

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: P973673

Luminaire Tested: FLR2-22-20-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973673
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-L850-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

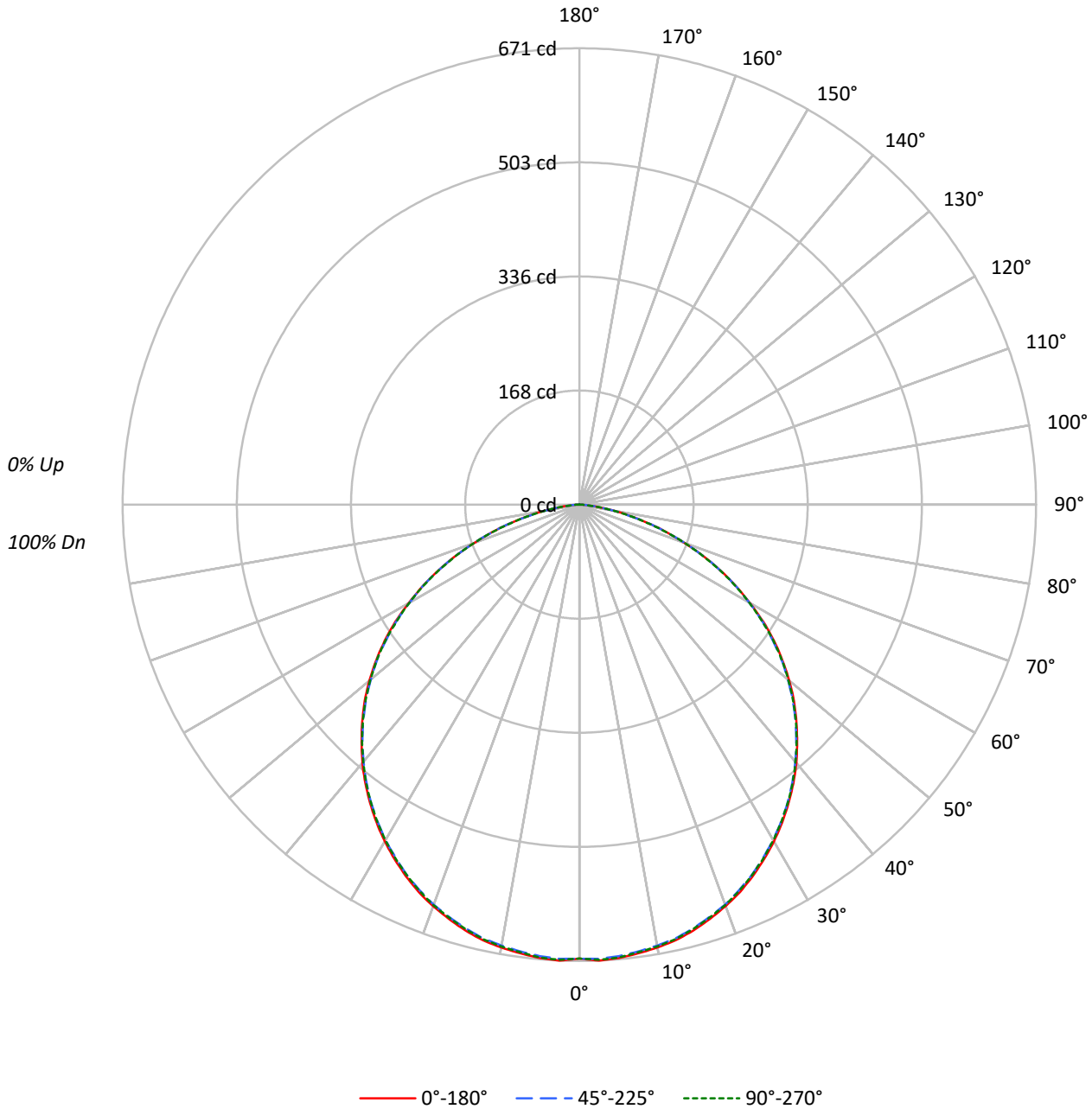
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1866.7 lumens
Efficiency: N/A
Efficacy: 123.6 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°	1796	1796	1796
5°	1808	1800	1805
10°	1807	1799	1803
15°	1806	1797	1800
20°	1799	1792	1795
25°	1790	1782	1784
30°	1777	1769	1771
35°	1761	1754	1755
40°	1742	1734	1735
45°	1717	1709	1712
50°	1686	1674	1678
55°	1638	1625	1631
60°	1558	1551	1551
65°	1454	1452	1447
70°	1288	1294	1291
75°	1084	1076	1068
80°	779	767	761
85°	408	408	395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1717 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	3.4
10°-20°	181.8	9.7
20°-30°	276.2	14.8
30°-40°	333.9	17.9
40°-50°	346.6	18.6
50°-60°	309.8	16.6
60°-70°	225.3	12.1
70°-80°	110.8	5.9
80°-90°	19.2	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°	521.2	27.9
0°-40°	855.1	45.8
0°-60°	1511.5	81.0
0°-90°	1866.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1866.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	669	661	666	664	668	64
15°	648	641	645	644	646	183
25°	603	596	600	599	601	278
35°	536	532	534	534	534	335
45°	451	449	449	450	450	348
55°	349	347	346	347	348	311
65°	228	229	228	228	227	225
75°	104	105	104	104	103	111
85°	13	14	13	13	13	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	667.5	667.5	667.5	667.5	667.5
2.5°	671.2	663.4	668.3	665.4	670.0
5°	669.2	661.3	666.3	663.8	668.3
7.5°	665.4	657.6	662.6	660.1	663.8
10°	661.3	653.1	658.4	656.0	659.7
12.5°	656.0	648.1	653.1	651.0	654.3
15°	648.1	640.7	645.2	643.6	646.1
17.5°	638.6	631.2	635.8	634.5	636.6
20°	628.3	621.3	625.9	624.6	626.7
22.5°	616.8	609.4	613.5	612.7	614.3
25°	602.8	596.2	600.3	599.1	600.7
27.5°	587.9	581.7	585.0	585.0	585.9
30°	571.9	566.1	569.4	569.4	569.8
32.5°	554.5	550.0	552.1	552.5	552.5
35°	536.0	532.3	533.9	534.3	534.3
37.5°	516.6	512.9	514.1	515.0	515.0
40°	496.0	492.7	493.5	494.3	493.9
42.5°	473.7	471.3	471.7	472.5	472.5
45°	451.1	449.0	449.0	449.8	449.8
47.5°	428.0	425.9	425.1	425.9	425.9
50°	402.8	400.8	399.9	400.8	400.8
52.5°	376.4	374.4	374.4	374.4	374.8
55°	349.2	347.2	346.3	347.2	347.6
57.5°	320.4	319.5	318.3	318.7	317.5
60°	289.4	289.4	288.2	289.0	288.2
62.5°	259.3	260.2	258.9	258.9	258.1
65°	228.4	229.2	228.0	228.0	227.2
67.5°	196.7	197.9	196.3	196.3	195.4
70°	163.7	166.2	164.5	164.9	164.1
72.5°	134.0	135.2	133.6	133.6	132.8
75°	104.3	105.1	103.5	103.9	102.7
77.5°	75.0	76.3	74.6	75.0	74.6
80°	50.3	50.7	49.5	49.9	49.1
82.5°	29.3	29.7	29.3	28.9	28.4
85°	13.2	13.6	13.2	13.2	12.8
87.5°	3.3	3.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)