

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: P1345042

Luminaire Tested: P3A13R309740DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345042
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: P3A13R309740DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

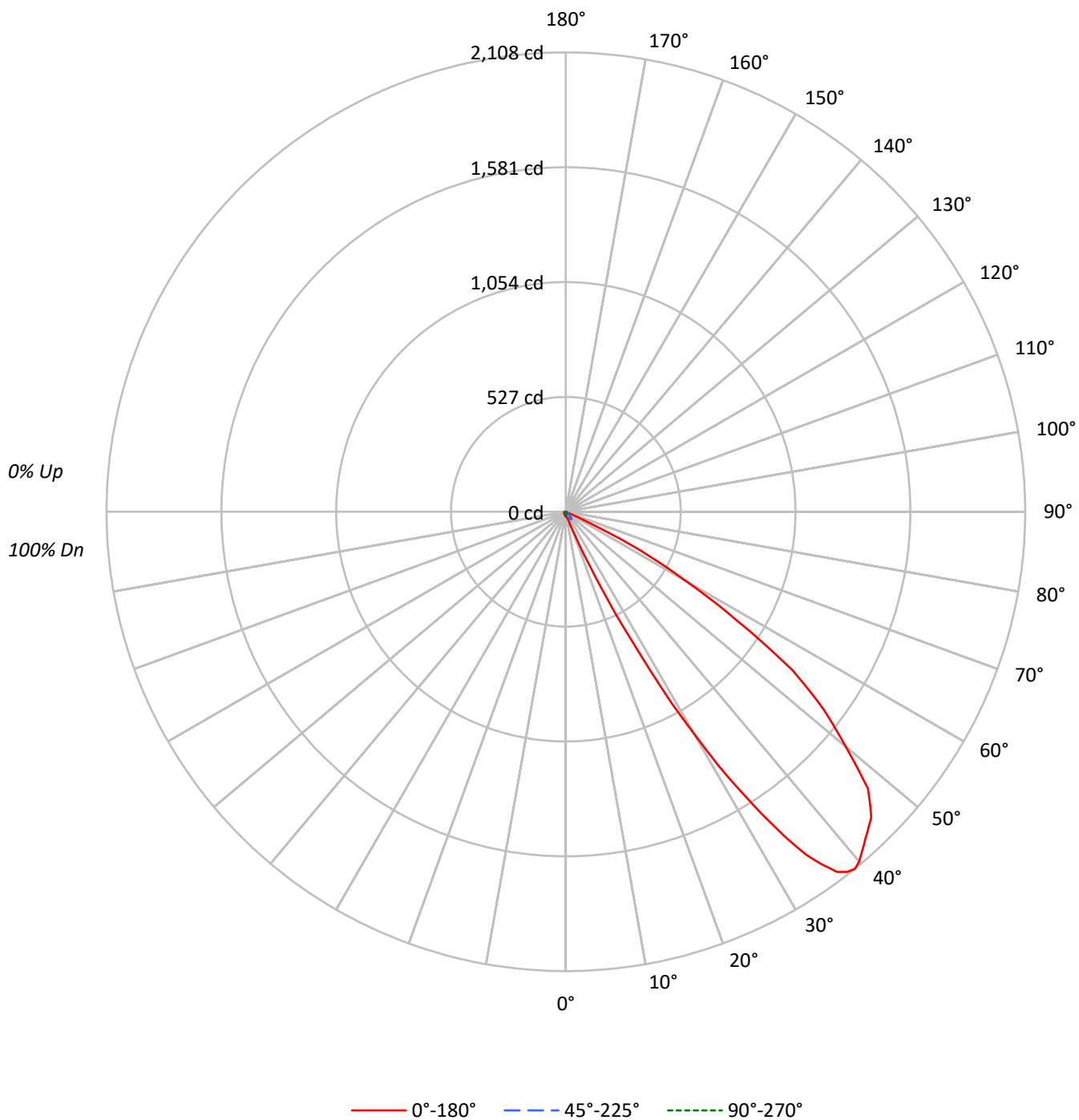
Lumens per Lamp: N/A
Luminaire Lumens: 548.0 lumens
Efficiency: N/A
Efficacy: 37.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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				0
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°	4649	4649	4649	4649	4649
5°	4975	4887	4578	4160	4072
10°	5455	4832	4008	3607	3496
15°	7968	4813	3360	3042	3133
20°	20045	5274	2590	2590	2917
25°	93030	6581	2008	2347	2686
30°	296172	9115	1519	2228	2684
35°	513916	11109	1231	2088	2730
40°	599380	11107	916	2118	2777
45°	614699	7877	992	2295	3008
50°	571649	4401	785	2354	3480
55°	485832	2294	879	2638	3900
60°	280592	614	1009	2851	4254
65°	57231	0	1193	3373	4774
70°	898	321	1475	3847	5642
75°	763	424	1525	3897	6608
80°	631	631	2273	4672	7577
85°	0	1258	4529	4529	9309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 614699 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.4
10°-20°	5.5	1.0
20°-30°	31.6	5.8
30°-40°	147.6	26.9
40°-50°	208.7	38.1
50°-60°	128.4	23.4
60°-70°	19.6	3.6
70°-80°	3.1	0.6
80°-90°	1.5	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°	39.0	7.1
0°-40°	186.6	34.1
0°-60°	523.8	95.6
0°-90°	548.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	548.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	21	21	21	21	21	
5°	23	22	21	19	18	2
15°	35	21	15	13	14	12
25°	384	27	8	10	11	237
35°	1920	42	5	8	10	1152
45°	1982	25	3	7	10	1503
55°	1271	6	2	7	10	1081
65°	110	0	2	6	9	200
75°	1	0	2	5	8	1
85°	0	0	2	2	4	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°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
2.5°	21.7	21.7	22.2	22.2	21.7	22.2	22.2	22.2	21.2	20.8	19.8
5°	22.6	22.6	22.6	23.1	22.6	22.6	22.2	21.7	20.8	19.4	18.9
7.5°	23.5	23.5	23.1	23.5	23.1	23.1	22.2	21.2	19.8	18.5	17.5
10°	24.5	24.5	24.0	24.0	23.5	23.5	21.7	20.3	18.0	16.6	16.2
12.5°	27.2	27.2	26.8	26.3	25.4	24.9	21.2	18.9	16.2	14.8	14.3
15°	35.1	34.6	33.7	32.3	30.0	29.5	21.2	17.5	14.8	13.4	13.4
17.5°	48.0	47.5	46.2	42.5	38.3	36.9	21.2	15.7	12.9	12.0	12.0
20°	85.9	82.2	75.2	66.0	56.3	51.2	22.6	13.8	11.1	10.6	11.1
21°	112.2	108.5	99.7	84.5	67.4	61.9	23.5	13.4	10.6	10.2	11.1
22°	152.8	148.6	130.6	109.9	85.4	75.7	24.0	12.5	9.7	9.7	10.6
23°	213.3	206.3	175.9	142.6	106.6	92.8	24.9	12.0	9.2	9.7	10.2
24°	279.3	273.3	238.7	188.8	136.2	116.3	25.9	11.5	8.8	8.8	9.7
25°	384.5	377.6	316.2	238.2	172.6	139.9	27.2	10.6	8.3	8.3	9.7
26°	520.7	488.8	407.1	307.0	212.8	175.4	28.6	10.2	7.8	8.3	9.2
27°	649.9	623.6	531.8	393.8	263.1	215.6	30.5	9.7	7.4	7.8	9.2
28°	819.8	782.9	667.0	498.1	331.4	260.8	32.3	9.2	6.9	7.8	8.8
29°	1010.0	958.3	818.4	615.3	408.5	311.6	34.2	8.8	6.5	7.4	8.8
30°	1169.7	1121.3	981.4	754.3	497.2	378.5	36.0	8.3	6.0	7.4	8.8
31°	1357.1	1283.7	1114.3	872.0	573.3	445.5	37.9	7.4	5.5	6.9	8.3
32°	1509.0	1457.8	1277.7	1004.9	673.5	519.3	39.2	6.9	5.5	6.9	8.3
33°	1655.8	1587.0	1413.0	1132.3	764.0	595.0	40.6	6.5	5.1	6.5	8.3
34°	1796.1	1732.9	1540.9	1235.3	849.4	667.0	41.5	5.5	5.1	6.5	7.8
35°	1919.8	1846.4	1653.5	1335.9	937.1	732.6	41.5	5.1	4.6	6.0	7.8
36°	2000.2	1947.5	1751.4	1435.2	1016.5	794.9	41.5	4.6	4.2	6.0	7.4
37°	2068.9	2007.6	1829.8	1511.3	1075.1	844.8	41.5	4.2	4.2	6.0	7.4
38°	2097.1	2044.5	1883.8	1578.7	1130.0	895.5	41.1	3.7	3.7	5.5	7.4
39°	2108.2	2061.1	1924.5	1627.2	1170.6	929.7	40.2	3.2	3.7	5.5	7.4
40°	2093.9	2058.3	1945.2	1658.6	1203.0	954.6	38.8	2.8	3.2	5.5	7.4
42.5°	2034.8	2011.2	1940.6	1690.0	1230.7	973.1	33.7	1.8	3.2	5.1	7.4
45°	1982.2	1956.3	1894.0	1657.2	1194.7	936.6	25.4	0.9	3.2	5.1	7.4
47.5°	1880.1	1864.0	1815.1	1573.6	1115.7	854.4	18.0	0.5	2.8	4.6	6.9
50°	1675.7	1660.4	1595.8	1366.4	959.7	722.4	12.9	0.5	2.3	4.6	6.9
52.5°	1492.4	1476.2	1383.5	1136.0	737.2	529.5	8.3	0.5	2.3	4.6	6.9
55°	1270.8	1242.7	1120.8	862.3	522.5	355.0	6.0	0.5	2.3	4.2	6.9
57.5°	940.8	899.7	790.7	588.1	301.0	192.5	3.2	0.5	2.3	4.2	6.9
60°	639.8	615.3	494.8	310.2	128.3	81.2	1.4	0.5	2.3	4.2	6.5
62.5°	387.8	356.8	248.8	132.0	55.4	36.9	0.0	0.9	2.3	4.2	6.5
65°	110.3	97.9	65.1	30.0	15.7	12.0	0.0	0.9	2.3	4.2	6.5
67.5°	3.7	3.7	3.7	3.2	2.3	2.3	0.5	0.9	2.3	4.2	6.0
70°	1.4	1.4	1.4	0.9	0.9	0.5	0.5	0.9	2.3	3.7	6.0
72.5°	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.9	1.8	3.2	5.5
75°	0.9	0.9	0.9	0.5	0.5	0.5	0.5	1.4	1.8	3.2	4.6
77.5°	0.9	0.9	0.9	0.5	0.5	0.5	0.5	1.4	1.8	2.8	4.6
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.4	1.8	2.8	3.7



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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	1.8	1.8	2.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.8	1.4	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.4	1.4	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°	21.2	21.2
2.5°	19.8	19.8
5°	18.5	18.5
7.5°	17.1	17.1
10°	15.7	15.7
12.5°	14.8	14.8
15°	13.4	13.8
17.5°	12.5	12.9
20°	12.0	12.5
21°	12.0	12.5
22°	11.5	12.0
23°	11.5	12.0
24°	11.1	11.5
25°	10.6	11.1
26°	10.6	11.1
27°	10.6	11.1
28°	10.2	11.1
29°	10.2	10.6
30°	10.2	10.6
31°	9.7	10.6
32°	9.7	10.6
33°	9.7	10.2
34°	9.2	10.2
35°	9.2	10.2
36°	9.2	10.2
37°	9.2	9.7
38°	9.2	10.2
39°	9.2	9.7
40°	9.2	9.7
42.5°	9.2	9.7
45°	9.2	9.7
47.5°	9.2	10.2
50°	9.2	10.2
52.5°	9.2	10.2
55°	9.2	10.2
57.5°	9.2	9.7
60°	9.2	9.7
62.5°	8.8	9.7
65°	8.8	9.2
67.5°	8.8	9.2
70°	8.3	8.8
72.5°	7.8	8.3
75°	6.9	7.8
77.5°	6.5	6.9
80°	5.5	6.0

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.6	4.6
85°	3.2	3.7
87.5°	1.8	1.8
90°	0.0	0.0

(END OF REPORT)