

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: P974309

Luminaire Tested: FLR2-24-45-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974309
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L840-CP250
Ballast/Driver: -

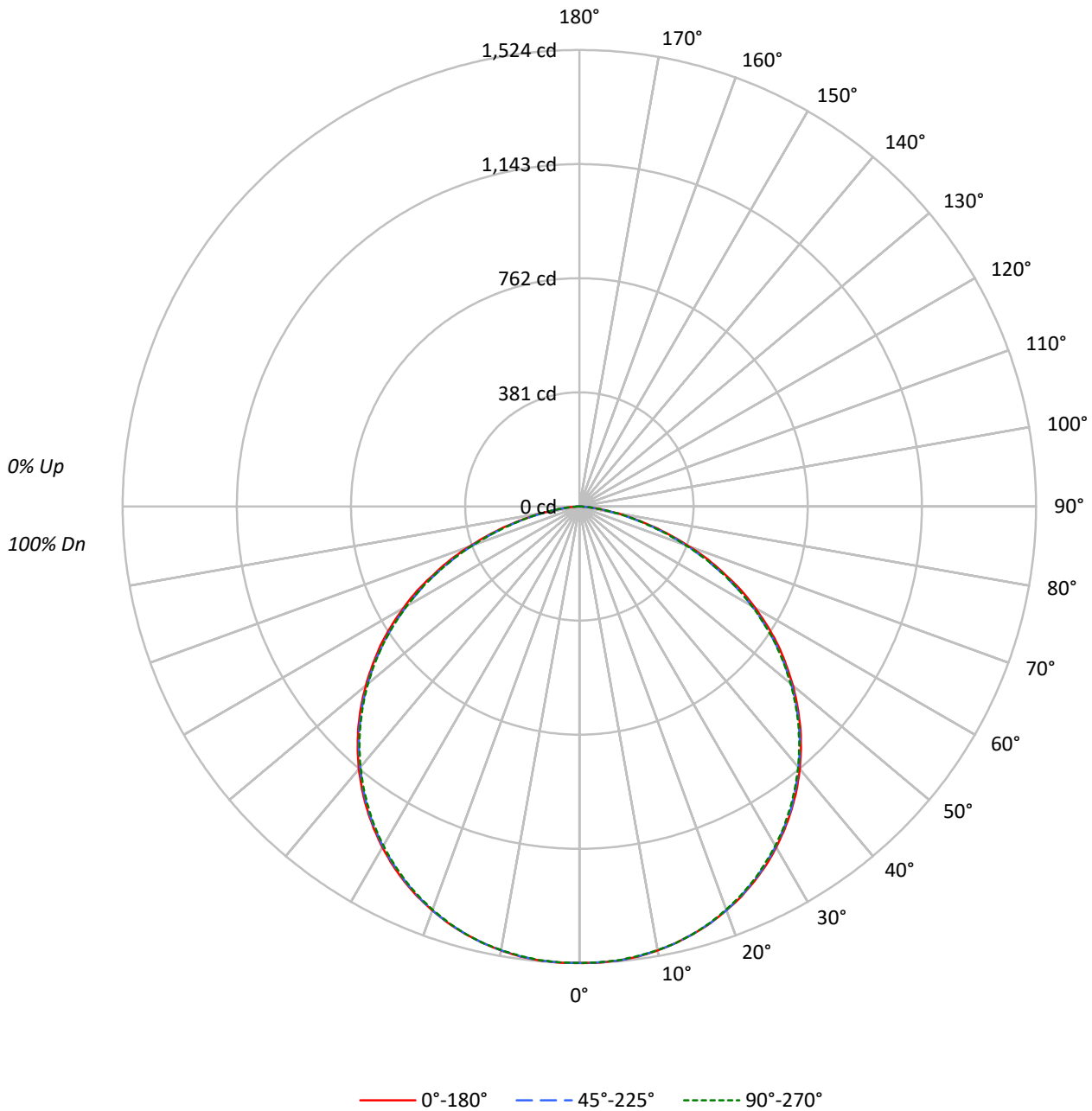
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4308.0 lumens
Efficiency: N/A
Efficacy: 121.0 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: P974309
CATALOG NUMBER: FLR2-24-45-L840-CP250

Luminous Intensity Polar Plot





TEST NUMBER: P974309
 CATALOG NUMBER: FLR2-24-45-L840-CP250

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°	2051	2051	2051
5°	2055	2055	2053
10°	2056	2056	2055
15°	2057	2056	2056
20°	2055	2054	2051
25°	2051	2047	2044
30°	2042	2036	2032
35°	2028	2023	2016
40°	2011	1998	1995
45°	1985	1973	1967
50°	1947	1932	1927
55°	1901	1875	1872
60°	1822	1790	1790
65°	1705	1665	1670
70°	1534	1487	1482
75°	1288	1237	1231
80°	941	894	932
85°	533	489	499

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1985 cd/sqm



TEST NUMBER: P974309
 CATALOG NUMBER: FLR2-24-45-L840-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.7	3.4
10°-20°	416.8	9.7
20°-30°	635.5	14.8
30°-40°	770.0	17.9
40°-50°	799.8	18.6
50°-60°	715.5	16.6
60°-70°	521.4	12.1
70°-80°	258.2	6.0
80°-90°	46.2	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°	1197.0	27.8
0°-40°	1967.0	45.7
0°-60°	3482.2	80.8
0°-90°	4308.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4308.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1524	1524	1524	1524	1524	
5°	1522	1522	1522	1522	1520	145
15°	1477	1476	1476	1477	1476	417
25°	1382	1380	1379	1378	1377	637
35°	1235	1233	1232	1230	1227	772
45°	1043	1041	1037	1035	1034	804
55°	810	804	799	799	798	722
65°	535	531	523	525	524	531
75°	248	244	238	242	237	264
85°	34	32	32	32	32	48
90°	0	0	0	0	0	



TEST NUMBER: P974309
 CATALOG NUMBER: FLR2-24-45-L840-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1524.3	1524.3	1524.3	1524.3	1524.3
2.5°	1524.3	1523.7	1523.7	1524.3	1523.2
5°	1521.5	1522.1	1521.5	1521.5	1520.4
7.5°	1515.5	1515.0	1514.4	1515.0	1513.3
10°	1505.1	1505.1	1504.6	1505.1	1504.0
12.5°	1492.5	1492.5	1492.5	1493.1	1492.5
15°	1476.7	1476.1	1476.1	1477.2	1476.1
17.5°	1458.1	1457.5	1457.5	1457.0	1455.9
20°	1435.1	1435.1	1434.6	1434.0	1432.4
22.5°	1410.5	1410.0	1408.3	1408.3	1406.1
25°	1381.5	1379.9	1378.8	1378.2	1376.6
27.5°	1349.8	1347.6	1346.0	1344.9	1343.2
30°	1314.3	1312.1	1310.4	1308.8	1307.7
32.5°	1276.0	1274.9	1272.1	1271.6	1269.4
35°	1234.9	1233.3	1231.7	1229.5	1227.3
37.5°	1191.2	1189.6	1185.7	1184.6	1183.0
40°	1144.7	1142.5	1137.6	1137.6	1136.0
42.5°	1094.9	1092.7	1089.5	1087.3	1086.2
45°	1043.0	1040.8	1037.0	1034.8	1033.7
47.5°	987.7	986.1	981.7	980.1	978.4
50°	930.3	928.1	923.2	922.1	920.5
52.5°	870.2	869.1	862.5	861.9	860.3
55°	810.5	804.5	799.1	799.1	798.0
57.5°	744.9	740.5	733.4	733.4	732.3
60°	677.1	673.3	665.1	666.2	665.1
62.5°	610.9	602.7	595.1	598.3	595.6
65°	535.4	531.1	522.9	525.0	524.5
67.5°	466.5	458.3	450.7	455.0	452.9
70°	390.0	385.6	377.9	382.3	376.8
72.5°	317.8	313.9	306.3	311.2	305.7
75°	247.8	243.9	237.9	242.3	236.8
77.5°	181.6	178.8	173.4	177.7	178.8
80°	121.4	118.1	115.4	119.2	120.3
82.5°	71.1	68.9	67.8	68.4	71.1
85°	34.5	31.7	31.7	32.3	32.3
87.5°	9.3	8.2	9.3	9.8	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)