

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: P973817

Luminaire Tested: FLR2-22-20HE-L835-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973817  
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-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

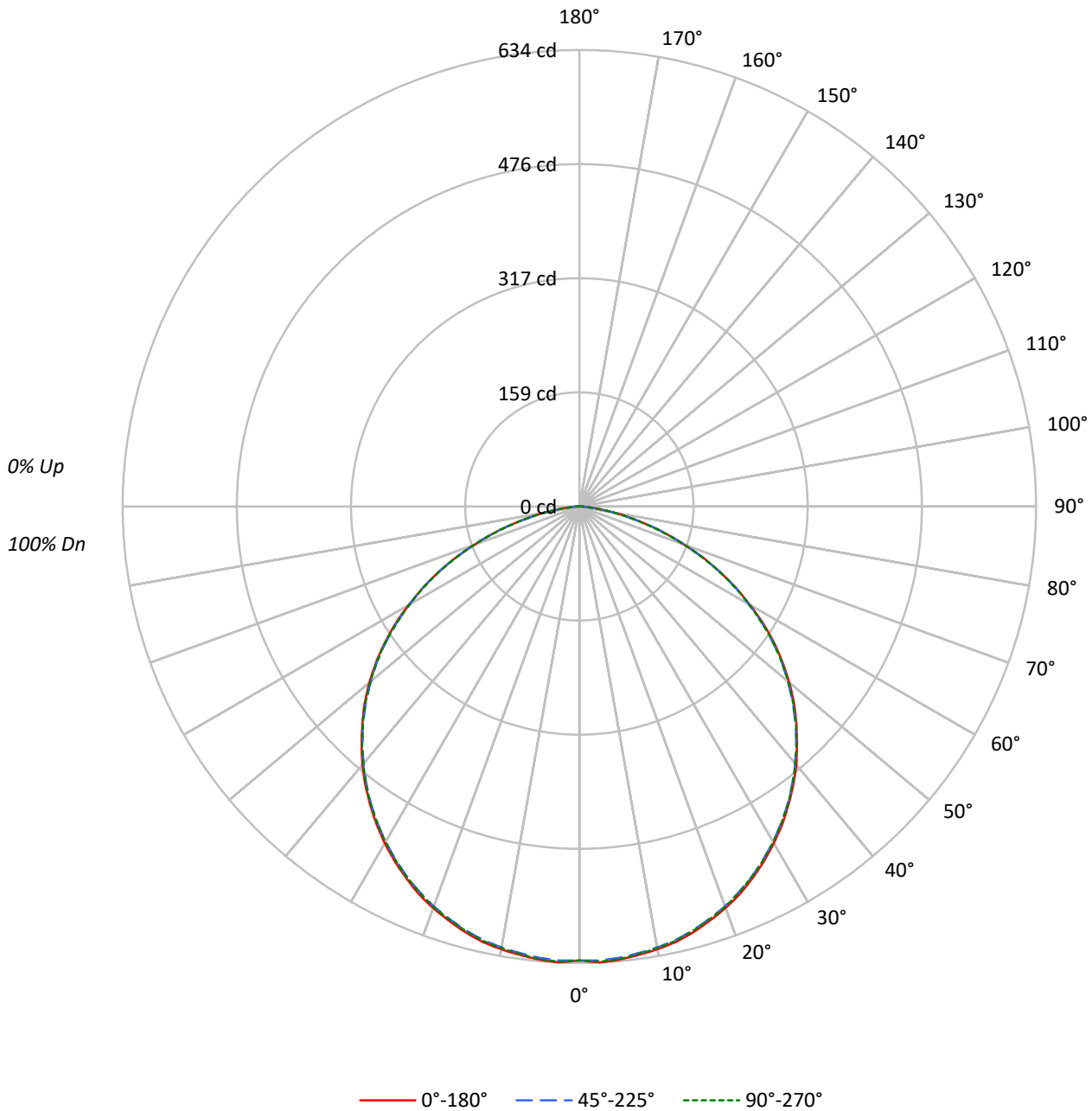
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1763.1 lumens  
Efficiency: N/A  
Efficacy: 119.1 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°	1697	1697	1697
5°	1707	1700	1705
10°	1707	1699	1703
15°	1706	1698	1700
20°	1700	1693	1695
25°	1690	1684	1685
30°	1678	1671	1672
35°	1663	1657	1658
40°	1646	1637	1639
45°	1621	1614	1617
50°	1593	1581	1585
55°	1547	1535	1540
60°	1471	1465	1465
65°	1373	1371	1366
70°	1216	1223	1220
75°	1024	1016	1009
80°	736	724	717
85°	386	386	374

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1621 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	3.4
10°-20°	171.7	9.7
20°-30°	260.9	14.8
30°-40°	315.3	17.9
40°-50°	327.3	18.6
50°-60°	292.6	16.6
60°-70°	212.8	12.1
70°-80°	104.6	5.9
80°-90°	18.1	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°	492.3	27.9
0°-40°	807.6	45.8
0°-60°	1427.6	81.0
0°-90°	1763.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1763.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	632	625	629	627	631	60
15°	612	605	609	608	610	173
25°	569	563	567	566	567	262
35°	506	503	504	505	505	317
45°	426	424	424	425	425	329
55°	330	328	327	328	328	294
65°	216	216	215	215	215	213
75°	98	99	98	98	97	105
85°	12	13	12	12	12	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	630.5	630.5	630.5	630.5	630.5
2.5°	634.0	626.6	631.2	628.5	632.8
5°	632.0	624.6	629.3	627.0	631.2
7.5°	628.5	621.1	625.8	623.5	627.0
10°	624.6	616.8	621.9	619.6	623.1
12.5°	619.6	612.2	616.8	614.9	618.0
15°	612.2	605.2	609.4	607.9	610.2
17.5°	603.2	596.2	600.5	599.3	601.3
20°	593.5	586.9	591.1	590.0	591.9
22.5°	582.6	575.6	579.5	578.7	580.2
25°	569.3	563.1	567.0	565.8	567.4
27.5°	555.3	549.5	552.6	552.6	553.4
30°	540.1	534.7	537.8	537.8	538.2
32.5°	523.8	519.5	521.4	521.8	521.8
35°	506.2	502.7	504.3	504.7	504.7
37.5°	487.9	484.4	485.6	486.4	486.4
40°	468.5	465.4	466.1	466.9	466.5
42.5°	447.4	445.1	445.5	446.3	446.3
45°	426.0	424.1	424.1	424.9	424.9
47.5°	404.2	402.3	401.5	402.3	402.3
50°	380.5	378.5	377.7	378.5	378.5
52.5°	355.5	353.6	353.6	353.6	354.0
55°	329.8	327.9	327.1	327.9	328.3
57.5°	302.6	301.8	300.6	301.0	299.9
60°	273.4	273.4	272.2	273.0	272.2
62.5°	244.9	245.7	244.6	244.6	243.8
65°	215.7	216.5	215.3	215.3	214.6
67.5°	185.8	186.9	185.4	185.4	184.6
70°	154.6	156.9	155.4	155.8	155.0
72.5°	126.6	127.7	126.2	126.2	125.4
75°	98.5	99.3	97.7	98.1	97.0
77.5°	70.9	72.0	70.5	70.9	70.5
80°	47.5	47.9	46.7	47.1	46.3
82.5°	27.6	28.0	27.6	27.3	26.9
85°	12.5	12.9	12.5	12.5	12.1
87.5°	3.1	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)