

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: P974663

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974663
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: FLR2-24-45HE-L835-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

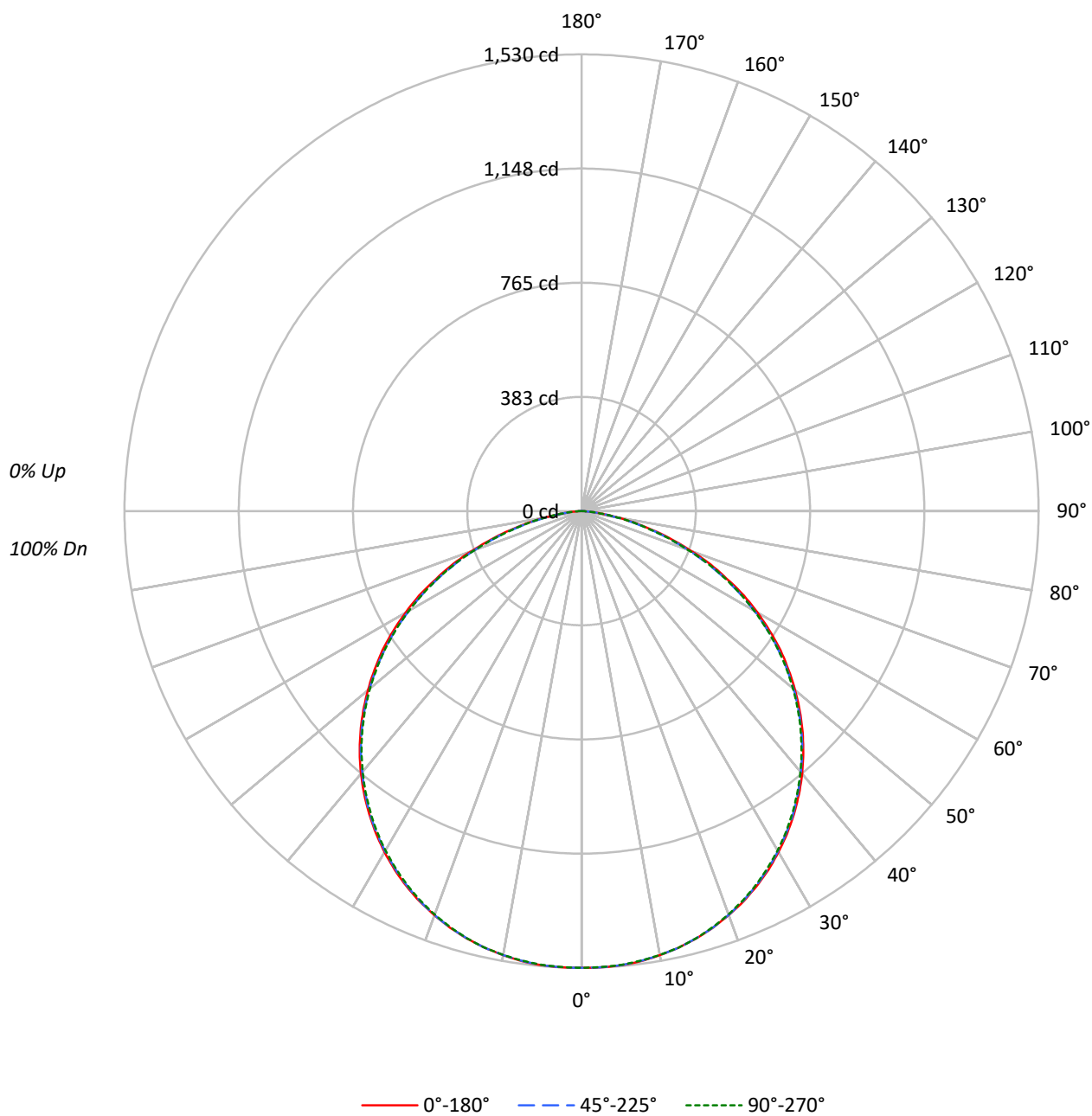
Lumens per Lamp: N/A
Luminaire Lumens: 4323.9 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
Input Voltage (V):
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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°	2058	2058	2058
5°	2063	2063	2061
10°	2064	2063	2062
15°	2064	2064	2064
20°	2062	2062	2059
25°	2059	2055	2051
30°	2049	2043	2039
35°	2036	2031	2023
40°	2018	2005	2002
45°	1992	1980	1974
50°	1954	1940	1934
55°	1908	1881	1879
60°	1829	1796	1796
65°	1711	1671	1676
70°	1540	1492	1488
75°	1293	1241	1236
80°	945	897	936
85°	534	491	500

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1992 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.2	3.4
10°-20°	418.4	9.7
20°-30°	637.8	14.8
30°-40°	772.8	17.9
40°-50°	802.7	18.6
50°-60°	718.1	16.6
60°-70°	523.4	12.1
70°-80°	259.2	6.0
80°-90°	46.3	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°	1201.4	27.8
0°-40°	1974.2	45.7
0°-60°	3495.1	80.8
0°-90°	4323.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4323.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1530	1530	1530	1530	1530	
5°	1527	1528	1527	1527	1526	145
15°	1482	1482	1482	1483	1482	418
25°	1387	1385	1384	1383	1382	639
35°	1240	1238	1236	1234	1232	775
45°	1047	1045	1041	1039	1038	807
55°	814	808	802	802	801	725
65°	537	533	525	527	526	533
75°	249	245	239	243	238	265
85°	35	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°	1529.9	1529.9	1529.9	1529.9	1529.9
2.5°	1529.9	1529.3	1529.3	1529.9	1528.8
5°	1527.2	1527.7	1527.2	1527.2	1526.1
7.5°	1521.1	1520.6	1520.0	1520.6	1518.9
10°	1510.7	1510.7	1510.1	1510.7	1509.6
12.5°	1498.1	1498.1	1498.1	1498.6	1498.1
15°	1482.1	1481.6	1481.6	1482.7	1481.6
17.5°	1463.5	1462.9	1462.9	1462.4	1461.3
20°	1440.4	1440.4	1439.9	1439.3	1437.7
22.5°	1415.7	1415.2	1413.5	1413.5	1411.3
25°	1386.6	1385.0	1383.9	1383.3	1381.7
27.5°	1354.8	1352.6	1350.9	1349.8	1348.2
30°	1319.1	1316.9	1315.3	1313.6	1312.5
32.5°	1280.7	1279.6	1276.8	1276.3	1274.1
35°	1239.5	1237.9	1236.2	1234.0	1231.8
37.5°	1195.6	1193.9	1190.1	1189.0	1187.4
40°	1148.9	1146.7	1141.8	1141.8	1140.1
42.5°	1099.0	1096.8	1093.5	1091.3	1090.2
45°	1046.8	1044.6	1040.8	1038.6	1037.5
47.5°	991.4	989.7	985.3	983.7	982.1
50°	933.7	931.6	926.6	925.5	923.9
52.5°	873.4	872.3	865.7	865.1	863.5
55°	813.5	807.5	802.0	802.0	800.9
57.5°	747.7	743.3	736.1	736.1	735.0
60°	679.6	675.7	667.5	668.6	667.5
62.5°	613.2	604.9	597.2	600.5	597.8
65°	537.4	533.0	524.8	527.0	526.4
67.5°	468.2	460.0	452.3	456.7	454.5
70°	391.4	387.0	379.3	383.7	378.2
72.5°	318.9	315.1	307.4	312.3	306.9
75°	248.7	244.8	238.8	243.2	237.7
77.5°	182.2	179.5	174.0	178.4	179.5
80°	121.9	118.6	115.8	119.7	120.8
82.5°	71.4	69.2	68.1	68.6	71.4
85°	34.6	31.8	31.8	32.4	32.4
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)