

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: P974453

Luminaire Tested: FLR2-24-45-L950-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974453
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-L950-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L950-CP080
Ballast/Driver: -

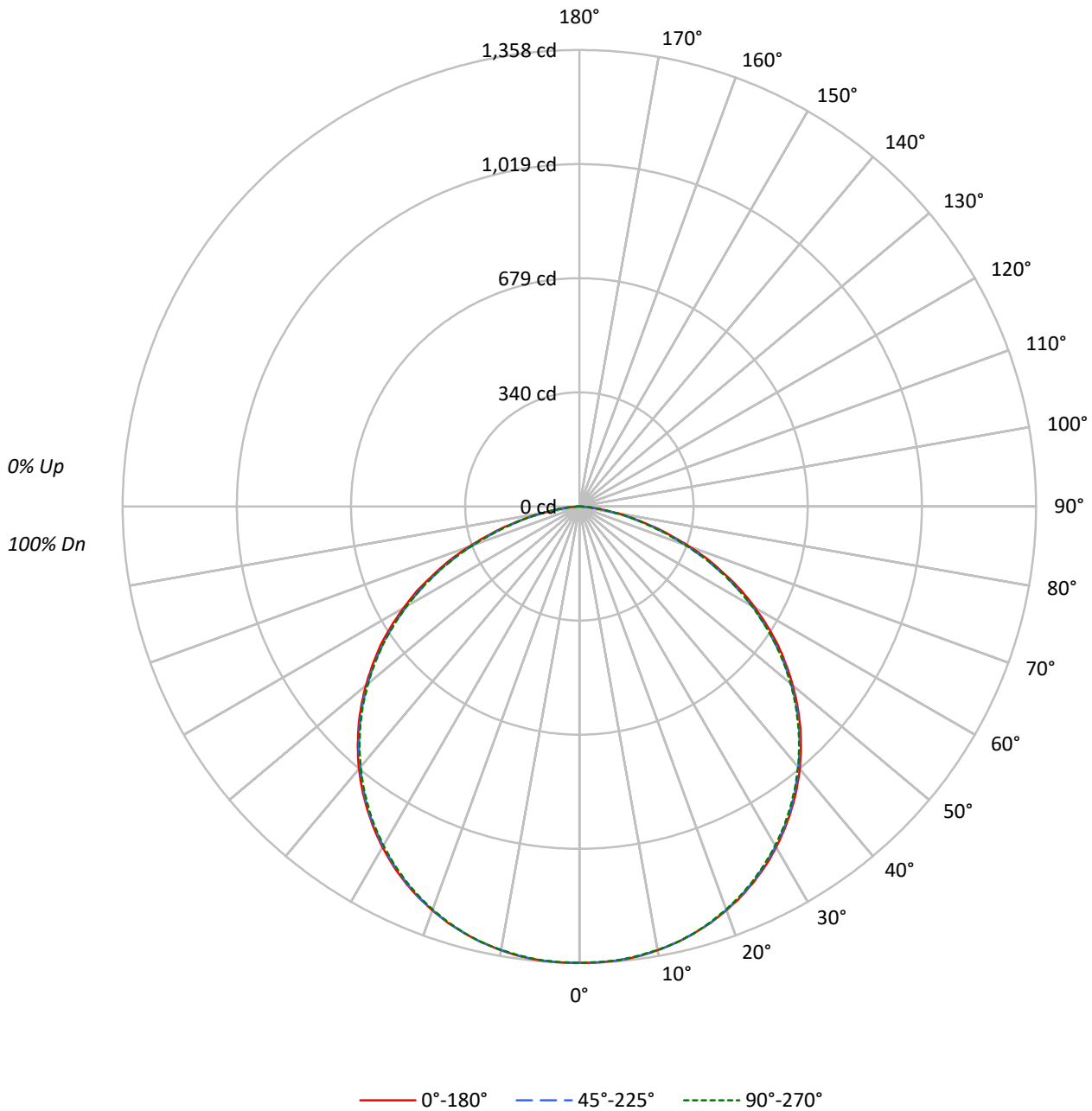
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3837.3 lumens
Efficiency: N/A
Efficacy: 107.8 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														
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°	1827	1827	1827
5°	1831	1831	1829
10°	1832	1831	1830
15°	1832	1831	1831
20°	1830	1830	1827
25°	1827	1823	1820
30°	1819	1813	1810
35°	1807	1802	1796
40°	1791	1780	1777
45°	1768	1758	1752
50°	1735	1721	1716
55°	1694	1669	1667
60°	1623	1594	1594
65°	1518	1483	1487
70°	1366	1324	1321
75°	1147	1102	1096
80°	838	797	831
85°	474	437	443

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1768 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.9	3.4
10°-20°	371.3	9.7
20°-30°	566.1	14.8
30°-40°	685.8	17.9
40°-50°	712.4	18.6
50°-60°	637.3	16.6
60°-70°	464.5	12.1
70°-80°	230.0	6.0
80°-90°	41.1	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°	1066.2	27.8
0°-40°	1752.0	45.7
0°-60°	3101.7	80.8
0°-90°	3837.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3837.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1355	1356	1355	1355	1354	129
15°	1315	1315	1315	1316	1315	371
25°	1231	1229	1228	1228	1226	567
35°	1100	1098	1097	1095	1093	688
45°	929	927	924	922	921	716
55°	722	717	712	712	711	643
65°	477	473	466	468	467	473
75°	221	217	212	216	211	235
85°	31	28	28	29	29	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1357.7	1357.7	1357.7	1357.7	1357.7
2.5°	1357.7	1357.2	1357.2	1357.7	1356.7
5°	1355.3	1355.8	1355.3	1355.3	1354.3
7.5°	1349.9	1349.4	1348.9	1349.4	1348.0
10°	1340.7	1340.7	1340.2	1340.7	1339.7
12.5°	1329.5	1329.5	1329.5	1329.9	1329.5
15°	1315.3	1314.8	1314.8	1315.8	1314.8
17.5°	1298.8	1298.3	1298.3	1297.8	1296.8
20°	1278.3	1278.3	1277.8	1277.3	1275.9
22.5°	1256.4	1255.9	1254.4	1254.4	1252.5
25°	1230.6	1229.1	1228.1	1227.6	1226.2
27.5°	1202.3	1200.4	1198.9	1197.9	1196.5
30°	1170.6	1168.7	1167.2	1165.8	1164.8
32.5°	1136.5	1135.6	1133.1	1132.6	1130.7
35°	1100.0	1098.5	1097.1	1095.1	1093.2
37.5°	1061.0	1059.6	1056.2	1055.2	1053.7
40°	1019.6	1017.7	1013.3	1013.3	1011.8
42.5°	975.3	973.3	970.4	968.5	967.5
45°	929.0	927.1	923.7	921.7	920.7
47.5°	879.8	878.4	874.5	873.0	871.5
50°	828.7	826.7	822.3	821.4	819.9
52.5°	775.1	774.1	768.3	767.8	766.3
55°	722.0	716.6	711.7	711.7	710.8
57.5°	663.5	659.6	653.3	653.3	652.3
60°	603.1	599.7	592.4	593.4	592.4
62.5°	544.2	536.9	530.0	533.0	530.5
65°	476.9	473.0	465.7	467.7	467.2
67.5°	415.5	408.2	401.4	405.3	403.4
70°	347.3	343.4	336.6	340.5	335.7
72.5°	283.0	279.6	272.8	277.2	272.3
75°	220.7	217.3	211.9	215.8	210.9
77.5°	161.7	159.3	154.4	158.3	159.3
80°	108.1	105.2	102.8	106.2	107.2
82.5°	63.3	61.4	60.4	60.9	63.3
85°	30.7	28.3	28.3	28.7	28.7
87.5°	8.3	7.3	8.3	8.8	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)