

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: P975010

Luminaire Tested: FLR2-24-100HE-L850-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975010
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-L850-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

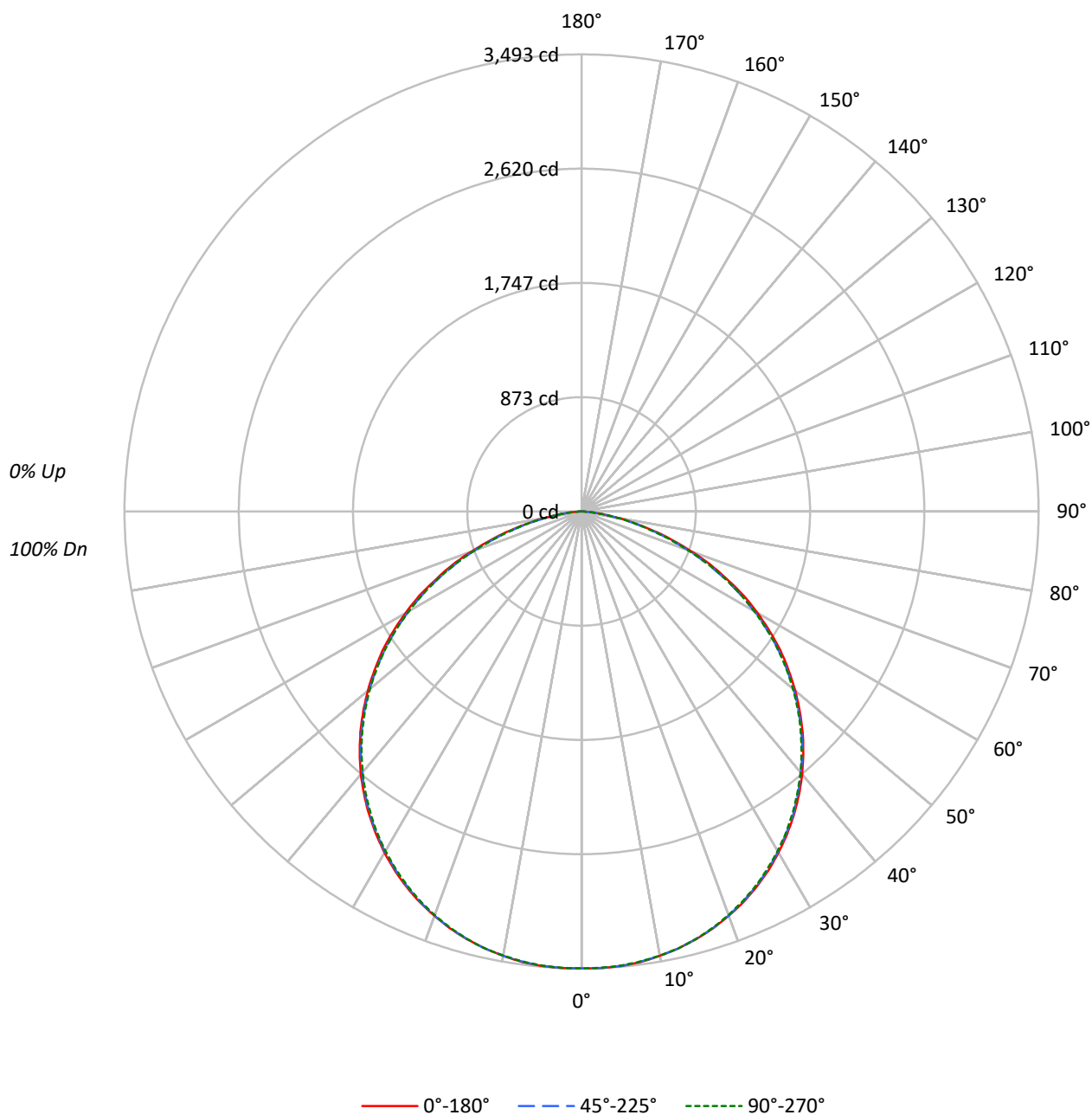
Lumens per Lamp: N/A
Luminaire Lumens: 9872.3 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4700	4700	4700
5°	4709	4709	4706
10°	4712	4711	4709
15°	4714	4712	4712
20°	4709	4707	4700
25°	4700	4691	4683
30°	4679	4666	4656
35°	4648	4636	4620
40°	4607	4579	4572
45°	4548	4522	4507
50°	4463	4428	4415
55°	4357	4295	4290
60°	4175	4101	4101
65°	3906	3815	3826
70°	3515	3407	3397
75°	2952	2834	2821
80°	2156	2049	2136
85°	1220	1122	1141

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4548 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.6	3.4
10°-20°	955.2	9.7
20°-30°	1456.3	14.8
30°-40°	1764.4	17.9
40°-50°	1832.8	18.6
50°-60°	1639.6	16.6
60°-70°	1194.9	12.1
70°-80°	591.8	6.0
80°-90°	105.8	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°	2743.0	27.8
0°-40°	4507.5	45.7
0°-60°	7979.8	80.8
0°-90°	9872.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9872.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3493	3493	3493	3493	3493	
5°	3487	3488	3487	3487	3484	332
15°	3384	3383	3383	3385	3383	955
25°	3166	3162	3160	3158	3155	1459
35°	2830	2826	2822	2818	2812	1770
45°	2390	2385	2376	2371	2369	1842
55°	1857	1844	1831	1831	1829	1655
65°	1227	1217	1198	1203	1202	1216
75°	568	559	545	555	543	605
85°	79	73	73	74	74	109
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3493.0	3493.0	3493.0	3493.0	3493.0
2.5°	3493.0	3491.8	3491.8	3493.0	3490.5
5°	3486.8	3488.0	3486.8	3486.8	3484.3
7.5°	3473.0	3471.7	3470.5	3471.7	3468.0
10°	3449.2	3449.2	3447.9	3449.2	3446.7
12.5°	3420.3	3420.3	3420.3	3421.6	3420.3
15°	3384.0	3382.7	3382.7	3385.2	3382.7
17.5°	3341.4	3340.1	3340.1	3338.9	3336.4
20°	3288.7	3288.7	3287.5	3286.2	3282.5
22.5°	3232.3	3231.1	3227.3	3227.3	3222.3
25°	3165.9	3162.2	3159.6	3158.4	3154.6
27.5°	3093.2	3088.2	3084.4	3081.9	3078.2
30°	3011.8	3006.7	3003.0	2999.2	2996.7
32.5°	2924.0	2921.5	2915.2	2914.0	2909.0
35°	2830.0	2826.3	2822.5	2817.5	2812.5
37.5°	2729.8	2726.0	2717.2	2714.7	2711.0
40°	2623.2	2618.2	2606.9	2606.9	2603.2
42.5°	2509.2	2504.2	2496.6	2491.6	2489.1
45°	2390.1	2385.1	2376.3	2371.3	2368.8
47.5°	2263.5	2259.8	2249.7	2246.0	2242.2
50°	2131.9	2126.9	2115.6	2113.1	2109.4
52.5°	1994.0	1991.5	1976.5	1975.2	1971.5
55°	1857.4	1843.6	1831.1	1831.1	1828.6
57.5°	1707.0	1697.0	1680.7	1680.7	1678.2
60°	1551.6	1542.9	1524.1	1526.6	1524.1
62.5°	1400.0	1381.2	1363.6	1371.1	1364.9
65°	1227.0	1217.0	1198.2	1203.2	1201.9
67.5°	1069.1	1050.3	1032.7	1042.8	1037.8
70°	893.6	883.6	866.1	876.1	863.5
72.5°	728.2	719.4	701.9	713.1	700.6
75°	567.8	559.0	545.2	555.2	542.7
77.5°	416.1	409.8	397.3	407.3	409.8
80°	278.2	270.7	264.5	273.2	275.7
82.5°	162.9	157.9	155.4	156.7	162.9
85°	79.0	72.7	72.7	73.9	73.9
87.5°	21.3	18.8	21.3	22.6	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)