

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: P975037

Luminaire Tested: FLR2-24-45HE-L850-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975037
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-L850-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

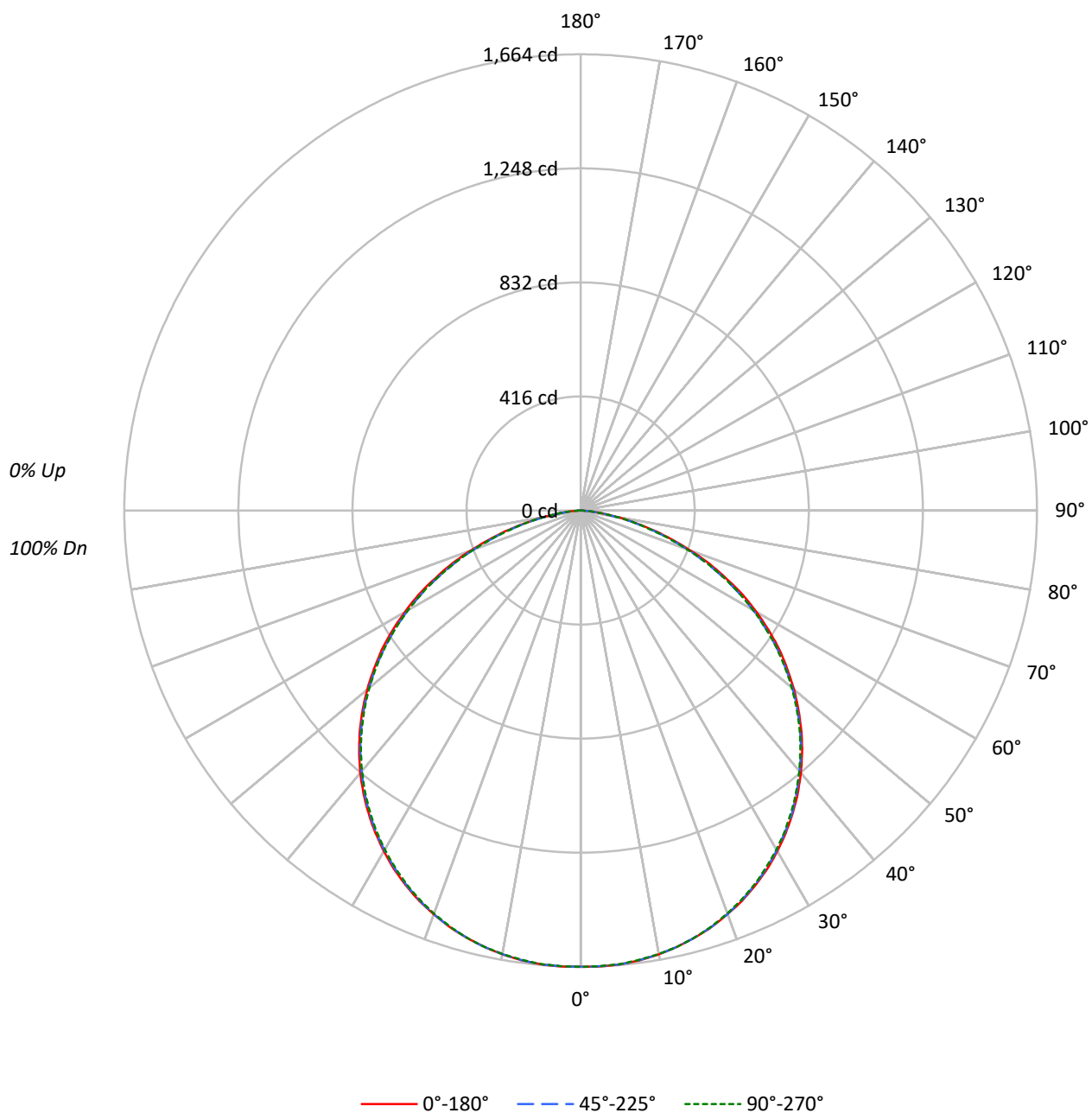
Lumens per Lamp: N/A
Luminaire Lumens: 4704.0 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2239	2239	2239
5°	2244	2244	2242
10°	2245	2245	2244
15°	2246	2245	2245
20°	2244	2243	2239
25°	2239	2235	2231
30°	2230	2223	2218
35°	2215	2209	2201
40°	2195	2182	2179
45°	2167	2155	2148
50°	2126	2110	2104
55°	2076	2047	2044
60°	1989	1954	1954
65°	1862	1818	1823
70°	1675	1624	1619
75°	1406	1351	1344
80°	1027	976	1018
85°	580	534	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2167 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.0	3.4
10°-20°	455.1	9.7
20°-30°	693.9	14.8
30°-40°	840.7	17.9
40°-50°	873.3	18.6
50°-60°	781.2	16.6
60°-70°	569.4	12.1
70°-80°	282.0	6.0
80°-90°	50.4	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°	1307.0	27.8
0°-40°	2147.8	45.7
0°-60°	3802.3	80.8
0°-90°	4704.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4704.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1664	1664	1664	1664	1664	
5°	1661	1662	1661	1661	1660	158
15°	1612	1612	1612	1613	1612	455
25°	1508	1507	1506	1505	1503	695
35°	1348	1347	1345	1342	1340	843
45°	1139	1136	1132	1130	1129	878
55°	885	878	872	872	871	789
65°	585	580	571	573	573	580
75°	270	266	260	265	259	288
85°	38	35	35	35	35	52
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1664.4	1664.4	1664.4	1664.4	1664.4
2.5°	1664.4	1663.8	1663.8	1664.4	1663.2
5°	1661.4	1662.0	1661.4	1661.4	1660.2
7.5°	1654.8	1654.2	1653.6	1654.2	1652.4
10°	1643.5	1643.5	1642.9	1643.5	1642.3
12.5°	1629.7	1629.7	1629.7	1630.3	1629.7
15°	1612.4	1611.8	1611.8	1613.0	1611.8
17.5°	1592.1	1591.5	1591.5	1590.9	1589.7
20°	1567.0	1567.0	1566.4	1565.8	1564.0
22.5°	1540.2	1539.6	1537.8	1537.8	1535.4
25°	1508.5	1506.7	1505.5	1504.9	1503.1
27.5°	1473.9	1471.5	1469.7	1468.5	1466.7
30°	1435.1	1432.7	1430.9	1429.1	1427.9
32.5°	1393.3	1392.1	1389.1	1388.5	1386.1
35°	1348.5	1346.7	1344.9	1342.5	1340.1
37.5°	1300.7	1298.9	1294.7	1293.5	1291.7
40°	1249.9	1247.5	1242.2	1242.2	1240.4
42.5°	1195.6	1193.2	1189.6	1187.2	1186.0
45°	1138.8	1136.5	1132.3	1129.9	1128.7
47.5°	1078.5	1076.7	1072.0	1070.2	1068.4
50°	1015.8	1013.4	1008.1	1006.9	1005.1
52.5°	950.1	948.9	941.8	941.2	939.4
55°	885.0	878.5	872.5	872.5	871.3
57.5°	813.4	808.6	800.8	800.8	799.6
60°	739.3	735.1	726.2	727.4	726.2
62.5°	667.1	658.1	649.7	653.3	650.3
65°	584.7	579.9	570.9	573.3	572.7
67.5°	509.4	500.4	492.1	496.9	494.5
70°	425.8	421.0	412.7	417.4	411.5
72.5°	347.0	342.8	334.4	339.8	333.8
75°	270.5	266.3	259.8	264.6	258.6
77.5°	198.3	195.3	189.3	194.1	195.3
80°	132.6	129.0	126.0	130.2	131.4
82.5°	77.6	75.2	74.1	74.6	77.6
85°	37.6	34.6	34.6	35.2	35.2
87.5°	10.2	9.0	10.2	10.7	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)