

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: P973064

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973064
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-CP250
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

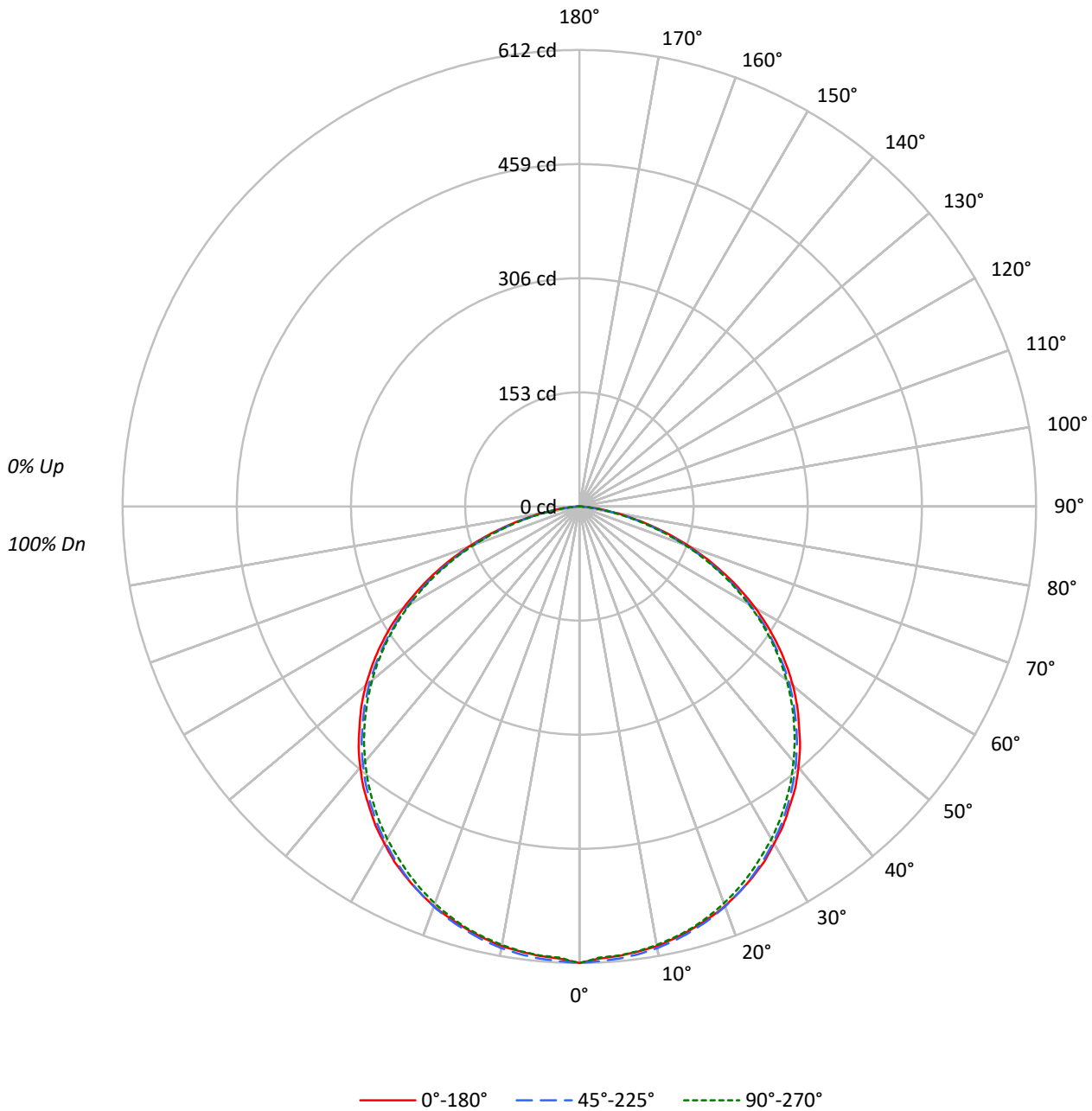
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1713.0 lumens
Efficiency: N/A
Efficacy: 115.7 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°	1647	1647	1647
5°	1634	1644	1632
10°	1636	1643	1631
15°	1633	1640	1630
20°	1633	1635	1621
25°	1629	1626	1611
30°	1622	1615	1600
35°	1614	1601	1585
40°	1605	1585	1569
45°	1585	1563	1547
50°	1564	1536	1518
55°	1525	1489	1475
60°	1466	1425	1413
65°	1373	1333	1318
70°	1238	1188	1178
75°	1038	985	974
80°	753	702	683
85°	398	352	321

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1585 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	3.4
10°-20°	166.5	9.7
20°-30°	252.9	14.8
30°-40°	306.0	17.9
40°-50°	318.0	18.6
50°-60°	284.7	16.6
60°-70°	207.7	12.1
70°-80°	102.2	6.0
80°-90°	17.1	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°	477.4	27.9
0°-40°	783.4	45.7
0°-60°	1386.1	80.9
0°-90°	1713.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1713.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	605	612	608	614	604	58
15°	586	592	588	594	585	166
25°	549	552	548	550	543	253
35°	491	492	487	489	483	308
45°	416	416	411	411	406	322
55°	325	322	317	317	314	290
65°	216	213	209	208	207	213
75°	100	98	95	94	94	106
85°	13	12	11	10	10	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	612.1	612.1	612.1	612.1	612.1
2.5°	606.7	613.6	610.3	616.4	605.5
5°	605.0	611.6	608.5	614.3	604.2
7.5°	601.9	608.8	605.5	611.0	601.4
10°	598.6	604.7	601.2	606.7	596.9
12.5°	592.8	598.9	595.6	600.7	591.5
15°	586.2	591.5	588.5	593.6	585.0
17.5°	578.6	583.7	580.4	585.0	576.3
20°	570.3	574.3	570.8	574.6	566.2
22.5°	559.9	563.7	559.9	562.4	555.1
25°	548.7	551.5	547.7	550.2	542.6
27.5°	536.8	538.3	534.5	536.6	528.7
30°	522.1	523.9	519.8	522.4	514.8
32.5°	507.9	509.0	504.4	506.4	499.6
35°	491.2	492.2	487.4	489.4	482.6
37.5°	475.3	475.0	469.9	471.2	465.4
40°	456.8	456.5	451.2	452.2	446.6
42.5°	437.8	436.8	431.7	432.2	427.1
45°	416.5	416.0	410.7	411.4	406.4
47.5°	396.0	394.4	389.1	389.4	385.1
50°	373.7	371.4	366.8	366.3	362.5
52.5°	349.9	347.3	342.3	341.7	339.0
55°	325.0	322.2	317.4	316.7	314.4
57.5°	299.4	295.9	292.1	290.6	288.8
60°	272.3	269.0	264.7	263.2	262.5
62.5°	244.2	240.9	237.6	236.1	235.1
65°	215.6	213.1	209.3	207.7	207.0
67.5°	186.5	184.2	180.6	178.9	178.6
70°	157.3	155.0	151.0	150.0	149.7
72.5°	128.2	126.2	122.4	121.3	121.3
75°	99.8	98.0	94.7	93.7	93.7
77.5°	73.0	71.4	68.9	67.6	67.6
80°	48.6	47.6	45.3	44.3	44.1
82.5°	28.1	27.6	25.6	24.6	25.1
85°	12.9	12.4	11.4	10.1	10.4
87.5°	3.3	3.0	2.3	1.8	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)