

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: P1344311

Luminaire Tested: P3A13R20W2N902765DE010 E3A301WMH_3500K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344311
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-60)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R20W2N902765DE010 E3A301WMH_3500K
Description: 3in Adjustable Tunable White LED luminaire with, R20 optic, 3500K CCT AND, 90CRI ,
E3A301WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

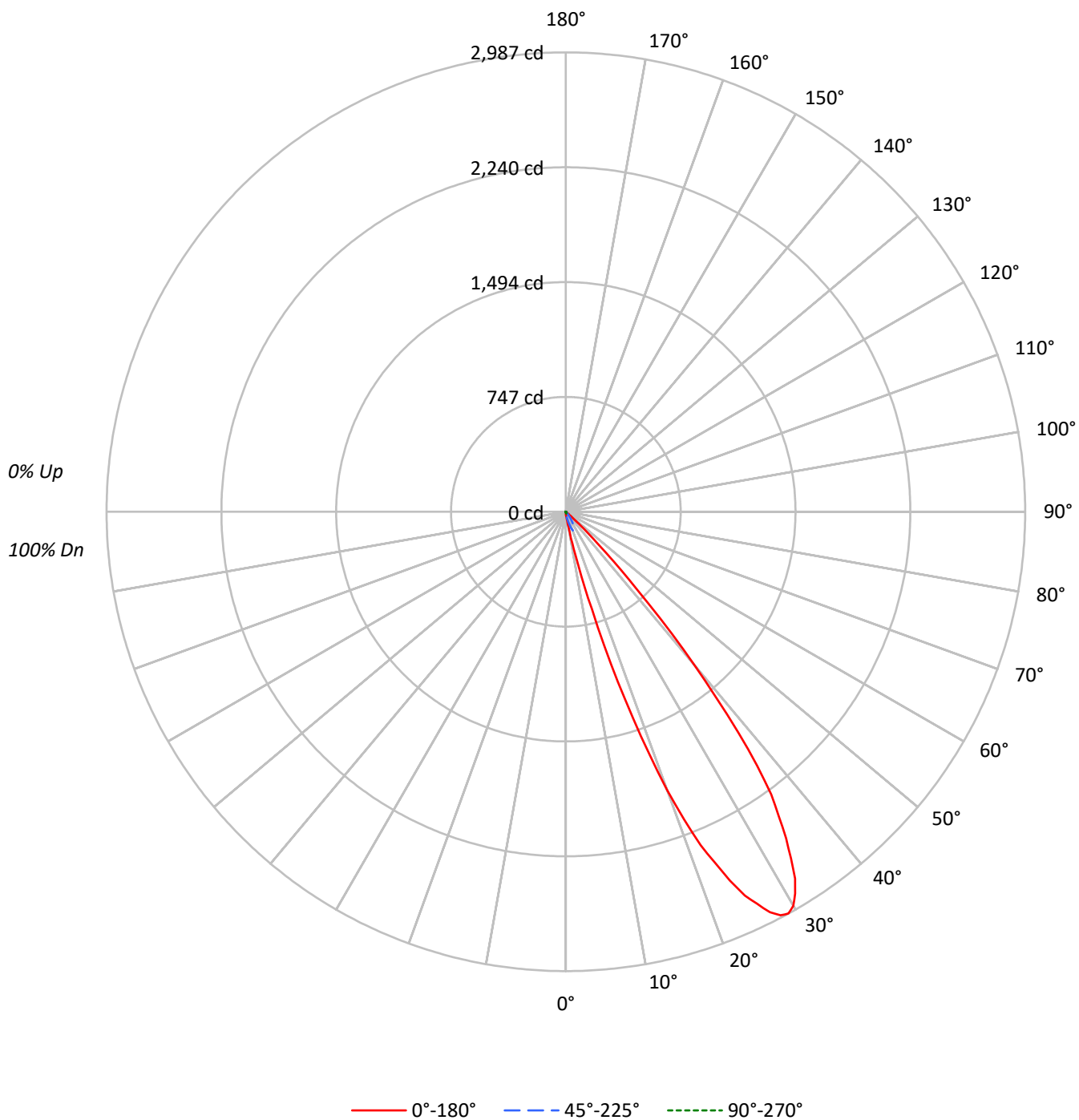
Lumens per Lamp: N/A
Luminaire Lumens: 419.0 lumens
Efficiency: N/A
Efficacy: 34.1 lumens/watt
Spacing Criteria (0/90/45): 2.3 / 0.54 / 1.19
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92	
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83	
3	99	92	86	81	97	90	85	81	88	83	79	85	81	78	83	80	77	75	
4	93	84	78	73	91	83	77	72	81	76	71	79	74	71	77	73	70	68	
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61	
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55	
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50	
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41	
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3158	3158	3158	3158	3158
5°	7286	5437	3016	1849	1585
10°	22934	9485	2449	1024	757
15°	148605	17526	1816	341	91
20°	448482	29986	1237	0	0
25°	666063	30268	726	0	0
30°	749027	23016	279	0	0
35°	646263	13733	214	0	0
40°	372154	4666	0	0	0
45°	90769	1892	124	0	124
50°	10882	512	136	136	375
55°	1453	0	306	306	573
60°	175	0	482	482	833
65°	208	208	778	778	1193
70°	256	256	962	962	1218
75°	0	339	1271	932	1271
80°	0	505	1389	1010	1389
85°	0	1006	2768	1006	1006

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2.5°

Vertical Angle: 45°

Luminance: 91358 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.5
10°-20°	38.8	9.3
20°-30°	169.3	40.4
30°-40°	170.4	40.7
40°-50°	34.2	8.2
50°-60°	1.7	0.4
60°-70°	1.1	0.3
70°-80°	1.0	0.2
80°-90°	0.5	0.1
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°	210.0	50.1
0°-40°	380.5	90.8
0°-60°	416.4	99.4
0°-90°	419.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	419.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	33	25	14	8	7	5
15°	655	77	8	2	0	256
25°	2753	125	3	0	0	1241
35°	2414	51	1	0	0	1436
45°	293	6	0	0	0	319
55°	4	0	1	1	2	7
65°	0	0	2	2	2	0
75°	0	0	2	1	2	0
85°	0	0	1	0	0	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°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
2.5°	21.7	21.7	21.3	21.3	20.9	21.3	20.5	20.9	20.9	20.5	18.6
5°	33.1	33.8	33.5	33.5	33.1	33.5	32.7	31.9	31.2	31.2	24.7
7.5°	54.4	54.0	53.2	53.6	52.5	51.7	50.9	50.6	48.3	47.1	32.3
10°	103.0	105.3	103.4	103.0	96.2	95.8	91.2	84.8	79.1	76.0	42.6
12.5°	283.6	295.7	276.7	267.6	262.3	241.8	233.0	210.6	188.9	172.6	54.0
15°	654.6	684.6	646.2	648.9	617.0	558.4	507.1	463.0	410.9	358.5	77.2
17.5°	1282.6	1258.2	1237.3	1202.0	1137.0	1051.1	940.4	828.3	731.4	629.9	107.6
20°	1921.9	1900.3	1852.8	1775.6	1692.7	1565.4	1433.9	1265.5	1102.4	949.6	128.5
21°	2142.0	2134.8	2056.9	2009.4	1881.7	1760.0	1608.3	1428.2	1244.6	1063.6	131.9
22°	2338.6	2295.2	2253.4	2183.1	2056.1	1923.8	1755.1	1565.4	1366.2	1165.1	132.3
23°	2474.7	2454.9	2415.4	2335.9	2209.7	2054.2	1876.3	1677.9	1468.1	1237.0	131.1
24°	2625.2	2600.1	2542.3	2449.6	2322.2	2168.7	1965.7	1768.8	1540.7	1297.4	128.1
25°	2752.9	2713.8	2645.3	2545.4	2406.2	2247.7	2043.6	1827.3	1591.2	1338.1	125.1
26°	2835.8	2814.5	2726.7	2618.0	2469.0	2305.5	2097.2	1872.2	1623.9	1356.7	120.1
27°	2922.1	2882.9	2796.6	2671.6	2510.0	2343.1	2127.6	1893.8	1635.3	1357.5	114.0
28°	2971.5	2928.9	2831.2	2699.7	2536.6	2364.0	2145.1	1900.7	1633.0	1345.7	106.8
29°	2987.1	2933.5	2838.1	2704.3	2543.1	2365.6	2142.4	1890.8	1612.9	1316.8	98.5
30°	2958.2	2903.5	2813.0	2682.6	2522.6	2346.6	2117.7	1858.1	1577.2	1275.3	90.9
31°	2895.1	2848.7	2761.3	2630.5	2476.9	2302.1	2061.8	1804.5	1516.3	1219.8	82.1
32°	2811.8	2766.2	2680.3	2562.1	2405.9	2229.5	1985.4	1720.9	1444.9	1137.0	73.4
33°	2686.8	2660.5	2583.4	2470.5	2314.2	2125.7	1882.8	1620.9	1343.0	1045.0	65.8
34°	2560.2	2527.1	2473.1	2349.6	2181.6	1993.4	1749.0	1482.9	1218.7	942.0	58.5
35°	2414.2	2394.5	2309.7	2210.8	2042.1	1849.7	1606.8	1348.7	1073.9	827.2	51.3
36°	2272.8	2242.4	2145.8	2041.3	1877.5	1669.5	1429.7	1187.2	948.8	719.6	43.7
37°	2067.5	2021.2	1952.4	1842.1	1650.5	1473.4	1254.4	1029.4	794.9	603.3	35.4
38°	1826.2	1804.5	1709.1	1598.1	1439.6	1271.5	1054.9	864.0	655.7	503.7	27.0
39°	1541.4	1541.1	1449.8	1369.6	1214.5	1063.2	867.8	701.3	541.3	405.6	20.9
40°	1300.1	1255.2	1198.9	1098.2	979.2	850.7	679.7	548.9	420.0	326.9	16.3
42.5°	681.6	677.8	644.7	569.1	502.5	426.9	339.5	282.8	221.2	180.2	10.3
45°	292.7	294.6	271.8	260.4	234.5	203.0	171.4	142.9	122.4	99.2	6.1
47.5°	74.1	71.1	70.3	73.0	73.0	70.7	63.5	59.7	55.1	50.6	3.4
50°	31.9	31.2	30.4	30.4	28.5	27.4	25.5	23.2	21.3	19.0	1.5
52.5°	11.8	12.2	12.5	12.2	12.2	11.8	11.8	11.4	10.3	9.1	0.8
55°	3.8	3.8	3.8	4.2	4.2	4.6	4.6	4.6	4.6	4.2	0.0
57.5°	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1	1.5	1.5	0.0
60°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
62.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
65°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
67.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72.5°	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75°	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.0	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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°	14.4	14.4	14.4	14.4	14.4	14.4
2.5°	16.7	14.8	12.5	10.6	10.3	9.9
5°	18.6	13.7	10.3	8.4	7.6	7.2
7.5°	20.1	12.5	8.4	6.1	5.3	4.9
10°	20.9	11.0	6.8	4.6	3.4	3.4
12.5°	21.3	9.5	4.9	3.0	1.9	1.9
15°	20.9	8.0	3.8	1.5	0.4	0.4
17.5°	19.0	6.5	2.3	0.4	0.0	0.0
20°	16.3	5.3	1.5	0.0	0.0	0.0
21°	15.6	4.6	1.1	0.0	0.0	0.0
22°	14.4	4.2	0.8	0.0	0.0	0.0
23°	13.3	3.8	0.8	0.0	0.0	0.0
24°	12.2	3.4	0.4	0.0	0.0	0.0
25°	11.4	3.0	0.4	0.0	0.0	0.0
26°	10.6	2.7	0.4	0.0	0.0	0.0
27°	9.5	2.3	0.0	0.0	0.0	0.0
28°	8.7	1.9	0.0	0.0	0.0	0.0
29°	7.6	1.5	0.0	0.0	0.0	0.0
30°	6.5	1.1	0.0	0.0	0.0	0.0
31°	5.3	1.1	0.0	0.0	0.0	0.0
32°	4.6	0.8	0.0	0.0	0.0	0.0
33°	3.8	0.8	0.0	0.0	0.0	0.0
34°	3.4	0.8	0.0	0.0	0.0	0.0
35°	3.0	0.8	0.0	0.0	0.0	0.0
36°	2.3	0.4	0.0	0.0	0.0	0.0
37°	1.9	0.4	0.0	0.0	0.0	0.0
38°	1.5	0.4	0.0	0.0	0.0	0.0
39°	1.1	0.0	0.0	0.0	0.0	0.0
40°	1.1	0.0	0.0	0.0	0.0	0.0
42.5°	0.4	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.4	0.0	0.0	0.4	0.4
47.5°	0.0	0.4	0.0	0.0	0.4	0.8
50°	0.0	0.4	0.4	0.4	0.8	1.1
52.5°	0.0	0.8	0.4	0.4	1.1	1.1
55°	0.4	0.8	0.4	0.8	1.5	1.5
57.5°	0.4	0.8	0.8	1.1	1.5	1.9
60°	0.8	1.1	1.1	1.1	1.9	1.9
62.5°	0.8	1.1	1.5	1.5	1.9	2.3
65°	0.8	1.5	1.5	1.5	1.9	2.3
67.5°	1.1	1.5	1.5	1.5	1.9	2.3
70°	1.1	1.5	1.5	1.5	1.9	1.9
72.5°	1.1	1.5	1.1	1.5	1.5	1.9
75°	1.1	1.5	1.1	1.1	1.5	1.5
77.5°	0.8	1.1	1.1	0.8	1.1	1.1
80°	0.8	1.1	0.8	0.8	1.1	1.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	0.8	1.1	0.8	0.4	0.8	0.8
85°	0.8	1.1	0.8	0.4	0.4	0.4
87.5°	0.8	1.1	0.8	0.4	0.0	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)