

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: P973452

Luminaire Tested: FLR2-14-20-L940-CA125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973452  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20-L940-CA125  
Description: 1\*4 FLR-2.0 2000 LUMEN at 4000 CCT & 90 CRI with Clear Acrylic (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

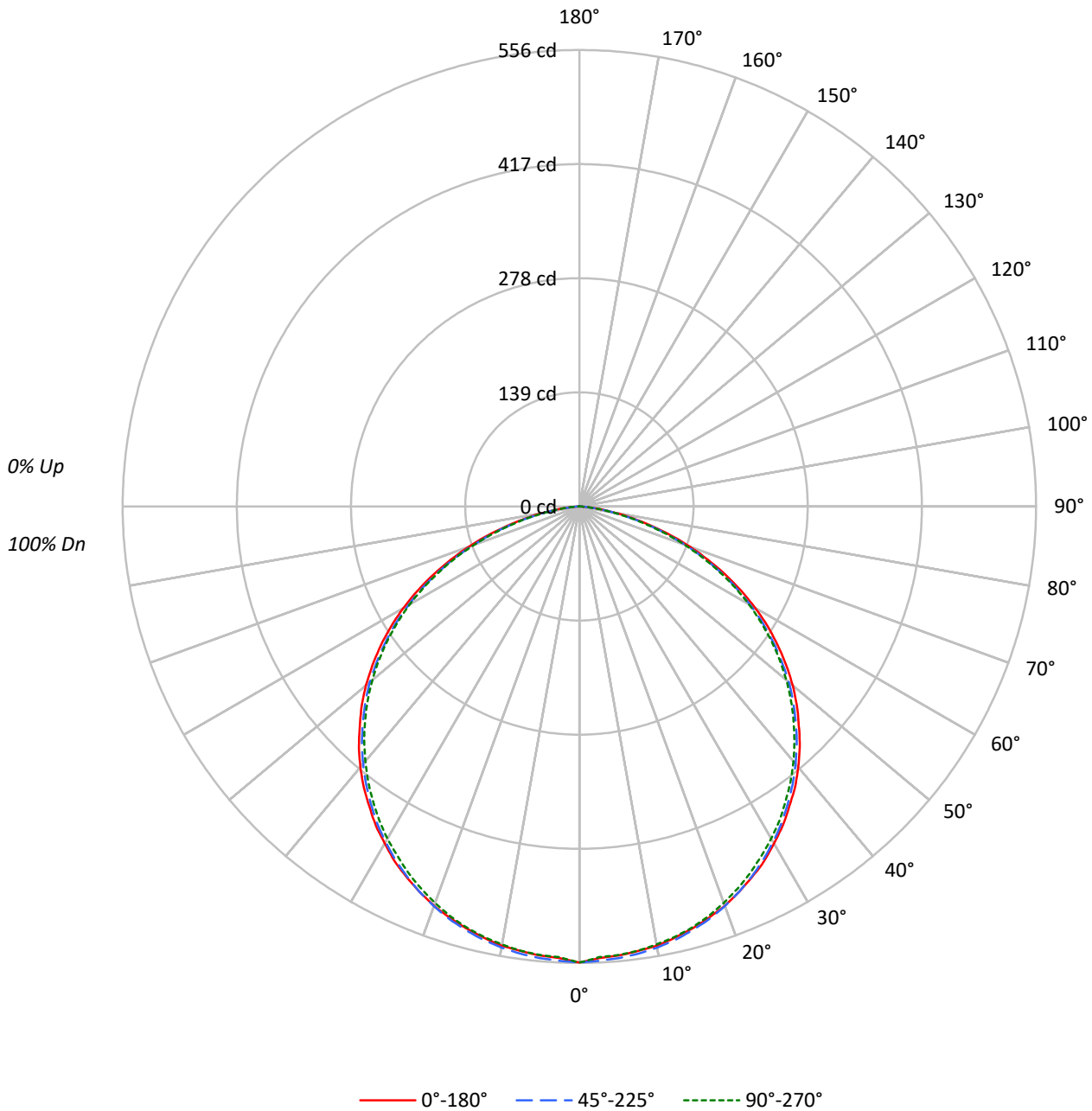
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1554.8 lumens  
Efficiency: N/A  
Efficacy: 94.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.4  
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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	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	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
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	40	34	29	27						27														
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25						25														

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

	0°	45°	90°
0°	1495	1495	1495
5°	1483	1492	1481
10°	1485	1491	1480
15°	1482	1488	1479
20°	1482	1483	1472
25°	1479	1476	1462
30°	1473	1466	1452
35°	1464	1453	1439
40°	1456	1439	1424
45°	1439	1418	1404
50°	1420	1394	1377
55°	1384	1352	1339
60°	1330	1293	1282
65°	1246	1209	1196
70°	1124	1078	1069
75°	942	894	885
80°	683	638	620
85°	361	318	290

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1439 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.6	3.4
10°-20°	151.1	9.7
20°-30°	229.6	14.8
30°-40°	277.7	17.9
40°-50°	288.6	18.6
50°-60°	258.4	16.6
60°-70°	188.5	12.1
70°-80°	92.8	6.0
80°-90°	15.5	1.0
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°	433.3	27.9
0°-40°	711.0	45.7
0°-60°	1258.0	80.9
0°-90°	1554.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1554.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	549	555	552	558	548	52
15°	532	537	534	539	531	150
25°	498	500	497	499	492	230
35°	446	447	442	444	438	279
45°	378	378	373	373	369	292
55°	295	292	288	287	285	263
65°	196	193	190	188	188	193
75°	91	89	86	85	85	97
85°	12	11	10	9	9	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	555.5	555.5	555.5	555.5	555.5
2.5°	550.7	556.9	553.9	559.4	549.5
5°	549.1	555.0	552.3	557.6	548.4
7.5°	546.3	552.5	549.5	554.6	545.8
10°	543.3	548.8	545.6	550.7	541.7
12.5°	538.0	543.5	540.6	545.2	536.9
15°	532.0	536.9	534.1	538.7	530.9
17.5°	525.2	529.7	526.8	530.9	523.1
20°	517.6	521.2	518.0	521.5	513.9
22.5°	508.1	511.6	508.1	510.4	503.8
25°	498.0	500.5	497.1	499.4	492.5
27.5°	487.2	488.6	485.1	487.0	479.9
30°	473.9	475.5	471.8	474.1	467.2
32.5°	461.0	461.9	457.8	459.6	453.4
35°	445.8	446.7	442.4	444.2	438.0
37.5°	431.3	431.1	426.5	427.7	422.4
40°	414.6	414.3	409.5	410.4	405.4
42.5°	397.3	396.4	391.8	392.3	387.7
45°	378.0	377.5	372.7	373.4	368.8
47.5°	359.4	358.0	353.2	353.4	349.5
50°	339.1	337.1	332.9	332.5	329.0
52.5°	317.5	315.2	310.6	310.2	307.6
55°	295.0	292.5	288.1	287.4	285.3
57.5°	271.8	268.6	265.1	263.7	262.1
60°	247.2	244.2	240.3	238.9	238.2
62.5°	221.6	218.7	215.7	214.3	213.4
65°	195.7	193.4	189.9	188.5	187.8
67.5°	169.2	167.2	163.9	162.3	162.1
70°	142.8	140.7	137.0	136.1	135.9
72.5°	116.3	114.5	111.1	110.1	110.1
75°	90.6	89.0	86.0	85.1	85.1
77.5°	66.2	64.8	62.5	61.4	61.4
80°	44.1	43.2	41.2	40.2	40.0
82.5°	25.5	25.1	23.2	22.3	22.8
85°	11.7	11.3	10.3	9.2	9.4
87.5°	3.0	2.8	2.1	1.6	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)