

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: P975026

Luminaire Tested: FLR2-24-45HE-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975026
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

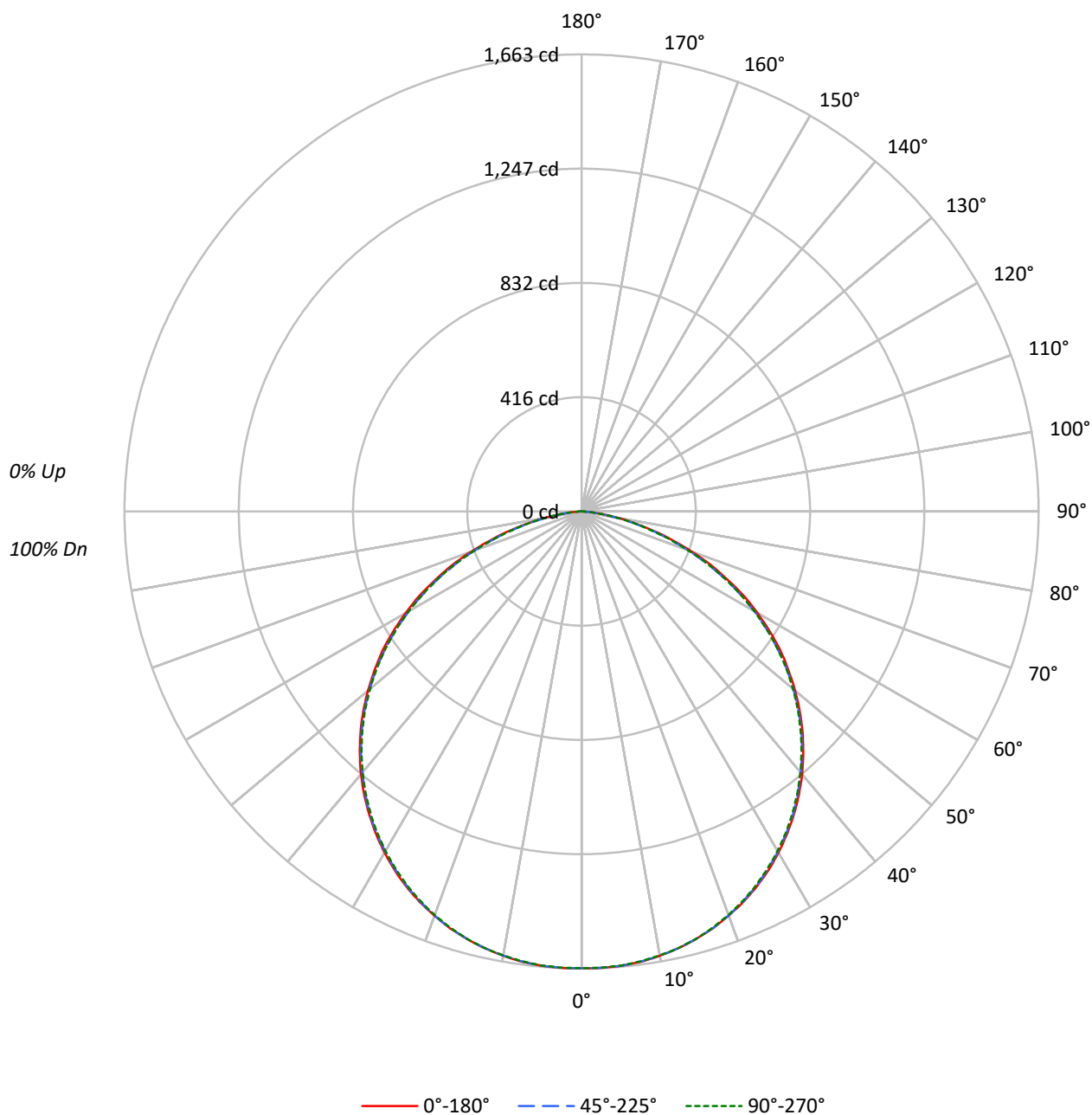
Lumens per Lamp: N/A
Luminaire Lumens: 4699.0 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2237	2237	2237
5°	2242	2242	2240
10°	2243	2242	2241
15°	2244	2243	2243
20°	2241	2241	2237
25°	2237	2233	2229
30°	2227	2221	2216
35°	2213	2207	2199
40°	2193	2179	2176
45°	2165	2152	2145
50°	2124	2108	2102
55°	2074	2045	2042
60°	1987	1952	1952
65°	1859	1816	1821
70°	1673	1622	1617
75°	1405	1349	1343
80°	1026	976	1017
85°	580	534	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2165 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.8	3.4
10°-20°	454.6	9.7
20°-30°	693.2	14.8
30°-40°	839.8	17.9
40°-50°	872.4	18.6
50°-60°	780.4	16.6
60°-70°	568.8	12.1
70°-80°	281.7	6.0
80°-90°	50.3	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°	1305.6	27.8
0°-40°	2145.4	45.7
0°-60°	3798.2	80.8
0°-90°	4699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1663	1663	1663	1663	1663	
5°	1660	1660	1660	1660	1658	158
15°	1611	1610	1610	1611	1610	455
25°	1507	1505	1504	1503	1502	694
35°	1347	1345	1343	1341	1339	843
45°	1138	1135	1131	1129	1128	877
55°	884	878	872	872	870	788
65°	584	579	570	573	572	579
75°	270	266	260	264	258	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°	1662.6	1662.6	1662.6	1662.6	1662.6
2.5°	1662.6	1662.0	1662.0	1662.6	1661.4
5°	1659.6	1660.2	1659.6	1659.6	1658.4
7.5°	1653.0	1652.4	1651.8	1652.4	1650.7
10°	1641.7	1641.7	1641.1	1641.7	1640.5
12.5°	1628.0	1628.0	1628.0	1628.6	1628.0
15°	1610.7	1610.1	1610.1	1611.3	1610.1
17.5°	1590.4	1589.8	1589.8	1589.2	1588.0
20°	1565.3	1565.3	1564.8	1564.2	1562.4
22.5°	1538.5	1537.9	1536.1	1536.1	1533.7
25°	1506.9	1505.1	1503.9	1503.3	1501.5
27.5°	1472.3	1469.9	1468.1	1466.9	1465.1
30°	1433.5	1431.1	1429.3	1427.5	1426.4
32.5°	1391.8	1390.6	1387.6	1387.0	1384.6
35°	1347.0	1345.2	1343.4	1341.0	1338.7
37.5°	1299.3	1297.5	1293.3	1292.1	1290.3
40°	1248.6	1246.2	1240.8	1240.8	1239.0
42.5°	1194.3	1191.9	1188.3	1185.9	1184.7
45°	1137.6	1135.2	1131.1	1128.7	1127.5
47.5°	1077.4	1075.6	1070.8	1069.0	1067.2
50°	1014.7	1012.3	1007.0	1005.8	1004.0
52.5°	949.1	947.9	940.8	940.2	938.4
55°	884.1	877.5	871.6	871.6	870.4
57.5°	812.5	807.7	800.0	800.0	798.8
60°	738.5	734.4	725.4	726.6	725.4
62.5°	666.3	657.4	649.0	652.6	649.6
65°	584.0	579.3	570.3	572.7	572.1
67.5°	508.9	499.9	491.6	496.3	493.9
70°	425.3	420.6	412.2	417.0	411.0
72.5°	346.6	342.4	334.1	339.4	333.5
75°	270.2	266.1	259.5	264.3	258.3
77.5°	198.1	195.1	189.1	193.9	195.1
80°	132.4	128.9	125.9	130.0	131.2
82.5°	77.6	75.2	74.0	74.6	77.6
85°	37.6	34.6	34.6	35.2	35.2
87.5°	10.1	8.9	10.1	10.7	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)