

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: P973079

Luminaire Tested: FLR2-14-20HE-L830-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973079
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-CA125
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3000CCT & 80CRI with Clear Aryalic (0.125" thickness)

Light Source:
Ballast/Driver: -

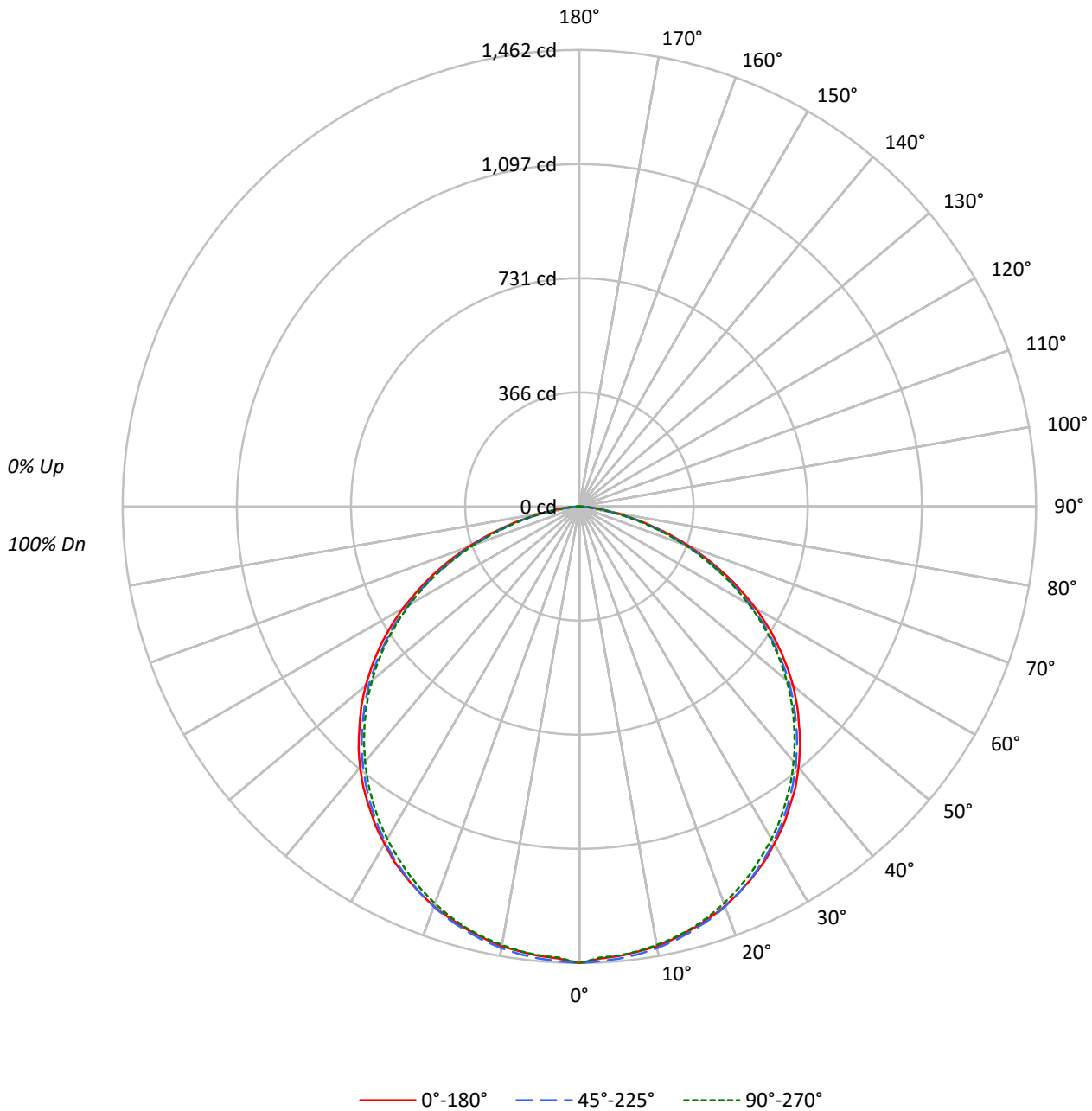
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4093.1 lumens
Efficiency: N/A
Efficacy: 276.6 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

TEST NUMBER: P973079
CATALOG NUMBER: FLR2-14-20HE-L830-CA125

Luminous Intensity Polar Plot





TEST NUMBER: P973079
 CATALOG NUMBER: FLR2-14-20HE-L830-CA125

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°	3935	3935	3935
5°	3905	3927	3900
10°	3908	3925	3897
15°	3902	3917	3894
20°	3902	3905	3874
25°	3893	3886	3850
30°	3876	3860	3822
35°	3856	3826	3788
40°	3834	3787	3749
45°	3787	3734	3695
50°	3738	3669	3626
55°	3643	3558	3524
60°	3502	3404	3375
65°	3280	3184	3149
70°	2958	2839	2814
75°	2480	2354	2329
80°	1801	1678	1632
85°	954	840	766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3787 cd/sqm



TEST NUMBER: P973079
 CATALOG NUMBER: FLR2-14-20HE-L830-CA125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.5	3.4
10°-20°	397.8	9.7
20°-30°	604.3	14.8
30°-40°	731.0	17.9
40°-50°	759.8	18.6
50°-60°	680.3	16.6
60°-70°	496.1	12.1
70°-80°	244.3	6.0
80°-90°	40.8	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°	1140.7	27.9
0°-40°	1871.7	45.7
0°-60°	3311.7	80.9
0°-90°	4093.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4093.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1462	1462	1462	1462	1462	
5°	1446	1461	1454	1468	1444	138
15°	1401	1413	1406	1418	1398	396
25°	1311	1318	1309	1315	1297	604
35°	1174	1176	1165	1169	1153	735
45°	995	994	981	983	971	768
55°	777	770	758	757	751	693
65°	515	509	500	496	494	509
75°	238	234	226	224	224	254
85°	31	30	27	24	25	45
90°	0	0	0	0	0	



TEST NUMBER: P973079
 CATALOG NUMBER: FLR2-14-20HE-L830-CA125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1462.4	1462.4	1462.4	1462.4	1462.4
2.5°	1449.7	1466.0	1458.2	1472.7	1446.7
5°	1445.5	1461.2	1453.9	1467.9	1443.6
7.5°	1438.2	1454.5	1446.7	1460.0	1437.0
10°	1430.3	1444.9	1436.4	1449.7	1426.1
12.5°	1416.4	1430.9	1423.1	1435.2	1413.4
15°	1400.7	1413.4	1406.1	1418.2	1397.6
17.5°	1382.5	1394.6	1386.8	1397.6	1377.1
20°	1362.5	1372.2	1363.7	1372.8	1352.9
22.5°	1337.7	1346.8	1337.7	1343.8	1326.2
25°	1311.1	1317.7	1308.7	1314.7	1296.6
27.5°	1282.6	1286.3	1277.2	1282.0	1263.3
30°	1247.5	1251.8	1242.1	1248.1	1230.0
32.5°	1213.6	1216.1	1205.2	1210.0	1193.7
35°	1173.7	1176.1	1164.6	1169.4	1153.1
37.5°	1135.5	1134.9	1122.8	1125.9	1111.9
40°	1091.4	1090.8	1078.0	1080.5	1067.2
42.5°	1046.0	1043.5	1031.4	1032.6	1020.5
45°	995.1	993.9	981.2	983.0	970.9
47.5°	946.1	942.5	929.7	930.4	920.1
50°	892.8	887.4	876.5	875.3	866.2
52.5°	835.9	829.9	817.8	816.6	809.9
55°	776.6	769.9	758.4	756.6	751.2
57.5°	715.5	707.0	697.9	694.3	690.0
60°	650.7	642.8	632.5	628.9	627.1
62.5°	583.5	575.6	567.8	564.1	561.7
65°	515.1	509.1	500.0	496.3	494.5
67.5°	445.5	440.1	431.6	427.3	426.7
70°	375.9	370.4	360.8	358.3	357.7
72.5°	306.3	301.4	292.4	289.9	289.9
75°	238.5	234.3	226.4	224.0	224.0
77.5°	174.3	170.7	164.6	161.6	161.6
80°	116.2	113.8	108.3	105.9	105.3
82.5°	67.2	66.0	61.1	58.7	59.9
85°	30.9	29.7	27.2	24.2	24.8
87.5°	7.9	7.3	5.4	4.2	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)