

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: P973730

Luminaire Tested: FLR2-22-45HE-L830-CP125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973730  
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-L830-CP125  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

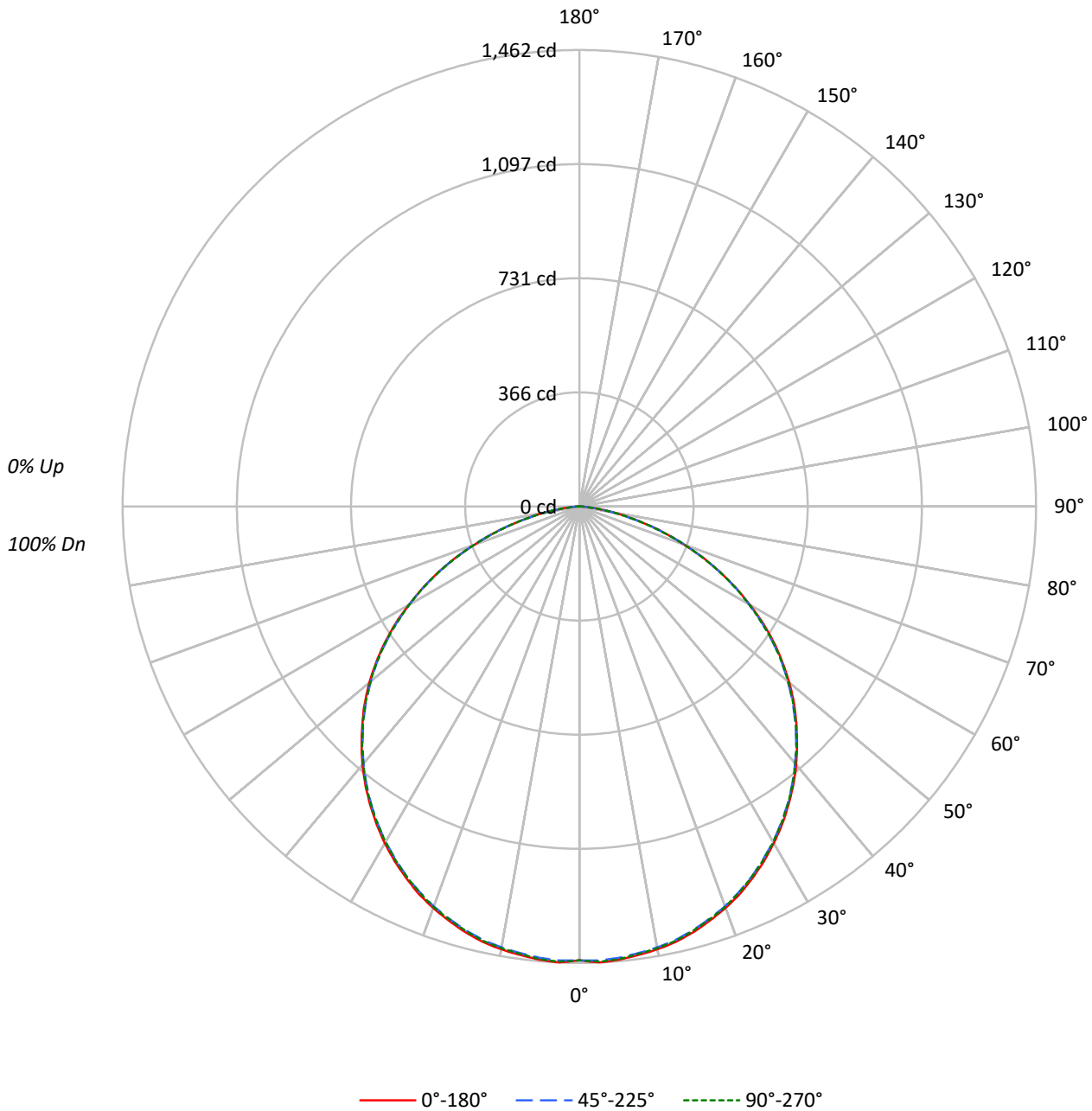
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4065.4 lumens  
Efficiency: N/A  
Efficacy: 112.3 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°	3912	3912	3912
5°	3937	3920	3932
10°	3936	3918	3926
15°	3932	3915	3920
20°	3919	3903	3908
25°	3898	3882	3885
30°	3870	3853	3856
35°	3835	3820	3823
40°	3795	3776	3779
45°	3738	3721	3728
50°	3673	3646	3654
55°	3568	3539	3551
60°	3392	3378	3378
65°	3167	3162	3151
70°	2805	2819	2812
75°	2362	2344	2325
80°	1697	1671	1657
85°	886	886	858

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3738 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.7	3.4
10°-20°	395.9	9.7
20°-30°	601.6	14.8
30°-40°	727.1	17.9
40°-50°	754.7	18.6
50°-60°	674.7	16.6
60°-70°	490.6	12.1
70°-80°	241.2	5.9
80°-90°	41.8	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°	1135.1	27.9
0°-40°	1862.2	45.8
0°-60°	3291.7	81.0
0°-90°	4065.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4065.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1457	1440	1451	1446	1456	139
15°	1412	1395	1405	1402	1407	398
25°	1313	1298	1307	1305	1308	605
35°	1167	1159	1163	1164	1164	730
45°	982	978	978	980	980	758
55°	760	756	754	756	757	678
65°	497	499	497	497	495	491
75°	227	229	225	226	224	241
85°	29	30	29	29	28	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1453.7	1453.7	1453.7	1453.7	1453.7
2.5°	1461.8	1444.8	1455.5	1449.2	1459.1
5°	1457.3	1440.3	1451.0	1445.7	1455.5
7.5°	1449.2	1432.2	1443.0	1437.6	1445.7
10°	1440.3	1422.3	1434.0	1428.6	1436.7
12.5°	1428.6	1411.5	1422.3	1417.8	1425.0
15°	1411.5	1395.4	1405.2	1401.7	1407.0
17.5°	1390.9	1374.7	1384.6	1381.9	1386.4
20°	1368.4	1353.2	1363.0	1360.4	1364.8
22.5°	1343.3	1327.1	1336.1	1334.3	1337.9
25°	1312.8	1298.4	1307.4	1304.7	1308.3
27.5°	1280.4	1267.0	1274.2	1274.2	1275.9
30°	1245.4	1232.8	1240.0	1240.0	1240.9
32.5°	1207.7	1197.8	1202.3	1203.2	1203.2
35°	1167.3	1159.2	1162.8	1163.7	1163.7
37.5°	1125.1	1117.0	1119.7	1121.5	1121.5
40°	1080.2	1073.0	1074.8	1076.6	1075.7
42.5°	1031.7	1026.3	1027.2	1029.0	1029.0
45°	982.3	977.8	977.8	979.6	979.6
47.5°	932.0	927.6	925.8	927.6	927.6
50°	877.3	872.8	871.0	872.8	872.8
52.5°	819.8	815.3	815.3	815.3	816.2
55°	760.5	756.0	754.3	756.0	756.9
57.5°	697.7	695.9	693.2	694.1	691.4
60°	630.3	630.3	627.6	629.4	627.6
62.5°	564.8	566.6	563.9	563.9	562.1
65°	497.4	499.2	496.6	496.6	494.8
67.5°	428.3	431.0	427.4	427.4	425.6
70°	356.5	361.9	358.3	359.2	357.4
72.5°	291.8	294.5	290.9	290.9	289.1
75°	227.2	229.0	225.4	226.3	223.6
77.5°	163.4	166.1	162.5	163.4	162.5
80°	109.5	110.4	107.8	108.6	106.9
82.5°	63.8	64.7	63.8	62.9	62.0
85°	28.7	29.6	28.7	28.7	27.8
87.5°	7.2	7.2	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)