

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: P974293

Luminaire Tested: FLR2-24-45-L840-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974293
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-L840-CP125
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L840-CP125
Ballast/Driver: -

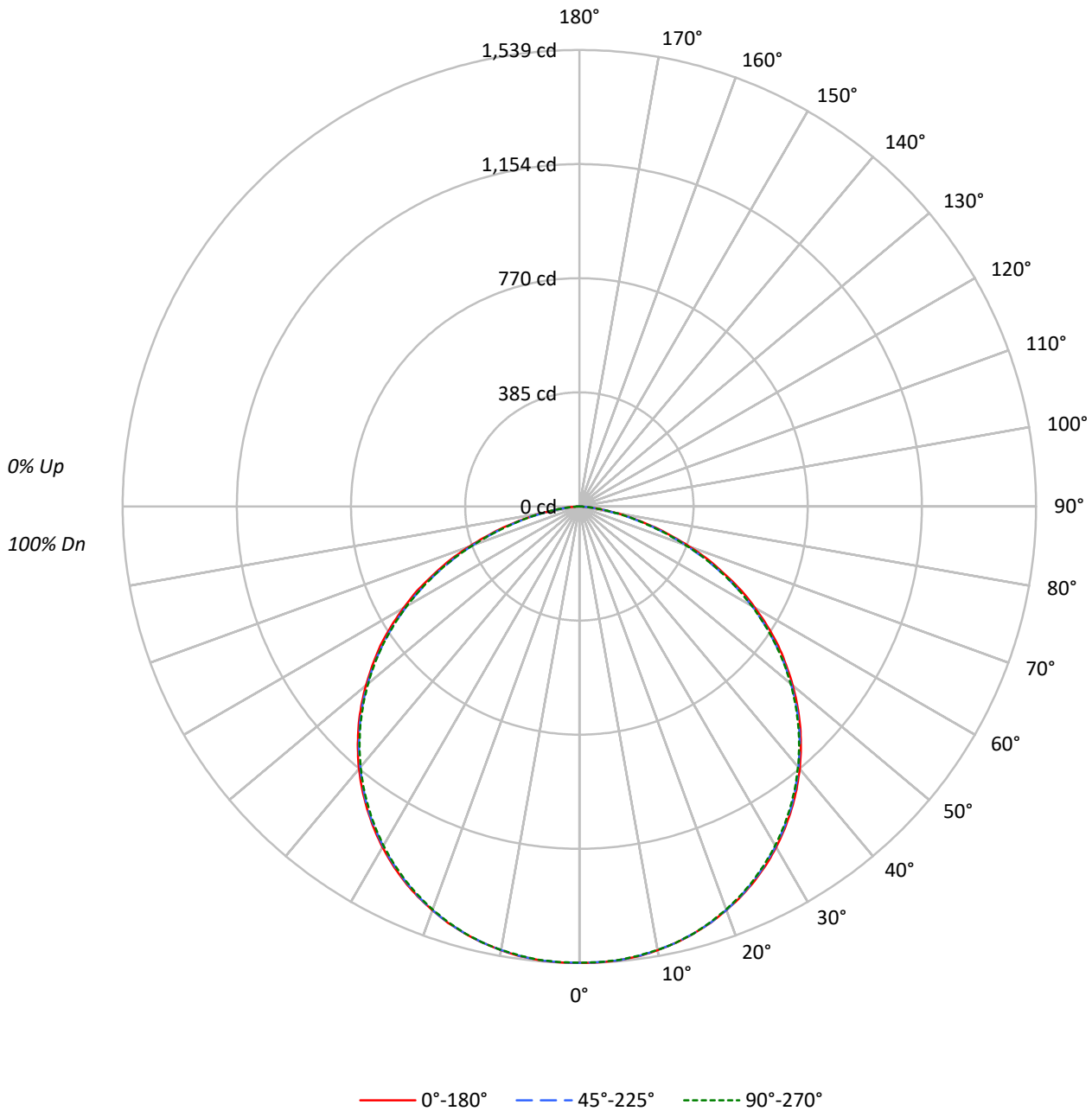
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4348.5 lumens
Efficiency: N/A
Efficacy: 122.1 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: P974293
CATALOG NUMBER: FLR2-24-45-L840-CP125

Luminous Intensity Polar Plot





TEST NUMBER: P974293
 CATALOG NUMBER: FLR2-24-45-L840-CP125

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	0
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°	2070	2070	2070
5°	2074	2074	2073
10°	2076	2075	2074
15°	2076	2076	2076
20°	2074	2073	2070
25°	2070	2066	2063
30°	2061	2055	2051
35°	2047	2042	2035
40°	2030	2017	2014
45°	2003	1992	1985
50°	1966	1951	1945
55°	1919	1892	1890
60°	1839	1806	1806
65°	1721	1680	1685
70°	1548	1501	1496
75°	1300	1248	1242
80°	950	903	941
85°	537	494	503

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2003 cd/sqm



TEST NUMBER: P974293
 CATALOG NUMBER: FLR2-24-45-L840-CP125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	3.4
10°-20°	420.7	9.7
20°-30°	641.5	14.8
30°-40°	777.2	17.9
40°-50°	807.3	18.6
50°-60°	722.2	16.6
60°-70°	526.3	12.1
70°-80°	260.7	6.0
80°-90°	46.6	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°	1208.2	27.8
0°-40°	1985.4	45.7
0°-60°	3514.9	80.8
0°-90°	4348.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4348.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1536	1536	1536	1536	1535	146
15°	1491	1490	1490	1491	1490	421
25°	1394	1393	1392	1391	1390	643
35°	1246	1245	1243	1241	1239	780
45°	1053	1051	1047	1044	1043	811
55°	818	812	807	807	806	729
65°	540	536	528	530	529	536
75°	250	246	240	245	239	267
85°	35	32	32	33	33	48
90°	0	0	0	0	0	



TEST NUMBER: P974293
 CATALOG NUMBER: FLR2-24-45-L840-CP125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1538.6	1538.6	1538.6	1538.6	1538.6
2.5°	1538.6	1538.0	1538.0	1538.6	1537.5
5°	1535.8	1536.4	1535.8	1535.8	1534.7
7.5°	1529.8	1529.2	1528.7	1529.2	1527.5
10°	1519.3	1519.3	1518.7	1519.3	1518.2
12.5°	1506.6	1506.6	1506.6	1507.1	1506.6
15°	1490.6	1490.0	1490.0	1491.1	1490.0
17.5°	1471.8	1471.2	1471.2	1470.7	1469.6
20°	1448.6	1448.6	1448.1	1447.5	1445.8
22.5°	1423.8	1423.2	1421.6	1421.6	1419.3
25°	1394.5	1392.8	1391.7	1391.2	1389.5
27.5°	1362.5	1360.3	1358.6	1357.5	1355.9
30°	1326.6	1324.4	1322.7	1321.1	1320.0
32.5°	1288.0	1286.8	1284.1	1283.5	1281.3
35°	1246.5	1244.9	1243.2	1241.0	1238.8
37.5°	1202.4	1200.7	1196.9	1195.8	1194.1
40°	1155.5	1153.3	1148.3	1148.3	1146.6
42.5°	1105.2	1103.0	1099.7	1097.5	1096.4
45°	1052.8	1050.6	1046.7	1044.5	1043.4
47.5°	997.0	995.4	990.9	989.3	987.6
50°	939.1	936.8	931.9	930.8	929.1
52.5°	878.3	877.2	870.6	870.0	868.4
55°	818.2	812.1	806.6	806.6	805.5
57.5°	751.9	747.5	740.3	740.3	739.2
60°	683.4	679.6	671.3	672.4	671.3
62.5°	616.7	608.4	600.6	604.0	601.2
65°	540.5	536.0	527.8	530.0	529.4
67.5°	470.9	462.6	454.9	459.3	457.1
70°	393.6	389.2	381.5	385.9	380.4
72.5°	320.7	316.9	309.2	314.1	308.6
75°	250.1	246.2	240.1	244.6	239.0
77.5°	183.3	180.5	175.0	179.4	180.5
80°	122.6	119.2	116.5	120.3	121.5
82.5°	71.8	69.6	68.5	69.0	71.8
85°	34.8	32.0	32.0	32.6	32.6
87.5°	9.4	8.3	9.4	9.9	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)