

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: P974393

Luminaire Tested: FLR2-24-20-L850-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974393
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L850-CP080
Ballast/Driver: -

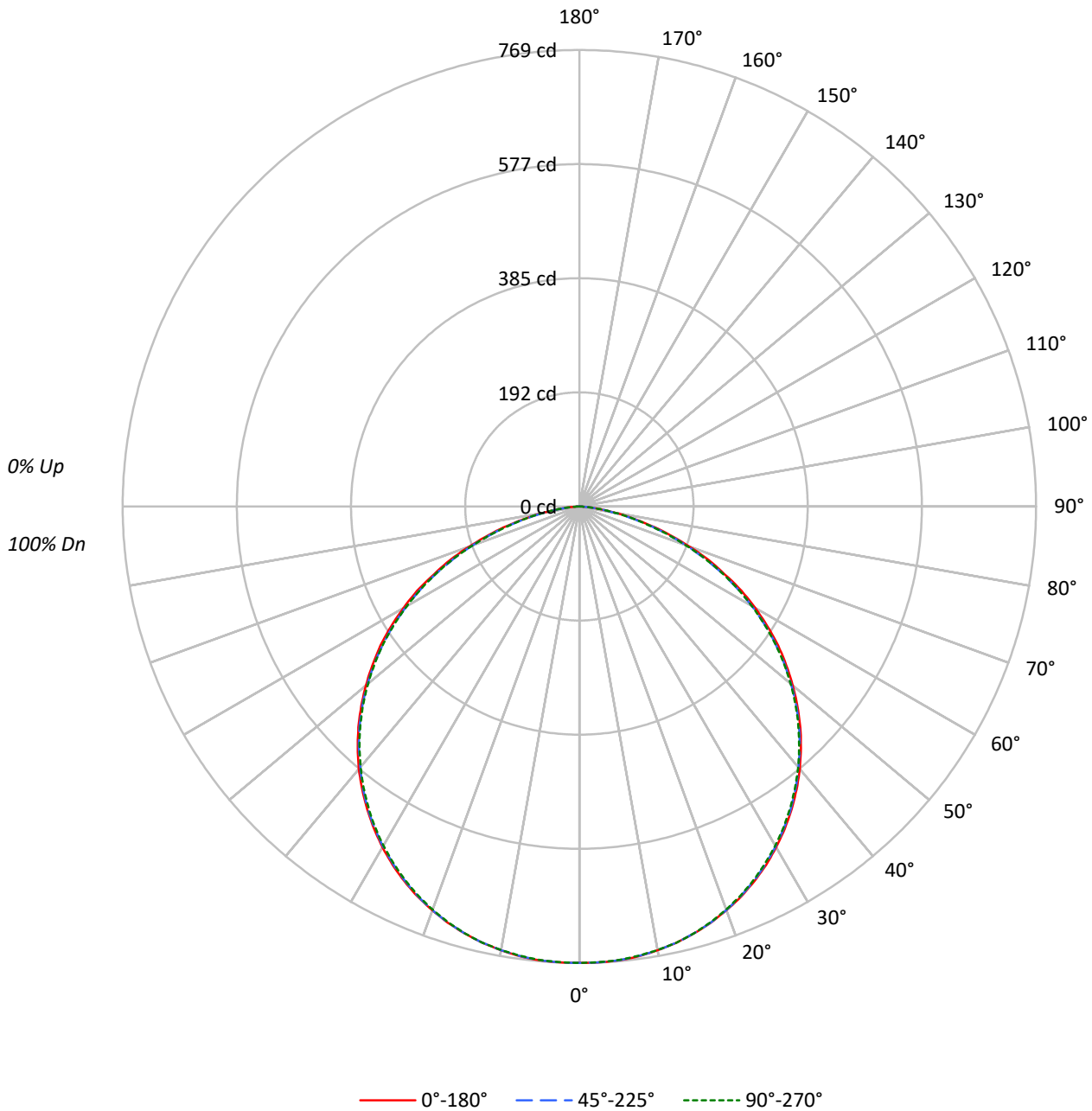
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2173.3 lumens
Efficiency: N/A
Efficacy: 130.1 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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CATALOG NUMBER: FLR2-24-20-L850-CP080

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°	1035	1035	1035
5°	1037	1037	1036
10°	1037	1037	1037
15°	1038	1037	1037
20°	1037	1036	1035
25°	1035	1033	1031
30°	1030	1027	1025
35°	1023	1021	1017
40°	1014	1008	1007
45°	1001	995	992
50°	982	975	972
55°	959	946	944
60°	919	903	903
65°	860	840	842
70°	774	750	748
75°	650	624	621
80°	475	451	470
85°	269	247	252

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1001 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.0	3.4
10°-20°	210.3	9.7
20°-30°	320.6	14.8
30°-40°	388.4	17.9
40°-50°	403.5	18.6
50°-60°	360.9	16.6
60°-70°	263.1	12.1
70°-80°	130.3	6.0
80°-90°	23.3	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°	603.9	27.8
0°-40°	992.3	45.7
0°-60°	1756.7	80.8
0°-90°	2173.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2173.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	768	768	768	768	767	73
15°	745	745	745	745	745	210
25°	697	696	696	695	694	321
35°	623	622	621	620	619	390
45°	526	525	523	522	522	405
55°	409	406	403	403	402	364
65°	270	268	264	265	265	268
75°	125	123	120	122	120	133
85°	17	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°	768.9	768.9	768.9	768.9	768.9
2.5°	768.9	768.7	768.7	768.9	768.4
5°	767.6	767.8	767.6	767.6	767.0
7.5°	764.5	764.3	764.0	764.3	763.4
10°	759.3	759.3	759.0	759.3	758.7
12.5°	752.9	752.9	752.9	753.2	752.9
15°	744.9	744.7	744.7	745.2	744.7
17.5°	735.6	735.3	735.3	735.0	734.5
20°	724.0	724.0	723.7	723.4	722.6
22.5°	711.6	711.3	710.5	710.5	709.4
25°	696.9	696.1	695.6	695.3	694.5
27.5°	680.9	679.8	679.0	678.5	677.6
30°	663.0	661.9	661.1	660.2	659.7
32.5°	643.7	643.1	641.8	641.5	640.4
35°	623.0	622.2	621.3	620.2	619.1
37.5°	600.9	600.1	598.2	597.6	596.8
40°	577.5	576.4	573.9	573.9	573.1
42.5°	552.4	551.3	549.6	548.5	547.9
45°	526.2	525.0	523.1	522.0	521.5
47.5°	498.3	497.5	495.3	494.4	493.6
50°	469.3	468.2	465.7	465.2	464.3
52.5°	439.0	438.4	435.1	434.8	434.0
55°	408.9	405.9	403.1	403.1	402.5
57.5°	375.8	373.6	370.0	370.0	369.4
60°	341.6	339.6	335.5	336.1	335.5
62.5°	308.2	304.0	300.2	301.8	300.5
65°	270.1	267.9	263.8	264.9	264.6
67.5°	235.3	231.2	227.3	229.6	228.4
70°	196.7	194.5	190.7	192.9	190.1
72.5°	160.3	158.4	154.5	157.0	154.2
75°	125.0	123.1	120.0	122.2	119.5
77.5°	91.6	90.2	87.5	89.7	90.2
80°	61.3	59.6	58.2	60.1	60.7
82.5°	35.9	34.8	34.2	34.5	35.9
85°	17.4	16.0	16.0	16.3	16.3
87.5°	4.7	4.1	4.7	5.0	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)