

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: P973835

Luminaire Tested: FLR2-22-20HE-L835-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973835  
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-L835-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

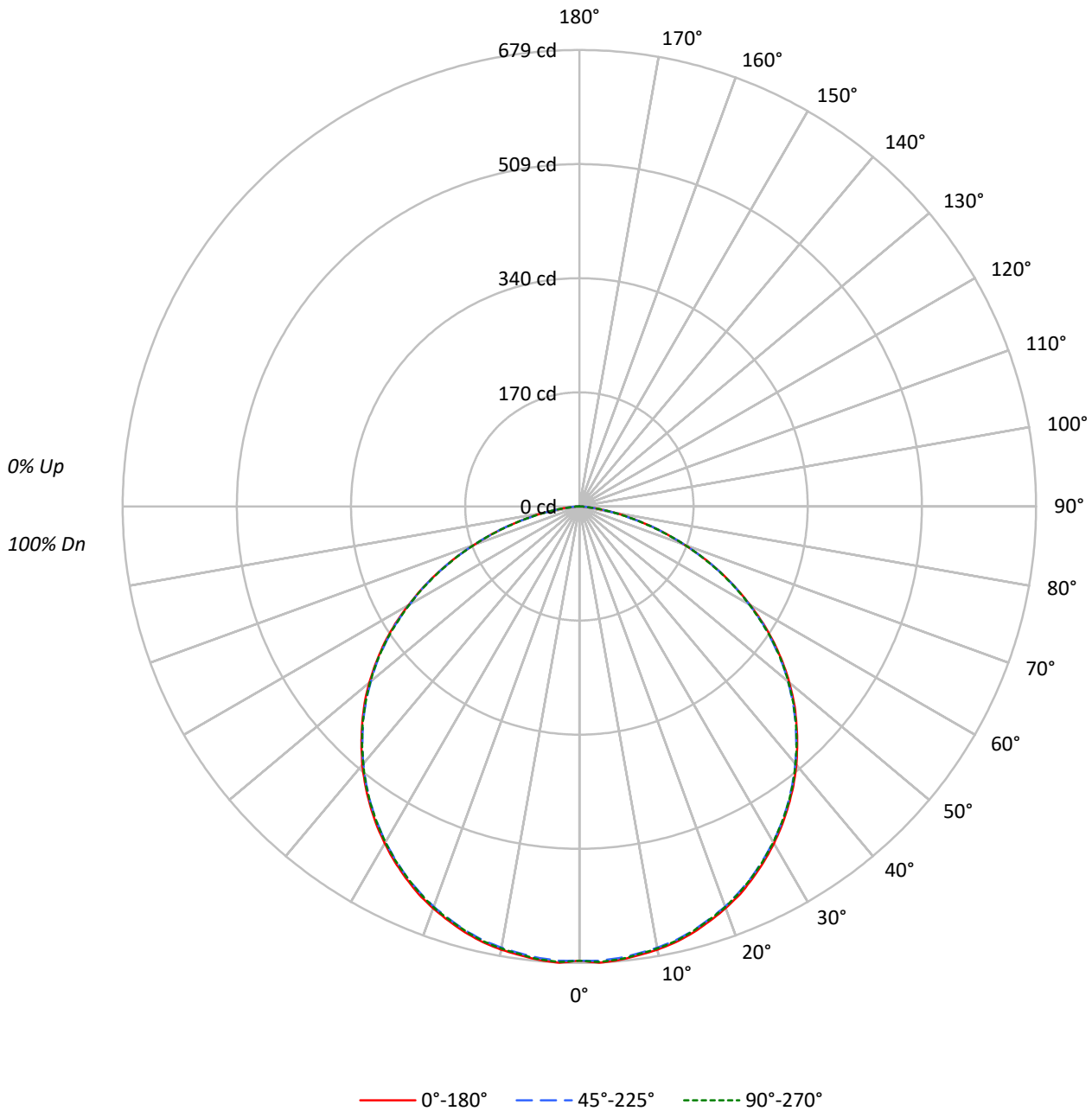
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1889.4 lumens  
Efficiency: N/A  
Efficacy: 127.7 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°	1818	1818	1818
5°	1830	1822	1827
10°	1829	1821	1824
15°	1828	1819	1822
20°	1821	1814	1816
25°	1811	1804	1805
30°	1798	1791	1792
35°	1782	1775	1777
40°	1763	1755	1756
45°	1737	1730	1733
50°	1707	1695	1698
55°	1658	1644	1650
60°	1577	1570	1570
65°	1472	1470	1464
70°	1304	1310	1307
75°	1098	1089	1080
80°	789	776	770
85°	414	414	398

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1737 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.0	3.4
10°-20°	184.0	9.7
20°-30°	279.6	14.8
30°-40°	337.9	17.9
40°-50°	350.8	18.6
50°-60°	313.6	16.6
60°-70°	228.0	12.1
70°-80°	112.1	5.9
80°-90°	19.4	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°	527.5	27.9
0°-40°	865.5	45.8
0°-60°	1529.8	81.0
0°-90°	1889.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1889.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	676	676	676	676	676	
5°	677	669	674	672	676	64
15°	656	648	653	651	654	185
25°	610	603	608	606	608	281
35°	542	539	540	541	541	339
45°	456	454	454	455	455	352
55°	354	351	350	351	352	315
65°	231	232	231	231	230	228
75°	106	106	105	105	104	112
85°	13	14	13	13	13	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	675.6	675.6	675.6	675.6	675.6
2.5°	679.4	671.5	676.5	673.5	678.1
5°	677.3	669.4	674.4	671.9	676.5
7.5°	673.5	665.6	670.6	668.1	671.9
10°	669.4	661.0	666.5	663.9	667.7
12.5°	663.9	656.0	661.0	658.9	662.3
15°	656.0	648.5	653.1	651.4	653.9
17.5°	646.4	638.9	643.5	642.2	644.3
20°	636.0	628.9	633.5	632.2	634.3
22.5°	624.3	616.8	621.0	620.1	621.8
25°	610.1	603.4	607.6	606.4	608.0
27.5°	595.1	588.8	592.2	592.2	593.0
30°	578.8	573.0	576.3	576.3	576.7
32.5°	561.3	556.7	558.8	559.2	559.2
35°	542.5	538.8	540.4	540.8	540.8
37.5°	522.9	519.1	520.4	521.2	521.2
40°	502.0	498.7	499.5	500.4	499.9
42.5°	479.5	477.0	477.4	478.2	478.2
45°	456.5	454.5	454.5	455.3	455.3
47.5°	433.2	431.1	430.3	431.1	431.1
50°	407.7	405.6	404.8	405.6	405.6
52.5°	381.0	378.9	378.9	378.9	379.3
55°	353.5	351.4	350.5	351.4	351.8
57.5°	324.3	323.4	322.2	322.6	321.3
60°	293.0	293.0	291.7	292.5	291.7
62.5°	262.5	263.3	262.1	262.1	261.2
65°	231.2	232.0	230.8	230.8	229.9
67.5°	199.1	200.3	198.6	198.6	197.8
70°	165.7	168.2	166.5	166.9	166.1
72.5°	135.6	136.9	135.2	135.2	134.4
75°	105.6	106.4	104.7	105.2	103.9
77.5°	76.0	77.2	75.5	76.0	75.5
80°	50.9	51.3	50.1	50.5	49.7
82.5°	29.6	30.0	29.6	29.2	28.8
85°	13.4	13.8	13.4	13.4	12.9
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)