

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: P973356

Luminaire Tested: FLR2-14-20-L930-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973356
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-CP187
Description: 1*4 FLR-2.0 2000 LUMEN at 3000CCT & 80CRI with Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

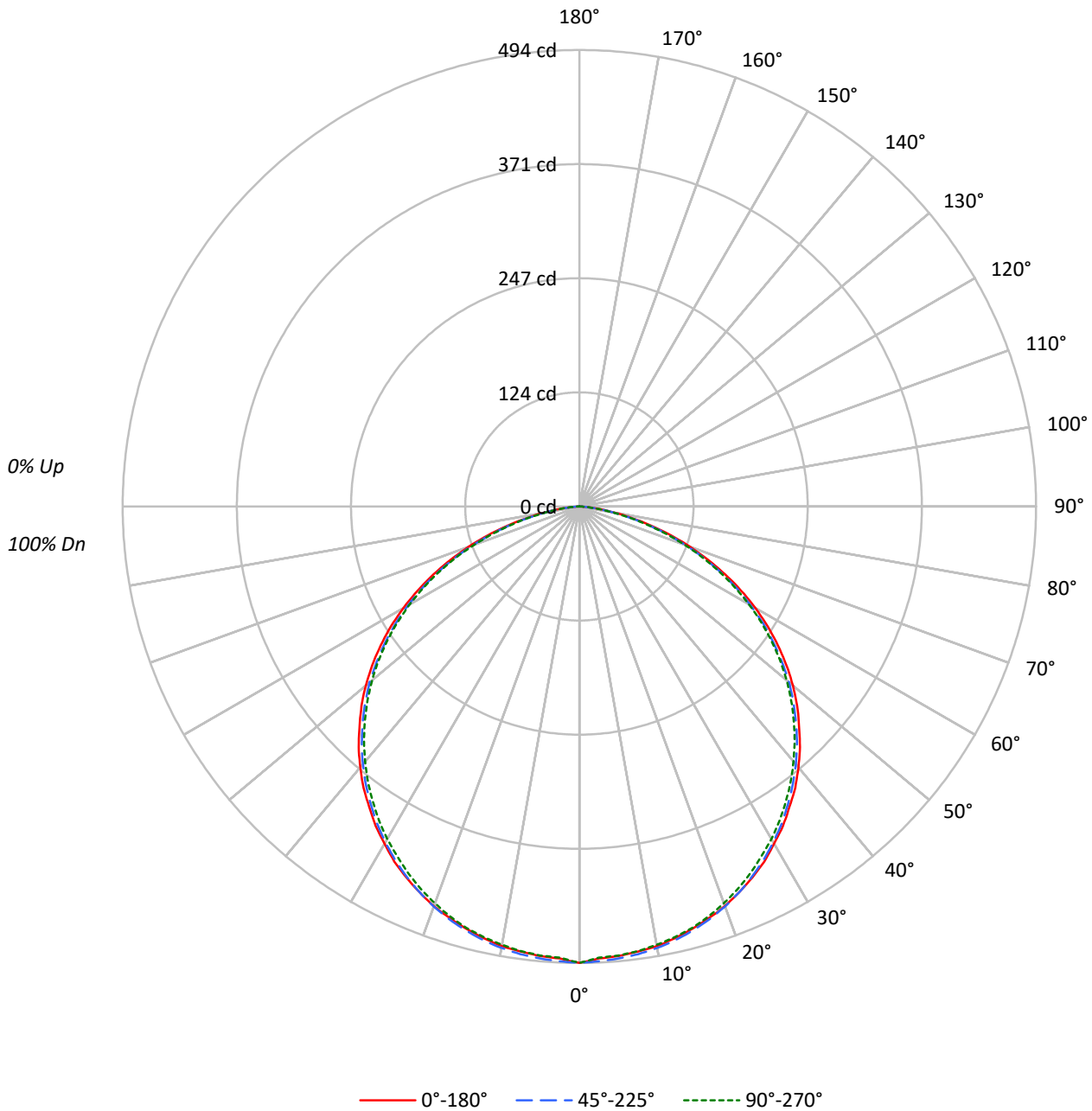
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1382.7 lumens
Efficiency: N/A
Efficacy: 84.3 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	31	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1329	1329	1329
5°	1319	1327	1317
10°	1320	1326	1316
15°	1318	1323	1315
20°	1318	1319	1309
25°	1315	1313	1300
30°	1309	1304	1291
35°	1303	1292	1280
40°	1295	1279	1266
45°	1279	1261	1248
50°	1263	1240	1225
55°	1231	1202	1190
60°	1183	1150	1140
65°	1108	1075	1064
70°	999	959	950
75°	838	795	787
80°	609	567	552
85°	321	284	259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1279 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	3.4
10°-20°	134.4	9.7
20°-30°	204.1	14.8
30°-40°	246.9	17.9
40°-50°	256.7	18.6
50°-60°	229.8	16.6
60°-70°	167.6	12.1
70°-80°	82.5	6.0
80°-90°	13.8	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°	385.3	27.9
0°-40°	632.3	45.7
0°-60°	1118.7	80.9
0°-90°	1382.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1382.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	488	494	491	496	488	46
15°	473	477	475	479	472	134
25°	443	445	442	444	438	204
35°	396	397	393	395	390	248
45°	336	336	331	332	328	260
55°	262	260	256	256	254	234
65°	174	172	169	168	167	172
75°	81	79	76	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°	494.0	494.0	494.0	494.0	494.0
2.5°	489.7	495.2	492.6	497.5	488.7
5°	488.3	493.6	491.1	495.8	487.7
7.5°	485.8	491.3	488.7	493.2	485.4
10°	483.2	488.1	485.2	489.7	481.7
12.5°	478.5	483.4	480.7	484.8	477.4
15°	473.1	477.4	475.0	479.1	472.1
17.5°	467.0	471.1	468.4	472.1	465.2
20°	460.3	463.5	460.7	463.7	457.0
22.5°	451.9	454.9	451.9	453.9	448.0
25°	442.9	445.1	442.1	444.1	438.0
27.5°	433.3	434.5	431.4	433.1	426.7
30°	421.4	422.8	419.6	421.6	415.5
32.5°	410.0	410.8	407.1	408.7	403.2
35°	396.5	397.3	393.4	395.0	389.5
37.5°	383.6	383.4	379.3	380.3	375.6
40°	368.7	368.5	364.2	365.0	360.5
42.5°	353.3	352.5	348.4	348.8	344.7
45°	336.2	335.7	331.4	332.1	328.0
47.5°	319.6	318.4	314.1	314.3	310.8
50°	301.6	299.8	296.1	295.7	292.6
52.5°	282.4	280.3	276.2	275.8	273.6
55°	262.3	260.1	256.2	255.6	253.7
57.5°	241.7	238.8	235.8	234.5	233.1
60°	219.8	217.1	213.7	212.4	211.8
62.5°	197.1	194.5	191.8	190.6	189.7
65°	174.0	172.0	168.9	167.7	167.1
67.5°	150.5	148.7	145.8	144.4	144.2
70°	127.0	125.1	121.9	121.0	120.8
72.5°	103.5	101.8	98.8	97.9	97.9
75°	80.6	79.1	76.5	75.7	75.7
77.5°	58.9	57.7	55.6	54.6	54.6
80°	39.3	38.4	36.6	35.8	35.6
82.5°	22.7	22.3	20.7	19.8	20.2
85°	10.4	10.0	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)