

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: P1345110

Luminaire Tested: P3A13R309840DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345110
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: P3A13R309840DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

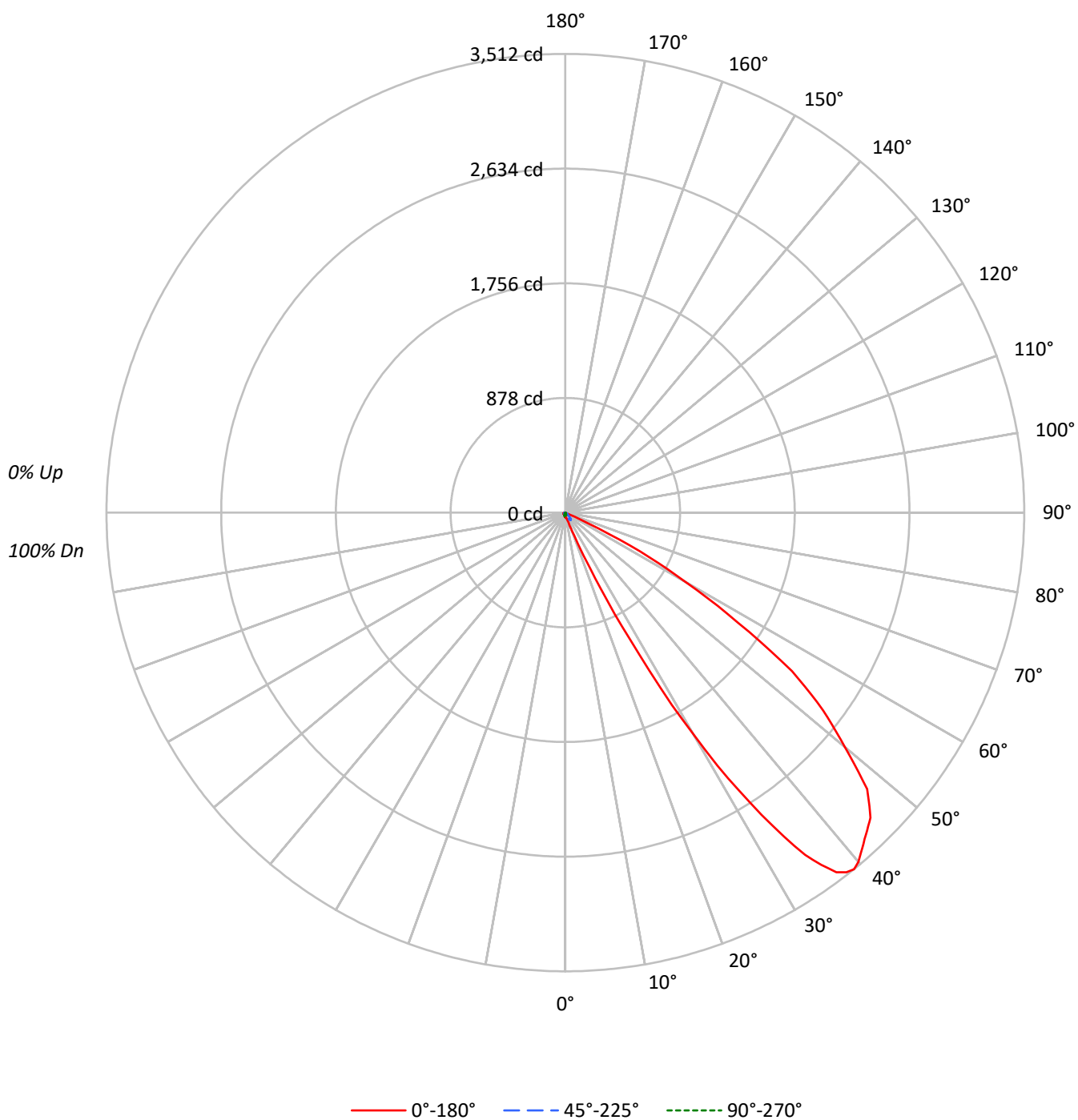
Lumens per Lamp: N/A
Luminaire Lumens: 913.0 lumens
Efficiency: N/A
Efficacy: 63.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

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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°	7763	7763	7763	7763	7763
5°	8298	8122	7616	6934	6780
10°	9085	8038	6680	5990	5812
15°	13258	8036	5585	5062	5244
20°	33370	8797	4317	4317	4854
25°	154993	10985	3339	3920	4476
30°	493443	15192	2532	3697	4482
35°	856241	18524	2061	3507	4524
40°	998585	18492	1546	3521	4637
45°	1024106	13118	1675	3814	5024
50°	952361	7335	1296	3923	5765
55°	809453	3823	1453	4396	6461
60°	467463	1009	1667	4736	7105
65°	95367	0	1972	5604	7990
70°	1475	513	2436	6411	9361
75°	1271	678	2626	6524	11099
80°	1010	1010	3915	7829	12628
85°	0	2013	7799	7799	15599

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1024106 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.2	0.4
10°-20°	9.2	1.0
20°-30°	52.7	5.8
30°-40°	245.9	26.9
40°-50°	347.8	38.1
50°-60°	213.9	23.4
60°-70°	32.6	3.6
70°-80°	5.2	0.6
80°-90°	2.6	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°	65.1	7.1
0°-40°	311.0	34.1
0°-60°	872.7	95.6
0°-90°	913.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	913.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	35	35	35	35	35	
5°	38	37	35	32	31	4
15°	58	35	25	22	23	21
25°	641	45	14	16	18	394
35°	3199	69	8	13	17	1920
45°	3302	42	5	12	16	2504
55°	2117	10	4	12	17	1802
65°	184	0	4	11	15	333
75°	2	1	3	8	13	2
85°	0	1	3	3	6	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°	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
2.5°	36.1	36.1	36.9	36.9	36.1	36.9	36.9	36.9	35.4	34.6	33.1
5°	37.7	37.7	37.7	38.5	37.7	37.7	36.9	36.1	34.6	32.3	31.5
7.5°	39.2	39.2	38.5	39.2	38.5	38.5	36.9	35.4	33.1	30.8	29.2
10°	40.8	40.8	40.0	40.0	39.2	39.2	36.1	33.8	30.0	27.7	26.9
12.5°	45.4	45.4	44.6	43.8	42.3	41.5	35.4	31.5	26.9	24.6	23.8
15°	58.4	57.7	56.1	53.8	50.0	49.2	35.4	29.2	24.6	22.3	22.3
17.5°	80.0	79.2	76.9	70.8	63.8	61.5	35.4	26.1	21.5	20.0	20.0
20°	143.0	136.9	125.4	110.0	93.8	85.4	37.7	23.1	18.5	17.7	18.5
21°	186.9	180.7	166.1	140.7	112.3	103.1	39.2	22.3	17.7	16.9	18.5
22°	254.6	247.6	217.6	183.0	142.3	126.1	40.0	20.8	16.2	16.2	17.7
23°	355.3	343.8	293.0	237.6	177.7	154.6	41.5	20.0	15.4	16.2	16.9
24°	465.3	455.3	397.6	314.6	226.9	193.8	43.1	19.2	14.6	14.6	16.2
25°	640.6	629.1	526.8	396.8	287.6	233.0	45.4	17.7	13.8	13.8	16.2
26°	867.5	814.4	678.3	511.4	354.5	292.2	47.7	16.9	13.1	13.8	15.4
27°	1082.9	1039.0	886.0	656.0	438.4	359.2	50.8	16.2	12.3	13.1	15.4
28°	1365.9	1304.3	1111.3	829.8	552.2	434.5	53.8	15.4	11.5	13.1	14.6
29°	1682.7	1596.6	1363.6	1025.2	680.6	519.1	56.9	14.6	10.8	12.3	14.6
30°	1948.8	1868.1	1635.0	1256.7	828.3	630.6	60.0	13.8	10.0	12.3	14.6
31°	2261.1	2138.8	1856.5	1452.8	955.2	742.2	63.1	12.3	9.2	11.5	13.8
32°	2514.1	2428.7	2128.8	1674.3	1122.1	865.2	65.4	11.5	9.2	11.5	13.8
33°	2758.7	2644.1	2354.1	1886.5	1272.8	991.3	67.7	10.8	8.5	10.8	13.8
34°	2992.5	2887.1	2567.2	2058.0	1415.1	1111.3	69.2	9.2	8.5	10.8	13.1
35°	3198.6	3076.3	2754.8	2225.7	1561.2	1220.5	69.2	8.5	7.7	10.0	13.1
36°	3332.4	3244.7	2917.9	2391.0	1693.5	1324.3	69.2	7.7	6.9	10.0	12.3
37°	3447.0	3344.7	3048.6	2517.9	1791.2	1407.4	69.2	6.9	6.9	10.0	12.3
38°	3493.9	3406.2	3138.6	2630.2	1882.7	1492.0	68.4	6.2	6.2	9.2	12.3
39°	3512.4	3433.9	3206.3	2711.0	1950.4	1548.9	66.9	5.4	6.2	9.2	12.3
40°	3488.5	3429.3	3240.9	2763.3	2004.2	1590.4	64.6	4.6	5.4	9.2	12.3
42.5°	3390.1	3350.8	3233.2	2815.6	2050.3	1621.2	56.1	3.1	5.4	8.5	12.3
45°	3302.4	3259.3	3155.5	2761.0	1990.4	1560.4	42.3	1.5	5.4	8.5	12.3
47.5°	3132.4	3105.5	3024.0	2621.8	1858.8	1423.6	30.0	0.8	4.6	7.7	11.5
50°	2791.7	2766.4	2658.7	2276.5	1598.9	1203.6	21.5	0.8	3.8	7.7	11.5
52.5°	2486.4	2459.5	2304.9	1892.7	1228.2	882.1	13.8	0.8	3.8	7.7	11.5
55°	2117.3	2070.3	1867.3	1436.6	870.6	591.4	10.0	0.8	3.8	6.9	11.5
57.5°	1567.4	1498.9	1317.4	979.8	501.4	320.7	5.4	0.8	3.8	6.9	11.5
60°	1065.9	1025.2	824.4	516.8	213.8	135.4	2.3	0.8	3.8	6.9	10.8
62.5°	646.0	594.5	414.5	220.0	92.3	61.5	0.0	1.5	3.8	6.9	10.8
65°	183.8	163.0	108.4	50.0	26.1	20.0	0.0	1.5	3.8	6.9	10.8
67.5°	6.2	6.2	6.2	5.4	3.8	3.8	0.8	1.5	3.8	6.9	10.0
70°	2.3	2.3	2.3	1.5	1.5	0.8	0.8	1.5	3.8	6.2	10.0
72.5°	1.5	1.5	1.5	1.5	0.8	0.8	0.8	1.5	3.1	5.4	9.2
75°	1.5	1.5	1.5	0.8	0.8	0.8	0.8	2.3	3.1	5.4	7.7
77.5°	1.5	1.5	1.5	0.8	0.8	0.8	0.8	2.3	3.1	4.6	7.7
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.1	4.6	6.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.8	2.3	3.1	3.1	4.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.3	3.1	2.3	3.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.3	2.3	2.3	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



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	35.4	35.4
2.5°	33.1	33.1
5°	30.8	30.8
7.5°	28.5	28.5
10°	26.1	26.1
12.5°	24.6	24.6
15°	22.3	23.1
17.5°	20.8	21.5
20°	20.0	20.8
21°	20.0	20.8
22°	19.2	20.0
23°	19.2	20.0
24°	18.5	19.2
25°	17.7	18.5
26°	17.7	18.5
27°	17.7	18.5
28°	16.9	18.5
29°	16.9	17.7
30°	16.9	17.7
31°	16.2	17.7
32°	16.2	17.7
33°	16.2	16.9
34°	15.4	16.9
35°	15.4	16.9
36°	15.4	16.9
37°	15.4	16.2
38°	15.4	16.9
39°	15.4	16.2
40°	15.4	16.2
42.5°	15.4	16.2
45°	15.4	16.2
47.5°	15.4	16.9
50°	15.4	16.9
52.5°	15.4	16.9
55°	15.4	16.9
57.5°	15.4	16.2
60°	15.4	16.2
62.5°	14.6	16.2
65°	14.6	15.4
67.5°	14.6	15.4
70°	13.8	14.6
72.5°	13.1	13.8
75°	11.5	13.1
77.5°	10.8	11.5
80°	9.2	10.0

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	7.7	7.7
85°	5.4	6.2
87.5°	3.1	3.1
90°	0.0	0.0

(END OF REPORT)