

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: P973564

Luminaire Tested: FLR2-22-45-L835-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973564
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

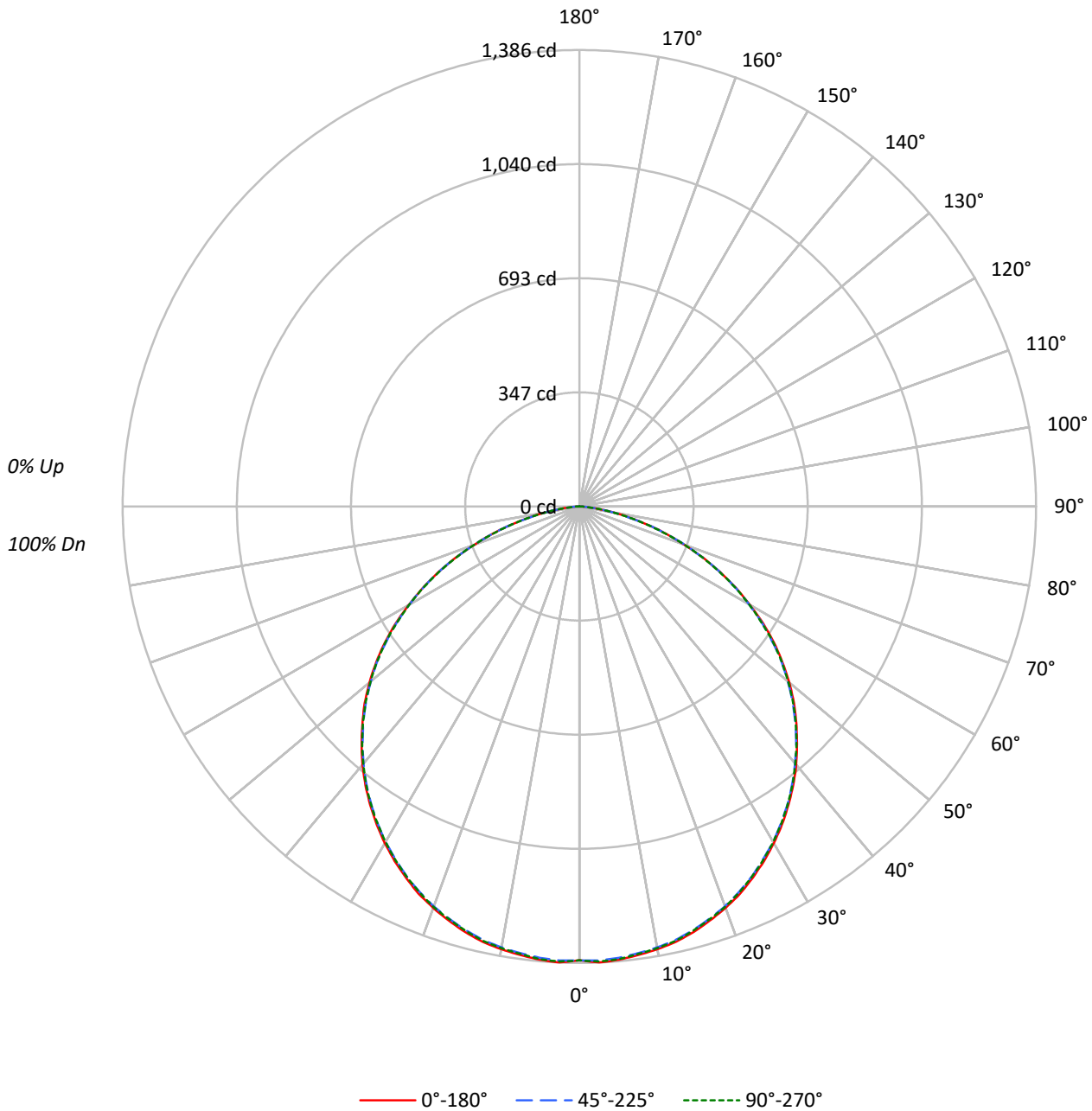
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3853.9 lumens
Efficiency: N/A
Efficacy: 106.8 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: P973564
CATALOG NUMBER: FLR2-22-45-L835-CP187

Luminous Intensity Polar Plot





TEST NUMBER: P973564
 CATALOG NUMBER: FLR2-22-45-L835-CP187

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																			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85																			
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71																			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60																			
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																			
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44																			
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39																			
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34																			
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30																			
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27																			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3708	3708	3708
5°	3732	3716	3727
10°	3731	3715	3721
15°	3728	3711	3716
20°	3715	3700	3705
25°	3695	3680	3682
30°	3668	3653	3655
35°	3635	3621	3624
40°	3597	3579	3582
45°	3544	3528	3534
50°	3481	3457	3464
55°	3383	3354	3367
60°	3216	3202	3202
65°	3003	2997	2986
70°	2659	2672	2666
75°	2240	2222	2204
80°	1609	1582	1570
85°	840	840	815

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3544 cd/sqm



TEST NUMBER: P973564
 CATALOG NUMBER: FLR2-22-45-L835-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.5	3.4
10°-20°	375.3	9.7
20°-30°	570.3	14.8
30°-40°	689.3	17.9
40°-50°	715.5	18.6
50°-60°	639.6	16.6
60°-70°	465.1	12.1
70°-80°	228.7	5.9
80°-90°	39.6	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°	1076.1	27.9
0°-40°	1765.4	45.8
0°-60°	3120.5	81.0
0°-90°	3853.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3853.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1382	1365	1376	1370	1380	131
15°	1338	1323	1332	1329	1334	378
25°	1244	1231	1239	1237	1240	574
35°	1107	1099	1102	1103	1103	692
45°	931	927	927	929	929	718
55°	721	717	715	717	718	643
65°	472	473	471	471	469	465
75°	215	217	214	214	212	229
85°	27	28	27	27	26	40
90°	0	0	0	0	0	



TEST NUMBER: P973564
 CATALOG NUMBER: FLR2-22-45-L835-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1378.1	1378.1	1378.1	1378.1	1378.1
2.5°	1385.8	1369.6	1379.8	1373.8	1383.2
5°	1381.5	1365.3	1375.5	1370.4	1379.8
7.5°	1373.8	1357.7	1367.9	1362.8	1370.4
10°	1365.3	1348.3	1359.4	1354.3	1361.9
12.5°	1354.3	1338.1	1348.3	1344.1	1350.9
15°	1338.1	1322.8	1332.1	1328.7	1333.8
17.5°	1318.5	1303.2	1312.6	1310.0	1314.3
20°	1297.2	1282.8	1292.1	1289.6	1293.8
22.5°	1273.4	1258.1	1266.6	1264.9	1268.3
25°	1244.5	1230.8	1239.4	1236.8	1240.2
27.5°	1213.8	1201.1	1207.9	1207.9	1209.6
30°	1180.6	1168.7	1175.5	1175.5	1176.4
32.5°	1144.9	1135.5	1139.8	1140.6	1140.6
35°	1106.6	1098.9	1102.3	1103.2	1103.2
37.5°	1066.6	1058.9	1061.5	1063.2	1063.2
40°	1024.0	1017.2	1018.9	1020.6	1019.7
42.5°	978.0	972.9	973.8	975.5	975.5
45°	931.2	927.0	927.0	928.7	928.7
47.5°	883.6	879.3	877.6	879.3	879.3
50°	831.6	827.4	825.7	827.4	827.4
52.5°	777.2	772.9	772.9	772.9	773.7
55°	721.0	716.7	715.0	716.7	717.6
57.5°	661.4	659.7	657.1	658.0	655.4
60°	597.5	597.5	595.0	596.7	595.0
62.5°	535.4	537.1	534.6	534.6	532.9
65°	471.6	473.3	470.7	470.7	469.0
67.5°	406.0	408.6	405.2	405.2	403.5
70°	337.9	343.0	339.6	340.5	338.8
72.5°	276.6	279.2	275.8	275.8	274.1
75°	215.4	217.1	213.7	214.5	212.0
77.5°	154.9	157.5	154.1	154.9	154.1
80°	103.8	104.7	102.1	103.0	101.3
82.5°	60.4	61.3	60.4	59.6	58.7
85°	27.2	28.1	27.2	27.2	26.4
87.5°	6.8	6.8	6.8	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)