

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: P974718

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974718
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

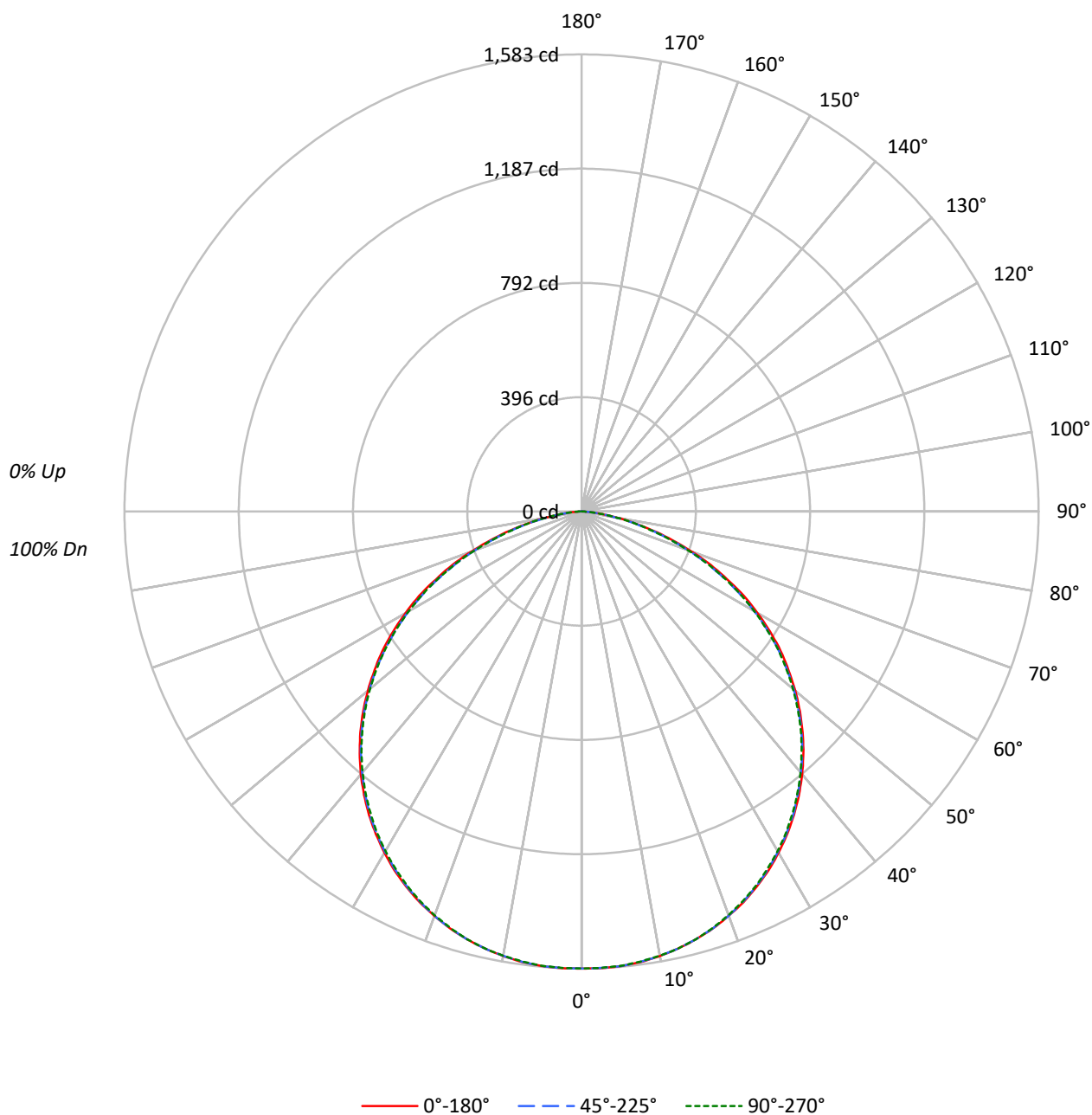
Lumens per Lamp: N/A
Luminaire Lumens: 4475.2 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2130	2130	2130
5°	2135	2135	2133
10°	2136	2135	2135
15°	2137	2136	2136
20°	2135	2134	2131
25°	2131	2126	2123
30°	2121	2115	2110
35°	2107	2102	2094
40°	2089	2076	2073
45°	2062	2050	2043
50°	2023	2007	2002
55°	1975	1947	1944
60°	1893	1859	1859
65°	1771	1729	1734
70°	1594	1544	1540
75°	1338	1285	1279
80°	977	929	969
85°	553	509	517

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2062 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.3	3.4
10°-20°	433.0	9.7
20°-30°	660.2	14.8
30°-40°	799.8	17.9
40°-50°	830.8	18.6
50°-60°	743.2	16.6
60°-70°	541.7	12.1
70°-80°	268.3	6.0
80°-90°	48.0	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°	1243.4	27.8
0°-40°	2043.3	45.7
0°-60°	3617.3	80.8
0°-90°	4475.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4475.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1581	1581	1581	1581	1579	150
15°	1534	1533	1533	1535	1533	433
25°	1435	1433	1432	1432	1430	661
35°	1283	1281	1280	1277	1275	802
45°	1083	1081	1077	1075	1074	835
55°	842	836	830	830	829	750
65°	556	552	543	545	545	551
75°	257	253	247	252	246	274
85°	36	33	33	34	34	50
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.4	1583.4	1583.4	1583.4	1583.4
2.5°	1583.4	1582.8	1582.8	1583.4	1582.3
5°	1580.6	1581.1	1580.6	1580.6	1579.4
7.5°	1574.3	1573.8	1573.2	1573.8	1572.1
10°	1563.5	1563.5	1563.0	1563.5	1562.4
12.5°	1550.5	1550.5	1550.5	1551.0	1550.5
15°	1534.0	1533.4	1533.4	1534.6	1533.4
17.5°	1514.7	1514.1	1514.1	1513.5	1512.4
20°	1490.8	1490.8	1490.2	1489.7	1488.0
22.5°	1465.2	1464.7	1463.0	1463.0	1460.7
25°	1435.1	1433.4	1432.3	1431.7	1430.0
27.5°	1402.2	1399.9	1398.2	1397.1	1395.4
30°	1365.2	1363.0	1361.3	1359.6	1358.4
32.5°	1325.5	1324.3	1321.5	1320.9	1318.7
35°	1282.9	1281.2	1279.5	1277.2	1274.9
37.5°	1237.4	1235.7	1231.7	1230.6	1228.9
40°	1189.1	1186.9	1181.7	1181.7	1180.0
42.5°	1137.4	1135.2	1131.7	1129.5	1128.3
45°	1083.4	1081.2	1077.2	1074.9	1073.8
47.5°	1026.1	1024.4	1019.8	1018.1	1016.4
50°	966.4	964.1	959.0	957.9	956.2
52.5°	903.9	902.8	896.0	895.4	893.7
55°	842.0	835.7	830.1	830.1	828.9
57.5°	773.8	769.3	761.9	761.9	760.7
60°	703.4	699.4	690.9	692.0	690.9
62.5°	634.6	626.1	618.1	621.5	618.7
65°	556.2	551.7	543.1	545.4	544.8
67.5°	484.6	476.1	468.2	472.7	470.4
70°	405.1	400.5	392.6	397.1	391.5
72.5°	330.1	326.1	318.2	323.3	317.6
75°	257.4	253.4	247.1	251.7	246.0
77.5°	188.6	185.8	180.1	184.6	185.8
80°	126.1	122.7	119.9	123.9	125.0
82.5°	73.9	71.6	70.4	71.0	73.9
85°	35.8	33.0	33.0	33.5	33.5
87.5°	9.7	8.5	9.7	10.2	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)