

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: P974398

Luminaire Tested: FLR2-24-55-L850-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974398
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-55-L850-CP080
Ballast/Driver: -

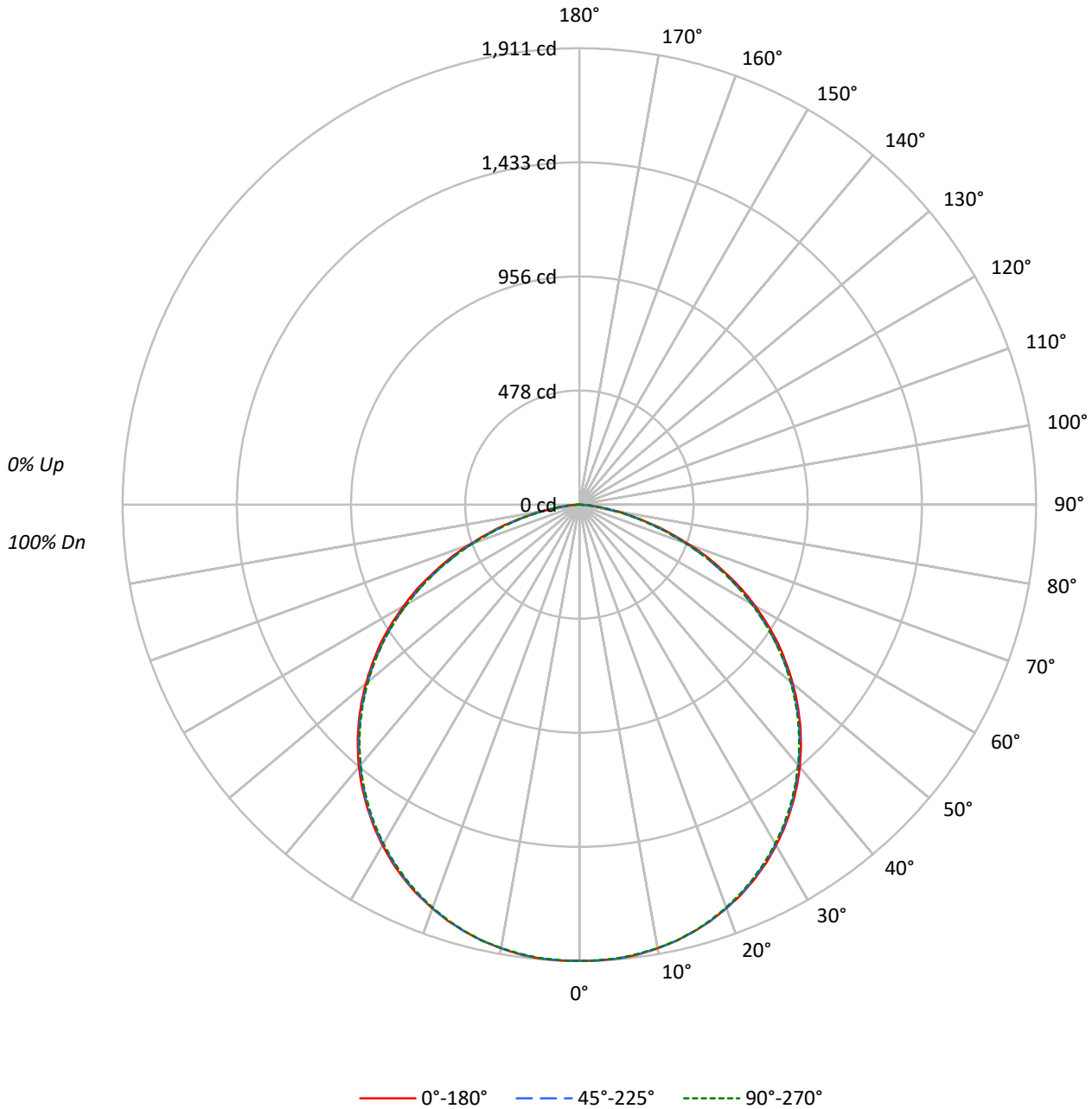
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5400.3 lumens
Efficiency: N/A
Efficacy: 122.5 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									70									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	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	100	100	100	100														
	1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85														
	2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71														
	3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60														
	4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51	51	51	51	51	51														
	5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44														
	6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38	38	38	38	38	38														
	7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34														
	8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30														
	9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27	27	27														
	10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25	25	25	25	25	25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2571	2571	2571
5°	2576	2576	2574
10°	2578	2577	2576
15°	2578	2578	2578
20°	2576	2575	2571
25°	2571	2566	2562
30°	2560	2552	2547
35°	2543	2536	2527
40°	2520	2505	2501
45°	2488	2473	2466
50°	2441	2422	2415
55°	2383	2350	2346
60°	2284	2243	2243
65°	2137	2087	2093
70°	1923	1864	1858
75°	1615	1550	1543
80°	1179	1121	1168
85°	667	614	624

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2488 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.4	3.4
10°-20°	522.5	9.7
20°-30°	796.6	14.8
30°-40°	965.2	17.9
40°-50°	1002.6	18.6
50°-60°	896.9	16.6
60°-70°	653.6	12.1
70°-80°	323.7	6.0
80°-90°	57.9	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°	1500.5	27.8
0°-40°	2465.7	45.7
0°-60°	4365.1	80.8
0°-90°	5400.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5400.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1911	1911	1911	1911	1911	
5°	1907	1908	1907	1907	1906	181
15°	1851	1850	1850	1852	1850	523
25°	1732	1730	1728	1728	1726	798
35°	1548	1546	1544	1541	1538	968
45°	1307	1305	1300	1297	1296	1008
55°	1016	1008	1002	1002	1000	905
65°	671	666	655	658	658	665
75°	311	306	298	304	297	331
85°	43	40	40	40	40	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1910.7	1910.7	1910.7	1910.7	1910.7
2.5°	1910.7	1910.0	1910.0	1910.7	1909.4
5°	1907.3	1908.0	1907.3	1907.3	1905.9
7.5°	1899.8	1899.1	1898.4	1899.1	1897.0
10°	1886.7	1886.7	1886.0	1886.7	1885.4
12.5°	1871.0	1871.0	1871.0	1871.6	1871.0
15°	1851.1	1850.4	1850.4	1851.8	1850.4
17.5°	1827.8	1827.1	1827.1	1826.4	1825.0
20°	1799.0	1799.0	1798.3	1797.6	1795.5
22.5°	1768.1	1767.4	1765.4	1765.4	1762.6
25°	1731.8	1729.7	1728.4	1727.7	1725.6
27.5°	1692.0	1689.3	1687.2	1685.9	1683.8
30°	1647.5	1644.7	1642.7	1640.6	1639.2
32.5°	1599.5	1598.1	1594.7	1594.0	1591.2
35°	1548.0	1546.0	1543.9	1541.2	1538.5
37.5°	1493.2	1491.1	1486.3	1485.0	1482.9
40°	1434.9	1432.2	1426.0	1426.0	1424.0
42.5°	1372.5	1369.8	1365.7	1362.9	1361.6
45°	1307.4	1304.7	1299.9	1297.1	1295.8
47.5°	1238.2	1236.1	1230.6	1228.6	1226.5
50°	1166.2	1163.4	1157.3	1155.9	1153.8
52.5°	1090.8	1089.4	1081.2	1080.5	1078.4
55°	1016.0	1008.5	1001.6	1001.6	1000.3
57.5°	933.8	928.3	919.4	919.4	918.0
60°	848.8	844.0	833.7	835.0	833.7
62.5°	765.8	755.5	745.9	750.0	746.6
65°	671.2	665.7	655.4	658.2	657.5
67.5°	584.8	574.5	564.9	570.4	567.7
70°	488.8	483.3	473.7	479.2	472.4
72.5°	398.3	393.5	383.9	390.1	383.2
75°	310.6	305.8	298.2	303.7	296.9
77.5°	227.6	224.2	217.3	222.8	224.2
80°	152.2	148.1	144.7	149.5	150.8
82.5°	89.1	86.4	85.0	85.7	89.1
85°	43.2	39.8	39.8	40.4	40.4
87.5°	11.7	10.3	11.7	12.3	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)