

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: P973416

Luminaire Tested: FLR2-14-20-L840-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973416
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-CP125
Description: 1*4 FLR-2.0 2000 LUMEN at 4000 CCT & 80CRI with Clear Polycarbonate (0.125" thickness)

Light Source:
Ballast/Driver: -

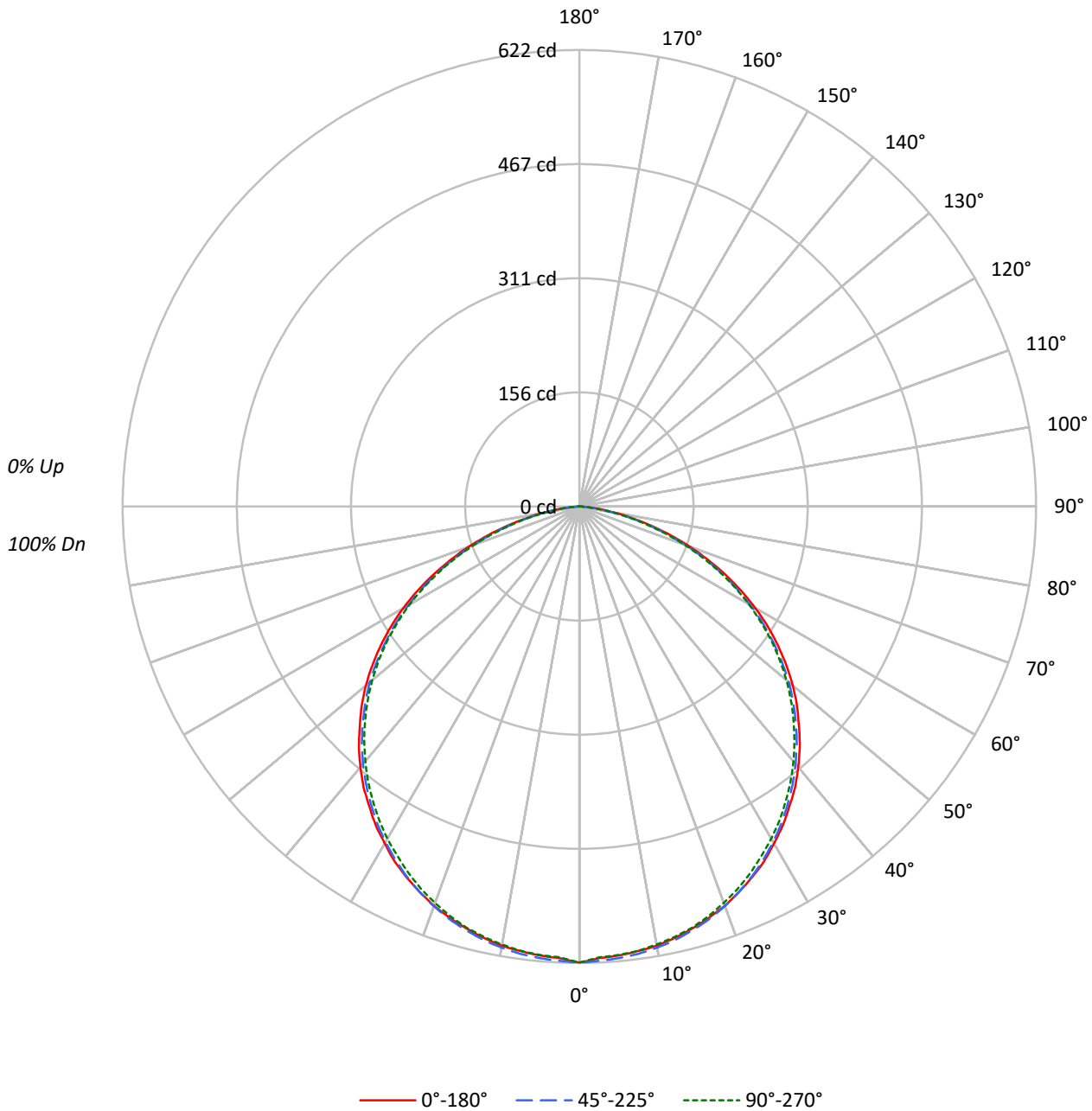
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1739.6 lumens
Efficiency: N/A
Efficacy: 106.1 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°	1672	1672	1672
5°	1659	1669	1657
10°	1661	1668	1656
15°	1658	1665	1655
20°	1658	1660	1647
25°	1654	1651	1636
30°	1647	1640	1624
35°	1639	1626	1610
40°	1629	1610	1593
45°	1609	1587	1570
50°	1589	1559	1541
55°	1549	1512	1498
60°	1489	1447	1434
65°	1394	1353	1338
70°	1257	1206	1196
75°	1054	1000	990
80°	766	713	694
85°	404	358	324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1609 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	3.4
10°-20°	169.1	9.7
20°-30°	256.9	14.8
30°-40°	310.7	17.9
40°-50°	322.9	18.6
50°-60°	289.1	16.6
60°-70°	210.9	12.1
70°-80°	103.8	6.0
80°-90°	17.4	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°	484.8	27.9
0°-40°	795.5	45.7
0°-60°	1407.5	80.9
0°-90°	1739.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1739.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	614	621	618	624	614	58
15°	595	601	598	603	594	168
25°	557	560	556	559	551	257
35°	499	500	495	497	490	312
45°	423	422	417	418	413	327
55°	330	327	322	322	319	295
65°	219	216	212	211	210	216
75°	101	100	96	95	95	108
85°	13	13	12	10	10	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	621.5	621.5	621.5	621.5	621.5
2.5°	616.1	623.1	619.7	625.9	614.9
5°	614.3	621.0	617.9	623.9	613.6
7.5°	611.2	618.2	614.9	620.5	610.7
10°	607.9	614.1	610.5	616.1	606.1
12.5°	602.0	608.2	604.8	610.0	600.7
15°	595.3	600.7	597.6	602.8	594.0
17.5°	587.6	592.7	589.4	594.0	585.3
20°	579.1	583.2	579.6	583.5	575.0
22.5°	568.5	572.4	568.5	571.1	563.7
25°	557.2	560.1	556.2	558.8	551.0
27.5°	545.1	546.7	542.8	544.9	536.9
30°	530.2	532.0	527.9	530.5	522.8
32.5°	515.8	516.8	512.2	514.3	507.3
35°	498.8	499.9	495.0	497.0	490.1
37.5°	482.6	482.4	477.2	478.5	472.6
40°	463.8	463.6	458.2	459.2	453.5
42.5°	444.5	443.5	438.4	438.9	433.7
45°	422.9	422.4	417.0	417.8	412.6
47.5°	402.1	400.6	395.2	395.4	391.0
50°	379.5	377.1	372.5	372.0	368.1
52.5°	355.3	352.7	347.6	347.0	344.2
55°	330.1	327.2	322.3	321.6	319.3
57.5°	304.1	300.5	296.6	295.1	293.3
60°	276.6	273.2	268.8	267.3	266.5
62.5°	248.0	244.7	241.3	239.8	238.7
65°	218.9	216.4	212.5	211.0	210.2
67.5°	189.3	187.0	183.4	181.6	181.4
70°	159.8	157.4	153.3	152.3	152.0
72.5°	130.2	128.1	124.3	123.2	123.2
75°	101.4	99.6	96.2	95.2	95.2
77.5°	74.1	72.5	70.0	68.7	68.7
80°	49.4	48.4	46.0	45.0	44.8
82.5°	28.6	28.0	26.0	25.0	25.5
85°	13.1	12.6	11.6	10.3	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)