

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: P1335412

Luminaire Tested: P3A02R359730DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335412
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: P3A02R359730DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

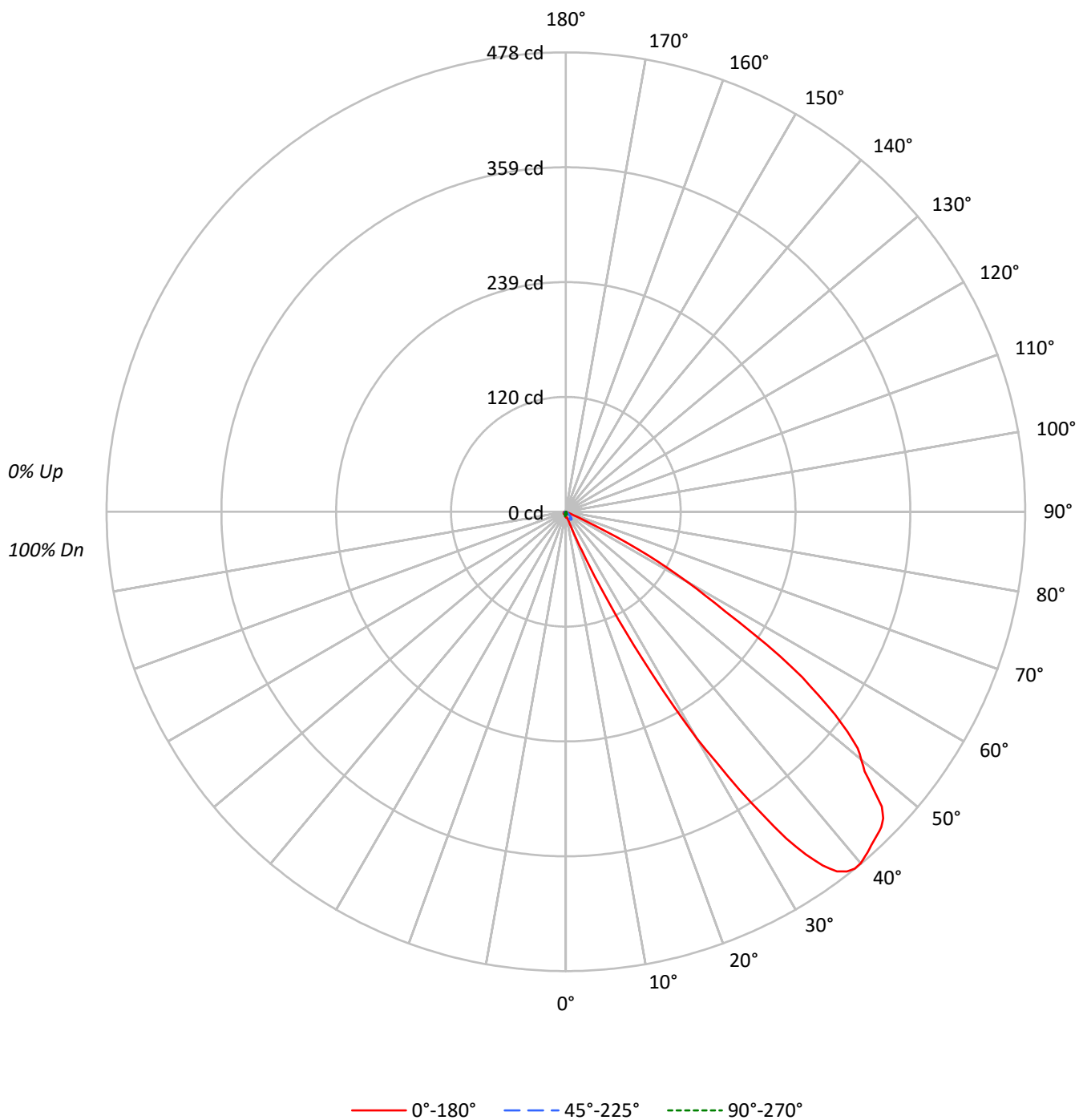
Lumens per Lamp: N/A
Luminaire Lumens: 119.0 lumens
Efficiency: N/A
Efficacy: 33.1 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.65 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	107	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	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1206	1206	1206	1206	1206
5°	1299	1277	1189	1057	1035
10°	1358	1247	1047	913	913
15°	1952	1226	863	772	795
20°	4877	1307	677	677	747
25°	22695	1669	508	629	702
30°	68973	2254	405	582	709
35°	116580	2623	348	535	696
40°	136656	2576	286	544	744
45°	143922	1830	248	589	806
50°	136968	1092	205	614	887
55°	114768	459	229	688	1032
60°	64249	88	263	789	1140
65°	11104	52	259	882	1297
70°	192	64	321	962	1475
75°	169	85	424	1101	1610
80°	126	126	505	1263	1894
85°	0	252	1006	1258	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 144923 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.4
10°-20°	1.4	1.2
20°-30°	7.3	6.1
30°-40°	31.5	26.5
40°-50°	45.0	37.8
50°-60°	27.9	23.4
60°-70°	4.2	3.6
70°-80°	0.8	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°	9.2	7.7
0°-40°	40.7	34.2
0°-60°	113.6	95.5
0°-90°	119.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	119.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	6	6	5	5	5	1
15°	9	5	4	3	4	3
25°	94	7	2	3	3	56
35°	436	10	1	2	3	261
45°	464	6	1	2	3	351
55°	300	1	1	2	3	256
65°	21	0	0	2	2	44
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°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
2.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.5	5.4
5°	5.9	5.9	5.8	5.8	5.8	5.8	5.8	5.8	5.6	5.4	5.0
7.5°	6.0	6.0	5.9	5.9	5.9	5.9	5.8	5.7	5.5	5.0	4.7
10°	6.1	6.1	6.1	6.1	6.0	5.9	5.8	5.6	5.3	4.7	4.4
12.5°	6.9	6.9	6.8	6.6	6.3	6.1	5.9	5.5	4.8	4.3	4.0
15°	8.6	8.5	8.3	7.9	7.5	7.0	6.6	5.4	4.4	3.8	3.5
17.5°	12.0	11.8	11.5	10.4	9.5	8.5	7.6	5.4	4.0	3.3	3.1
20°	20.9	21.1	18.8	16.2	14.1	11.7	9.6	5.6	3.5	2.9	2.8
22.5°	43.7	42.0	36.6	30.4	23.2	17.9	13.5	6.1	3.1	2.5	2.5
25°	93.8	87.2	74.2	56.1	39.5	28.0	19.7	6.9	2.8	2.1	2.3
27.5°	171.2	165.3	139.2	104.8	69.6	42.3	26.6	7.8	2.5	1.8	2.0
30°	272.4	256.1	222.0	171.9	116.3	64.8	35.8	8.9	2.0	1.6	1.9
31°	304.0	296.5	255.0	198.8	136.3	76.9	39.6	9.2	1.9	1.6	1.8
32°	341.5	328.2	291.0	228.4	156.6	87.8	44.3	9.6	1.8	1.4	1.8
33°	375.0	362.1	316.9	254.4	177.1	100.1	49.2	9.7	1.6	1.4	1.7
34°	410.2	392.6	347.8	281.6	198.2	113.4	53.7	9.8	1.5	1.3	1.7
35°	435.5	417.9	374.5	303.0	216.3	125.3	58.9	9.8	1.4	1.3	1.6
36°	455.0	439.6	397.5	325.2	234.4	135.9	62.9	9.8	1.2	1.2	1.6
37°	468.5	453.8	412.9	344.2	248.1	145.3	66.6	9.8	1.1	1.2	1.6
38°	475.0	462.8	427.9	358.0	261.5	152.8	69.5	9.6	1.0	1.1	1.5
39°	477.8	467.8	437.0	369.7	271.5	159.2	71.7	9.3	0.9	1.1	1.5
40°	477.4	468.7	442.2	377.8	279.5	163.6	72.8	9.0	0.8	1.0	1.5
41°	474.9	467.4	444.8	384.7	284.3	166.6	73.2	8.7	0.6	1.0	1.4
42°	472.1	465.2	445.7	388.3	287.5	167.6	72.3	8.3	0.6	0.9	1.4
43°	469.2	462.9	445.7	389.5	288.2	166.9	70.9	7.5	0.5	0.9	1.4
44°	466.9	460.8	444.3	389.2	286.6	164.5	68.3	6.7	0.4	0.9	1.4
45°	464.1	458.2	442.5	387.2	283.5	160.3	65.1	5.9	0.3	0.8	1.4
46°	459.1	454.5	439.3	383.0	278.5	154.5	61.0	5.4	0.2	0.8	1.3
47°	449.6	445.6	433.0	376.7	272.0	147.6	56.8	4.8	0.2	0.8	1.3
48°	430.3	430.2	420.6	365.1	261.6	139.0	52.4	4.3	0.2	0.8	1.3
49°	411.8	409.8	397.8	344.7	246.6	128.7	47.8	3.9	0.1	0.8	1.3
50°	401.5	397.4	377.6	320.7	227.5	114.4	42.9	3.2	0.1	0.6	1.3
51°	390.9	384.9	361.6	299.0	204.7	100.7	37.5	2.6	0.1	0.6	1.2
52°	371.7	366.0	339.9	278.2	182.6	86.6	32.3	2.1	0.1	0.6	1.3
53°	351.0	342.8	314.4	255.5	163.2	74.1	27.1	1.8	0.1	0.6	1.2
54°	324.8	321.2	288.6	227.5	140.4	62.1	22.2	1.5	0.1	0.6	1.2
55°	300.2	294.9	261.0	198.9	119.8	50.9	18.6	1.2	0.1	0.6	1.2
56°	268.9	260.8	229.1	172.7	98.8	41.0	15.7	1.0	0.1	0.6	1.2
57°	231.5	222.9	197.9	143.6	77.6	31.3	13.1	0.8	0.1	0.6	1.2
58°	195.8	188.4	161.6	110.9	58.4	21.7	10.8	0.5	0.1	0.5	1.2
59°	169.2	161.0	134.4	85.3	40.6	16.0	8.2	0.4	0.1	0.6	1.2
60°	146.5	136.0	108.2	66.1	29.0	11.5	6.0	0.2	0.2	0.6	1.2
62.5°	84.4	74.6	51.7	26.9	11.9	5.9	2.9	0.1	0.2	0.6	1.2
65°	21.4	19.0	12.4	5.8	3.3	2.0	1.1	0.1	0.2	0.5	1.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	0.8	0.8	0.8	0.6	0.5	0.4	0.2	0.1	0.2	0.5	1.1
70°	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.5	1.0
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.9
75°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.9
77.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.8
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°	5.5	5.5	5.5
2.5°	5.2	5.2	5.2
5°	4.8	4.8	4.7
7.5°	4.5	4.4	4.4
10°	4.1	4.1	4.1
12.5°	3.8	3.8	3.8
15°	3.4	3.5	3.5
17.5°	3.1	3.3	3.3
20°	2.9	3.1	3.2
22.5°	2.7	2.9	3.0
25°	2.6	2.8	2.9
27.5°	2.4	2.7	2.9
30°	2.3	2.6	2.8
31°	2.3	2.6	2.7
32°	2.1	2.6	2.7
33°	2.1	2.6	2.7
34°	2.1	2.5	2.7
35°	2.0	2.5	2.6
36°	2.0	2.5	2.6
37°	2.0	2.5	2.7
38°	2.0	2.5	2.6
39°	1.9	2.5	2.6
40°	1.9	2.5	2.6
41°	1.9	2.5	2.6
42°	1.9	2.5	2.6
43°	1.9	2.5	2.6
44°	1.9	2.4	2.6
45°	1.9	2.4	2.6
46°	1.9	2.5	2.6
47°	1.9	2.5	2.7
48°	1.9	2.4	2.6
49°	1.8	2.4	2.6
50°	1.8	2.4	2.6
51°	1.8	2.5	2.7
52°	1.8	2.5	2.7
53°	1.8	2.5	2.7
54°	1.8	2.5	2.6
55°	1.8	2.5	2.7
56°	1.8	2.5	2.6
57°	1.8	2.5	2.6
58°	1.8	2.4	2.6
59°	1.8	2.4	2.6
60°	1.8	2.4	2.6
62.5°	1.7	2.4	2.6
65°	1.7	2.3	2.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.6	2.3	2.4
70°	1.5	2.1	2.3
72.5°	1.4	2.0	2.1
75°	1.3	1.8	1.9
77.5°	1.1	1.6	1.8
80°	1.0	1.4	1.5
82.5°	0.8	1.2	1.3
85°	0.5	0.9	0.9
87.5°	0.2	0.4	0.4
90°	0.0	0.0	0.0

(END OF REPORT)