

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: P974405

Luminaire Tested: FLR2-24-45-L850-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974405
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-CP125
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L850-CP125
Ballast/Driver: -

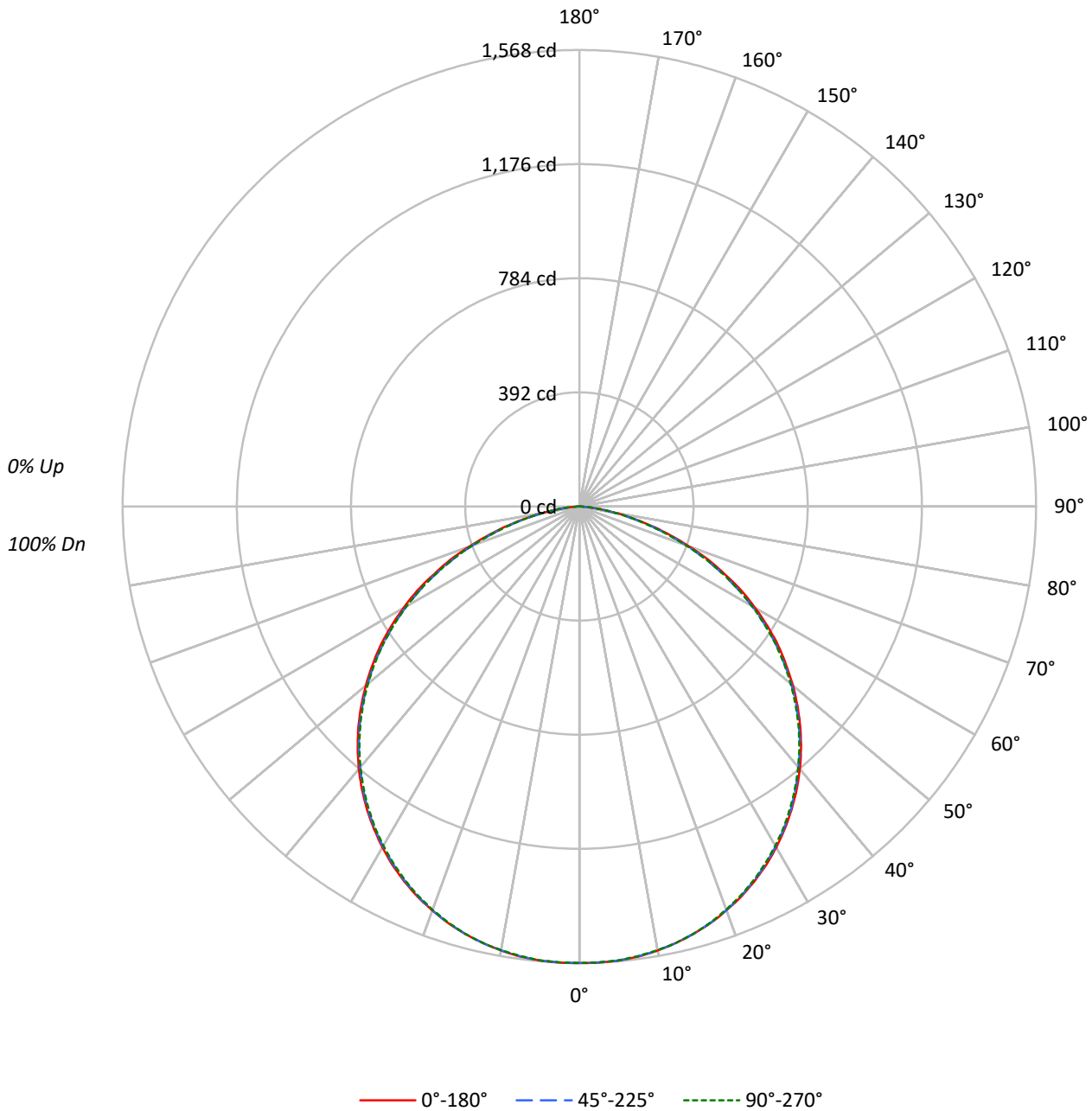
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4433.0 lumens
Efficiency: N/A
Efficacy: 124.5 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): 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										
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														
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°	2110	2110	2110
5°	2115	2115	2113
10°	2116	2115	2114
15°	2117	2116	2116
20°	2114	2114	2110
25°	2110	2106	2103
30°	2101	2095	2091
35°	2087	2082	2074
40°	2069	2056	2053
45°	2042	2030	2024
50°	2004	1989	1983
55°	1956	1929	1926
60°	1875	1841	1841
65°	1754	1713	1718
70°	1579	1530	1526
75°	1325	1273	1267
80°	968	920	959
85°	548	503	513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2042 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.9	3.4
10°-20°	428.9	9.7
20°-30°	653.9	14.8
30°-40°	792.3	17.9
40°-50°	823.0	18.6
50°-60°	736.2	16.6
60°-70°	536.6	12.1
70°-80°	265.7	6.0
80°-90°	47.5	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°	1231.7	27.8
0°-40°	2024.0	45.7
0°-60°	3583.2	80.8
0°-90°	4433.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4433.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1568	1568	1568	1568	1568	
5°	1566	1566	1566	1566	1564	149
15°	1520	1519	1519	1520	1519	429
25°	1422	1420	1419	1418	1416	655
35°	1271	1269	1267	1265	1263	795
45°	1073	1071	1067	1065	1064	827
55°	834	828	822	822	821	743
65°	551	546	538	540	540	546
75°	255	251	245	249	244	272
85°	36	33	33	33	33	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1568.5	1568.5	1568.5	1568.5	1568.5
2.5°	1568.5	1567.9	1567.9	1568.5	1567.3
5°	1565.7	1566.2	1565.7	1565.7	1564.5
7.5°	1559.5	1558.9	1558.3	1558.9	1557.2
10°	1548.8	1548.8	1548.2	1548.8	1547.6
12.5°	1535.8	1535.8	1535.8	1536.4	1535.8
15°	1519.5	1518.9	1518.9	1520.1	1518.9
17.5°	1500.4	1499.8	1499.8	1499.2	1498.1
20°	1476.7	1476.7	1476.2	1475.6	1473.9
22.5°	1451.4	1450.8	1449.2	1449.2	1446.9
25°	1421.6	1419.9	1418.8	1418.2	1416.5
27.5°	1388.9	1386.7	1385.0	1383.9	1382.2
30°	1352.4	1350.1	1348.4	1346.7	1345.6
32.5°	1313.0	1311.8	1309.0	1308.5	1306.2
35°	1270.8	1269.1	1267.4	1265.1	1262.9
37.5°	1225.7	1224.0	1220.1	1219.0	1217.3
40°	1177.9	1175.6	1170.6	1170.6	1168.9
42.5°	1126.7	1124.4	1121.1	1118.8	1117.7
45°	1073.2	1071.0	1067.0	1064.8	1063.7
47.5°	1016.4	1014.7	1010.2	1008.5	1006.8
50°	957.3	955.0	950.0	948.8	947.2
52.5°	895.4	894.3	887.5	886.9	885.3
55°	834.0	827.8	822.2	822.2	821.1
57.5°	766.5	762.0	754.7	754.7	753.6
60°	696.7	692.8	684.3	685.5	684.3
62.5°	628.6	620.2	612.3	615.7	612.9
65°	551.0	546.5	538.0	540.3	539.7
67.5°	480.1	471.6	463.7	468.2	466.0
70°	401.3	396.8	388.9	393.4	387.8
72.5°	327.0	323.0	315.2	320.2	314.6
75°	254.9	251.0	244.8	249.3	243.7
77.5°	186.8	184.0	178.4	182.9	184.0
80°	124.9	121.6	118.7	122.7	123.8
82.5°	73.2	70.9	69.8	70.3	73.2
85°	35.5	32.6	32.6	33.2	33.2
87.5°	9.6	8.4	9.6	10.1	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)