

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: P1334808

Luminaire Tested: P3A02R259830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334808
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: P3A02R259830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

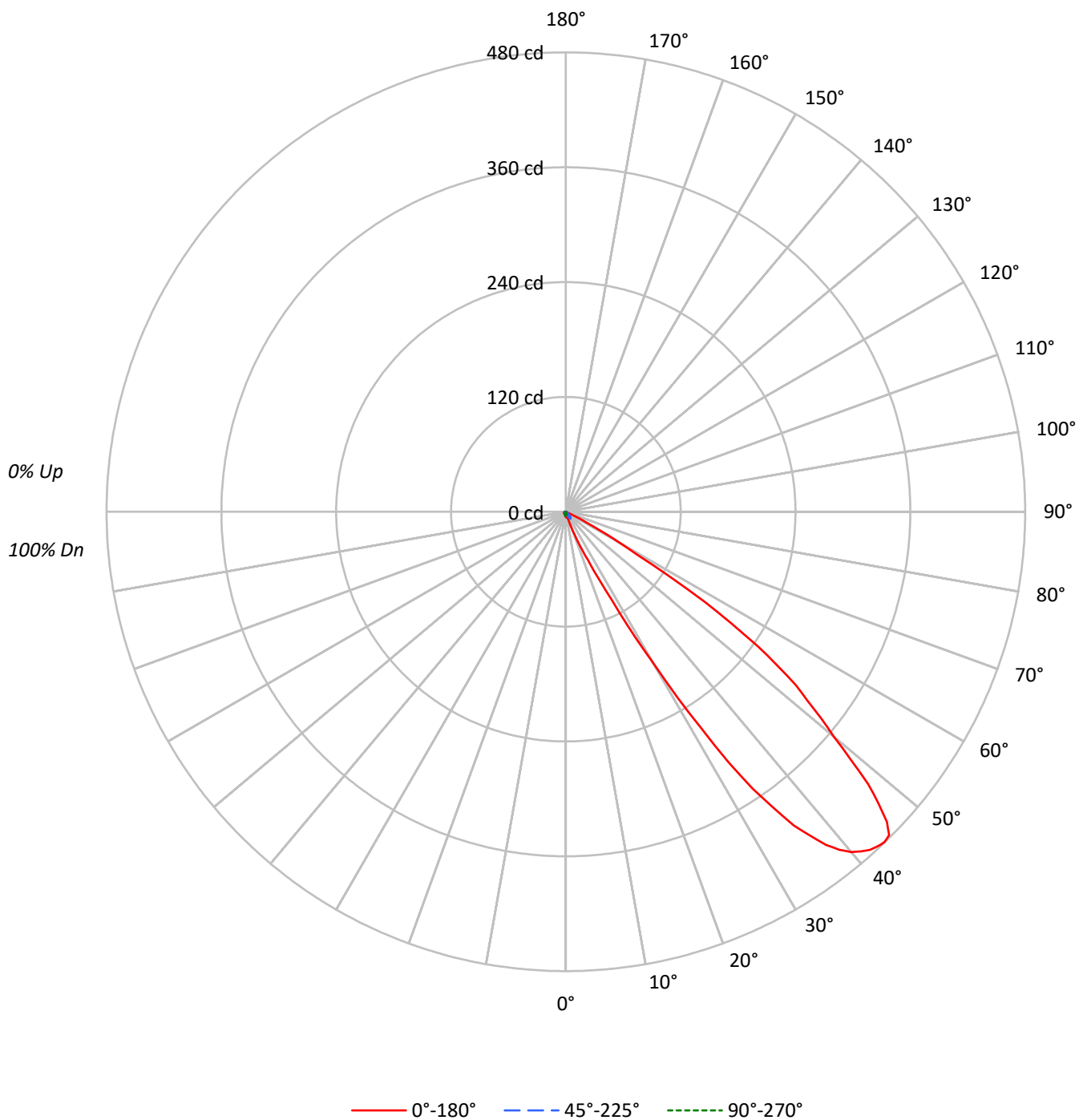
Lumens per Lamp: N/A
Luminaire Lumens: 100.0 lumens
Efficiency: N/A
Efficacy: 27.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	1118	1118	1118	1118	1118
5°	1277	1211	1079	969	947
10°	1269	1158	913	802	802
15°	1407	999	726	681	726
20°	5017	980	560	583	630
25°	14420	1258	436	532	629
30°	45982	1950	354	506	633
35°	100733	2275	294	482	642
40°	132878	2061	258	515	687
45°	148170	1458	248	558	744
50°	124721	751	239	580	819
55°	93244	306	229	650	918
60°	28857	88	219	702	1009
65°	2491	0	259	726	1090
70°	192	64	256	833	1218
75°	169	85	339	932	1440
80°	126	126	505	1010	1642
85°	252	252	1006	1006	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 148170 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.5
10°-20°	1.2	1.2
20°-30°	5.5	5.5
30°-40°	26.6	26.6
40°-50°	41.8	41.7
50°-60°	21.4	21.4
60°-70°	2.0	2.0
70°-80°	0.7	0.7
80°-90°	0.4	0.4
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°	7.2	7.2
0°-40°	33.8	33.8
0°-60°	97.0	96.9
0°-90°	100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	100.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	6	6	5	4	4	1
15°	6	4	3	3	3	3
25°	60	5	2	2	3	37
35°	376	8	1	2	2	228
45°	478	5	1	2	2	350
55°	244	1	1	2	2	203
65°	5	0	0	1	2	15
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°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
2.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7	5.5
7.5°	5.9	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.5
10°	5.7	5.7	5.7	5.7	5.6	5.6	5.6	5.5	5.5	5.5	5.2
12.5°	5.7	5.7	5.7	5.7	5.6	5.6	5.5	5.5	5.5	5.4	4.8
15°	6.2	6.2	6.2	6.2	6.1	6.0	5.9	5.8	5.7	5.5	4.4
17.5°	9.2	8.9	8.8	8.4	8.0	7.6	7.2	6.9	6.5	6.2	4.2
20°	21.5	21.4	20.9	19.9	18.7	17.4	16.1	14.6	12.5	11.1	4.2
22.5°	37.2	36.7	35.9	35.1	33.1	30.7	28.2	25.4	22.7	19.8	4.5
25°	59.6	60.8	58.2	56.1	52.5	48.2	43.6	39.7	34.8	30.2	5.2
27.5°	103.6	104.4	99.2	92.3	84.1	75.1	66.3	59.7	51.4	43.8	6.5
30°	181.6	182.4	173.7	159.1	142.2	127.3	107.2	89.5	73.2	60.6	7.7
31°	226.7	220.5	210.4	196.2	174.9	152.4	128.2	106.8	86.2	69.7	8.0
32°	265.8	265.3	253.5	232.0	210.6	182.9	152.9	125.0	99.7	78.8	8.3
33°	312.0	308.5	291.9	271.6	243.2	215.3	176.6	144.8	113.5	89.1	8.4
34°	349.1	339.6	332.7	309.6	279.6	244.0	202.6	165.7	130.8	98.9	8.5
35°	376.3	374.3	360.9	339.3	308.8	272.4	230.6	187.4	145.2	110.3	8.5
36°	405.1	398.8	385.8	366.2	336.5	298.9	251.9	206.3	162.0	120.6	8.4
37°	423.1	419.4	406.5	386.3	357.2	321.3	275.9	226.2	175.4	130.9	8.3
38°	441.7	434.2	421.4	402.1	373.6	339.8	293.2	241.5	187.7	140.0	8.0
39°	454.5	446.8	433.7	414.6	386.6	353.1	306.9	254.5	198.4	146.8	7.7
40°	464.2	456.7	443.5	423.8	396.2	363.6	318.4	266.0	207.4	152.7	7.2
41°	470.2	463.2	450.1	430.5	402.8	369.6	325.9	273.5	213.5	156.6	6.8
42°	475.2	468.1	454.7	434.6	406.8	374.7	330.4	278.2	217.6	158.7	6.4
43°	478.0	470.9	457.9	437.3	409.3	377.1	332.9	280.4	219.0	158.4	5.8
44°	479.6	472.2	459.1	438.6	410.3	377.7	333.1	280.0	218.1	156.3	5.3
45°	477.8	470.5	457.9	437.3	408.5	375.7	331.3	277.6	214.4	152.1	4.7
46°	466.4	460.8	449.1	430.3	402.7	370.8	326.8	273.1	208.6	147.0	4.0
47°	446.2	441.7	430.5	416.5	391.5	361.8	318.6	264.3	200.6	139.4	3.2
48°	425.2	418.6	408.1	393.8	372.7	345.5	304.9	251.6	188.5	129.4	2.8
49°	394.1	390.3	381.0	365.0	347.5	323.6	285.6	235.2	173.6	118.4	2.5
50°	365.6	363.0	350.1	338.3	319.7	297.3	259.5	213.7	155.1	104.9	2.2
51°	343.4	340.2	330.9	316.2	296.4	270.4	234.8	185.7	133.9	88.8	1.8
52°	320.1	318.4	310.1	295.0	275.5	249.6	210.8	161.9	113.3	75.1	1.4
53°	301.1	298.6	288.5	275.0	254.0	227.2	184.7	139.8	96.0	63.1	1.2
54°	273.4	272.4	265.8	251.8	229.0	199.8	161.1	117.7	80.1	53.5	1.1
55°	243.9	240.4	233.8	222.6	201.7	174.5	133.8	97.6	64.8	45.1	0.8
56°	208.0	207.9	196.1	186.7	168.2	139.3	106.9	76.2	52.6	37.6	0.7
57°	173.7	168.2	156.8	147.6	127.6	105.7	79.4	57.1	41.2	30.4	0.5
58°	128.5	125.6	122.6	109.0	90.5	74.9	56.7	40.1	30.4	23.2	0.4
59°	87.2	87.1	83.6	73.3	62.7	46.6	35.4	27.3	20.9	17.1	0.3
60°	65.8	64.2	57.2	50.4	39.4	29.5	20.9	16.1	13.0	11.0	0.2
62.5°	23.1	23.9	21.0	17.4	13.3	10.9	8.4	6.8	5.5	4.5	0.0
65°	4.8	5.2	4.5	4.2	3.3	2.9	2.6	2.2	1.8	1.6	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°	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	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°	5.1	5.1	5.1	5.1	5.1	5.1
2.5°	5.4	5.2	4.9	4.8	4.8	4.8
5°	5.3	4.9	4.7	4.4	4.3	4.3
7.5°	5.0	4.6	4.2	4.0	4.0	3.9
10°	4.8	4.1	3.8	3.6	3.6	3.6
12.5°	4.2	3.7	3.3	3.3	3.3	3.3
15°	3.8	3.2	3.0	3.0	3.1	3.2
17.5°	3.3	2.8	2.6	2.7	2.8	2.9
20°	2.9	2.4	2.4	2.5	2.7	2.7
22.5°	2.6	2.1	2.1	2.4	2.6	2.6
25°	2.3	1.8	1.9	2.2	2.5	2.6
27.5°	1.9	1.6	1.8	2.1	2.4	2.5
30°	1.7	1.4	1.7	2.0	2.3	2.5
31°	1.6	1.3	1.7	1.9	2.3	2.5
32°	1.4	1.3	1.6	1.9	2.3	2.4
33°	1.3	1.2	1.6	1.9	2.3	2.4
34°	1.2	1.1	1.5	1.9	2.3	2.4
35°	1.1	1.1	1.5	1.8	2.2	2.4
36°	1.0	1.1	1.5	1.8	2.2	2.4
37°	0.9	1.1	1.4	1.8	2.2	2.4
38°	0.8	1.0	1.4	1.8	2.2	2.4
39°	0.7	1.0	1.3	1.8	2.2	2.4
40°	0.6	0.9	1.3	1.8	2.2	2.4
41°	0.6	0.9	1.3	1.8	2.2	2.4
42°	0.5	0.9	1.3	1.8	2.2	2.4
43°	0.4	0.8	1.3	1.8	2.2	2.4
44°	0.4	0.8	1.2	1.8	2.2	2.4
45°	0.4	0.8	1.2	1.8	2.2	2.4
46°	0.3	0.7	1.2	1.8	2.2	2.4
47°	0.2	0.7	1.2	1.7	2.2	2.4
48°	0.2	0.7	1.2	1.7	2.2	2.4
49°	0.2	0.7	1.1	1.7	2.2	2.4
50°	0.2	0.7	1.1	1.7	2.2	2.4
51°	0.1	0.6	1.1	1.7	2.2	2.4
52°	0.1	0.6	1.1	1.7	2.2	2.5
53°	0.1	0.6	1.1	1.7	2.2	2.4
54°	0.1	0.6	1.1	1.7	2.2	2.4
55°	0.1	0.6	1.1	1.7	2.2	2.4
56°	0.1	0.5	1.1	1.6	2.2	2.4
57°	0.2	0.5	1.1	1.6	2.2	2.3
58°	0.2	0.5	1.1	1.6	2.1	2.3
59°	0.2	0.5	1.1	1.6	2.1	2.3
60°	0.2	0.5	1.0	1.6	2.1	2.3
62.5°	0.2	0.5	1.0	1.5	2.0	2.2
65°	0.2	0.5	0.9	1.4	2.0	2.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.4	0.9	1.3	1.9	2.0
70°	0.3	0.4	0.8	1.3	1.8	1.9
72.5°	0.3	0.4	0.8	1.1	1.7	1.8
75°	0.3	0.4	0.7	1.1	1.6	1.7
77.5°	0.3	0.4	0.6	1.0	1.4	1.5
80°	0.4	0.4	0.5	0.8	1.2	1.3
82.5°	0.4	0.4	0.4	0.6	1.0	1.1
85°	0.3	0.4	0.4	0.4	0.6	0.7
87.5°	0.3	0.4	0.3	0.2	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)