

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: P1344946

Luminaire Tested: P3A13R309035DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344946
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: P3A13R309035DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

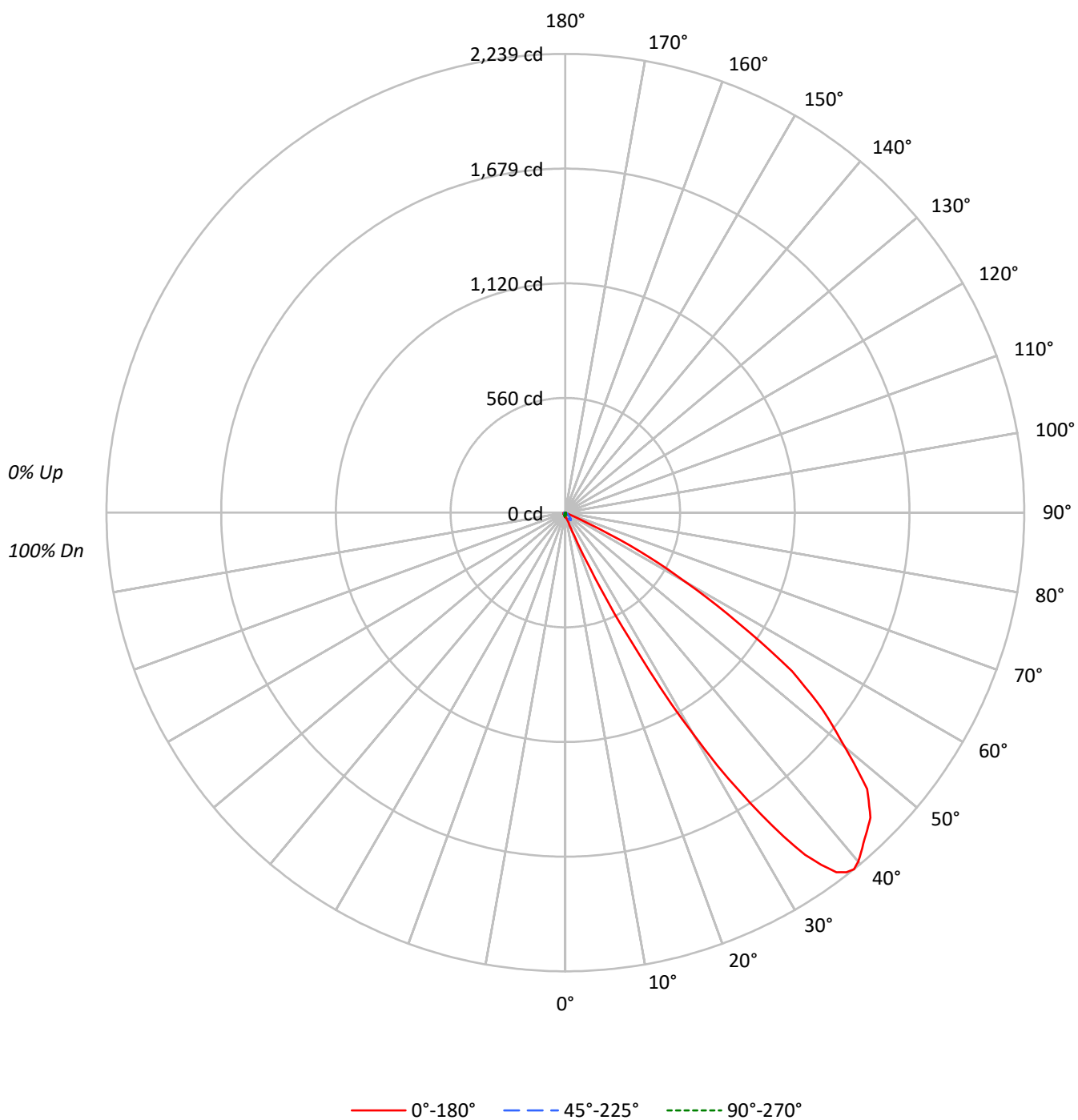
Lumens per Lamp: N/A
Luminaire Lumens: 582.0 lumens
Efficiency: N/A
Efficacy: 39.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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°	4956	4956	4956	4956	4956
5°	5283	5173	4865	4424	4314
10°	5789	5121	4253	3830	3718
15°	8468	5131	3564	3224	3337
20°	21282	5600	2754	2754	3080
25°	98812	6992	2129	2492	2855
30°	314555	9672	1621	2355	2861
35°	545825	11805	1312	2222	2891
40°	636564	11794	973	2233	2948
45°	652812	8373	1054	2419	3194
50°	607093	4674	853	2524	3684
55°	515996	2447	956	2829	4129
60°	298002	658	1096	3026	4517
65°	60811	0	1297	3580	5085
70°	962	321	1603	4103	5963
75°	847	424	1694	4151	7032
80°	631	631	2526	4925	8082
85°	0	1258	5032	5032	9812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 652812 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.4
10°-20°	5.9	1.0
20°-30°	33.6	5.8
30°-40°	156.8	26.9
40°-50°	221.7	38.1
50°-60°	136.4	23.4
60°-70°	20.8	3.6
70°-80°	3.3	0.6
80°-90°	1.7	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°	41.5	7.1
0°-40°	198.2	34.1
0°-60°	556.3	95.6
0°-90°	582.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	582.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	23	23	23	23	23	
5°	24	24	22	20	20	2
15°	37	23	16	14	15	13
25°	408	29	9	10	12	251
35°	2039	44	5	8	11	1224
45°	2105	27	3	8	10	1596
55°	1350	6	2	7	11	1148
65°	117	0	2	7	10	212
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°	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6
2.5°	23.0	23.0	23.5	23.5	23.0	23.5	23.5	23.5	22.6	22.1	21.1
5°	24.0	24.0	24.0	24.5	24.0	24.0	23.5	23.0	22.1	20.6	20.1
7.5°	25.0	25.0	24.5	25.0	24.5	24.5	23.5	22.6	21.1	19.6	18.6
10°	26.0	26.0	25.5	25.5	25.0	25.0	23.0	21.6	19.1	17.6	17.2
12.5°	28.9	28.9	28.4	27.9	27.0	26.5	22.6	20.1	17.2	15.7	15.2
15°	37.3	36.8	35.8	34.3	31.9	31.4	22.6	18.6	15.7	14.2	14.2
17.5°	51.0	50.5	49.0	45.1	40.7	39.2	22.6	16.7	13.7	12.7	12.7
20°	91.2	87.3	79.9	70.1	59.8	54.4	24.0	14.7	11.8	11.3	11.8
21°	119.1	115.2	105.9	89.7	71.6	65.7	25.0	14.2	11.3	10.8	11.8
22°	162.3	157.9	138.7	116.7	90.7	80.4	25.5	13.2	10.3	10.3	11.3
23°	226.5	219.1	186.8	151.5	113.2	98.5	26.5	12.7	9.8	10.3	10.8
24°	296.6	290.2	253.5	200.5	144.6	123.5	27.5	12.3	9.3	9.3	10.3
25°	408.4	401.0	335.8	253.0	183.4	148.5	28.9	11.3	8.8	8.8	10.3
26°	553.0	519.2	432.4	326.0	226.0	186.3	30.4	10.8	8.3	8.8	9.8
27°	690.3	662.3	564.8	418.2	279.4	228.9	32.4	10.3	7.8	8.3	9.8
28°	870.7	831.5	708.4	529.0	352.0	277.0	34.3	9.8	7.4	8.3	9.3
29°	1072.7	1017.8	869.2	653.5	433.9	330.9	36.3	9.3	6.9	7.8	9.3
30°	1242.3	1190.8	1042.3	801.1	528.0	402.0	38.2	8.8	6.4	7.8	9.3
31°	1441.3	1363.4	1183.5	926.1	608.9	473.1	40.2	7.8	5.9	7.4	8.8
32°	1602.6	1548.2	1357.0	1067.3	715.3	551.5	41.7	7.4	5.9	7.4	8.8
33°	1758.5	1685.5	1500.7	1202.6	811.4	631.9	43.1	6.9	5.4	6.9	8.8
34°	1907.6	1840.4	1636.5	1311.9	902.1	708.4	44.1	5.9	5.4	6.9	8.3
35°	2039.0	1961.0	1756.1	1418.8	995.2	778.0	44.1	5.4	4.9	6.4	8.3
36°	2124.3	2068.4	1860.0	1524.2	1079.5	844.2	44.1	4.9	4.4	6.4	7.8
37°	2197.3	2132.1	1943.4	1605.1	1141.8	897.2	44.1	4.4	4.4	6.4	7.8
38°	2227.2	2171.3	2000.7	1676.7	1200.1	951.1	43.6	3.9	3.9	5.9	7.8
39°	2239.0	2189.0	2043.9	1728.1	1243.3	987.4	42.7	3.4	3.9	5.9	7.8
40°	2223.8	2186.0	2065.9	1761.5	1277.6	1013.8	41.2	2.9	3.4	5.9	7.8
42.5°	2161.0	2136.0	2061.0	1794.8	1307.0	1033.5	35.8	2.0	3.4	5.4	7.8
45°	2105.1	2077.7	2011.5	1760.0	1268.8	994.7	27.0	1.0	3.4	5.4	7.8
47.5°	1996.8	1979.6	1927.7	1671.3	1184.9	907.5	19.1	0.5	2.9	4.9	7.4
50°	1779.6	1763.4	1694.8	1451.1	1019.2	767.2	13.7	0.5	2.5	4.9	7.4
52.5°	1585.0	1567.8	1469.3	1206.5	782.9	562.3	8.8	0.5	2.5	4.9	7.4
55°	1349.7	1319.8	1190.3	915.8	555.0	377.0	6.4	0.5	2.5	4.4	7.4
57.5°	999.1	955.5	839.8	624.6	319.6	204.4	3.4	0.5	2.5	4.4	7.4
60°	679.5	653.5	525.6	329.4	136.3	86.3	1.5	0.5	2.5	4.4	6.9
62.5°	411.8	379.0	264.2	140.2	58.8	39.2	0.0	1.0	2.5	4.4	6.9
65°	117.2	103.9	69.1	31.9	16.7	12.7	0.0	1.0	2.5	4.4	6.9
67.5°	3.9	3.9	3.9	3.4	2.5	2.5	0.5	1.0	2.5	4.4	6.4
70°	1.5	1.5	1.5	1.0	1.0	0.5	0.5	1.0	2.5	3.9	6.4
72.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	2.0	3.4	5.9
75°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.0	3.4	4.9
77.5°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.0	2.9	4.9
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0	2.9	3.9



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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	1.5	2.0	2.0	2.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.0	1.5	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	1.5	1.5	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

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	22.6	22.6
2.5°	21.1	21.1
5°	19.6	19.6
7.5°	18.1	18.1
10°	16.7	16.7
12.5°	15.7	15.7
15°	14.2	14.7
17.5°	13.2	13.7
20°	12.7	13.2
21°	12.7	13.2
22°	12.3	12.7
23°	12.3	12.7
24°	11.8	12.3
25°	11.3	11.8
26°	11.3	11.8
27°	11.3	11.8
28°	10.8	11.8
29°	10.8	11.3
30°	10.8	11.3
31°	10.3	11.3
32°	10.3	11.3
33°	10.3	10.8
34°	9.8	10.8
35°	9.8	10.8
36°	9.8	10.8
37°	9.8	10.3
38°	9.8	10.8
39°	9.8	10.3
40°	9.8	10.3
42.5°	9.8	10.3
45°	9.8	10.3
47.5°	9.8	10.8
50°	9.8	10.8
52.5°	9.8	10.8
55°	9.8	10.8
57.5°	9.8	10.3
60°	9.8	10.3
62.5°	9.3	10.3
65°	9.3	9.8
67.5°	9.3	9.8
70°	8.8	9.3
72.5°	8.3	8.8
75°	7.4	8.3
77.5°	6.9	7.4
80°	5.9	6.4

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.9	4.9
85°	3.4	3.9
87.5°	2.0	2.0
90°	0.0	0.0

(END OF REPORT)