

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: P973805

Luminaire Tested: FLR2-22-20HE-L835-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973805  
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-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

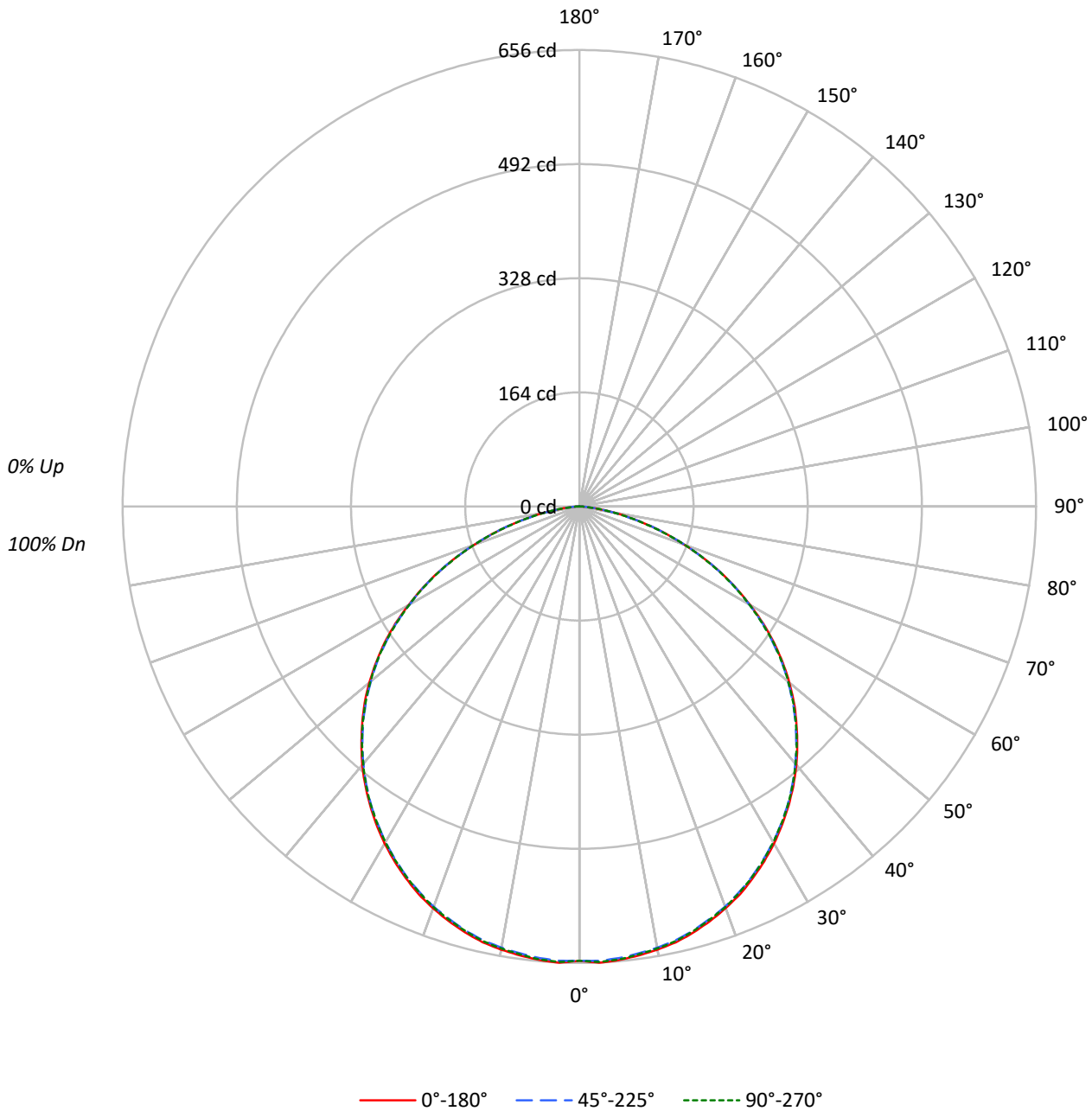
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1825.5 lumens  
Efficiency: N/A  
Efficacy: 123.3 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										
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°	1757	1757	1757
5°	1768	1760	1766
10°	1767	1759	1763
15°	1766	1758	1760
20°	1760	1753	1755
25°	1750	1743	1744
30°	1738	1730	1731
35°	1722	1715	1717
40°	1704	1695	1697
45°	1679	1671	1674
50°	1649	1637	1641
55°	1602	1589	1595
60°	1524	1517	1517
65°	1422	1420	1415
70°	1260	1266	1263
75°	1061	1052	1044
80°	762	750	744
85°	398	398	386

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1679 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.8	3.4
10°-20°	177.8	9.7
20°-30°	270.1	14.8
30°-40°	326.5	17.9
40°-50°	338.9	18.6
50°-60°	303.0	16.6
60°-70°	220.3	12.1
70°-80°	108.3	5.9
80°-90°	18.8	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°	509.7	27.9
0°-40°	836.2	45.8
0°-60°	1478.1	81.0
0°-90°	1825.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1825.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	653	653	653	653	653	
5°	654	647	652	649	654	62
15°	634	627	631	629	632	179
25°	590	583	587	586	588	272
35°	524	520	522	523	523	328
45°	441	439	439	440	440	340
55°	342	340	339	340	340	304
65°	223	224	223	223	222	220
75°	102	103	101	102	100	108
85°	13	13	13	13	12	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	652.8	652.8	652.8	652.8	652.8
2.5°	656.4	648.8	653.6	650.8	655.2
5°	654.4	646.7	651.6	649.2	653.6
7.5°	650.8	643.1	648.0	645.5	649.2
10°	646.7	638.7	643.9	641.5	645.1
12.5°	641.5	633.8	638.7	636.7	639.9
15°	633.8	626.6	631.0	629.4	631.8
17.5°	624.6	617.3	621.7	620.5	622.6
20°	614.5	607.6	612.1	610.9	612.9
22.5°	603.2	595.9	600.0	599.2	600.8
25°	589.5	583.0	587.1	585.9	587.5
27.5°	575.0	568.9	572.2	572.2	573.0
30°	559.3	553.6	556.8	556.8	557.2
32.5°	542.3	537.9	539.9	540.3	540.3
35°	524.2	520.5	522.2	522.6	522.6
37.5°	505.2	501.6	502.8	503.6	503.6
40°	485.1	481.8	482.6	483.4	483.0
42.5°	463.3	460.9	461.3	462.1	462.1
45°	441.1	439.1	439.1	439.9	439.9
47.5°	418.5	416.5	415.7	416.5	416.5
50°	393.9	391.9	391.1	391.9	391.9
52.5°	368.1	366.1	366.1	366.1	366.5
55°	341.5	339.5	338.7	339.5	339.9
57.5°	313.3	312.5	311.3	311.7	310.5
60°	283.1	283.1	281.8	282.6	281.8
62.5°	253.6	254.4	253.2	253.2	252.4
65°	223.4	224.2	223.0	223.0	222.2
67.5°	192.3	193.5	191.9	191.9	191.1
70°	160.1	162.5	160.9	161.3	160.5
72.5°	131.0	132.3	130.6	130.6	129.8
75°	102.0	102.8	101.2	101.6	100.4
77.5°	73.4	74.6	73.0	73.4	73.0
80°	49.2	49.6	48.4	48.8	48.0
82.5°	28.6	29.0	28.6	28.2	27.8
85°	12.9	13.3	12.9	12.9	12.5
87.5°	3.2	3.2	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)