

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: P1343768

Luminaire Tested: P3A13R15W2N902750DE010 E3CA451MB_5000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343768
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_5000K
Description: 3in Adjustable Tunable White LED luminaire with, R15 optic, 5000K CCT AND, 90CRI ,
E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

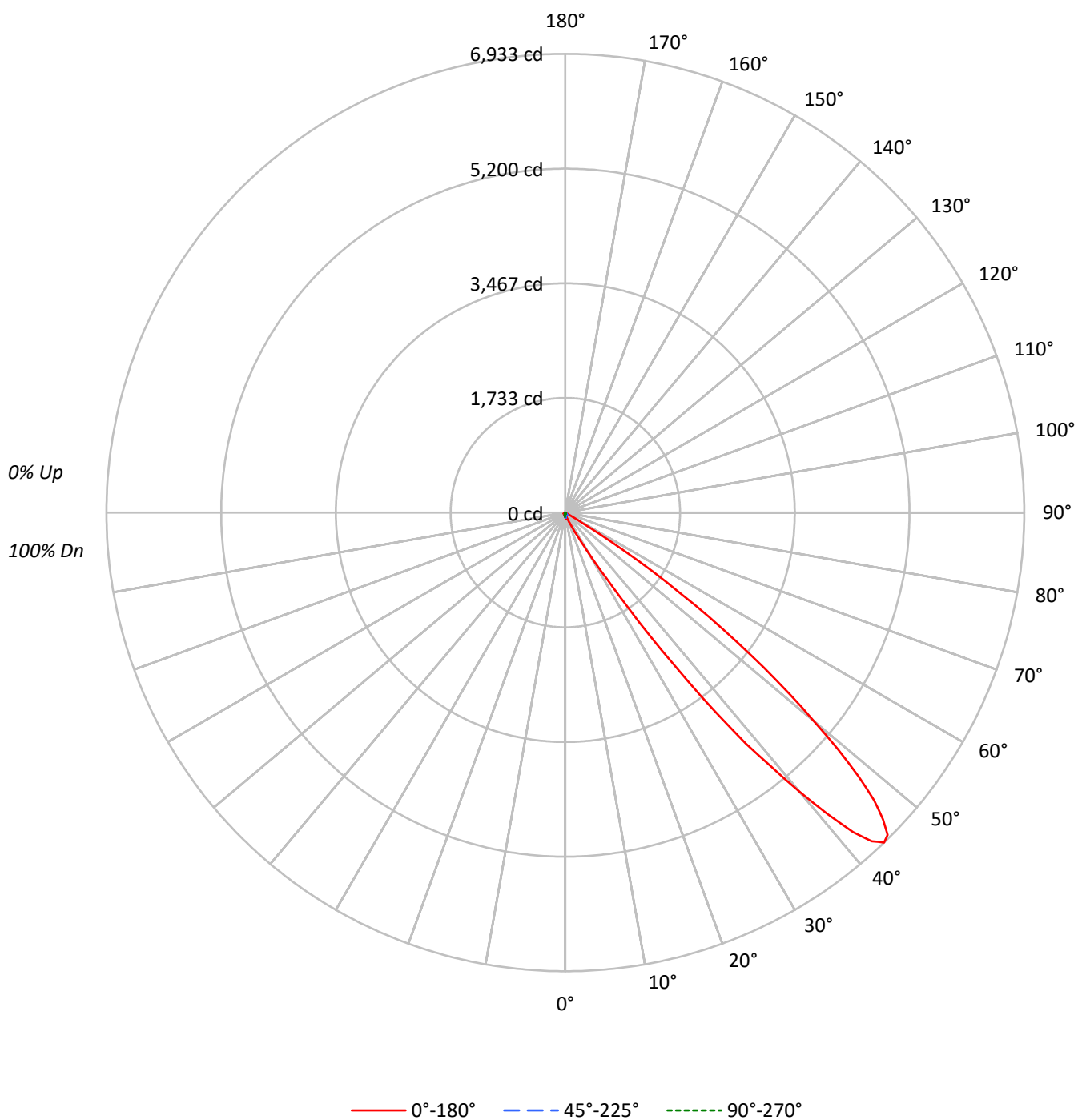
Lumens per Lamp: N/A
Luminaire Lumens: 774.0 lumens
Efficiency: N/A
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1343768

CATALOG NUMBER: P3A13R15W2N902750DE010 E3CA451MB_5000K

Luminous Intensity Polar Plot





TEST NUMBER: P1343768

CATALOG NUMBER: P3A13R15W2N902750DE010 E3CA451MB_5000K

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°	15065	15065	15065	15065	15065
5°	18688	16641	13581	11886	11732
10°	18392	14273	10487	9285	9441
15°	15233	10170	7537	7719	8241
20°	26462	8097	5764	6674	7561
25°	59011	9702	4670	6170	7089
30°	176458	11926	4102	6052	7419
35°	679269	13438	3721	6210	7843
40°	1576668	11708	3521	6412	8387
45°	2135508	8869	3101	6946	9086
50°	1674418	5254	3173	7369	9995
55°	803680	2370	2944	7952	10934
60°	73459	351	2719	8464	12192
65°	7990	0	2387	8821	13231
70°	1988	0	2949	9425	14361
75°	1949	678	3897	10421	16352
80°	1894	1894	4925	10734	17553
85°	2013	2013	7799	9812	19373

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2135508 cd/sqm

TEST NUMBER: P1343768

CATALOG NUMBER: P3A13R15W2N902750DE010 E3CA451MB_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.9	0.8
10°-20°	12.2	1.6
20°-30°	29.2	3.8
30°-40°	160.1	20.7
40°-50°	387.7	50.1
50°-60°	154.7	20.0
60°-70°	13.4	1.7
70°-80°	7.5	1.0
80°-90°	3.3	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°	47.3	6.1
0°-40°	207.4	26.8
0°-60°	749.8	96.9
0°-90°	774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	774.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	69	69	69	69	69	
5°	85	76	62	54	53	8
15°	67	45	33	34	36	23
25°	244	40	19	26	29	147
35°	2538	50	14	23	29	1793
45°	6886	29	10	22	29	4858
55°	2102	6	8	21	29	1958
65°	15	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	

TEST NUMBER: P1343768

CATALOG NUMBER: P3A13R15W2N902750DE010 E3CA451MB_5000K

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
2.5°	77.2	77.2	77.9	77.2	77.2	77.2	77.2	76.4	76.4	76.4	74.1
5°	84.9	84.9	84.9	84.9	84.1	84.1	84.1	83.3	83.3	82.6	75.6
7.5°	88.0	88.0	87.2	87.2	86.4	86.4	85.7	84.9	84.1	83.3	72.5
10°	82.6	82.6	82.6	81.8	81.8	81.0	80.3	79.5	78.7	77.2	64.1
12.5°	73.3	73.3	74.1	73.3	72.5	71.8	70.2	69.5	68.7	67.1	53.3
15°	67.1	67.1	67.1	66.4	65.6	64.1	63.3	61.7	61.0	58.7	44.8
17.5°	85.7	85.7	84.9	83.3	80.3	77.9	74.1	71.0	67.1	62.5	38.6
20°	113.4	113.4	111.9	110.4	106.5	102.6	96.5	91.1	84.9	79.5	34.7
22.5°	164.4	166.7	162.1	156.7	151.3	142.0	133.5	125.0	114.2	105.0	35.5
25°	243.9	246.2	243.9	231.5	221.5	209.1	192.9	176.0	157.4	140.5	40.1
27.5°	395.1	396.7	392.8	362.7	346.5	314.1	285.5	257.8	226.9	196.0	44.0
30°	696.9	697.7	673.0	612.8	559.5	488.5	428.3	370.4	321.8	272.4	47.1
31°	917.6	896.0	843.5	771.0	686.1	590.4	507.8	433.0	360.4	307.2	47.8
32°	1165.3	1162.3	1075.0	949.3	835.8	716.2	591.9	496.2	412.9	340.3	48.6
33°	1493.3	1494.9	1357.5	1209.3	1023.3	862.8	700.0	568.8	468.5	379.7	50.2
34°	2005.8	1885.4	1724.1	1523.4	1270.3	1028.7	817.3	652.9	518.6	417.5	50.2
35°	2537.5	2416.4	2238.8	1934.8	1587.5	1249.5	957.0	743.2	578.8	458.4	50.2
36°	3133.3	3030.7	2762.1	2373.9	1930.9	1457.8	1105.1	847.4	638.2	495.5	49.4
37°	3776.9	3626.5	3328.6	2904.9	2312.2	1751.1	1285.7	950.8	697.7	535.6	47.8
38°	4430.6	4294.8	3919.0	3405.7	2767.5	2060.6	1466.3	1050.4	752.5	565.7	45.5
39°	4926.1	4852.0	4479.2	3905.8	3131.0	2353.8	1652.3	1156.9	810.3	595.8	43.2
40°	5508.0	5388.4	5034.9	4325.7	3560.9	2652.5	1834.5	1251.0	858.2	619.7	40.9
41°	6039.0	5887.7	5441.6	4756.3	3905.1	2921.1	2007.3	1348.2	896.8	633.6	39.4
42°	6494.3	6318.3	5852.2	5125.2	4192.9	3135.6	2145.5	1417.7	933.0	645.2	37.0
43°	6789.1	6637.1	6178.6	5402.3	4439.1	3332.4	2274.3	1490.3	955.4	652.9	34.0
44°	6932.6	6779.1	6335.3	5575.9	4590.4	3450.5	2357.7	1540.4	980.1	662.9	31.6
45°	6886.3	6730.4	6301.3	5579.0	4637.5	3492.9	2393.2	1562.8	993.2	672.2	28.6
46°	6674.1	6564.5	6132.3	5433.9	4547.9	3447.4	2373.1	1545.8	988.6	672.2	25.5
47°	6376.2	6251.2	5839.8	5184.6	4331.1	3330.1	2292.1	1494.1	960.1	656.8	22.4
48°	5970.3	5863.8	5431.6	4788.7	3998.4	3074.7	2109.2	1410.0	915.3	626.7	19.3
49°	5460.9	5312.7	4910.7	4282.4	3564.7	2711.9	1869.2	1268.0	843.5	584.2	17.0
50°	4908.3	4725.4	4415.2	3775.4	3116.3	2325.3	1553.5	1072.0	742.4	528.6	15.4
51°	4367.3	4181.3	3885.8	3341.7	2637.8	1929.4	1253.3	855.9	611.2	452.2	13.1
52°	3806.3	3650.4	3319.3	2891.8	2258.1	1563.6	1044.2	723.9	507.8	379.7	10.8
53°	3247.5	3141.0	2826.2	2393.2	1814.4	1277.2	852.8	619.7	443.0	324.9	8.5
54°	2688.0	2571.5	2332.2	1946.4	1462.5	1007.9	723.1	518.6	384.3	283.2	7.7
55°	2102.2	2042.1	1821.3	1484.1	1108.2	804.2	586.5	446.1	321.8	236.9	6.2
56°	1619.1	1551.2	1349.8	1076.6	823.5	629.7	474.6	364.3	272.4	198.3	4.6
57°	1060.4	990.9	857.4	751.7	599.7	459.2	362.7	287.1	221.5	164.4	3.9
58°	626.7	563.4	542.5	463.1	399.8	311.8	267.8	213.8	163.6	129.7	2.3
59°	287.9	292.5	260.1	243.9	221.5	198.3	162.8	142.8	111.9	93.4	1.5
60°	167.5	158.2	154.4	138.1	122.7	108.8	98.0	86.4	70.2	60.2	0.8
62.5°	57.1	54.8	56.3	50.9	47.8	46.3	42.4	36.3	30.1	24.7	0.0
65°	15.4	15.4	14.7	13.9	13.1	12.3	11.6	10.0	9.3	7.7	0.0



TEST NUMBER: P1343768

CATALOG NUMBER: P3A13R15W2N902750DE010 E3CA451MB_5000K

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	4.6	4.6	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	1.5	1.5	1.5	0.8	0.0
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	1.5	1.5	1.5	0.8	0.8
75°	2.3	2.3	2.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8	1.5
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.5
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

TEST NUMBER: P1343768

CATALOG NUMBER: P3A13R15W2N902750DE010 E3CA451MB_5000K

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	68.7	68.7	68.7	68.7	68.7	68.7
2.5°	71.0	67.9	64.1	61.7	61.0	60.2
5°	67.9	61.7	57.1	54.0	53.3	53.3
7.5°	61.0	54.0	49.4	47.8	47.1	47.1
10°	53.3	47.1	43.2	41.7	42.4	42.4
12.5°	44.8	39.4	37.8	37.8	38.6	39.4
15°	36.3	33.2	33.2	34.0	35.5	36.3
17.5°	30.1	28.6	29.3	30.9	32.4	34.0
20°	24.7	24.7	26.2	28.6	30.9	32.4
22.5°	20.8	21.6	23.9	26.2	29.3	30.9
25°	17.8	19.3	21.6	25.5	28.6	29.3
27.5°	15.4	17.8	20.8	24.7	27.8	29.3
30°	13.1	16.2	20.1	23.9	27.8	29.3
31°	12.3	15.4	19.3	23.9	27.8	29.3
32°	11.6	15.4	19.3	23.9	27.8	29.3
33°	10.8	14.7	19.3	23.2	27.8	29.3
34°	10.0	14.7	19.3	23.9	27.8	29.3
35°	9.3	13.9	18.5	23.2	27.0	29.3
36°	8.5	13.9	18.5	23.2	27.8	29.3
37°	7.7	13.9	18.5	23.2	27.0	29.3
38°	7.7	13.1	17.8	23.2	27.0	29.3
39°	6.9	12.3	17.8	23.2	27.0	29.3
40°	6.2	12.3	17.0	22.4	27.0	29.3
41°	5.4	11.6	17.0	22.4	27.0	29.3
42°	4.6	11.6	17.0	22.4	27.0	29.3
43°	3.9	10.8	16.2	22.4	27.0	29.3
44°	3.9	10.8	16.2	22.4	27.0	29.3
45°	3.1	10.0	15.4	22.4	27.0	29.3
46°	3.1	10.0	15.4	21.6	27.0	29.3
47°	2.3	10.0	15.4	21.6	27.0	29.3
48°	2.3	9.3	15.4	21.6	27.0	29.3
49°	1.5	9.3	15.4	21.6	27.0	29.3
50°	1.5	9.3	14.7	21.6	27.0	29.3
51°	1.5	9.3	14.7	21.6	27.0	29.3
52°	1.5	8.5	14.7	21.6	27.0	29.3
53°	1.5	8.5	14.7	21.6	27.0	29.3
54°	1.5	8.5	13.9	21.6	27.0	29.3
55°	1.5	7.7	13.9	20.8	27.0	28.6
56°	1.5	7.7	13.9	20.8	27.0	28.6
57°	1.5	7.7	13.1	20.8	27.0	28.6
58°	1.5	6.9	13.1	20.1	26.2	28.6
59°	1.5	6.9	12.3	20.1	26.2	27.8
60°	1.5	6.2	12.3	19.3	25.5	27.8
62.5°	1.5	5.4	10.8	18.5	24.7	26.2
65°	1.5	4.6	10.0	17.0	23.9	25.5



TEST NUMBER: P1343768

CATALOG NUMBER: P3A13R15W2N902750DE010 E3CA451MB_5000K

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.5	4.6	9.3	16.2	22.4	24.7
70°	1.5	4.6	8.5	14.7	21.6	22.4
72.5°	2.3	4.6	7.7	13.9	20.1	20.8
75°	3.1	4.6	6.9	12.3	18.5	19.3
77.5°	3.1	4.6	6.2	10.8	16.2	17.0
80°	3.1	3.9	5.4	8.5	13.1	13.9
82.5°	3.1	3.9	3.9	6.9	10.0	10.8
85°	2.3	3.1	3.1	3.9	6.9	7.7
87.5°	2.3	3.1	1.5	2.3	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)