

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: P974729

Luminaire Tested: FLR2-24-45HE-L835-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974729
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-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

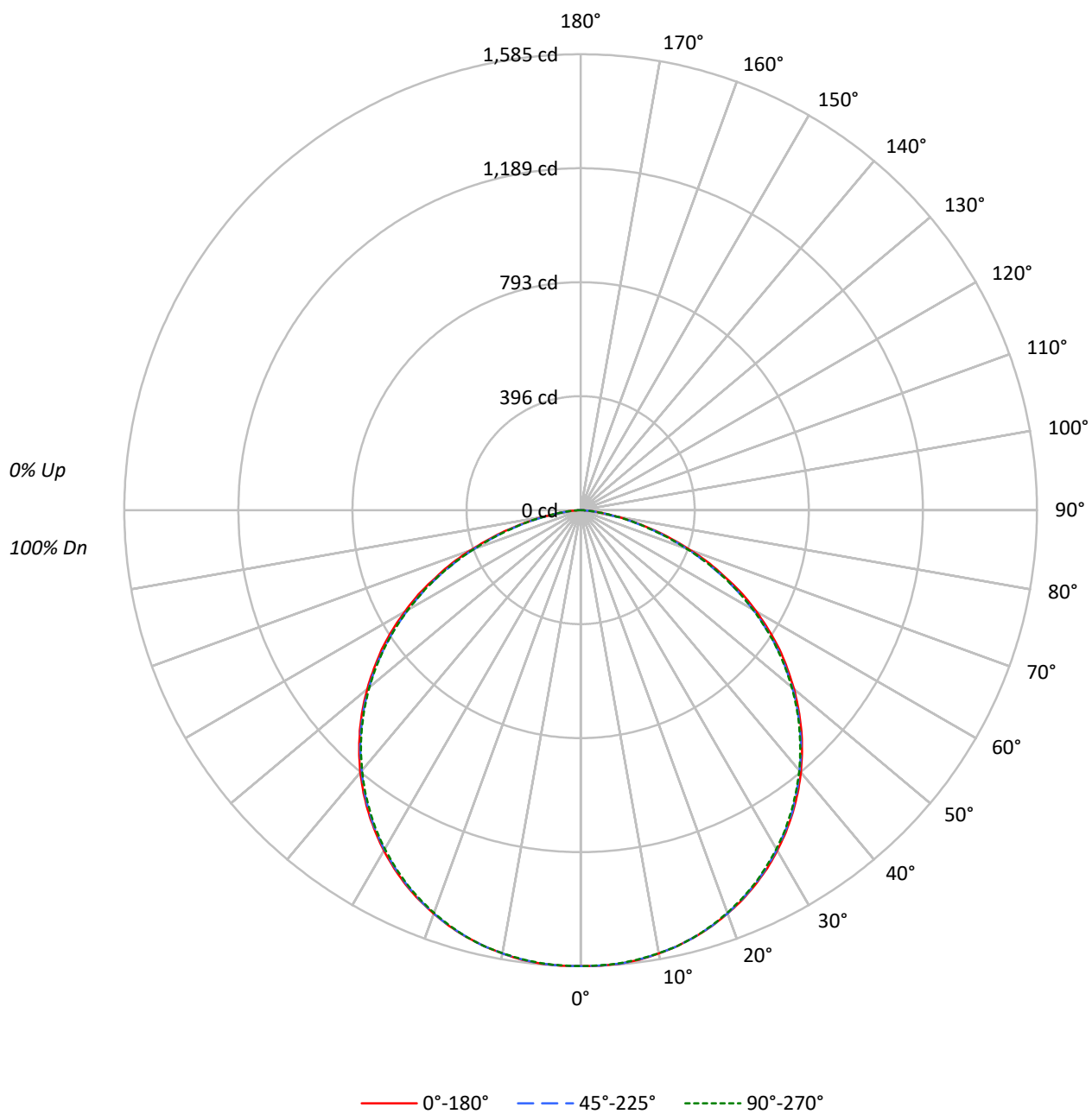
Lumens per Lamp: N/A
Luminaire Lumens: 4480.0 lumens
Efficiency: N/A
Efficacy: 129.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	2133	2133	2133
5°	2137	2137	2135
10°	2138	2138	2137
15°	2139	2138	2138
20°	2137	2136	2133
25°	2133	2129	2125
30°	2123	2117	2113
35°	2110	2104	2096
40°	2091	2078	2075
45°	2064	2052	2045
50°	2025	2010	2004
55°	1977	1949	1947
60°	1895	1861	1861
65°	1773	1731	1736
70°	1595	1546	1542
75°	1339	1286	1280
80°	979	930	969
85°	553	509	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2064 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.5	3.4
10°-20°	433.5	9.7
20°-30°	660.9	14.8
30°-40°	800.7	17.9
40°-50°	831.7	18.6
50°-60°	744.0	16.6
60°-70°	542.3	12.1
70°-80°	268.6	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°	1244.8	27.8
0°-40°	2045.5	45.7
0°-60°	3621.2	80.8
0°-90°	4480.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4480.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1585	1585	1585	1585	1585	
5°	1582	1583	1582	1582	1581	150
15°	1536	1535	1535	1536	1535	434
25°	1437	1435	1434	1433	1432	662
35°	1284	1282	1281	1279	1276	803
45°	1085	1082	1078	1076	1075	836
55°	843	837	831	831	830	751
65°	557	552	544	546	545	552
75°	258	254	247	252	246	275
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°	1585.1	1585.1	1585.1	1585.1	1585.1
2.5°	1585.1	1584.6	1584.6	1585.1	1584.0
5°	1582.3	1582.8	1582.3	1582.3	1581.1
7.5°	1576.0	1575.5	1574.9	1575.5	1573.7
10°	1565.2	1565.2	1564.6	1565.2	1564.1
12.5°	1552.1	1552.1	1552.1	1552.7	1552.1
15°	1535.6	1535.1	1535.1	1536.2	1535.1
17.5°	1516.3	1515.7	1515.7	1515.2	1514.0
20°	1492.4	1492.4	1491.8	1491.3	1489.6
22.5°	1466.8	1466.3	1464.5	1464.5	1462.3
25°	1436.7	1435.0	1433.8	1433.3	1431.6
27.5°	1403.7	1401.4	1399.7	1398.6	1396.9
30°	1366.7	1364.4	1362.7	1361.0	1359.9
32.5°	1326.9	1325.8	1322.9	1322.4	1320.1
35°	1284.3	1282.5	1280.8	1278.6	1276.3
37.5°	1238.8	1237.0	1233.1	1231.9	1230.2
40°	1190.4	1188.1	1183.0	1183.0	1181.3
42.5°	1138.6	1136.4	1133.0	1130.7	1129.5
45°	1084.6	1082.3	1078.4	1076.1	1074.9
47.5°	1027.2	1025.5	1020.9	1019.2	1017.5
50°	967.5	965.2	960.1	958.9	957.2
52.5°	904.9	903.8	896.9	896.4	894.7
55°	842.9	836.6	831.0	831.0	829.8
57.5°	774.6	770.1	762.7	762.7	761.6
60°	704.1	700.1	691.6	692.7	691.6
62.5°	635.3	626.8	618.8	622.2	619.4
65°	556.8	552.3	543.7	546.0	545.4
67.5°	485.1	476.6	468.7	473.2	470.9
70°	405.5	401.0	393.0	397.6	391.9
72.5°	330.4	326.5	318.5	323.6	317.9
75°	257.6	253.7	247.4	252.0	246.3
77.5°	188.8	186.0	180.3	184.8	186.0
80°	126.3	122.9	120.0	124.0	125.1
82.5°	73.9	71.7	70.5	71.1	73.9
85°	35.8	33.0	33.0	33.6	33.6
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)