

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: P973443

Luminaire Tested: FLR2-14-20-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973443
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-L940-CP250
Description: 1*4 FLR-2.0 2000 LUMEN at 4000 CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

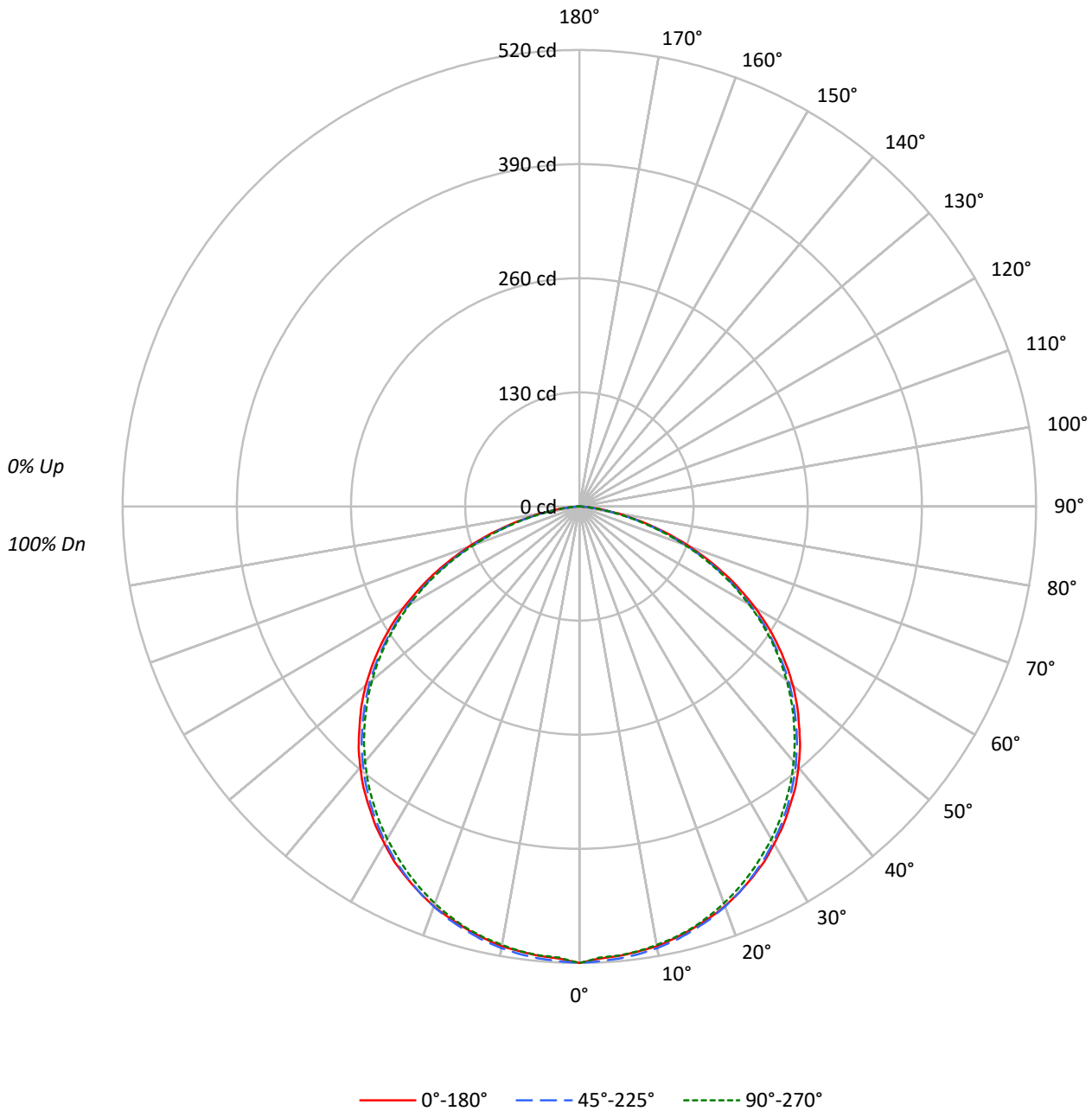
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1455.7 lumens
Efficiency: N/A
Efficacy: 88.8 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					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°	1400	1400	1400
5°	1389	1397	1387
10°	1390	1396	1386
15°	1388	1393	1385
20°	1388	1389	1378
25°	1385	1382	1369
30°	1379	1372	1359
35°	1371	1361	1347
40°	1363	1347	1333
45°	1347	1328	1314
50°	1329	1305	1290
55°	1296	1265	1254
60°	1245	1211	1200
65°	1167	1132	1120
70°	1052	1009	1001
75°	882	837	829
80°	640	597	581
85°	340	299	272

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1347 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.3	3.4
10°-20°	141.5	9.7
20°-30°	214.9	14.8
30°-40°	260.0	17.9
40°-50°	270.2	18.6
50°-60°	241.9	16.6
60°-70°	176.4	12.1
70°-80°	86.9	6.0
80°-90°	14.5	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°	405.7	27.9
0°-40°	665.7	45.7
0°-60°	1177.8	80.9
0°-90°	1455.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1455.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	520	520	520	520	520	
5°	514	520	517	522	513	49
15°	498	503	500	504	497	141
25°	466	469	465	468	461	215
35°	417	418	414	416	410	261
45°	354	354	349	350	345	273
55°	276	274	270	269	267	247
65°	183	181	178	176	176	181
75°	85	83	80	80	80	90
85°	11	10	10	9	9	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.1	520.1	520.1	520.1	520.1
2.5°	515.6	521.4	518.6	523.8	514.5
5°	514.1	519.7	517.1	522.0	513.4
7.5°	511.5	517.3	514.5	519.2	511.1
10°	508.7	513.9	510.8	515.6	507.2
12.5°	503.7	508.9	506.1	510.4	502.7
15°	498.1	502.7	500.1	504.4	497.1
17.5°	491.7	496.0	493.2	497.1	489.7
20°	484.6	488.0	485.0	488.2	481.1
22.5°	475.8	479.0	475.8	477.9	471.7
25°	466.3	468.7	465.4	467.6	461.1
27.5°	456.2	457.5	454.2	456.0	449.3
30°	443.7	445.2	441.7	443.9	437.4
32.5°	431.6	432.5	428.6	430.3	424.5
35°	417.4	418.3	414.2	415.9	410.1
37.5°	403.9	403.6	399.3	400.4	395.5
40°	388.1	387.9	383.4	384.3	379.5
42.5°	372.0	371.1	366.8	367.3	363.0
45°	353.9	353.5	349.0	349.6	345.3
47.5°	336.5	335.2	330.7	330.9	327.2
50°	317.5	315.6	311.7	311.3	308.1
52.5°	297.3	295.1	290.8	290.4	288.0
55°	276.2	273.8	269.7	269.1	267.2
57.5°	254.5	251.4	248.2	246.9	245.4
60°	231.4	228.6	225.0	223.7	223.0
62.5°	207.5	204.7	201.9	200.6	199.8
65°	183.2	181.0	177.8	176.5	175.9
67.5°	158.4	156.5	153.5	152.0	151.8
70°	133.7	131.7	128.3	127.4	127.2
72.5°	108.9	107.2	104.0	103.1	103.1
75°	84.8	83.3	80.5	79.7	79.7
77.5°	62.0	60.7	58.6	57.5	57.5
80°	41.3	40.5	38.5	37.7	37.5
82.5°	23.9	23.5	21.7	20.9	21.3
85°	11.0	10.5	9.7	8.6	8.8
87.5°	2.8	2.6	1.9	1.5	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)