

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: P974548

Luminaire Tested: FLR2-24-100HE-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974548
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

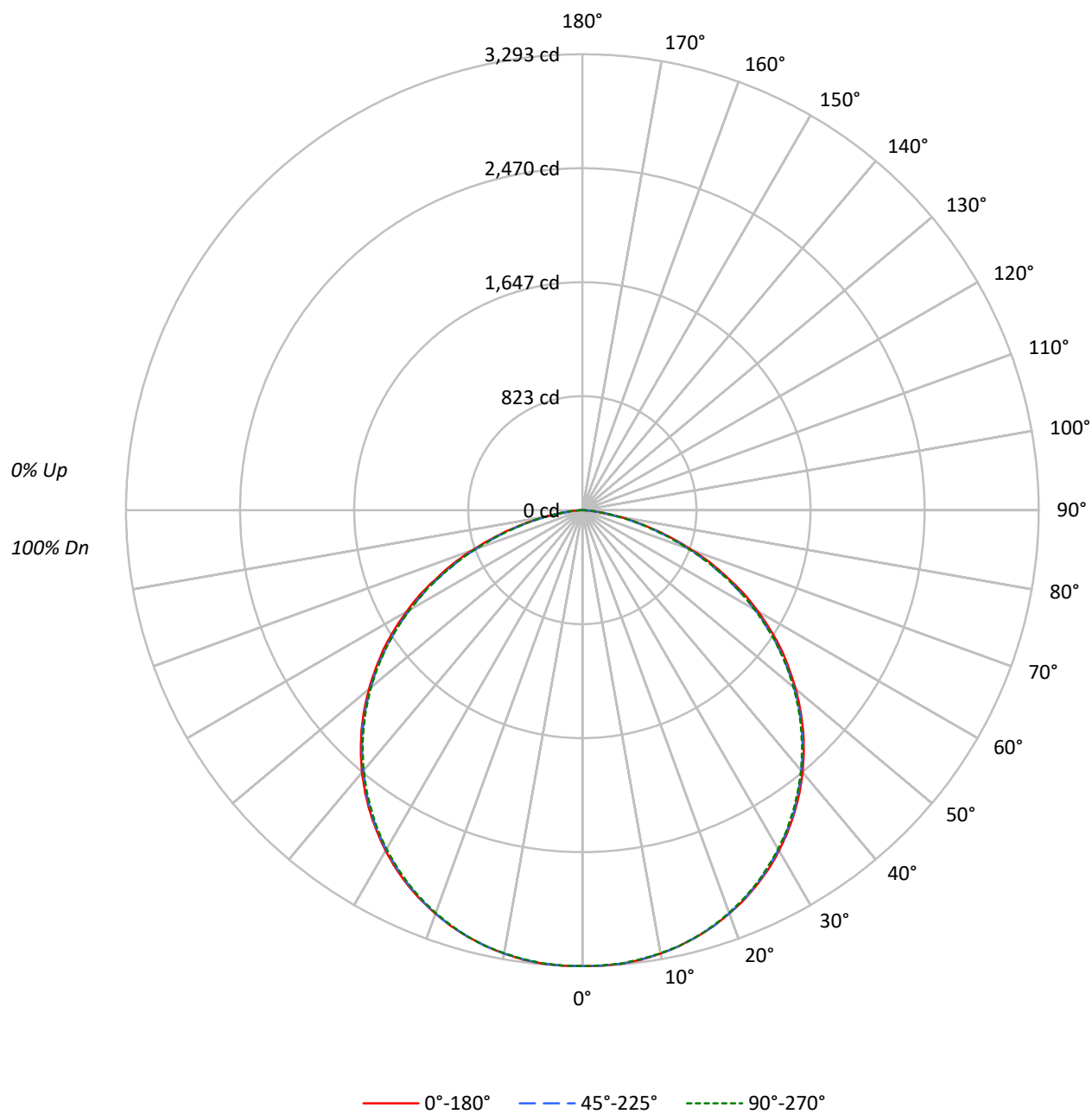
Lumens per Lamp: N/A
Luminaire Lumens: 9308.2 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4431	4431	4431
5°	4440	4440	4437
10°	4443	4442	4440
15°	4444	4443	4443
20°	4440	4438	4431
25°	4431	4423	4416
30°	4412	4399	4390
35°	4383	4371	4356
40°	4344	4317	4311
45°	4288	4263	4250
50°	4208	4175	4163
55°	4108	4050	4044
60°	3937	3867	3867
65°	3683	3597	3608
70°	3315	3212	3203
75°	2783	2672	2660
80°	2032	1932	2015
85°	1149	1057	1076

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4288 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.6	3.4
10°-20°	900.6	9.7
20°-30°	1373.1	14.8
30°-40°	1663.6	17.9
40°-50°	1728.1	18.6
50°-60°	1545.9	16.6
60°-70°	1126.7	12.1
70°-80°	558.0	6.0
80°-90°	99.7	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°	2586.3	27.8
0°-40°	4249.9	45.7
0°-60°	7523.9	80.8
0°-90°	9308.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9308.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3293	3293	3293	3293	3293	
5°	3288	3289	3288	3288	3285	313
15°	3191	3189	3189	3192	3189	901
25°	2985	2982	2979	2978	2974	1376
35°	2668	2665	2661	2656	2652	1669
45°	2254	2249	2240	2236	2233	1737
55°	1751	1738	1726	1726	1724	1560
65°	1157	1147	1130	1134	1133	1147
75°	535	527	514	524	512	571
85°	74	68	68	70	70	103
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3293.4	3293.4	3293.4	3293.4	3293.4
2.5°	3293.4	3292.2	3292.2	3293.4	3291.1
5°	3287.5	3288.7	3287.5	3287.5	3285.2
7.5°	3274.5	3273.3	3272.2	3273.3	3269.8
10°	3252.1	3252.1	3250.9	3252.1	3249.7
12.5°	3224.9	3224.9	3224.9	3226.1	3224.9
15°	3190.6	3189.4	3189.4	3191.8	3189.4
17.5°	3150.4	3149.3	3149.3	3148.1	3145.7
20°	3100.8	3100.8	3099.6	3098.4	3094.9
22.5°	3047.6	3046.5	3042.9	3042.9	3038.2
25°	2985.0	2981.5	2979.1	2977.9	2974.4
27.5°	2916.5	2911.7	2908.2	2905.8	2902.3
30°	2839.7	2834.9	2831.4	2827.8	2825.5
32.5°	2756.9	2754.6	2748.7	2747.5	2742.8
35°	2668.3	2664.8	2661.2	2656.5	2651.8
37.5°	2573.8	2570.2	2562.0	2559.6	2556.0
40°	2473.3	2468.6	2458.0	2458.0	2454.4
42.5°	2365.8	2361.1	2354.0	2349.2	2346.9
45°	2253.5	2248.8	2240.5	2235.8	2233.4
47.5°	2134.2	2130.6	2121.2	2117.6	2114.1
50°	2010.1	2005.4	1994.7	1992.4	1988.8
52.5°	1880.1	1877.7	1863.6	1862.4	1858.8
55°	1751.3	1738.3	1726.5	1726.5	1724.1
57.5°	1609.5	1600.0	1584.7	1584.7	1582.3
60°	1463.0	1454.7	1437.0	1439.3	1437.0
62.5°	1320.0	1302.2	1285.7	1292.8	1286.9
65°	1156.9	1147.4	1129.7	1134.4	1133.3
67.5°	1008.0	990.3	973.7	983.2	978.5
70°	842.6	833.1	816.6	826.0	814.2
72.5°	686.6	678.3	661.8	672.4	660.6
75°	535.3	527.0	514.0	523.5	511.7
77.5°	392.3	386.4	374.6	384.1	386.4
80°	262.3	255.2	249.3	257.6	260.0
82.5°	153.6	148.9	146.5	147.7	153.6
85°	74.4	68.5	68.5	69.7	69.7
87.5°	20.1	17.7	20.1	21.3	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)