

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: P973923

Luminaire Tested: FLR2-22-50HE-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973923
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-50HE-L840-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

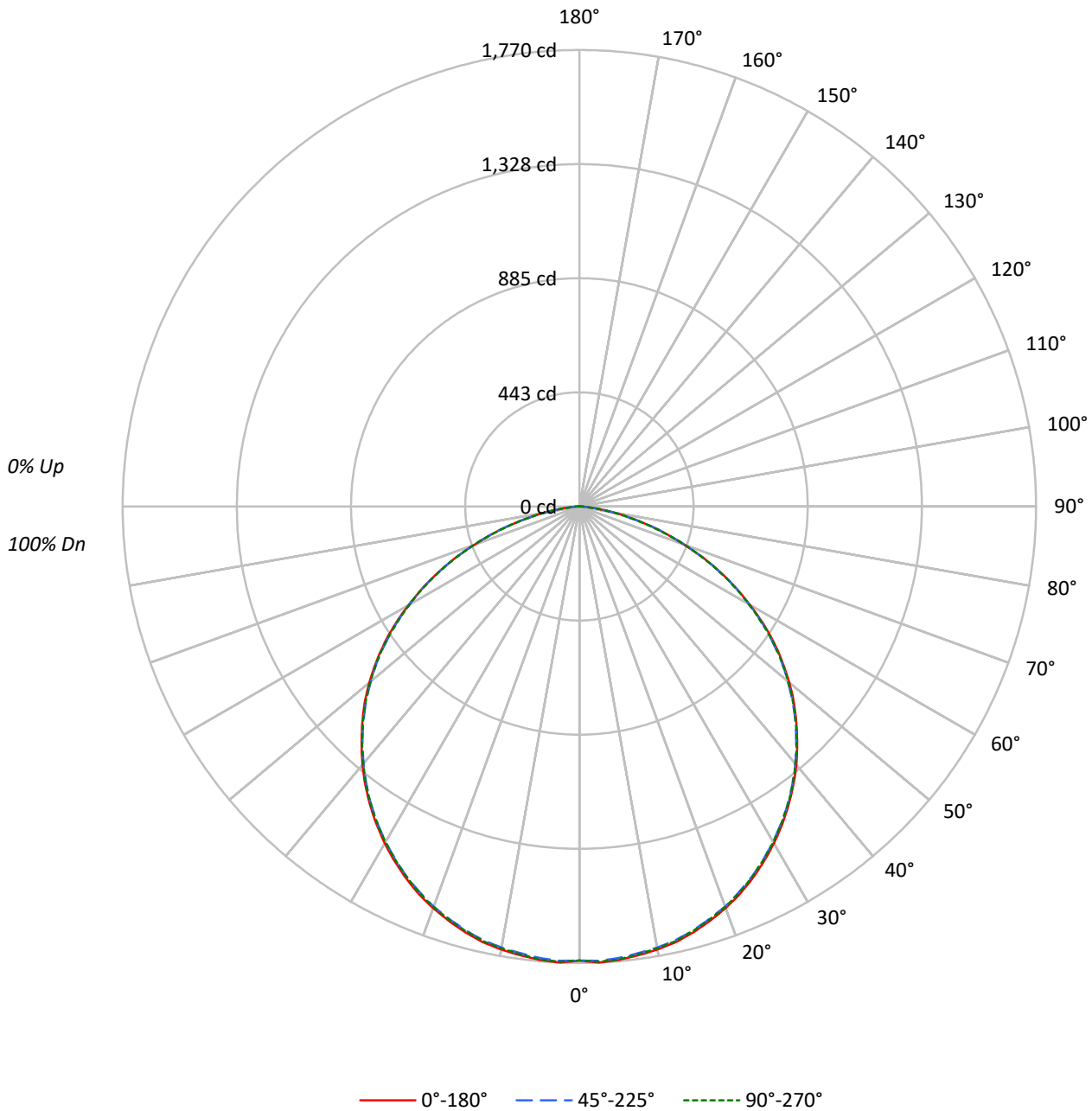
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4923.5 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 40
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: P973923
CATALOG NUMBER: FLR2-22-50HE-L840-CA080

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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	39	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	40	34	29	27						27														
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4738	4738	4738
5°	4767	4747	4762
10°	4766	4746	4754
15°	4763	4741	4747
20°	4746	4727	4733
25°	4721	4701	4704
30°	4687	4667	4670
35°	4644	4626	4630
40°	4595	4573	4577
45°	4528	4507	4515
50°	4448	4416	4425
55°	4321	4286	4301
60°	4109	4091	4091
65°	3836	3829	3815
70°	3397	3414	3405
75°	2860	2837	2816
80°	2056	2022	2005
85°	1074	1074	1041

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4528 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.7	3.4
10°-20°	479.4	9.7
20°-30°	728.6	14.8
30°-40°	880.6	17.9
40°-50°	914.0	18.6
50°-60°	817.2	16.6
60°-70°	594.1	12.1
70°-80°	292.2	5.9
80°-90°	50.7	1.0
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°	1374.7	27.9
0°-40°	2255.3	45.8
0°-60°	3986.5	81.0
0°-90°	4923.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4923.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1761	1761	1761	1761	1761	
5°	1765	1744	1757	1751	1763	168
15°	1710	1690	1702	1698	1704	482
25°	1590	1572	1583	1580	1584	733
35°	1414	1404	1408	1409	1409	884
45°	1190	1184	1184	1186	1186	918
55°	921	916	914	916	917	821
65°	602	605	601	601	599	594
75°	275	277	273	274	271	292
85°	35	36	35	35	34	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1760.6	1760.6	1760.6	1760.6	1760.6
2.5°	1770.4	1749.7	1762.8	1755.1	1767.1
5°	1764.9	1744.3	1757.3	1750.8	1762.8
7.5°	1755.1	1734.5	1747.5	1741.0	1750.8
10°	1744.3	1722.5	1736.7	1730.1	1739.9
12.5°	1730.1	1709.5	1722.5	1717.1	1725.8
15°	1709.5	1689.9	1701.9	1697.5	1704.0
17.5°	1684.5	1664.9	1676.8	1673.6	1679.0
20°	1657.3	1638.8	1650.7	1647.5	1652.9
22.5°	1626.8	1607.3	1618.1	1616.0	1620.3
25°	1589.9	1572.5	1583.3	1580.1	1584.4
27.5°	1550.7	1534.4	1543.1	1543.1	1545.3
30°	1508.3	1493.1	1501.8	1501.8	1502.9
32.5°	1462.6	1450.7	1456.1	1457.2	1457.2
35°	1413.7	1403.9	1408.2	1409.3	1409.3
37.5°	1362.6	1352.8	1356.1	1358.2	1358.2
40°	1308.2	1299.5	1301.7	1303.9	1302.8
42.5°	1249.5	1243.0	1244.0	1246.2	1246.2
45°	1189.7	1184.2	1184.2	1186.4	1186.4
47.5°	1128.8	1123.3	1121.2	1123.3	1123.3
50°	1062.4	1057.0	1054.8	1057.0	1057.0
52.5°	992.8	987.4	987.4	987.4	988.5
55°	921.1	915.6	913.5	915.6	916.7
57.5°	844.9	842.8	839.5	840.6	837.3
60°	763.4	763.4	760.1	762.3	760.1
62.5°	684.0	686.2	682.9	682.9	680.7
65°	602.4	604.6	601.4	601.4	599.2
67.5°	518.7	522.0	517.6	517.6	515.5
70°	431.7	438.2	433.9	435.0	432.8
72.5°	353.4	356.7	352.3	352.3	350.2
75°	275.1	277.3	272.9	274.0	270.8
77.5°	197.9	201.2	196.8	197.9	196.8
80°	132.7	133.8	130.5	131.6	129.4
82.5°	77.2	78.3	77.2	76.1	75.0
85°	34.8	35.9	34.8	34.8	33.7
87.5°	8.7	8.7	8.7	8.7	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)