

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: P1343754

Luminaire Tested: P3A13R15W2N902750DE010 E3A451WMH_2700K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343754
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: P3A13R15W2N902750DE010 E3A451WMH_2700K
Description: 3in Adjustable Tunable White LED luminaire with, R15 optic, 2700K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

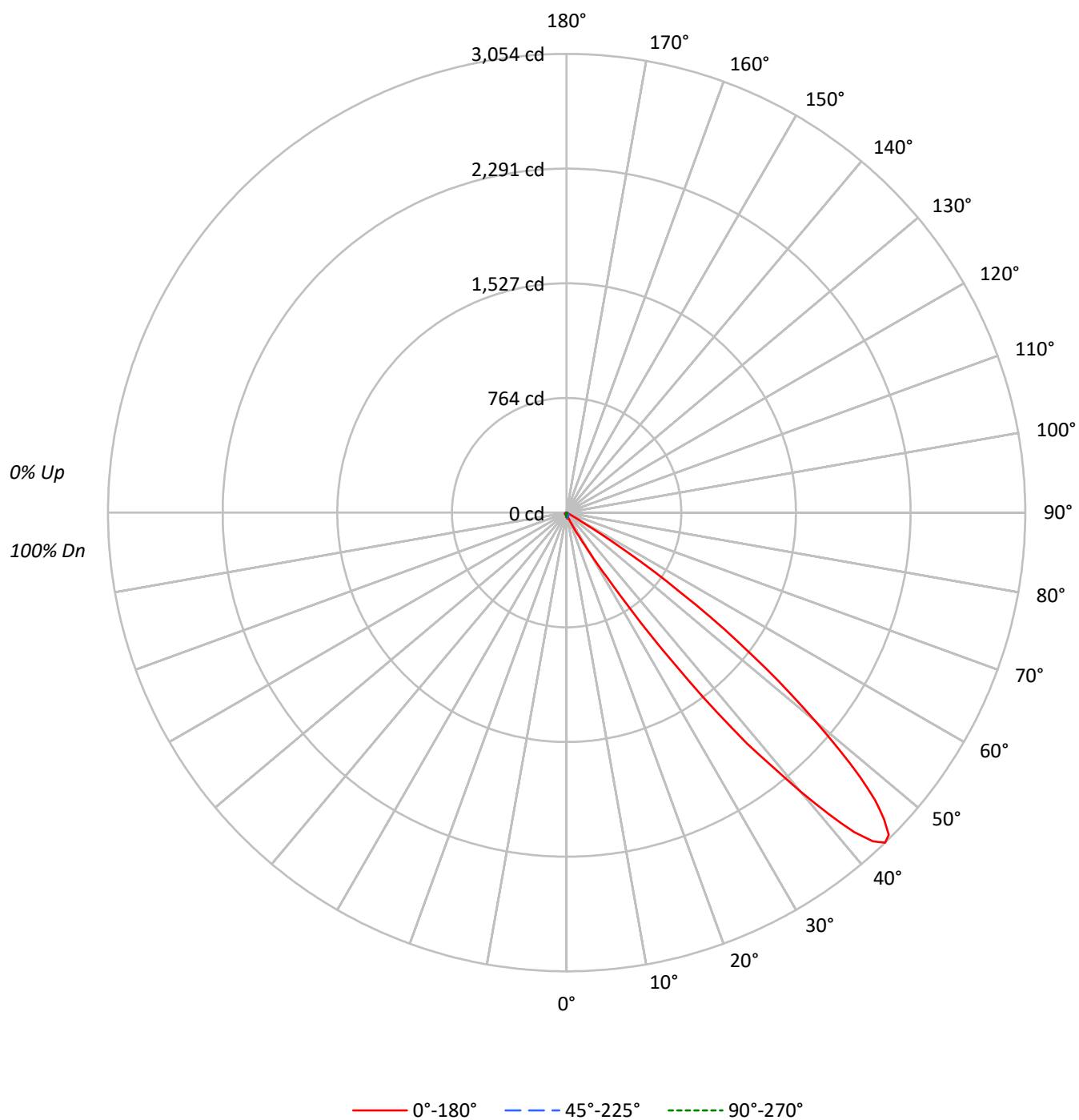
Lumens per Lamp: N/A
Luminaire Lumens: 341.0 lumens
Efficiency: N/A
Efficacy: 27.7 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 12.3
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	87	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°	6644	6644	6644	6644	6644
5°	8232	7330	5987	5239	5173
10°	8105	6279	4609	4097	4164
15°	6720	4472	3314	3405	3632
20°	11668	3570	2544	2940	3337
25°	25985	4283	2057	2710	3121
30°	77733	5241	1798	2659	3266
35°	299253	5916	1633	2730	3453
40°	694616	5153	1546	2834	3693
45°	940842	3907	1364	3070	4000
50°	737716	2320	1399	3241	4401
55°	354090	1032	1300	3517	4817
60°	32366	132	1184	3728	5350
65°	3528	0	1038	3891	5811
70°	898	0	1282	4167	6347
75°	847	254	1694	4575	7202
80°	884	884	2147	4672	7703
85°	755	755	3522	4277	8554

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 940842 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.8
10°-20°	5.4	1.6
20°-30°	12.9	3.8
30°-40°	70.5	20.7
40°-50°	170.8	50.1
50°-60°	68.1	20.0
60°-70°	5.9	1.7
70°-80°	3.3	1.0
80°-90°	1.5	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°	20.8	6.1
0°-40°	91.4	26.8
0°-60°	330.3	96.9
0°-90°	341.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	341.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	30	30	30	30	30	
5°	37	33	27	24	24	4
15°	30	20	15	15	16	10
25°	107	18	8	11	13	65
35°	1118	22	6	10	13	790
45°	3034	13	4	10	13	2140
55°	926	3	3	9	13	863
65°	7	0	2	8	11	17
75°	1	0	2	5	8	1
85°	0	0	1	2	3	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°	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
2.5°	34.0	34.0	34.3	34.0	34.0	34.0	34.0	33.7	33.7	33.7	32.6
5°	37.4	37.4	37.4	37.4	37.1	37.1	37.1	36.7	36.7	36.4	33.3
7.5°	38.8	38.8	38.4	38.4	38.1	38.1	37.7	37.4	37.1	36.7	32.0
10°	36.4	36.4	36.4	36.0	36.0	35.7	35.4	35.0	34.7	34.0	28.2
12.5°	32.3	32.3	32.6	32.3	32.0	31.6	30.9	30.6	30.3	29.6	23.5
15°	29.6	29.6	29.6	29.2	28.9	28.2	27.9	27.2	26.9	25.8	19.7
17.5°	37.7	37.7	37.4	36.7	35.4	34.3	32.6	31.3	29.6	27.5	17.0
20°	50.0	50.0	49.3	48.6	46.9	45.2	42.5	40.1	37.4	35.0	15.3
22.5°	72.4	73.4	71.4	69.0	66.6	62.6	58.8	55.1	50.3	46.2	15.6
25°	107.4	108.5	107.4	102.0	97.6	92.1	85.0	77.5	69.4	61.9	17.7
27.5°	174.1	174.8	173.1	159.8	152.7	138.4	125.8	113.6	100.0	86.4	19.4
30°	307.0	307.4	296.5	270.0	246.5	215.2	188.7	163.2	141.8	120.0	20.7
31°	404.3	394.8	371.6	339.7	302.3	260.1	223.7	190.7	158.8	135.3	21.1
32°	513.4	512.1	473.6	418.2	368.2	315.5	260.8	218.6	181.9	149.9	21.4
33°	657.9	658.6	598.1	532.8	450.9	380.1	308.4	250.6	206.4	167.3	22.1
34°	883.7	830.6	759.6	671.2	559.7	453.2	360.1	287.6	228.5	183.9	22.1
35°	1117.9	1064.6	986.4	852.4	699.4	550.5	421.6	327.4	255.0	202.0	22.1
36°	1380.4	1335.2	1216.9	1045.9	850.7	642.3	486.9	373.3	281.2	218.3	21.8
37°	1664.0	1597.7	1466.5	1279.8	1018.7	771.5	566.5	418.9	307.4	236.0	21.1
38°	1952.0	1892.2	1726.6	1500.5	1219.3	907.8	646.0	462.8	331.5	249.2	20.1
39°	2170.3	2137.6	1973.4	1720.8	1379.4	1037.0	728.0	509.7	357.0	262.5	19.0
40°	2426.6	2373.9	2218.2	1905.8	1568.8	1168.6	808.2	551.2	378.1	273.0	18.0
41°	2660.6	2593.9	2397.4	2095.5	1720.4	1286.9	884.4	594.0	395.1	279.1	17.3
42°	2861.2	2783.7	2578.3	2258.0	1847.3	1381.5	945.2	624.6	411.1	284.2	16.3
43°	2991.1	2924.1	2722.1	2380.1	1955.7	1468.2	1002.0	656.6	420.9	287.6	15.0
44°	3054.3	2986.6	2791.1	2456.6	2022.4	1520.2	1038.7	678.7	431.8	292.1	13.9
45°	3033.9	2965.2	2776.2	2457.9	2043.1	1538.9	1054.4	688.5	437.6	296.1	12.6
46°	2940.4	2892.1	2701.7	2394.0	2003.7	1518.8	1045.5	681.0	435.6	296.1	11.2
47°	2809.2	2754.1	2572.8	2284.2	1908.1	1467.1	1009.8	658.3	423.0	289.3	9.9
48°	2630.3	2583.4	2393.0	2109.8	1761.6	1354.6	929.2	621.2	403.3	276.1	8.5
49°	2405.9	2340.6	2163.5	1886.7	1570.5	1194.8	823.5	558.6	371.6	257.4	7.5
50°	2162.5	2081.9	1945.2	1663.3	1373.0	1024.4	684.4	472.3	327.1	232.9	6.8
51°	1924.1	1842.2	1711.9	1472.2	1162.2	850.0	552.2	377.1	269.3	199.2	5.8
52°	1676.9	1608.2	1462.4	1274.0	994.9	688.9	460.0	318.9	223.7	167.3	4.8
53°	1430.8	1383.8	1245.1	1054.4	799.4	562.7	375.7	273.0	195.2	143.1	3.7
54°	1184.3	1132.9	1027.5	857.5	644.3	444.1	318.6	228.5	169.3	124.8	3.4
55°	926.2	899.7	802.4	653.8	488.3	354.3	258.4	196.5	141.8	104.4	2.7
56°	713.3	683.4	594.7	474.3	362.8	277.4	209.1	160.5	120.0	87.4	2.0
57°	467.2	436.6	377.8	331.2	264.2	202.3	159.8	126.5	97.6	72.4	1.7
58°	276.1	248.2	239.0	204.0	176.1	137.4	118.0	94.2	72.1	57.1	1.0
59°	126.8	128.9	114.6	107.4	97.6	87.4	71.7	62.9	49.3	41.1	0.7
60°	73.8	69.7	68.0	60.9	54.1	47.9	43.2	38.1	30.9	26.5	0.3
62.5°	25.2	24.1	24.8	22.4	21.1	20.4	18.7	16.0	13.3	10.9	0.0
65°	6.8	6.8	6.5	6.1	5.8	5.4	5.1	4.4	4.1	3.4	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°	2.4	2.4	2.0	2.0	1.7	1.7	1.4	1.4	1.0	1.0	0.0
70°	1.4	1.4	1.4	1.0	1.0	1.0	0.7	0.7	0.7	0.3	0.0
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.3	0.3
75°	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.7
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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°	30.3	30.3	30.3	30.3	30.3	30.3
2.5°	31.3	29.9	28.2	27.2	26.9	26.5
5°	29.9	27.2	25.2	23.8	23.5	23.5
7.5°	26.9	23.8	21.8	21.1	20.7	20.7
10°	23.5	20.7	19.0	18.4	18.7	18.7
12.5°	19.7	17.3	16.7	16.7	17.0	17.3
15°	16.0	14.6	14.6	15.0	15.6	16.0
17.5°	13.3	12.6	12.9	13.6	14.3	15.0
20°	10.9	10.9	11.6	12.6	13.6	14.3
22.5°	9.2	9.5	10.5	11.6	12.9	13.6
25°	7.8	8.5	9.5	11.2	12.6	12.9
27.5°	6.8	7.8	9.2	10.9	12.2	12.9
30°	5.8	7.1	8.8	10.5	12.2	12.9
31°	5.4	6.8	8.5	10.5	12.2	12.9
32°	5.1	6.8	8.5	10.5	12.2	12.9
33°	4.8	6.5	8.5	10.2	12.2	12.9
34°	4.4	6.5	8.5	10.5	12.2	12.9
35°	4.1	6.1	8.2	10.2	11.9	12.9
36°	3.7	6.1	8.2	10.2	12.2	12.9
37°	3.4	6.1	8.2	10.2	11.9	12.9
38°	3.4	5.8	7.8	10.2	11.9	12.9
39°	3.1	5.4	7.8	10.2	11.9	12.9
40°	2.7	5.4	7.5	9.9	11.9	12.9
41°	2.4	5.1	7.5	9.9	11.9	12.9
42°	2.0	5.1	7.5	9.9	11.9	12.9
43°	1.7	4.8	7.1	9.9	11.9	12.9
44°	1.7	4.8	7.1	9.9	11.9	12.9
45°	1.4	4.4	6.8	9.9	11.9	12.9
46°	1.4	4.4	6.8	9.5	11.9	12.9
47°	1.0	4.4	6.8	9.5	11.9	12.9
48°	1.0	4.1	6.8	9.5	11.9	12.9
49°	0.7	4.1	6.8	9.5	11.9	12.9
50°	0.7	4.1	6.5	9.5	11.9	12.9
51°	0.7	4.1	6.5	9.5	11.9	12.9
52°	0.7	3.7	6.5	9.5	11.9	12.9
53°	0.7	3.7	6.5	9.5	11.9	12.9
54°	0.7	3.7	6.1	9.5	11.9	12.9
55°	0.7	3.4	6.1	9.2	11.9	12.6
56°	0.7	3.4	6.1	9.2	11.9	12.6
57°	0.7	3.4	5.8	9.2	11.9	12.6
58°	0.7	3.1	5.8	8.8	11.6	12.6
59°	0.7	3.1	5.4	8.8	11.6	12.2
60°	0.7	2.7	5.4	8.5	11.2	12.2
62.5°	0.7	2.4	4.8	8.2	10.9	11.6
65°	0.7	2.0	4.4	7.5	10.5	11.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	2.0	4.1	7.1	9.9	10.9
70°	0.7	2.0	3.7	6.5	9.5	9.9
72.5°	1.0	2.0	3.4	6.1	8.8	9.2
75°	1.4	2.0	3.1	5.4	8.2	8.5
77.5°	1.4	2.0	2.7	4.8	7.1	7.5
80°	1.4	1.7	2.4	3.7	5.8	6.1
82.5°	1.4	1.7	1.7	3.1	4.4	4.8
85°	1.0	1.4	1.4	1.7	3.1	3.4
87.5°	1.0	1.4	0.7	1.0	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)