

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: P973054

Luminaire Tested: FLR2-14-20HE-L830-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973054
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-CP125
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3000CCT & 80CRI with Clear Polycarbonate (0.125" thickness)

Light Source:
Ballast/Driver: -

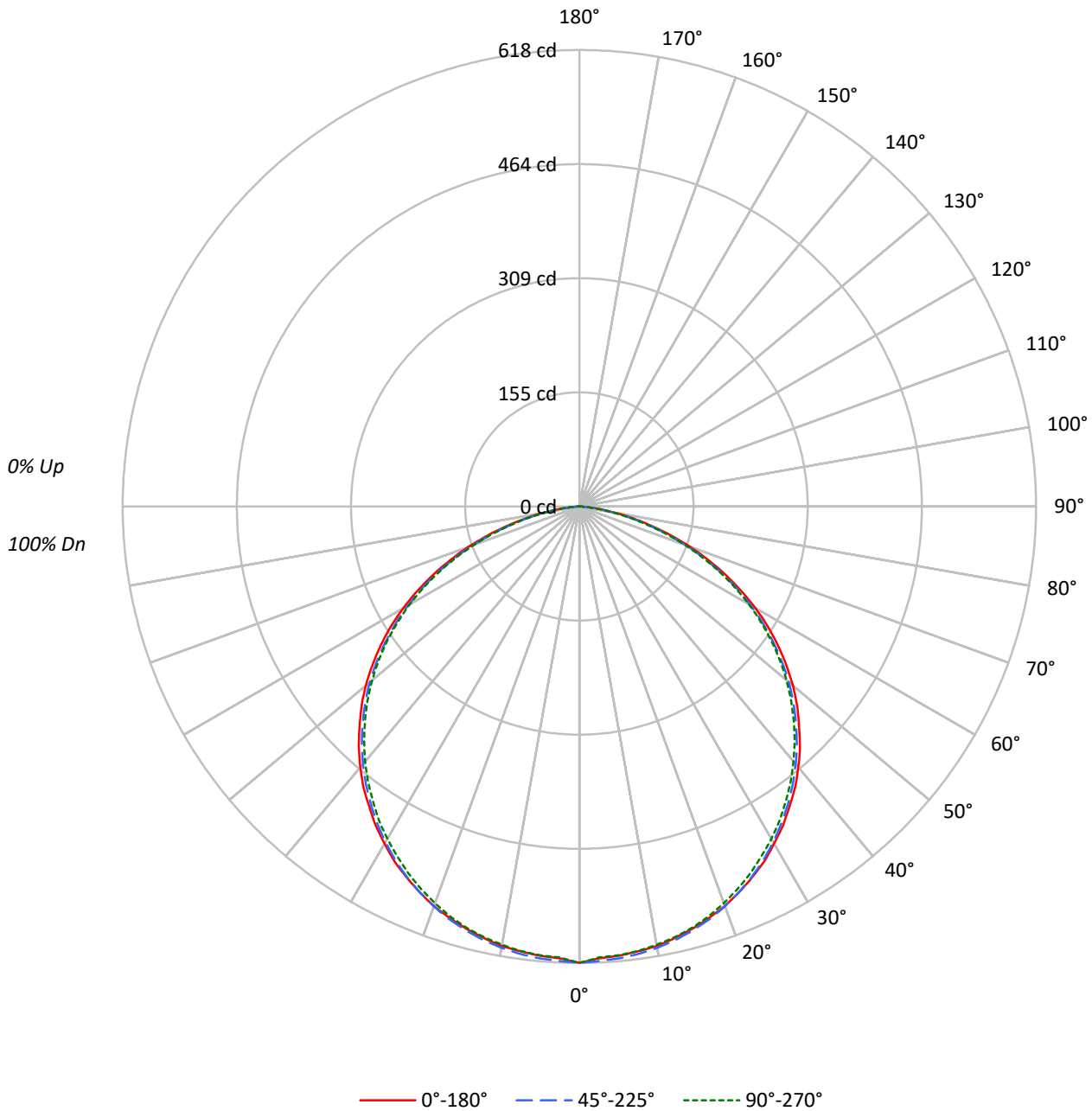
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1729.2 lumens
Efficiency: N/A
Efficacy: 116.8 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

TEST NUMBER: P973054
CATALOG NUMBER: FLR2-14-20HE-L830-CP125

Luminous Intensity Polar Plot





TEST NUMBER: P973054
 CATALOG NUMBER: FLR2-14-20HE-L830-CP125

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																				
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85																				
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71																				
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60																				
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																				
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44																				
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39																				
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34																				
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30																				
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27																				
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1662	1662	1662
5°	1649	1659	1647
10°	1651	1658	1646
15°	1648	1655	1645
20°	1648	1650	1637
25°	1645	1642	1626
30°	1638	1630	1615
35°	1629	1616	1600
40°	1620	1600	1584
45°	1600	1577	1561
50°	1579	1550	1532
55°	1539	1503	1489
60°	1480	1438	1426
65°	1386	1345	1330
70°	1249	1199	1189
75°	1048	994	984
80°	761	710	690
85°	401	355	324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1600 cd/sqm



TEST NUMBER: P973054
 CATALOG NUMBER: FLR2-14-20HE-L830-CP125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	3.4
10°-20°	168.1	9.7
20°-30°	255.3	14.8
30°-40°	308.8	17.9
40°-50°	321.0	18.6
50°-60°	287.4	16.6
60°-70°	209.6	12.1
70°-80°	103.2	6.0
80°-90°	17.3	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°	481.9	27.9
0°-40°	790.7	45.7
0°-60°	1399.1	80.9
0°-90°	1729.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1729.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	611	617	614	620	610	58
15°	592	597	594	599	590	167
25°	554	557	553	555	548	255
35°	496	497	492	494	487	311
45°	420	420	414	415	410	325
55°	328	325	320	320	317	293
65°	218	215	211	210	209	215
75°	101	99	96	95	95	107
85°	13	12	12	10	10	19
90°	0	0	0	0	0	



TEST NUMBER: P973054
 CATALOG NUMBER: FLR2-14-20HE-L830-CP125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	617.8	617.8	617.8	617.8	617.8
2.5°	612.4	619.3	616.0	622.2	611.2
5°	610.6	617.3	614.2	620.1	609.9
7.5°	607.6	614.5	611.2	616.8	607.1
10°	604.3	610.4	606.8	612.4	602.5
12.5°	598.4	604.5	601.2	606.3	597.1
15°	591.7	597.1	594.0	599.1	590.4
17.5°	584.1	589.2	585.8	590.4	581.8
20°	575.6	579.7	576.1	580.0	571.5
22.5°	565.1	569.0	565.1	567.7	560.3
25°	553.9	556.7	552.9	555.4	547.7
27.5°	541.9	543.4	539.6	541.6	533.7
30°	527.0	528.8	524.7	527.3	519.6
32.5°	512.7	513.7	509.1	511.2	504.3
35°	495.8	496.9	492.0	494.0	487.1
37.5°	479.7	479.5	474.4	475.6	469.7
40°	461.1	460.8	455.4	456.5	450.8
42.5°	441.9	440.9	435.7	436.3	431.1
45°	420.4	419.9	414.5	415.3	410.2
47.5°	399.7	398.1	392.8	393.0	388.7
50°	377.2	374.9	370.3	369.8	365.9
52.5°	353.1	350.6	345.5	345.0	342.1
55°	328.1	325.3	320.4	319.6	317.3
57.5°	302.3	298.7	294.8	293.3	291.5
60°	274.9	271.6	267.2	265.7	264.9
62.5°	246.5	243.2	239.9	238.3	237.3
65°	217.6	215.1	211.2	209.7	208.9
67.5°	188.2	185.9	182.3	180.5	180.3
70°	158.8	156.5	152.4	151.4	151.1
72.5°	129.4	127.3	123.5	122.5	122.5
75°	100.8	99.0	95.6	94.6	94.6
77.5°	73.6	72.1	69.6	68.3	68.3
80°	49.1	48.1	45.8	44.8	44.5
82.5°	28.4	27.9	25.8	24.8	25.3
85°	13.0	12.5	11.5	10.2	10.5
87.5°	3.3	3.1	2.3	1.8	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)