

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: P1335460

Luminaire Tested: P3A02R359827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335460
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: P3A02R359827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

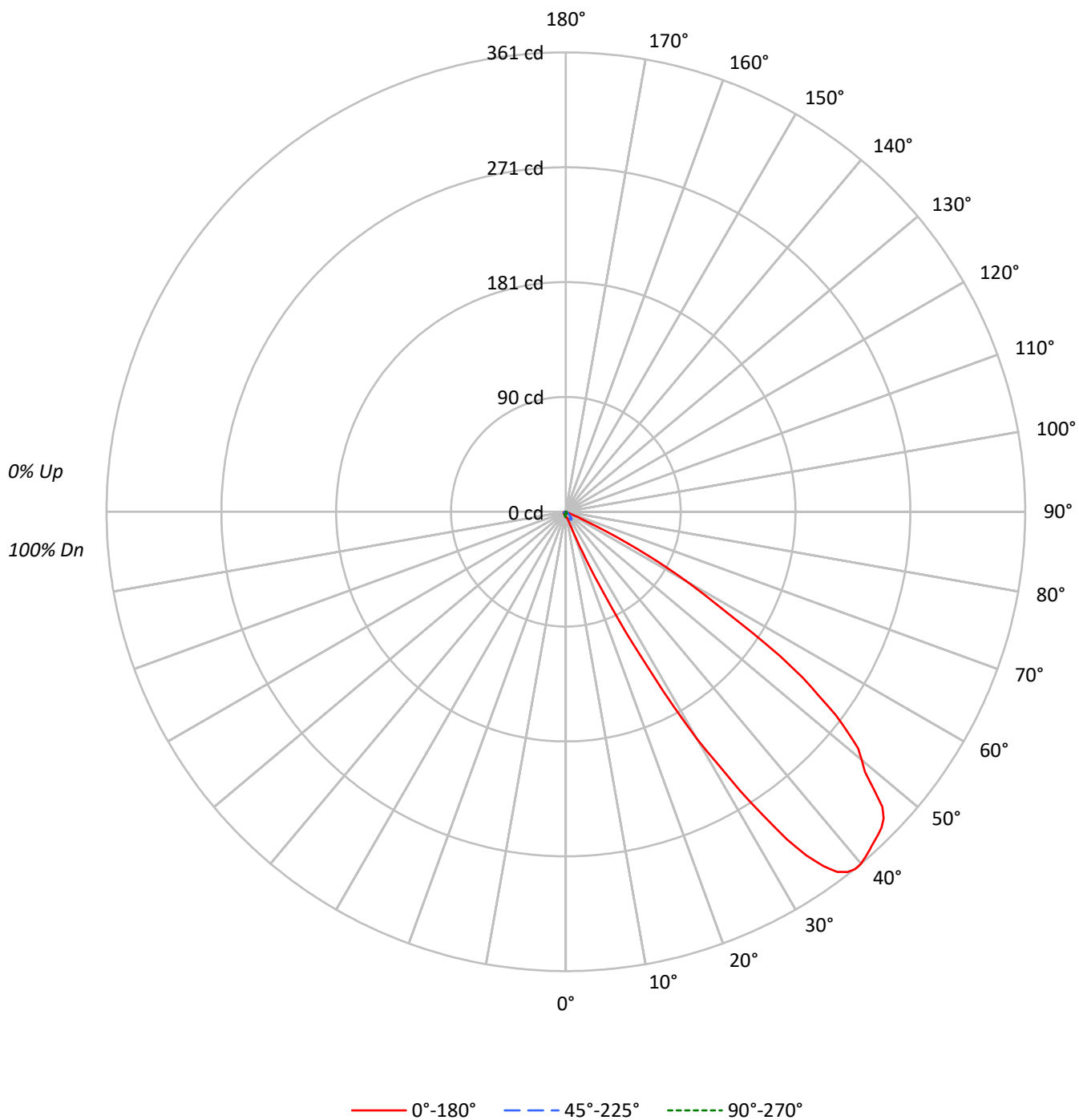
Lumens per Lamp: N/A
Luminaire Lumens: 90.0 lumens
Efficiency: N/A
Efficacy: 25.0 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.42
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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	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	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	899	899	899	899	899
5°	991	969	902	814	792
10°	1024	935	802	690	690
15°	1476	931	636	590	613
20°	3687	980	513	513	560
25°	17154	1258	387	460	532
30°	52160	1696	304	430	532
35°	88178	1981	268	402	509
40°	103336	1947	200	429	544
45°	108849	1395	186	465	589
50°	103604	819	171	478	648
55°	86821	344	191	535	765
60°	48593	88	219	614	833
65°	8406	52	208	675	986
70°	128	64	256	705	1090
75°	169	85	339	847	1271
80°	126	126	379	884	1389
85°	0	252	755	1006	1510

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 109600 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.4	0.4
10°-20°	1.1	1.2
20°-30°	5.5	6.1
30°-40°	23.8	26.5
40°-50°	34.0	37.8
50°-60°	21.1	23.4
60°-70°	3.2	3.6
70°-80°	0.6	0.7
80°-90°	0.3	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°	7.0	7.7
0°-40°	30.8	34.2
0°-60°	85.9	95.4
0°-90°	90.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	90.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4	4	4	4	4	
5°	4	4	4	4	4	0
15°	6	4	3	3	3	2
25°	71	5	2	2	2	42
35°	329	7	1	2	2	198
45°	351	4	1	2	2	265
55°	227	1	0	1	2	193
65°	16	0	0	1	2	33
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°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
2.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.1	4.1
5°	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.2	4.1	3.8
7.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.1	3.8	3.6
10°	4.6	4.6	4.6	4.6	4.5	4.5	4.4	4.2	4.0	3.6	3.3
12.5°	5.2	5.2	5.1	5.0	4.8	4.6	4.5	4.1	3.7	3.2	3.0
15°	6.5	6.4	6.3	6.0	5.7	5.3	5.0	4.1	3.3	2.8	2.7
17.5°	9.1	8.9	8.7	7.9	7.1	6.4	5.8	4.1	3.0	2.5	2.4
20°	15.8	15.9	14.2	12.3	10.6	8.9	7.2	4.2	2.7	2.2	2.1
22.5°	33.1	31.8	27.7	23.0	17.5	13.6	10.2	4.6	2.4	1.9	1.9
25°	70.9	66.0	56.1	42.4	29.9	21.2	14.9	5.2	2.1	1.6	1.7
27.5°	129.5	125.0	105.3	79.3	52.6	32.0	20.1	5.9	1.9	1.4	1.5
30°	206.0	193.7	167.9	130.0	88.0	49.0	27.1	6.7	1.5	1.2	1.5
31°	229.9	224.2	192.9	150.4	103.1	58.2	30.0	7.0	1.5	1.2	1.4
32°	258.3	248.2	220.1	172.7	118.5	66.4	33.5	7.2	1.4	1.1	1.4
33°	283.6	273.9	239.7	192.4	134.0	75.7	37.2	7.3	1.2	1.1	1.3
34°	310.3	296.9	263.1	212.9	149.9	85.8	40.6	7.4	1.1	1.0	1.3
35°	329.4	316.0	283.2	229.2	163.6	94.7	44.5	7.4	1.1	1.0	1.2
36°	344.2	332.5	300.6	245.9	177.3	102.8	47.6	7.4	0.9	0.9	1.2
37°	354.3	343.2	312.3	260.3	187.7	109.9	50.4	7.4	0.8	0.9	1.2
38°	359.3	350.0	323.6	270.8	197.7	115.5	52.6	7.2	0.7	0.8	1.1
39°	361.4	353.8	330.5	279.6	205.3	120.4	54.2	7.1	0.6	0.8	1.1
40°	361.0	354.5	334.4	285.7	211.4	123.7	55.1	6.8	0.6	0.7	1.1
41°	359.2	353.5	336.4	290.9	215.1	126.0	55.3	6.6	0.5	0.7	1.1
42°	357.1	351.9	337.1	293.7	217.4	126.7	54.7	6.3	0.5	0.6	1.1
43°	354.9	350.1	337.1	294.6	218.0	126.3	53.6	5.7	0.4	0.6	1.1
44°	353.1	348.5	336.0	294.3	216.8	124.4	51.7	5.0	0.3	0.6	1.1
45°	351.0	346.5	334.6	292.8	214.4	121.2	49.2	4.5	0.2	0.6	1.1
46°	347.2	343.7	332.2	289.6	210.7	116.8	46.1	4.1	0.2	0.6	1.0
47°	340.0	337.0	327.5	284.9	205.7	111.6	43.0	3.7	0.2	0.6	1.0
48°	325.5	325.4	318.1	276.1	197.8	105.1	39.6	3.2	0.2	0.6	1.0
49°	311.4	309.9	300.8	260.7	186.5	97.3	36.2	2.9	0.1	0.6	1.0
50°	303.7	300.5	285.6	242.5	172.1	86.5	32.4	2.4	0.1	0.5	1.0
51°	295.6	291.1	273.5	226.1	154.9	76.1	28.4	1.9	0.1	0.5	0.9
52°	281.1	276.8	257.1	210.4	138.1	65.5	24.5	1.6	0.1	0.5	1.0
53°	265.4	259.3	237.8	193.2	123.4	56.1	20.5	1.4	0.1	0.5	0.9
54°	245.7	242.9	218.3	172.1	106.2	47.0	16.8	1.1	0.1	0.5	0.9
55°	227.1	223.0	197.4	150.5	90.6	38.5	14.1	0.9	0.1	0.5	0.9
56°	203.4	197.3	173.3	130.6	74.7	31.0	11.9	0.7	0.1	0.5	0.9
57°	175.1	168.6	149.7	108.6	58.7	23.6	9.9	0.6	0.1	0.5	0.9
58°	148.1	142.5	122.2	83.8	44.2	16.4	8.2	0.4	0.1	0.4	0.9
59°	128.0	121.8	101.6	64.5	30.7	12.1	6.2	0.3	0.1	0.5	0.9
60°	110.8	102.9	81.8	50.0	21.9	8.7	4.5	0.2	0.2	0.5	0.9
62.5°	63.9	56.4	39.1	20.3	9.0	4.5	2.2	0.1	0.2	0.5	0.9
65°	16.2	14.4	9.3	4.4	2.5	1.5	0.8	0.1	0.2	0.4	0.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.1	0.2	0.4	0.8
70°	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.7
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.4	0.6
75°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.4	0.6
77.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.5
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4
85°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2
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°	4.1	4.1	4.1
2.5°	3.9	3.9	3.9
5°	3.7	3.7	3.6
7.5°	3.4	3.3	3.3
10°	3.1	3.1	3.1
12.5°	2.8	2.8	2.8
15°	2.6	2.7	2.7
17.5°	2.4	2.5	2.5
20°	2.2	2.4	2.4
22.5°	2.0	2.2	2.3
25°	1.9	2.1	2.2
27.5°	1.8	2.0	2.2
30°	1.7	1.9	2.1
31°	1.7	1.9	2.0
32°	1.6	1.9	2.0
33°	1.6	1.9	2.0
34°	1.6	1.9	2.0
35°	1.5	1.9	1.9
36°	1.5	1.9	1.9
37°	1.5	1.9	2.0
38°	1.5	1.9	1.9
39°	1.5	1.9	1.9
40°	1.5	1.9	1.9
41°	1.5	1.9	1.9
42°	1.5	1.9	1.9
43°	1.5	1.9	1.9
44°	1.5	1.8	1.9
45°	1.5	1.8	1.9
46°	1.5	1.9	1.9
47°	1.5	1.9	2.0
48°	1.5	1.8	1.9
49°	1.4	1.8	1.9
50°	1.4	1.8	1.9
51°	1.4	1.9	2.0
52°	1.4	1.9	2.0
53°	1.4	1.9	2.0
54°	1.4	1.9	1.9
55°	1.4	1.9	2.0
56°	1.4	1.9	1.9
57°	1.4	1.9	1.9
58°	1.4	1.8	1.9
59°	1.4	1.8	1.9
60°	1.4	1.8	1.9
62.5°	1.3	1.8	1.9
65°	1.3	1.7	1.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.2	1.7	1.8
70°	1.1	1.6	1.7
72.5°	1.1	1.5	1.6
75°	1.0	1.4	1.5
77.5°	0.8	1.2	1.4
80°	0.7	1.1	1.1
82.5°	0.6	0.9	1.0
85°	0.4	0.6	0.6
87.5°	0.2	0.3	0.3
90°	0.0	0.0	0.0

(END OF REPORT)