

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: P562864

Luminaire Tested: FSR-24-4-LD4-2STD-35-UNV-80-84-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P562864
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-24-4-LD4-2STD-35-UNV-80-84-EDD-90
Description: 2X4 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6531.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

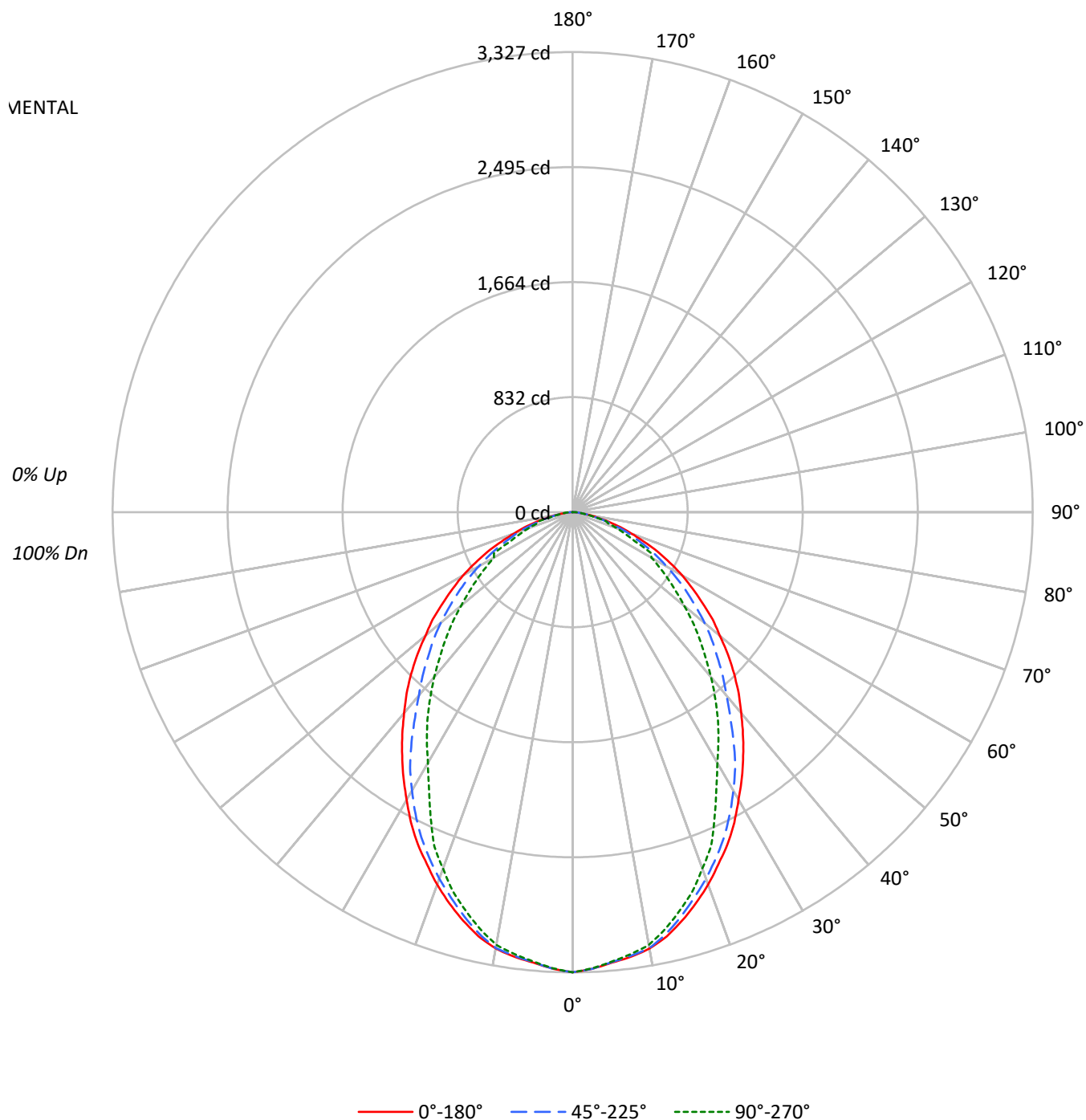
Input Watts (W): 66.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4476	4476	4476
5°	4415	4410	4405
10°	4377	4372	4340
15°	4259	4216	4157
20°	4103	4036	3926
25°	3934	3848	3609
30°	3729	3609	3251
35°	3531	3336	3007
40°	3330	3040	2736
45°	3139	2810	2474
50°	2906	2608	2206
55°	2689	2364	1976
60°	2463	2111	1770
65°	2167	1849	1567
70°	1785	1619	1331
75°	1420	1240	1300
80°	954	894	834
85°	594	713	831

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3139 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.7	4.7
10°-20°	849.9	13.0
20°-30°	1176.6	18.0
30°-40°	1254.6	19.2
40°-50°	1144.6	17.5
50°-60°	896.7	13.7
60°-70°	584.4	8.9
70°-80°	258.9	4.0
80°-90°	55.6	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°	2336.2	35.8
0°-40°	3590.8	55.0
0°-60°	5632.1	86.2
0°-90°	6531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6531.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3327	3327	3327	3327	3327	
5°	3269	3265	3265	3261	3261	310
15°	3058	3058	3027	2996	2984	860
25°	2650	2634	2592	2500	2431	1217
35°	2150	2134	2031	1877	1831	1344
45°	1650	1615	1477	1354	1300	1271
55°	1146	1112	1008	888	842	1028
65°	681	642	581	592	492	671
75°	273	254	238	227	250	293
85°	38	42	46	50	54	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3326.8	3326.8	3326.8	3326.8	3326.8
2.5°	3303.7	3303.7	3303.7	3299.9	3299.9
5°	3269.1	3265.3	3265.3	3261.4	3261.4
7.5°	3242.2	3238.3	3234.5	3230.7	3223.0
10°	3203.7	3203.7	3199.9	3180.7	3176.8
12.5°	3142.2	3138.3	3123.0	3096.0	3088.4
15°	3057.6	3057.6	3026.8	2996.0	2984.5
17.5°	2965.3	2961.4	2923.0	2892.2	2876.8
20°	2865.3	2857.6	2819.1	2769.1	2742.2
22.5°	2753.7	2753.7	2707.6	2642.2	2615.3
25°	2649.9	2634.5	2592.2	2499.9	2430.7
27.5°	2530.7	2507.6	2461.5	2330.7	2249.9
30°	2399.9	2388.4	2323.0	2153.8	2092.2
32.5°	2276.8	2257.6	2188.4	2011.5	1961.5
35°	2149.9	2134.5	2030.7	1876.9	1830.7
37.5°	2023.0	2003.8	1873.0	1749.9	1692.2
40°	1896.1	1873.0	1730.7	1619.2	1557.6
42.5°	1776.9	1746.1	1607.6	1488.4	1419.2
45°	1649.9	1615.3	1476.9	1353.8	1300.0
47.5°	1523.0	1492.3	1365.3	1238.4	1176.9
50°	1388.4	1361.5	1246.1	1119.2	1053.8
52.5°	1276.9	1234.6	1123.0	996.1	942.3
55°	1146.1	1111.5	1007.7	888.4	842.3
57.5°	1026.9	992.3	896.1	784.6	746.1
60°	915.4	865.4	784.6	688.4	657.7
62.5°	792.3	753.8	684.6	603.8	642.3
65°	680.7	642.3	580.7	592.3	492.3
67.5°	557.7	538.4	484.6	430.8	415.4
70°	453.8	430.8	411.5	353.8	338.4
72.5°	361.5	338.4	311.5	280.8	269.2
75°	273.1	253.8	238.5	226.9	250.0
77.5°	188.5	180.8	169.2	157.7	153.8
80°	123.1	119.2	115.4	111.5	107.7
82.5°	73.1	73.1	73.1	73.1	73.1
85°	38.5	42.3	46.2	50.0	53.8
87.5°	23.1	23.1	26.9	30.8	34.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)