

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: P1344914

Luminaire Tested: P3A13R309030D2WDE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344914
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: P3A13R309030D2WDE010 E3A451WMH
Description: 3in Adjustable Dim to Warm LED luminaire with, R30 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

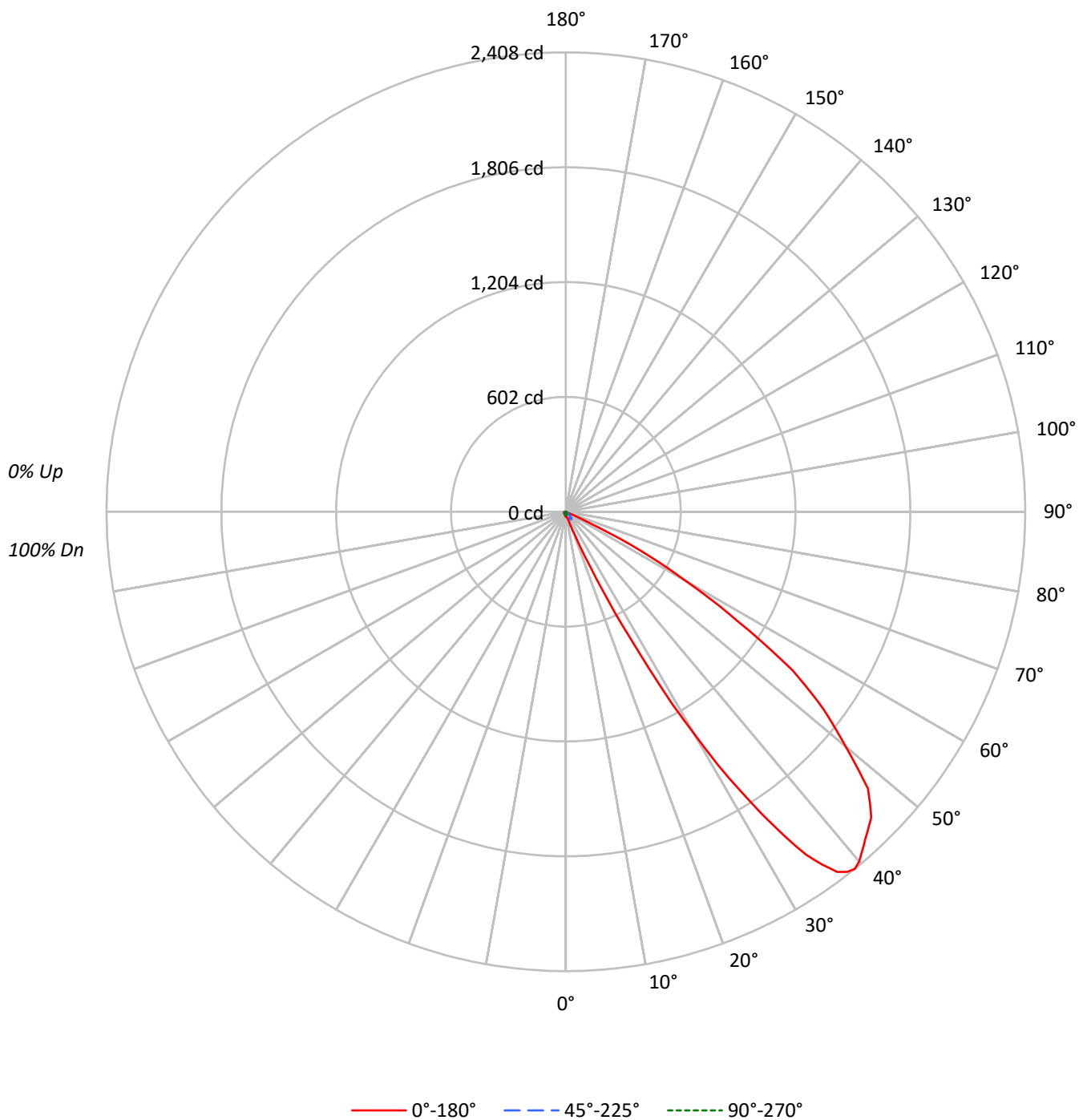
Lumens per Lamp: N/A
Luminaire Lumens: 626.0 lumens
Efficiency: N/A
Efficacy: 31.1 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.1
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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5329	5329	5329	5329	5329
5°	5679	5569	5217	4755	4644
10°	6212	5522	4587	4119	3986
15°	9103	5516	3837	3473	3587
20°	22892	6021	2964	2964	3314
25°	106288	7525	2299	2686	3073
30°	338331	10407	1747	2532	3064
35°	587076	12715	1419	2409	3105
40°	684683	12681	1059	2405	3177
45°	702181	8993	1147	2605	3442
50°	653011	5049	887	2695	3957
55°	554991	2638	994	3020	4435
60°	320544	702	1140	3245	4868
65°	65377	0	1349	3840	5448
70°	1026	321	1667	4424	6411
75°	932	424	1779	4490	7625
80°	631	631	2652	5304	8713
85°	0	1258	5284	5284	10567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 702181 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.2	0.4
10°-20°	6.3	1.0
20°-30°	36.1	5.8
30°-40°	168.6	26.9
40°-50°	238.4	38.1
50°-60°	146.7	23.4
60°-70°	22.3	3.6
70°-80°	3.5	0.6
80°-90°	1.8	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°	44.6	7.1
0°-40°	213.2	34.1
0°-60°	598.3	95.6
0°-90°	626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	626.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	24	24	24	24	24	
5°	26	25	24	22	21	3
15°	40	24	17	15	16	14
25°	439	31	10	11	13	270
35°	2193	48	5	9	12	1316
45°	2264	29	4	8	11	1717
55°	1452	7	3	8	12	1235
65°	126	0	3	7	10	228
75°	1	0	2	5	9	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°	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
2.5°	24.8	24.8	25.3	25.3	24.8	25.3	25.3	25.3	24.3	23.7	22.7
5°	25.8	25.8	25.8	26.4	25.8	25.8	25.3	24.8	23.7	22.1	21.6
7.5°	26.9	26.9	26.4	26.9	26.4	26.4	25.3	24.3	22.7	21.1	20.0
10°	27.9	27.9	27.4	27.4	26.9	26.9	24.8	23.2	20.6	19.0	18.5
12.5°	31.1	31.1	30.6	30.1	29.0	28.5	24.3	21.6	18.5	16.9	16.3
15°	40.1	39.5	38.5	36.9	34.3	33.7	24.3	20.0	16.9	15.3	15.3
17.5°	54.8	54.3	52.7	48.5	43.8	42.2	24.3	17.9	14.8	13.7	13.7
20°	98.1	93.9	86.0	75.4	64.3	58.5	25.8	15.8	12.7	12.1	12.7
21°	128.1	123.9	113.9	96.5	77.0	70.7	26.9	15.3	12.1	11.6	12.7
22°	174.5	169.8	149.2	125.5	97.6	86.5	27.4	14.2	11.1	11.1	12.1
23°	243.6	235.7	200.9	162.9	121.8	106.0	28.5	13.7	10.5	11.1	11.6
24°	319.0	312.2	272.6	215.7	155.6	132.9	29.5	13.2	10.0	10.0	11.1
25°	439.3	431.3	361.2	272.1	197.2	159.8	31.1	12.1	9.5	9.5	11.1
26°	594.8	558.4	465.1	350.7	243.1	200.4	32.7	11.6	9.0	9.5	10.5
27°	742.5	712.4	607.5	449.8	300.6	246.3	34.8	11.1	8.4	9.0	10.5
28°	936.5	894.3	762.0	569.0	378.6	297.9	36.9	10.5	7.9	9.0	10.0
29°	1153.8	1094.7	934.9	702.9	466.7	355.9	39.0	10.0	7.4	8.4	10.0
30°	1336.2	1280.9	1121.1	861.6	567.9	432.4	41.1	9.5	6.9	8.4	10.0
31°	1550.3	1466.5	1272.9	996.1	654.9	508.9	43.2	8.4	6.3	7.9	9.5
32°	1723.8	1665.3	1459.6	1148.0	769.4	593.2	44.8	7.9	6.3	7.9	9.5
33°	1891.5	1812.9	1614.1	1293.5	872.7	679.7	46.4	7.4	5.8	7.4	9.5
34°	2051.8	1979.5	1760.2	1411.1	970.3	762.0	47.5	6.3	5.8	7.4	9.0
35°	2193.1	2109.3	1888.8	1526.1	1070.5	836.9	47.5	5.8	5.3	6.9	9.0
36°	2284.9	2224.7	2000.6	1639.4	1161.1	908.0	47.5	5.3	4.7	6.9	8.4
37°	2363.4	2293.3	2090.3	1726.4	1228.1	965.0	47.5	4.7	4.7	6.9	8.4
38°	2395.6	2335.5	2152.0	1803.4	1290.9	1023.0	46.9	4.2	4.2	6.3	8.4
39°	2408.3	2354.5	2198.4	1858.8	1337.3	1062.0	45.9	3.7	4.2	6.3	8.4
40°	2391.9	2351.3	2222.1	1894.6	1374.2	1090.5	44.3	3.2	3.7	6.3	8.4
42.5°	2324.4	2297.5	2216.8	1930.5	1405.8	1111.6	38.5	2.1	3.7	5.8	8.4
45°	2264.3	2234.8	2163.6	1893.1	1364.7	1069.9	29.0	1.1	3.7	5.8	8.4
47.5°	2147.8	2129.3	2073.4	1797.6	1274.5	976.1	20.6	0.5	3.2	5.3	7.9
50°	1914.2	1896.8	1822.9	1560.9	1096.3	825.2	14.8	0.5	2.6	5.3	7.9
52.5°	1704.8	1686.4	1580.4	1297.7	842.1	604.8	9.5	0.5	2.6	5.3	7.9
55°	1451.7	1419.5	1280.3	985.0	596.9	405.5	6.9	0.5	2.6	4.7	7.9
57.5°	1074.7	1027.7	903.3	671.8	343.8	219.9	3.7	0.5	2.6	4.7	7.9
60°	730.9	702.9	565.3	354.4	146.6	92.8	1.6	0.5	2.6	4.7	7.4
62.5°	442.9	407.6	284.2	150.8	63.3	42.2	0.0	1.1	2.6	4.7	7.4
65°	126.0	111.8	74.4	34.3	17.9	13.7	0.0	1.1	2.6	4.7	7.4
67.5°	4.2	4.2	4.2	3.7	2.6	2.6	0.5	1.1	2.6	4.7	6.9
70°	1.6	1.6	1.6	1.1	1.1	0.5	0.5	1.1	2.6	4.2	6.9
72.5°	1.1	1.1	1.1	1.1	0.5	0.5	0.5	1.1	2.1	3.7	6.3
75°	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.6	2.1	3.7	5.3
77.5°	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.6	2.1	3.2	5.3
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.1	3.2	4.2



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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	1.6	2.1	2.1	3.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.6	2.1	1.6	2.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.6	1.6	1.6	1.1
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°	24.3	24.3
2.5°	22.7	22.7
5°	21.1	21.1
7.5°	19.5	19.5
10°	17.9	17.9
12.5°	16.9	16.9
15°	15.3	15.8
17.5°	14.2	14.8
20°	13.7	14.2
21°	13.7	14.2
22°	13.2	13.7
23°	13.2	13.7
24°	12.7	13.2
25°	12.1	12.7
26°	12.1	12.7
27°	12.1	12.7
28°	11.6	12.7
29°	11.6	12.1
30°	11.6	12.1
31°	11.1	12.1
32°	11.1	12.1
33°	11.1	11.6
34°	10.5	11.6
35°	10.5	11.6
36°	10.5	11.6
37°	10.5	11.1
38°	10.5	11.6
39°	10.5	11.1
40°	10.5	11.1
42.5°	10.5	11.1
45°	10.5	11.1
47.5°	10.5	11.6
50°	10.5	11.6
52.5°	10.5	11.6
55°	10.5	11.6
57.5°	10.5	11.1
60°	10.5	11.1
62.5°	10.0	11.1
65°	10.0	10.5
67.5°	10.0	10.5
70°	9.5	10.0
72.5°	9.0	9.5
75°	7.9	9.0
77.5°	7.4	7.9
80°	6.3	6.9

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	5.3	5.3
85°	3.7	4.2
87.5°	2.1	2.1
90°	0.0	0.0

(END OF REPORT)