

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: P974213

Luminaire Tested: FLR2-24-45-L835-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974213
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-L835-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L835-CA080
Ballast/Driver: -

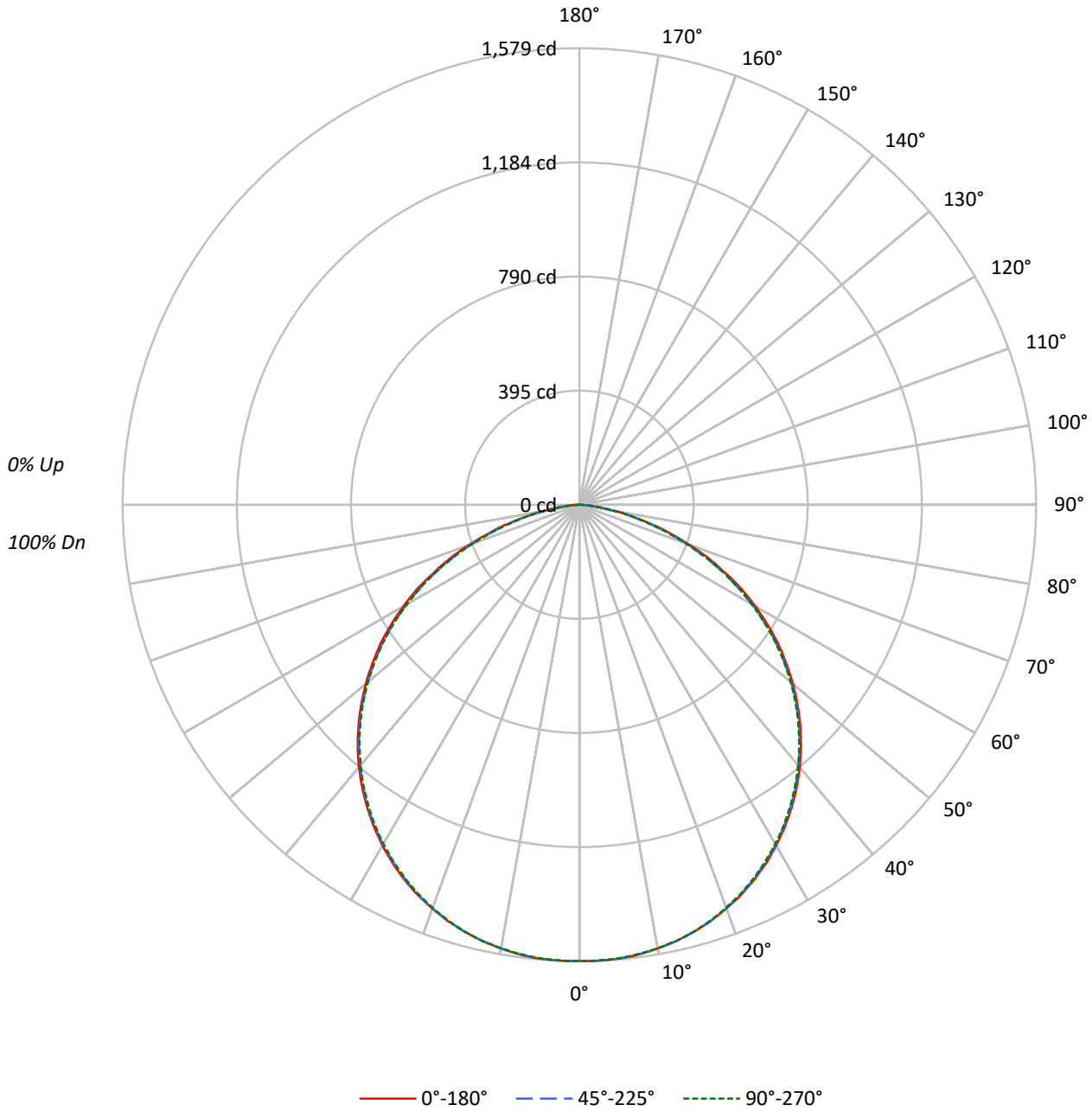
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4462.4 lumens
Efficiency: N/A
Efficacy: 125.3 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°	2124	2124	2124
5°	2129	2129	2127
10°	2130	2129	2128
15°	2131	2130	2130
20°	2128	2128	2124
25°	2124	2120	2117
30°	2115	2109	2104
35°	2101	2096	2088
40°	2083	2070	2067
45°	2056	2044	2037
50°	2017	2002	1996
55°	1970	1942	1939
60°	1887	1854	1854
65°	1766	1724	1730
70°	1589	1540	1535
75°	1334	1281	1275
80°	975	926	965
85°	551	508	516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2056 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.9	3.4
10°-20°	431.7	9.7
20°-30°	658.3	14.8
30°-40°	797.6	17.9
40°-50°	828.4	18.6
50°-60°	741.1	16.6
60°-70°	540.1	12.1
70°-80°	267.5	6.0
80°-90°	47.8	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°	1239.9	27.8
0°-40°	2037.4	45.7
0°-60°	3607.0	80.8
0°-90°	4462.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4462.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1579	1579	1579	1579	1579	
5°	1576	1577	1576	1576	1575	150
15°	1530	1529	1529	1530	1529	432
25°	1431	1429	1428	1428	1426	660
35°	1279	1278	1276	1274	1271	800
45°	1080	1078	1074	1072	1071	833
55°	840	833	828	828	827	748
65°	555	550	542	544	543	550
75°	257	253	246	251	245	274
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°	1578.9	1578.9	1578.9	1578.9	1578.9
2.5°	1578.9	1578.3	1578.3	1578.9	1577.8
5°	1576.1	1576.6	1576.1	1576.1	1574.9
7.5°	1569.8	1569.3	1568.7	1569.3	1567.6
10°	1559.1	1559.1	1558.5	1559.1	1557.9
12.5°	1546.0	1546.0	1546.0	1546.6	1546.0
15°	1529.6	1529.0	1529.0	1530.2	1529.0
17.5°	1510.3	1509.8	1509.8	1509.2	1508.1
20°	1486.5	1486.5	1486.0	1485.4	1483.7
22.5°	1461.1	1460.5	1458.8	1458.8	1456.5
25°	1431.0	1429.3	1428.2	1427.6	1425.9
27.5°	1398.2	1395.9	1394.2	1393.1	1391.4
30°	1361.3	1359.1	1357.4	1355.7	1354.5
32.5°	1321.7	1320.6	1317.7	1317.2	1314.9
35°	1279.2	1277.5	1275.8	1273.5	1271.3
37.5°	1233.9	1232.2	1228.2	1227.1	1225.4
40°	1185.7	1183.5	1178.4	1178.4	1176.7
42.5°	1134.2	1131.9	1128.5	1126.2	1125.1
45°	1080.4	1078.1	1074.1	1071.9	1070.7
47.5°	1023.1	1021.4	1016.9	1015.2	1013.5
50°	963.7	961.4	956.3	955.2	953.5
52.5°	901.3	900.2	893.4	892.8	891.1
55°	839.6	833.4	827.7	827.7	826.6
57.5°	771.6	767.1	759.7	759.7	758.6
60°	701.4	697.4	688.9	690.0	688.9
62.5°	632.8	624.3	616.4	619.8	616.9
65°	554.6	550.1	541.6	543.9	543.3
67.5°	483.2	474.7	466.8	471.3	469.1
70°	403.9	399.4	391.5	396.0	390.3
72.5°	329.1	325.2	317.3	322.3	316.7
75°	256.6	252.7	246.4	251.0	245.3
77.5°	188.1	185.3	179.6	184.1	185.3
80°	125.8	122.4	119.5	123.5	124.6
82.5°	73.6	71.4	70.2	70.8	73.6
85°	35.7	32.9	32.9	33.4	33.4
87.5°	9.6	8.5	9.6	10.2	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)