

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: P973545

Luminaire Tested: FLR2-22-20-L930-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-20-L930-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

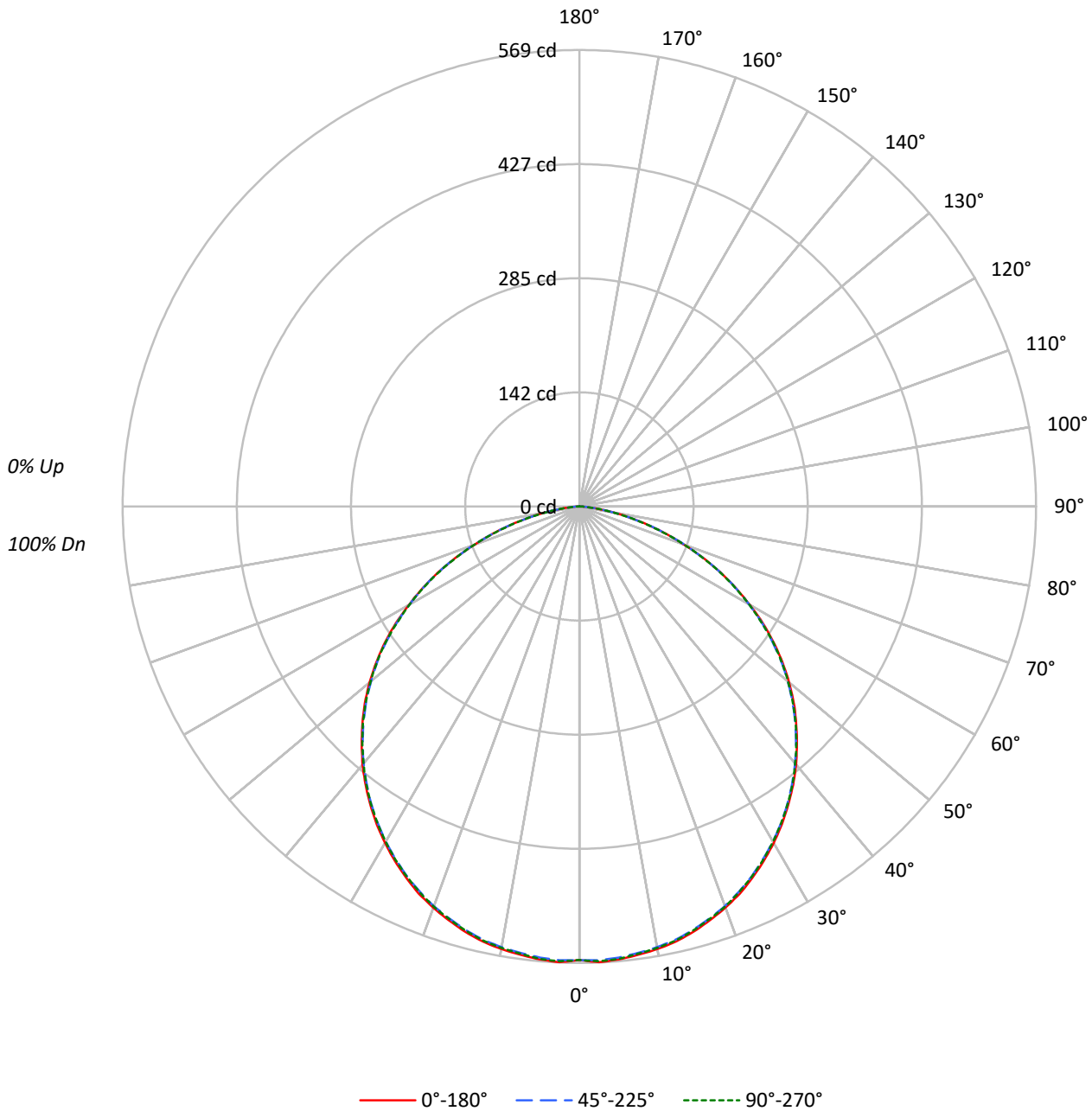
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1581.3 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 15.1
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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	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	40	34	29	27					27															
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1521	1521	1521
5°	1531	1525	1529
10°	1531	1524	1527
15°	1529	1523	1525
20°	1524	1518	1520
25°	1516	1510	1511
30°	1505	1499	1500
35°	1491	1486	1487
40°	1476	1469	1470
45°	1454	1447	1450
50°	1428	1418	1421
55°	1388	1377	1381
60°	1320	1314	1314
65°	1232	1230	1225
70°	1091	1097	1094
75°	919	912	905
80°	660	649	645
85°	346	346	333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1454 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	3.4
10°-20°	154.0	9.7
20°-30°	234.0	14.8
30°-40°	282.8	17.9
40°-50°	293.6	18.6
50°-60°	262.5	16.6
60°-70°	190.8	12.1
70°-80°	93.9	5.9
80°-90°	16.3	1.0
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°	441.5	27.9
0°-40°	724.3	45.8
0°-60°	1280.4	81.0
0°-90°	1581.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1581.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	565	565	565	565	565	
5°	567	560	564	562	566	54
15°	549	543	547	545	547	155
25°	511	505	508	508	509	235
35°	454	451	452	453	453	284
45°	382	380	380	381	381	295
55°	296	294	293	294	294	264
65°	194	194	193	193	192	191
75°	88	89	88	88	87	94
85°	11	12	11	11	11	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	565.4	565.4	565.4	565.4	565.4
2.5°	568.6	562.0	566.1	563.7	567.5
5°	566.8	560.2	564.4	562.3	566.1
7.5°	563.7	557.1	561.3	559.2	562.3
10°	560.2	553.2	557.8	555.7	558.8
12.5°	555.7	549.0	553.2	551.5	554.3
15°	549.0	542.7	546.6	545.2	547.3
17.5°	541.0	534.7	538.6	537.5	539.3
20°	532.3	526.3	530.2	529.1	530.9
22.5°	522.5	516.2	519.7	519.0	520.4
25°	510.6	505.0	508.5	507.5	508.9
27.5°	498.0	492.8	495.6	495.6	496.3
30°	484.4	479.5	482.3	482.3	482.7
32.5°	469.7	465.9	467.7	468.0	468.0
35°	454.0	450.9	452.3	452.6	452.6
37.5°	437.6	434.5	435.5	436.2	436.2
40°	420.2	417.4	418.1	418.8	418.4
42.5°	401.3	399.2	399.5	400.2	400.2
45°	382.1	380.3	380.3	381.0	381.0
47.5°	362.5	360.8	360.1	360.8	360.8
50°	341.2	339.5	338.8	339.5	339.5
52.5°	318.9	317.1	317.1	317.1	317.5
55°	295.8	294.1	293.4	294.1	294.4
57.5°	271.4	270.7	269.6	270.0	268.9
60°	245.2	245.2	244.1	244.8	244.1
62.5°	219.7	220.4	219.3	219.3	218.6
65°	193.5	194.2	193.1	193.1	192.4
67.5°	166.6	167.6	166.2	166.2	165.5
70°	138.7	140.8	139.4	139.7	139.0
72.5°	113.5	114.6	113.2	113.2	112.5
75°	88.4	89.1	87.7	88.0	87.0
77.5°	63.6	64.6	63.2	63.6	63.2
80°	42.6	43.0	41.9	42.3	41.6
82.5°	24.8	25.1	24.8	24.4	24.1
85°	11.2	11.5	11.2	11.2	10.8
87.5°	2.8	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)