### LIGHTOLIER

by (s) ignify

### **Downlighting**

LyteProfile 3"









LyteProfile downlights and wall washers provide a comfortable 60° cut-off to both the actual and reflected source. Utilizes a robust frame-in kit, light engine and reflector design that is designed for a wide variety of installation conditions with a plenum depth of 4-1/2".

Project Location Cat.No: Type: Qty: Notes

example: P3RDL10935WCLZ10US

Complete unit = Fixture + Light Engine/Trim + Optional Accessories

**Frame** example: 3RAS

Series	Installation	Voltage/Options		
3R				
3R Uniframe 3" round frame	N New Construction Non-IC	Universal 120/277/347V     Chicago plenum	EM6	Emergency, 6W Self-Test/Self-Diagnostic <sup>1</sup>
	A AirSeal IC (1000lm max)	<ul> <li>Standard Universal 120/277/347V</li> <li>Shallow Universal 120/277/347V<sup>2</sup></li> </ul>		

### Light Engine / Trim

Series P3R	Style	Lumens	CRI/CCT	Beam
P3R LyteProfile 3" round light engine / trim	DL Downlight LW Lensed wall wash³ SL Shower light³ (with non-conductive trim and lens)	05 500 lm 07 750 lm 10 1000 lm 15 1500 lm <sup>4</sup>	927 90CRI / 2700K 930 90CRI / 3000K 935 90CRI / 3500K 940 90CRI / 4000K	N Narrow M Medium W Wide

### Light Engine / Trim (continued)

Reflector	Flange	Dimming	Voltage	Plenum	Options
CL Specular clear CC Comfort clear	- White (matte) B Black (matte) <sup>5</sup>	<b>Z10</b> 0-10 V 1% dimming	U 120V/277V 3 347V (0-10v only) <sup>9</sup>	- Standard depth S Shallow for	None IEM6 Trim mounted
CD Comfort clear diffuse	P Polished (matches aperture) F Flangeless (requires CA3RFT) <sup>5</sup>	Z10D2O 0-10V 1% dimming w/ dim-to-off L01 Lutron PEQO dimming w/ dim to 0.1%) 6.9	U 120V/277V (order T347-75VA accessory for 347V)	shallow IC frame <sup>2</sup>	EM test switch (option available on DL style only)
WH White (matte) BK Black (matte)	- White (matte)  B Black (matte) <sup>5</sup>	(not compatible with Shallow  E Electronic low	w (S) plenums)  1 120V		
Accessories	F Flangeless (requires CA3RFT) <sup>5</sup>	voltage dimming  RA Integral Interact Pro RF sensor <sup>7</sup>	U 120V/277V		

SWCS Interact Ready System Bridge Accessory with integral occupancy and daylight sensor (compatible with all 0-10V options, see SWCS spec sheet)<sup>8</sup> **CA3RFT** Mud-in ring for round flangeless installs (ordered with a flangeless trim)

CAEM6 Field installable Bodine BSL6 6W battery pack with self-test/self-diagnostic for use with new construction frames (120-277V - see page 2 for details)

CAEM6TSCP  $Emergency \ test \ switch \ mounting \ plate. \ Must \ be \ ordered \ with \ EM6 \ frame \ for \ remote \ test \ switch \ (see \ page \ 2 \ for \ details)$ 

T347-75VA 347:120V step-down transformer for non-IC (N) frame only (see page 3 for details)

- 1. Emergency (EM6) frame is compatible with reflector mounted test switch when light engine is ordered with IEM6 option code (not compatible with 347V).
- 2. Must order shallow IC frame (S), shallow engine / shallow trim (S) for complete shallow assembly. Shallow configurations available in 750lm (07) and 1000lm (10) only with ELV or 0-10V.
- 3. Lensed wall wash (LW) and Shower lights (SL) have a 1000lm (10) limit in Non-IC (N) configurations and 500lm (05) limit in IC (A) configurations. Order Shower light (SL) with WH trim finish only (wide beam only). Not available with flangeless option.
- 4. The 1500lm (15) option is not available with standard AirSeal IC frame (3RA-).
- 5. Consult factory with ETO request for black (B) flange for all styles, and flangeless for lensed wall wash (LW) style.
- 6. Lutron PEQ0 (L01) dimming available only with 500lm (05) and 1000lm (10) lumen options.
- 7. Linear driver profile. See page 5 for details. Specify only with non-IC (N) frame, not for use with LC or EM6 options.
- 8. Requires IRT9015 IR remote & Interact Pro App for commissioning.
- 9. The 500lm (05) option is not available.













### Round downlight

### Frame-in-kits

### New construction:

Galvanized stamped steel for dry or plaster ceilings. Preinstalled telescoping mounting bars from 13" to 24". For 4' distances, use 1/2" EMT, 1-1/2" x 1/2" U or C channel.

Max ceiling thickness is 2" (51 mm)

### Patented install mounting frame:

- Pre-installed mounting bars for fast and tool-less installs into T-grid & hat channel ceilings.
- Close-cut aperture design eliminates possibility of gap between ceiling opening and reflector flange.
- Separate wiring compartment for wiring frame to building allows inspection prior to light engine install.
- Simple plug-and-play connection between frame and light engine from below ceiling.

### Dimmino

All configurations are FCC Class A unless otherwise specified.

- Advance 0-10V 1% (Z10)
- · Lutron PEQO Hi-lume Premier 0.1% EcoSystem
- Electronic low voltage (ELV) Remodel and AirSeal IC Shallow are FCC Class B

### **Optical systems**

**Quality of light:** 2 SDCM ensures color consistency from fixture to fixture and over the luminaire's long lifetime.

**Construction:** Precision formed high grade aluminum reflectors with options for anodized or painted finishes.

Comfort throughout the space:  $60^{\circ}$  cutoff.

### **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.
- Predicted 70% lumen maintenance to 57,000 hrs.
- · Max operating ambient temperature of 30°C.
- 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.

### **Options and Accessories**

**Flangeless mud-in ring:** Use CA3RFT for use with flangeless 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 light engine with IEM6 option code (e.g. P3RDL10935WCDZ10UIEM6).

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.

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

**SWCS:** Interact Ready System Bridge Accessory Requires IRT9015 IR remote and Interact Pro App for commissioning.

### **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: P3RDL10935WCDZ10UIEM6). DL style only.
- For remote ceiling mounted test switch, order standard light engine (ex: P3RDL10935WCDZ10U).
   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.

### **ENERGY STAR® exceptions**

- · BK finishes
- · 347V & Emergency voltage/options
- · Lutron configurations

### Title 24 exceptions

- · BK finishes
- · Must be installed in shallow AirSeal IC Frame
- · Downlight (DL): 500lm and 1000lm only
- · Lensed wall wash (LW): 500lm only

### Labels and listings

- · cULus listed for wet locations
- ENERGY STAR® certified
- CEC Title 24 JA8 certified
- CCEA (frames with \*LC suffix)
- Red List Declare label certified, ID SIG-0021 (<u>View full Declare label</u>)

### Warranty



5 year limited warranty

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

### 0-10V electrical tables (50/60Hz Input Freq.)

Light	Input	Input	LED Drive	Input	LED	THD Factor	Power Factor
engine	Volts	Current			Power	@ Max	Load
	120V	0.041A	0.12A	4.9W	3.9W	<10%	>0.9
P3RDL05_Z10U/3	277V	0.019A	0.12A	5.1W	3.9W	<30%	>0.8
	347V	0.017A	0.12A	5.8W	3.9W	<20%	>0.9
	120V	0.066A	0.19A	7.9W	6.5W	<10%	>0.9
P3RDL07_Z10U/3	277V	0.029A	0.19A	8.0W	6.5W	<20%	>0.8
	347V	0.026A	0.19A	9.2W	6.5W	<20%	>0.9
	120V	0.078A	0.23A	9.3W	7.7W	<10%	>0.9
P3RDL10_Z10U/3	277V	0.034A	0.23A	9.5W	7.7W	<10%	>0.8
	347V	0.031A	0.23A	10.9W	7.7W	<20%	>0.9
	120V	0.119A	0.35A	14.3W	11.9W	<10%	>0.9
P3RDL15_Z10U/3	277V	0.052A	0.35A	14.3W	11.9W	<10%	>0.9
	347V	0.047A	0.35A	16.3W	11.9W	<20%	>0.9
	120V	0.066A	0.19A	7.9W	6.5W	<10%	>0.9
P3RDL07_Z10U_S	277V	0.029A	0.19A	8.0W	6.5W	<20%	>0.8
	347V	0.026A	0.19A	9.2W	6.5W	<20%	>0.9
	120V	0.078A	0.23A	9.3W	7.7W	<10%	>0.9
P3RDL10_Z10U_S	277V	0.034A	0.23A	9.5W	7.7W	<10%	>0.8
	347V	0.031A	0.23A	10.9W	7.7W	<20%	>0.9

### ELV electrical tables (50/60Hz Input Freq.)

Light	Input	Input	LED Drive	Input	LED	THD Factor	Power Factor
engine	Volts	Current	Current		Power	@ Max	Load
P3RDL05_E1	120V	0.052A	0.15A	6.2W	5.1W	<10%	>0.9
P3RDL07_E1	120V	0.067A	0.20A	8.1W	6.8W	<10%	>0.9
P3RDL10_E1	120V	0.083A	0.25A	10.0W	8.5W	<10%	>0.9
P3RDL15_E1	120V	0.115A	0.35A	13.8W	11.9W	<10%	>0.9
P3RDL07_E1_S	120V	0.067A	0.20A	8.1W	6.8W	<10%	>0.9
P3RDL10 E1 S	120V	0.083A	0.25A	10.0W	8.5W	<10%	>0.9

### Lutron electrical tables (50/60Hz Input Freq.)

Light	Input	Input	LED Drive	Input	LED	THD Factor	Power Factor
engine	Volts			Power	Power	@ Max Load	
P3RDL05_LU	120V	0.040A	0.12A	4.8W	3.9W	<25%	>0.9
	277V	0.017A	0.12A	4.8W	3.9W	<20%	>0.5
DARRI OZ III	120V	0.063A	0.19A	7.5W	6.5W	<20%	>0.9
P3RDL07_LU	277V	0.028A	0.19A	7.7W	6.5W	<15%	>0.6
D2DD140 111	120V	0.073A	0.23A	8.8W	7.7W	<15%	>0.9
P3RDL10_LU	277V	0.033A	0.23A	9.1W	7.7W	<15%	>0.6
P3RDL15_LU	120V	0.114A	0.35A	13.7W	11.9W	<10%	>0.9
	277V	0.049A	0.35A	13.7W	11.9W	<15%	>0.7

## Round downlight

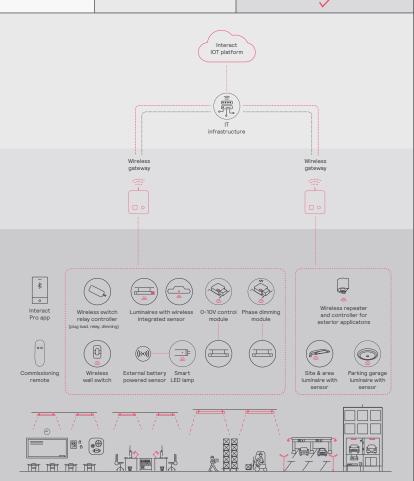
interact	in the second se	The second secon	Property for the state of the s
			vay Connected
	Standalone	Option 1	Option 2
Dimming, grouping, and zoning	<b>~</b>	<b>~</b>	<b>✓</b>
Bluetooth and ZigBee enabled	<b>~</b>	<b>~</b>	<b>~</b>
Motion sensing and daylight harvesting	<b>/</b>	<b>✓</b>	<b>~</b>
Integration with 0-10V and phase dimming fixtures	<b>~</b>	<b>✓</b>	<b>~</b>
Code compliance	<b>~</b>	<b>~</b>	<b>✓</b>
Granular dimming and dwell time	<b>/</b>	<b>~</b>	<b>~</b>
Correlated color temperature (CCT) tuning by switch New	<b>~</b>	<b>✓</b>	<b>✓</b>
Support for sensor-based Tunable White luminaires New	<b>~</b>	<b>✓</b>	<b>✓</b>
Energy reporting and monitoring		<b>✓</b>	<b>✓</b>
Scheduling		<b>✓</b>	<b>✓</b>
Demand response		<b>✓</b>	<b>✓</b>
BMS integration (BACnet)			<b>~</b>
Floor plan visualization			<b>✓</b>
IoT sensors for wellness			<b>✓</b>
IoT Apps for productivity			<b>✓</b>

### Currently supported maximum system size

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			



dilato

### Round downlight

### 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)**

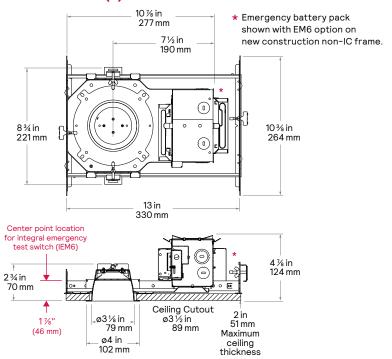
- Power Sensing (factory default) –
  Recommended UL924 option requires unswitched
  power sense line, absence of voltage on the
  normal circuit triggers luminaire to 100% output.
- Power Interruption Detection (field option) –
  Detects AC power interruption >30ms triggers
  90 minute emergency mode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

### Interact supported sensor option codes across Genlyte product lines

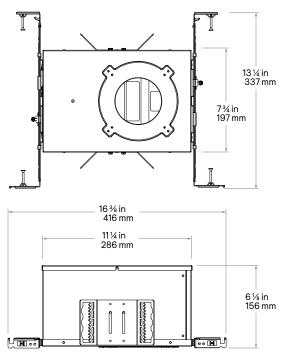
	Evokit	Day-Brite	Ledalite	Lightolier
ZigBee + Bluetooth + Sensing	SWZCS	SWZCS	CS	SBA accessory (external)
ZigBee + Bluetooth	RADIO	RADIO	RA	RA
ZigBee + Bluetooth + Sensing + Environmental data	IAOSB	IAOSB	SB	SB
ZigBee + Highbay + Sensing	-	SWZCSH	-	-

## Round downlight

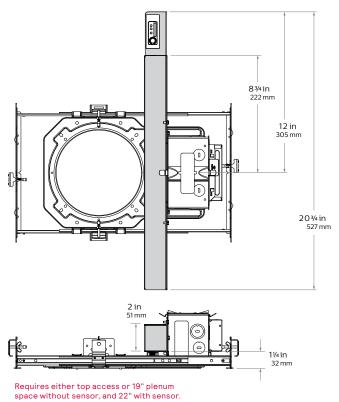
### New construction (N)



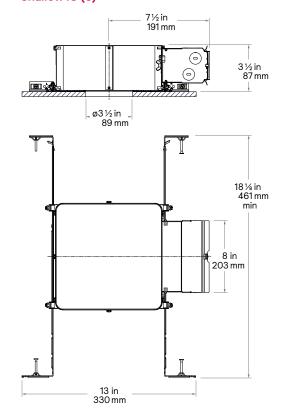
### Standard IC (A) and Chicago plenum (LC)



### Linear driver (RA)



### Shallow IC (S)



## Round downlight

### **Polished Reflectors** Shown as round reflectors but represent the finish of LyteProfile square 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, that eliminates iridescence and reduces the mirror image effect inherent with specular finishes.



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



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



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).



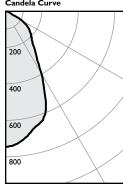
Flangeless (F): (flush-mount) Creates a flush, virtually seamless transition from aperture to ceiling.



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

### Downlight, Narrow Beam, 1000lm engine, 111 lm/W at 8.7W



Frame: 3RN P3RDL10935NCLZ10U

Output lumens: 968 lms Input watts: CRI: 90 min CCT1: 3500K Spacing Crit.: Beam Angle: 62°

### Zonal summary

Zone	Lumens	%Luminaire
0-30	488	50.4%
0-40	673	69.5%
0-60	949	98.0%
0-90	968	100.0%

Angle	Mean CP	Lumens
0	743	
5	730	
10	694	69
15	653	
20	619	185
25	517	
30	389	234
35	291	
40	233	185
45	200	
50	175	155
55	144	
60	67	121
65	9	
70	4	17
75	2	
80	1	2
85	0	

### Single unit data

	nitial center beam foot-candles	
5'	30	4.8'
6'	21	5.8'
7'	15	6.7'
8'	12	7.7'
9'	9	8.6'

\* 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'	43.0	0.39			
6'	28.0	0.25			
7'	20.0	0.18			
8'	17.0	0.15			
9'	13.0	0.12			
01 201 101 Danasa - Washington - 2 Fl					

38' x 38' x 10' Room, Workplane 2.5 above floor, 80/50/20% Reflectances

Efficacy: 111.3 lm/w Report<sup>2</sup>: STMR-3755

### **Adjustment Factors**

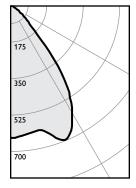
Finish	ССТ	Lumens
CL = 101% CC = 100% CD = 96% WH = 92% BK = 56%	90CRI 4000K = 107% 90CRI 3500K = 100% 90CRI 3000K = 93% 90CRI 2700K = 87%	1500lm = 150% 1000lm = 100% 500lm = 70%

### Coefficients of utilization

Се	iling		80	)%		70	)%	50	)%	30	)%	0%
Wa	II	70	50	30	10	50	10	50	10	50	10	0
RC	R	Zon	al cav	ity m	ethod	l – Eff	ectiv	e floo	r refl	ectan	ce = :	20%
	0	119	119	119	119	116	116	111	111	106	106	100
0	1	112	109	106	103	107	102	103	99	99	96	91
Ĕ	2	105	99	94	90	97	89	94	87	91	85	82
8	3	98	90	84	79	89	79	86	77	84	76	73
ΞŦ	4	92	83	76	71	81	70	79	69	77	68	66
a	5	86	76	69	63	75	63	73	62	71	62	60
Room Cavity Ratio	6	80	70	62	57	69	57	67	57	66	56	54
O	7	76	64	57	52	64	52	62	52	61	51	49
8	8	71	60	53	48	59	48	58	47	57	47	45
	9	67	56	49	44	55	44	54	44	53	44	42
	10	63	52	45	41	52	41	51	41	50	40	39

### Downlight, Medium Beam, 1000lm engine, 116 lm/W at 8.7W

### Candela Curve



Frame: 3RN Engine / Trim P3RDL10935MCLZ10U

Output lumens: 1013 lms Input watts: 8.7 W CCT1: 3500K Spacing Crit.: 1.3 Beam Angle:

### Zonal summary

Zone	Lumens	%Luminaire
0-30	544	53.7%
0-40	829	81.8%
0-60	1002	98.9%
0-90	1013	100.0%

Angle	Mean CP	Lumens
0	633	
5	626	
10	614	59
15	620	
20	680	180
25	676	
30	589	305
35	471	
40	291	285
45	147	
50	87	123
55	58	
60	23	50
65	6	
70	3	8
75	2	
80	1	2
85	0	
90	0	0

	Initial center beam	
lighted plane	foot-candles	diameter (ft)*
5'	25	6.5'
6'	18	7.8'
7'	13	9.1'
8'	10	10.4'
9'	8	11.7'

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

### Multiple unit data - RCR 2

.a.c.p.o ac	and pro anne data in the n						
Spacing on center	Initial center beam foot-candles	Watts per sq. ft.					
5'	45.0	0.39					
6'	30.0	0.25					
7'	21.0	0.18					
8'	18.0	0.15					
9'	14.0	0.12					

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 116.4 lm/w STMR-3754

### **Adjustment Factors**

Finish	ССТ	Lumens
CL = 101% CC = 100% CD = 96% WH = 92% BK = 56%	90CRI 4000K = 107% 90CRI 3500K = 100% 90CRI 3000K = 93% 90CRI 2700K = 87%	1500lm = 150% 1000lm = 100% 500lm = 70%

### Coefficients of utilization

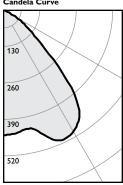
Ceiling		80	)%		70	)%	50	)%	30	)%	0%
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	Zon	al cav	ity m	ethod	l - Eff	ectiv	e floo	r refl	ectar	ice = :	20%
0	119	119	119	119	116	116	111	111	106	106	100
0 1	113	110	107	104	107	103	103	99	100	96	92
Room Cavity Ratio 8 ∠ 9 ⊆ 7 € 6 −	106	100	96	92	99	91	95	89	92	87	83
až 3	100	92	87	82	91	81	88	80	86	79	76
	93	85	78	74	84	73	81	72	79	71	69
<u>2</u> 5 ∫	88	78	71	66	77	66	75	66	73	65	63
ے 6 ا	82	72	65	60	71	60	70	60	68	59	57
5 7	77	67	60	55	66	55	65	55	63	54	52
윤 8	73	62	55	51	61	50	60	50	59	50	48
9	69	58	51	46	57	46	56	46	55	46	44
10	65	54	47	43	53	43	53	43	52	43	41

<sup>1.</sup> Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

## Round downlight

### Downlight, Wide Beam, 1000lm engine, 114 lm/W at 8.6W



Frame: 3RN Engine / Trim: P3RDL10935WCLZ10U

Output lumens: 8.6 W Input watts: CRI: 90 min CCT1: 3500K Spacing Crit.: Beam Angle: 90°

### Zonal summary

Zone	Lumens	%Luminaire	
0-30	401	41.0%	
0-40	688	70.4%	
0-60	965	98.8%	
0-90	977	100.0%	

Angle Mean CP Lumens

-		
0	444	
5	440	
10	432	42
15	439	
20	484	127
25	506	
30	497	232
35	467	
40	391	287
45	252	
50	145	197
55	91	
60	35	80
65	6	
70	3	10
75	2	
80	1	2
85	0	

### Single unit data

	nitial center bear foot-candles	
5'	18	7.7'
6'	12	9.2'
7'	9	10.8'
8'	7	12.3'
9'	5	13.9'

\* 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'	43.0	0.38
6'	28.0	0.25
7'	20.0	0.18
8'	17.0	0.15
9'	13.0	0.12

 $38' \times 38' \times 10'$  Room, Workplane 2.5'above floor, 80/50/20% Reflectances

Efficacy: 113.6 lm/w Report2: STMR-3753

### Adjustment Factors

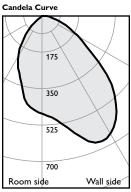
Finish	CCT	Lumens
CL = 101% CC = 100% CD = 96% WH = 92% BK = 56%	90CRI 4000K = 107% 90CRI 3500K = 100% 90CRI 3000K = 93% 90CRI 2700K = 87%	1500lm = 150% 1000lm = 100% 500lm = 70%

### Coefficients of utilization

Ceiling		80%		70%		50%		30%		0%		
Wa	II	70	50	30	10	50	10	50	10	50	10	0
RCR Zonal cavity method - Effective floor ref				r refl	ectan	ce = :	20%					
	0	119	119	119	119	116	116	111	111	106	106	100
0	1	112	109	106	103	107	101	102	98	99	95	91
Room Cavity Ratio	2	105	99	94	90	97	89	94	87	91	85	81
	3	98	90	83	78	88	78	85	77	83	75	72
ΞΞ	4	91	81	75	69	80	69	78	68	76	67	64
æ	5	85	74	67	61	73	61	71	61	69	60	58
õ	6	79	68	60	55	67	55	65	54	64	54	52
O	7	74	62	55	49	61	49	60	49	59	49	47
Š	8	69	57	50	45	56	44	55	44	54	44	42
	9	64	53	45	40	52	40	51	40	50	40	38
	10	61	49	42	37	48	37	47	37	46	37	35

### Wall wash, Wide Beam, 1000lm engine, 88 lm/W at 10.3W

# 175



Frame: 3RN Engine / Trim P3RLW10935WCCZ10U

Output lumens: 905 lms Input watts: 10.3 W 90 min CCT1: 3500K

Efficacy: 88.0 lm/w

Report<sup>2</sup>:

### Multiple unit data Footcandles on wall

		2 0			
		4	3' on ctr		
	1	27	22	27	
ee	2	43	38	43	
'n	2 3	36	34	36	
Distance from ceiling in feet	4	25	24	25	
ij	5 6	16	16	16	
8	6	11	11	11	
EO	7	8	8	8	
Į.	8	6 5 4 3	6 5 4 3	6	
õ	9	5	5	5 4 3	
tar	10	4	4	4	
Dis	12	3	3	3	

2' from wall

### Multiple unit data Footcandles on wall

		2' from wall			
		5	4' on ctr		
	1	23	13	23	
ee	2	36	23	36	
n f	2	30	23	30	
ij	4	20	18	20	
ij	5 6	13	13	13	
S	6	9	9		
E O	7	7	7	7	
£	8	5	5	5	
ce	9	5 4 3	4	4	
tar	10	3	3	3	
Distance from ceiling in feet	12	3	2	9 7 5 4 3 3	
	14	2	2	2	

### Multiple unit data Footcandles on wall

	2' from wall		
	5	5' on ctr	
., 1	24	8	24
Distance from ceiling in feet of 0 6 8 2 9 5 7 5 6 7	35	14	35
gin fee 3	28	15	28
<u>.</u> 6	18	13	18
<u>≒</u> 5	11	10	11
ဗ္ဗီ 6	8	7	8
E 7	6	6	6
₽ 8	5	6 4 4 3	6 5 4 3 3
ညီ 9	4	4	4
克 10	4 3	3	3
<u>≤</u> 12	3 2	3 2	3
14	2	2	2
	1	1	'

### Adjustment factors

Finish	ССТ	Lumens
CL = 102% CC = 100% CD = 95% WH = 95% BK = 85%	90CRI 4000K = 107% 90CRI 3500K = 100% 90CRI 3000K = 93% 90CRI 2700K = 87%	1500lm = 150% 1000lm = 100% 500lm = 70%

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



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