

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: P974169

Luminaire Tested: FLR2-24-20-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974169
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-L835-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L835-CP080
Ballast/Driver: -

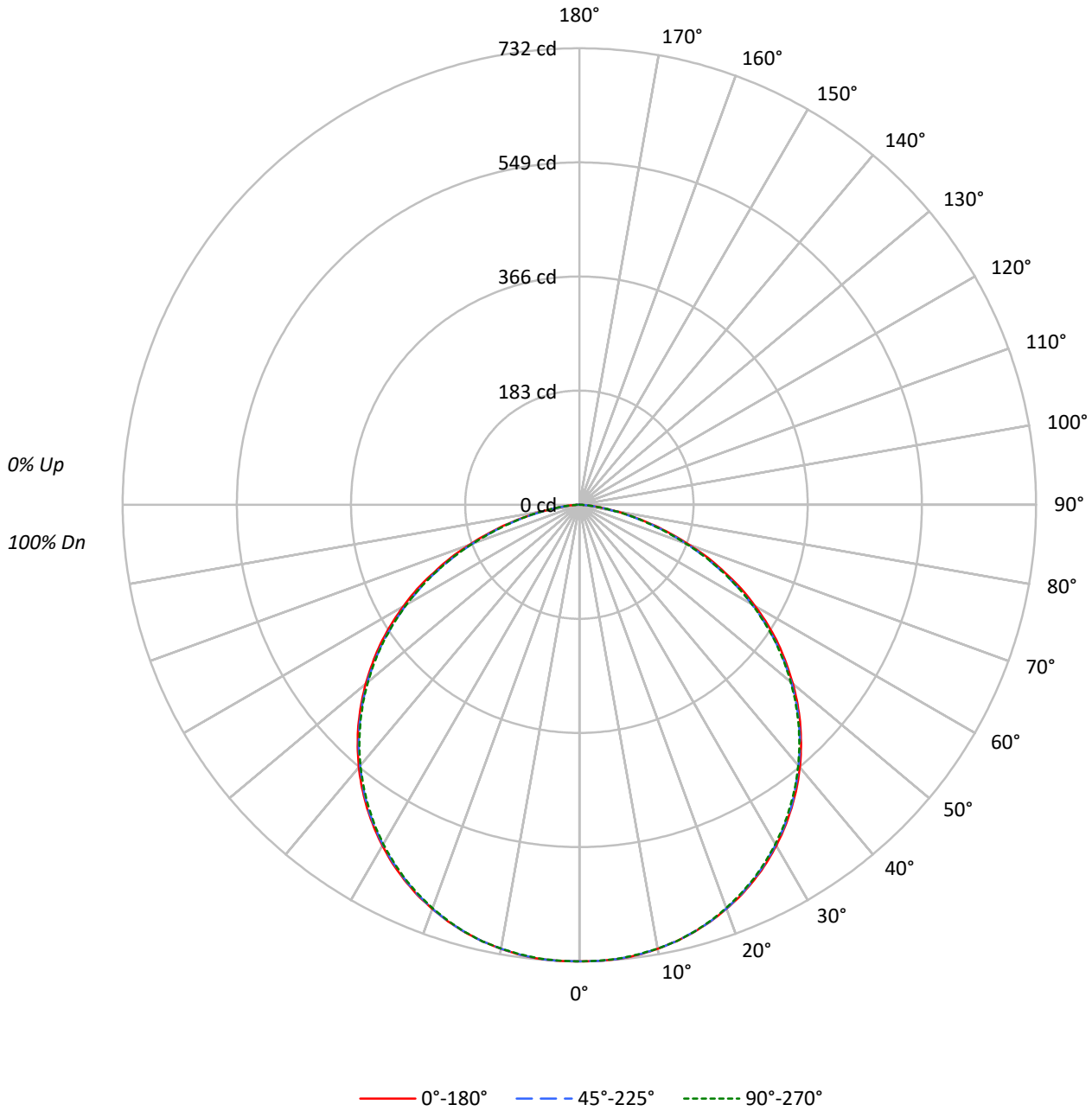
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2069.8 lumens
Efficiency: N/A
Efficacy: 123.9 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										
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	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						100														
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71						71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60						60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44						44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38						38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30						30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27						27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	985	985	985
5°	987	987	987
10°	988	988	987
15°	988	988	988
20°	987	987	985
25°	985	983	982
30°	981	978	976
35°	975	972	968
40°	966	960	959
45°	953	948	945
50°	936	929	926
55°	913	901	899
60°	875	860	860
65°	819	800	802
70°	737	714	712
75°	619	594	592
80°	452	429	448
85°	256	235	239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 953 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	3.4
10°-20°	200.3	9.7
20°-30°	305.3	14.8
30°-40°	369.9	17.9
40°-50°	384.3	18.6
50°-60°	343.7	16.6
60°-70°	250.5	12.1
70°-80°	124.1	6.0
80°-90°	22.2	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°	575.1	27.8
0°-40°	945.0	45.7
0°-60°	1673.0	80.8
0°-90°	2069.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2069.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	732	732	732	732	732	
5°	731	731	731	731	730	70
15°	710	709	709	710	709	200
25°	664	663	662	662	661	306
35°	593	592	592	591	590	371
45°	501	500	498	497	497	386
55°	389	386	384	384	383	347
65°	257	255	251	252	252	255
75°	119	117	114	116	114	127
85°	17	15	15	16	16	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	732.3	732.3	732.3	732.3	732.3
2.5°	732.3	732.1	732.1	732.3	731.8
5°	731.0	731.3	731.0	731.0	730.5
7.5°	728.1	727.9	727.6	727.9	727.1
10°	723.1	723.1	722.9	723.1	722.6
12.5°	717.1	717.1	717.1	717.4	717.1
15°	709.5	709.2	709.2	709.7	709.2
17.5°	700.5	700.3	700.3	700.0	699.5
20°	689.5	689.5	689.2	689.0	688.2
22.5°	677.7	677.4	676.6	676.6	675.6
25°	663.8	663.0	662.4	662.2	661.4
27.5°	648.5	647.5	646.7	646.1	645.4
30°	631.4	630.4	629.6	628.8	628.3
32.5°	613.0	612.5	611.2	610.9	609.9
35°	593.3	592.5	591.8	590.7	589.6
37.5°	572.3	571.5	569.7	569.2	568.4
40°	550.0	548.9	546.6	546.6	545.8
42.5°	526.1	525.0	523.4	522.4	521.9
45°	501.1	500.0	498.2	497.2	496.6
47.5°	474.6	473.8	471.7	470.9	470.1
50°	447.0	445.9	443.6	443.0	442.2
52.5°	418.1	417.5	414.4	414.1	413.3
55°	389.4	386.5	383.9	383.9	383.4
57.5°	357.9	355.8	352.4	352.4	351.8
60°	325.3	323.5	319.5	320.1	319.5
62.5°	293.5	289.6	285.9	287.5	286.2
65°	257.2	255.1	251.2	252.3	252.0
67.5°	224.1	220.2	216.5	218.6	217.6
70°	187.4	185.3	181.6	183.7	181.0
72.5°	152.7	150.8	147.1	149.5	146.9
75°	119.0	117.2	114.3	116.4	113.8
77.5°	87.2	85.9	83.3	85.4	85.9
80°	58.3	56.8	55.4	57.3	57.8
82.5°	34.2	33.1	32.6	32.8	34.2
85°	16.6	15.2	15.2	15.5	15.5
87.5°	4.5	3.9	4.5	4.7	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)