

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: P973424

Luminaire Tested: FLR2-14-42-L840-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973424  
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: FLR2-14-42-L840-CP250  
Description: 1\*4 FLR-2.0 4200 LUMEN at 4000 CCT & 80CRI with Clear Polycarbonate (0.250" thickness)  
  
Light Source:  
Ballast/Driver: -

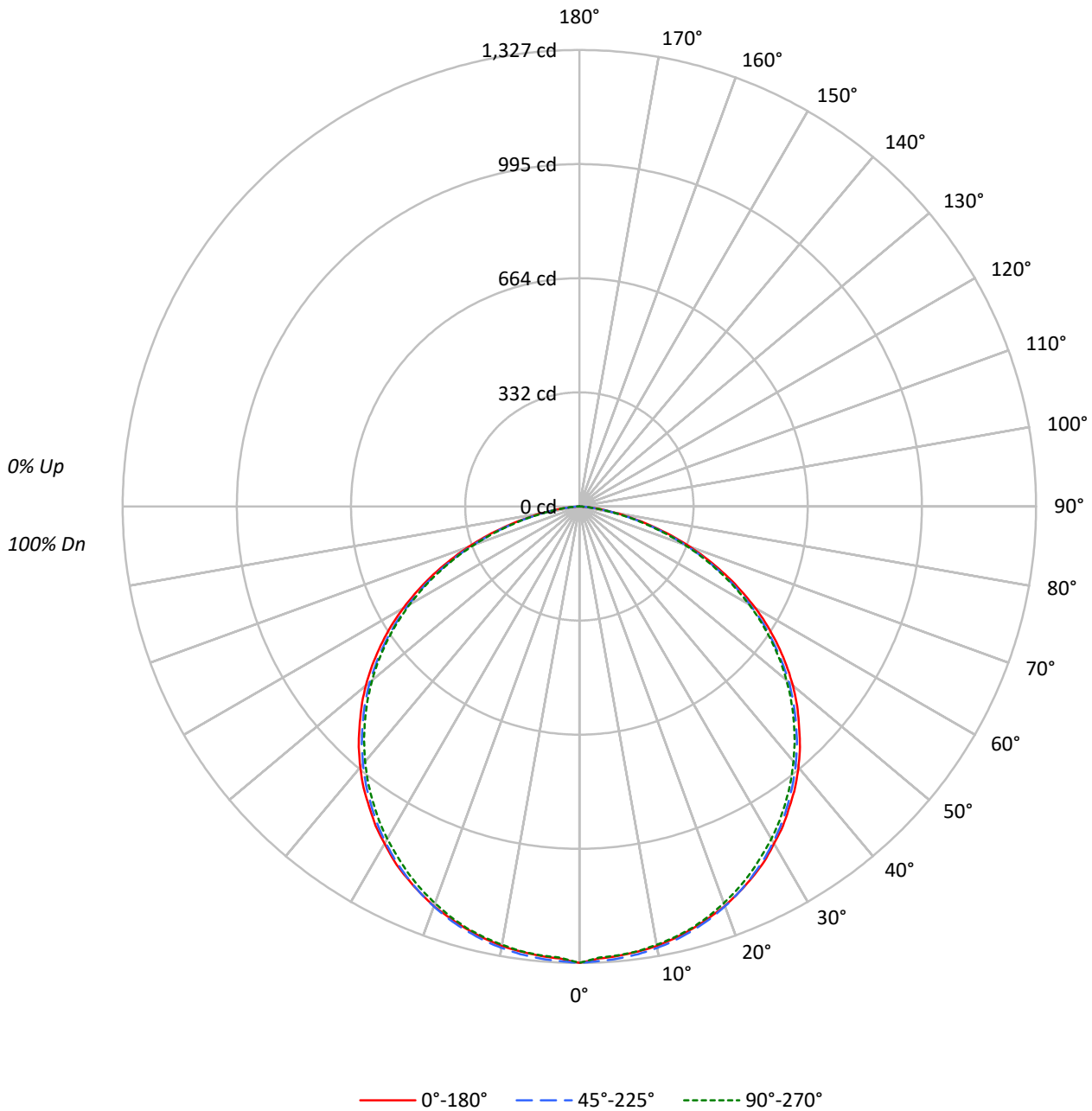
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3713.6 lumens  
Efficiency: N/A  
Efficacy: 117.1 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): 31.7  
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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	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	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
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	40	34	29	27
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	3570	3570	3570
5°	3543	3563	3538
10°	3546	3561	3536
15°	3540	3554	3533
20°	3540	3543	3515
25°	3532	3525	3493
30°	3517	3502	3468
35°	3498	3471	3437
40°	3478	3436	3401
45°	3436	3388	3352
50°	3391	3329	3290
55°	3306	3228	3197
60°	3178	3089	3062
65°	2976	2888	2857
70°	2683	2575	2554
75°	2250	2136	2113
80°	1633	1523	1481
85°	865	763	695

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3436 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.7	3.4
10°-20°	360.9	9.7
20°-30°	548.3	14.8
30°-40°	663.3	17.9
40°-50°	689.3	18.6
50°-60°	617.2	16.6
60°-70°	450.2	12.1
70°-80°	221.7	6.0
80°-90°	37.1	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°	1034.9	27.9
0°-40°	1698.2	45.7
0°-60°	3004.7	80.9
0°-90°	3713.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3713.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1312	1326	1319	1332	1310	125
15°	1271	1282	1276	1287	1268	359
25°	1190	1196	1187	1193	1176	548
35°	1065	1067	1057	1061	1046	667
45°	903	902	890	892	881	697
55°	705	699	688	686	682	629
65°	467	462	454	450	449	462
75°	216	212	205	203	203	231
85°	28	27	25	22	22	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1326.8	1326.8	1326.8	1326.8	1326.8
2.5°	1315.3	1330.1	1323.0	1336.2	1312.6
5°	1311.5	1325.7	1319.2	1331.8	1309.8
7.5°	1304.9	1319.7	1312.6	1324.6	1303.8
10°	1297.7	1310.9	1303.2	1315.3	1293.9
12.5°	1285.1	1298.3	1291.1	1302.1	1282.4
15°	1270.8	1282.4	1275.8	1286.7	1268.1
17.5°	1254.3	1265.3	1258.2	1268.1	1249.4
20°	1236.2	1245.0	1237.3	1245.6	1227.4
22.5°	1213.7	1221.9	1213.7	1219.2	1203.3
25°	1189.5	1195.6	1187.3	1192.8	1176.4
27.5°	1163.7	1167.0	1158.8	1163.2	1146.2
30°	1131.9	1135.7	1126.9	1132.4	1116.0
32.5°	1101.1	1103.3	1093.4	1097.8	1083.0
35°	1064.9	1067.1	1056.6	1061.0	1046.2
37.5°	1030.3	1029.7	1018.7	1021.5	1008.9
40°	990.2	989.6	978.1	980.3	968.2
42.5°	949.0	946.8	935.8	936.9	925.9
45°	902.9	901.8	890.2	891.9	880.9
47.5°	858.4	855.1	843.6	844.1	834.8
50°	810.1	805.1	795.2	794.1	785.9
52.5°	758.4	752.9	742.0	740.9	734.8
55°	704.6	698.6	688.1	686.5	681.5
57.5°	649.1	641.5	633.2	629.9	626.1
60°	590.4	583.2	573.9	570.6	569.0
62.5°	529.4	522.3	515.1	511.8	509.6
65°	467.4	461.9	453.6	450.3	448.7
67.5°	404.2	399.3	391.6	387.7	387.2
70°	341.0	336.1	327.3	325.1	324.6
72.5°	277.9	273.5	265.3	263.1	263.1
75°	216.4	212.5	205.4	203.2	203.2
77.5°	158.2	154.9	149.4	146.6	146.6
80°	105.4	103.2	98.3	96.1	95.6
82.5°	61.0	59.9	55.5	53.3	54.4
85°	28.0	26.9	24.7	22.0	22.5
87.5°	7.1	6.6	4.9	3.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)