

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: P973458

Luminaire Tested: FLR2-14-20-L850-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973458
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-CP125
Description: 1*4 FLR-2.0 2000 LUMEN at 5000 CCT & 80CRI with Clear Polycarbonate (0.125" thickness)

Light Source:
Ballast/Driver: -

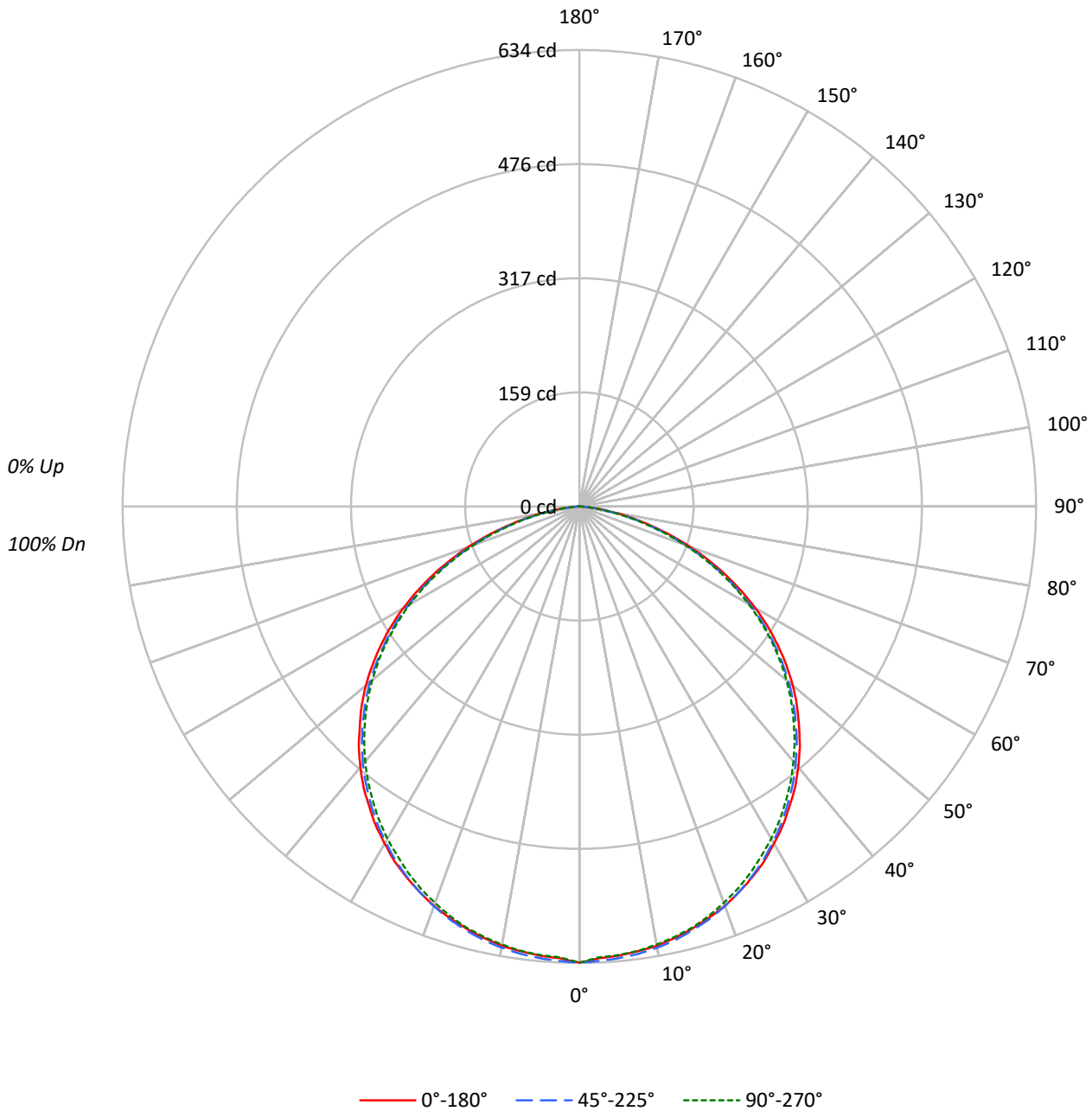
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1773.4 lumens
Efficiency: N/A
Efficacy: 108.1 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°	1705	1705	1705
5°	1692	1702	1690
10°	1693	1700	1688
15°	1691	1697	1687
20°	1690	1692	1678
25°	1686	1684	1668
30°	1679	1672	1656
35°	1670	1658	1641
40°	1661	1641	1624
45°	1641	1618	1601
50°	1619	1590	1571
55°	1579	1542	1527
60°	1517	1475	1462
65°	1421	1379	1365
70°	1282	1230	1220
75°	1074	1020	1009
80°	781	727	707
85°	414	364	333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1641 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	3.4
10°-20°	172.3	9.7
20°-30°	261.8	14.8
30°-40°	316.7	17.9
40°-50°	329.2	18.6
50°-60°	294.7	16.6
60°-70°	215.0	12.1
70°-80°	105.9	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°	494.2	27.9
0°-40°	810.9	45.7
0°-60°	1434.9	80.9
0°-90°	1773.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1773.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	626	633	630	636	626	60
15°	607	612	609	614	606	171
25°	568	571	567	570	562	262
35°	508	510	505	507	500	318
45°	431	431	425	426	421	333
55°	336	334	329	328	326	300
65°	223	221	217	215	214	220
75°	103	102	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°	633.6	633.6	633.6	633.6	633.6
2.5°	628.1	635.2	631.8	638.1	626.8
5°	626.3	633.1	629.9	636.0	625.5
7.5°	623.1	630.2	626.8	632.6	622.6
10°	619.7	626.0	622.3	628.1	617.9
12.5°	613.7	620.0	616.6	621.8	612.4
15°	606.9	612.4	609.2	614.5	605.5
17.5°	599.0	604.2	600.8	605.5	596.6
20°	590.3	594.5	590.9	594.8	586.1
22.5°	579.6	583.5	579.6	582.2	574.6
25°	568.0	570.9	567.0	569.6	561.7
27.5°	555.7	557.3	553.4	555.5	547.3
30°	540.5	542.3	538.1	540.8	532.9
32.5°	525.8	526.9	522.1	524.2	517.2
35°	508.5	509.6	504.6	506.7	499.6
37.5°	492.0	491.7	486.5	487.8	481.8
40°	472.8	472.6	467.1	468.1	462.4
42.5°	453.2	452.1	446.9	447.4	442.2
45°	431.1	430.6	425.1	425.9	420.7
47.5°	409.9	408.3	402.8	403.1	398.6
50°	386.8	384.5	379.7	379.2	375.3
52.5°	362.2	359.6	354.3	353.8	350.9
55°	336.5	333.6	328.6	327.8	325.5
57.5°	310.0	306.3	302.4	300.8	299.0
60°	281.9	278.5	274.1	272.5	271.7
62.5°	252.8	249.4	246.0	244.4	243.4
65°	223.2	220.6	216.6	215.0	214.3
67.5°	193.0	190.7	187.0	185.2	184.9
70°	162.9	160.5	156.3	155.3	155.0
72.5°	132.7	130.6	126.7	125.6	125.6
75°	103.3	101.5	98.1	97.0	97.0
77.5°	75.5	74.0	71.3	70.0	70.0
80°	50.4	49.3	46.9	45.9	45.6
82.5°	29.1	28.6	26.5	25.4	26.0
85°	13.4	12.9	11.8	10.5	10.8
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)