

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: P973144

Luminaire Tested: FLR2-14-20HE-L835-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973144
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-L835-CA080
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 80CRI with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

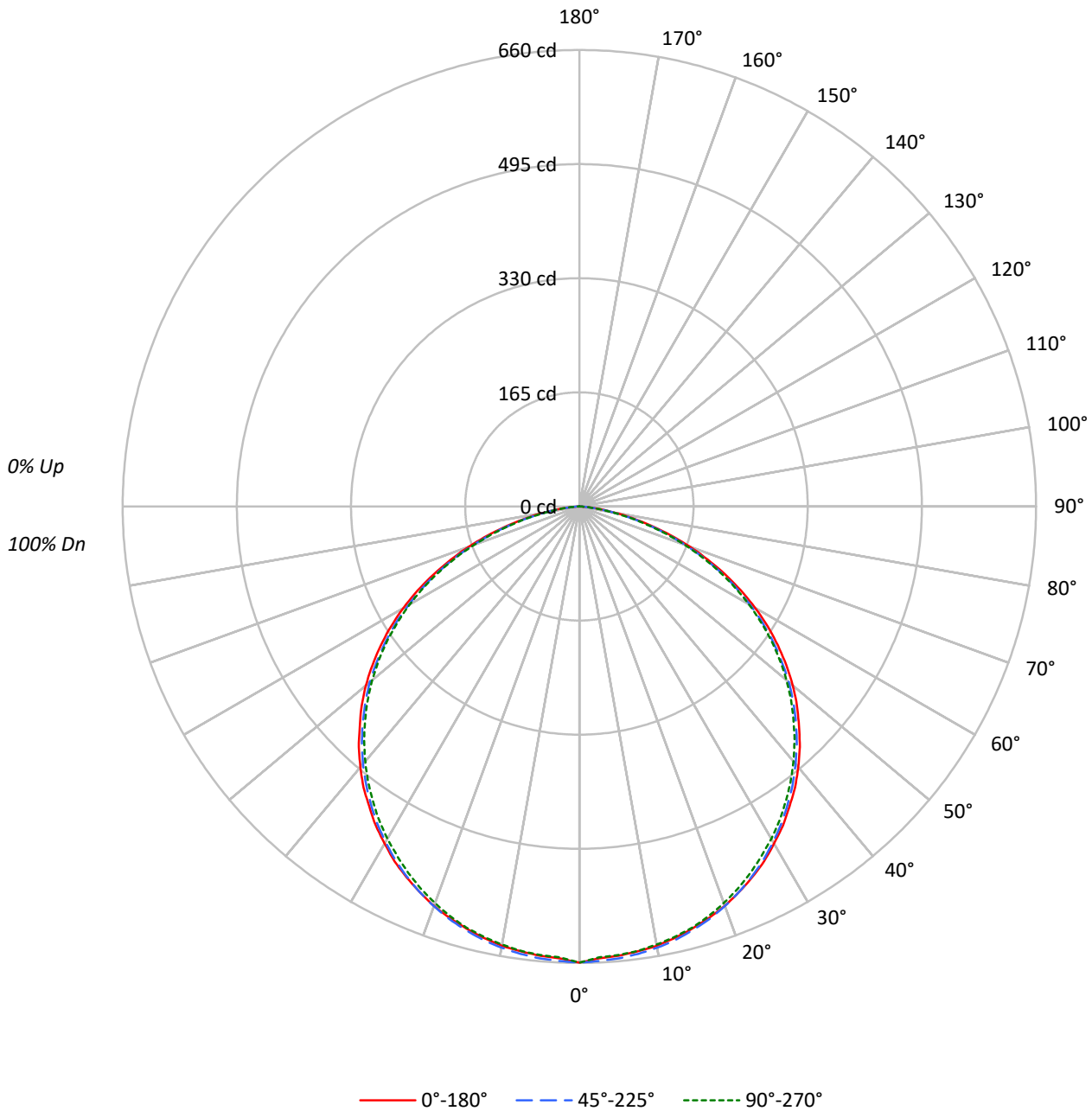
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1846.2 lumens
Efficiency: N/A
Efficacy: 124.7 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°	1775	1775	1775
5°	1761	1771	1759
10°	1763	1770	1758
15°	1760	1767	1756
20°	1760	1761	1747
25°	1756	1753	1736
30°	1748	1741	1724
35°	1739	1726	1709
40°	1729	1708	1691
45°	1708	1684	1666
50°	1686	1655	1636
55°	1643	1605	1590
60°	1580	1535	1522
65°	1479	1436	1421
70°	1334	1280	1270
75°	1119	1062	1050
80°	812	758	736
85°	429	380	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1708 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	3.4
10°-20°	179.4	9.7
20°-30°	272.6	14.8
30°-40°	329.7	17.9
40°-50°	342.7	18.6
50°-60°	306.8	16.6
60°-70°	223.8	12.1
70°-80°	110.2	6.0
80°-90°	18.4	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°	514.5	27.9
0°-40°	844.2	45.7
0°-60°	1493.7	80.9
0°-90°	1846.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1846.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	652	659	656	662	651	62
15°	632	638	634	640	630	178
25°	591	594	590	593	585	273
35°	529	530	525	528	520	332
45°	449	448	443	443	438	347
55°	350	347	342	341	339	313
65°	232	230	226	224	223	229
75°	108	106	102	101	101	115
85°	14	13	12	11	11	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	659.6	659.6	659.6	659.6	659.6
2.5°	653.9	661.2	657.7	664.2	652.5
5°	652.0	659.1	655.8	662.1	651.1
7.5°	648.7	656.1	652.5	658.5	648.1
10°	645.1	651.7	647.9	653.9	643.2
12.5°	638.9	645.4	641.9	647.3	637.5
15°	631.8	637.5	634.2	639.7	630.4
17.5°	623.6	629.0	625.5	630.4	621.1
20°	614.6	618.9	615.1	619.2	610.2
22.5°	603.4	607.5	603.4	606.1	598.2
25°	591.4	594.4	590.3	593.0	584.8
27.5°	578.5	580.2	576.1	578.2	569.8
30°	562.7	564.6	560.2	563.0	554.8
32.5°	547.4	548.5	543.6	545.8	538.4
35°	529.4	530.5	525.3	527.5	520.1
37.5°	512.2	511.9	506.4	507.8	501.5
40°	492.2	492.0	486.2	487.3	481.3
42.5°	471.8	470.7	465.2	465.8	460.3
45°	448.8	448.3	442.6	443.4	437.9
47.5°	426.7	425.1	419.4	419.6	415.0
50°	402.7	400.2	395.3	394.8	390.7
52.5°	377.0	374.3	368.8	368.3	365.3
55°	350.3	347.3	342.1	341.3	338.8
57.5°	322.7	318.9	314.8	313.1	311.2
60°	293.5	289.9	285.3	283.7	282.8
62.5°	263.2	259.6	256.1	254.5	253.4
65°	232.3	229.6	225.5	223.9	223.1
67.5°	200.9	198.5	194.7	192.7	192.5
70°	169.5	167.1	162.7	161.6	161.4
72.5°	138.1	136.0	131.9	130.8	130.8
75°	107.6	105.7	102.1	101.0	101.0
77.5°	78.6	77.0	74.3	72.9	72.9
80°	52.4	51.3	48.9	47.8	47.5
82.5°	30.3	29.8	27.6	26.5	27.0
85°	13.9	13.4	12.3	10.9	11.2
87.5°	3.5	3.3	2.5	1.9	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)