

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: P1334776

Luminaire Tested: P3A02R259740DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334776
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: P3A02R259740DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

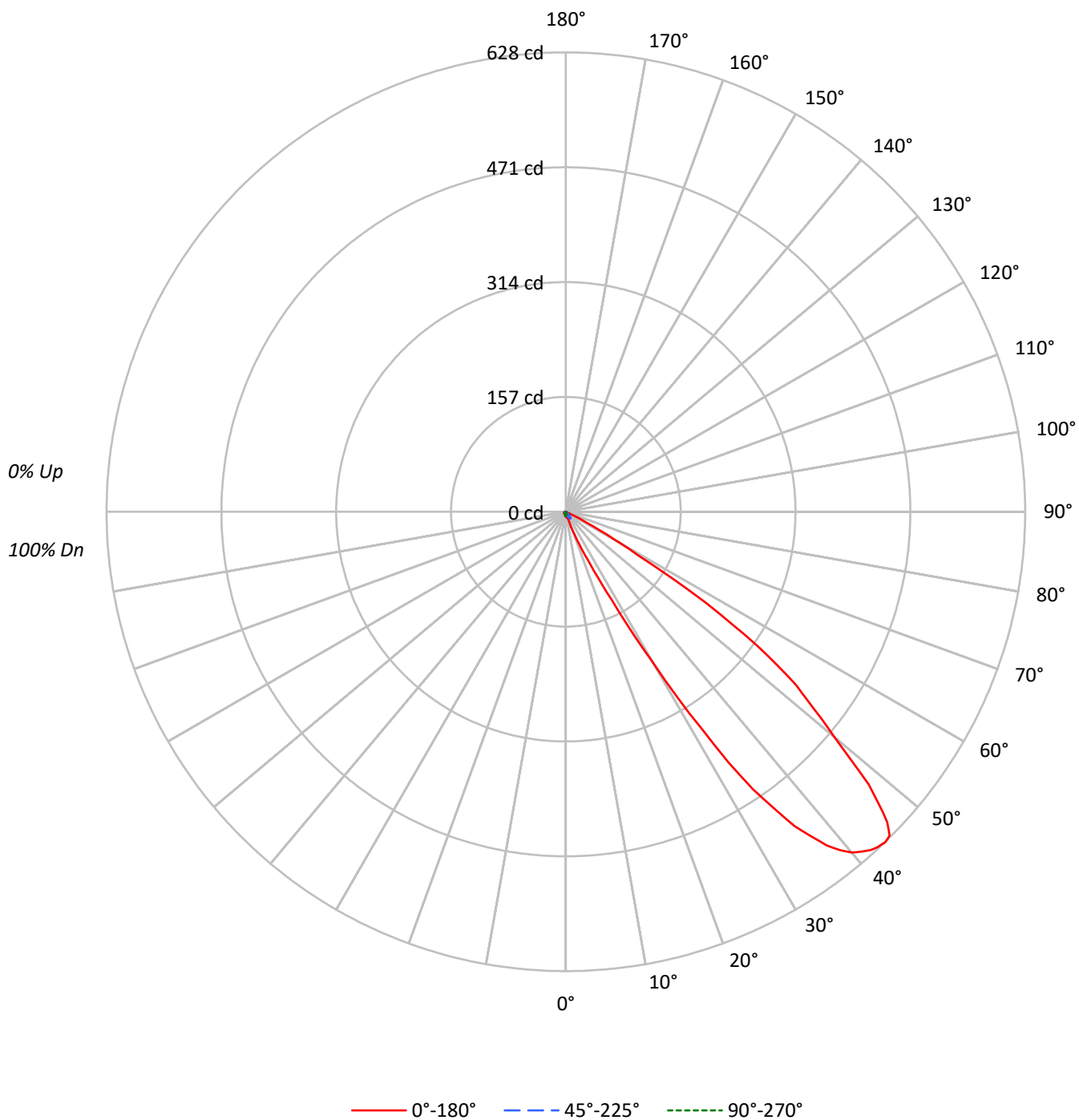
Lumens per Lamp: N/A
Luminaire Lumens: 131.0 lumens
Efficiency: N/A
Efficacy: 36.4 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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°	1469	1469	1469	1469	1469
5°	1673	1607	1431	1277	1233
10°	1670	1514	1202	1047	1047
15°	1862	1317	931	885	931
20°	6557	1283	723	747	840
25°	18872	1645	581	702	798
30°	60237	2532	456	684	810
35°	131946	2998	402	642	830
40°	174069	2719	344	658	887
45°	194129	1892	310	713	961
50°	163406	989	307	751	1058
55°	122146	382	306	841	1185
60°	37804	88	307	921	1316
65°	3217	0	363	934	1453
70°	192	64	385	1090	1603
75°	169	85	508	1186	1864
80°	126	126	758	1263	2147
85°	252	252	1258	1510	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 194129 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.5
10°-20°	1.5	1.2
20°-30°	7.2	5.5
30°-40°	34.9	26.6
40°-50°	54.7	41.8
50°-60°	28.0	21.4
60°-70°	2.6	2.0
70°-80°	0.9	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°	9.4	7.2
0°-40°	44.3	33.8
0°-60°	127.0	97.0
0°-90°	131.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	131.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7	7	7	7	7	
5°	8	7	6	6	6	1
15°	8	6	4	4	4	3
25°	78	7	2	3	3	48
35°	493	11	2	2	3	299
45°	626	6	1	2	3	458
55°	320	1	1	2	3	266
65°	6	0	1	2	3	19
75°	0	0	1	1	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°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
2.5°	7.3	7.3	7.3	7.3	7.3	7.3	7.1	7.1	7.3	7.1	7.1
5°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.3
7.5°	7.7	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.5	7.5	7.1
10°	7.5	7.5	7.5	7.5	7.4	7.4	7.4	7.3	7.3	7.3	6.8
12.5°	7.5	7.5	7.5	7.5	7.4	7.4	7.3	7.3	7.1	7.0	6.2
15°	8.2	8.2	8.2	8.1	8.0	7.8	7.7	7.6	7.5	7.3	5.8
17.5°	12.0	11.6	11.5	11.1	10.5	9.9	9.5	9.0	8.5	8.2	5.5
20°	28.1	28.0	27.4	26.1	24.6	22.8	21.1	19.1	16.4	14.5	5.5
22.5°	48.8	48.1	47.0	46.0	43.3	40.2	37.0	33.3	29.7	25.9	5.9
25°	78.0	79.7	76.2	73.4	68.8	63.2	57.1	52.0	45.5	39.5	6.8
27.5°	135.7	136.7	129.9	120.9	110.2	98.3	86.8	78.2	67.3	57.4	8.5
30°	237.9	239.0	227.6	208.4	186.3	166.8	140.4	117.2	95.9	79.4	10.0
31°	297.0	288.9	275.6	257.1	229.1	199.7	168.0	139.9	113.0	91.3	10.5
32°	348.3	347.6	332.1	304.0	275.9	239.5	200.2	163.7	130.6	103.3	10.8
33°	408.8	404.2	382.4	355.9	318.6	282.1	231.4	189.6	148.7	116.7	11.1
34°	457.3	444.9	435.9	405.5	366.2	319.7	265.4	217.1	171.3	129.6	11.2
35°	492.9	490.3	472.8	444.5	404.5	356.9	302.0	245.5	190.2	144.6	11.2
36°	530.6	522.4	505.4	479.8	440.8	391.6	330.0	270.2	212.2	158.0	11.1
37°	554.3	549.4	532.5	506.1	467.9	420.9	361.4	296.3	229.7	171.5	10.8
38°	578.6	568.8	552.1	526.8	489.4	445.2	384.1	316.3	245.9	183.4	10.5
39°	595.4	585.3	568.2	543.1	506.4	462.6	402.1	333.4	259.9	192.3	10.0
40°	608.1	598.3	581.0	555.2	519.0	476.3	417.1	348.5	271.7	200.0	9.5
41°	615.9	606.8	589.6	563.9	527.6	484.2	426.9	358.3	279.7	205.2	8.9
42°	622.5	613.2	595.6	569.4	532.9	490.8	432.9	364.5	285.1	207.8	8.4
43°	626.2	616.8	599.8	572.9	536.2	494.0	436.1	367.4	286.9	207.5	7.6
44°	628.3	618.6	601.4	574.5	537.5	494.8	436.3	366.8	285.7	204.7	6.9
45°	626.0	616.4	599.8	572.9	535.1	492.2	434.0	363.7	280.8	199.3	6.1
46°	611.0	603.6	588.4	563.7	527.5	485.8	428.1	357.7	273.3	192.6	5.2
47°	584.6	578.7	563.9	545.6	512.9	473.9	417.3	346.3	262.8	182.6	4.1
48°	557.0	548.4	534.7	515.9	488.2	452.6	399.4	329.6	246.9	169.5	3.7
49°	516.3	511.3	499.1	478.2	455.2	423.9	374.2	308.1	227.4	155.2	3.2
50°	479.0	475.5	458.6	443.1	418.8	389.5	340.0	279.9	203.2	137.4	2.9
51°	449.8	445.7	433.4	414.2	388.3	354.2	307.6	243.2	175.5	116.3	2.3
52°	419.4	417.1	406.2	386.4	360.9	327.0	276.1	212.1	148.5	98.3	1.8
53°	394.5	391.1	377.9	360.2	332.7	297.6	242.0	183.2	125.8	82.7	1.6
54°	358.2	356.8	348.3	329.8	300.0	261.8	211.1	154.2	104.9	70.1	1.4
55°	319.5	314.9	306.3	291.7	264.2	228.6	175.3	127.8	84.8	59.0	1.0
56°	272.5	272.3	256.8	244.6	220.3	182.5	140.1	99.8	68.9	49.2	0.9
57°	227.6	220.3	205.4	193.3	167.2	138.4	104.0	74.8	53.9	39.9	0.7
58°	168.3	164.5	160.6	142.8	118.6	98.1	74.2	52.6	39.9	30.4	0.5
59°	114.2	114.1	109.5	96.0	82.1	61.1	46.3	35.7	27.4	22.4	0.3
60°	86.2	84.2	74.9	66.1	51.6	38.6	27.4	21.1	17.1	14.4	0.2
62.5°	30.2	31.4	27.6	22.8	17.4	14.3	11.0	8.9	7.3	5.9	0.0
65°	6.2	6.8	5.9	5.5	4.4	3.8	3.3	2.9	2.4	2.1	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°	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.1
70°	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1
72.5°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
75°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	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	0.2
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°	6.7	6.7	6.7	6.7	6.7	6.7
2.5°	7.0	6.8	6.5	6.3	6.2	6.2
5°	6.9	6.5	6.1	5.8	5.6	5.6
7.5°	6.6	6.0	5.5	5.3	5.2	5.1
10°	6.2	5.4	5.0	4.7	4.7	4.7
12.5°	5.5	4.8	4.4	4.3	4.4	4.4
15°	5.0	4.1	3.9	3.9	4.0	4.1
17.5°	4.3	3.7	3.5	3.6	3.7	3.8
20°	3.8	3.1	3.1	3.2	3.6	3.6
22.5°	3.3	2.8	2.8	3.1	3.3	3.5
25°	3.0	2.4	2.5	2.9	3.2	3.3
27.5°	2.5	2.1	2.3	2.8	3.1	3.2
30°	2.2	1.8	2.2	2.7	3.0	3.2
31°	2.1	1.7	2.2	2.5	3.0	3.2
32°	1.8	1.7	2.1	2.5	3.0	3.1
33°	1.7	1.6	2.1	2.5	3.0	3.1
34°	1.6	1.5	2.0	2.5	3.0	3.1
35°	1.4	1.5	2.0	2.4	2.9	3.1
36°	1.3	1.4	2.0	2.4	2.9	3.1
37°	1.2	1.4	1.8	2.4	2.9	3.1
38°	1.0	1.3	1.8	2.4	2.9	3.1
39°	0.9	1.3	1.7	2.4	2.9	3.1
40°	0.8	1.2	1.7	2.3	2.9	3.1
41°	0.8	1.2	1.7	2.3	2.9	3.1
42°	0.7	1.2	1.7	2.3	2.9	3.1
43°	0.6	1.0	1.7	2.3	2.9	3.1
44°	0.5	1.0	1.6	2.3	2.9	3.1
45°	0.5	1.0	1.6	2.3	2.9	3.1
46°	0.3	0.9	1.6	2.3	2.9	3.1
47°	0.2	0.9	1.6	2.2	2.9	3.1
48°	0.2	0.9	1.6	2.2	2.9	3.1
49°	0.2	0.9	1.5	2.2	2.9	3.1
50°	0.2	0.9	1.5	2.2	2.9	3.1
51°	0.1	0.8	1.5	2.2	2.9	3.1
52°	0.1	0.8	1.5	2.2	2.9	3.2
53°	0.1	0.8	1.5	2.2	2.9	3.1
54°	0.1	0.8	1.4	2.2	2.9	3.1
55°	0.1	0.8	1.4	2.2	2.9	3.1
56°	0.1	0.7	1.4	2.1	2.9	3.1
57°	0.2	0.7	1.4	2.1	2.9	3.0
58°	0.2	0.7	1.4	2.1	2.8	3.0
59°	0.2	0.7	1.4	2.1	2.8	3.0
60°	0.2	0.7	1.3	2.1	2.8	3.0
62.5°	0.2	0.7	1.3	2.0	2.7	2.9
65°	0.2	0.7	1.2	1.8	2.7	2.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.6	1.2	1.7	2.5	2.7
70°	0.3	0.6	1.0	1.7	2.4	2.5
72.5°	0.3	0.6	1.0	1.5	2.2	2.4
75°	0.3	0.6	0.9	1.4	2.1	2.2
77.5°	0.3	0.6	0.8	1.3	1.8	2.0
80°	0.5	0.6	0.7	1.0	1.6	1.7
82.5°	0.5	0.6	0.6	0.8	1.3	1.4
85°	0.3	0.5	0.5	0.6	0.8	0.9
87.5°	0.3	0.5	0.3	0.2	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)