wall

RWL1/RWL2 LED WALLPACK

PERFORMANCE DATA

Description	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)					
				Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	
RWL1	10	10.1	3	1362	135	0	0	1	1355	134	0	0	1	1303	129	0	0	1	
			4W	1343	133	0	0	1	1336	132	0	0	1	1285	127	0	0	1	
	15	14.5	3	1972	136	1	0	1	1962	135	1	0	1	1887	130	1	0	1	
			4W	1945	134	0	0	1	1935	133	0	0	1	1861	128	0	0	1	
	20	19.9	3	2722	137	1	0	1	2709	136	1	0	1	2605	131	1	0	1	
			4W	2685	135	1	0	1	2672	134	1	0	1	2569	129	1	0	1	
	25	28.0	3	3749	134	1	0	1	3732	133	1	0	1	3588	128	1	0	1	
			4W	3698	132	1	0	1	3680	131	1	0	1	3538	126	1	0	1	
	35	36.9	3	4751	129	1	0	2	4728	128	1	0	2	4546	123	1	0	1	
			4W	4685	127	1	0	2	4663	126	1	0	2	4483	121	1	0	2	
	45	46.5	3	5812	125	1	0	2	5784	124	1	0	2	5562	120	1	0	2	
			4W	5731	123	1	0	2	5704	123	1	0	2	5485	118	1	0	2	
	RWL2	45	46.1	2	6701	145	1	0	2	6668	145	1	0	2	6412	139	1	0	2
				3	6812	148	1	0	2	6780	147	1	0	2	6519	141	1	0	2
4W				6678	145	1	0	2	6646	144	1	0	2	6390	139	1	0	2	
50		54.0	2	7747	143	1	0	2	7710	143	1	0	2	7413	137	1	0	2	
			3	7876	146	1	0	2	7838	145	1	0	2	7537	140	1	0	2	
4W		7720	143	1	0	2	7683	142	1	0	2	7388	137	1	0	2			
																	2	9539	142
65		67.2	3	9699	144	2	0	2	9652	144	2	0	2	9281	138	2	0	2	
			4W	9507	141	2	0	2	9461	141	2	0	2	9097	135	2	0	2	
80		80.8	2	11228	139	2	0	2	11174	138	2	0	2	10745	133	2	0	2	
			3	11416	141	2	0	2	11361	141	2	0	2	10924	135	2	0	2	
			4W	11190	138	2	0	2	11136	138	2	0	2	10708	133	2	0	2	
95		93.2	2	13148	141	2	0	2	13085	140	2	0	2	12582	135	2	0	2	
			3	13368	143	2	0	2	13304	143	2	0	2	12792	137	2	0	2	
			4W	13103	141	2	0	2	13040	140	2	0	2	12539	135	2	0	2	
115		109.8	2	15102	138	2	0	3	15030	137	2	0	3	14452	132	2	0	3	
			3	15354	140	2	0	3	15281	139	2	0	3	14693	134	2	0	3	
			4W	15050	137	2	0	3	14978	136	2	0	3	14402	131	2	0	3	
135		137.1	2	17533	128	2	0	3	17449	127	2	0	3	16778	122	2	0	3	
			3	17826	130	2	0	3	17740	129	2	0	3	17058	124	2	0	3	
			4W	17473	127	2	0	3	17389	127	2	0	3	16720	122	2	0	3	
155		156.8	2	19495	124	2	0	3	19402	124	2	0	3	18656	119	2	0	3	
			3	19821	126	2	0	3	19726	126	2	0	3	18967	121	2	0	3	
			4W	19542	125	2	0	3	19448	124	2	0	3	18700	119	2	0	3	

RATIO Wall

RWL1/RWL2 LED WALLPACK

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98
50°C	122°F	0.97

PROJECTED LUMEN MAINTENANCE

Ambient Temperature	OPERATING HOURS					
	0	25,000	TM-21-11 L90 36,000	50,000	100,000	L70 (Hours)
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000

MULTIPLIER

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.841	–
3000K	0.977	0.861	0.647
3500K	–	0.900	–
4000K	1	0.926	0.699
5000K	1	0.937	0.791
Monochromatic Amber Multiplier			
Amber	0.250		

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

ELECTRICAL DATA

# OF LEDS	Nominal Wattage	Input Voltage	Oper. Current (Amps)	System Power (Watts)
RWL1	10	120	0.08	10.1
		208	0.05	
		240	0.04	
		277	0.04	
		347	0.03	
		480	0.02	
	15	120	0.12	14.5
		208	0.07	
		240	0.06	
		277	0.05	
		347	0.04	
		480	0.03	
	20	120	0.17	19.9
		208	0.10	
		240	0.08	
		277	0.07	
		347	0.06	
		480	0.04	
	25	120	0.23	28.0
		208	0.13	
		240	0.12	
		277	0.10	
		347	0.08	
		480	0.06	
35	120	0.31	36.9	
	208	0.18		
	240	0.15		
	277	0.13		
	347	0.11		
	480	0.08		
45	120	0.39	46.5	
	208	0.22		
	240	0.19		
	277	0.17		
	347	0.13		
	480	0.10		

# OF LEDS	Nominal Wattage	Input Voltage	Oper. Current (Amps)	System Power (Watts)
RWL2	45	120	0.38	46.1
		208	0.22	
		240	0.19	
		277	0.17	
		347	0.13	
		480	0.10	
	50	120	0.45	54.0
		208	0.26	
		240	0.23	
		277	0.19	
		347	0.16	
		480	0.11	
	65	120	0.56	67.2
		208	0.32	
		240	0.28	
		277	0.24	
		347	0.19	
		480	0.14	
	80	120	0.67	80.8
		208	0.39	
		240	0.34	
		277	0.29	
		347	0.23	
		480	0.17	
	95	120	0.78	93.2
		208	0.45	
		240	0.39	
		277	0.34	
		347	0.27	
		480	0.19	
	115	120	0.92	109.8
		208	0.53	
		240	0.46	
		277	0.40	
		347	0.32	
		480	0.23	
	135	120	1.14	137.1
		208	0.66	
		240	0.57	
		277	0.49	
		347	0.40	
		480	0.29	
155	120	1.31	156.8	
	208	0.75		
	240	0.65		
	277	0.57		
	347	0.45		
	480	0.33		

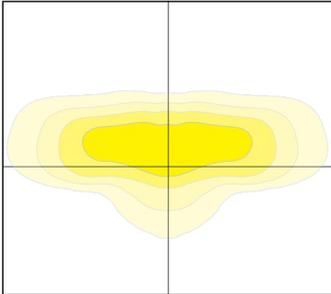
RATIO Wall

RWL1/RWL2 LED WALLPACK

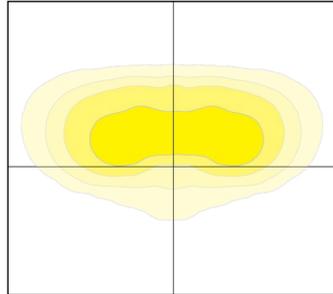
PHOTOMETRY

Mounting Height: 30ft

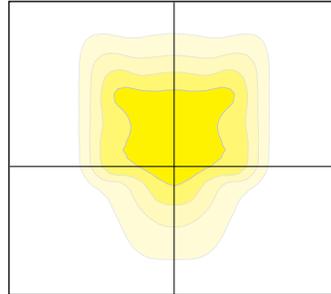
Type 2



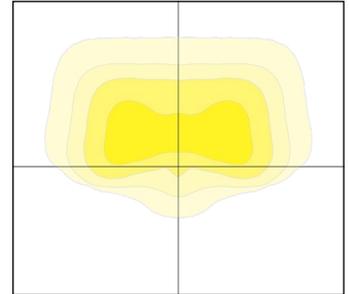
Type 3



Type 4F



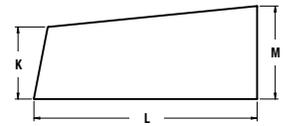
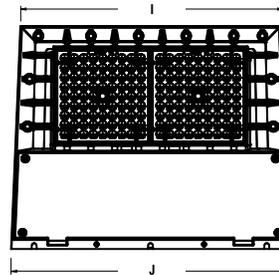
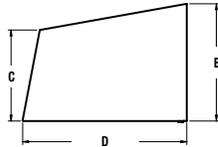
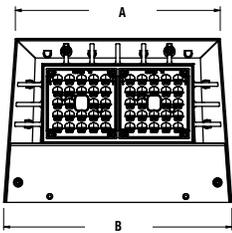
Type 4W



DIMENSIONS

RWL1

RWL2

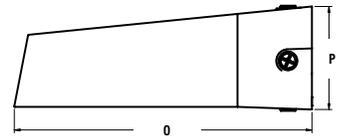
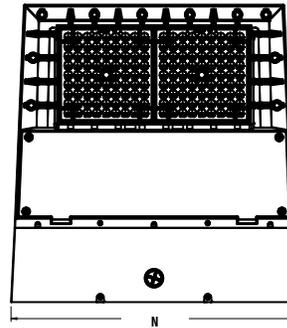
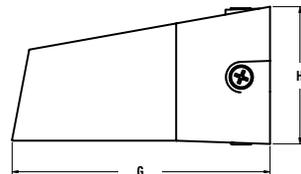
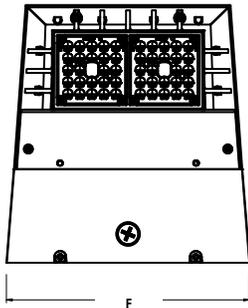


A	B	C	D	E	Weight
8.7"	9.7"	3.9"	7.0"	5.0"	6.5 lbs (2.95 kgs)
221mm	246mm	99mm	178mm	127mm	

I	J	K	L	M	Weight
14.0"	15.0"	3.9"	12.0"	5.0"	16.5 lbs (7.48 kgs)
356mm	381mm	99mm	305mm	127mm	

RWL1 with
Integral Back Box

RWL2 with
Integral Back Box



F	G	H
10.4"	11.0"	5.9"
264mm	279mm	150mm

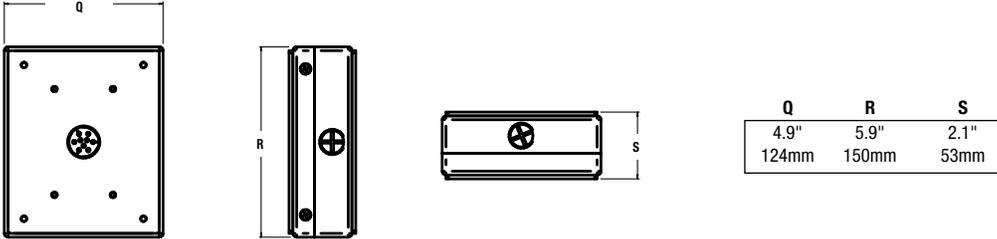
N	O	P
15.4"	16.0"	5.5"
391mm	406mm	140mm

RATIO Wall

RWL1/RWL2 LED WALLPACK

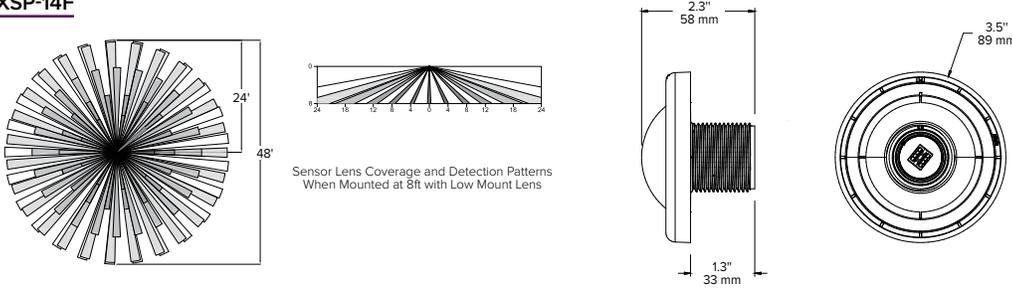
DIMENSIONS (CONTINUED)

Back Box Accessory

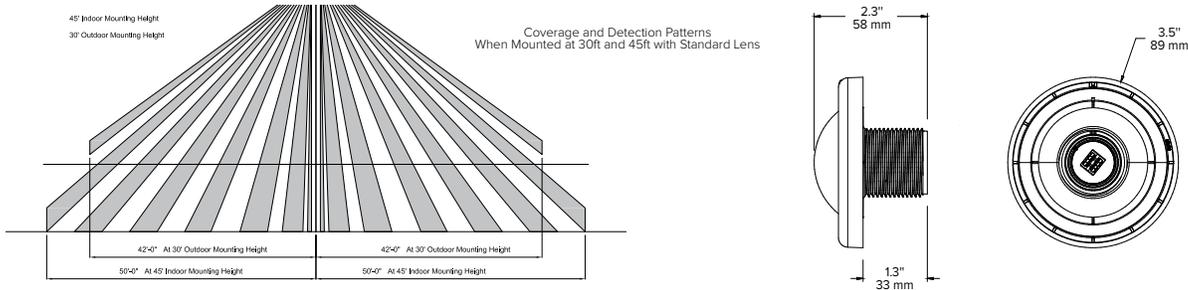


ADDITIONAL INFORMATION

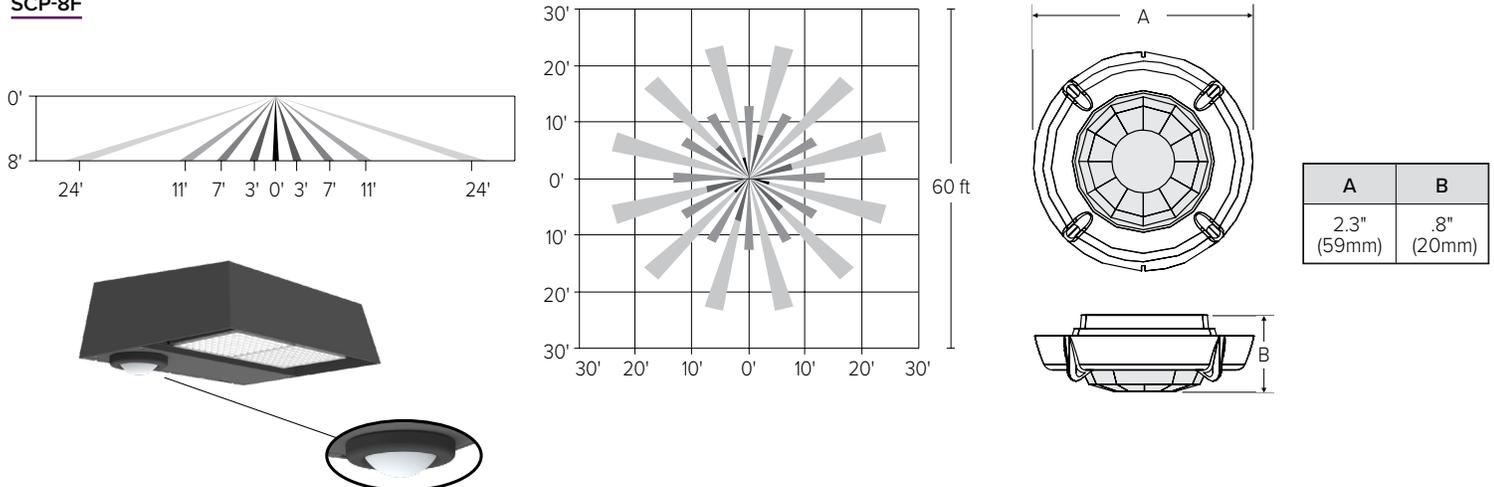
NXSP-14F



NXSP-40F



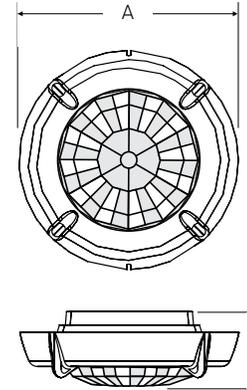
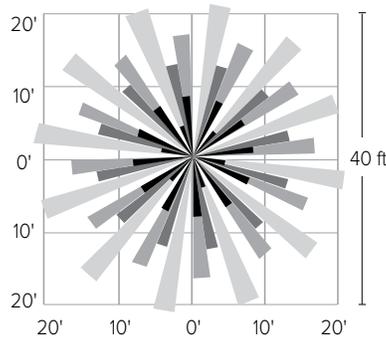
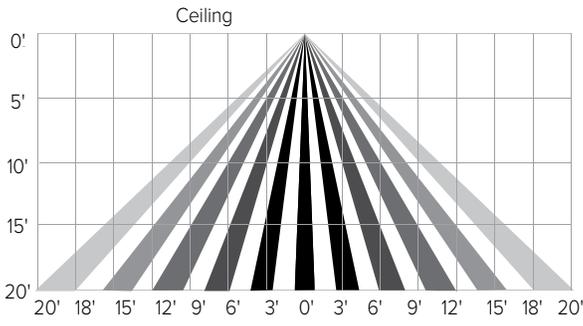
SCP-8F



RATIO Wall

RWL1/RWL2 LED WALLPACK

SCP-20F



A	B
2.3" (59mm)	.8" (20mm)