

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: P974181

Luminaire Tested: FLR2-24-45-L835-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974181
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: FLR2-24-45-L835-CP125
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L835-CP125
Ballast/Driver: -

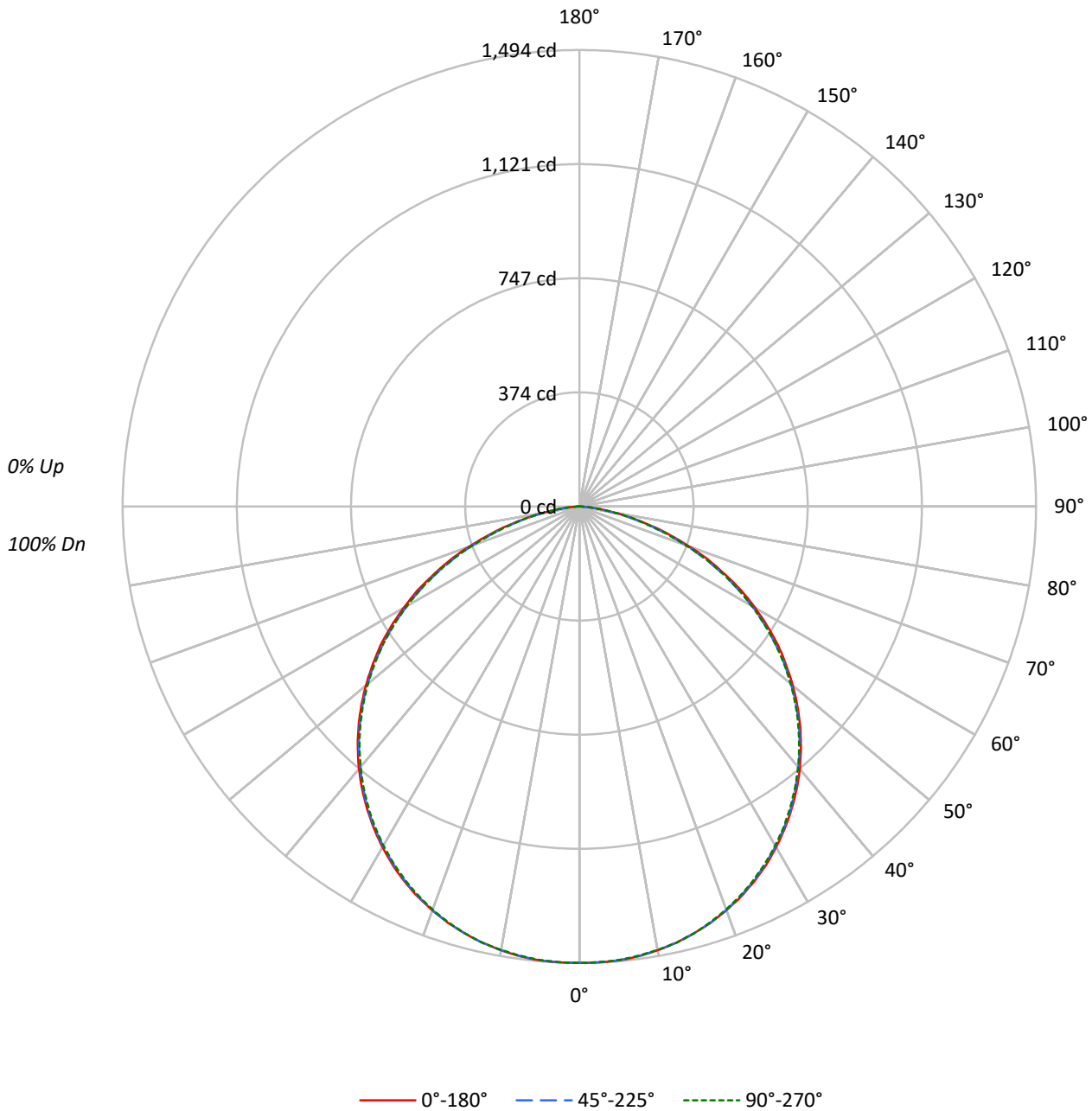
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4221.9 lumens
Efficiency: N/A
Efficacy: 118.6 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): 35.6
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: P974181
CATALOG NUMBER: FLR2-24-45-L835-CP125

Luminous Intensity Polar Plot





TEST NUMBER: P974181
 CATALOG NUMBER: FLR2-24-45-L835-CP125

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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44						44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38						38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	38	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	39	33	29	27						27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2010	2010	2010
5°	2014	2014	2012
10°	2015	2015	2014
15°	2016	2015	2015
20°	2014	2013	2010
25°	2010	2006	2003
30°	2001	1995	1991
35°	1988	1983	1975
40°	1970	1958	1955
45°	1945	1934	1928
50°	1908	1894	1888
55°	1863	1837	1834
60°	1785	1754	1754
65°	1670	1631	1636
70°	1504	1457	1453
75°	1262	1212	1207
80°	922	876	914
85°	522	480	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1945 cd/sqm



TEST NUMBER: P974181
 CATALOG NUMBER: FLR2-24-45-L835-CP125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.8	3.4
10°-20°	408.5	9.7
20°-30°	622.8	14.8
30°-40°	754.6	17.9
40°-50°	783.8	18.6
50°-60°	701.2	16.6
60°-70°	511.0	12.1
70°-80°	253.1	6.0
80°-90°	45.2	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°	1173.1	27.8
0°-40°	1927.6	45.7
0°-60°	3412.6	80.8
0°-90°	4221.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4221.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1494	1494	1494	1494	1494	
5°	1491	1492	1491	1491	1490	142
15°	1447	1447	1447	1448	1447	409
25°	1354	1352	1351	1351	1349	624
35°	1210	1209	1207	1205	1203	757
45°	1022	1020	1016	1014	1013	788
55°	794	788	783	783	782	708
65°	525	520	512	514	514	520
75°	243	239	233	237	232	259
85°	34	31	31	32	32	47
90°	0	0	0	0	0	



TEST NUMBER: P974181
 CATALOG NUMBER: FLR2-24-45-L835-CP125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1493.8	1493.8	1493.8	1493.8	1493.8
2.5°	1493.8	1493.2	1493.2	1493.8	1492.7
5°	1491.1	1491.6	1491.1	1491.1	1490.0
7.5°	1485.2	1484.7	1484.1	1484.7	1483.1
10°	1475.0	1475.0	1474.5	1475.0	1473.9
12.5°	1462.7	1462.7	1462.7	1463.2	1462.7
15°	1447.1	1446.6	1446.6	1447.7	1446.6
17.5°	1428.9	1428.4	1428.4	1427.9	1426.8
20°	1406.4	1406.4	1405.9	1405.3	1403.7
22.5°	1382.3	1381.8	1380.1	1380.1	1378.0
25°	1353.9	1352.3	1351.2	1350.7	1349.1
27.5°	1322.8	1320.7	1319.0	1318.0	1316.4
30°	1288.0	1285.8	1284.2	1282.6	1281.5
32.5°	1250.4	1249.4	1246.7	1246.2	1244.0
35°	1210.2	1208.6	1207.0	1204.9	1202.7
37.5°	1167.4	1165.8	1162.0	1160.9	1159.3
40°	1121.8	1119.7	1114.8	1114.8	1113.2
42.5°	1073.0	1070.9	1067.7	1065.5	1064.5
45°	1022.1	1020.0	1016.2	1014.1	1013.0
47.5°	968.0	966.4	962.1	960.5	958.9
50°	911.7	909.6	904.7	903.7	902.1
52.5°	852.7	851.7	845.2	844.7	843.1
55°	794.3	788.4	783.1	783.1	782.0
57.5°	730.0	725.7	718.7	718.7	717.7
60°	663.5	659.8	651.8	652.8	651.8
62.5°	598.7	590.6	583.1	586.4	583.7
65°	524.7	520.4	512.4	514.5	514.0
67.5°	457.2	449.2	441.6	445.9	443.8
70°	382.2	377.9	370.4	374.6	369.3
72.5°	311.4	307.7	300.1	305.0	299.6
75°	242.8	239.0	233.2	237.4	232.1
77.5°	177.9	175.3	169.9	174.2	175.3
80°	119.0	115.8	113.1	116.8	117.9
82.5°	69.7	67.5	66.5	67.0	69.7
85°	33.8	31.1	31.1	31.6	31.6
87.5°	9.1	8.0	9.1	9.6	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)