

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: P973499

Luminaire Tested: FLR2-22-35-L830-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973499  
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: FLR2-22-35-L830-CP080  
Description: SHAPER SENSE CIRCLE  
LIGHT LEVEL 1  
Light Source:  
Ballast/Driver: -

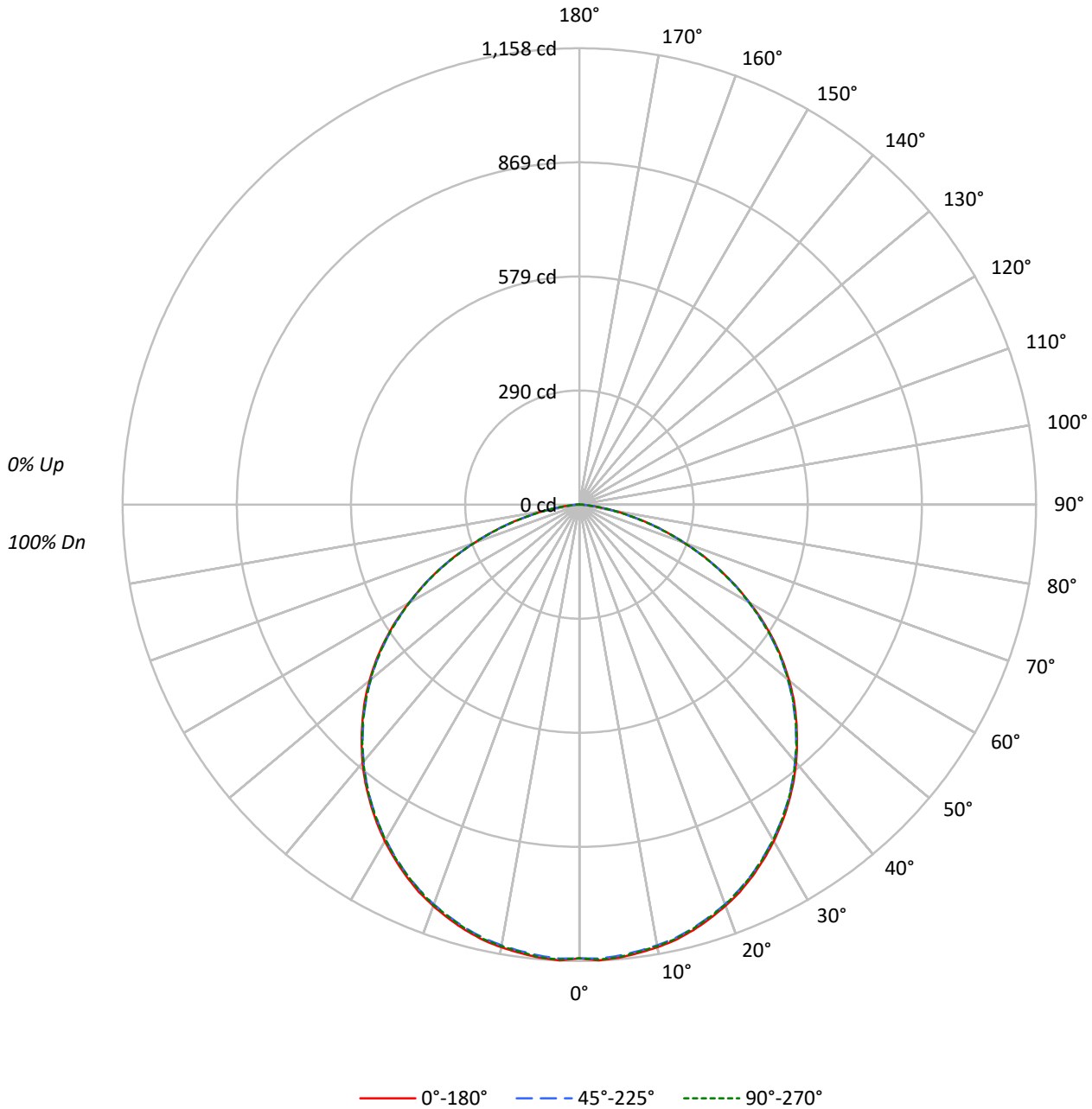
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3219.5 lumens  
Efficiency: N/A  
Efficacy: 116.6 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): 27.6  
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	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°	3098	3098	3098
5°	3118	3104	3114
10°	3117	3103	3109
15°	3114	3100	3104
20°	3103	3091	3095
25°	3087	3074	3076
30°	3065	3051	3054
35°	3037	3025	3028
40°	3005	2990	2993
45°	2960	2947	2952
50°	2908	2887	2894
55°	2826	2802	2812
60°	2687	2675	2675
65°	2508	2504	2495
70°	2221	2232	2227
75°	1870	1856	1841
80°	1345	1322	1311
85°	704	704	679

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2960 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	3.4
10°-20°	313.5	9.7
20°-30°	476.4	14.8
30°-40°	575.8	17.9
40°-50°	597.7	18.6
50°-60°	534.4	16.6
60°-70°	388.5	12.1
70°-80°	191.0	5.9
80°-90°	33.1	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°	898.9	27.9
0°-40°	1474.7	45.8
0°-60°	2606.8	81.0
0°-90°	3219.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3219.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1154	1141	1149	1145	1153	110
15°	1118	1105	1113	1110	1114	315
25°	1040	1028	1035	1033	1036	479
35°	924	918	921	922	922	578
45°	778	774	774	776	776	600
55°	602	599	597	599	599	537
65°	394	395	393	393	392	389
75°	180	181	178	179	177	191
85°	23	24	23	23	22	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1157.6	1144.1	1152.7	1147.7	1155.5
5°	1154.1	1140.6	1149.1	1144.8	1152.7
7.5°	1147.7	1134.2	1142.7	1138.4	1144.8
10°	1140.6	1126.3	1135.6	1131.3	1137.7
12.5°	1131.3	1117.8	1126.3	1122.8	1128.5
15°	1117.8	1105.0	1112.8	1110.0	1114.3
17.5°	1101.5	1088.7	1096.5	1094.4	1097.9
20°	1083.7	1071.6	1079.4	1077.3	1080.8
22.5°	1063.8	1051.0	1058.1	1056.7	1059.5
25°	1039.6	1028.2	1035.3	1033.2	1036.0
27.5°	1014.0	1003.3	1009.0	1009.0	1010.4
30°	986.3	976.3	982.0	982.0	982.7
32.5°	956.4	948.6	952.1	952.8	952.8
35°	924.4	918.0	920.8	921.6	921.6
37.5°	891.0	884.6	886.7	888.1	888.1
40°	855.4	849.7	851.2	852.6	851.9
42.5°	817.0	812.8	813.5	814.9	814.9
45°	777.9	774.4	774.4	775.8	775.8
47.5°	738.1	734.5	733.1	734.5	734.5
50°	694.7	691.2	689.7	691.2	691.2
52.5°	649.2	645.7	645.7	645.7	646.4
55°	602.3	598.7	597.3	598.7	599.4
57.5°	552.5	551.1	549.0	549.7	547.5
60°	499.2	499.2	497.0	498.5	497.0
62.5°	447.3	448.7	446.6	446.6	445.1
65°	393.9	395.4	393.2	393.2	391.8
67.5°	339.2	341.3	338.5	338.5	337.1
70°	282.3	286.6	283.7	284.4	283.0
72.5°	231.1	233.2	230.4	230.4	229.0
75°	179.9	181.3	178.5	179.2	177.1
77.5°	129.4	131.5	128.7	129.4	128.7
80°	86.8	87.5	85.3	86.0	84.6
82.5°	50.5	51.2	50.5	49.8	49.1
85°	22.8	23.5	22.8	22.8	22.0
87.5°	5.7	5.7	5.7	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)