

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: P974104

Luminaire Tested: FLR2-24-72-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974104
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: FLR2-24-72-L830-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-72-L830-CA080
Ballast/Driver: -

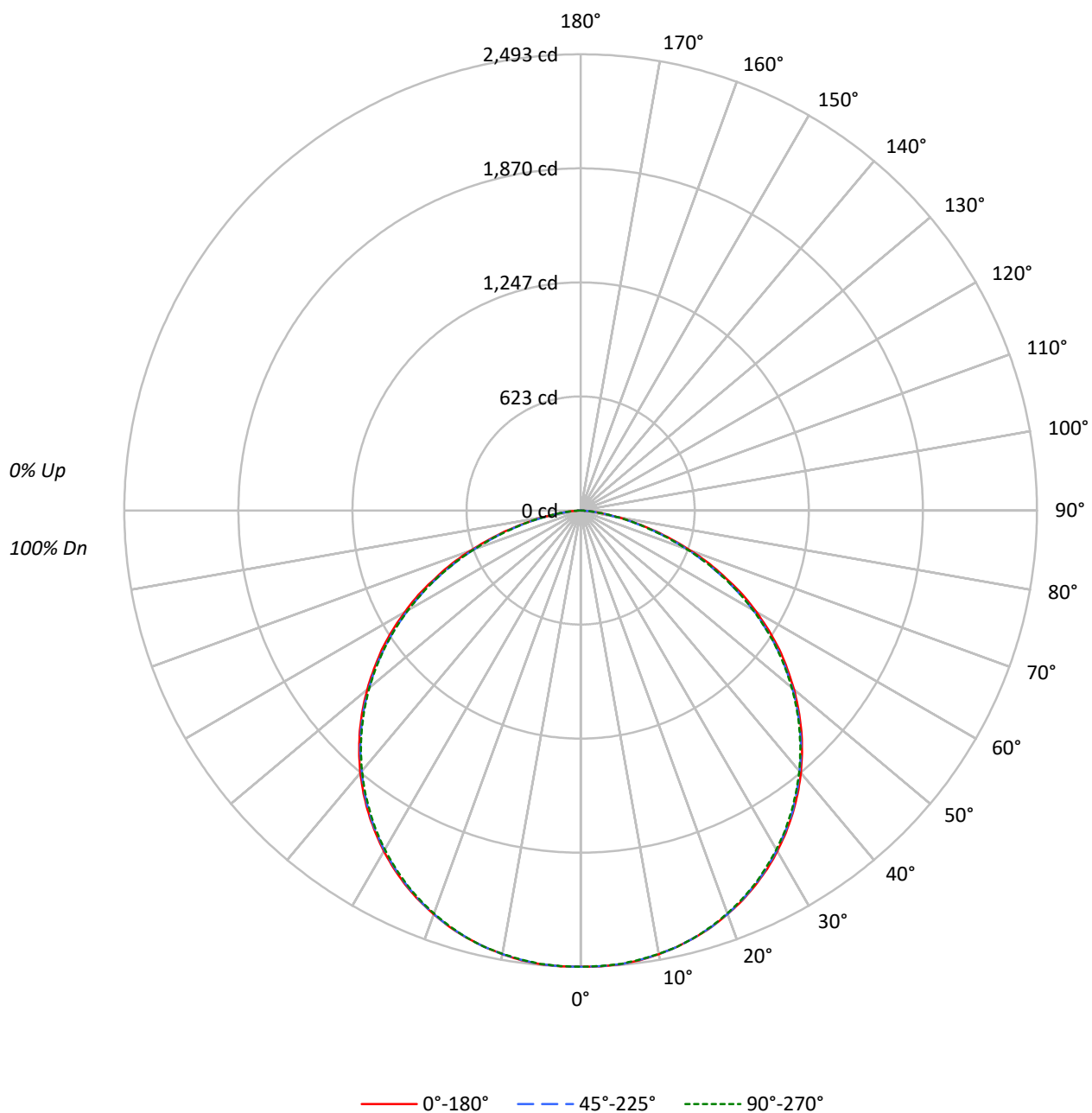
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7046.9 lumens
Efficiency: N/A
Efficacy: 115.7 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): 60.9
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

TEST NUMBER: P974104
CATALOG NUMBER: FLR2-24-72-L830-CA080

Luminous Intensity Polar Plot



TEST NUMBER: P974104

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3355	3355	3355
5°	3361	3361	3359
10°	3364	3362	3361
15°	3365	3363	3363
20°	3361	3360	3355
25°	3355	3348	3343
30°	3340	3330	3323
35°	3318	3309	3297
40°	3289	3268	3264
45°	3246	3228	3217
50°	3185	3161	3152
55°	3110	3066	3062
60°	2980	2928	2928
65°	2788	2723	2731
70°	2509	2432	2425
75°	2107	2023	2014
80°	1539	1463	1525
85°	871	801	815

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3246 cd/sqm

TEST NUMBER: P974104
CATALOG NUMBER: FLR2-24-72-L830-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.7	3.4
10°-20°	681.8	9.7
20°-30°	1039.5	14.8
30°-40°	1259.5	17.9
40°-50°	1308.2	18.6
50°-60°	1170.3	16.6
60°-70°	852.9	12.1
70°-80°	422.4	6.0
80°-90°	75.5	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°	1958.0	27.8
0°-40°	3217.4	45.7
0°-60°	5696.0	80.8
0°-90°	7046.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7046.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2493	2493	2493	2493	2493	
5°	2489	2490	2489	2489	2487	237
15°	2416	2415	2415	2416	2415	682
25°	2260	2257	2255	2254	2252	1041
35°	2020	2017	2015	2011	2008	1264
45°	1706	1702	1696	1693	1691	1315
55°	1326	1316	1307	1307	1305	1181
65°	876	869	855	859	858	868
75°	405	399	389	396	387	432
85°	56	52	52	53	53	78
90°	0	0	0	0	0	

TEST NUMBER: P974104

CATALOG NUMBER: FLR2-24-72-L830-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2493.3	2493.3	2493.3	2493.3	2493.3
2.5°	2493.3	2492.4	2492.4	2493.3	2491.5
5°	2488.8	2489.7	2488.8	2488.8	2487.1
7.5°	2479.0	2478.1	2477.2	2478.1	2475.4
10°	2462.0	2462.0	2461.1	2462.0	2460.2
12.5°	2441.4	2441.4	2441.4	2442.3	2441.4
15°	2415.5	2414.6	2414.6	2416.4	2414.6
17.5°	2385.1	2384.2	2384.2	2383.3	2381.5
20°	2347.5	2347.5	2346.6	2345.7	2343.0
22.5°	2307.2	2306.3	2303.7	2303.7	2300.1
25°	2259.8	2257.1	2255.3	2254.5	2251.8
27.5°	2207.9	2204.4	2201.7	2199.9	2197.2
30°	2149.8	2146.2	2143.5	2140.8	2139.0
32.5°	2087.2	2085.4	2080.9	2080.0	2076.4
35°	2020.1	2017.4	2014.7	2011.1	2007.5
37.5°	1948.5	1945.8	1939.5	1937.8	1935.1
40°	1872.4	1868.9	1860.8	1860.8	1858.1
42.5°	1791.0	1787.5	1782.1	1778.5	1776.7
45°	1706.0	1702.5	1696.2	1692.6	1690.8
47.5°	1615.7	1613.0	1605.8	1603.2	1600.5
50°	1521.8	1518.2	1510.1	1508.3	1505.7
52.5°	1423.3	1421.6	1410.8	1409.9	1407.2
55°	1325.8	1316.0	1307.0	1307.0	1305.3
57.5°	1218.5	1211.3	1199.7	1199.7	1197.9
60°	1107.5	1101.3	1087.9	1089.7	1087.9
62.5°	999.3	985.9	973.4	978.7	974.2
65°	875.8	868.7	855.3	858.8	857.9
67.5°	763.1	749.7	737.2	744.3	740.7
70°	637.9	630.7	618.2	625.3	616.4
72.5°	519.8	513.5	501.0	509.0	500.1
75°	405.3	399.0	389.2	396.3	387.4
77.5°	297.0	292.5	283.6	290.8	292.5
80°	198.6	193.2	188.8	195.0	196.8
82.5°	116.3	112.7	110.9	111.8	116.3
85°	56.4	51.9	51.9	52.8	52.8
87.5°	15.2	13.4	15.2	16.1	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)