

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: P1345010

Luminaire Tested: P3A13R309730DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345010
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: P3A13R309730DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

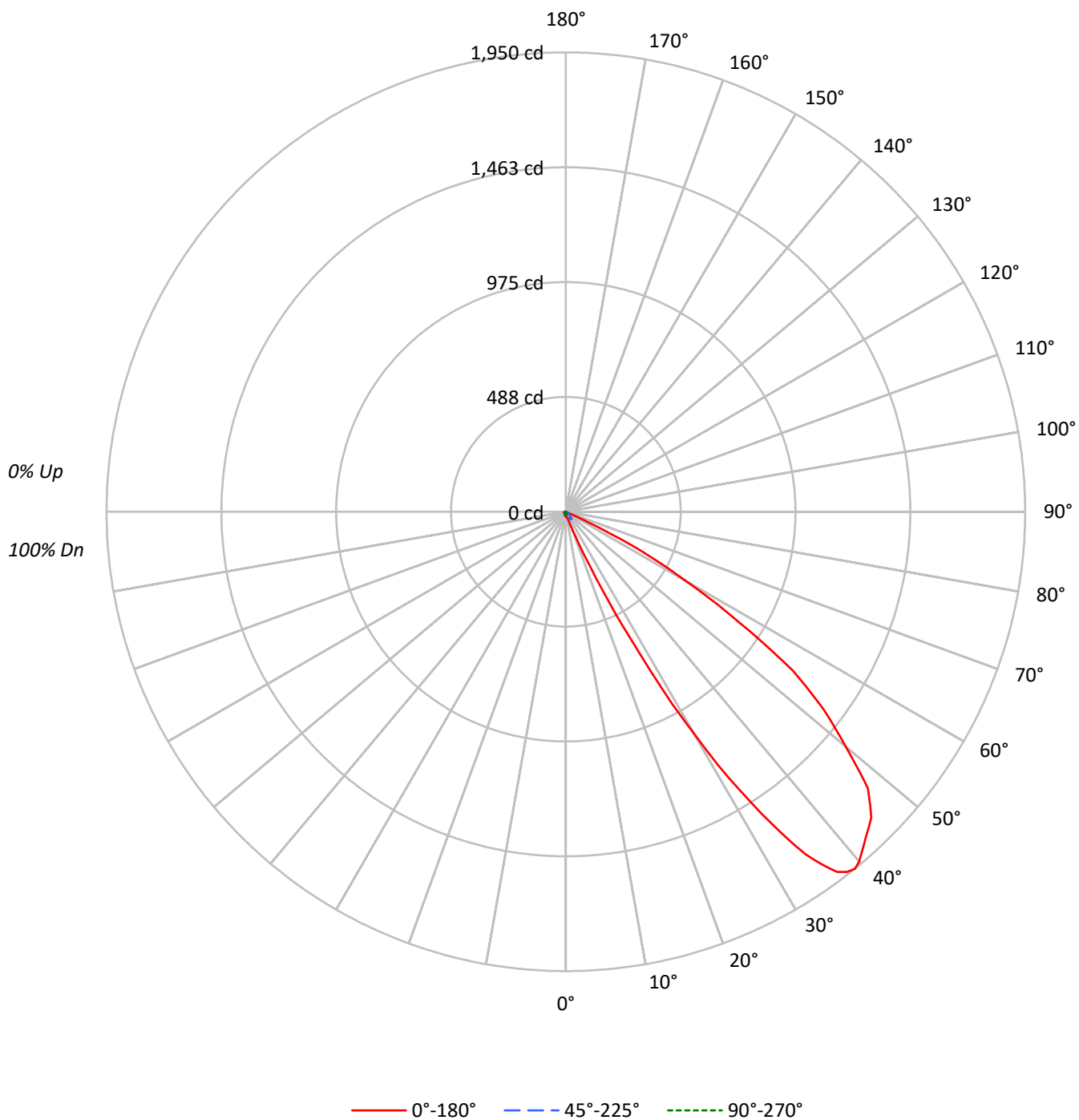
Lumens per Lamp: N/A
Luminaire Lumens: 507.0 lumens
Efficiency: N/A
Efficacy: 34.7 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	108	104	100	97	100	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48
7	62	48	38	32	60	47	38	32	45	37	31		44	36	31		42
8	56	42	33	27	55	41	33	27	40	32	26		39	32	26		37
9	52	37	29	23	50	37	28	23	36	28	22		34	27	22		33
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4298	4298	4298	4298	4298
5°	4600	4512	4226	3852	3764
10°	5032	4476	3718	3318	3229
15°	7378	4450	3110	2815	2906
20°	18528	4877	2380	2380	2684
25°	86086	6097	1863	2178	2468
30°	274017	8432	1418	2051	2481
35°	475475	10279	1151	1954	2516
40°	554525	10276	859	1947	2576
45°	568710	7288	930	2109	2791
50°	528870	4094	716	2183	3207
55°	449475	2141	803	2447	3594
60°	259584	570	921	2631	3947
65°	52976	0	1090	3113	4410
70°	833	256	1346	3590	5193
75°	763	339	1440	3643	6185
80°	505	505	2147	4293	7072
85°	0	1006	4277	4277	8554

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 568710 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.8	0.4
10°-20°	5.1	1.0
20°-30°	29.2	5.8
30°-40°	136.6	26.9
40°-50°	193.1	38.1
50°-60°	118.8	23.4
60°-70°	18.1	3.6
70°-80°	2.9	0.6
80°-90°	1.4	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°	36.1	7.1
0°-40°	172.7	34.1
0°-60°	484.6	95.6
0°-90°	507.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	507.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	20	20	20	20	20	
5°	21	20	19	18	17	2
15°	32	20	14	12	13	12
25°	356	25	8	9	10	219
35°	1776	38	4	7	9	1066
45°	1834	24	3	7	9	1390
55°	1176	6	2	6	9	1000
65°	102	0	2	6	8	185
75°	1	0	2	4	7	1
85°	0	0	2	2	3	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
2.5°	20.1	20.1	20.5	20.5	20.1	20.5	20.5	20.5	19.6	19.2	18.4
5°	20.9	20.9	20.9	21.4	20.9	20.9	20.5	20.1	19.2	17.9	17.5
7.5°	21.8	21.8	21.4	21.8	21.4	21.4	20.5	19.6	18.4	17.1	16.2
10°	22.6	22.6	22.2	22.2	21.8	21.8	20.1	18.8	16.7	15.4	14.9
12.5°	25.2	25.2	24.8	24.3	23.5	23.1	19.6	17.5	14.9	13.7	13.2
15°	32.5	32.0	31.2	29.9	27.8	27.3	19.6	16.2	13.7	12.4	12.4
17.5°	44.4	44.0	42.7	39.3	35.4	34.2	19.6	14.5	12.0	11.1	11.1
20°	79.4	76.0	69.6	61.1	52.1	47.4	20.9	12.8	10.2	9.8	10.2
21°	103.8	100.4	92.2	78.2	62.4	57.2	21.8	12.4	9.8	9.4	10.2
22°	141.4	137.5	120.9	101.6	79.0	70.0	22.2	11.5	9.0	9.0	9.8
23°	197.3	190.9	162.7	132.0	98.7	85.8	23.1	11.1	8.5	9.0	9.4
24°	258.4	252.8	220.8	174.7	126.0	107.6	23.9	10.7	8.1	8.1	9.0
25°	355.8	349.3	292.5	220.4	159.7	129.4	25.2	9.8	7.7	7.7	9.0
26°	481.7	452.3	376.7	284.0	196.9	162.3	26.5	9.4	7.3	7.7	8.5
27°	601.3	577.0	492.0	364.3	243.4	199.4	28.2	9.0	6.8	7.3	8.5
28°	758.5	724.3	617.1	460.8	306.6	241.3	29.9	8.5	6.4	7.3	8.1
29°	934.4	886.6	757.2	569.3	378.0	288.3	31.6	8.1	6.0	6.8	8.1
30°	1082.2	1037.4	908.0	697.8	460.0	350.2	33.3	7.7	5.6	6.8	8.1
31°	1255.6	1187.7	1031.0	806.7	530.4	412.1	35.0	6.8	5.1	6.4	7.7
32°	1396.1	1348.7	1182.1	929.7	623.1	480.5	36.3	6.4	5.1	6.4	7.7
33°	1531.9	1468.3	1307.3	1047.6	706.8	550.5	37.6	6.0	4.7	6.0	7.7
34°	1661.8	1603.2	1425.6	1142.9	785.8	617.1	38.4	5.1	4.7	6.0	7.3
35°	1776.2	1708.3	1529.8	1236.0	867.0	677.8	38.4	4.7	4.3	5.6	7.3
36°	1850.5	1801.8	1620.3	1327.8	940.4	735.4	38.4	4.3	3.8	5.6	6.8
37°	1914.2	1857.4	1692.9	1398.2	994.7	781.5	38.4	3.8	3.8	5.6	6.8
38°	1940.2	1891.5	1742.9	1460.6	1045.5	828.5	38.0	3.4	3.4	5.1	6.8
39°	1950.5	1906.9	1780.5	1505.4	1083.1	860.1	37.2	3.0	3.4	5.1	6.8
40°	1937.2	1904.3	1799.7	1534.5	1113.0	883.2	35.9	2.6	3.0	5.1	6.8
42.5°	1882.5	1860.8	1795.4	1563.5	1138.6	900.3	31.2	1.7	3.0	4.7	6.8
45°	1833.9	1809.9	1752.3	1533.2	1105.3	866.5	23.5	0.9	3.0	4.7	6.8
47.5°	1739.5	1724.5	1679.3	1455.9	1032.2	790.5	16.7	0.4	2.6	4.3	6.4
50°	1550.3	1536.2	1476.4	1264.1	887.9	668.4	12.0	0.4	2.1	4.3	6.4
52.5°	1380.7	1365.8	1279.9	1051.0	682.0	489.9	7.7	0.4	2.1	4.3	6.4
55°	1175.7	1149.7	1036.9	797.8	483.4	328.4	5.6	0.4	2.1	3.8	6.4
57.5°	870.4	832.4	731.6	544.1	278.5	178.1	3.0	0.4	2.1	3.8	6.4
60°	591.9	569.3	457.8	287.0	118.7	75.2	1.3	0.4	2.1	3.8	6.0
62.5°	358.7	330.1	230.2	122.1	51.2	34.2	0.0	0.9	2.1	3.8	6.0
65°	102.1	90.5	60.2	27.8	14.5	11.1	0.0	0.9	2.1	3.8	6.0
67.5°	3.4	3.4	3.4	3.0	2.1	2.1	0.4	0.9	2.1	3.8	5.6
70°	1.3	1.3	1.3	0.9	0.9	0.4	0.4	0.9	2.1	3.4	5.6
72.5°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.9	1.7	3.0	5.1
75°	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	1.7	3.0	4.3
77.5°	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	1.7	2.6	4.3
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.7	2.6	3.4



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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	1.7	1.7	2.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.7	1.3	1.7
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

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	19.6	19.6
2.5°	18.4	18.4
5°	17.1	17.1
7.5°	15.8	15.8
10°	14.5	14.5
12.5°	13.7	13.7
15°	12.4	12.8
17.5°	11.5	12.0
20°	11.1	11.5
21°	11.1	11.5
22°	10.7	11.1
23°	10.7	11.1
24°	10.2	10.7
25°	9.8	10.2
26°	9.8	10.2
27°	9.8	10.2
28°	9.4	10.2
29°	9.4	9.8
30°	9.4	9.8
31°	9.0	9.8
32°	9.0	9.8
33°	9.0	9.4
34°	8.5	9.4
35°	8.5	9.4
36°	8.5	9.4
37°	8.5	9.0
38°	8.5	9.4
39°	8.5	9.0
40°	8.5	9.0
42.5°	8.5	9.0
45°	8.5	9.0
47.5°	8.5	9.4
50°	8.5	9.4
52.5°	8.5	9.4
55°	8.5	9.4
57.5°	8.5	9.0
60°	8.5	9.0
62.5°	8.1	9.0
65°	8.1	8.5
67.5°	8.1	8.5
70°	7.7	8.1
72.5°	7.3	7.7
75°	6.4	7.3
77.5°	6.0	6.4
80°	5.1	5.6



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.3	4.3
85°	3.0	3.4
87.5°	1.7	1.7
90°	0.0	0.0

(END OF REPORT)