

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: P973066

Luminaire Tested: FLR2-14-42HE-L830-CP250

Issue Date: 3/13/2025

**Test Information**

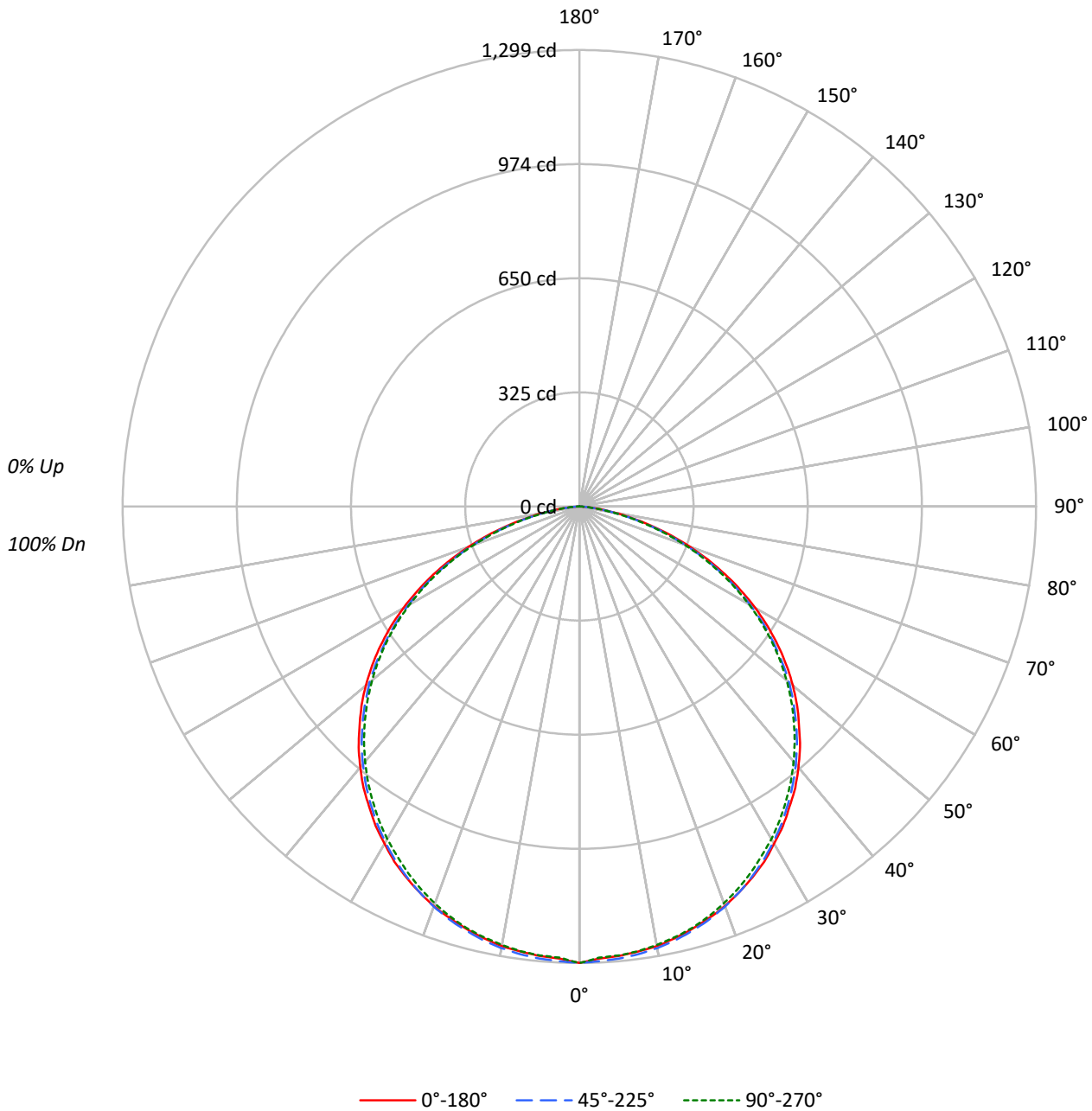
Test Method: LM-79-2019  
Report Number: P973066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L830-CP250  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 3000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3636.1 lumens  
Efficiency: N/A  
Efficacy: 114.0 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): 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°	3496	3496	3496
5°	3469	3489	3464
10°	3472	3487	3462
15°	3467	3480	3459
20°	3466	3469	3442
25°	3458	3452	3420
30°	3443	3429	3395
35°	3425	3399	3365
40°	3406	3364	3330
45°	3364	3317	3282
50°	3320	3260	3221
55°	3237	3161	3131
60°	3111	3024	2998
65°	2914	2828	2797
70°	2627	2522	2500
75°	2203	2091	2069
80°	1599	1492	1450
85°	846	747	679

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3364 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.1	3.4
10°-20°	353.4	9.7
20°-30°	536.9	14.8
30°-40°	649.4	17.9
40°-50°	674.9	18.6
50°-60°	604.3	16.6
60°-70°	440.8	12.1
70°-80°	217.1	6.0
80°-90°	36.3	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°	1013.3	27.9
0°-40°	1662.7	45.7
0°-60°	2942.0	80.9
0°-90°	3636.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3636.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1299	1299	1299	1299	1299	
5°	1284	1298	1292	1304	1282	122
15°	1244	1256	1249	1260	1242	351
25°	1165	1171	1162	1168	1152	537
35°	1043	1045	1035	1039	1024	653
45°	884	883	872	873	862	683
55°	690	684	674	672	667	616
65°	458	452	444	441	439	452
75°	212	208	201	199	199	226
85°	27	26	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°	1299.1	1299.1	1299.1	1299.1	1299.1
2.5°	1287.8	1302.3	1295.4	1308.3	1285.1
5°	1284.1	1298.0	1291.6	1304.0	1282.4
7.5°	1277.6	1292.1	1285.1	1297.0	1276.5
10°	1270.6	1283.5	1276.0	1287.8	1266.9
12.5°	1258.3	1271.2	1264.2	1274.9	1255.6
15°	1244.3	1255.6	1249.1	1259.9	1241.6
17.5°	1228.1	1238.9	1231.9	1241.6	1223.3
20°	1210.4	1219.0	1211.5	1219.5	1201.8
22.5°	1188.3	1196.4	1188.3	1193.7	1178.1
25°	1164.7	1170.6	1162.5	1167.9	1151.8
27.5°	1139.4	1142.6	1134.6	1138.9	1122.2
30°	1108.2	1112.0	1103.4	1108.8	1092.6
32.5°	1078.1	1080.3	1070.6	1074.9	1060.4
35°	1042.6	1044.8	1034.6	1038.9	1024.3
37.5°	1008.8	1008.2	997.5	1000.1	987.8
40°	969.5	969.0	957.7	959.8	948.0
42.5°	929.2	927.0	916.3	917.3	906.6
45°	884.0	882.9	871.6	873.2	862.5
47.5°	840.4	837.2	825.9	826.5	817.3
50°	793.1	788.3	778.6	777.5	769.5
52.5°	742.6	737.2	726.5	725.4	719.5
55°	689.9	684.0	673.8	672.1	667.3
57.5°	635.6	628.0	620.0	616.8	613.0
60°	578.0	571.1	561.9	558.7	557.1
62.5°	518.4	511.4	504.4	501.1	499.0
65°	457.6	452.2	444.2	440.9	439.3
67.5°	395.8	390.9	383.4	379.6	379.1
70°	333.9	329.1	320.5	318.3	317.8
72.5°	272.1	267.8	259.7	257.6	257.6
75°	211.9	208.1	201.1	199.0	199.0
77.5°	154.9	151.6	146.3	143.6	143.6
80°	103.2	101.1	96.3	94.1	93.6
82.5°	59.7	58.6	54.3	52.2	53.2
85°	27.4	26.3	24.2	21.5	22.0
87.5°	7.0	6.5	4.8	3.8	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)