

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: P1345354

Luminaire Tested: P3A13R30W2N902765DE010 E3A451WMH_3000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345354
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_3000K
Description: 3in Adjustable Tunable White LED luminaire with, R30 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

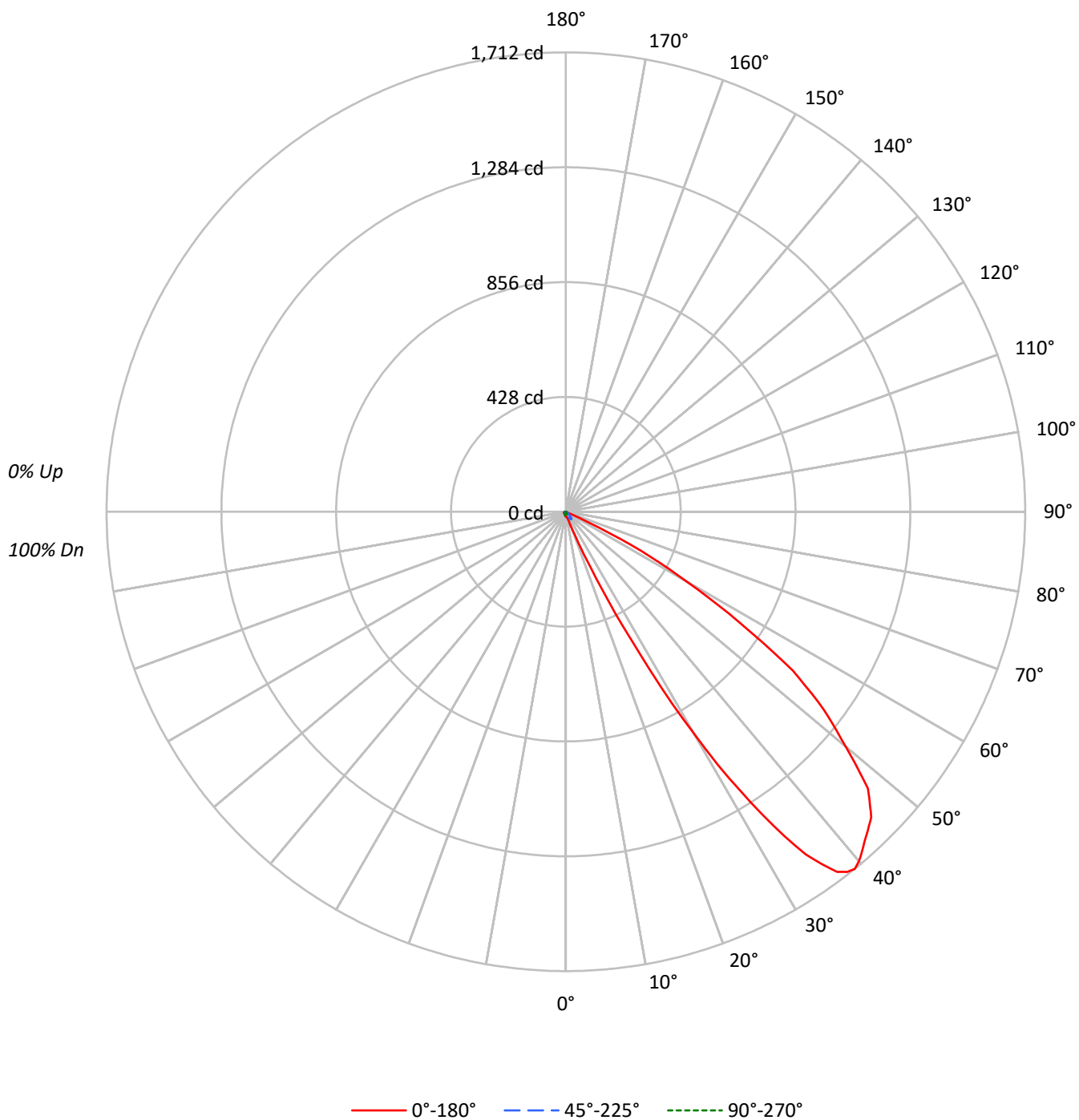
Lumens per Lamp: N/A
Luminaire Lumens: 445.0 lumens
Efficiency: N/A
Efficacy: 36.2 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3772	3772	3772	3772	3772
5°	4050	3962	3720	3390	3302
10°	4431	3919	3251	2917	2828
15°	6470	3905	2724	2474	2543
20°	16265	4294	2100	2100	2357
25°	75537	5347	1621	1911	2178
30°	240518	7394	1241	1798	2178
35°	417332	9021	990	1713	2195
40°	486712	9017	744	1718	2261
45°	499153	6388	806	1861	2450
50°	464189	3582	648	1910	2797
55°	394538	1873	726	2141	3135
60°	227833	482	833	2281	3465
65°	46490	0	986	2698	3891
70°	705	256	1218	3142	4552
75°	593	339	1271	3135	5422
80°	505	505	1894	3788	6188
85°	0	1006	3774	3774	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 499153 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.3
10°-20°	4.5	1.0
20°-30°	25.7	5.8
30°-40°	119.9	26.9
40°-50°	169.5	38.1
50°-60°	104.3	23.4
60°-70°	15.9	3.6
70°-80°	2.5	0.6
80°-90°	1.2	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°	31.7	7.1
0°-40°	151.6	34.1
0°-60°	425.3	95.6
0°-90°	445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	445.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	17	17	17	17	17	
5°	18	18	17	15	15	2
15°	28	17	12	11	11	10
25°	312	22	7	8	9	192
35°	1559	34	4	6	8	936
45°	1610	21	3	6	8	1220
55°	1032	5	2	6	8	878
65°	90	0	2	5	8	162
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°	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
2.5°	17.6	17.6	18.0	18.0	17.6	18.0	18.0	18.0	17.2	16.9	16.1
5°	18.4	18.4	18.4	18.7	18.4	18.4	18.0	17.6	16.9	15.7	15.4
7.5°	19.1	19.1	18.7	19.1	18.7	18.7	18.0	17.2	16.1	15.0	14.2
10°	19.9	19.9	19.5	19.5	19.1	19.1	17.6	16.5	14.6	13.5	13.1
12.5°	22.1	22.1	21.7	21.4	20.6	20.2	17.2	15.4	13.1	12.0	11.6
15°	28.5	28.1	27.4	26.2	24.4	24.0	17.2	14.2	12.0	10.9	10.9
17.5°	39.0	38.6	37.5	34.5	31.1	30.0	17.2	12.7	10.5	9.7	9.7
20°	69.7	66.7	61.1	53.6	45.7	41.6	18.4	11.2	9.0	8.6	9.0
21°	91.1	88.1	81.0	68.6	54.7	50.2	19.1	10.9	8.6	8.2	9.0
22°	124.1	120.7	106.1	89.2	69.3	61.5	19.5	10.1	7.9	7.9	8.6
23°	173.2	167.6	142.8	115.8	86.6	75.3	20.2	9.7	7.5	7.9	8.2
24°	226.8	221.9	193.8	153.3	110.6	94.5	21.0	9.4	7.1	7.1	7.9
25°	312.2	306.6	256.8	193.4	140.2	113.6	22.1	8.6	6.7	6.7	7.9
26°	422.8	397.0	330.6	249.3	172.8	142.4	23.2	8.2	6.4	6.7	7.5
27°	527.8	506.4	431.8	319.7	213.7	175.1	24.7	7.9	6.0	6.4	7.5
28°	665.7	635.7	541.7	404.5	269.1	211.8	26.2	7.5	5.6	6.4	7.1
29°	820.2	778.2	664.6	499.7	331.7	253.0	27.7	7.1	5.2	6.0	7.1
30°	949.9	910.5	796.9	612.5	403.7	307.4	29.2	6.7	4.9	6.0	7.1
31°	1102.1	1042.5	904.9	708.1	465.6	361.7	30.7	6.0	4.5	5.6	6.7
32°	1225.4	1183.8	1037.6	816.0	546.9	421.7	31.9	5.6	4.5	5.6	6.7
33°	1344.6	1288.7	1147.4	919.5	620.4	483.2	33.0	5.2	4.1	5.2	6.7
34°	1458.5	1407.2	1251.2	1003.1	689.7	541.7	33.7	4.5	4.1	5.2	6.4
35°	1559.0	1499.4	1342.7	1084.8	760.9	594.9	33.7	4.1	3.7	4.9	6.4
36°	1624.2	1581.5	1422.2	1165.4	825.4	645.5	33.7	3.7	3.4	4.9	6.0
37°	1680.1	1630.2	1485.9	1227.3	873.0	686.0	33.7	3.4	3.4	4.9	6.0
38°	1702.9	1660.2	1529.8	1282.0	917.6	727.2	33.4	3.0	3.0	4.5	6.0
39°	1711.9	1673.7	1562.7	1321.3	950.6	754.9	32.6	2.6	3.0	4.5	6.0
40°	1700.3	1671.5	1579.6	1346.8	976.9	775.2	31.5	2.2	2.6	4.5	6.0
42.5°	1652.3	1633.2	1575.9	1372.3	999.3	790.2	27.4	1.5	2.6	4.1	6.0
45°	1609.6	1588.6	1538.0	1345.7	970.1	760.6	20.6	0.7	2.6	4.1	6.0
47.5°	1526.8	1513.6	1473.9	1277.9	906.0	693.8	14.6	0.4	2.2	3.7	5.6
50°	1360.7	1348.3	1295.9	1109.6	779.3	586.6	10.5	0.4	1.9	3.7	5.6
52.5°	1211.9	1198.8	1123.4	922.5	598.6	430.0	6.7	0.4	1.9	3.7	5.6
55°	1032.0	1009.1	910.1	700.2	424.3	288.3	4.9	0.4	1.9	3.4	5.6
57.5°	763.9	730.6	642.1	477.6	244.4	156.3	2.6	0.4	1.9	3.4	5.6
60°	519.5	499.7	401.8	251.9	104.2	66.0	1.1	0.4	1.9	3.4	5.2
62.5°	314.9	289.8	202.0	107.2	45.0	30.0	0.0	0.7	1.9	3.4	5.2
65°	89.6	79.5	52.9	24.4	12.7	9.7	0.0	0.7	1.9	3.4	5.2
67.5°	3.0	3.0	3.0	2.6	1.9	1.9	0.4	0.7	1.9	3.4	4.9
70°	1.1	1.1	1.1	0.7	0.7	0.4	0.4	0.7	1.9	3.0	4.9
72.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.7	1.5	2.6	4.5
75°	0.7	0.7	0.7	0.4	0.4	0.4	0.4	1.1	1.5	2.6	3.7
77.5°	0.7	0.7	0.7	0.4	0.4	0.4	0.4	1.1	1.5	2.2	3.7
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5	2.2	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	2.2
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	0.7
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°	17.2	17.2
2.5°	16.1	16.1
5°	15.0	15.0
7.5°	13.9	13.9
10°	12.7	12.7
12.5°	12.0	12.0
15°	10.9	11.2
17.5°	10.1	10.5
20°	9.7	10.1
21°	9.7	10.1
22°	9.4	9.7
23°	9.4	9.7
24°	9.0	9.4
25°	8.6	9.0
26°	8.6	9.0
27°	8.6	9.0
28°	8.2	9.0
29°	8.2	8.6
30°	8.2	8.6
31°	7.9	8.6
32°	7.9	8.6
33°	7.9	8.2
34°	7.5	8.2
35°	7.5	8.2
36°	7.5	8.2
37°	7.5	7.9
38°	7.5	8.2
39°	7.5	7.9
40°	7.5	7.9
42.5°	7.5	7.9
45°	7.5	7.9
47.5°	7.5	8.2
50°	7.5	8.2
52.5°	7.5	8.2
55°	7.5	8.2
57.5°	7.5	7.9
60°	7.5	7.9
62.5°	7.1	7.9
65°	7.1	7.5
67.5°	7.1	7.5
70°	6.7	7.1
72.5°	6.4	6.7
75°	5.6	6.4
77.5°	5.2	5.6
80°	4.5	4.9



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	3.7	3.7
85°	2.6	3.0
87.5°	1.5	1.5
90°	0.0	0.0

(END OF REPORT)