

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: P973382

Luminaire Tested: FLR2-14-42-L835-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973382
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-L835-CP250
Description: 1*4 FLR-2.0 4200 LUMEN at 3500 CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

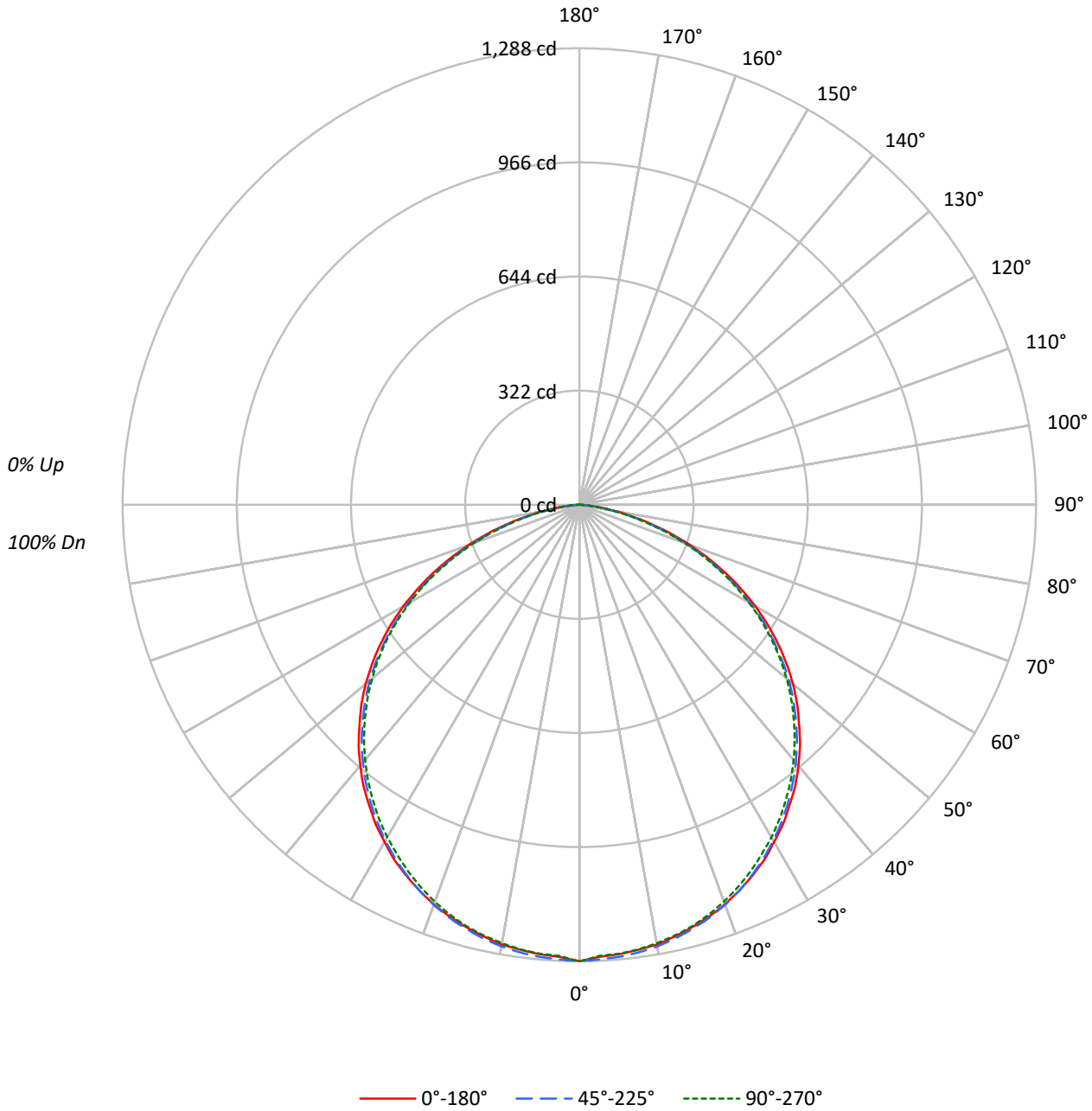
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3605.5 lumens
Efficiency: N/A
Efficacy: 113.7 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

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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°	3467	3467	3467
5°	3440	3460	3435
10°	3443	3457	3433
15°	3437	3451	3430
20°	3437	3440	3413
25°	3429	3423	3391
30°	3415	3400	3366
35°	3396	3370	3337
40°	3377	3336	3302
45°	3336	3289	3255
50°	3293	3232	3194
55°	3210	3134	3104
60°	3085	2999	2973
65°	2889	2804	2774
70°	2605	2500	2479
75°	2184	2073	2051
80°	1587	1478	1438
85°	840	741	676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3336 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.0	3.4
10°-20°	350.4	9.7
20°-30°	532.3	14.8
30°-40°	644.0	17.9
40°-50°	669.3	18.6
50°-60°	599.2	16.6
60°-70°	437.0	12.1
70°-80°	215.2	6.0
80°-90°	36.0	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°	1004.8	27.9
0°-40°	1648.7	45.7
0°-60°	2917.2	80.9
0°-90°	3605.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3605.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1288	1288	1288	1288	1288	
5°	1273	1287	1281	1293	1272	121
15°	1234	1245	1239	1249	1231	348
25°	1155	1161	1153	1158	1142	532
35°	1034	1036	1026	1030	1016	647
45°	877	876	864	866	855	677
55°	684	678	668	666	662	611
65°	454	448	440	437	436	448
75°	210	206	199	197	197	224
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°	1288.2	1288.2	1288.2	<i>1288.2</i>	1288.2
2.5°	<i>1277.0</i>	<i>1291.4</i>	<i>1284.5</i>	<i>1297.3</i>	<i>1274.3</i>
5°	1273.3	1287.1	1280.7	<i>1293.0</i>	1271.7
7.5°	1266.9	1281.3	1274.3	<i>1286.1</i>	1265.8
10°	1259.9	1272.7	1265.3	<i>1277.0</i>	1256.2
12.5°	1247.7	1260.5	1253.5	<i>1264.2</i>	1245.0
15°	1233.8	1245.0	1238.6	<i>1249.3</i>	1231.1
17.5°	1217.8	1228.5	1221.5	<i>1231.1</i>	1213.0
20°	1200.2	1208.7	1201.3	<i>1209.3</i>	1191.7
22.5°	1178.4	1186.4	1178.4	<i>1183.7</i>	1168.2
25°	1154.9	1160.8	1152.8	<i>1158.1</i>	1142.1
27.5°	1129.8	1133.0	1125.0	<i>1129.3</i>	1112.8
30°	1098.9	1102.6	1094.1	<i>1099.4</i>	1083.4
32.5°	1069.1	1071.2	1061.6	<i>1065.9</i>	1051.5
35°	1033.9	1036.0	1025.9	<i>1030.1</i>	1015.7
37.5°	1000.3	999.7	989.1	<i>991.7</i>	979.5
40°	961.3	960.8	949.6	<i>951.7</i>	940.0
42.5°	921.4	919.2	908.6	<i>909.6</i>	899.0
45°	876.6	875.5	864.3	<i>865.9</i>	855.2
47.5°	833.4	830.2	819.0	<i>819.5</i>	810.5
50°	786.5	781.7	772.1	<i>771.0</i>	763.0
52.5°	736.3	731.0	720.3	<i>719.3</i>	713.4
55°	684.1	678.2	668.1	<i>666.5</i>	661.7
57.5°	630.2	622.8	614.8	<i>611.6</i>	607.8
60°	573.2	566.3	557.2	<i>554.0</i>	552.4
62.5°	514.0	507.1	500.1	<i>496.9</i>	494.8
65°	453.7	448.4	440.4	<i>437.2</i>	435.6
67.5°	392.4	387.6	380.2	<i>376.4</i>	375.9
70°	331.1	326.3	317.8	<i>315.7</i>	315.1
72.5°	269.8	265.5	257.5	<i>255.4</i>	255.4
75°	210.1	206.3	199.4	<i>197.3</i>	197.3
77.5°	153.6	150.4	145.0	<i>142.4</i>	142.4
80°	102.4	100.2	95.4	<i>93.3</i>	92.8
82.5°	59.2	58.1	53.9	<i>51.7</i>	52.8
85°	27.2	26.1	24.0	<i>21.3</i>	21.9
87.5°	6.9	6.4	4.8	<i>3.7</i>	4.8
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)