

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: P974081

Luminaire Tested: FLR2-24-20-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974081
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-L830-CP250
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L830-CP250
Ballast/Driver: -

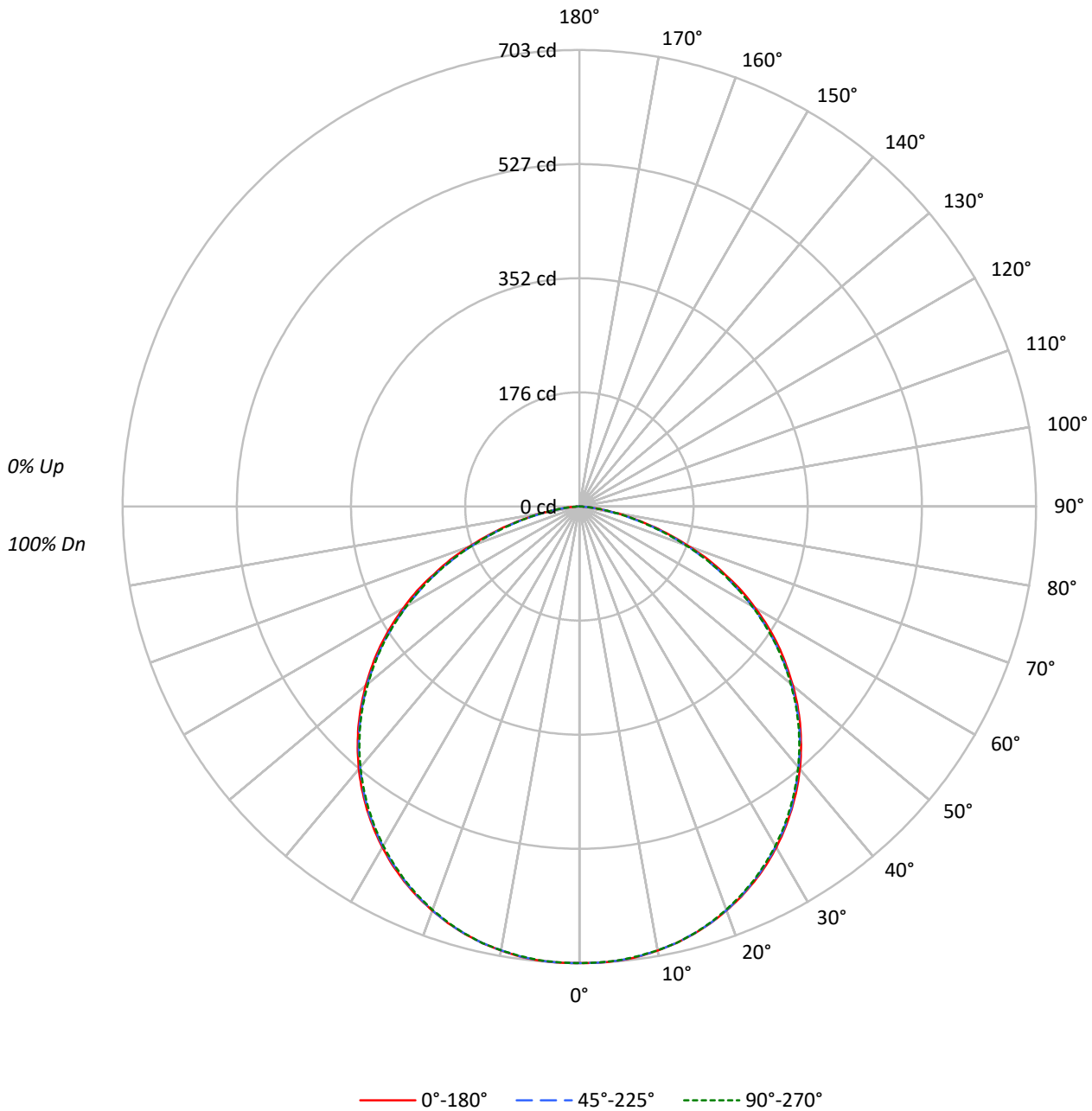
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1987.8 lumens
Efficiency: N/A
Efficacy: 119.0 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	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	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	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	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	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	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	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	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	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	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	25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	946	946	946
5°	948	948	947
10°	949	948	948
15°	949	949	949
20°	948	948	946
25°	946	944	943
30°	942	939	937
35°	936	933	930
40°	928	922	921
45°	916	910	908
50°	899	892	889
55°	877	865	864
60°	841	826	826
65°	787	768	770
70°	708	686	684
75°	594	571	568
80°	434	412	430
85°	245	225	230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 916 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	3.4
10°-20°	192.3	9.7
20°-30°	293.2	14.8
30°-40°	355.3	17.9
40°-50°	369.0	18.6
50°-60°	330.1	16.6
60°-70°	240.6	12.1
70°-80°	119.2	6.0
80°-90°	21.3	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°	552.3	27.8
0°-40°	907.6	45.7
0°-60°	1606.7	80.8
0°-90°	1987.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1987.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	702	702	702	702	702	67
15°	681	681	681	682	681	192
25°	637	637	636	636	635	294
35°	570	569	568	567	566	356
45°	481	480	478	478	477	371
55°	374	371	369	369	368	333
65°	247	245	241	242	242	245
75°	114	113	110	112	109	122
85°	16	15	15	15	15	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.3	703.3	703.3	703.3	703.3
2.5°	703.3	703.1	703.1	703.3	702.8
5°	702.1	702.3	702.1	702.1	701.5
7.5°	699.3	699.0	698.8	699.0	698.3
10°	694.5	694.5	694.2	694.5	694.0
12.5°	688.7	688.7	688.7	688.9	688.7
15°	681.4	681.1	681.1	681.6	681.1
17.5°	672.8	672.5	672.5	672.3	671.8
20°	662.2	662.2	661.9	661.7	660.9
22.5°	650.8	650.6	649.8	649.8	648.8
25°	637.4	636.7	636.2	635.9	635.2
27.5°	622.8	621.8	621.0	620.5	619.8
30°	606.4	605.4	604.6	603.9	603.4
32.5°	588.7	588.2	587.0	586.7	585.7
35°	569.8	569.1	568.3	567.3	566.3
37.5°	549.6	548.9	547.1	546.6	545.8
40°	528.2	527.2	524.9	524.9	524.1
42.5°	505.2	504.2	502.7	501.7	501.2
45°	481.2	480.2	478.5	477.5	477.0
47.5°	455.8	455.0	453.0	452.2	451.5
50°	429.3	428.2	426.0	425.5	424.7
52.5°	401.5	401.0	398.0	397.7	397.0
55°	374.0	371.2	368.7	368.7	368.2
57.5°	343.7	341.7	338.4	338.4	337.9
60°	312.4	310.6	306.9	307.4	306.9
62.5°	281.9	278.1	274.6	276.1	274.8
65°	247.1	245.0	241.3	242.3	242.0
67.5°	215.3	211.5	207.9	210.0	208.9
70°	179.9	177.9	174.4	176.4	173.9
72.5°	146.6	144.9	141.3	143.6	141.1
75°	114.3	112.6	109.8	111.8	109.3
77.5°	83.8	82.5	80.0	82.0	82.5
80°	56.0	54.5	53.2	55.0	55.5
82.5°	32.8	31.8	31.3	31.5	32.8
85°	15.9	14.6	14.6	14.9	14.9
87.5°	4.3	3.8	4.3	4.5	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)