

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: P975042

Luminaire Tested: FLR2-24-90HE-L850-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975042
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: FLR2-24-90HE-L850-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

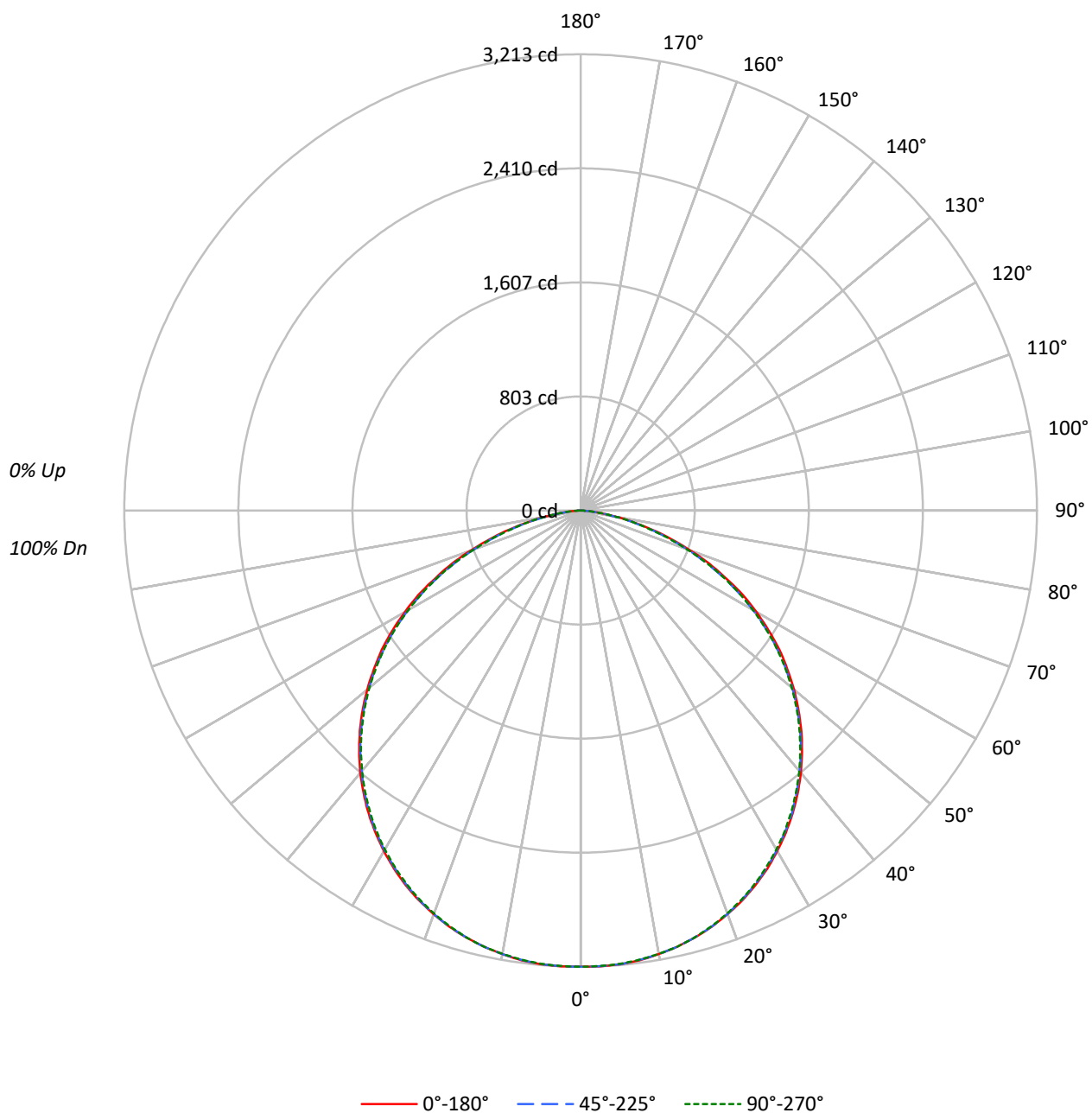
Lumens per Lamp: N/A
Luminaire Lumens: 9081.4 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.3
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°	4323	4323	4323
5°	4332	4332	4329
10°	4335	4333	4332
15°	4336	4334	4334
20°	4332	4330	4323
25°	4324	4315	4308
30°	4304	4292	4283
35°	4276	4265	4249
40°	4238	4212	4206
45°	4184	4159	4146
50°	4105	4074	4062
55°	4008	3951	3946
60°	3841	3772	3772
65°	3593	3509	3520
70°	3234	3134	3125
75°	2715	2607	2595
80°	1983	1885	1965
85°	1121	1033	1050

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4184 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.0	3.4
10°-20°	878.6	9.7
20°-30°	1339.6	14.8
30°-40°	1623.1	17.9
40°-50°	1686.0	18.6
50°-60°	1508.2	16.6
60°-70°	1099.2	12.1
70°-80°	544.4	6.0
80°-90°	97.3	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°	2523.3	27.8
0°-40°	4146.3	45.7
0°-60°	7340.5	80.8
0°-90°	9081.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9081.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3213	3213	3213	3213	3213	
5°	3207	3209	3207	3207	3205	305
15°	3113	3112	3112	3114	3112	879
25°	2912	2909	2906	2905	2902	1342
35°	2603	2600	2596	2592	2587	1628
45°	2199	2194	2186	2181	2179	1694
55°	1709	1696	1684	1684	1682	1522
65°	1129	1120	1102	1107	1106	1119
75°	522	514	502	511	499	557
85°	73	67	67	68	68	101
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3213.2	3213.2	3213.2	3213.2	3213.2
2.5°	3213.2	3212.0	3212.0	3213.2	3210.9
5°	3207.4	3208.6	3207.4	3207.4	3205.1
7.5°	3194.7	3193.6	3192.4	3193.6	3190.1
10°	3172.8	3172.8	3171.7	3172.8	3170.5
12.5°	3146.3	3146.3	3146.3	3147.4	3146.3
15°	3112.9	3111.7	3111.7	3114.0	3111.7
17.5°	3073.7	3072.5	3072.5	3071.4	3069.1
20°	3025.2	3025.2	3024.1	3022.9	3019.5
22.5°	2973.4	2972.2	2968.7	2968.7	2964.1
25°	2912.3	2908.8	2906.5	2905.3	2901.9
27.5°	2845.4	2840.8	2837.3	2835.0	2831.6
30°	2770.4	2765.8	2762.4	2758.9	2756.6
32.5°	2689.7	2687.4	2681.7	2680.5	2675.9
35°	2603.3	2599.8	2596.4	2591.7	2587.1
37.5°	2511.0	2507.6	2499.5	2497.2	2493.7
40°	2413.0	2408.4	2398.1	2398.1	2394.6
42.5°	2308.1	2303.5	2296.6	2292.0	2289.7
45°	2198.6	2194.0	2185.9	2181.3	2179.0
47.5°	2082.2	2078.7	2069.5	2066.0	2062.6
50°	1961.1	1956.5	1946.1	1943.8	1940.4
52.5°	1834.3	1832.0	1818.1	1817.0	1813.5
55°	1708.6	1695.9	1684.4	1684.4	1682.1
57.5°	1570.3	1561.0	1546.1	1546.1	1543.7
60°	1427.3	1419.2	1401.9	1404.2	1401.9
62.5°	1287.8	1270.5	1254.4	1261.3	1255.5
65°	1128.7	1119.5	1102.2	1106.8	1105.6
67.5°	983.4	966.1	950.0	959.2	954.6
70°	822.0	812.8	796.7	805.9	794.4
72.5°	669.8	661.8	645.6	656.0	644.5
75°	522.3	514.2	501.5	510.7	499.2
77.5°	382.8	377.0	365.5	374.7	377.0
80°	255.9	249.0	243.3	251.3	253.6
82.5°	149.9	145.3	143.0	144.1	149.9
85°	72.6	66.9	66.9	68.0	68.0
87.5°	19.6	17.3	19.6	20.8	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)