

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: P1335048

Luminaire Tested: P3A02R309050DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335048
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: P3A02R309050DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 5000K CCT AND, 90CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

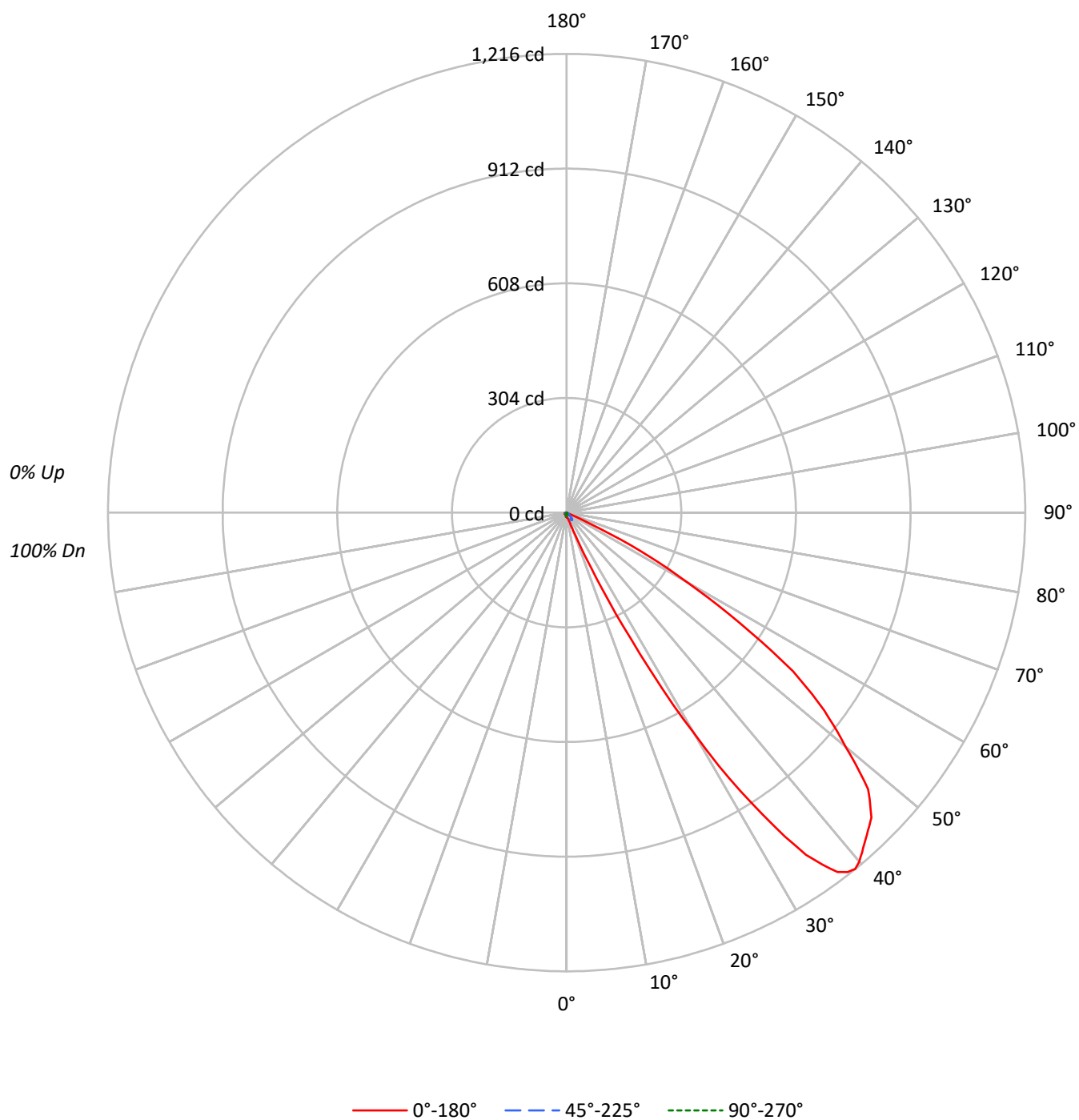
Lumens per Lamp: N/A
Luminaire Lumens: 316.0 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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°	2675	2675	2675	2675	2675
5°	2862	2818	2641	2399	2333
10°	3140	2783	2316	2071	2026
15°	4586	2770	1930	1748	1816
20°	11551	3034	1493	1493	1680
25°	53640	3799	1161	1355	1548
30°	170786	5267	886	1291	1545
35°	296362	6425	723	1205	1579
40°	345619	6412	544	1231	1603
45°	354455	4528	589	1333	1737
50°	329644	2559	443	1365	2013
55°	280153	1338	497	1529	2256
60°	161785	351	570	1623	2456
65°	33000	0	675	1920	2750
70°	513	192	833	2244	3270
75°	424	254	932	2288	3813
80°	379	379	1389	2652	4420
85°	0	755	2768	2768	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 354455 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.3
10°-20°	3.2	1.0
20°-30°	18.2	5.8
30°-40°	85.1	26.9
40°-50°	120.4	38.1
50°-60°	74.1	23.4
60°-70°	11.3	3.6
70°-80°	1.8	0.6
80°-90°	0.9	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°	22.5	7.1
0°-40°	107.6	34.1
0°-60°	302.1	95.6
0°-90°	316.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	316.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	13	13	12	11	11	1
15°	20	12	8	8	8	7
25°	222	16	5	6	6	136
35°	1107	24	3	4	6	664
45°	1143	15	2	4	6	867
55°	733	4	1	4	6	624
65°	64	0	1	4	5	115
75°	0	0	1	3	4	1
85°	0	0	1	1	2	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°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
2.5°	12.5	12.5	12.8	12.8	12.5	12.8	12.8	12.8	12.2	12.0	11.4
5°	13.0	13.0	13.0	13.3	13.0	13.0	12.8	12.5	12.0	11.2	10.9
7.5°	13.6	13.6	13.3	13.6	13.3	13.3	12.8	12.2	11.4	10.6	10.1
10°	14.1	14.1	13.8	13.8	13.6	13.6	12.5	11.7	10.4	9.6	9.3
12.5°	15.7	15.7	15.4	15.2	14.6	14.4	12.2	10.9	9.3	8.5	8.3
15°	20.2	20.0	19.4	18.6	17.3	17.0	12.2	10.1	8.5	7.7	7.7
17.5°	27.7	27.4	26.6	24.5	22.1	21.3	12.2	9.1	7.5	6.9	6.9
20°	49.5	47.4	43.4	38.1	32.5	29.5	13.0	8.0	6.4	6.1	6.4
21°	64.7	62.6	57.5	48.7	38.9	35.7	13.6	7.7	6.1	5.9	6.4
22°	88.1	85.7	75.3	63.4	49.2	43.7	13.8	7.2	5.6	5.6	6.1
23°	123.0	119.0	101.4	82.3	61.5	53.5	14.4	6.9	5.3	5.6	5.9
24°	161.0	157.6	137.6	108.9	78.5	67.1	14.9	6.7	5.1	5.1	5.6
25°	221.7	217.7	182.3	137.4	99.6	80.7	15.7	6.1	4.8	4.8	5.6
26°	300.3	281.9	234.8	177.0	122.7	101.2	16.5	5.9	4.5	4.8	5.3
27°	374.8	359.6	306.6	227.1	151.7	124.3	17.6	5.6	4.3	4.5	5.3
28°	472.7	451.4	384.6	287.2	191.1	150.4	18.6	5.3	4.0	4.5	5.1
29°	582.4	552.6	471.9	354.8	235.6	179.7	19.7	5.1	3.7	4.3	5.1
30°	674.5	646.6	565.9	434.9	286.7	218.3	20.8	4.8	3.5	4.3	5.1
31°	782.6	740.3	642.6	502.8	330.6	256.9	21.8	4.3	3.2	4.0	4.8
32°	870.2	840.6	736.8	579.5	388.4	299.5	22.6	4.0	3.2	4.0	4.8
33°	954.8	915.1	814.8	653.0	440.5	343.1	23.4	3.7	2.9	3.7	4.8
34°	1035.7	999.3	888.5	712.3	489.8	384.6	24.0	3.2	2.9	3.7	4.5
35°	1107.1	1064.7	953.5	770.3	540.4	422.4	24.0	2.9	2.7	3.5	4.5
36°	1153.4	1123.0	1009.9	827.6	586.1	458.4	24.0	2.7	2.4	3.5	4.3
37°	1193.0	1157.6	1055.2	871.5	619.9	487.1	24.0	2.4	2.4	3.5	4.3
38°	1209.3	1178.9	1086.3	910.4	651.6	516.4	23.7	2.1	2.1	3.2	4.3
39°	1215.7	1188.5	1109.7	938.3	675.0	536.1	23.2	1.9	2.1	3.2	4.3
40°	1207.4	1186.9	1121.7	956.4	693.7	550.5	22.4	1.6	1.9	3.2	4.3
42.5°	1173.3	1159.8	1119.0	974.5	709.6	561.1	19.4	1.1	1.9	2.9	4.3
45°	1143.0	1128.1	1092.2	955.6	688.9	540.1	14.6	0.5	1.9	2.9	4.3
47.5°	1084.2	1074.9	1046.6	907.4	643.4	492.7	10.4	0.3	1.6	2.7	4.0
50°	966.3	957.5	920.2	787.9	553.4	416.6	7.5	0.3	1.3	2.7	4.0
52.5°	860.6	851.3	797.8	655.1	425.1	305.3	4.8	0.3	1.3	2.7	4.0
55°	732.8	716.6	646.3	497.2	301.3	204.7	3.5	0.3	1.3	2.4	4.0
57.5°	542.5	518.8	456.0	339.1	173.6	111.0	1.9	0.3	1.3	2.4	4.0
60°	368.9	354.8	285.4	178.9	74.0	46.8	0.8	0.3	1.3	2.4	3.7
62.5°	223.6	205.8	143.5	76.1	31.9	21.3	0.0	0.5	1.3	2.4	3.7
65°	63.6	56.4	37.5	17.3	9.1	6.9	0.0	0.5	1.3	2.4	3.7
67.5°	2.1	2.1	2.1	1.9	1.3	1.3	0.3	0.5	1.3	2.4	3.5
70°	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.5	1.3	2.1	3.5
72.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5	1.1	1.9	3.2
75°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.1	1.9	2.7
77.5°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.1	1.6	2.7
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1	1.6	2.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.8	1.1	1.1	1.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.1	0.8	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.8	0.8	0.5
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°	12.2	12.2
2.5°	11.4	11.4
5°	10.6	10.6
7.5°	9.8	9.8
10°	9.1	9.1
12.5°	8.5	8.5
15°	7.7	8.0
17.5°	7.2	7.5
20°	6.9	7.2
21°	6.9	7.2
22°	6.7	6.9
23°	6.7	6.9
24°	6.4	6.7
25°	6.1	6.4
26°	6.1	6.4
27°	6.1	6.4
28°	5.9	6.4
29°	5.9	6.1
30°	5.9	6.1
31°	5.6	6.1
32°	5.6	6.1
33°	5.6	5.9
34°	5.3	5.9
35°	5.3	5.9
36°	5.3	5.9
37°	5.3	5.6
38°	5.3	5.9
39°	5.3	5.6
40°	5.3	5.6
42.5°	5.3	5.6
45°	5.3	5.6
47.5°	5.3	5.9
50°	5.3	5.9
52.5°	5.3	5.9
55°	5.3	5.9
57.5°	5.3	5.6
60°	5.3	5.6
62.5°	5.1	5.6
65°	5.1	5.3
67.5°	5.1	5.3
70°	4.8	5.1
72.5°	4.5	4.8
75°	4.0	4.5
77.5°	3.7	4.0
80°	3.2	3.5



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.7	2.7
85°	1.9	2.1
87.5°	1.1	1.1
90°	0.0	0.0

(END OF REPORT)