

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: P974077

Luminaire Tested: FLR2-24-45-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974077
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L830-CP187
Ballast/Driver: -

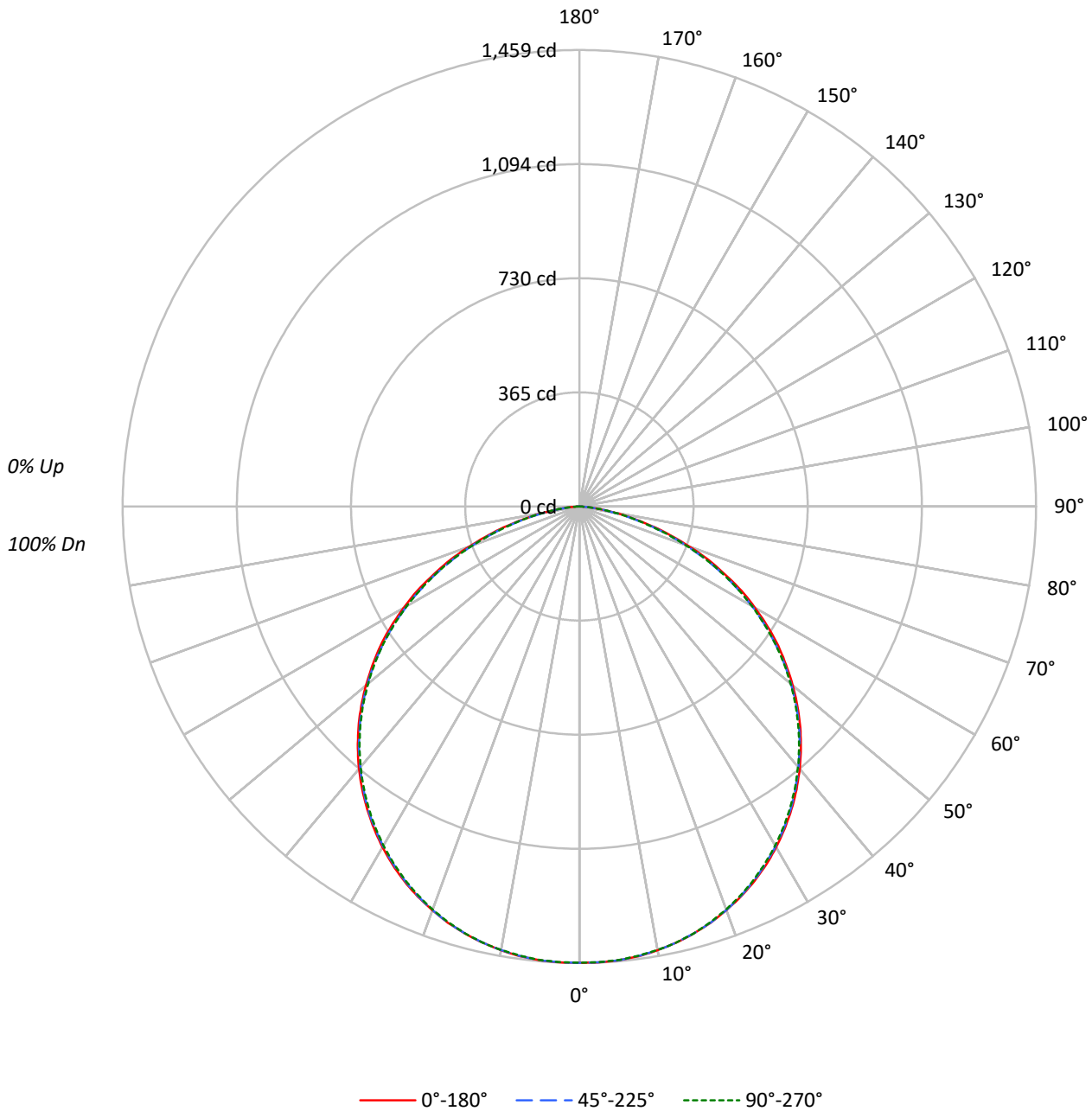
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4122.5 lumens
Efficiency: N/A
Efficacy: 115.8 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): 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°	1963	1963	1963
5°	1967	1967	1965
10°	1968	1967	1966
15°	1968	1968	1968
20°	1966	1966	1963
25°	1963	1959	1956
30°	1954	1948	1944
35°	1941	1936	1929
40°	1924	1912	1909
45°	1899	1888	1882
50°	1863	1849	1844
55°	1819	1794	1791
60°	1743	1713	1713
65°	1631	1593	1598
70°	1468	1423	1419
75°	1233	1184	1178
80°	900	855	892
85°	509	469	477

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1899 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.5	3.4
10°-20°	398.9	9.7
20°-30°	608.1	14.8
30°-40°	736.8	17.9
40°-50°	765.3	18.6
50°-60°	684.6	16.6
60°-70°	499.0	12.1
70°-80°	247.1	6.0
80°-90°	44.2	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°	1145.5	27.8
0°-40°	1882.2	45.7
0°-60°	3332.2	80.8
0°-90°	4122.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4122.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1459	1459	1459	1459	1459	
5°	1456	1456	1456	1456	1455	138
15°	1413	1413	1413	1414	1413	399
25°	1322	1320	1319	1319	1317	609
35°	1182	1180	1179	1176	1174	739
45°	998	996	992	990	989	769
55°	776	770	765	765	764	691
65°	512	508	500	502	502	508
75°	237	233	228	232	227	253
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°	1458.6	1458.6	1458.6	1458.6	1458.6
2.5°	1458.6	1458.1	1458.1	1458.6	1457.6
5°	1456.0	1456.5	1456.0	1456.0	1455.0
7.5°	1450.2	1449.7	1449.2	1449.7	1448.1
10°	1440.3	1440.3	1439.8	1440.3	1439.3
12.5°	1428.3	1428.3	1428.3	1428.8	1428.3
15°	1413.1	1412.6	1412.6	1413.6	1412.6
17.5°	1395.3	1394.8	1394.8	1394.2	1393.2
20°	1373.3	1373.3	1372.8	1372.3	1370.7
22.5°	1349.8	1349.2	1347.7	1347.7	1345.6
25°	1322.0	1320.4	1319.4	1318.9	1317.3
27.5°	1291.7	1289.6	1288.0	1287.0	1285.4
30°	1257.6	1255.5	1254.0	1252.4	1251.4
32.5°	1221.0	1220.0	1217.3	1216.8	1214.7
35°	1181.8	1180.2	1178.6	1176.5	1174.4
37.5°	1139.9	1138.3	1134.7	1133.6	1132.0
40°	1095.4	1093.3	1088.6	1088.6	1087.0
42.5°	1047.8	1045.7	1042.5	1040.4	1039.4
45°	998.1	996.0	992.3	990.2	989.2
47.5°	945.2	943.6	939.4	937.9	936.3
50°	890.2	888.1	883.4	882.4	880.8
52.5°	832.7	831.6	825.3	824.8	823.3
55°	775.6	769.9	764.6	764.6	763.6
57.5°	712.8	708.6	701.8	701.8	700.8
60°	647.9	644.3	636.4	637.5	636.4
62.5°	584.6	576.7	569.4	572.6	569.9
65°	512.4	508.2	500.3	502.4	501.9
67.5°	446.4	438.6	431.3	435.4	433.3
70°	373.2	369.0	361.6	365.8	360.6
72.5°	304.1	300.4	293.1	297.8	292.6
75°	237.1	233.4	227.7	231.9	226.6
77.5°	173.8	171.1	165.9	170.1	171.1
80°	116.2	113.0	110.4	114.1	115.1
82.5°	68.0	65.9	64.9	65.4	68.0
85°	33.0	30.4	30.4	30.9	30.9
87.5°	8.9	7.9	8.9	9.4	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)