

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: P973497

Luminaire Tested: FLR2-22-20-L830-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973497
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-20-L830-CP080
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 1
Light Source:
Ballast/Driver: -

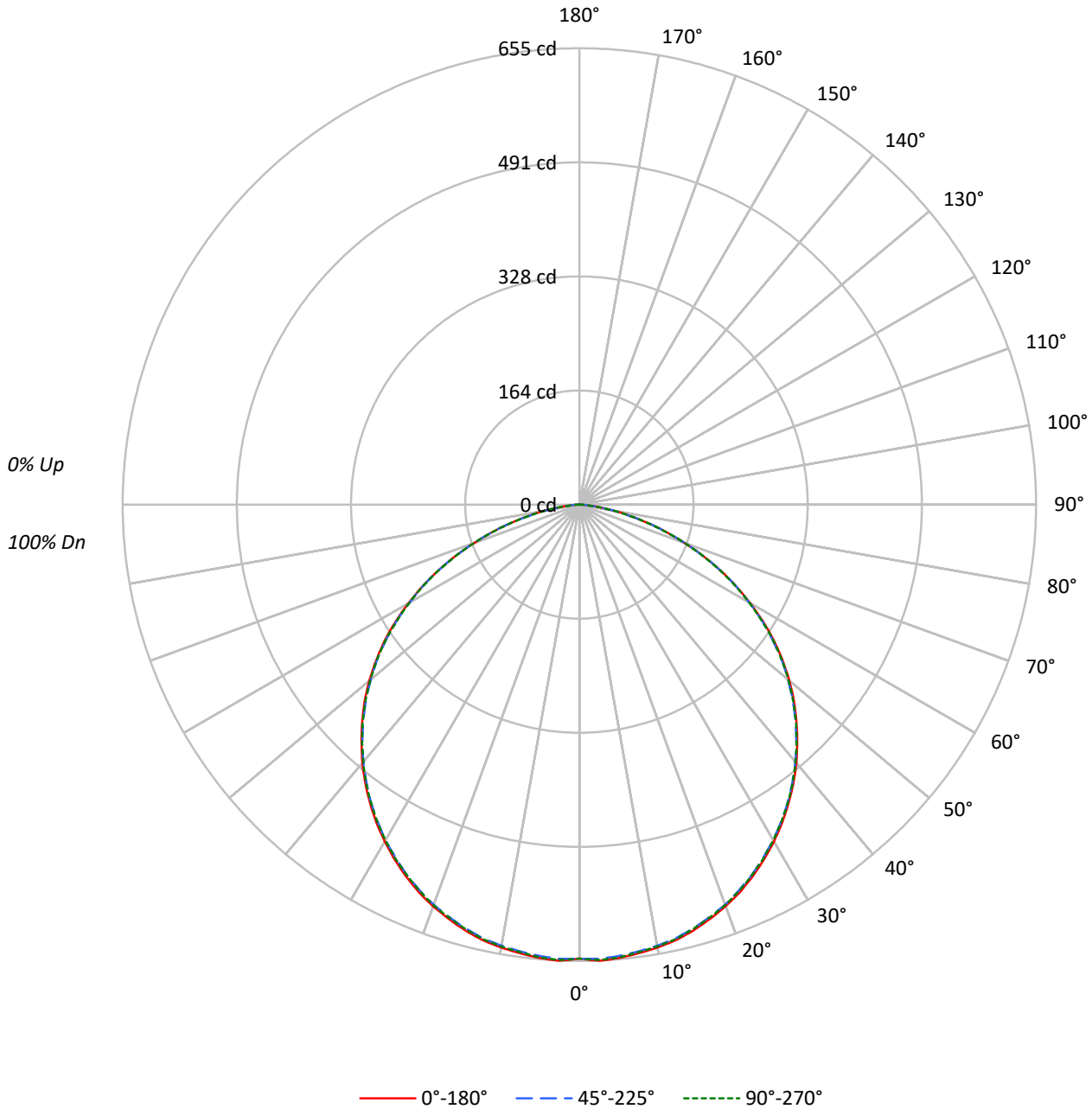
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1822.4 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 15.1
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															
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	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	40	34	29	27					27															
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1754	1754	1754
5°	1765	1757	1763
10°	1764	1756	1760
15°	1763	1755	1757
20°	1757	1750	1752
25°	1747	1740	1741
30°	1735	1727	1729
35°	1719	1712	1713
40°	1701	1692	1694
45°	1676	1668	1671
50°	1646	1634	1638
55°	1599	1586	1592
60°	1521	1514	1514
65°	1420	1417	1412
70°	1257	1264	1260
75°	1058	1050	1042
80°	761	748	742
85°	398	398	386

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1676 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	3.4
10°-20°	177.5	9.7
20°-30°	269.7	14.8
30°-40°	325.9	17.9
40°-50°	338.3	18.6
50°-60°	302.5	16.6
60°-70°	219.9	12.1
70°-80°	108.1	5.9
80°-90°	18.8	1.0
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°	508.8	27.9
0°-40°	834.8	45.8
0°-60°	1475.5	81.0
0°-90°	1822.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1822.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	652	652	652	652	652	
5°	653	646	650	648	652	62
15°	633	626	630	628	631	179
25°	588	582	586	585	586	271
35°	523	520	521	522	522	327
45°	440	438	438	439	439	340
55°	341	339	338	339	339	304
65°	223	224	223	223	222	220
75°	102	103	101	101	100	108
85°	13	13	13	13	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	651.7	651.7	651.7	651.7	651.7
2.5°	655.3	647.6	652.5	649.6	654.1
5°	653.3	645.6	650.4	648.0	652.5
7.5°	649.6	642.0	646.8	644.4	648.0
10°	645.6	637.6	642.8	640.4	644.0
12.5°	640.4	632.7	637.6	635.6	638.8
15°	632.7	625.5	629.9	628.3	630.7
17.5°	623.5	616.2	620.7	619.5	621.5
20°	613.4	606.6	611.0	609.8	611.8
22.5°	602.1	594.9	598.9	598.1	599.7
25°	588.5	582.0	586.0	584.8	586.4
27.5°	574.0	567.9	571.1	571.1	572.0
30°	558.3	552.6	555.9	555.9	556.3
32.5°	541.4	536.9	538.9	539.4	539.4
35°	523.3	519.6	521.2	521.6	521.6
37.5°	504.3	500.7	501.9	502.7	502.7
40°	484.2	481.0	481.8	482.6	482.2
42.5°	462.5	460.1	460.5	461.3	461.3
45°	440.3	438.3	438.3	439.1	439.1
47.5°	417.8	415.8	415.0	415.8	415.8
50°	393.2	391.2	390.4	391.2	391.2
52.5°	367.5	365.5	365.5	365.5	365.9
55°	340.9	338.9	338.1	338.9	339.3
57.5°	312.7	311.9	310.7	311.1	309.9
60°	282.6	282.6	281.3	282.2	281.3
62.5°	253.2	254.0	252.8	252.8	252.0
65°	223.0	223.8	222.6	222.6	221.8
67.5°	192.0	193.2	191.6	191.6	190.8
70°	159.8	162.2	160.6	161.0	160.2
72.5°	130.8	132.0	130.4	130.4	129.6
75°	101.8	102.6	101.0	101.4	100.2
77.5°	73.3	74.5	72.9	73.3	72.9
80°	49.1	49.5	48.3	48.7	47.9
82.5°	28.6	29.0	28.6	28.2	27.8
85°	12.9	13.3	12.9	12.9	12.5
87.5°	3.2	3.2	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)