

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: P1344930

Luminaire Tested: P3A13R309030DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344930
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: P3A13R309030DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

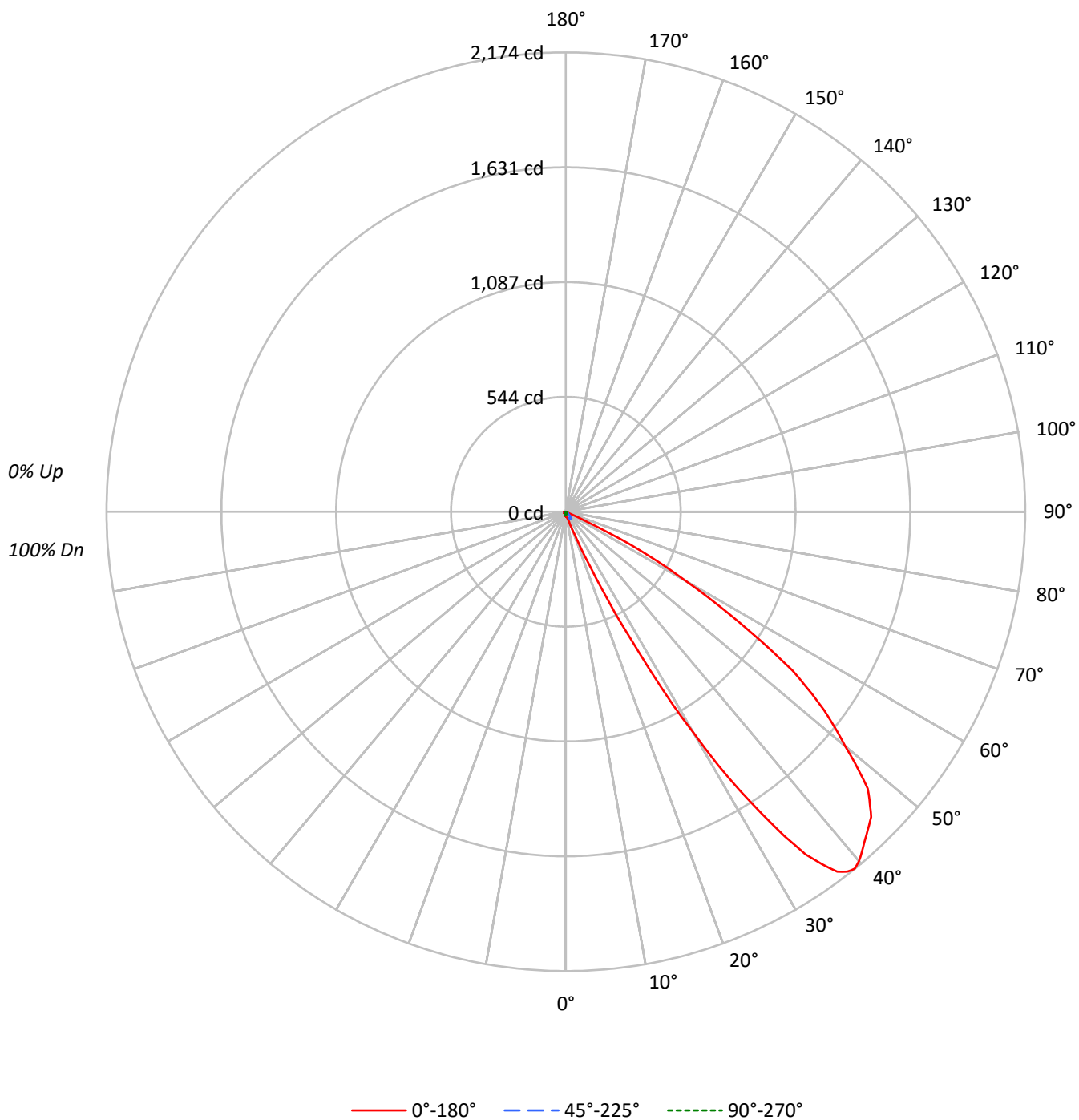
Lumens per Lamp: N/A
Luminaire Lumens: 565.0 lumens
Efficiency: N/A
Efficacy: 38.7 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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: P1344930

CATALOG NUMBER: P3A13R309030DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1344930

CATALOG NUMBER: P3A13R309030DE010 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°	4802	4802	4802	4802	4802
5°	5129	5019	4711	4292	4182
10°	5611	4988	4142	3718	3607
15°	8218	4972	3451	3133	3246
20°	20652	5437	2660	2660	3010
25°	95933	6799	2081	2419	2758
30°	305363	9394	1570	2279	2760
35°	529870	11457	1285	2168	2811
40°	617958	11450	945	2176	2863
45°	633771	8125	1023	2357	3101
50°	589354	4537	819	2422	3582
55°	500895	2370	918	2714	4014
60°	289275	614	1053	2938	4386
65°	58995	0	1245	3476	4929
70°	898	321	1539	3975	5770
75°	847	424	1610	4067	6863
80°	631	631	2399	4799	7829
85°	0	1258	4780	4780	9561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 633771 cd/sqm

TEST NUMBER: P1344930

CATALOG NUMBER: P3A13R309030DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.4
10°-20°	5.7	1.0
20°-30°	32.6	5.8
30°-40°	152.2	26.9
40°-50°	215.2	38.1
50°-60°	132.4	23.4
60°-70°	20.2	3.6
70°-80°	3.2	0.6
80°-90°	1.6	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°	40.3	7.1
0°-40°	192.4	34.1
0°-60°	540.0	95.6
0°-90°	565.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	565.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	23	23	21	20	19	2
15°	36	22	15	14	14	13
25°	396	28	9	10	11	244
35°	1979	43	5	8	10	1188
45°	2044	26	3	8	10	1549
55°	1310	6	2	7	10	1115
65°	114	0	2	7	10	206
75°	1	0	2	5	8	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1344930

CATALOG NUMBER: P3A13R309030DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9
2.5°	22.4	22.4	22.8	22.8	22.4	22.8	22.8	22.8	21.9	21.4	20.5
5°	23.3	23.3	23.3	23.8	23.3	23.3	22.8	22.4	21.4	20.0	19.5
7.5°	24.3	24.3	23.8	24.3	23.8	23.8	22.8	21.9	20.5	19.0	18.1
10°	25.2	25.2	24.7	24.7	24.3	24.3	22.4	20.9	18.6	17.1	16.7
12.5°	28.1	28.1	27.6	27.1	26.2	25.7	21.9	19.5	16.7	15.2	14.8
15°	36.2	35.7	34.7	33.3	30.9	30.5	21.9	18.1	15.2	13.8	13.8
17.5°	49.5	49.0	47.6	43.8	39.5	38.1	21.9	16.2	13.3	12.4	12.4
20°	88.5	84.7	77.6	68.1	58.1	52.8	23.3	14.3	11.4	10.9	11.4
21°	115.7	111.8	102.8	87.1	69.5	63.8	24.3	13.8	10.9	10.5	11.4
22°	157.5	153.3	134.7	113.3	88.0	78.1	24.7	12.9	10.0	10.0	10.9
23°	219.9	212.7	181.3	147.1	109.9	95.7	25.7	12.4	9.5	10.0	10.5
24°	287.9	281.8	246.1	194.7	140.4	119.9	26.7	11.9	9.0	9.0	10.0
25°	396.5	389.3	326.0	245.6	178.0	144.2	28.1	10.9	8.6	8.6	10.0
26°	536.9	504.0	419.8	316.5	219.4	180.9	29.5	10.5	8.1	8.6	9.5
27°	670.1	643.0	548.3	406.0	271.3	222.3	31.4	10.0	7.6	8.1	9.5
28°	845.3	807.2	687.7	513.5	341.7	268.9	33.3	9.5	7.1	8.1	9.0
29°	1041.3	988.0	843.8	634.4	421.2	321.3	35.2	9.0	6.7	7.6	9.0
30°	1206.0	1156.0	1011.8	777.7	512.6	390.3	37.1	8.6	6.2	7.6	9.0
31°	1399.2	1323.6	1148.9	899.0	591.1	459.3	39.0	7.6	5.7	7.1	8.6
32°	1555.8	1503.0	1317.4	1036.1	694.4	535.4	40.5	7.1	5.7	7.1	8.6
33°	1707.2	1636.3	1456.8	1167.5	787.7	613.5	41.9	6.7	5.2	6.7	8.6
34°	1851.9	1786.6	1588.7	1273.6	875.7	687.7	42.8	5.7	5.2	6.7	8.1
35°	1979.4	1903.7	1704.8	1377.3	966.1	755.3	42.8	5.2	4.8	6.2	8.1
36°	2062.2	2008.0	1805.7	1479.7	1048.0	819.6	42.8	4.8	4.3	6.2	7.6
37°	2133.1	2069.8	1886.6	1558.2	1108.4	871.0	42.8	4.3	4.3	6.2	7.6
38°	2162.2	2107.9	1942.3	1627.7	1165.1	923.3	42.4	3.8	3.8	5.7	7.6
39°	2173.6	2125.0	1984.2	1677.7	1207.0	958.5	41.4	3.3	3.8	5.7	7.6
40°	2158.8	2122.2	2005.6	1710.0	1240.3	984.2	40.0	2.9	3.3	5.7	7.6
42.5°	2097.9	2073.6	2000.8	1742.4	1268.8	1003.3	34.7	1.9	3.3	5.2	7.6
45°	2043.7	2017.0	1952.7	1708.6	1231.7	965.7	26.2	1.0	3.3	5.2	7.6
47.5°	1938.5	1921.8	1871.4	1622.5	1150.3	881.0	18.6	0.5	2.9	4.8	7.1
50°	1727.6	1711.9	1645.3	1408.8	989.5	744.8	13.3	0.5	2.4	4.8	7.1
52.5°	1538.7	1522.0	1426.4	1171.3	760.1	545.9	8.6	0.5	2.4	4.8	7.1
55°	1310.2	1281.2	1155.6	889.0	538.8	366.0	6.2	0.5	2.4	4.3	7.1
57.5°	969.9	927.6	815.3	606.3	310.3	198.5	3.3	0.5	2.4	4.3	7.1
60°	659.6	634.4	510.2	319.8	132.3	83.8	1.4	0.5	2.4	4.3	6.7
62.5°	399.8	367.9	256.5	136.1	57.1	38.1	0.0	1.0	2.4	4.3	6.7
65°	113.7	100.9	67.1	30.9	16.2	12.4	0.0	1.0	2.4	4.3	6.7
67.5°	3.8	3.8	3.8	3.3	2.4	2.4	0.5	1.0	2.4	4.3	6.2
70°	1.4	1.4	1.4	1.0	1.0	0.5	0.5	1.0	2.4	3.8	6.2
72.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	1.9	3.3	5.7
75°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.4	1.9	3.3	4.8
77.5°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.4	1.9	2.9	4.8
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.4	1.9	2.9	3.8



TEST NUMBER: P1344930

CATALOG NUMBER: P3A13R309030DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	1.4	1.9	1.9	2.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.9	1.4	1.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.4	1.4	1.0
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: P1344930

CATALOG NUMBER: P3A13R309030DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	21.9	21.9
2.5°	20.5	20.5
5°	19.0	19.0
7.5°	17.6	17.6
10°	16.2	16.2
12.5°	15.2	15.2
15°	13.8	14.3
17.5°	12.9	13.3
20°	12.4	12.9
21°	12.4	12.9
22°	11.9	12.4
23°	11.9	12.4
24°	11.4	11.9
25°	10.9	11.4
26°	10.9	11.4
27°	10.9	11.4
28°	10.5	11.4
29°	10.5	10.9
30°	10.5	10.9
31°	10.0	10.9
32°	10.0	10.9
33°	10.0	10.5
34°	9.5	10.5
35°	9.5	10.5
36°	9.5	10.5
37°	9.5	10.0
38°	9.5	10.5
39°	9.5	10.0
40°	9.5	10.0
42.5°	9.5	10.0
45°	9.5	10.0
47.5°	9.5	10.5
50°	9.5	10.5
52.5°	9.5	10.5
55°	9.5	10.5
57.5°	9.5	10.0
60°	9.5	10.0
62.5°	9.0	10.0
65°	9.0	9.5
67.5°	9.0	9.5
70°	8.6	9.0
72.5°	8.1	8.6
75°	7.1	8.1
77.5°	6.7	7.1
80°	5.7	6.2

TEST NUMBER: P1344930

CATALOG NUMBER: P3A13R309030DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.8	4.8
85°	3.3	3.8
87.5°	1.9	1.9
90°	0.0	0.0

(END OF REPORT)