

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: P1343849

Luminaire Tested: P3A13R15W2N902765DE010 E3A451WMH_5000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343849
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: P3A13R15W2N902765DE010 E3A451WMH_5000K
Description: 3in Adjustable Tunable White LED luminaire with, R15 optic, 5000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

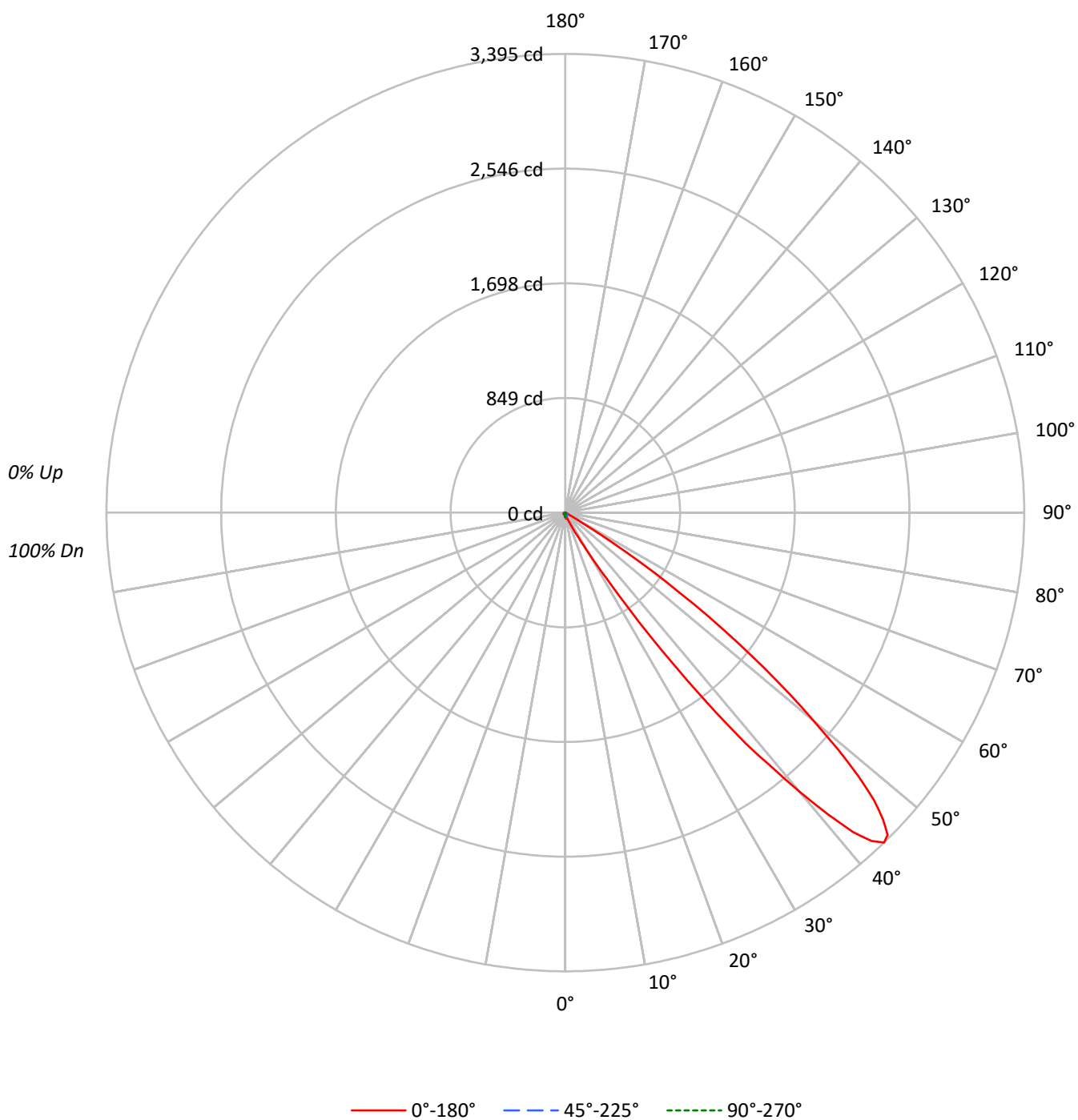
Lumens per Lamp: N/A
Luminaire Lumens: 379.0 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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				0			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0			
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°	7368	7368	7368	7368	7368
5°	9157	8144	6648	5833	5745
10°	8996	6992	5144	4542	4631
15°	7469	4972	3678	3768	4041
20°	12974	3967	2824	3267	3710
25°	28889	4766	2274	3024	3484
30°	86393	5849	2000	2962	3646
35°	332608	6585	1820	3025	3855
40°	772046	5725	1718	3149	4122
45°	1045690	4342	1520	3411	4466
50°	819896	2593	1535	3616	4912
55°	393544	1147	1453	3900	5352
60°	35962	175	1316	4122	5964
65°	3943	0	1193	4307	6486
70°	962	0	1475	4616	7052
75°	932	339	1949	5083	7964
80°	1010	1010	2399	5304	8587
85°	1006	1006	3774	4780	9561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1045690 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.9	0.8
10°-20°	6.0	1.6
20°-30°	14.3	3.8
30°-40°	78.4	20.7
40°-50°	189.8	50.1
50°-60°	75.7	20.0
60°-70°	6.6	1.7
70°-80°	3.7	1.0
80°-90°	1.6	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°	23.2	6.1
0°-40°	101.6	26.8
0°-60°	367.1	96.9
0°-90°	379.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	379.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	34	34	34	34	34	
5°	42	37	30	26	26	4
15°	33	22	16	17	18	11
25°	119	20	9	12	14	72
35°	1242	25	7	11	14	878
45°	3372	14	5	11	14	2379
55°	1029	3	4	10	14	959
65°	8	0	2	8	12	19
75°	1	0	2	6	9	1
85°	0	0	2	2	4	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°	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
2.5°	37.8	37.8	38.2	37.8	37.8	37.8	37.8	37.4	37.4	37.4	36.3
5°	41.6	41.6	41.6	41.6	41.2	41.2	41.2	40.8	40.8	40.4	37.0
7.5°	43.1	43.1	42.7	42.7	42.3	42.3	41.9	41.6	41.2	40.8	35.5
10°	40.4	40.4	40.4	40.1	40.1	39.7	39.3	38.9	38.5	37.8	31.4
12.5°	35.9	35.9	36.3	35.9	35.5	35.1	34.4	34.0	33.6	32.9	26.1
15°	32.9	32.9	32.9	32.5	32.1	31.4	31.0	30.2	29.9	28.7	21.9
17.5°	41.9	41.9	41.6	40.8	39.3	38.2	36.3	34.8	32.9	30.6	18.9
20°	55.6	55.6	54.8	54.0	52.2	50.3	47.2	44.6	41.6	38.9	17.0
22.5°	80.5	81.6	79.4	76.7	74.1	69.5	65.4	61.2	55.9	51.4	17.4
25°	119.4	120.5	119.4	113.4	108.5	102.4	94.5	86.2	77.1	68.8	19.7
27.5°	193.5	194.2	192.4	177.6	169.7	153.8	139.8	126.2	111.1	96.0	21.5
30°	341.2	341.6	329.5	300.1	274.0	239.2	209.7	181.4	157.6	133.4	23.1
31°	449.3	438.7	413.0	377.5	336.0	289.1	248.7	212.0	176.5	150.4	23.4
32°	570.6	569.1	526.4	464.8	409.3	350.7	289.8	243.0	202.2	166.7	23.8
33°	731.2	732.0	664.7	592.2	501.1	422.5	342.8	278.5	229.4	185.9	24.6
34°	982.2	923.2	844.2	746.0	622.0	503.7	400.2	319.7	253.9	204.4	24.6
35°	1242.5	1183.2	1096.3	947.4	777.3	611.8	468.6	363.9	283.4	224.5	24.6
36°	1534.3	1484.0	1352.5	1162.4	945.5	713.9	541.2	414.9	312.5	242.6	24.2
37°	1849.4	1775.7	1629.9	1422.4	1132.2	857.5	629.6	465.6	341.6	262.3	23.4
38°	2169.5	2103.0	1919.0	1667.7	1355.1	1009.0	718.0	514.3	368.5	277.0	22.3
39°	2412.1	2375.8	2193.3	1912.5	1533.1	1152.6	809.1	566.5	396.8	291.7	21.2
40°	2697.1	2638.5	2465.4	2118.1	1743.6	1298.8	898.3	612.6	420.2	303.5	20.0
41°	2957.1	2883.0	2664.6	2329.0	1912.2	1430.3	982.9	660.2	439.1	310.3	19.3
42°	3180.0	3093.9	2865.6	2509.6	2053.1	1535.4	1050.6	694.2	456.9	315.9	18.1
43°	3324.4	3249.9	3025.5	2645.3	2173.7	1631.8	1113.7	729.7	467.8	319.7	16.6
44°	3394.7	3319.5	3102.2	2730.3	2247.7	1689.6	1154.5	754.3	479.9	324.6	15.5
45°	3372.0	3295.7	3085.5	2731.8	2270.8	1710.4	1171.9	765.2	486.4	329.1	14.0
46°	3268.1	3214.4	3002.8	2660.8	2227.0	1688.1	1162.0	756.9	484.1	329.1	12.5
47°	3122.2	3061.0	2859.6	2538.7	2120.8	1630.6	1122.4	731.6	470.1	321.6	11.0
48°	2923.4	2871.3	2659.7	2344.9	1957.9	1505.5	1032.8	690.4	448.2	306.9	9.4
49°	2674.0	2601.5	2404.6	2097.0	1745.5	1327.9	915.3	620.9	413.0	286.1	8.3
50°	2403.4	2313.9	2162.0	1848.7	1526.0	1138.6	760.7	524.9	363.5	258.9	7.6
51°	2138.5	2047.5	1902.7	1636.3	1291.7	944.7	613.7	419.1	299.3	221.4	6.4
52°	1863.8	1787.5	1625.3	1416.0	1105.7	765.6	511.3	354.5	248.7	185.9	5.3
53°	1590.2	1538.0	1383.9	1171.9	888.4	625.4	417.6	303.5	216.9	159.1	4.2
54°	1316.2	1259.2	1142.0	953.1	716.1	493.5	354.1	253.9	188.2	138.7	3.8
55°	1029.4	999.9	891.8	726.7	542.7	393.8	287.2	218.4	157.6	116.0	3.0
56°	792.8	759.6	660.9	527.2	403.2	308.4	232.4	178.4	133.4	97.1	2.3
57°	519.2	485.2	419.8	368.1	293.6	224.8	177.6	140.6	108.5	80.5	1.9
58°	306.9	275.9	265.7	226.7	195.8	152.7	131.1	104.7	80.1	63.5	1.1
59°	141.0	143.2	127.4	119.4	108.5	97.1	79.7	69.9	54.8	45.7	0.8
60°	82.0	77.5	75.6	67.6	60.1	53.3	48.0	42.3	34.4	29.5	0.4
62.5°	28.0	26.8	27.6	24.9	23.4	22.7	20.8	17.8	14.7	12.1	0.0
65°	7.6	7.6	7.2	6.8	6.4	6.0	5.7	4.9	4.5	3.8	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°	2.6	2.6	2.3	2.3	1.9	1.9	1.5	1.5	1.1	1.1	0.0
70°	1.5	1.5	1.5	1.1	1.1	1.1	0.8	0.8	0.8	0.4	0.0
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	0.8	0.8	0.8	0.4	0.4
75°	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.8
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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°	33.6	33.6	33.6	33.6	33.6	33.6
2.5°	34.8	33.3	31.4	30.2	29.9	29.5
5°	33.3	30.2	28.0	26.5	26.1	26.1
7.5°	29.9	26.5	24.2	23.4	23.1	23.1
10°	26.1	23.1	21.2	20.4	20.8	20.8
12.5°	21.9	19.3	18.5	18.5	18.9	19.3
15°	17.8	16.2	16.2	16.6	17.4	17.8
17.5°	14.7	14.0	14.4	15.1	15.9	16.6
20°	12.1	12.1	12.8	14.0	15.1	15.9
22.5°	10.2	10.6	11.7	12.8	14.4	15.1
25°	8.7	9.4	10.6	12.5	14.0	14.4
27.5°	7.6	8.7	10.2	12.1	13.6	14.4
30°	6.4	7.9	9.8	11.7	13.6	14.4
31°	6.0	7.6	9.4	11.7	13.6	14.4
32°	5.7	7.6	9.4	11.7	13.6	14.4
33°	5.3	7.2	9.4	11.3	13.6	14.4
34°	4.9	7.2	9.4	11.7	13.6	14.4
35°	4.5	6.8	9.1	11.3	13.2	14.4
36°	4.2	6.8	9.1	11.3	13.6	14.4
37°	3.8	6.8	9.1	11.3	13.2	14.4
38°	3.8	6.4	8.7	11.3	13.2	14.4
39°	3.4	6.0	8.7	11.3	13.2	14.4
40°	3.0	6.0	8.3	11.0	13.2	14.4
41°	2.6	5.7	8.3	11.0	13.2	14.4
42°	2.3	5.7	8.3	11.0	13.2	14.4
43°	1.9	5.3	7.9	11.0	13.2	14.4
44°	1.9	5.3	7.9	11.0	13.2	14.4
45°	1.5	4.9	7.6	11.0	13.2	14.4
46°	1.5	4.9	7.6	10.6	13.2	14.4
47°	1.1	4.9	7.6	10.6	13.2	14.4
48°	1.1	4.5	7.6	10.6	13.2	14.4
49°	0.8	4.5	7.6	10.6	13.2	14.4
50°	0.8	4.5	7.2	10.6	13.2	14.4
51°	0.8	4.5	7.2	10.6	13.2	14.4
52°	0.8	4.2	7.2	10.6	13.2	14.4
53°	0.8	4.2	7.2	10.6	13.2	14.4
54°	0.8	4.2	6.8	10.6	13.2	14.4
55°	0.8	3.8	6.8	10.2	13.2	14.0
56°	0.8	3.8	6.8	10.2	13.2	14.0
57°	0.8	3.8	6.4	10.2	13.2	14.0
58°	0.8	3.4	6.4	9.8	12.8	14.0
59°	0.8	3.4	6.0	9.8	12.8	13.6
60°	0.8	3.0	6.0	9.4	12.5	13.6
62.5°	0.8	2.6	5.3	9.1	12.1	12.8
65°	0.8	2.3	4.9	8.3	11.7	12.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	2.3	4.5	7.9	11.0	12.1
70°	0.8	2.3	4.2	7.2	10.6	11.0
72.5°	1.1	2.3	3.8	6.8	9.8	10.2
75°	1.5	2.3	3.4	6.0	9.1	9.4
77.5°	1.5	2.3	3.0	5.3	7.9	8.3
80°	1.5	1.9	2.6	4.2	6.4	6.8
82.5°	1.5	1.9	1.9	3.4	4.9	5.3
85°	1.1	1.5	1.5	1.9	3.4	3.8
87.5°	1.1	1.5	0.8	1.1	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)