

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: P973338

Luminaire Tested: FLR2-14-20-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973338
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-CP250
Description: 1*4 FLR-2.0 2000 LUMEN at 3000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

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

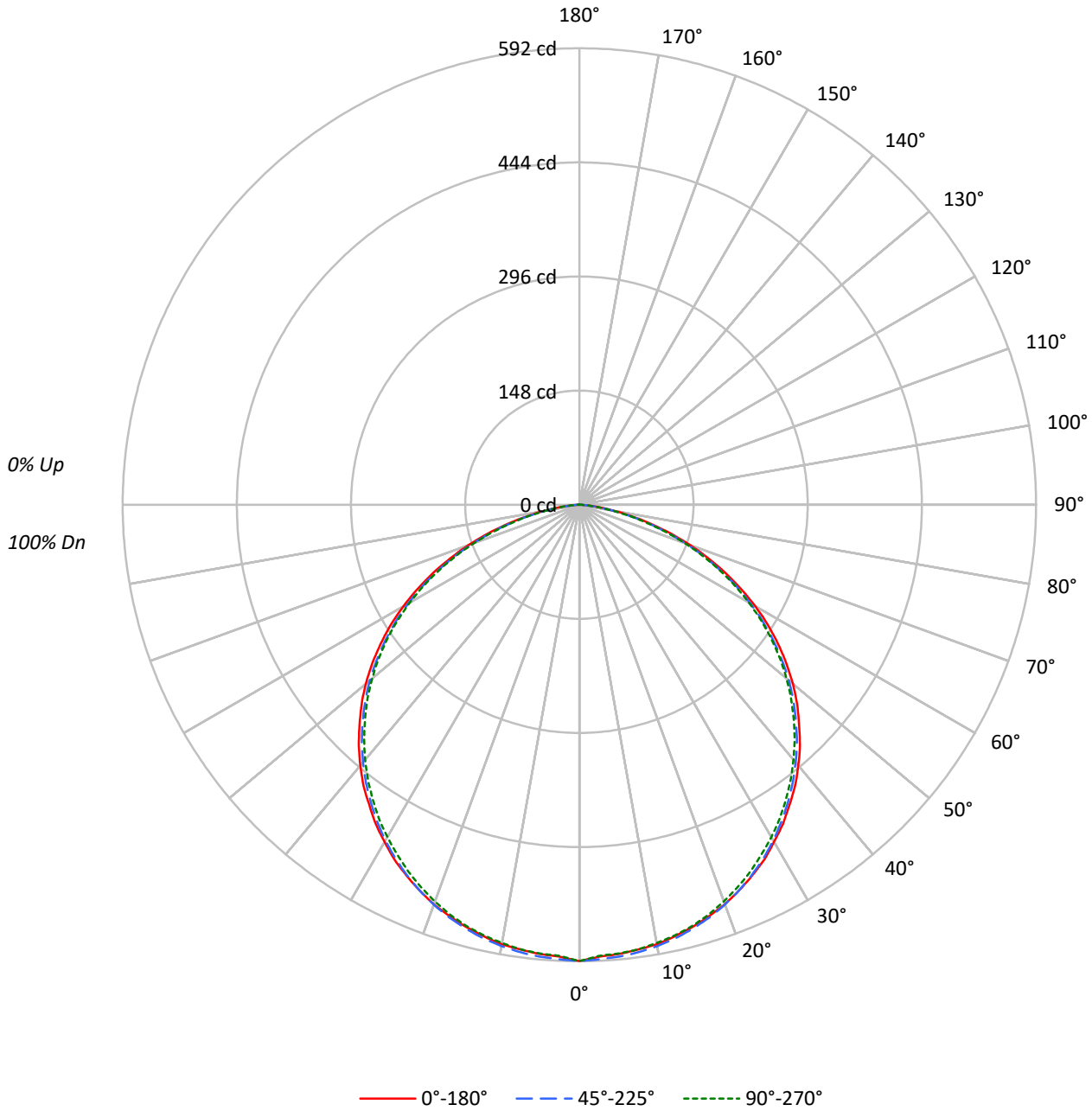
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1656.5 lumens
Efficiency: N/A
Efficacy: 101.0 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										
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°	1593	1593	1593
5°	1580	1589	1578
10°	1582	1588	1577
15°	1579	1585	1576
20°	1579	1580	1568
25°	1575	1572	1558
30°	1569	1562	1547
35°	1560	1548	1533
40°	1552	1533	1517
45°	1533	1511	1495
50°	1513	1485	1467
55°	1475	1440	1426
60°	1417	1378	1366
65°	1328	1288	1274
70°	1197	1149	1139
75°	1003	952	942
80°	728	679	660
85°	386	340	309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1533 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	3.4
10°-20°	161.0	9.7
20°-30°	244.6	14.8
30°-40°	295.9	17.9
40°-50°	307.5	18.6
50°-60°	275.3	16.6
60°-70°	200.8	12.1
70°-80°	98.9	6.0
80°-90°	16.5	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°	461.6	27.9
0°-40°	757.5	45.7
0°-60°	1340.3	80.9
0°-90°	1656.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1656.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	585	591	588	594	584	56
15°	567	572	569	574	566	160
25°	531	533	530	532	525	245
35°	475	476	471	473	467	297
45°	403	402	397	398	393	311
55°	314	312	307	306	304	281
65°	208	206	202	201	200	206
75°	96	95	92	91	91	103
85°	12	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°	591.8	591.8	591.8	591.8	591.8
2.5°	586.7	593.3	590.1	596.0	585.5
5°	585.0	591.4	588.4	594.0	584.2
7.5°	582.0	588.7	585.5	590.9	581.6
10°	578.9	584.7	581.3	586.7	577.1
12.5°	573.2	579.1	575.9	580.8	572.0
15°	566.9	572.0	569.1	574.0	565.6
17.5°	559.5	564.4	561.2	565.6	557.3
20°	551.4	555.3	551.9	555.6	547.5
22.5°	541.4	545.1	541.4	543.8	536.7
25°	530.6	533.3	529.6	532.1	524.7
27.5°	519.1	520.6	516.9	518.8	511.2
30°	504.9	506.6	502.7	505.1	497.8
32.5°	491.2	492.1	487.7	489.7	483.1
35°	475.0	476.0	471.3	473.3	466.7
37.5°	459.6	459.3	454.4	455.6	450.0
40°	441.7	441.4	436.3	437.3	431.9
42.5°	423.3	422.3	417.4	417.9	413.0
45°	402.7	402.2	397.1	397.8	392.9
47.5°	382.9	381.4	376.3	376.5	372.4
50°	361.3	359.1	354.7	354.2	350.5
52.5°	338.3	335.9	331.0	330.5	327.8
55°	314.3	311.6	306.9	306.2	304.0
57.5°	289.6	286.1	282.4	281.0	279.3
60°	263.3	260.2	256.0	254.5	253.8
62.5°	236.1	233.0	229.8	228.3	227.3
65°	208.5	206.0	202.3	200.9	200.1
67.5°	180.3	178.1	174.7	172.9	172.7
70°	152.1	149.9	146.0	145.0	144.8
72.5°	124.0	122.0	118.3	117.3	117.3
75°	96.5	94.8	91.6	90.6	90.6
77.5°	70.6	69.1	66.6	65.4	65.4
80°	47.0	46.1	43.8	42.9	42.6
82.5°	27.2	26.7	24.7	23.8	24.3
85°	12.5	12.0	11.0	9.8	10.0
87.5°	3.2	2.9	2.2	1.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)