

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: P973332

Luminaire Tested: FLR2-14-20-L830-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973332
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-L830-CP125
Description: 1*4 FLR-2.0 2000 LUMEN at 3000CCT & 80CRI with Clear Polycarbonate (0.125" thickness)

Light Source: 3000k CCT, 80 CRI LEDS
Ballast/Driver: -

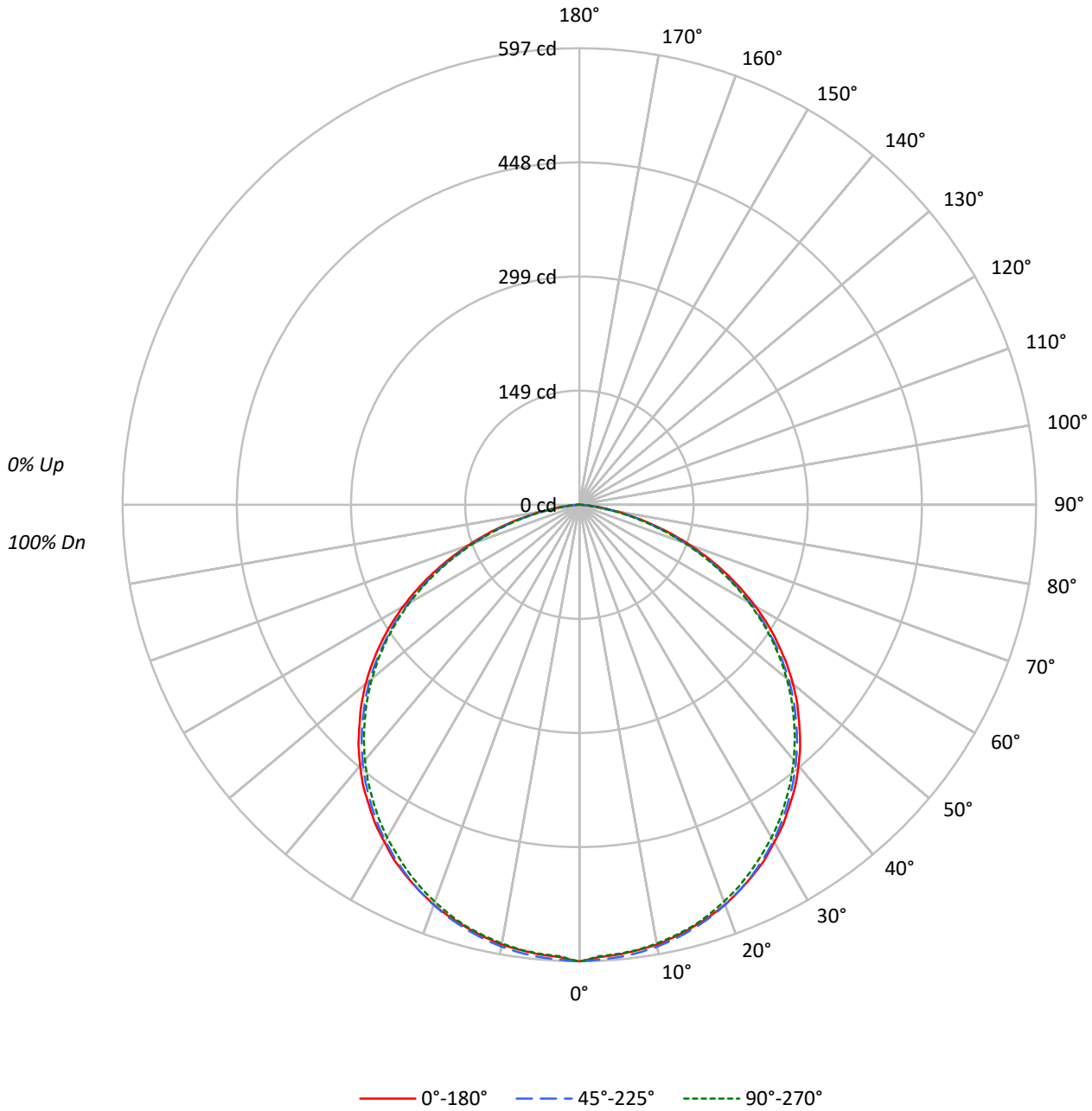
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1672.0 lumens
Efficiency: N/A
Efficacy: 102.0 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°	1608	1608	1608
5°	1595	1604	1593
10°	1597	1603	1592
15°	1594	1600	1590
20°	1594	1595	1582
25°	1590	1587	1572
30°	1583	1577	1561
35°	1575	1563	1547
40°	1566	1547	1531
45°	1547	1525	1509
50°	1527	1499	1481
55°	1488	1453	1440
60°	1431	1391	1379
65°	1340	1300	1286
70°	1209	1160	1149
75°	1013	962	951
80°	736	687	666
85°	389	343	312

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1547 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	3.4
10°-20°	162.5	9.7
20°-30°	246.9	14.8
30°-40°	298.6	17.9
40°-50°	310.4	18.6
50°-60°	277.9	16.6
60°-70°	202.7	12.1
70°-80°	99.8	6.0
80°-90°	16.7	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°	466.0	27.9
0°-40°	764.6	45.7
0°-60°	1352.9	80.9
0°-90°	1672.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1672.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	590	597	594	600	590	56
15°	572	577	574	579	571	162
25°	536	538	535	537	530	247
35°	480	480	476	478	471	300
45°	406	406	401	402	397	314
55°	317	314	310	309	307	283
65°	210	208	204	203	202	208
75°	97	96	92	92	92	104
85°	13	12	11	10	10	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	597.4	597.4	597.4	597.4	597.4
2.5°	592.2	598.9	595.7	601.6	591.0
5°	590.5	596.9	593.9	599.6	589.7
7.5°	587.5	594.2	591.0	596.4	587.0
10°	584.3	590.2	586.8	592.2	582.6
12.5°	578.6	584.5	581.3	586.3	577.4
15°	572.2	577.4	574.4	579.4	570.9
17.5°	564.8	569.7	566.5	570.9	562.5
20°	556.6	560.6	557.1	560.8	552.6
22.5°	546.5	550.2	546.5	548.9	541.8
25°	535.6	538.3	534.6	537.1	529.6
27.5°	524.0	525.4	521.7	523.7	516.1
30°	509.6	511.4	507.4	509.9	502.5
32.5°	495.8	496.8	492.3	494.3	487.6
35°	479.5	480.4	475.7	477.7	471.0
37.5°	463.9	463.6	458.7	459.9	454.2
40°	445.8	445.6	440.4	441.4	435.9
42.5°	427.3	426.3	421.3	421.8	416.9
45°	406.5	406.0	400.8	401.6	396.6
47.5°	386.5	385.0	379.8	380.1	375.8
50°	364.7	362.5	358.0	357.6	353.8
52.5°	341.5	339.0	334.1	333.6	330.8
55°	317.2	314.5	309.8	309.1	306.9
57.5°	292.3	288.8	285.1	283.6	281.9
60°	265.8	262.6	258.4	256.9	256.2
62.5°	238.4	235.2	231.9	230.5	229.5
65°	210.4	208.0	204.2	202.8	202.0
67.5°	182.0	179.8	176.3	174.6	174.3
70°	153.6	151.3	147.4	146.4	146.1
72.5°	125.1	123.1	119.4	118.4	118.4
75°	97.4	95.7	92.5	91.5	91.5
77.5°	71.2	69.7	67.3	66.0	66.0
80°	47.5	46.5	44.3	43.3	43.0
82.5°	27.4	27.0	25.0	24.0	24.5
85°	12.6	12.1	11.1	9.9	10.1
87.5°	3.2	3.0	2.2	1.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)