

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: P974321

Luminaire Tested: FLR2-24-20-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974321
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-L840-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L840-CA080
Ballast/Driver: -

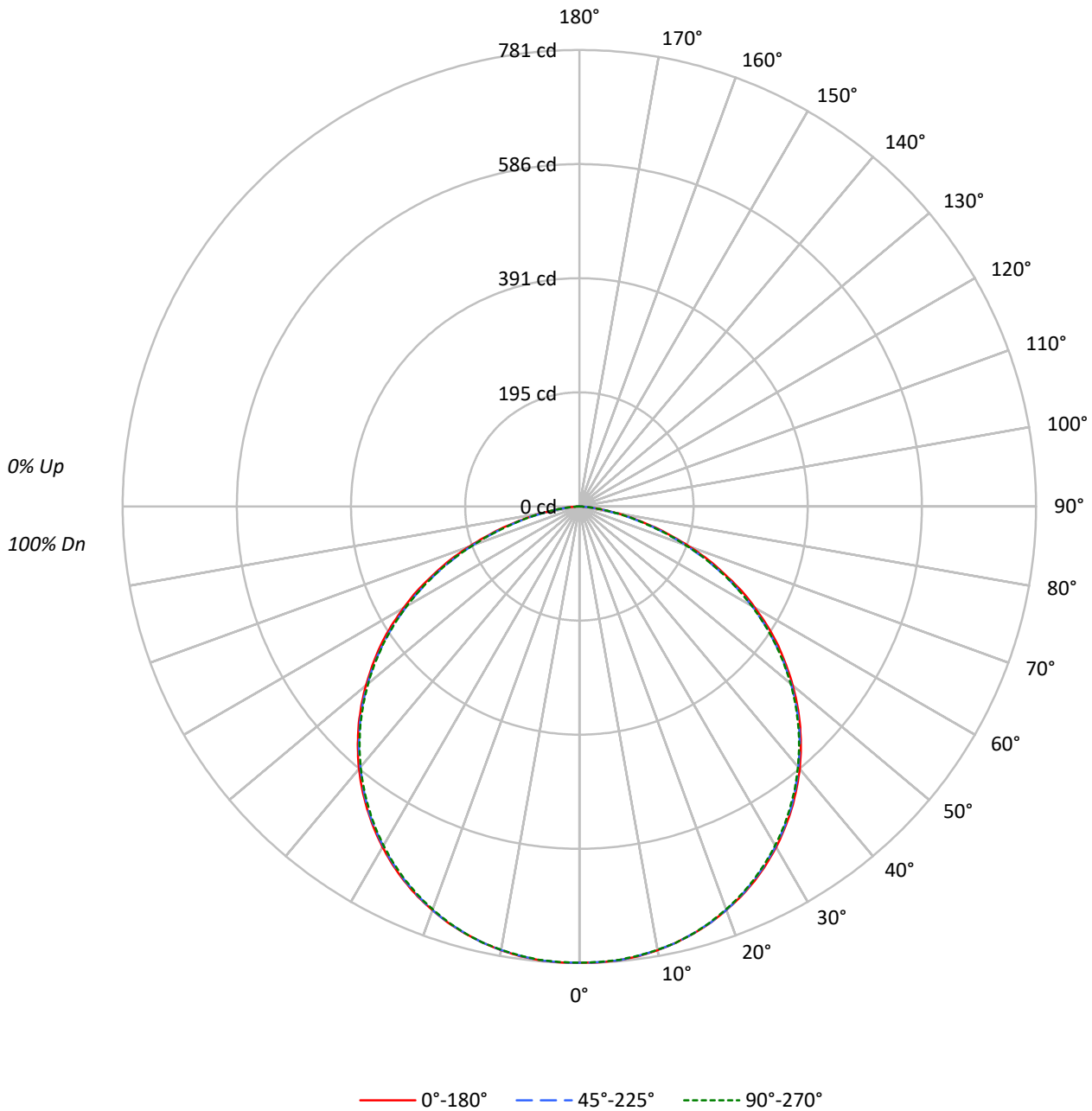
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2206.5 lumens
Efficiency: N/A
Efficacy: 132.1 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°	1050	1050	1050
5°	1053	1053	1052
10°	1053	1053	1052
15°	1053	1053	1053
20°	1052	1052	1050
25°	1050	1048	1047
30°	1046	1043	1041
35°	1039	1036	1033
40°	1030	1023	1022
45°	1016	1011	1007
50°	997	990	987
55°	974	960	959
60°	933	917	917
65°	873	853	855
70°	786	762	759
75°	660	634	631
80°	482	458	477
85°	272	250	255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1016 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	3.4
10°-20°	213.5	9.7
20°-30°	325.5	14.8
30°-40°	394.4	17.9
40°-50°	409.6	18.6
50°-60°	366.4	16.6
60°-70°	267.1	12.1
70°-80°	132.3	6.0
80°-90°	23.6	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°	613.1	27.8
0°-40°	1007.4	45.7
0°-60°	1783.5	80.8
0°-90°	2206.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2206.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	779	780	779	779	779	74
15°	756	756	756	757	756	214
25°	708	707	706	706	705	326
35°	632	632	631	630	629	396
45°	534	533	531	530	529	412
55°	415	412	409	409	409	370
65°	274	272	268	269	269	272
75°	127	125	122	124	121	135
85°	18	16	16	16	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	780.7	780.7	780.7	780.7	780.7
2.5°	780.7	780.4	780.4	780.7	780.1
5°	779.3	779.6	779.3	779.3	778.7
7.5°	776.2	775.9	775.6	775.9	775.1
10°	770.9	770.9	770.6	770.9	770.3
12.5°	764.4	764.4	764.4	764.7	764.4
15°	756.3	756.0	756.0	756.6	756.0
17.5°	746.8	746.5	746.5	746.2	745.7
20°	735.0	735.0	734.8	734.5	733.6
22.5°	722.4	722.1	721.3	721.3	720.2
25°	707.6	706.7	706.2	705.9	705.1
27.5°	691.3	690.2	689.4	688.8	688.0
30°	673.1	672.0	671.2	670.3	669.8
32.5°	653.5	653.0	651.6	651.3	650.2
35°	632.5	631.7	630.8	629.7	628.6
37.5°	610.1	609.3	607.3	606.7	605.9
40°	586.3	585.2	582.6	582.6	581.8
42.5°	560.8	559.7	558.0	556.9	556.3
45°	534.2	533.1	531.1	530.0	529.4
47.5°	505.9	505.1	502.8	502.0	501.1
50°	476.5	475.4	472.8	472.3	471.4
52.5°	445.7	445.1	441.7	441.5	440.6
55°	415.1	412.1	409.3	409.3	408.7
57.5°	381.5	379.3	375.6	375.6	375.1
60°	346.8	344.8	340.6	341.2	340.6
62.5°	312.9	308.7	304.8	306.4	305.0
65°	274.2	272.0	267.8	268.9	268.6
67.5°	238.9	234.7	230.8	233.1	231.9
70°	199.7	197.5	193.6	195.8	193.0
72.5°	162.7	160.8	156.9	159.4	156.6
75°	126.9	124.9	121.9	124.1	121.3
77.5°	93.0	91.6	88.8	91.0	91.6
80°	62.2	60.5	59.1	61.1	61.6
82.5°	36.4	35.3	34.7	35.0	36.4
85°	17.6	16.2	16.2	16.5	16.5
87.5°	4.8	4.2	4.8	5.0	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)