

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: P973446

Luminaire Tested: FLR2-14-20-L940-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973446
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-CP375
Description: 1*4 FLR-2.0 2000 LUMEN at 4000 CCT & 90 CRI with Clear Polycarbonate (0.375" thickness)

Light Source:
Ballast/Driver: -

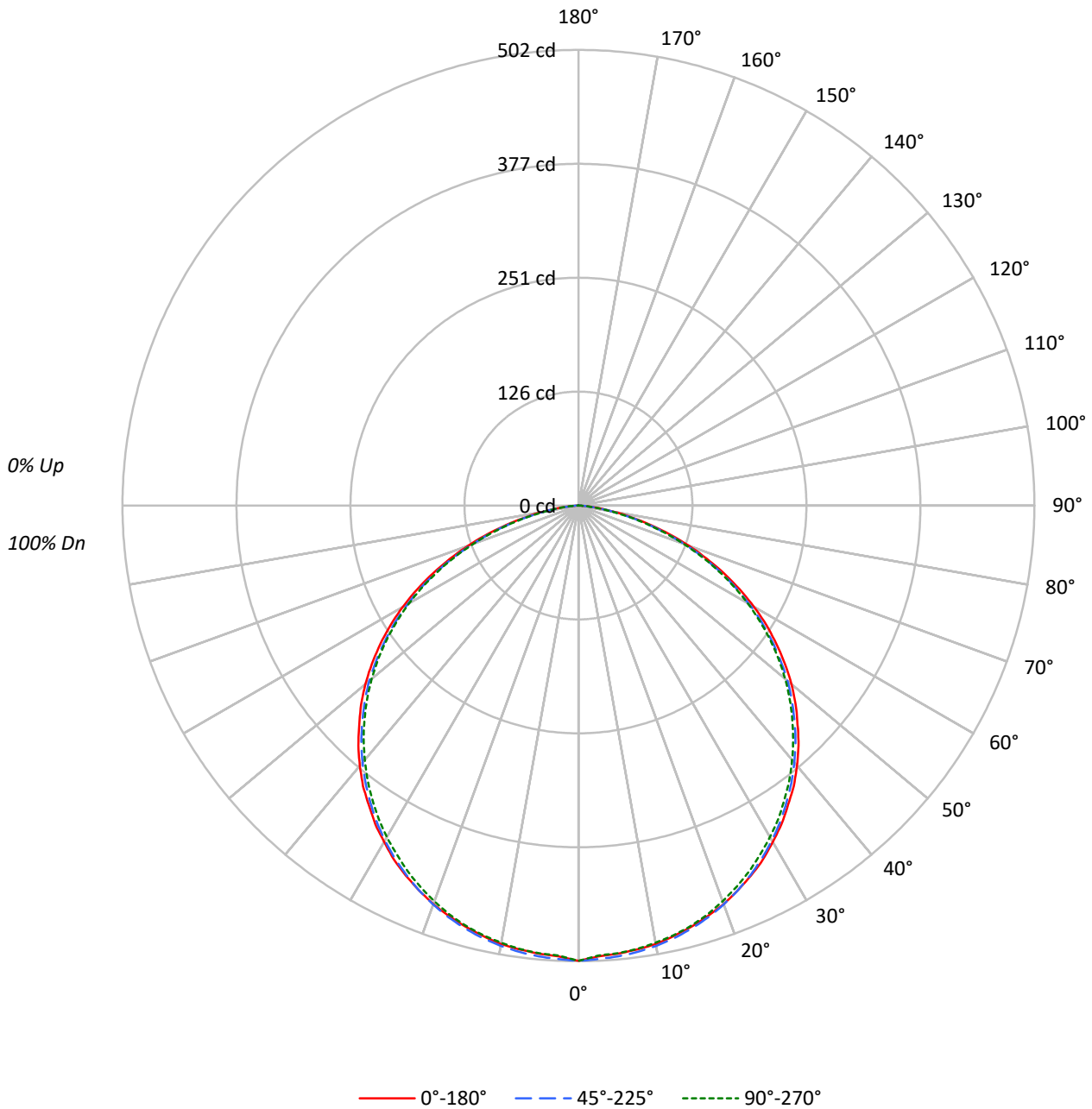
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1403.8 lumens
Efficiency: N/A
Efficacy: 85.6 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°	1350	1350	1350
5°	1339	1347	1337
10°	1341	1346	1336
15°	1338	1344	1335
20°	1338	1339	1329
25°	1335	1333	1320
30°	1330	1324	1311
35°	1322	1312	1299
40°	1315	1299	1286
45°	1299	1281	1267
50°	1282	1258	1244
55°	1249	1220	1209
60°	1201	1167	1158
65°	1125	1092	1080
70°	1014	973	965
75°	850	807	799
80°	618	576	559
85°	327	287	262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1299 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	3.4
10°-20°	136.4	9.7
20°-30°	207.3	14.8
30°-40°	250.7	17.9
40°-50°	260.6	18.6
50°-60°	233.3	16.6
60°-70°	170.2	12.1
70°-80°	83.8	6.0
80°-90°	14.0	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°	391.2	27.9
0°-40°	641.9	45.7
0°-60°	1135.8	80.9
0°-90°	1403.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1403.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	496	501	499	503	495	47
15°	480	485	482	486	479	136
25°	450	452	449	451	445	207
35°	402	403	399	401	396	252
45°	341	341	336	337	333	264
55°	266	264	260	260	258	238
65°	177	175	172	170	170	175
75°	82	80	78	77	77	87
85°	11	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°	501.6	501.6	501.6	501.6	501.6
2.5°	497.2	502.8	500.1	505.1	496.2
5°	495.7	501.1	498.7	503.4	495.1
7.5°	493.3	498.9	496.2	500.7	492.8
10°	490.6	495.5	492.6	497.2	489.1
12.5°	485.8	490.8	488.1	492.2	484.7
15°	480.4	484.7	482.3	486.4	479.3
17.5°	474.2	478.3	475.6	479.3	472.3
20°	467.3	470.6	467.7	470.8	464.0
22.5°	458.8	461.9	458.8	460.9	454.8
25°	449.7	451.9	448.8	450.9	444.7
27.5°	439.9	441.1	438.0	439.7	433.3
30°	427.9	429.3	426.0	428.1	421.8
32.5°	416.2	417.1	413.3	415.0	409.4
35°	402.5	403.4	399.4	401.1	395.5
37.5°	389.5	389.2	385.1	386.1	381.4
40°	374.3	374.1	369.7	370.6	366.0
42.5°	358.7	357.9	353.7	354.2	350.0
45°	341.3	340.9	336.5	337.1	333.0
47.5°	324.5	323.2	318.9	319.1	315.5
50°	306.2	304.3	300.6	300.2	297.1
52.5°	286.7	284.6	280.5	280.0	277.8
55°	266.3	264.1	260.1	259.5	257.6
57.5°	245.4	242.5	239.4	238.1	236.7
60°	223.2	220.5	216.9	215.7	215.1
62.5°	200.1	197.4	194.7	193.5	192.7
65°	176.7	174.6	171.5	170.2	169.6
67.5°	152.8	150.9	148.0	146.6	146.4
70°	128.9	127.0	123.7	122.9	122.7
72.5°	105.0	103.4	100.3	99.4	99.4
75°	81.8	80.3	77.6	76.8	76.8
77.5°	59.8	58.5	56.5	55.4	55.4
80°	39.9	39.0	37.2	36.3	36.1
82.5°	23.0	22.6	21.0	20.1	20.6
85°	10.6	10.2	9.3	8.3	8.5
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)