

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: P974085

Luminaire Tested: FLR2-24-45-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974085
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L830-CP250
Ballast/Driver: -

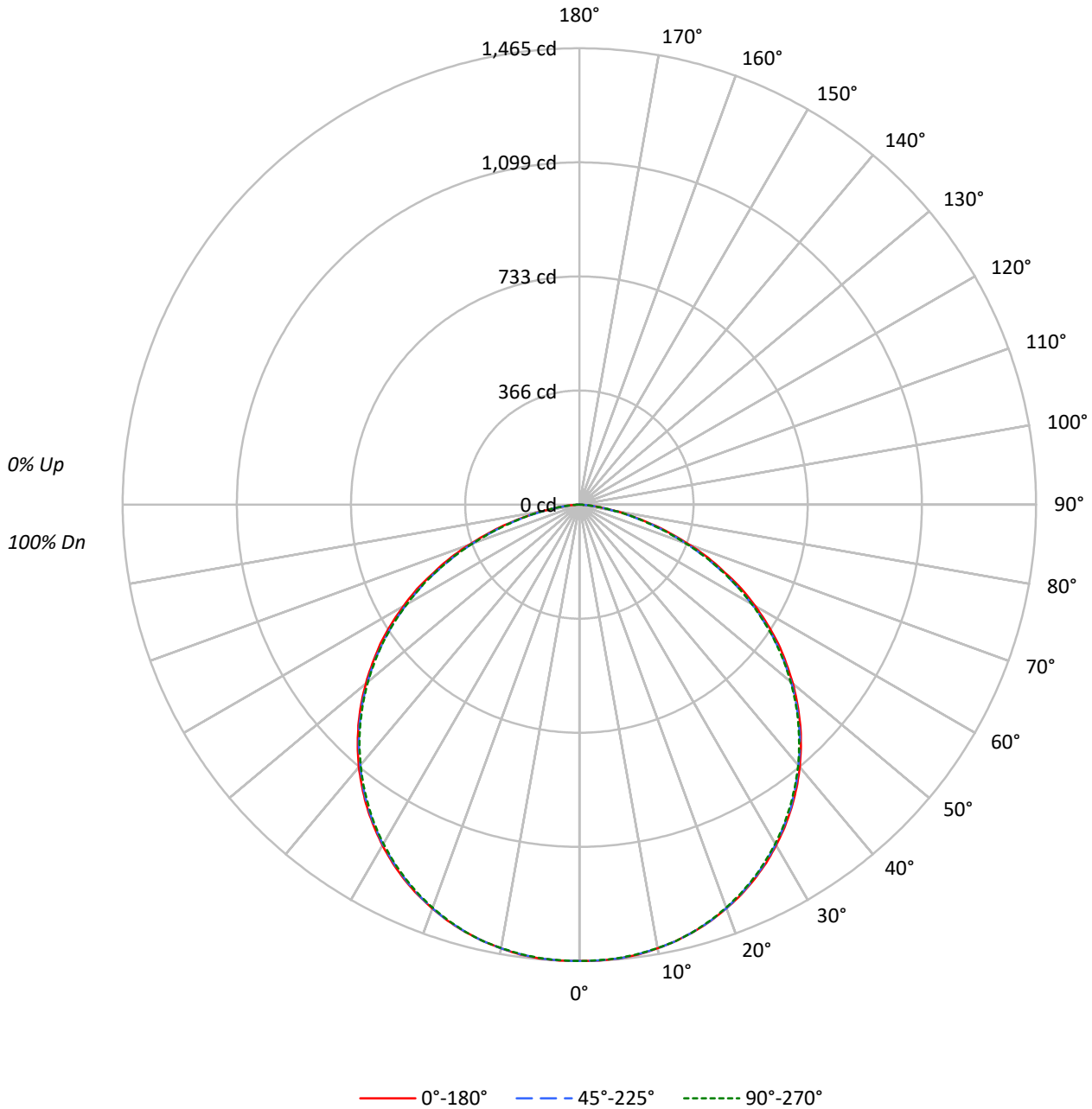
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4140.7 lumens
Efficiency: N/A
Efficacy: 116.3 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				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°	1971	1971	1971
5°	1975	1975	1974
10°	1977	1976	1975
15°	1977	1976	1976
20°	1975	1974	1971
25°	1971	1967	1964
30°	1963	1957	1953
35°	1950	1944	1938
40°	1933	1920	1918
45°	1908	1897	1890
50°	1872	1858	1852
55°	1828	1802	1799
60°	1751	1720	1720
65°	1638	1600	1605
70°	1474	1429	1425
75°	1238	1189	1183
80°	904	859	896
85°	511	471	479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1908 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.1	3.4
10°-20°	400.6	9.7
20°-30°	610.8	14.8
30°-40°	740.1	17.9
40°-50°	768.7	18.6
50°-60°	687.7	16.6
60°-70°	501.2	12.1
70°-80°	248.2	6.0
80°-90°	44.4	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°	1150.5	27.8
0°-40°	1890.6	45.7
0°-60°	3347.0	80.8
0°-90°	4140.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4140.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1462	1463	1462	1462	1461	139
15°	1419	1419	1419	1420	1419	401
25°	1328	1326	1325	1325	1323	612
35°	1187	1185	1184	1182	1180	742
45°	1002	1000	997	995	994	773
55°	779	773	768	768	767	694
65°	515	510	503	505	504	510
75°	238	234	229	233	228	254
85°	33	30	30	31	31	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1465.1	1465.1	1465.1	1465.1	1465.1
2.5°	1465.1	1464.5	1464.5	1465.1	1464.0
5°	1462.4	1463.0	1462.4	1462.4	1461.4
7.5°	1456.7	1456.1	1455.6	1456.1	1454.6
10°	1446.7	1446.7	1446.2	1446.7	1445.6
12.5°	1434.6	1434.6	1434.6	1435.1	1434.6
15°	1419.3	1418.8	1418.8	1419.9	1418.8
17.5°	1401.5	1400.9	1400.9	1400.4	1399.4
20°	1379.4	1379.4	1378.9	1378.3	1376.8
22.5°	1355.7	1355.2	1353.6	1353.6	1351.5
25°	1327.9	1326.3	1325.2	1324.7	1323.1
27.5°	1297.4	1295.3	1293.7	1292.7	1291.1
30°	1263.2	1261.1	1259.5	1258.0	1256.9
32.5°	1226.4	1225.4	1222.7	1222.2	1220.1
35°	1187.0	1185.4	1183.8	1181.7	1179.6
37.5°	1144.9	1143.4	1139.7	1138.6	1137.0
40°	1100.3	1098.1	1093.4	1093.4	1091.8
42.5°	1052.4	1050.3	1047.2	1045.1	1044.0
45°	1002.5	1000.4	996.7	994.6	993.5
47.5°	949.4	947.8	943.6	942.0	940.4
50°	894.2	892.1	887.4	886.3	884.7
52.5°	836.4	835.3	829.0	828.5	826.9
55°	779.1	773.3	768.0	768.0	767.0
57.5°	716.0	711.8	704.9	704.9	703.9
60°	650.8	647.1	639.2	640.3	639.2
62.5°	587.2	579.3	571.9	575.1	572.5
65°	514.6	510.4	502.6	504.7	504.1
67.5°	448.4	440.5	433.2	437.4	435.3
70°	374.8	370.6	363.2	367.5	362.2
72.5°	305.4	301.7	294.4	299.1	293.9
75°	238.1	234.5	228.7	232.9	227.6
77.5°	174.5	171.9	166.6	170.8	171.9
80°	116.7	113.5	110.9	114.6	115.6
82.5°	68.3	66.2	65.2	65.7	68.3
85°	33.1	30.5	30.5	31.0	31.0
87.5°	8.9	7.9	8.9	9.5	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)