

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: P974012

Luminaire Tested: FLR2-22-45HE-L850-CA125

Issue Date: 3/13/2025

**Test Information**

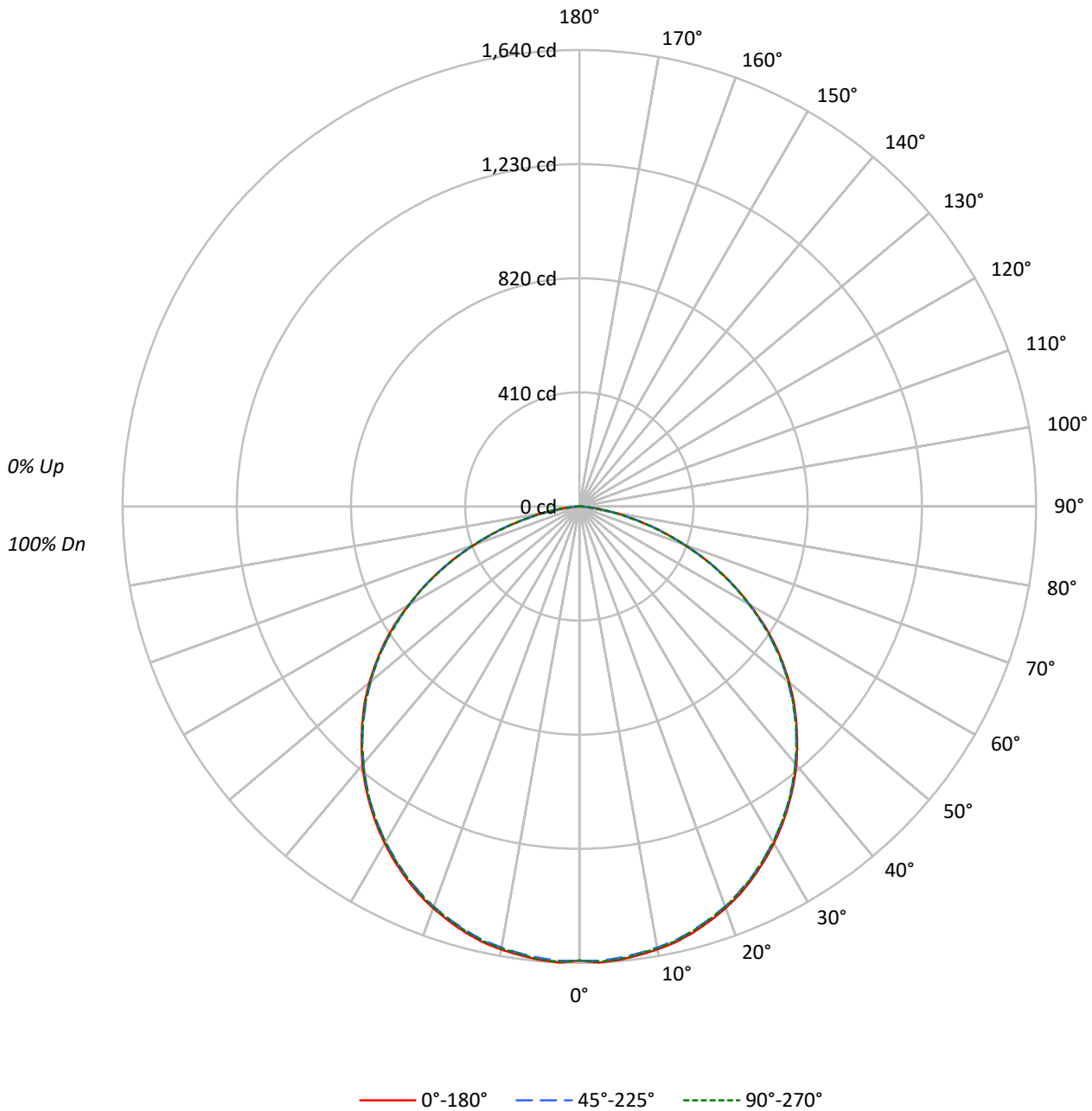
Test Method: LM-79-2019  
Report Number: P974012  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-45HE-L850-CA125  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4562.4 lumens  
Efficiency: N/A  
Efficacy: 126.0 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): 36.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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°	4390	4390	4390
5°	4418	4399	4413
10°	4417	4397	4406
15°	4413	4393	4399
20°	4398	4381	4386
25°	4374	4356	4359
30°	4343	4324	4327
35°	4303	4287	4290
40°	4259	4237	4241
45°	4195	4176	4184
50°	4122	4092	4101
55°	4004	3971	3985
60°	3807	3791	3791
65°	3555	3549	3535
70°	3148	3164	3156
75°	2650	2629	2609
80°	1905	1874	1858
85°	994	994	963

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4195 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.5	3.4
10°-20°	444.3	9.7
20°-30°	675.1	14.8
30°-40°	816.0	17.9
40°-50°	847.0	18.6
50°-60°	757.2	16.6
60°-70°	550.6	12.1
70°-80°	270.7	5.9
80°-90°	46.9	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°	1273.9	27.9
0°-40°	2089.9	45.8
0°-60°	3694.2	81.0
0°-90°	4562.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4562.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1632	1632	1632	1632	1632	
5°	1636	1616	1628	1622	1634	155
15°	1584	1566	1577	1573	1579	447
25°	1473	1457	1467	1464	1468	679
35°	1310	1301	1305	1306	1306	820
45°	1102	1097	1097	1099	1099	850
55°	854	848	846	848	850	761
65°	558	560	557	557	555	551
75°	255	257	253	254	251	271
85°	32	33	32	32	31	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1631.5	1631.5	1631.5	1631.5	1631.5
2.5°	1640.5	1621.4	1633.5	1626.4	1637.5
5°	1635.5	1616.3	1628.4	1622.4	1633.5
7.5°	1626.4	1607.3	1619.4	1613.3	1622.4
10°	1616.3	1596.2	1609.3	1603.2	1612.3
12.5°	1603.2	1584.1	1596.2	1591.1	1599.2
15°	1584.1	1566.0	1577.0	1573.0	1579.1
17.5°	1560.9	1542.8	1553.9	1550.8	1555.9
20°	1535.7	1518.6	1529.7	1526.7	1531.7
22.5°	1507.5	1489.4	1499.4	1497.4	1501.5
25°	1473.2	1457.1	1467.2	1464.2	1468.2
27.5°	1437.0	1421.9	1429.9	1429.9	1431.9
30°	1397.7	1383.6	1391.6	1391.6	1392.6
32.5°	1355.3	1344.3	1349.3	1350.3	1350.3
35°	1310.0	1300.9	1305.0	1306.0	1306.0
37.5°	1262.6	1253.6	1256.6	1258.6	1258.6
40°	1212.3	1204.2	1206.2	1208.2	1207.2
42.5°	1157.8	1151.8	1152.8	1154.8	1154.8
45°	1102.4	1097.4	1097.4	1099.4	1099.4
47.5°	1046.0	1040.9	1038.9	1040.9	1040.9
50°	984.5	979.5	977.5	979.5	979.5
52.5°	920.0	915.0	915.0	915.0	916.0
55°	853.5	848.5	846.5	848.5	849.5
57.5°	783.0	781.0	777.9	778.9	775.9
60°	707.4	707.4	704.4	706.4	704.4
62.5°	633.8	635.9	632.8	632.8	630.8
65°	558.3	560.3	557.3	557.3	555.2
67.5°	480.7	483.7	479.7	479.7	477.6
70°	400.1	406.1	402.1	403.1	401.1
72.5°	327.5	330.5	326.5	326.5	324.5
75°	254.9	257.0	252.9	253.9	250.9
77.5°	183.4	186.4	182.4	183.4	182.4
80°	122.9	123.9	120.9	121.9	119.9
82.5°	71.5	72.6	71.5	70.5	69.5
85°	32.2	33.3	32.2	32.2	31.2
87.5°	8.1	8.1	8.1	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)