

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: P973521

Luminaire Tested: FLR2-22-20-L830-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-20-L830-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

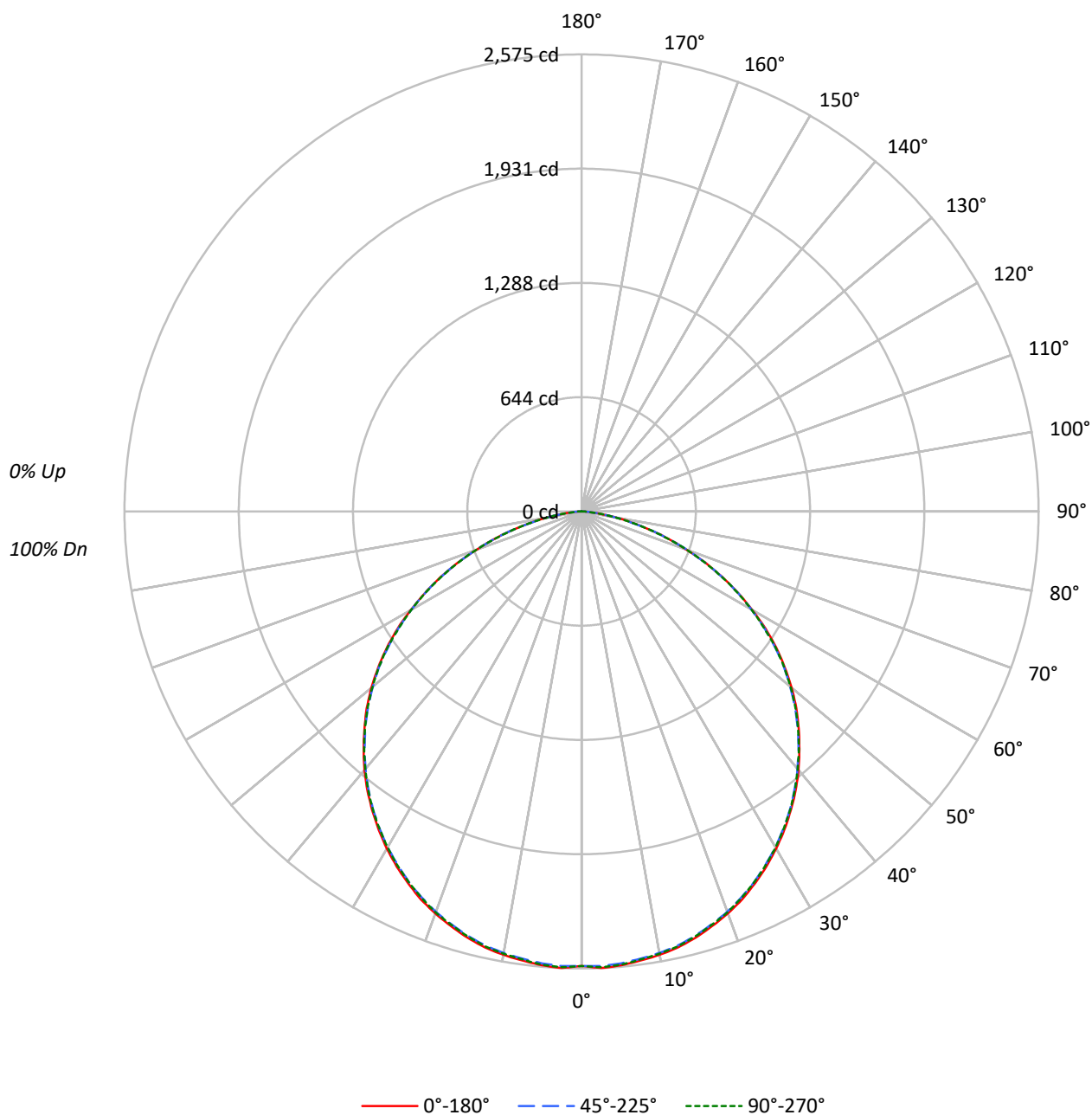
Lumens per Lamp: N/A
Luminaire Lumens: 7160.7 lumens
Efficiency: N/A
Efficacy: 474.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
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	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71		71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60		60
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44		44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39		39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30		30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6891	6891	6891
5°	6934	6904	6925
10°	6932	6902	6915
15°	6926	6896	6904
20°	6902	6875	6884
25°	6866	6837	6842
30°	6816	6787	6792
35°	6754	6728	6733
40°	6683	6650	6656
45°	6584	6554	6567
50°	6469	6422	6436
55°	6285	6233	6255
60°	5976	5950	5950
65°	5579	5569	5549
70°	4940	4965	4953
75°	4160	4128	4094
80°	2991	2941	2916
85°	1562	1562	1513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6584 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.5	3.4
10°-20°	697.3	9.7
20°-30°	1059.6	14.8
30°-40°	1280.7	17.9
40°-50°	1329.4	18.6
50°-60°	1188.5	16.6
60°-70°	864.1	12.1
70°-80°	424.9	5.9
80°-90°	73.7	1.0
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°	1999.4	27.9
0°-40°	3280.1	45.8
0°-60°	5798.0	81.0
0°-90°	7160.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7160.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2561	2561	2561	2561	2561	
5°	2567	2537	2556	2546	2564	244
15°	2486	2458	2475	2469	2478	702
25°	2312	2287	2303	2298	2304	1066
35°	2056	2042	2048	2050	2050	1286
45°	1730	1722	1722	1726	1726	1335
55°	1340	1332	1328	1332	1333	1194
65°	876	879	875	875	871	864
75°	400	403	397	399	394	425
85°	51	52	51	51	49	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2560.6	2560.6	2560.6	2560.6	2560.6
2.5°	2574.8	2544.8	2563.7	2552.7	2570.1
5°	2566.9	2536.8	2555.8	2546.3	2563.7
7.5°	2552.7	2522.6	2541.6	2532.1	2546.3
10°	2536.8	2505.2	2525.8	2516.3	2530.5
12.5°	2516.3	2486.2	2505.2	2497.3	2510.0
15°	2486.2	2457.8	2475.2	2468.8	2478.3
17.5°	2449.9	2421.4	2438.8	2434.0	2442.0
20°	2410.3	2383.4	2400.8	2396.1	2404.0
22.5°	2366.0	2337.6	2353.4	2350.2	2356.5
25°	2312.3	2287.0	2302.8	2298.0	2304.4
27.5°	2255.3	2231.6	2244.3	2244.3	2247.4
30°	2193.6	2171.5	2184.2	2184.2	2185.7
32.5°	2127.2	2109.8	2117.7	2119.3	2119.3
35°	2056.0	2041.8	2048.1	2049.7	2049.7
37.5°	1981.7	1967.5	1972.2	1975.4	1975.4
40°	1902.6	1890.0	1893.1	1896.3	1894.7
42.5°	1817.2	1807.7	1809.3	1812.5	1812.5
45°	1730.2	1722.3	1722.3	1725.5	1725.5
47.5°	1641.7	1633.8	1630.6	1633.8	1633.8
50°	1545.2	1537.3	1534.1	1537.3	1537.3
52.5°	1444.0	1436.1	1436.1	1436.1	1437.7
55°	1339.6	1331.7	1328.5	1331.7	1333.3
57.5°	1228.9	1225.7	1221.0	1222.6	1217.8
60°	1110.3	1110.3	1105.5	1108.7	1105.5
62.5°	994.8	998.0	993.2	993.2	990.1
65°	876.2	879.4	874.6	874.6	871.4
67.5°	754.4	759.2	752.8	752.8	749.7
70°	627.9	637.4	631.0	632.6	629.5
72.5°	514.0	518.8	512.4	512.4	509.3
75°	400.1	403.3	397.0	398.6	393.8
77.5°	287.8	292.6	286.3	287.8	286.3
80°	193.0	194.5	189.8	191.4	188.2
82.5°	112.3	113.9	112.3	110.7	109.1
85°	50.6	52.2	50.6	50.6	49.0
87.5°	12.7	12.7	12.7	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)