

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: P974818

Luminaire Tested: FLR2-24-55HE-L840-CP080

Issue Date: 3/13/2025

**Test Information**

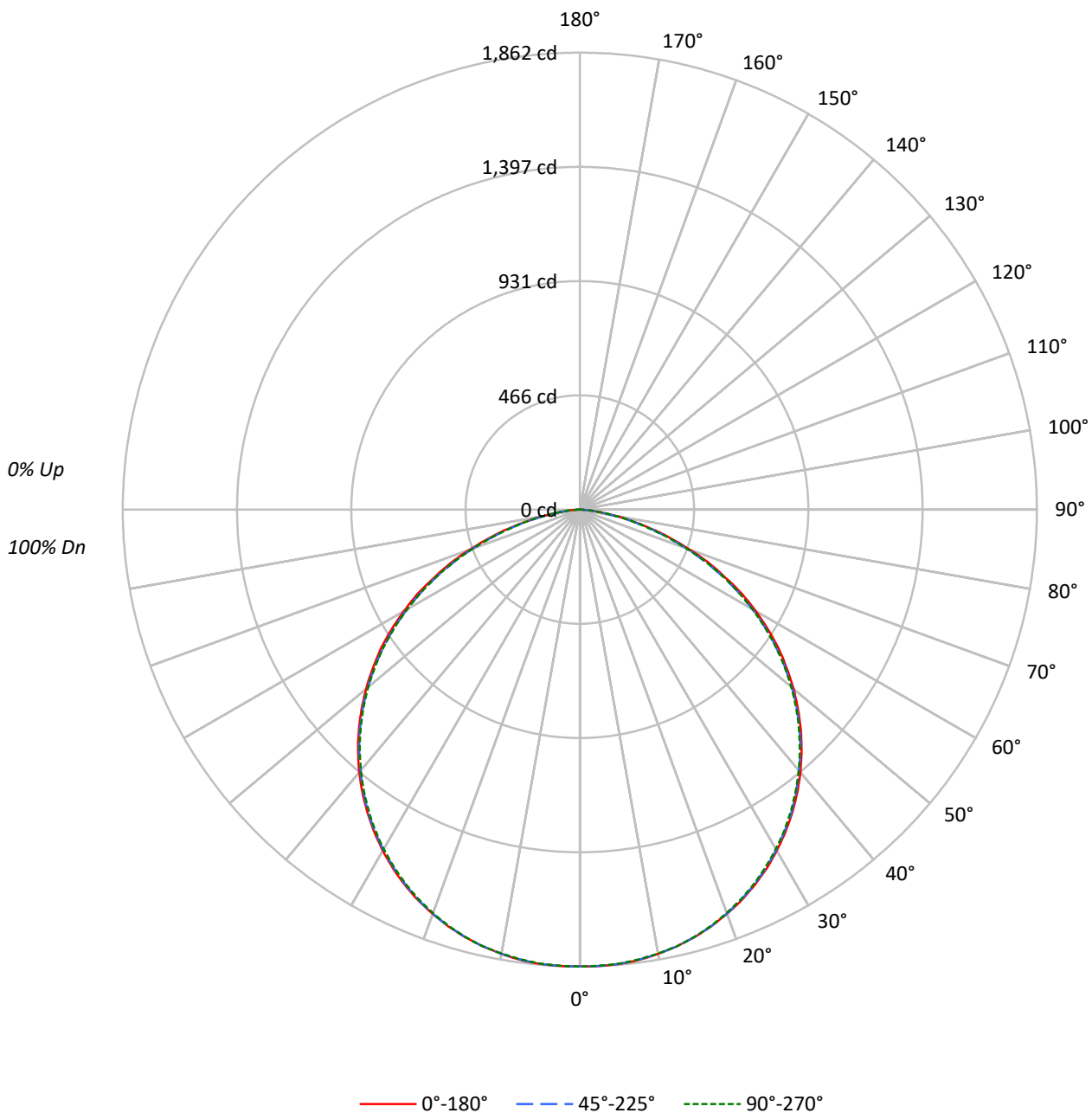
Test Method: LM-79-2019  
Report Number: P974818  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-24-55HE-L840-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5262.2 lumens  
Efficiency: N/A  
Efficacy: 127.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.3  
Input Voltage (V):  
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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2505	2505	2505
5°	2510	2510	2508
10°	2512	2511	2510
15°	2512	2512	2512
20°	2510	2509	2505
25°	2505	2500	2496
30°	2494	2487	2482
35°	2478	2471	2462
40°	2456	2441	2437
45°	2424	2410	2402
50°	2379	2361	2353
55°	2323	2289	2286
60°	2225	2186	2186
65°	2082	2033	2040
70°	1874	1816	1811
75°	1573	1511	1504
80°	1149	1093	1139
85°	650	597	608

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2424 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.7	3.4
10°-20°	509.1	9.7
20°-30°	776.3	14.8
30°-40°	940.5	17.9
40°-50°	976.9	18.6
50°-60°	873.9	16.6
60°-70°	636.9	12.1
70°-80°	315.4	6.0
80°-90°	56.4	1.1
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°	1462.1	27.8
0°-40°	2402.6	45.7
0°-60°	4253.4	80.8
0°-90°	5262.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5262.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1862	1862	1862	1862	1862	
5°	1858	1859	1858	1858	1857	177
15°	1804	1803	1803	1804	1803	509
25°	1688	1686	1684	1684	1682	778
35°	1508	1506	1504	1502	1499	944
45°	1274	1271	1267	1264	1263	982
55°	990	983	976	976	975	882
65°	654	649	639	641	641	648
75°	303	298	291	296	289	323
85°	42	39	39	39	39	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1861.9	1861.9	1861.9	1861.9	1861.9
2.5°	1861.9	1861.2	1861.2	1861.9	1860.5
5°	1858.5	1859.2	1858.5	1858.5	1857.2
7.5°	1851.2	1850.5	1849.8	1850.5	1848.5
10°	1838.5	1838.5	1837.8	1838.5	1837.1
12.5°	1823.1	1823.1	1823.1	1823.8	1823.1
15°	1803.7	1803.1	1803.1	1804.4	1803.1
17.5°	1781.0	1780.4	1780.4	1779.7	1778.4
20°	1753.0	1753.0	1752.3	1751.6	1749.6
22.5°	1722.9	1722.2	1720.2	1720.2	1717.6
25°	1687.5	1685.5	1684.2	1683.5	1681.5
27.5°	1648.8	1646.1	1644.1	1642.7	1640.7
30°	1605.3	1602.7	1600.7	1598.6	1597.3
32.5°	1558.6	1557.2	1553.9	1553.2	1550.5
35°	1508.5	1506.5	1504.5	1501.8	1499.1
37.5°	1455.0	1453.0	1448.3	1447.0	1445.0
40°	1398.2	1395.6	1389.5	1389.5	1387.5
42.5°	1337.4	1334.8	1330.8	1328.1	1326.8
45°	1274.0	1271.3	1266.6	1264.0	1262.6
47.5°	1206.5	1204.5	1199.2	1197.1	1195.1
50°	1136.4	1133.7	1127.7	1126.3	1124.3
52.5°	1062.9	1061.5	1053.5	1052.8	1050.8
55°	990.1	982.7	976.0	976.0	974.7
57.5°	909.9	904.5	895.9	895.9	894.5
60°	827.0	822.4	812.4	813.7	812.4
62.5°	746.2	736.2	726.8	730.8	727.5
65°	654.0	648.7	638.7	641.3	640.7
67.5°	569.8	559.8	550.5	555.8	553.1
70°	476.3	471.0	461.6	467.0	460.3
72.5°	388.1	383.5	374.1	380.1	373.4
75°	302.6	298.0	290.6	295.9	289.3
77.5°	221.8	218.5	211.8	217.1	218.5
80°	148.3	144.3	141.0	145.6	147.0
82.5°	86.8	84.2	82.8	83.5	86.8
85°	42.1	38.7	38.7	39.4	39.4
87.5°	11.4	10.0	11.4	12.0	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)