

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: P973423

Luminaire Tested: FLR2-14-30-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973423
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-L840-CP250
Description: 1*4 FLR-2.0 3000 LUMEN at 4000 CCT & 80CRI Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

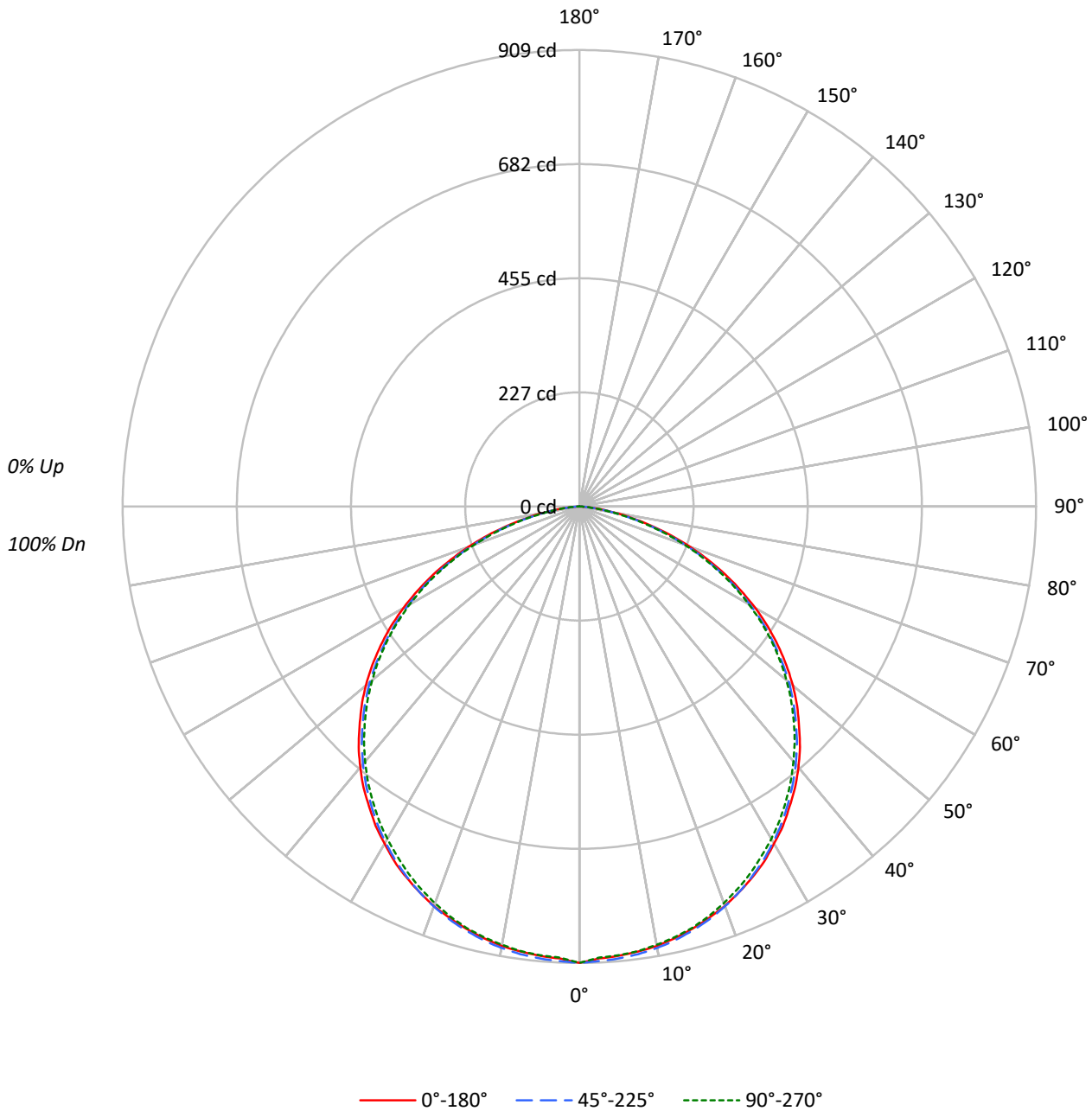
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2543.8 lumens
Efficiency: N/A
Efficacy: 106.4 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 (A_{in}): 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

TEST NUMBER: P973423
CATALOG NUMBER: FLR2-14-30-L840-CP250

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°	2446	2446	2446
5°	2427	2441	2424
10°	2429	2439	2422
15°	2425	2435	2420
20°	2425	2427	2408
25°	2419	2415	2393
30°	2409	2399	2375
35°	2396	2378	2354
40°	2383	2354	2330
45°	2354	2321	2296
50°	2323	2280	2254
55°	2265	2212	2190
60°	2176	2116	2097
65°	2038	1978	1957
70°	1838	1764	1749
75°	1541	1463	1447
80°	1119	1043	1015
85°	593	522	475

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2354 cd/sqm



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 CATALOG NUMBER: FLR2-14-30-L840-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	3.4
10°-20°	247.2	9.7
20°-30°	375.6	14.8
30°-40°	454.3	17.9
40°-50°	472.2	18.6
50°-60°	422.8	16.6
60°-70°	308.4	12.1
70°-80°	151.8	6.0
80°-90°	25.4	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°	708.9	27.9
0°-40°	1163.2	45.7
0°-60°	2058.2	80.9
0°-90°	2543.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2543.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	898	908	904	912	897	85
15°	870	878	874	881	869	246
25°	815	819	813	817	806	376
35°	729	731	724	727	717	457
45°	618	618	610	611	603	478
55°	483	478	471	470	467	431
65°	320	316	311	308	307	316
75°	148	146	141	139	139	158
85°	19	18	17	15	15	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.9	908.9	908.9	908.9	908.9
2.5°	901.0	911.1	906.2	915.3	899.1
5°	898.3	908.1	903.6	912.3	897.2
7.5°	893.8	904.0	899.1	907.4	893.1
10°	888.9	898.0	892.7	901.0	886.3
12.5°	880.3	889.3	884.4	891.9	878.4
15°	870.5	878.4	873.9	881.4	868.6
17.5°	859.2	866.7	861.9	868.6	855.8
20°	846.8	852.8	847.6	853.2	840.8
22.5°	831.4	837.0	831.4	835.1	824.2
25°	814.8	819.0	813.3	817.1	805.8
27.5°	797.1	799.4	793.8	796.8	785.1
30°	775.3	778.0	771.9	775.7	764.4
32.5°	754.3	755.8	749.0	752.0	741.8
35°	729.4	730.9	723.8	726.8	716.6
37.5°	705.7	705.4	697.8	699.7	691.1
40°	678.3	677.9	670.0	671.5	663.2
42.5°	650.1	648.6	641.0	641.8	634.3
45°	618.5	617.7	609.8	610.9	603.4
47.5°	588.0	585.7	577.8	578.2	571.8
50°	554.9	551.5	544.7	544.0	538.3
52.5°	519.5	515.8	508.2	507.5	503.3
55°	482.7	478.5	471.4	470.2	466.9
57.5°	444.7	439.4	433.7	431.5	428.9
60°	404.4	399.5	393.1	390.9	389.7
62.5°	362.6	357.8	352.9	350.6	349.1
65°	320.1	316.4	310.7	308.5	307.3
67.5°	276.9	273.5	268.2	265.6	265.2
70°	233.6	230.2	224.2	222.7	222.3
72.5°	190.4	187.3	181.7	180.2	180.2
75°	148.2	145.6	140.7	139.2	139.2
77.5°	108.3	106.1	102.3	100.4	100.4
80°	72.2	70.7	67.3	65.8	65.5
82.5°	41.8	41.0	38.0	36.5	37.2
85°	19.2	18.4	16.9	15.0	15.4
87.5°	4.9	4.5	3.4	2.6	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)