

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: P1334712

Luminaire Tested: P3A02R259050DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334712
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R259050DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 5000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

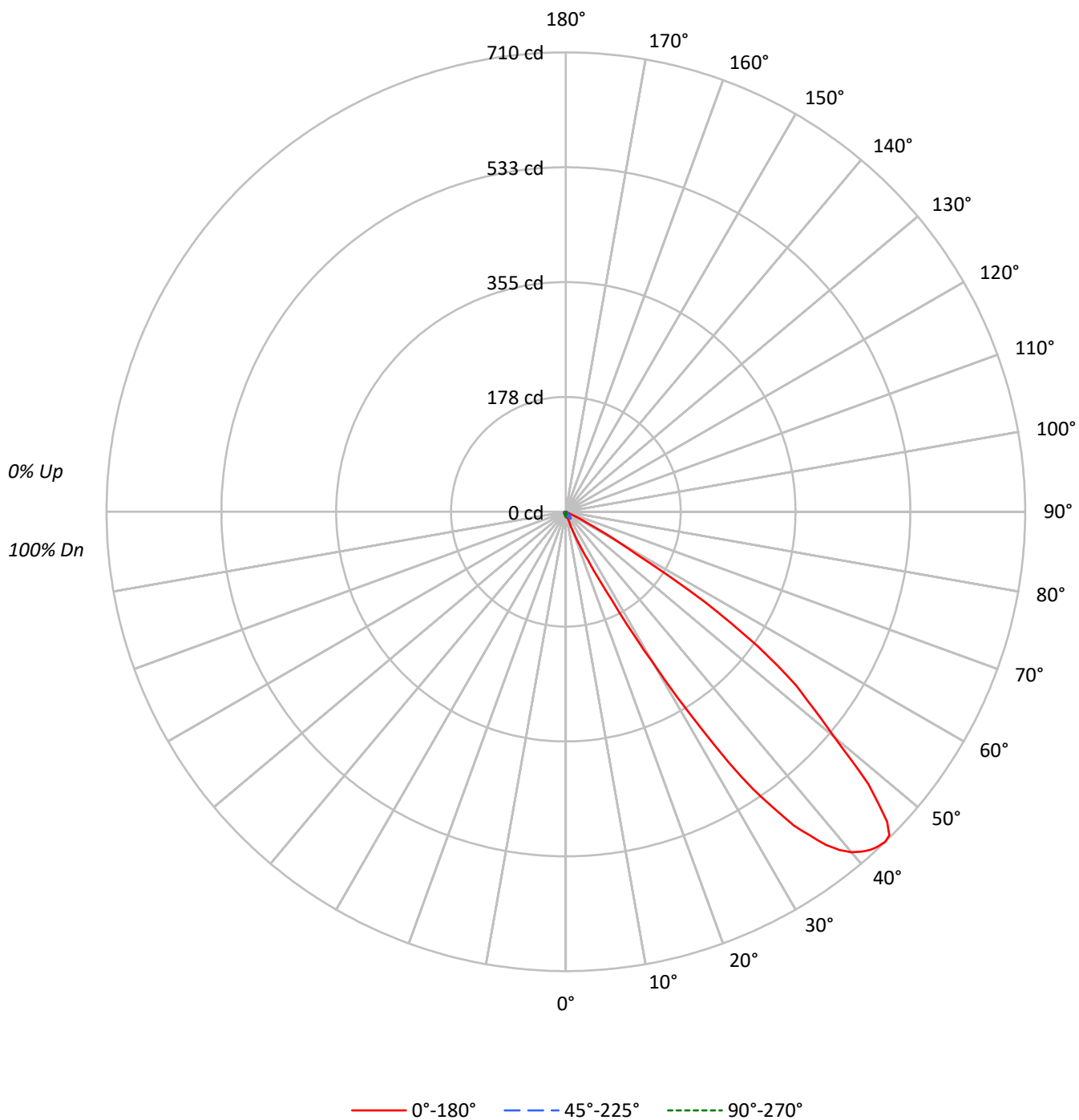
Lumens per Lamp: N/A
Luminaire Lumens: 148.0 lumens
Efficiency: N/A
Efficacy: 41.1 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			0
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	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1667	1667	1667	1667	1667
5°	1893	1805	1607	1431	1409
10°	1893	1715	1358	1180	1180
15°	2089	1476	1067	999	1067
20°	7421	1470	817	840	933
25°	21340	1863	653	798	919
30°	68061	2861	532	760	912
35°	149078	3373	455	723	937
40°	196654	3063	372	744	1002
45°	219310	2140	372	806	1085
50°	184591	1126	341	853	1194
55°	138012	459	344	956	1338
60°	42716	132	351	1009	1491
65°	3632	0	415	1090	1608
70°	256	64	449	1282	1859
75°	254	85	593	1356	2118
80°	126	126	884	1515	2526
85°	252	252	1258	1761	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 219310 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.7	0.5
10°-20°	1.7	1.2
20°-30°	8.2	5.5
30°-40°	39.4	26.6
40°-50°	61.8	41.7
50°-60°	31.7	21.4
60°-70°	3.0	2.0
70°-80°	1.0	0.7
80°-90°	0.5	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°	10.6	7.2
0°-40°	50.0	33.8
0°-60°	143.5	97.0
0°-90°	148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	148.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8	8	8	8	8	
5°	9	8	7	6	6	1
15°	9	6	5	4	5	4
25°	88	8	3	3	4	55
35°	557	13	2	3	4	338
45°	707	7	1	3	4	517
55°	361	1	1	2	4	301
65°	7	0	1	2	3	22
75°	0	0	1	2	2	0
85°	0	0	0	1	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
2.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.1	8.2	8.1	8.1
5°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.5	8.5	8.5	8.2
7.5°	8.7	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.5	8.5	8.1
10°	8.5	8.5	8.5	8.5	8.3	8.3	8.3	8.2	8.2	8.2	7.7
12.5°	8.5	8.5	8.5	8.5	8.3	8.3	8.2	8.2	8.1	7.9	7.0
15°	9.2	9.2	9.2	9.1	9.0	8.9	8.7	8.6	8.5	8.2	6.5
17.5°	13.5	13.2	13.0	12.5	11.9	11.2	10.7	10.2	9.6	9.2	6.3
20°	31.8	31.6	31.0	29.4	27.7	25.8	23.8	21.6	18.5	16.4	6.3
22.5°	55.1	54.3	53.1	52.0	49.0	45.5	41.8	37.6	33.6	29.3	6.6
25°	88.2	90.0	86.1	83.0	77.8	71.4	64.5	58.7	51.4	44.7	7.7
27.5°	153.3	154.5	146.8	136.6	124.5	111.1	98.1	88.3	76.1	64.9	9.6
30°	268.8	270.0	257.1	235.5	210.5	188.5	158.6	132.5	108.4	89.7	11.3
31°	335.5	326.4	311.4	290.4	258.8	225.6	189.8	158.1	127.6	103.1	11.9
32°	393.4	392.7	375.2	343.4	311.7	270.6	226.2	184.9	147.6	116.7	12.2
33°	461.8	456.6	432.0	402.0	360.0	318.7	261.4	214.2	168.0	131.8	12.5
34°	516.6	502.6	492.4	458.2	413.8	361.1	299.8	245.2	193.5	146.4	12.6
35°	556.9	553.9	534.1	502.2	457.0	403.2	341.2	277.4	214.9	163.3	12.6
36°	599.5	590.2	571.0	542.0	498.0	442.4	372.9	305.3	239.8	178.6	12.5
37°	626.2	620.7	601.6	571.7	528.6	475.5	408.3	334.7	259.6	193.8	12.2
38°	653.7	642.6	623.7	595.2	552.9	503.0	433.9	357.4	277.8	207.2	11.9
39°	672.7	661.2	641.9	613.5	572.1	522.6	454.3	376.6	293.7	217.2	11.3
40°	687.0	675.9	656.4	627.2	586.3	538.1	471.2	393.7	307.0	226.0	10.7
41°	695.9	685.6	666.2	637.1	596.1	547.0	482.3	404.8	316.0	231.8	10.0
42°	703.3	692.7	672.9	643.2	602.1	554.5	489.0	411.8	322.1	234.8	9.5
43°	707.4	696.9	677.6	647.3	605.7	558.1	492.7	415.1	324.2	234.4	8.6
44°	709.8	698.8	679.4	649.1	607.3	559.0	492.9	414.4	322.7	231.3	7.8
45°	707.2	696.4	677.6	647.3	604.6	556.1	490.3	410.9	317.3	225.2	6.9
46°	690.3	681.9	664.7	636.9	596.0	548.8	483.7	404.1	308.8	217.6	5.9
47°	660.4	653.8	637.1	616.4	579.4	535.4	471.5	391.2	296.9	206.3	4.7
48°	629.3	619.5	604.0	582.8	551.6	511.3	451.3	372.3	279.0	191.4	4.2
49°	583.3	577.6	563.9	540.2	514.3	478.9	422.7	348.1	257.0	175.3	3.6
50°	541.1	537.2	518.1	500.6	473.1	440.1	384.1	316.2	229.6	155.2	3.3
51°	508.2	503.5	489.7	467.9	438.6	400.2	347.5	274.8	198.2	131.4	2.6
52°	473.8	471.2	459.0	436.6	407.8	369.5	311.9	239.6	167.7	111.1	2.1
53°	445.7	441.9	426.9	407.0	375.9	336.3	273.4	206.9	142.1	93.4	1.8
54°	404.6	403.1	393.4	372.6	338.9	295.8	238.5	174.3	118.5	79.2	1.6
55°	361.0	355.8	346.0	329.5	298.5	258.3	198.1	144.4	95.9	66.7	1.2
56°	307.9	307.6	290.2	276.4	248.9	206.2	158.2	112.8	77.9	55.6	1.0
57°	257.1	248.9	232.1	218.4	188.8	156.4	117.5	84.5	61.0	45.1	0.8
58°	190.1	185.8	181.4	161.4	134.0	110.8	83.9	59.4	45.1	34.4	0.5
59°	129.1	128.9	123.7	108.5	92.7	69.0	52.4	40.4	31.0	25.3	0.4
60°	97.4	95.1	84.7	74.6	58.3	43.6	31.0	23.8	19.3	16.3	0.3
62.5°	34.1	35.4	31.1	25.8	19.7	16.1	12.4	10.0	8.2	6.6	0.0
65°	7.0	7.7	6.6	6.3	4.9	4.3	3.8	3.3	2.7	2.3	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.1
70°	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.1
72.5°	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.1
75°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1
77.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
85°	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	7.6	7.6	7.6	7.6	7.6	7.6
2.5°	7.9	7.7	7.3	7.2	7.0	7.0
5°	7.8	7.3	6.9	6.5	6.4	6.4
7.5°	7.4	6.8	6.3	6.0	5.9	5.7
10°	7.0	6.1	5.6	5.3	5.3	5.3
12.5°	6.3	5.5	4.9	4.8	4.9	4.9
15°	5.6	4.7	4.4	4.4	4.6	4.7
17.5°	4.8	4.2	3.9	4.0	4.2	4.3
20°	4.3	3.5	3.5	3.6	4.0	4.0
22.5°	3.8	3.1	3.1	3.5	3.8	3.9
25°	3.4	2.7	2.9	3.3	3.6	3.8
27.5°	2.9	2.3	2.6	3.1	3.5	3.6
30°	2.5	2.1	2.5	3.0	3.4	3.6
31°	2.3	2.0	2.5	2.9	3.4	3.6
32°	2.1	2.0	2.3	2.9	3.4	3.5
33°	2.0	1.8	2.3	2.9	3.4	3.5
34°	1.8	1.7	2.2	2.9	3.4	3.5
35°	1.6	1.7	2.2	2.7	3.3	3.5
36°	1.4	1.6	2.2	2.7	3.3	3.5
37°	1.3	1.6	2.1	2.7	3.3	3.5
38°	1.2	1.4	2.1	2.7	3.3	3.5
39°	1.0	1.4	2.0	2.7	3.3	3.5
40°	0.9	1.3	2.0	2.6	3.3	3.5
41°	0.9	1.3	2.0	2.6	3.3	3.5
42°	0.8	1.3	2.0	2.6	3.3	3.5
43°	0.7	1.2	2.0	2.6	3.3	3.5
44°	0.5	1.2	1.8	2.6	3.3	3.5
45°	0.5	1.2	1.8	2.6	3.3	3.5
46°	0.4	1.0	1.8	2.6	3.3	3.5
47°	0.3	1.0	1.8	2.5	3.3	3.5
48°	0.3	1.0	1.8	2.5	3.3	3.5
49°	0.3	1.0	1.7	2.5	3.3	3.5
50°	0.3	1.0	1.7	2.5	3.3	3.5
51°	0.1	0.9	1.7	2.5	3.3	3.5
52°	0.1	0.9	1.7	2.5	3.3	3.6
53°	0.1	0.9	1.7	2.5	3.3	3.5
54°	0.1	0.9	1.6	2.5	3.3	3.5
55°	0.1	0.9	1.6	2.5	3.3	3.5
56°	0.1	0.8	1.6	2.3	3.3	3.5
57°	0.3	0.8	1.6	2.3	3.3	3.4
58°	0.3	0.8	1.6	2.3	3.1	3.4
59°	0.3	0.8	1.6	2.3	3.1	3.4
60°	0.3	0.8	1.4	2.3	3.1	3.4
62.5°	0.3	0.8	1.4	2.2	3.0	3.3
65°	0.3	0.8	1.3	2.1	3.0	3.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.3	0.7	1.3	2.0	2.9	3.0
70°	0.4	0.7	1.2	2.0	2.7	2.9
72.5°	0.4	0.7	1.2	1.7	2.5	2.7
75°	0.4	0.7	1.0	1.6	2.3	2.5
77.5°	0.4	0.7	0.9	1.4	2.1	2.2
80°	0.5	0.7	0.8	1.2	1.8	2.0
82.5°	0.5	0.7	0.7	0.9	1.4	1.6
85°	0.4	0.5	0.5	0.7	0.9	1.0
87.5°	0.4	0.5	0.4	0.3	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)