

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: P974429

Luminaire Tested: FLR2-24-45-L850-CP375

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974429  
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-CP375  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-45-L850-CP375  
Ballast/Driver: -

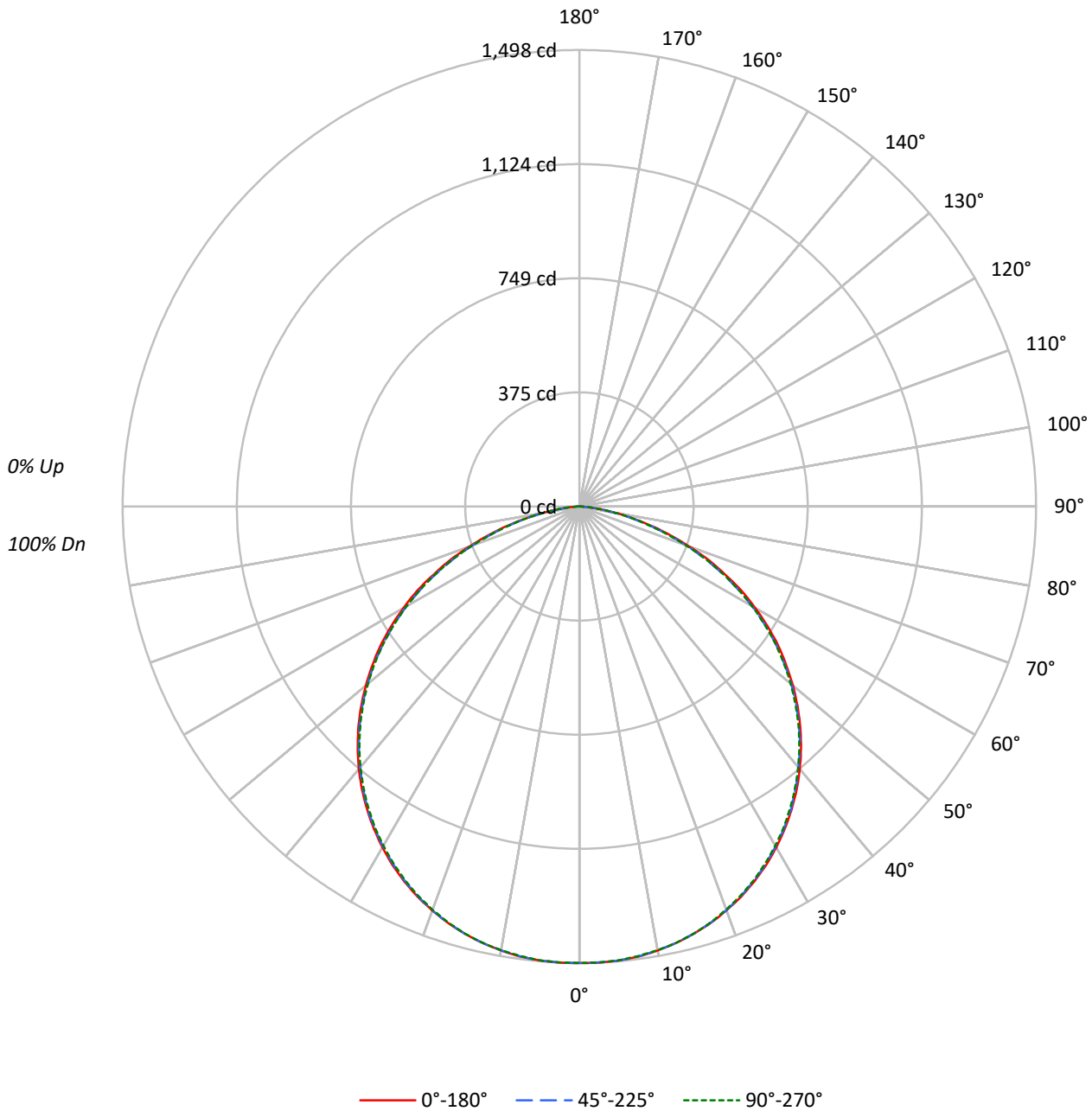
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4235.1 lumens  
Efficiency: N/A  
Efficacy: 119.0 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										
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	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						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°	2016	2016	2016
5°	2020	2020	2019
10°	2021	2021	2020
15°	2022	2021	2021
20°	2020	2019	2016
25°	2016	2012	2009
30°	2007	2001	1997
35°	1994	1989	1982
40°	1976	1964	1961
45°	1951	1940	1934
50°	1914	1900	1894
55°	1869	1843	1840
60°	1791	1759	1759
65°	1676	1636	1642
70°	1508	1461	1457
75°	1266	1216	1210
80°	925	879	917
85°	523	482	489

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1951 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.2	3.4
10°-20°	409.8	9.7
20°-30°	624.7	14.8
30°-40°	756.9	17.9
40°-50°	786.2	18.6
50°-60°	703.4	16.6
60°-70°	512.6	12.1
70°-80°	253.9	6.0
80°-90°	45.4	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°	1176.7	27.8
0°-40°	1933.6	45.7
0°-60°	3423.2	80.8
0°-90°	4235.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4235.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1496	1496	1496	1496	1495	142
15°	1452	1451	1451	1452	1451	410
25°	1358	1356	1355	1355	1353	626
35°	1214	1212	1211	1209	1206	759
45°	1025	1023	1019	1017	1016	790
55°	797	791	786	786	784	710
65°	526	522	514	516	516	522
75°	244	240	234	238	233	260
85°	34	31	31	32	32	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1498.5	1498.5	1498.5	1498.5	1498.5
2.5°	1498.5	1497.9	1497.9	1498.5	1497.4
5°	1495.8	1496.3	1495.8	1495.8	1494.7
7.5°	1489.9	1489.3	1488.8	1489.3	1487.7
10°	1479.6	1479.6	1479.1	1479.6	1478.6
12.5°	1467.3	1467.3	1467.3	1467.8	1467.3
15°	1451.7	1451.1	1451.1	1452.2	1451.1
17.5°	1433.4	1432.9	1432.9	1432.3	1431.2
20°	1410.8	1410.8	1410.3	1409.7	1408.1
22.5°	1386.6	1386.1	1384.5	1384.5	1382.3
25°	1358.1	1356.5	1355.4	1354.9	1353.3
27.5°	1326.9	1324.8	1323.2	1322.1	1320.5
30°	1292.0	1289.8	1288.2	1286.6	1285.5
32.5°	1254.4	1253.3	1250.6	1250.1	1247.9
35°	1214.0	1212.4	1210.8	1208.7	1206.5
37.5°	1171.0	1169.4	1165.6	1164.6	1163.0
40°	1125.3	1123.2	1118.3	1118.3	1116.7
42.5°	1076.4	1074.2	1071.0	1068.9	1067.8
45°	1025.3	1023.2	1019.4	1017.3	1016.2
47.5°	971.0	969.4	965.1	963.5	961.9
50°	914.6	912.4	907.6	906.5	904.9
52.5°	855.4	854.3	847.9	847.4	845.7
55°	796.8	790.9	785.5	785.5	784.4
57.5°	732.3	728.0	721.0	721.0	719.9
60°	665.6	661.9	653.8	654.9	653.8
62.5°	600.6	592.5	585.0	588.2	585.5
65°	526.4	522.1	514.0	516.2	515.6
67.5°	458.6	450.6	443.0	447.3	445.2
70°	383.4	379.0	371.5	375.8	370.4
72.5°	312.4	308.6	301.1	305.9	300.6
75°	243.6	239.8	233.9	238.2	232.8
77.5°	178.5	175.8	170.4	174.7	175.8
80°	119.4	116.1	113.4	117.2	118.3
82.5°	69.9	67.7	66.7	67.2	69.9
85°	33.9	31.2	31.2	31.7	31.7
87.5°	9.1	8.1	9.1	9.7	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)