

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: P973401

Luminaire Tested: FLR2-14-20-L935-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973401
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: FLR2-14-20-L935-CP250
Description: 1*4 FLR-2.0 2000 LUMEN at 3500 CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

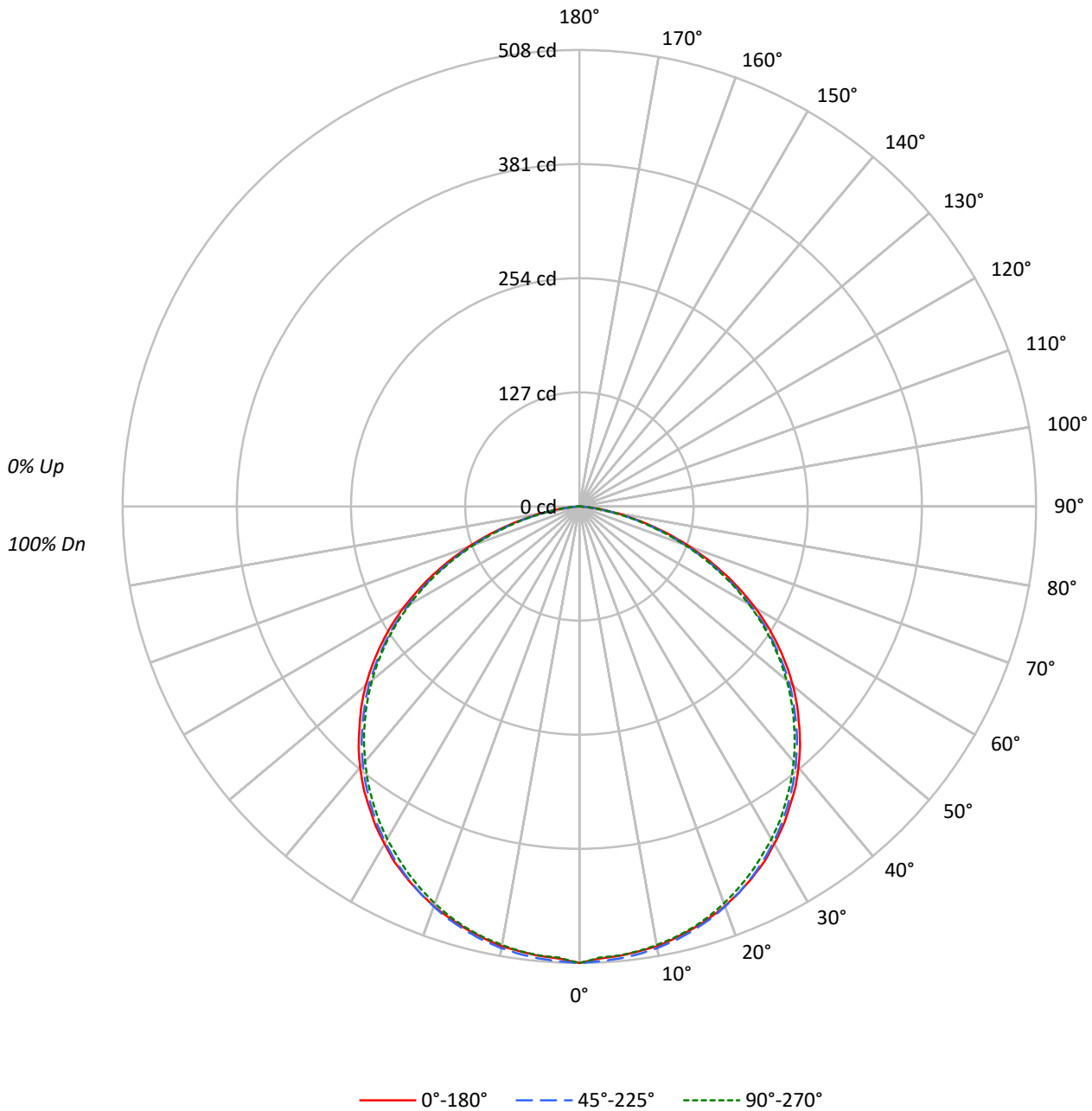
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1422.2 lumens
Efficiency: N/A
Efficacy: 86.7 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): 16.4
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										
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																				
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°	1367	1367	1367
5°	1357	1365	1355
10°	1358	1364	1354
15°	1356	1361	1353
20°	1356	1357	1346
25°	1353	1350	1338
30°	1347	1341	1328
35°	1340	1329	1316
40°	1332	1316	1303
45°	1316	1297	1284
50°	1299	1275	1260
55°	1266	1236	1225
60°	1217	1183	1173
65°	1140	1106	1094
70°	1028	987	978
75°	862	818	809
80°	626	583	567
85°	330	293	266

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1316 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.1	3.4
10°-20°	138.2	9.7
20°-30°	210.0	14.8
30°-40°	254.0	17.9
40°-50°	264.0	18.6
50°-60°	236.4	16.6
60°-70°	172.4	12.1
70°-80°	84.9	6.0
80°-90°	14.2	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°	396.3	27.9
0°-40°	650.4	45.7
0°-60°	1150.7	80.9
0°-90°	1422.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	508	508	508	508	508	
5°	502	508	505	510	502	48
15°	487	491	489	493	486	137
25°	456	458	455	457	450	210
35°	408	409	405	406	401	255
45°	346	345	341	342	337	267
55°	270	268	264	263	261	241
65°	179	177	174	172	172	177
75°	83	81	79	78	78	88
85°	11	10	10	8	9	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	508.1	508.1	508.1	508.1	508.1
2.5°	503.7	509.4	506.7	511.7	502.7
5°	502.3	507.7	505.2	510.0	501.6
7.5°	499.7	505.4	502.7	507.3	499.3
10°	497.0	502.0	499.1	503.7	495.5
12.5°	492.2	497.2	494.5	498.7	491.1
15°	486.7	491.1	488.6	492.8	485.6
17.5°	480.4	484.6	481.9	485.6	478.5
20°	473.4	476.8	473.9	477.0	470.1
22.5°	464.8	468.0	464.8	466.9	460.8
25°	455.6	457.9	454.7	456.8	450.5
27.5°	445.7	446.9	443.8	445.5	438.9
30°	433.5	435.0	431.6	433.7	427.4
32.5°	421.7	422.5	418.8	420.4	414.8
35°	407.8	408.7	404.7	406.3	400.7
37.5°	394.6	394.4	390.2	391.2	386.4
40°	379.2	379.0	374.6	375.4	370.8
42.5°	363.4	362.6	358.4	358.8	354.6
45°	345.8	345.4	340.9	341.6	337.4
47.5°	328.7	327.5	323.1	323.3	319.7
50°	310.2	308.3	304.6	304.1	301.0
52.5°	290.5	288.4	284.2	283.7	281.4
55°	269.8	267.5	263.5	262.9	261.0
57.5°	248.6	245.7	242.5	241.2	239.8
60°	226.1	223.4	219.8	218.5	217.9
62.5°	202.8	200.0	197.3	196.0	195.2
65°	179.0	176.9	173.7	172.5	171.8
67.5°	154.8	152.9	150.0	148.5	148.3
70°	130.6	128.7	125.4	124.5	124.3
72.5°	106.4	104.7	101.6	100.7	100.7
75°	82.9	81.4	78.7	77.8	77.8
77.5°	60.6	59.3	57.2	56.2	56.2
80°	40.4	39.5	37.6	36.8	36.6
82.5°	23.3	22.9	21.2	20.4	20.8
85°	10.7	10.3	9.5	8.4	8.6
87.5°	2.7	2.5	1.9	1.5	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)