

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: P974421

Luminaire Tested: FLR2-24-45-L850-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974421
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: FLR2-24-45-L850-CP250
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L850-CP250
Ballast/Driver: -

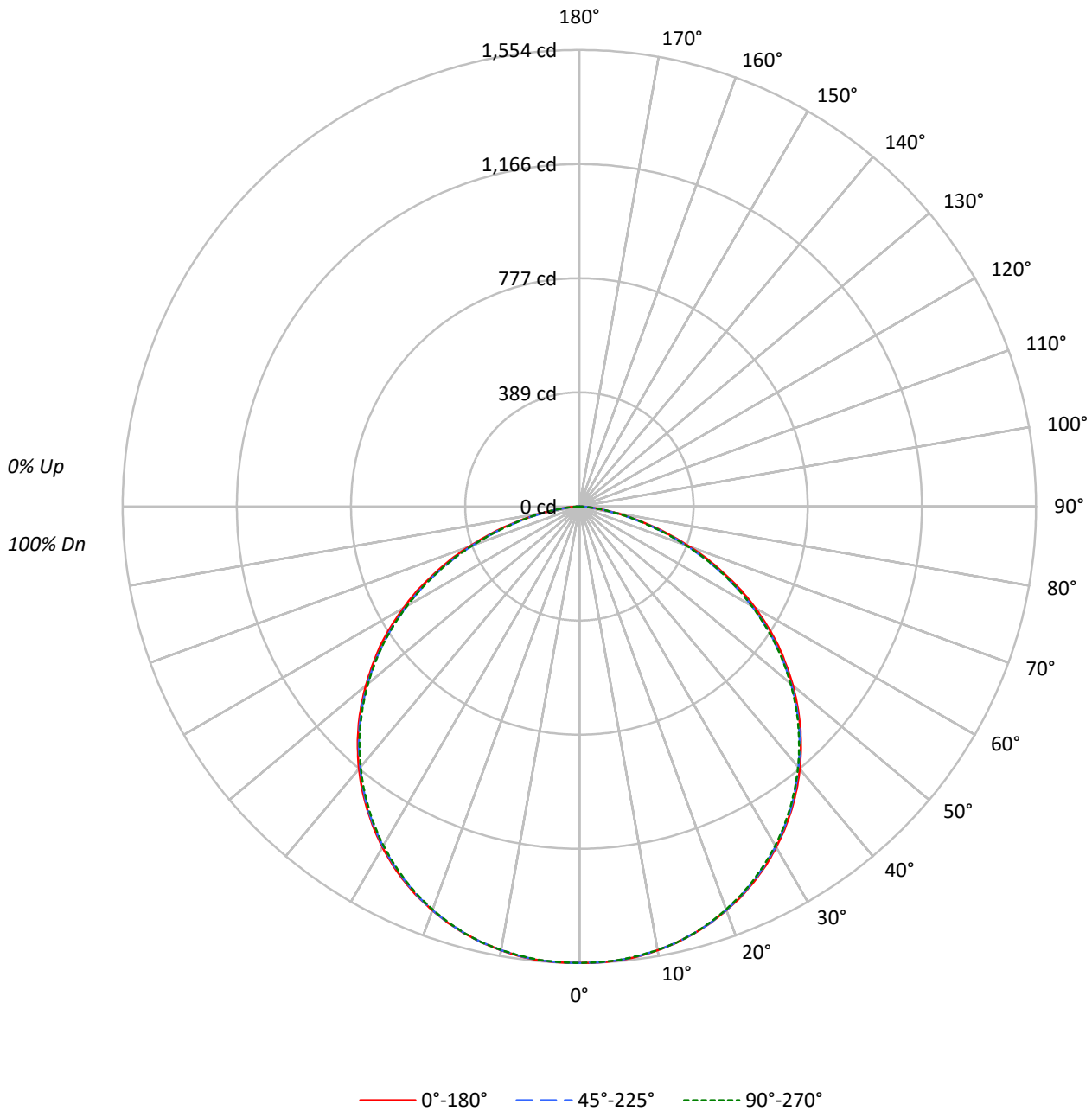
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4391.7 lumens
Efficiency: N/A
Efficacy: 123.4 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): 35.6
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				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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2091	2091	2091
5°	2095	2095	2093
10°	2096	2096	2095
15°	2097	2096	2096
20°	2095	2094	2091
25°	2091	2087	2083
30°	2082	2076	2071
35°	2068	2062	2055
40°	2050	2037	2034
45°	2023	2011	2005
50°	1985	1970	1964
55°	1938	1911	1908
60°	1857	1824	1824
65°	1738	1697	1702
70°	1564	1516	1511
75°	1313	1261	1255
80°	959	911	951
85°	542	499	508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2023 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	3.4
10°-20°	424.9	9.7
20°-30°	647.8	14.8
30°-40°	784.9	17.9
40°-50°	815.3	18.6
50°-60°	729.4	16.6
60°-70°	531.6	12.1
70°-80°	263.2	6.0
80°-90°	47.1	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°	1220.2	27.8
0°-40°	2005.2	45.7
0°-60°	3549.8	80.8
0°-90°	4391.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4391.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1551	1552	1551	1551	1550	148
15°	1505	1505	1505	1506	1505	425
25°	1408	1407	1406	1405	1403	649
35°	1259	1257	1256	1253	1251	787
45°	1063	1061	1057	1055	1054	819
55°	826	820	815	815	814	736
65°	546	541	533	535	535	541
75°	253	249	242	247	241	269
85°	35	32	32	33	33	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1553.9	1553.3	1553.3	1553.9	1552.8
5°	1551.1	1551.6	1551.1	1551.1	1550.0
7.5°	1544.9	1544.4	1543.8	1544.4	1542.7
10°	1534.4	1534.4	1533.8	1534.4	1533.2
12.5°	1521.5	1521.5	1521.5	1522.1	1521.5
15°	1505.4	1504.8	1504.8	1505.9	1504.8
17.5°	1486.4	1485.8	1485.8	1485.3	1484.2
20°	1463.0	1463.0	1462.4	1461.9	1460.2
22.5°	1437.9	1437.3	1435.7	1435.7	1433.4
25°	1408.3	1406.7	1405.6	1405.0	1403.3
27.5°	1376.0	1373.8	1372.1	1371.0	1369.3
30°	1339.8	1337.5	1335.9	1334.2	1333.1
32.5°	1300.7	1299.6	1296.8	1296.3	1294.1
35°	1258.9	1257.3	1255.6	1253.4	1251.1
37.5°	1214.3	1212.7	1208.7	1207.6	1206.0
40°	1166.9	1164.7	1159.7	1159.7	1158.0
42.5°	1116.2	1114.0	1110.6	1108.4	1107.3
45°	1063.2	1061.0	1057.1	1054.9	1053.8
47.5°	1006.9	1005.2	1000.8	999.1	997.4
50°	948.4	946.1	941.1	940.0	938.3
52.5°	887.0	885.9	879.2	878.7	877.0
55°	826.3	820.1	814.6	814.6	813.5
57.5°	759.4	754.9	747.7	747.7	746.5
60°	690.2	686.3	678.0	679.1	678.0
62.5°	622.8	614.4	606.6	610.0	607.2
65°	545.8	541.4	533.0	535.2	534.7
67.5°	475.6	467.2	459.4	463.9	461.6
70°	397.5	393.1	385.3	389.7	384.1
72.5°	323.9	320.0	312.2	317.2	311.7
75°	252.6	248.7	242.5	247.0	241.4
77.5°	185.1	182.3	176.7	181.2	182.3
80°	123.8	120.4	117.6	121.5	122.7
82.5°	72.5	70.3	69.1	69.7	72.5
85°	35.1	32.3	32.3	32.9	32.9
87.5°	9.5	8.4	9.5	10.0	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)