

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: P973347

Luminaire Tested: FLR2-14-20-L830-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973347
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-CA125
Description: 1*4 FLR-2.0 2000 LUMEN at 3000CCT & 80CRI with Clear Acrylic (0.125" thickness)

Light Source:
Ballast/Driver: -

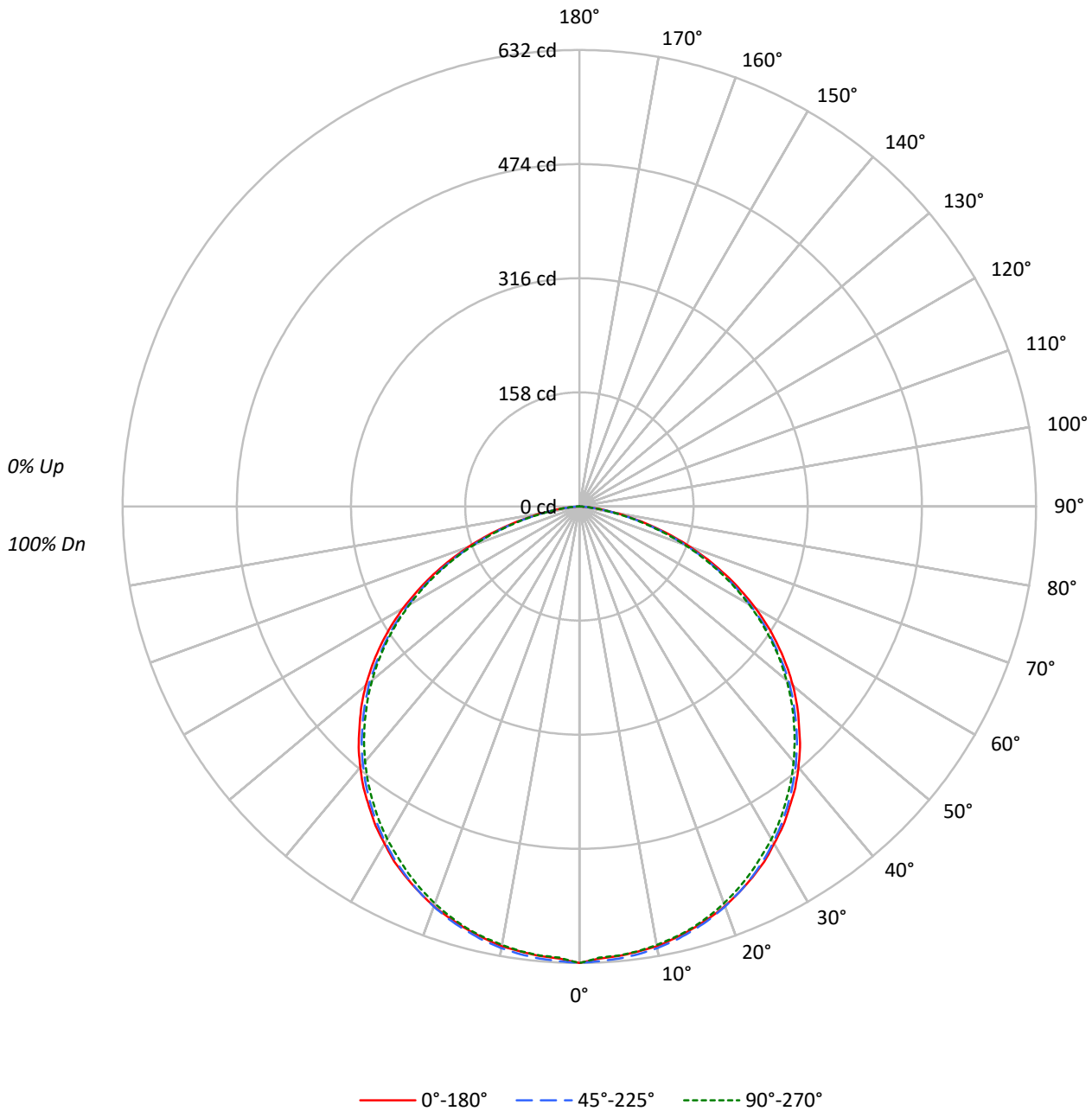
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1769.2 lumens
Efficiency: N/A
Efficacy: 107.9 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°	1701	1701	1701
5°	1688	1698	1686
10°	1689	1697	1684
15°	1687	1693	1683
20°	1687	1688	1675
25°	1683	1680	1664
30°	1675	1668	1652
35°	1667	1654	1637
40°	1657	1637	1620
45°	1637	1614	1597
50°	1616	1586	1567
55°	1575	1538	1523
60°	1514	1471	1459
65°	1418	1376	1361
70°	1279	1227	1216
75°	1072	1018	1006
80°	778	725	705
85°	411	364	330

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1637 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.9	3.4
10°-20°	171.9	9.7
20°-30°	261.2	14.8
30°-40°	316.0	17.9
40°-50°	328.4	18.6
50°-60°	294.0	16.6
60°-70°	214.4	12.1
70°-80°	105.6	6.0
80°-90°	17.7	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°	493.0	27.9
0°-40°	809.0	45.7
0°-60°	1431.5	80.9
0°-90°	1769.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1769.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	625	632	628	634	624	59
15°	605	611	608	613	604	171
25°	567	570	566	568	560	261
35°	507	508	503	506	498	318
45°	430	430	424	425	420	332
55°	336	333	328	327	325	300
65°	223	220	216	214	214	220
75°	103	101	98	97	97	110
85°	13	13	12	10	11	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	632.1	632.1	632.1	632.1	632.1
2.5°	626.6	633.7	630.3	636.6	625.3
5°	624.8	631.6	628.5	634.5	624.0
7.5°	621.7	628.7	625.3	631.1	621.1
10°	618.3	624.5	620.9	626.6	616.4
12.5°	612.2	618.5	615.1	620.3	610.9
15°	605.4	610.9	607.8	613.0	604.1
17.5°	597.6	602.8	599.4	604.1	595.2
20°	589.0	593.1	589.5	593.4	584.8
22.5°	578.2	582.1	578.2	580.8	573.3
25°	566.7	569.6	565.7	568.3	560.4
27.5°	554.4	556.0	552.1	554.2	546.0
30°	539.2	541.1	536.9	539.5	531.7
32.5°	524.6	525.6	520.9	523.0	516.0
35°	507.3	508.4	503.4	505.5	498.4
37.5°	490.8	490.6	485.3	486.7	480.6
40°	471.7	471.5	466.0	467.0	461.3
42.5°	452.1	451.1	445.8	446.4	441.1
45°	430.1	429.6	424.1	424.9	419.7
47.5°	408.9	407.4	401.9	402.1	397.7
50°	385.9	383.6	378.9	378.3	374.4
52.5°	361.3	358.7	353.5	353.0	350.1
55°	335.7	332.8	327.8	327.1	324.7
57.5°	309.3	305.6	301.7	300.1	298.3
60°	281.3	277.9	273.4	271.8	271.1
62.5°	252.2	248.8	245.4	243.8	242.8
65°	222.7	220.0	216.1	214.5	213.8
67.5°	192.6	190.2	186.5	184.7	184.5
70°	162.5	160.1	155.9	154.9	154.6
72.5°	132.4	130.3	126.4	125.3	125.3
75°	103.1	101.3	97.9	96.8	96.8
77.5°	75.4	73.8	71.2	69.9	69.9
80°	50.2	49.2	46.8	45.8	45.5
82.5°	29.0	28.5	26.4	25.4	25.9
85°	13.3	12.8	11.8	10.5	10.7
87.5°	3.4	3.1	2.4	1.8	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)