

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: P1337792

Luminaire Tested: P3A05R309024DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337792
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: P3A05R309024DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 2400K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

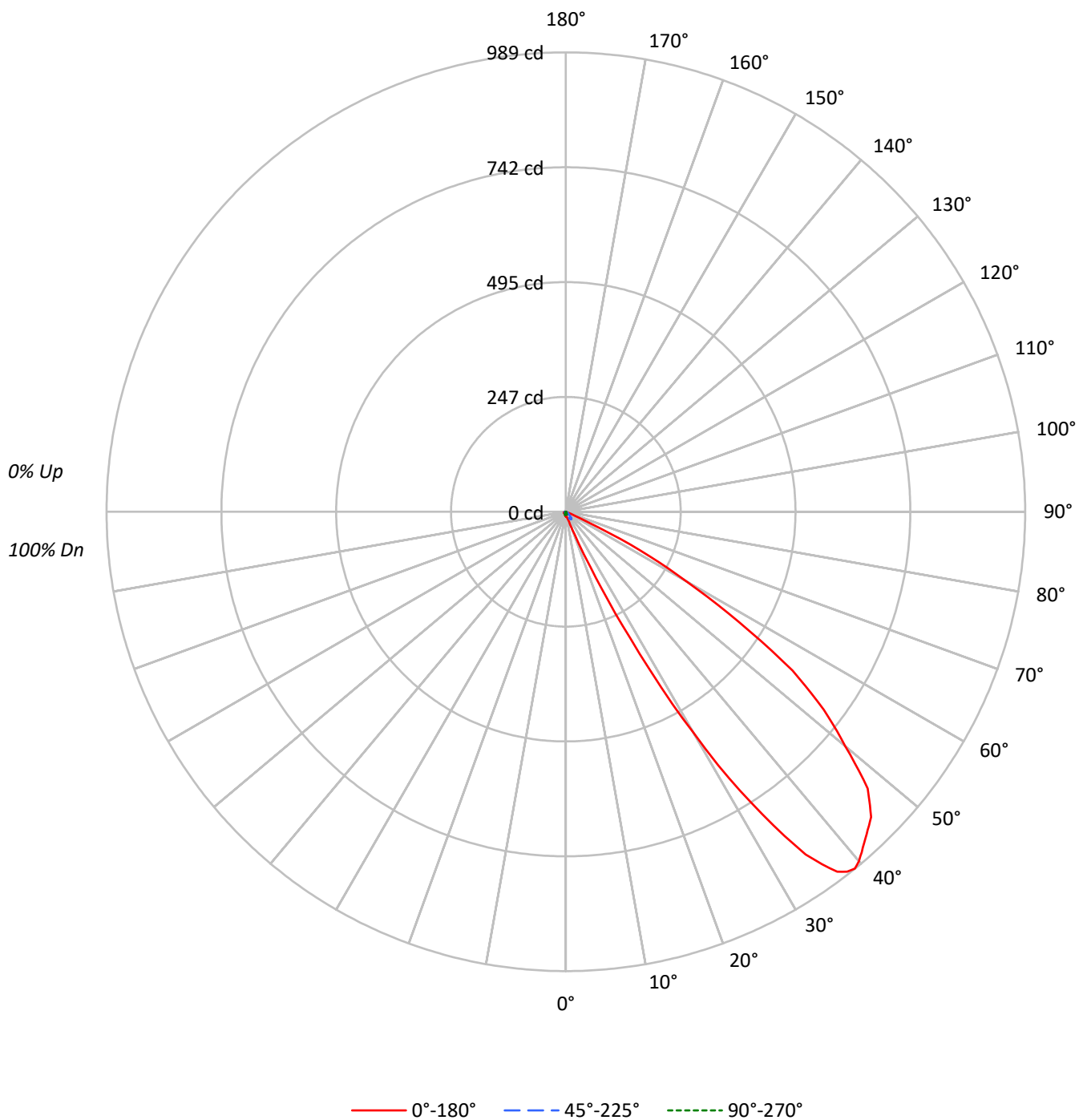
Lumens per Lamp: N/A
Luminaire Lumens: 257.0 lumens
Efficiency: N/A
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1337792

CATALOG NUMBER: P3A05R309024DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1337792

CATALOG NUMBER: P3A05R309024DE010 E3A451WMH

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°	2193	2193	2193	2193	2193
5°	2333	2289	2135	1959	1915
10°	2561	2271	1870	1692	1648
15°	3746	2270	1566	1430	1476
20°	9404	2474	1213	1213	1353
25°	43623	3097	944	1089	1258
30°	138907	4279	709	1038	1266
35°	241030	5220	589	990	1285
40°	281098	5210	429	1002	1288
45°	288278	3690	465	1085	1395
50°	268068	2081	375	1092	1637
55°	227853	1070	421	1223	1835
60°	131568	263	482	1316	1974
65°	26825	0	571	1557	2231
70°	385	128	705	1795	2629
75°	339	169	763	1864	3135
80°	253	253	1137	2147	3536
85°	0	503	2264	2264	4277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 288278 cd/sqm

TEST NUMBER: P1337792

CATALOG NUMBER: P3A05R309024DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.4
10°-20°	2.6	1.0
20°-30°	14.8	5.8
30°-40°	69.2	26.9
40°-50°	97.9	38.1
50°-60°	60.2	23.4
60°-70°	9.2	3.6
70°-80°	1.4	0.6
80°-90°	0.7	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°	18.3	7.1
0°-40°	87.5	34.1
0°-60°	245.6	95.6
0°-90°	257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	257.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	11	10	10	9	9	1
15°	16	10	7	6	6	6
25°	180	13	4	4	5	111
35°	900	20	2	4	5	540
45°	930	12	2	4	4	705
55°	596	3	1	3	5	507
65°	52	0	1	3	4	94
75°	0	0	1	2	4	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1337792

CATALOG NUMBER: P3A05R309024DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
2.5°	10.2	10.2	10.4	10.4	10.2	10.4	10.4	10.4	10.0	9.7	9.3
5°	10.6	10.6	10.6	10.8	10.6	10.6	10.4	10.2	9.7	9.1	8.9
7.5°	11.0	11.0	10.8	11.0	10.8	10.8	10.4	10.0	9.3	8.7	8.2
10°	11.5	11.5	11.3	11.3	11.0	11.0	10.2	9.5	8.4	7.8	7.6
12.5°	12.8	12.8	12.6	12.3	11.9	11.7	10.0	8.9	7.6	6.9	6.7
15°	16.5	16.2	15.8	15.2	14.1	13.9	10.0	8.2	6.9	6.3	6.3
17.5°	22.5	22.3	21.6	19.9	18.0	17.3	10.0	7.4	6.1	5.6	5.6
20°	40.3	38.5	35.3	31.0	26.4	24.0	10.6	6.5	5.2	5.0	5.2
21°	52.6	50.9	46.8	39.6	31.6	29.0	11.0	6.3	5.0	4.8	5.2
22°	71.7	69.7	61.3	51.5	40.0	35.5	11.3	5.8	4.5	4.5	5.0
23°	100.0	96.8	82.5	66.9	50.0	43.5	11.7	5.6	4.3	4.5	4.8
24°	131.0	128.2	111.9	88.5	63.9	54.6	12.1	5.4	4.1	4.1	4.5
25°	180.3	177.1	148.3	111.7	81.0	65.6	12.8	5.0	3.9	3.9	4.5
26°	244.2	229.3	190.9	144.0	99.8	82.3	13.4	4.8	3.7	3.9	4.3
27°	304.8	292.5	249.4	184.7	123.4	101.1	14.3	4.5	3.5	3.7	4.3
28°	384.5	367.2	312.8	233.6	155.4	122.3	15.2	4.3	3.2	3.7	4.1
29°	473.7	449.4	383.8	288.6	191.6	146.1	16.0	4.1	3.0	3.5	4.1
30°	548.6	525.8	460.2	353.7	233.2	177.5	16.9	3.9	2.8	3.5	4.1
31°	636.5	602.0	522.6	408.9	268.9	208.9	17.8	3.5	2.6	3.2	3.9
32°	707.7	683.7	599.2	471.3	315.9	243.5	18.4	3.2	2.6	3.2	3.9
33°	776.5	744.3	662.7	531.0	358.3	279.1	19.1	3.0	2.4	3.0	3.9
34°	842.3	812.7	722.6	579.3	398.3	312.8	19.5	2.6	2.4	3.0	3.7
35°	900.4	865.9	775.5	626.5	439.5	343.6	19.5	2.4	2.2	2.8	3.7
36°	938.0	913.4	821.3	673.1	476.7	372.8	19.5	2.2	1.9	2.8	3.5
37°	970.3	941.5	858.2	708.8	504.2	396.2	19.5	1.9	1.9	2.8	3.5
38°	983.5	958.8	883.5	740.4	530.0	420.0	19.3	1.7	1.7	2.6	3.5
39°	988.7	966.6	902.5	763.1	549.0	436.0	18.8	1.5	1.7	2.6	3.5
40°	982.0	965.3	912.3	777.8	564.2	447.7	18.2	1.3	1.5	2.6	3.5
42.5°	954.3	943.2	910.1	792.6	577.2	456.4	15.8	0.9	1.5	2.4	3.5
45°	929.6	917.5	888.2	777.2	560.3	439.3	11.9	0.4	1.5	2.4	3.5
47.5°	881.7	874.2	851.2	738.0	523.2	400.7	8.4	0.2	1.3	2.2	3.2
50°	785.8	778.7	748.4	640.8	450.1	338.8	6.1	0.2	1.1	2.2	3.2
52.5°	699.9	692.3	648.8	532.8	345.7	248.3	3.9	0.2	1.1	2.2	3.2
55°	596.0	582.8	525.6	404.4	245.1	166.5	2.8	0.2	1.1	1.9	3.2
57.5°	441.2	421.9	370.8	275.8	141.1	90.3	1.5	0.2	1.1	1.9	3.2
60°	300.0	288.6	232.1	145.5	60.2	38.1	0.6	0.2	1.1	1.9	3.0
62.5°	181.8	167.3	116.7	61.9	26.0	17.3	0.0	0.4	1.1	1.9	3.0
65°	51.7	45.9	30.5	14.1	7.4	5.6	0.0	0.4	1.1	1.9	3.0
67.5°	1.7	1.7	1.7	1.5	1.1	1.1	0.2	0.4	1.1	1.9	2.8
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.4	1.1	1.7	2.8
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.9	1.5	2.6
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.9	1.5	2.2
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.9	1.3	2.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.9	1.3	1.7



TEST NUMBER: P1337792

CATALOG NUMBER: P3A05R309024DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.6	0.9	0.9	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.9	0.6	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	0.6	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: P1337792

CATALOG NUMBER: P3A05R309024DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	10.0	10.0
2.5°	9.3	9.3
5°	8.7	8.7
7.5°	8.0	8.0
10°	7.4	7.4
12.5°	6.9	6.9
15°	6.3	6.5
17.5°	5.8	6.1
20°	5.6	5.8
21°	5.6	5.8
22°	5.4	5.6
23°	5.4	5.6
24°	5.2	5.4
25°	5.0	5.2
26°	5.0	5.2
27°	5.0	5.2
28°	4.8	5.2
29°	4.8	5.0
30°	4.8	5.0
31°	4.5	5.0
32°	4.5	5.0
33°	4.5	4.8
34°	4.3	4.8
35°	4.3	4.8
36°	4.3	4.8
37°	4.3	4.5
38°	4.3	4.8
39°	4.3	4.5
40°	4.3	4.5
42.5°	4.3	4.5
45°	4.3	4.5
47.5°	4.3	4.8
50°	4.3	4.8
52.5°	4.3	4.8
55°	4.3	4.8
57.5°	4.3	4.5
60°	4.3	4.5
62.5°	4.1	4.5
65°	4.1	4.3
67.5°	4.1	4.3
70°	3.9	4.1
72.5°	3.7	3.9
75°	3.2	3.7
77.5°	3.0	3.2
80°	2.6	2.8



TEST NUMBER: P1337792

CATALOG NUMBER: P3A05R309024DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.2	2.2
85°	1.5	1.7
87.5°	0.9	0.9
90°	0.0	0.0

(END OF REPORT)