

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: P974377

Luminaire Tested: FLR2-24-20-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974377
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-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L940-CA080
Ballast/Driver: -

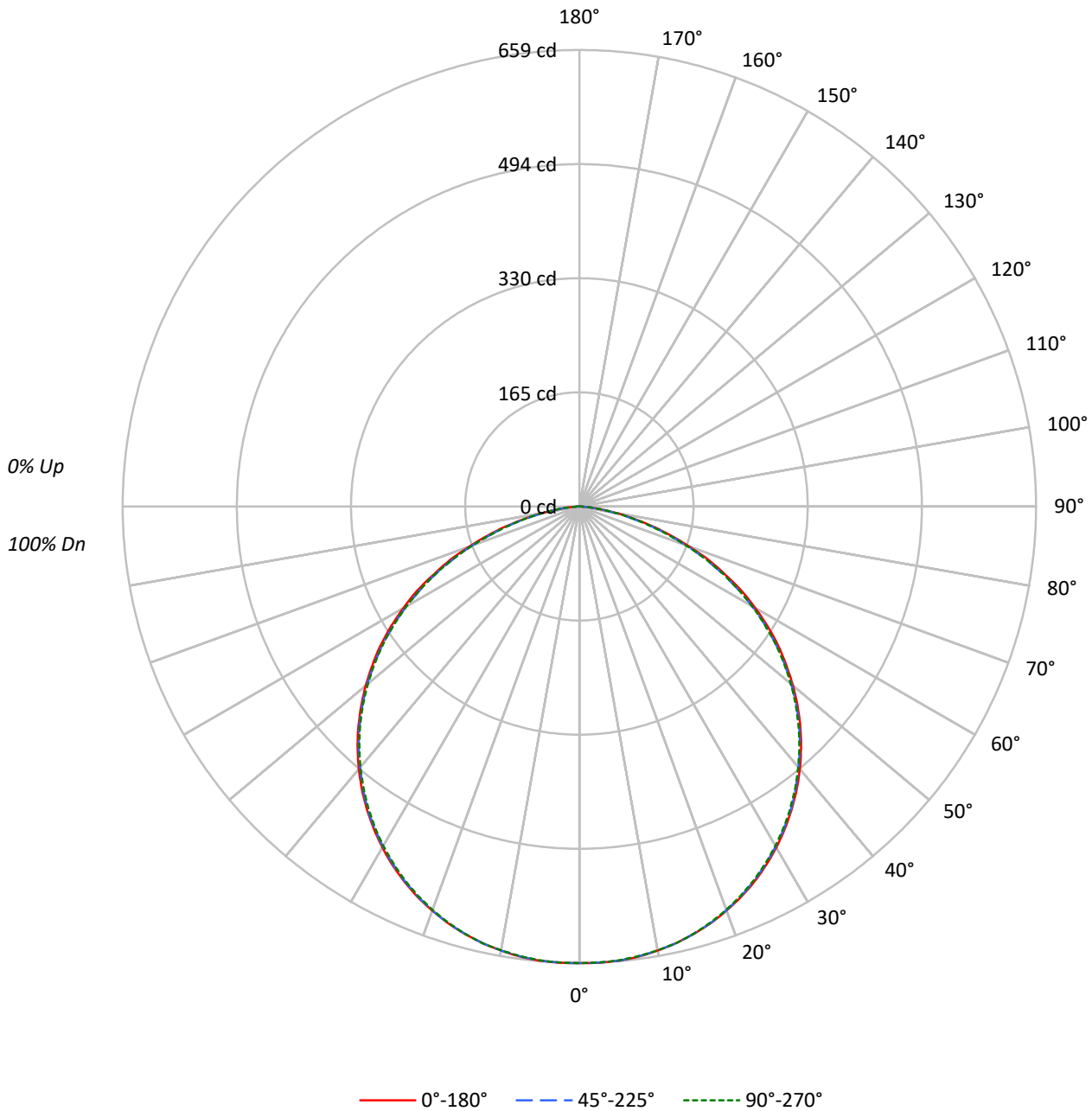
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1863.7 lumens
Efficiency: N/A
Efficacy: 111.6 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	0
RW	70	50	30	10	70	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
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°	887	887	887
5°	889	889	888
10°	890	889	889
15°	890	890	890
20°	889	889	887
25°	887	886	884
30°	883	881	879
35°	878	875	872
40°	870	864	863
45°	859	854	851
50°	843	836	834
55°	822	811	810
60°	788	774	774
65°	737	720	722
70°	664	643	641
75°	557	535	532
80°	407	387	404
85°	230	211	216

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 859 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	3.4
10°-20°	180.3	9.7
20°-30°	274.9	14.8
30°-40°	333.1	17.9
40°-50°	346.0	18.6
50°-60°	309.5	16.6
60°-70°	225.6	12.1
70°-80°	111.7	6.0
80°-90°	20.0	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°	517.8	27.8
0°-40°	850.9	45.7
0°-60°	1506.5	80.8
0°-90°	1863.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1863.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	659	659	659	659	659	
5°	658	658	658	658	658	63
15°	639	639	639	639	639	180
25°	598	597	596	596	596	275
35°	534	534	533	532	531	334
45°	451	450	449	448	447	348
55°	351	348	346	346	345	312
65°	232	230	226	227	227	230
75°	107	106	103	105	102	114
85°	15	14	14	14	14	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	659.4	659.4	659.4	659.4	659.4
2.5°	659.4	659.2	659.2	659.4	658.9
5°	658.2	658.5	658.2	658.2	657.8
7.5°	655.6	655.4	655.2	655.4	654.7
10°	651.1	651.1	650.9	651.1	650.7
12.5°	645.7	645.7	645.7	645.9	645.7
15°	638.8	638.6	638.6	639.1	638.6
17.5°	630.8	630.6	630.6	630.3	629.8
20°	620.9	620.9	620.6	620.4	619.7
22.5°	610.2	610.0	609.3	609.3	608.3
25°	597.7	597.0	596.5	596.2	595.5
27.5°	583.9	583.0	582.3	581.8	581.1
30°	568.6	567.6	566.9	566.2	565.7
32.5°	552.0	551.5	550.3	550.1	549.2
35°	534.3	533.5	532.8	531.9	530.9
37.5°	515.3	514.6	513.0	512.5	511.8
40°	495.2	494.3	492.1	492.1	491.4
42.5°	473.7	472.7	471.3	470.4	469.9
45°	451.2	450.3	448.6	447.7	447.2
47.5°	427.3	426.6	424.7	424.0	423.3
50°	402.5	401.5	399.4	398.9	398.2
52.5°	376.4	376.0	373.1	372.9	372.2
55°	350.6	348.0	345.7	345.7	345.2
57.5°	322.3	320.4	317.3	317.3	316.8
60°	292.9	291.3	287.7	288.2	287.7
62.5°	264.3	260.7	257.4	258.8	257.7
65°	231.6	229.7	226.2	227.1	226.9
67.5°	201.8	198.3	195.0	196.9	195.9
70°	168.7	166.8	163.5	165.4	163.0
72.5°	137.5	135.8	132.5	134.6	132.3
75°	107.2	105.5	102.9	104.8	102.4
77.5°	78.6	77.4	75.0	76.9	77.4
80°	52.5	51.1	49.9	51.6	52.1
82.5°	30.8	29.8	29.3	29.6	30.8
85°	14.9	13.7	13.7	14.0	14.0
87.5°	4.0	3.5	4.0	4.3	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)