

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: P974153

Luminaire Tested: FLR2-24-20-L930-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974153
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: FLR2-24-20-L930-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L930-CA080
Ballast/Driver: -

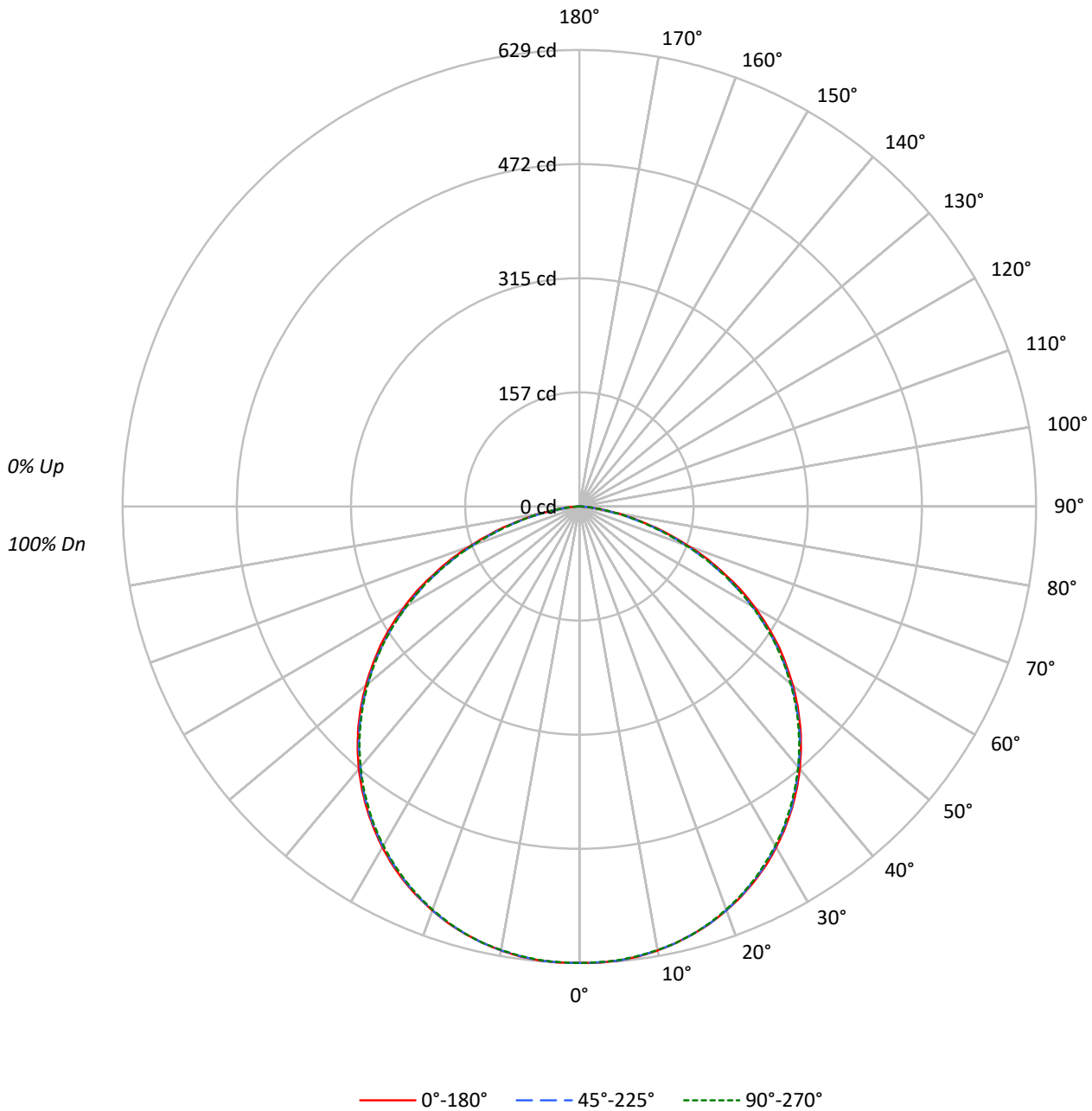
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1778.0 lumens
Efficiency: N/A
Efficacy: 106.5 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): 16.7
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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	846	846	846
5°	848	848	848
10°	849	848	848
15°	849	849	849
20°	848	848	847
25°	847	845	844
30°	843	840	838
35°	837	835	832
40°	830	825	823
45°	819	814	812
50°	804	798	795
55°	785	774	772
60°	752	739	739
65°	704	687	689
70°	633	614	612
75°	532	510	508
80°	388	369	385
85°	219	202	205

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 819 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	3.4
10°-20°	172.0	9.7
20°-30°	262.3	14.8
30°-40°	317.8	17.9
40°-50°	330.1	18.6
50°-60°	295.3	16.6
60°-70°	215.2	12.1
70°-80°	106.6	6.0
80°-90°	19.0	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°	494.0	27.8
0°-40°	811.8	45.7
0°-60°	1437.2	80.8
0°-90°	1778.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1778.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	629	629	629	629	629	
5°	628	628	628	628	628	60
15°	610	609	609	610	609	172
25°	570	570	569	569	568	263
35°	510	509	508	507	506	319
45°	430	430	428	427	427	332
55°	334	332	330	330	329	298
65°	221	219	216	217	216	219
75°	102	101	98	100	98	109
85°	14	13	13	13	13	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	629.1	629.1	629.1	629.1	629.1
2.5°	629.1	628.9	628.9	629.1	628.6
5°	628.0	628.2	628.0	628.0	627.5
7.5°	625.5	625.3	625.0	625.3	624.6
10°	621.2	621.2	621.0	621.2	620.7
12.5°	616.0	616.0	616.0	616.2	616.0
15°	609.5	609.2	609.2	609.7	609.2
17.5°	601.8	601.6	601.6	601.3	600.9
20°	592.3	592.3	592.1	591.9	591.2
22.5°	582.1	581.9	581.2	581.2	580.3
25°	570.2	569.5	569.1	568.8	568.2
27.5°	557.1	556.2	555.5	555.1	554.4
30°	542.4	541.5	540.8	540.2	539.7
32.5°	526.6	526.2	525.0	524.8	523.9
35°	509.7	509.0	508.3	507.4	506.5
37.5°	491.6	491.0	489.4	488.9	488.2
40°	472.4	471.5	469.5	469.5	468.8
42.5°	451.9	451.0	449.6	448.7	448.3
45°	430.5	429.6	428.0	427.1	426.6
47.5°	407.7	407.0	405.2	404.5	403.8
50°	384.0	383.1	381.0	380.6	379.9
52.5°	359.1	358.7	356.0	355.7	355.1
55°	334.5	332.0	329.8	329.8	329.3
57.5°	307.4	305.6	302.7	302.7	302.2
60°	279.4	277.9	274.5	274.9	274.5
62.5°	252.1	248.8	245.6	246.9	245.8
65°	221.0	219.2	215.8	216.7	216.5
67.5°	192.5	189.2	186.0	187.8	186.9
70°	160.9	159.1	156.0	157.8	155.5
72.5°	131.1	129.6	126.4	128.4	126.2
75°	102.3	100.7	98.2	100.0	97.7
77.5°	74.9	73.8	71.6	73.4	73.8
80°	50.1	48.8	47.6	49.2	49.7
82.5°	29.3	28.4	28.0	28.2	29.3
85°	14.2	13.1	13.1	13.3	13.3
87.5°	3.8	3.4	3.8	4.1	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)