

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: P1337938

Luminaire Tested: P3A05R309735DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337938
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: P3A05R309735DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

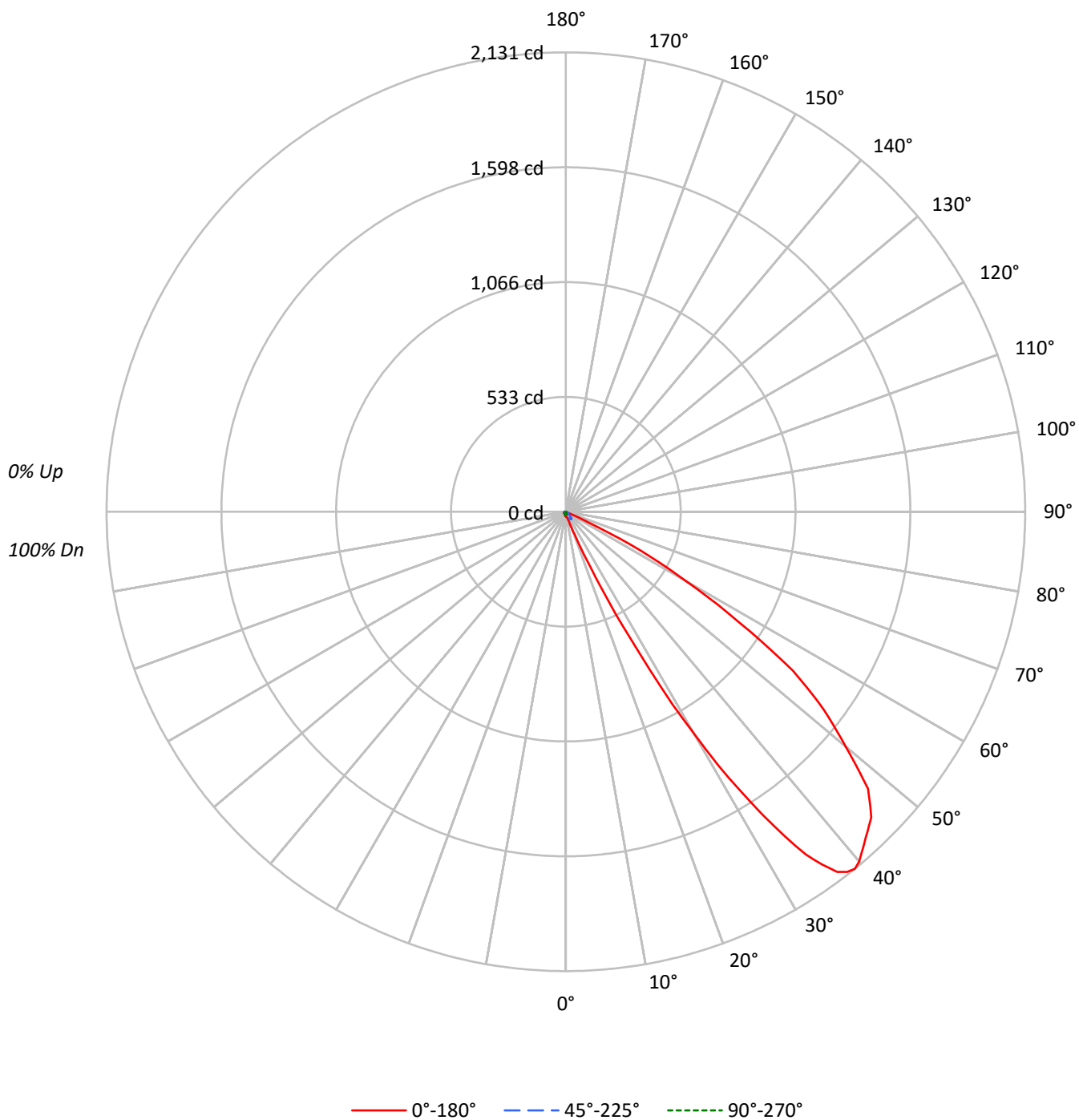
Lumens per Lamp: N/A
Luminaire Lumens: 554.0 lumens
Efficiency: N/A
Efficacy: 76.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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: P1337938

CATALOG NUMBER: P3A05R309735DE010 E3CA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1337938

CATALOG NUMBER: P3A05R309735DE010 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°	4715	4715	4715	4715	4715
5°	5041	4931	4622	4204	4116
10°	5500	4876	4052	3629	3540
15°	8059	4881	3383	3065	3178
20°	20255	5344	2614	2614	2940
25°	94046	6654	2032	2371	2710
30°	299413	9217	1545	2254	2709
35°	519564	11243	1258	2115	2757
40°	605935	11221	945	2147	2805
45°	621429	7970	1023	2326	3039
50°	577891	4469	785	2388	3514
55°	491146	2332	879	2676	3938
60°	283661	614	1009	2851	4298
65°	57853	0	1193	3373	4825
70°	898	321	1475	3911	5706
75°	763	424	1610	3982	6693
80°	631	631	2399	4672	7703
85°	0	1258	4780	4780	9309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 621429 cd/sqm

TEST NUMBER: P1337938

CATALOG NUMBER: P3A05R309735DE010 E3CA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.4
10°-20°	5.6	1.0
20°-30°	31.9	5.8
30°-40°	149.2	26.9
40°-50°	211.0	38.1
50°-60°	129.8	23.4
60°-70°	19.8	3.6
70°-80°	3.1	0.6
80°-90°	1.6	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°	39.5	7.1
0°-40°	188.7	34.1
0°-60°	529.5	95.6
0°-90°	554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	554.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	23	22	21	19	19	2
15°	36	22	15	14	14	13
25°	389	28	8	10	11	239
35°	1941	42	5	8	10	1165
45°	2004	26	3	8	10	1519
55°	1285	6	2	7	10	1093
65°	112	0	2	6	9	202
75°	1	0	2	5	8	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1337938

CATALOG NUMBER: P3A05R309735DE010 E3CA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
2.5°	21.9	21.9	22.4	22.4	21.9	22.4	22.4	22.4	21.5	21.0	20.1
5°	22.9	22.9	22.9	23.3	22.9	22.9	22.4	21.9	21.0	19.6	19.1
7.5°	23.8	23.8	23.3	23.8	23.3	23.3	22.4	21.5	20.1	18.7	17.7
10°	24.7	24.7	24.3	24.3	23.8	23.8	21.9	20.5	18.2	16.8	16.3
12.5°	27.5	27.5	27.1	26.6	25.7	25.2	21.5	19.1	16.3	14.9	14.5
15°	35.5	35.0	34.1	32.7	30.3	29.9	21.5	17.7	14.9	13.5	13.5
17.5°	48.5	48.1	46.7	42.9	38.7	37.3	21.5	15.9	13.1	12.1	12.1
20°	86.8	83.1	76.1	66.7	56.9	51.8	22.9	14.0	11.2	10.7	11.2
21°	113.4	109.7	100.8	85.4	68.1	62.5	23.8	13.5	10.7	10.3	11.2
22°	154.5	150.3	132.1	111.1	86.3	76.5	24.3	12.6	9.8	9.8	10.7
23°	215.6	208.6	177.8	144.2	107.8	93.8	25.2	12.1	9.3	9.8	10.3
24°	282.3	276.3	241.3	190.9	137.7	117.6	26.1	11.7	8.9	8.9	9.8
25°	388.7	381.7	319.7	240.8	174.5	141.4	27.5	10.7	8.4	8.4	9.8
26°	526.4	494.2	411.6	310.3	215.1	177.3	28.9	10.3	7.9	8.4	9.3
27°	657.1	630.5	537.6	398.1	266.0	217.9	30.8	9.8	7.5	7.9	9.3
28°	828.8	791.5	674.3	503.5	335.1	263.7	32.7	9.3	7.0	7.9	8.9
29°	1021.1	968.8	827.4	622.1	413.0	315.0	34.5	8.9	6.5	7.5	8.9
30°	1182.5	1133.5	992.1	762.5	502.6	382.7	36.4	8.4	6.1	7.5	8.9
31°	1372.0	1297.8	1126.5	881.5	579.6	450.3	38.3	7.5	5.6	7.0	8.4
32°	1525.5	1473.7	1291.7	1015.9	680.9	525.0	39.7	7.0	5.6	7.0	8.4
33°	1673.9	1604.4	1428.5	1144.7	772.3	601.5	41.1	6.5	5.1	6.5	8.4
34°	1815.8	1751.9	1557.7	1248.8	858.7	674.3	42.0	5.6	5.1	6.5	7.9
35°	1940.9	1866.7	1671.6	1350.5	947.3	740.6	42.0	5.1	4.7	6.1	7.9
36°	2022.1	1968.9	1770.5	1450.9	1027.6	803.6	42.0	4.7	4.2	6.1	7.5
37°	2091.6	2029.5	1849.9	1527.9	1086.9	854.0	42.0	4.2	4.2	6.1	7.5
38°	2120.1	2066.9	1904.5	1596.0	1142.4	905.3	41.5	3.7	3.7	5.6	7.5
39°	2131.3	2083.7	1945.5	1645.0	1183.5	939.9	40.6	3.3	3.7	5.6	7.5
40°	2116.8	2080.9	1966.5	1676.7	1216.1	965.1	39.2	2.8	3.3	5.6	7.5
42.5°	2057.1	2033.3	1961.9	1708.5	1244.1	983.7	34.1	1.9	3.3	5.1	7.5
45°	2003.9	1977.7	1914.7	1675.3	1207.7	946.9	25.7	0.9	3.3	5.1	7.5
47.5°	1900.7	1884.4	1834.9	1590.9	1127.9	863.8	18.2	0.5	2.8	4.7	7.0
50°	1694.0	1678.6	1613.3	1381.3	970.2	730.3	13.1	0.5	2.3	4.7	7.0
52.5°	1508.7	1492.4	1398.6	1148.5	745.3	535.3	8.4	0.5	2.3	4.7	7.0
55°	1284.7	1256.3	1133.1	871.7	528.3	358.9	6.1	0.5	2.3	4.2	7.0
57.5°	951.1	909.5	799.4	594.5	304.3	194.6	3.3	0.5	2.3	4.2	7.0
60°	646.8	622.1	500.3	313.6	129.7	82.1	1.4	0.5	2.3	4.2	6.5
62.5°	392.0	360.7	251.5	133.5	56.0	37.3	0.0	0.9	2.3	4.2	6.5
65°	111.5	98.9	65.8	30.3	15.9	12.1	0.0	0.9	2.3	4.2	6.5
67.5°	3.7	3.7	3.7	3.3	2.3	2.3	0.5	0.9	2.3	4.2	6.1
70°	1.4	1.4	1.4	0.9	0.9	0.5	0.5	0.9	2.3	3.7	6.1
72.5°	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.9	1.9	3.3	5.6
75°	0.9	0.9	0.9	0.5	0.5	0.5	0.5	1.4	1.9	3.3	4.7
77.5°	0.9	0.9	0.9	0.5	0.5	0.5	0.5	1.4	1.9	2.8	4.7
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.4	1.9	2.8	3.7



TEST NUMBER: P1337938

CATALOG NUMBER: P3A05R309735DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	1.4	1.9	1.9	2.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.9	1.4	1.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.4	1.4	0.9
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: P1337938

CATALOG NUMBER: P3A05R309735DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	21.5	21.5
2.5°	20.1	20.1
5°	18.7	18.7
7.5°	17.3	17.3
10°	15.9	15.9
12.5°	14.9	14.9
15°	13.5	14.0
17.5°	12.6	13.1
20°	12.1	12.6
21°	12.1	12.6
22°	11.7	12.1
23°	11.7	12.1
24°	11.2	11.7
25°	10.7	11.2
26°	10.7	11.2
27°	10.7	11.2
28°	10.3	11.2
29°	10.3	10.7
30°	10.3	10.7
31°	9.8	10.7
32°	9.8	10.7
33°	9.8	10.3
34°	9.3	10.3
35°	9.3	10.3
36°	9.3	10.3
37°	9.3	9.8
38°	9.3	10.3
39°	9.3	9.8
40°	9.3	9.8
42.5°	9.3	9.8
45°	9.3	9.8
47.5°	9.3	10.3
50°	9.3	10.3
52.5°	9.3	10.3
55°	9.3	10.3
57.5°	9.3	9.8
60°	9.3	9.8
62.5°	8.9	9.8
65°	8.9	9.3
67.5°	8.9	9.3
70°	8.4	8.9
72.5°	7.9	8.4
75°	7.0	7.9
77.5°	6.5	7.0
80°	5.6	6.1

TEST NUMBER: P1337938

CATALOG NUMBER: P3A05R309735DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.7	4.7
85°	3.3	3.7
87.5°	1.9	1.9
90°	0.0	0.0

(END OF REPORT)