

Provides 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: _____

Frame (frame + trim = complete product)

example: 4RN

Series	Aperture	Installation	Options
4	R		
4 4-inch Non-IC	R Round	N New construction (Non-IC)	— Universal 120/277V (specify for Power Over Ethernet) LC Chicago Plenum EM Emergency ¹
		R Remodeler (Non-IC)	— Universal 120/277V (specify for Power Over Ethernet)
		A AirSeal (IC)	— Universal 120/277V (specify for Power Over Ethernet)
			3 347V (not compatible with ELV dimming) 3RADIO 347V Integral Interact Pro RF sensor (enables wireless connected lighting control) ⁴ RADIO Integral Interact Pro RF sensor (enables wireless connected lighting control) ⁴

Trim

example: P4RDL20835CDZ10U

Series	Style	Lumen	CRI/CCT	Reflector	Flange	Dimming ²	Voltage
P4R							
P4R LyteProfile 4-inch Round	DL Downlight	05 500lm (0-10V only) 10 1000lm 15 1500lm 20 2000lm 25 2500lm	827 80CRI / 2700K 830 80CRI / 3000K 835 80CRI / 3500K 840 80CRI / 4000K 850 80CRI / 5000K	CL Specular clear	— White (matte) P Polished	Z10 0-10V 1% L Lutron LDE1 EcoSystem (fade-to-black) P Power over Ethernet (PoE)	U Universal 120/277/347V E Ethernet 48V DC
	LW Lensed			CC Comfort clear			
	SL Shower light ³ (non-conductive lens)			CD Comfort clear diffuse			
				WH White (matte)			
				BK Black (matte)			

Only compatible with 1000 (10) to 2500 (25) lumen configurations

Accessories

- SBA** Interact Ready System Bridge Accessory with integral occupancy and daylight sensor (compatible with all 0-10V options, see SBA spec sheet)⁵
- SWZDT** SpaceWise wireless controller with dwell time functionality, compatible with all 0-10V configurations (for details see SWZDT spec sheet)
- CAEM** Field installable EM pack (for use with new construction frame only)
- 7920** 4" sloped ceiling adapter (refer to SCA spec sheet for slope options)
- AMS** ActiLume multi-sensor (optional accessory for PoE configurations)

1. Emergency (EM) frame includes emergency battery with ceiling and reflector mountable test switch (see page 2 for details and limitations). Integral emergency battery not compatible with Power over Ethernet configurations.
 2. Consult factory for available DALI and 0-10V dimming to 0.1% availability.
 3. Order Shower light (SL) with WH finish only.
 4. Interact Pro (RADIO & 3RADIO) requires above ceiling access.
 5. Requires IRT9015 IR remote & Interact Pro App for commissioning.

Note: For reflector mounted test switch add "EM" to end of catalog code (example: P4RDL20835CDZ10UEM). Leave blank for ceiling mounted test switch. Reflector mounted test switch requires above ceiling access and 1.25" max ceiling thickness for downlight only. See LED-EM spec sheet for more details.

P4R LyteProfile 4"

Round Downlight & Lensed Wall Wash

Features

Optics

- Provides a 60° cutoff (physical and reflected)
- Wide beam distribution for general illumination
- Spun and anodized reflectors available in specular (clear), semi-specular (comfort clear and diffuse finishes. Also available in white and black painted finishes.

Quality of light

- Lumen Maintenance: L80 at 60,000 hours
- Color consistency: 3 SDCM
- 80 CRI minimum

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 1.5" (38 mm).
Including PoE frame 4.88" (124 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

Dimming

- Advance 0-10V 1% dimming
- Lutron Hi-lume EcoSystem H Series 1% dimming
- EldoLED ECOdrive Dali 1% dimming
- EldoLED SOLOdrive 0-10V 0.1% dimming
- EldoLED DMX POWERdrive

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.

Power over Ethernet

Powered via Philips PoE lighting controller:

complies with FCC rules per Title 47 part 15 (Class A) for EMI / RFI (conducted & radiated). PoE lighting controller accessible from below ceiling.

Rated life: 60,000 hrs at 80% lumen maintenance based on IES LM-80-08 and TM-21-11.

Emergency

For reflector mounted test switch add "EM" to end of the catalog code (example: P4RDL20835CDZ10UEM). Leave blank for ceiling mounted test switch.

Reflector mounted test switch requires above ceiling access and 1.25" max ceiling thickness for downlight only. See LED-EM spec sheet for more details.

ENERGY STAR® exceptions

- 500lm configurations
- Black finishes
- PoE drivers

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](https://www.signify.com/warranties)
for more information on Signify's
standard 5-year limited warranty
on complete luminaire systems.

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Wireless Controls Options

Interact Pro scalable sensor

(System Bridge Accessory with -CS option):

- CS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.
- Interact Pro 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 onsite to identify and group devices together.
- Compatible with:
 - UID8451/10 wireless dimmer switch
 - SWS200 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
 - Battery powered IP65 presence sensor OCC sensor IA CM IP65 WH
 - Battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH
- For more information on Interact Pro visit: www.interact-lighting.com/interactproscalablesystem

SpaceWiseDT (SWZDT)

(SWZDT Accessory):

- Remote mounted and centralized SWZDT module accessory controls multiple luminaires.
- Compatible with any 0-10v driver
- 120-347V mains input voltage
- Up to 730VA load at 120V

Interact Pro Enterprise

(System Bridge Accessory with -SB option):

- 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 UID8451/10 wireless dimmer switch, SWS200 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) 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.
- SB option in addition to occupancy and daylight 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: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Emergency Options (ER100)

(System Bridge Accessory with -ER100 option):

- 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

Radio only sensor (RADIO):

- Integral 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.

Wired Controls Options

Interact Office Wired (PoE):

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.

- Optional integral emergency controller and battery pack provides 600lm nominal output.
- Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

Interact Office Wired (PoE), Static White:

- 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 Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

P4R LyteProfile 4"

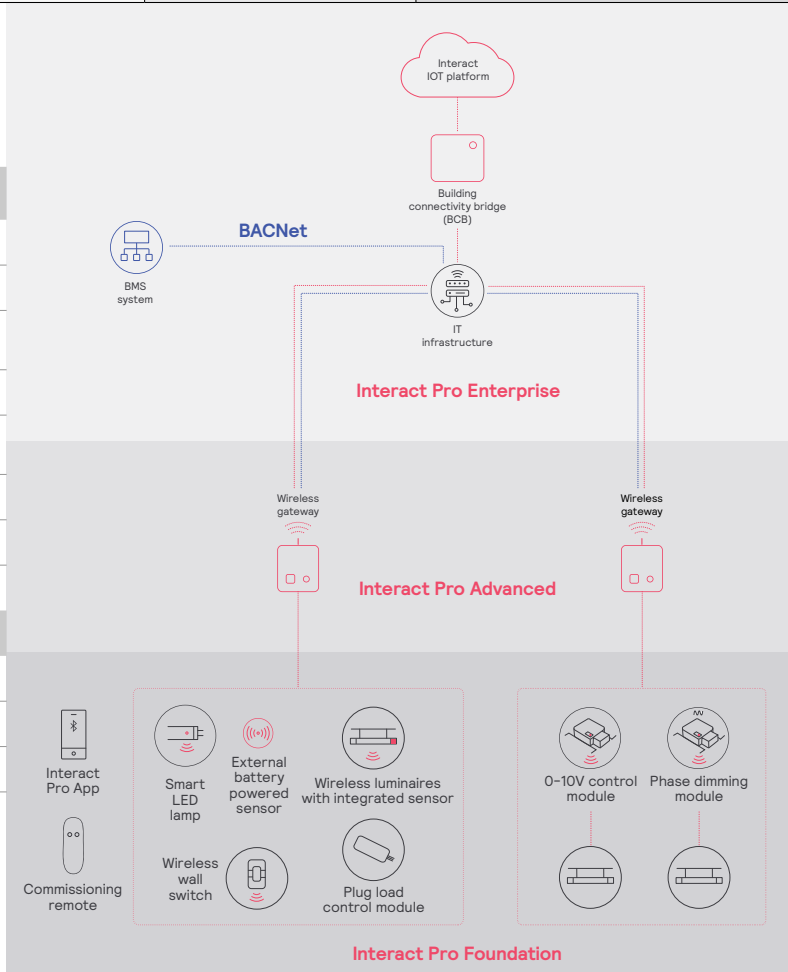
Round Downlight & Lensed Wall Wash

	Interact Pro scalable system		
	Foundation	Advanced	Enterprise
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	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

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.

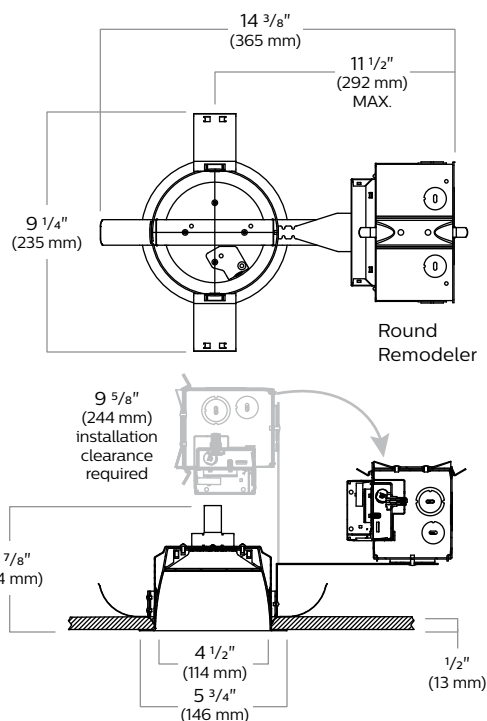
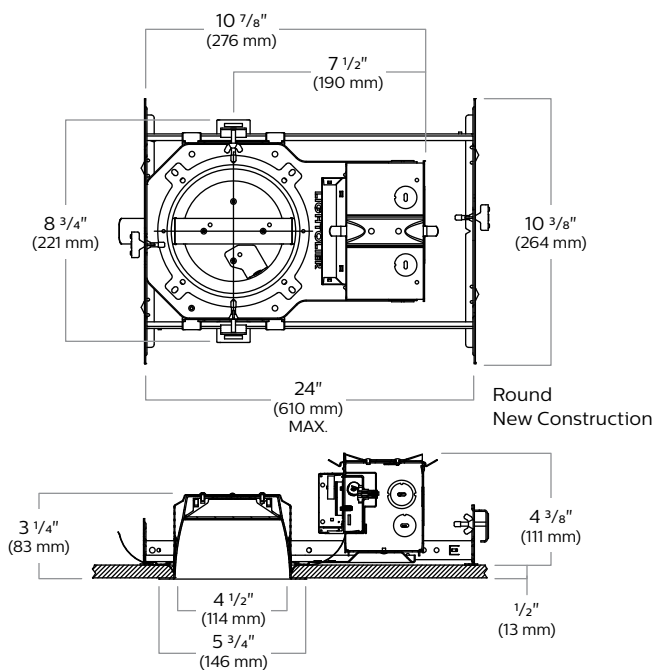
System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
• luminaires with integrated sensors	150
• smart TLEDS	150
Total number of ZGP devices (sensors and switches)	50
• sensors	30
• switches	50
• zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



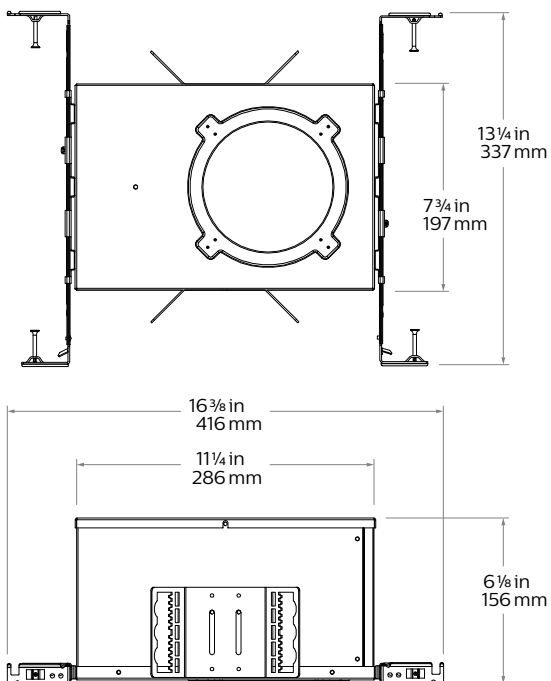
P4R LyteProfile 4"

Round Downlight & Lensed Wall Wash

Dimensions



AirSeal (A)



Electrical

Product	Input Volts	Input Freq.	Input Current (A)	Input Power (W)
P4*05*Z10U	120	50/60Hz	0.06	7
	277		0.029	7
P4*10*Z10U	120	50/60Hz	0.122	11
	277		0.038	10
P4*15*Z10U	120	50/60Hz	0.13	15
	277		0.063	16
P4*20*Z10U	120	50/60Hz	0.175	21
	277		0.078	21
P4*25*Z10U	120	50/60Hz	0.22	26
	277		0.099	27

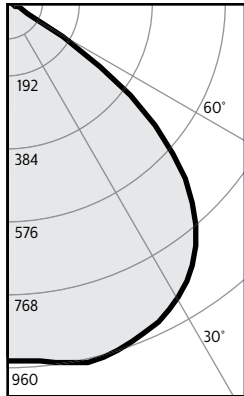
Product	Input Volts	Input Freq.	Input Current (A)	Input Power (W)
P4*10*LU	120	50/60Hz	0.094	10
	277		0.047	10
P4*15*LU	120	50/60Hz	0.134	15
	277		0.07	15
P4*20*LU	120	50/60Hz	0.176	21
	277		0.086	21
P4*25*LU	120	50/60Hz	0.23	27
	277		0.106	28

P4R LyteProfile 4"

Round Downlight & Lensed Wall Wash

P4RDL20835CLZ10U • 20W LED, 80 CRI, 3500 K

Candela Curves



Angle	Mean CP	Lumens
0	937	90
5	940	
10	956	
15	960	271
20	941	
25	921	424
30	886	
35	836	520
40	759	
45	652	495
50	498	
55	289	250
60	54	
65	20	24
70	12	
75	6	7
80	3	
85	1	1
90	0	

Single unit data

Height to Lighted Plane	Initial center beam foot-candles	Beam dia. (ft)*
5'	37	7.0'
6'	26	8.4'
7'	19	9.8'
8'	15	11.2'
9'	12	12.6'

* 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'	90.3	0.87
6'	59.3	0.57
7'	42.3	0.41
8'	35.3	0.34
9'	28.2	0.27

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

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	112	108	105	103	106	101	102	98	98	95	90
	2	104	98	93	88	96	87	93	85	90	84	80
	3	97	88	82	77	87	76	84	75	82	74	71
	4	90	80	73	67	79	67	76	66	74	65	62
	5	83	72	65	59	71	59	69	58	68	58	55
	6	77	66	58	53	65	52	63	52	62	52	49
	7	72	60	53	47	59	47	58	47	57	46	44
	8	67	55	48	42	55	42	53	42	52	42	40
	9	63	51	43	38	50	38	49	38	48	38	36
	10	59	47	40	35	46	35	46	35	45	35	33

Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	785	37.7%
0-40	1306	62.7%
0-60	2050	98.5%
0-90	2082	100.0%

CRI and CCT adjustment factors

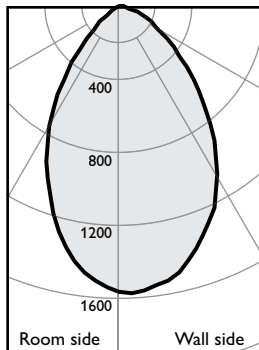
90 CRI 2700K = 84%
80 CRI 2700K = 100%
80 CRI 3000K = 100%
80 CRI 3500K = 105%
80 CRI 4000K = 109%

Report¹: 1550GFR

Output lumens:	2082 lms	Efficacy:	105.7 lm/w
Spacing Criterion:	1.4	CCT ³ :	3500 K
Beam Angle:	99°	CRI:	80 min
Input Watts ² :	19.7W		

P4RLW20835CLZ10U • 20W LED, 80 CRI, 3500 K

Candela Curve



Report ¹ :	1559GFR
Efficacy:	104.6 lm/w
Output lumens:	2060 lms
Input watts ² :	19.7 W
CRI:	80 min
CCT ³ :	3500K

Multiple unit data

Footcandles on wall	2' from wall		
	3' on ctr.		
1	38	25	38
2	64	51	64
3	59	54	59
4	47	45	47
5	36	36	36
6	28	28	28
7	23	23	23
8	19	19	19
9	16	16	16
10	14	14	14
12	11	11	11
14	10	10	10

Multiple unit data

Footcandles on wall	3' from wall		
	3' on ctr.		
1	14	12	14
2	30	29	30
3	39	38	39
4	40	39	40
5	36	36	36
6	32	31	32
7	27	27	27
8	23	23	23
9	20	20	20
10	17	17	17
12	14	14	14
14	12	12	12

Multiple unit data

Footcandles on wall	3' from wall		
	4' on ctr.		
1	12	9	9
2	25	20	20
3	32	28	28
4	31	30	30
5	28	27	27
6	24	24	24
7	21	21	21
8	18	18	18
9	16	15	15
10	14	14	14
12	11	11	11
14	10	10	10

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_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

