

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: P973991

Luminaire Tested: FLR2-22-20HE-L850-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973991  
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: FLR2-22-20HE-L850-CP250  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

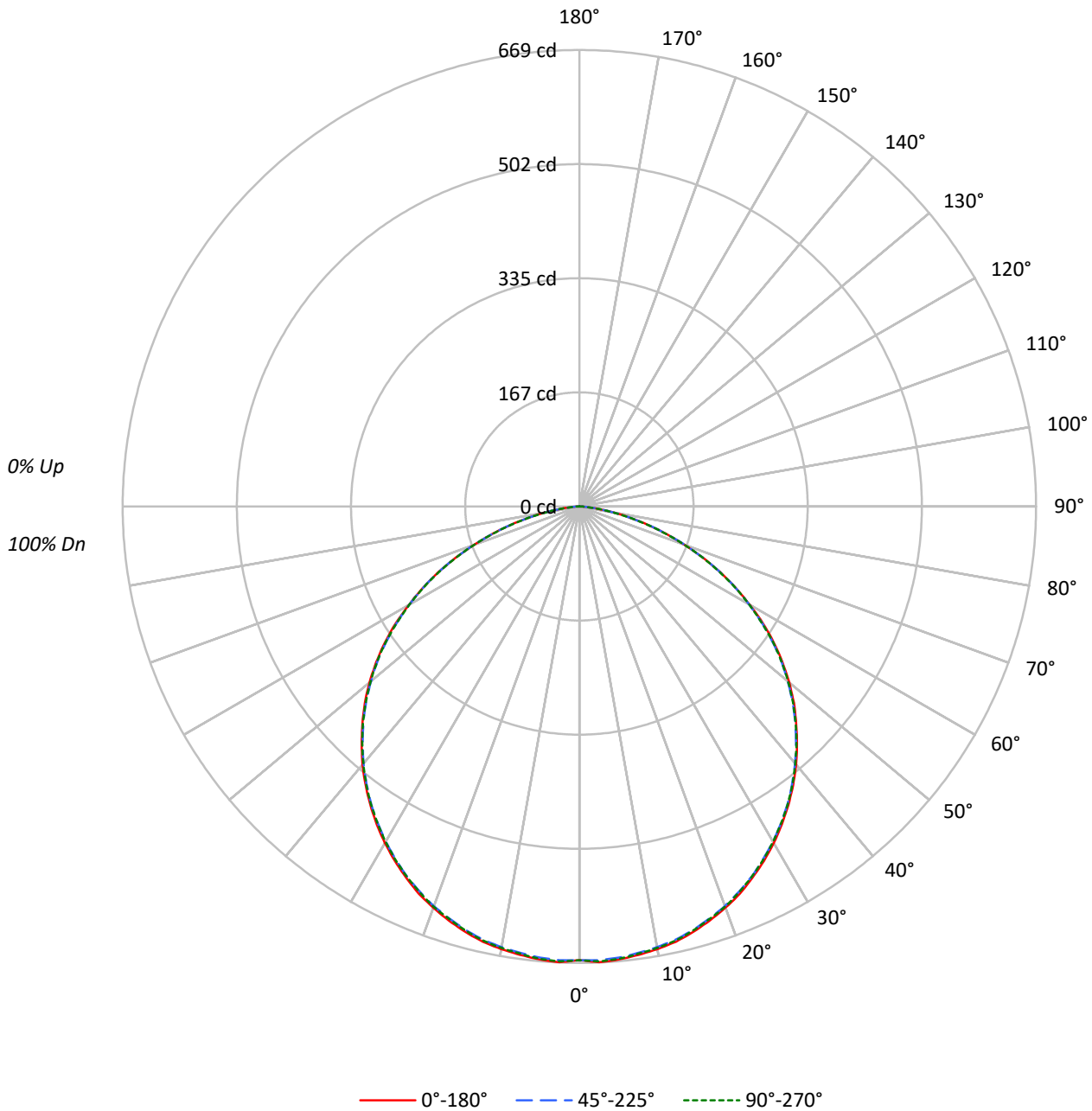
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1859.5 lumens  
Efficiency: N/A  
Efficacy: 125.6 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): 14.8  
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°	1789	1789	1789
5°	1801	1793	1798
10°	1800	1792	1796
15°	1799	1791	1793
20°	1792	1785	1788
25°	1783	1776	1777
30°	1770	1762	1764
35°	1754	1747	1749
40°	1736	1727	1728
45°	1710	1702	1705
50°	1680	1668	1671
55°	1632	1619	1624
60°	1552	1545	1545
65°	1449	1446	1441
70°	1282	1290	1286
75°	1080	1072	1064
80°	776	764	758
85°	404	404	392

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1710 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	3.4
10°-20°	181.1	9.7
20°-30°	275.2	14.8
30°-40°	332.6	17.9
40°-50°	345.2	18.6
50°-60°	308.6	16.6
60°-70°	224.4	12.1
70°-80°	110.3	5.9
80°-90°	19.1	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°	519.2	27.9
0°-40°	851.8	45.8
0°-60°	1505.6	81.0
0°-90°	1859.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1859.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	667	659	664	661	666	63
15°	646	638	643	641	644	182
25°	600	594	598	597	598	277
35°	534	530	532	532	532	334
45°	449	447	447	448	448	347
55°	348	346	345	346	346	310
65°	228	228	227	227	226	224
75°	104	105	103	104	102	110
85°	13	14	13	13	13	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	664.9	664.9	664.9	664.9	664.9
2.5°	668.6	660.8	665.7	662.9	667.4
5°	666.6	658.8	663.7	661.2	665.7
7.5°	662.9	655.1	660.0	657.5	661.2
10°	658.8	650.5	655.9	653.4	657.1
12.5°	653.4	645.6	650.5	648.5	651.8
15°	645.6	638.2	642.7	641.1	643.6
17.5°	636.2	628.8	633.3	632.1	634.1
20°	625.9	618.9	623.4	622.2	624.3
22.5°	614.4	607.0	611.1	610.3	611.9
25°	600.4	593.9	598.0	596.7	598.4
27.5°	585.7	579.5	582.8	582.8	583.6
30°	569.6	563.9	567.2	567.2	567.6
32.5°	552.4	547.9	549.9	550.3	550.3
35°	533.9	530.2	531.9	532.3	532.3
37.5°	514.6	510.9	512.1	513.0	513.0
40°	494.1	490.8	491.6	492.4	492.0
42.5°	471.9	469.4	469.8	470.7	470.7
45°	449.3	447.3	447.3	448.1	448.1
47.5°	426.3	424.3	423.4	424.3	424.3
50°	401.3	399.2	398.4	399.2	399.2
52.5°	375.0	372.9	372.9	372.9	373.3
55°	347.9	345.8	345.0	345.8	346.2
57.5°	319.1	318.3	317.1	317.5	316.2
60°	288.3	288.3	287.1	287.9	287.1
62.5°	258.3	259.2	257.9	257.9	257.1
65°	227.5	228.3	227.1	227.1	226.3
67.5°	195.9	197.1	195.5	195.5	194.7
70°	163.0	165.5	163.9	164.3	163.5
72.5°	133.5	134.7	133.1	133.1	132.2
75°	103.9	104.7	103.1	103.5	102.3
77.5°	74.7	76.0	74.3	74.7	74.3
80°	50.1	50.5	49.3	49.7	48.9
82.5°	29.2	29.6	29.2	28.7	28.3
85°	13.1	13.6	13.1	13.1	12.7
87.5°	3.3	3.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)