

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: P974170

Luminaire Tested: FLR2-24-30-L835-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974170  
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: FLR2-24-30-L835-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-30-L835-CP080  
Ballast/Driver: -

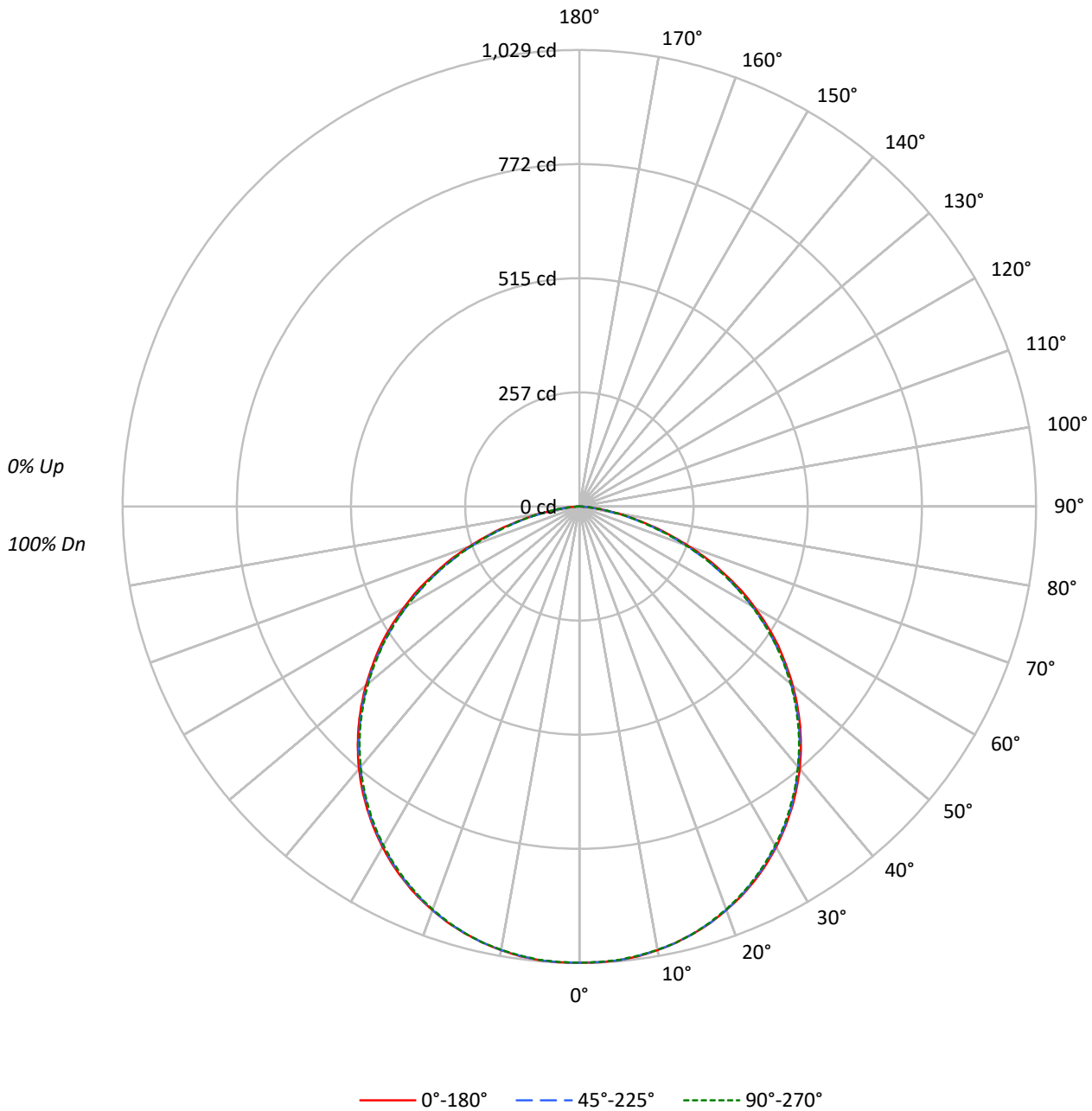
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2907.0 lumens  
Efficiency: N/A  
Efficacy: 122.7 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): 23.7  
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									70									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	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	100	100	100	100	100														
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85	85														
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71	71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60	60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51	51	51	51	51	51	51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44	44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38	38	38	38	38	38	38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34	34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30	30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27	27	27	27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25	25	25	25	25	25	25														

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

	0°	45°	90°
0°	1384	1384	1384
5°	1387	1387	1386
10°	1388	1387	1387
15°	1388	1388	1388
20°	1387	1386	1384
25°	1384	1381	1379
30°	1378	1374	1371
35°	1369	1365	1360
40°	1357	1348	1346
45°	1339	1331	1327
50°	1314	1304	1300
55°	1283	1265	1263
60°	1230	1208	1208
65°	1150	1123	1127
70°	1035	1003	1000
75°	869	834	831
80°	635	604	629
85°	360	330	337

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1339 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.6	3.4
10°-20°	281.3	9.7
20°-30°	428.8	14.8
30°-40°	519.6	17.9
40°-50°	539.7	18.6
50°-60°	482.8	16.6
60°-70°	351.9	12.1
70°-80°	174.3	6.0
80°-90°	31.2	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°	807.7	27.8
0°-40°	1327.3	45.7
0°-60°	2349.8	80.8
0°-90°	2907.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2907.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1029	1029	1029	1029	1029	
5°	1027	1027	1027	1027	1026	98
15°	996	996	996	997	996	281
25°	932	931	930	930	929	430
35°	833	832	831	830	828	521
45°	704	702	700	698	698	542
55°	547	543	539	539	538	487
65°	361	358	353	354	354	358
75°	167	165	160	164	160	178
85°	23	21	21	22	22	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1028.6	1028.6	1028.6	1028.6	1028.6
2.5°	1028.6	1028.2	1028.2	1028.6	1027.8
5°	1026.7	1027.1	1026.7	1026.7	1026.0
7.5°	1022.7	1022.3	1021.9	1022.3	1021.2
10°	1015.6	1015.6	1015.3	1015.6	1014.9
12.5°	1007.2	1007.2	1007.2	1007.5	1007.2
15°	996.5	996.1	996.1	996.8	996.1
17.5°	983.9	983.5	983.5	983.2	982.4
20°	968.4	968.4	968.0	967.7	966.6
22.5°	951.8	951.4	950.3	950.3	948.8
25°	932.2	931.1	930.4	930.0	928.9
27.5°	910.8	909.4	908.2	907.5	906.4
30°	886.8	885.4	884.3	883.2	882.4
32.5°	861.0	860.3	858.4	858.1	856.6
35°	833.3	832.2	831.1	829.6	828.2
37.5°	803.8	802.7	800.1	799.4	798.3
40°	772.4	771.0	767.6	767.6	766.5
42.5°	738.9	737.4	735.2	733.7	732.9
45°	703.8	702.3	699.7	698.3	697.5
47.5°	666.5	665.4	662.5	661.3	660.2
50°	627.8	626.3	623.0	622.2	621.1
52.5°	587.2	586.4	582.0	581.6	580.5
55°	546.9	542.9	539.2	539.2	538.5
57.5°	502.7	499.7	494.9	494.9	494.2
60°	456.9	454.3	448.8	449.5	448.8
62.5°	412.2	406.7	401.5	403.7	401.9
65°	361.3	358.4	352.8	354.3	353.9
67.5°	314.8	309.3	304.1	307.1	305.6
70°	263.1	260.2	255.0	258.0	254.3
72.5°	214.4	211.8	206.7	210.0	206.3
75°	167.2	164.6	160.5	163.5	159.8
77.5°	122.5	120.7	117.0	119.9	120.7
80°	81.9	79.7	77.9	80.5	81.2
82.5°	48.0	46.5	45.8	46.1	48.0
85°	23.3	21.4	21.4	21.8	21.8
87.5°	6.3	5.5	6.3	6.6	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)