

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: P974897

Luminaire Tested: FLR2-24-72HE-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974897
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

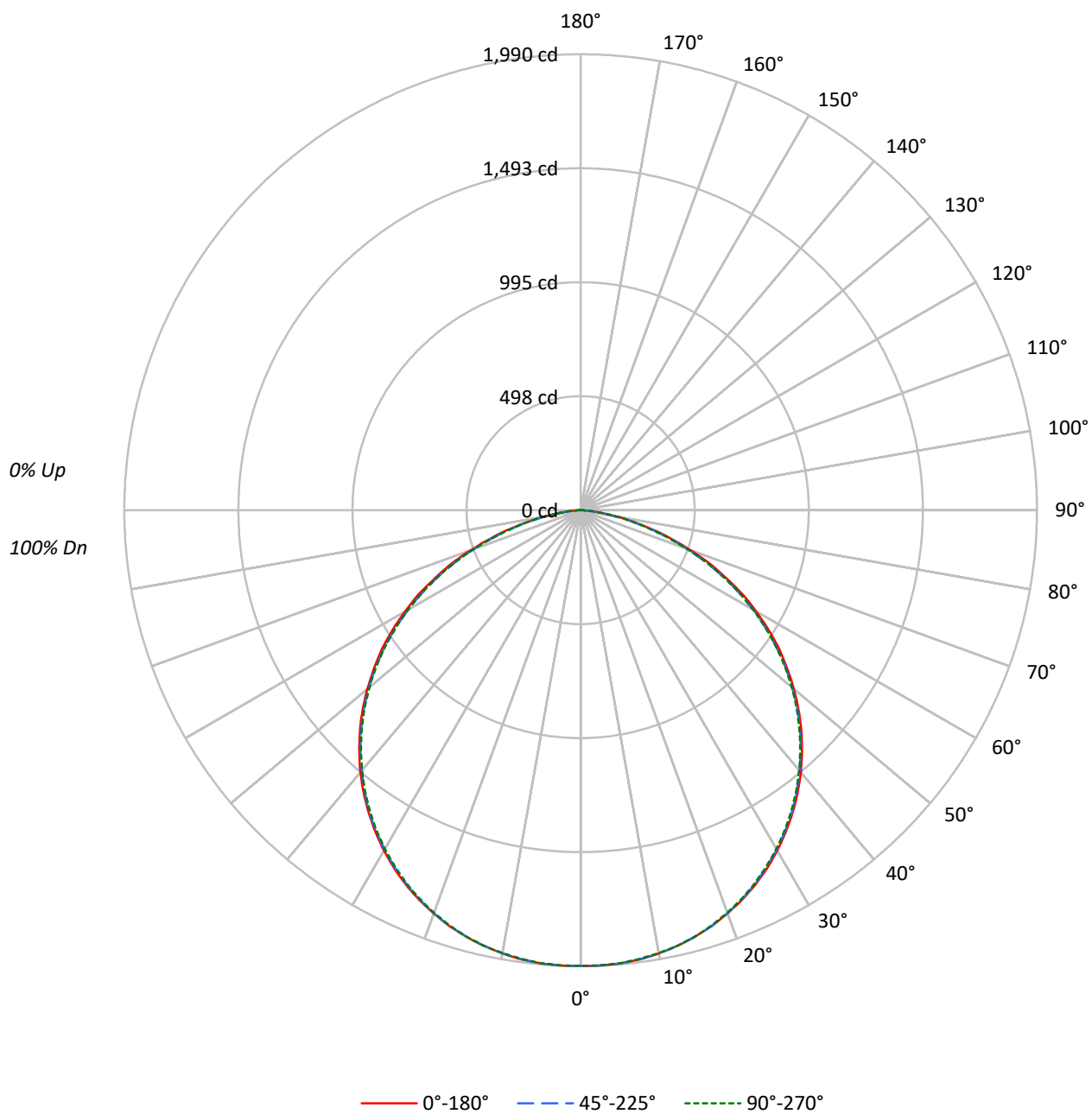
Lumens per Lamp: N/A
Luminaire Lumens: 5622.9 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2677	2677	2677
5°	2682	2682	2680
10°	2684	2683	2682
15°	2685	2684	2684
20°	2682	2681	2677
25°	2677	2672	2667
30°	2665	2657	2652
35°	2648	2641	2631
40°	2624	2608	2604
45°	2590	2575	2567
50°	2542	2522	2515
55°	2482	2446	2443
60°	2378	2336	2336
65°	2225	2173	2180
70°	2002	1941	1935
75°	1681	1614	1607
80°	1228	1167	1216
85°	695	639	650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2590 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.8	3.4
10°-20°	544.0	9.7
20°-30°	829.5	14.8
30°-40°	1005.0	17.9
40°-50°	1043.9	18.6
50°-60°	933.8	16.6
60°-70°	680.6	12.1
70°-80°	337.1	6.0
80°-90°	60.2	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°	1562.3	27.8
0°-40°	2567.3	45.7
0°-60°	4545.0	80.8
0°-90°	5622.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5622.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1990	1990	1990	1990	1990	
5°	1986	1987	1986	1986	1984	189
15°	1927	1927	1927	1928	1927	544
25°	1803	1801	1800	1799	1797	831
35°	1612	1610	1608	1605	1602	1008
45°	1361	1358	1354	1351	1349	1049
55°	1058	1050	1043	1043	1042	943
65°	699	693	682	685	685	693
75°	323	318	310	316	309	345
85°	45	41	41	42	42	62
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1989.5	1989.5	1989.5	1989.5	1989.5
2.5°	1989.5	1988.8	1988.8	1989.5	1988.1
5°	1985.9	1986.6	1985.9	1985.9	1984.5
7.5°	1978.1	1977.4	1976.6	1977.4	1975.2
10°	1964.5	1964.5	1963.8	1964.5	1963.1
12.5°	1948.1	1948.1	1948.1	1948.8	1948.1
15°	1927.4	1926.7	1926.7	1928.1	1926.7
17.5°	1903.1	1902.4	1902.4	1901.7	1900.3
20°	1873.1	1873.1	1872.4	1871.7	1869.6
22.5°	1841.0	1840.3	1838.2	1838.2	1835.3
25°	1803.2	1801.0	1799.6	1798.9	1796.8
27.5°	1761.8	1758.9	1756.8	1755.4	1753.2
30°	1715.4	1712.5	1710.4	1708.2	1706.8
32.5°	1665.4	1664.0	1660.4	1659.7	1656.8
35°	1611.9	1609.7	1607.6	1604.7	1601.9
37.5°	1554.8	1552.6	1547.6	1546.2	1544.1
40°	1494.1	1491.2	1484.8	1484.8	1482.7
42.5°	1429.1	1426.3	1422.0	1419.1	1417.7
45°	1361.3	1358.5	1353.5	1350.6	1349.2
47.5°	1289.2	1287.1	1281.4	1279.2	1277.1
50°	1214.3	1211.4	1205.0	1203.5	1201.4
52.5°	1135.7	1134.3	1125.7	1125.0	1122.9
55°	1057.9	1050.1	1042.9	1042.9	1041.5
57.5°	972.3	966.5	957.3	957.3	955.8
60°	883.7	878.7	868.0	869.5	868.0
62.5°	797.4	786.7	776.7	780.9	777.4
65°	698.9	693.1	682.4	685.3	684.6
67.5°	608.9	598.2	588.2	593.9	591.1
70°	509.0	503.3	493.3	499.0	491.8
72.5°	414.7	409.7	399.8	406.2	399.0
75°	323.4	318.4	310.5	316.2	309.1
77.5°	237.0	233.4	226.3	232.0	233.4
80°	158.5	154.2	150.6	155.6	157.0
82.5°	92.8	89.9	88.5	89.2	92.8
85°	45.0	41.4	41.4	42.1	42.1
87.5°	12.1	10.7	12.1	12.8	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)