

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: P973428

Luminaire Tested: FLR2-14-20-L840-CA125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973428  
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: FLR2-14-20-L840-CA125  
Description: 1\*4 FLR-2.0 2000 LUMEN at 4000 CCT & 80CRI with Clear Acrylic (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

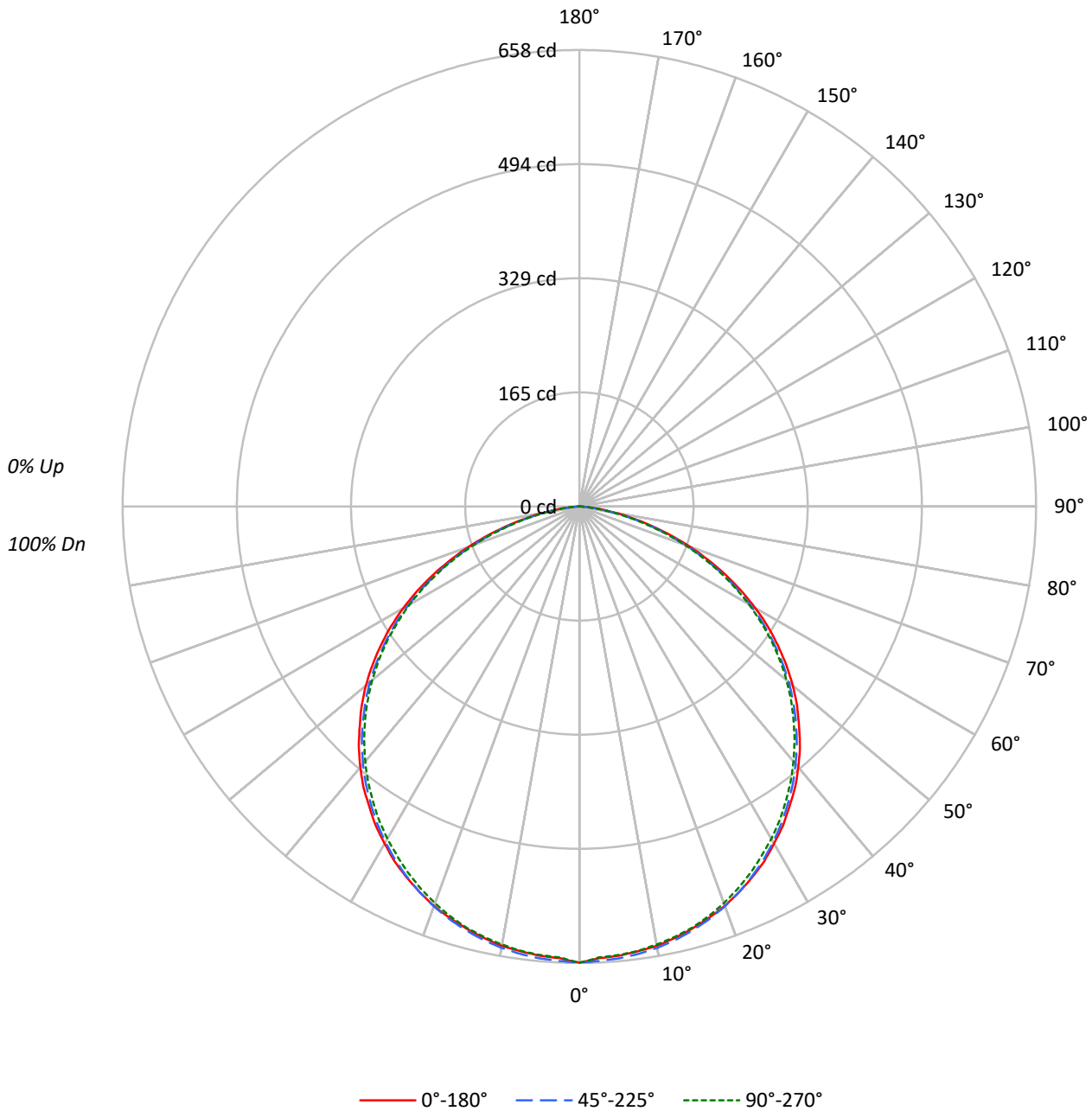
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1840.7 lumens  
Efficiency: N/A  
Efficacy: 112.2 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): 16.4  
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				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	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°	1770	1770	1770
5°	1756	1766	1754
10°	1758	1765	1752
15°	1755	1762	1751
20°	1755	1756	1742
25°	1751	1747	1731
30°	1743	1736	1719
35°	1734	1720	1704
40°	1724	1703	1686
45°	1703	1679	1662
50°	1681	1650	1631
55°	1638	1600	1585
60°	1575	1531	1518
65°	1475	1431	1416
70°	1330	1276	1266
75°	1116	1058	1047
80°	810	755	735
85°	429	377	346

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1703 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.3	3.4
10°-20°	178.9	9.7
20°-30°	271.8	14.8
30°-40°	328.8	17.9
40°-50°	341.7	18.6
50°-60°	305.9	16.6
60°-70°	223.1	12.1
70°-80°	109.9	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°	513.0	27.9
0°-40°	841.7	45.7
0°-60°	1489.3	80.9
0°-90°	1840.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	650	657	654	660	649	62
15°	630	636	632	638	628	178
25°	590	593	588	591	583	272
35°	528	529	524	526	519	331
45°	448	447	441	442	437	346
55°	349	346	341	340	338	312
65°	232	229	225	223	222	229
75°	107	105	102	101	101	114
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°	657.7	657.7	657.7	657.7	657.7
2.5°	651.9	659.3	655.8	662.3	650.6
5°	650.0	657.1	653.9	660.1	649.2
7.5°	646.8	654.1	650.6	656.6	646.2
10°	643.2	649.8	646.0	651.9	641.3
12.5°	637.0	643.5	640.0	645.4	635.6
15°	629.9	635.6	632.3	637.8	628.5
17.5°	621.7	627.2	623.6	628.5	619.3
20°	612.7	617.1	613.3	617.4	608.4
22.5°	601.6	605.7	601.6	604.3	596.4
25°	589.6	592.6	588.5	591.2	583.1
27.5°	576.8	578.4	574.4	576.5	568.1
30°	561.0	562.9	558.6	561.3	553.1
32.5°	545.8	546.9	542.0	544.2	536.8
35°	527.8	528.9	523.7	525.9	518.6
37.5°	510.7	510.4	505.0	506.3	500.1
40°	490.8	490.5	484.8	485.9	479.9
42.5°	470.4	469.3	463.8	464.4	458.9
45°	447.5	447.0	441.3	442.1	436.6
47.5°	425.5	423.8	418.1	418.4	413.8
50°	401.5	399.1	394.2	393.6	389.5
52.5°	375.9	373.2	367.8	367.2	364.2
55°	349.2	346.3	341.1	340.3	337.8
57.5°	321.8	317.9	313.9	312.2	310.3
60°	292.6	289.1	284.5	282.8	282.0
62.5°	262.4	258.9	255.3	253.7	252.6
65°	231.7	228.9	224.8	223.2	222.4
67.5°	200.3	197.9	194.1	192.2	191.9
70°	169.0	166.6	162.2	161.1	160.9
72.5°	137.7	135.6	131.5	130.4	130.4
75°	107.3	105.3	101.8	100.7	100.7
77.5°	78.4	76.8	74.0	72.7	72.7
80°	52.3	51.2	48.7	47.6	47.4
82.5°	30.2	29.7	27.5	26.4	26.9
85°	13.9	13.3	12.2	10.9	11.2
87.5°	3.5	3.3	2.4	1.9	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)