

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: P1337921

Luminaire Tested: P3A05R309730DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337921
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: P3A05R309730DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

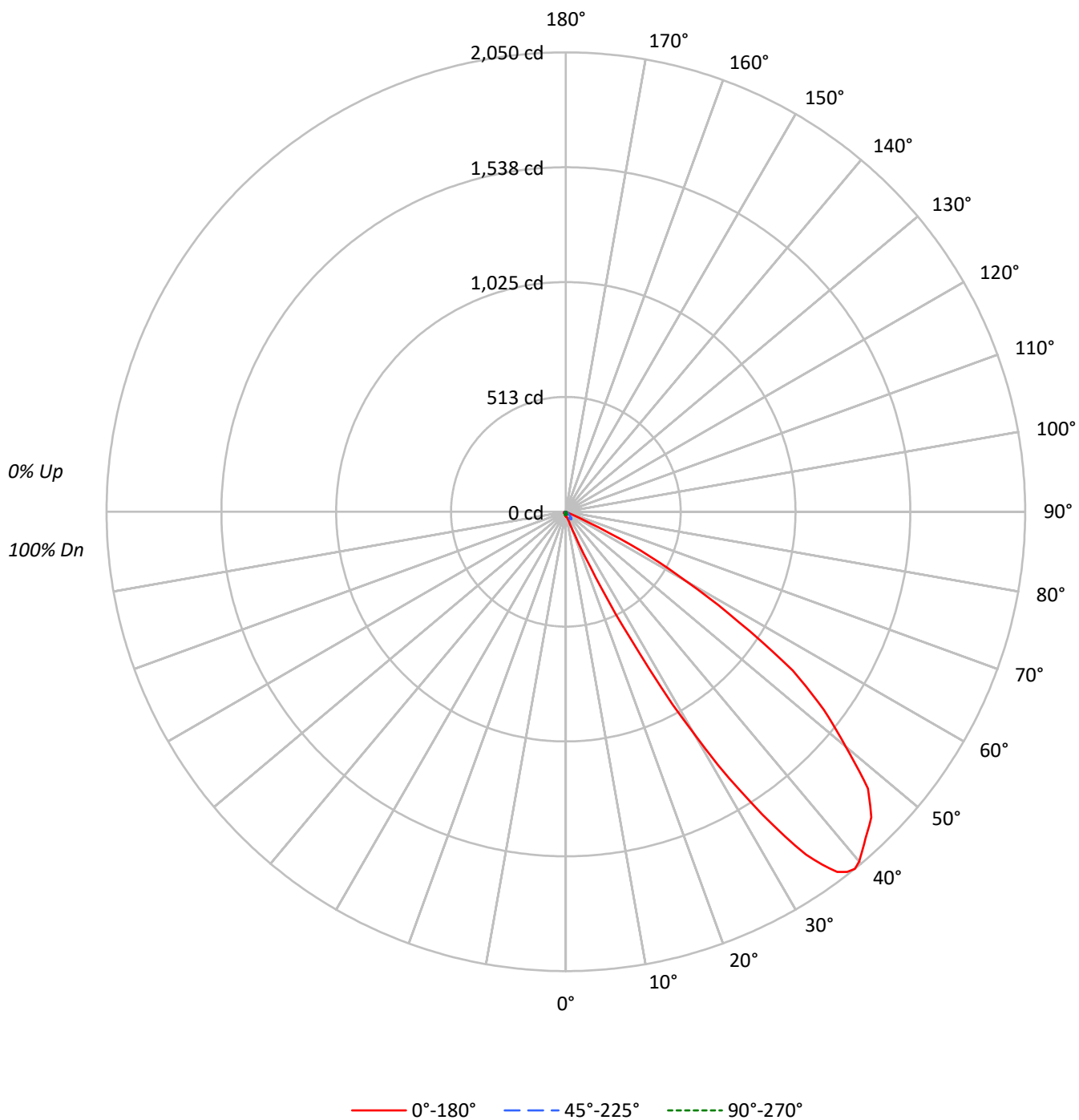
Lumens per Lamp: N/A
Luminaire Lumens: 532.9 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1337921

CATALOG NUMBER: P3A05R309730DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1337921

CATALOG NUMBER: P3A05R309730DE010 E3CA451MMS

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
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°	4539	4539	4539	4539	4539
5°	4843	4755	4446	4050	3962
10°	5299	4698	3897	3496	3407
15°	7741	4699	3269	2951	3065
20°	19485	5134	2520	2520	2824
25°	90489	6412	1960	2274	2613
30°	288070	8862	1469	2152	2608
35°	499862	10815	1205	2034	2650
40°	582978	10792	887	2061	2691
45°	597861	7660	961	2233	2915
50°	555990	4298	751	2286	3377
55°	472528	2217	841	2561	3785
60°	272917	570	965	2763	4122
65°	55674	0	1141	3269	4670
70°	833	256	1410	3719	5450
75°	763	339	1525	3813	6439
80°	505	505	2273	4546	7324
85°	0	1006	4529	4529	9057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 597861 cd/sqm

TEST NUMBER: P1337921

CATALOG NUMBER: P3A05R309730DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.4
10°-20°	5.4	1.0
20°-30°	30.7	5.8
30°-40°	143.6	26.9
40°-50°	203.0	38.1
50°-60°	124.9	23.4
60°-70°	19.0	3.6
70°-80°	3.0	0.6
80°-90°	1.5	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°	38.0	7.1
0°-40°	181.5	34.1
0°-60°	509.4	95.6
0°-90°	532.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	532.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	21	21	21	21	21	
5°	22	22	20	18	18	2
15°	34	21	14	13	14	12
25°	374	26	8	9	11	230
35°	1867	40	4	8	10	1121
45°	1928	25	3	7	9	1462
55°	1236	6	2	7	10	1052
65°	107	0	2	6	9	194
75°	1	0	2	4	8	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1337921

CATALOG NUMBER: P3A05R309730DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
2.5°	21.1	21.1	21.6	21.6	21.1	21.6	21.6	21.6	20.7	20.2	19.3
5°	22.0	22.0	22.0	22.4	22.0	22.0	21.6	21.1	20.2	18.9	18.4
7.5°	22.9	22.9	22.4	22.9	22.4	22.4	21.6	20.7	19.3	18.0	17.1
10°	23.8	23.8	23.3	23.3	22.9	22.9	21.1	19.8	17.5	16.2	15.7
12.5°	26.5	26.5	26.0	25.6	24.7	24.2	20.7	18.4	15.7	14.4	13.9
15°	34.1	33.7	32.8	31.4	29.2	28.7	20.7	17.1	14.4	13.0	13.0
17.5°	46.7	46.2	44.9	41.3	37.3	35.9	20.7	15.3	12.6	11.7	11.7
20°	83.5	79.9	73.2	64.2	54.8	49.8	22.0	13.5	10.8	10.3	10.8
21°	109.1	105.5	97.0	82.2	65.6	60.2	22.9	13.0	10.3	9.9	10.8
22°	148.6	144.6	127.1	106.9	83.1	73.6	23.3	12.1	9.4	9.4	10.3
23°	207.4	200.7	171.1	138.7	103.7	90.2	24.2	11.7	9.0	9.4	9.9
24°	271.6	265.8	232.1	183.6	132.4	113.1	25.1	11.2	8.5	8.5	9.4
25°	374.0	367.3	307.5	231.7	167.9	136.0	26.5	10.3	8.1	8.1	9.4
26°	506.4	475.5	396.0	298.6	207.0	170.6	27.8	9.9	7.6	8.1	9.0
27°	632.2	606.6	517.2	383.0	255.9	209.7	29.6	9.4	7.2	7.6	9.0
28°	797.4	761.5	648.8	484.4	322.4	253.7	31.4	9.0	6.7	7.6	8.5
29°	982.4	932.1	796.0	598.5	397.3	303.1	33.2	8.5	6.3	7.2	8.5
30°	1137.7	1090.6	954.5	733.6	483.5	368.2	35.0	8.1	5.8	7.2	8.5
31°	1320.0	1248.6	1083.8	848.1	557.6	433.3	36.8	7.2	5.4	6.7	8.1
32°	1467.7	1417.9	1242.8	977.4	655.1	505.1	38.2	6.7	5.4	6.7	8.1
33°	1610.5	1543.6	1374.3	1101.3	743.1	578.7	39.5	6.3	4.9	6.3	8.1
34°	1747.0	1685.5	1498.7	1201.5	826.1	648.8	40.4	5.4	4.9	6.3	7.6
35°	1867.3	1795.9	1608.2	1299.3	911.4	712.5	40.4	4.9	4.5	5.8	7.6
36°	1945.4	1894.2	1703.4	1395.9	988.6	773.1	40.4	4.5	4.0	5.8	7.2
37°	2012.3	1952.6	1779.7	1469.9	1045.7	821.6	40.4	4.0	4.0	5.8	7.2
38°	2039.7	1988.5	1832.3	1535.5	1099.1	871.0	40.0	3.6	3.6	5.4	7.2
39°	2050.5	2004.7	1871.8	1582.6	1138.6	904.2	39.1	3.1	3.6	5.4	7.2
40°	2036.6	2002.0	1892.0	1613.2	1170.0	928.5	37.7	2.7	3.1	5.4	7.2
42.5°	1979.1	1956.2	1887.5	1643.7	1197.0	946.4	32.8	1.8	3.1	4.9	7.2
45°	1927.9	1902.8	1842.2	1611.8	1162.0	911.0	24.7	0.9	3.1	4.9	7.2
47.5°	1828.7	1813.0	1765.4	1530.6	1085.2	831.1	17.5	0.4	2.7	4.5	6.7
50°	1629.8	1615.0	1552.1	1329.0	933.4	702.6	12.6	0.4	2.2	4.5	6.7
52.5°	1451.5	1435.8	1345.6	1104.9	717.0	515.0	8.1	0.4	2.2	4.5	6.7
55°	1236.0	1208.6	1090.1	838.7	508.2	345.3	5.8	0.4	2.2	4.0	6.7
57.5°	915.0	875.1	769.1	572.0	292.7	187.2	3.1	0.4	2.2	4.0	6.7
60°	622.3	598.5	481.3	301.7	124.8	79.0	1.3	0.4	2.2	4.0	6.3
62.5°	377.1	347.1	242.0	128.4	53.9	35.9	0.0	0.9	2.2	4.0	6.3
65°	107.3	95.2	63.3	29.2	15.3	11.7	0.0	0.9	2.2	4.0	6.3
67.5°	3.6	3.6	3.6	3.1	2.2	2.2	0.4	0.9	2.2	4.0	5.8
70°	1.3	1.3	1.3	0.9	0.9	0.4	0.4	0.9	2.2	3.6	5.8
72.5°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.9	1.8	3.1	5.4
75°	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	1.8	3.1	4.5
77.5°	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	1.8	2.7	4.5
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	2.7	3.6



TEST NUMBER: P1337921

CATALOG NUMBER: P3A05R309730DE010 E3CA451MMS

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	1.8	1.8	2.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.8	1.3	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.3	1.3	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: P1337921

CATALOG NUMBER: P3A05R309730DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	20.7	20.7
2.5°	19.3	19.3
5°	18.0	18.0
7.5°	16.6	16.6
10°	15.3	15.3
12.5°	14.4	14.4
15°	13.0	13.5
17.5°	12.1	12.6
20°	11.7	12.1
21°	11.7	12.1
22°	11.2	11.7
23°	11.2	11.7
24°	10.8	11.2
25°	10.3	10.8
26°	10.3	10.8
27°	10.3	10.8
28°	9.9	10.8
29°	9.9	10.3
30°	9.9	10.3
31°	9.4	10.3
32°	9.4	10.3
33°	9.4	9.9
34°	9.0	9.9
35°	9.0	9.9
36°	9.0	9.9
37°	9.0	9.4
38°	9.0	9.9
39°	9.0	9.4
40°	9.0	9.4
42.5°	9.0	9.4
45°	9.0	9.4
47.5°	9.0	9.9
50°	9.0	9.9
52.5°	9.0	9.9
55°	9.0	9.9
57.5°	9.0	9.4
60°	9.0	9.4
62.5°	8.5	9.4
65°	8.5	9.0
67.5°	8.5	9.0
70°	8.1	8.5
72.5°	7.6	8.1
75°	6.7	7.6
77.5°	6.3	6.7
80°	5.4	5.8

TEST NUMBER: P1337921

CATALOG NUMBER: P3A05R309730DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.5	4.5
85°	3.1	3.6
87.5°	1.8	1.8
90°	0.0	0.0

(END OF REPORT)