

Product Description

FOS LED Lighting 5" to 6" LED Downlight Retrofit Kit is designed and engineered for residential applications, retrofitting existing recessed 5" or 6" can housings as well as new construction applications. This LED Downlight delivers high lumen with 90+ CRI, including an E26 Edison screw base adapter, GU24 Base or AB male/female connector accessory.

Product Specifications

LED Chip

The product light source is a high efficiency LM80 chip with low thermal resistance. This product enables color management to preserve high color consistency over the life of the product, with a CRI of at least 90 while maintaining high luminous efficacy—a no compromise solution.

Construction & Materials

Thermal management system uses a durable upper housing and driver to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum even when installed in attic insulation with ambient temperatures exceeding 40 °C. Suitable for insulated and non-insulated ceilings.

Optical System

- A unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixel and color fringing. This ensures smooth light patterns are projected with no hot spots and striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.

Electrical System

Integral, high-efficiency driver and power supply.

Power Factor > 0.9

Input Voltage: 120V, 60Hz

Dimming: Dimmable to 20%-100% with most incandescent dimmers. (FOS-CR6-11W-XXH/FOS-CR6-14W-XXH)

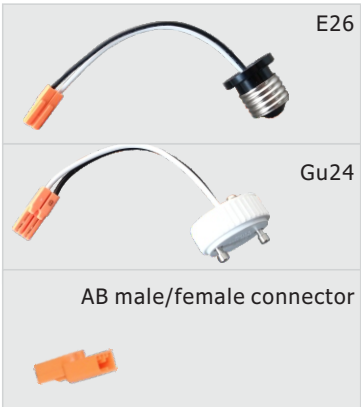
(Suggested dimmer manufacturers: Lutron & Leviton)

Order Information

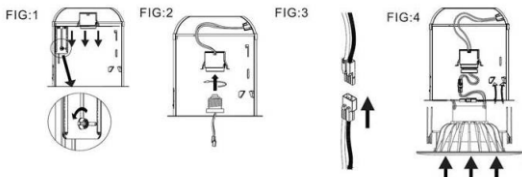
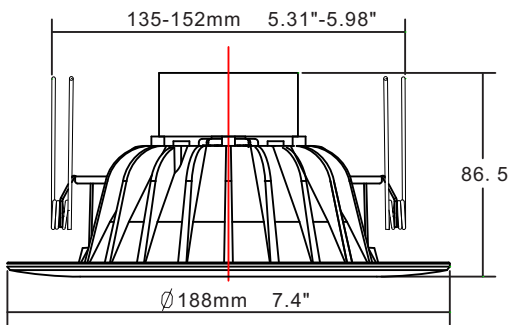
FOS-CR6-14W-30H				
Category	Size	Wattage	CCT(XX)	Version(X)
CR=Retrofit	6=6inch	11W=11W 14W=14W	30=3000K 40=4000K 50=5000K	E=80CRI H=90CRI



Accessories



Dimension



PERFORMANCE SUMMARY

Efficacy:70LPW

Delivered Light Output:740Lumens

Rated Power:11Watts

CRI:Ra>90

ES CCT Options:3000K 4000K 5000K

Input Voltage: 120 VAC

Input current:0.1A

THD: <20%

PF: >0.9

Standard Warranty: 5 Years

Standard Lifetime: Designed minimum 35,000 hours

Mounting: Recessed

CERTIFICATE

UL and cUL listed

Energy Star Listed

FCC 47Part 15

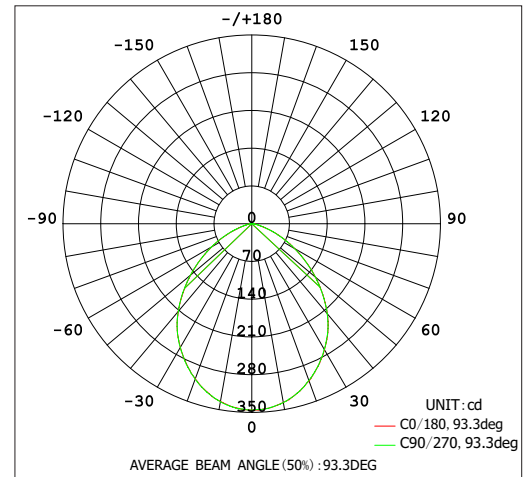
LM79 Report

Suitable for damp locations.

Photometric:

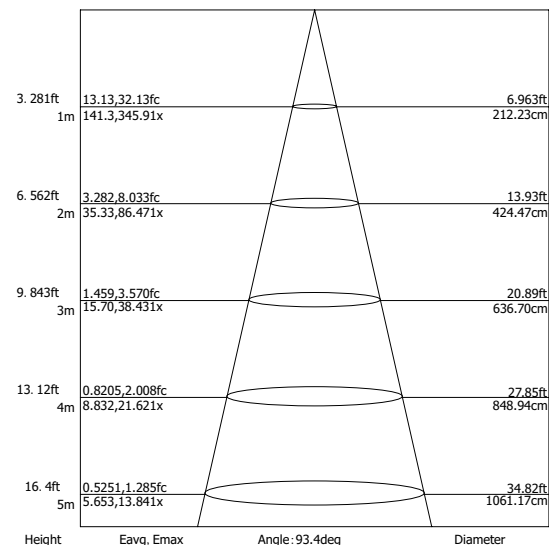
Fixture photometry has been conducted in an accredited testing laboratory in accordance with IESNA LM-79-08.

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE ILLUMINANCE CURVE

Flux out:510.5lm



Note :The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

ZONAL LUMEN DENSITY MEASUREMENT

T	φ zone	φ total	%lum, lamp
0-10	32.54	32.54	4.39,4.39
10-20	91.32	123.9	16.7,16.7
20-30	133.1	256.9	34.6,34.6
30-40	151.8	408.8	55.1,55.1
40-50	141.4	550.2	74.2,74.2
50-60	106.8	657.0	88.5,88.5
60-70	60.38	717.4	96.7,96.7
70-80	20.30	737.7	99.4,99.4
80-90	4.319	742.0	100,100

LUMINOUS INTENSITY(CD) DISTRIBUTION DATA

Y	C0	C45	C90
10	334.6	335.3	335.3
20	306.3	306.9	306.9
30	265.3	264.5	265.2
40	212.3	211.6	212.0
50	148.1	147.3	148.6
60	85.85	85.06	86.3
70	33.19	32.40	82.64
80	8.0250	7.978	33.56
90	0	0	0

COEFFICIENTS OF UTILIZATION

ppc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			CU												
0	119	119	119	116	116	116	111	111	111	106	106	106	102	102	102	100
1	107	103	100	104	101	98	100	97	95	96	94	92	93	91	89	87
2	95	89	84	93	87	83	89	85	81	86	82	79	83	80	77	75
3	84	77	71	83	76	71	80	74	70	77	73	68	75	71	67	65
4	76	68	62	74	67	61	72	66	61	70	64	60	68	63	59	57
5	68	60	54	67	59	54	65	58	53	63	57	53	61	56	52	50
6	62	54	48	61	53	48	59	52	47	58	51	47	56	51	46	44
7	56	48	43	56	48	42	54	47	42	53	47	42	51	46	42	40
8	52	44	38	51	43	38	50	43	38	49	42	38	47	42	38	36
9	48	40	35	47	40	35	46	39	34	45	39	34	44	38	34	32
10	44	37	32	44	36	32	43	36	31	42	36	31	41	35	31	30

PERFORMANCE SUMMARY

Efficacy:74LPW

Delivered Light Output:1030Lumens

Rated Power:14Watts

CRI:Ra>90

ES CCT Options:3000K 4000K 5000K

Input Voltage: 120 VAC

Input current:0.12A

THD:<20%

PF:>0.9

Standard Warranty: 5 Years

Standard Lifetime: Designed minimum 48,000 hours

Mounting: Recessed

CERTIFICATE

UL and cUL listed

Energy Star Listed

FCC 47Part 15

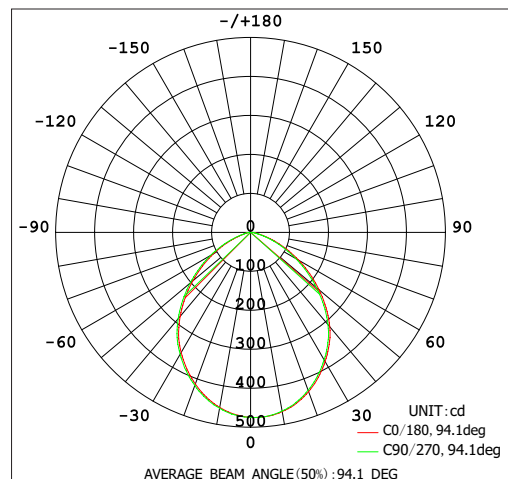
LM79 Report

Suitable for damp locations.

Photometric:

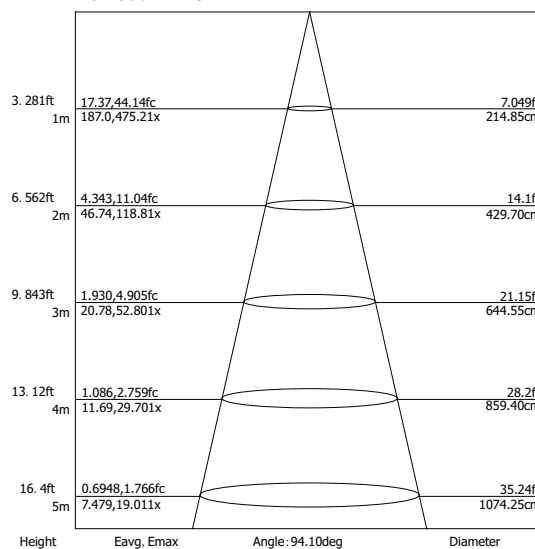
Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08.

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE ILLUMINANCE CURVE

Flux out:724.5lm



Note :The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

ZONAL LUMEN DENSITY MEASUREMENT

T	φ zone	φ total	%lum. lamp
0-10	44.69	44.69	4.32,4.32
10-20	125.6	170.3	16.5,16.5
20-30	183.6	353.9	34.2,34.2
30-40	210.2	564.1	54.5,54.5
40-50	197.0	761.0	73.5,73.5
50-60	150.1	911.1	88,88
60-70	86.84	997.9	96.4,96.4
70-80	30.38	1028	99.3,99.3
80-90	6.735	1035	100,100

LUMINOUS INTENSITY(CD) DISTRIBUTION DATA

Y	C0	C45	C90
10	456.1	455.0	458.2
20	414.4	412.6	418.1
30	356.1	354.2	361.6
40	281.0	279.4	289.2
50	193.4	192.4	202.3
60	110.4	109.8	118.7
70	41.38	40.95	47.22
80	10.58	10.36	11.80
90	0	0	0

COEFFICIENTS OF UTILIZATION

ppc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			CU												
0	119	119	119	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	103	99	104	101	98	100	97	95	96	94	92	93	91	89	87
2	94	89	83	93	87	83	89	85	81	86	82	79	83	80	77	75
3	84	77	71	83	76	70	80	74	69	77	72	68	75	70	67	65
4	75	67	61	74	67	61	72	65	60	69	64	59	67	63	59	57
5	68	60	54	67	59	53	65	58	53	63	57	52	61	56	52	50
6	62	53	47	61	53	47	59	52	47	57	51	46	56	50	46	44
7	56	48	42	55	48	42	54	47	42	52	46	41	51	46	41	39
8	51	43	38	51	43	38	50	43	38	48	42	37	47	41	37	35
9	47	40	34	47	39	34	46	39	34	45	38	34	44	38	34	32
10	44	36	31	43	36	31	42	36	31	42	35	31	41	35	31	29