

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: P1341544

Luminaire Tested: P3A09R309835DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R309835DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

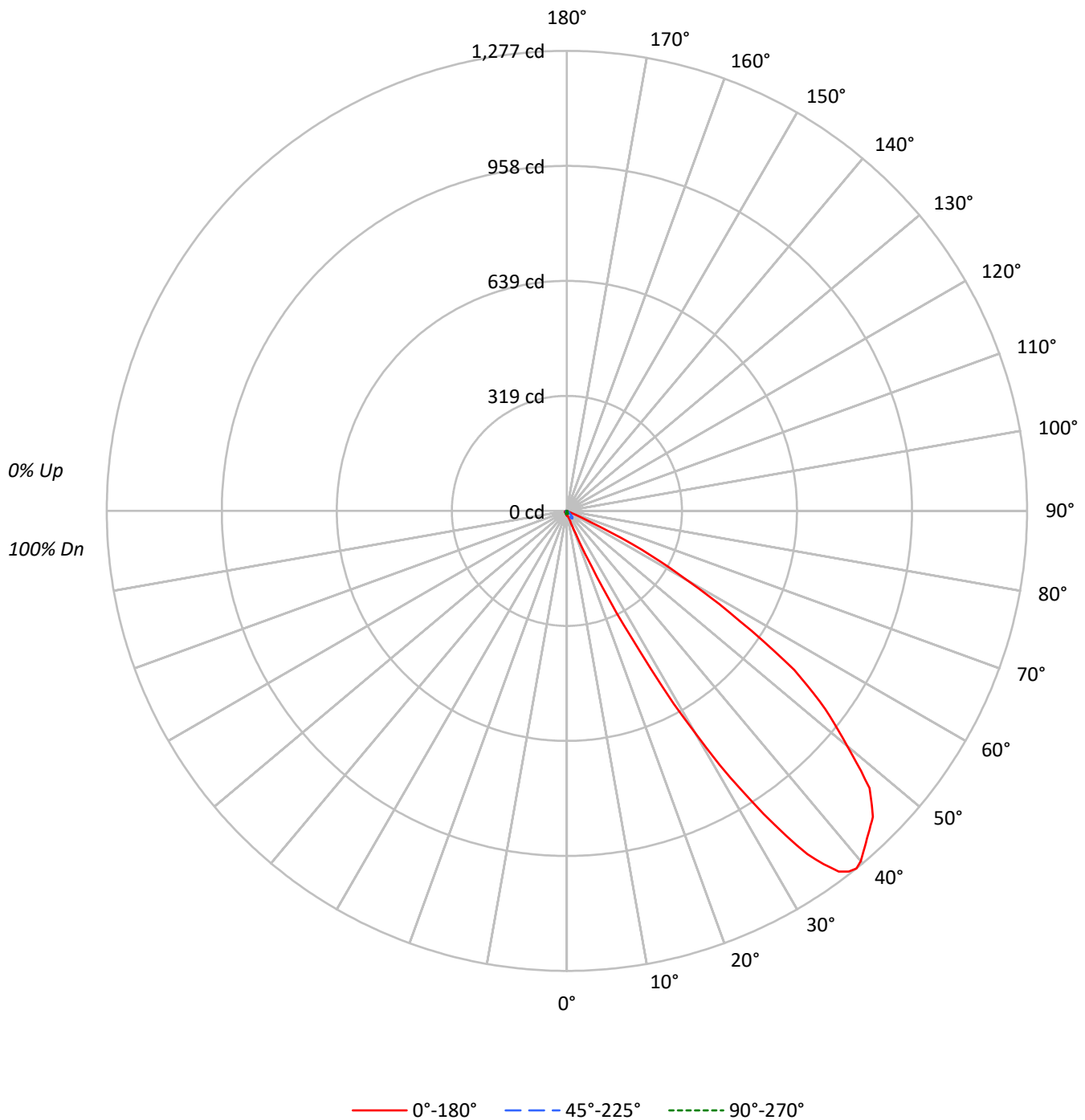
Lumens per Lamp: N/A
Luminaire Lumens: 332.0 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	108	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2829	2829	2829	2829	2829
5°	3016	2950	2773	2531	2465
10°	3295	2917	2427	2182	2115
15°	4835	2929	2020	1839	1907
20°	12134	3197	1563	1563	1773
25°	56374	3992	1210	1428	1621
30°	179445	5520	912	1342	1621
35°	311353	6746	750	1285	1660
40°	363138	6727	573	1288	1689
45°	372411	4776	620	1395	1830
50°	346326	2661	478	1433	2115
55°	294336	1376	535	1606	2370
60°	169986	351	614	1710	2588
65°	34660	0	726	2024	2906
70°	513	192	898	2308	3398
75°	508	254	932	2372	4067
80°	379	379	1389	2778	4546
85°	0	755	2768	2768	5535

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 372411 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.3
10°-20°	3.3	1.0
20°-30°	19.1	5.8
30°-40°	89.4	26.9
40°-50°	126.5	38.1
50°-60°	77.8	23.4
60°-70°	11.8	3.6
70°-80°	1.9	0.6
80°-90°	0.9	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°	23.7	7.1
0°-40°	113.1	34.1
0°-60°	317.4	95.6
0°-90°	332.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	332.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	14	13	13	12	11	1
15°	21	13	9	8	8	8
25°	233	16	5	6	7	143
35°	1163	25	3	5	6	698
45°	1201	15	2	4	6	910
55°	770	4	1	4	6	655
65°	67	0	1	4	6	121
75°	1	0	1	3	5	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
2.5°	13.1	13.1	13.4	13.4	13.1	13.4	13.4	13.4	12.9	12.6	12.0
5°	13.7	13.7	13.7	14.0	13.7	13.7	13.4	13.1	12.6	11.7	11.5
7.5°	14.3	14.3	14.0	14.3	14.0	14.0	13.4	12.9	12.0	11.2	10.6
10°	14.8	14.8	14.5	14.5	14.3	14.3	13.1	12.3	10.9	10.1	9.8
12.5°	16.5	16.5	16.2	15.9	15.4	15.1	12.9	11.5	9.8	8.9	8.7
15°	21.3	21.0	20.4	19.6	18.2	17.9	12.9	10.6	8.9	8.1	8.1
17.5°	29.1	28.8	28.0	25.7	23.2	22.4	12.9	9.5	7.8	7.3	7.3
20°	52.0	49.8	45.6	40.0	34.1	31.0	13.7	8.4	6.7	6.4	6.7
21°	68.0	65.7	60.4	51.2	40.8	37.5	14.3	8.1	6.4	6.2	6.7
22°	92.6	90.1	79.1	66.6	51.7	45.9	14.5	7.6	5.9	5.9	6.4
23°	129.2	125.0	106.6	86.4	64.6	56.2	15.1	7.3	5.6	5.9	6.2
24°	169.2	165.6	144.6	114.4	82.5	70.5	15.7	7.0	5.3	5.3	5.9
25°	233.0	228.8	191.6	144.3	104.6	84.7	16.5	6.4	5.0	5.0	5.9
26°	315.5	296.2	246.7	186.0	128.9	106.3	17.3	6.2	4.8	5.0	5.6
27°	393.8	377.8	322.2	238.6	159.4	130.6	18.5	5.9	4.5	4.8	5.6
28°	496.7	474.3	404.1	301.8	200.8	158.0	19.6	5.6	4.2	4.8	5.3
29°	611.9	580.6	495.8	372.8	247.5	188.8	20.7	5.3	3.9	4.5	5.3
30°	708.7	679.3	594.6	457.0	301.2	229.3	21.8	5.0	3.6	4.5	5.3
31°	822.2	777.7	675.1	528.3	347.3	269.9	22.9	4.5	3.4	4.2	5.0
32°	914.2	883.2	774.1	608.8	408.0	314.6	23.8	4.2	3.4	4.2	5.0
33°	1003.2	961.5	856.0	686.0	462.8	360.5	24.6	3.9	3.1	3.9	5.0
34°	1088.2	1049.9	933.5	748.4	514.6	404.1	25.2	3.4	3.1	3.9	4.8
35°	1163.1	1118.7	1001.8	809.3	567.7	443.8	25.2	3.1	2.8	3.6	4.8
36°	1211.8	1179.9	1061.0	869.5	615.8	481.6	25.2	2.8	2.5	3.6	4.5
37°	1253.4	1216.3	1108.6	915.6	651.3	511.8	25.2	2.5	2.5	3.6	4.5
38°	1270.5	1238.6	1141.3	956.4	684.6	542.5	24.9	2.2	2.2	3.4	4.5
39°	1277.2	1248.7	1165.9	985.8	709.2	563.2	24.3	2.0	2.2	3.4	4.5
40°	1268.6	1247.0	1178.5	1004.8	728.8	578.3	23.5	1.7	2.0	3.4	4.5
42.5°	1232.8	1218.5	1175.7	1023.8	745.6	589.5	20.4	1.1	2.0	3.1	4.5
45°	1200.9	1185.2	1147.5	1004.0	723.8	567.4	15.4	0.6	2.0	3.1	4.5
47.5°	1139.1	1129.3	1099.6	953.4	675.9	517.7	10.9	0.3	1.7	2.8	4.2
50°	1015.2	1005.9	966.8	827.8	581.4	437.7	7.8	0.3	1.4	2.8	4.2
52.5°	904.1	894.4	838.1	688.3	446.6	320.8	5.0	0.3	1.4	2.8	4.2
55°	769.9	752.9	679.0	522.4	316.6	215.1	3.6	0.3	1.4	2.5	4.2
57.5°	570.0	545.1	479.1	356.3	182.3	116.6	2.0	0.3	1.4	2.5	4.2
60°	387.6	372.8	299.8	187.9	77.7	49.2	0.8	0.3	1.4	2.5	3.9
62.5°	234.9	216.2	150.7	80.0	33.6	22.4	0.0	0.6	1.4	2.5	3.9
65°	66.8	59.3	39.4	18.2	9.5	7.3	0.0	0.6	1.4	2.5	3.9
67.5°	2.2	2.2	2.2	2.0	1.4	1.4	0.3	0.6	1.4	2.5	3.6
70°	0.8	0.8	0.8	0.6	0.6	0.3	0.3	0.6	1.4	2.2	3.6
72.5°	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.6	1.1	2.0	3.4
75°	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.8	1.1	2.0	2.8
77.5°	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.8	1.1	1.7	2.8
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.7	2.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.8	1.1	1.1	1.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.1	0.8	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.8	0.8	0.6
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):

	157.5°	180°
0°	12.9	12.9
2.5°	12.0	12.0
5°	11.2	11.2
7.5°	10.3	10.3
10°	9.5	9.5
12.5°	8.9	8.9
15°	8.1	8.4
17.5°	7.6	7.8
20°	7.3	7.6
21°	7.3	7.6
22°	7.0	7.3
23°	7.0	7.3
24°	6.7	7.0
25°	6.4	6.7
26°	6.4	6.7
27°	6.4	6.7
28°	6.2	6.7
29°	6.2	6.4
30°	6.2	6.4
31°	5.9	6.4
32°	5.9	6.4
33°	5.9	6.2
34°	5.6	6.2
35°	5.6	6.2
36°	5.6	6.2
37°	5.6	5.9
38°	5.6	6.2
39°	5.6	5.9
40°	5.6	5.9
42.5°	5.6	5.9
45°	5.6	5.9
47.5°	5.6	6.2
50°	5.6	6.2
52.5°	5.6	6.2
55°	5.6	6.2
57.5°	5.6	5.9
60°	5.6	5.9
62.5°	5.3	5.9
65°	5.3	5.6
67.5°	5.3	5.6
70°	5.0	5.3
72.5°	4.8	5.0
75°	4.2	4.8
77.5°	3.9	4.2
80°	3.4	3.6



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.8	2.8
85°	2.0	2.2
87.5°	1.1	1.1
90°	0.0	0.0

(END OF REPORT)