

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: P974069

Luminaire Tested: FLR2-24-45-L830-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974069
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: FLR2-24-45-L830-CP125
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L830-CP125
Ballast/Driver: -

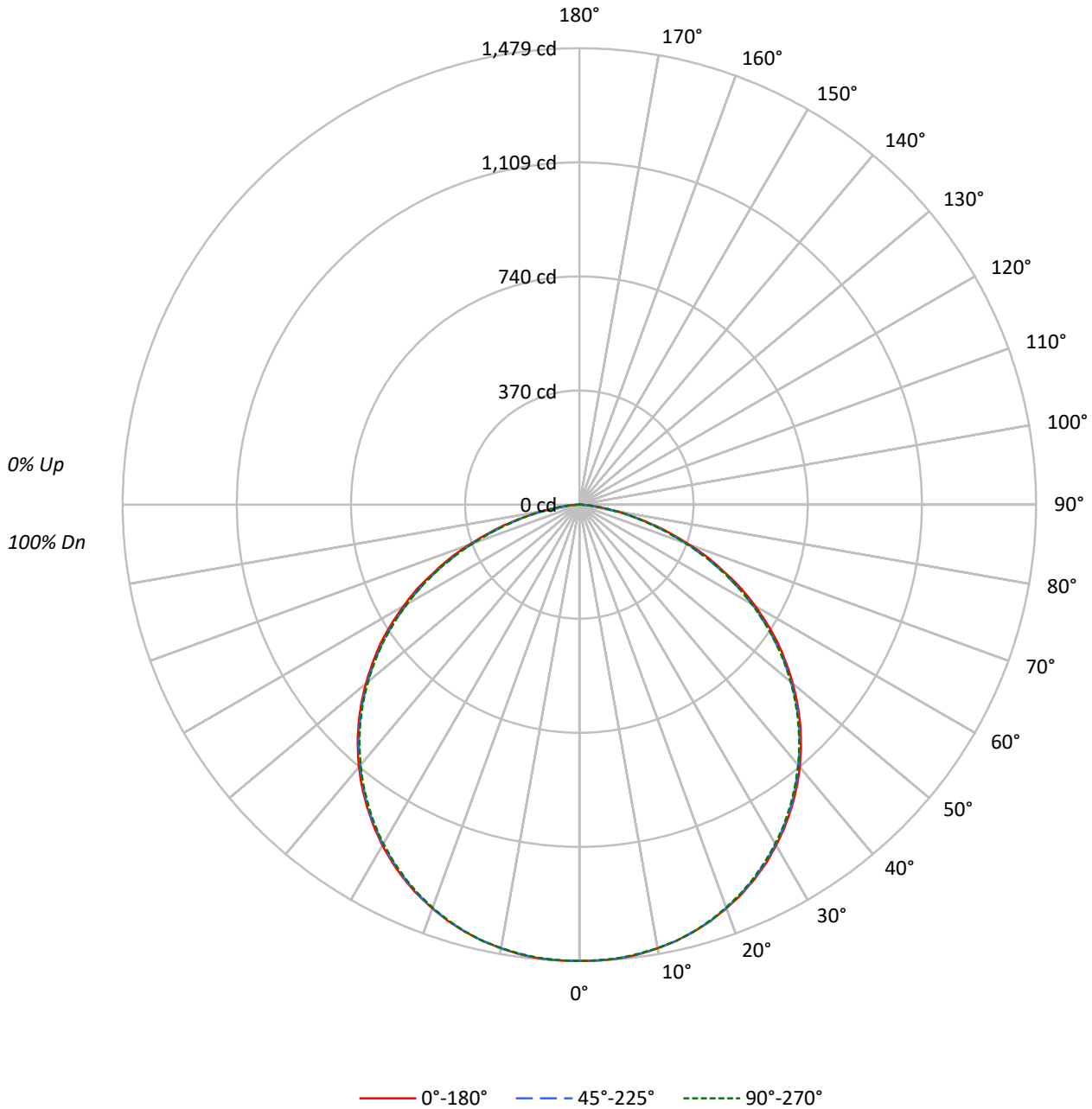
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4179.7 lumens
Efficiency: N/A
Efficacy: 117.4 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): 35.6
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	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°	1990	1990	1990
5°	1994	1994	1992
10°	1995	1994	1994
15°	1996	1995	1995
20°	1994	1993	1990
25°	1990	1986	1983
30°	1981	1975	1971
35°	1968	1963	1956
40°	1951	1939	1936
45°	1925	1914	1908
50°	1889	1875	1869
55°	1845	1818	1816
60°	1768	1736	1736
65°	1654	1615	1620
70°	1488	1443	1438
75°	1250	1200	1195
80°	913	868	904
85°	516	475	483

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1925 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	3.4
10°-20°	404.4	9.7
20°-30°	616.6	14.8
30°-40°	747.0	17.9
40°-50°	776.0	18.6
50°-60°	694.1	16.6
60°-70°	505.9	12.1
70°-80°	250.5	6.0
80°-90°	44.8	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°	1161.3	27.8
0°-40°	1908.3	45.7
0°-60°	3378.4	80.8
0°-90°	4179.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4179.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1479	1479	1479	1479	1479	
5°	1476	1477	1476	1476	1475	140
15°	1433	1432	1432	1433	1432	405
25°	1340	1339	1338	1337	1336	618
35°	1198	1196	1195	1193	1191	749
45°	1012	1010	1006	1004	1003	780
55°	786	780	775	775	774	701
65°	520	515	507	509	509	515
75°	240	237	231	235	230	256
85°	33	31	31	31	31	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1478.8	1478.8	1478.8	1478.8	1478.8
2.5°	1478.8	1478.3	1478.3	1478.8	1477.8
5°	1476.2	1476.7	1476.2	1476.2	1475.1
7.5°	1470.3	1469.8	1469.3	1469.8	1468.2
10°	1460.3	1460.3	1459.7	1460.3	1459.2
12.5°	1448.1	1448.1	1448.1	1448.6	1448.1
15°	1432.7	1432.1	1432.1	1433.2	1432.1
17.5°	1414.6	1414.1	1414.1	1413.6	1412.5
20°	1392.3	1392.3	1391.8	1391.3	1389.7
22.5°	1368.5	1367.9	1366.3	1366.3	1364.2
25°	1340.3	1338.8	1337.7	1337.2	1335.6
27.5°	1309.6	1307.4	1305.9	1304.8	1303.2
30°	1275.1	1273.0	1271.4	1269.8	1268.7
32.5°	1237.9	1236.9	1234.2	1233.7	1231.6
35°	1198.1	1196.5	1195.0	1192.8	1190.7
37.5°	1155.7	1154.1	1150.4	1149.3	1147.7
40°	1110.6	1108.5	1103.7	1103.7	1102.1
42.5°	1062.3	1060.2	1057.0	1054.9	1053.8
45°	1011.9	1009.8	1006.1	1003.9	1002.9
47.5°	958.3	956.7	952.5	950.9	949.3
50°	902.6	900.5	895.7	894.6	893.0
52.5°	844.2	843.2	836.8	836.3	834.7
55°	786.4	780.5	775.2	775.2	774.2
57.5°	722.7	718.5	711.6	711.6	710.5
60°	656.9	653.2	645.2	646.3	645.2
62.5°	592.7	584.7	577.3	580.5	577.8
65°	519.5	515.2	507.3	509.4	508.9
67.5°	452.6	444.7	437.2	441.5	439.4
70°	378.3	374.1	366.7	370.9	365.6
72.5°	308.3	304.6	297.1	301.9	296.6
75°	240.4	236.7	230.8	235.1	229.8
77.5°	176.2	173.5	168.2	172.5	173.5
80°	117.8	114.6	112.0	115.7	116.7
82.5°	69.0	66.9	65.8	66.3	69.0
85°	33.4	30.8	30.8	31.3	31.3
87.5°	9.0	8.0	9.0	9.6	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)