

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: P1337446

Luminaire Tested: P3A05R259740DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337446
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: P3A05R259740DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

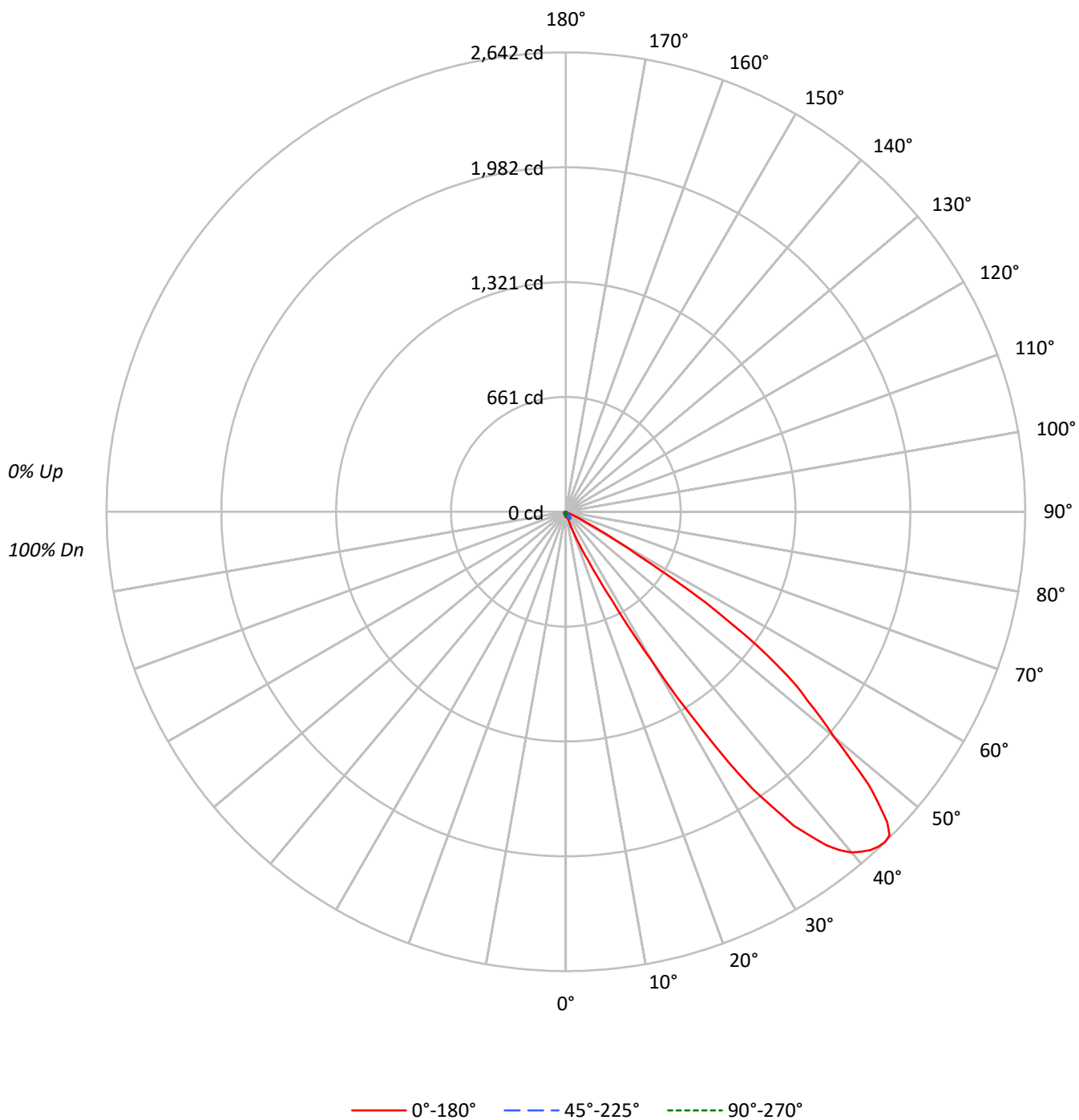
Lumens per Lamp: N/A
Luminaire Lumens: 551.0 lumens
Efficiency: N/A
Efficacy: 76.5 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1337446

CATALOG NUMBER: P3A05R259740DE010 E3CA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1337446

CATALOG NUMBER: P3A05R259740DE010 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	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°	6162	6162	6162	6162	6162
5°	7044	6714	5987	5327	5239
10°	7014	6368	5077	4431	4431
15°	7809	5494	3973	3746	3973
20°	27606	5437	3057	3174	3500
25°	79432	6920	2468	2928	3411
30°	253406	10685	1975	2836	3444
35°	555006	12582	1686	2730	3507
40°	732143	11393	1374	2777	3750
45°	816457	7970	1364	3008	4062
50°	687261	4128	1330	3138	4469
55°	513855	1682	1300	3517	5008
60°	159066	439	1272	3815	5526
65°	13594	0	1505	4047	6019
70°	962	321	1539	4680	6860
75°	847	424	2033	4914	7795
80°	631	631	3031	5556	9218
85°	1258	1258	4780	6038	9812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 816457 cd/sqm

TEST NUMBER: P1337446

CATALOG NUMBER: P3A05R259740DE010 E3CA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.5	0.5
10°-20°	6.5	1.2
20°-30°	30.5	5.5
30°-40°	146.8	26.6
40°-50°	230.1	41.8
50°-60°	117.9	21.4
60°-70°	11.1	2.0
70°-80°	3.8	0.7
80°-90°	1.9	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	7.2
0°-40°	186.3	33.8
0°-60°	534.3	97.0
0°-90°	551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	551.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	28	28	28	28	28	
5°	32	30	27	24	24	3
15°	34	24	18	16	18	15
25°	328	29	10	12	14	204
35°	2073	47	6	10	13	1259
45°	2633	26	4	10	13	1927
55°	1344	4	3	9	13	1119
65°	26	0	3	8	12	82
75°	1	0	2	6	9	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1337446

CATALOG NUMBER: P3A05R259740DE010 E3CA451MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
2.5°	30.5	30.5	30.5	30.5	30.5	30.5	30.1	30.1	30.5	30.1	30.1
5°	32.0	32.0	32.0	32.0	32.0	32.0	32.0	31.5	31.5	31.5	30.5
7.5°	32.5	32.0	32.0	32.0	32.0	32.0	32.0	32.0	31.5	31.5	30.1
10°	31.5	31.5	31.5	31.5	31.0	31.0	31.0	30.5	30.5	30.5	28.6
12.5°	31.5	31.5	31.5	31.5	31.0	31.0	30.5	30.5	30.1	29.6	26.2
15°	34.4	34.4	34.4	33.9	33.5	33.0	32.5	32.0	31.5	30.5	24.2
17.5°	50.4	49.0	48.5	46.5	44.1	41.7	39.8	37.8	35.9	34.4	23.3
20°	118.3	117.8	115.4	109.6	103.3	96.0	88.7	80.5	68.9	61.1	23.3
22.5°	205.1	202.2	197.8	193.5	182.3	169.2	155.6	140.1	125.1	109.1	24.7
25°	328.3	335.0	320.5	308.9	289.5	265.7	240.0	218.7	191.5	166.3	28.6
27.5°	570.7	575.1	546.4	508.6	463.5	413.6	365.1	328.7	283.2	241.5	35.9
30°	1000.8	1005.1	957.1	876.6	783.5	701.6	590.6	493.1	403.4	334.1	42.2
31°	1249.0	1215.1	1159.3	1081.3	963.4	839.8	706.5	588.6	475.2	384.0	44.1
32°	1464.8	1461.9	1396.9	1278.6	1160.3	1007.6	842.2	688.5	549.4	434.4	45.6
33°	1719.3	1699.9	1608.3	1496.8	1340.2	1186.5	973.1	797.6	625.5	490.7	46.5
34°	1923.5	1871.1	1833.3	1705.8	1540.4	1344.5	1116.2	913.0	720.5	545.0	47.0
35°	2073.3	2062.1	1988.4	1869.6	1701.4	1501.1	1270.4	1032.8	800.0	608.0	47.0
36°	2231.8	2197.4	2125.7	2018.0	1854.1	1647.1	1388.2	1136.5	892.6	664.8	46.5
37°	2331.2	2310.9	2239.6	2128.6	1968.1	1770.2	1520.1	1246.1	966.3	721.5	45.6
38°	2433.5	2392.3	2322.0	2215.8	2058.3	1872.6	1615.6	1330.5	1034.2	771.4	44.1
39°	2504.3	2461.7	2389.9	2284.2	2130.0	1945.8	1691.2	1402.2	1093.4	808.8	42.2
40°	2557.7	2516.5	2443.7	2335.1	2182.9	2003.5	1754.2	1465.8	1142.8	841.2	39.8
41°	2590.6	2552.3	2480.1	2372.0	2219.2	2036.4	1795.5	1507.0	1176.3	863.1	37.3
42°	2618.3	2579.0	2505.3	2394.8	2241.5	2064.6	1820.7	1533.1	1199.1	874.2	35.4
43°	2633.8	2594.5	2522.8	2409.8	2255.1	2077.7	1834.3	1545.3	1206.8	872.8	32.0
44°	2642.5	2601.8	2529.6	2416.6	2260.9	2081.0	1835.2	1542.8	1201.5	861.1	29.1
45°	2632.8	2592.6	2522.8	2409.8	2250.8	2070.4	1825.5	1529.8	1181.1	838.3	25.7
46°	2569.8	2538.8	2474.8	2371.0	2218.8	2043.2	1800.8	1504.5	1149.6	810.2	21.8
47°	2458.8	2434.0	2372.0	2294.9	2157.2	1993.3	1755.2	1456.5	1105.5	768.0	17.5
48°	2342.9	2306.5	2248.8	2169.8	2053.4	1903.6	1680.1	1386.2	1038.6	712.8	15.5
49°	2171.7	2150.4	2099.5	2011.2	1914.7	1782.9	1573.9	1296.0	956.6	652.6	13.6
50°	2014.6	2000.1	1928.8	1863.8	1761.5	1638.4	1429.9	1177.3	854.8	578.0	12.1
51°	1892.0	1874.5	1823.1	1742.1	1633.0	1490.0	1293.6	1023.1	738.0	489.2	9.7
52°	1763.9	1754.2	1708.7	1625.3	1518.1	1375.6	1161.3	892.2	624.5	413.6	7.8
53°	1659.2	1645.2	1589.4	1515.2	1399.3	1251.9	1017.7	770.5	529.0	347.6	6.8
54°	1506.5	1500.7	1464.8	1387.2	1261.6	1101.1	887.8	648.8	441.2	294.8	5.8
55°	1344.1	1324.7	1288.3	1226.7	1111.3	961.5	737.5	537.7	356.9	248.3	4.4
56°	1146.2	1145.3	1080.3	1028.9	926.6	767.5	589.1	419.9	290.0	207.0	3.9
57°	957.1	926.6	864.0	813.1	703.1	582.3	437.4	314.7	226.9	167.8	2.9
58°	707.9	691.9	675.4	600.8	498.9	412.6	312.3	221.1	167.8	128.0	1.9
59°	480.5	480.0	460.6	403.9	345.2	257.0	194.9	150.3	115.4	94.1	1.5
60°	362.7	354.0	315.2	277.8	217.2	162.4	115.4	88.7	71.8	60.6	1.0
62.5°	127.0	131.9	115.9	96.0	73.2	60.1	46.1	37.3	30.5	24.7	0.0
65°	26.2	28.6	24.7	23.3	18.4	16.0	14.1	12.1	10.2	8.7	0.0



TEST NUMBER: P1337446

CATALOG NUMBER: P3A05R259740DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	3.4	2.9	2.9	2.9	2.4	2.4	2.4	2.4	1.9	1.9	0.5
70°	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	0.5
72.5°	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
85°	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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: P1337446

CATALOG NUMBER: P3A05R259740DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	28.1	28.1	28.1	28.1	28.1	28.1
2.5°	29.6	28.6	27.2	26.7	26.2	26.2
5°	29.1	27.2	25.7	24.2	23.8	23.8
7.5°	27.6	25.2	23.3	22.3	21.8	21.3
10°	26.2	22.8	20.8	19.9	19.9	19.9
12.5°	23.3	20.4	18.4	17.9	18.4	18.4
15°	20.8	17.5	16.5	16.5	17.0	17.5
17.5°	17.9	15.5	14.5	15.0	15.5	16.0
20°	16.0	13.1	13.1	13.6	15.0	15.0
22.5°	14.1	11.6	11.6	13.1	14.1	14.5
25°	12.6	10.2	10.7	12.1	13.6	14.1
27.5°	10.7	8.7	9.7	11.6	13.1	13.6
30°	9.2	7.8	9.2	11.2	12.6	13.6
31°	8.7	7.3	9.2	10.7	12.6	13.6
32°	7.8	7.3	8.7	10.7	12.6	13.1
33°	7.3	6.8	8.7	10.7	12.6	13.1
34°	6.8	6.3	8.2	10.7	12.6	13.1
35°	5.8	6.3	8.2	10.2	12.1	13.1
36°	5.3	5.8	8.2	10.2	12.1	13.1
37°	4.8	5.8	7.8	10.2	12.1	13.1
38°	4.4	5.3	7.8	10.2	12.1	13.1
39°	3.9	5.3	7.3	10.2	12.1	13.1
40°	3.4	4.8	7.3	9.7	12.1	13.1
41°	3.4	4.8	7.3	9.7	12.1	13.1
42°	2.9	4.8	7.3	9.7	12.1	13.1
43°	2.4	4.4	7.3	9.7	12.1	13.1
44°	1.9	4.4	6.8	9.7	12.1	13.1
45°	1.9	4.4	6.8	9.7	12.1	13.1
46°	1.5	3.9	6.8	9.7	12.1	13.1
47°	1.0	3.9	6.8	9.2	12.1	13.1
48°	1.0	3.9	6.8	9.2	12.1	13.1
49°	1.0	3.9	6.3	9.2	12.1	13.1
50°	1.0	3.9	6.3	9.2	12.1	13.1
51°	0.5	3.4	6.3	9.2	12.1	13.1
52°	0.5	3.4	6.3	9.2	12.1	13.6
53°	0.5	3.4	6.3	9.2	12.1	13.1
54°	0.5	3.4	5.8	9.2	12.1	13.1
55°	0.5	3.4	5.8	9.2	12.1	13.1
56°	0.5	2.9	5.8	8.7	12.1	13.1
57°	1.0	2.9	5.8	8.7	12.1	12.6
58°	1.0	2.9	5.8	8.7	11.6	12.6
59°	1.0	2.9	5.8	8.7	11.6	12.6
60°	1.0	2.9	5.3	8.7	11.6	12.6
62.5°	1.0	2.9	5.3	8.2	11.2	12.1
65°	1.0	2.9	4.8	7.8	11.2	11.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	2.4	4.8	7.3	10.7	11.2
70°	1.5	2.4	4.4	7.3	10.2	10.7
72.5°	1.5	2.4	4.4	6.3	9.2	10.2
75°	1.5	2.4	3.9	5.8	8.7	9.2
77.5°	1.5	2.4	3.4	5.3	7.8	8.2
80°	1.9	2.4	2.9	4.4	6.8	7.3
82.5°	1.9	2.4	2.4	3.4	5.3	5.8
85°	1.5	1.9	1.9	2.4	3.4	3.9
87.5°	1.5	1.9	1.5	1.0	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)