

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: P1344888

Luminaire Tested: P3A13R309024DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344888
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: P3A13R309024DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 2400K CCT AND, 90CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

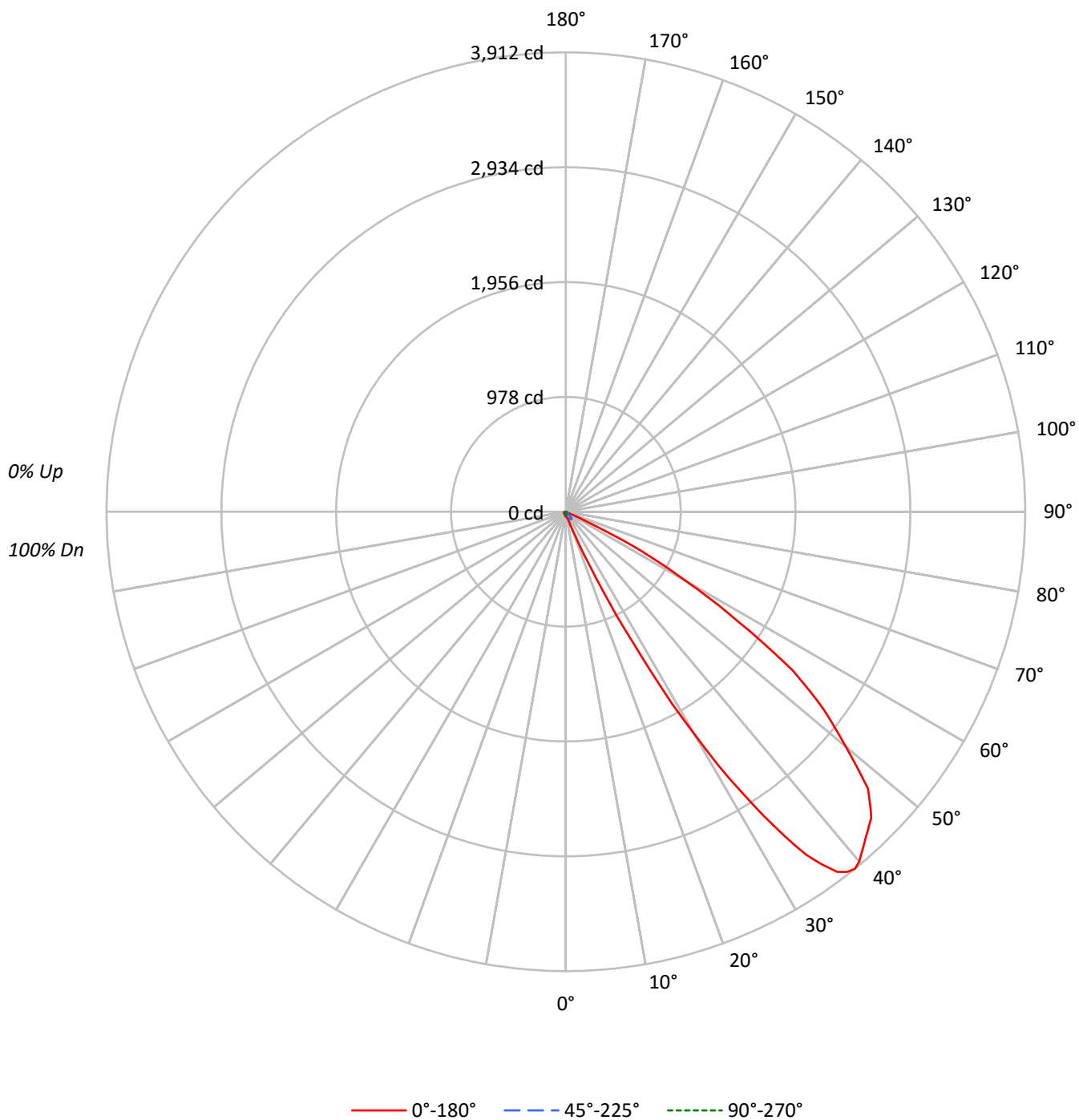
Lumens per Lamp: N/A
Luminaire Lumens: 1017.0 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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
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°	8640	8640	8640	8640	8640
5°	9245	9047	8497	7726	7550
10°	10109	8973	7437	6680	6480
15°	14779	8944	6220	5630	5834
20°	37173	9801	4807	4807	5390
25°	172655	12218	3726	4355	4984
30°	549654	16914	2811	4127	4988
35°	953761	20639	2302	3908	5033
40°	1112341	20610	1718	3922	5153
45°	1140770	14606	1861	4249	5582
50°	1060844	8187	1467	4401	6413
55°	901626	4244	1644	4932	7187
60°	520748	1140	1886	5263	7894
65°	106211	0	2231	6226	8873
70°	1667	577	2757	7117	10450
75°	1440	763	2881	7286	12370
80°	1137	1137	4293	8713	14017
85°	0	2264	8554	8554	17360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1140770 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.6	0.4
10°-20°	10.3	1.0
20°-30°	58.6	5.8
30°-40°	273.9	26.9
40°-50°	387.4	38.1
50°-60°	238.3	23.4
60°-70°	36.3	3.6
70°-80°	5.8	0.6
80°-90°	2.9	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°	72.5	7.1
0°-40°	346.4	34.1
0°-60°	972.1	95.6
0°-90°	1017.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1017.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	39	39	39	39	39	
5°	42	41	39	35	34	4
15°	65	39	27	25	26	23
25°	714	50	15	18	21	439
35°	3563	77	9	15	19	2138
45°	3679	47	6	14	18	2789
55°	2358	11	4	13	19	2007
65°	205	0	4	12	17	371
75°	2	1	3	9	15	2
85°	0	1	3	3	7	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
2.5°	40.3	40.3	41.1	41.1	40.3	41.1	41.1	41.1	39.4	38.6	36.8
5°	42.0	42.0	42.0	42.8	42.0	42.0	41.1	40.3	38.6	36.0	35.1
7.5°	43.7	43.7	42.8	43.7	42.8	42.8	41.1	39.4	36.8	34.3	32.6
10°	45.4	45.4	44.5	44.5	43.7	43.7	40.3	37.7	33.4	30.8	30.0
12.5°	50.5	50.5	49.7	48.8	47.1	46.3	39.4	35.1	30.0	27.4	26.6
15°	65.1	64.3	62.5	60.0	55.7	54.8	39.4	32.6	27.4	24.8	24.8
17.5°	89.1	88.2	85.7	78.8	71.1	68.5	39.4	29.1	24.0	22.3	22.3
20°	159.3	152.5	139.6	122.5	104.5	95.1	42.0	25.7	20.6	19.7	20.6
21°	208.2	201.3	185.0	156.8	125.1	114.8	43.7	24.8	19.7	18.8	20.6
22°	283.6	275.9	242.4	203.9	158.5	140.5	44.5	23.1	18.0	18.0	19.7
23°	395.8	382.9	326.4	264.7	197.9	172.2	46.3	22.3	17.1	18.0	18.8
24°	518.3	507.2	442.9	350.4	252.7	215.9	48.0	21.4	16.3	16.3	18.0
25°	713.6	700.8	586.8	442.0	320.4	259.6	50.5	19.7	15.4	15.4	18.0
26°	966.3	907.2	755.6	569.7	394.9	325.5	53.1	18.8	14.6	15.4	17.1
27°	1206.2	1157.4	986.9	730.7	488.3	400.1	56.5	18.0	13.7	14.6	17.1
28°	1521.5	1452.9	1237.9	924.4	615.1	484.0	60.0	17.1	12.9	14.6	16.3
29°	1874.4	1778.5	1518.9	1142.0	758.2	578.3	63.4	16.3	12.0	13.7	16.3
30°	2170.8	2080.9	1821.3	1399.8	922.6	702.5	66.8	15.4	11.1	13.7	16.3
31°	2518.6	2382.4	2068.0	1618.3	1064.0	826.7	70.2	13.7	10.3	12.9	15.4
32°	2800.5	2705.4	2371.3	1865.0	1249.9	963.8	72.8	12.9	10.3	12.9	15.4
33°	3072.9	2945.3	2622.3	2101.4	1417.8	1104.3	75.4	12.0	9.4	12.0	15.4
34°	3333.3	3216.0	2859.6	2292.5	1576.3	1237.9	77.1	10.3	9.4	12.0	14.6
35°	3562.9	3426.7	3068.6	2479.2	1739.1	1359.5	77.1	9.4	8.6	11.1	14.6
36°	3712.0	3614.3	3250.2	2663.4	1886.4	1475.2	77.1	8.6	7.7	11.1	13.7
37°	3839.6	3725.7	3395.9	2804.8	1995.2	1567.7	77.1	7.7	7.7	11.1	13.7
38°	3891.9	3794.2	3496.1	2929.8	2097.1	1662.0	76.2	6.9	6.9	10.3	13.7
39°	3912.4	3825.1	3571.5	3019.8	2172.5	1725.3	74.5	6.0	6.9	10.3	13.7
40°	3885.9	3819.9	3610.0	3078.0	2232.5	1771.6	72.0	5.1	6.0	10.3	13.7
42.5°	3776.2	3732.5	3601.5	3136.3	2283.9	1805.9	62.5	3.4	6.0	9.4	13.7
45°	3678.6	3630.6	3514.9	3075.5	2217.1	1738.2	47.1	1.7	6.0	9.4	13.7
47.5°	3489.2	3459.3	3368.5	2920.4	2070.6	1585.7	33.4	0.9	5.1	8.6	12.9
50°	3109.7	3081.5	2961.5	2535.8	1781.0	1340.7	24.0	0.9	4.3	8.6	12.9
52.5°	2769.6	2739.7	2567.5	2108.3	1368.1	982.6	15.4	0.9	4.3	8.6	12.9
55°	2358.4	2306.2	2080.0	1600.3	969.8	658.8	11.1	0.9	4.3	7.7	12.9
57.5°	1745.9	1669.7	1467.5	1091.4	558.6	357.2	6.0	0.9	4.3	7.7	12.9
60°	1187.4	1142.0	918.4	575.7	238.2	150.8	2.6	0.9	4.3	7.7	12.0
62.5°	719.6	662.2	461.7	245.0	102.8	68.5	0.0	1.7	4.3	7.7	12.0
65°	204.7	181.6	120.8	55.7	29.1	22.3	0.0	1.7	4.3	7.7	12.0
67.5°	6.9	6.9	6.9	6.0	4.3	4.3	0.9	1.7	4.3	7.7	11.1
70°	2.6	2.6	2.6	1.7	1.7	0.9	0.9	1.7	4.3	6.9	11.1
72.5°	1.7	1.7	1.7	1.7	0.9	0.9	0.9	1.7	3.4	6.0	10.3
75°	1.7	1.7	1.7	0.9	0.9	0.9	0.9	2.6	3.4	6.0	8.6
77.5°	1.7	1.7	1.7	0.9	0.9	0.9	0.9	2.6	3.4	5.1	8.6
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.6	3.4	5.1	6.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.9	2.6	3.4	3.4	5.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.6	3.4	2.6	3.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.6	2.6	2.6	1.7
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):

	157.5°	180°
0°	39.4	39.4
2.5°	36.8	36.8
5°	34.3	34.3
7.5°	31.7	31.7
10°	29.1	29.1
12.5°	27.4	27.4
15°	24.8	25.7
17.5°	23.1	24.0
20°	22.3	23.1
21°	22.3	23.1
22°	21.4	22.3
23°	21.4	22.3
24°	20.6	21.4
25°	19.7	20.6
26°	19.7	20.6
27°	19.7	20.6
28°	18.8	20.6
29°	18.8	19.7
30°	18.8	19.7
31°	18.0	19.7
32°	18.0	19.7
33°	18.0	18.8
34°	17.1	18.8
35°	17.1	18.8
36°	17.1	18.8
37°	17.1	18.0
38°	17.1	18.8
39°	17.1	18.0
40°	17.1	18.0
42.5°	17.1	18.0
45°	17.1	18.0
47.5°	17.1	18.8
50°	17.1	18.8
52.5°	17.1	18.8
55°	17.1	18.8
57.5°	17.1	18.0
60°	17.1	18.0
62.5°	16.3	18.0
65°	16.3	17.1
67.5°	16.3	17.1
70°	15.4	16.3
72.5°	14.6	15.4
75°	12.9	14.6
77.5°	12.0	12.9
80°	10.3	11.1



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	8.6	8.6
85°	6.0	6.9
87.5°	3.4	3.4
90°	0.0	0.0

(END OF REPORT)