

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: P973450

Luminaire Tested: FLR2-14-30-L940-CA080

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973450  
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: FLR2-14-30-L940-CA080  
Description: 1\*4 FLR-2.0 3000 LUMEN at 3500 CCT & 90CRI with Clear Acrylic (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

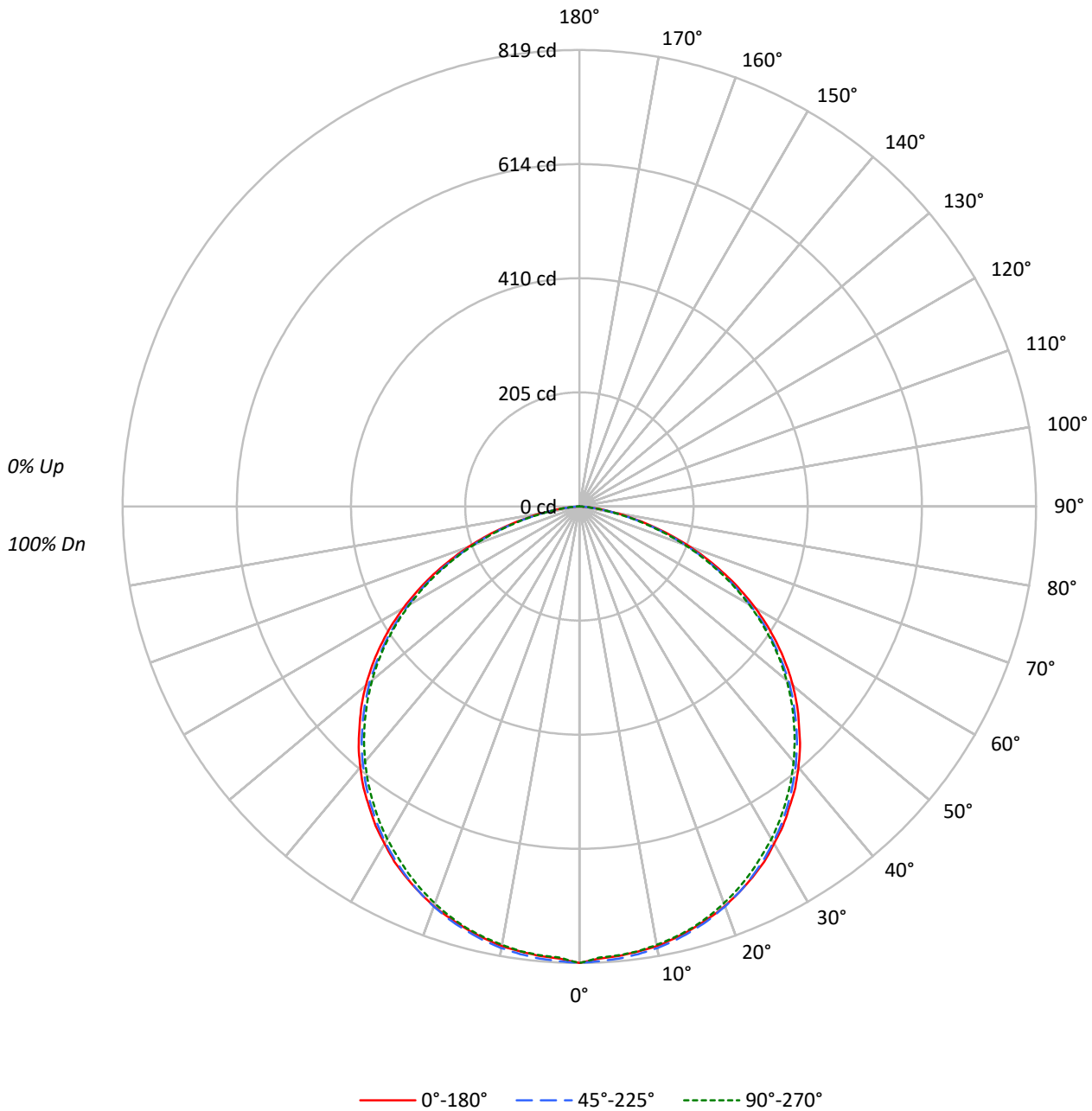
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2292.4 lumens  
Efficiency: N/A  
Efficacy: 95.9 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): 23.9  
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°	2204	2204	2204
5°	2187	2200	2184
10°	2189	2198	2182
15°	2186	2194	2181
20°	2185	2187	2170
25°	2180	2176	2156
30°	2171	2162	2141
35°	2159	2143	2122
40°	2147	2121	2100
45°	2121	2091	2069
50°	2093	2055	2031
55°	2041	1993	1974
60°	1961	1907	1890
65°	1837	1783	1764
70°	1656	1590	1577
75°	1389	1318	1304
80°	1009	941	914
85°	534	472	429

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2121 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.6	3.4
10°-20°	222.8	9.7
20°-30°	338.5	14.8
30°-40°	409.4	17.9
40°-50°	425.5	18.6
50°-60°	381.0	16.6
60°-70°	277.9	12.1
70°-80°	136.8	6.0
80°-90°	22.9	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°	638.8	27.9
0°-40°	1048.3	45.7
0°-60°	1854.8	80.9
0°-90°	2292.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2292.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	819	819	819	819	819	
5°	810	818	814	822	808	77
15°	784	792	788	794	783	222
25°	734	738	733	736	726	339
35°	657	659	652	655	646	412
45°	557	557	550	551	544	430
55°	435	431	425	424	421	388
65°	288	285	280	278	277	285
75°	134	131	127	125	125	142
85°	17	17	15	14	14	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	819.1	819.1	819.1	819.1	819.1
2.5°	811.9	821.1	816.7	824.8	810.2
5°	809.6	818.4	814.3	822.1	808.5
7.5°	805.5	814.6	810.2	817.7	804.8
10°	801.1	809.2	804.5	811.9	798.7
12.5°	793.3	801.4	797.0	803.8	791.6
15°	784.5	791.6	787.5	794.3	782.8
17.5°	774.3	781.1	776.7	782.8	771.3
20°	763.1	768.5	763.8	768.9	757.7
22.5°	749.2	754.3	749.2	752.6	742.8
25°	734.3	738.0	732.9	736.3	726.2
27.5°	718.4	720.4	715.3	718.0	707.5
30°	698.7	701.1	695.7	699.0	688.9
32.5°	679.7	681.1	675.0	677.7	668.5
35°	657.3	658.7	652.3	655.0	645.8
37.5°	636.0	635.6	628.9	630.6	622.8
40°	611.2	610.9	603.8	605.1	597.7
42.5°	585.8	584.5	577.7	578.4	571.6
45°	557.3	556.7	549.5	550.6	543.8
47.5°	529.9	527.8	520.7	521.1	515.3
50°	500.0	497.0	490.9	490.2	485.1
52.5°	468.2	464.8	458.0	457.3	453.6
55°	435.0	431.2	424.8	423.8	420.7
57.5°	400.7	396.0	390.9	388.8	386.5
60°	364.4	360.0	354.3	352.2	351.2
62.5°	326.8	322.4	318.0	316.0	314.6
65°	288.5	285.1	280.0	278.0	277.0
67.5°	249.5	246.5	241.7	239.3	239.0
70°	210.5	207.5	202.1	200.7	200.4
72.5°	171.5	168.8	163.7	162.4	162.4
75°	133.6	131.2	126.8	125.4	125.4
77.5°	97.6	95.6	92.2	90.5	90.5
80°	65.1	63.7	60.7	59.3	59.0
82.5°	37.6	37.0	34.2	32.9	33.6
85°	17.3	16.6	15.3	13.6	13.9
87.5°	4.4	4.1	3.1	2.4	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)