

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: P973200

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973200
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: FLR2-14-30HE-L840-CP187
Description: 1*4 FLR-2.0 4000 Lumen High Efficacy at 4000CCT & 80CRI Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

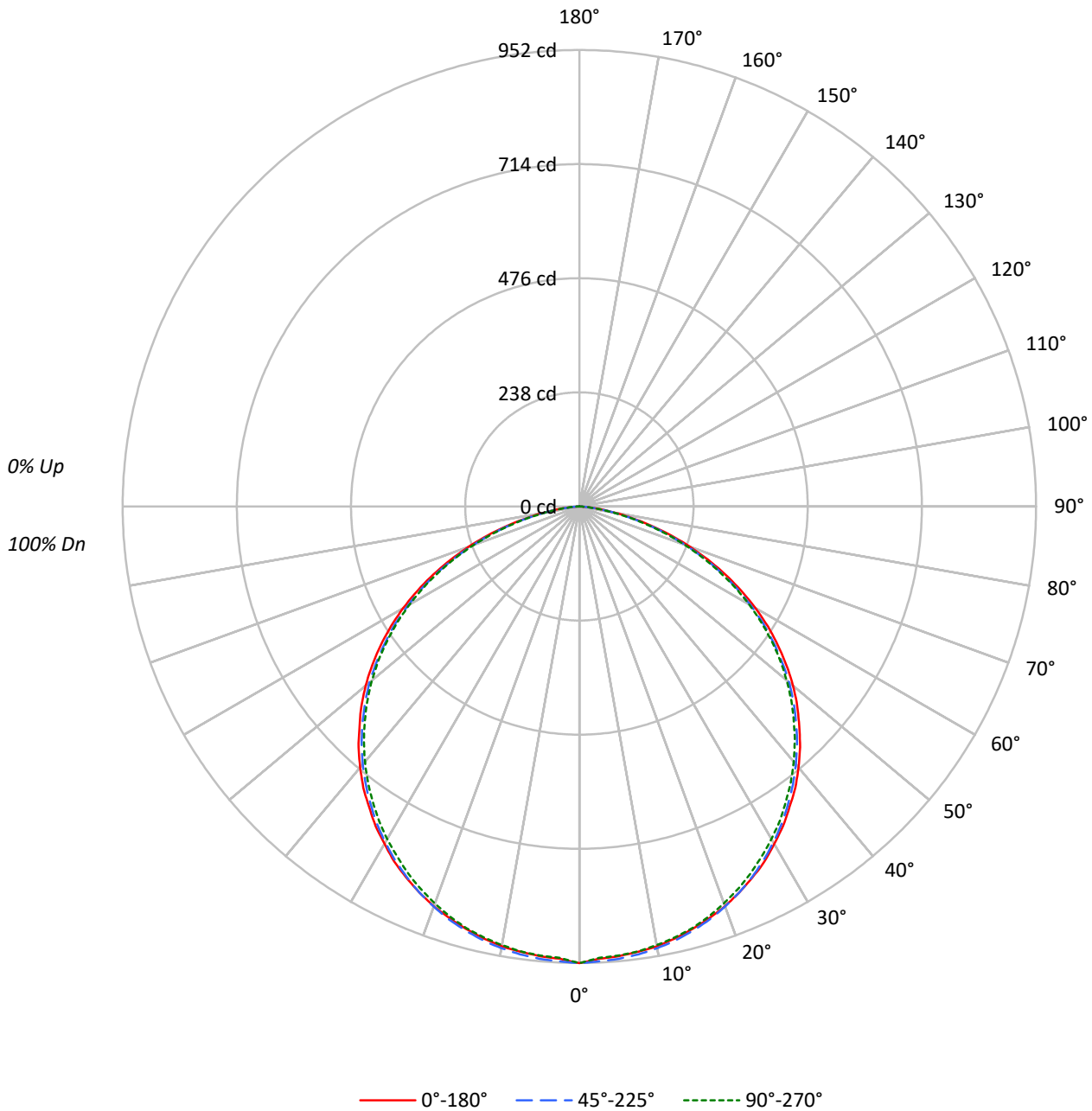
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2665.9 lumens
Efficiency: N/A
Efficacy: 119.0 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): 22.4
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

TEST NUMBER: P973200
CATALOG NUMBER: FLR2-14-30HE-L840-CP187

Luminous Intensity Polar Plot





TEST NUMBER: P973200
 CATALOG NUMBER: FLR2-14-30HE-L840-CP187

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°	2563	2563	2563
5°	2543	2558	2540
10°	2546	2556	2538
15°	2542	2551	2536
20°	2541	2544	2523
25°	2535	2531	2507
30°	2525	2514	2489
35°	2511	2492	2467
40°	2497	2466	2442
45°	2466	2432	2407
50°	2434	2390	2362
55°	2373	2318	2296
60°	2281	2217	2198
65°	2136	2073	2051
70°	1926	1849	1833
75°	1615	1533	1517
80°	1173	1094	1063
85°	621	546	500

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2466 cd/sqm



TEST NUMBER: P973200
 CATALOG NUMBER: FLR2-14-30HE-L840-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.2	3.4
10°-20°	259.1	9.7
20°-30°	393.6	14.8
30°-40°	476.1	17.9
40°-50°	494.9	18.6
50°-60°	443.1	16.6
60°-70°	323.2	12.1
70°-80°	159.1	6.0
80°-90°	26.6	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°	742.9	27.9
0°-40°	1219.1	45.7
0°-60°	2157.0	80.9
0°-90°	2665.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2665.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	952	952	952	952	952	
5°	942	952	947	956	940	90
15°	912	921	916	924	910	258
25°	854	858	852	856	844	394
35°	764	766	758	762	751	479
45°	648	647	639	640	632	500
55°	506	502	494	493	489	451
65°	336	332	326	323	322	331
75°	155	153	147	146	146	166
85°	20	19	18	16	16	29
90°	0	0	0	0	0	



TEST NUMBER: P973200
 CATALOG NUMBER: FLR2-14-30HE-L840-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	952.5	952.5	952.5	952.5	952.5
2.5°	944.2	954.9	949.7	959.2	942.2
5°	941.5	951.7	947.0	956.0	940.3
7.5°	936.7	947.4	942.2	950.9	935.9
10°	931.6	941.1	935.5	944.2	928.8
12.5°	922.5	932.0	926.9	934.7	920.6
15°	912.3	920.6	915.8	923.7	910.3
17.5°	900.5	908.3	903.2	910.3	896.9
20°	887.4	893.7	888.2	894.1	881.1
22.5°	871.3	877.2	871.3	875.2	863.8
25°	853.9	858.3	852.4	856.3	844.5
27.5°	835.4	837.8	831.9	835.0	822.8
30°	812.5	815.3	809.0	812.9	801.1
32.5°	790.5	792.0	784.9	788.1	777.4
35°	764.4	766.0	758.5	761.7	751.0
37.5°	739.6	739.2	731.3	733.3	724.2
40°	710.8	710.4	702.1	703.7	695.1
42.5°	681.3	679.7	671.8	672.6	664.7
45°	648.1	647.3	639.1	640.3	632.4
47.5°	616.2	613.8	605.6	606.0	599.2
50°	581.5	578.0	570.9	570.1	564.2
52.5°	544.4	540.5	532.6	531.8	527.5
55°	505.8	501.5	494.0	492.8	489.3
57.5°	466.0	460.5	454.6	452.2	449.4
60°	423.8	418.7	412.0	409.6	408.4
62.5°	380.1	374.9	369.8	367.4	365.9
65°	335.5	331.6	325.6	323.3	322.1
67.5°	290.2	286.6	281.1	278.3	277.9
70°	244.8	241.3	235.0	233.4	233.0
72.5°	199.5	196.3	190.4	188.8	188.8
75°	155.3	152.6	147.4	145.9	145.9
77.5°	113.5	111.2	107.2	105.3	105.3
80°	75.7	74.1	70.6	69.0	68.6
82.5°	43.8	43.0	39.8	38.2	39.0
85°	20.1	19.3	17.7	15.8	16.2
87.5°	5.1	4.7	3.5	2.8	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)