

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P560146

Luminaire Tested: FSR-12-2-LD4-1STD-50-UNV-82-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560146
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-12-2-LD4-1STD-50-UNV-82-85-EDD-90
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1243.0 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

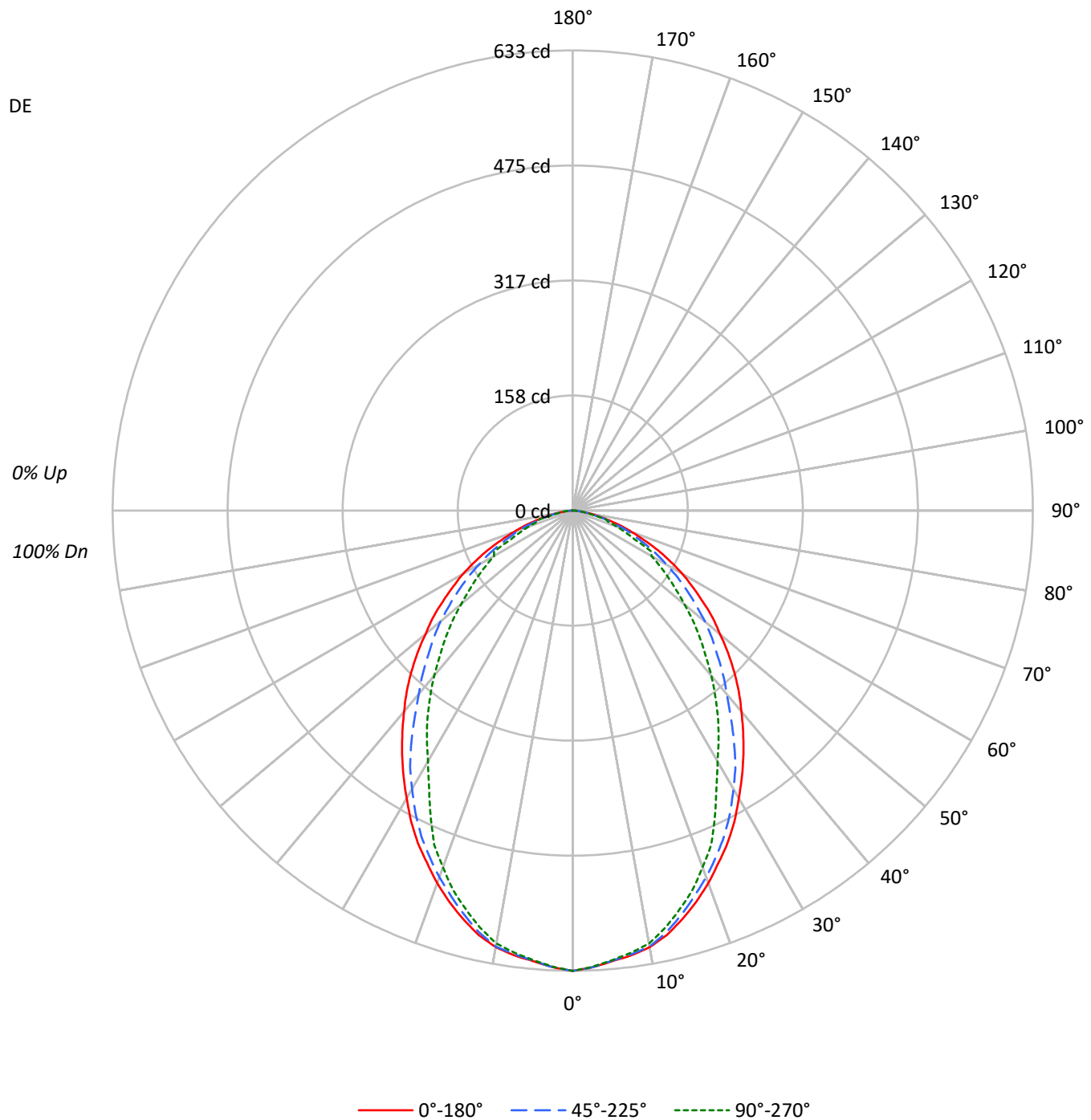
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20
RC	80					70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0			
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75			
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65			
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50			
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40			
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36			
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33			
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3408	3408	3408
5°	3361	3358	3353
10°	3332	3328	3304
15°	3242	3210	3165
20°	3123	3073	2989
25°	2995	2930	2747
30°	2839	2747	2475
35°	2689	2539	2289
40°	2536	2314	2083
45°	2390	2140	1883
50°	2212	1986	1680
55°	2046	1800	1504
60°	1875	1607	1348
65°	1650	1407	1193
70°	1360	1232	1013
75°	1081	944	990
80°	725	682	635
85°	451	543	630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2390 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	4.7
10°-20°	161.8	13.0
20°-30°	223.9	18.0
30°-40°	238.8	19.2
40°-50°	217.8	17.5
50°-60°	170.7	13.7
60°-70°	111.2	8.9
70°-80°	49.3	4.0
80°-90°	10.6	0.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	444.6	35.8
0°-40°	683.4	55.0
0°-60°	1071.9	86.2
0°-90°	1243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1243.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	633	633	633	633	633	
5°	622	622	622	621	621	59
15°	582	582	576	570	568	164
25°	504	501	493	476	463	232
35°	409	406	386	357	348	256
45°	314	307	281	258	247	242
55°	218	212	192	169	160	196
65°	130	122	110	113	94	128
75°	52	48	45	43	48	56
85°	7	8	9	10	10	10
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	633.2	633.2	633.2	633.2	633.2
2.5°	628.8	628.8	628.8	628.0	628.0
5°	622.2	621.5	621.5	620.7	620.7
7.5°	617.1	616.3	615.6	614.9	613.4
10°	609.7	609.7	609.0	605.4	604.6
12.5°	598.0	597.3	594.4	589.2	587.8
15°	581.9	581.9	576.1	570.2	568.0
17.5°	564.4	563.6	556.3	550.5	547.5
20°	545.3	543.9	536.5	527.0	521.9
22.5°	524.1	524.1	515.3	502.9	497.8
25°	504.3	501.4	493.4	475.8	462.6
27.5°	481.6	477.3	468.5	443.6	428.2
30°	456.8	454.6	442.1	409.9	398.2
32.5°	433.3	429.7	416.5	382.8	373.3
35°	409.2	406.3	386.5	357.2	348.4
37.5°	385.0	381.4	356.5	333.1	322.1
40°	360.9	356.5	329.4	308.2	296.5
42.5°	338.2	332.3	306.0	283.3	270.1
45°	314.0	307.4	281.1	257.7	247.4
47.5°	289.9	284.0	259.9	235.7	224.0
50°	264.2	259.1	237.2	213.0	200.6
52.5°	243.0	235.0	213.7	189.6	179.3
55°	218.1	211.5	191.8	169.1	160.3
57.5°	195.4	188.9	170.6	149.3	142.0
60°	174.2	164.7	149.3	131.0	125.2
62.5°	150.8	143.5	130.3	114.9	122.2
65°	129.6	122.2	110.5	112.7	93.7
67.5°	106.1	102.5	92.2	82.0	79.1
70°	86.4	82.0	78.3	67.3	64.4
72.5°	68.8	64.4	59.3	53.4	51.2
75°	52.0	48.3	45.4	43.2	47.6
77.5°	35.9	34.4	32.2	30.0	29.3
80°	23.4	22.7	22.0	21.2	20.5
82.5°	13.9	13.9	13.9	13.9	13.9
85°	7.3	8.1	8.8	9.5	10.2
87.5°	4.4	4.4	5.1	5.9	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)