# **Downlighting**

# LIGHTOLIER

# LyteProfile 6"



Project





P6R Round Downlight & Wall Wash

LyteProfile downlights and wall washers provide a perfect balance of functionality with glare control. The robust and versatile UniFrame frame-in kit makes changes and updates easy to manage and install. High optical efficiency reinforced with Accurender technology provides an optimum balance of performance and quality of light. Ideal for use in a variety of applications including open office, institutional, healthcare, and retail.

Location:
Cat.No:
Type:
Qty:
Notes:

Standard luminaire: Complete luminaire = Frame + Engine + Trim + Accessories (optional)

Flex install luminaire: Complete luminaires = Engine (F) + Trim + Accessories (optional)

Buy American Act of 1933 (BAA)\*\* Compliant luminaire\*: Complete luminaire = Frame-BAC + Engine/Trim-BAC

Frame Standard example: 6RN | BAC Example: 6RN-BAC

Series 6	Aperture R	Installation	Options
6 Uniframe 6" Non-IC	R Round	N New construction (Non-IC)	Universal 120/277/347V     Chicago Plenum     Emergency, 6W Self-Test/Self-Diagnostic (not available for BAC) <sup>1</sup>
		R Remodeler (Non-IC)	- Universal 120/277/347V
		A AirSeal (IC)	- Universal 120/277/347V

# Engine/Trim

Series	Style	Lumen	CRI/CCT	Beam	Reflector	Flange	Dimming / Options	Voltage	Optic	ons
P6R										
P6R	<b>DL</b> Downlight	<b>10</b> 1000 lm	927 90CRI/2700K	N Narrow	CL Specular clear	- White (matte)	<b>Z10</b> 0-10V 1%	U 120/277V	_	None
LyteProfile	LW Lensed	<b>15</b> 1500 lm	930 90CRI/3000K	M Medium	CC Comfort clear	<b>B</b> Black (matte) <sup>8</sup>	<b>Z10D20</b> 0-10V 1%	<b>3</b> 347V	R	Retrofit <sup>10</sup>
6" round	Wall Wash <sup>2</sup>	<b>20</b> 2000 lm <sup>4</sup>	935 90CRI/3500K	W Wide <sup>2,3</sup>	CD Comfort clear	P Polished	(dim to Off) (up to 3500lm)	(Z10 only) (up to 3000lm)		(not compatible with IEM6)
downlight	SL Shower light <sup>3</sup>	<b>25</b> 2500lm⁴	940 90CRI/4000K		diffuse	(matches aperture)		, ,	F	Flex install
	(non-conductive lens)	<b>30</b> 3000lm <sup>4</sup> <b>35</b> 3500lm <sup>4</sup>	9D2W 3000-1800K (dim to warm) 6			F Flangeless (requires CA6RFT) <sup>8</sup>	L1 Lutron LDE1 EcoSystem 1%	<b>U</b> 120/277V	•	(no frame required) <sup>11</sup>
		<b>40</b> 4000lm <sup>5</sup>	96T 2700-6500K		WH White (matte)	- White (matte)	RA Integral Interac	t Pro	IEM6	Trim mounted
		<b>45</b> 4500lm⁵	(tunable white) <sup>7</sup>		BK Black (matte)	<b>B</b> Black (matte) <sup>8</sup>	RF sensor (up to	3500lm) <sup>9</sup>		EM test switch
		<b>50</b> 5000lm⁵				F Flangeless	E Forward &	1 120V		(for DL style only)
						(requires CA6RFT) <sup>8</sup>	Revserse Phase		BAC	Meets the
					WHAMF White	- White (gloss)	(up to 3000lm)			requirements

(gloss antimicrobial)

# **Accessories**

SBA Interact Ready System Bridge Accessory with integral occupancy and daylight sensor (compatible with all 0-10V options, see SBA spec sheet) 13

CAEM6 Field installable Bodine BSL6 6W battery pack with self-test/self-diagnostic for use with new construction frames, 120-277V

CA6RFT Mud-in ring for use in 6" round flangeless trim installations (ordered with a flangeless (F) light engine).

**CAEM6TSCP** Remote switch cover plate. Order with EM6 frame for remote mounted test switch.

C6RVPWH IP65 rated vandal proof matte white accessory mounts onto flangeless light engines (F) and non-IC (N) frame only.

6RNSR 6" round/square non-IC frame with Flex (F) light engine (provides mechanical support for rough-in construction only, no junction box)

LCEM6 Field installable Bodine BSL06 emergency battery pack (for Flex (F) light engine only, includes switch mounting plate)

T347-75VA 347:120V step-down transformer for non-IC (N) frame only (see page 2 for details)

7925 6" sloped ceiling adapter (refer to SCA spec sheet for slope options). Must order 6RN frame and flanged trim.

- Emergency (EM6) frame is compatible with reflector mounted test switch wher light engine is ordered with IEM6 (not compatible w/347V).
- 2. Lensed wall wash (LW) style only available with Wide (W) beam
- 3. Shower light (SL) in only available with White (WH) reflector finish, and wide (W) beam. Not available with flangeless option.
- 4. Not available with AirSeal (A) frame.
- Not available with AirSeal (A) frame. Available with CL, CC, and CD reflector finishes only.
   Specify 9D2W with Z10U dimming only (up to 3000lm max).
- Not compatible with Z10D20 or 347V (3) options. Not available with wide (W) beam.
- 7. Specify 96T with Z10U or RAU dimming only (up to 2500lm max).
- Not compatible with Z10D20 or 347V (3) options. Not available with wide (W) beam.

  8. Consult factory with ETO request for antimicrobial reflector finish (WHAMF) and black (B) flange for all styles, and flangeless (F) for LW style.
- Linear driver profile. See dimensional data following.
   Specify only with non-IC (N) frame, not for use with LC or EM6 options.
- 10. Retrofits select legacy Lightolier luminaires (see pages 2 for details).

- 11. Flex install requires light engine & trim only (up to 4000lm only). Accessory frames available. Not compatible with standard frames and associated options. Not available with Interact (RA) dimming and IEM6 trim.
- Requires IRT9015 IR remote and Interact Pro App for commissioning (requires above ceiling access).
- \* BAA compliance requires that BAC option be selected for each of frame, engine/trim.

  Frame and engine will be ordered/shipped together; trim will be ordered/shipped separately.

  Accessories (optional) are not currently BAA-compliant.

Standard example: P6RDL20935WCDZ10U BAC example: P6RDL20935WCDZ10U-BAC

\*\* Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.





F Flangeless (requires CA6RFT)<sup>8</sup>









of the Buy

American Act of 1933 (BAA)\*

# Round Downlight & Lensed Wall Wash

### **Features**

# Optics

- · Provides a 60° cutoff (physical and reflected)
- Available in wide (85°), medium (65°), and narrow (55°) beam options.
- Spun and anodized reflectors available in specular (clear), semi-specular (comfort clear and diffuse finishes. Also available in white and black painted finishes.
- Consult factory for RAL finishes

### Quality of light

- · Color consistency: 2 SDCM
- · 90 CRI minimum (Accurender)

# Construction (New Construction)

- · Galvanized stamped steal for dry / plaster ceilings.
- Pre-installed telescoping mounting bars (13"-24")
- Frame accommodates C- channel, black iron, and 3/4" EMT for mounting distances greater than 24" between joists.
- Manufactured from 20 gage galvanized steel construction with rolled edge aperture to guide cutting tools for perfect hole cutting.

Max ceiling thickness is 2" (51 mm).

# Patented install Mounting frame

- Pre-installed mounting bars allow for fast and tool-less install into T-grid & hat channel ceilings
- Close-cut aperture design eliminates an undesired gap between ceiling material and reflector.
- Simple plug-and-play connection between frame and light engine from below the ceiling allows for:
- Easy upgrades
- · Technology changes
- · Repairs and troubleshooting

# Retrofit

 Easily updates legacy LyteProfile LED downlights to the latest technology. Includes light engine, trim, and driver mounted on cover plate that mounts to previous generations of LyteProfile LED luminaires. Order with R option code at end of light engine/trim catalog number.

# **Dimming**

- Advance 0-10v 1% (Z10) logarithmic curve is standard. Specify D2O for factory-set dimto-off function (consult factory for linear dimming curve).
- · Lutron LDE1 (L1) EcoSystem 1%
- Electronic low voltage (E) offers forward or reverse phase dimming
- Dim to Warm (D2W): changes CCT from 3000– 1800K gradually as it dims. Use with Z10U dimming only. Fixture-to-fixture consistency of ≤3SDCM at 2700K & 3000K, & ≤5SDCM at 1800K
- Tunable white (6T): 2700K to 6500K CCT.
   Use with Z10U or RAU dimming only. Fixture-to-fixture consistency of ≤3SDCM at 2700K, 5000K, & 6500K CCT.

### Light engine

Quick connect power pack allow for easy installation and replacement from below ceiling with no need for additional wiring. This allows for:

- Frame and ceiling installation to be performed while still finalizing details such as lumen packages, CCT and control type.
- Easy replacement of electronics at end of life with minimal wasted material and labor required.
- · Ease and upgradability of technology.
- · Lumen Maintenance: L80 at 60,000 hours.
- 347V light engines are Z10 dimming only and include dedicated 347V driver. For 347V non-Z10 dimming, order T347-75VA field-installed stepdown transformer accessory.

# **Emergency**

Bodine BSL6 6W battery pack with self-test/ diagnostic functionality. Factory or field mounted to frame.

- For trim with integral emergency test switch, order light engine with IEM6 option (ex: P6RDL20935WCDZ10UIEM6). DL style only.
- For remote ceiling mounted test switch, order standard light engine (ex: P6RDL20935WCDZ10U).
   Optional accessory ceiling mounting plate available (CAEM6TSCP) for remote mounted test switch.
- Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.
- · CEC Title 24 JA8 Certified.

# **Options and Accessories**

**Sloped ceilings:** Compatible with sloped ceiling adapters (see SCA spec sheet).

Flangeless mud-in ring: Use CA6RFT For use with flangless plaster installations.

**Field Installed Emergency:** Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

 CAEM6: Field install EM6 kit with Bodine BSL6 6W battery pack with self-test/self-diagnostic, mounts to new construction frames. Includes remote ceiling plate for test switch. To mount test switch to trim for new construction frame, order downlight light engine with IEM6 option code (e.g. P6RDL20935WCDZ10UIEM6).

**C6RVPWH:** includes machined aluminum ring painted white, gasketed for IP65 protection, and impact resistant polycarbonate lens (IK10). Locks in place with discrete setscrew (key included). Available also with antimicrobial finish (C6RVPWHAMF).

CAEM6TSCP: Ceiling cover plate for remote mounted EM6 test switch. 1/2" (25mm) hole, 4 3/8" (109mm) x 2 3/4" (69mm) rectangular. Includes two mounting screws. Required for lensed wall wash (LW) and shower light (SL) styles.

T347-75VA: Field installable 347:120V 75VA step-down transformer, attaches to knock out on frame junction box, for use with non-IC (N) or remodel (R) frames.

# **ENERGY STAR® exceptions**

- Black finishes

# Labels and Listings

- cULus listed for wet locations
- CCEA (frames with \*LC suffix)
- ENERGY STAR® certified
- RoHS certified

# Warranty



5 year limited warranty Visit Signify.com/warranties for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

# Round Downlight & Lensed Wall Wash

# Interact Standalone Gateway Gateway + IoT Dimming, grouping, and zoning Bluetooth and ZigBee enabled Motion sensing and daylight harvesting Integration with 0-10V and phase dimming fixtures Code compliance Granular dimming and dwell time Correlated color temperature (CCT) tuning by switch Support for sensor-based Tunable White luminaires New Y Energy reporting and monitoring

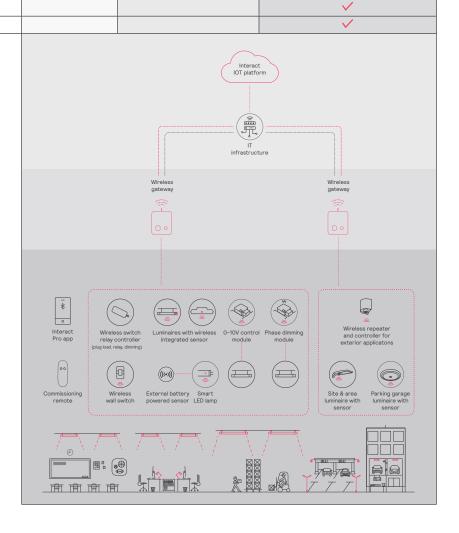
# Currently supported maximum system size

Scheduling
Demand response
BMS integration (BACnet)
Floor plan visualization
loT sensors for wellness
loT Apps for productivity

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
Luminaires with integrated sensors	150
Smart TLEDS	150
Zones + groups	64
Total number of ZGP devices (sensors and switches)	50
Sensors	30
Switches	50

Group level	
Recommended number of lights	40 (maximum 150)
Number of ZGP devices	5
Number of scenes	16



# Round Downlight & Lensed Wall Wash

# Wireless controls options

### Interact

- SWZCS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the standalone mode (similar to SpaceWise) when configured without a gateway or in a cloud connected mode if a compatible gateway is used.
- Interact includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & BlueTooth connectivity.
   The App provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote on-site to identify and group devices together.

### Compatible with:

- SWS200 & UID8465 wireless scene switch
- Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
- Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
- LCN3110: battery powered IP65 presence sensor, OCC sensor IA CM IP65W
- LCN3120: battery powered IP65 presence & daylight sensor, OCC-DL sensor IA CM IP65 WH
- For more information on Interact visit: interact-lighting.com/interactproscalablesystem

# Radio only sensor (RA or RADIO)

- Integral RA or RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.
- Interact includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & Bluetooth connectivity.
   The App provides flexibility to choose between a gateway or non-gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely, identify and group devices together onsite.
- Compatible with SWS200 and UID8465 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1).
- For more information on Interact visit: interact-lighting.com/interactproscalablesystem

# Sensor bundle (IAOSB or SB)

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with SWS200 wireless scene switch, wireless Occ sensor (OCC SENSORIA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available. Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- IAOSB or SB option in addition to occupancy and daylights sensing supports advanced IoT capabilities, such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit: interact-lighting.com/interactproscalablesystem

# **Emergency Options (ER100)**

- Power Sensing (factory default) –
  Recommended UL924 option requires unswitched
  power sense line, absence of voltage on the
  normal circuit triggers luminaire to 100% output.
- Power Interruption Detection (field option) –
  Detects AC power interruption >30ms triggers
  90 minute emergency mode with luminaire at
  100% output.

# Interact supported sensor option codes across Genlyte product lines

	Evokit	Day-Brite	Ledalite	Lightolier
ZigBee + Bluetooth + Sensing	SWZCS	SWZCS	CS	SBA accessory (external)
ZigBee + Bluetooth	RADIO	RADIO	RA	RA
ZigBee + Bluetooth + Sensing + Environmental data	IAOSB	IAOSB	SB	SB
ZigBee + Highbay + Sensing	-	SWZCSH	-	-

# Round Downlight & Lensed Wall Wash



# AccuRender Technology (CRI 90+)

The right light brings colors to life. Our new AccuRender technology helps ensure colors are rendered more accurately and consistently, while doing so as efficiently as CRI 80 products.



Standard CRI 80

Good color rendering and high efficacy



Standard CRI 90

Better color rendering and low efficacy



Best color rendering, color preference and high efficacy

# Enjoy design flexibility

### Full range of products and options:

- Available soon in across Lightolier portfolio for application flexibility
- Multiple color temperatures (CCTs) and lumen packages offered

# **Promote savings**

# High efficacy, with no penalty:

- Energy efficacy compares well to conventional 80 CRI
- Up to 25% more energy savings vs competitor 90 CRI¹
- · Helps meet Title 24 requirements

# Show your true colors

### High color rendering:

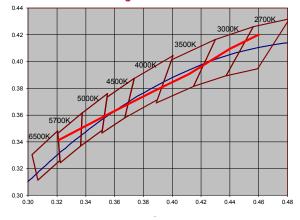
- True to life colors to help energize your environment and render better flesh tones critical for healthcare hospitality and retail applications.
- R<sub>a</sub> up to 94 CRI
   R<sub>f</sub> up to 92 TM-30
   R<sub>g</sub> up to 67 CRI
   R<sub>f,m</sub> up to 91 TM-30
   G<sub>a</sub> up to 99 CRI
   R<sub>g</sub> up to 100 TM-30

 $C_9$  up to 94 CRI  $R_{cs,h1}$  up to -5% TM-30

# Achieve color balance

Best in class color consistency:
 Promote aesthetic harmony in your space with ≤ 2 SDCM

# Tunable white binning chart



### Dim-to-Warm: CCT vs Dimmed level 3200 3000 2800 2600 2400 2200 2000 1800 1600 2% 30% 50% 75% 100% Dimming level

# Round Downlight & Lensed Wall Wash

# **Electrical - Static White**

Input frequency of 50/60Hz, Power Factor @ Max Load >0.9

Product	Input Volts (V)	Input Freq. (Hz)	Input Current (A)	LED Drive Current (A)	Input Power (W)	LED Power (W)	THD Factor @ Max Load
	120V	0.081A	0.23A	9.8W	8.0W	<10%	>0.9
P6RDL10_Z10U/3	277V	0.036A	0.23A	10.0W	8.0W	<20%	>0.9
	347V	0.033A	0.23A	11.4W	8.0W	<30%	>0.9
	120V	0.121A	0.35A	14.5W	12.1W	<10%	>0.9
P6RDL15_Z10U/3	277V	0.053A	0.35A	14.6W	12.1W	<10%	>0.9
	347V	0.048A	0.35A	16.6W	12.1W	<25%	>0.9
	120V	0.154A	0.45A	18.4W	15.6W	<10%	>0.9
P6RDL20_Z10U/3	277V	0.067A	0.45A	18.5W	15.6W	<10%	>0.9
	347V	0.059A	0.45A	20.5W	15.6W	<20%	>0.9
	120V	0.195A	0.58A	23.4W	19.9W	<10%	>0.9
P6RDL25_Z10U/3	277V	0.085A	0.58A	23.5W	19.9W	<10%	>0.9
	347V	0.072A	0.58A	24.9W	19.9W	<20%	>0.9
	120V	0.236A	0.70A	28.3W	24.2W	<10%	>0.9
P6RDL30_Z10U/3	277V	0.102A	0.70A	28.2W	24.2W	<10%	>0.9
P6RDL30_Z10U/3	347V	0.079A	0.65A	27.4W	22.5W	<15%	>0.9
	120V	0.285A	0.85A	34.2W	29.4W	<10%	>0.9
P6RDL35_Z10U/3	277V	0.123A	0.85A	34.2W	29.4W	<10%	>0.9
	347V	0.101A	0.85A	35.0W	29.4W	<10%	>0.9
	120V	0.296A	0.88A	35.5W	30.5W	<10%	>0.9
P6RDL40_Z10U/3	277V	0.128A	0.88A	35.5W	30.5W	<10%	>0.9
	347V	0.105A	0.88A	36.4W	30.5W	<10%	>0.9
	120V	0.307A	0.92A	36.8W	31.7W	<10%	>0.9
P6RDL45_Z10U/3	277V	0.133A	0.92A	36.8W	31.7W	<10%	>0.9
F0NDL40_Z100/3	347V	0.109A	0.92A	37.7W	31.7W	<10%	>0.9
·	120V	0.342A	1.02A	41.0W	35.3W	<10%	>0.9
P6RDL50_Z10U/3	277V	0.148A	1.02A	41.0W	35.3W	<10%	>0.9
	347V	0.120A	1.02A	41.5W	35.3W	<10%	>0.9

# Electrical - Dim-to-Warm (9D2W)

Input frequency of 50/60Hz, Power Factor @ Max Load >0.9

	Input Volts	Input Freq.	Input Current	LED Drive Current	Input Power	LED Power	THD Factor @
Product	(V)	(Hz)	(A)	(A)	(W)	(W)	Max Load
P6RDL109D2W_Z10U	120V	0.122A	0.325	14.6W	11.7W	<10%	>0.9
P6RDL109D2W_Z10U	277V	0.056A	0.325	15.6W	11.7W	<20%	>0.9
P6RDL159D2W_Z10U	120V	0.164A	0.460	19.7W	16.6W	<10%	>0.9
P6RDL159D2W_Z10U	277V	0.076A	0.460	21.0W	16.6W	<20%	>0.9
P6RDL209D2W_Z10U	120V	0.212A	0.600	25.4W	21.6W	<10%	>0.9
P6RDL209D2W_Z10U	277V	0.094A	0.600	26.0W	21.6W	<10%	>0.9
P6RDL259D2W_Z10U	120V	0.256A	0.725	30.7W	26.1W	<15%	>0.9
P6RDL259D2W_Z10U	277V	0.111A	0.725	30.7W	26.1W	<25%	>0.8
P6RDL309D2W_Z10U	120V	0.300A	0.850	36.0W	30.6W	<15%	>0.9
P6RDL309D2W_Z10U	277V	0.130A	0.850	36.0W	30.6W	<25%	>0.8

# Electrical - Tunable White (96T)

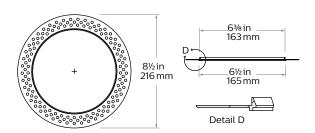
Input frequency of 50/60Hz, Power Factor @ Max Load >0.9

	Input Volts	Input Freq.	Input Current	LED Drive Current	Input Power	LED Power	THD Factor @
Product	(V)	(Hz)	(A)	(A)	(W)	(W)	Max Load
P6RDL1096T_Z10U	120V	0.080A	0.220	9.5W	7.9W	<15%	>0.9
P6RDL1096T_Z10U	277V	0.037A	0.220	10.2W	7.9W	<15%	>0.8
P6RDL1596T_Z10U	120V	0.119A	0.332	14.2W	12.0W	<15%	>0.9
P6RDL1596T_Z10U	277V	0.055A	0.332	15.1W	12.0W	<15%	>0.8
P6RDL2096T_Z10U	120V	0.158A	0.447	18.9W	16.1W	<15%	>0.9
P6RDL2096T_Z10U	277V	0.073A	0.447	20.1W	16.1W	<15%	>0.9
P6RDL2596T_Z10U	120V	0.200A	0.566	24.0W	20.4W	<15%	>0.9
P6RDL2596T_Z10U	277V	0.091A	0.566	25.2W	20.4W	<15%	>0.9
P6RDL3096T_Z10U	120V	0.241A	0.692	29.0W	24.9W	<15%	>0.9
P6RDL3096T_Z10U	277V	0.110A	0.692	30.4W	24.9W	<10%	>0.9

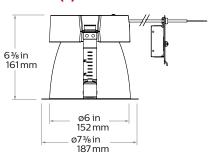
# Round Downlight & Lensed Wall Wash

### **New construction** 17 %" 12 %" (314 mm) (448 mm) 81/4" 12 1/4" (209 mm) (311 mm) MAX. Emergency battery pack shown with EM6 option on new construction non-IC frame. 10 ½" 10 %" 101/8" (267 mm) (257 mm) Remodeler 24" (610 mm) Round **New Construction** 9 5/8" (244 mm) installation clearance required Emergency battery EM6 option on new construction non-IC frame. 4 3/8" (111 mm) 1/2" (13 mm) D Ε 6" 1/2" (152 mm) (13 mm) 71/4" (184 mm) Downlight/Showerlight \* Center point location Lensed for integral emergency test switch (IEM6) 1000-3500lm 4000-5000lm Wall Wash 7¼" (184mm) 7¼" (184mm) 7¼" (184mm) 6" (152mm) В 6" (152mm) 6" (152mm) С 4½" (116mm) 63/4" (160mm) 41/8" (102mm) 25%" (65mm) - Lower end of LW lens is 3/16" (5mm) above flange. D 2 %" (60mm) 2 3/8" (60mm) Ε 3¾" (85mm) 33/8" (85mm) N/A F 5" (127mm) 6 3/8" (160mm) 4 %" (124mm)

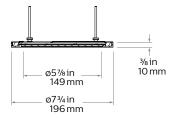
# Flangeless mud-in ring (CA6RFT) accessory



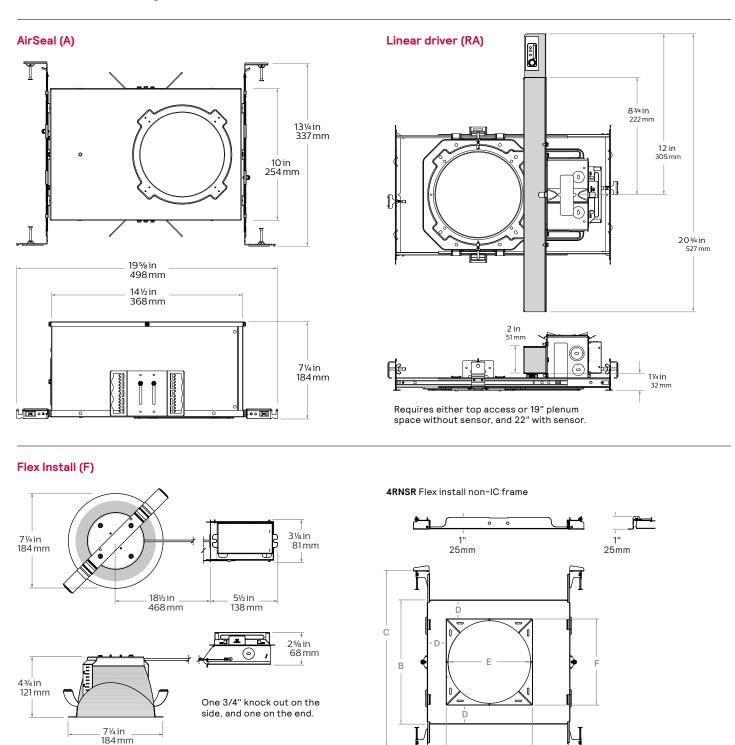
# Retrofit (R) with round trim



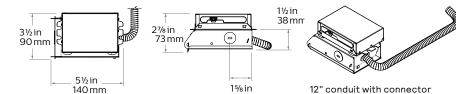
# Vandal Proof (VP) accessory



# Round Downlight & Lensed Wall Wash



12" conduit with connector to j-box knock out



15% in 42 mm

A	В	C	D	E	F
10 ¾" 276mm	7¼" 184mm	13 %" 345mm	1" 25mm	4%" 124mm	5¼" 132mm

LCEM6 Flex install (F) engine only

# Round Downlight & Lensed Wall Wash

# Reflectors



Specular clear (CL): Most specular and most efficient finish, delivers maximum photometric performance but can produce a mirror image effect of the interior space.



Comfort clear (CC): Semi-specular finish that softens the light at the source of the reflector and creates a subtle, even luminance from the reflector cone.



Comfort clear diffuse (CD): Slightly diffuse clear finish, which eliminates iridescence and reduces the mirror image effect inherent with a specular finish.



Vandal proof (VP): Provides an elegant solution for vandal resistant needs. One piece machined aluminum ring with impact resistant clear lens. Flangeless (F) flange must be ordered. Provides the luminaire with an IK10 impact and IP65 rating.



White (-): (matte) Brightest aperture when illuminated and provides the smoothest transition to most ceilings when off (white is only available with a white flange).



**Black (BK):** Painted matte finish that provides the lowest aperture brightness possible and reduces source identification in a ceiling significantly.



Shower light (SL): Wet location rated shower light applicable in any installation requiring dead front trims, interior or exterior non-corrosive applications, or where a diffused lens at the ceiling is required (non-conductive).

# **Flanges**



White (-): (matte) Provides the smoothest transition to ceilings when off.



**Black (BK):** Painted matte finish that provides the lowest aperture brightness possible.



**Polished (P):** (matches aperture) Produces a continuous look throughout the reflector (aperture matching).



Flangeless (F): (flush-mount) Creates a flush, virtually seamless transition from aperture to ceiling.



Mud-in ring (FT): Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

# Round Downlight & Lensed Wall Wash

### **Adjustment Factors**

Finish	CRI/CCT	Lumens	
CL =100%	90CRI 4000K = 106%	5000lm = 167%	2500lm = 83%
CC = 86%	90CRI 3500K = 104%	4500lm = 150%	2000lm = 67%
CD = 91%	90CRI 3000K = 100%	4000lm = 133%	1500lm = 50%
WH = 90%	90CRI 2700K = 96%	3500lm = 117%	1000lm = 33%
BK = 54%		3000lm = 100%	

# Downlight, Narrow beam, 29W LED, 90 CRI, 3000 K

# 1625

Candela	Curves
813	60°
1625	
2438	30°
3250	

			Angle	Mean CP	Lms
Report		CLZ10U.ies	0 5	3015 2903	
Output	I me:	2992 lms	10	2670	268
Spacing		0.92	15	2585	
		58°	20	2369	722
Beam A			25	1942	
Input W		28.8W	30	1357	871
Efficac	y:	103.9 lm/w	35	854	
CCT3:		3000K	40	597	554
CRI:		90 min	45	489	
			50	399	378
<b>-</b>			55	213	
Zonai iu	mens &	percentages	60	32	188
Zone I	umano	%Luminaire	65	5	
	Lumens	70Eumman e	70	3	8
0-30	1861	62.2%	75	2	
0-40	2415	80.7%	80	1	2
0-60	2982	99.7%	85	0	
0-90	2992	100.0%	90	0	0

# Single unit data

	Initial center beam foot-candles	Beam dia. (ft)*
5'	121	4.6'
6'	84	5.5'
7'	62	6.4'
8'	47	7.4'
9'	37	8.3'
+5 "		

\*Beam diameter is where foot-candles drop to 50% of maximum.

### Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq.ft.
5'	134.0	1.28
6'	88.0	0.84
7'	63.0	0.60
8'	53.0	0.50
9'	42.0	0.40

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

### Coefficients of utilization

Cei	ling		80	)%		70	1%	50	)%	30	)%	0%
Wa	II	70	50	30	10	50	10	50	10	50	10	0
RC	R	Zon	al cav	cavity method - Effective floor reflectance = 209				20%				
	0	119	119	119	119	116	116	111	111	106	106	100
0	1	113	110	107	105	108	103	104	100	100	97	92
ξį	2	107	101	97	93	100	92	96	90	93	88	85
20	3	101	94	88	84	92	83	90	82	87	81	78
ΞΞ	4	95	87	81	76	85	76	83	75	81	74	71
aS	5	90	80	74	69	79	69	78	68	76	68	66
Room Cavity Ratio	6	85	75	68	64	74	63	72	63	71	63	61
O	7	80	70	63	59	69	59	68	58	67	58	56
8	8	76	65	59	54	65	54	64	54	63	54	52
	9	72	61	55	51	61	51	60	50	59	50	49
	10	68	58	52	47	57	47	56	47	56	47	45

# Downlight, Medium beam, 29W LED, 90 CRI, 3000 K

# Candela Curves 1615 2438 3250

		•		
Report¹:		0	3161	
P6RDL30930N	ICLZ10U.ies	5	3048	
	04401	10	2789	282
Output Lms:	3118 lms	15	2498	
Spacing Crit.:	0.9	20	2178	698
Beam Angle:	66°	25	2065	
nput Watts <sup>2</sup> :		30	1942	955
Efficacy:	108.3 lm/w	35	1298	
CCT <sup>3</sup> :	3000K	40	650	799
CRI:	90 min	45	349	
		50	224	288
		55	93	
Zonal lumens &	percentages	60	13	90
Zone Lumens	%I uminaire	65	4	
		70	2	5
0-30 1935	62.1%	75	1	
0-40 2734	87.7%	80	1	2
0-60 3112	99.8%	85	0	
0-90 3118	100.0%	90	0	0
			ı	'

Angle | Mean CP | Lms

	foot-candles	dia. (ft)*
5'	126	4.5'
6'	88	5.4'
7'	65	6.3'
8'	49	7.2'
9'	39	8.1'

\*Beam diameter is where foot-candles drop to 50% of maximum.

# Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq.ft.
5'	140.0	1.28
6'	92.0	0.84
7'	66.0	0.60
8'	55.0	0.50
9'	44.0	0.40

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Ce	lling		80	1%		//	1%	50	)%	30	1%	0%
Wa	II	70	50	30	10	50	10	50	10	50	10	0
RC	R	Zon	al cav	ity m	ethoc	l – Eff	ectiv	e floo	r refl	ectan	ce = :	20%
	0	119	119	119	119	116	116	111		106	106	
0	1	113	110	107	105	108	103	104	100	100	97	92
ij.	2	107	101	97	93	100	92	96	90	93	88	85
æ	3	101	94	88	84	92	83	90	82	87	81	78
ΞΞ	4	95	87	81	76	85	76	83	75	81	74	71
á	5	90	80	74	69	79	69	78	68	76	68	66
ō	6	85	75	68	64	74	63	72	63	71	63	61
Room Cavity Ratio	7	80	70	63	59	69	59	68	58	67	58	56
8	8	76	65	59	54	65	54	64	54	63	54	52
	9	72	61	55	51	61	51	60	50	59	50	49
	10	68	58	52	47	57	47	56	47	56	47	45

- 1. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.
- 2. Wattage: controlled to within 5%
- 3. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

# Round Downlight & Lensed Wall Wash

### **Adjustment Factors**

Finish	CRI/CCT	Lumens	
CL =100%	90CRI 4000K = 106%	5000lm = 167%	2500lm = 83%
CC = 86%	90CRI 3500K = 104%	4500lm = 150%	2000lm = 67%
CD = 91%	90CRI 3000K = 100%	4000lm = 133%	1500lm = 50%
WH = 90%	90CRI 2700K = 96%	3500lm = 117%	1000lm = 33%
BK = 54%		3000lm = 100%	

# Downlight, Wide beam, 29W LED, 90 CRI, 3000 K

# Candela Curves 60° 450 1350 30° 1800

,,,								
Zonal lumens 8	percentages	Angle	Mean CP	Lms				
Zone Lumen	s %Luminaire	0	1720					
0-30 1464 0-40 242 0-60 3088	7 78.4%	5 10 15 20	1695 1710 1770 1750	162 498				
0-90 309	5 100.0%	25 30	1725 1752	804				
		35	1611	004				
		40	1114	963				
Report <sup>1</sup> :		45 50	646 379	520				
P6RDL30930V		55 60	139 17	141				
Output Lms: Input Watts <sup>2</sup> :	30951ms 28.3W	65 70	4 3	6				
Efficacy:	109.4 lm/w	75	1					
CCT <sup>3</sup> :	3000K	80	1	2				
CRI: Beam Angle: Spacing Crit.:	90 min 84° 1.42	85 90	0	0				

# Single unit data

	Initial center beam foot-candles	Beam dia. (ft)*
5'	69	7.1'
6'	48	8.5'
7'	35	9.9'
8'	27	11.4'
9'	21	12.8'
* Roam dian	neter is where for	nt-can-

dles drop to 50% of maximum.

### Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq.ft.
5'	137.0	1.25
6'	90.0	0.82
7'	64.0	0.59
8'	53.0	0.49
9'	43.0	0.39

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Multiple unit data

### Coefficients of utilization

Cei	ling		80	)%		70	1%	50	)%	30	)%	0%
Wal	I	70	50	30	10	50	10	50	10	50	10	0
RCF	RCR Zonal cavity method - Effective floor reflectance =					20%						
	0	119	119	119	119	116	116	111	111	106	106	100
0	1	113	109	107	104	107	102	103	99	99	96	92
Ĕ	2	106	100	95	92	98	90	95	88	92	87	83
8	3	99	92	86	81	90	80	87	79	85	78	75
Ę	4	93	84	77	72	83	72	80	71	78	70	68
á	5	87	77	70	65	76	65	74	64	72	64	61
Room Cavity Ratio	6	81	71	64	59	70	58	68	58	67	58	56
o	7	76	65	58	53	65	53	63	53	62	52	51
8	8	72	60	53	49	60	48	59	48	57	48	46
	9	67	56	49	44	55	44	54	44	53	44	42
	10	63	52	45	41	52	41	51	41	50	40	39

# Lensed Wall Wash, Wide beam, 29W LED, 90 CRI, 3000 K

# Candela Curve 375 750 1125 1500 Wall side Room side



	2' from wall 3' on ctr.				
n feet 2 2 3	57 87 73	47 79 71	57 87 73		
ui Buili	54	54	54		
	38	39	38		
Ince from ceiling in feet	28	28	28		
	21	22	21		
ince fr	16	17	16		
6 00	13	13	13		

Multiple unit data

Footcandles on wall			Footcandles on wall				
		' from wa			5	' from wa	
Distance from ceiling in feet 1 0 6 8 2 9 9 7 7 7 10 10 10 10 10 10 10 10 10 10 10 10 10	57 87 73 54 38 28 21	47 79 71 54 39 28 22	57 87 73 54 38 28 21	Distance from celling in feet 1 0 6 8 2 9 9 7 7 8 7 1 1 2 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	25 49 55 50 41 32 26	24 48 55 51 42 33 26	25 49 55 50 41 32 26
Distance fr 71 01 6 8	16 13 11 9 8	17 13 11 9 8	16 13 11 9 8	Distance fr 71 01 01 01 01 01 01 01 01 01 01 01 01 01	20 16 14 11 10	21 17 14 12 10	20 16 14 11 10

	3' from wall 4' on ctr.			
1 1	22	17	22	
	41	35	41	
2 3 4	44	40	44	
eiling 2	39	36	39	
	31	30	31	
stance from ceiling in feet	25	24	25	
0 6 8 2 9 5 7 8 5	19	19	19	
nce fr	15	15	15	
8 9	12	12	12	
10 <u>ئ</u>	10	10	10	

Multiple unit data

Footcandles on wall

- 1. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.
- 2. Wattage: controlled to within 5%
- 3. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.