

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: P1335300

Luminaire Tested: P3A02R359027DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359027DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

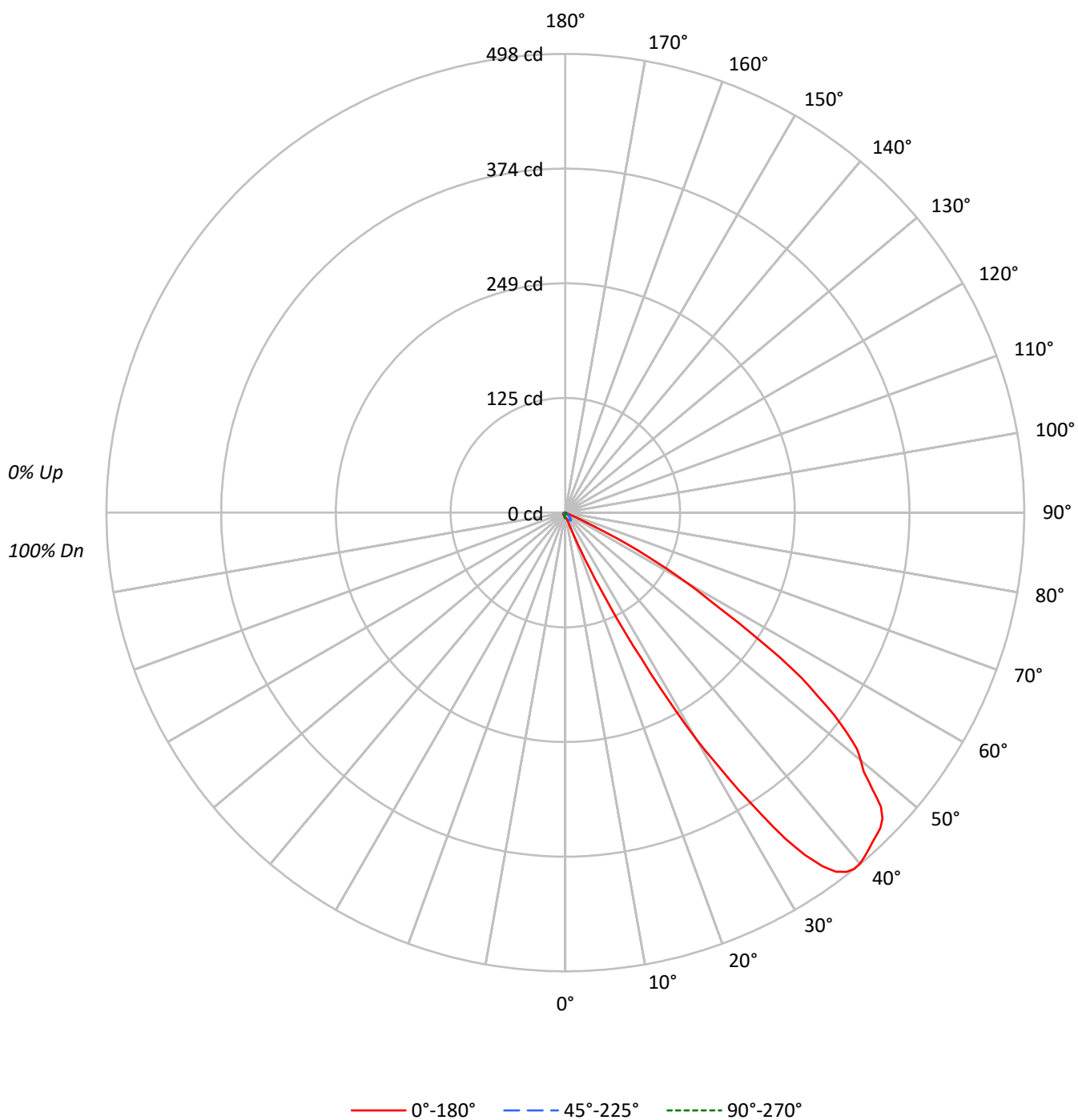
Lumens per Lamp: N/A
Luminaire Lumens: 124.0 lumens
Efficiency: N/A
Efficacy: 34.4 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.42
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	100	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42
8	57	42	33	27	55	41	33	27	40	32	27		39	32	26		38
9	52	38	29	23	50	37	29	23	36	28	23		35	28	22		34
10	48	34	25	19	46	33	25	19	32	25	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1250	1250	1250	1250	1250
5°	1365	1321	1233	1101	1079
10°	1425	1291	1091	957	957
15°	2043	1271	885	817	840
20°	5087	1353	700	700	793
25°	23638	1742	532	653	726
30°	71884	2355	430	608	734
35°	121479	2730	348	562	723
40°	142381	2691	286	573	773
45°	149969	1923	248	620	837
50°	142733	1160	239	648	921
55°	119623	459	268	726	1070
60°	66968	88	307	833	1184
65°	11571	52	311	934	1349
70°	192	64	385	1026	1539
75°	169	85	508	1101	1694
80°	126	126	505	1263	2020
85°	0	252	1006	1510	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 151015 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.4
10°-20°	1.5	1.2
20°-30°	7.6	6.1
30°-40°	32.9	26.5
40°-50°	46.9	37.8
50°-60°	29.0	23.4
60°-70°	4.4	3.6
70°-80°	0.8	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°	9.6	7.7
0°-40°	42.4	34.2
0°-60°	118.4	95.5
0°-90°	124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	124.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	6	6	6	5	5	1
15°	9	6	4	4	4	3
25°	98	7	2	3	3	58
35°	454	10	1	2	3	272
45°	484	6	1	2	3	365
55°	313	1	1	2	3	266
65°	22	0	1	2	3	46
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°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
2.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.7	5.6
5°	6.2	6.2	6.0	6.0	6.0	6.0	6.0	6.0	5.8	5.6	5.3
7.5°	6.3	6.3	6.2	6.2	6.2	6.2	6.0	5.9	5.7	5.3	4.9
10°	6.4	6.4	6.4	6.4	6.3	6.2	6.0	5.8	5.5	4.9	4.6
12.5°	7.2	7.2	7.1	6.8	6.6	6.4	6.2	5.7	5.0	4.5	4.1
15°	9.0	8.8	8.6	8.3	7.8	7.3	6.8	5.6	4.6	3.9	3.7
17.5°	12.5	12.3	12.0	10.9	9.9	8.8	7.9	5.6	4.1	3.5	3.2
20°	21.8	21.9	19.6	16.9	14.7	12.2	10.0	5.8	3.7	3.0	2.9
22.5°	45.6	43.8	38.2	31.7	24.2	18.7	14.1	6.4	3.2	2.6	2.6
25°	97.7	90.9	77.3	58.4	41.2	29.2	20.5	7.2	2.9	2.2	2.4
27.5°	178.4	172.3	145.1	109.3	72.5	44.1	27.8	8.2	2.6	1.9	2.1
30°	283.9	266.9	231.4	179.1	121.2	67.5	37.3	9.3	2.1	1.7	2.0
31°	316.8	308.9	265.7	207.2	142.0	80.1	41.3	9.6	2.0	1.7	1.9
32°	355.8	342.0	303.2	238.0	163.2	91.5	46.1	10.0	1.9	1.5	1.9
33°	390.8	377.3	330.2	265.1	184.6	104.3	51.3	10.1	1.7	1.5	1.8
34°	427.5	409.1	362.5	293.4	206.5	118.2	56.0	10.2	1.6	1.3	1.8
35°	453.8	435.4	390.2	315.8	225.4	130.5	61.3	10.2	1.5	1.3	1.7
36°	474.2	458.0	414.2	338.8	244.2	141.6	65.6	10.2	1.2	1.2	1.7
37°	488.2	472.8	430.3	358.6	258.6	151.5	69.4	10.2	1.1	1.2	1.7
38°	495.0	482.2	445.8	373.1	272.5	159.2	72.4	10.0	1.0	1.1	1.6
39°	497.9	487.5	455.4	385.3	282.9	165.9	74.7	9.7	0.9	1.1	1.6
40°	497.4	488.4	460.7	393.7	291.3	170.5	75.9	9.4	0.8	1.0	1.6
41°	494.9	487.0	463.5	400.8	296.3	173.6	76.2	9.1	0.7	1.0	1.5
42°	492.0	484.8	464.4	404.7	299.5	174.6	75.3	8.6	0.7	0.9	1.5
43°	488.9	482.3	464.4	405.9	300.3	173.9	73.9	7.8	0.6	0.9	1.5
44°	486.5	480.2	463.0	405.5	298.6	171.4	71.2	6.9	0.4	0.9	1.5
45°	483.6	477.4	461.1	403.4	295.4	167.0	67.8	6.2	0.3	0.8	1.5
46°	478.4	473.6	457.7	399.1	290.3	161.0	63.6	5.6	0.2	0.8	1.3
47°	468.5	464.3	451.2	392.6	283.4	153.8	59.2	5.0	0.2	0.8	1.3
48°	448.4	448.3	438.2	380.5	272.6	144.8	54.6	4.5	0.2	0.8	1.3
49°	429.1	427.0	414.5	359.2	257.0	134.1	49.8	4.0	0.1	0.8	1.3
50°	418.4	414.1	393.5	334.1	237.1	119.2	44.7	3.4	0.1	0.7	1.3
51°	407.3	401.1	376.8	311.5	213.4	104.9	39.1	2.7	0.1	0.7	1.2
52°	387.3	381.4	354.2	289.9	190.3	90.2	33.7	2.2	0.1	0.7	1.3
53°	365.7	357.2	327.6	266.2	170.0	77.2	28.2	1.9	0.1	0.7	1.2
54°	338.5	334.7	300.8	237.1	146.3	64.7	23.2	1.6	0.1	0.7	1.2
55°	312.9	307.3	272.0	207.3	124.8	53.1	19.4	1.2	0.1	0.7	1.2
56°	280.2	271.8	238.8	180.0	103.0	42.8	16.3	1.0	0.1	0.7	1.2
57°	241.2	232.3	206.2	149.7	80.8	32.6	13.7	0.8	0.1	0.7	1.2
58°	204.1	196.3	168.4	115.5	60.9	22.6	11.3	0.6	0.1	0.6	1.2
59°	176.3	167.8	140.0	88.9	42.3	16.7	8.5	0.4	0.1	0.7	1.2
60°	152.7	141.7	112.7	68.8	30.2	12.0	6.3	0.2	0.2	0.7	1.2
62.5°	88.0	77.7	53.8	28.0	12.4	6.2	3.0	0.1	0.2	0.7	1.2
65°	22.3	19.8	12.9	6.0	3.5	2.1	1.1	0.1	0.2	0.6	1.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	0.8	0.8	0.8	0.7	0.6	0.4	0.2	0.1	0.2	0.6	1.1
70°	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.6	1.0
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.6	0.9
75°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.6	0.9
77.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.8
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.7
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.3
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):

	135°	157.5°	180°
0°	5.7	5.7	5.7
2.5°	5.4	5.4	5.4
5°	5.0	5.0	4.9
7.5°	4.7	4.6	4.6
10°	4.3	4.3	4.3
12.5°	3.9	3.9	3.9
15°	3.6	3.7	3.7
17.5°	3.2	3.5	3.5
20°	3.0	3.2	3.4
22.5°	2.8	3.0	3.1
25°	2.7	2.9	3.0
27.5°	2.5	2.8	3.0
30°	2.4	2.7	2.9
31°	2.4	2.7	2.8
32°	2.2	2.7	2.8
33°	2.2	2.7	2.8
34°	2.2	2.6	2.8
35°	2.1	2.6	2.7
36°	2.1	2.6	2.7
37°	2.1	2.6	2.8
38°	2.1	2.6	2.7
39°	2.0	2.6	2.7
40°	2.0	2.6	2.7
41°	2.0	2.6	2.7
42°	2.0	2.6	2.7
43°	2.0	2.6	2.7
44°	2.0	2.5	2.7
45°	2.0	2.5	2.7
46°	2.0	2.6	2.7
47°	2.0	2.6	2.8
48°	2.0	2.5	2.7
49°	1.9	2.5	2.7
50°	1.9	2.5	2.7
51°	1.9	2.6	2.8
52°	1.9	2.6	2.8
53°	1.9	2.6	2.8
54°	1.9	2.6	2.7
55°	1.9	2.6	2.8
56°	1.9	2.6	2.7
57°	1.9	2.6	2.7
58°	1.9	2.5	2.7
59°	1.9	2.5	2.7
60°	1.9	2.5	2.7
62.5°	1.8	2.5	2.7
65°	1.8	2.4	2.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.7	2.4	2.5
70°	1.6	2.2	2.4
72.5°	1.5	2.1	2.2
75°	1.3	1.9	2.0
77.5°	1.1	1.7	1.9
80°	1.0	1.5	1.6
82.5°	0.8	1.2	1.3
85°	0.6	0.9	0.9
87.5°	0.2	0.4	0.4
90°	0.0	0.0	0.0

(END OF REPORT)