

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: P1335176

Luminaire Tested: P3A02R309840DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335176
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: P3A02R309840DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

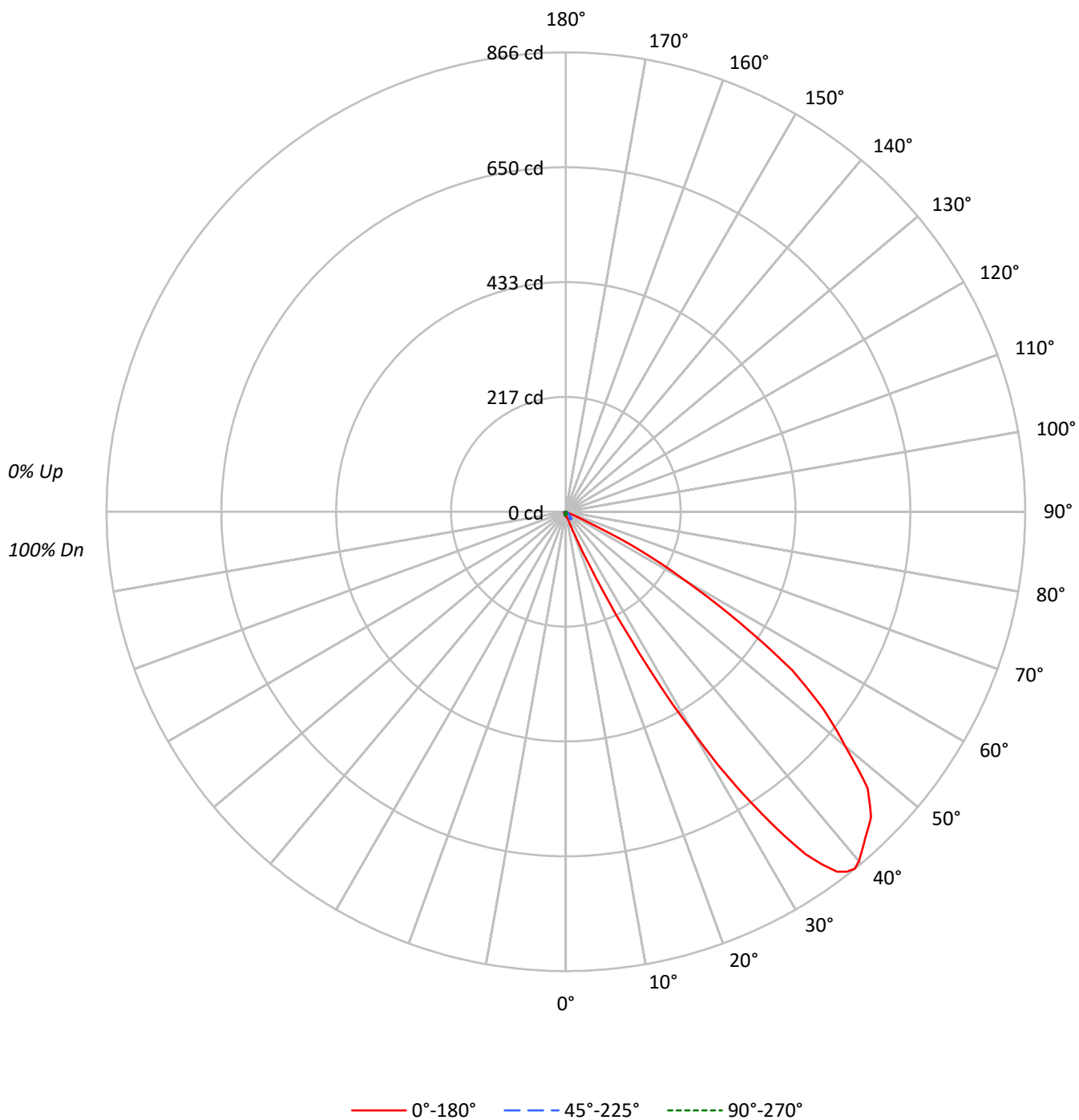
Lumens per Lamp: N/A
Luminaire Lumens: 225.0 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1335176

CATALOG NUMBER: P3A02R309840DE010 E3CA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1335176

CATALOG NUMBER: P3A02R309840DE010 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1908	1908	1908	1908	1908
5°	2047	2003	1871	1717	1673
10°	2227	1982	1648	1470	1425
15°	3269	1975	1385	1249	1294
20°	8237	2170	1050	1050	1190
25°	38204	2710	823	968	1089
30°	121614	3747	633	912	1114
35°	211022	4578	509	857	1124
40°	246090	4551	372	859	1145
45°	252367	3225	403	930	1240
50°	234704	1808	307	955	1433
55°	199486	956	344	1070	1606
60°	115210	263	395	1184	1754
65°	23504	0	467	1401	1972
70°	385	128	577	1603	2308
75°	339	169	678	1610	2711
80°	253	253	1010	1894	3157
85°	0	503	2013	2013	3774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 252367 cd/sqm

TEST NUMBER: P1335176

CATALOG NUMBER: P3A02R309840DE010 E3CA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.3
10°-20°	2.3	1.0
20°-30°	13.0	5.8
30°-40°	60.6	26.9
40°-50°	85.7	38.1
50°-60°	52.7	23.4
60°-70°	8.0	3.6
70°-80°	1.3	0.6
80°-90°	0.7	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°	16.0	7.1
0°-40°	76.6	34.1
0°-60°	215.1	95.6
0°-90°	225.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	225.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9	9	9	9	9	
5°	9	9	8	8	8	1
15°	14	9	6	6	6	5
25°	158	11	3	4	4	97
35°	788	17	2	3	4	473
45°	814	10	1	3	4	617
55°	522	2	1	3	4	444
65°	45	0	1	3	4	82
75°	0	0	1	2	3	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1335176

CATALOG NUMBER: P3A02R309840DE010 E3CA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
2.5°	8.9	8.9	9.1	9.1	8.9	9.1	9.1	9.1	8.7	8.5	8.1
5°	9.3	9.3	9.3	9.5	9.3	9.3	9.1	8.9	8.5	8.0	7.8
7.5°	9.7	9.7	9.5	9.7	9.5	9.5	9.1	8.7	8.1	7.6	7.2
10°	10.0	10.0	9.9	9.9	9.7	9.7	8.9	8.3	7.4	6.8	6.6
12.5°	11.2	11.2	11.0	10.8	10.4	10.2	8.7	7.8	6.6	6.1	5.9
15°	14.4	14.2	13.8	13.3	12.3	12.1	8.7	7.2	6.1	5.5	5.5
17.5°	19.7	19.5	19.0	17.4	15.7	15.2	8.7	6.4	5.3	4.9	4.9
20°	35.3	33.7	30.9	27.1	23.1	21.0	9.3	5.7	4.5	4.4	4.5
21°	46.1	44.5	40.9	34.7	27.7	25.4	9.7	5.5	4.4	4.2	4.5
22°	62.7	61.0	53.6	45.1	35.1	31.1	9.9	5.1	4.0	4.0	4.4
23°	87.6	84.7	72.2	58.6	43.8	38.1	10.2	4.9	3.8	4.0	4.2
24°	114.7	112.2	98.0	77.5	55.9	47.8	10.6	4.7	3.6	3.6	4.0
25°	157.9	155.0	129.8	97.8	70.9	57.4	11.2	4.4	3.4	3.4	4.0
26°	213.8	200.7	167.2	126.0	87.4	72.0	11.8	4.2	3.2	3.4	3.8
27°	266.9	256.1	218.3	161.7	108.0	88.5	12.5	4.0	3.0	3.2	3.8
28°	336.6	321.4	273.9	204.5	136.1	107.1	13.3	3.8	2.8	3.2	3.6
29°	414.7	393.5	336.0	252.6	167.7	127.9	14.0	3.6	2.7	3.0	3.6
30°	480.3	460.4	402.9	309.7	204.1	155.4	14.8	3.4	2.5	3.0	3.6
31°	557.2	527.1	457.5	358.0	235.4	182.9	15.5	3.0	2.3	2.8	3.4
32°	619.6	598.5	524.6	412.6	276.5	213.2	16.1	2.8	2.3	2.8	3.4
33°	679.8	651.6	580.2	464.9	313.7	244.3	16.7	2.7	2.1	2.7	3.4
34°	737.5	711.5	632.7	507.2	348.7	273.9	17.1	2.3	2.1	2.7	3.2
35°	788.3	758.1	678.9	548.5	384.7	300.8	17.1	2.1	1.9	2.5	3.2
36°	821.2	799.6	719.1	589.3	417.3	326.4	17.1	1.9	1.7	2.5	3.0
37°	849.5	824.3	751.3	620.5	441.4	346.8	17.1	1.7	1.7	2.5	3.0
38°	861.0	839.4	773.5	648.2	464.0	367.7	16.9	1.5	1.5	2.3	3.0
39°	865.6	846.3	790.2	668.1	480.6	381.7	16.5	1.3	1.5	2.3	3.0
40°	859.7	845.1	798.7	681.0	493.9	391.9	15.9	1.1	1.3	2.3	3.0
42.5°	835.5	825.8	796.8	693.9	505.3	399.5	13.8	0.8	1.3	2.1	3.0
45°	813.8	803.2	777.6	680.4	490.5	384.6	10.4	0.4	1.3	2.1	3.0
47.5°	772.0	765.3	745.2	646.1	458.1	350.8	7.4	0.2	1.1	1.9	2.8
50°	688.0	681.7	655.2	561.0	394.0	296.6	5.3	0.2	0.9	1.9	2.8
52.5°	612.8	606.1	568.0	466.4	302.7	217.4	3.4	0.2	0.9	1.9	2.8
55°	521.8	510.2	460.2	354.0	214.5	145.7	2.5	0.2	0.9	1.7	2.8
57.5°	386.3	369.4	324.7	241.5	123.6	79.0	1.3	0.2	0.9	1.7	2.8
60°	262.7	252.6	203.2	127.4	52.7	33.4	0.6	0.2	0.9	1.7	2.7
62.5°	159.2	146.5	102.2	54.2	22.7	15.2	0.0	0.4	0.9	1.7	2.7
65°	45.3	40.2	26.7	12.3	6.4	4.9	0.0	0.4	0.9	1.7	2.7
67.5°	1.5	1.5	1.5	1.3	0.9	0.9	0.2	0.4	0.9	1.7	2.5
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.4	0.9	1.5	2.5
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.8	1.3	2.3
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.8	1.3	1.9
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.8	1.1	1.9
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.1	1.5



TEST NUMBER: P1335176

CATALOG NUMBER: P3A02R309840DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.6	0.8	0.8	1.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	0.6	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	0.6	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



TEST NUMBER: P1335176

CATALOG NUMBER: P3A02R309840DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	8.7	8.7
2.5°	8.1	8.1
5°	7.6	7.6
7.5°	7.0	7.0
10°	6.4	6.4
12.5°	6.1	6.1
15°	5.5	5.7
17.5°	5.1	5.3
20°	4.9	5.1
21°	4.9	5.1
22°	4.7	4.9
23°	4.7	4.9
24°	4.5	4.7
25°	4.4	4.5
26°	4.4	4.5
27°	4.4	4.5
28°	4.2	4.5
29°	4.2	4.4
30°	4.2	4.4
31°	4.0	4.4
32°	4.0	4.4
33°	4.0	4.2
34°	3.8	4.2
35°	3.8	4.2
36°	3.8	4.2
37°	3.8	4.0
38°	3.8	4.2
39°	3.8	4.0
40°	3.8	4.0
42.5°	3.8	4.0
45°	3.8	4.0
47.5°	3.8	4.2
50°	3.8	4.2
52.5°	3.8	4.2
55°	3.8	4.2
57.5°	3.8	4.0
60°	3.8	4.0
62.5°	3.6	4.0
65°	3.6	3.8
67.5°	3.6	3.8
70°	3.4	3.6
72.5°	3.2	3.4
75°	2.8	3.2
77.5°	2.7	2.8
80°	2.3	2.5



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CATALOG NUMBER: P3A02R309840DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.9	1.9
85°	1.3	1.5
87.5°	0.8	0.8
90°	0.0	0.0

(END OF REPORT)