

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: P973556

Luminaire Tested: FLR2-22-45-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973556
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-L835-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

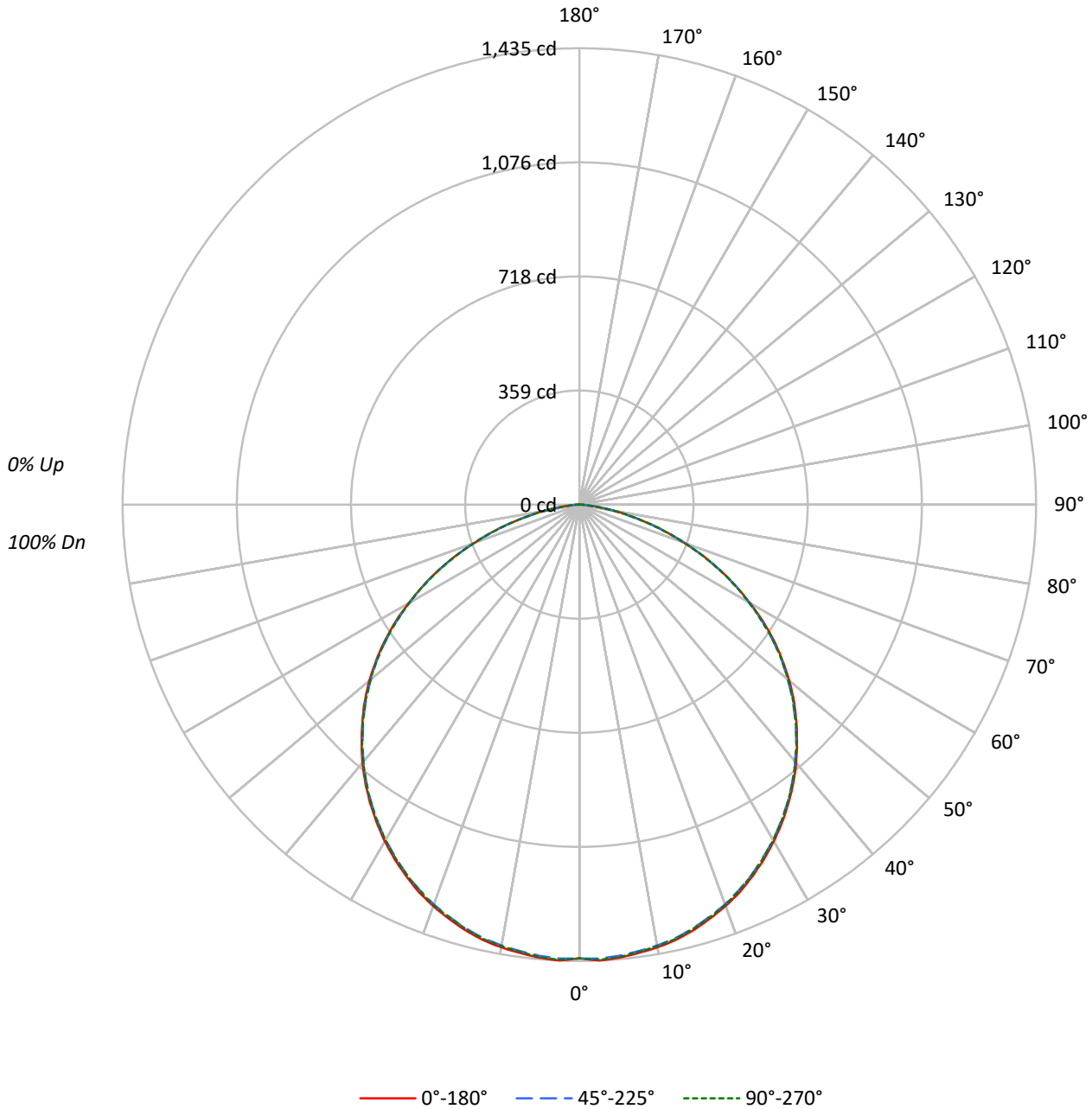
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3990.4 lumens
Efficiency: N/A
Efficacy: 110.5 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

TEST NUMBER: P973556
CATALOG NUMBER: FLR2-22-45-L835-CP080

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	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°	3840	3840	3840
5°	3864	3847	3859
10°	3863	3846	3853
15°	3860	3843	3848
20°	3846	3831	3836
25°	3826	3810	3813
30°	3798	3782	3785
35°	3764	3749	3752
40°	3725	3706	3709
45°	3669	3653	3659
50°	3605	3579	3587
55°	3502	3473	3486
60°	3330	3316	3316
65°	3109	3103	3092
70°	2753	2767	2760
75°	2319	2300	2282
80°	1666	1640	1626
85°	871	871	843

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3669 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.1	3.4
10°-20°	388.6	9.7
20°-30°	590.5	14.8
30°-40°	713.7	17.9
40°-50°	740.8	18.6
50°-60°	662.3	16.6
60°-70°	481.5	12.1
70°-80°	236.8	5.9
80°-90°	41.1	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°	1114.2	27.9
0°-40°	1827.9	45.8
0°-60°	3231.0	81.0
0°-90°	3990.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3990.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1430	1414	1424	1419	1429	136
15°	1386	1370	1379	1376	1381	391
25°	1288	1274	1283	1281	1284	594
35°	1146	1138	1141	1142	1142	717
45°	964	960	960	962	962	744
55°	746	742	740	742	743	665
65°	488	490	487	487	486	482
75°	223	225	221	222	220	237
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°	1426.9	1426.9	1426.9	1426.9	1426.9
2.5°	1434.8	1418.1	1428.7	1422.5	1432.2
5°	1430.4	1413.7	1424.3	1419.0	1428.7
7.5°	1422.5	1405.8	1416.3	1411.0	1419.0
10°	1413.7	1396.1	1407.5	1402.2	1410.2
12.5°	1402.2	1385.5	1396.1	1391.7	1398.7
15°	1385.5	1369.6	1379.3	1375.8	1381.1
17.5°	1365.2	1349.3	1359.0	1356.4	1360.8
20°	1343.2	1328.2	1337.9	1335.2	1339.7
22.5°	1318.5	1302.6	1311.4	1309.7	1313.2
25°	1288.5	1274.4	1283.2	1280.6	1284.1
27.5°	1256.8	1243.6	1250.6	1250.6	1252.4
30°	1222.4	1210.1	1217.1	1217.1	1218.0
32.5°	1185.4	1175.7	1180.1	1181.0	1181.0
35°	1145.8	1137.8	1141.3	1142.2	1142.2
37.5°	1104.3	1096.4	1099.0	1100.8	1100.8
40°	1060.3	1053.2	1055.0	1056.7	1055.9
42.5°	1012.7	1007.4	1008.3	1010.0	1010.0
45°	964.2	959.8	959.8	961.6	961.6
47.5°	914.8	910.4	908.7	910.4	910.4
50°	861.1	856.7	854.9	856.7	856.7
52.5°	804.7	800.3	800.3	800.3	801.1
55°	746.5	742.1	740.3	742.1	743.0
57.5°	684.8	683.0	680.4	681.3	678.6
60°	618.7	618.7	616.1	617.8	616.1
62.5°	554.4	556.1	553.5	553.5	551.7
65°	488.3	490.0	487.4	487.4	485.6
67.5°	420.4	423.0	419.5	419.5	417.8
70°	349.9	355.2	351.7	352.5	350.8
72.5°	286.4	289.1	285.6	285.6	283.8
75°	223.0	224.7	221.2	222.1	219.5
77.5°	160.4	163.0	159.5	160.4	159.5
80°	107.5	108.4	105.8	106.6	104.9
82.5°	62.6	63.5	62.6	61.7	60.8
85°	28.2	29.1	28.2	28.2	27.3
87.5°	7.1	7.1	7.1	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)