

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: P1343772

Luminaire Tested: P3A13R15W2N902750DE010 E3CA451MMS_4000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343772
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 E3CA451MMS_4000K
Description: 3in Adjustable Tunable White LED luminaire with, R15 optic, 4000K CCT AND, 90CRI ,
E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

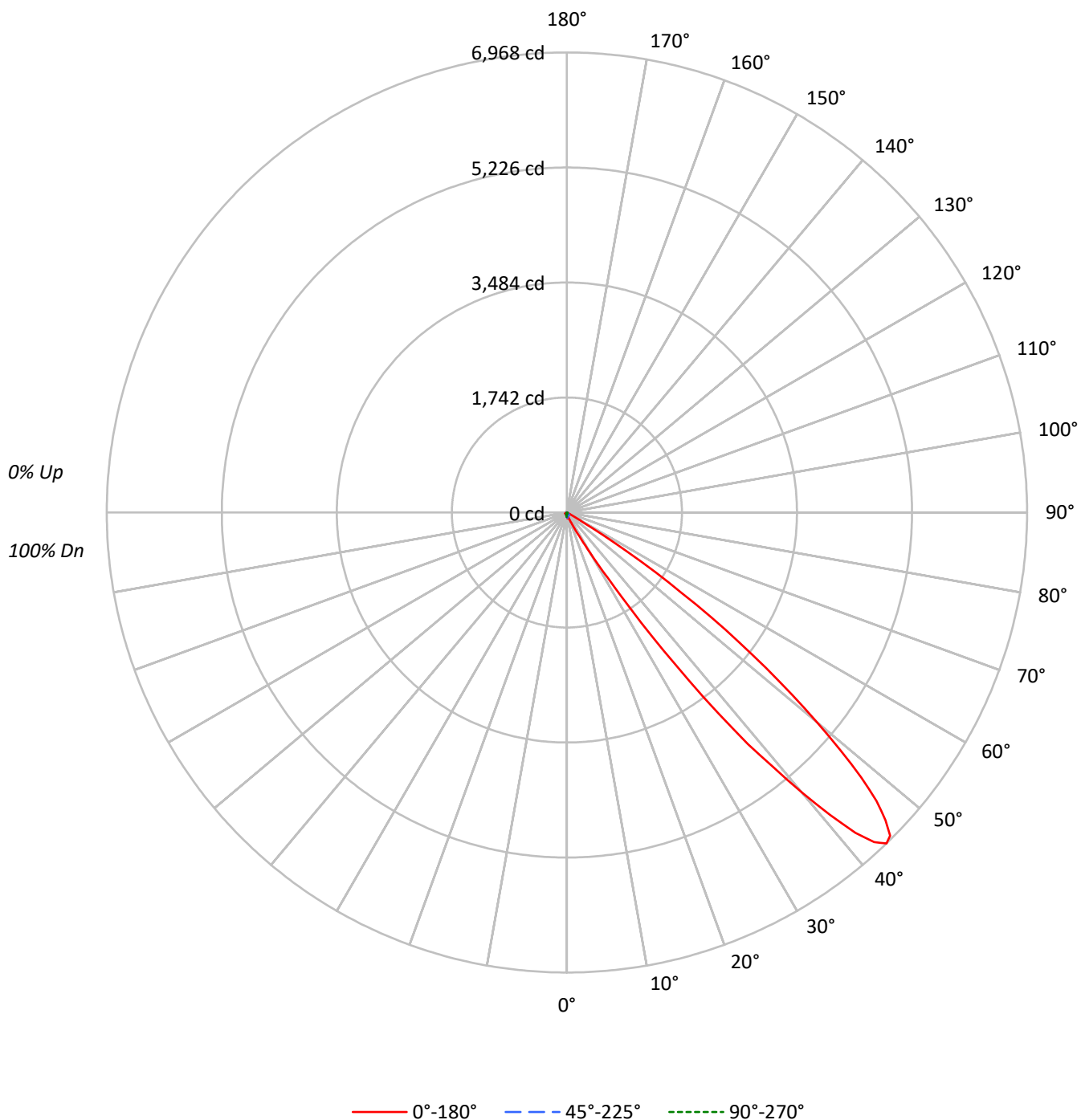
Lumens per Lamp: N/A
Luminaire Lumens: 778.1 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.48 / 1.09
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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°	15130	15130	15130	15130	15130
5°	18776	16729	13669	11952	11776
10°	18481	14340	10532	9330	9508
15°	15324	10216	7582	7741	8286
20°	26602	8144	5787	6697	7607
25°	59302	9751	4694	6194	7138
30°	177369	11977	4127	6077	7470
35°	682776	13492	3748	6237	7897
40°	1584826	11765	3550	6441	8444
45°	2146548	8900	3132	6977	9148
50°	1683083	5288	3173	7403	10064
55°	807847	2370	2982	7990	10972
60°	73810	351	2719	8508	12236
65°	8042	0	2439	8873	13283
70°	1988	0	3013	9425	14426
75°	1949	678	3982	10506	16436
80°	2020	2020	4925	10734	17679
85°	2013	2013	7799	9812	19625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2146548 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.9	0.8
10°-20°	12.3	1.6
20°-30°	29.4	3.8
30°-40°	160.9	20.7
40°-50°	389.7	50.1
50°-60°	155.5	20.0
60°-70°	13.4	1.7
70°-80°	7.6	1.0
80°-90°	3.4	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°	47.6	6.1
0°-40°	208.5	26.8
0°-60°	753.7	96.9
0°-90°	778.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	778.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	69	69	69	69	69	
5°	85	76	62	54	54	8
15°	68	45	33	34	36	23
25°	245	40	19	26	30	148
35°	2551	50	14	23	30	1802
45°	6922	29	10	22	30	4883
55°	2113	6	8	21	29	1969
65°	16	0	5	17	26	40
75°	2	1	5	12	19	2
85°	1	1	3	4	8	1
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°	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
2.5°	77.6	77.6	78.3	77.6	77.6	77.6	77.6	76.8	76.8	76.8	74.5
5°	85.3	85.3	85.3	85.3	84.6	84.6	84.6	83.8	83.8	83.0	76.0
7.5°	88.4	88.4	87.7	87.7	86.9	86.9	86.1	85.3	84.6	83.8	72.9
10°	83.0	83.0	83.0	82.2	82.2	81.5	80.7	79.9	79.1	77.6	64.4
12.5°	73.7	73.7	74.5	73.7	72.9	72.1	70.6	69.8	69.0	67.5	53.5
15°	67.5	67.5	67.5	66.7	65.9	64.4	63.6	62.1	61.3	59.0	45.0
17.5°	86.1	86.1	85.3	83.8	80.7	78.3	74.5	71.4	67.5	62.8	38.8
20°	114.0	114.0	112.5	110.9	107.1	103.2	97.0	91.5	85.3	79.9	34.9
22.5°	165.2	167.6	162.9	157.5	152.0	142.7	134.2	125.7	114.8	105.5	35.7
25°	245.1	247.5	245.1	232.7	222.6	210.2	193.9	176.9	158.3	141.2	40.3
27.5°	397.2	398.7	394.9	364.6	348.3	315.7	287.0	259.1	228.1	197.0	44.2
30°	700.5	701.3	676.4	615.9	562.4	491.0	430.5	372.4	323.5	273.8	47.3
31°	922.4	900.6	847.9	775.0	689.6	593.4	510.4	435.2	362.3	308.7	48.1
32°	1171.4	1168.3	1080.6	954.2	840.1	719.9	595.0	498.8	415.0	342.1	48.9
33°	1501.1	1502.6	1364.5	1215.6	1028.6	867.3	703.6	571.7	470.9	381.7	50.4
34°	2016.1	1895.1	1733.0	1531.3	1276.9	1034.1	821.5	656.3	521.3	419.7	50.4
35°	2550.6	2428.8	2250.4	1944.8	1595.7	1255.9	961.9	747.0	581.8	460.8	50.4
36°	3149.5	3046.3	2776.4	2386.2	1940.9	1465.4	1110.9	851.8	641.5	498.0	49.6
37°	3796.5	3645.2	3345.8	2919.9	2324.1	1760.2	1292.4	955.7	701.3	538.4	48.1
38°	4453.5	4317.0	3939.2	3423.3	2781.8	2071.2	1473.9	1055.8	756.3	568.6	45.8
39°	4951.5	4877.1	4502.4	3926.0	3147.2	2366.0	1660.9	1162.8	814.5	598.9	43.4
40°	5536.5	5416.2	5060.9	4348.0	3579.3	2666.2	1843.9	1257.5	862.6	622.9	41.1
41°	6070.2	5918.1	5469.7	4780.9	3925.2	2936.2	2017.7	1355.2	901.4	636.9	39.6
42°	6527.8	6351.0	5882.4	5151.7	4214.6	3151.8	2156.6	1425.0	937.9	648.5	37.2
43°	6824.2	6671.4	6210.6	5430.2	4462.1	3349.6	2286.1	1498.0	960.4	656.3	34.1
44°	6968.5	6814.1	6368.0	5604.7	4614.1	3468.3	2369.9	1548.4	985.2	666.4	31.8
45°	6921.9	6765.2	6333.9	5607.8	4661.4	3511.0	2405.6	1570.9	998.4	675.7	28.7
46°	6708.6	6598.4	6164.0	5462.0	4571.4	3465.2	2385.4	1553.8	993.7	675.7	25.6
47°	6409.2	6283.5	5870.0	5211.4	4353.4	3347.3	2303.9	1501.8	965.0	660.2	22.5
48°	6001.1	5894.1	5459.7	4813.5	4019.1	3090.5	2120.1	1417.3	920.0	629.9	19.4
49°	5489.1	5340.2	4936.0	4304.6	3583.1	2725.9	1878.8	1274.5	847.9	587.2	17.1
50°	4933.7	4749.9	4438.0	3794.9	3132.4	2337.3	1561.6	1077.5	746.3	531.4	15.5
51°	4389.9	4203.0	3905.8	3359.0	2651.5	1939.3	1259.8	860.3	614.4	454.6	13.2
52°	3825.9	3669.2	3336.5	2906.7	2269.8	1571.6	1049.6	727.6	510.4	381.7	10.9
53°	3264.3	3157.3	2840.8	2405.6	1823.8	1283.8	857.2	622.9	445.3	326.6	8.5
54°	2701.9	2584.8	2344.3	1956.4	1470.0	1013.1	726.9	521.3	386.3	284.7	7.8
55°	2113.1	2052.6	1830.7	1491.7	1114.0	808.3	589.6	448.4	323.5	238.2	6.2
56°	1627.5	1559.2	1356.8	1082.2	827.7	633.0	477.1	366.1	273.8	199.4	4.7
57°	1065.9	996.0	861.8	755.6	602.7	461.6	364.6	288.6	222.6	165.2	3.9
58°	629.9	566.3	545.3	465.4	401.8	313.4	269.2	214.9	164.5	130.3	2.3
59°	289.4	294.0	261.4	245.1	222.6	199.4	163.7	143.5	112.5	93.9	1.6
60°	168.3	159.0	155.1	138.9	123.3	109.4	98.5	86.9	70.6	60.5	0.8
62.5°	57.4	55.1	56.6	51.2	48.1	46.5	42.7	36.5	30.3	24.8	0.0
65°	15.5	15.5	14.7	14.0	13.2	12.4	11.6	10.1	9.3	7.8	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°	5.4	5.4	4.7	4.7	3.9	3.9	3.1	3.1	2.3	2.3	0.0
70°	3.1	3.1	3.1	2.3	2.3	2.3	1.6	1.6	1.6	0.8	0.0
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	1.6	1.6	1.6	0.8	0.8
75°	2.3	2.3	2.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8	1.6
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
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°	69.0	69.0	69.0	69.0	69.0	69.0
2.5°	71.4	68.3	64.4	62.1	61.3	60.5
5°	68.3	62.1	57.4	54.3	53.5	53.5
7.5°	61.3	54.3	49.6	48.1	47.3	47.3
10°	53.5	47.3	43.4	41.9	42.7	42.7
12.5°	45.0	39.6	38.0	38.0	38.8	39.6
15°	36.5	33.4	33.4	34.1	35.7	36.5
17.5°	30.3	28.7	29.5	31.0	32.6	34.1
20°	24.8	24.8	26.4	28.7	31.0	32.6
22.5°	20.9	21.7	24.0	26.4	29.5	31.0
25°	17.8	19.4	21.7	25.6	28.7	29.5
27.5°	15.5	17.8	20.9	24.8	27.9	29.5
30°	13.2	16.3	20.2	24.0	27.9	29.5
31°	12.4	15.5	19.4	24.0	27.9	29.5
32°	11.6	15.5	19.4	24.0	27.9	29.5
33°	10.9	14.7	19.4	23.3	27.9	29.5
34°	10.1	14.7	19.4	24.0	27.9	29.5
35°	9.3	14.0	18.6	23.3	27.2	29.5
36°	8.5	14.0	18.6	23.3	27.9	29.5
37°	7.8	14.0	18.6	23.3	27.2	29.5
38°	7.8	13.2	17.8	23.3	27.2	29.5
39°	7.0	12.4	17.8	23.3	27.2	29.5
40°	6.2	12.4	17.1	22.5	27.2	29.5
41°	5.4	11.6	17.1	22.5	27.2	29.5
42°	4.7	11.6	17.1	22.5	27.2	29.5
43°	3.9	10.9	16.3	22.5	27.2	29.5
44°	3.9	10.9	16.3	22.5	27.2	29.5
45°	3.1	10.1	15.5	22.5	27.2	29.5
46°	3.1	10.1	15.5	21.7	27.2	29.5
47°	2.3	10.1	15.5	21.7	27.2	29.5
48°	2.3	9.3	15.5	21.7	27.2	29.5
49°	1.6	9.3	15.5	21.7	27.2	29.5
50°	1.6	9.3	14.7	21.7	27.2	29.5
51°	1.6	9.3	14.7	21.7	27.2	29.5
52°	1.6	8.5	14.7	21.7	27.2	29.5
53°	1.6	8.5	14.7	21.7	27.2	29.5
54°	1.6	8.5	14.0	21.7	27.2	29.5
55°	1.6	7.8	14.0	20.9	27.2	28.7
56°	1.6	7.8	14.0	20.9	27.2	28.7
57°	1.6	7.8	13.2	20.9	27.2	28.7
58°	1.6	7.0	13.2	20.2	26.4	28.7
59°	1.6	7.0	12.4	20.2	26.4	27.9
60°	1.6	6.2	12.4	19.4	25.6	27.9
62.5°	1.6	5.4	10.9	18.6	24.8	26.4
65°	1.6	4.7	10.1	17.1	24.0	25.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.6	4.7	9.3	16.3	22.5	24.8
70°	1.6	4.7	8.5	14.7	21.7	22.5
72.5°	2.3	4.7	7.8	14.0	20.2	20.9
75°	3.1	4.7	7.0	12.4	18.6	19.4
77.5°	3.1	4.7	6.2	10.9	16.3	17.1
80°	3.1	3.9	5.4	8.5	13.2	14.0
82.5°	3.1	3.9	3.9	7.0	10.1	10.9
85°	2.3	3.1	3.1	3.9	7.0	7.8
87.5°	2.3	3.1	1.6	2.3	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)