

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: P974173

Luminaire Tested: FLR2-24-45-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974173
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L835-CP080
Ballast/Driver: -

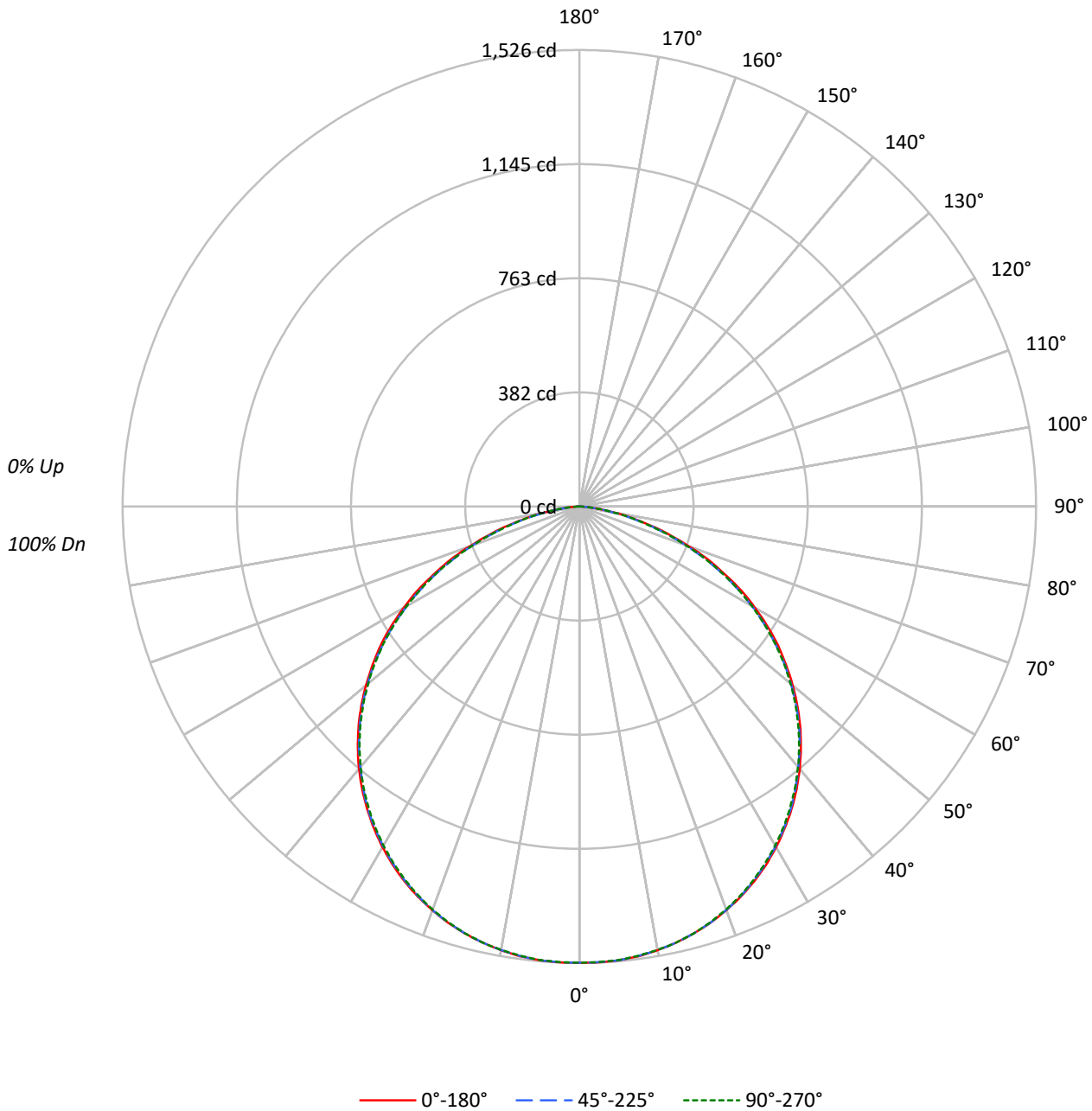
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4311.6 lumens
Efficiency: N/A
Efficacy: 121.1 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°	2053	2053	2053
5°	2057	2057	2055
10°	2058	2057	2057
15°	2059	2058	2058
20°	2057	2056	2053
25°	2053	2049	2045
30°	2043	2038	2033
35°	2030	2025	2018
40°	2012	2000	1997
45°	1986	1975	1968
50°	1949	1934	1928
55°	1903	1876	1873
60°	1823	1791	1791
65°	1706	1666	1671
70°	1535	1488	1483
75°	1289	1238	1232
80°	941	895	933
85°	533	489	499

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1986 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	3.4
10°-20°	417.2	9.7
20°-30°	636.0	14.8
30°-40°	770.6	17.9
40°-50°	800.4	18.6
50°-60°	716.1	16.6
60°-70°	521.9	12.1
70°-80°	258.4	6.0
80°-90°	46.2	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°	1198.0	27.8
0°-40°	1968.6	45.7
0°-60°	3485.1	80.8
0°-90°	4311.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4311.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1523	1523	1523	1523	1522	145
15°	1478	1477	1477	1478	1477	417
25°	1383	1381	1380	1379	1378	637
35°	1236	1234	1233	1230	1228	773
45°	1044	1042	1038	1036	1034	804
55°	811	805	800	800	799	723
65°	536	532	523	526	525	531
75°	248	244	238	242	237	264
85°	34	32	32	32	32	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1525.5	1525.5	1525.5	1525.5	1525.5
2.5°	1525.5	1525.0	1525.0	1525.5	1524.4
5°	1522.8	1523.3	1522.8	1522.8	1521.7
7.5°	1516.8	1516.2	1515.7	1516.2	1514.6
10°	1506.4	1506.4	1505.8	1506.4	1505.3
12.5°	1493.8	1493.8	1493.8	1494.3	1493.8
15°	1477.9	1477.4	1477.4	1478.5	1477.4
17.5°	1459.3	1458.7	1458.7	1458.2	1457.1
20°	1436.3	1436.3	1435.8	1435.2	1433.6
22.5°	1411.7	1411.1	1409.5	1409.5	1407.3
25°	1382.7	1381.0	1379.9	1379.4	1377.7
27.5°	1350.9	1348.7	1347.1	1346.0	1344.3
30°	1315.3	1313.1	1311.5	1309.9	1308.8
32.5°	1277.0	1275.9	1273.2	1272.6	1270.4
35°	1236.0	1234.3	1232.7	1230.5	1228.3
37.5°	1192.2	1190.5	1186.7	1185.6	1184.0
40°	1145.6	1143.5	1138.5	1138.5	1136.9
42.5°	1095.8	1093.6	1090.4	1088.2	1087.1
45°	1043.8	1041.6	1037.8	1035.6	1034.5
47.5°	988.6	986.9	982.5	980.9	979.2
50°	931.1	928.9	924.0	922.9	921.2
52.5°	870.9	869.8	863.2	862.7	861.0
55°	811.2	805.2	799.7	799.7	798.6
57.5°	745.5	741.1	734.0	734.0	732.9
60°	677.6	673.8	665.6	666.7	665.6
62.5°	611.4	603.2	595.5	598.8	596.1
65°	535.9	531.5	523.3	525.5	524.9
67.5°	466.9	458.7	451.0	455.4	453.2
70°	390.3	385.9	378.2	382.6	377.1
72.5°	318.0	314.2	306.5	311.5	306.0
75°	248.0	244.1	238.1	242.5	237.0
77.5°	181.7	179.0	173.5	177.9	179.0
80°	121.5	118.2	115.5	119.3	120.4
82.5°	71.2	69.0	67.9	68.4	71.2
85°	34.5	31.7	31.7	32.3	32.3
87.5°	9.3	8.2	9.3	9.9	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)