

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: P974515

Luminaire Tested: FLR2-24-100HE-L830-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974515
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-CP080
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 2
Light Source:
Ballast/Driver: -

Summary

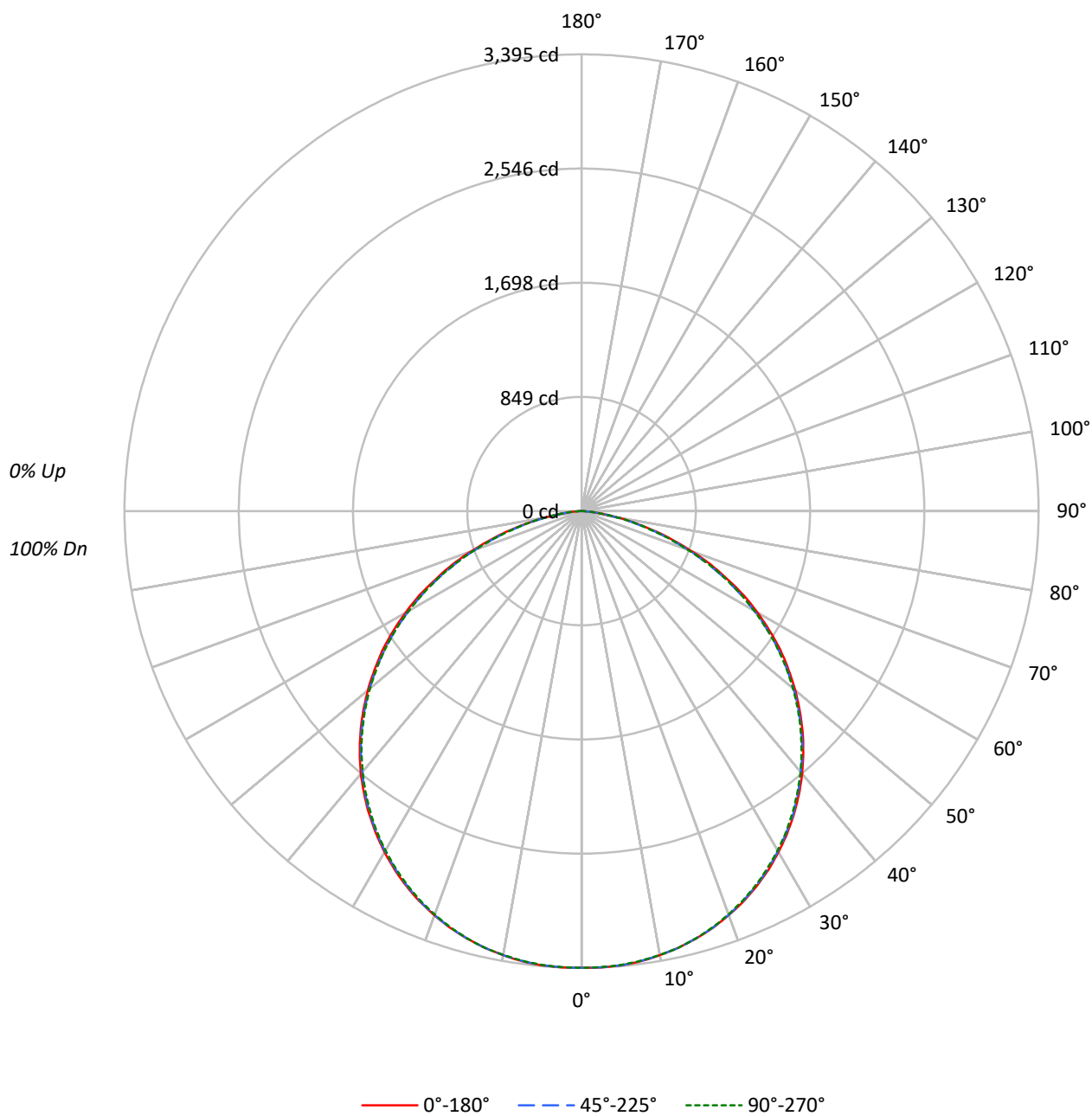
Lumens per Lamp: N/A
Luminaire Lumens: 9595.4 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	4568	4568	4568
5°	4577	4577	4574
10°	4580	4579	4577
15°	4581	4580	4580
20°	4577	4575	4568
25°	4568	4559	4552
30°	4548	4535	4525
35°	4518	4506	4490
40°	4478	4450	4444
45°	4420	4395	4381
50°	4337	4304	4291
55°	4235	4175	4169
60°	4058	3986	3986
65°	3797	3708	3719
70°	3417	3312	3302
75°	2869	2755	2742
80°	2095	1991	2077
85°	1184	1091	1110

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4420 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.3	3.4
10°-20°	928.4	9.7
20°-30°	1415.5	14.8
30°-40°	1714.9	17.9
40°-50°	1781.4	18.6
50°-60°	1593.6	16.6
60°-70°	1161.4	12.1
70°-80°	575.2	6.0
80°-90°	102.8	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°	2666.1	27.8
0°-40°	4381.0	45.7
0°-60°	7756.0	80.8
0°-90°	9595.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9595.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3395	3395	3395	3395	3395	
5°	3389	3390	3389	3389	3386	322
15°	3289	3288	3288	3290	3288	929
25°	3077	3073	3071	3070	3066	1418
35°	2751	2747	2743	2738	2734	1720
45°	2323	2318	2310	2305	2302	1790
55°	1805	1792	1780	1780	1777	1608
65°	1193	1183	1165	1169	1168	1182
75°	552	543	530	540	528	588
85°	77	71	71	72	72	106
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3395.0	3395.0	3395.0	3395.0	3395.0
2.5°	3395.0	3393.8	3393.8	3395.0	3392.6
5°	3388.9	3390.2	3388.9	3388.9	3386.5
7.5°	3375.5	3374.3	3373.1	3374.3	3370.7
10°	3352.4	3352.4	3351.2	3352.4	3350.0
12.5°	3324.4	3324.4	3324.4	3325.6	3324.4
15°	3289.0	3287.8	3287.8	3290.3	3287.8
17.5°	3247.6	3246.4	3246.4	3245.2	3242.8
20°	3196.5	3196.5	3195.2	3194.0	3190.4
22.5°	3141.6	3140.4	3136.8	3136.8	3131.9
25°	3077.1	3073.4	3071.0	3069.8	3066.1
27.5°	3006.4	3001.6	2997.9	2995.5	2991.8
30°	2927.3	2922.4	2918.7	2915.1	2912.6
32.5°	2842.0	2839.5	2833.5	2832.2	2827.4
35°	2750.6	2747.0	2743.3	2738.4	2733.6
37.5°	2653.2	2649.5	2641.0	2638.5	2634.9
40°	2549.6	2544.7	2533.8	2533.8	2530.1
42.5°	2438.8	2433.9	2426.6	2421.7	2419.3
45°	2323.0	2318.2	2309.6	2304.8	2302.3
47.5°	2200.0	2196.4	2186.6	2183.0	2179.3
50°	2072.1	2067.2	2056.3	2053.8	2050.2
52.5°	1938.1	1935.7	1921.0	1919.8	1916.2
55°	1805.3	1791.9	1779.7	1779.7	1777.3
57.5°	1659.1	1649.4	1633.6	1633.6	1631.1
60°	1508.1	1499.6	1481.3	1483.7	1481.3
62.5°	1360.7	1342.4	1325.4	1332.7	1326.6
65°	1192.6	1182.8	1164.6	1169.4	1168.2
67.5°	1039.1	1020.8	1003.8	1013.5	1008.6
70°	868.6	858.8	841.8	851.5	839.3
72.5°	707.8	699.2	682.2	693.1	681.0
75°	551.8	543.3	529.9	539.6	527.5
77.5°	404.4	398.3	386.2	395.9	398.3
80°	270.4	263.1	257.0	265.6	268.0
82.5°	158.4	153.5	151.1	152.3	158.4
85°	76.7	70.7	70.7	71.9	71.9
87.5°	20.7	18.3	20.7	21.9	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)