

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: P974285

Luminaire Tested: FLR2-24-45-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974285
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L840-CP080
Ballast/Driver: -

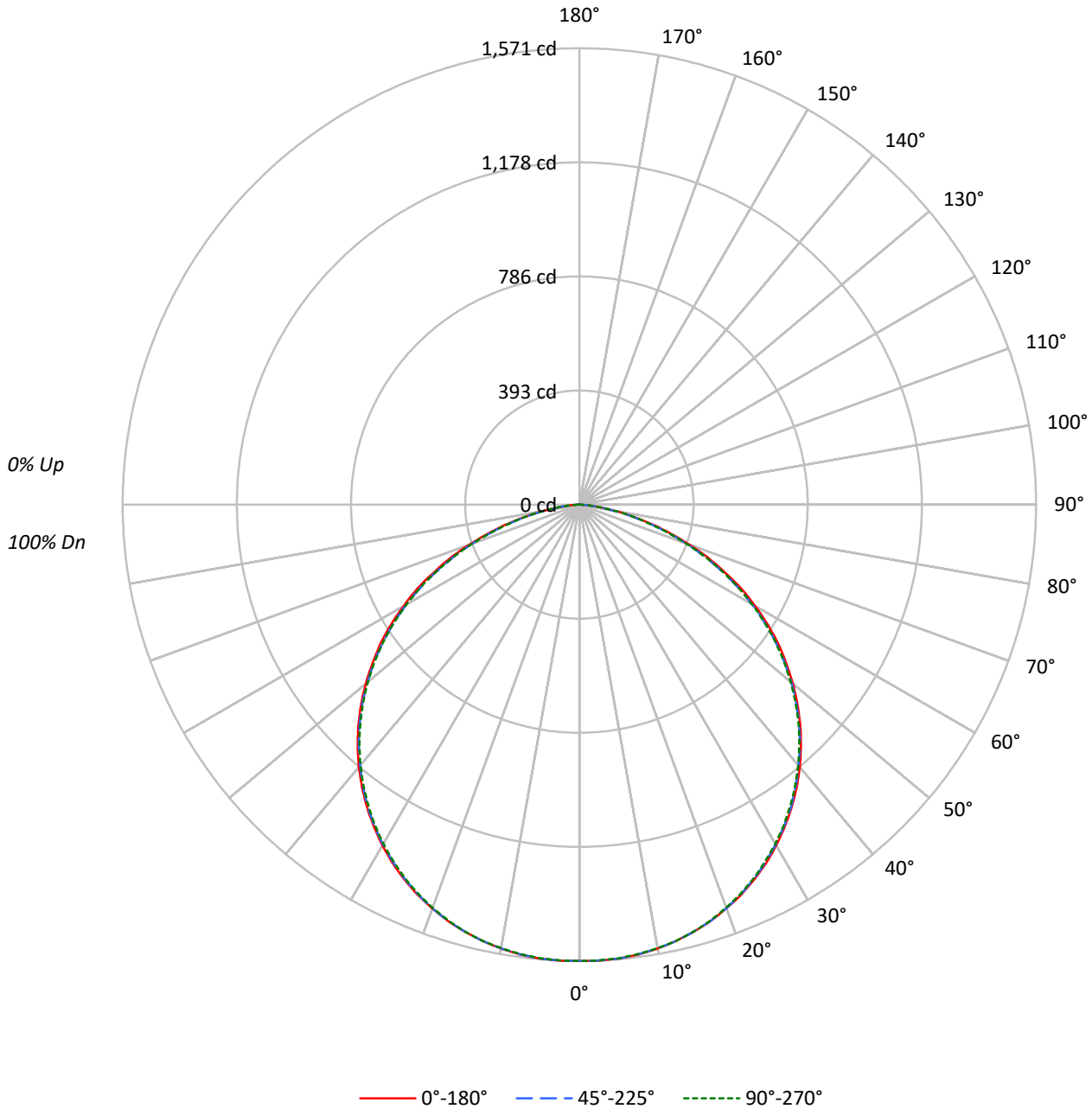
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4441.0 lumens
Efficiency: N/A
Efficacy: 124.7 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

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Luminous Intensity Polar Plot





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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	100	100	100	100	100														
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85	85														
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71	71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60	60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51	51	51	51	51	51	51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44	44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38	38	38	38	38	38	38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34	34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30	30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27	27	27	27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25	25	25	25	25	25	25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2114	2114	2114
5°	2118	2118	2117
10°	2120	2119	2118
15°	2120	2120	2120
20°	2118	2117	2114
25°	2114	2110	2107
30°	2105	2099	2094
35°	2091	2086	2078
40°	2073	2060	2057
45°	2046	2034	2028
50°	2007	1992	1986
55°	1960	1932	1930
60°	1878	1845	1845
65°	1757	1716	1721
70°	1581	1533	1528
75°	1328	1275	1269
80°	970	922	961
85°	548	505	514

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2046 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.1	3.4
10°-20°	429.7	9.7
20°-30°	655.1	14.8
30°-40°	793.7	17.9
40°-50°	824.5	18.6
50°-60°	737.5	16.6
60°-70°	537.5	12.1
70°-80°	266.2	6.0
80°-90°	47.6	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°	1233.9	27.8
0°-40°	2027.6	45.7
0°-60°	3589.6	80.8
0°-90°	4441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4441.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1571	1571	1571	1571	1571	
5°	1568	1569	1568	1568	1567	149
15°	1522	1522	1522	1523	1522	430
25°	1424	1422	1421	1421	1419	656
35°	1273	1271	1270	1267	1265	796
45°	1075	1073	1069	1067	1066	829
55°	836	829	824	824	823	744
65°	552	547	539	541	541	547
75°	255	252	245	250	244	272
85°	36	33	33	33	33	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1571.3	1571.3	1571.3	1571.3	1571.3
2.5°	1571.3	1570.7	1570.7	1571.3	1570.2
5°	1568.5	1569.0	1568.5	1568.5	1567.3
7.5°	1562.3	1561.7	1561.1	1561.7	1560.0
10°	1551.6	1551.6	1551.0	1551.6	1550.4
12.5°	1538.6	1538.6	1538.6	1539.2	1538.6
15°	1522.2	1521.7	1521.7	1522.8	1521.7
17.5°	1503.1	1502.5	1502.5	1501.9	1500.8
20°	1479.4	1479.4	1478.8	1478.3	1476.6
22.5°	1454.0	1453.5	1451.8	1451.8	1449.5
25°	1424.1	1422.4	1421.3	1420.8	1419.1
27.5°	1391.4	1389.2	1387.5	1386.4	1384.7
30°	1354.8	1352.5	1350.8	1349.2	1348.0
32.5°	1315.3	1314.2	1311.4	1310.8	1308.6
35°	1273.0	1271.4	1269.7	1267.4	1265.2
37.5°	1227.9	1226.2	1222.3	1221.2	1219.5
40°	1180.0	1177.8	1172.7	1172.7	1171.0
42.5°	1128.7	1126.5	1123.1	1120.8	1119.7
45°	1075.2	1072.9	1069.0	1066.7	1065.6
47.5°	1018.2	1016.5	1012.0	1010.3	1008.6
50°	959.0	956.8	951.7	950.6	948.9
52.5°	897.0	895.9	889.1	888.5	886.8
55°	835.5	829.3	823.7	823.7	822.6
57.5°	767.9	763.4	756.0	756.0	754.9
60°	698.0	694.0	685.6	686.7	685.6
62.5°	629.8	621.3	613.4	616.8	614.0
65°	552.0	547.4	539.0	541.2	540.7
67.5°	480.9	472.5	464.6	469.1	466.8
70°	402.0	397.5	389.6	394.1	388.5
72.5°	327.6	323.6	315.7	320.8	315.2
75°	255.4	251.5	245.2	249.8	244.1
77.5°	187.2	184.4	178.7	183.2	184.4
80°	125.2	121.8	119.0	122.9	124.0
82.5°	73.3	71.0	69.9	70.5	73.3
85°	35.5	32.7	32.7	33.3	33.3
87.5°	9.6	8.5	9.6	10.1	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)