

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: P1334670

Luminaire Tested: P3A02R259030DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334670
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: P3A02R259030DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

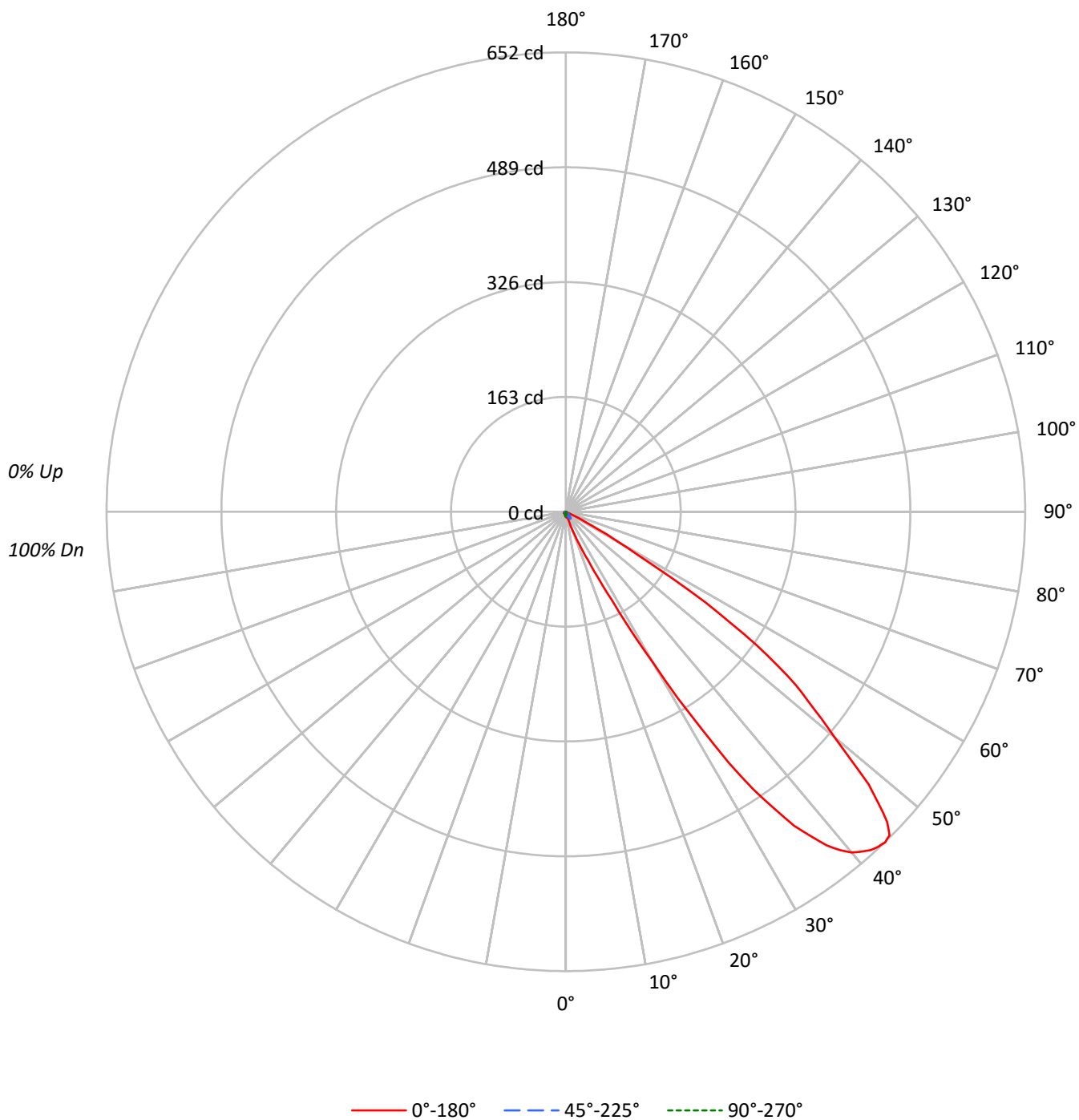
Lumens per Lamp: N/A
Luminaire Lumens: 136.0 lumens
Efficiency: N/A
Efficacy: 37.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			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°	1513	1513	1513	1513	1513
5°	1739	1651	1475	1321	1299
10°	1737	1581	1247	1091	1091
15°	1930	1362	976	931	976
20°	6814	1330	747	793	863
25°	19598	1718	605	726	847
30°	62541	2633	481	709	861
35°	136978	3105	428	669	857
40°	180710	2805	344	687	916
45°	201509	1954	341	744	992
50°	169649	1023	341	785	1092
55°	126810	421	306	879	1223
60°	39251	88	307	965	1360
65°	3373	0	363	986	1505
70°	256	64	385	1154	1667
75°	169	85	508	1186	1949
80°	126	126	758	1389	2273
85°	252	252	1258	1510	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 201509 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.5
10°-20°	1.6	1.2
20°-30°	7.5	5.5
30°-40°	36.2	26.6
40°-50°	56.8	41.8
50°-60°	29.1	21.4
60°-70°	2.7	2.0
70°-80°	0.9	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°	9.7	7.2
0°-40°	46.0	33.8
0°-60°	131.9	97.0
0°-90°	136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	136.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7	7	7	7	7	
5°	8	8	7	6	6	1
15°	8	6	4	4	4	4
25°	81	7	2	3	4	50
35°	512	12	2	2	3	311
45°	650	6	1	2	3	476
55°	332	1	1	2	3	276
65°	6	0	1	2	3	20
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°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
2.5°	7.5	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.5	7.4	7.4
5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.5
7.5°	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.4
10°	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.5	7.5	7.5	7.1
12.5°	7.8	7.8	7.8	7.8	7.7	7.7	7.5	7.5	7.4	7.3	6.5
15°	8.5	8.5	8.5	8.4	8.3	8.1	8.0	7.9	7.8	7.5	6.0
17.5°	12.4	12.1	12.0	11.5	10.9	10.3	9.8	9.3	8.9	8.5	5.7
20°	29.2	29.1	28.5	27.0	25.5	23.7	21.9	19.9	17.0	15.1	5.7
22.5°	50.6	49.9	48.8	47.8	45.0	41.8	38.4	34.6	30.9	26.9	6.1
25°	81.0	82.7	79.1	76.2	71.4	65.6	59.2	54.0	47.3	41.0	7.1
27.5°	140.9	141.9	134.9	125.5	114.4	102.1	90.1	81.1	69.9	59.6	8.9
30°	247.0	248.1	236.2	216.4	193.4	173.2	145.8	121.7	99.6	82.5	10.4
31°	308.3	299.9	286.1	266.9	237.8	207.3	174.4	145.3	117.3	94.8	10.9
32°	361.5	360.8	344.8	315.6	286.4	248.7	207.9	169.9	135.6	107.2	11.2
33°	424.4	419.6	397.0	369.4	330.8	292.8	240.2	196.9	154.4	121.1	11.5
34°	474.8	461.8	452.5	421.0	380.2	331.9	275.5	225.4	177.8	134.5	11.6
35°	511.7	509.0	490.8	461.5	419.9	370.5	313.6	254.9	197.5	150.1	11.6
36°	550.9	542.4	524.7	498.1	457.6	406.5	342.6	280.5	220.3	164.1	11.5
37°	575.4	570.4	552.8	525.4	485.8	436.9	375.2	307.6	238.5	178.1	11.2
38°	600.7	590.5	573.1	546.9	508.0	462.2	398.8	328.4	255.3	190.4	10.9
39°	618.1	607.6	589.9	563.8	525.7	480.3	417.4	346.1	269.9	199.6	10.4
40°	631.3	621.1	603.2	576.4	538.8	494.5	433.0	361.8	282.1	207.6	9.8
41°	639.4	630.0	612.1	585.5	547.8	502.6	443.2	372.0	290.3	213.0	9.2
42°	646.3	636.6	618.4	591.1	553.3	509.6	449.4	378.4	296.0	215.8	8.7
43°	650.1	640.4	622.7	594.8	556.6	512.8	452.7	381.4	297.9	215.4	7.9
44°	652.2	642.2	624.4	596.5	558.1	513.7	453.0	380.8	296.6	212.5	7.2
45°	649.8	639.9	622.7	594.8	555.5	511.0	450.6	377.6	291.5	206.9	6.3
46°	634.3	626.6	610.8	585.2	547.6	504.3	444.5	371.4	283.8	200.0	5.4
47°	606.9	600.8	585.5	566.4	532.4	492.0	433.2	359.5	272.9	189.6	4.3
48°	578.3	569.3	555.1	535.6	506.8	469.9	414.7	342.2	256.3	175.9	3.8
49°	536.0	530.8	518.2	496.4	472.6	440.1	388.5	319.9	236.1	161.1	3.4
50°	497.3	493.7	476.1	460.0	434.8	404.4	352.9	290.6	211.0	142.7	3.0
51°	467.0	462.7	450.0	430.0	403.1	367.8	319.3	252.5	182.1	120.8	2.4
52°	435.4	433.0	421.7	401.2	374.7	339.5	286.6	220.2	154.1	102.1	1.9
53°	409.5	406.1	392.3	374.0	345.4	309.0	251.2	190.2	130.6	85.8	1.7
54°	371.8	370.4	361.5	342.4	311.4	271.8	219.1	160.1	108.9	72.8	1.4
55°	331.7	327.0	318.0	302.8	274.3	237.3	182.0	132.7	88.1	61.3	1.1
56°	282.9	282.7	266.6	254.0	228.7	189.4	145.4	103.6	71.6	51.1	1.0
57°	236.2	228.7	213.3	200.7	173.5	143.7	107.9	77.7	56.0	41.4	0.7
58°	174.7	170.8	166.7	148.3	123.1	101.8	77.1	54.6	41.4	31.6	0.5
59°	118.6	118.5	113.7	99.7	85.2	63.4	48.1	37.1	28.5	23.2	0.4
60°	89.5	87.4	77.8	68.6	53.6	40.1	28.5	21.9	17.7	15.0	0.2
62.5°	31.4	32.6	28.6	23.7	18.1	14.8	11.4	9.2	7.5	6.1	0.0
65°	6.5	7.1	6.1	5.7	4.5	3.9	3.5	3.0	2.5	2.2	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°	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.1
72.5°	0.4	0.4	0.4	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°	6.9	6.9	6.9	6.9	6.9	6.9
2.5°	7.3	7.1	6.7	6.6	6.5	6.5
5°	7.2	6.7	6.3	6.0	5.9	5.9
7.5°	6.8	6.2	5.7	5.5	5.4	5.3
10°	6.5	5.6	5.1	4.9	4.9	4.9
12.5°	5.7	5.0	4.5	4.4	4.5	4.5
15°	5.1	4.3	4.1	4.1	4.2	4.3
17.5°	4.4	3.8	3.6	3.7	3.8	3.9
20°	3.9	3.2	3.2	3.4	3.7	3.7
22.5°	3.5	2.9	2.9	3.2	3.5	3.6
25°	3.1	2.5	2.6	3.0	3.4	3.5
27.5°	2.6	2.2	2.4	2.9	3.2	3.4
30°	2.3	1.9	2.3	2.8	3.1	3.4
31°	2.2	1.8	2.3	2.6	3.1	3.4
32°	1.9	1.8	2.2	2.6	3.1	3.2
33°	1.8	1.7	2.2	2.6	3.1	3.2
34°	1.7	1.6	2.0	2.6	3.1	3.2
35°	1.4	1.6	2.0	2.5	3.0	3.2
36°	1.3	1.4	2.0	2.5	3.0	3.2
37°	1.2	1.4	1.9	2.5	3.0	3.2
38°	1.1	1.3	1.9	2.5	3.0	3.2
39°	1.0	1.3	1.8	2.5	3.0	3.2
40°	0.8	1.2	1.8	2.4	3.0	3.2
41°	0.8	1.2	1.8	2.4	3.0	3.2
42°	0.7	1.2	1.8	2.4	3.0	3.2
43°	0.6	1.1	1.8	2.4	3.0	3.2
44°	0.5	1.1	1.7	2.4	3.0	3.2
45°	0.5	1.1	1.7	2.4	3.0	3.2
46°	0.4	1.0	1.7	2.4	3.0	3.2
47°	0.2	1.0	1.7	2.3	3.0	3.2
48°	0.2	1.0	1.7	2.3	3.0	3.2
49°	0.2	1.0	1.6	2.3	3.0	3.2
50°	0.2	1.0	1.6	2.3	3.0	3.2
51°	0.1	0.8	1.6	2.3	3.0	3.2
52°	0.1	0.8	1.6	2.3	3.0	3.4
53°	0.1	0.8	1.6	2.3	3.0	3.2
54°	0.1	0.8	1.4	2.3	3.0	3.2
55°	0.1	0.8	1.4	2.3	3.0	3.2
56°	0.1	0.7	1.4	2.2	3.0	3.2
57°	0.2	0.7	1.4	2.2	3.0	3.1
58°	0.2	0.7	1.4	2.2	2.9	3.1
59°	0.2	0.7	1.4	2.2	2.9	3.1
60°	0.2	0.7	1.3	2.2	2.9	3.1
62.5°	0.2	0.7	1.3	2.0	2.8	3.0
65°	0.2	0.7	1.2	1.9	2.8	2.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.6	1.2	1.8	2.6	2.8
70°	0.4	0.6	1.1	1.8	2.5	2.6
72.5°	0.4	0.6	1.1	1.6	2.3	2.5
75°	0.4	0.6	1.0	1.4	2.2	2.3
77.5°	0.4	0.6	0.8	1.3	1.9	2.0
80°	0.5	0.6	0.7	1.1	1.7	1.8
82.5°	0.5	0.6	0.6	0.8	1.3	1.4
85°	0.4	0.5	0.5	0.6	0.8	1.0
87.5°	0.4	0.5	0.4	0.2	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)