

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: P973725

Luminaire Tested: FLR2-22-50HE-L830-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973725
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-L830-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

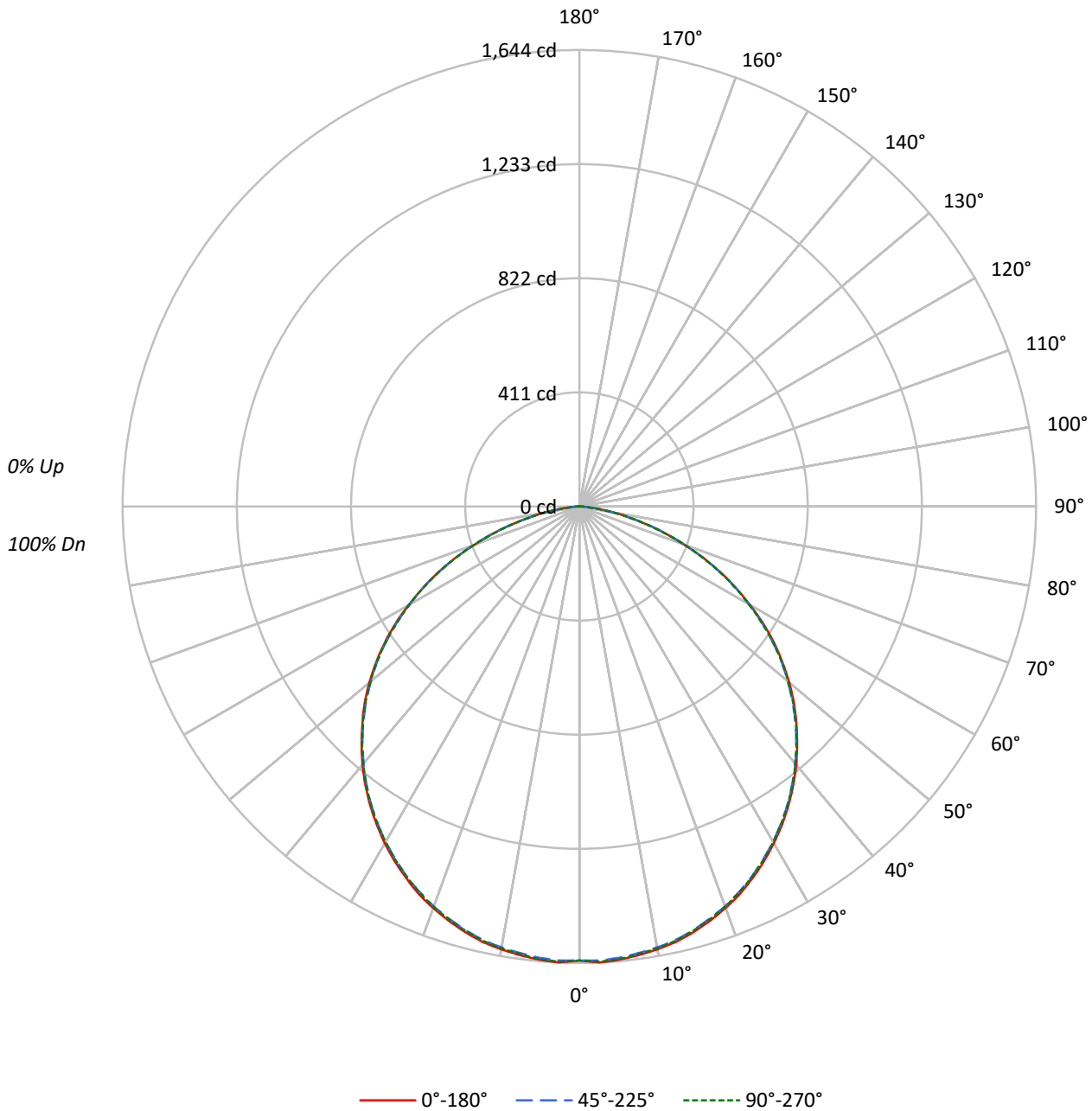
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4572.3 lumens
Efficiency: N/A
Efficacy: 114.3 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

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Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4400	4400	4400
5°	4428	4408	4422
10°	4426	4407	4415
15°	4423	4403	4409
20°	4407	4390	4396
25°	4384	4366	4369
30°	4352	4334	4337
35°	4313	4296	4300
40°	4268	4246	4250
45°	4204	4185	4193
50°	4131	4101	4109
55°	4013	3980	3994
60°	3815	3799	3799
65°	3563	3556	3543
70°	3154	3170	3162
75°	2656	2636	2615
80°	1909	1878	1863
85°	997	997	966

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4204 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.8	3.4
10°-20°	445.2	9.7
20°-30°	676.6	14.8
30°-40°	817.8	17.9
40°-50°	848.8	18.6
50°-60°	758.9	16.6
60°-70°	551.8	12.1
70°-80°	271.3	5.9
80°-90°	47.1	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°	1276.7	27.9
0°-40°	2094.5	45.8
0°-60°	3702.2	81.0
0°-90°	4572.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4572.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1639	1620	1632	1626	1637	156
15°	1588	1569	1580	1576	1582	448
25°	1476	1460	1470	1467	1471	681
35°	1313	1304	1308	1309	1309	821
45°	1105	1100	1100	1102	1102	852
55°	855	850	848	850	851	762
65°	560	562	558	558	556	552
75°	256	258	254	254	252	271
85°	32	33	32	32	31	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1635.0	1635.0	1635.0	1635.0	1635.0
2.5°	1644.1	1624.9	1637.0	1630.0	1641.1
5°	1639.1	1619.9	1632.0	1625.9	1637.0
7.5°	1630.0	1610.8	1622.9	1616.8	1625.9
10°	1619.9	1599.7	1612.8	1606.7	1615.8
12.5°	1606.7	1587.5	1599.7	1594.6	1602.7
15°	1587.5	1569.4	1580.5	1576.4	1582.5
17.5°	1564.3	1546.1	1557.3	1554.2	1559.3
20°	1539.1	1521.9	1533.0	1530.0	1535.0
22.5°	1510.8	1492.6	1502.7	1500.7	1504.7
25°	1476.5	1460.3	1470.4	1467.4	1471.4
27.5°	1440.1	1425.0	1433.0	1433.0	1435.1
30°	1400.7	1386.6	1394.7	1394.7	1395.7
32.5°	1358.3	1347.2	1352.2	1353.3	1353.3
35°	1312.9	1303.8	1307.8	1308.8	1308.8
37.5°	1265.4	1256.3	1259.3	1261.4	1261.4
40°	1214.9	1206.8	1208.8	1210.9	1209.8
42.5°	1160.4	1154.3	1155.3	1157.3	1157.3
45°	1104.8	1099.8	1099.8	1101.8	1101.8
47.5°	1048.3	1043.2	1041.2	1043.2	1043.2
50°	986.7	981.6	979.6	981.6	981.6
52.5°	922.0	917.0	917.0	917.0	918.0
55°	855.4	850.3	848.3	850.3	851.3
57.5°	784.7	782.7	779.6	780.6	777.6
60°	708.9	708.9	705.9	707.9	705.9
62.5°	635.2	637.2	634.2	634.2	632.2
65°	559.5	561.5	558.5	558.5	556.4
67.5°	481.7	484.7	480.7	480.7	478.7
70°	400.9	407.0	402.9	404.0	401.9
72.5°	328.2	331.2	327.2	327.2	325.2
75°	255.5	257.5	253.5	254.5	251.5
77.5°	183.8	186.8	182.8	183.8	182.8
80°	123.2	124.2	121.2	122.2	120.2
82.5°	71.7	72.7	71.7	70.7	69.7
85°	32.3	33.3	32.3	32.3	31.3
87.5°	8.1	8.1	8.1	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)