

**Lightolier LED Flat Downlight dual select** provides an easy and quick to install downlight solution without the traditional frame and reflector. The perfect solution for installation in low plenum and existing shallow space ceilings. The CCT selector and Lumen selector features make it easy to adjust both features at the time of installation avoiding extra stock.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Fixture

Example: FD3RSLMZ10SCTUW

Family	Size	Lumens	Dimming	CCT / CRI	Voltage	CCT
<b>FD2</b>				<b>SCT</b>		<b>W</b>
FD2 Flat Downlight	4R 4in Round	9 900lm	E TRIAC to 5%	SCT <sup>2</sup> 90CRI; Field Selectable 5CCT (2700K, 3000K, 3500K, 4000K & 5000K)	1 120V	W White (matte)
		SLM Field Selectable (600lm/900lm)	Z10 0-10V		U UNV	
	5R 5in Round <sup>1</sup>	91 900lm	E TRIAC to 5%		1 120V	
		6R 6in Round	12 1200lm		E TRIAC to 5%	
	SLM Field Selectable (900lm/1200lm)		Z10 0-10V		U UNV	
		8R 8in Round	20 2000lm		E TRIAC to 5%	
	SLM Field Selectable (1300lm/2000lm)		Z10 0-10V		U UNV	

1. 5in downlights not stocked in US. Please inquire for price and availability.  
 2. Default settings for selectable features: highest available lumens and 4000K CCT.

### Accessories

DSAEC20	20" Extension Cord	DSFD4RTBK	4" Round Flat Downlight Trim Black
DSANCPR5	5" Round Plate for new construction	DSFD5RTBK	5" Round Flat Downlight Trim Black
DSANCPR468	4" 6" 8" Round Plate for new construction	DSFD6RTBK	6" Round Flat Downlight Trim Black
		DSFD8RTBK	8" Round Flat Downlight Trim Black

### Features

- Flange:** aluminum with powder coating.
- Lens:** high-quality plastic diffuser for smooth and diffused light pattern.
- Junction Box:** extruded aluminum and steel.
- Connector:** locking power connection between J-box and fixture. Standard length of the connection is 14.96in (38cm).
- Ceiling cutout:** installation template is provided.
- Gasket:** foam gasket supplied with the fixture.
- 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 (120V) dimmers.  
 UNV versions are compatible with 0-10V (UNV) dimmers.  
 Review dimmer compatibility list for further information.

### Labels

ETL listed (UL 1598) for wet location rated (covered ceiling only).  
 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

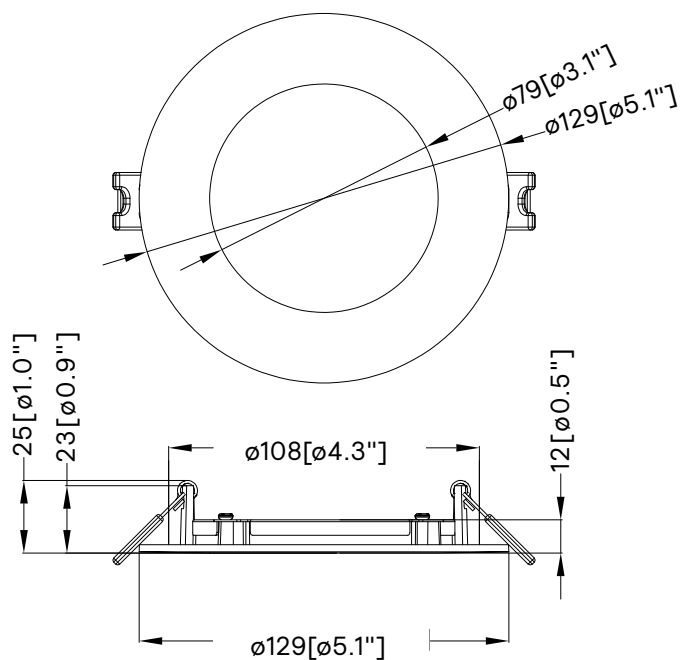
**Lifetime:** Expected lifetime 50,000 hours and backed by a 5-year warranty (<https://www.genlyte.com/en-us/support/warranties> for details).

# FD Flat Downlight DualSelect

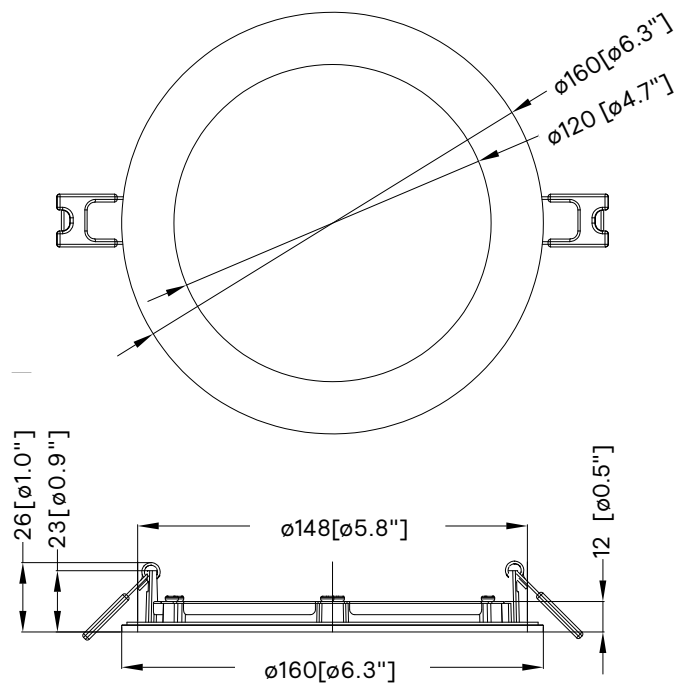
## Round aperture recessed downlight

### Dimensions

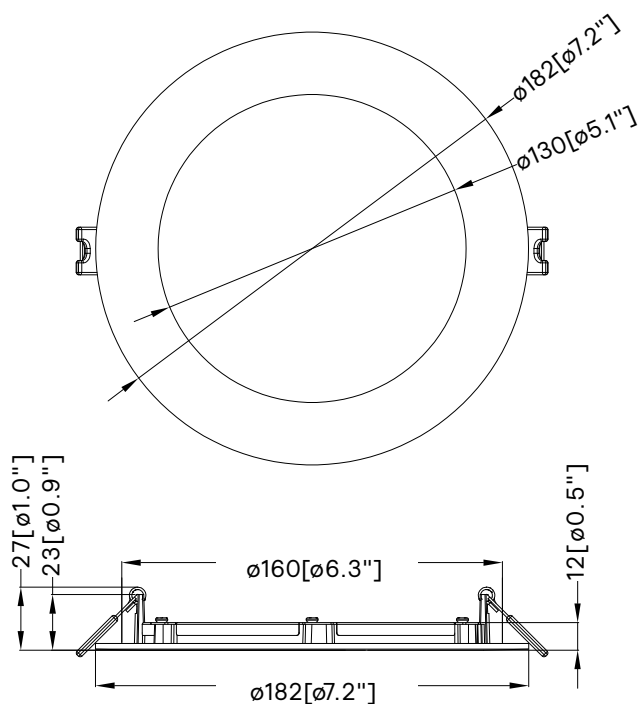
Downlight 4" Round



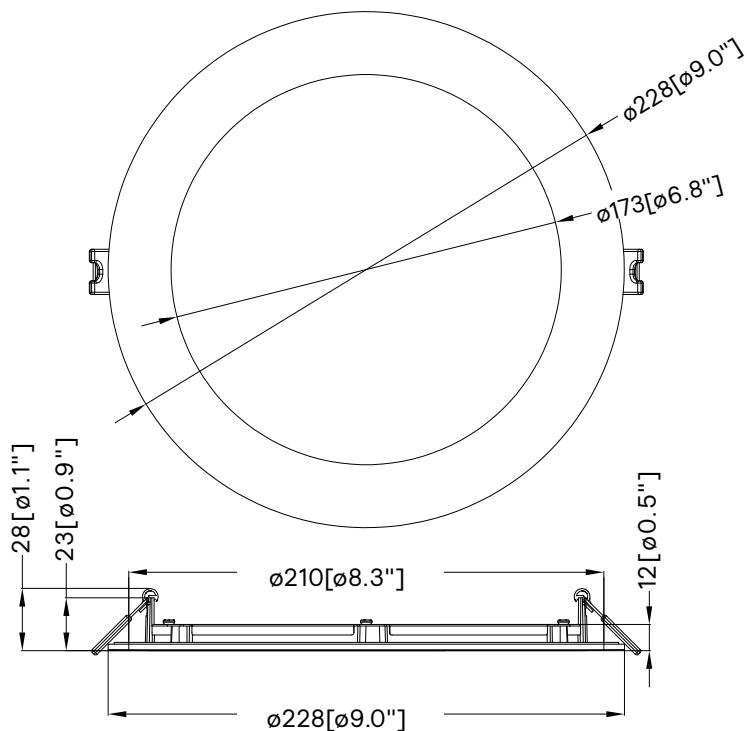
Downlight 5" Round



Downlight 6" Round



Downlight 8" Round



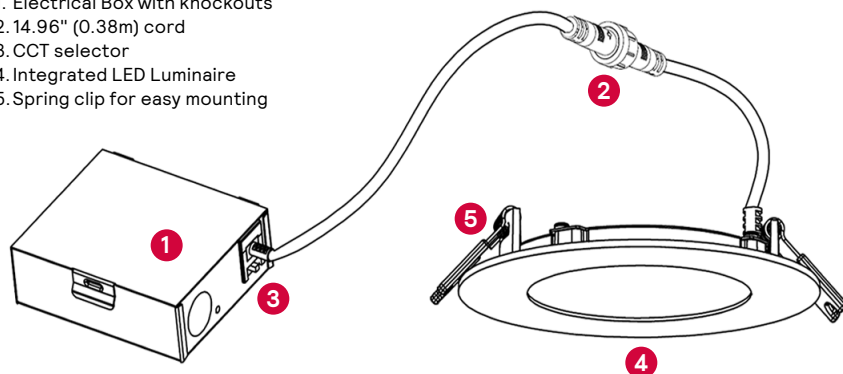
Note: All dimensions shown are in millimeters and inches

# FD Flat Downlight DualSelect

## Round aperture recessed downlight

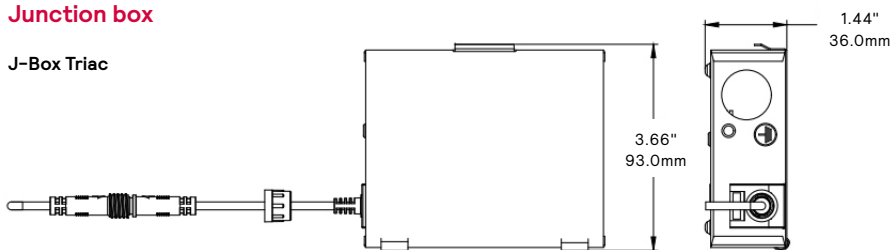
### Components

1. Electrical Box with knockouts
2. 14.96" (0.38m) cord
3. CCT selector
4. Integrated LED Luminaire
5. Spring clip for easy mounting

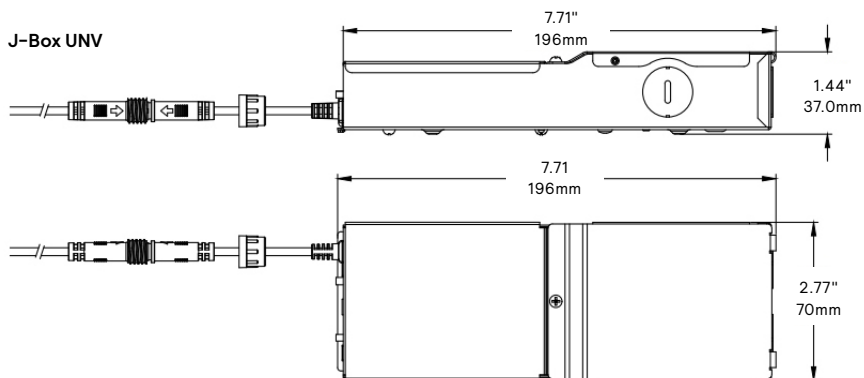


### Junction box

#### J-Box Triac



#### J-Box UNV



### Lumen Output Chart

	Lumen Output	Input voltage	Input freq	Max. Input current	Max. Input power	Max. THD	Power factor	CRI
4" Round 120V	900lm	120V	60Hz	0.26A	11W	20%	0.9	90
4" Round UNV	600lm / 900lm	120V - 277V	50/60Hz	0.26A	11W / 8W	20%	0.9	90
5" Round UNV	900lm	120V - 277V	50/60Hz	0.26A	11W	20%	0.9	90
6" Round 120V	1200lm	120V	60Hz	0.31A	15W	20%	0.9	90
6" Round UNV	900lm / 1200lm	120V - 277V	50/60Hz	0.31A	11W / 15W	20%	0.9	90
8" Round 120V	2000lm	120V	60Hz	0.45A	24W	20%	0.9	90
8" Round UNV	1300lm / 2000lm	120V - 277V	50/60Hz	0.45A	15W / 24W	20%	0.9	90

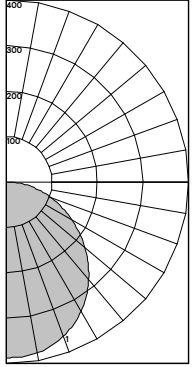
\* Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electronic products. For products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

# FD Flat Downlight DualSelect

## Round aperture recessed downlight

### FD24R9ESCT1W

#### Candlepower Distribution



Fixture: **FD24R9ESCT1W**

Output lumens: 1057 lm  
 Correlated Color Temp:  
 Input Watts: 10.9 W  
 Efficacy: 97.2 lm/W  
 CRI: 90 min  
 Spacing Criterion: 1.2  
 Beam Angle: 107°

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	297	28.1%
0-40	482	45.6%
0-60	834	78.9%
0-90	1057	100.0%

Angle	Mean CP	Lumens
0	388	
5	387	
10	383	37
15	375	
20	363	104
25	347	
30	329	156
35	306	
40	281	185
45	254	
50	225	187
55	196	
60	166	165
65	136	
70	107	126
75	78	
80	51	75
85	23	
90	0	19

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	16	6.0'
6'	11	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	0.48
6'	27.0	0.32
7'	19.0	0.23
8'	16.0	0.19
9'	12.0	0.15

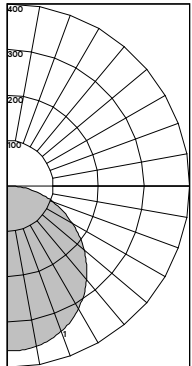
38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

#### 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%											
Room Cavity Ratio	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	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

### FD24RSLMZ10SCTUW

#### Candlepower Distribution



Fixture: **FD24RSLMZ10SCTUW**

Output lumens: 1014 lm  
 Correlated Color Temp:  
 Input Watts: 10.3 W  
 Efficacy: 98.4 lm/W  
 CRI: 90 min  
 Spacing Criterion: 1.26  
 Beam Angle: 109°

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	194	27.5%
0-40	316	44.8%
0-60	553	78.4%
0-90	705	100.0%

Angle	Mean CP	Lumens
0	364	
5	363	
10	359	34
15	353	
20	342	98
25	329	
30	312	148
35	293	
40	270	177
45	246	
50	219	181
55	192	
60	164	160
65	136	
70	108	122
75	81	
80	55	73
85	29	
90	0	20

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	15	6.3'
6'	10	7.6'
7'	7	8.8'
8'	6	10.1'
9'	4	11.3'

\* 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	0.46
6'	27.0	0.30
7'	19.0	0.21
8'	16.0	0.18
9'	12.0	0.14

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%											
Room Cavity Ratio	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	77	85	75	81	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	61	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

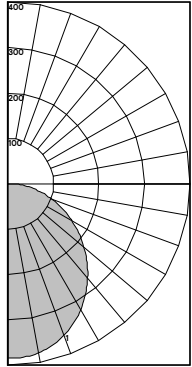
\*Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# FD Flat Downlight DualSelect

## Round aperture recessed downlight

### FD25R91ESCT1W

#### Candlepower Distribution



Fixture: **FD25R91ESCT1W**

Output lumens: 1039 lm  
 Correlated Color Temp:  
 Input Watts: 10.8 W  
 Efficacy: 96.2 lm/W  
 CRI: 90min  
 Spacing Criterion: 1.22  
 Beam Angle: 106°

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	293	28.2%
0-40	475	45.7%
0-60	821	79.0%
0-90	1039	100.0%

Angle	Mean CP	Lumens
0	385	
5	384	
10	379	36
15	370	
20	357	103
25	340	
30	320	154
35	297	
40	272	182
45	246	
50	218	184
55	189	
60	160	162
65	132	
70	104	123
75	62	
80	52	72
85	26	
90	0	21

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	15	6.1'
6'	11	7.3'
7'	8	8.5'
8'	6	9.8'
9'	5	11.0'

\* 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	0.48
6'	27.0	0.31
7'	19.0	0.22
8'	16.0	0.19
9'	12.0	0.15

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%											
Room Cavity Ratio	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	81	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

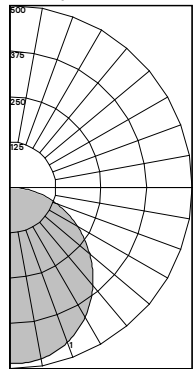
\*Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# FD Flat Downlight DualSelect

## Round aperture recessed downlight

### FD26R12ESCT1W

#### Candlepower Distribution



Fixture: **FD26R12ESCT1W**

Output lumens: 1331 lm  
 Correlated Color Temp:  
 Input Watts: 14.1 W  
 Efficacy: 94.3 lm/W  
 CRI: 90 min  
 Spacing Criterion: 1.24  
 Beam Angle: 107°

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	373	28.0%
0-40	605	45.5%
0-60	1048	78.7%
0-90	1331	100.0%

Angle	Mean CP	Lumens
0	486	
5	486	
10	480	46
15	471	
20	456	131
25	436	
30	413	196
35	385	
40	354	232
45	321	
50	286	235
55	249	
60	212	208
65	176	
70	138	159
75	103	
80	69	95
85	36	
90	0	28

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	19	6.2'
6'	14	7.4'
7'	10	8.7'
8'	8	9.9'
9'	6	11.2'

\* 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'	49.0	0.63
6'	32.0	0.41
7'	23.0	0.29
8'	19.0	0.24
9'	15.0	0.20

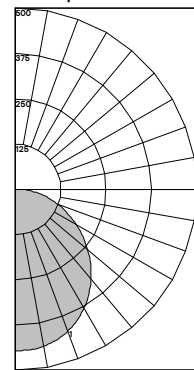
38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

#### 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	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

### FD26RSLMZ10SCTUW

#### Candlepower Distribution



Fixture: **FD26RSLMZ10SCTUW**

Output lumens: 1219 lm  
 Correlated Color Temp:  
 Input Watts: 13.1 W  
 Efficacy: 92.9 lm/W  
 CRI: 90 min  
 Spacing Criterion: 1.2  
 Beam Angle: 107°

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	342	28.1%
0-40	555	45.5%
0-60	961	78.8%
0-90	1219	100.0%

Angle	Mean CP	Lumens
0	446	
5	446	
10	441	42
15	432	
20	419	120
25	400	
30	379	180
35	353	
40	324	213
45	293	
50	260	216
55	226	
60	193	190
65	159	
70	126	145
75	94	
80	63	87
85	34	
90	3	25

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	18	6.0'
6'	12	7.2'
7'	9	8.4'
8'	7	9.6'
9'	6	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'	49.0	0.58
6'	32.0	0.38
7'	23.0	0.27
8'	19.0	0.23
9'	15.0	0.18

38' x 38' x 10' 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	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

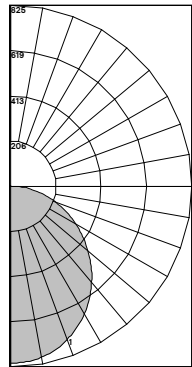
\*Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# FD Flat Downlight DualSelect

## Round aperture recessed downlight

### FD28R20ESC1W

#### Candlepower Distribution



Fixture: **FD28R20ESC1W**

Output lumens: 2194lm  
 Correlated Color Temp: 22.0 W  
 Input Watts: 99.7 lm/W  
 Efficacy: 90min  
 CRI: 1.24  
 Spacing Criterion: 107°  
 Beam Angle:

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	617	28.1%
0-40	1000	45.6%
0-60	1731	78.9%
0-90	2194	100.0%

Angle	Mean CP	Lumens
0	808	
5	805	
10	795	76
15	775	
20	748	217
25	713	
30	672	324
35	626	
40	574	383
45	519	
50	461	388
55	401	
60	330	343
65	281	
70	223	260
75	166	
80	110	156
85	58	
90	3	47

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	32	6.2
6'	22	7.4
7'	16	8.7
8'	13	9.9
9'	10	11.2

\* 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'	87.0	0.98
6'	57.0	0.64
7'	40.0	0.46
8'	34.0	0.38
9'	27.0	0.30

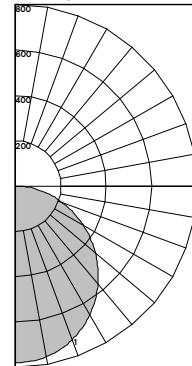
38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

#### Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall	Zonal cavity method - Effective floor reflectance = 20%											
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	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

### FD28RSLMZ10SCTUW

#### Candlepower Distribution



Fixture: **FD28RSLMZ10SCTUW**

Output lumens: 2176 lm  
 Correlated Color Temp: 21.9 W  
 Input Watts: 99.4 lm/W  
 Efficacy: 90 min  
 CRI: 1.26  
 Spacing Criterion: 109°  
 Beam Angle:

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	599	27.5%
0-40	975	44.8%
0-60	1705	78.4%
0-90	2176	100.0%

Angle	Mean CP	Lumens
0	780	
5	777	
10	767	74
15	750	
20	724	210
25	693	
30	655	315
35	612	
40	564	376
45	513	
50	459	385
55	401	
60	343	345
65	283	
70	223	265
75	165	
80	110	159
85	56	
90	4	47

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	31	6.3'
6'	22	7.6'
7'	16	8.8'
8'	12	10.1'
9'	10	11.3'

\* 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'	87.0	0.97
6'	57.0	0.64
7'	40.0	0.45
8'	34.0	0.38
9'	27.0	0.30

38' x 38' x 10' 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	Zonal cavity method - Effective floor reflectance = 20%											
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	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

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