

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: P973235

Luminaire Tested: FLR2-14-30HE-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973235
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-L940-CP187
Description: 1*4 FLR-2.0 4000 Lumen High Efficacy at 4000CCT & 90 CRI Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

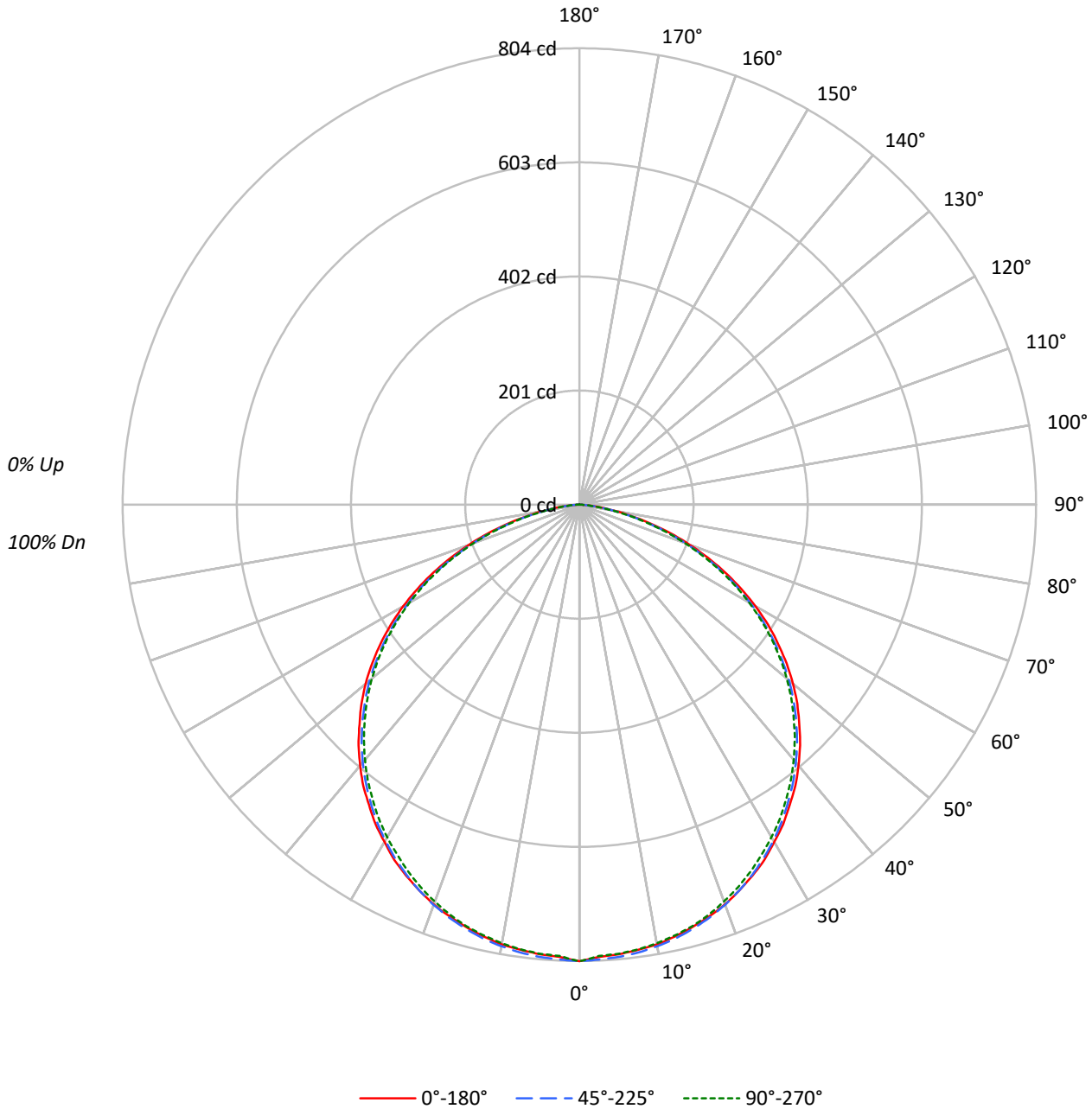
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2251.8 lumens
Efficiency: N/A
Efficacy: 100.5 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

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CATALOG NUMBER: FLR2-14-30HE-L940-CP187

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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	2165	2165	2165
5°	2148	2161	2145
10°	2150	2159	2144
15°	2147	2155	2142
20°	2147	2149	2131
25°	2142	2138	2118
30°	2133	2123	2103
35°	2121	2105	2084
40°	2109	2083	2062
45°	2084	2054	2033
50°	2056	2019	1995
55°	2004	1958	1939
60°	1927	1873	1857
65°	1805	1752	1733
70°	1627	1562	1548
75°	1364	1294	1281
80°	990	924	897
85°	525	463	423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2084 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	3.4
10°-20°	218.8	9.7
20°-30°	332.5	14.8
30°-40°	402.2	17.9
40°-50°	418.0	18.6
50°-60°	374.2	16.6
60°-70°	273.0	12.1
70°-80°	134.4	6.0
80°-90°	22.5	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°	627.5	27.9
0°-40°	1029.7	45.7
0°-60°	1821.9	80.9
0°-90°	2251.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2251.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	795	804	800	808	794	76
15°	771	778	774	780	769	218
25°	721	725	720	723	713	333
35°	646	647	641	643	634	404
45°	548	547	540	541	534	423
55°	427	424	417	416	413	381
65°	283	280	275	273	272	280
75°	131	129	124	123	123	140
85°	17	16	15	13	14	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	804.5	804.5	804.5	804.5	804.5
2.5°	797.5	806.5	802.2	810.2	795.9
5°	795.2	803.9	799.9	807.5	794.2
7.5°	791.2	800.2	795.9	803.2	790.5
10°	786.9	794.9	790.2	797.5	784.6
12.5°	779.2	787.2	782.9	789.5	777.6
15°	770.6	777.6	773.6	780.2	768.9
17.5°	760.6	767.2	762.9	768.9	757.6
20°	749.6	754.9	750.3	755.2	744.3
22.5°	735.9	740.9	735.9	739.3	729.6
25°	721.3	724.9	719.9	723.3	713.3
27.5°	705.6	707.6	702.6	705.3	695.0
30°	686.3	688.6	683.3	686.6	676.7
32.5°	667.7	669.0	663.0	665.7	656.7
35°	645.7	647.0	640.7	643.4	634.4
37.5°	624.7	624.4	617.7	619.4	611.7
40°	600.4	600.1	593.1	594.4	587.1
42.5°	575.4	574.1	567.4	568.1	561.4
45°	547.5	546.8	539.8	540.8	534.1
47.5°	520.5	518.5	511.5	511.8	506.2
50°	491.2	488.2	482.2	481.5	476.5
52.5°	459.9	456.5	449.9	449.2	445.6
55°	427.2	423.6	417.3	416.3	413.3
57.5°	393.6	388.9	384.0	382.0	379.6
60°	358.0	353.6	348.0	346.0	345.0
62.5°	321.0	316.7	312.4	310.4	309.0
65°	283.4	280.1	275.1	273.1	272.1
67.5°	245.1	242.1	237.4	235.1	234.8
70°	206.8	203.8	198.5	197.1	196.8
72.5°	168.5	165.8	160.8	159.5	159.5
75°	131.2	128.9	124.5	123.2	123.2
77.5°	95.9	93.9	90.6	88.9	88.9
80°	63.9	62.6	59.6	58.3	57.9
82.5°	37.0	36.3	33.6	32.3	33.0
85°	17.0	16.3	15.0	13.3	13.7
87.5°	4.3	4.0	3.0	2.3	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)