

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: P974059

Luminaire Tested: FLR2-24-35-L830-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974059  
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: FLR2-24-35-L830-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-35-L830-CP080  
Ballast/Driver: -

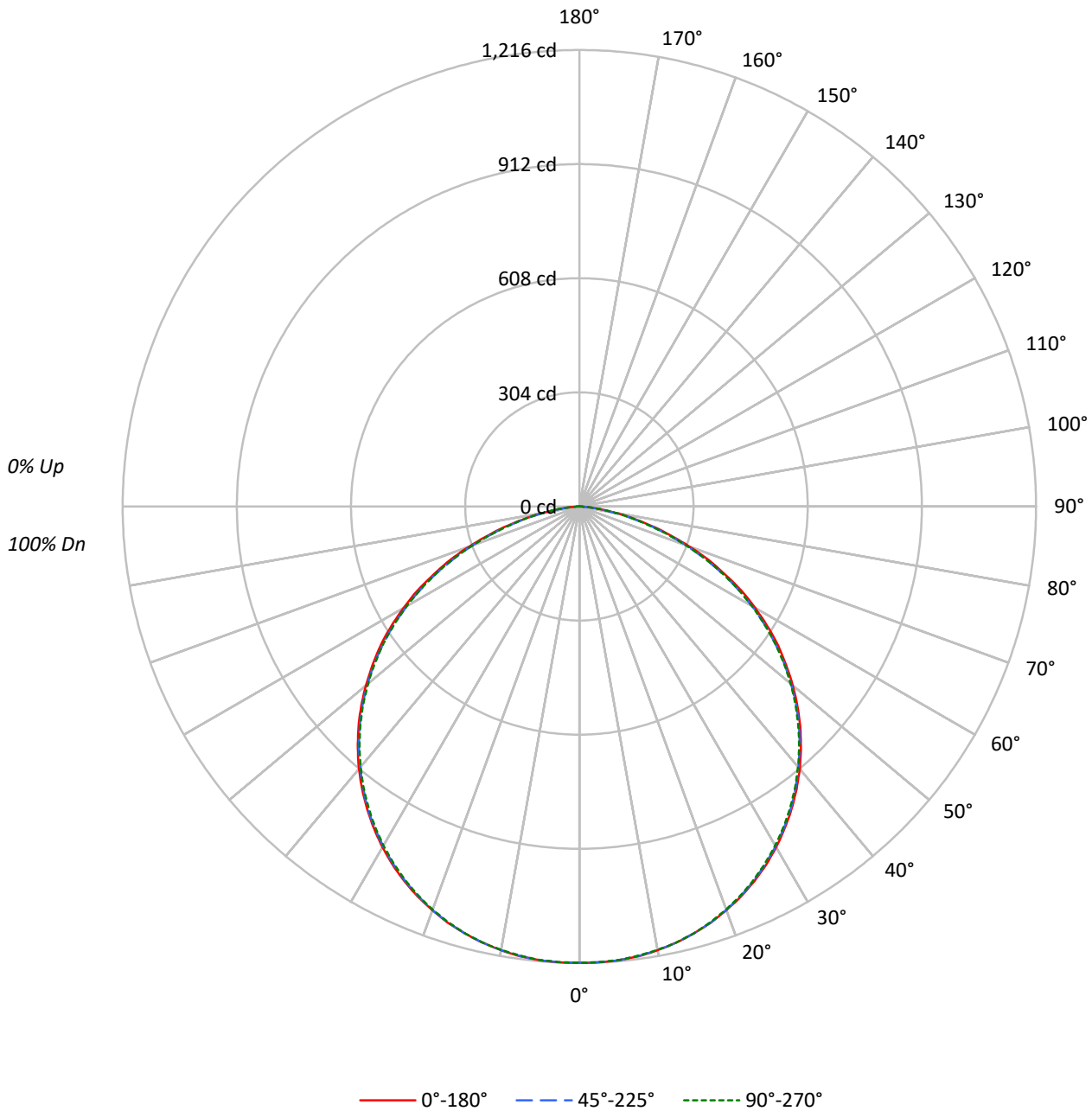
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3435.8 lumens  
Efficiency: N/A  
Efficacy: 121.0 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): 28.4  
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														
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°	1636	1636	1636
5°	1639	1639	1638
10°	1640	1639	1639
15°	1640	1640	1640
20°	1639	1638	1636
25°	1636	1632	1630
30°	1629	1624	1620
35°	1618	1613	1608
40°	1604	1594	1591
45°	1583	1574	1569
50°	1553	1541	1537
55°	1516	1495	1493
60°	1453	1427	1427
65°	1359	1328	1332
70°	1223	1186	1182
75°	1027	986	982
80°	750	713	744
85°	425	391	397

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1583 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.4	3.4
10°-20°	332.4	9.7
20°-30°	506.8	14.8
30°-40°	614.1	17.9
40°-50°	637.9	18.6
50°-60°	570.6	16.6
60°-70°	415.9	12.1
70°-80°	205.9	6.0
80°-90°	36.8	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°	954.7	27.8
0°-40°	1568.7	45.7
0°-60°	2777.2	80.8
0°-90°	3435.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3435.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1214	1214	1214	1214	1213	115
15°	1178	1177	1177	1178	1177	333
25°	1102	1100	1100	1099	1098	508
35°	985	984	982	981	979	616
45°	832	830	827	825	824	641
55°	646	642	637	637	636	576
65°	427	424	417	419	418	423
75°	198	194	190	193	189	211
85°	28	25	25	26	26	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1215.7	1215.7	1215.7	1215.7	1215.7
2.5°	1215.7	1215.2	1215.2	1215.7	1214.8
5°	1213.5	1213.9	1213.5	1213.5	1212.6
7.5°	1208.7	1208.3	1207.8	1208.3	1206.9
10°	1200.4	1200.4	1200.0	1200.4	1199.5
12.5°	1190.4	1190.4	1190.4	1190.8	1190.4
15°	1177.7	1177.3	1177.3	1178.2	1177.3
17.5°	1162.9	1162.5	1162.5	1162.0	1161.1
20°	1144.6	1144.6	1144.1	1143.7	1142.4
22.5°	1124.9	1124.5	1123.2	1123.2	1121.5
25°	1101.8	1100.5	1099.6	1099.2	1097.9
27.5°	1076.5	1074.8	1073.5	1072.6	1071.3
30°	1048.2	1046.4	1045.1	1043.8	1042.9
32.5°	1017.6	1016.8	1014.6	1014.2	1012.4
35°	984.9	983.6	982.3	980.6	978.8
37.5°	950.0	948.7	945.7	944.8	943.5
40°	913.0	911.2	907.3	907.3	906.0
42.5°	873.3	871.5	868.9	867.2	866.3
45°	831.8	830.1	827.0	825.3	824.4
47.5°	787.8	786.5	783.0	781.7	780.4
50°	742.0	740.2	736.3	735.4	734.1
52.5°	694.0	693.1	687.9	687.4	686.1
55°	646.4	641.6	637.3	637.3	636.4
57.5°	594.1	590.6	584.9	584.9	584.1
60°	540.0	537.0	530.4	531.3	530.4
62.5°	487.2	480.7	474.6	477.2	475.0
65°	427.0	423.5	417.0	418.7	418.3
67.5°	372.1	365.5	359.4	362.9	361.2
70°	311.0	307.5	301.4	304.9	300.5
72.5°	253.4	250.4	244.3	248.2	243.8
75°	197.6	194.5	189.7	193.2	188.9
77.5°	144.8	142.6	138.3	141.8	142.6
80°	96.8	94.2	92.0	95.1	96.0
82.5°	56.7	55.0	54.1	54.5	56.7
85°	27.5	25.3	25.3	25.7	25.7
87.5°	7.4	6.5	7.4	7.9	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)