

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: P973414

Luminaire Tested: FLR2-14-30-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973414
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-CP080
Description: 1*4 FLR-2.0 3000 LUMEN at 4000 CCT & 80CRI Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

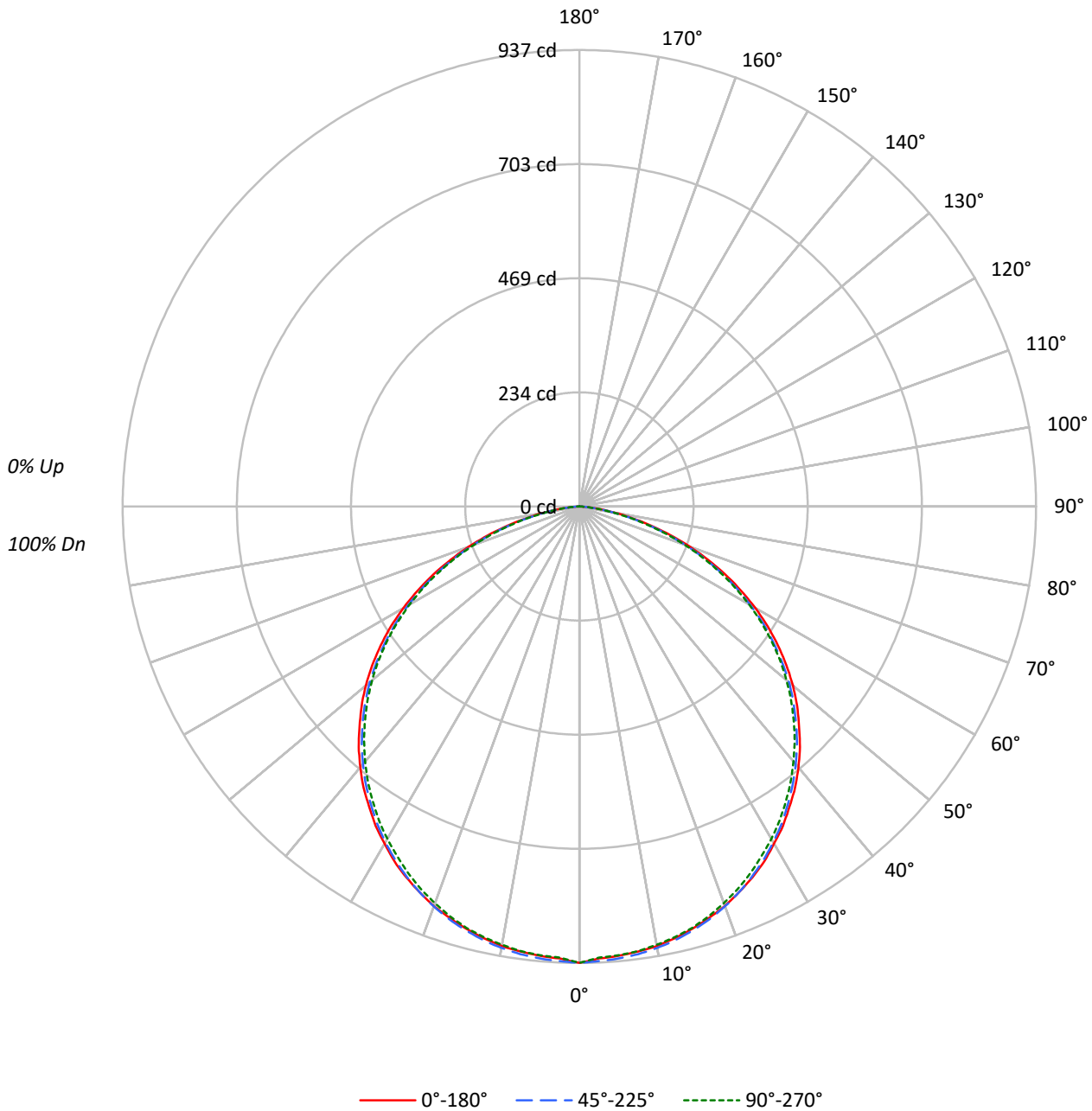
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2622.3 lumens
Efficiency: N/A
Efficacy: 109.7 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°	2521	2521	2521
5°	2502	2516	2498
10°	2504	2514	2496
15°	2500	2510	2495
20°	2500	2502	2482
25°	2494	2489	2466
30°	2483	2473	2449
35°	2470	2451	2427
40°	2456	2426	2402
45°	2426	2392	2367
50°	2395	2351	2323
55°	2334	2280	2258
60°	2244	2181	2162
65°	2101	2039	2017
70°	1895	1818	1803
75°	1589	1508	1492
80°	1155	1075	1046
85°	611	540	491

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2426 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.7	3.4
10°-20°	254.8	9.7
20°-30°	387.2	14.8
30°-40°	468.4	17.9
40°-50°	486.8	18.6
50°-60°	435.8	16.6
60°-70°	317.9	12.1
70°-80°	156.5	6.0
80°-90°	26.2	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°	730.8	27.9
0°-40°	1199.1	45.7
0°-60°	2121.7	80.9
0°-90°	2622.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2622.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	937	937	937	937	937	
5°	926	936	932	940	925	88
15°	897	906	901	909	895	253
25°	840	844	838	842	831	387
35°	752	754	746	749	739	471
45°	638	637	629	630	622	492
55°	498	493	486	485	481	444
65°	330	326	320	318	317	326
75°	153	150	145	144	144	163
85°	20	19	18	16	16	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	936.9	936.9	936.9	936.9	936.9
2.5°	928.8	939.2	934.2	943.5	926.8
5°	926.1	936.1	931.5	940.4	924.9
7.5°	921.4	931.9	926.8	935.4	920.6
10°	916.4	925.7	920.2	928.8	913.6
12.5°	907.4	916.7	911.7	919.5	905.5
15°	897.4	905.5	900.8	908.6	895.4
17.5°	885.7	893.5	888.4	895.4	882.2
20°	872.9	879.1	873.7	879.5	866.7
22.5°	857.0	862.8	857.0	860.9	849.7
25°	840.0	844.2	838.4	842.3	830.7
27.5°	821.7	824.1	818.2	821.3	809.3
30°	799.2	802.0	795.8	799.6	788.0
32.5°	777.5	779.1	772.1	775.2	764.7
35°	751.9	753.5	746.1	749.2	738.7
37.5°	727.5	727.1	719.4	721.3	712.4
40°	699.2	698.8	690.7	692.2	683.7
42.5°	670.1	668.6	660.8	661.6	653.8
45°	637.5	636.8	628.6	629.8	622.0
47.5°	606.1	603.8	595.7	596.0	589.4
50°	572.0	568.5	561.5	560.8	554.9
52.5°	535.5	531.7	523.9	523.1	518.9
55°	497.5	493.3	485.9	484.7	481.3
57.5°	458.4	452.9	447.1	444.8	442.1
60°	416.9	411.8	405.2	402.9	401.8
62.5°	373.8	368.8	363.8	361.4	359.9
65°	330.0	326.1	320.3	318.0	316.8
67.5°	285.4	281.9	276.5	273.8	273.4
70°	240.8	237.3	231.1	229.6	229.2
72.5°	196.2	193.1	187.3	185.8	185.8
75°	152.8	150.1	145.0	143.5	143.5
77.5°	111.7	109.4	105.5	103.5	103.5
80°	74.5	72.9	69.4	67.9	67.5
82.5°	43.0	42.3	39.2	37.6	38.4
85°	19.8	19.0	17.5	15.5	15.9
87.5°	5.0	4.7	3.5	2.7	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)