

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: P1334746

Luminaire Tested: P3A02R259730DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334746
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R259730DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 97CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

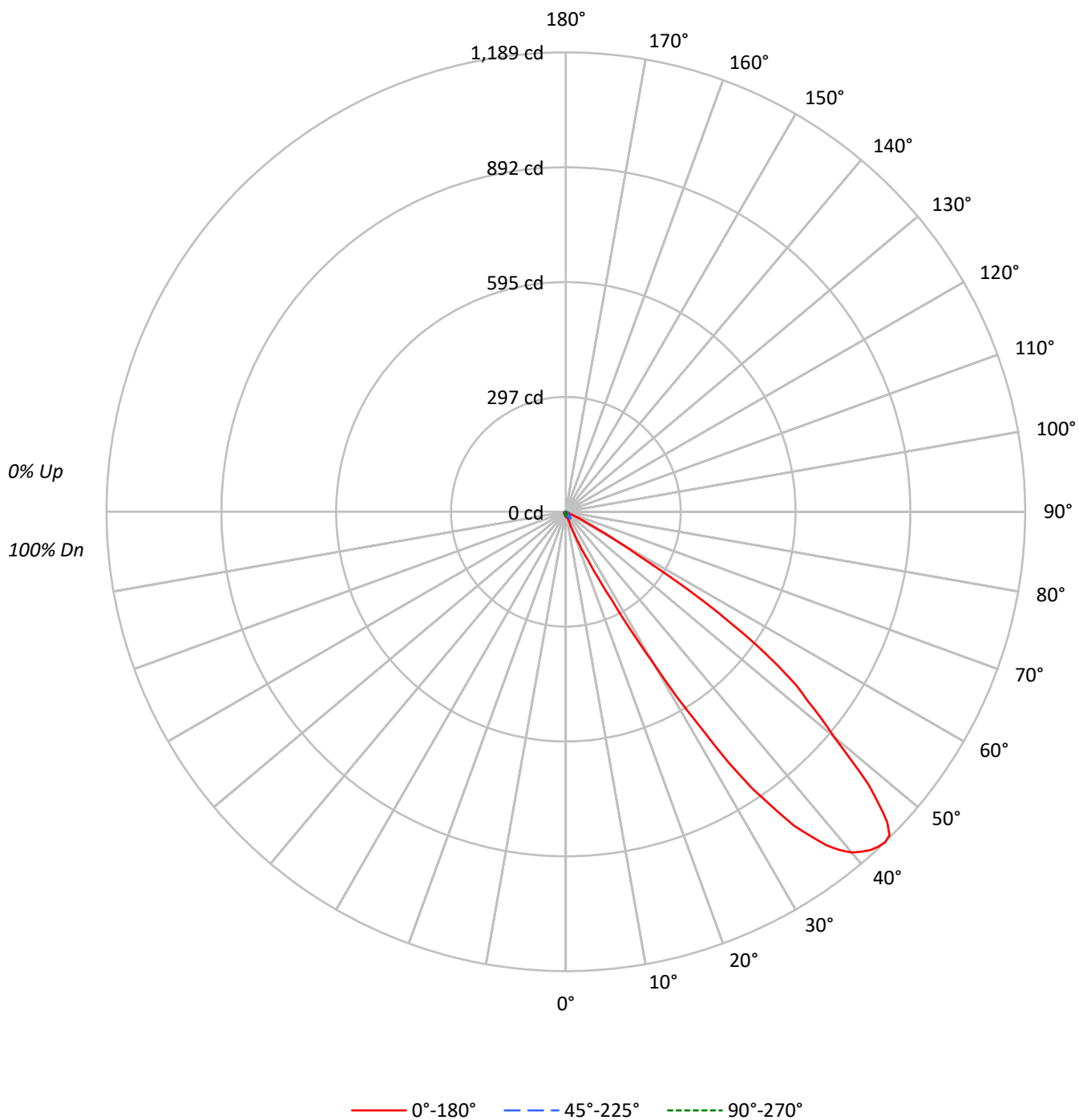
Lumens per Lamp: N/A
Luminaire Lumens: 248.0 lumens
Efficiency: N/A
Efficacy: 68.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1334746

CATALOG NUMBER: P3A02R259730DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1334746

CATALOG NUMBER: P3A02R259730DE010 E3CA451MB

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	101	97	100	97	94	96	94	92	92	91	89
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2785	2785	2785	2785	2785
5°	3170	3016	2685	2399	2355
10°	3162	2872	2293	1982	1982
15°	3519	2474	1793	1680	1793
20°	12414	2450	1377	1423	1587
25°	35736	3121	1113	1331	1524
30°	114043	4811	886	1266	1545
35°	249810	5675	750	1231	1579
40°	329532	5124	630	1260	1689
45°	367480	3597	620	1364	1830
50°	309346	1876	580	1399	2013
55°	231256	765	573	1567	2256
60°	71573	175	570	1710	2500
65°	6123	0	675	1816	2698
70°	449	128	705	2116	3077
75°	339	169	932	2203	3474
80°	253	253	1389	2526	4167
85°	503	503	2264	2768	4277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 367480 cd/sqm

TEST NUMBER: P1334746

CATALOG NUMBER: P3A02R259730DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.5
10°-20°	2.9	1.2
20°-30°	13.7	5.5
30°-40°	66.1	26.6
40°-50°	103.6	41.8
50°-60°	53.1	21.4
60°-70°	5.0	2.0
70°-80°	1.7	0.7
80°-90°	0.8	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°	17.8	7.2
0°-40°	83.8	33.8
0°-60°	240.5	97.0
0°-90°	248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	248.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	14	14	12	11	11	1
15°	16	11	8	7	8	7
25°	148	13	5	6	6	92
35°	933	21	3	5	6	566
45°	1185	12	2	4	6	867
55°	605	2	2	4	6	504
65°	12	0	1	4	5	37
75°	0	0	1	3	4	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1334746

CATALOG NUMBER: P3A02R259730DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
2.5°	13.7	13.7	13.7	13.7	13.7	13.7	13.5	13.5	13.7	13.5	13.5
5°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.2	14.2	14.2	13.7
7.5°	14.6	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.2	14.2	13.5
10°	14.2	14.2	14.2	14.2	14.0	14.0	14.0	13.7	13.7	13.7	12.9
12.5°	14.2	14.2	14.2	14.2	14.0	14.0	13.7	13.7	13.5	13.3	11.8
15°	15.5	15.5	15.5	15.3	15.1	14.8	14.6	14.4	14.2	13.7	10.9
17.5°	22.7	22.0	21.8	21.0	19.9	18.8	17.9	17.0	16.1	15.5	10.5
20°	53.2	53.0	51.9	49.3	46.5	43.2	39.9	36.2	31.0	27.5	10.5
22.5°	92.3	91.0	89.0	87.1	82.1	76.2	70.1	63.1	56.3	49.1	11.1
25°	147.7	150.8	144.3	139.0	130.3	119.6	108.0	98.4	86.2	74.9	12.9
27.5°	256.9	258.8	245.9	228.9	208.6	186.2	164.3	148.0	127.4	108.7	16.1
30°	450.4	452.4	430.8	394.6	352.7	315.8	265.8	221.9	181.6	150.4	19.0
31°	562.2	546.9	521.8	486.7	433.6	378.0	318.0	264.9	213.9	172.8	19.9
32°	659.3	658.0	628.7	575.5	522.2	453.5	379.1	309.9	247.3	195.5	20.5
33°	773.9	765.1	723.9	673.7	603.2	534.0	438.0	359.0	281.5	220.9	21.0
34°	865.7	842.2	825.1	767.7	693.3	605.2	502.4	410.9	324.3	245.3	21.2
35°	933.2	928.1	895.0	841.5	765.8	675.7	571.8	464.8	360.1	273.7	21.2
36°	1004.5	989.0	956.7	908.3	834.5	741.3	624.8	511.5	401.8	299.2	21.0
37°	1049.3	1040.1	1008.0	958.0	885.8	796.8	684.2	560.9	434.9	324.7	20.5
38°	1095.3	1076.8	1045.1	997.3	926.4	842.8	727.2	598.8	465.5	347.2	19.9
39°	1127.2	1108.0	1075.7	1028.1	958.7	875.8	761.2	631.1	492.1	364.0	19.0
40°	1151.2	1132.6	1099.9	1051.0	982.5	901.7	789.6	659.7	514.4	378.6	17.9
41°	1166.0	1148.8	1116.3	1067.6	998.9	916.6	808.1	678.3	529.4	388.5	16.8
42°	1178.5	1160.8	1127.6	1077.9	1008.9	929.2	819.5	690.1	539.7	393.5	15.9
43°	1185.4	1167.8	1135.5	1084.6	1015.0	935.1	825.6	695.5	543.2	392.8	14.4
44°	1189.4	1171.0	1138.5	1087.7	1017.6	936.7	826.0	694.4	540.8	387.6	13.1
45°	1185.0	1166.9	1135.5	1084.6	1013.0	931.9	821.7	688.5	531.6	377.3	11.6
46°	1156.6	1142.7	1113.9	1067.2	998.6	919.6	810.5	677.2	517.4	364.7	9.8
47°	1106.7	1095.5	1067.6	1032.9	970.9	897.2	790.0	655.6	497.6	345.7	7.9
48°	1054.5	1038.1	1012.2	976.6	924.2	856.8	756.2	623.9	467.5	320.8	7.0
49°	977.5	967.9	945.0	905.2	861.8	802.4	708.4	583.3	430.6	293.7	6.1
50°	906.8	900.2	868.1	838.9	792.8	737.4	643.6	529.9	384.7	260.1	5.5
51°	851.5	843.7	820.6	784.1	735.0	670.6	582.2	460.5	332.2	220.2	4.4
52°	793.9	789.6	769.1	731.5	683.3	619.1	522.7	401.6	281.1	186.2	3.5
53°	746.8	740.5	715.4	682.0	629.8	563.5	458.1	346.8	238.1	156.5	3.1
54°	678.1	675.4	659.3	624.4	567.8	495.6	399.6	292.0	198.6	132.7	2.6
55°	604.9	596.2	579.8	552.1	500.2	432.8	331.9	242.0	160.6	111.7	2.0
56°	515.9	515.5	486.2	463.1	417.0	345.5	265.2	189.0	130.5	93.2	1.7
57°	430.8	417.0	388.9	366.0	316.4	262.1	196.8	141.6	102.1	75.5	1.3
58°	318.6	311.4	304.0	270.4	224.6	185.7	140.5	99.5	75.5	57.6	0.9
59°	216.3	216.1	207.3	181.8	155.4	115.7	87.7	67.7	51.9	42.3	0.7
60°	163.2	159.3	141.9	125.0	97.8	73.1	51.9	39.9	32.3	27.3	0.4
62.5°	57.2	59.4	52.2	43.2	33.0	27.1	20.7	16.8	13.7	11.1	0.0
65°	11.8	12.9	11.1	10.5	8.3	7.2	6.3	5.5	4.6	3.9	0.0



TEST NUMBER: P1334746

CATALOG NUMBER: P3A02R259730DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.5	1.3	1.3	1.3	1.1	1.1	1.1	1.1	0.9	0.9	0.2
70°	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.2
72.5°	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
85°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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: P1334746

CATALOG NUMBER: P3A02R259730DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	12.7	12.7	12.7	12.7	12.7	12.7
2.5°	13.3	12.9	12.2	12.0	11.8	11.8
5°	13.1	12.2	11.6	10.9	10.7	10.7
7.5°	12.4	11.3	10.5	10.0	9.8	9.6
10°	11.8	10.3	9.4	8.9	8.9	8.9
12.5°	10.5	9.2	8.3	8.1	8.3	8.3
15°	9.4	7.9	7.4	7.4	7.6	7.9
17.5°	8.1	7.0	6.5	6.8	7.0	7.2
20°	7.2	5.9	5.9	6.1	6.8	6.8
22.5°	6.3	5.2	5.2	5.9	6.3	6.5
25°	5.7	4.6	4.8	5.5	6.1	6.3
27.5°	4.8	3.9	4.4	5.2	5.9	6.1
30°	4.1	3.5	4.1	5.0	5.7	6.1
31°	3.9	3.3	4.1	4.8	5.7	6.1
32°	3.5	3.3	3.9	4.8	5.7	5.9
33°	3.3	3.1	3.9	4.8	5.7	5.9
34°	3.1	2.8	3.7	4.8	5.7	5.9
35°	2.6	2.8	3.7	4.6	5.5	5.9
36°	2.4	2.6	3.7	4.6	5.5	5.9
37°	2.2	2.6	3.5	4.6	5.5	5.9
38°	2.0	2.4	3.5	4.6	5.5	5.9
39°	1.7	2.4	3.3	4.6	5.5	5.9
40°	1.5	2.2	3.3	4.4	5.5	5.9
41°	1.5	2.2	3.3	4.4	5.5	5.9
42°	1.3	2.2	3.3	4.4	5.5	5.9
43°	1.1	2.0	3.3	4.4	5.5	5.9
44°	0.9	2.0	3.1	4.4	5.5	5.9
45°	0.9	2.0	3.1	4.4	5.5	5.9
46°	0.7	1.7	3.1	4.4	5.5	5.9
47°	0.4	1.7	3.1	4.1	5.5	5.9
48°	0.4	1.7	3.1	4.1	5.5	5.9
49°	0.4	1.7	2.8	4.1	5.5	5.9
50°	0.4	1.7	2.8	4.1	5.5	5.9
51°	0.2	1.5	2.8	4.1	5.5	5.9
52°	0.2	1.5	2.8	4.1	5.5	6.1
53°	0.2	1.5	2.8	4.1	5.5	5.9
54°	0.2	1.5	2.6	4.1	5.5	5.9
55°	0.2	1.5	2.6	4.1	5.5	5.9
56°	0.2	1.3	2.6	3.9	5.5	5.9
57°	0.4	1.3	2.6	3.9	5.5	5.7
58°	0.4	1.3	2.6	3.9	5.2	5.7
59°	0.4	1.3	2.6	3.9	5.2	5.7
60°	0.4	1.3	2.4	3.9	5.2	5.7
62.5°	0.4	1.3	2.4	3.7	5.0	5.5
65°	0.4	1.3	2.2	3.5	5.0	5.2



TEST NUMBER: P1334746

CATALOG NUMBER: P3A02R259730DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.1	2.2	3.3	4.8	5.0
70°	0.7	1.1	2.0	3.3	4.6	4.8
72.5°	0.7	1.1	2.0	2.8	4.1	4.6
75°	0.7	1.1	1.7	2.6	3.9	4.1
77.5°	0.7	1.1	1.5	2.4	3.5	3.7
80°	0.9	1.1	1.3	2.0	3.1	3.3
82.5°	0.9	1.1	1.1	1.5	2.4	2.6
85°	0.7	0.9	0.9	1.1	1.5	1.7
87.5°	0.7	0.9	0.7	0.4	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)