

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: P974559

Luminaire Tested: FLR2-24-100HE-L830-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974559
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-100HE-L830-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

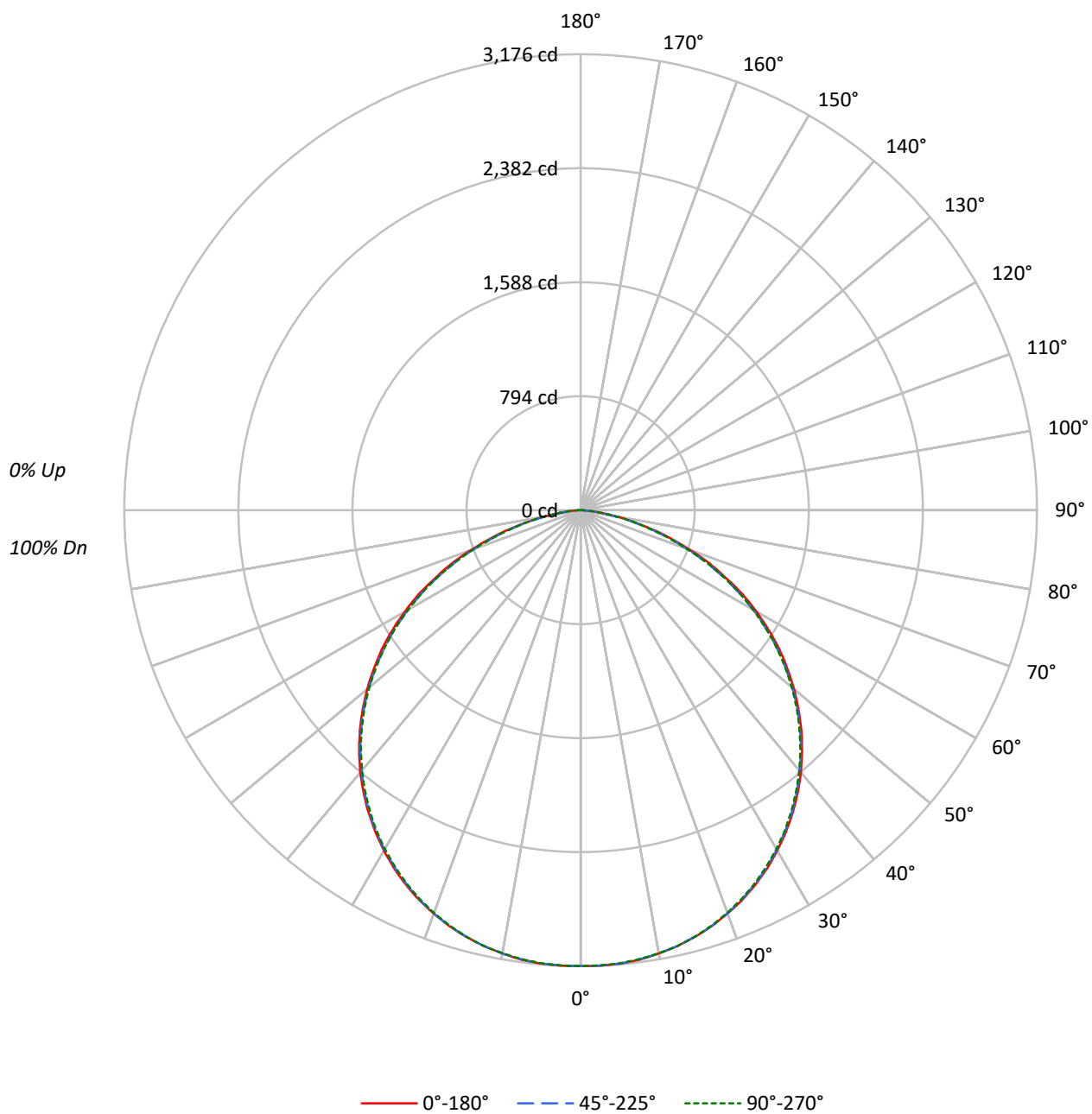
Lumens per Lamp: N/A
Luminaire Lumens: 8976.3 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 82.6
Input Voltage (V):
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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4273	4273	4273
5°	4282	4282	4279
10°	4285	4283	4282
15°	4286	4284	4284
20°	4281	4280	4273
25°	4274	4265	4258
30°	4254	4242	4233
35°	4227	4215	4200
40°	4189	4163	4157
45°	4135	4111	4098
50°	4057	4026	4015
55°	3962	3906	3900
60°	3796	3729	3729
65°	3552	3468	3479
70°	3196	3098	3089
75°	2684	2577	2565
80°	1960	1863	1943
85°	1108	1020	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4135 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.5	3.4
10°-20°	868.5	9.7
20°-30°	1324.1	14.8
30°-40°	1604.3	17.9
40°-50°	1666.4	18.6
50°-60°	1490.8	16.6
60°-70°	1086.5	12.1
70°-80°	538.1	6.0
80°-90°	96.2	1.1
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°	2494.1	27.8
0°-40°	4098.4	45.7
0°-60°	7255.6	80.8
0°-90°	8976.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8976.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3176	3176	3176	3176	3176	
5°	3170	3171	3170	3170	3168	302
15°	3077	3076	3076	3078	3076	869
25°	2879	2875	2873	2872	2868	1327
35°	2573	2570	2566	2562	2557	1609
45°	2173	2169	2161	2156	2154	1675
55°	1689	1676	1665	1665	1663	1505
65°	1116	1106	1089	1094	1093	1106
75°	516	508	496	505	493	550
85°	72	66	66	67	67	99
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3176.0	3176.0	3176.0	3176.0	3176.0
2.5°	3176.0	3174.8	3174.8	3176.0	3173.7
5°	3170.3	3171.4	3170.3	3170.3	3168.0
7.5°	3157.8	3156.6	3155.5	3156.6	3153.2
10°	3136.1	3136.1	3135.0	3136.1	3133.8
12.5°	3109.9	3109.9	3109.9	3111.0	3109.9
15°	3076.8	3075.7	3075.7	3078.0	3075.7
17.5°	3038.1	3037.0	3037.0	3035.8	3033.5
20°	2990.2	2990.2	2989.1	2988.0	2984.5
22.5°	2939.0	2937.8	2934.4	2934.4	2929.8
25°	2878.6	2875.1	2872.9	2871.7	2868.3
27.5°	2812.5	2807.9	2804.5	2802.2	2798.8
30°	2738.4	2733.8	2730.4	2727.0	2724.7
32.5°	2658.6	2656.3	2650.6	2649.5	2644.9
35°	2573.2	2569.7	2566.3	2561.8	2557.2
37.5°	2482.0	2478.6	2470.6	2468.3	2464.9
40°	2385.1	2380.6	2370.3	2370.3	2366.9
42.5°	2281.4	2276.9	2270.0	2265.5	2263.2
45°	2173.2	2168.6	2160.6	2156.1	2153.8
47.5°	2058.1	2054.6	2045.5	2042.1	2038.7
50°	1938.4	1933.9	1923.6	1921.3	1917.9
52.5°	1813.1	1810.8	1797.1	1796.0	1792.5
55°	1688.8	1676.3	1664.9	1664.9	1662.6
57.5°	1552.1	1543.0	1528.2	1528.2	1525.9
60°	1410.8	1402.8	1385.7	1388.0	1385.7
62.5°	1272.9	1255.8	1239.9	1246.7	1241.0
65°	1115.6	1106.5	1089.4	1094.0	1092.9
67.5°	972.1	955.0	939.0	948.1	943.6
70°	812.5	803.4	787.4	796.6	785.2
72.5°	662.1	654.1	638.2	648.4	637.0
75°	516.2	508.2	495.7	504.8	493.4
77.5°	378.3	372.6	361.2	370.4	372.6
80°	253.0	246.1	240.4	248.4	250.7
82.5°	148.1	143.6	141.3	142.4	148.1
85°	71.8	66.1	66.1	67.2	67.2
87.5°	19.4	17.1	19.4	20.5	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)