

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: P973928

Luminaire Tested: FLR2-22-45HE-L840-CA125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973928  
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-L840-CA125  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

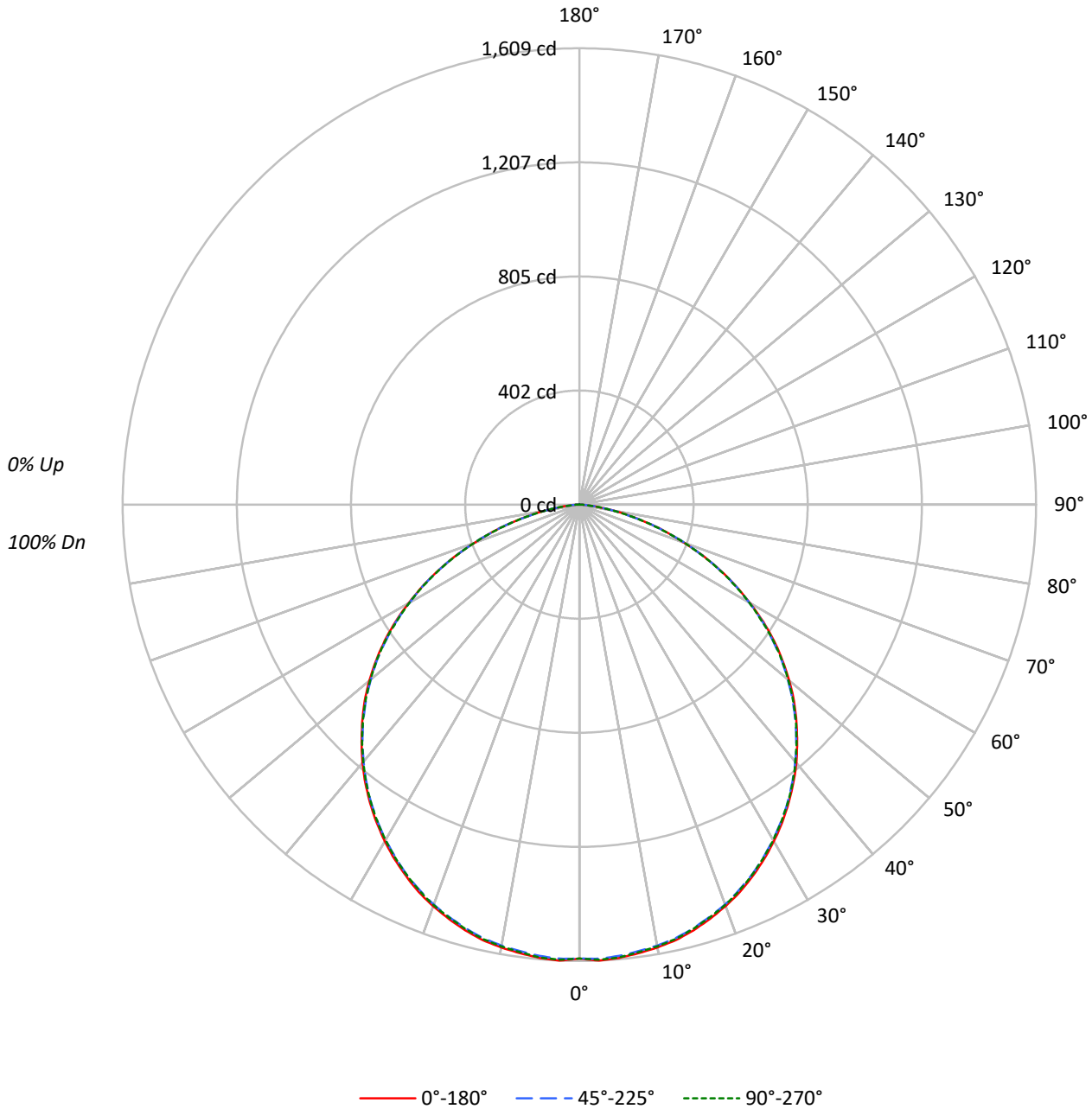
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4475.5 lumens  
Efficiency: N/A  
Efficacy: 123.6 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): 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									
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°	4307	4307	4307
5°	4334	4315	4328
10°	4332	4314	4322
15°	4329	4310	4315
20°	4314	4297	4303
25°	4291	4274	4276
30°	4260	4242	4245
35°	4221	4205	4209
40°	4177	4156	4160
45°	4115	4097	4104
50°	4043	4014	4022
55°	3928	3895	3909
60°	3735	3719	3719
65°	3487	3480	3468
70°	3087	3103	3095
75°	2600	2580	2559
80°	1869	1838	1822
85°	976	976	945

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4115 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.5	3.4
10°-20°	435.8	9.7
20°-30°	662.3	14.8
30°-40°	800.5	17.9
40°-50°	830.9	18.6
50°-60°	742.8	16.6
60°-70°	540.1	12.1
70°-80°	265.6	5.9
80°-90°	46.1	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°	1249.6	27.9
0°-40°	2050.1	45.8
0°-60°	3623.8	81.0
0°-90°	4475.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4475.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1604	1586	1597	1592	1602	152
15°	1554	1536	1547	1543	1549	438
25°	1445	1429	1439	1436	1440	666
35°	1285	1276	1280	1281	1281	804
45°	1081	1076	1076	1078	1078	834
55°	837	832	830	832	833	746
65°	548	550	547	547	545	540
75°	250	252	248	249	246	265
85°	32	33	32	32	31	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1600.4	1600.4	1600.4	1600.4	1600.4
2.5°	1609.3	1590.5	1602.4	1595.4	1606.3
5°	1604.3	1585.5	1597.4	1591.5	1602.4
7.5°	1595.4	1576.7	1588.5	1582.6	1591.5
10°	1585.5	1565.8	1578.6	1572.7	1581.6
12.5°	1572.7	1553.9	1565.8	1560.8	1568.7
15°	1553.9	1536.1	1547.0	1543.0	1549.0
17.5°	1531.2	1513.4	1524.3	1521.3	1526.2
20°	1506.5	1489.7	1500.5	1497.6	1502.5
22.5°	1478.8	1461.0	1470.9	1468.9	1472.9
25°	1445.2	1429.4	1439.3	1436.3	1440.2
27.5°	1409.6	1394.8	1402.7	1402.7	1404.7
30°	1371.0	1357.2	1365.1	1365.1	1366.1
32.5°	1329.5	1318.7	1323.6	1324.6	1324.6
35°	1285.0	1276.1	1280.1	1281.1	1281.1
37.5°	1238.6	1229.7	1232.7	1234.6	1234.6
40°	1189.2	1181.3	1183.2	1185.2	1184.2
42.5°	1135.8	1129.9	1130.8	1132.8	1132.8
45°	1081.4	1076.5	1076.5	1078.4	1078.4
47.5°	1026.1	1021.1	1019.1	1021.1	1021.1
50°	965.8	960.8	958.8	960.8	960.8
52.5°	902.5	897.6	897.6	897.6	898.5
55°	837.3	832.3	830.3	832.3	833.3
57.5°	768.1	766.1	763.1	764.1	761.1
60°	693.9	693.9	691.0	692.9	691.0
62.5°	621.8	623.7	620.8	620.8	618.8
65°	547.6	549.6	546.6	546.6	544.7
67.5°	471.5	474.5	470.5	470.5	468.5
70°	392.4	398.4	394.4	395.4	393.4
72.5°	321.3	324.2	320.3	320.3	318.3
75°	250.1	252.1	248.1	249.1	246.1
77.5°	179.9	182.9	178.9	179.9	178.9
80°	120.6	121.6	118.6	119.6	117.6
82.5°	70.2	71.2	70.2	69.2	68.2
85°	31.6	32.6	31.6	31.6	30.6
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)