

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: P973500

Luminaire Tested: FLR2-22-45-L830-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973500
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: FLR2-22-45-L830-CP080
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 1
Light Source:
Ballast/Driver: -

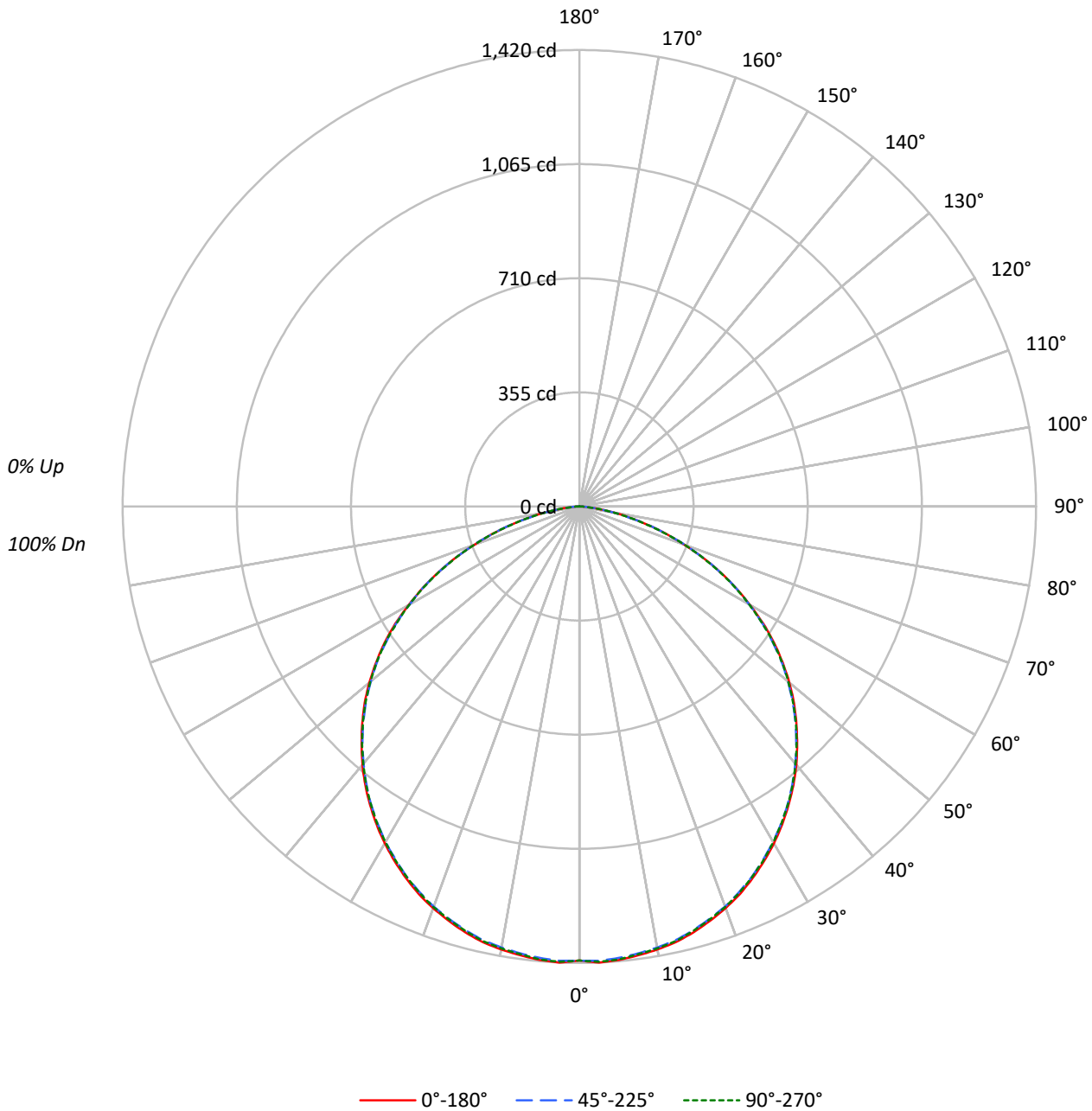
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3950.5 lumens
Efficiency: N/A
Efficacy: 109.4 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): 36.1
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°	3801	3801	3801
5°	3825	3809	3821
10°	3824	3807	3815
15°	3821	3804	3809
20°	3808	3793	3798
25°	3787	3772	3775
30°	3760	3744	3747
35°	3726	3712	3715
40°	3687	3669	3672
45°	3633	3616	3623
50°	3569	3543	3551
55°	3467	3438	3451
60°	3296	3282	3282
65°	3078	3072	3061
70°	2725	2739	2733
75°	2296	2277	2259
80°	1649	1623	1609
85°	861	861	834

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3633 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	3.4
10°-20°	384.7	9.7
20°-30°	584.6	14.8
30°-40°	706.6	17.9
40°-50°	733.4	18.6
50°-60°	655.7	16.6
60°-70°	476.7	12.1
70°-80°	234.4	5.9
80°-90°	40.7	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°	1103.0	27.9
0°-40°	1809.6	45.8
0°-60°	3198.7	81.0
0°-90°	3950.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3950.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1413	1413	1413	1413	1413	
5°	1416	1400	1410	1405	1414	135
15°	1372	1356	1366	1362	1367	387
25°	1276	1262	1270	1268	1271	588
35°	1134	1126	1130	1131	1131	710
45°	955	950	950	952	952	736
55°	739	735	733	735	736	659
65°	483	485	482	482	481	477
75°	221	222	219	220	217	234
85°	28	29	28	28	27	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1412.6	1412.6	1412.6	1412.6	1412.6
2.5°	1420.5	1403.9	1414.4	1408.3	1417.9
5°	1416.1	1399.5	1410.0	1404.8	1414.4
7.5°	1408.3	1391.7	1402.2	1396.9	1404.8
10°	1399.5	1382.1	1393.4	1388.2	1396.1
12.5°	1388.2	1371.6	1382.1	1377.7	1384.7
15°	1371.6	1355.9	1365.5	1362.0	1367.3
17.5°	1351.6	1335.9	1345.5	1342.8	1347.2
20°	1329.7	1314.9	1324.5	1321.9	1326.3
22.5°	1305.3	1289.6	1298.3	1296.6	1300.1
25°	1275.6	1261.7	1270.4	1267.8	1271.3
27.5°	1244.2	1231.1	1238.1	1238.1	1239.9
30°	1210.2	1198.0	1205.0	1205.0	1205.8
32.5°	1173.6	1164.0	1168.3	1169.2	1169.2
35°	1134.3	1126.4	1129.9	1130.8	1130.8
37.5°	1093.3	1085.4	1088.1	1089.8	1089.8
40°	1049.7	1042.7	1044.4	1046.2	1045.3
42.5°	1002.5	997.3	998.2	999.9	999.9
45°	954.6	950.2	950.2	951.9	951.9
47.5°	905.7	901.3	899.6	901.3	901.3
50°	852.5	848.1	846.4	848.1	848.1
52.5°	796.6	792.3	792.3	792.3	793.1
55°	739.0	734.7	732.9	734.7	735.5
57.5°	678.0	676.2	673.6	674.5	671.9
60°	612.5	612.5	609.9	611.6	609.9
62.5°	548.8	550.6	548.0	548.0	546.2
65°	483.4	485.1	482.5	482.5	480.8
67.5°	416.2	418.8	415.3	415.3	413.6
70°	346.4	351.6	348.1	349.0	347.3
72.5°	283.6	286.2	282.7	282.7	281.0
75°	220.8	222.5	219.0	219.9	217.3
77.5°	158.8	161.4	157.9	158.8	157.9
80°	106.4	107.3	104.7	105.6	103.8
82.5°	62.0	62.8	62.0	61.1	60.2
85°	27.9	28.8	27.9	27.9	27.0
87.5°	7.0	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)