

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: P973359

Luminaire Tested: FLR2-14-20-L930-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973359
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-L930-CP250
Description: 1*4 FLR-2.0 2000 LUMEN at 3000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

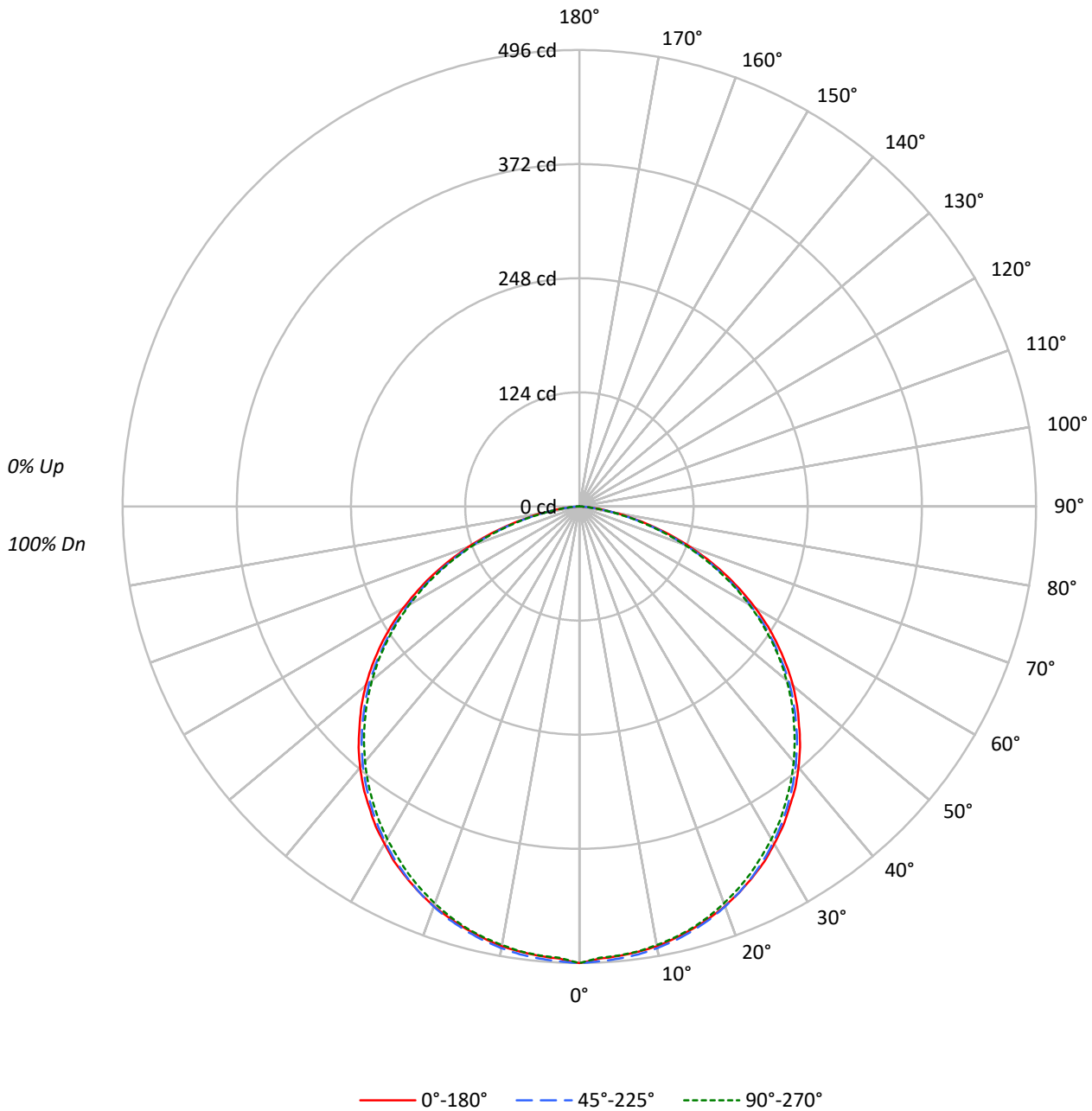
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1388.8 lumens
Efficiency: N/A
Efficacy: 84.7 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				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	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°	1335	1335	1335
5°	1325	1333	1323
10°	1326	1332	1322
15°	1324	1329	1321
20°	1324	1325	1314
25°	1321	1318	1306
30°	1315	1309	1297
35°	1308	1298	1285
40°	1301	1285	1272
45°	1285	1267	1254
50°	1268	1245	1230
55°	1236	1207	1196
60°	1188	1155	1145
65°	1113	1080	1068
70°	1003	963	955
75°	841	799	790
80°	611	570	553
85°	324	284	259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1285 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.0	3.4
10°-20°	135.0	9.7
20°-30°	205.0	14.8
30°-40°	248.0	17.9
40°-50°	257.8	18.6
50°-60°	230.8	16.6
60°-70°	168.3	12.1
70°-80°	82.9	6.0
80°-90°	13.9	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°	387.0	27.9
0°-40°	635.1	45.7
0°-60°	1123.7	80.9
0°-90°	1388.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1388.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	496	496	496	496	496	
5°	490	496	493	498	490	47
15°	475	480	477	481	474	134
25°	445	447	444	446	440	205
35°	398	399	395	397	391	249
45°	338	337	333	334	329	261
55°	264	261	257	257	255	235
65°	175	173	170	168	168	173
75°	81	80	77	76	76	86
85°	10	10	9	8	8	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	496.2	496.2	496.2	496.2	496.2
2.5°	491.9	497.4	494.8	499.7	490.9
5°	490.4	495.8	493.3	498.0	489.8
7.5°	488.0	493.5	490.9	495.4	487.6
10°	485.3	490.2	487.4	491.9	483.9
12.5°	480.6	485.5	482.8	486.9	479.6
15°	475.2	479.6	477.1	481.2	474.2
17.5°	469.1	473.2	470.5	474.2	467.2
20°	462.3	465.6	462.7	465.8	459.0
22.5°	453.9	457.0	453.9	455.9	450.0
25°	444.8	447.1	444.0	446.1	439.9
27.5°	435.2	436.4	433.3	435.0	428.6
30°	423.3	424.7	421.4	423.5	417.3
32.5°	411.8	412.6	408.9	410.5	405.0
35°	398.2	399.0	395.1	396.8	391.2
37.5°	385.3	385.1	381.0	382.0	377.3
40°	370.3	370.1	365.8	366.6	362.1
42.5°	354.9	354.1	350.0	350.4	346.3
45°	337.6	337.2	332.9	333.5	329.4
47.5°	321.0	319.8	315.5	315.7	312.2
50°	302.9	301.1	297.4	297.0	293.9
52.5°	283.6	281.6	277.5	277.1	274.8
55°	263.5	261.2	257.3	256.7	254.9
57.5°	242.8	239.9	236.8	235.6	234.1
60°	220.8	218.1	214.6	213.4	212.8
62.5°	198.0	195.3	192.6	191.4	190.6
65°	174.8	172.7	169.6	168.4	167.8
67.5°	151.2	149.3	146.4	145.0	144.8
70°	127.5	125.7	122.4	121.6	121.4
72.5°	103.9	102.3	99.2	98.4	98.4
75°	80.9	79.5	76.8	76.0	76.0
77.5°	59.1	57.9	55.9	54.8	54.8
80°	39.4	38.6	36.8	35.9	35.7
82.5°	22.8	22.4	20.7	19.9	20.3
85°	10.5	10.1	9.2	8.2	8.4
87.5°	2.7	2.5	1.8	1.4	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)