

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: P1334640

Luminaire Tested: P3A02R259027DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334640
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: P3A02R259027DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

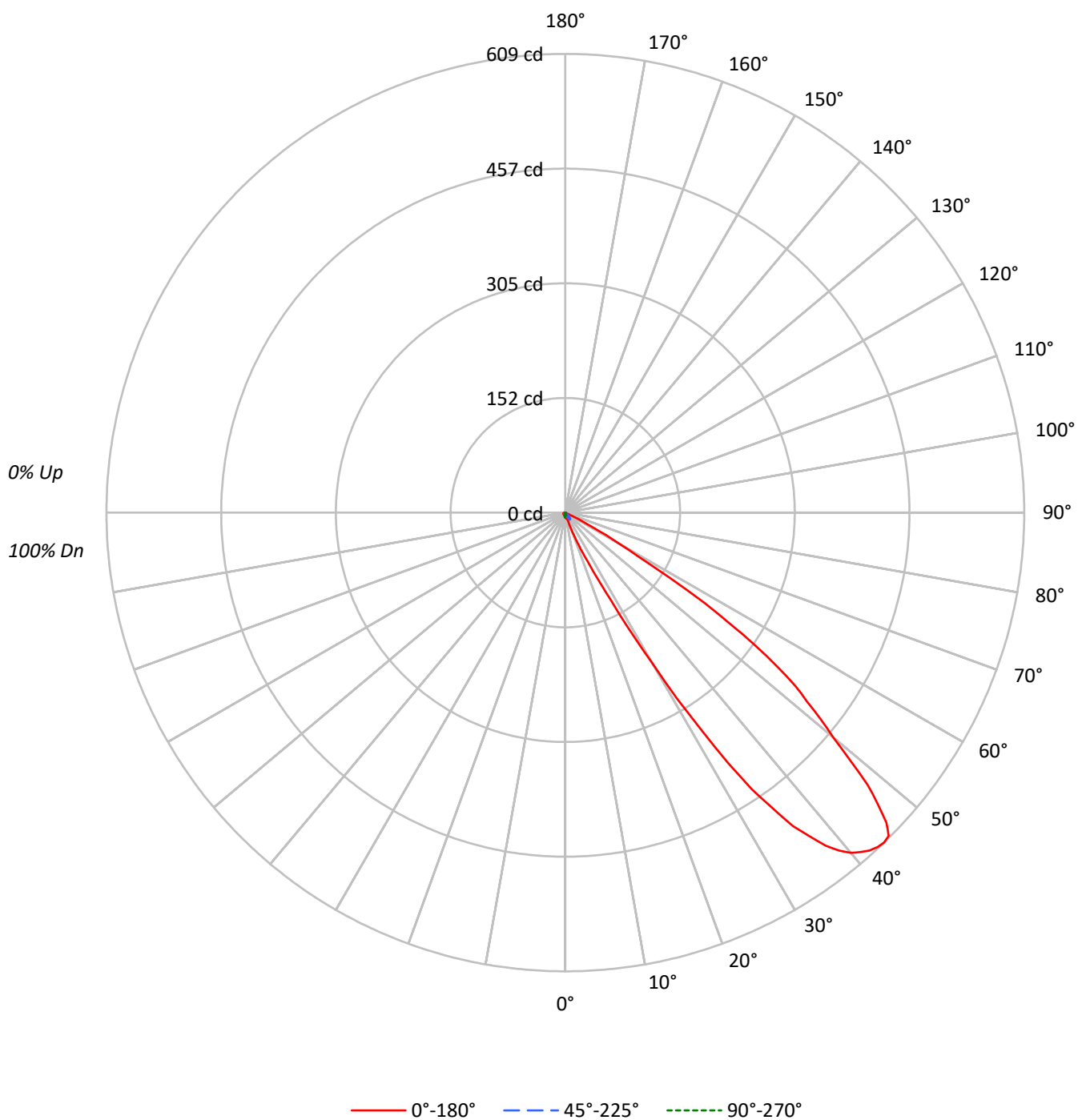
Lumens per Lamp: N/A
Luminaire Lumens: 127.0 lumens
Efficiency: N/A
Efficacy: 35.3 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	1425	1425	1425	1425	1425
5°	1629	1541	1387	1233	1211
10°	1625	1470	1180	1024	1024
15°	1793	1271	908	863	908
20°	6371	1260	700	723	817
25°	18316	1597	556	677	774
30°	58414	2456	456	658	785
35°	127930	2891	402	616	803
40°	168745	2634	315	630	859
45°	188175	1830	310	682	930
50°	158425	955	307	716	1023
55°	118438	382	306	803	1147
60°	36664	88	307	877	1272
65°	3113	0	363	934	1401
70°	192	64	385	1090	1603
75°	169	85	508	1101	1779
80°	126	126	758	1263	2147
85°	252	252	1006	1510	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 188175 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°	7.0	5.5
30°-40°	33.8	26.6
40°-50°	53.0	41.8
50°-60°	27.2	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°	9.1	7.2
0°-40°	42.9	33.8
0°-60°	123.1	97.0
0°-90°	127.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	127.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	7	7	6	6	6	1
15°	8	6	4	4	4	3
25°	76	7	2	3	3	47
35°	478	11	2	2	3	290
45°	607	6	1	2	3	444
55°	310	1	1	2	3	258
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°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
2.5°	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.9	7.0	6.9	6.9
5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.3	7.0
7.5°	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.3	6.9
10°	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.0	7.0	7.0	6.6
12.5°	7.3	7.3	7.3	7.3	7.2	7.2	7.0	7.0	6.9	6.8	6.0
15°	7.9	7.9	7.9	7.8	7.7	7.6	7.5	7.4	7.3	7.0	5.6
17.5°	11.6	11.3	11.2	10.7	10.2	9.6	9.2	8.7	8.3	7.9	5.4
20°	27.3	27.2	26.6	25.3	23.8	22.1	20.5	18.6	15.9	14.1	5.4
22.5°	47.3	46.6	45.6	44.6	42.0	39.0	35.9	32.3	28.8	25.1	5.7
25°	75.7	77.2	73.9	71.2	66.7	61.2	55.3	50.4	44.1	38.3	6.6
27.5°	131.5	132.5	126.0	117.2	106.8	95.3	84.2	75.8	65.3	55.7	8.3
30°	230.7	231.7	220.6	202.1	180.6	161.7	136.1	113.7	93.0	77.0	9.7
31°	287.9	280.1	267.2	249.2	222.1	193.6	162.8	135.7	109.5	88.5	10.2
32°	337.6	336.9	322.0	294.7	267.4	232.2	194.1	158.7	126.6	100.1	10.5
33°	396.3	391.8	370.7	345.0	308.9	273.5	224.3	183.8	144.2	113.1	10.7
34°	443.3	431.3	422.6	393.2	355.1	309.9	257.3	210.4	166.1	125.6	10.8
35°	477.9	475.3	458.3	430.9	392.2	346.0	292.8	238.0	184.4	140.1	10.8
36°	514.4	506.5	489.9	465.1	427.4	379.6	320.0	262.0	205.7	153.2	10.7
37°	537.3	532.6	516.2	490.6	453.6	408.0	350.4	287.2	222.7	166.3	10.5
38°	560.9	551.4	535.2	510.7	474.4	431.6	372.4	306.7	238.4	177.8	10.2
39°	577.2	567.4	550.9	526.5	490.9	448.5	389.8	323.2	252.0	186.4	9.7
40°	589.5	580.0	563.3	538.2	503.1	461.8	404.3	337.8	263.4	193.9	9.2
41°	597.1	588.3	571.6	546.7	511.5	469.4	413.8	347.3	271.1	198.9	8.6
42°	603.5	594.4	577.4	552.0	516.7	475.9	419.6	353.4	276.4	201.5	8.2
43°	607.1	598.0	581.5	555.4	519.8	478.9	422.8	356.2	278.2	201.2	7.4
44°	609.1	599.7	583.0	557.0	521.1	479.7	423.0	355.6	276.9	198.5	6.7
45°	606.8	597.6	581.5	555.4	518.8	477.2	420.8	352.6	272.2	193.2	5.9
46°	592.3	585.2	570.4	546.5	511.4	470.9	415.1	346.8	265.0	186.7	5.0
47°	566.7	561.0	546.7	528.9	497.2	459.4	404.6	335.7	254.8	177.0	4.0
48°	540.0	531.6	518.3	500.1	473.3	438.8	387.2	319.5	239.4	164.3	3.6
49°	500.6	495.6	483.9	463.6	441.3	410.9	362.8	298.7	220.5	150.4	3.1
50°	464.4	461.0	444.6	429.6	406.0	377.6	329.6	271.3	197.0	133.2	2.8
51°	436.1	432.1	420.2	401.5	376.4	343.4	298.2	235.8	170.1	112.8	2.2
52°	406.6	404.3	393.8	374.6	349.9	317.1	267.7	205.6	143.9	95.3	1.8
53°	382.4	379.2	366.3	349.2	322.5	288.6	234.6	177.6	121.9	80.1	1.6
54°	347.2	345.9	337.6	319.7	290.8	253.8	204.6	149.5	101.7	67.9	1.3
55°	309.8	305.3	296.9	282.7	256.1	221.6	170.0	123.9	82.3	57.2	1.0
56°	264.2	264.0	249.0	237.1	213.6	176.9	135.8	96.8	66.8	47.7	0.9
57°	220.6	213.6	199.2	187.4	162.0	134.2	100.8	72.5	52.3	38.7	0.7
58°	163.2	159.5	155.7	138.5	115.0	95.1	72.0	51.0	38.7	29.5	0.4
59°	110.8	110.6	106.2	93.1	79.6	59.2	44.9	34.6	26.6	21.7	0.3
60°	83.6	81.6	72.6	64.0	50.1	37.4	26.6	20.5	16.5	14.0	0.2
62.5°	29.3	30.4	26.7	22.1	16.9	13.9	10.6	8.6	7.0	5.7	0.0
65°	6.0	6.6	5.7	5.4	4.2	3.7	3.2	2.8	2.3	2.0	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	0.4	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°	6.5	6.5	6.5	6.5	6.5	6.5
2.5°	6.8	6.6	6.3	6.1	6.0	6.0
5°	6.7	6.3	5.9	5.6	5.5	5.5
7.5°	6.4	5.8	5.4	5.1	5.0	4.9
10°	6.0	5.3	4.8	4.6	4.6	4.6
12.5°	5.4	4.7	4.2	4.1	4.2	4.2
15°	4.8	4.0	3.8	3.8	3.9	4.0
17.5°	4.1	3.6	3.4	3.5	3.6	3.7
20°	3.7	3.0	3.0	3.1	3.5	3.5
22.5°	3.2	2.7	2.7	3.0	3.2	3.4
25°	2.9	2.3	2.5	2.8	3.1	3.2
27.5°	2.5	2.0	2.2	2.7	3.0	3.1
30°	2.1	1.8	2.1	2.6	2.9	3.1
31°	2.0	1.7	2.1	2.5	2.9	3.1
32°	1.8	1.7	2.0	2.5	2.9	3.0
33°	1.7	1.6	2.0	2.5	2.9	3.0
34°	1.6	1.5	1.9	2.5	2.9	3.0
35°	1.3	1.5	1.9	2.3	2.8	3.0
36°	1.2	1.3	1.9	2.3	2.8	3.0
37°	1.1	1.3	1.8	2.3	2.8	3.0
38°	1.0	1.2	1.8	2.3	2.8	3.0
39°	0.9	1.2	1.7	2.3	2.8	3.0
40°	0.8	1.1	1.7	2.2	2.8	3.0
41°	0.8	1.1	1.7	2.2	2.8	3.0
42°	0.7	1.1	1.7	2.2	2.8	3.0
43°	0.6	1.0	1.7	2.2	2.8	3.0
44°	0.4	1.0	1.6	2.2	2.8	3.0
45°	0.4	1.0	1.6	2.2	2.8	3.0
46°	0.3	0.9	1.6	2.2	2.8	3.0
47°	0.2	0.9	1.6	2.1	2.8	3.0
48°	0.2	0.9	1.6	2.1	2.8	3.0
49°	0.2	0.9	1.5	2.1	2.8	3.0
50°	0.2	0.9	1.5	2.1	2.8	3.0
51°	0.1	0.8	1.5	2.1	2.8	3.0
52°	0.1	0.8	1.5	2.1	2.8	3.1
53°	0.1	0.8	1.5	2.1	2.8	3.0
54°	0.1	0.8	1.3	2.1	2.8	3.0
55°	0.1	0.8	1.3	2.1	2.8	3.0
56°	0.1	0.7	1.3	2.0	2.8	3.0
57°	0.2	0.7	1.3	2.0	2.8	2.9
58°	0.2	0.7	1.3	2.0	2.7	2.9
59°	0.2	0.7	1.3	2.0	2.7	2.9
60°	0.2	0.7	1.2	2.0	2.7	2.9
62.5°	0.2	0.7	1.2	1.9	2.6	2.8
65°	0.2	0.7	1.1	1.8	2.6	2.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.6	1.1	1.7	2.5	2.6
70°	0.3	0.6	1.0	1.7	2.3	2.5
72.5°	0.3	0.6	1.0	1.5	2.1	2.3
75°	0.3	0.6	0.9	1.3	2.0	2.1
77.5°	0.3	0.6	0.8	1.2	1.8	1.9
80°	0.4	0.6	0.7	1.0	1.6	1.7
82.5°	0.4	0.6	0.6	0.8	1.2	1.3
85°	0.3	0.4	0.4	0.6	0.8	0.9
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)