

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: P974414

Luminaire Tested: FLR2-24-55-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974414
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: FLR2-24-55-L850-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-55-L850-CP187
Ballast/Driver: -

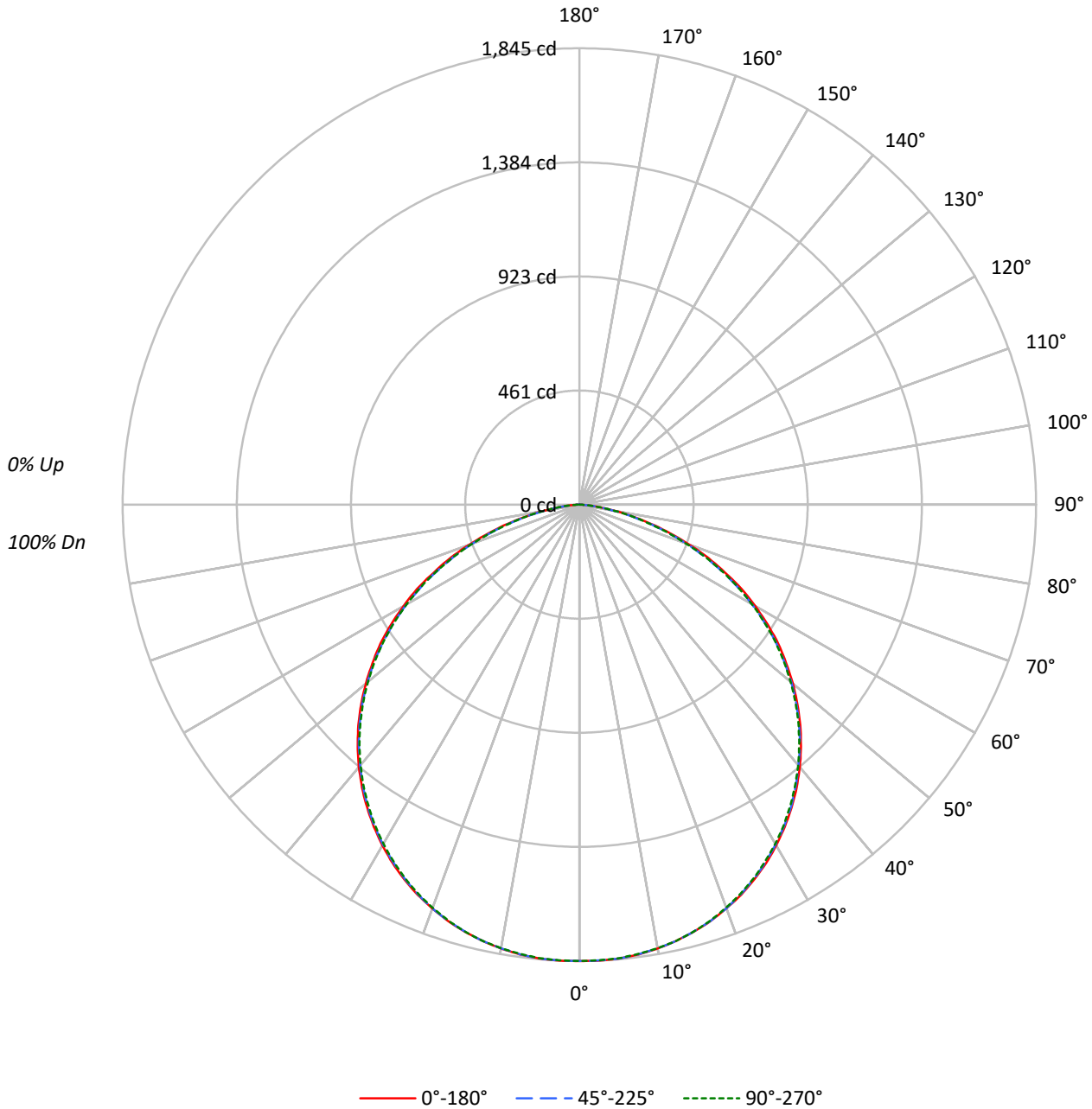
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5215.6 lumens
Efficiency: N/A
Efficacy: 118.3 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): 44.1
Input Voltage (V): 120
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	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°	2483	2483	2483
5°	2488	2488	2486
10°	2490	2489	2488
15°	2490	2489	2489
20°	2488	2487	2483
25°	2483	2478	2474
30°	2472	2465	2460
35°	2456	2449	2440
40°	2434	2419	2416
45°	2403	2389	2381
50°	2358	2340	2333
55°	2302	2269	2266
60°	2206	2167	2167
65°	2064	2015	2022
70°	1857	1800	1795
75°	1559	1497	1490
80°	1139	1082	1129
85°	644	593	604

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2403 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.2	3.4
10°-20°	504.6	9.7
20°-30°	769.4	14.8
30°-40°	932.2	17.9
40°-50°	968.3	18.6
50°-60°	866.2	16.6
60°-70°	631.3	12.1
70°-80°	312.6	6.0
80°-90°	55.9	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°	1449.2	27.8
0°-40°	2381.3	45.7
0°-60°	4215.8	80.8
0°-90°	5215.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5215.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1845	1845	1845	1845	1845	
5°	1842	1843	1842	1842	1841	175
15°	1788	1787	1787	1788	1787	505
25°	1673	1671	1669	1669	1667	771
35°	1495	1493	1491	1488	1486	935
45°	1263	1260	1255	1253	1251	973
55°	981	974	967	967	966	874
65°	648	643	633	636	635	643
75°	300	295	288	293	287	320
85°	42	38	38	39	39	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1845.4	1845.4	1845.4	1845.4	1845.4
2.5°	1845.4	1844.7	1844.7	1845.4	1844.0
5°	1842.1	1842.7	1842.1	1842.1	1840.7
7.5°	1834.8	1834.1	1833.5	1834.1	1832.1
10°	1822.2	1822.2	1821.5	1822.2	1820.9
12.5°	1807.0	1807.0	1807.0	1807.6	1807.0
15°	1787.8	1787.1	1787.1	1788.4	1787.1
17.5°	1765.3	1764.6	1764.6	1763.9	1762.6
20°	1737.4	1737.4	1736.8	1736.1	1734.1
22.5°	1707.6	1707.0	1705.0	1705.0	1702.3
25°	1672.6	1670.6	1669.2	1668.6	1666.6
27.5°	1634.1	1631.5	1629.5	1628.2	1626.2
30°	1591.1	1588.5	1586.5	1584.5	1583.2
32.5°	1544.8	1543.4	1540.1	1539.5	1536.8
35°	1495.1	1493.1	1491.1	1488.5	1485.8
37.5°	1442.1	1440.1	1435.5	1434.2	1432.2
40°	1385.8	1383.2	1377.2	1377.2	1375.3
42.5°	1325.6	1322.9	1319.0	1316.3	1315.0
45°	1262.7	1260.0	1255.4	1252.8	1251.4
47.5°	1195.8	1193.8	1188.5	1186.5	1184.6
50°	1126.3	1123.6	1117.7	1116.4	1114.4
52.5°	1053.5	1052.1	1044.2	1043.5	1041.5
55°	981.3	974.0	967.4	967.4	966.1
57.5°	901.8	896.5	887.9	887.9	886.6
60°	819.7	815.1	805.2	806.5	805.2
62.5°	739.6	729.7	720.4	724.4	721.1
65°	648.2	642.9	633.0	635.6	635.0
67.5°	564.8	554.9	545.6	550.9	548.2
70°	472.1	466.8	457.5	462.8	456.2
72.5°	384.7	380.1	370.8	376.8	370.1
75°	299.9	295.3	288.0	293.3	286.7
77.5°	219.8	216.5	209.9	215.2	216.5
80°	147.0	143.0	139.7	144.3	145.7
82.5°	86.1	83.4	82.1	82.8	86.1
85°	41.7	38.4	38.4	39.1	39.1
87.5°	11.3	9.9	11.3	11.9	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)