

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: P974570

Luminaire Tested: FLR2-24-100HE-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974570
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

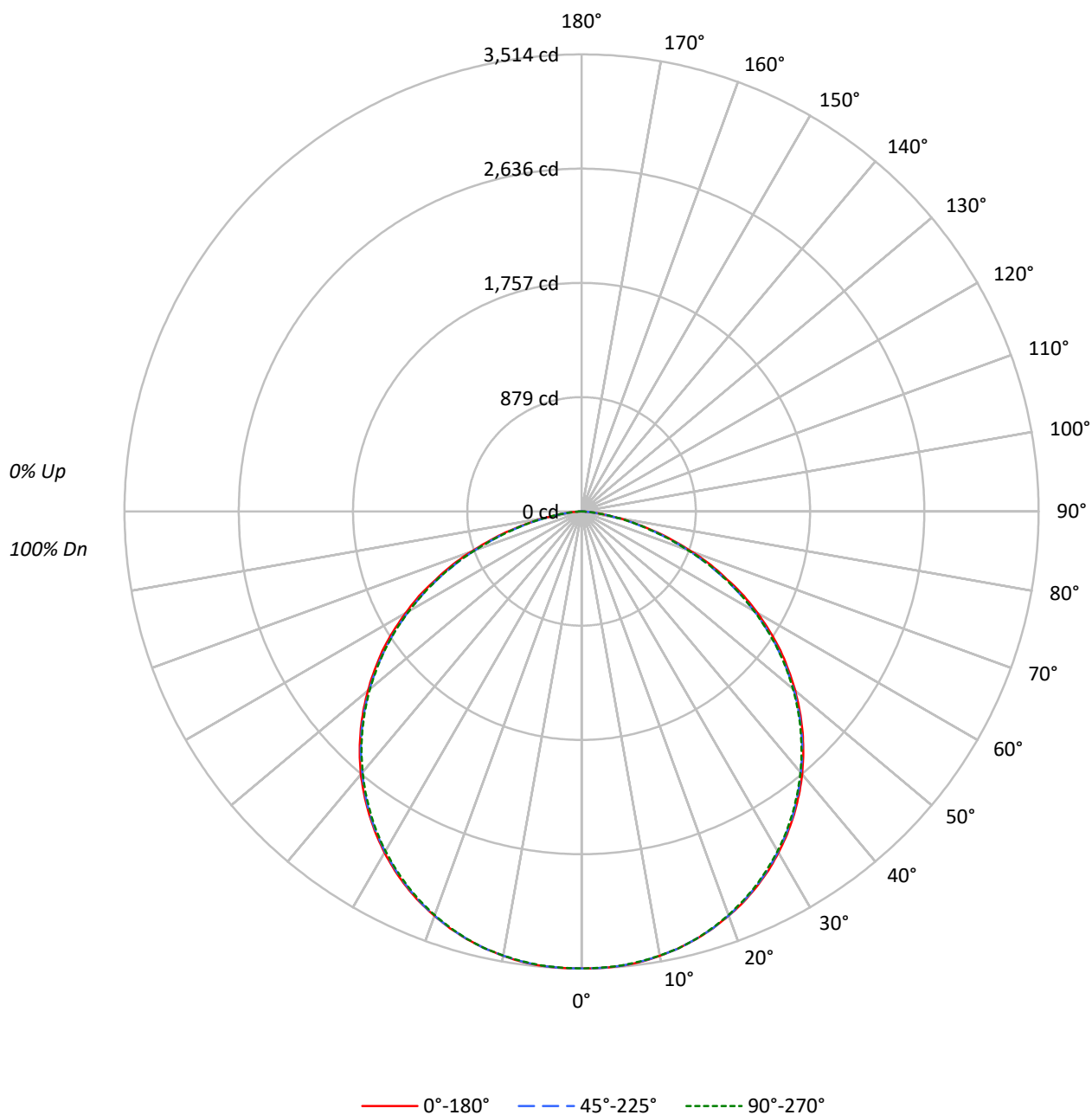
Lumens per Lamp: N/A
Luminaire Lumens: 9931.0 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4728	4728	4728
5°	4737	4737	4734
10°	4740	4739	4737
15°	4742	4740	4740
20°	4737	4735	4728
25°	4728	4719	4711
30°	4707	4693	4683
35°	4676	4664	4647
40°	4635	4606	4599
45°	4575	4548	4534
50°	4489	4455	4442
55°	4383	4321	4315
60°	4200	4126	4126
65°	3930	3837	3849
70°	3536	3427	3417
75°	2969	2851	2838
80°	2169	2061	2149
85°	1226	1129	1149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4575 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.5	3.4
10°-20°	960.9	9.7
20°-30°	1465.0	14.8
30°-40°	1774.9	17.9
40°-50°	1843.7	18.6
50°-60°	1649.3	16.6
60°-70°	1202.0	12.1
70°-80°	595.3	6.0
80°-90°	106.4	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°	2759.4	27.8
0°-40°	4534.3	45.7
0°-60°	8027.3	80.8
0°-90°	9931.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9931.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3514	3514	3514	3514	3514	
5°	3508	3509	3508	3508	3505	334
15°	3404	3403	3403	3405	3403	961
25°	3185	3181	3178	3177	3173	1468
35°	2847	2843	2839	2834	2829	1781
45°	2404	2399	2390	2385	2383	1853
55°	1868	1855	1842	1842	1840	1665
65°	1234	1224	1205	1210	1209	1224
75°	571	562	548	558	546	609
85°	79	73	73	74	74	110
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3513.8	3513.8	3513.8	3513.8	3513.8
2.5°	3513.8	3512.5	3512.5	3513.8	3511.3
5°	3507.5	3508.7	3507.5	3507.5	3505.0
7.5°	3493.6	3492.4	3491.1	3492.4	3488.6
10°	3469.7	3469.7	3468.4	3469.7	3467.1
12.5°	3440.7	3440.7	3440.7	3441.9	3440.7
15°	3404.1	3402.8	3402.8	3405.4	3402.8
17.5°	3361.2	3360.0	3360.0	3358.7	3356.2
20°	3308.3	3308.3	3307.0	3305.8	3302.0
22.5°	3251.6	3250.3	3246.5	3246.5	3241.5
25°	3184.7	3180.9	3178.4	3177.2	3173.4
27.5°	3111.6	3106.6	3102.8	3100.3	3096.5
30°	3029.7	3024.6	3020.8	3017.0	3014.5
32.5°	2941.4	2938.9	2932.6	2931.3	2926.3
35°	2846.8	2843.1	2839.3	2834.2	2829.2
37.5°	2746.0	2742.2	2733.4	2730.8	2727.1
40°	2638.8	2633.8	2622.4	2622.4	2618.6
42.5°	2524.1	2519.0	2511.5	2506.4	2503.9
45°	2404.3	2399.3	2390.4	2385.4	2382.9
47.5°	2277.0	2273.2	2263.1	2259.3	2255.5
50°	2144.6	2139.5	2128.2	2125.7	2121.9
52.5°	2005.9	2003.4	1988.2	1987.0	1983.2
55°	1868.5	1854.6	1842.0	1842.0	1839.5
57.5°	1717.2	1707.1	1690.7	1690.7	1688.2
60°	1560.8	1552.0	1533.1	1535.6	1533.1
62.5°	1408.3	1389.4	1371.7	1379.3	1373.0
65°	1234.3	1224.2	1205.3	1210.3	1209.1
67.5°	1075.4	1056.5	1038.9	1049.0	1043.9
70°	898.9	888.8	871.2	881.3	868.7
72.5°	732.5	723.7	706.0	717.4	704.8
75°	571.1	562.3	548.4	558.5	545.9
77.5°	418.6	412.3	399.7	409.8	412.3
80°	279.9	272.3	266.0	274.8	277.4
82.5°	163.9	158.9	156.3	157.6	163.9
85°	79.4	73.1	73.1	74.4	74.4
87.5°	21.4	18.9	21.4	22.7	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)