

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: P973978

Luminaire Tested: FLR2-22-60HE-L850-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973978  
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-L850-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

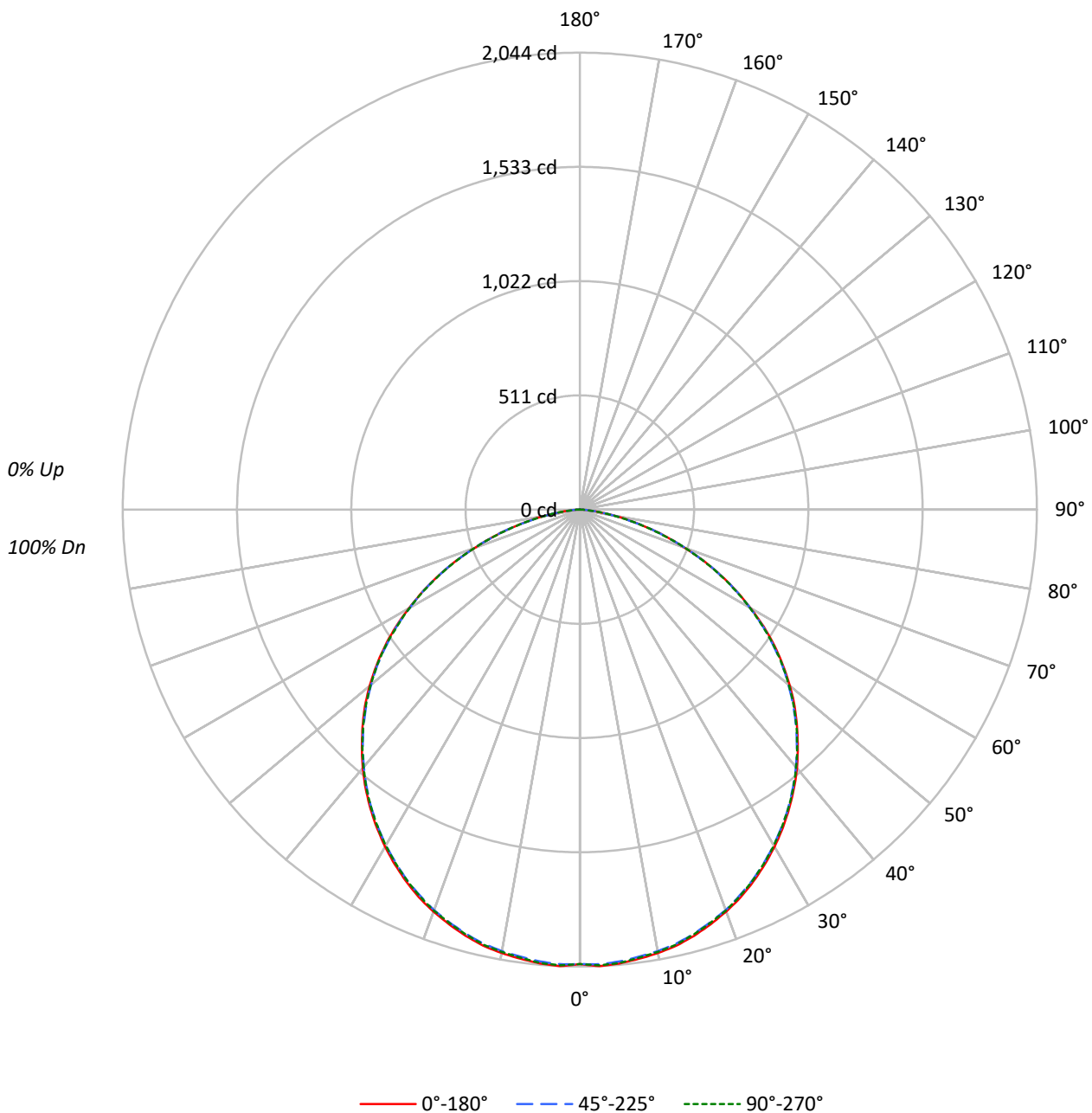
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5685.7 lumens  
Efficiency: N/A  
Efficacy: 120.0 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										
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	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						100														
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	39	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	40	34	29	27						27														
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25						25														

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5471	5471	5471
5°	5505	5482	5499
10°	5504	5480	5490
15°	5500	5475	5482
20°	5481	5459	5466
25°	5451	5429	5433
30°	5412	5389	5393
35°	5363	5342	5346
40°	5307	5280	5285
45°	5228	5204	5214
50°	5136	5099	5110
55°	4990	4949	4967
60°	4745	4724	4724
65°	4430	4422	4406
70°	3922	3943	3932
75°	3303	3277	3251
80°	2374	2335	2315
85°	1241	1241	1201

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5228 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.5	3.4
10°-20°	553.7	9.7
20°-30°	841.3	14.8
30°-40°	1016.9	17.9
40°-50°	1055.5	18.6
50°-60°	943.7	16.6
60°-70°	686.1	12.1
70°-80°	337.4	5.9
80°-90°	58.5	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°	1587.5	27.9
0°-40°	2604.4	45.8
0°-60°	4603.6	81.0
0°-90°	5685.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5685.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2033	2033	2033	2033	2033	
5°	2038	2014	2029	2022	2036	194
15°	1974	1952	1965	1960	1968	557
25°	1836	1816	1828	1825	1830	846
35°	1632	1621	1626	1628	1628	1021
45°	1374	1368	1368	1370	1370	1060
55°	1064	1057	1055	1057	1059	948
65°	696	698	694	694	692	686
75°	318	320	315	316	313	337
85°	40	41	40	40	39	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2033.1	2033.1	2033.1	2033.1	2033.1
2.5°	2044.4	2020.6	2035.6	2026.8	2040.6
5°	2038.1	2014.3	2029.3	2021.8	2035.6
7.5°	2026.8	2003.0	2018.0	2010.5	2021.8
10°	2014.3	1989.2	2005.5	1998.0	2009.3
12.5°	1998.0	1974.1	1989.2	1982.9	1992.9
15°	1974.1	1951.5	1965.3	1960.3	1967.8
17.5°	1945.2	1922.6	1936.4	1932.7	1938.9
20°	1913.8	1892.5	1906.3	1902.5	1908.8
22.5°	1878.7	1856.0	1868.6	1866.1	1871.1
25°	1836.0	1815.9	1828.4	1824.7	1829.7
27.5°	1790.7	1771.9	1782.0	1782.0	1784.5
30°	1741.8	1724.2	1734.2	1734.2	1735.5
32.5°	1689.0	1675.2	1681.5	1682.7	1682.7
35°	1632.5	1621.2	1626.2	1627.5	1627.5
37.5°	1573.5	1562.2	1566.0	1568.5	1568.5
40°	1510.7	1500.7	1503.2	1505.7	1504.4
42.5°	1442.9	1435.4	1436.6	1439.1	1439.1
45°	1373.8	1367.5	1367.5	1370.1	1370.1
47.5°	1303.5	1297.2	1294.7	1297.2	1297.2
50°	1226.9	1220.6	1218.1	1220.6	1220.6
52.5°	1146.5	1140.3	1140.3	1140.3	1141.5
55°	1063.6	1057.4	1054.9	1057.4	1058.6
57.5°	975.7	973.2	969.5	970.7	967.0
60°	881.6	881.6	877.8	880.3	877.8
62.5°	789.9	792.4	788.6	788.6	786.1
65°	695.7	698.2	694.4	694.4	691.9
67.5°	599.0	602.8	597.8	597.8	595.2
70°	498.5	506.1	501.1	502.3	499.8
72.5°	408.1	411.9	406.9	406.9	404.4
75°	317.7	320.2	315.2	316.5	312.7
77.5°	228.6	232.3	227.3	228.6	227.3
80°	153.2	154.5	150.7	151.9	149.4
82.5°	89.2	90.4	89.2	87.9	86.6
85°	40.2	41.4	40.2	40.2	38.9
87.5°	10.0	10.0	10.0	10.0	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)