

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: P975025

Luminaire Tested: FLR2-24-40HE-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975025
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: FLR2-24-40HE-L850-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

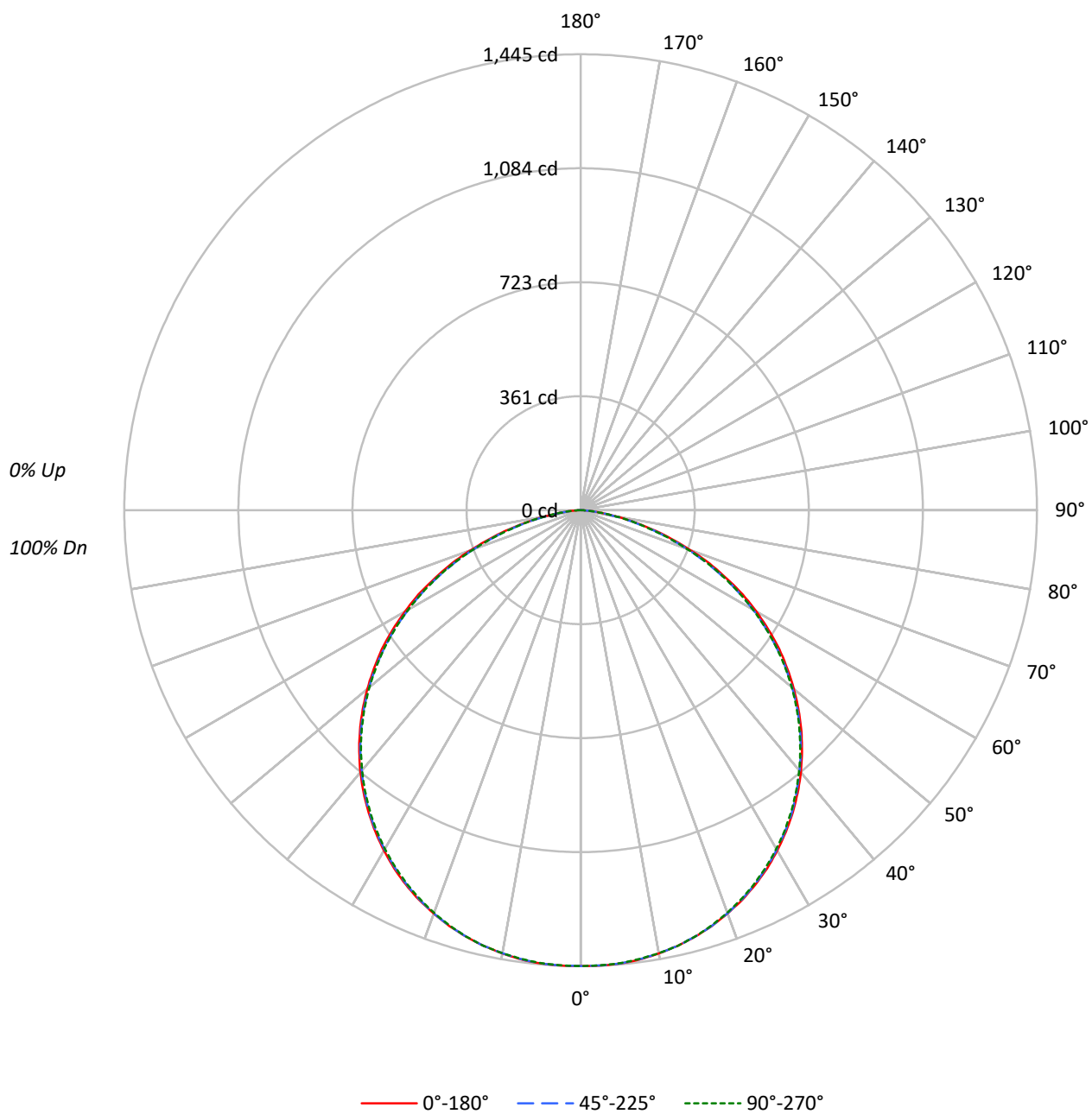
Lumens per Lamp: N/A
Luminaire Lumens: 4083.5 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.9
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°	1944	1944	1944
5°	1948	1948	1947
10°	1949	1948	1948
15°	1950	1949	1949
20°	1948	1947	1944
25°	1944	1940	1937
30°	1935	1930	1926
35°	1923	1918	1911
40°	1906	1894	1891
45°	1881	1870	1864
50°	1846	1832	1826
55°	1802	1777	1774
60°	1727	1696	1696
65°	1616	1578	1583
70°	1454	1409	1405
75°	1221	1172	1167
80°	892	848	883
85°	505	465	472

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	3.4
10°-20°	395.1	9.7
20°-30°	602.4	14.8
30°-40°	729.8	17.9
40°-50°	758.1	18.6
50°-60°	678.2	16.6
60°-70°	494.3	12.1
70°-80°	244.8	6.0
80°-90°	43.8	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°	1134.6	27.8
0°-40°	1864.4	45.7
0°-60°	3300.7	80.8
0°-90°	4083.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4083.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1442	1443	1442	1442	1441	137
15°	1400	1399	1399	1400	1399	395
25°	1310	1308	1307	1306	1305	604
35°	1171	1169	1168	1165	1163	732
45°	989	986	983	981	980	762
55°	768	763	757	757	756	685
65°	508	503	496	498	497	503
75°	235	231	226	230	224	250
85°	33	30	30	31	31	45
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1444.8	1444.8	1444.8	1444.8	1444.8
2.5°	1444.8	1444.3	1444.3	1444.8	1443.8
5°	1442.2	1442.7	1442.2	1442.2	1441.2
7.5°	1436.5	1436.0	1435.5	1436.0	1434.4
10°	1426.7	1426.7	1426.1	1426.7	1425.6
12.5°	1414.7	1414.7	1414.7	1415.3	1414.7
15°	1399.7	1399.2	1399.2	1400.2	1399.2
17.5°	1382.1	1381.6	1381.6	1381.0	1380.0
20°	1360.3	1360.3	1359.8	1359.3	1357.7
22.5°	1337.0	1336.5	1334.9	1334.9	1332.8
25°	1309.5	1307.9	1306.9	1306.4	1304.8
27.5°	1279.4	1277.4	1275.8	1274.8	1273.2
30°	1245.7	1243.7	1242.1	1240.6	1239.5
32.5°	1209.4	1208.4	1205.8	1205.3	1203.2
35°	1170.6	1169.0	1167.5	1165.4	1163.3
37.5°	1129.1	1127.5	1123.9	1122.9	1121.3
40°	1085.0	1083.0	1078.3	1078.3	1076.7
42.5°	1037.9	1035.8	1032.7	1030.6	1029.6
45°	988.6	986.5	982.9	980.8	979.8
47.5°	936.2	934.7	930.5	929.0	927.4
50°	881.8	879.7	875.1	874.0	872.5
52.5°	824.8	823.8	817.5	817.0	815.5
55°	768.3	762.6	757.4	757.4	756.4
57.5°	706.1	701.9	695.2	695.2	694.1
60°	641.8	638.2	630.4	631.4	630.4
62.5°	579.1	571.3	564.0	567.1	564.5
65°	507.5	503.4	495.6	497.7	497.2
67.5°	442.2	434.4	427.2	431.3	429.2
70°	369.6	365.5	358.2	362.4	357.2
72.5°	301.2	297.6	290.3	295.0	289.8
75°	234.8	231.2	225.5	229.7	224.5
77.5°	172.1	169.5	164.3	168.5	169.5
80°	115.1	112.0	109.4	113.0	114.0
82.5°	67.4	65.3	64.3	64.8	67.4
85°	32.7	30.1	30.1	30.6	30.6
87.5°	8.8	7.8	8.8	9.3	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)