

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: P973840

Luminaire Tested: FLR2-22-60HE-L835-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973840
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-60HE-L835-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

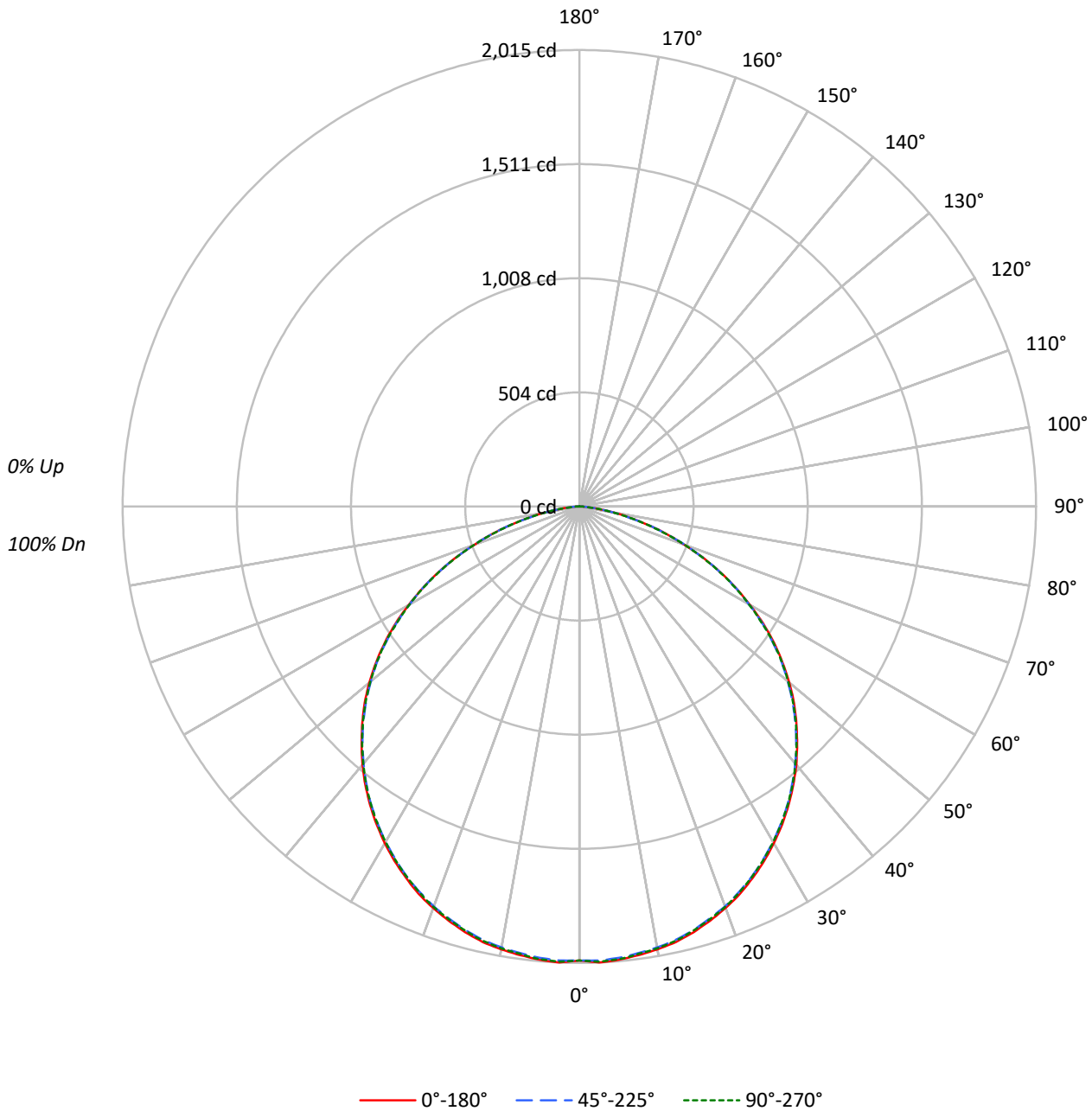
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5604.3 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 47.4
Input Voltage (V): 120
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				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5393	5393	5393
5°	5427	5403	5420
10°	5425	5402	5412
15°	5421	5397	5404
20°	5402	5381	5388
25°	5373	5351	5355
30°	5335	5312	5316
35°	5286	5266	5270
40°	5231	5205	5209
45°	5154	5130	5139
50°	5063	5027	5037
55°	4919	4878	4896
60°	4677	4656	4656
65°	4367	4358	4343
70°	3866	3886	3877
75°	3256	3230	3204
80°	2340	2301	2283
85°	1223	1223	1186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5154 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.8	3.4
10°-20°	545.7	9.7
20°-30°	829.3	14.8
30°-40°	1002.4	17.9
40°-50°	1040.4	18.6
50°-60°	930.2	16.6
60°-70°	676.3	12.1
70°-80°	332.6	5.9
80°-90°	57.7	1.0
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°	1564.8	27.9
0°-40°	2567.2	45.8
0°-60°	4537.8	81.0
0°-90°	5604.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5604.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2004	2004	2004	2004	2004	
5°	2009	1986	2000	1993	2006	191
15°	1946	1924	1937	1932	1940	549
25°	1810	1790	1802	1799	1804	834
35°	1609	1598	1603	1604	1604	1007
45°	1354	1348	1348	1350	1350	1045
55°	1048	1042	1040	1042	1044	935
65°	686	688	684	684	682	676
75°	313	316	311	312	308	332
85°	40	41	40	40	38	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2004.0	2004.0	2004.0	2004.0	2004.0
2.5°	2015.2	1991.7	2006.5	1997.8	2011.5
5°	2009.0	1985.5	2000.3	1992.9	2006.5
7.5°	1997.8	1974.3	1989.2	1981.8	1992.9
10°	1985.5	1960.7	1976.8	1969.4	1980.5
12.5°	1969.4	1945.9	1960.7	1954.5	1964.4
15°	1945.9	1923.6	1937.2	1932.2	1939.7
17.5°	1917.4	1895.1	1908.7	1905.0	1911.2
20°	1886.4	1865.4	1879.0	1875.3	1881.5
22.5°	1851.8	1829.5	1841.9	1839.4	1844.4
25°	1809.7	1789.9	1802.3	1798.6	1803.5
27.5°	1765.1	1746.6	1756.5	1756.5	1758.9
30°	1716.9	1699.5	1709.4	1709.4	1710.7
32.5°	1664.9	1651.3	1657.4	1658.7	1658.7
35°	1609.2	1598.0	1603.0	1604.2	1604.2
37.5°	1551.0	1539.9	1543.6	1546.0	1546.0
40°	1489.1	1479.2	1481.7	1484.1	1482.9
42.5°	1422.3	1414.8	1416.1	1418.5	1418.5
45°	1354.2	1348.0	1348.0	1350.5	1350.5
47.5°	1284.9	1278.7	1276.2	1278.7	1278.7
50°	1209.4	1203.2	1200.7	1203.2	1203.2
52.5°	1130.1	1123.9	1123.9	1123.9	1125.2
55°	1048.4	1042.2	1039.8	1042.2	1043.5
57.5°	961.8	959.3	955.6	956.8	953.1
60°	869.0	869.0	865.2	867.7	865.2
62.5°	778.6	781.1	777.4	777.4	774.9
65°	685.8	688.2	684.5	684.5	682.0
67.5°	590.4	594.2	589.2	589.2	586.7
70°	491.4	498.8	493.9	495.1	492.7
72.5°	402.3	406.0	401.1	401.1	398.6
75°	313.2	315.6	310.7	311.9	308.2
77.5°	225.3	229.0	224.0	225.3	224.0
80°	151.0	152.3	148.5	149.8	147.3
82.5°	87.9	89.1	87.9	86.6	85.4
85°	39.6	40.8	39.6	39.6	38.4
87.5°	9.9	9.9	9.9	9.9	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)