

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: P974210

Luminaire Tested: FLR2-24-30-L835-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974210  
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-CA080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-30-L835-CA080  
Ballast/Driver: -

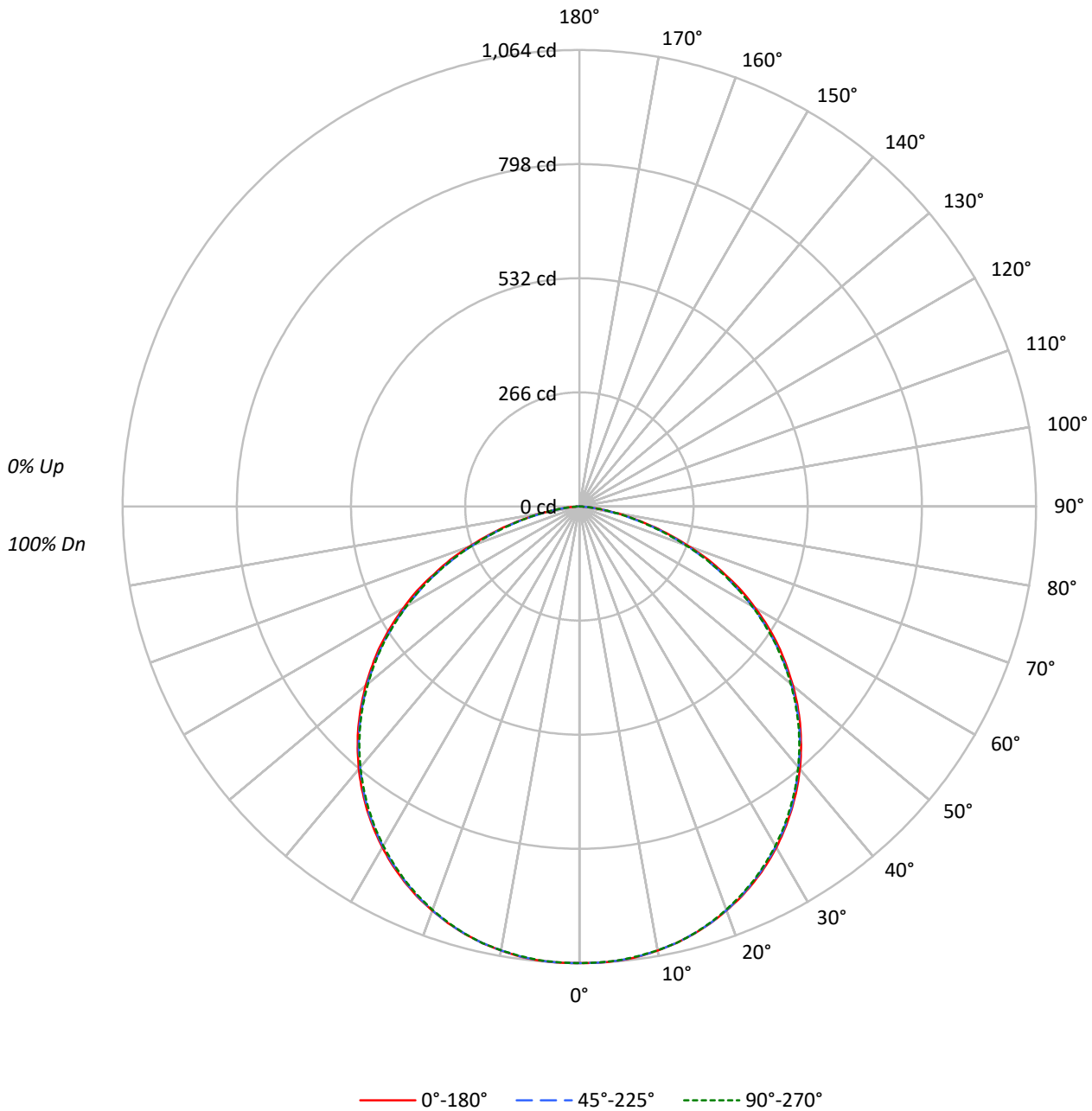
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3008.7 lumens  
Efficiency: N/A  
Efficacy: 127.0 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	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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85							85																					
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51							51																					
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44							44																					
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38							38																					
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34							34																					
8	61	47	39	33	59	47	38	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	39	33	29	27							27																					
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25							25																					

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

	0°	45°	90°
0°	1432	1432	1432
5°	1435	1435	1434
10°	1436	1436	1435
15°	1437	1436	1436
20°	1435	1435	1432
25°	1432	1430	1427
30°	1426	1422	1419
35°	1417	1413	1408
40°	1404	1395	1393
45°	1386	1378	1374
50°	1360	1350	1346
55°	1328	1309	1307
60°	1273	1250	1250
65°	1190	1163	1166
70°	1071	1038	1035
75°	899	864	860
80°	657	625	651
85°	372	343	347

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1386 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.0	3.4
10°-20°	291.1	9.7
20°-30°	443.8	14.8
30°-40°	537.7	17.9
40°-50°	558.6	18.6
50°-60°	499.7	16.6
60°-70°	364.2	12.1
70°-80°	180.3	6.0
80°-90°	32.2	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°	836.0	27.8
0°-40°	1373.7	45.7
0°-60°	2432.0	80.8
0°-90°	3008.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3008.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1063	1063	1063	1063	1062	101
15°	1031	1031	1031	1032	1031	291
25°	965	964	963	963	961	445
35°	862	861	860	859	857	539
45°	728	727	724	723	722	561
55°	566	562	558	558	557	504
65°	374	371	365	367	366	371
75°	173	170	166	169	165	184
85°	24	22	22	22	22	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1064.5	1064.5	1064.5	1064.5	1064.5
2.5°	1064.5	1064.2	1064.2	1064.5	1063.8
5°	1062.6	1063.0	1062.6	1062.6	1061.9
7.5°	1058.4	1058.0	1057.7	1058.0	1056.9
10°	1051.2	1051.2	1050.8	1051.2	1050.4
12.5°	1042.4	1042.4	1042.4	1042.8	1042.4
15°	1031.3	1030.9	1030.9	1031.7	1030.9
17.5°	1018.3	1017.9	1017.9	1017.6	1016.8
20°	1002.3	1002.3	1001.9	1001.5	1000.4
22.5°	985.1	984.7	983.6	983.6	982.0
25°	964.8	963.7	962.9	962.6	961.4
27.5°	942.7	941.2	940.0	939.3	938.1
30°	917.9	916.3	915.2	914.0	913.3
32.5°	891.1	890.4	888.5	888.1	886.5
35°	862.5	861.3	860.2	858.7	857.1
37.5°	831.9	830.8	828.1	827.3	826.2
40°	799.5	797.9	794.5	794.5	793.3
42.5°	764.7	763.2	760.9	759.4	758.6
45°	728.4	726.9	724.2	722.7	721.9
47.5°	689.8	688.7	685.6	684.5	683.3
50°	649.7	648.2	644.8	644.0	642.9
52.5°	607.7	606.9	602.4	602.0	600.8
55°	566.1	561.9	558.1	558.1	557.3
57.5°	520.2	517.2	512.2	512.2	511.5
60°	472.9	470.2	464.5	465.2	464.5
62.5°	426.7	420.9	415.6	417.9	416.0
65°	373.9	370.9	365.2	366.7	366.3
67.5°	325.8	320.1	314.7	317.8	316.3
70°	272.3	269.3	263.9	267.0	263.2
72.5°	221.9	219.2	213.9	217.3	213.5
75°	173.0	170.4	166.2	169.2	165.4
77.5°	126.8	124.9	121.1	124.1	124.9
80°	84.8	82.5	80.6	83.3	84.0
82.5°	49.7	48.1	47.4	47.7	49.7
85°	24.1	22.2	22.2	22.5	22.5
87.5°	6.5	5.7	6.5	6.9	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)