

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: P974413

Luminaire Tested: FLR2-24-45-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974413
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-L850-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L850-CP187
Ballast/Driver: -

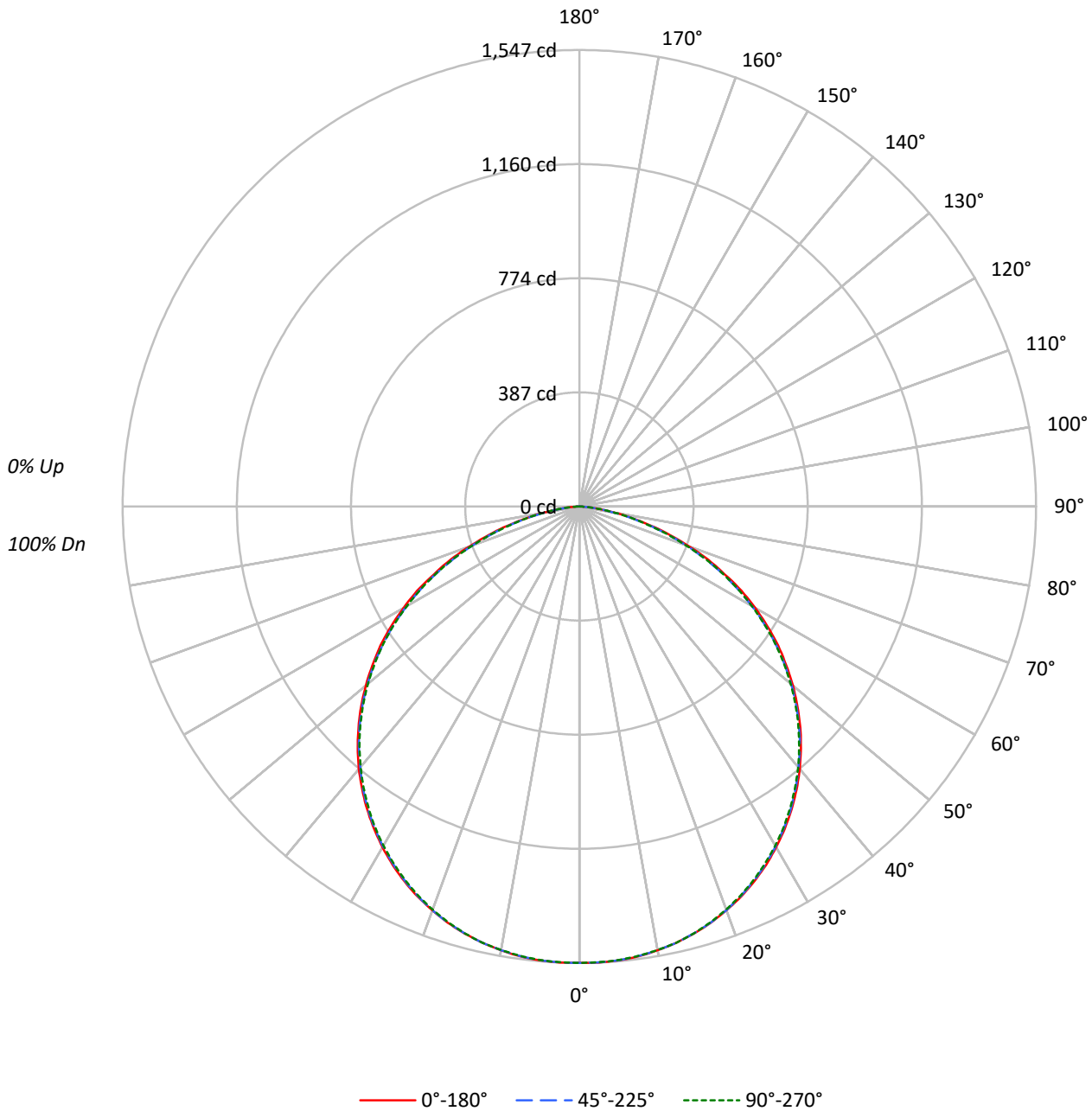
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4372.3 lumens
Efficiency: N/A
Efficacy: 122.8 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				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°	2081	2081	2081
5°	2086	2086	2084
10°	2087	2086	2086
15°	2088	2087	2087
20°	2085	2085	2082
25°	2082	2078	2074
30°	2072	2066	2062
35°	2059	2053	2046
40°	2041	2028	2025
45°	2014	2003	1996
50°	1976	1961	1955
55°	1930	1902	1900
60°	1849	1816	1816
65°	1730	1690	1695
70°	1557	1509	1505
75°	1307	1255	1250
80°	955	907	946
85°	540	497	505

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2014 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	3.4
10°-20°	423.0	9.7
20°-30°	645.0	14.8
30°-40°	781.4	17.9
40°-50°	811.7	18.6
50°-60°	726.2	16.6
60°-70°	529.2	12.1
70°-80°	262.1	6.0
80°-90°	46.8	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°	1214.9	27.8
0°-40°	1996.3	45.7
0°-60°	3534.2	80.8
0°-90°	4372.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4372.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1547	1547	1547	1547	1547	
5°	1544	1545	1544	1544	1543	147
15°	1499	1498	1498	1499	1498	423
25°	1402	1400	1399	1399	1397	646
35°	1253	1252	1250	1248	1246	784
45°	1058	1056	1052	1050	1049	816
55°	823	816	811	811	810	733
65°	543	539	531	533	532	539
75°	252	248	242	246	240	268
85°	35	32	32	33	33	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1547.0	1547.0	1547.0	1547.0	1547.0
2.5°	1547.0	1546.5	1546.5	1547.0	1545.9
5°	1544.2	1544.8	1544.2	1544.2	1543.1
7.5°	1538.1	1537.6	1537.0	1537.6	1535.9
10°	1527.6	1527.6	1527.0	1527.6	1526.5
12.5°	1514.8	1514.8	1514.8	1515.4	1514.8
15°	1498.7	1498.2	1498.2	1499.3	1498.2
17.5°	1479.9	1479.3	1479.3	1478.7	1477.6
20°	1456.5	1456.5	1456.0	1455.4	1453.8
22.5°	1431.6	1431.0	1429.3	1429.3	1427.1
25°	1402.1	1400.5	1399.4	1398.8	1397.1
27.5°	1369.9	1367.7	1366.1	1364.9	1363.3
30°	1333.9	1331.6	1330.0	1328.3	1327.2
32.5°	1295.0	1293.9	1291.1	1290.6	1288.3
35°	1253.4	1251.7	1250.0	1247.8	1245.6
37.5°	1209.0	1207.3	1203.4	1202.3	1200.6
40°	1161.8	1159.6	1154.6	1154.6	1152.9
42.5°	1111.3	1109.1	1105.7	1103.5	1102.4
45°	1058.5	1056.3	1052.4	1050.2	1049.1
47.5°	1002.5	1000.8	996.4	994.7	993.0
50°	944.2	942.0	937.0	935.9	934.2
52.5°	883.1	882.0	875.4	874.8	873.1
55°	822.6	816.5	811.0	811.0	809.9
57.5°	756.0	751.6	744.4	744.4	743.3
60°	687.2	683.3	675.0	676.1	675.0
62.5°	620.0	611.7	603.9	607.3	604.5
65°	543.4	539.0	530.7	532.9	532.3
67.5°	473.5	465.2	457.4	461.8	459.6
70°	395.8	391.3	383.6	388.0	382.5
72.5°	322.5	318.6	310.8	315.8	310.3
75°	251.5	247.6	241.5	245.9	240.4
77.5°	184.3	181.5	176.0	180.4	181.5
80°	123.2	119.9	117.1	121.0	122.1
82.5°	72.2	69.9	68.8	69.4	72.2
85°	35.0	32.2	32.2	32.7	32.7
87.5°	9.4	8.3	9.4	10.0	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)