

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: P974396

Luminaire Tested: FLR2-24-40-L850-CP080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974396  
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: FLR2-24-40-L850-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-40-L850-CP080  
Ballast/Driver: -

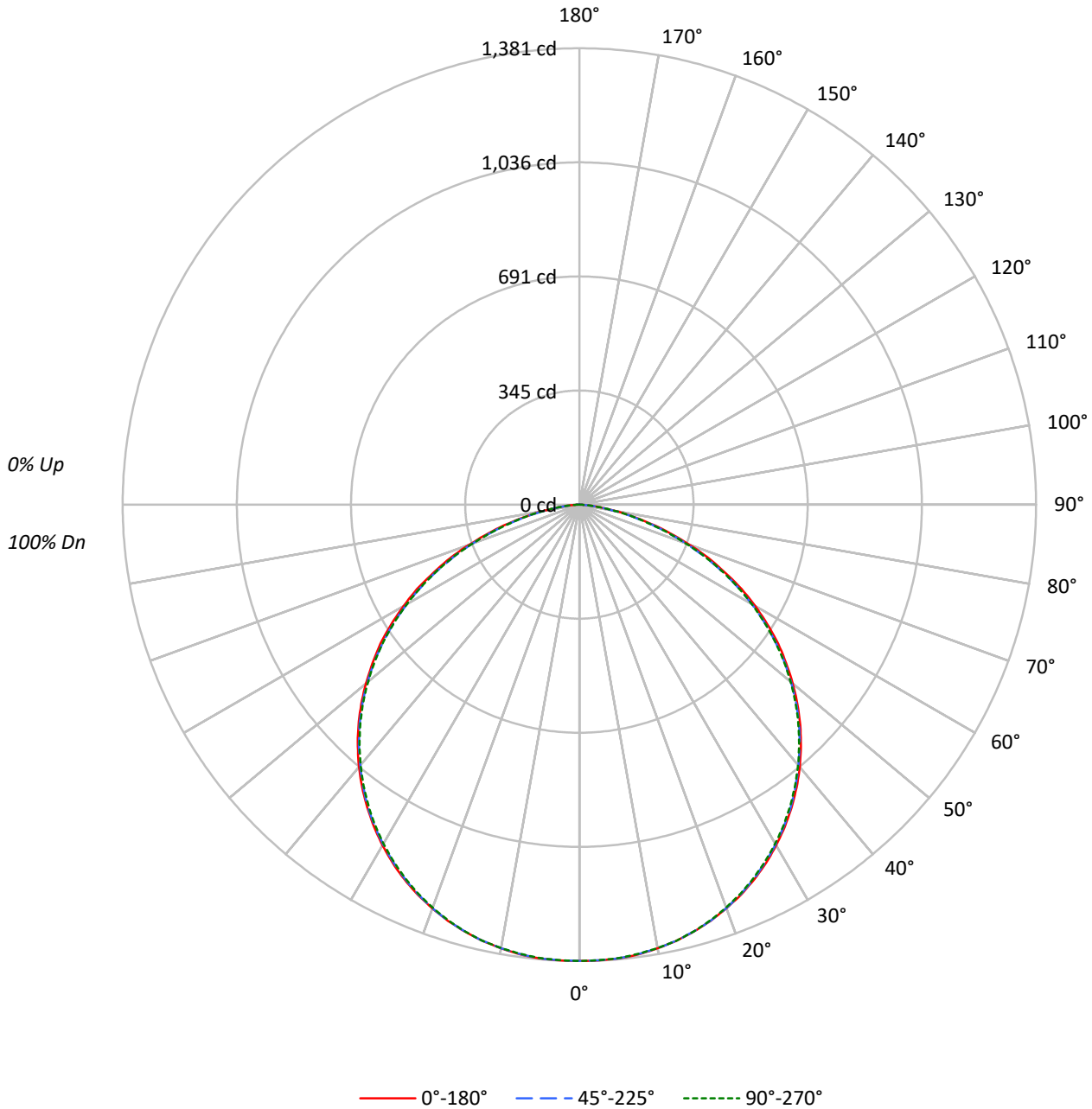
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3902.5 lumens  
Efficiency: N/A  
Efficacy: 128.8 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): 30.3  
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									
RC	80									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	102	102	102	102	102	100														
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	87	87	87	87	87	85														
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	73	73	73	73	73	71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	62	62	62	62	62	60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	53	53	53	53	53	51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	46	46	44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	41	41	41	41	41	38														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	36	36	36	36	36	34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	32	32	30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	29	29	29	29	29	27														
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	26	26	26	26	26	25														

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1858	1858	1858
5°	1862	1862	1860
10°	1863	1862	1862
15°	1863	1863	1863
20°	1861	1861	1858
25°	1858	1854	1851
30°	1850	1844	1840
35°	1838	1833	1826
40°	1821	1810	1807
45°	1798	1787	1782
50°	1764	1751	1745
55°	1722	1698	1696
60°	1651	1621	1621
65°	1544	1508	1513
70°	1389	1347	1343
75°	1167	1120	1115
80°	852	810	845
85°	482	443	451

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1798 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.1	3.4
10°-20°	377.6	9.7
20°-30°	575.7	14.8
30°-40°	697.5	17.9
40°-50°	724.5	18.6
50°-60°	648.1	16.6
60°-70°	472.3	12.1
70°-80°	233.9	6.0
80°-90°	41.8	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°	1084.3	27.8
0°-40°	1781.8	45.7
0°-60°	3154.4	80.8
0°-90°	3902.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3902.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1381	1381	1381	1381	1381	
5°	1378	1379	1378	1378	1377	131
15°	1338	1337	1337	1338	1337	378
25°	1252	1250	1249	1248	1247	577
35°	1119	1117	1116	1114	1112	700
45°	945	943	939	937	936	728
55°	734	729	724	724	723	654
65°	485	481	474	476	475	481
75°	224	221	216	220	214	239
85°	31	29	29	29	29	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1380.8	1380.8	1380.8	1380.8	1380.8
2.5°	1380.8	1380.3	1380.3	1380.8	1379.8
5°	1378.3	1378.8	1378.3	1378.3	1377.3
7.5°	1372.9	1372.4	1371.9	1372.4	1370.9
10°	1363.4	1363.4	1363.0	1363.4	1362.5
12.5°	1352.1	1352.1	1352.1	1352.5	1352.1
15°	1337.7	1337.2	1337.2	1338.2	1337.2
17.5°	1320.8	1320.3	1320.3	1319.9	1318.9
20°	1300.0	1300.0	1299.5	1299.0	1297.6
22.5°	1277.7	1277.2	1275.8	1275.8	1273.8
25°	1251.5	1250.0	1249.0	1248.5	1247.0
27.5°	1222.7	1220.8	1219.3	1218.3	1216.8
30°	1190.5	1188.6	1187.1	1185.6	1184.6
32.5°	1155.9	1154.9	1152.4	1151.9	1149.9
35°	1118.7	1117.2	1115.7	1113.7	1111.8
37.5°	1079.1	1077.6	1074.1	1073.1	1071.6
40°	1037.0	1035.0	1030.5	1030.5	1029.0
42.5°	991.9	989.9	986.9	984.9	983.9
45°	944.8	942.8	939.4	937.4	936.4
47.5°	894.8	893.3	889.3	887.8	886.3
50°	842.7	840.8	836.3	835.3	833.8
52.5°	788.2	787.3	781.3	780.8	779.3
55°	734.2	728.8	723.8	723.8	722.8
57.5°	674.8	670.8	664.4	664.4	663.4
60°	613.4	609.9	602.5	603.4	602.5
62.5°	553.4	546.0	539.0	542.0	539.5
65°	485.0	481.1	473.6	475.6	475.1
67.5°	422.6	415.2	408.2	412.2	410.2
70°	353.2	349.3	342.3	346.3	341.4
72.5°	287.9	284.4	277.4	281.9	277.0
75°	224.4	221.0	215.5	219.5	214.5
77.5°	164.5	162.0	157.1	161.0	162.0
80°	110.0	107.0	104.5	108.0	109.0
82.5°	64.4	62.4	61.4	61.9	64.4
85°	31.2	28.7	28.7	29.2	29.2
87.5°	8.4	7.4	8.4	8.9	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)