

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: IRiS

Report Number: P1345093

Luminaire Tested: P3A13R309835DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345093
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R309835DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

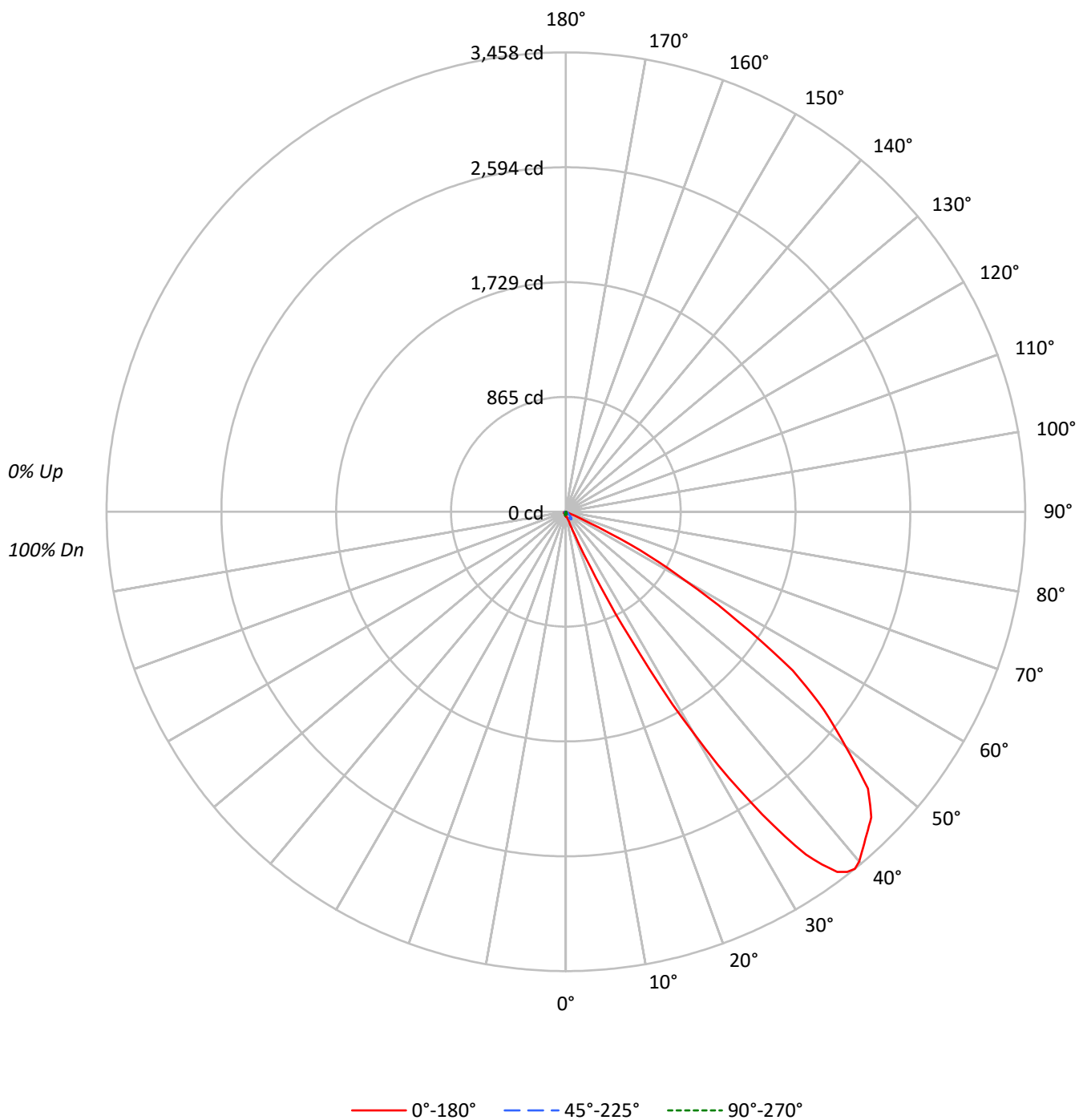
Lumens per Lamp: N/A
Luminaire Lumens: 899.0 lumens
Efficiency: N/A
Efficacy: 62.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	7631	7631	7631	7631	7631
5°	8166	7990	7506	6824	6670
10°	8929	7927	6569	5901	5722
15°	13076	7900	5494	4994	5153
20°	32880	8657	4247	4247	4760
25°	152622	10815	3291	3847	4403
30°	485872	14964	2481	3646	4406
35°	843097	18257	2034	3453	4470
40°	983271	18206	1517	3464	4551
45°	1008415	12932	1644	3752	4931
50°	937760	7232	1296	3889	5697
55°	797028	3747	1453	4358	6384
60°	460314	1009	1667	4649	6973
65°	93914	0	1972	5500	7835
70°	1475	513	2436	6283	9232
75°	1271	678	2542	6439	10929
80°	1010	1010	3788	7703	12375
85°	0	2013	7548	7548	15347

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1008415 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.1	0.4
10°-20°	9.1	1.0
20°-30°	51.8	5.8
30°-40°	242.1	26.9
40°-50°	342.4	38.1
50°-60°	210.7	23.4
60°-70°	32.1	3.6
70°-80°	5.1	0.6
80°-90°	2.5	0.3
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°	64.1	7.1
0°-40°	306.2	34.1
0°-60°	859.3	95.6
0°-90°	899.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	899.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	35	35	35	35	35	
5°	37	36	34	31	30	4
15°	58	35	24	22	23	21
25°	631	45	14	16	18	388
35°	3150	68	8	13	17	1890
45°	3252	42	5	12	16	2465
55°	2085	10	4	11	17	1774
65°	181	0	4	11	15	328
75°	2	1	3	8	13	2
85°	0	1	3	3	6	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
2.5°	35.6	35.6	36.3	36.3	35.6	36.3	36.3	36.3	34.8	34.1	32.6
5°	37.1	37.1	37.1	37.9	37.1	37.1	36.3	35.6	34.1	31.8	31.0
7.5°	38.6	38.6	37.9	38.6	37.9	37.9	36.3	34.8	32.6	30.3	28.8
10°	40.1	40.1	39.4	39.4	38.6	38.6	35.6	33.3	29.5	27.3	26.5
12.5°	44.7	44.7	43.9	43.2	41.7	40.9	34.8	31.0	26.5	24.2	23.5
15°	57.6	56.8	55.3	53.0	49.2	48.5	34.8	28.8	24.2	22.0	22.0
17.5°	78.8	78.0	75.7	69.7	62.9	60.6	34.8	25.7	21.2	19.7	19.7
20°	140.9	134.8	123.4	108.3	92.4	84.1	37.1	22.7	18.2	17.4	18.2
21°	184.0	178.0	163.6	138.6	110.6	101.5	38.6	22.0	17.4	16.7	18.2
22°	250.7	243.8	214.3	180.2	140.1	124.2	39.4	20.4	15.9	15.9	17.4
23°	349.9	338.5	288.5	234.0	174.9	152.2	40.9	19.7	15.1	15.9	16.7
24°	458.2	448.3	391.5	309.7	223.4	190.8	42.4	18.9	14.4	14.4	15.9
25°	630.8	619.5	518.7	390.8	283.2	229.5	44.7	17.4	13.6	13.6	15.9
26°	854.2	802.0	667.9	503.6	349.1	287.8	47.0	16.7	12.9	13.6	15.1
27°	1066.2	1023.1	872.4	646.0	431.6	353.6	50.0	15.9	12.1	12.9	15.1
28°	1344.9	1284.3	1094.3	817.1	543.7	427.9	53.0	15.1	11.4	12.9	14.4
29°	1656.9	1572.1	1342.7	1009.5	670.2	511.2	56.0	14.4	10.6	12.1	14.4
30°	1918.9	1839.4	1610.0	1237.4	815.6	621.0	59.1	13.6	9.8	12.1	14.4
31°	2226.4	2106.0	1828.1	1430.5	940.5	730.8	62.1	12.1	9.1	11.4	13.6
32°	2475.5	2391.5	2096.2	1648.6	1104.9	851.9	64.4	11.4	9.1	11.4	13.6
33°	2716.4	2603.5	2318.0	1857.6	1253.3	976.1	66.6	10.6	8.3	10.6	13.6
34°	2946.6	2842.8	2527.8	2026.5	1393.4	1094.3	68.2	9.1	8.3	10.6	12.9
35°	3149.5	3029.1	2712.6	2191.6	1537.3	1201.8	68.2	8.3	7.6	9.8	12.9
36°	3281.3	3195.0	2873.1	2354.4	1667.5	1304.0	68.2	7.6	6.8	9.8	12.1
37°	3394.1	3293.4	3001.9	2479.3	1763.7	1385.8	68.2	6.8	6.8	9.8	12.1
38°	3440.3	3354.0	3090.5	2589.9	1853.8	1469.1	67.4	6.1	6.1	9.1	12.1
39°	3458.5	3381.3	3157.1	2669.4	1920.5	1525.2	65.9	5.3	6.1	9.1	12.1
40°	3435.0	3376.7	3191.2	2720.9	1973.5	1566.1	63.6	4.5	5.3	9.1	12.1
42.5°	3338.1	3299.5	3183.6	2772.4	2018.9	1596.3	55.3	3.0	5.3	8.3	12.1
45°	3251.8	3209.4	3107.1	2718.6	1959.8	1536.5	41.7	1.5	5.3	8.3	12.1
47.5°	3084.4	3057.9	2977.6	2581.6	1830.3	1401.7	29.5	0.8	4.5	7.6	11.4
50°	2748.9	2723.9	2617.9	2241.5	1574.4	1185.1	21.2	0.8	3.8	7.6	11.4
52.5°	2448.3	2421.8	2269.6	1863.7	1209.4	868.6	13.6	0.8	3.8	7.6	11.4
55°	2084.8	2038.6	1838.7	1414.6	857.2	582.3	9.8	0.8	3.8	6.8	11.4
57.5°	1543.3	1475.9	1297.2	964.8	493.7	315.8	5.3	0.8	3.8	6.8	11.4
60°	1049.6	1009.5	811.8	508.9	210.5	133.3	2.3	0.8	3.8	6.8	10.6
62.5°	636.1	585.4	408.2	216.6	90.9	60.6	0.0	1.5	3.8	6.8	10.6
65°	181.0	160.5	106.8	49.2	25.7	19.7	0.0	1.5	3.8	6.8	10.6
67.5°	6.1	6.1	6.1	5.3	3.8	3.8	0.8	1.5	3.8	6.8	9.8
70°	2.3	2.3	2.3	1.5	1.5	0.8	0.8	1.5	3.8	6.1	9.8
72.5°	1.5	1.5	1.5	1.5	0.8	0.8	0.8	1.5	3.0	5.3	9.1
75°	1.5	1.5	1.5	0.8	0.8	0.8	0.8	2.3	3.0	5.3	7.6
77.5°	1.5	1.5	1.5	0.8	0.8	0.8	0.8	2.3	3.0	4.5	7.6
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.0	4.5	6.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.8	2.3	3.0	3.0	4.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.3	3.0	2.3	3.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.3	2.3	2.3	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	34.8	34.8
2.5°	32.6	32.6
5°	30.3	30.3
7.5°	28.0	28.0
10°	25.7	25.7
12.5°	24.2	24.2
15°	22.0	22.7
17.5°	20.4	21.2
20°	19.7	20.4
21°	19.7	20.4
22°	18.9	19.7
23°	18.9	19.7
24°	18.2	18.9
25°	17.4	18.2
26°	17.4	18.2
27°	17.4	18.2
28°	16.7	18.2
29°	16.7	17.4
30°	16.7	17.4
31°	15.9	17.4
32°	15.9	17.4
33°	15.9	16.7
34°	15.1	16.7
35°	15.1	16.7
36°	15.1	16.7
37°	15.1	15.9
38°	15.1	16.7
39°	15.1	15.9
40°	15.1	15.9
42.5°	15.1	15.9
45°	15.1	15.9
47.5°	15.1	16.7
50°	15.1	16.7
52.5°	15.1	16.7
55°	15.1	16.7
57.5°	15.1	15.9
60°	15.1	15.9
62.5°	14.4	15.9
65°	14.4	15.1
67.5°	14.4	15.1
70°	13.6	14.4
72.5°	12.9	13.6
75°	11.4	12.9
77.5°	10.6	11.4
80°	9.1	9.8

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	7.6	7.6
85°	5.3	6.1
87.5°	3.0	3.0
90°	0.0	0.0

(END OF REPORT)