

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: P974189

Luminaire Tested: FLR2-24-45-L835-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974189
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L835-CP187
Ballast/Driver: -

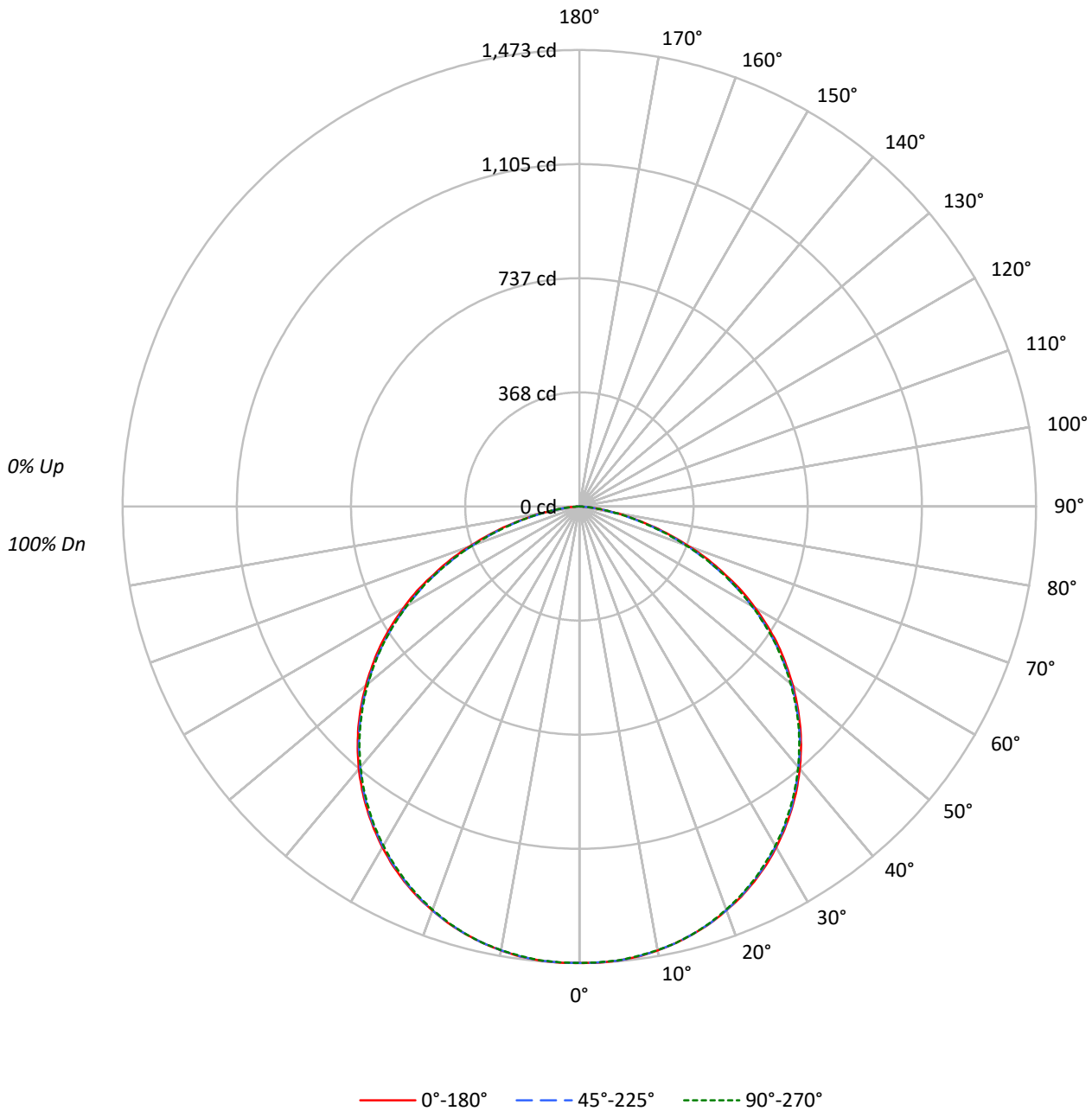
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4164.1 lumens
Efficiency: N/A
Efficacy: 117.0 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: P974189
CATALOG NUMBER: FLR2-24-45-L835-CP187

Luminous Intensity Polar Plot





TEST NUMBER: P974189
 CATALOG NUMBER: FLR2-24-45-L835-CP187

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1982	1982	1982
5°	1986	1986	1985
10°	1988	1987	1986
15°	1988	1987	1987
20°	1986	1985	1982
25°	1983	1979	1975
30°	1974	1968	1964
35°	1961	1955	1949
40°	1943	1931	1929
45°	1918	1907	1901
50°	1882	1868	1862
55°	1838	1812	1809
60°	1761	1730	1730
65°	1648	1609	1614
70°	1483	1437	1433
75°	1245	1196	1190
80°	910	864	901
85°	514	474	482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1918 cd/sqm



TEST NUMBER: P974189
 CATALOG NUMBER: FLR2-24-45-L835-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.8	3.4
10°-20°	402.9	9.7
20°-30°	614.3	14.8
30°-40°	744.2	17.9
40°-50°	773.1	18.6
50°-60°	691.6	16.6
60°-70°	504.0	12.1
70°-80°	249.6	6.0
80°-90°	44.6	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°	1157.0	27.8
0°-40°	1901.2	45.7
0°-60°	3365.9	80.8
0°-90°	4164.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4164.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1471	1471	1471	1471	1470	140
15°	1427	1427	1427	1428	1427	403
25°	1335	1334	1333	1332	1331	615
35°	1194	1192	1190	1188	1186	747
45°	1008	1006	1002	1000	999	777
55°	784	778	772	772	771	698
65°	518	513	505	508	507	513
75°	240	236	230	234	229	255
85°	33	31	31	31	31	46
90°	0	0	0	0	0	



TEST NUMBER: P974189
 CATALOG NUMBER: FLR2-24-45-L835-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1473.3	1473.3	1473.3	1473.3	1473.3
2.5°	1473.3	1472.8	1472.8	1473.3	1472.3
5°	1470.7	1471.2	1470.7	1470.7	1469.6
7.5°	1464.9	1464.4	1463.8	1464.4	1462.8
10°	1454.8	1454.8	1454.3	1454.8	1453.8
12.5°	1442.7	1442.7	1442.7	1443.2	1442.7
15°	1427.4	1426.8	1426.8	1427.9	1426.8
17.5°	1409.4	1408.9	1408.9	1408.3	1407.3
20°	1387.2	1387.2	1386.6	1386.1	1384.5
22.5°	1363.4	1362.9	1361.3	1361.3	1359.2
25°	1335.4	1333.8	1332.7	1332.2	1330.6
27.5°	1304.7	1302.6	1301.0	1300.0	1298.4
30°	1270.3	1268.2	1266.6	1265.1	1264.0
32.5°	1233.3	1232.3	1229.6	1229.1	1227.0
35°	1193.7	1192.1	1190.5	1188.4	1186.3
37.5°	1151.4	1149.8	1146.1	1145.1	1143.5
40°	1106.5	1104.4	1099.6	1099.6	1098.0
42.5°	1058.4	1056.2	1053.1	1051.0	1049.9
45°	1008.1	1006.0	1002.3	1000.2	999.1
47.5°	954.7	953.2	948.9	947.3	945.8
50°	899.2	897.1	892.4	891.3	889.7
52.5°	841.1	840.0	833.7	833.2	831.6
55°	783.5	777.6	772.4	772.4	771.3
57.5°	720.0	715.8	708.9	708.9	707.9
60°	654.5	650.8	642.8	643.9	642.8
62.5°	590.5	582.6	575.2	578.3	575.7
65°	517.5	513.3	505.4	507.5	507.0
67.5°	450.9	443.0	435.6	439.8	437.7
70°	376.9	372.7	365.3	369.5	364.2
72.5°	307.1	303.4	296.0	300.8	295.5
75°	239.5	235.8	230.0	234.2	228.9
77.5°	175.5	172.9	167.6	171.8	172.9
80°	117.4	114.2	111.5	115.2	116.3
82.5°	68.7	66.6	65.6	66.1	68.7
85°	33.3	30.7	30.7	31.2	31.2
87.5°	9.0	7.9	9.0	9.5	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)