

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: P973069

Luminaire Tested: FLR2-14-20HE-L830-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973069
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: FLR2-14-20HE-L830-CP375
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3000CCT & 80CRI with Clear Polycarbonate (0.375" thickness)

Light Source:
Ballast/Driver: -

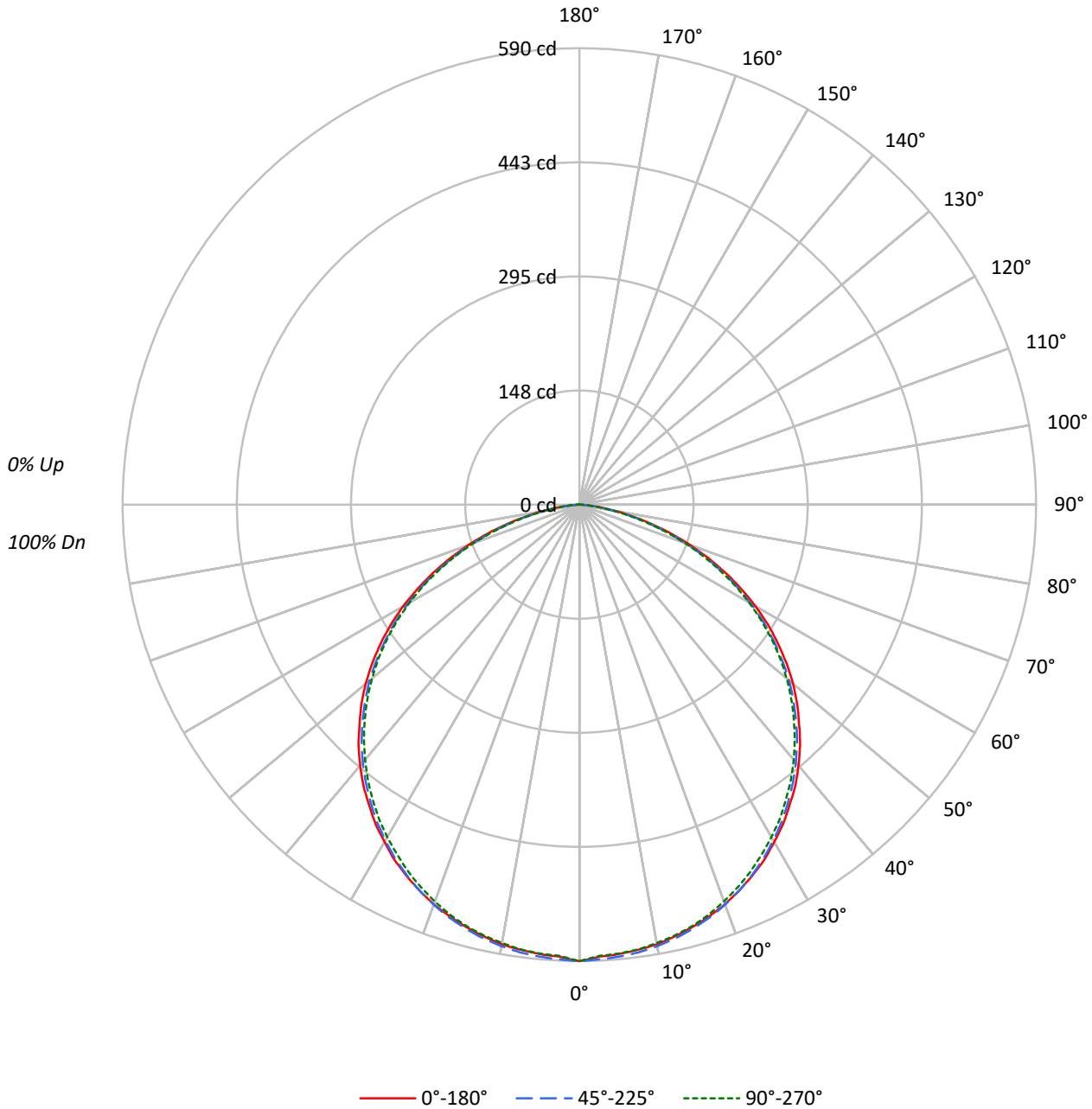
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1652.0 lumens
Efficiency: N/A
Efficacy: 111.6 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): 14.8
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°	1588	1588	1588
5°	1576	1585	1574
10°	1577	1584	1573
15°	1575	1581	1572
20°	1575	1576	1564
25°	1571	1568	1554
30°	1565	1558	1542
35°	1556	1544	1529
40°	1547	1528	1513
45°	1528	1507	1491
50°	1508	1481	1464
55°	1470	1436	1422
60°	1413	1374	1362
65°	1324	1285	1271
70°	1194	1146	1136
75°	1001	950	940
80°	727	677	659
85°	386	340	309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1528 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	3.4
10°-20°	160.6	9.7
20°-30°	243.9	14.8
30°-40°	295.1	17.9
40°-50°	306.6	18.6
50°-60°	274.6	16.6
60°-70°	200.2	12.1
70°-80°	98.6	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°	460.4	27.9
0°-40°	755.4	45.7
0°-60°	1336.6	80.9
0°-90°	1652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1652.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	583	590	587	592	583	55
15°	565	570	568	572	564	160
25°	529	532	528	531	523	244
35°	474	475	470	472	465	297
45°	402	401	396	397	392	310
55°	313	311	306	305	303	280
65°	208	206	202	200	200	205
75°	96	94	91	90	90	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°	590.2	590.2	590.2	590.2	590.2
2.5°	585.1	591.7	588.5	594.4	583.9
5°	583.4	589.7	586.8	592.4	582.7
7.5°	580.5	587.1	583.9	589.3	580.0
10°	577.3	583.1	579.7	585.1	575.6
12.5°	571.7	577.5	574.4	579.2	570.4
15°	565.3	570.4	567.5	572.4	564.1
17.5°	558.0	562.9	559.7	564.1	555.8
20°	549.9	553.8	550.4	554.1	546.0
22.5°	539.9	543.6	539.9	542.3	535.3
25°	529.2	531.8	528.2	530.6	523.3
27.5°	517.7	519.1	515.5	517.4	509.9
30°	503.5	505.2	501.3	503.8	496.4
32.5°	489.8	490.8	486.4	488.4	481.8
35°	473.7	474.7	470.0	472.0	465.4
37.5°	458.3	458.1	453.2	454.4	448.8
40°	440.5	440.2	435.1	436.1	430.7
42.5°	422.2	421.2	416.3	416.8	411.9
45°	401.6	401.1	396.0	396.7	391.9
47.5°	381.8	380.4	375.2	375.5	371.3
50°	360.3	358.1	353.7	353.3	349.6
52.5°	337.4	334.9	330.1	329.6	326.9
55°	313.4	310.8	306.1	305.4	303.2
57.5°	288.8	285.3	281.7	280.2	278.5
60°	262.6	259.4	255.3	253.8	253.1
62.5°	235.5	232.3	229.2	227.7	226.7
65°	207.9	205.5	201.8	200.3	199.6
67.5°	179.8	177.6	174.2	172.5	172.2
70°	151.7	149.5	145.6	144.6	144.4
72.5°	123.6	121.7	118.0	117.0	117.0
75°	96.3	94.5	91.4	90.4	90.4
77.5°	70.4	68.9	66.5	65.2	65.2
80°	46.9	45.9	43.7	42.8	42.5
82.5°	27.1	26.6	24.7	23.7	24.2
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)