

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: P974433

Luminaire Tested: FLR2-24-20-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974433
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-L850-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L850-CA080
Ballast/Driver: -

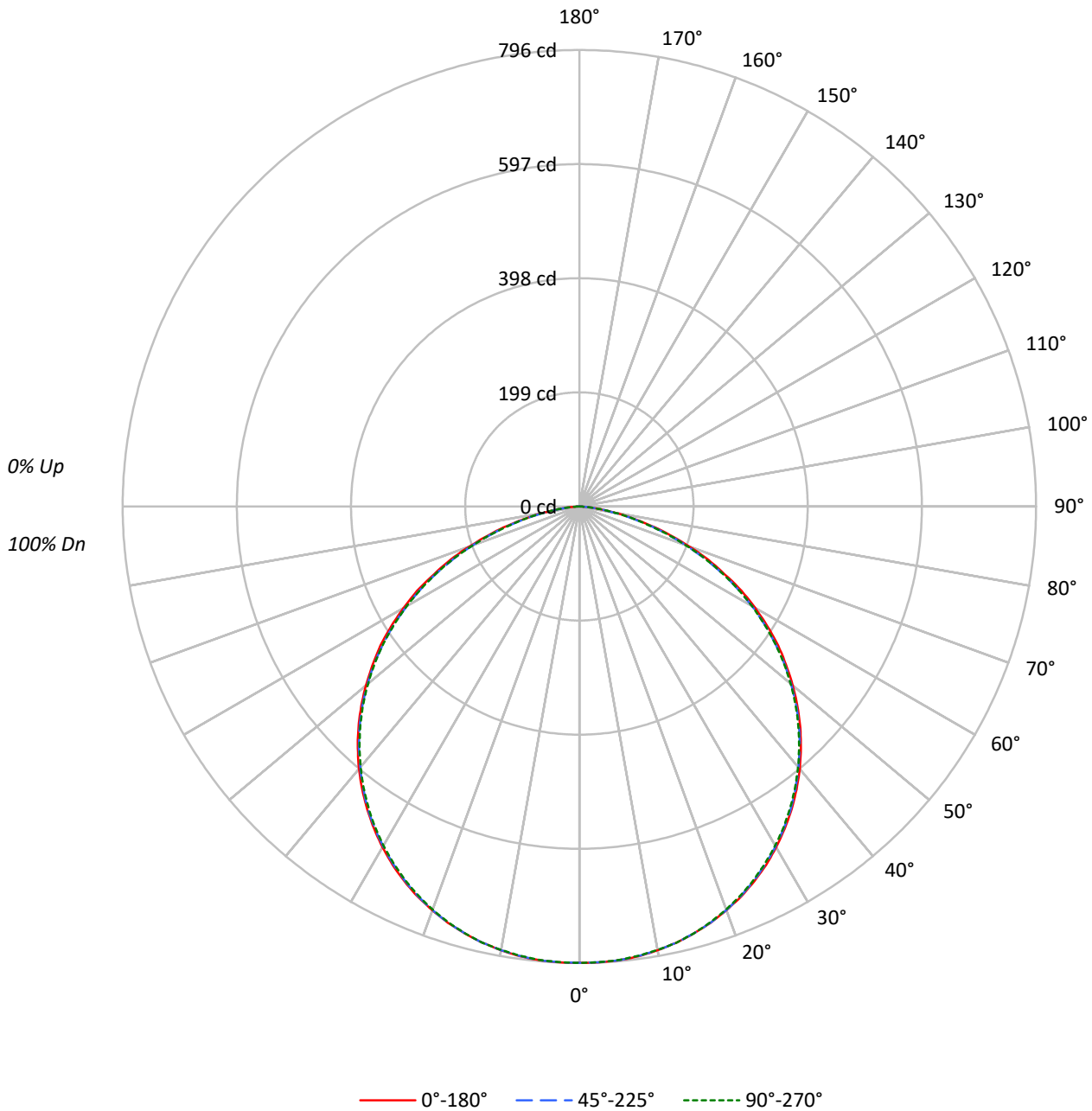
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2249.3 lumens
Efficiency: N/A
Efficacy: 134.7 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°	1071	1071	1071
5°	1073	1073	1072
10°	1074	1073	1073
15°	1074	1074	1074
20°	1073	1072	1071
25°	1071	1069	1067
30°	1066	1063	1061
35°	1059	1056	1053
40°	1050	1043	1042
45°	1036	1030	1027
50°	1017	1009	1006
55°	993	979	977
60°	951	934	934
65°	890	869	872
70°	801	776	774
75°	673	646	643
80°	491	467	487
85°	278	256	259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1036 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	3.4
10°-20°	217.6	9.7
20°-30°	331.8	14.8
30°-40°	402.0	17.9
40°-50°	417.6	18.6
50°-60°	373.5	16.6
60°-70°	272.3	12.1
70°-80°	134.8	6.0
80°-90°	24.1	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°	625.0	27.8
0°-40°	1027.0	45.7
0°-60°	1818.1	80.8
0°-90°	2249.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2249.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	794	795	794	794	794	76
15°	771	771	771	771	771	218
25°	721	720	720	720	719	332
35°	645	644	643	642	641	403
45°	545	543	541	540	540	420
55°	423	420	417	417	417	377
65°	280	277	273	274	274	277
75°	129	127	124	126	124	138
85°	18	17	17	17	17	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	795.8	795.8	795.8	795.8	795.8
2.5°	795.8	795.6	795.6	795.8	795.3
5°	794.4	794.7	794.4	794.4	793.8
7.5°	791.3	791.0	790.7	791.0	790.1
10°	785.9	785.9	785.6	785.9	785.3
12.5°	779.3	779.3	779.3	779.6	779.3
15°	771.0	770.7	770.7	771.3	770.7
17.5°	761.3	761.0	761.0	760.7	760.2
20°	749.3	749.3	749.0	748.7	747.9
22.5°	736.5	736.2	735.3	735.3	734.2
25°	721.3	720.5	719.9	719.6	718.7
27.5°	704.8	703.6	702.8	702.2	701.3
30°	686.2	685.1	684.2	683.3	682.8
32.5°	666.2	665.6	664.2	663.9	662.8
35°	644.8	643.9	643.1	641.9	640.8
37.5°	621.9	621.1	619.1	618.5	617.7
40°	597.7	596.5	594.0	594.0	593.1
42.5°	571.7	570.5	568.8	567.7	567.1
45°	544.6	543.4	541.4	540.3	539.7
47.5°	515.7	514.9	512.6	511.7	510.9
50°	485.7	484.6	482.0	481.4	480.6
52.5°	454.3	453.8	450.3	450.0	449.2
55°	423.2	420.1	417.2	417.2	416.6
57.5°	388.9	386.6	382.9	382.9	382.4
60°	353.5	351.5	347.2	347.8	347.2
62.5°	319.0	314.7	310.7	312.4	311.0
65°	279.6	277.3	273.0	274.1	273.8
67.5°	243.6	239.3	235.3	237.6	236.4
70°	203.6	201.3	197.3	199.6	196.7
72.5°	165.9	163.9	159.9	162.5	159.6
75°	129.4	127.4	124.2	126.5	123.6
77.5°	94.8	93.4	90.5	92.8	93.4
80°	63.4	61.7	60.3	62.3	62.8
82.5°	37.1	36.0	35.4	35.7	37.1
85°	18.0	16.6	16.6	16.8	16.8
87.5°	4.9	4.3	4.9	5.1	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)