

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: P1335154

Luminaire Tested: P3A02R309835DE010 E3A451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335154
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: P3A02R309835DE010 E3A451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 98CRI , E3A451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

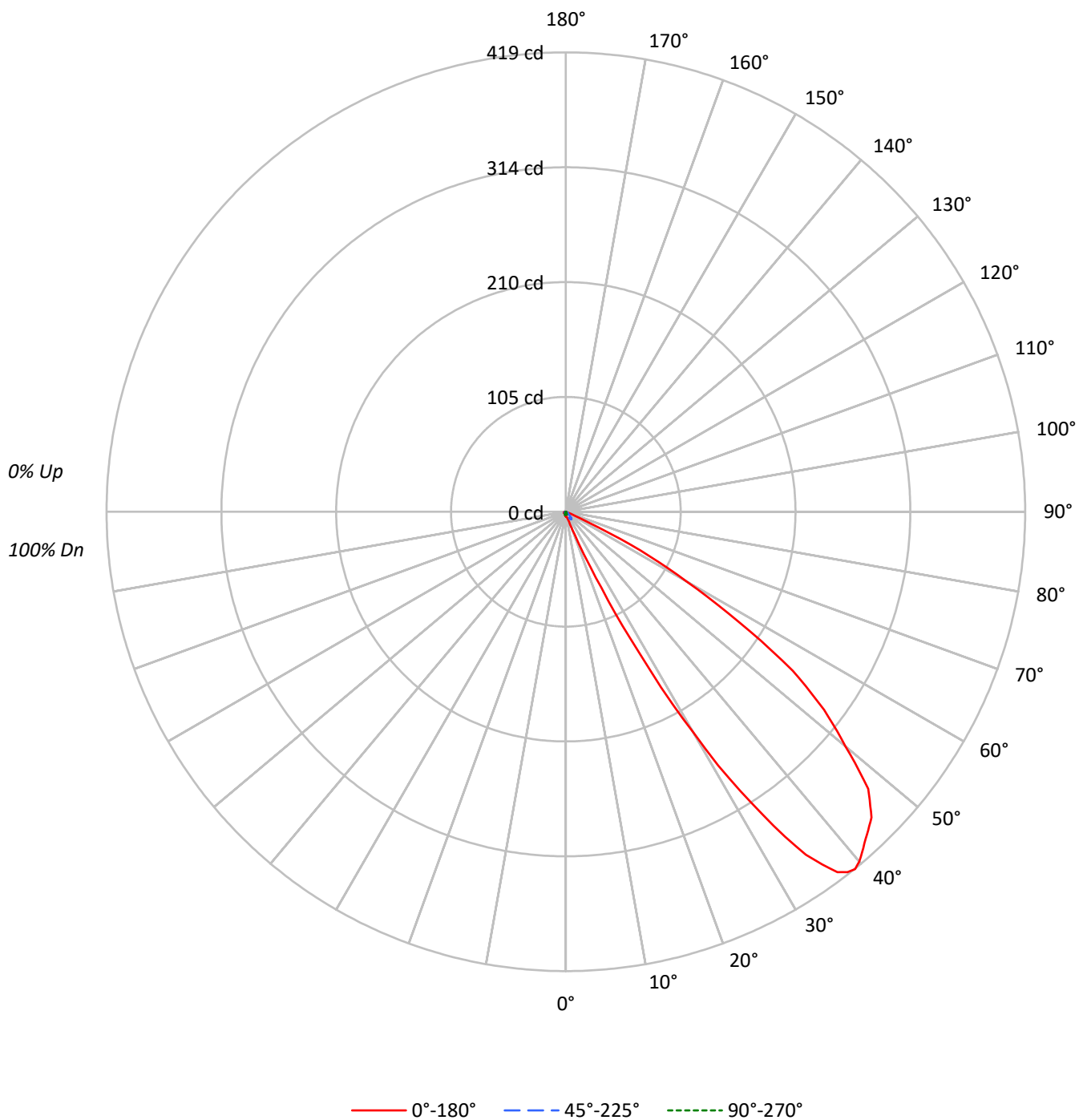
Lumens per Lamp: N/A
Luminaire Lumens: 109.0 lumens
Efficiency: N/A
Efficacy: 30.3 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	921	921	921	921	921
5°	991	969	902	836	814
10°	1091	957	802	713	690
15°	1589	953	658	613	636
20°	3990	1050	513	513	583
25°	18509	1307	411	460	532
30°	58920	1823	304	430	532
35°	102232	2222	241	428	535
40°	119223	2204	172	429	544
45°	122276	1551	186	465	589
50°	113702	887	171	478	682
55°	96647	459	191	535	765
60°	55829	132	219	570	833
65°	11363	0	259	675	934
70°	192	64	321	769	1090
75°	169	85	339	763	1356
80°	126	126	505	884	1515
85°	0	252	1006	1006	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 122276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.4	0.3
10°-20°	1.1	1.0
20°-30°	6.3	5.8
30°-40°	29.4	26.9
40°-50°	41.5	38.1
50°-60°	25.5	23.4
60°-70°	3.9	3.6
70°-80°	0.6	0.6
80°-90°	0.3	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°	7.8	7.1
0°-40°	37.1	34.1
0°-60°	104.2	95.6
0°-90°	109.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	109.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4	4	4	4	4	
5°	4	4	4	4	4	0
15°	7	4	3	3	3	2
25°	76	5	2	2	2	47
35°	382	8	1	2	2	229
45°	394	5	1	2	2	299
55°	253	1	0	1	2	215
65°	22	0	0	1	2	40
75°	0	0	0	1	2	0
85°	0	0	0	0	1	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°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
2.5°	4.3	4.3	4.4	4.4	4.3	4.4	4.4	4.4	4.2	4.1	3.9
5°	4.5	4.5	4.5	4.6	4.5	4.5	4.4	4.3	4.1	3.9	3.8
7.5°	4.7	4.7	4.6	4.7	4.6	4.6	4.4	4.2	3.9	3.7	3.5
10°	4.9	4.9	4.8	4.8	4.7	4.7	4.3	4.0	3.6	3.3	3.2
12.5°	5.4	5.4	5.3	5.2	5.0	5.0	4.2	3.8	3.2	2.9	2.8
15°	7.0	6.9	6.7	6.4	6.0	5.9	4.2	3.5	2.9	2.7	2.7
17.5°	9.5	9.5	9.2	8.4	7.6	7.3	4.2	3.1	2.6	2.4	2.4
20°	17.1	16.3	15.0	13.1	11.2	10.2	4.5	2.8	2.2	2.1	2.2
21°	22.3	21.6	19.8	16.8	13.4	12.3	4.7	2.7	2.1	2.0	2.2
22°	30.4	29.6	26.0	21.9	17.0	15.1	4.8	2.5	1.9	1.9	2.1
23°	42.4	41.0	35.0	28.4	21.2	18.5	5.0	2.4	1.8	1.9	2.0
24°	55.5	54.4	47.5	37.6	27.1	23.1	5.1	2.3	1.7	1.7	1.9
25°	76.5	75.1	62.9	47.4	34.3	27.8	5.4	2.1	1.7	1.7	1.9
26°	103.6	97.2	81.0	61.1	42.3	34.9	5.7	2.0	1.6	1.7	1.8
27°	129.3	124.0	105.8	78.3	52.3	42.9	6.1	1.9	1.5	1.6	1.8
28°	163.1	155.7	132.7	99.1	65.9	51.9	6.4	1.8	1.4	1.6	1.7
29°	200.9	190.6	162.8	122.4	81.3	62.0	6.8	1.7	1.3	1.5	1.7
30°	232.7	223.0	195.2	150.0	98.9	75.3	7.2	1.7	1.2	1.5	1.7
31°	269.9	255.3	221.6	173.4	114.0	88.6	7.5	1.5	1.1	1.4	1.7
32°	300.1	290.0	254.1	199.9	134.0	103.3	7.8	1.4	1.1	1.4	1.7
33°	329.3	315.7	281.1	225.2	152.0	118.4	8.1	1.3	1.0	1.3	1.7
34°	357.3	344.7	306.5	245.7	168.9	132.7	8.3	1.1	1.0	1.3	1.6
35°	381.9	367.3	328.9	265.7	186.4	145.7	8.3	1.0	0.9	1.2	1.6
36°	397.8	387.4	348.4	285.5	202.2	158.1	8.3	0.9	0.8	1.2	1.5
37°	411.5	399.3	364.0	300.6	213.8	168.0	8.3	0.8	0.8	1.2	1.5
38°	417.1	406.7	374.7	314.0	224.8	178.1	8.2	0.7	0.7	1.1	1.5
39°	419.3	410.0	382.8	323.7	232.8	184.9	8.0	0.6	0.7	1.1	1.5
40°	416.5	409.4	386.9	329.9	239.3	189.9	7.7	0.6	0.6	1.1	1.5
42.5°	404.7	400.0	386.0	336.1	244.8	193.6	6.7	0.4	0.6	1.0	1.5
45°	394.3	389.1	376.7	329.6	237.6	186.3	5.0	0.2	0.6	1.0	1.5
47.5°	374.0	370.8	361.0	313.0	221.9	170.0	3.6	0.1	0.6	0.9	1.4
50°	333.3	330.3	317.4	271.8	190.9	143.7	2.6	0.1	0.5	0.9	1.4
52.5°	296.8	293.6	275.2	226.0	146.6	105.3	1.7	0.1	0.5	0.9	1.4
55°	252.8	247.2	222.9	171.5	103.9	70.6	1.2	0.1	0.5	0.8	1.4
57.5°	187.1	179.0	157.3	117.0	59.9	38.3	0.6	0.1	0.5	0.8	1.4
60°	127.3	122.4	98.4	61.7	25.5	16.2	0.3	0.1	0.5	0.8	1.3
62.5°	77.1	71.0	49.5	26.3	11.0	7.3	0.0	0.2	0.5	0.8	1.3
65°	21.9	19.5	12.9	6.0	3.1	2.4	0.0	0.2	0.5	0.8	1.3
67.5°	0.7	0.7	0.7	0.6	0.5	0.5	0.1	0.2	0.5	0.8	1.2
70°	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.5	0.7	1.2
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.6	1.1
75°	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.4	0.6	0.9
77.5°	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.4	0.6	0.9
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.6	0.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.3	0.4	0.4	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.3	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	0.2
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°	4.2	4.2
2.5°	3.9	3.9
5°	3.7	3.7
7.5°	3.4	3.4
10°	3.1	3.1
12.5°	2.9	2.9
15°	2.7	2.8
17.5°	2.5	2.6
20°	2.4	2.5
21°	2.4	2.5
22°	2.3	2.4
23°	2.3	2.4
24°	2.2	2.3
25°	2.1	2.2
26°	2.1	2.2
27°	2.1	2.2
28°	2.0	2.2
29°	2.0	2.1
30°	2.0	2.1
31°	1.9	2.1
32°	1.9	2.1
33°	1.9	2.0
34°	1.8	2.0
35°	1.8	2.0
36°	1.8	2.0
37°	1.8	1.9
38°	1.8	2.0
39°	1.8	1.9
40°	1.8	1.9
42.5°	1.8	1.9
45°	1.8	1.9
47.5°	1.8	2.0
50°	1.8	2.0
52.5°	1.8	2.0
55°	1.8	2.0
57.5°	1.8	1.9
60°	1.8	1.9
62.5°	1.7	1.9
65°	1.7	1.8
67.5°	1.7	1.8
70°	1.7	1.7
72.5°	1.6	1.7
75°	1.4	1.6
77.5°	1.3	1.4
80°	1.1	1.2

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	0.9	0.9
85°	0.6	0.7
87.5°	0.4	0.4
90°	0.0	0.0

(END OF REPORT)