

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: P973225

Luminaire Tested: FLR2-14-30HE-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973225
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-CP080
Description: 1*4 FLR-2.0 4000 Lumen High Efficacy at 4000CCT & 90 CRI Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

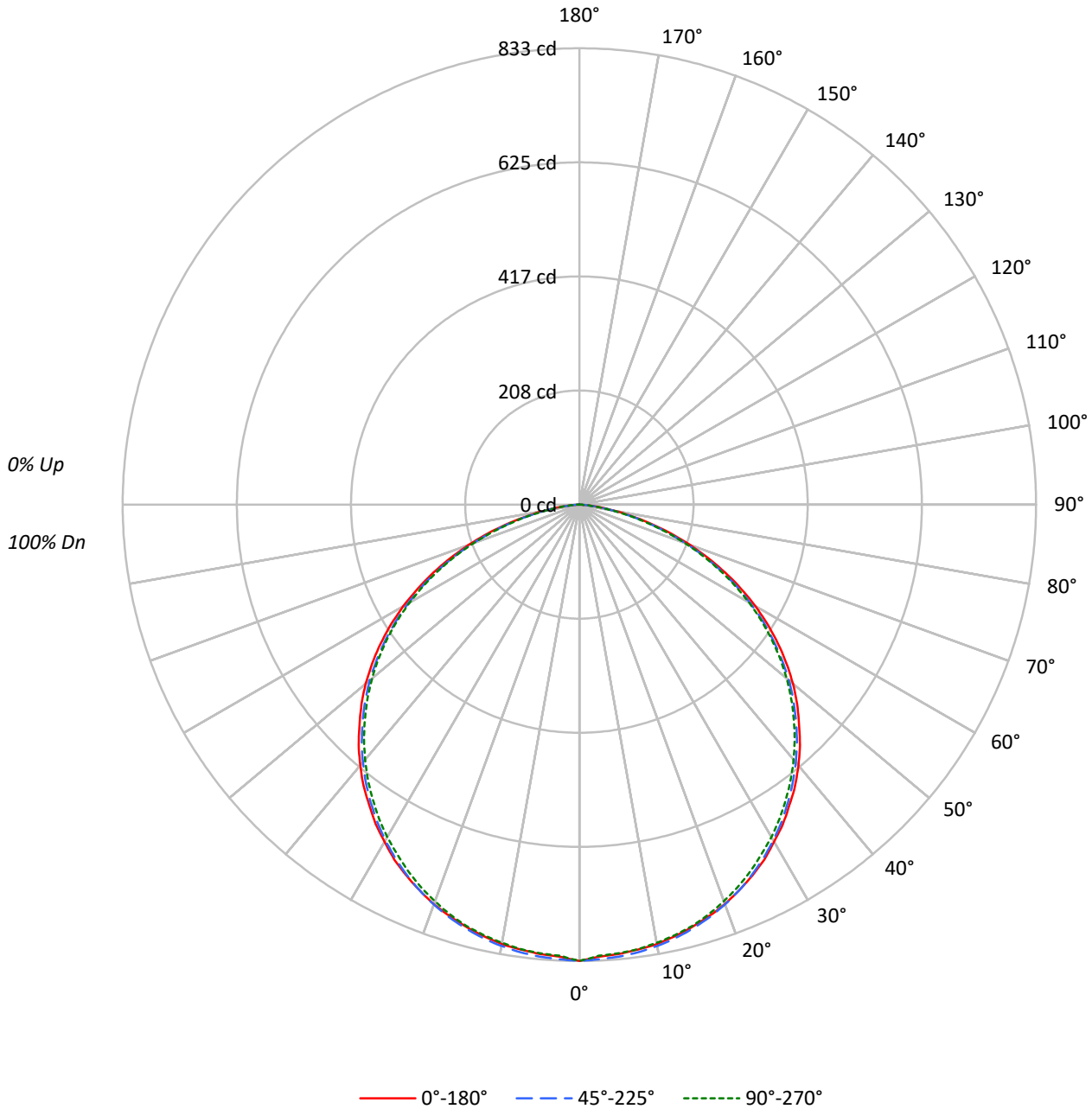
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2331.5 lumens
Efficiency: N/A
Efficacy: 104.1 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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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°	2242	2242	2242
5°	2224	2237	2221
10°	2226	2236	2220
15°	2223	2232	2218
20°	2223	2225	2207
25°	2217	2213	2193
30°	2208	2198	2177
35°	2196	2179	2158
40°	2184	2157	2135
45°	2157	2127	2105
50°	2129	2090	2066
55°	2076	2027	2008
60°	1995	1939	1922
65°	1868	1813	1794
70°	1685	1617	1603
75°	1412	1341	1327
80°	1026	956	930
85°	543	479	435

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2157 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	3.4
10°-20°	226.6	9.7
20°-30°	344.2	14.8
30°-40°	416.4	17.9
40°-50°	432.8	18.6
50°-60°	387.5	16.6
60°-70°	282.6	12.1
70°-80°	139.2	6.0
80°-90°	23.3	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°	649.7	27.9
0°-40°	1066.2	45.7
0°-60°	1886.4	80.9
0°-90°	2331.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2331.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	833	833	833	833	833	
5°	823	832	828	836	822	78
15°	798	805	801	808	796	225
25°	747	751	745	749	738	344
35°	669	670	663	666	657	419
45°	567	566	559	560	553	438
55°	442	439	432	431	428	395
65°	293	290	285	283	282	290
75°	136	133	129	128	128	145
85°	18	17	16	14	14	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.0	833.0	833.0	<i>833.0</i>	833.0
2.5°	<i>825.8</i>	<i>835.1</i>	<i>830.6</i>	<i>838.9</i>	<i>824.1</i>
5°	823.4	832.3	828.2	<i>836.1</i>	822.3
7.5°	819.2	828.5	824.1	<i>831.6</i>	818.5
10°	814.7	823.0	818.2	<i>825.8</i>	812.3
12.5°	806.8	815.1	810.6	<i>817.5</i>	805.1
15°	797.9	805.1	801.0	<i>807.9</i>	796.1
17.5°	787.5	794.4	789.9	<i>796.1</i>	784.4
20°	776.1	781.6	776.8	<i>782.0</i>	770.6
22.5°	762.0	767.2	762.0	<i>765.4</i>	755.4
25°	746.8	750.6	745.4	<i>748.9</i>	738.5
27.5°	730.6	732.7	727.5	<i>730.3</i>	719.6
30°	710.6	713.0	707.5	<i>711.0</i>	700.6
32.5°	691.3	692.7	686.5	<i>689.2</i>	679.9
35°	668.6	669.9	663.4	<i>666.1</i>	656.8
37.5°	646.8	646.5	639.6	<i>641.3</i>	633.4
40°	621.7	621.3	614.1	<i>615.5</i>	607.9
42.5°	595.8	594.4	587.5	<i>588.2</i>	581.3
45°	566.8	566.2	558.9	<i>559.9</i>	553.0
47.5°	538.9	536.8	529.6	<i>529.9</i>	524.1
50°	508.6	505.5	499.3	<i>498.6</i>	493.4
52.5°	476.2	472.7	465.8	<i>465.1</i>	461.3
55°	442.4	438.6	432.0	<i>431.0</i>	427.9
57.5°	407.5	402.7	397.5	<i>395.5</i>	393.1
60°	370.7	366.2	360.3	<i>358.2</i>	357.2
62.5°	332.4	327.9	323.4	<i>321.3</i>	320.0
65°	293.4	290.0	284.8	<i>282.7</i>	281.7
67.5°	253.8	250.7	245.8	<i>243.4</i>	243.1
70°	214.1	211.0	205.5	<i>204.1</i>	203.8
72.5°	174.5	171.7	166.5	<i>165.2</i>	165.2
75°	135.8	133.4	129.0	<i>127.6</i>	127.6
77.5°	99.3	97.2	93.8	<i>92.1</i>	92.1
80°	66.2	64.8	61.7	<i>60.3</i>	60.0
82.5°	38.3	37.6	34.8	<i>33.4</i>	34.1
85°	17.6	16.9	15.5	<i>13.8</i>	14.1
87.5°	4.5	4.1	3.1	<i>2.4</i>	3.1
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)