

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: P974449

Luminaire Tested: FLR2-24-20-L950-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974449
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-L950-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L950-CP080
Ballast/Driver: -

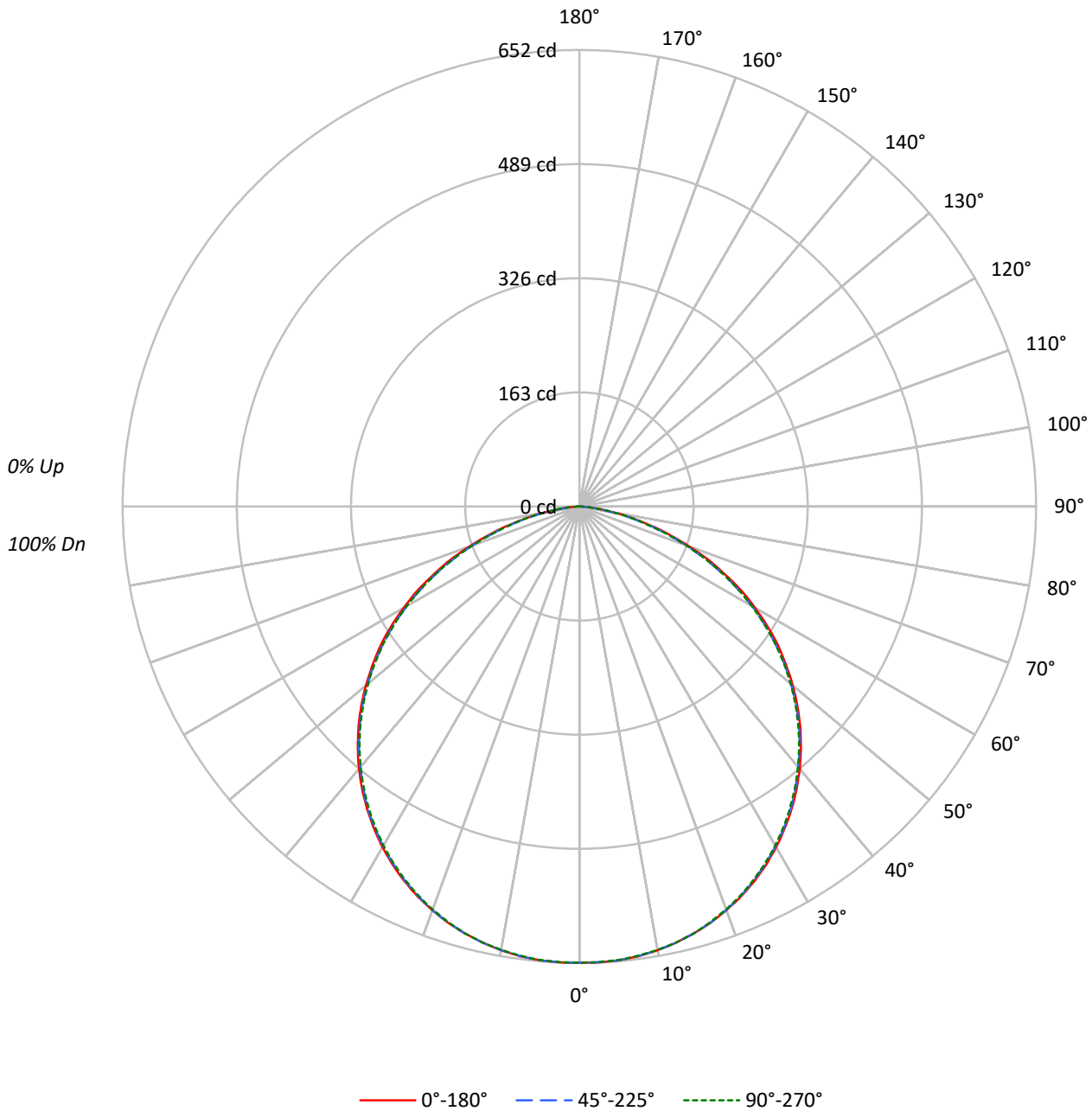
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1842.1 lumens
Efficiency: N/A
Efficacy: 110.3 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	100	100	100	100														
	1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85														
	2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71														
	3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60														
	4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51	51	51	51	51	51														
	5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44														
	6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38	38	38	38	38	38														
	7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34														
	8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30														
	9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27	27	27														
	10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25	25	25	25	25	25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	877	877	877
5°	879	879	878
10°	879	879	879
15°	880	879	879
20°	879	878	877
25°	877	875	874
30°	873	871	869
35°	867	865	862
40°	860	854	853
45°	849	844	841
50°	833	826	824
55°	813	802	800
60°	779	765	765
65°	729	712	714
70°	656	636	634
75°	551	529	527
80°	402	382	398
85°	227	210	213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 849 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.9	3.4
10°-20°	178.2	9.7
20°-30°	271.7	14.8
30°-40°	329.2	17.9
40°-50°	342.0	18.6
50°-60°	305.9	16.6
60°-70°	223.0	12.1
70°-80°	110.4	6.0
80°-90°	19.7	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°	511.8	27.8
0°-40°	841.1	45.7
0°-60°	1489.0	80.8
0°-90°	1842.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1842.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	652	652	652	652	652	
5°	651	651	651	651	650	62
15°	631	631	631	632	631	178
25°	591	590	590	589	589	272
35°	528	527	527	526	525	330
45°	446	445	443	442	442	344
55°	347	344	342	342	341	309
65°	229	227	224	224	224	227
75°	106	104	102	104	101	113
85°	15	14	14	14	14	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	651.8	651.8	651.8	651.8	651.8
2.5°	651.8	651.5	651.5	651.8	651.3
5°	650.6	650.8	650.6	650.6	650.1
7.5°	648.0	647.8	647.6	647.8	647.1
10°	643.6	643.6	643.4	643.6	643.1
12.5°	638.2	638.2	638.2	638.4	638.2
15°	631.4	631.2	631.2	631.7	631.2
17.5°	623.5	623.2	623.2	623.0	622.5
20°	613.7	613.7	613.4	613.2	612.5
22.5°	603.1	602.9	602.2	602.2	601.3
25°	590.7	590.0	589.6	589.3	588.6
27.5°	577.2	576.2	575.5	575.1	574.4
30°	562.0	561.0	560.3	559.6	559.2
32.5°	545.6	545.1	544.0	543.7	542.8
35°	528.1	527.4	526.7	525.7	524.8
37.5°	509.4	508.7	507.0	506.5	505.8
40°	489.5	488.5	486.4	486.4	485.7
42.5°	468.2	467.3	465.9	464.9	464.5
45°	446.0	445.0	443.4	442.5	442.0
47.5°	422.4	421.7	419.8	419.1	418.4
50°	397.8	396.9	394.8	394.3	393.6
52.5°	372.1	371.6	368.8	368.6	367.9
55°	346.6	344.0	341.7	341.7	341.2
57.5°	318.5	316.7	313.6	313.6	313.1
60°	289.5	287.9	284.4	284.8	284.4
62.5°	261.2	257.7	254.4	255.8	254.7
65°	229.0	227.1	223.6	224.5	224.3
67.5°	199.5	196.0	192.7	194.6	193.6
70°	166.7	164.9	161.6	163.5	161.1
72.5°	135.9	134.2	131.0	133.1	130.7
75°	105.9	104.3	101.7	103.6	101.3
77.5°	77.6	76.5	74.1	76.0	76.5
80°	51.9	50.5	49.3	51.0	51.4
82.5°	30.4	29.5	29.0	29.2	30.4
85°	14.7	13.6	13.6	13.8	13.8
87.5°	4.0	3.5	4.0	4.2	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)