

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: P1336412

Luminaire Tested: P3A05R159730DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R159730DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 97CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

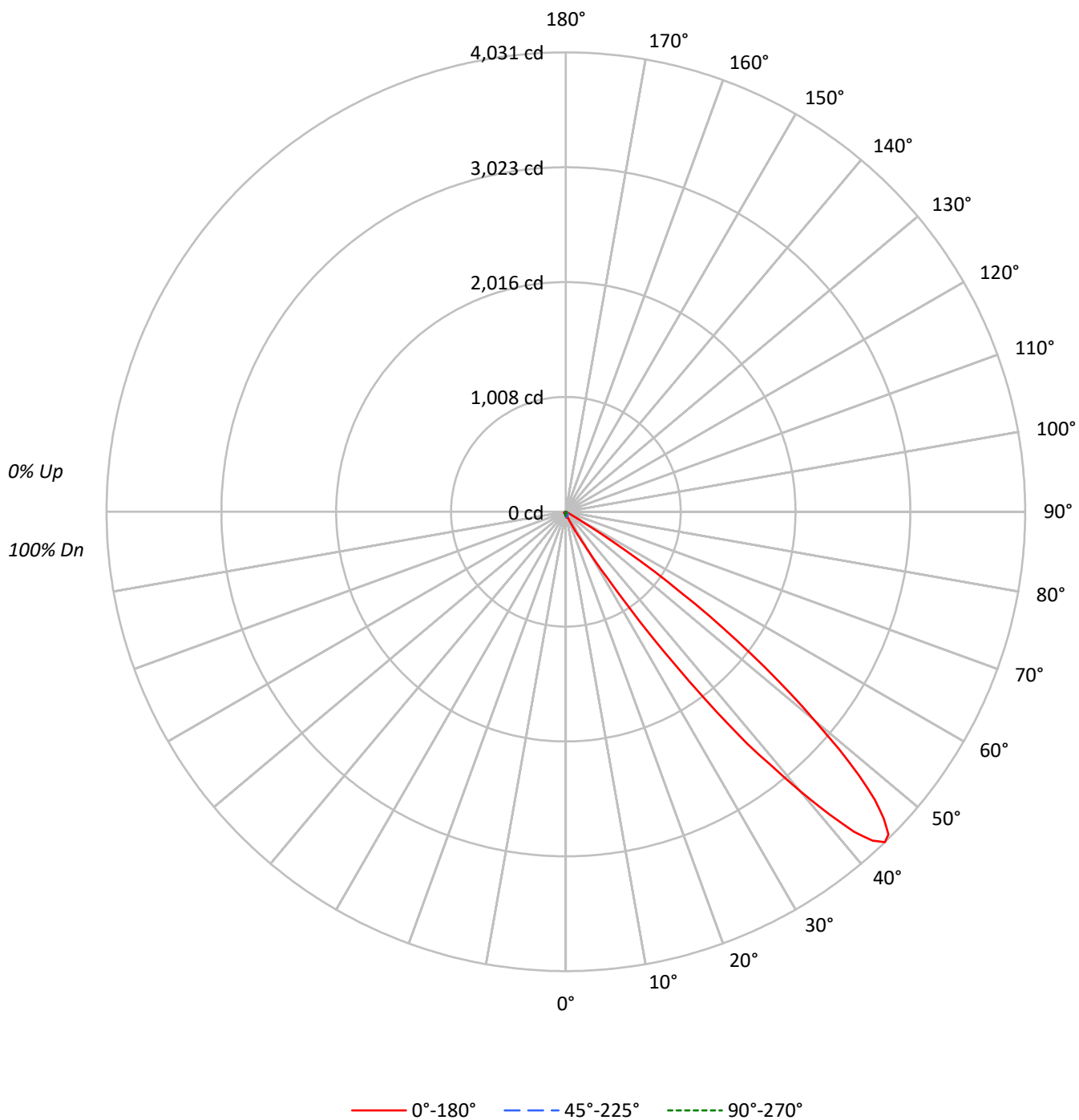
Lumens per Lamp: N/A
Luminaire Lumens: 450.0 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.09
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1336412

CATALOG NUMBER: P3A05R159730DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1336412

CATALOG NUMBER: P3A05R159730DE010 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	107	104	100	97	100	97	94	96	93	91	92	90	89
2	101	93	87	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	53
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	47	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	31	26	37	31	26
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8749	8749	8749	8749	8749
5°	10874	9685	7902	6912	6824
10°	10688	8283	6101	5388	5500
15°	8854	5902	4381	4472	4790
20°	15401	4714	3360	3874	4387
25°	34308	5637	2710	3581	4137
30°	102598	6938	2380	3520	4330
35°	394926	7817	2168	3614	4578
40°	916660	6813	2061	3721	4895
45°	1241586	5148	1799	4031	5303
50°	973512	3070	1842	4298	5833
55°	467252	1376	1720	4626	6346
60°	42716	175	1579	4912	7105
65°	4670	0	1401	5137	7679
70°	1154	0	1731	5450	8335
75°	1101	339	2288	6100	9489
80°	1137	1137	2778	6188	10229
85°	1006	1006	4529	5535	11322

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1241586 cd/sqm

TEST NUMBER: P1336412

CATALOG NUMBER: P3A05R159730DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.4	0.8
10°-20°	7.1	1.6
20°-30°	17.0	3.8
30°-40°	93.1	20.7
40°-50°	225.4	50.1
50°-60°	89.9	20.0
60°-70°	7.8	1.7
70°-80°	4.4	1.0
80°-90°	1.9	0.4
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°	27.5	6.1
0°-40°	120.6	26.8
0°-60°	435.9	96.9
0°-90°	450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	450.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	40	40	40	40	40	
5°	49	44	36	31	31	5
15°	39	26	19	20	21	14
25°	142	23	11	15	17	86
35°	1475	29	8	14	17	1042
45°	4004	17	6	13	17	2824
55°	1222	4	4	12	17	1139
65°	9	0	3	10	15	23
75°	1	0	3	7	11	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1336412

CATALOG NUMBER: P3A05R159730DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9
2.5°	44.9	44.9	45.3	44.9	44.9	44.9	44.9	44.4	44.4	44.4	43.1
5°	49.4	49.4	49.4	49.4	48.9	48.9	48.9	48.5	48.5	48.0	44.0
7.5°	51.2	51.2	50.7	50.7	50.3	50.3	49.8	49.4	48.9	48.5	42.2
10°	48.0	48.0	48.0	47.6	47.6	47.1	46.7	46.2	45.8	44.9	37.2
12.5°	42.6	42.6	43.1	42.6	42.2	41.7	40.8	40.4	39.9	39.0	31.0
15°	39.0	39.0	39.0	38.6	38.1	37.2	36.8	35.9	35.4	34.1	26.0
17.5°	49.8	49.8	49.4	48.5	46.7	45.3	43.1	41.3	39.0	36.3	22.4
20°	66.0	66.0	65.1	64.2	61.9	59.7	56.1	52.9	49.4	46.2	20.2
22.5°	95.6	96.9	94.2	91.1	87.9	82.6	77.6	72.7	66.4	61.0	20.6
25°	141.8	143.1	141.8	134.6	128.8	121.6	112.2	102.3	91.5	81.7	23.3
27.5°	229.7	230.6	228.4	210.9	201.5	182.6	166.0	149.9	131.9	114.0	25.6
30°	405.2	405.6	391.3	356.3	325.3	284.0	249.0	215.4	187.1	158.4	27.4
31°	533.5	520.9	490.4	448.2	398.9	343.2	295.2	251.7	209.5	178.6	27.8
32°	677.5	675.7	625.0	551.9	485.9	416.4	344.1	288.5	240.1	197.9	28.3
33°	868.2	869.1	789.2	703.1	595.0	501.6	407.0	330.7	272.4	220.8	29.2
34°	1166.2	1096.2	1002.4	885.7	738.5	598.1	475.2	379.6	301.5	242.7	29.2
35°	1475.3	1404.9	1301.7	1124.9	923.0	726.4	556.4	432.1	336.5	266.5	29.2
36°	1821.7	1762.0	1605.9	1380.2	1122.6	847.6	642.5	492.7	371.1	288.1	28.7
37°	2195.9	2108.4	1935.2	1688.9	1344.3	1018.1	747.5	552.8	405.6	311.4	27.8
38°	2575.9	2497.0	2278.5	1980.1	1609.0	1198.0	852.5	610.7	437.5	328.9	26.5
39°	2864.0	2820.9	2604.2	2270.8	1820.3	1368.5	960.7	672.6	471.1	346.4	25.1
40°	3202.3	3132.8	2927.3	2514.9	2070.3	1542.2	1066.5	727.3	498.9	360.3	23.8
41°	3511.0	3423.1	3163.7	2765.3	2270.4	1698.3	1167.0	783.9	521.4	368.4	22.9
42°	3775.7	3673.4	3402.4	2979.8	2437.7	1823.0	1247.4	824.2	542.5	375.1	21.5
43°	3947.1	3858.8	3592.2	3140.8	2580.9	1937.5	1322.3	866.4	555.5	379.6	19.7
44°	4030.6	3941.3	3683.3	3241.8	2668.8	2006.1	1370.8	895.6	569.8	385.4	18.4
45°	4003.7	3913.0	3663.6	3243.6	2696.2	2030.8	1391.4	908.6	577.5	390.8	16.6
46°	3880.3	3816.6	3565.3	3159.2	2644.1	2004.3	1379.7	898.7	574.8	390.8	14.8
47°	3707.1	3634.4	3395.3	3014.3	2518.1	1936.1	1332.6	868.7	558.2	381.8	13.0
48°	3471.1	3409.2	3157.9	2784.1	2324.7	1787.6	1226.3	819.8	532.1	364.3	11.2
49°	3174.9	3088.8	2855.0	2489.8	2072.5	1576.7	1086.7	737.2	490.4	339.7	9.9
50°	2853.7	2747.3	2567.0	2195.0	1811.8	1351.9	903.2	623.2	431.6	307.4	9.0
51°	2539.1	2431.0	2259.2	1942.8	1533.6	1121.7	728.7	497.6	355.4	262.9	7.6
52°	2213.0	2122.3	1929.8	1681.3	1312.9	909.1	607.1	420.9	295.2	220.8	6.3
53°	1888.1	1826.2	1643.1	1391.4	1054.9	742.6	495.8	360.3	257.5	188.9	4.9
54°	1562.8	1495.0	1355.9	1131.6	850.3	586.0	420.4	301.5	223.4	164.7	4.5
55°	1222.2	1187.2	1058.9	862.8	644.3	467.5	341.0	259.3	187.1	137.7	3.6
56°	941.4	901.9	784.8	625.9	478.8	366.1	275.9	211.8	158.4	115.3	2.7
57°	616.5	576.1	498.5	437.0	348.6	267.0	210.9	166.9	128.8	95.6	2.2
58°	364.3	327.5	315.4	269.2	232.4	181.3	155.7	124.3	95.1	75.4	1.3
59°	167.4	170.1	151.2	141.8	128.8	115.3	94.7	83.0	65.1	54.3	0.9
60°	97.4	92.0	89.7	80.3	71.3	63.3	57.0	50.3	40.8	35.0	0.4
62.5°	33.2	31.9	32.8	29.6	27.8	26.9	24.7	21.1	17.5	14.4	0.0
65°	9.0	9.0	8.5	8.1	7.6	7.2	6.7	5.8	5.4	4.5	0.0



TEST NUMBER: P1336412

CATALOG NUMBER: P3A05R159730DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	3.1	3.1	2.7	2.7	2.2	2.2	1.8	1.8	1.3	1.3	0.0
70°	1.8	1.8	1.8	1.3	1.3	1.3	0.9	0.9	0.9	0.4	0.0
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	0.9	0.9	0.9	0.4	0.4
75°	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.4
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.9
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P1336412

CATALOG NUMBER: P3A05R159730DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	39.9	39.9	39.9	39.9	39.9	39.9
2.5°	41.3	39.5	37.2	35.9	35.4	35.0
5°	39.5	35.9	33.2	31.4	31.0	31.0
7.5°	35.4	31.4	28.7	27.8	27.4	27.4
10°	31.0	27.4	25.1	24.2	24.7	24.7
12.5°	26.0	22.9	22.0	22.0	22.4	22.9
15°	21.1	19.3	19.3	19.7	20.6	21.1
17.5°	17.5	16.6	17.1	17.9	18.8	19.7
20°	14.4	14.4	15.3	16.6	17.9	18.8
22.5°	12.1	12.6	13.9	15.3	17.1	17.9
25°	10.3	11.2	12.6	14.8	16.6	17.1
27.5°	9.0	10.3	12.1	14.4	16.2	17.1
30°	7.6	9.4	11.7	13.9	16.2	17.1
31°	7.2	9.0	11.2	13.9	16.2	17.1
32°	6.7	9.0	11.2	13.9	16.2	17.1
33°	6.3	8.5	11.2	13.5	16.2	17.1
34°	5.8	8.5	11.2	13.9	16.2	17.1
35°	5.4	8.1	10.8	13.5	15.7	17.1
36°	4.9	8.1	10.8	13.5	16.2	17.1
37°	4.5	8.1	10.8	13.5	15.7	17.1
38°	4.5	7.6	10.3	13.5	15.7	17.1
39°	4.0	7.2	10.3	13.5	15.7	17.1
40°	3.6	7.2	9.9	13.0	15.7	17.1
41°	3.1	6.7	9.9	13.0	15.7	17.1
42°	2.7	6.7	9.9	13.0	15.7	17.1
43°	2.2	6.3	9.4	13.0	15.7	17.1
44°	2.2	6.3	9.4	13.0	15.7	17.1
45°	1.8	5.8	9.0	13.0	15.7	17.1
46°	1.8	5.8	9.0	12.6	15.7	17.1
47°	1.3	5.8	9.0	12.6	15.7	17.1
48°	1.3	5.4	9.0	12.6	15.7	17.1
49°	0.9	5.4	9.0	12.6	15.7	17.1
50°	0.9	5.4	8.5	12.6	15.7	17.1
51°	0.9	5.4	8.5	12.6	15.7	17.1
52°	0.9	4.9	8.5	12.6	15.7	17.1
53°	0.9	4.9	8.5	12.6	15.7	17.1
54°	0.9	4.9	8.1	12.6	15.7	17.1
55°	0.9	4.5	8.1	12.1	15.7	16.6
56°	0.9	4.5	8.1	12.1	15.7	16.6
57°	0.9	4.5	7.6	12.1	15.7	16.6
58°	0.9	4.0	7.6	11.7	15.3	16.6
59°	0.9	4.0	7.2	11.7	15.3	16.2
60°	0.9	3.6	7.2	11.2	14.8	16.2
62.5°	0.9	3.1	6.3	10.8	14.4	15.3
65°	0.9	2.7	5.8	9.9	13.9	14.8



TEST NUMBER: P1336412

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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.9	2.7	5.4	9.4	13.0	14.4
70°	0.9	2.7	4.9	8.5	12.6	13.0
72.5°	1.3	2.7	4.5	8.1	11.7	12.1
75°	1.8	2.7	4.0	7.2	10.8	11.2
77.5°	1.8	2.7	3.6	6.3	9.4	9.9
80°	1.8	2.2	3.1	4.9	7.6	8.1
82.5°	1.8	2.2	2.2	4.0	5.8	6.3
85°	1.3	1.8	1.8	2.2	4.0	4.5
87.5°	1.3	1.8	0.9	1.3	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)