

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: P973617

Luminaire Tested: FLR2-22-20-L840-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973617
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-L840-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

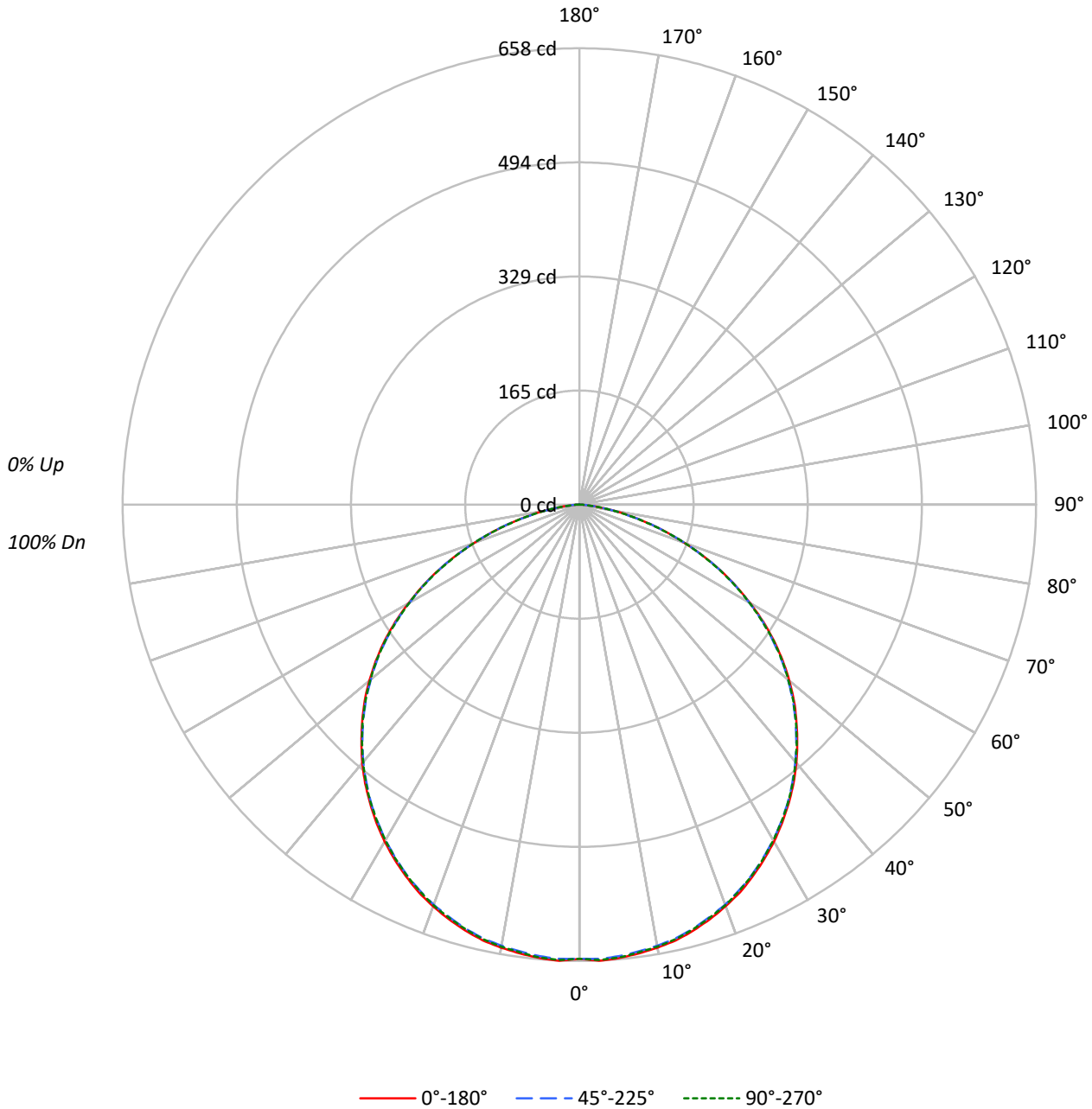
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1831.1 lumens
Efficiency: N/A
Efficacy: 121.3 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°	1762	1762	1762
5°	1773	1766	1771
10°	1773	1765	1768
15°	1771	1763	1766
20°	1765	1758	1761
25°	1756	1749	1750
30°	1743	1735	1737
35°	1727	1721	1722
40°	1709	1701	1702
45°	1684	1676	1679
50°	1654	1642	1646
55°	1607	1594	1599
60°	1528	1521	1521
65°	1427	1424	1419
70°	1264	1270	1267
75°	1064	1055	1047
80°	764	752	745
85°	398	398	386

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1684 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	3.4
10°-20°	178.3	9.7
20°-30°	271.0	14.8
30°-40°	327.5	17.9
40°-50°	339.9	18.6
50°-60°	303.9	16.6
60°-70°	221.0	12.1
70°-80°	108.6	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°	511.3	27.9
0°-40°	838.8	45.8
0°-60°	1482.6	81.0
0°-90°	1831.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1831.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	655	655	655	655	655	
5°	656	649	654	651	656	62
15°	636	628	633	631	634	179
25°	591	585	589	588	589	273
35°	526	522	524	524	524	329
45°	442	440	440	441	441	341
55°	343	340	340	340	341	305
65°	224	225	224	224	223	221
75°	102	103	102	102	101	109
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°	654.8	654.8	654.8	654.8	654.8
2.5°	658.4	650.7	655.6	652.8	657.2
5°	656.4	648.7	653.6	651.2	655.6
7.5°	652.8	645.1	649.9	647.5	651.2
10°	648.7	640.6	645.9	643.5	647.1
12.5°	643.5	635.8	640.6	638.6	641.8
15°	635.8	628.5	633.0	631.3	633.8
17.5°	626.5	619.2	623.6	622.4	624.5
20°	616.4	609.5	613.9	612.7	614.8
22.5°	605.0	597.8	601.8	601.0	602.6
25°	591.3	584.8	588.9	587.7	589.3
27.5°	576.7	570.7	573.9	573.9	574.7
30°	561.0	555.3	558.5	558.5	558.9
32.5°	544.0	539.5	541.5	542.0	542.0
35°	525.8	522.1	523.8	524.2	524.2
37.5°	506.8	503.1	504.3	505.1	505.1
40°	486.5	483.3	484.1	484.9	484.5
42.5°	464.7	462.3	462.7	463.5	463.5
45°	442.5	440.4	440.4	441.2	441.2
47.5°	419.8	417.8	417.0	417.8	417.8
50°	395.1	393.1	392.3	393.1	393.1
52.5°	369.3	367.2	367.2	367.2	367.6
55°	342.6	340.5	339.7	340.5	340.9
57.5°	314.3	313.4	312.2	312.6	311.4
60°	283.9	283.9	282.7	283.5	282.7
62.5°	254.4	255.2	254.0	254.0	253.2
65°	224.1	224.9	223.7	223.7	222.8
67.5°	192.9	194.1	192.5	192.5	191.7
70°	160.6	163.0	161.4	161.8	161.0
72.5°	131.4	132.7	131.0	131.0	130.2
75°	102.3	103.1	101.5	101.9	100.7
77.5°	73.6	74.8	73.2	73.6	73.2
80°	49.3	49.7	48.5	48.9	48.1
82.5°	28.7	29.1	28.7	28.3	27.9
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)