

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: P1334744

Luminaire Tested: P3A02R259730DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334744
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: P3A02R259730DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

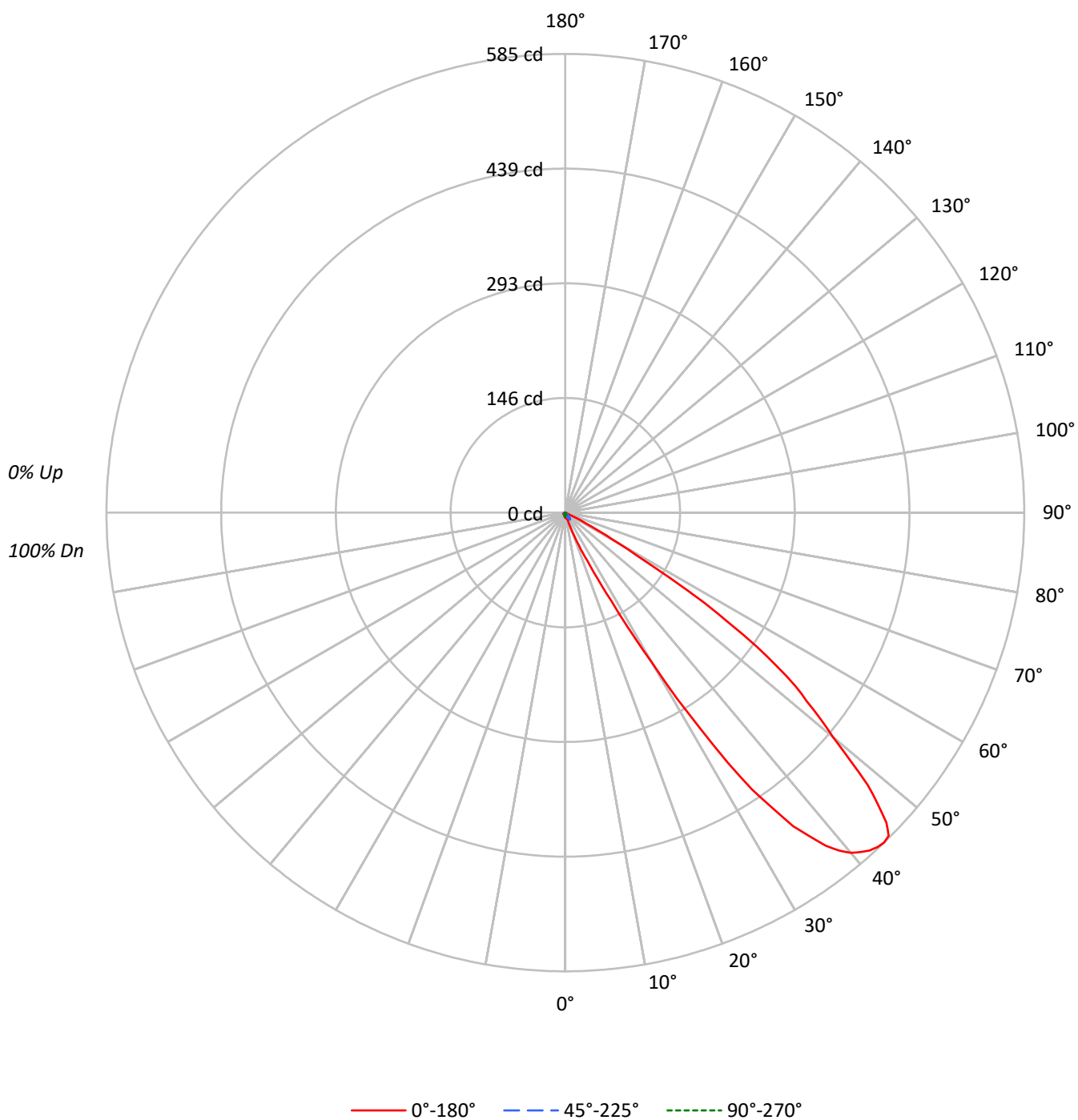
Lumens per Lamp: N/A
Luminaire Lumens: 122.0 lumens
Efficiency: N/A
Efficacy: 33.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1360	1360	1360	1360	1360
5°	1563	1497	1321	1189	1167
10°	1559	1403	1113	980	980
15°	1725	1226	885	840	885
20°	6114	1213	677	700	770
25°	17590	1524	556	653	750
30°	56110	2355	430	633	760
35°	122898	2784	375	616	776
40°	162104	2519	315	601	830
45°	180763	1768	310	651	899
50°	152183	921	307	682	989
55°	113774	382	306	765	1109
60°	35216	88	263	833	1228
65°	3009	0	311	882	1349
70°	192	64	321	1026	1539
75°	169	85	424	1101	1694
80°	126	126	631	1263	2020
85°	252	252	1006	1258	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 180763 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.5
10°-20°	1.4	1.2
20°-30°	6.7	5.5
30°-40°	32.5	26.6
40°-50°	50.9	41.8
50°-60°	26.1	21.4
60°-70°	2.5	2.0
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°	8.7	7.2
0°-40°	41.2	33.8
0°-60°	118.3	97.0
0°-90°	122.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	122.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6	6	6	6	6	
5°	7	7	6	5	5	1
15°	8	5	4	4	4	3
25°	73	6	2	3	3	45
35°	459	10	1	2	3	279
45°	583	6	1	2	3	427
55°	298	1	1	2	3	248
65°	6	0	1	2	3	18
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°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
2.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.7	6.7	6.8	6.7	6.7
5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.0	6.8
7.5°	7.2	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	6.7
10°	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.8	6.8	6.8	6.3
12.5°	7.0	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.7	6.5	5.8
15°	7.6	7.6	7.6	7.5	7.4	7.3	7.2	7.1	7.0	6.8	5.4
17.5°	11.2	10.8	10.7	10.3	9.8	9.2	8.8	8.4	7.9	7.6	5.2
20°	26.2	26.1	25.6	24.3	22.9	21.3	19.6	17.8	15.2	13.5	5.2
22.5°	45.4	44.8	43.8	42.8	40.4	37.5	34.5	31.0	27.7	24.2	5.5
25°	72.7	74.2	71.0	68.4	64.1	58.8	53.1	48.4	42.4	36.8	6.3
27.5°	126.4	127.3	121.0	112.6	102.6	91.6	80.8	72.8	62.7	53.5	7.9
30°	221.6	222.6	211.9	194.1	173.5	155.3	130.8	109.2	89.3	74.0	9.3
31°	276.6	269.0	256.7	239.4	213.3	185.9	156.4	130.3	105.2	85.0	9.8
32°	324.3	323.7	309.3	283.1	256.9	223.1	186.5	152.4	121.6	96.2	10.1
33°	380.7	376.4	356.1	331.4	296.7	262.7	215.5	176.6	138.5	108.6	10.3
34°	425.9	414.3	405.9	377.7	341.1	297.7	247.1	202.2	159.5	120.7	10.4
35°	459.1	456.6	440.3	414.0	376.7	332.4	281.3	228.7	177.1	134.6	10.4
36°	494.2	486.5	470.7	446.8	410.5	364.7	307.4	251.6	197.6	147.2	10.3
37°	516.2	511.7	495.9	471.3	435.8	392.0	336.6	275.9	214.0	159.7	10.1
38°	538.8	529.7	514.1	490.6	455.7	414.6	357.7	294.6	229.0	170.8	9.8
39°	554.5	545.1	529.2	505.8	471.6	430.8	374.5	310.5	242.1	179.1	9.3
40°	566.3	557.2	541.1	517.0	483.3	443.6	388.4	324.5	253.0	186.3	8.8
41°	573.6	565.1	549.1	525.2	491.4	450.9	397.5	333.7	260.4	191.1	8.3
42°	579.7	571.0	554.7	530.2	496.3	457.1	403.1	339.5	265.5	193.6	7.8
43°	583.2	574.5	558.6	533.6	499.3	460.0	406.1	342.1	267.2	193.2	7.1
44°	585.1	576.1	560.1	535.1	500.6	460.8	406.3	341.6	266.0	190.7	6.4
45°	582.9	574.0	558.6	533.6	498.4	458.4	404.2	338.7	261.5	185.6	5.7
46°	569.0	562.1	548.0	525.0	491.3	452.4	398.7	333.1	254.5	179.4	4.8
47°	544.4	538.9	525.2	508.1	477.6	441.3	388.6	322.5	244.8	170.1	3.9
48°	518.7	510.7	497.9	480.4	454.7	421.5	372.0	306.9	230.0	157.8	3.4
49°	480.9	476.1	464.9	445.3	424.0	394.8	348.5	287.0	211.8	144.5	3.0
50°	446.1	442.8	427.1	412.7	390.0	362.8	316.6	260.7	189.3	128.0	2.7
51°	418.9	415.0	403.7	385.7	361.6	329.9	286.4	226.5	163.4	108.3	2.1
52°	390.6	388.4	378.3	359.9	336.1	304.6	257.1	197.5	138.3	91.6	1.7
53°	367.4	364.3	351.9	335.5	309.8	277.2	225.3	170.6	117.1	77.0	1.5
54°	333.6	332.3	324.3	307.1	279.3	243.8	196.6	143.6	97.7	65.3	1.3
55°	297.6	293.3	285.2	271.6	246.1	212.9	163.3	119.1	79.0	55.0	1.0
56°	253.8	253.6	239.2	227.8	205.2	169.9	130.4	93.0	64.2	45.8	0.9
57°	211.9	205.2	191.3	180.0	155.7	128.9	96.8	69.7	50.2	37.1	0.6
58°	156.7	153.2	149.5	133.0	110.5	91.4	69.1	49.0	37.1	28.3	0.4
59°	106.4	106.3	102.0	89.4	76.4	56.9	43.2	33.3	25.6	20.8	0.3
60°	80.3	78.4	69.8	61.5	48.1	36.0	25.6	19.6	15.9	13.4	0.2
62.5°	28.1	29.2	25.7	21.3	16.2	13.3	10.2	8.3	6.8	5.5	0.0
65°	5.8	6.3	5.5	5.2	4.1	3.5	3.1	2.7	2.3	1.9	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	0.6	0.6	0.6	0.5	0.5	0.5	0.5	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°	6.2	6.2	6.2	6.2	6.2	6.2
2.5°	6.5	6.3	6.0	5.9	5.8	5.8
5°	6.4	6.0	5.7	5.4	5.3	5.3
7.5°	6.1	5.6	5.2	4.9	4.8	4.7
10°	5.8	5.0	4.6	4.4	4.4	4.4
12.5°	5.2	4.5	4.1	4.0	4.1	4.1
15°	4.6	3.9	3.7	3.7	3.8	3.9
17.5°	4.0	3.4	3.2	3.3	3.4	3.5
20°	3.5	2.9	2.9	3.0	3.3	3.3
22.5°	3.1	2.6	2.6	2.9	3.1	3.2
25°	2.8	2.3	2.4	2.7	3.0	3.1
27.5°	2.4	1.9	2.1	2.6	2.9	3.0
30°	2.0	1.7	2.0	2.5	2.8	3.0
31°	1.9	1.6	2.0	2.4	2.8	3.0
32°	1.7	1.6	1.9	2.4	2.8	2.9
33°	1.6	1.5	1.9	2.4	2.8	2.9
34°	1.5	1.4	1.8	2.4	2.8	2.9
35°	1.3	1.4	1.8	2.3	2.7	2.9
36°	1.2	1.3	1.8	2.3	2.7	2.9
37°	1.1	1.3	1.7	2.3	2.7	2.9
38°	1.0	1.2	1.7	2.3	2.7	2.9
39°	0.9	1.2	1.6	2.3	2.7	2.9
40°	0.8	1.1	1.6	2.1	2.7	2.9
41°	0.8	1.1	1.6	2.1	2.7	2.9
42°	0.6	1.1	1.6	2.1	2.7	2.9
43°	0.5	1.0	1.6	2.1	2.7	2.9
44°	0.4	1.0	1.5	2.1	2.7	2.9
45°	0.4	1.0	1.5	2.1	2.7	2.9
46°	0.3	0.9	1.5	2.1	2.7	2.9
47°	0.2	0.9	1.5	2.0	2.7	2.9
48°	0.2	0.9	1.5	2.0	2.7	2.9
49°	0.2	0.9	1.4	2.0	2.7	2.9
50°	0.2	0.9	1.4	2.0	2.7	2.9
51°	0.1	0.8	1.4	2.0	2.7	2.9
52°	0.1	0.8	1.4	2.0	2.7	3.0
53°	0.1	0.8	1.4	2.0	2.7	2.9
54°	0.1	0.8	1.3	2.0	2.7	2.9
55°	0.1	0.8	1.3	2.0	2.7	2.9
56°	0.1	0.6	1.3	1.9	2.7	2.9
57°	0.2	0.6	1.3	1.9	2.7	2.8
58°	0.2	0.6	1.3	1.9	2.6	2.8
59°	0.2	0.6	1.3	1.9	2.6	2.8
60°	0.2	0.6	1.2	1.9	2.6	2.8
62.5°	0.2	0.6	1.2	1.8	2.5	2.7
65°	0.2	0.6	1.1	1.7	2.5	2.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.5	1.1	1.6	2.4	2.5
70°	0.3	0.5	1.0	1.6	2.3	2.4
72.5°	0.3	0.5	1.0	1.4	2.0	2.3
75°	0.3	0.5	0.9	1.3	1.9	2.0
77.5°	0.3	0.5	0.8	1.2	1.7	1.8
80°	0.4	0.5	0.6	1.0	1.5	1.6
82.5°	0.4	0.5	0.5	0.8	1.2	1.3
85°	0.3	0.4	0.4	0.5	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)