

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: P974075

Luminaire Tested: FLR2-24-35-L830-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974075  
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-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-35-L830-CP187  
Ballast/Driver: -

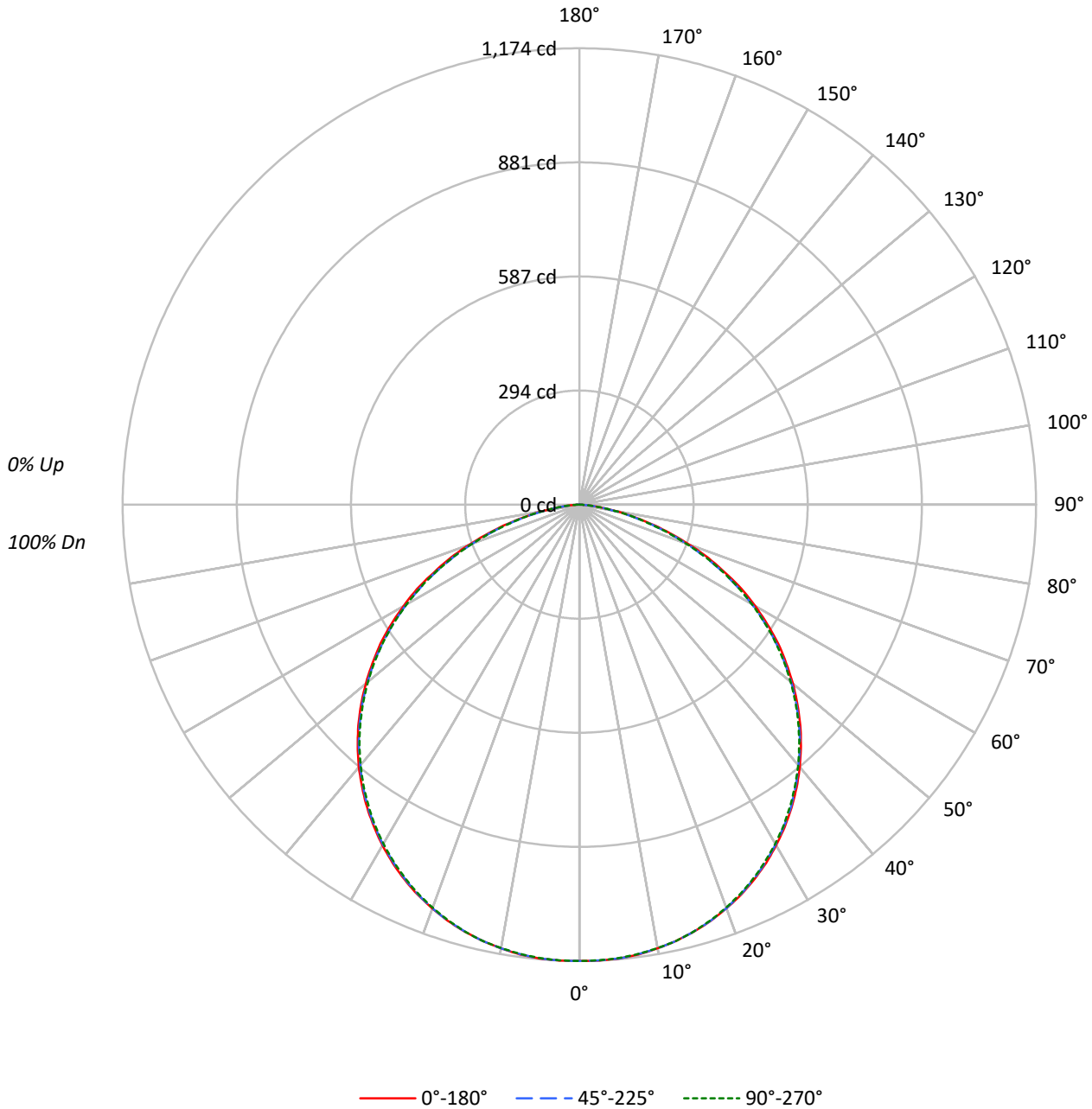
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3318.3 lumens  
Efficiency: N/A  
Efficacy: 116.8 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				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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

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

	0°	45°	90°
0°	1580	1580	1580
5°	1583	1583	1582
10°	1584	1583	1583
15°	1584	1584	1584
20°	1583	1582	1580
25°	1580	1577	1574
30°	1573	1568	1565
35°	1562	1558	1553
40°	1549	1539	1537
45°	1529	1520	1515
50°	1500	1488	1484
55°	1464	1444	1442
60°	1403	1379	1379
65°	1313	1282	1286
70°	1182	1145	1142
75°	992	953	948
80°	724	689	718
85°	409	377	384

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1529 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.4	3.4
10°-20°	321.1	9.7
20°-30°	489.5	14.8
30°-40°	593.1	17.9
40°-50°	616.1	18.6
50°-60°	551.1	16.6
60°-70°	401.6	12.1
70°-80°	198.9	6.0
80°-90°	35.6	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°	922.0	27.8
0°-40°	1515.1	45.7
0°-60°	2682.2	80.8
0°-90°	3318.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3318.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1174	1174	1174	1174	1174	
5°	1172	1172	1172	1172	1171	111
15°	1137	1137	1137	1138	1137	321
25°	1064	1063	1062	1062	1060	490
35°	951	950	949	947	945	595
45°	803	802	799	797	796	619
55°	624	620	616	616	615	556
65°	412	409	403	404	404	409
75°	191	188	183	187	182	203
85°	26	24	24	25	25	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1174.1	1174.1	1174.1	1174.1	1174.1
2.5°	1174.1	1173.7	1173.7	1174.1	1173.3
5°	1172.0	1172.4	1172.0	1172.0	1171.1
7.5°	1167.4	1166.9	1166.5	1166.9	1165.7
10°	1159.3	1159.3	1158.9	1159.3	1158.5
12.5°	1149.7	1149.7	1149.7	1150.1	1149.7
15°	1137.4	1137.0	1137.0	1137.9	1137.0
17.5°	1123.1	1122.7	1122.7	1122.3	1121.4
20°	1105.4	1105.4	1105.0	1104.6	1103.3
22.5°	1086.5	1086.0	1084.8	1084.8	1083.1
25°	1064.1	1062.9	1062.0	1061.6	1060.3
27.5°	1039.7	1038.0	1036.8	1035.9	1034.7
30°	1012.3	1010.6	1009.4	1008.1	1007.3
32.5°	982.8	982.0	979.9	979.5	977.8
35°	951.2	950.0	948.7	947.0	945.3
37.5°	917.5	916.3	913.3	912.5	911.2
40°	881.7	880.0	876.3	876.3	875.0
42.5°	843.4	841.7	839.2	837.5	836.7
45°	803.4	801.7	798.7	797.1	796.2
47.5°	760.8	759.6	756.2	754.9	753.7
50°	716.6	714.9	711.1	710.3	709.0
52.5°	670.2	669.4	664.4	663.9	662.7
55°	624.3	619.7	615.5	615.5	614.6
57.5°	573.8	570.4	564.9	564.9	564.1
60°	521.5	518.6	512.3	513.1	512.3
62.5°	470.6	464.2	458.3	460.9	458.8
65°	412.4	409.1	402.7	404.4	404.0
67.5°	359.3	353.0	347.1	350.5	348.8
70°	300.4	297.0	291.1	294.5	290.3
72.5°	244.8	241.8	235.9	239.7	235.5
75°	190.8	187.9	183.3	186.6	182.4
77.5°	139.9	137.8	133.5	136.9	137.8
80°	93.5	91.0	88.9	91.8	92.7
82.5°	54.8	53.1	52.2	52.7	54.8
85°	26.5	24.4	24.4	24.9	24.9
87.5°	7.2	6.3	7.2	7.6	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)