

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: P1343764

Luminaire Tested: P3A13R15W2N902750DE010 E3CA451MB_2700K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343764
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 E3CA451MB_2700K
Description: 3in Adjustable Tunable White LED luminaire with, R15 optic, 2700K CCT AND, 90CRI ,
E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

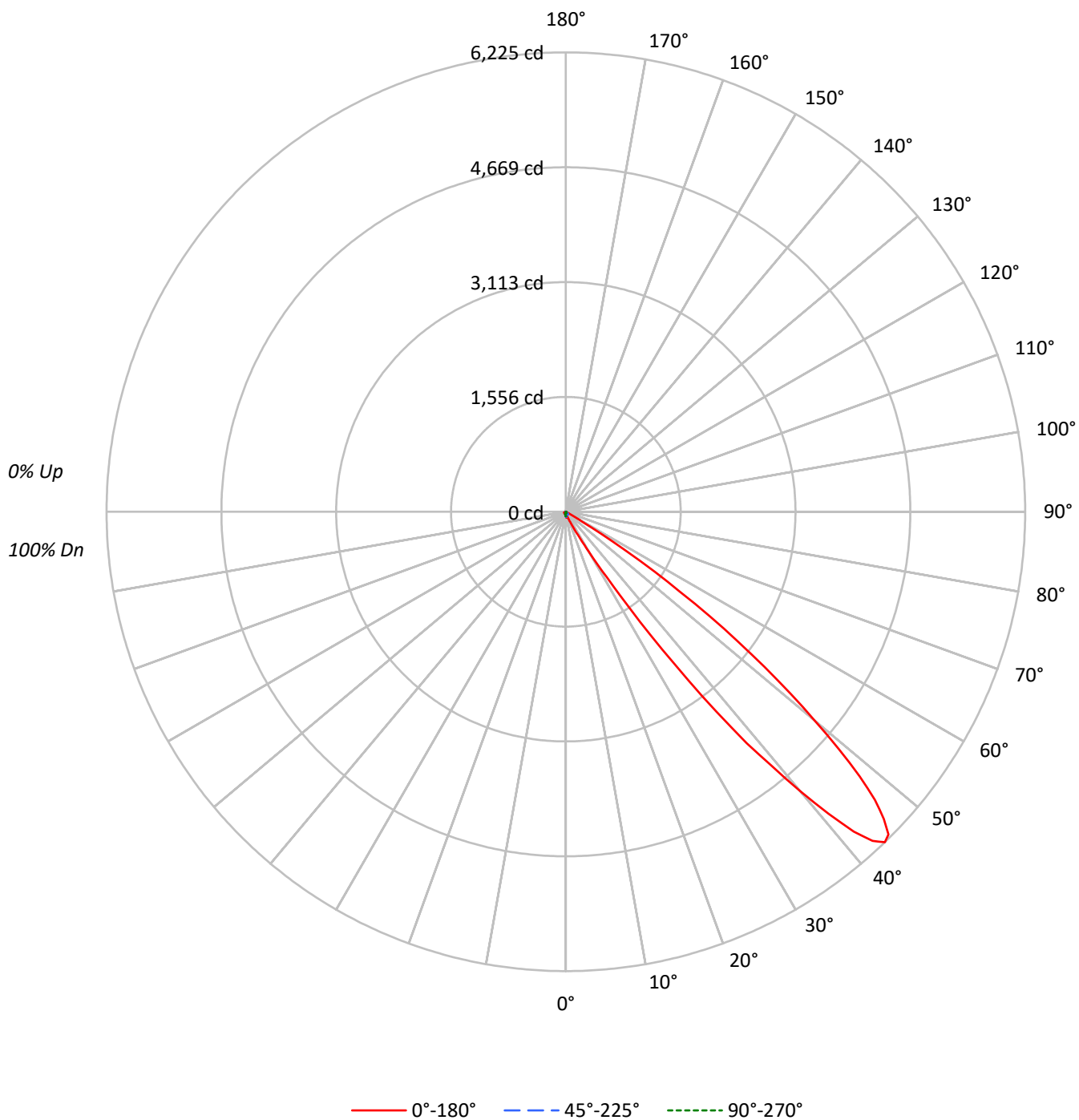
Lumens per Lamp: N/A
Luminaire Lumens: 695.0 lumens
Efficiency: N/A
Efficacy: 56.5 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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°	13530	13530	13530	13530	13530
5°	16773	14946	12195	10676	10522
10°	16499	12803	9419	8328	8483
15°	13689	9126	6765	6924	7401
20°	23779	7281	5180	5974	6791
25°	52987	8710	4186	5541	6363
30°	158455	10711	3697	5444	6659
35°	609937	12046	3346	5568	7040
40°	1415738	10505	3177	5754	7528
45°	1917563	7939	2791	6233	8156
50°	1503541	4742	2831	6618	8972
55°	721676	2103	2638	7149	9787
60°	65960	307	2412	7587	10920
65°	7212	0	2179	7887	11882
70°	1795	0	2693	8463	12887
75°	1779	593	3558	9404	14657
80°	1768	1768	4420	9597	15785
85°	1761	1761	7045	8806	17360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1917563 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.3	0.8
10°-20°	11.0	1.6
20°-30°	26.3	3.8
30°-40°	143.8	20.7
40°-50°	348.1	50.1
50°-60°	138.9	20.0
60°-70°	12.0	1.7
70°-80°	6.8	1.0
80°-90°	3.0	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°	42.5	6.1
0°-40°	186.2	26.8
0°-60°	673.2	96.9
0°-90°	695.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	695.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	62	62	62	62	62	
5°	76	68	55	48	48	7
15°	60	40	30	30	33	21
25°	219	36	17	23	26	132
35°	2278	45	12	21	26	1610
45°	6184	26	9	20	26	4362
55°	1888	6	7	19	26	1759
65°	14	0	4	15	23	36
75°	2	1	4	11	17	2
85°	1	1	3	4	7	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°	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
2.5°	69.3	69.3	70.0	69.3	69.3	69.3	69.3	68.6	68.6	68.6	66.5
5°	76.2	76.2	76.2	76.2	75.5	75.5	75.5	74.8	74.8	74.1	67.9
7.5°	79.0	79.0	78.3	78.3	77.6	77.6	76.9	76.2	75.5	74.8	65.1
10°	74.1	74.1	74.1	73.5	73.5	72.8	72.1	71.4	70.7	69.3	57.5
12.5°	65.8	65.8	66.5	65.8	65.1	64.4	63.1	62.4	61.7	60.3	47.8
15°	60.3	60.3	60.3	59.6	58.9	57.5	56.8	55.4	54.7	52.7	40.2
17.5°	76.9	76.9	76.2	74.8	72.1	70.0	66.5	63.8	60.3	56.1	34.6
20°	101.9	101.9	100.5	99.1	95.6	92.2	86.6	81.8	76.2	71.4	31.2
22.5°	147.6	149.7	145.5	140.7	135.8	127.5	119.9	112.3	102.6	94.2	31.9
25°	219.0	221.1	219.0	207.9	198.9	187.8	173.2	158.0	141.4	126.1	36.0
27.5°	354.8	356.2	352.7	325.7	311.1	282.0	256.4	231.5	203.7	176.0	39.5
30°	625.8	626.5	604.3	550.2	502.4	438.7	384.6	332.6	289.0	244.6	42.3
31°	824.0	804.6	757.4	692.3	616.1	530.1	456.0	388.8	323.6	275.8	43.0
32°	1046.4	1043.6	965.3	852.4	750.5	643.1	531.5	445.6	370.7	305.6	43.7
33°	1340.9	1342.3	1219.0	1085.9	918.9	774.8	628.5	510.7	420.6	340.9	45.0
34°	1801.1	1693.0	1548.1	1367.9	1140.6	923.7	733.9	586.3	465.7	374.9	45.0
35°	2278.5	2169.7	2010.3	1737.3	1425.5	1121.9	859.3	667.3	519.7	411.6	45.0
36°	2813.5	2721.3	2480.2	2131.6	1733.8	1309.0	992.3	760.9	573.1	444.9	44.4
37°	3391.4	3256.3	2988.8	2608.4	2076.2	1572.4	1154.5	853.8	626.5	480.9	43.0
38°	3978.4	3856.4	3519.0	3058.1	2485.0	1850.3	1316.7	943.1	675.7	508.0	40.9
39°	4423.3	4356.8	4022.1	3507.2	2811.4	2113.6	1483.7	1038.8	727.6	535.0	38.8
40°	4945.8	4838.4	4521.0	3884.2	3197.4	2381.8	1647.2	1123.3	770.6	556.5	36.7
41°	5422.6	5286.7	4886.2	4270.8	3506.5	2622.9	1802.4	1210.6	805.2	568.9	35.3
42°	5831.4	5673.4	5254.9	4602.1	3765.0	2815.6	1926.5	1273.0	837.8	579.3	33.3
43°	6096.1	5959.6	5548.0	4850.9	3986.0	2992.3	2042.2	1338.1	857.9	586.3	30.5
44°	6225.0	6087.1	5688.7	5006.8	4121.8	3098.3	2117.1	1383.2	880.1	595.3	28.4
45°	6183.5	6043.5	5658.2	5009.6	4164.1	3136.4	2148.9	1403.3	891.9	603.6	25.6
46°	5992.9	5894.5	5506.4	4879.3	4083.7	3095.5	2130.9	1388.0	887.7	603.6	22.9
47°	5725.4	5613.1	5243.8	4655.4	3889.0	2990.2	2058.2	1341.6	862.1	589.7	20.1
48°	5360.9	5265.3	4877.2	4299.9	3590.3	2760.8	1893.9	1266.1	821.9	562.7	17.3
49°	4903.5	4770.5	4409.4	3845.3	3200.9	2435.1	1678.4	1138.6	757.4	524.6	15.2
50°	4407.4	4243.1	3964.5	3390.1	2798.3	2087.9	1395.0	962.5	666.6	474.7	13.9
51°	3921.6	3754.6	3489.2	3000.6	2368.6	1732.5	1125.4	768.5	548.8	406.1	11.8
52°	3417.8	3277.8	2980.5	2596.6	2027.7	1404.0	937.6	650.0	456.0	340.9	9.7
53°	2916.1	2820.4	2537.7	2148.9	1629.2	1146.9	765.7	556.5	397.8	291.7	7.6
54°	2413.7	2309.0	2094.2	1747.7	1313.2	905.0	649.3	465.7	345.1	254.3	6.9
55°	1887.7	1833.6	1635.4	1332.6	995.1	722.1	526.7	400.5	289.0	212.7	5.5
56°	1453.9	1392.9	1212.0	966.7	739.4	565.5	426.2	327.1	244.6	178.1	4.2
57°	952.2	889.8	769.9	675.0	538.4	412.3	325.7	257.8	198.9	147.6	3.5
58°	562.7	505.9	487.2	415.8	359.0	280.0	240.5	192.0	146.9	116.4	2.1
59°	258.5	262.6	233.5	219.0	198.9	178.1	146.2	128.2	100.5	83.9	1.4
60°	150.4	142.1	138.6	124.0	110.2	97.7	88.0	77.6	63.1	54.1	0.7
62.5°	51.3	49.2	50.6	45.7	43.0	41.6	38.1	32.6	27.0	22.2	0.0
65°	13.9	13.9	13.2	12.5	11.8	11.1	10.4	9.0	8.3	6.9	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°	4.9	4.9	4.2	4.2	3.5	3.5	2.8	2.8	2.1	2.1	0.0
70°	2.8	2.8	2.8	2.1	2.1	2.1	1.4	1.4	1.4	0.7	0.0
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	0.7	0.7
75°	2.1	2.1	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	1.4
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
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°	61.7	61.7	61.7	61.7	61.7	61.7
2.5°	63.8	61.0	57.5	55.4	54.7	54.1
5°	61.0	55.4	51.3	48.5	47.8	47.8
7.5°	54.7	48.5	44.4	43.0	42.3	42.3
10°	47.8	42.3	38.8	37.4	38.1	38.1
12.5°	40.2	35.3	34.0	34.0	34.6	35.3
15°	32.6	29.8	29.8	30.5	31.9	32.6
17.5°	27.0	25.6	26.3	27.7	29.1	30.5
20°	22.2	22.2	23.6	25.6	27.7	29.1
22.5°	18.7	19.4	21.5	23.6	26.3	27.7
25°	15.9	17.3	19.4	22.9	25.6	26.3
27.5°	13.9	15.9	18.7	22.2	24.9	26.3
30°	11.8	14.6	18.0	21.5	24.9	26.3
31°	11.1	13.9	17.3	21.5	24.9	26.3
32°	10.4	13.9	17.3	21.5	24.9	26.3
33°	9.7	13.2	17.3	20.8	24.9	26.3
34°	9.0	13.2	17.3	21.5	24.9	26.3
35°	8.3	12.5	16.6	20.8	24.3	26.3
36°	7.6	12.5	16.6	20.8	24.9	26.3
37°	6.9	12.5	16.6	20.8	24.3	26.3
38°	6.9	11.8	15.9	20.8	24.3	26.3
39°	6.2	11.1	15.9	20.8	24.3	26.3
40°	5.5	11.1	15.2	20.1	24.3	26.3
41°	4.9	10.4	15.2	20.1	24.3	26.3
42°	4.2	10.4	15.2	20.1	24.3	26.3
43°	3.5	9.7	14.6	20.1	24.3	26.3
44°	3.5	9.7	14.6	20.1	24.3	26.3
45°	2.8	9.0	13.9	20.1	24.3	26.3
46°	2.8	9.0	13.9	19.4	24.3	26.3
47°	2.1	9.0	13.9	19.4	24.3	26.3
48°	2.1	8.3	13.9	19.4	24.3	26.3
49°	1.4	8.3	13.9	19.4	24.3	26.3
50°	1.4	8.3	13.2	19.4	24.3	26.3
51°	1.4	8.3	13.2	19.4	24.3	26.3
52°	1.4	7.6	13.2	19.4	24.3	26.3
53°	1.4	7.6	13.2	19.4	24.3	26.3
54°	1.4	7.6	12.5	19.4	24.3	26.3
55°	1.4	6.9	12.5	18.7	24.3	25.6
56°	1.4	6.9	12.5	18.7	24.3	25.6
57°	1.4	6.9	11.8	18.7	24.3	25.6
58°	1.4	6.2	11.8	18.0	23.6	25.6
59°	1.4	6.2	11.1	18.0	23.6	24.9
60°	1.4	5.5	11.1	17.3	22.9	24.9
62.5°	1.4	4.9	9.7	16.6	22.2	23.6
65°	1.4	4.2	9.0	15.2	21.5	22.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.4	4.2	8.3	14.6	20.1	22.2
70°	1.4	4.2	7.6	13.2	19.4	20.1
72.5°	2.1	4.2	6.9	12.5	18.0	18.7
75°	2.8	4.2	6.2	11.1	16.6	17.3
77.5°	2.8	4.2	5.5	9.7	14.6	15.2
80°	2.8	3.5	4.9	7.6	11.8	12.5
82.5°	2.8	3.5	3.5	6.2	9.0	9.7
85°	2.1	2.8	2.8	3.5	6.2	6.9
87.5°	2.1	2.8	1.4	2.1	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)