

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: P1334096

Luminaire Tested: P3A02R159730DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334096
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R159730DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

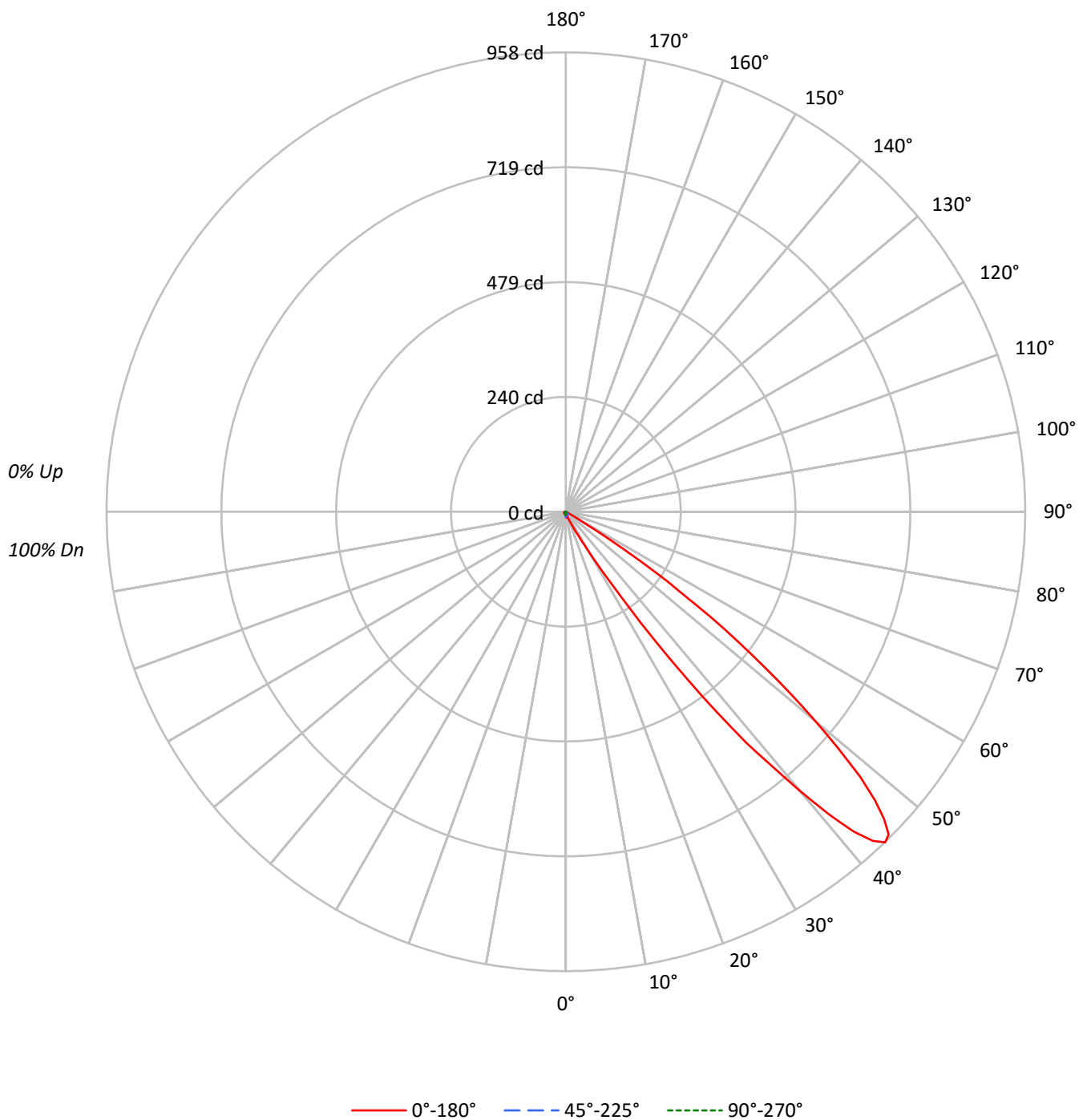
Lumens per Lamp: N/A
Luminaire Lumens: 107.0 lumens
Efficiency: N/A
Efficacy: 29.7 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2083	2083	2083	2083	2083
5°	2575	2311	1871	1651	1629
10°	2538	1982	1447	1291	1314
15°	2111	1407	1044	1067	1135
20°	3664	1120	793	910	1050
25°	8154	1331	653	847	992
30°	24383	1646	557	836	1038
35°	93906	1847	509	857	1098
40°	217951	1632	487	887	1174
45°	295224	1209	434	961	1271
50°	231464	716	443	1023	1399
55°	111098	344	421	1109	1491
60°	10175	44	395	1184	1667
65°	1090	0	311	1193	1816
70°	256	0	385	1282	1988
75°	254	85	508	1440	2288
80°	253	253	631	1515	2399
85°	252	252	1006	1258	2768

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 295224 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.8
10°-20°	1.7	1.6
20°-30°	4.0	3.8
30°-40°	22.1	20.7
40°-50°	53.6	50.1
50°-60°	21.4	20.0
60°-70°	1.8	1.7
70°-80°	1.0	1.0
80°-90°	0.4	0.4
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°	6.5	6.1
0°-40°	28.7	26.8
0°-60°	103.6	96.9
0°-90°	107.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	107.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	12	10	8	8	7	1
15°	9	6	5	5	5	3
25°	34	6	3	4	4	20
35°	351	7	2	3	4	248
45°	952	4	1	3	4	672
55°	291	1	1	3	4	271
65°	2	0	1	2	4	5
75°	0	0	1	2	3	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°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
2.5°	10.7	10.7	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	10.2
5°	11.7	11.7	11.7	11.7	11.6	11.6	11.6	11.5	11.5	11.4	10.5
7.5°	12.2	12.2	12.1	12.1	11.9	11.9	11.8	11.7	11.6	11.5	10.0
10°	11.4	11.4	11.4	11.3	11.3	11.2	11.1	11.0	10.9	10.7	8.9
12.5°	10.1	10.1	10.2	10.1	10.0	9.9	9.7	9.6	9.5	9.3	7.4
15°	9.3	9.3	9.3	9.2	9.1	8.9	8.7	8.5	8.4	8.1	6.2
17.5°	11.8	11.8	11.7	11.5	11.1	10.8	10.2	9.8	9.3	8.6	5.3
20°	15.7	15.7	15.5	15.3	14.7	14.2	13.3	12.6	11.7	11.0	4.8
22.5°	22.7	23.0	22.4	21.7	20.9	19.6	18.5	17.3	15.8	14.5	4.9
25°	33.7	34.0	33.7	32.0	30.6	28.9	26.7	24.3	21.8	19.4	5.5
27.5°	54.6	54.8	54.3	50.1	47.9	43.4	39.5	35.6	31.4	27.1	6.1
30°	96.3	96.4	93.0	84.7	77.3	67.5	59.2	51.2	44.5	37.7	6.5
31°	126.9	123.9	116.6	106.6	94.8	81.6	70.2	59.9	49.8	42.5	6.6
32°	161.1	160.7	148.6	131.2	115.5	99.0	81.8	68.6	57.1	47.0	6.7
33°	206.4	206.7	187.7	167.2	141.5	119.3	96.8	78.6	64.8	52.5	6.9
34°	277.3	260.6	238.3	210.6	175.6	142.2	113.0	90.3	71.7	57.7	6.9
35°	350.8	334.0	309.5	267.5	219.5	172.7	132.3	102.7	80.0	63.4	6.9
36°	433.2	419.0	381.8	328.2	266.9	201.5	152.8	117.1	88.2	68.5	6.8
37°	522.1	501.3	460.1	401.6	319.6	242.1	177.7	131.4	96.4	74.0	6.6
38°	612.5	593.7	541.8	470.8	382.6	284.9	202.7	145.2	104.0	78.2	6.3
39°	681.0	670.8	619.2	540.0	432.8	325.4	228.4	159.9	112.0	82.4	6.0
40°	761.4	744.9	696.0	598.0	492.3	366.7	253.6	172.9	118.6	85.7	5.7
41°	834.8	813.9	752.3	657.5	539.8	403.8	277.5	186.4	124.0	87.6	5.4
42°	897.8	873.5	809.0	708.5	579.6	433.5	296.6	196.0	129.0	89.2	5.1
43°	938.5	917.5	854.2	746.8	613.7	460.7	314.4	206.0	132.1	90.3	4.7
44°	958.4	937.2	875.8	770.8	634.6	477.0	325.9	213.0	135.5	91.6	4.4
45°	952.0	930.4	871.1	771.3	641.1	482.9	330.8	216.0	137.3	92.9	3.9
46°	922.6	907.5	847.8	751.2	628.7	476.6	328.1	213.7	136.7	92.9	3.5
47°	881.5	864.2	807.3	716.7	598.7	460.4	316.9	206.6	132.7	90.8	3.1
48°	825.3	810.6	750.9	662.0	552.8	425.0	291.6	194.9	126.5	86.6	2.7
49°	754.9	734.4	678.9	592.0	492.8	374.9	258.4	175.3	116.6	80.8	2.3
50°	678.5	653.3	610.4	521.9	430.8	321.5	214.8	148.2	102.6	73.1	2.1
51°	603.8	578.0	537.2	462.0	364.7	266.7	173.3	118.3	84.5	62.5	1.8
52°	526.2	504.6	458.9	399.8	312.2	216.2	144.4	100.1	70.2	52.5	1.5
53°	448.9	434.2	390.7	330.8	250.8	176.6	117.9	85.7	61.2	44.9	1.2
54°	371.6	355.5	322.4	269.1	202.2	139.3	100.0	71.7	53.1	39.2	1.1
55°	290.6	282.3	251.8	205.2	153.2	111.2	81.1	61.7	44.5	32.8	0.9
56°	223.8	214.4	186.6	148.8	113.8	87.1	65.6	50.4	37.7	27.4	0.6
57°	146.6	137.0	118.5	103.9	82.9	63.5	50.1	39.7	30.6	22.7	0.5
58°	86.6	77.9	75.0	64.0	55.3	43.1	37.0	29.6	22.6	17.9	0.3
59°	39.8	40.4	36.0	33.7	30.6	27.4	22.5	19.7	15.5	12.9	0.2
60°	23.2	21.9	21.3	19.1	17.0	15.0	13.5	11.9	9.7	8.3	0.1
62.5°	7.9	7.6	7.8	7.0	6.6	6.4	5.9	5.0	4.2	3.4	0.0
65°	2.1	2.1	2.0	1.9	1.8	1.7	1.6	1.4	1.3	1.1	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°	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.0
70°	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.0
72.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1
75°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
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	0.1	0.1	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°	9.5	9.5	9.5	9.5	9.5	9.5
2.5°	9.8	9.4	8.9	8.5	8.4	8.3
5°	9.4	8.5	7.9	7.5	7.4	7.4
7.5°	8.4	7.5	6.8	6.6	6.5	6.5
10°	7.4	6.5	6.0	5.8	5.9	5.9
12.5°	6.2	5.4	5.2	5.2	5.3	5.4
15°	5.0	4.6	4.6	4.7	4.9	5.0
17.5°	4.2	3.9	4.1	4.3	4.5	4.7
20°	3.4	3.4	3.6	3.9	4.3	4.5
22.5°	2.9	3.0	3.3	3.6	4.1	4.3
25°	2.5	2.7	3.0	3.5	3.9	4.1
27.5°	2.1	2.5	2.9	3.4	3.8	4.1
30°	1.8	2.2	2.8	3.3	3.8	4.1
31°	1.7	2.1	2.7	3.3	3.8	4.1
32°	1.6	2.1	2.7	3.3	3.8	4.1
33°	1.5	2.0	2.7	3.2	3.8	4.1
34°	1.4	2.0	2.7	3.3	3.8	4.1
35°	1.3	1.9	2.6	3.2	3.7	4.1
36°	1.2	1.9	2.6	3.2	3.8	4.1
37°	1.1	1.9	2.6	3.2	3.7	4.1
38°	1.1	1.8	2.5	3.2	3.7	4.1
39°	1.0	1.7	2.5	3.2	3.7	4.1
40°	0.9	1.7	2.3	3.1	3.7	4.1
41°	0.7	1.6	2.3	3.1	3.7	4.1
42°	0.6	1.6	2.3	3.1	3.7	4.1
43°	0.5	1.5	2.2	3.1	3.7	4.1
44°	0.5	1.5	2.2	3.1	3.7	4.1
45°	0.4	1.4	2.1	3.1	3.7	4.1
46°	0.4	1.4	2.1	3.0	3.7	4.1
47°	0.3	1.4	2.1	3.0	3.7	4.1
48°	0.3	1.3	2.1	3.0	3.7	4.1
49°	0.2	1.3	2.1	3.0	3.7	4.1
50°	0.2	1.3	2.0	3.0	3.7	4.1
51°	0.2	1.3	2.0	3.0	3.7	4.1
52°	0.2	1.2	2.0	3.0	3.7	4.1
53°	0.2	1.2	2.0	3.0	3.7	4.1
54°	0.2	1.2	1.9	3.0	3.7	4.1
55°	0.2	1.1	1.9	2.9	3.7	3.9
56°	0.2	1.1	1.9	2.9	3.7	3.9
57°	0.2	1.1	1.8	2.9	3.7	3.9
58°	0.2	1.0	1.8	2.8	3.6	3.9
59°	0.2	1.0	1.7	2.8	3.6	3.8
60°	0.2	0.9	1.7	2.7	3.5	3.8
62.5°	0.2	0.7	1.5	2.6	3.4	3.6
65°	0.2	0.6	1.4	2.3	3.3	3.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.6	1.3	2.2	3.1	3.4
70°	0.2	0.6	1.2	2.0	3.0	3.1
72.5°	0.3	0.6	1.1	1.9	2.8	2.9
75°	0.4	0.6	1.0	1.7	2.6	2.7
77.5°	0.4	0.6	0.9	1.5	2.2	2.3
80°	0.4	0.5	0.7	1.2	1.8	1.9
82.5°	0.4	0.5	0.5	1.0	1.4	1.5
85°	0.3	0.4	0.4	0.5	1.0	1.1
87.5°	0.3	0.4	0.2	0.3	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)