

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: P1335508

Luminaire Tested: P3A02R359840DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335508
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359840DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

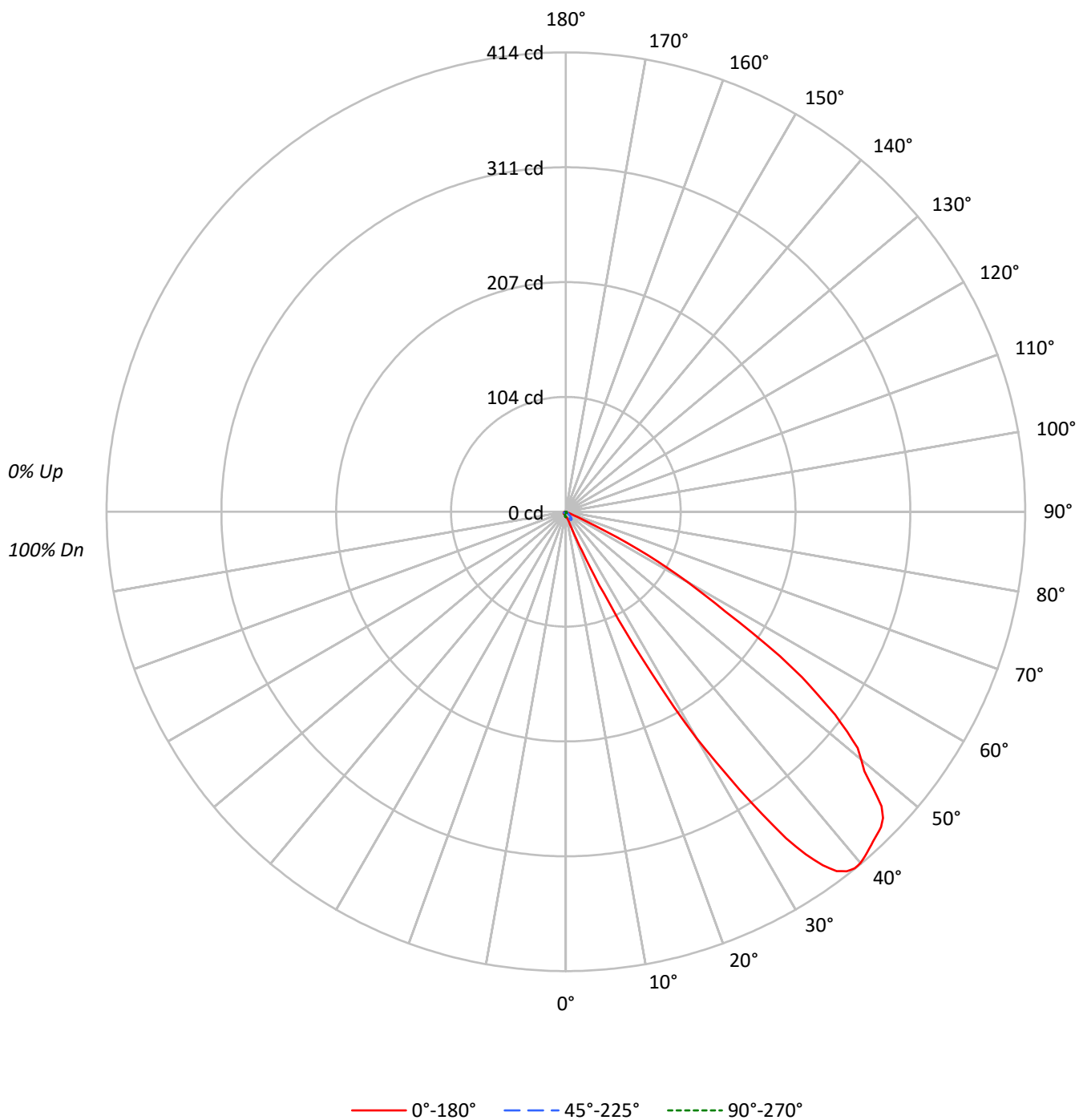
Lumens per Lamp: N/A
Luminaire Lumens: 103.0 lumens
Efficiency: N/A
Efficacy: 28.6 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.67 / 1.42
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42
8	57	42	33	27	55	41	33	27	40	32	27		39	32	26		38
9	52	38	29	23	50	37	29	23	36	28	23		35	28	22		34
10	48	34	25	19	46	33	25	19	32	25	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1031	1031	1031	1031	1031
5°	1123	1101	1013	924	902
10°	1180	1069	913	779	779
15°	1680	1044	749	681	704
20°	4224	1120	583	583	653
25°	19646	1452	460	532	605
30°	59705	1950	354	506	608
35°	100893	2275	294	482	589
40°	118279	2233	229	487	630
45°	124571	1582	217	527	682
50°	118580	955	205	546	751
55°	99361	382	229	612	879
60°	55610	88	263	702	965
65°	9599	52	259	778	1090
70°	192	64	321	833	1282
75°	169	85	424	932	1440
80°	126	126	505	1010	1642
85°	0	252	1006	1258	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 125446 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.4	0.4
10°-20°	1.2	1.2
20°-30°	6.3	6.1
30°-40°	27.3	26.5
40°-50°	38.9	37.8
50°-60°	24.1	23.4
60°-70°	3.7	3.6
70°-80°	0.7	0.7
80°-90°	0.4	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°	8.0	7.7
0°-40°	35.3	34.2
0°-60°	98.3	95.4
0°-90°	103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	103.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	5	5	5	4	4	0
15°	7	5	3	3	3	3
25°	81	6	2	2	2	49
35°	377	8	1	2	2	226
45°	402	5	1	2	2	303
55°	260	1	1	2	2	221
65°	18	0	0	2	2	38
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°	25°	30°	45°	67.5°	90°	112.5°
0°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
2.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.7	4.6
5°	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.0	4.8	4.6	4.4
7.5°	5.2	5.2	5.1	5.1	5.1	5.1	5.0	4.9	4.7	4.4	4.1
10°	5.3	5.3	5.3	5.3	5.2	5.1	5.0	4.8	4.6	4.1	3.8
12.5°	6.0	6.0	5.9	5.7	5.5	5.3	5.1	4.7	4.2	3.7	3.4
15°	7.4	7.3	7.2	6.9	6.5	6.0	5.7	4.6	3.8	3.3	3.1
17.5°	10.4	10.2	9.9	9.0	8.2	7.3	6.6	4.6	3.4	2.9	2.7
20°	18.1	18.2	16.3	14.0	12.2	10.1	8.3	4.8	3.1	2.5	2.4
22.5°	37.8	36.4	31.7	26.3	20.1	15.5	11.7	5.3	2.7	2.1	2.1
25°	81.2	75.5	64.2	48.5	34.2	24.3	17.0	6.0	2.4	1.9	2.0
27.5°	148.2	143.1	120.5	90.7	60.3	36.6	23.1	6.8	2.1	1.6	1.8
30°	235.8	221.7	192.2	148.8	100.7	56.1	31.0	7.7	1.8	1.4	1.7
31°	263.1	256.6	220.7	172.1	118.0	66.6	34.3	8.0	1.7	1.4	1.6
32°	295.6	284.1	251.9	197.7	135.6	76.0	38.3	8.3	1.6	1.2	1.6
33°	324.6	313.4	274.3	220.2	153.3	86.7	42.6	8.4	1.4	1.2	1.5
34°	355.1	339.8	301.1	243.7	171.5	98.2	46.5	8.5	1.3	1.1	1.5
35°	376.9	361.7	324.1	262.3	187.3	108.4	51.0	8.5	1.2	1.1	1.4
36°	393.9	380.5	344.0	281.4	202.9	117.6	54.5	8.5	1.0	1.0	1.4
37°	405.5	392.7	357.4	297.9	214.8	125.8	57.6	8.5	0.9	1.0	1.4
38°	411.2	400.6	370.3	309.9	226.3	132.2	60.2	8.3	0.8	0.9	1.3
39°	413.6	404.9	378.2	320.0	235.0	137.8	62.0	8.1	0.7	0.9	1.3
40°	413.2	405.7	382.7	327.0	241.9	141.6	63.0	7.8	0.7	0.8	1.3
41°	411.1	404.6	385.0	333.0	246.1	144.2	63.3	7.5	0.6	0.8	1.2
42°	408.6	402.7	385.8	336.1	248.8	145.0	62.6	7.2	0.6	0.7	1.2
43°	406.1	400.6	385.8	337.1	249.5	144.5	61.4	6.5	0.5	0.7	1.2
44°	404.1	398.9	384.6	336.9	248.1	142.4	59.1	5.8	0.4	0.7	1.2
45°	401.7	396.6	383.0	335.1	245.4	138.7	56.3	5.1	0.3	0.7	1.2
46°	397.4	393.4	380.2	331.5	241.1	133.7	52.8	4.6	0.2	0.7	1.1
47°	389.1	385.7	374.8	326.1	235.4	127.8	49.2	4.2	0.2	0.7	1.1
48°	372.5	372.4	364.0	316.0	226.4	120.3	45.4	3.7	0.2	0.7	1.1
49°	356.4	354.7	344.3	298.4	213.5	111.4	41.4	3.3	0.1	0.7	1.1
50°	347.6	343.9	326.8	277.5	196.9	99.0	37.1	2.8	0.1	0.6	1.1
51°	338.4	333.1	313.0	258.8	177.2	87.1	32.4	2.2	0.1	0.6	1.0
52°	321.7	316.8	294.2	240.8	158.1	74.9	28.0	1.9	0.1	0.6	1.1
53°	303.8	296.7	272.2	221.1	141.2	64.2	23.4	1.6	0.1	0.6	1.0
54°	281.2	278.0	249.8	196.9	121.5	53.7	19.2	1.3	0.1	0.6	1.0
55°	259.9	255.2	225.9	172.2	103.7	44.1	16.1	1.0	0.1	0.6	1.0
56°	232.7	225.8	198.3	149.5	85.5	35.5	13.6	0.8	0.1	0.6	1.0
57°	200.4	192.9	171.3	124.3	67.1	27.1	11.3	0.7	0.1	0.6	1.0
58°	169.5	163.1	139.8	96.0	50.6	18.8	9.4	0.5	0.1	0.5	1.0
59°	146.4	139.4	116.3	73.8	35.1	13.9	7.1	0.4	0.1	0.6	1.0
60°	126.8	117.7	93.6	57.2	25.1	9.9	5.2	0.2	0.2	0.6	1.0
62.5°	73.1	64.5	44.7	23.2	10.3	5.1	2.5	0.1	0.2	0.6	1.0
65°	18.5	16.5	10.7	5.0	2.9	1.8	0.9	0.1	0.2	0.5	0.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	0.7	0.7	0.7	0.6	0.5	0.4	0.2	0.1	0.2	0.5	0.9
70°	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.8
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.7
75°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.7
77.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.7
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.6
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.5
85°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.3
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):

	135°	157.5°	180°
0°	4.7	4.7	4.7
2.5°	4.5	4.5	4.5
5°	4.2	4.2	4.1
7.5°	3.9	3.8	3.8
10°	3.5	3.5	3.5
12.5°	3.3	3.3	3.3
15°	3.0	3.1	3.1
17.5°	2.7	2.9	2.9
20°	2.5	2.7	2.8
22.5°	2.3	2.5	2.6
25°	2.2	2.4	2.5
27.5°	2.0	2.3	2.5
30°	2.0	2.2	2.4
31°	2.0	2.2	2.3
32°	1.9	2.2	2.3
33°	1.9	2.2	2.3
34°	1.9	2.1	2.3
35°	1.8	2.1	2.2
36°	1.8	2.1	2.2
37°	1.8	2.1	2.3
38°	1.8	2.1	2.2
39°	1.7	2.1	2.2
40°	1.7	2.1	2.2
41°	1.7	2.1	2.2
42°	1.7	2.1	2.2
43°	1.7	2.1	2.2
44°	1.7	2.0	2.2
45°	1.7	2.0	2.2
46°	1.7	2.1	2.2
47°	1.7	2.1	2.3
48°	1.7	2.0	2.2
49°	1.6	2.0	2.2
50°	1.6	2.0	2.2
51°	1.6	2.1	2.3
52°	1.6	2.1	2.3
53°	1.6	2.1	2.3
54°	1.6	2.1	2.2
55°	1.6	2.1	2.3
56°	1.6	2.1	2.2
57°	1.6	2.1	2.2
58°	1.6	2.0	2.2
59°	1.6	2.0	2.2
60°	1.6	2.0	2.2
62.5°	1.5	2.0	2.2
65°	1.5	2.0	2.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.4	2.0	2.0
70°	1.3	1.9	2.0
72.5°	1.2	1.8	1.9
75°	1.1	1.6	1.7
77.5°	0.9	1.4	1.6
80°	0.8	1.2	1.3
82.5°	0.7	1.0	1.1
85°	0.5	0.7	0.7
87.5°	0.2	0.4	0.4
90°	0.0	0.0	0.0

(END OF REPORT)