

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: P974102

Luminaire Tested: FLR2-24-55-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974102
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-L830-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-55-L830-CA080
Ballast/Driver: -

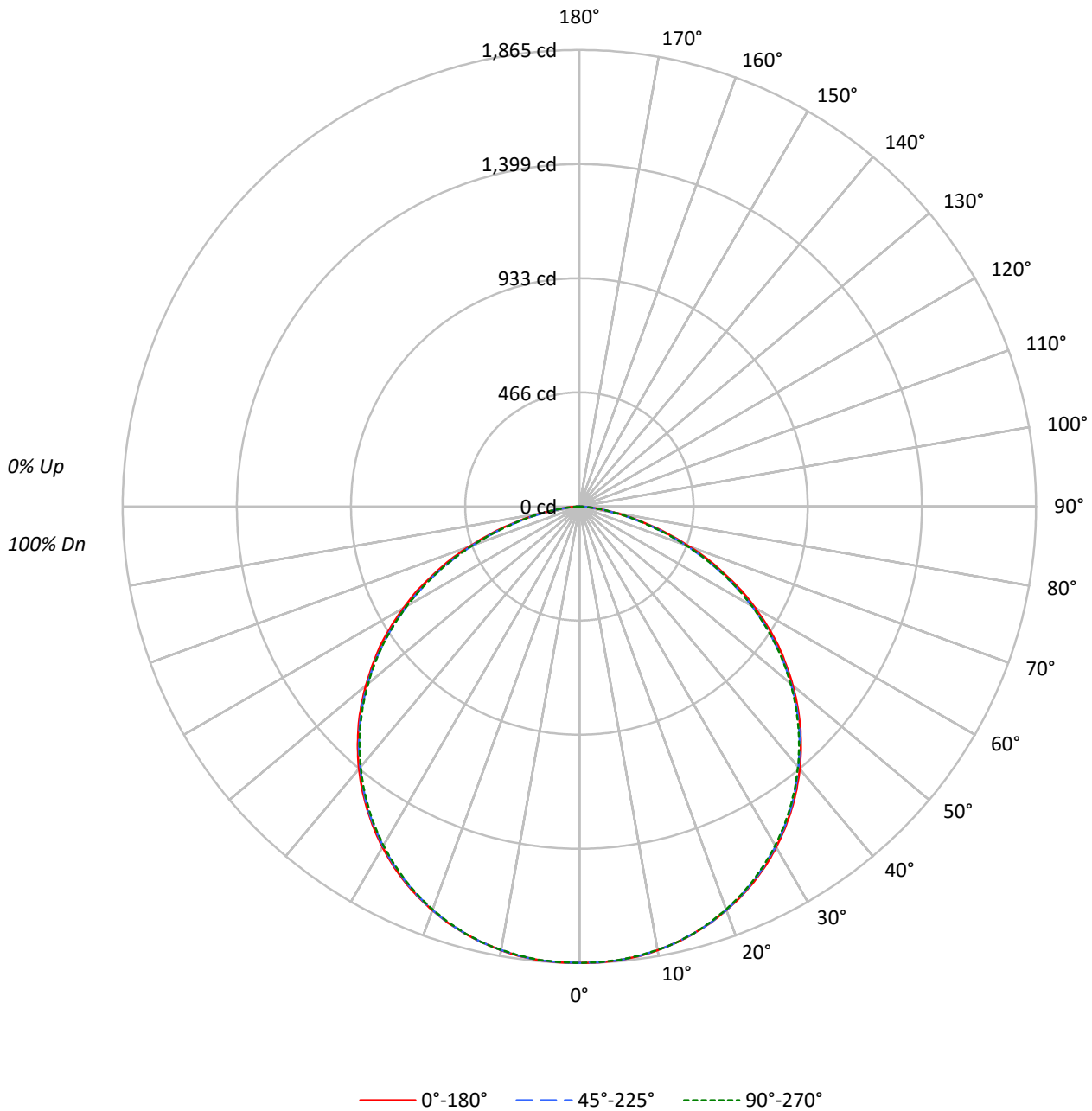
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5269.8 lumens
Efficiency: N/A
Efficacy: 119.5 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									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°	2509	2509	2509
5°	2514	2514	2512
10°	2515	2515	2514
15°	2516	2515	2515
20°	2514	2513	2509
25°	2509	2504	2500
30°	2498	2490	2485
35°	2481	2475	2466
40°	2460	2444	2441
45°	2428	2414	2406
50°	2382	2364	2357
55°	2326	2293	2290
60°	2229	2189	2189
65°	2085	2036	2043
70°	1876	1819	1814
75°	1576	1513	1506
80°	1151	1094	1141
85°	650	599	610

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2428 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.0	3.4
10°-20°	509.9	9.7
20°-30°	777.4	14.8
30°-40°	941.9	17.9
40°-50°	978.3	18.6
50°-60°	875.2	16.6
60°-70°	637.9	12.1
70°-80°	315.9	6.0
80°-90°	56.5	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°	1464.2	27.8
0°-40°	2406.1	45.7
0°-60°	4259.6	80.8
0°-90°	5269.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5269.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1865	1865	1865	1865	1865	
5°	1861	1862	1861	1861	1860	177
15°	1806	1806	1806	1807	1806	510
25°	1690	1688	1687	1686	1684	779
35°	1511	1509	1507	1504	1501	945
45°	1276	1273	1268	1266	1264	983
55°	992	984	977	977	976	883
65°	655	650	640	642	642	649
75°	303	298	291	296	290	323
85°	42	39	39	40	40	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1864.6	1864.6	1864.6	1864.6	1864.6
2.5°	1864.6	1863.9	1863.9	1864.6	1863.2
5°	1861.2	1861.9	1861.2	1861.2	1859.9
7.5°	1853.9	1853.2	1852.5	1853.2	1851.2
10°	1841.1	1841.1	1840.5	1841.1	1839.8
12.5°	1825.8	1825.8	1825.8	1826.4	1825.8
15°	1806.4	1805.7	1805.7	1807.0	1805.7
17.5°	1783.6	1782.9	1782.9	1782.3	1780.9
20°	1755.5	1755.5	1754.8	1754.2	1752.2
22.5°	1725.4	1724.7	1722.7	1722.7	1720.1
25°	1689.9	1687.9	1686.6	1685.9	1683.9
27.5°	1651.1	1648.5	1646.5	1645.1	1643.1
30°	1607.7	1605.0	1603.0	1601.0	1599.6
32.5°	1560.8	1559.5	1556.1	1555.5	1552.8
35°	1510.6	1508.6	1506.6	1504.0	1501.3
37.5°	1457.1	1455.1	1450.4	1449.1	1447.1
40°	1400.3	1397.6	1391.6	1391.6	1389.6
42.5°	1339.4	1336.7	1332.7	1330.0	1328.7
45°	1275.8	1273.1	1268.5	1265.8	1264.4
47.5°	1208.3	1206.2	1200.9	1198.9	1196.9
50°	1138.0	1135.3	1129.3	1128.0	1126.0
52.5°	1064.4	1063.1	1055.0	1054.4	1052.4
55°	991.5	984.1	977.4	977.4	976.1
57.5°	911.2	905.9	897.2	897.2	895.8
60°	828.2	823.6	813.5	814.9	813.5
62.5°	747.3	737.3	727.9	731.9	728.6
65°	655.0	649.6	639.6	642.3	641.6
67.5°	570.7	560.6	551.3	556.6	553.9
70°	477.0	471.7	462.3	467.6	461.0
72.5°	388.7	384.0	374.7	380.7	374.0
75°	303.1	298.4	291.0	296.4	289.7
77.5°	222.1	218.8	212.1	217.4	218.8
80°	148.5	144.5	141.2	145.8	147.2
82.5°	87.0	84.3	83.0	83.6	87.0
85°	42.1	38.8	38.8	39.5	39.5
87.5°	11.4	10.0	11.4	12.0	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)