

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: P1345078

Luminaire Tested: P3A13R309830DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345078
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R309830DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

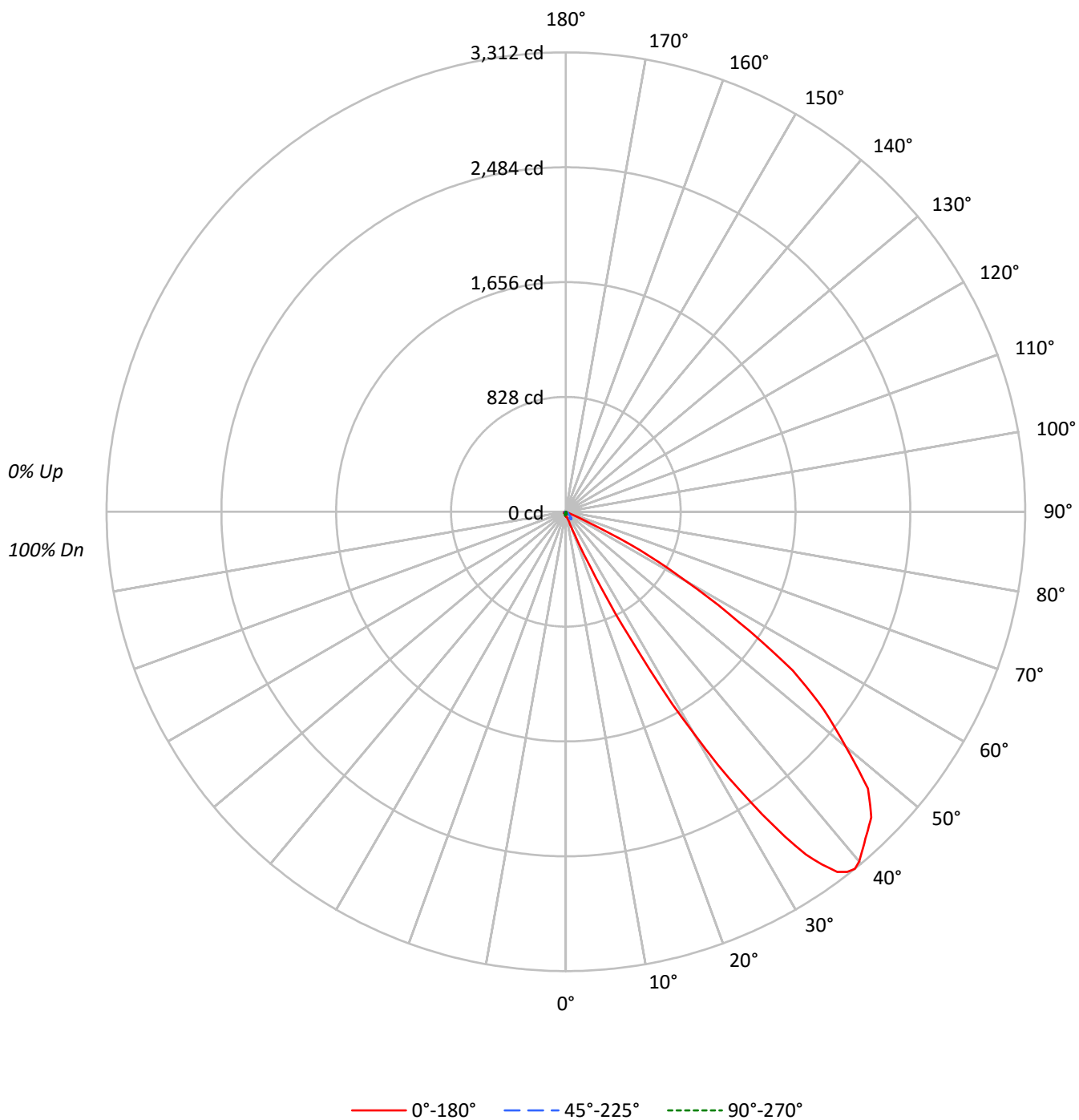
Lumens per Lamp: N/A
Luminaire Lumens: 861.0 lumens
Efficiency: N/A
Efficacy: 59.4 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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: P1345078

CATALOG NUMBER: P3A13R309830DE010 E3CA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1345078

CATALOG NUMBER: P3A13R309830DE010 E3CA451MW

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	7324	7324	7324	7324	7324
5°	7814	7660	7176	6538	6383
10°	8550	7593	6301	5656	5500
15°	12509	7582	5267	4767	4949
20°	31479	8284	4060	4060	4574
25°	146162	10355	3170	3678	4210
30°	465337	14331	2380	3494	4228
35°	807467	17480	1954	3293	4283
40°	941707	17433	1460	3321	4351
45°	965775	12373	1582	3597	4714
50°	898120	6925	1228	3718	5458
55°	763347	3594	1376	4167	6117
60°	440842	965	1579	4473	6666
65°	89919	0	1868	5292	7524
70°	1410	449	2308	6027	8848
75°	1271	593	2457	6185	10421
80°	884	884	3662	7324	11870
85°	0	1761	7296	7296	14593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 965775 cd/sqm

TEST NUMBER: P1345078

CATALOG NUMBER: P3A13R309830DE010 E3CA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.0	0.4
10°-20°	8.7	1.0
20°-30°	49.7	5.8
30°-40°	231.9	26.9
40°-50°	328.0	38.1
50°-60°	201.8	23.4
60°-70°	30.7	3.6
70°-80°	4.9	0.6
80°-90°	2.4	0.3
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°	61.4	7.1
0°-40°	293.3	34.1
0°-60°	823.0	95.6
0°-90°	861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	861.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	33	33	33	33	33	
5°	36	35	33	30	29	3
15°	55	33	23	21	22	20
25°	604	43	13	15	17	372
35°	3016	65	7	12	16	1810
45°	3114	40	5	12	15	2361
55°	1997	9	4	11	16	1699
65°	173	0	4	10	14	314
75°	2	1	3	7	12	2
85°	0	1	3	3	6	0
90°	0	0	0	0	0	

TEST NUMBER: P1345078

CATALOG NUMBER: P3A13R309830DE010 E3CA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4
2.5°	34.1	34.1	34.8	34.8	34.1	34.8	34.8	34.8	33.4	32.6	31.2
5°	35.5	35.5	35.5	36.3	35.5	35.5	34.8	34.1	32.6	30.5	29.7
7.5°	37.0	37.0	36.3	37.0	36.3	36.3	34.8	33.4	31.2	29.0	27.6
10°	38.4	38.4	37.7	37.7	37.0	37.0	34.1	31.9	28.3	26.1	25.4
12.5°	42.8	42.8	42.1	41.3	39.9	39.2	33.4	29.7	25.4	23.2	22.5
15°	55.1	54.4	52.9	50.8	47.1	46.4	33.4	27.6	23.2	21.0	21.0
17.5°	75.4	74.7	72.5	66.7	60.2	58.0	33.4	24.7	20.3	18.9	18.9
20°	134.9	129.1	118.2	103.7	88.5	80.5	35.5	21.8	17.4	16.7	17.4
21°	176.2	170.4	156.7	132.7	105.9	97.2	37.0	21.0	16.7	16.0	17.4
22°	240.1	233.5	205.3	172.6	134.2	118.9	37.7	19.6	15.2	15.2	16.7
23°	335.1	324.2	276.3	224.1	167.5	145.8	39.2	18.9	14.5	15.2	16.0
24°	438.8	429.4	375.0	296.6	214.0	182.8	40.6	18.1	13.8	13.8	15.2
25°	604.1	593.3	496.8	374.2	271.3	219.8	42.8	16.7	13.1	13.1	15.2
26°	818.1	768.1	639.7	482.3	334.3	275.6	45.0	16.0	12.3	13.1	14.5
27°	1021.2	979.8	835.5	618.7	413.4	338.7	47.9	15.2	11.6	12.3	14.5
28°	1288.1	1230.1	1048.0	782.6	520.7	409.8	50.8	14.5	10.9	12.3	13.8
29°	1586.9	1505.7	1285.9	966.8	641.9	489.6	53.7	13.8	10.2	11.6	13.8
30°	1837.8	1761.7	1541.9	1185.1	781.1	594.7	56.6	13.1	9.4	11.6	13.8
31°	2132.3	2017.0	1750.8	1370.0	900.8	699.9	59.5	11.6	8.7	10.9	13.1
32°	2370.9	2290.4	2007.5	1578.9	1058.2	815.9	61.6	10.9	8.7	10.9	13.1
33°	2601.5	2493.5	2220.1	1779.1	1200.3	934.9	63.8	10.2	8.0	10.2	13.1
34°	2822.0	2722.7	2421.0	1940.8	1334.5	1048.0	65.3	8.7	8.0	10.2	12.3
35°	3016.4	2901.1	2597.9	2098.9	1472.3	1151.0	65.3	8.0	7.3	9.4	12.3
36°	3142.6	3059.9	2751.7	2254.9	1597.0	1248.9	65.3	7.3	6.5	9.4	11.6
37°	3250.7	3154.2	2875.0	2374.5	1689.2	1327.2	65.3	6.5	6.5	9.4	11.6
38°	3294.9	3212.2	2959.8	2480.4	1775.5	1407.0	64.5	5.8	5.8	8.7	11.6
39°	3312.3	3238.3	3023.7	2556.6	1839.3	1460.7	63.1	5.1	5.8	8.7	11.6
40°	3289.8	3234.0	3056.3	2605.9	1890.1	1499.9	60.9	4.4	5.1	8.7	11.6
42.5°	3197.0	3160.0	3049.0	2655.2	1933.6	1528.9	52.9	2.9	5.1	8.0	11.6
45°	3114.3	3073.7	2975.8	2603.7	1877.0	1471.6	39.9	1.5	5.1	8.0	11.6
47.5°	2954.0	2928.6	2851.8	2472.4	1753.0	1342.5	28.3	0.7	4.4	7.3	10.9
50°	2632.7	2608.8	2507.3	2146.8	1507.8	1135.0	20.3	0.7	3.6	7.3	10.9
52.5°	2344.8	2319.4	2173.6	1784.9	1158.3	831.9	13.1	0.7	3.6	7.3	10.9
55°	1996.7	1952.4	1761.0	1354.8	821.0	557.7	9.4	0.7	3.6	6.5	10.9
57.5°	1478.1	1413.6	1242.4	924.0	472.9	302.4	5.1	0.7	3.6	6.5	10.9
60°	1005.2	966.8	777.5	487.4	201.6	127.6	2.2	0.7	3.6	6.5	10.2
62.5°	609.2	560.6	390.9	207.4	87.0	58.0	0.0	1.5	3.6	6.5	10.2
65°	173.3	153.8	102.3	47.1	24.7	18.9	0.0	1.5	3.6	6.5	10.2
67.5°	5.8	5.8	5.8	5.1	3.6	3.6	0.7	1.5	3.6	6.5	9.4
70°	2.2	2.2	2.2	1.5	1.5	0.7	0.7	1.5	3.6	5.8	9.4
72.5°	1.5	1.5	1.5	1.5	0.7	0.7	0.7	1.5	2.9	5.1	8.7
75°	1.5	1.5	1.5	0.7	0.7	0.7	0.7	2.2	2.9	5.1	7.3
77.5°	1.5	1.5	1.5	0.7	0.7	0.7	0.7	2.2	2.9	4.4	7.3
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.2	2.9	4.4	5.8



TEST NUMBER: P1345078

CATALOG NUMBER: P3A13R309830DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.7	0.7	0.7	0.0	0.0	0.0	0.7	2.2	2.9	2.9	4.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.2	2.9	2.2	2.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.2	2.2	2.2	1.5
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: P1345078

CATALOG NUMBER: P3A13R309830DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	33.4	33.4
2.5°	31.2	31.2
5°	29.0	29.0
7.5°	26.8	26.8
10°	24.7	24.7
12.5°	23.2	23.2
15°	21.0	21.8
17.5°	19.6	20.3
20°	18.9	19.6
21°	18.9	19.6
22°	18.1	18.9
23°	18.1	18.9
24°	17.4	18.1
25°	16.7	17.4
26°	16.7	17.4
27°	16.7	17.4
28°	16.0	17.4
29°	16.0	16.7
30°	16.0	16.7
31°	15.2	16.7
32°	15.2	16.7
33°	15.2	16.0
34°	14.5	16.0
35°	14.5	16.0
36°	14.5	16.0
37°	14.5	15.2
38°	14.5	16.0
39°	14.5	15.2
40°	14.5	15.2
42.5°	14.5	15.2
45°	14.5	15.2
47.5°	14.5	16.0
50°	14.5	16.0
52.5°	14.5	16.0
55°	14.5	16.0
57.5°	14.5	15.2
60°	14.5	15.2
62.5°	13.8	15.2
65°	13.8	14.5
67.5°	13.8	14.5
70°	13.1	13.8
72.5°	12.3	13.1
75°	10.9	12.3
77.5°	10.2	10.9
80°	8.7	9.4

TEST NUMBER: P1345078

CATALOG NUMBER: P3A13R309830DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	7.3	7.3
85°	5.1	5.8
87.5°	2.9	2.9
90°	0.0	0.0

(END OF REPORT)