LIGHTOLIER

Downlighting

Fire Rated Flat Downlight

4in & 6in Round

Project:

Location:

Cat.No:

Type:

Qty:

Notes:

Lightolier LED Fire Rated Flat Downlight without the traditional frame and reflector is the perfect solution for installation in low plenum and existing shallow space ceilings. The CCT field selector feature makes it easy to adjust during installation avoiding extra stock.

CCT with Select Switch

Fixture

Example: FR4R10ESCT1W

Family	Size	Lumens	Dimming	CCT / CRI	Input Voltage	Finish
FR			E	SCT	1	W
FR Fire Rated Flat Downlight	**4R** 4in Round	**10** 1000 lumens	**E** TRIAC to 5%	**SCT** 90CRI; Field Selectable 5CCT (2700K, 3000K, 3500K, 4000K & 5000K)	**1** 120V	**W** White Matte
	6R 6in Round	**12** 1230 lumens				

Accessories

DSAEC20	20" Extension Cord
DSANCPR468	4" 6" 8" Round Plate for new construction
DSFD4RTBK	4" Round Flat Downlight Trim Black
DSFD6RTBK	6" Round Flat Downlight Trim Black

Features

1. Flange: aluminum with powder coating.

2. Lens: high-quality PMMA diffuser for smooth and diffused light pattern.

3. Junction Box: aluminum and steel.

4. Connector: locking power connection between J-box and fixture. Standard length of the connection is 14.96in (38cm).

5. Ceiling cutout: installation template is provided.

6. Connectors: quick connectors supplied with the fixture for ease of installation.

Electrical

Electronic power supply:

RoHS compliant.

Isolated driver, Class 2 Power Unit.

Remote power supply can only accommodate one LED module and cannot be shared with other LED module.

Dimming:

120V versions are compatible with ELV/TRIAC 5% (120V) dimmers.

Review dimmer compatibility list for further information.

Labels

ETL listed for Damp location

UL Fire Resistant rated

IC rated for direct contact with thermal insulation.

Operating temperature: -30°C to 40°C

AirSeal for minimal air leakage.

ENERGY STAR® certified.

Title 24 compliant (JA8).

Warranty

Lifetime: Expected lifetime 50,000 hours and backed by a 5-year warranty (https://www.genlyte.com/en-us/support/warranties for details).

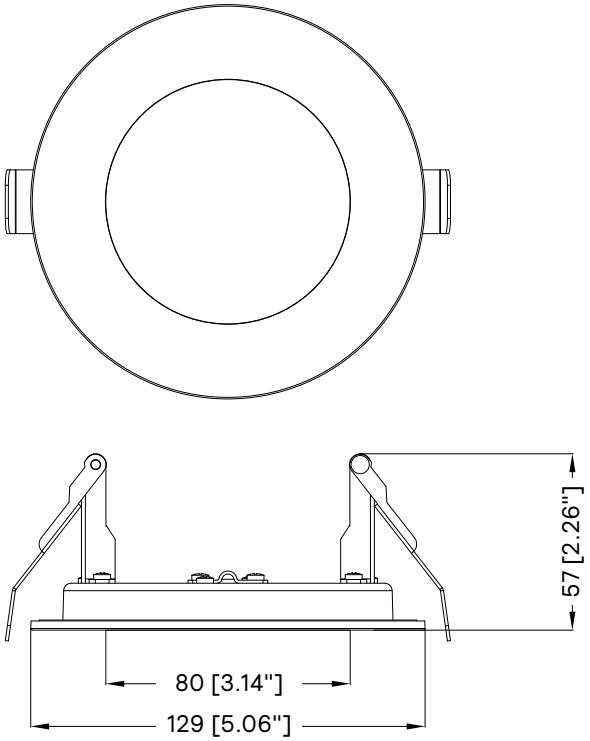
IC INSULATION CONTACT · TITLE 24 LISTED · ETL LISTED · FC · RoHS COMPLIANT · ENERGY STAR

FR Fire Rated Flat Downlight 4" & 6"

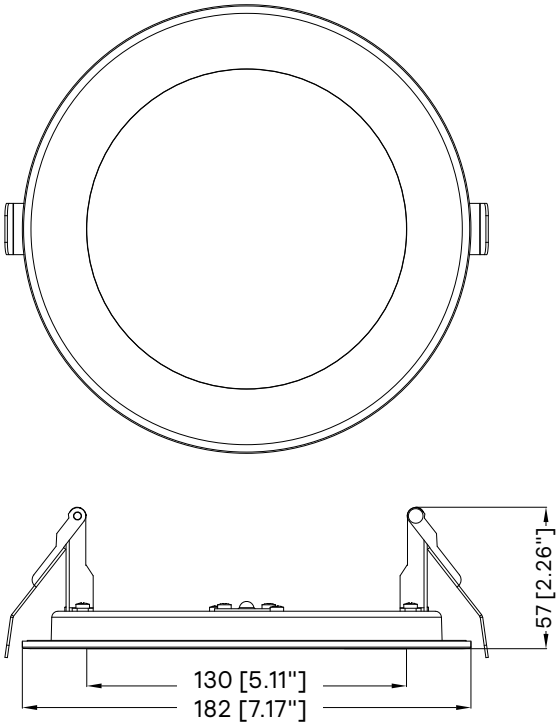
Round aperture recessed downlight

Dimensions

Downlight 4" Round



Downlight 6" Round



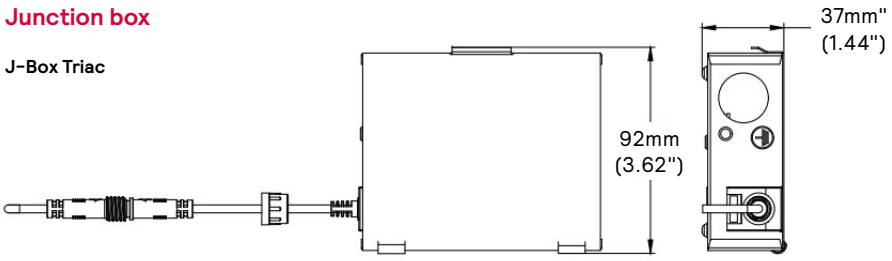
Note: All dimensions shown are in millimeters and inches

FR Fire Rated Flat Downlight 4" & 6"

Round aperture recessed downlight

Junction box

J-Box Triac



	Lumen Output	Input voltage	Input freq	Max. Input current	Max. Input power	Max. THD	Power factor	CRI
4" Round 120V	1000lm	120V	60Hz	0.28A	12W	20%	0.9	90
6" Round 120V	1230lm	120V	60Hz	0.36A	15W	20%	0.9	90

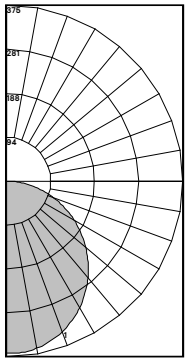
* Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electronic products. For products used in North America compliance to RoHS is voluntary and self-certified.

FR Fire Rated Flat Downlight 4" & 6"

Round aperture recessed downlight

FR4R10ESCT1W

Candlepower Distribution



Fixture: **FR4R10ESCT1W**

Output lumens:	1024 lm
Correlated Color Temp:	
Input Watts:	12.0 W
Efficacy:	85.3 lm/W
CRI:	90 min
Spacing Criterion:	1.2
Beam Angle:	109°

Zonal summary

Zone	Lumens	%Luminaire
0-30	284	27.7%
0-40	462	45.1%
0-60	807	78.8%
0-90	1024	100.0%

Angle	Mean CP	Lumens
0	368	
5	368	
10	363	35
15	355	
20	344	100
25	329	
30	312	149
35	292	
40	270	178
45	245	
50	220	182
55	193	
60	165	163
65	136	
70	107	124
75	79	
80	52	72
85	27	
90	6	20

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	15	6.0'
6'	10	7.2'
7'	8	8.4'
8'	6	9.6'
9'	5	10.8'

* 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'	40.0	0.53
6'	27.0	0.35
7'	19.0	0.25
8'	16.0	0.21
9'	12.0	0.17

38' x 38' x 10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

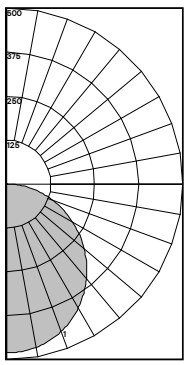
Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%										
0	119	119	119	119	116	116	111	111	106	106	100
1	108	104	99	95	101	94	97	91	93	88	83
2	99	90	83	77	88	76	85	75	81	73	69
3	90	79	71	64	77	64	74	62	72	61	58
4	82	70	61	54	69	54	66	53	64	52	49
5	76	63	53	47	61	46	59	46	57	45	43
6	70	56	47	41	55	41	53	40	52	40	37
7	65	51	42	36	50	36	49	36	47	35	33
8	60	47	38	32	46	32	45	32	43	32	29
9	56	43	34	29	42	29	41	29	40	28	26
10	53	39	31	26	39	26	38	26	37	26	24

Room Cavity Ratio

FR6R12ESCT1W

Candlepower Distribution



Fixture: **FR6R12ESCT1W**

Output lumens:	1362 lm
Correlated Color Temp:	
Input Watts:	15.0 W
Efficacy:	90.8 lm/W
CRI:	90 min
Spacing Criterion:	1.2
Beam Angle:	111°

Zonal summary

Zone	Lumens	%Luminaire
0-30	371	27.2%
0-40	605	44.4%
0-60	1063	78.0%
0-90	1362	100.0%

Angle	Mean CP	Lumens
0	480	
5	479	
10	474	46
15	463	
20	449	130
25	430	
30	407	195
35	382	
40	352	234
45	321	
50	287	241
55	253	
60	216	217
65	179	
70	142	167
75	106	
80	70	102
85	36	
90	5	31

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	19	6.0'
6'	13	7.2'
7'	10	8.4'
8'	8	9.6'
9'	6	10.8'

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	49.0	0.66
6'	32.0	0.44
7'	23.0	0.31
8'	19.0	0.26
9'	15.0	0.21

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

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%										
0	119	119	119	119	116	116	111	111	106	106	100
1	109	104	99	95	101	94	97	91	93	88	83
2	99	90	83	78	88	77	85	75	82	73	69
3	90	79	71	64	78	64	75	63	72	62	58
4	82	70	61	54	69	54	66	53	64	53	50
5	76	63	54	47	62	47	59	46	57	46	43
6	70	56	47	41	55	41	54	40	52	40	38
7	65	51	42	36	50	36	49	36	47	35	33
8	60	47	38	32	46	32	45	32	43	32	30
9	56	43	35	29	42	29	41	29	40	29	27
10	53	40	32	26	39	26	38	26	37	26	24

Room Cavity Ratio

* 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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GENLYTE SOLUTIONS
a signify business

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

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

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