

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: P974004

Luminaire Tested: FLR2-22-25HE-L850-CA080

Issue Date: 3/13/2025

**Test Information**

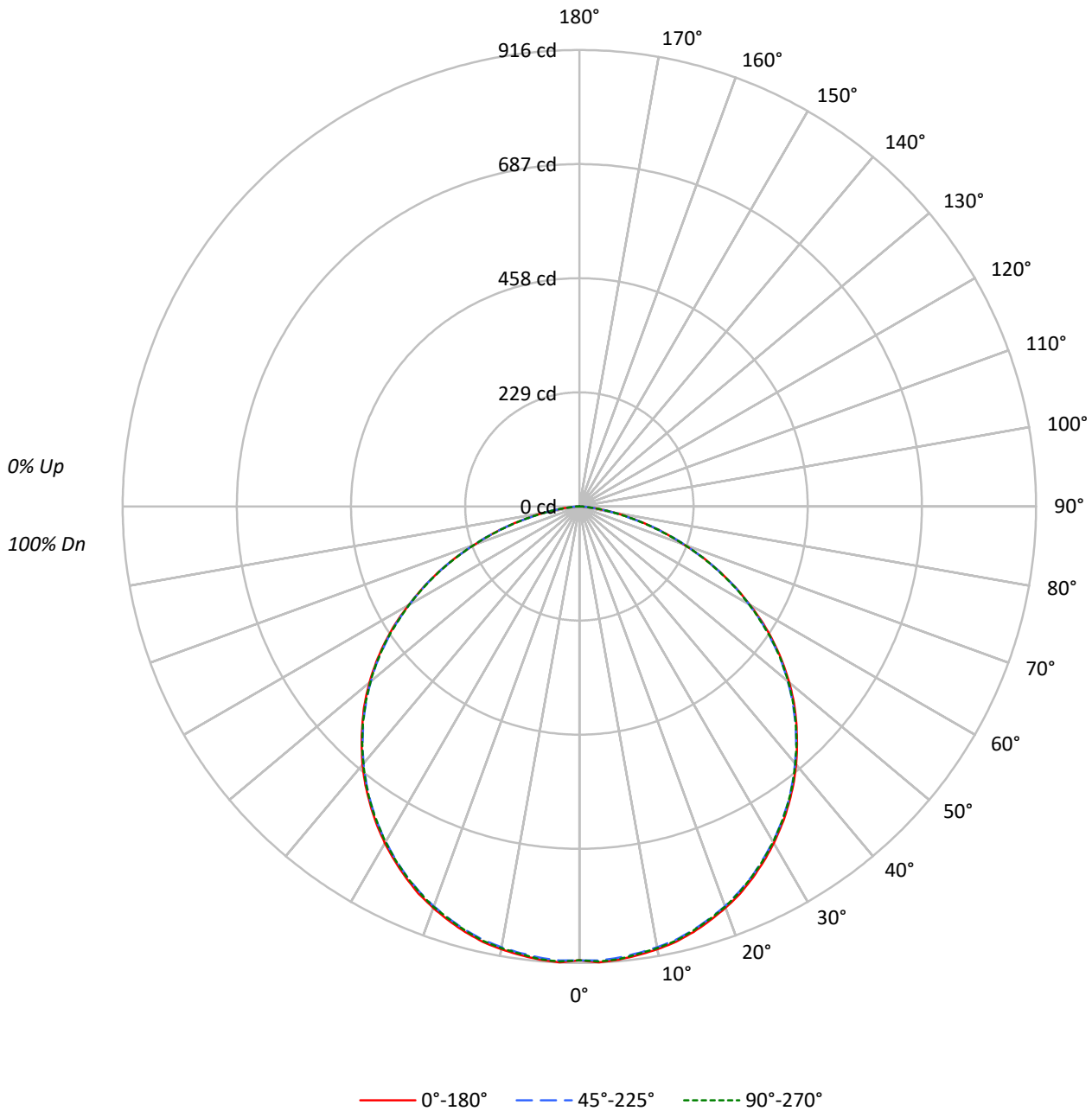
Test Method: LM-79-2019  
Report Number: P974004  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-25HE-L850-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2546.7 lumens  
Efficiency: N/A  
Efficacy: 132.6 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): 19.2  
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

TEST NUMBER: P974004  
CATALOG NUMBER: FLR2-22-25HE-L850-CA080

### Luminous Intensity Polar Plot





TEST NUMBER: P974004  
 CATALOG NUMBER: FLR2-22-25HE-L850-CA080

**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°	2451	2451	2451
5°	2466	2455	2463
10°	2465	2455	2459
15°	2463	2452	2455
20°	2455	2445	2448
25°	2442	2432	2434
30°	2424	2414	2416
35°	2402	2393	2395
40°	2377	2365	2367
45°	2342	2331	2336
50°	2301	2284	2289
55°	2235	2217	2225
60°	2125	2116	2116
65°	1984	1981	1973
70°	1757	1766	1762
75°	1480	1468	1457
80°	1063	1046	1037
85°	556	556	537

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2342 cd/sqm



TEST NUMBER: P974004  
 CATALOG NUMBER: FLR2-22-25HE-L850-CA080

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.2	3.4
10°-20°	248.0	9.7
20°-30°	376.9	14.8
30°-40°	455.5	17.9
40°-50°	472.8	18.6
50°-60°	422.7	16.6
60°-70°	307.3	12.1
70°-80°	151.1	5.9
80°-90°	26.2	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°	711.1	27.9
0°-40°	1166.6	45.8
0°-60°	2062.1	81.0
0°-90°	2546.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2546.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	913	902	909	906	912	87
15°	884	874	880	878	881	250
25°	822	813	819	817	820	379
35°	731	726	728	729	729	457
45°	615	613	613	614	614	475
55°	476	474	472	474	474	425
65°	312	313	311	311	310	307
75°	142	143	141	142	140	151
85°	18	19	18	18	17	26
90°	0	0	0	0	0	



TEST NUMBER: P974004  
 CATALOG NUMBER: FLR2-22-25HE-L850-CA080

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	910.7	910.7	910.7	910.7	910.7
2.5°	915.7	905.1	911.8	907.9	914.1
5°	912.9	902.2	909.0	905.6	911.8
7.5°	907.9	897.2	903.9	900.6	905.6
10°	902.2	891.0	898.3	894.9	900.0
12.5°	894.9	884.2	891.0	888.2	892.7
15°	884.2	874.1	880.3	878.1	881.4
17.5°	871.3	861.2	867.4	865.7	868.5
20°	857.2	847.7	853.9	852.2	855.0
22.5°	841.5	831.4	837.0	835.9	838.1
25°	822.4	813.4	819.0	817.3	819.6
27.5°	802.1	793.7	798.2	798.2	799.3
30°	780.2	772.3	776.8	776.8	777.4
32.5°	756.6	750.4	753.2	753.7	753.7
35°	731.2	726.2	728.4	729.0	729.0
37.5°	704.8	699.7	701.4	702.6	702.6
40°	676.7	672.2	673.3	674.4	673.9
42.5°	646.3	642.9	643.5	644.6	644.6
45°	615.4	612.6	612.6	613.7	613.7
47.5°	583.9	581.1	579.9	581.1	581.1
50°	549.6	546.7	545.6	546.7	546.7
52.5°	513.6	510.7	510.7	510.7	511.3
55°	476.4	473.6	472.5	473.6	474.2
57.5°	437.1	435.9	434.2	434.8	433.1
60°	394.9	394.9	393.2	394.3	393.2
62.5°	353.8	354.9	353.2	353.2	352.1
65°	311.6	312.7	311.1	311.1	309.9
67.5°	268.3	270.0	267.7	267.7	266.6
70°	223.3	226.7	224.4	225.0	223.9
72.5°	182.8	184.5	182.2	182.2	181.1
75°	142.3	143.4	141.2	141.7	140.1
77.5°	102.4	104.1	101.8	102.4	101.8
80°	68.6	69.2	67.5	68.1	66.9
82.5°	39.9	40.5	39.9	39.4	38.8
85°	18.0	18.6	18.0	18.0	17.4
87.5°	4.5	4.5	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)