

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: P974325

Luminaire Tested: FLR2-24-45-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974325
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L840-CA080
Ballast/Driver: -

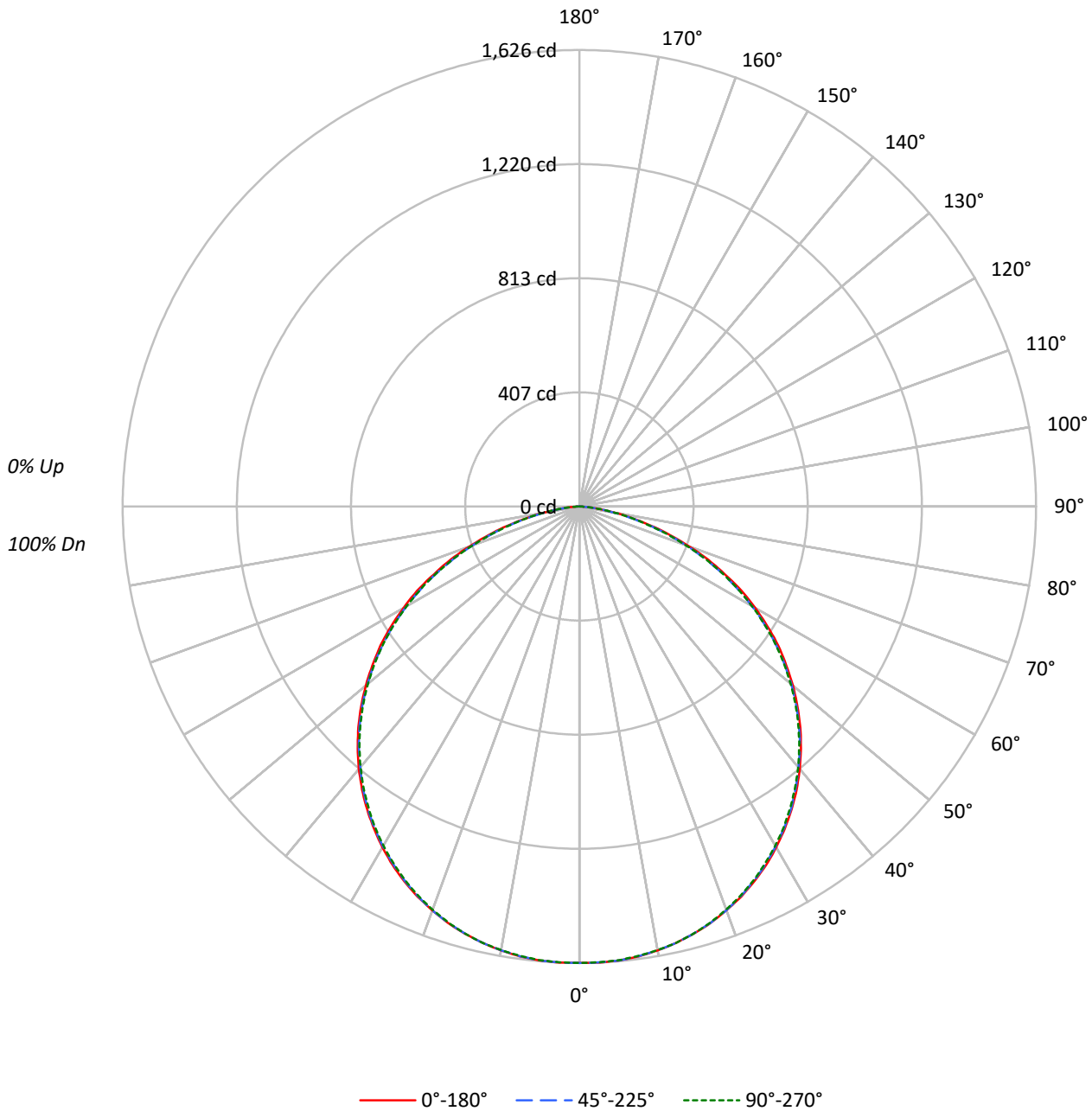
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4596.3 lumens
Efficiency: N/A
Efficacy: 129.1 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				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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2188	2188	2188
5°	2192	2192	2191
10°	2194	2193	2192
15°	2195	2194	2194
20°	2192	2192	2188
25°	2188	2184	2180
30°	2179	2172	2168
35°	2164	2158	2151
40°	2145	2132	2129
45°	2117	2105	2098
50°	2078	2062	2056
55°	2029	2000	1997
60°	1944	1910	1910
65°	1819	1776	1782
70°	1637	1586	1581
75°	1374	1319	1314
80°	1003	954	995
85°	568	522	531

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2117 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.4	3.4
10°-20°	444.7	9.7
20°-30°	678.0	14.8
30°-40°	821.5	17.9
40°-50°	853.3	18.6
50°-60°	763.3	16.6
60°-70°	556.3	12.1
70°-80°	275.5	6.0
80°-90°	49.2	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°	1277.1	27.8
0°-40°	2098.6	45.7
0°-60°	3715.2	80.8
0°-90°	4596.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4596.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1626	1626	1626	1626	1626	
5°	1623	1624	1623	1623	1622	154
15°	1576	1575	1575	1576	1575	445
25°	1474	1472	1471	1470	1469	679
35°	1318	1316	1314	1312	1309	824
45°	1113	1110	1106	1104	1103	858
55°	865	858	852	852	851	770
65°	571	567	558	560	560	566
75°	264	260	254	258	253	282
85°	37	34	34	34	34	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1626.3	1626.3	1626.3	1626.3	1626.3
2.5°	1626.3	1625.7	1625.7	1626.3	1625.1
5°	1623.3	1623.9	1623.3	1623.3	1622.2
7.5°	1616.9	1616.3	1615.8	1616.3	1614.6
10°	1605.8	1605.8	1605.3	1605.8	1604.7
12.5°	1592.4	1592.4	1592.4	1593.0	1592.4
15°	1575.5	1574.9	1574.9	1576.1	1574.9
17.5°	1555.7	1555.1	1555.1	1554.5	1553.3
20°	1531.1	1531.1	1530.6	1530.0	1528.2
22.5°	1504.9	1504.3	1502.6	1502.6	1500.2
25°	1474.0	1472.2	1471.0	1470.5	1468.7
27.5°	1440.1	1437.8	1436.0	1434.9	1433.1
30°	1402.2	1399.9	1398.1	1396.4	1395.2
32.5°	1361.3	1360.2	1357.3	1356.7	1354.3
35°	1317.6	1315.8	1314.1	1311.7	1309.4
37.5°	1270.9	1269.1	1265.1	1263.9	1262.1
40°	1221.3	1219.0	1213.7	1213.7	1212.0
42.5°	1168.2	1165.9	1162.4	1160.0	1158.9
45°	1112.8	1110.4	1106.3	1104.0	1102.8
47.5°	1053.8	1052.1	1047.4	1045.7	1043.9
50°	992.6	990.2	985.0	983.8	982.1
52.5°	928.4	927.2	920.2	919.6	917.9
55°	864.8	858.4	852.5	852.5	851.3
57.5°	794.7	790.1	782.5	782.5	781.3
60°	722.4	718.3	709.6	710.7	709.6
62.5°	651.8	643.0	634.9	638.4	635.4
65°	571.3	566.6	557.8	560.2	559.6
67.5°	497.7	489.0	480.8	485.5	483.2
70°	416.0	411.4	403.2	407.9	402.0
72.5°	339.0	334.9	326.8	332.0	326.2
75°	264.3	260.2	253.8	258.5	252.7
77.5°	193.7	190.8	185.0	189.6	190.8
80°	129.5	126.0	123.1	127.2	128.4
82.5°	75.9	73.5	72.4	72.9	75.9
85°	36.8	33.8	33.8	34.4	34.4
87.5°	9.9	8.8	9.9	10.5	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)