

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: P975109

Luminaire Tested: FLR2-24-100HE-L950-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975109
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-L950-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

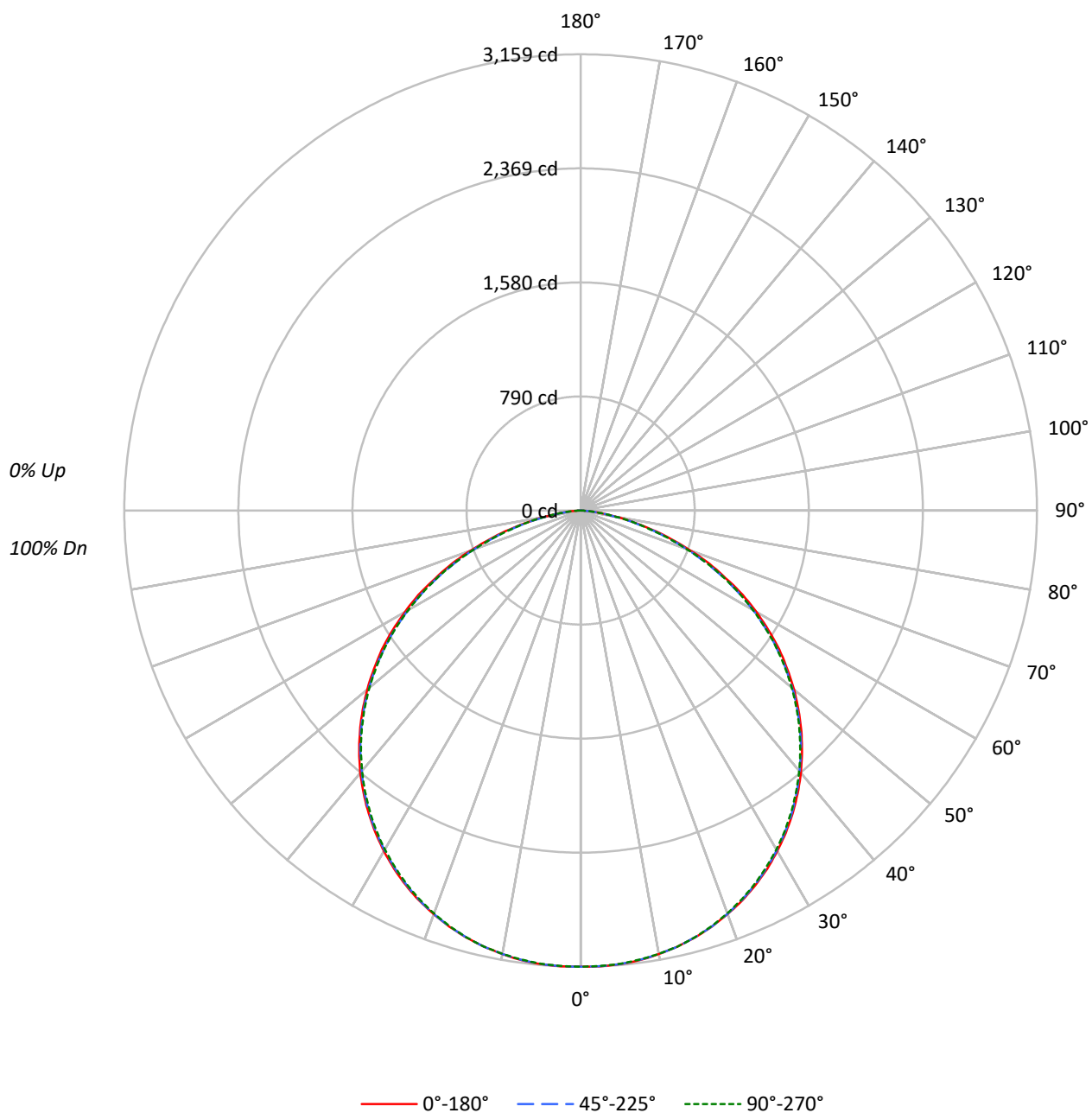
Lumens per Lamp: N/A
Luminaire Lumens: 8927.9 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4250	4250	4250
5°	4259	4259	4256
10°	4262	4260	4258
15°	4263	4261	4261
20°	4258	4257	4250
25°	4250	4242	4235
30°	4231	4219	4210
35°	4204	4193	4178
40°	4167	4141	4135
45°	4113	4089	4076
50°	4036	4005	3993
55°	3940	3884	3879
60°	3776	3709	3709
65°	3533	3450	3461
70°	3179	3081	3072
75°	2669	2563	2551
80°	1949	1853	1932
85°	1102	1014	1033

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4113 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.8	3.4
10°-20°	863.8	9.7
20°-30°	1317.0	14.8
30°-40°	1595.6	17.9
40°-50°	1657.5	18.6
50°-60°	1482.7	16.6
60°-70°	1080.6	12.1
70°-80°	535.2	6.0
80°-90°	95.7	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°	2480.6	27.8
0°-40°	4076.3	45.7
0°-60°	7216.5	80.8
0°-90°	8927.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8927.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3159	3159	3159	3159	3159	
5°	3153	3154	3153	3153	3151	300
15°	3060	3059	3059	3061	3059	864
25°	2863	2860	2857	2856	2853	1319
35°	2559	2556	2552	2548	2543	1601
45°	2161	2157	2149	2144	2142	1666
55°	1680	1667	1656	1656	1654	1497
65°	1110	1101	1084	1088	1087	1100
75°	513	506	493	502	491	547
85°	71	66	66	67	67	99
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3158.9	3158.9	3158.9	3158.9	3158.9
2.5°	3158.9	3157.7	3157.7	3158.9	3156.6
5°	3153.2	3154.3	3153.2	3153.2	3150.9
7.5°	3140.7	3139.6	3138.5	3139.6	3136.2
10°	3119.2	3119.2	3118.1	3119.2	3116.9
12.5°	3093.1	3093.1	3093.1	3094.3	3093.1
15°	3060.3	3059.1	3059.1	3061.4	3059.1
17.5°	3021.7	3020.6	3020.6	3019.5	3017.2
20°	2974.1	2974.1	2973.0	2971.8	2968.4
22.5°	2923.1	2922.0	2918.6	2918.6	2914.0
25°	2863.0	2859.6	2857.4	2856.2	2852.8
27.5°	2797.3	2792.8	2789.4	2787.1	2783.7
30°	2723.6	2719.1	2715.7	2712.3	2710.0
32.5°	2644.3	2642.0	2636.4	2635.2	2630.7
35°	2559.3	2555.9	2552.5	2547.9	2543.4
37.5°	2468.6	2465.2	2457.3	2455.0	2451.6
40°	2372.3	2367.7	2357.5	2357.5	2354.1
42.5°	2269.1	2264.6	2257.8	2253.3	2251.0
45°	2161.4	2156.9	2149.0	2144.4	2142.2
47.5°	2047.0	2043.6	2034.5	2031.1	2027.7
50°	1928.0	1923.4	1913.2	1911.0	1907.6
52.5°	1803.3	1801.0	1787.4	1786.3	1782.9
55°	1679.7	1667.3	1655.9	1655.9	1653.7
57.5°	1543.7	1534.7	1519.9	1519.9	1517.7
60°	1403.2	1395.3	1378.2	1380.5	1378.2
62.5°	1266.0	1249.0	1233.2	1240.0	1234.3
65°	1109.6	1100.6	1083.6	1088.1	1087.0
67.5°	966.8	949.8	933.9	943.0	938.5
70°	808.1	799.1	783.2	792.3	780.9
72.5°	658.5	650.6	634.7	644.9	633.6
75°	513.4	505.5	493.0	502.1	490.8
77.5°	376.3	370.6	359.3	368.4	370.6
80°	251.6	244.8	239.2	247.1	249.4
82.5°	147.3	142.8	140.5	141.7	147.3
85°	71.4	65.7	65.7	66.9	66.9
87.5°	19.3	17.0	19.3	20.4	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)