

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: P1334792

Luminaire Tested: P3A02R259827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334792
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: P3A02R259827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

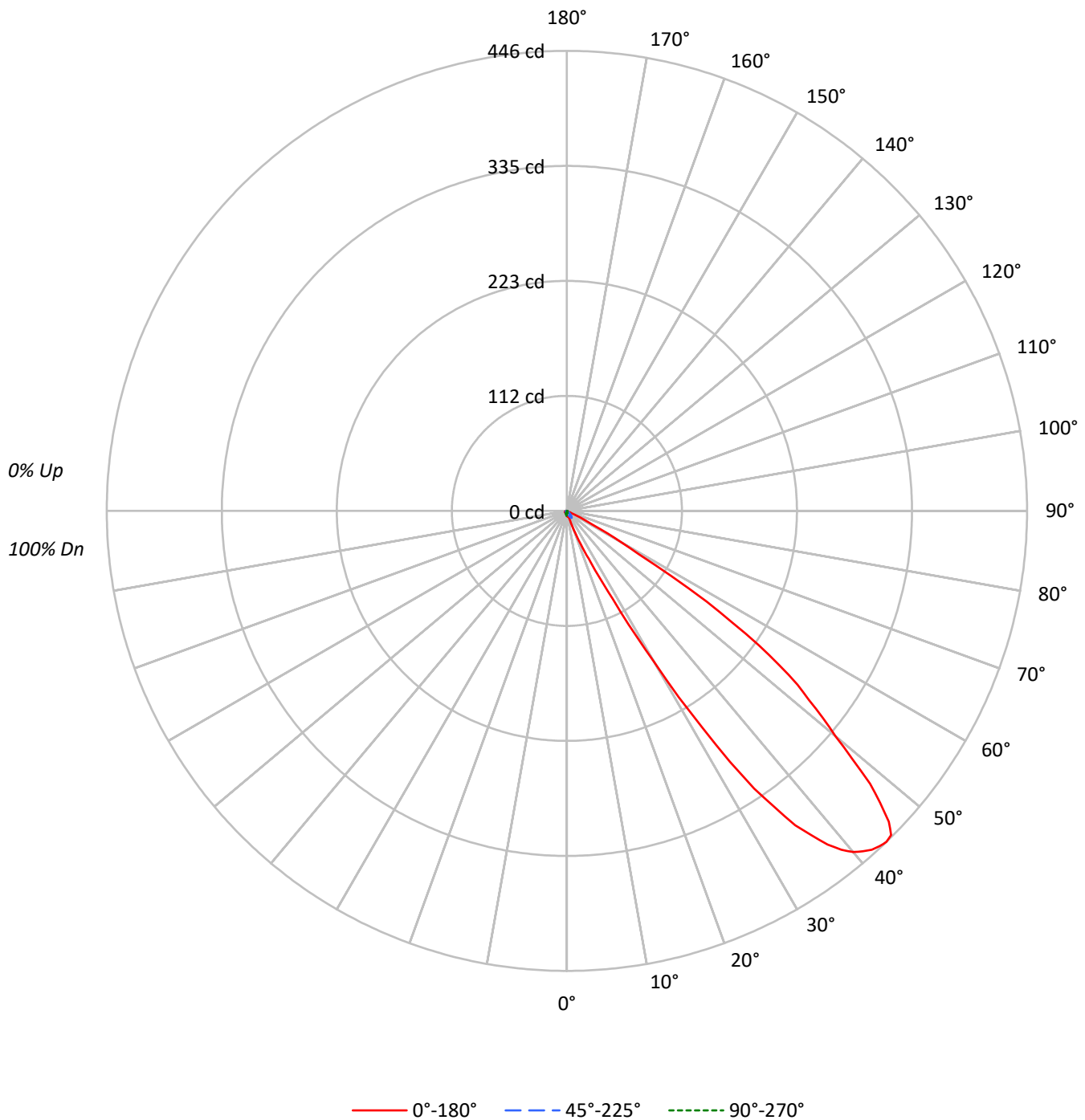
Lumens per Lamp: N/A
Luminaire Lumens: 93.0 lumens
Efficiency: N/A
Efficacy: 25.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			0
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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1031	1031	1031	1031	1031
5°	1189	1145	1013	902	880
10°	1180	1069	846	757	757
15°	1317	931	658	636	658
20°	4667	910	513	537	583
25°	13404	1161	411	484	581
30°	42766	1798	329	481	582
35°	93666	2115	294	455	589
40°	123574	1918	229	458	630
45°	137813	1333	217	496	682
50°	115988	682	239	546	751
55°	86745	268	229	612	841
60°	26840	88	219	658	921
65°	2283	0	259	675	1038
70°	128	64	256	769	1154
75°	169	85	339	847	1356
80°	126	126	505	884	1515
85°	252	252	755	1006	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 137813 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.4	0.5
10°-20°	1.1	1.2
20°-30°	5.1	5.5
30°-40°	24.8	26.6
40°-50°	38.8	41.7
50°-60°	19.9	21.4
60°-70°	1.9	2.0
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°	6.7	7.2
0°-40°	31.4	33.8
0°-60°	90.2	97.0
0°-90°	93.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	93.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	5	5	5	4	4	1
15°	6	4	3	3	3	2
25°	55	5	2	2	2	34
35°	350	8	1	2	2	212
45°	444	4	1	2	2	325
55°	227	1	1	2	2	189
65°	4	0	0	1	2	14
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°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
2.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.2	5.1	5.1
5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.3	5.3	5.3	5.2
7.5°	5.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.3	5.3	5.1
10°	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2	5.2	5.2	4.8
12.5°	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2	5.1	5.0	4.4
15°	5.8	5.8	5.8	5.7	5.6	5.6	5.5	5.4	5.3	5.2	4.1
17.5°	8.5	8.3	8.2	7.9	7.4	7.0	6.7	6.4	6.1	5.8	3.9
20°	20.0	19.9	19.5	18.5	17.4	16.2	15.0	13.6	11.6	10.3	3.9
22.5°	34.6	34.1	33.4	32.7	30.8	28.6	26.3	23.7	21.1	18.4	4.2
25°	55.4	56.5	54.1	52.1	48.9	44.8	40.5	36.9	32.3	28.1	4.8
27.5°	96.3	97.1	92.2	85.8	78.2	69.8	61.6	55.5	47.8	40.8	6.1
30°	168.9	169.6	161.5	148.0	132.2	118.4	99.7	83.2	68.1	56.4	7.1
31°	210.8	205.1	195.7	182.5	162.6	141.7	119.2	99.4	80.2	64.8	7.4
32°	247.2	246.7	235.8	215.8	195.8	170.1	142.2	116.2	92.7	73.3	7.7
33°	290.2	286.9	271.5	252.6	226.2	200.3	164.2	134.6	105.6	82.8	7.9
34°	324.7	315.8	309.4	287.9	260.0	226.9	188.4	154.1	121.6	92.0	7.9
35°	349.9	348.1	335.6	315.6	287.2	253.4	214.4	174.3	135.0	102.6	7.9
36°	376.7	370.9	358.8	340.6	312.9	278.0	234.3	191.8	150.7	112.2	7.9
37°	393.5	390.0	378.0	359.3	332.2	298.8	256.6	210.3	163.1	121.8	7.7
38°	410.7	403.8	391.9	374.0	347.4	316.1	272.7	224.6	174.6	130.2	7.4
39°	422.7	415.5	403.4	385.5	359.5	328.4	285.5	236.7	184.5	136.5	7.1
40°	431.7	424.7	412.5	394.1	368.4	338.2	296.1	247.4	192.9	142.0	6.7
41°	437.3	430.8	418.6	400.4	374.6	343.7	303.0	254.4	198.5	145.7	6.3
42°	441.9	435.3	422.9	404.2	378.3	348.5	307.3	258.8	202.4	147.6	6.0
43°	444.5	437.9	425.8	406.7	380.6	350.7	309.6	260.8	203.7	147.3	5.4
44°	446.0	439.1	426.9	407.9	381.6	351.2	309.8	260.4	202.8	145.3	4.9
45°	444.4	437.6	425.8	406.7	379.9	349.4	308.1	258.2	199.4	141.5	4.3
46°	433.7	428.5	417.7	400.2	374.5	344.9	303.9	253.9	194.0	136.8	3.7
47°	415.0	410.8	400.4	387.3	364.1	336.4	296.3	245.8	186.6	129.6	2.9
48°	395.4	389.3	379.6	366.2	346.6	321.3	283.6	234.0	175.3	120.3	2.6
49°	366.6	363.0	354.4	339.5	323.2	300.9	265.6	218.8	161.5	110.2	2.3
50°	340.0	337.6	325.6	314.6	297.3	276.5	241.3	198.7	144.3	97.6	2.0
51°	319.3	316.4	307.7	294.0	275.6	251.5	218.3	172.7	124.6	82.6	1.6
52°	297.7	296.1	288.4	274.3	256.2	232.2	196.0	150.6	105.4	69.8	1.3
53°	280.0	277.7	268.3	255.7	236.2	211.3	171.8	130.0	89.3	58.7	1.1
54°	254.3	253.3	247.2	234.1	212.9	185.9	149.8	109.5	74.5	49.8	1.0
55°	226.9	223.6	217.4	207.0	187.6	162.3	124.5	90.8	60.2	41.9	0.7
56°	193.5	193.3	182.3	173.7	156.4	129.5	99.4	70.9	48.9	34.9	0.7
57°	161.5	156.4	145.8	137.2	118.7	98.3	73.8	53.1	38.3	28.3	0.5
58°	119.5	116.8	114.0	101.4	84.2	69.6	52.7	37.3	28.3	21.6	0.3
59°	81.1	81.0	77.7	68.2	58.3	43.4	32.9	25.4	19.5	15.9	0.2
60°	61.2	59.7	53.2	46.9	36.7	27.4	19.5	15.0	12.1	10.2	0.2
62.5°	21.4	22.3	19.6	16.2	12.4	10.1	7.8	6.3	5.2	4.2	0.0
65°	4.4	4.8	4.2	3.9	3.1	2.7	2.4	2.0	1.7	1.5	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°	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.1
70°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
72.5°	0.2	0.2	0.2	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°	4.7	4.7	4.7	4.7	4.7	4.7
2.5°	5.0	4.8	4.6	4.5	4.4	4.4
5°	4.9	4.6	4.3	4.1	4.0	4.0
7.5°	4.7	4.3	3.9	3.8	3.7	3.6
10°	4.4	3.8	3.5	3.4	3.4	3.4
12.5°	3.9	3.4	3.1	3.0	3.1	3.1
15°	3.5	2.9	2.8	2.8	2.9	2.9
17.5°	3.0	2.6	2.5	2.5	2.6	2.7
20°	2.7	2.2	2.2	2.3	2.5	2.5
22.5°	2.4	2.0	2.0	2.2	2.4	2.5
25°	2.1	1.7	1.8	2.0	2.3	2.4
27.5°	1.8	1.5	1.6	2.0	2.2	2.3
30°	1.6	1.3	1.6	1.9	2.1	2.3
31°	1.5	1.2	1.6	1.8	2.1	2.3
32°	1.3	1.2	1.5	1.8	2.1	2.2
33°	1.2	1.1	1.5	1.8	2.1	2.2
34°	1.1	1.1	1.4	1.8	2.1	2.2
35°	1.0	1.1	1.4	1.7	2.0	2.2
36°	0.9	1.0	1.4	1.7	2.0	2.2
37°	0.8	1.0	1.3	1.7	2.0	2.2
38°	0.7	0.9	1.3	1.7	2.0	2.2
39°	0.7	0.9	1.2	1.7	2.0	2.2
40°	0.6	0.8	1.2	1.6	2.0	2.2
41°	0.6	0.8	1.2	1.6	2.0	2.2
42°	0.5	0.8	1.2	1.6	2.0	2.2
43°	0.4	0.7	1.2	1.6	2.0	2.2
44°	0.3	0.7	1.1	1.6	2.0	2.2
45°	0.3	0.7	1.1	1.6	2.0	2.2
46°	0.2	0.7	1.1	1.6	2.0	2.2
47°	0.2	0.7	1.1	1.6	2.0	2.2
48°	0.2	0.7	1.1	1.6	2.0	2.2
49°	0.2	0.7	1.1	1.6	2.0	2.2
50°	0.2	0.7	1.1	1.6	2.0	2.2
51°	0.1	0.6	1.1	1.6	2.0	2.2
52°	0.1	0.6	1.1	1.6	2.0	2.3
53°	0.1	0.6	1.1	1.6	2.0	2.2
54°	0.1	0.6	1.0	1.6	2.0	2.2
55°	0.1	0.6	1.0	1.6	2.0	2.2
56°	0.1	0.5	1.0	1.5	2.0	2.2
57°	0.2	0.5	1.0	1.5	2.0	2.1
58°	0.2	0.5	1.0	1.5	2.0	2.1
59°	0.2	0.5	1.0	1.5	2.0	2.1
60°	0.2	0.5	0.9	1.5	2.0	2.1
62.5°	0.2	0.5	0.9	1.4	1.9	2.0
65°	0.2	0.5	0.8	1.3	1.9	2.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.4	0.8	1.2	1.8	1.9
70°	0.2	0.4	0.7	1.2	1.7	1.8
72.5°	0.2	0.4	0.7	1.1	1.6	1.7
75°	0.2	0.4	0.7	1.0	1.5	1.6
77.5°	0.2	0.4	0.6	0.9	1.3	1.4
80°	0.3	0.4	0.5	0.7	1.1	1.2
82.5°	0.3	0.4	0.4	0.6	0.9	1.0
85°	0.2	0.3	0.3	0.4	0.6	0.7
87.5°	0.2	0.3	0.2	0.2	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)