

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: P975107

Luminaire Tested: FLR2-24-80HE-L950-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975107
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: FLR2-24-80HE-L950-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

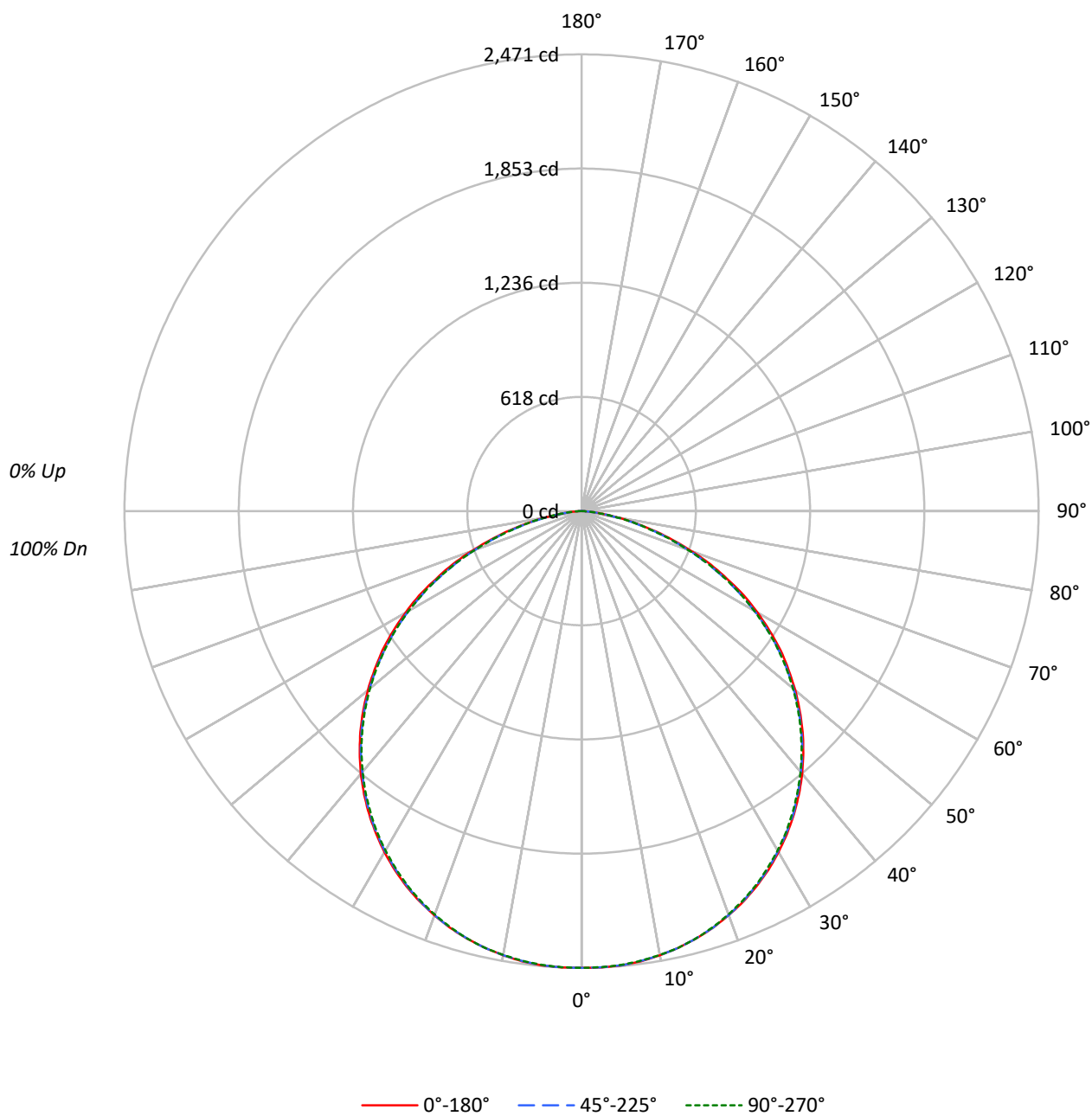
Lumens per Lamp: N/A
Luminaire Lumens: 6984.6 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 63.5
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3325	3325	3325
5°	3332	3332	3329
10°	3334	3333	3332
15°	3335	3334	3334
20°	3331	3330	3325
25°	3325	3319	3313
30°	3310	3301	3294
35°	3289	3280	3268
40°	3260	3240	3235
45°	3218	3199	3189
50°	3157	3133	3124
55°	3083	3039	3035
60°	2954	2901	2901
65°	2764	2699	2707
70°	2487	2410	2403
75°	2088	2005	1996
80°	1526	1450	1512
85°	863	794	807

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3218 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.6	3.4
10°-20°	675.8	9.7
20°-30°	1030.3	14.8
30°-40°	1248.3	17.9
40°-50°	1296.7	18.6
50°-60°	1160.0	16.6
60°-70°	845.4	12.1
70°-80°	418.7	6.0
80°-90°	74.8	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°	1940.7	27.8
0°-40°	3189.0	45.7
0°-60°	5645.7	80.8
0°-90°	6984.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6984.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2471	2471	2471	2471	2471	
5°	2467	2468	2467	2467	2465	235
15°	2394	2393	2393	2395	2393	676
25°	2240	2237	2235	2234	2232	1032
35°	2002	2000	1997	1993	1990	1252
45°	1691	1687	1681	1678	1676	1303
55°	1314	1304	1296	1296	1294	1171
65°	868	861	848	851	850	861
75°	402	396	386	393	384	428
85°	56	51	51	52	52	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2471.3	2471.3	2471.3	2471.3	2471.3
2.5°	2471.3	2470.4	2470.4	2471.3	2469.5
5°	2466.8	2467.7	2466.8	2466.8	2465.1
7.5°	2457.1	2456.2	2455.3	2456.2	2453.5
10°	2440.2	2440.2	2439.4	2440.2	2438.5
12.5°	2419.8	2419.8	2419.8	2420.7	2419.8
15°	2394.1	2393.2	2393.2	2395.0	2393.2
17.5°	2364.0	2363.1	2363.1	2362.2	2360.4
20°	2326.7	2326.7	2325.9	2325.0	2322.3
22.5°	2286.8	2286.0	2283.3	2283.3	2279.7
25°	2239.8	2237.2	2235.4	2234.5	2231.9
27.5°	2188.4	2184.9	2182.2	2180.4	2177.8
30°	2130.8	2127.2	2124.6	2121.9	2120.1
32.5°	2068.7	2066.9	2062.5	2061.6	2058.1
35°	2002.2	1999.5	1996.9	1993.3	1989.8
37.5°	1931.3	1928.6	1922.4	1920.6	1918.0
40°	1855.9	1852.4	1844.4	1844.4	1841.7
42.5°	1775.2	1771.7	1766.3	1762.8	1761.0
45°	1691.0	1687.4	1681.2	1677.7	1675.9
47.5°	1601.4	1598.8	1591.7	1589.0	1586.3
50°	1508.3	1504.8	1496.8	1495.0	1492.3
52.5°	1410.8	1409.0	1398.4	1397.5	1394.8
55°	1314.1	1304.4	1295.5	1295.5	1293.7
57.5°	1207.7	1200.6	1189.1	1189.1	1187.3
60°	1097.8	1091.5	1078.2	1080.0	1078.2
62.5°	990.5	977.2	964.7	970.1	965.6
65°	868.1	861.0	847.7	851.2	850.4
67.5°	756.4	743.1	730.7	737.7	734.2
70°	632.2	625.1	612.7	619.8	610.9
72.5°	515.2	509.0	496.6	504.5	495.7
75°	401.7	395.5	385.7	392.8	383.9
77.5°	294.4	290.0	281.1	288.2	290.0
80°	196.9	191.5	187.1	193.3	195.1
82.5°	115.3	111.7	110.0	110.8	115.3
85°	55.9	51.4	51.4	52.3	52.3
87.5°	15.1	13.3	15.1	16.0	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)