

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: P974564

Luminaire Tested: FLR2-24-45HE-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974564
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-L830-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

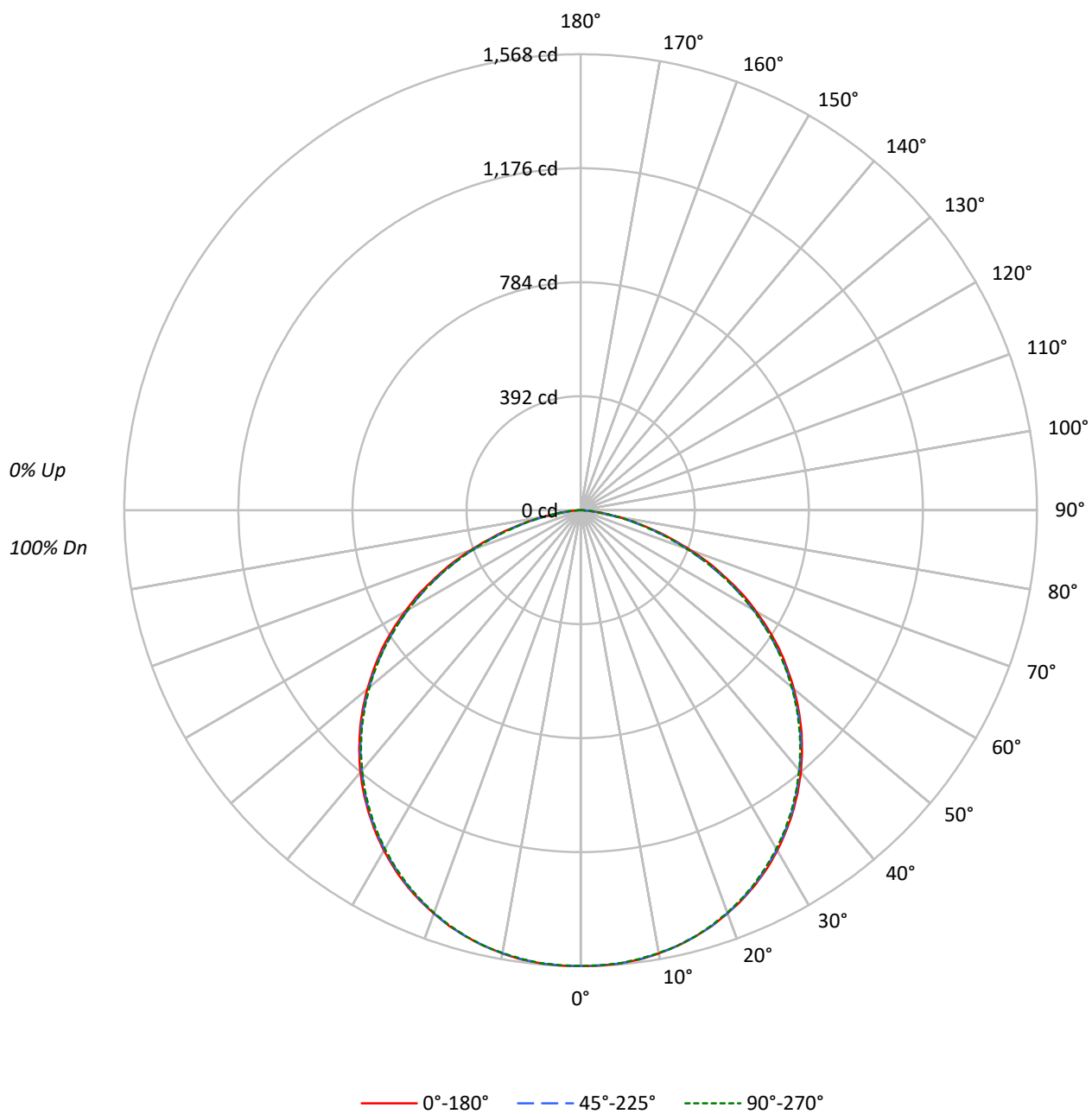
Lumens per Lamp: N/A
Luminaire Lumens: 4430.5 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2109	2109	2109
5°	2113	2113	2112
10°	2115	2114	2113
15°	2115	2115	2115
20°	2113	2112	2109
25°	2109	2105	2102
30°	2100	2094	2089
35°	2086	2081	2073
40°	2068	2055	2052
45°	2041	2029	2023
50°	2003	1987	1981
55°	1955	1928	1925
60°	1874	1841	1841
65°	1753	1712	1717
70°	1578	1529	1524
75°	1325	1272	1266
80°	968	920	958
85°	546	503	513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	3.4
10°-20°	428.7	9.7
20°-30°	653.6	14.8
30°-40°	791.8	17.9
40°-50°	822.5	18.6
50°-60°	735.8	16.6
60°-70°	536.3	12.1
70°-80°	265.6	6.0
80°-90°	47.5	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°	1231.0	27.8
0°-40°	2022.9	45.7
0°-60°	3581.2	80.8
0°-90°	4430.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4430.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1568	1568	1568	1568	1568	
5°	1565	1565	1565	1565	1564	149
15°	1519	1518	1518	1519	1518	429
25°	1421	1419	1418	1417	1416	655
35°	1270	1268	1267	1264	1262	794
45°	1073	1070	1066	1064	1063	827
55°	834	827	822	822	821	743
65°	551	546	538	540	539	546
75°	255	251	245	249	244	272
85°	35	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°	1567.6	1567.6	1567.6	1567.6	1567.6
2.5°	1567.6	1567.0	1567.0	1567.6	1566.5
5°	1564.8	1565.3	1564.8	1564.8	1563.6
7.5°	1558.6	1558.0	1557.5	1558.0	1556.3
10°	1547.9	1547.9	1547.3	1547.9	1546.8
12.5°	1535.0	1535.0	1535.0	1535.5	1535.0
15°	1518.6	1518.1	1518.1	1519.2	1518.1
17.5°	1499.5	1499.0	1499.0	1498.4	1497.3
20°	1475.9	1475.9	1475.3	1474.8	1473.1
22.5°	1450.6	1450.0	1448.3	1448.3	1446.1
25°	1420.8	1419.1	1418.0	1417.4	1415.7
27.5°	1388.2	1385.9	1384.2	1383.1	1381.4
30°	1351.6	1349.3	1347.7	1346.0	1344.8
32.5°	1312.2	1311.1	1308.3	1307.7	1305.5
35°	1270.0	1268.4	1266.7	1264.4	1262.2
37.5°	1225.0	1223.4	1219.4	1218.3	1216.6
40°	1177.2	1175.0	1169.9	1169.9	1168.2
42.5°	1126.0	1123.8	1120.4	1118.2	1117.0
45°	1072.6	1070.4	1066.4	1064.2	1063.1
47.5°	1015.8	1014.1	1009.6	1007.9	1006.2
50°	956.7	954.5	949.4	948.3	946.6
52.5°	894.9	893.8	887.0	886.4	884.8
55°	833.6	827.4	821.8	821.8	820.6
57.5°	766.1	761.6	754.3	754.3	753.1
60°	696.3	692.4	684.0	685.1	684.0
62.5°	628.3	619.8	612.0	615.3	612.5
65°	550.7	546.2	537.7	540.0	539.4
67.5°	479.8	471.3	463.5	468.0	465.7
70°	401.0	396.5	388.7	393.2	387.5
72.5°	326.8	322.9	315.0	320.0	314.4
75°	254.8	250.9	244.7	249.2	243.5
77.5°	186.7	183.9	178.3	182.8	183.9
80°	124.9	121.5	118.7	122.6	123.7
82.5°	73.1	70.9	69.7	70.3	73.1
85°	35.4	32.6	32.6	33.2	33.2
87.5°	9.6	8.4	9.6	10.1	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)