

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: P974333

Luminaire Tested: FLR2-24-45-L840-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974333
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-CA125
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L840-CA125
Ballast/Driver: -

Summary

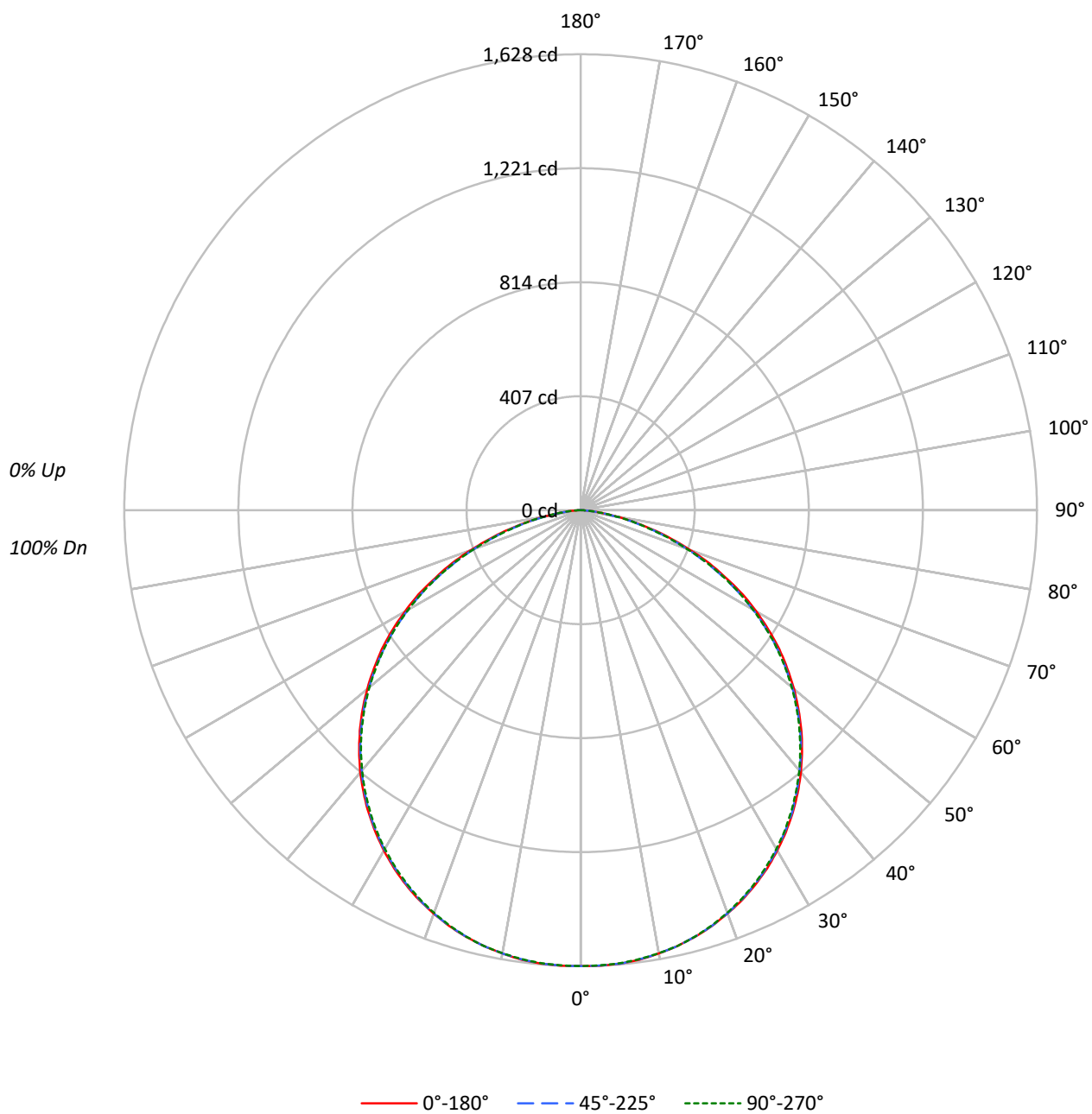
Lumens per Lamp: N/A
Luminaire Lumens: 4601.2 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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°	2190	2190	2190
5°	2195	2195	2193
10°	2196	2196	2195
15°	2197	2196	2196
20°	2195	2194	2191
25°	2191	2186	2183
30°	2181	2174	2170
35°	2167	2161	2153
40°	2147	2134	2131
45°	2120	2107	2101
50°	2080	2064	2058
55°	2031	2002	1999
60°	1946	1911	1911
65°	1821	1778	1784
70°	1638	1588	1583
75°	1376	1321	1315
80°	1005	955	996
85°	568	523	533

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2120 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	3.4
10°-20°	445.2	9.7
20°-30°	678.8	14.8
30°-40°	822.4	17.9
40°-50°	854.2	18.6
50°-60°	764.2	16.6
60°-70°	556.9	12.1
70°-80°	275.8	6.0
80°-90°	49.3	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°	1278.5	27.8
0°-40°	2100.8	45.7
0°-60°	3719.2	80.8
0°-90°	4601.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4601.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1625	1626	1625	1625	1624	155
15°	1577	1577	1577	1578	1577	445
25°	1476	1474	1473	1472	1470	680
35°	1319	1317	1316	1313	1311	825
45°	1114	1112	1108	1105	1104	858
55°	866	859	853	853	852	771
65°	572	567	558	561	560	567
75°	265	260	254	259	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°	1628.0	1628.0	1628.0	1628.0	1628.0
2.5°	1628.0	1627.4	1627.4	1628.0	1626.8
5°	1625.1	1625.7	1625.1	1625.1	1623.9
7.5°	1618.7	1618.1	1617.5	1618.1	1616.3
10°	1607.6	1607.6	1607.0	1607.6	1606.4
12.5°	1594.1	1594.1	1594.1	1594.7	1594.1
15°	1577.2	1576.6	1576.6	1577.8	1576.6
17.5°	1557.3	1556.7	1556.7	1556.2	1555.0
20°	1532.8	1532.8	1532.2	1531.6	1529.9
22.5°	1506.5	1505.9	1504.2	1504.2	1501.8
25°	1475.5	1473.8	1472.6	1472.0	1470.3
27.5°	1441.7	1439.3	1437.6	1436.4	1434.7
30°	1403.7	1401.4	1399.6	1397.9	1396.7
32.5°	1362.8	1361.6	1358.7	1358.1	1355.8
35°	1319.0	1317.2	1315.5	1313.2	1310.8
37.5°	1272.3	1270.5	1266.4	1265.3	1263.5
40°	1222.6	1220.3	1215.0	1215.0	1213.3
42.5°	1169.5	1167.1	1163.6	1161.3	1160.1
45°	1114.0	1111.6	1107.5	1105.2	1104.0
47.5°	1055.0	1053.2	1048.5	1046.8	1045.0
50°	993.6	991.3	986.0	984.9	983.1
52.5°	929.4	928.2	921.2	920.6	918.9
55°	865.7	859.3	853.4	853.4	852.3
57.5°	795.6	790.9	783.3	783.3	782.2
60°	723.2	719.1	710.3	711.5	710.3
62.5°	652.5	643.7	635.5	639.1	636.1
65°	571.9	567.2	558.4	560.8	560.2
67.5°	498.3	489.5	481.3	486.0	483.7
70°	416.5	411.8	403.6	408.3	402.5
72.5°	339.4	335.3	327.1	332.4	326.5
75°	264.6	260.5	254.1	258.8	252.9
77.5°	193.9	191.0	185.2	189.8	191.0
80°	129.7	126.2	123.3	127.3	128.5
82.5°	75.9	73.6	72.4	73.0	75.9
85°	36.8	33.9	33.9	34.5	34.5
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)