

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: P973821

Luminaire Tested: FLR2-22-50HE-L835-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973821  
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: FLR2-22-50HE-L835-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

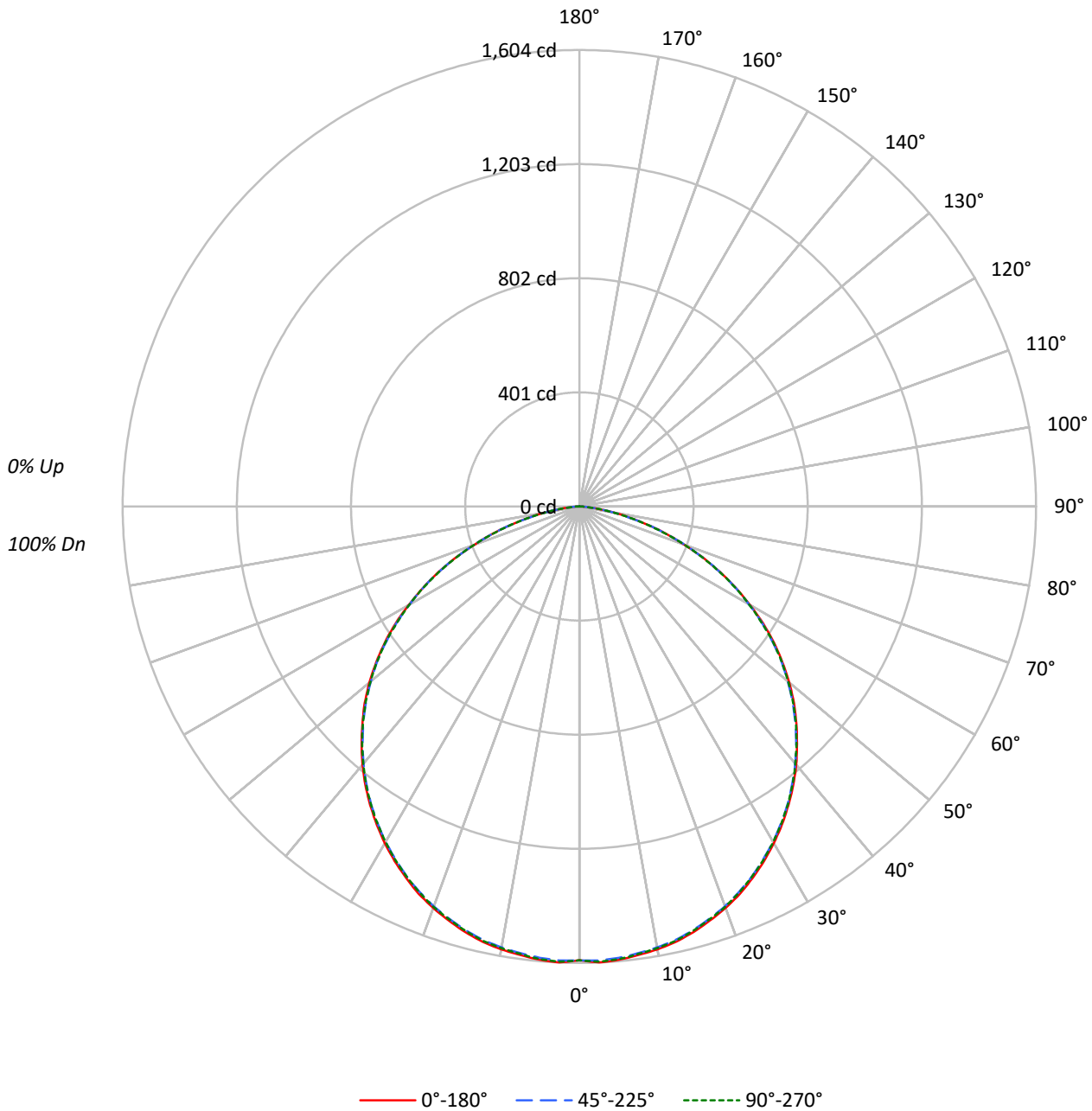
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4460.6 lumens  
Efficiency: N/A  
Efficacy: 111.5 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): 40  
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									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	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°	4292	4292	4292
5°	4319	4301	4314
10°	4318	4299	4307
15°	4315	4295	4301
20°	4300	4283	4288
25°	4277	4259	4262
30°	4246	4228	4231
35°	4208	4191	4194
40°	4163	4143	4146
45°	4102	4083	4091
50°	4029	4001	4009
55°	3915	3883	3896
60°	3722	3707	3707
65°	3475	3469	3456
70°	3077	3093	3085
75°	2592	2571	2550
80°	1863	1832	1816
85°	973	973	942

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4102 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.0	3.4
10°-20°	434.4	9.7
20°-30°	660.1	14.8
30°-40°	797.8	17.9
40°-50°	828.1	18.6
50°-60°	740.3	16.6
60°-70°	538.3	12.1
70°-80°	264.7	5.9
80°-90°	45.9	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°	1245.5	27.9
0°-40°	2043.3	45.8
0°-60°	3611.7	81.0
0°-90°	4460.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4460.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1595	1595	1595	1595	1595	
5°	1599	1580	1592	1586	1597	152
15°	1549	1531	1542	1538	1544	437
25°	1440	1425	1434	1432	1435	664
35°	1281	1272	1276	1277	1277	801
45°	1078	1073	1073	1075	1075	831
55°	834	830	828	830	830	744
65°	546	548	545	545	543	538
75°	249	251	247	248	245	265
85°	32	32	32	32	30	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1595.0	1595.0	1595.0	1595.0	1595.0
2.5°	1603.9	1585.2	1597.0	1590.1	1601.0
5°	1599.0	1580.3	1592.1	1586.2	1597.0
7.5°	1590.1	1571.4	1583.2	1577.3	1586.2
10°	1580.3	1560.6	1573.4	1567.5	1576.3
12.5°	1567.5	1548.7	1560.6	1555.6	1563.5
15°	1548.7	1531.0	1541.8	1537.9	1543.8
17.5°	1526.1	1508.3	1519.2	1516.2	1521.2
20°	1501.4	1484.7	1495.5	1492.6	1497.5
22.5°	1473.9	1456.1	1466.0	1464.0	1468.0
25°	1440.4	1424.6	1434.5	1431.5	1435.4
27.5°	1404.9	1390.1	1398.0	1398.0	1400.0
30°	1366.5	1352.7	1360.6	1360.6	1361.5
32.5°	1325.1	1314.3	1319.2	1320.2	1320.2
35°	1280.8	1271.9	1275.8	1276.8	1276.8
37.5°	1234.5	1225.6	1228.5	1230.5	1230.5
40°	1185.2	1177.3	1179.3	1181.3	1180.3
42.5°	1132.0	1126.1	1127.1	1129.0	1129.0
45°	1077.8	1072.9	1072.9	1074.9	1074.9
47.5°	1022.6	1017.7	1015.7	1017.7	1017.7
50°	962.5	957.6	955.6	957.6	957.6
52.5°	899.5	894.6	894.6	894.6	895.5
55°	834.5	829.5	827.6	829.5	830.5
57.5°	765.5	763.5	760.6	761.6	758.6
60°	691.6	691.6	688.7	690.6	688.7
62.5°	619.7	621.7	618.7	618.7	616.7
65°	545.8	547.8	544.8	544.8	542.8
67.5°	469.9	472.9	469.0	469.0	467.0
70°	391.1	397.0	393.1	394.1	392.1
72.5°	320.2	323.1	319.2	319.2	317.2
75°	249.3	251.2	247.3	248.3	245.3
77.5°	179.3	182.3	178.3	179.3	178.3
80°	120.2	121.2	118.2	119.2	117.2
82.5°	69.9	70.9	69.9	69.0	68.0
85°	31.5	32.5	31.5	31.5	30.5
87.5°	7.9	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)