

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: P1345357

Luminaire Tested: P3A13R30W2N902765DE010 E3A451WMH_5000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345357
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: P3A13R30W2N902765DE010 E3A451WMH_5000K
Description: 3in Adjustable Tunable White LED luminaire with, R30 optic, 5000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

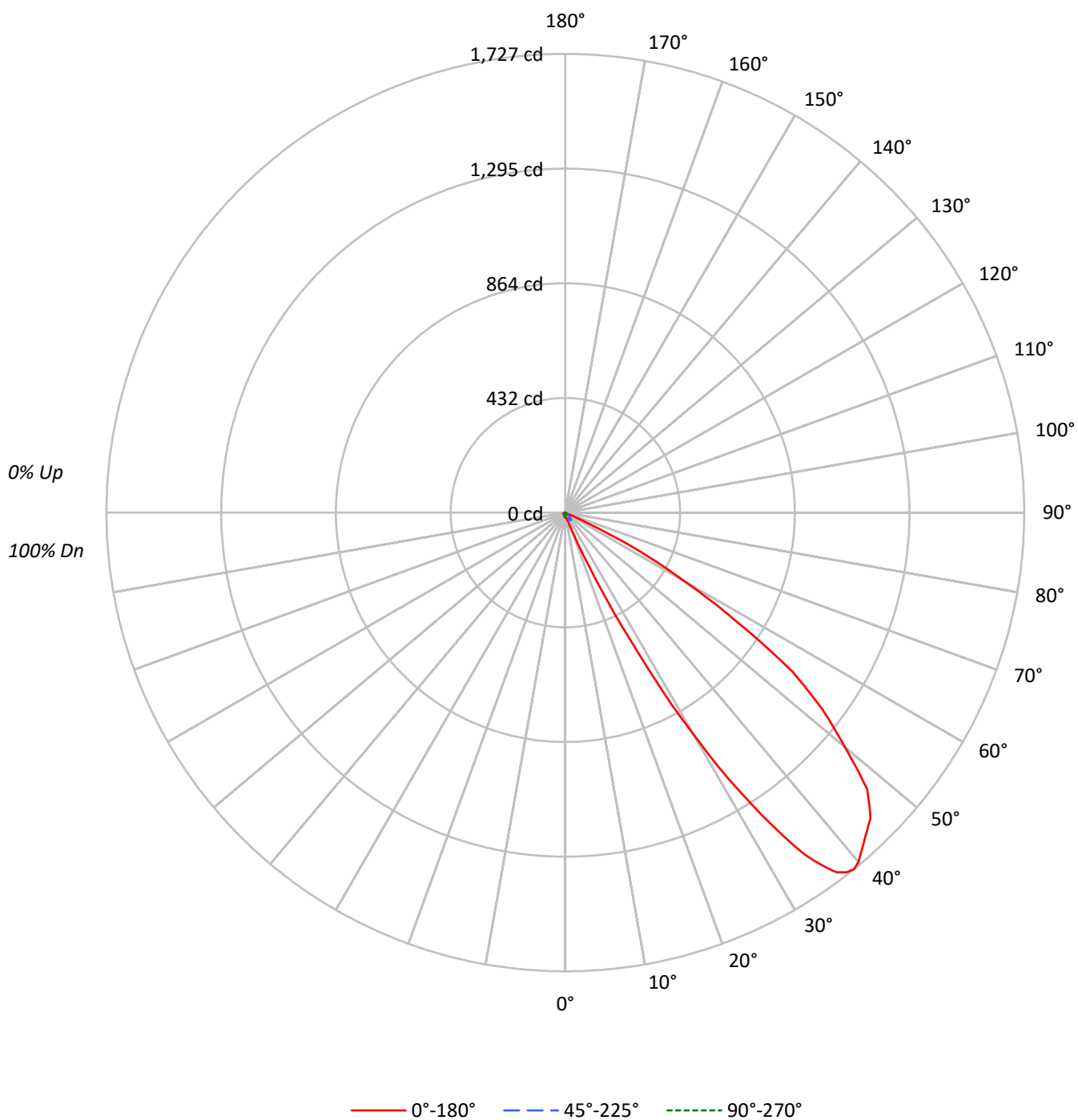
Lumens per Lamp: N/A
Luminaire Lumens: 449.0 lumens
Efficiency: N/A
Efficacy: 36.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 12.3
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°	3815	3815	3815	3815	3815
5°	4072	4006	3742	3412	3324
10°	4453	3963	3295	2939	2872
15°	6515	3950	2747	2497	2565
20°	16405	4317	2124	2124	2380
25°	76238	5395	1645	1911	2202
30°	242670	7470	1241	1823	2203
35°	421080	9102	1017	1713	2222
40°	491092	9103	744	1746	2261
45°	503649	6450	806	1892	2450
50°	468351	3616	648	1944	2831
55°	398055	1873	726	2179	3173
60°	229894	482	833	2324	3465
65°	46905	0	986	2750	3943
70°	705	256	1218	3142	4616
75°	678	339	1271	3219	5422
80°	505	505	1894	3788	6188
85°	0	1006	3774	3774	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 503649 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.4
10°-20°	4.5	1.0
20°-30°	25.9	5.8
30°-40°	120.9	26.9
40°-50°	171.0	38.1
50°-60°	105.2	23.4
60°-70°	16.0	3.6
70°-80°	2.5	0.6
80°-90°	1.3	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°	32.0	7.1
0°-40°	152.9	34.1
0°-60°	429.2	95.6
0°-90°	449.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	449.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	17	17	17	17	17	
5°	18	18	17	16	15	2
15°	29	17	12	11	11	10
25°	315	22	7	8	9	194
35°	1573	34	4	6	8	944
45°	1624	21	3	6	8	1231
55°	1041	5	2	6	8	886
65°	90	0	2	5	8	164
75°	1	0	2	4	6	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°	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4
2.5°	17.8	17.8	18.2	18.2	17.8	18.2	18.2	18.2	17.4	17.0	16.3
5°	18.5	18.5	18.5	18.9	18.5	18.5	18.2	17.8	17.0	15.9	15.5
7.5°	19.3	19.3	18.9	19.3	18.9	18.9	18.2	17.4	16.3	15.1	14.4
10°	20.0	20.0	19.7	19.7	19.3	19.3	17.8	16.6	14.8	13.6	13.2
12.5°	22.3	22.3	21.9	21.6	20.8	20.4	17.4	15.5	13.2	12.1	11.7
15°	28.7	28.4	27.6	26.5	24.6	24.2	17.4	14.4	12.1	11.0	11.0
17.5°	39.3	39.0	37.8	34.8	31.4	30.3	17.4	12.9	10.6	9.8	9.8
20°	70.3	67.3	61.6	54.1	46.1	42.0	18.5	11.3	9.1	8.7	9.1
21°	91.9	88.9	81.7	69.2	55.2	50.7	19.3	11.0	8.7	8.3	9.1
22°	125.2	121.8	107.0	90.0	70.0	62.0	19.7	10.2	7.9	7.9	8.7
23°	174.7	169.1	144.1	116.9	87.4	76.0	20.4	9.8	7.6	7.9	8.3
24°	228.8	223.9	195.5	154.7	111.6	95.3	21.2	9.5	7.2	7.2	7.9
25°	315.1	309.4	259.1	195.2	141.5	114.6	22.3	8.7	6.8	6.8	7.9
26°	426.6	400.5	333.6	251.5	174.4	143.7	23.4	8.3	6.4	6.8	7.6
27°	532.5	511.0	435.7	322.6	215.6	176.6	25.0	7.9	6.1	6.4	7.6
28°	671.7	641.5	546.5	408.1	271.6	213.7	26.5	7.6	5.7	6.4	7.2
29°	827.5	785.2	670.6	504.2	334.7	255.3	28.0	7.2	5.3	6.1	7.2
30°	958.4	918.7	804.1	618.0	407.3	310.1	29.5	6.8	4.9	6.1	7.2
31°	1112.0	1051.8	913.0	714.5	469.7	365.0	31.0	6.1	4.5	5.7	6.8
32°	1236.4	1194.4	1046.9	823.4	551.8	425.5	32.1	5.7	4.5	5.7	6.8
33°	1356.7	1300.3	1157.7	927.8	626.0	487.5	33.3	5.3	4.2	5.3	6.8
34°	1471.6	1419.8	1262.5	1012.1	695.9	546.5	34.0	4.5	4.2	5.3	6.4
35°	1573.0	1512.9	1354.8	1094.6	767.8	600.2	34.0	4.2	3.8	4.9	6.4
36°	1638.8	1595.7	1435.0	1175.9	832.8	651.3	34.0	3.8	3.4	4.9	6.1
37°	1695.2	1644.9	1499.3	1238.3	880.9	692.1	34.0	3.4	3.4	4.9	6.1
38°	1718.2	1675.1	1543.5	1293.5	925.9	733.7	33.7	3.0	3.0	4.5	6.1
39°	1727.3	1688.7	1576.8	1333.2	959.2	761.7	32.9	2.6	3.0	4.5	6.1
40°	1715.6	1686.5	1593.8	1358.9	985.6	782.2	31.8	2.3	2.6	4.5	6.1
42.5°	1667.2	1647.9	1590.0	1384.7	1008.3	797.3	27.6	1.5	2.6	4.2	6.1
45°	1624.1	1602.9	1551.8	1357.8	978.8	767.4	20.8	0.8	2.6	4.2	6.1
47.5°	1540.5	1527.2	1487.2	1289.3	914.2	700.1	14.8	0.4	2.3	3.8	5.7
50°	1372.9	1360.5	1307.5	1119.5	786.3	591.9	10.6	0.4	1.9	3.8	5.7
52.5°	1222.8	1209.5	1133.5	930.8	604.0	433.8	6.8	0.4	1.9	3.8	5.7
55°	1041.2	1018.2	918.3	706.5	428.1	290.9	4.9	0.4	1.9	3.4	5.7
57.5°	770.8	737.1	647.9	481.9	246.6	157.7	2.6	0.4	1.9	3.4	5.7
60°	524.2	504.2	405.5	254.2	105.1	66.6	1.1	0.4	1.9	3.4	5.3
62.5°	317.7	292.4	203.9	108.2	45.4	30.3	0.0	0.8	1.9	3.4	5.3
65°	90.4	80.2	53.3	24.6	12.9	9.8	0.0	0.8	1.9	3.4	5.3
67.5°	3.0	3.0	3.0	2.6	1.9	1.9	0.4	0.8	1.9	3.4	4.9
70°	1.1	1.1	1.1	0.8	0.8	0.4	0.4	0.8	1.9	3.0	4.9
72.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.8	1.5	2.6	4.5
75°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	1.1	1.5	2.6	3.8
77.5°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	1.1	1.5	2.3	3.8
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5	2.3	3.0



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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	1.1	1.5	1.5	2.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	1.5	1.1	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	1.1	1.1	0.8
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°	17.4	17.4
2.5°	16.3	16.3
5°	15.1	15.1
7.5°	14.0	14.0
10°	12.9	12.9
12.5°	12.1	12.1
15°	11.0	11.3
17.5°	10.2	10.6
20°	9.8	10.2
21°	9.8	10.2
22°	9.5	9.8
23°	9.5	9.8
24°	9.1	9.5
25°	8.7	9.1
26°	8.7	9.1
27°	8.7	9.1
28°	8.3	9.1
29°	8.3	8.7
30°	8.3	8.7
31°	7.9	8.7
32°	7.9	8.7
33°	7.9	8.3
34°	7.6	8.3
35°	7.6	8.3
36°	7.6	8.3
37°	7.6	7.9
38°	7.6	8.3
39°	7.6	7.9
40°	7.6	7.9
42.5°	7.6	7.9
45°	7.6	7.9
47.5°	7.6	8.3
50°	7.6	8.3
52.5°	7.6	8.3
55°	7.6	8.3
57.5°	7.6	7.9
60°	7.6	7.9
62.5°	7.2	7.9
65°	7.2	7.6
67.5°	7.2	7.6
70°	6.8	7.2
72.5°	6.4	6.8
75°	5.7	6.4
77.5°	5.3	5.7
80°	4.5	4.9



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	3.8	3.8
85°	2.6	3.0
87.5°	1.5	1.5
90°	0.0	0.0

(END OF REPORT)