

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: P974109

Luminaire Tested: FLR2-24-45-L830-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974109
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-L830-CA125
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L830-CA125
Ballast/Driver: -

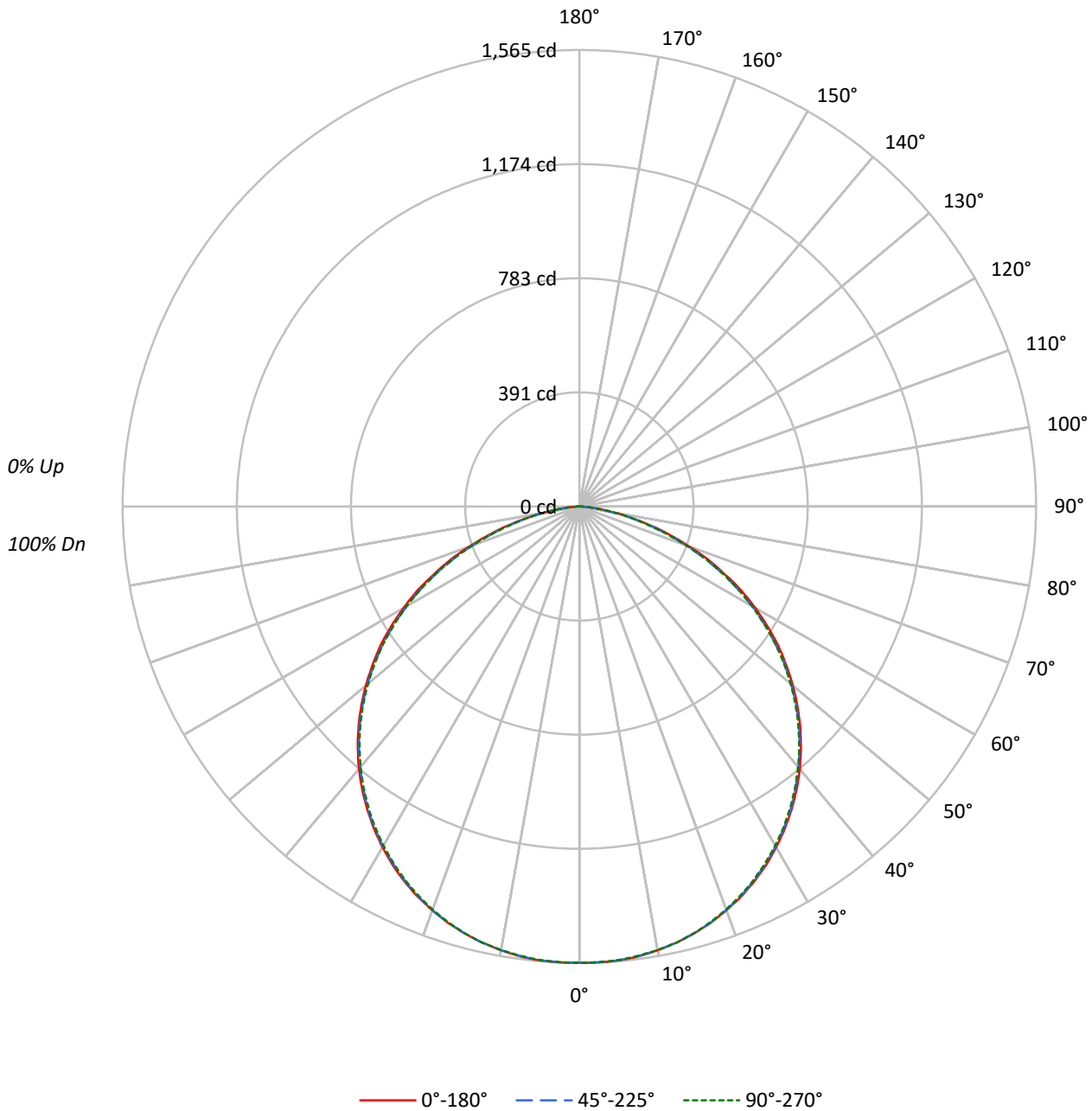
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4422.6 lumens
Efficiency: N/A
Efficacy: 124.2 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°	2105	2105	2105
5°	2110	2110	2108
10°	2111	2110	2109
15°	2112	2111	2111
20°	2110	2109	2106
25°	2105	2101	2098
30°	2096	2090	2086
35°	2082	2077	2069
40°	2064	2051	2048
45°	2037	2026	2019
50°	1999	1984	1978
55°	1952	1924	1922
60°	1870	1837	1837
65°	1750	1709	1714
70°	1575	1526	1522
75°	1322	1269	1264
80°	965	918	957
85°	546	503	511

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2037 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.5	3.4
10°-20°	427.9	9.7
20°-30°	652.4	14.8
30°-40°	790.4	17.9
40°-50°	821.0	18.6
50°-60°	734.5	16.6
60°-70°	535.3	12.1
70°-80°	265.1	6.0
80°-90°	47.4	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°	1228.8	27.8
0°-40°	2019.2	45.7
0°-60°	3574.8	80.8
0°-90°	4422.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4422.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1562	1562	1562	1562	1561	149
15°	1516	1515	1515	1516	1515	428
25°	1418	1417	1415	1415	1413	654
35°	1268	1266	1264	1262	1260	793
45°	1071	1068	1064	1062	1061	825
55°	832	826	820	820	819	741
65°	550	545	537	539	538	545
75°	254	250	244	249	243	271
85°	35	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°	1564.8	1564.8	1564.8	1564.8	1564.8
2.5°	1564.8	1564.2	1564.2	1564.8	1563.7
5°	1562.0	1562.5	1562.0	1562.0	1560.9
7.5°	1555.8	1555.2	1554.7	1555.2	1553.6
10°	1545.1	1545.1	1544.6	1545.1	1544.0
12.5°	1532.2	1532.2	1532.2	1532.8	1532.2
15°	1515.9	1515.4	1515.4	1516.5	1515.4
17.5°	1496.9	1496.3	1496.3	1495.7	1494.6
20°	1473.3	1473.3	1472.7	1472.1	1470.5
22.5°	1448.0	1447.4	1445.8	1445.8	1443.5
25°	1418.2	1416.6	1415.4	1414.9	1413.2
27.5°	1385.7	1383.4	1381.8	1380.6	1378.9
30°	1349.2	1346.9	1345.3	1343.6	1342.4
32.5°	1309.9	1308.8	1306.0	1305.4	1303.1
35°	1267.8	1266.1	1264.4	1262.2	1259.9
37.5°	1222.9	1221.2	1217.2	1216.1	1214.4
40°	1175.1	1172.9	1167.8	1167.8	1166.2
42.5°	1124.0	1121.8	1118.4	1116.2	1115.1
45°	1070.7	1068.5	1064.5	1062.3	1061.2
47.5°	1014.0	1012.3	1007.8	1006.1	1004.5
50°	955.0	952.8	947.7	946.6	944.9
52.5°	893.3	892.2	885.4	884.9	883.2
55°	832.1	825.9	820.3	820.3	819.2
57.5°	764.7	760.2	752.9	752.9	751.8
60°	695.1	691.2	682.7	683.9	682.7
62.5°	627.2	618.7	610.9	614.2	611.4
65°	549.7	545.2	536.8	539.0	538.4
67.5°	478.9	470.5	462.6	467.1	464.9
70°	400.3	395.8	388.0	392.5	386.8
72.5°	326.2	322.3	314.4	319.5	313.9
75°	254.3	250.4	244.2	248.7	243.1
77.5°	186.4	183.6	178.0	182.5	183.6
80°	124.6	121.3	118.5	122.4	123.5
82.5°	73.0	70.7	69.6	70.2	73.0
85°	35.4	32.6	32.6	33.1	33.1
87.5°	9.5	8.4	9.5	10.1	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)