LIGHTOLIER

Downlighting

EasyLyte LED flex install

ZF4RDL 4" Round downlight **ZF6RDL** 6" Round downlight



Project:			
Location:			
Cat.No:			
Туре:			
Qty:			
Notes:			

EasyLyte LED flex install downlights are designed to offer peak performance and aesthetic appeal while making job specification and installation simple for either retrofit or new construction applications. The unique trim retention springs adapt to varying ceiling thicknesses and types with simple adjustments while requiring no new frame at all. EasyLyte Flex is an ideal choice for open office, healthcare, design build, and other light commercial applications.

Standard luminaire = Engine/Trim + Accessories (optional). Accessory new construction frames available.

Frame

Series	Lumen	CRI / CCT	Beam	Style	Reflector	Flange	Dimming	Voltage
ZF4RDL EasyLyte LED flex install 4-inch Round	05 500lm 10 1000lm 15 1500lm	927 90CRI / 2700K 930 90CRI / 3000K 935 90CRI / 3500K	W Wide	O Open	WH White BK Black CD Clear Diffuse	– White (matte)	Z10 0-10V 1%	U 120/277V 3 347V ² (Z10 only)
downlight	20 2000lm 25 2500lm	940 90CRI / 4000K			(applied finish)		E ELV ¹	1 120V
ZF6RDL EasyLyte LED flex install	05 500 lm 10 1000 lm	927 90CRI / 2700K 930 90CRI / 3000K	W Wide	O Open	WH White BK Black	– White (matte)	Z10 0-10V 1%	U 120/277V 3 347V ² (Z10 only)
6-inch Round downlight	15 1500 lm 20 2000 lm 25 2500 lm 30 3000 lm 35 3500 lm	935 90CRI / 3500K 940 90CRI / 4000K			CD Clear Diffuse (applied finish)		E ELV ¹	1 120V

Accessories

SBA 4RNSR 6RNSR Interact Ready System Bridge Accessory with integral occupancy and daylight sensor (compatible with all 0-10V options, see SBA spec sheet)³ 4" round/square non-IC frame with Flex (F) light engine (provides mechanical support for rough-in construction only, no junction box) 6" round/square non-IC frame with Flex (F) light engine (provides mechanical support for rough-in construction only, no junction box)

 ELV (E) dimming is only compatible with 1000 lm (10), 1500 lm (15), 2000 lm (20) configurations. Not compatible with 347V.

2. The 347V light engine voltage option is available only with Z10 dimming option.

3. Requires IRT9015 IR remote & Interact Pro App for commissioning.



Standard example: ZF4RDL20935WOCDZ10U

4" & 6" Round Downlights

Features

Optics

- Provides a 70° cutoff (physical and reflected)
- Wide beam distribution for general illumination
- Spun aluminum outer reflector with integral flange painted white
- Injection molded plastic trim inserts in splay and baffle options
- Reflectors available in painted clear diffuse, white, black and dark bronze

Quality of light

- Lumen Maintenance: L70 at 60,000 hours
- Color consistency: 2 SDCM
- 90 CRI minimum

	Ceiling Cutout		
	Min	Max	
ZF4RDL	4.88"	5.50"	
ZF6RDL	6.37"	7.00"	

Max ceiling thickness is 1.5" (38 mm).

Dimming

- Advance 0-10V 1% dimming
- ELV/Triac dimming 120V
- Integral 347V drivers available for 0-10v (Z10) light engine configurations
- Rated life: 60,000 hrs at 70% lumen maintenance based on IES LM-80-08 and TM-21-11.

Accessories

4RN-NJB 4" round new construction non-IC frame-in kit with 24" telescoping bar hangers for suspended t-bar or hard ceilings. No junction box included, wire splicing is accommodated on the light engine.

6RN-NJB 6" round new construction non-IC frame-in kit with 24" telescoping bar hangers for suspended t-bar or hard ceilings. No junction box included, wire splicing is accommodated on the light engine.

Installations

- With frame (new construction)
- Without frame (retrofit & remodel)

Construction

- Spring steel trim retention springs allow for easy installation without need for a metal pan above the ceiling. Adapt easily for different ceiling thicknesses by adjusting spring depth.
- Easily accommodates retrofitting existing luminaires without need for accessories or adjustment. See chart below for **accommodating aperture diameters**.
- Floating junction box makes installation easier by avoiding interference above the ceiling. All wire splicing is accommodated on the light engine.

Labels and Listings

- cULus listed for wet location
- RoHS certified
- Consult factory for Buy America Compliance

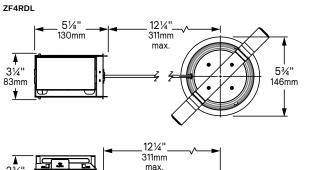
Warranty

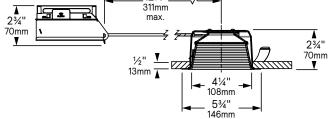


5 year limited warranty Visit Signify.com/warranties for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

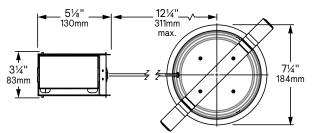
4" & 6" Round Downlights

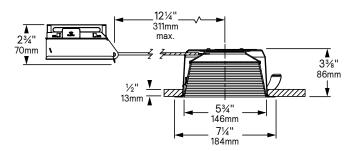
Dimensions



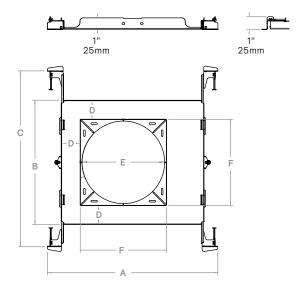


ZF6RDL





Flex install non-IC frame



	Α	В	с	D	E	F
4RNSR	10 %" 276mm	7¼" 184mm	13 %" 345mm	1" 25mm	4%" 124mm	5¼" 132mm
6RNSR	13 ¼" 334mm	9 %" 244mm	13 %" 345mm	1½" 37mm	6¾" 162mm	5%" 169mm

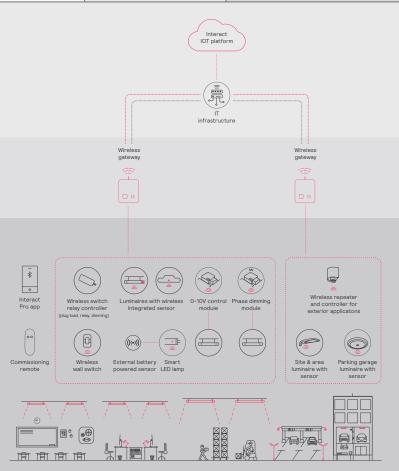
4" & 6" Round Downlights

dil.in interact Gateway Connected Option 2 Dimming, grouping, and zoning \checkmark \checkmark \checkmark \checkmark \checkmark Bluetooth and ZigBee enabled 1 Motion sensing and daylight harvesting \checkmark \checkmark \checkmark 1 1 1 Integration with 0-10V and phase dimming fixtures Code compliance \checkmark \checkmark \checkmark V \checkmark Granular dimming and dwell time \checkmark Correlated color temperature (CCT) tuning by switch New \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark Support for sensor-based Tunable White luminaires New Energy reporting and monitoring 1 \checkmark \checkmark \checkmark Scheduling \checkmark \checkmark Demand response \checkmark BMS integration (BACnet) Floor plan visualization IoT sensors for wellness \checkmark IoT Apps for productivity \checkmark

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.

Unlimited
200 per network
150
150
64
50
30
50
40 (maximum 150)
5
16



4" & 6" Round Downlights

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.

4" & 6" Round Downlights



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.



Good color rendering and high efficacy



Standard CRI 90 Better color rendering and low efficacy



AccuRender 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_a up to 94 CRI
R_f up to 92 TM-30
R_g up to 67 CRI
R_{fini} up to 91 TM-30
G_a up to 99 CRI
R_g up to 100 TM-30
C_g 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

4" & 6" Round Downlights

ZF4RDL - Electrical

All have an input frequency of 50/60Hz

Light engine	Input volts	Input Current	Input Power	LED Drive Current	LED Power	THD Factor @ Max Load	Power Factor @ Max Load
	120V	0.050A	6.0W	0.15A	5.0W	<10%	>0.9
ZF4*05*	277V	0.022A	6.1W	0.15A	5.0W	<15%	>0.9
	347V	0.021A	7.2W	0.15A	5.0W	<15%	>0.9
	120V	0.074A	8.9W	0.22A	7.4W	<10%	>0.9
ZF4*10*	277V	0.033A	9.1W	0.22A	7.4W	<15%	>0.9
	347V	0.030A	10.3W	0.22A	7.4W	<15%	>0.9
	120V	0.113A	13.6W	0.33A	11.5W	<10%	>0.9
ZF4*15*	277V	0.050A	13.9W	0.33A	11.5W	<15%	>0.9
	347V	0.044A	15.4W	0.33A	11.5W	<15%	>0.9
	120V	0.167A	20.0W	0.50A	17.2W	<10%	>0.9
ZF4*20*	277V	0.072A	20.0W	0.50A	17.2W	<15%	>0.9
	347V	0.062A	21.5W	0.50A	17.2W	<15%	>0.9
	120V	0.216A	25.9W	0.64A	22.5W	<10%	>0.9
ZF4*25*	277V	0.094A	25.9W	0.64A	22.5W	<15%	>0.9
	347V	0.078A	27.2W	0.64A	22.5W	<15%	>0.9

ZF6RDL - Electrical

All have an input frequency of 50/60Hz

Light engine	Input volts	Input Current	Input Power	LED Drive Current	LED Power	THD Factor @ Max Load	Power Factor @ Max Load
	120V	0.070A	8.4W	0.22A	7.1W	<10%	>0.9
ZF6*10*	277V	0.031A	8.6W	0.22A	7.1W	<15%	>0.9
	347V	0.028A	9.9W	0.22A	7.1W	<15%	>0.9
	120V	0.106A	12.8W	0.33A	10.9W	<10%	>0.9
ZF6*15*	277V	0.047A	13.1W	0.33A	10.9W	<15%	>0.9
	347V	0.042A	14.5W	0.33A	10.9W	<15%	>0.9
	120V	0.164A	19.6W	0.50A	16.9W	<10%	>0.9
ZF6*20*	277V	0.071A	19.6W	0.50A	16.9W	<15%	>0.9
	347V	0.061A	21.1W	0.50A	16.9W	<15%	>0.9
	120V	0.204A	24.5W	0.63A	21.3W	<10%	>0.9
ZF6*25*	277V	0.089A	24.5W	0.63A	21.3W	<15%	>0.9
	347V	0.074A	25.7W	0.63A	21.3W	<15%	>0.9
	120V	0.258A	31.0W	0.78A	27.0W	<10%	>0.9
ZF6*30*	277V	0.112A	31.0W	0.78A	27.0W	<15%	>0.9
	347V	0.092A	32.1W	0.78A	27.0W	<15%	>0.9
	120V	0.304A	36.5W	0.90A	31.8W	<10%	>0.9
ZF6*35*	277V	0.132A	36.5W	0.90A	31.8W	<15%	>0.9
	347V	0.108A	37.4W	0.90A	31.8W	<15%	>0.9

ZF4RDL - Photometry (open downlight)

Reflector Finish	Flux (lm)	Power (W)	Efficacy (Im/W)	CRI	R9	Beam Angle	Field Angle	Spacing Criterion
Black	459	7.3	62.9	93	58	74°	107°	1.070
White	660	7.3	90.5	93	56	79°	129°	1.130
Clear Diffuse	653	7.3	89.5	93	56	83°	120°	1.178
Black	653	10.0	65.0	93	58	74°	107°	1.070
White	939	10.0	93.4	93	56	79°	129°	1.130
Clear Diffuse	928	10.0	92.4	93	56	83°	120°	1.178
Black	968	14.6	66.3	93	58	74°	107°	1.070
White	1392	14.6	95.4	93	56	79°	129°	1.130
Clear Diffuse	1376	14.6	94.3	93	56	83°	120°	1.178
Black	1453	20.6	70.6	93	58	74°	107°	1.070
White	2089	20.6	101.4	93	56	79°	129°	1.130
Clear Diffuse	2066	20.6	100.3	93	56	83°	120°	1.178
Black	1796	27.4	65.5	93	58	74°	107°	1.070
White	2581	27.4	94.1	93	56	79°	129°	1.130
Clear Diffuse	2552	27.4	93.1	93	56	83°	120°	1.178

ZF6RDL - Photometry (open downlight)

Reflector Finish	Flux (lm)	Power (W)	Efficacy (Im/W)	CRI	R9	Beam Angle	Field Angle	Spacing Criterion
Black	459	7.3	62.9	93	58	74°	107°	1.070
White	660	7.3	90.5	93	56	79°	129°	1.130
Clear Diffuse	653	7.3	89.5	93	56	83°	120°	1.178
Black	653	10.0	65.0	93	58	74°	107°	1.070
White	939	10.0	93.4	93	56	79°	129°	1.130
Clear Diffuse	928	10.0	92.4	93	56	83°	120°	1.178
Black	968	14.6	66.3	93	58	74°	107°	1.070
White	1392	14.6	95.4	93	56	79°	129°	1.130
Clear Diffuse	1376	14.6	94.3	93	56	83°	120°	1.178
Black	1453	20.6	70.6	93	58	74°	107°	1.070
White	2089	20.6	101.4	93	56	79°	129°	1.130
Clear Diffuse	2066	20.6	100.3	93	56	83°	120°	1.178
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Clear Diffuse	2552	27.4	93.1	93	56	83°	120°	1.178

EasyLyte LED flex install ZF4RDL / ZF6RDL

4" & 6" Round Downlights

Downlight, Wide beam, 2100lm Engine, 102 lm/W at 21W

0-30

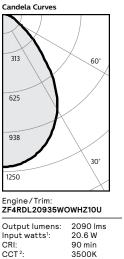
Zonal summary

Zone Lumens

1181

%Luminaire

40.7%



3500K

82°

1.1

	0-40 0-60 0-90	1816 2609 2900	62.6% 90.0% 100.0%
	Angle	Mean CP	Lumen
	0 5 10	1215 1205 1177	114
	15 20	1130 1063	318
	25 30	977 871	448
	35 40	742 593	461
	40 45 50	439 323	343
_	55	223	204
	60 65	157 116	117
	70 75	88 62	66
	80 85 90	38 18 0	20

	Initial center beam foot-candles	Beam diameter (ft)*
5'	49	5.5'
6'	34	6.6'
7'	25	7.7'
8'	19	8.8'
9'	15	9.9'

oot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	89.0	0.91
6'	58.0	0.60
7'	42.0	0.43
8'	35.0	0.36
9'	28.0	0.29

above floor, 80/50/20% Reflectances

Efficacy: 101.5 lm/w Report³: STMR-531-I

Coefficients of utilization

Ceiling		80%			70%		50%		30%		0%
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	RCR Zonal cavity method - Effective floor reflectance = 20%							20%			
0	119	119	119	119	116	116	111	111	106	106	100
0 1	111	107	103	100	105	99	101	96	97	93	88
Room Cavity Ratio & 2 9 G † C C -	103	96	90	85	94	84	91	83	87	81	77
<u>د</u> ۲	95	86	79	74	85	73	82	72	79	71	68
<u>,</u> ≩ 4	88	78	71	65	77	64	74	64	72	63	60
<u>≷</u> 5	82	71	63	57	70	57	68	57	66	56	54
0 6	77	65	57	51	64	51	62	51	61	50	48
57	72	60	52	46	59	46	57	46	56	46	44
8 %	67	55	47	42	54	42	53	42	52	42	40
9	63	51	43	38	50	38	49	38	48	38	36
10	59	47	40	35	47	35	46	35	45	35	33

Adjustment factors

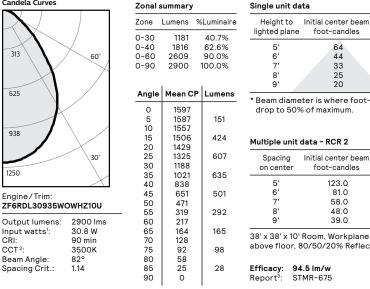
Finish								
wн	=	100%						
CD	=	98%						
ΒK	=	70%						

Downlight, Wide beam, 2900lm Engine, 94 lm/W at 31W

Candela Curves

Beam Angle:

Spacing Crit.:



0 1		. ,	Wall						
5' 6'	64 44	5.7' 6.8'	RCR						
7' 8' 9'	33 25 20	8.0' 9.1' 10.3'	0 0 1						
* Beam diame drop to 509 Multiple unit	Room Cavity Ratio 8 2 9 5 4 2 5 .								
Spacing on center	Initial center beam foot-candles	Watts per sq. ft.	9 10						
5' 6' 7' 8' 9'	123.0 81.0 58.0 48.0 39.0	1.37 0.90 0.64 0.53 0.43	Adjus Finish CD =						
38' x 38' x 10' Room, Workplane 2.5'WHabove floor, 80/50/20% ReflectancesBK									

Beam

diameter (ft)*

Coefficients of utilization

Ceiling		80%			70%		50%		30%		0%	
Wa	11	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
Room Cavity Ratio	1	111	107	103	100	105	99	101	96	97	93	88
	2	103	96	90	85	94	84	91	83	87	81	77
æ	3	95	86	79	74	85	73	82	72	79	71	68
÷	4	88	78	71	65	77	64	74	64	72	63	60
av	5	82	71	63	57	70	57	68	57	66	56	54
0	6	77	65	57	51	64	51	62	51	61	50	48
no	7	72	60	52	46	59	46	57	46	56	46	44
å	8	67	55	47	42	54	42	53	42	52	42	40
	9	63	51	43	38	50	38	49	38	48	38	36
	10	59	47	40	35	47	35	46	35	45	35	33

Adjustment factors						
Finis	sh		_			
CD	=	110%	-			
WH	=	100%				
ΒK	=	65%				

1. Wattage: controlled to within 5%

2. Correlated Color Temperature: within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

3. 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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Signify North America Corp 400 Crossing Blvd, Suite 600 Bridgewater, NJ 08807 Telephone: 800-555<u>-0050</u>

Signify Canada Ltd. 281 Hillmount Road Markham, ON, Canada L6C 2S3 Telephone: 800-668-9008

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