

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: P974820

Luminaire Tested: FLR2-24-72HE-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974820
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: FLR2-24-72HE-L840-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

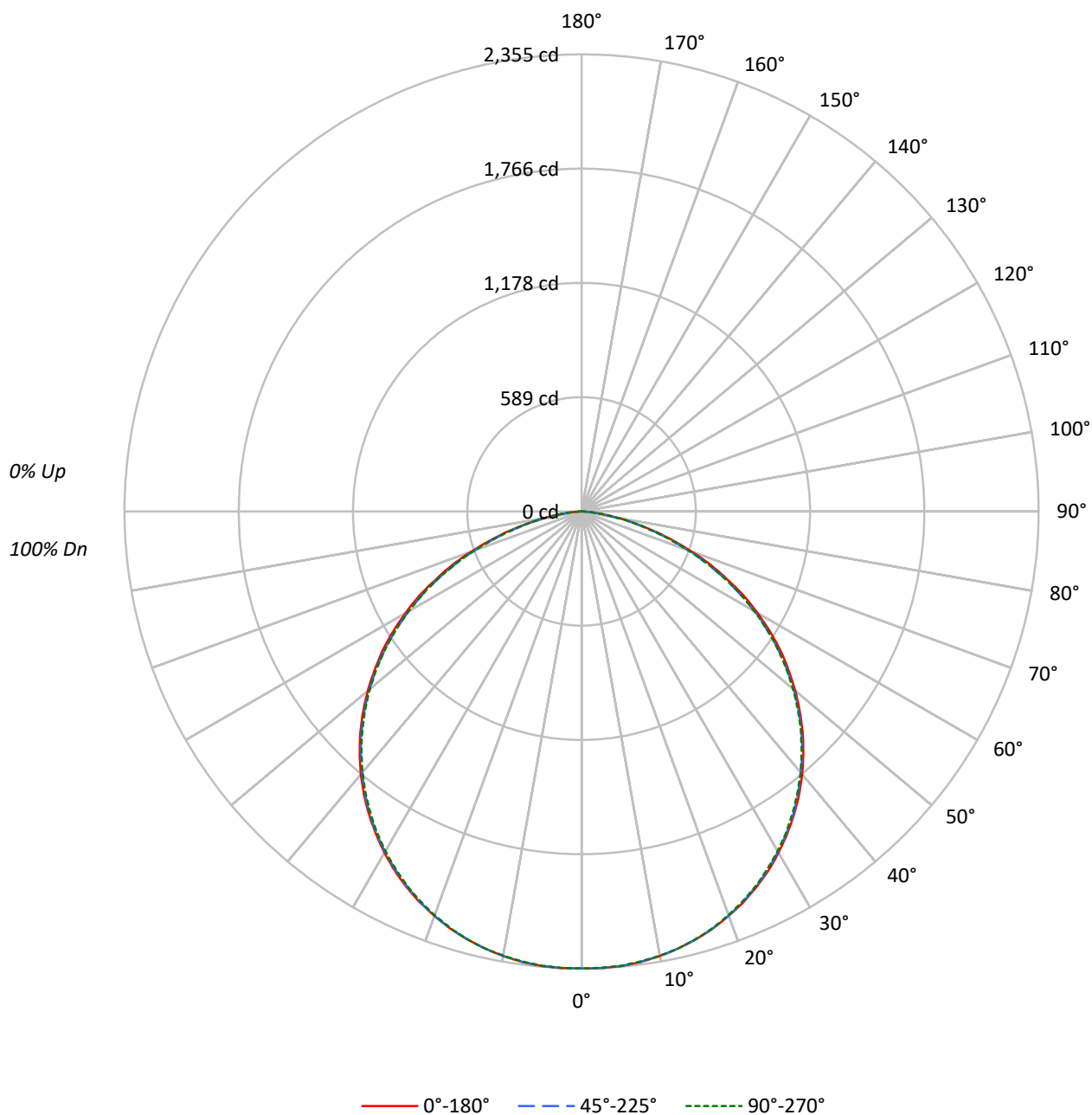
Lumens per Lamp: N/A
Luminaire Lumens: 6657.0 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 53.6
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°	3169	3169	3169
5°	3176	3176	3173
10°	3178	3177	3175
15°	3179	3177	3177
20°	3175	3174	3169
25°	3169	3163	3158
30°	3155	3146	3139
35°	3134	3126	3115
40°	3107	3088	3083
45°	3067	3049	3039
50°	3009	2986	2977
55°	2938	2896	2892
60°	2816	2766	2766
65°	2634	2572	2580
70°	2371	2297	2291
75°	1990	1911	1902
80°	1454	1382	1440
85°	821	756	770

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3067 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.6	3.4
10°-20°	644.1	9.7
20°-30°	982.0	14.8
30°-40°	1189.8	17.9
40°-50°	1235.9	18.6
50°-60°	1105.6	16.6
60°-70°	805.8	12.1
70°-80°	399.0	6.0
80°-90°	71.3	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°	1849.7	27.8
0°-40°	3039.5	45.7
0°-60°	5380.9	80.8
0°-90°	6657.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6657.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2355	2355	2355	2355	2355	
5°	2351	2352	2351	2351	2350	224
15°	2282	2281	2281	2283	2281	644
25°	2135	2132	2131	2130	2127	984
35°	1908	1906	1903	1900	1896	1194
45°	1612	1608	1602	1599	1597	1242
55°	1252	1243	1235	1235	1233	1116
65°	827	821	808	811	810	820
75°	383	377	368	374	366	408
85°	53	49	49	50	50	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2355.4	2355.4	2355.4	2355.4	2355.4
2.5°	2355.4	2354.5	2354.5	2355.4	2353.7
5°	2351.2	2352.0	2351.2	2351.2	2349.5
7.5°	2341.9	2341.0	2340.2	2341.0	2338.5
10°	2325.8	2325.8	2325.0	2325.8	2324.1
12.5°	2306.4	2306.4	2306.4	2307.2	2306.4
15°	2281.9	2281.0	2281.0	2282.7	2281.0
17.5°	2253.1	2252.3	2252.3	2251.4	2249.7
20°	2217.6	2217.6	2216.8	2215.9	2213.4
22.5°	2179.6	2178.7	2176.2	2176.2	2172.8
25°	2134.8	2132.3	2130.6	2129.7	2127.2
27.5°	2085.8	2082.4	2079.9	2078.2	2075.6
30°	2030.8	2027.5	2024.9	2022.4	2020.7
32.5°	1971.7	1970.0	1965.8	1964.9	1961.5
35°	1908.3	1905.8	1903.2	1899.9	1896.5
37.5°	1840.7	1838.2	1832.2	1830.6	1828.0
40°	1768.9	1765.5	1757.9	1757.9	1755.3
42.5°	1692.0	1688.6	1683.5	1680.1	1678.4
45°	1611.7	1608.3	1602.4	1599.0	1597.3
47.5°	1526.3	1523.8	1517.0	1514.5	1511.9
50°	1437.6	1434.2	1426.6	1424.9	1422.4
52.5°	1344.6	1342.9	1332.8	1331.9	1329.4
55°	1252.5	1243.2	1234.7	1234.7	1233.0
57.5°	1151.1	1144.3	1133.3	1133.3	1131.6
60°	1046.3	1040.4	1027.7	1029.4	1027.7
62.5°	944.0	931.3	919.5	924.6	920.3
65°	827.4	820.6	807.9	811.3	810.5
67.5°	720.9	708.2	696.4	703.1	699.8
70°	602.6	595.8	584.0	590.7	582.3
72.5°	491.0	485.1	473.3	480.9	472.4
75°	382.8	376.9	367.6	374.4	365.9
77.5°	280.6	276.4	267.9	274.7	276.4
80°	187.6	182.5	178.3	184.2	185.9
82.5°	109.9	106.5	104.8	105.6	109.9
85°	53.2	49.0	49.0	49.9	49.9
87.5°	14.4	12.7	14.4	15.2	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)