

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: P1343048

Luminaire Tested: P3A09R459827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343048
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R459827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

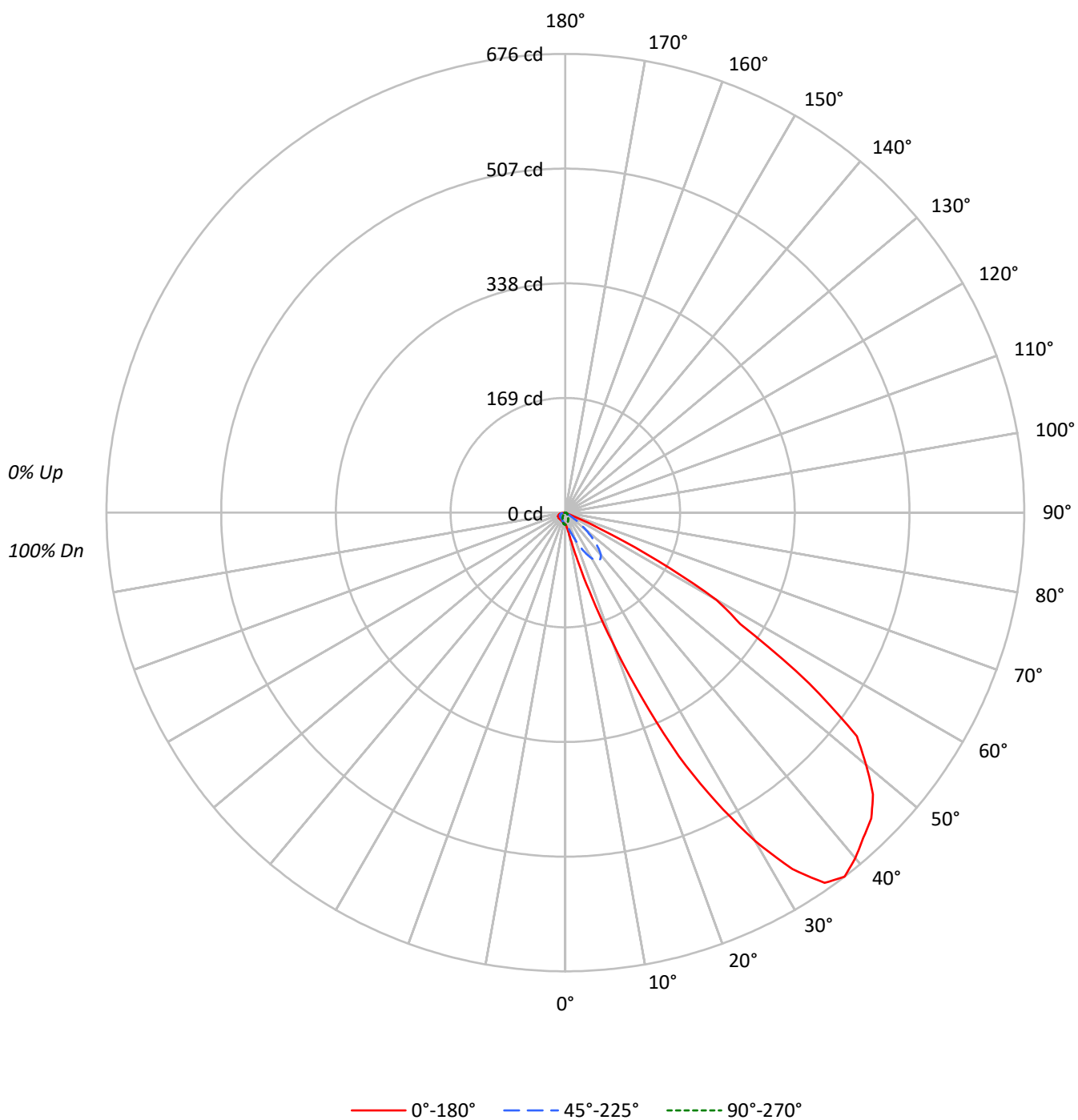
Lumens per Lamp: N/A
Luminaire Lumens: 301.9 lumens
Efficiency: N/A
Efficacy: 27.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	40	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	38	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3837	3837	3837	3837	3837
5°	4556	4226	3786	3522	3522
10°	7281	4943	3563	3340	3340
15°	18139	6629	3224	3110	3224
20°	47744	9894	2800	2964	3150
25°	95885	14662	2419	2782	3073
30°	141338	19649	1950	2709	3165
35°	178283	23048	1660	2677	3266
40°	190214	23272	1489	2777	3492
45°	197633	19413	1395	3008	3783
50°	197315	13543	1365	3241	4264
55°	167717	6002	1415	3632	4664
60°	112710	1184	1403	4035	5350
65°	29886	519	1401	4410	6071
70°	769	641	1410	4809	6860
75°	593	593	1440	5083	7795
80°	631	884	1515	5304	8840
85°	503	1258	2516	5535	8806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 202730 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.6
10°-20°	8.5	2.8
20°-30°	35.1	11.6
30°-40°	74.0	24.5
40°-50°	91.3	30.3
50°-60°	68.5	22.7
60°-70°	17.6	5.8
70°-80°	3.6	1.2
80°-90°	1.5	0.5
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°	45.4	15.0
0°-40°	119.4	39.6
0°-60°	279.2	92.5
0°-90°	301.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	301.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18	18	18	18	18	
5°	21	19	17	16	16	2
15°	80	29	14	14	14	29
25°	396	61	10	12	13	185
35°	666	86	6	10	12	406
45°	637	63	4	10	12	488
55°	439	16	4	10	12	379
65°	58	1	3	8	12	83
75°	1	1	2	6	9	1
85°	0	0	1	2	4	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°	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
2.5°	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.2	18.0	17.5	17.0
5°	20.7	20.5	20.5	20.5	20.2	20.0	20.0	19.2	18.2	17.2	16.5
7.5°	24.5	24.5	24.2	23.7	23.5	23.0	22.5	20.5	18.2	16.7	15.7
10°	32.7	32.2	31.4	30.9	29.7	27.9	26.7	22.2	18.0	16.0	15.2
12.5°	48.9	49.9	47.4	44.9	41.4	38.2	34.2	25.2	18.0	15.2	14.5
15°	79.9	81.6	76.9	71.9	63.4	55.4	47.9	29.2	17.5	14.2	13.5
17.5°	130.5	132.8	124.8	113.0	99.8	83.8	70.1	34.7	17.0	13.2	12.7
20°	204.6	204.4	188.9	174.2	148.7	125.3	99.6	42.4	16.2	12.0	12.0
22.5°	295.7	296.7	277.7	251.3	215.1	177.4	136.5	51.4	15.2	11.0	11.2
25°	396.3	387.8	365.3	333.1	287.0	234.8	180.9	60.6	14.2	10.0	10.5
27.5°	480.1	471.9	446.2	408.0	358.3	296.4	226.1	69.9	13.0	9.0	9.7
30°	558.2	547.7	516.8	473.6	414.5	347.6	268.5	77.6	11.5	7.7	9.0
32.5°	622.6	613.1	577.9	527.8	463.4	391.5	304.4	83.6	10.0	7.0	8.5
35°	666.0	656.3	623.8	568.7	498.6	423.5	333.6	86.1	8.7	6.2	8.2
37.5°	676.0	670.8	647.5	595.9	522.8	443.9	352.3	85.3	7.2	5.7	7.7
40°	664.5	665.8	654.8	611.9	535.8	452.7	360.1	81.3	6.0	5.2	7.5
42.5°	649.8	653.0	652.3	618.3	541.2	453.2	356.8	73.4	4.7	4.7	7.2
45°	637.3	640.6	645.0	615.6	537.5	446.7	346.6	62.6	3.5	4.5	7.2
47.5°	614.6	618.1	624.6	593.6	518.5	429.9	328.1	50.9	2.5	4.2	7.0
50°	578.4	580.2	578.4	543.7	482.1	403.0	298.2	39.7	1.7	4.0	7.0
52.5°	541.2	537.7	523.3	479.4	424.2	360.3	260.5	28.2	1.2	3.7	6.7
55°	438.7	433.2	422.5	395.5	364.1	307.9	210.6	15.7	1.2	3.7	6.5
57.5°	305.7	308.7	312.4	306.9	292.5	242.5	160.0	7.0	1.2	3.5	6.5
60°	257.0	254.5	254.8	251.3	227.3	176.9	110.0	2.7	1.2	3.2	6.2
62.5°	153.5	155.2	158.5	159.2	135.5	98.8	57.6	1.2	1.2	3.0	6.0
65°	57.6	60.4	52.9	45.9	36.4	26.7	13.5	1.0	1.5	2.7	5.5
67.5°	1.7	2.0	2.5	2.2	2.2	2.0	1.5	1.0	1.5	2.5	5.2
70°	1.2	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.2	2.2	4.7
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	2.0	4.2
75°	0.7	1.0	0.7	0.7	0.7	0.7	0.7	0.7	1.2	1.7	3.5
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.5	3.0
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	1.0	1.2	2.5
82.5°	0.5	0.5	0.5	0.2	0.5	0.5	0.5	0.5	1.0	1.0	2.0
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.0	1.2
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.5	0.7	0.7	0.7
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°	17.5	17.5	17.5
2.5°	16.5	16.5	16.5
5°	16.0	16.0	16.0
7.5°	15.5	15.5	15.5
10°	15.0	15.0	15.0
12.5°	14.5	14.5	14.7
15°	13.7	14.2	14.2
17.5°	13.2	13.7	14.0
20°	12.7	13.2	13.5
22.5°	12.0	12.7	13.2
25°	11.5	12.5	12.7
27.5°	11.0	12.2	12.7
30°	10.7	12.0	12.5
32.5°	10.2	11.7	12.2
35°	10.0	11.7	12.2
37.5°	10.0	11.5	12.2
40°	9.7	11.5	12.2
42.5°	9.7	11.5	12.2
45°	9.7	11.5	12.2
47.5°	9.5	11.5	12.5
50°	9.5	11.7	12.5
52.5°	9.5	11.7	12.5
55°	9.5	11.7	12.2
57.5°	9.2	11.5	12.2
60°	9.2	11.5	12.2
62.5°	8.7	11.2	12.0
65°	8.5	11.0	11.7
67.5°	8.0	10.7	11.2
70°	7.5	10.0	10.7
72.5°	6.7	9.5	10.2
75°	6.0	8.7	9.2
77.5°	5.2	7.7	8.2
80°	4.2	6.5	7.0
82.5°	3.2	5.0	5.2
85°	2.2	3.2	3.5
87.5°	1.0	1.5	1.7
90°	0.0	0.0	0.0

(END OF REPORT)