

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: P973056

Luminaire Tested: FLR2-14-42HE-L830-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973056
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: FLR2-14-42HE-L830-CP125
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 3000CCT & 80CRI with Clear Polycarbonate (0.125" thickness)

Light Source:
Ballast/Driver: -

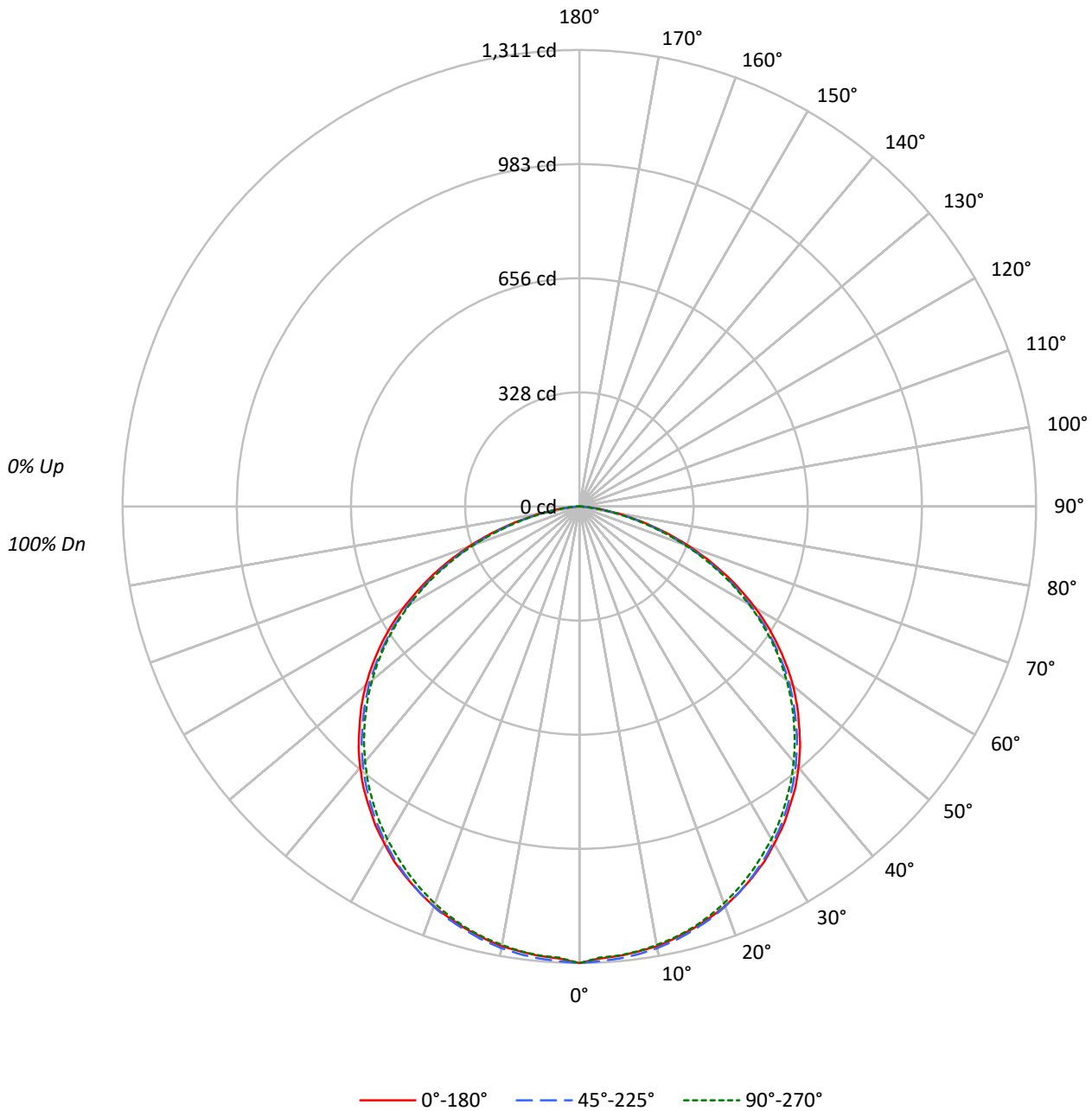
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3670.2 lumens
Efficiency: N/A
Efficacy: 115.1 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): 31.9
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										
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°	3529	3529	3529
5°	3501	3522	3497
10°	3505	3519	3494
15°	3499	3512	3491
20°	3499	3502	3474
25°	3491	3484	3452
30°	3476	3461	3427
35°	3457	3431	3397
40°	3438	3396	3361
45°	3396	3348	3313
50°	3352	3290	3252
55°	3267	3191	3160
60°	3140	3053	3026
65°	2941	2855	2823
70°	2652	2545	2524
75°	2223	2111	2088
80°	1615	1506	1463
85°	855	753	689

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3396 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.2	3.4
10°-20°	356.7	9.7
20°-30°	541.9	14.8
30°-40°	655.5	17.9
40°-50°	681.3	18.6
50°-60°	610.0	16.6
60°-70°	444.9	12.1
70°-80°	219.1	6.0
80°-90°	36.6	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°	1022.8	27.9
0°-40°	1678.3	45.7
0°-60°	2969.6	80.9
0°-90°	3670.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3670.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1296	1310	1304	1316	1294	123
15°	1256	1267	1261	1272	1253	355
25°	1176	1182	1174	1179	1163	542
35°	1052	1055	1044	1049	1034	659
45°	892	891	880	882	871	689
55°	696	690	680	678	674	622
65°	462	456	448	445	443	456
75°	214	210	203	201	201	228
85°	28	27	24	22	22	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1311.3	1311.3	1311.3	<i>1311.3</i>	1311.3
2.5°	<i>1299.9</i>	<i>1314.6</i>	<i>1307.5</i>	<i>1320.5</i>	<i>1297.2</i>
5°	1296.1	1310.2	1303.7	<i>1316.2</i>	1294.5
7.5°	1289.6	1304.3	1297.2	<i>1309.1</i>	1288.5
10°	1282.6	1295.6	1288.0	<i>1299.9</i>	1278.8
12.5°	1270.1	1283.1	1276.0	<i>1286.9</i>	1267.4
15°	1256.0	1267.4	1260.8	<i>1271.7</i>	1253.2
17.5°	1239.7	1250.5	1243.5	<i>1253.2</i>	1234.8
20°	1221.8	1230.4	1222.9	<i>1231.0</i>	1213.1
22.5°	1199.5	1207.7	1199.5	<i>1204.9</i>	1189.2
25°	1175.6	1181.6	1173.5	<i>1178.9</i>	1162.6
27.5°	1150.1	1153.4	1145.2	<i>1149.6</i>	1132.8
30°	1118.6	1122.4	1113.8	<i>1119.2</i>	1102.9
32.5°	1088.2	1090.4	1080.6	<i>1085.0</i>	1070.3
35°	1052.4	1054.6	1044.3	<i>1048.6</i>	1034.0
37.5°	1018.2	1017.7	1006.8	<i>1009.5</i>	997.1
40°	978.6	978.1	966.7	<i>968.8</i>	956.9
42.5°	937.9	935.7	924.9	<i>926.0</i>	915.1
45°	892.3	891.2	879.8	<i>881.5</i>	870.6
47.5°	848.3	845.1	833.7	<i>834.2</i>	825.0
50°	800.6	795.7	785.9	<i>784.8</i>	776.7
52.5°	749.6	744.1	733.3	<i>732.2</i>	726.2
55°	696.4	690.4	680.1	<i>678.5</i>	673.6
57.5°	641.5	633.9	625.8	<i>622.6</i>	618.8
60°	583.5	576.4	567.2	<i>563.9</i>	562.3
62.5°	523.2	516.2	509.1	<i>505.9</i>	503.7
65°	461.9	456.5	448.3	<i>445.1</i>	443.4
67.5°	399.5	394.6	387.0	<i>383.2</i>	382.6
70°	337.1	332.2	323.5	<i>321.3</i>	320.8
72.5°	274.6	270.3	262.2	<i>260.0</i>	260.0
75°	213.8	210.1	203.0	<i>200.8</i>	200.8
77.5°	156.3	153.1	147.6	<i>144.9</i>	144.9
80°	104.2	102.0	97.2	<i>95.0</i>	94.4
82.5°	60.2	59.2	54.8	<i>52.6</i>	53.7
85°	27.7	26.6	24.4	<i>21.7</i>	22.3
87.5°	7.1	6.5	4.9	<i>3.8</i>	4.9
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)