

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: P973340

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973340
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: FLR2-14-42-L830-CP250
Description: 1*4 FLR-2.0 4200 LUMEN at 3000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source: 3000k CCT, 80 CRI LEDS
Ballast/Driver: -

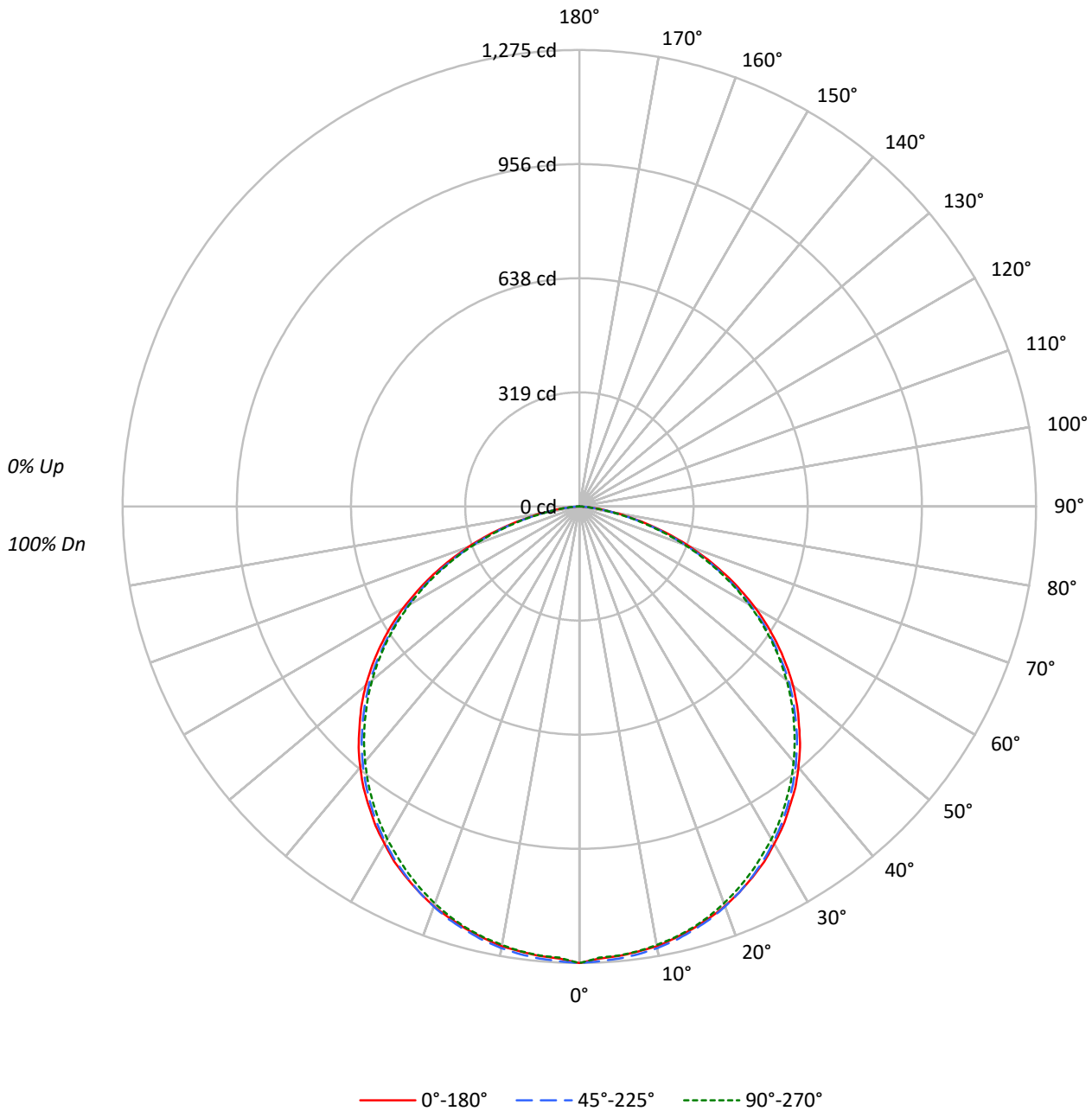
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3569.4 lumens
Efficiency: N/A
Efficacy: 112.6 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): 31.7
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: P973340
CATALOG NUMBER: FLR2-14-42-L830-CP250

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°	3432	3432	3432
5°	3405	3425	3401
10°	3408	3423	3398
15°	3403	3416	3395
20°	3403	3406	3379
25°	3395	3388	3357
30°	3380	3366	3333
35°	3362	3336	3303
40°	3343	3302	3269
45°	3303	3256	3222
50°	3260	3200	3162
55°	3177	3103	3073
60°	3054	2969	2943
65°	2860	2776	2746
70°	2579	2475	2455
75°	2163	2052	2031
80°	1570	1464	1423
85°	831	735	667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3303 cd/sqm



TEST NUMBER: P973340
 CATALOG NUMBER: FLR2-14-42-L830-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	3.4
10°-20°	346.9	9.7
20°-30°	527.0	14.8
30°-40°	637.5	17.9
40°-50°	662.6	18.6
50°-60°	593.2	16.6
60°-70°	432.7	12.1
70°-80°	213.1	6.0
80°-90°	35.6	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°	994.7	27.9
0°-40°	1632.2	45.7
0°-60°	2888.0	80.9
0°-90°	3569.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3569.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1275	1275	1275	1275	1275	
5°	1260	1274	1268	1280	1259	120
15°	1222	1233	1226	1237	1219	345
25°	1143	1149	1141	1146	1131	527
35°	1024	1026	1016	1020	1006	641
45°	868	867	856	857	847	670
55°	677	671	661	660	655	604
65°	449	444	436	433	431	444
75°	208	204	197	195	195	222
85°	27	26	24	21	22	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1275.3	1275.3	1275.3	1275.3	1275.3
2.5°	1264.2	1278.5	1271.6	1284.3	1261.6
5°	1260.5	1274.3	1267.9	1280.1	1258.9
7.5°	1254.2	1268.5	1261.6	1273.2	1253.1
10°	1247.3	1260.0	1252.6	1264.2	1243.6
12.5°	1235.2	1247.9	1241.0	1251.6	1232.6
15°	1221.5	1232.6	1226.2	1236.8	1218.8
17.5°	1205.6	1216.2	1209.3	1218.8	1200.9
20°	1188.2	1196.7	1189.3	1197.2	1179.8
22.5°	1166.6	1174.5	1166.6	1171.9	1156.5
25°	1143.3	1149.2	1141.2	1146.5	1130.7
27.5°	1118.5	1121.7	1113.8	1118.0	1101.6
30°	1087.9	1091.6	1083.2	1088.4	1072.6
32.5°	1058.4	1060.5	1051.0	1055.2	1040.9
35°	1023.5	1025.6	1015.6	1019.8	1005.6
37.5°	990.3	989.7	979.2	981.8	969.7
40°	951.7	951.2	940.1	942.2	930.6
42.5°	912.1	910.0	899.5	900.5	890.0
45°	867.8	866.7	855.7	857.2	846.7
47.5°	825.0	821.9	810.8	811.3	802.3
50°	778.6	773.8	764.3	763.3	755.4
52.5°	729.0	723.7	713.1	712.1	706.3
55°	677.2	671.4	661.4	659.8	655.1
57.5°	623.9	616.5	608.6	605.5	601.8
60°	567.5	560.6	551.6	548.4	546.9
62.5°	508.9	502.0	495.1	492.0	489.9
65°	449.2	443.9	436.0	432.8	431.3
67.5°	388.5	383.8	376.4	372.7	372.1
70°	327.8	323.1	314.6	312.5	312.0
72.5°	267.1	262.9	255.0	252.8	252.8
75°	208.0	204.3	197.4	195.3	195.3
77.5°	152.0	148.9	143.6	140.9	140.9
80°	101.3	99.2	94.5	92.4	91.8
82.5°	58.6	57.5	53.3	51.2	52.3
85°	26.9	25.9	23.8	21.1	21.6
87.5°	6.9	6.3	4.8	3.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)