

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: P973464

Luminaire Tested: FLR2-14-20-L850-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973464
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-CP250
Description: 1*4 FLR-2.0 2000 LUMEN at 5000 CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

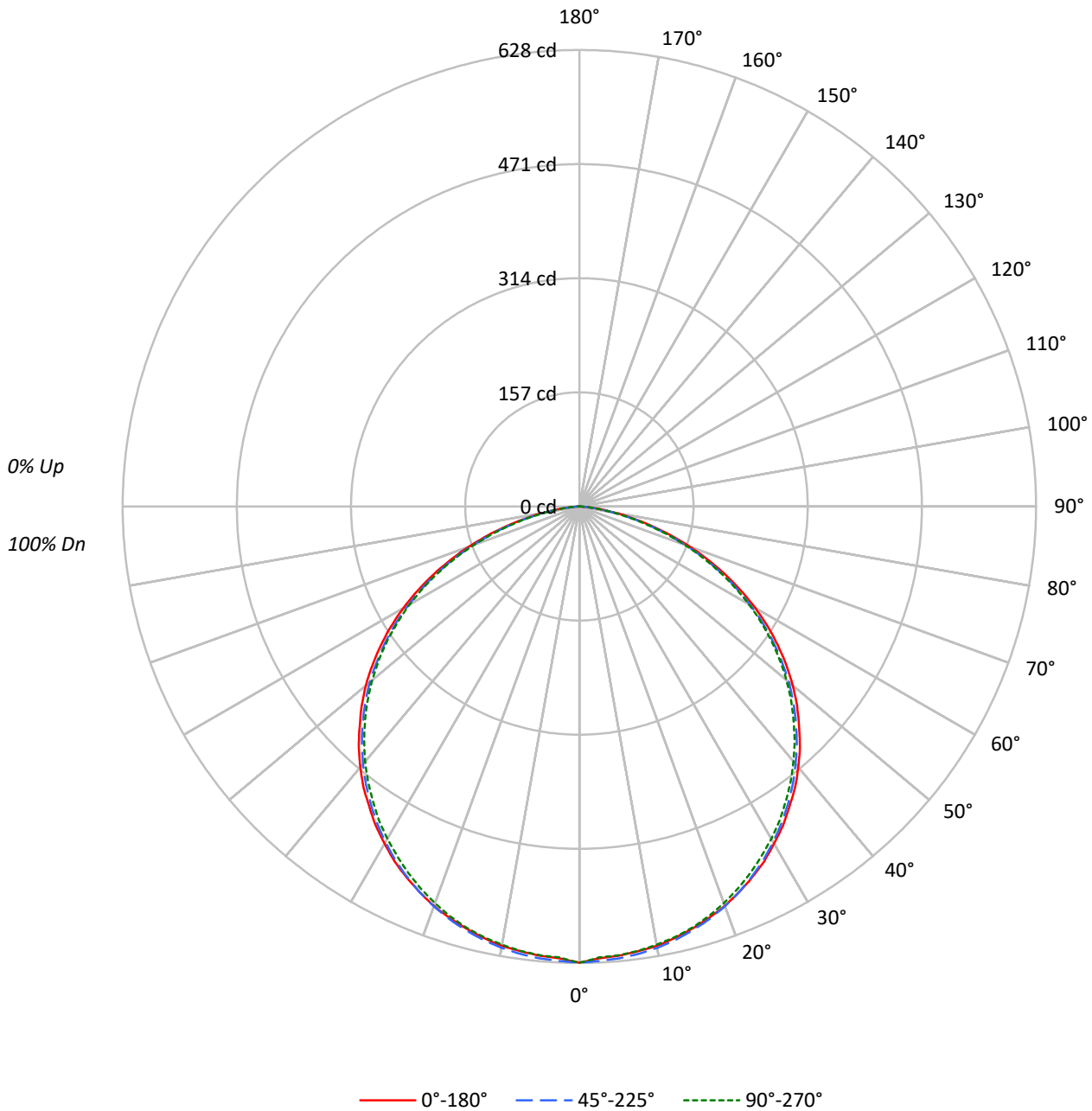
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1756.9 lumens
Efficiency: N/A
Efficacy: 107.1 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°	1689	1689	1689
5°	1676	1686	1674
10°	1677	1685	1673
15°	1675	1681	1671
20°	1675	1676	1663
25°	1671	1668	1652
30°	1664	1656	1640
35°	1655	1642	1626
40°	1645	1625	1609
45°	1625	1603	1586
50°	1604	1575	1557
55°	1564	1527	1513
60°	1503	1461	1449
65°	1408	1366	1352
70°	1269	1218	1209
75°	1065	1011	999
80°	773	721	700
85°	411	361	330

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1625 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.5	3.4
10°-20°	170.7	9.7
20°-30°	259.4	14.8
30°-40°	313.8	17.9
40°-50°	326.1	18.6
50°-60°	292.0	16.6
60°-70°	213.0	12.1
70°-80°	104.9	6.0
80°-90°	17.5	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°	489.6	27.9
0°-40°	803.4	45.7
0°-60°	1421.5	80.9
0°-90°	1756.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1756.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	620	627	624	630	620	59
15°	601	607	604	609	600	170
25°	563	566	562	564	556	259
35°	504	505	500	502	495	315
45°	427	427	421	422	417	330
55°	333	330	326	325	322	298
65°	221	218	215	213	212	218
75°	102	100	97	96	96	109
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°	627.7	627.7	627.7	627.7	627.7
2.5°	622.3	629.3	625.9	632.1	621.0
5°	620.4	627.2	624.1	630.0	619.7
7.5°	617.3	624.3	621.0	626.7	616.8
10°	613.9	620.2	616.5	622.3	612.1
12.5°	608.0	614.2	610.8	616.0	606.7
15°	601.2	606.7	603.5	608.7	599.9
17.5°	593.4	598.6	595.2	599.9	591.1
20°	584.8	589.0	585.4	589.3	580.7
22.5°	574.2	578.1	574.2	576.8	569.3
25°	562.8	565.6	561.7	564.3	556.5
27.5°	550.5	552.1	548.2	550.3	542.2
30°	535.5	537.3	533.1	535.7	527.9
32.5°	520.9	522.0	517.3	519.4	512.4
35°	503.8	504.8	499.9	502.0	494.9
37.5°	487.4	487.2	482.0	483.3	477.3
40°	468.4	468.2	462.7	463.8	458.1
42.5°	449.0	447.9	442.7	443.2	438.0
45°	427.1	426.6	421.2	421.9	416.7
47.5°	406.1	404.5	399.1	399.3	394.9
50°	383.2	380.9	376.2	375.7	371.8
52.5°	358.8	356.2	351.0	350.5	347.6
55°	333.3	330.5	325.5	324.8	322.4
57.5°	307.1	303.5	299.6	298.0	296.2
60°	279.3	275.9	271.5	269.9	269.2
62.5°	250.5	247.1	243.7	242.1	241.1
65°	221.1	218.5	214.6	213.0	212.3
67.5°	191.2	188.9	185.2	183.4	183.2
70°	161.3	159.0	154.8	153.8	153.6
72.5°	131.5	129.4	125.5	124.5	124.5
75°	102.4	100.5	97.2	96.1	96.1
77.5°	74.8	73.3	70.7	69.4	69.4
80°	49.9	48.8	46.5	45.5	45.2
82.5°	28.8	28.3	26.2	25.2	25.7
85°	13.3	12.7	11.7	10.4	10.7
87.5°	3.4	3.1	2.3	1.8	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)