

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: P1337904

Luminaire Tested: P3A05R309727DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337904
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: P3A05R309727DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 97CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

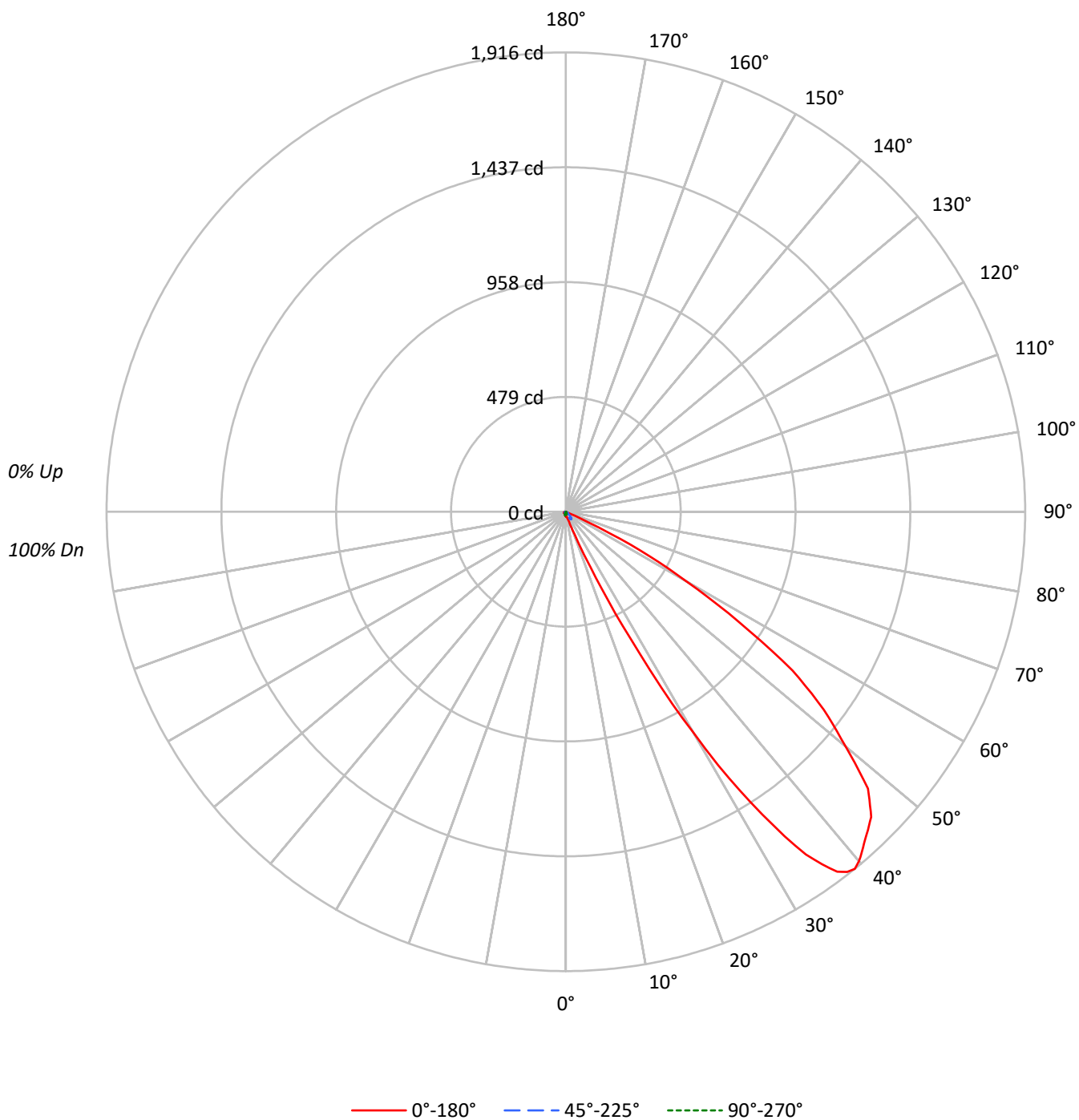
Lumens per Lamp: N/A
Luminaire Lumens: 498.0 lumens
Efficiency: N/A
Efficacy: 69.2 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1337904

CATALOG NUMBER: P3A05R309727DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1337904

CATALOG NUMBER: P3A05R309727DE010 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	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°	4232	4232	4232	4232	4232
5°	4534	4424	4160	3786	3698
10°	4943	4386	3652	3273	3184
15°	7242	4381	3042	2770	2860
20°	18202	4807	2357	2357	2637
25°	84537	6000	1839	2129	2444
30°	269155	8280	1393	2026	2431
35°	467043	10119	1124	1901	2463
40°	544678	10076	830	1918	2519
45°	558601	7164	899	2078	2729
50°	519488	3991	716	2149	3138
55°	441523	2103	803	2409	3517
60°	254980	570	921	2588	3859
65°	52042	0	1090	3061	4358
70°	833	256	1346	3526	5129
75°	678	339	1440	3558	6015
80°	505	505	2147	4293	6945
85°	0	1006	4277	4277	8554

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 558601 cd/sqm

TEST NUMBER: P1337904

CATALOG NUMBER: P3A05R309727DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.4
10°-20°	5.0	1.0
20°-30°	28.7	5.8
30°-40°	134.1	26.9
40°-50°	189.7	38.1
50°-60°	116.7	23.4
60°-70°	17.8	3.6
70°-80°	2.8	0.6
80°-90°	1.4	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°	35.5	7.1
0°-40°	169.6	34.1
0°-60°	476.0	95.6
0°-90°	498.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	498.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	21	20	19	17	17	2
15°	32	19	13	12	13	11
25°	349	25	8	9	10	215
35°	1745	38	4	7	9	1047
45°	1801	23	3	7	9	1366
55°	1155	6	2	6	9	983
65°	100	0	2	6	8	181
75°	1	0	2	4	7	1
85°	0	0	2	2	3	0
90°	0	0	0	0	0	

TEST NUMBER: P1337904

CATALOG NUMBER: P3A05R309727DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
2.5°	19.7	19.7	20.1	20.1	19.7	20.1	20.1	20.1	19.3	18.9	18.0
5°	20.6	20.6	20.6	21.0	20.6	20.6	20.1	19.7	18.9	17.6	17.2
7.5°	21.4	21.4	21.0	21.4	21.0	21.0	20.1	19.3	18.0	16.8	15.9
10°	22.2	22.2	21.8	21.8	21.4	21.4	19.7	18.5	16.4	15.1	14.7
12.5°	24.8	24.8	24.3	23.9	23.1	22.7	19.3	17.2	14.7	13.4	13.0
15°	31.9	31.5	30.6	29.4	27.3	26.8	19.3	15.9	13.4	12.2	12.2
17.5°	43.6	43.2	41.9	38.6	34.8	33.6	19.3	14.3	11.7	10.9	10.9
20°	78.0	74.7	68.4	60.0	51.2	46.6	20.6	12.6	10.1	9.6	10.1
21°	101.9	98.6	90.6	76.8	61.2	56.2	21.4	12.2	9.6	9.2	10.1
22°	138.9	135.1	118.7	99.8	77.6	68.8	21.8	11.3	8.8	8.8	9.6
23°	193.8	187.5	159.8	129.6	96.9	84.3	22.7	10.9	8.4	8.8	9.2
24°	253.8	248.3	216.9	171.6	123.8	105.7	23.5	10.5	8.0	8.0	8.8
25°	349.4	343.1	287.4	216.5	156.9	127.1	24.8	9.6	7.6	7.6	8.8
26°	473.2	444.2	370.0	279.0	193.4	159.4	26.0	9.2	7.1	7.6	8.4
27°	590.6	566.7	483.3	357.8	239.1	195.9	27.7	8.8	6.7	7.1	8.4
28°	745.0	711.5	606.2	452.6	301.2	237.0	29.4	8.4	6.3	7.1	8.0
29°	917.9	870.9	743.8	559.2	371.3	283.2	31.0	8.0	5.9	6.7	8.0
30°	1063.0	1019.0	891.8	685.5	451.8	344.0	32.7	7.6	5.5	6.7	8.0
31°	1233.3	1166.6	1012.7	792.4	521.0	404.8	34.4	6.7	5.0	6.3	7.6
32°	1371.3	1324.8	1161.2	913.2	612.0	471.9	35.7	6.3	5.0	6.3	7.6
33°	1504.7	1442.2	1284.1	1029.0	694.3	540.7	36.9	5.9	4.6	5.9	7.6
34°	1632.3	1574.8	1400.3	1122.6	771.9	606.2	37.8	5.0	4.6	5.9	7.1
35°	1744.7	1678.0	1502.6	1214.0	851.6	665.7	37.8	4.6	4.2	5.5	7.1
36°	1817.7	1769.8	1591.6	1304.2	923.7	722.4	37.8	4.2	3.8	5.5	6.7
37°	1880.2	1824.4	1662.9	1373.4	977.0	767.7	37.8	3.8	3.8	5.5	6.7
38°	1905.8	1857.9	1712.0	1434.7	1026.9	813.8	37.3	3.4	3.4	5.0	6.7
39°	1915.8	1873.0	1748.9	1478.7	1063.8	844.9	36.5	2.9	3.4	5.0	6.7
40°	1902.8	1870.5	1767.7	1507.2	1093.2	867.5	35.2	2.5	2.9	5.0	6.7
42.5°	1849.1	1827.7	1763.6	1535.8	1118.4	884.3	30.6	1.7	2.9	4.6	6.7
45°	1801.3	1777.8	1721.2	1506.0	1085.7	851.2	23.1	0.8	2.9	4.6	6.7
47.5°	1708.6	1693.9	1649.5	1430.1	1013.9	776.5	16.4	0.4	2.5	4.2	6.3
50°	1522.8	1508.9	1450.2	1241.7	872.1	656.5	11.7	0.4	2.1	4.2	6.3
52.5°	1356.2	1341.5	1257.2	1032.4	669.9	481.2	7.6	0.4	2.1	4.2	6.3
55°	1154.9	1129.3	1018.5	783.6	474.9	322.6	5.5	0.4	2.1	3.8	6.3
57.5°	854.9	817.6	718.6	534.4	273.5	174.9	2.9	0.4	2.1	3.8	6.3
60°	581.4	559.2	449.7	281.9	116.6	73.8	1.3	0.4	2.1	3.8	5.9
62.5°	352.4	324.3	226.1	120.0	50.3	33.6	0.0	0.8	2.1	3.8	5.9
65°	100.3	88.9	59.1	27.3	14.3	10.9	0.0	0.8	2.1	3.8	5.9
67.5°	3.4	3.4	3.4	2.9	2.1	2.1	0.4	0.8	2.1	3.8	5.5
70°	1.3	1.3	1.3	0.8	0.8	0.4	0.4	0.8	2.1	3.4	5.5
72.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.8	1.7	2.9	5.0
75°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	1.3	1.7	2.9	4.2
77.5°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	1.3	1.7	2.5	4.2
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.7	2.5	3.4



TEST NUMBER: P1337904

CATALOG NUMBER: P3A05R309727DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	1.3	1.7	1.7	2.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.7	1.3	1.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.3	1.3	0.8
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: P1337904

CATALOG NUMBER: P3A05R309727DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	19.3	19.3
2.5°	18.0	18.0
5°	16.8	16.8
7.5°	15.5	15.5
10°	14.3	14.3
12.5°	13.4	13.4
15°	12.2	12.6
17.5°	11.3	11.7
20°	10.9	11.3
21°	10.9	11.3
22°	10.5	10.9
23°	10.5	10.9
24°	10.1	10.5
25°	9.6	10.1
26°	9.6	10.1
27°	9.6	10.1
28°	9.2	10.1
29°	9.2	9.6
30°	9.2	9.6
31°	8.8	9.6
32°	8.8	9.6
33°	8.8	9.2
34°	8.4	9.2
35°	8.4	9.2
36°	8.4	9.2
37°	8.4	8.8
38°	8.4	9.2
39°	8.4	8.8
40°	8.4	8.8
42.5°	8.4	8.8
45°	8.4	8.8
47.5°	8.4	9.2
50°	8.4	9.2
52.5°	8.4	9.2
55°	8.4	9.2
57.5°	8.4	8.8
60°	8.4	8.8
62.5°	8.0	8.8
65°	8.0	8.4
67.5°	8.0	8.4
70°	7.6	8.0
72.5°	7.1	7.6
75°	6.3	7.1
77.5°	5.9	6.3
80°	5.0	5.5

TEST NUMBER: P1337904

CATALOG NUMBER: P3A05R309727DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.2	4.2
85°	2.9	3.4
87.5°	1.7	1.7
90°	0.0	0.0

(END OF REPORT)