

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: P974854

Luminaire Tested: FLR2-24-80HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974854
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-L840-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

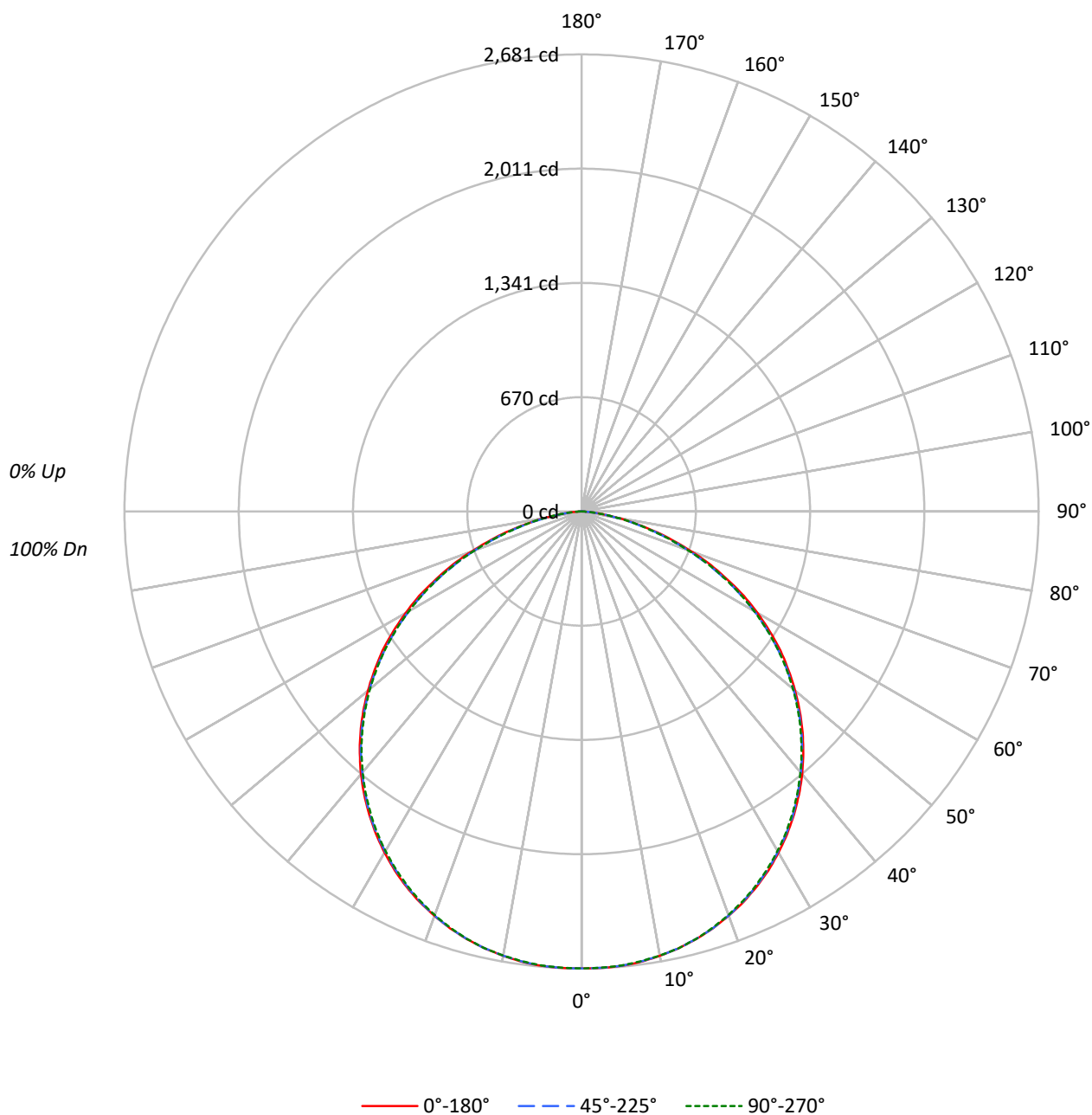
Lumens per Lamp: N/A
Luminaire Lumens: 7576.4 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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°	3607	3607	3607
5°	3614	3614	3611
10°	3616	3615	3614
15°	3617	3616	3616
20°	3614	3612	3607
25°	3607	3600	3594
30°	3591	3581	3573
35°	3567	3558	3545
40°	3536	3514	3509
45°	3490	3470	3459
50°	3425	3399	3388
55°	3344	3297	3292
60°	3204	3147	3147
65°	2998	2927	2937
70°	2698	2615	2607
75°	2265	2175	2165
80°	1654	1572	1640
85°	936	861	875

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3490 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.4	3.4
10°-20°	733.0	9.7
20°-30°	1117.6	14.8
30°-40°	1354.1	17.9
40°-50°	1406.5	18.6
50°-60°	1258.3	16.6
60°-70°	917.0	12.1
70°-80°	454.1	6.0
80°-90°	81.2	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°	2105.1	27.8
0°-40°	3459.2	45.7
0°-60°	6124.0	80.8
0°-90°	7576.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7576.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2681	2681	2681	2681	2681	
5°	2676	2677	2676	2676	2674	255
15°	2597	2596	2596	2598	2596	733
25°	2430	2427	2425	2424	2421	1120
35°	2172	2169	2166	2162	2158	1358
45°	1834	1830	1824	1820	1818	1414
55°	1426	1415	1405	1405	1403	1270
65°	942	934	920	923	922	934
75°	436	429	418	426	416	465
85°	61	56	56	57	57	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2680.7	2680.7	2680.7	2680.7	2680.7
2.5°	2680.7	2679.7	2679.7	2680.7	2678.7
5°	2675.8	2676.8	2675.8	2675.8	2673.9
7.5°	2665.3	2664.3	2663.3	2664.3	2661.4
10°	2647.0	2647.0	2646.0	2647.0	2645.1
12.5°	2624.9	2624.9	2624.9	2625.8	2624.9
15°	2597.0	2596.0	2596.0	2597.9	2596.0
17.5°	2564.3	2563.3	2563.3	2562.4	2560.4
20°	2523.9	2523.9	2522.9	2522.0	2519.1
22.5°	2480.6	2479.6	2476.7	2476.7	2472.9
25°	2429.6	2426.7	2424.8	2423.8	2421.0
27.5°	2373.8	2370.0	2367.1	2365.2	2362.3
30°	2311.3	2307.5	2304.6	2301.7	2299.8
32.5°	2244.0	2242.1	2237.2	2236.3	2232.4
35°	2171.8	2169.0	2166.1	2162.2	2158.4
37.5°	2094.9	2092.0	2085.3	2083.4	2080.5
40°	2013.1	2009.3	2000.6	2000.6	1997.7
42.5°	1925.6	1921.8	1916.0	1912.1	1910.2
45°	1834.2	1830.4	1823.7	1819.8	1817.9
47.5°	1737.1	1734.2	1726.5	1723.6	1720.7
50°	1636.1	1632.2	1623.6	1621.7	1618.8
52.5°	1530.3	1528.4	1516.8	1515.9	1513.0
55°	1425.5	1414.9	1405.3	1405.3	1403.3
57.5°	1310.0	1302.3	1289.8	1289.8	1287.9
60°	1190.8	1184.0	1169.6	1171.5	1169.6
62.5°	1074.4	1060.0	1046.5	1052.3	1047.4
65°	941.6	934.0	919.5	923.4	922.4
67.5°	820.5	806.0	792.6	800.3	796.4
70°	685.8	678.1	664.6	672.3	662.7
72.5°	558.8	552.1	538.6	547.3	537.7
75°	435.7	429.0	418.4	426.1	416.5
77.5°	319.3	314.5	304.9	312.6	314.5
80°	213.5	207.8	202.9	209.7	211.6
82.5°	125.0	121.2	119.3	120.2	125.0
85°	60.6	55.8	55.8	56.7	56.7
87.5°	16.4	14.4	16.4	17.3	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)