

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: P974930

Luminaire Tested: FLR2-24-72HE-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974930
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-L940-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

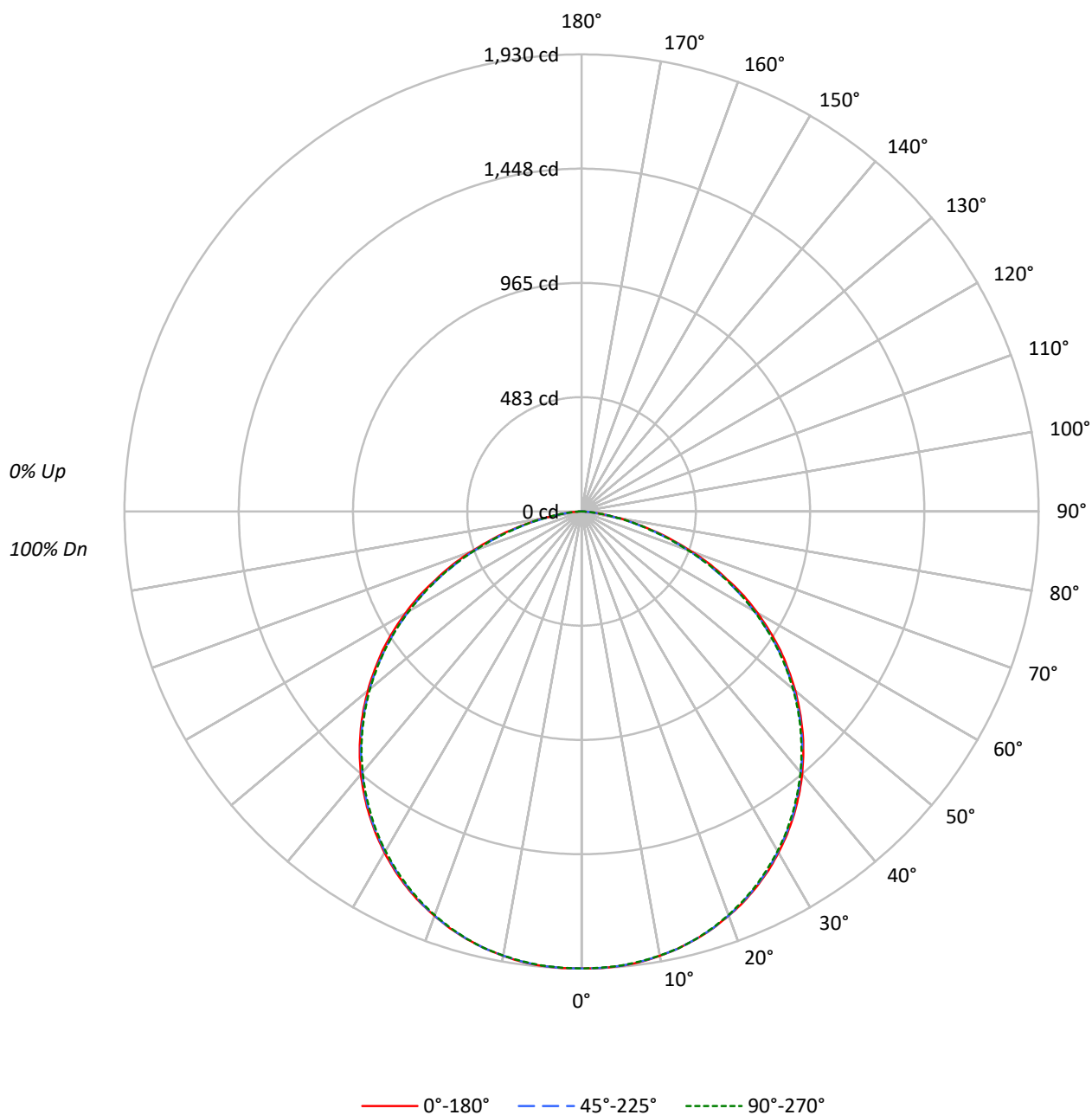
Lumens per Lamp: N/A
Luminaire Lumens: 5454.7 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2597	2597	2597
5°	2602	2602	2600
10°	2604	2603	2602
15°	2604	2603	2603
20°	2602	2601	2597
25°	2597	2592	2588
30°	2585	2578	2572
35°	2568	2562	2552
40°	2546	2530	2526
45°	2513	2498	2490
50°	2466	2447	2440
55°	2407	2373	2370
60°	2307	2266	2266
65°	2158	2108	2114
70°	1942	1882	1877
75°	1631	1566	1559
80°	1191	1132	1180
85°	673	621	631

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2513 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.2	3.4
10°-20°	527.8	9.7
20°-30°	804.6	14.8
30°-40°	974.9	17.9
40°-50°	1012.7	18.6
50°-60°	905.9	16.6
60°-70°	660.2	12.1
70°-80°	327.0	6.0
80°-90°	58.5	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°	1515.6	27.8
0°-40°	2490.5	45.7
0°-60°	4409.0	80.8
0°-90°	5454.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5454.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1930	1930	1930	1930	1930	
5°	1926	1927	1926	1926	1925	183
15°	1870	1869	1869	1870	1869	528
25°	1749	1747	1746	1745	1743	806
35°	1564	1562	1560	1557	1554	978
45°	1321	1318	1313	1310	1309	1018
55°	1026	1019	1012	1012	1010	914
65°	678	672	662	665	664	672
75°	314	309	301	307	300	334
85°	44	40	40	41	41	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1930.0	1930.0	1930.0	1930.0	1930.0
2.5°	1930.0	1929.3	1929.3	1930.0	1928.6
5°	1926.5	1927.2	1926.5	1926.5	1925.1
7.5°	1918.9	1918.2	1917.5	1918.2	1916.1
10°	1905.7	1905.7	1905.0	1905.7	1904.3
12.5°	1889.8	1889.8	1889.8	1890.5	1889.8
15°	1869.7	1869.0	1869.0	1870.4	1869.0
17.5°	1846.2	1845.5	1845.5	1844.8	1843.4
20°	1817.1	1817.1	1816.4	1815.7	1813.6
22.5°	1785.9	1785.2	1783.2	1783.2	1780.4
25°	1749.2	1747.1	1745.8	1745.1	1743.0
27.5°	1709.1	1706.3	1704.2	1702.8	1700.7
30°	1664.0	1661.3	1659.2	1657.1	1655.7
32.5°	1615.6	1614.2	1610.7	1610.0	1607.3
35°	1563.6	1561.6	1559.5	1556.7	1553.9
37.5°	1508.2	1506.2	1501.3	1499.9	1497.8
40°	1449.4	1446.6	1440.4	1440.4	1438.3
42.5°	1386.4	1383.6	1379.4	1376.7	1375.3
45°	1320.6	1317.8	1313.0	1310.2	1308.8
47.5°	1250.6	1248.6	1243.0	1240.9	1238.9
50°	1177.9	1175.1	1168.9	1167.5	1165.5
52.5°	1101.7	1100.4	1092.1	1091.4	1089.3
55°	1026.3	1018.6	1011.7	1011.7	1010.3
57.5°	943.2	937.6	928.6	928.6	927.2
60°	857.3	852.5	842.1	843.4	842.1
62.5°	773.5	763.1	753.4	757.6	754.1
65°	677.9	672.4	662.0	664.8	664.1
67.5°	590.7	580.3	570.6	576.1	573.4
70°	493.7	488.2	478.5	484.0	477.1
72.5°	402.3	397.5	387.8	394.0	387.1
75°	313.7	308.8	301.2	306.8	299.8
77.5°	229.9	226.4	219.5	225.1	226.4
80°	153.7	149.6	146.1	151.0	152.3
82.5°	90.0	87.3	85.9	86.6	90.0
85°	43.6	40.2	40.2	40.9	40.9
87.5°	11.8	10.4	11.8	12.5	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)