

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: P973420

Luminaire Tested: FLR2-14-30-L840-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973420
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-CP187
Description: 1*4 FLR-2.0 3000 LUMEN at 4000 CCT & 80CRI Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

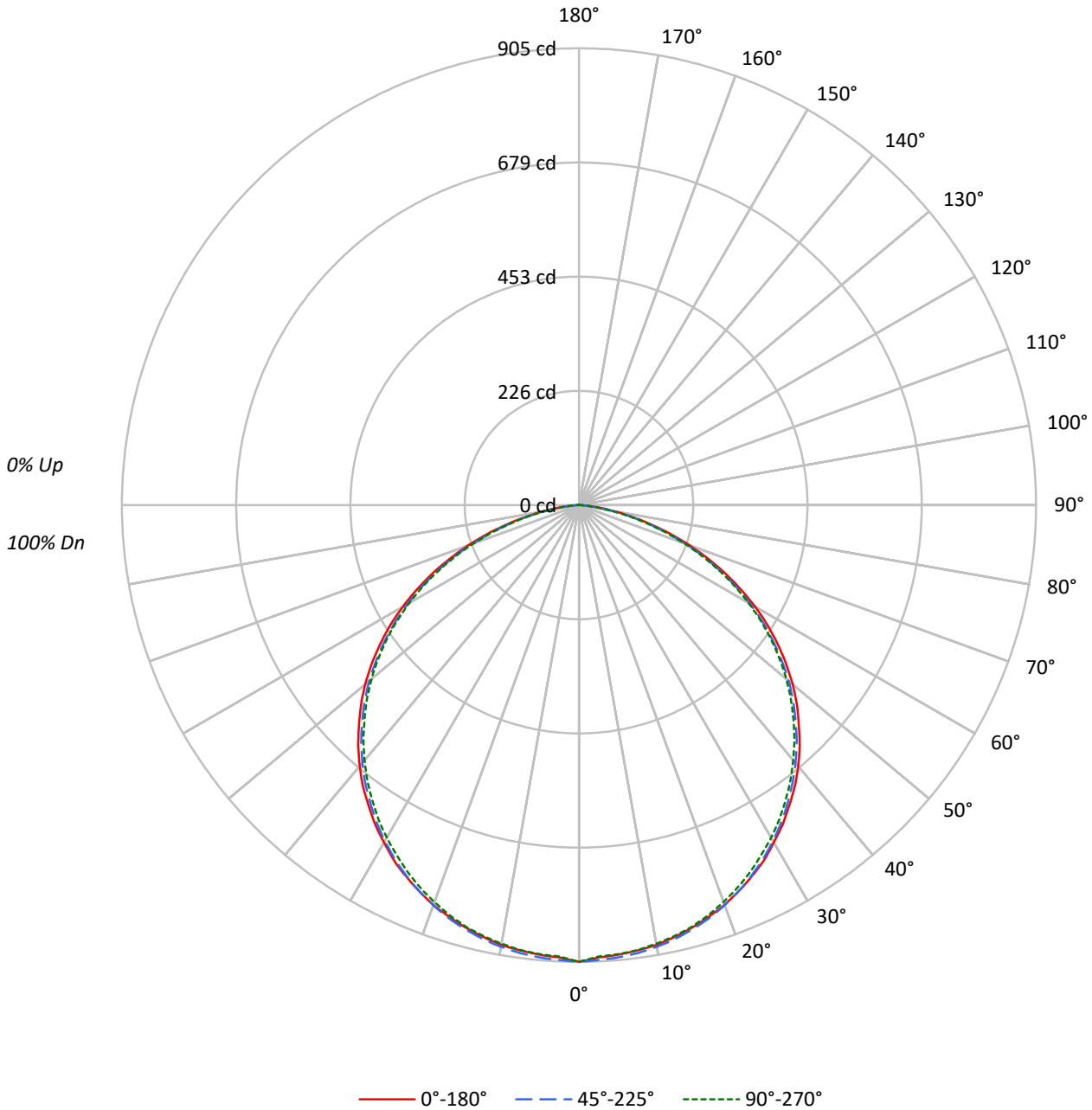
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2532.6 lumens
Efficiency: N/A
Efficacy: 106.0 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				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°	2435	2435	2435
5°	2416	2430	2413
10°	2418	2429	2411
15°	2415	2424	2409
20°	2414	2416	2397
25°	2409	2404	2382
30°	2399	2388	2365
35°	2386	2367	2344
40°	2372	2343	2320
45°	2343	2310	2286
50°	2313	2270	2244
55°	2254	2202	2181
60°	2167	2106	2088
65°	2029	1970	1948
70°	1830	1756	1741
75°	1535	1457	1441
80°	1114	1038	1010
85°	590	522	475

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2343 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	3.4
10°-20°	246.1	9.7
20°-30°	373.9	14.8
30°-40°	452.3	17.9
40°-50°	470.1	18.6
50°-60°	420.9	16.6
60°-70°	307.0	12.1
70°-80°	151.2	6.0
80°-90°	25.3	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°	705.8	27.9
0°-40°	1158.1	45.7
0°-60°	2049.1	80.9
0°-90°	2532.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2532.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	894	904	900	908	893	85
15°	867	874	870	878	865	245
25°	811	815	810	814	802	374
35°	726	728	721	724	714	455
45°	616	615	607	608	601	475
55°	480	476	469	468	465	429
65°	319	315	309	307	306	315
75°	148	145	140	139	139	157
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°	904.9	904.9	904.9	904.9	904.9
2.5°	897.0	907.1	902.2	911.2	895.1
5°	894.4	904.1	899.6	908.2	893.3
7.5°	889.9	900.0	895.1	903.4	889.1
10°	885.0	894.0	888.8	897.0	882.4
12.5°	876.4	885.4	880.5	888.0	874.5
15°	866.7	874.5	870.0	877.5	864.8
17.5°	855.4	862.9	858.0	864.8	852.1
20°	843.1	849.1	843.8	849.4	837.1
22.5°	827.7	833.3	827.7	831.5	820.6
25°	811.2	815.4	809.7	813.5	802.2
27.5°	793.6	795.9	790.3	793.3	781.6
30°	771.9	774.5	768.5	772.3	761.0
32.5°	750.9	752.4	745.7	748.7	738.6
35°	726.2	727.7	720.6	723.6	713.5
37.5°	702.6	702.2	694.8	696.6	688.0
40°	675.3	674.9	667.0	668.5	660.3
42.5°	647.2	645.7	638.2	638.9	631.5
45°	615.7	615.0	607.1	608.2	600.7
47.5°	585.4	583.1	575.3	575.7	569.3
50°	552.4	549.1	542.3	541.6	536.0
52.5°	517.2	513.5	506.0	505.2	501.1
55°	480.5	476.4	469.3	468.2	464.8
57.5°	442.7	437.5	431.8	429.6	427.0
60°	402.6	397.8	391.4	389.1	388.0
62.5°	361.0	356.2	351.3	349.1	347.6
65°	318.7	315.0	309.4	307.1	306.0
67.5°	275.7	272.3	267.0	264.4	264.0
70°	232.6	229.2	223.2	221.7	221.3
72.5°	189.5	186.5	180.9	179.4	179.4
75°	147.6	144.9	140.1	138.6	138.6
77.5°	107.9	105.6	101.9	100.0	100.0
80°	71.9	70.4	67.0	65.5	65.2
82.5°	41.6	40.8	37.8	36.3	37.1
85°	19.1	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)