

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: P973470

Luminaire Tested: FLR2-14-20-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973470
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-L850-CA080
Description: 1*4 FLR-2.0 2000 LUMEN at 5000 CCT & 80CRI with Clear Acrylic (0.080" thickness)

Light Source:
Ballast/Driver: -

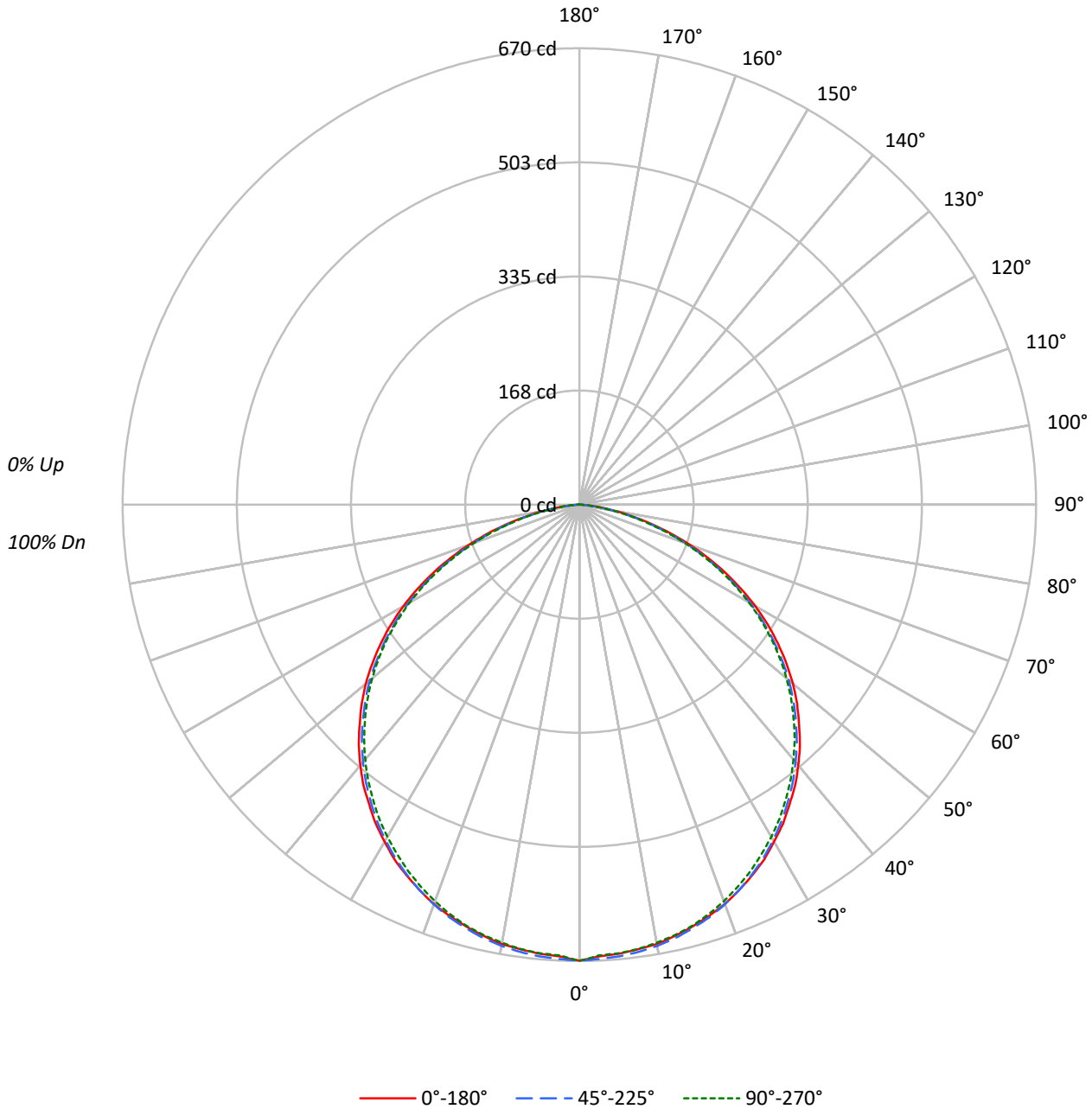
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1874.4 lumens
Efficiency: N/A
Efficacy: 114.3 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									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	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°	1802	1802	1802
5°	1788	1798	1786
10°	1790	1797	1785
15°	1787	1794	1783
20°	1787	1788	1774
25°	1783	1779	1763
30°	1775	1767	1750
35°	1766	1752	1735
40°	1756	1734	1717
45°	1734	1710	1692
50°	1712	1680	1661
55°	1668	1629	1614
60°	1604	1559	1546
65°	1502	1458	1442
70°	1354	1300	1289
75°	1135	1078	1067
80°	824	769	747
85°	435	386	352

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1734 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	3.4
10°-20°	182.2	9.7
20°-30°	276.8	14.8
30°-40°	334.8	17.9
40°-50°	347.9	18.6
50°-60°	311.5	16.6
60°-70°	227.2	12.1
70°-80°	111.9	6.0
80°-90°	18.7	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°	522.4	27.9
0°-40°	857.1	45.7
0°-60°	1516.6	80.9
0°-90°	1874.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1874.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	670	670	670	670	670	
5°	662	669	666	672	661	63
15°	641	647	644	650	640	181
25°	600	604	599	602	594	277
35°	538	539	533	536	528	337
45°	456	455	449	450	445	352
55°	356	353	347	346	344	317
65°	236	233	229	227	226	233
75°	109	107	104	103	103	116
85°	14	14	12	11	11	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	669.7	669.7	669.7	669.7	669.7
2.5°	663.9	671.4	667.8	674.4	662.5
5°	661.9	669.2	665.8	672.2	661.1
7.5°	658.6	666.1	662.5	668.6	658.1
10°	655.0	661.7	657.8	663.9	653.1
12.5°	648.6	655.3	651.7	657.2	647.3
15°	641.4	647.3	643.9	649.5	640.1
17.5°	633.1	638.7	635.1	640.1	630.6
20°	624.0	628.4	624.5	628.7	619.5
22.5°	612.6	616.8	612.6	615.4	607.3
25°	600.4	603.5	599.3	602.1	593.8
27.5°	587.4	589.0	584.9	587.1	578.5
30°	571.3	573.2	568.8	571.6	563.3
32.5°	555.8	556.9	551.9	554.1	546.6
35°	537.5	538.6	533.3	535.5	528.1
37.5°	520.0	519.7	514.2	515.6	509.2
40°	499.8	499.5	493.7	494.8	488.7
42.5°	479.0	477.9	472.3	472.9	467.4
45°	455.7	455.2	449.3	450.2	444.6
47.5°	433.3	431.6	425.8	426.1	421.3
50°	408.9	406.4	401.4	400.8	396.7
52.5°	382.8	380.0	374.5	373.9	370.9
55°	355.6	352.6	347.3	346.5	344.0
57.5°	327.6	323.8	319.6	317.9	316.0
60°	298.0	294.4	289.7	288.0	287.2
62.5°	267.2	263.6	260.0	258.3	257.2
65°	235.9	233.1	229.0	227.3	226.5
67.5°	204.0	201.5	197.6	195.7	195.4
70°	172.1	169.6	165.2	164.1	163.8
72.5°	140.3	138.0	133.9	132.8	132.8
75°	109.2	107.3	103.7	102.6	102.6
77.5°	79.8	78.2	75.4	74.0	74.0
80°	53.2	52.1	49.6	48.5	48.2
82.5°	30.8	30.2	28.0	26.9	27.4
85°	14.1	13.6	12.5	11.1	11.4
87.5°	3.6	3.3	2.5	1.9	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)