

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: P1344846

Luminaire Tested: P3A13R25W2N902765DE010 E3A451WMH_3000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344846
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R25W2N902765DE010 E3A451WMH_3000K
Description: 3in Adjustable Tunable White LED luminaire with, R25 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

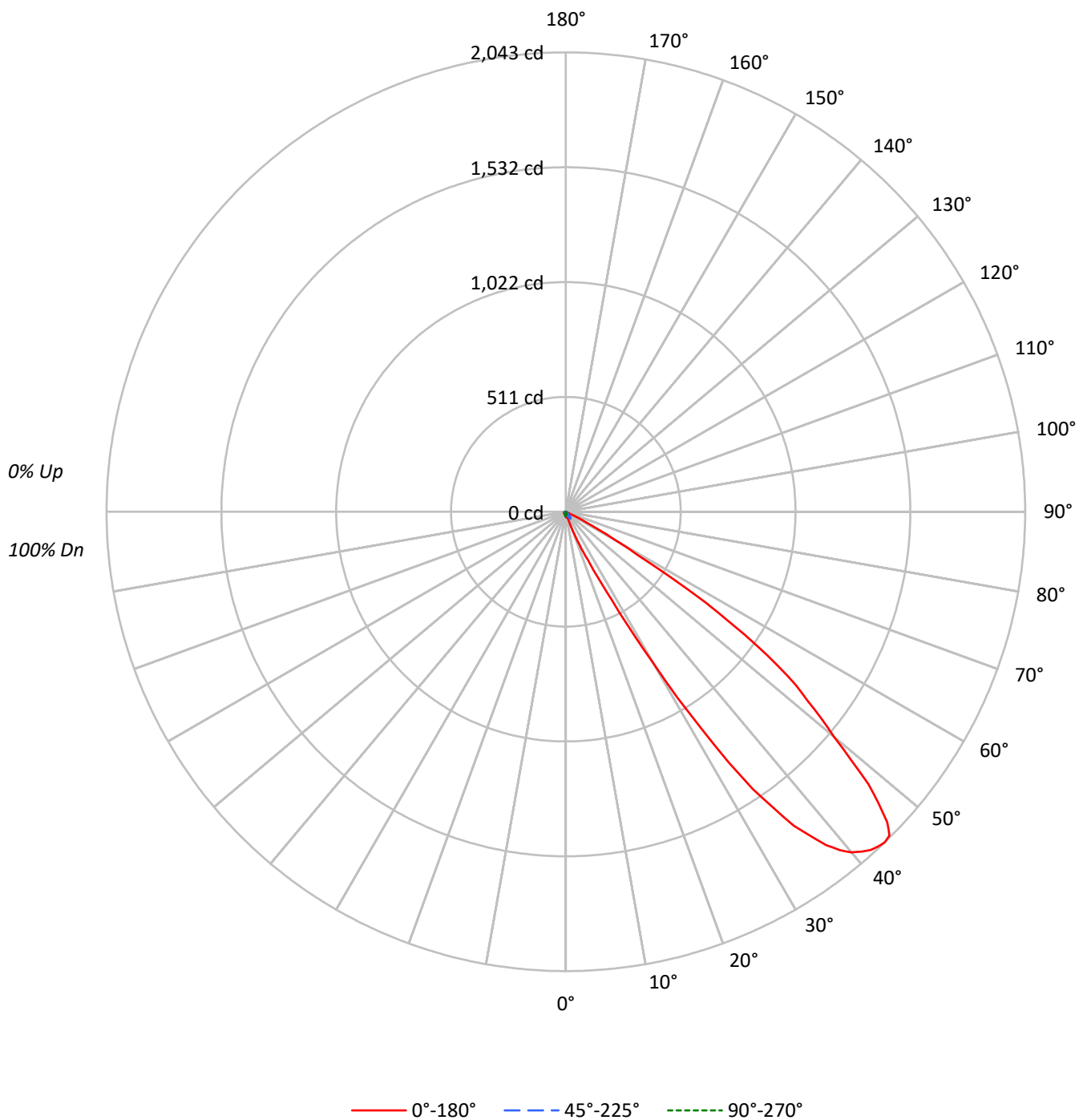
Lumens per Lamp: N/A
Luminaire Lumens: 426.0 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4758	4758	4758	4758	4758
5°	5437	5195	4622	4116	4050
10°	5433	4921	3919	3429	3429
15°	6039	4245	3065	2883	3065
20°	21352	4200	2357	2450	2707
25°	61407	5347	1911	2274	2637
30°	195904	8254	1519	2178	2659
35°	429084	9744	1312	2115	2704
40°	566032	8788	1059	2147	2891
45°	631228	6171	1054	2326	3132
50°	531360	3207	1023	2422	3446
55°	397252	1300	994	2714	3861
60°	122973	307	965	2938	4254
65°	10481	0	1141	3113	4670
70°	705	256	1218	3590	5257
75°	593	339	1610	3813	6015
80°	505	505	2399	4293	7072
85°	1006	1006	3774	4780	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 631228 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.5
10°-20°	5.0	1.2
20°-30°	23.6	5.5
30°-40°	113.5	26.6
40°-50°	177.9	41.8
50°-60°	91.2	21.4
60°-70°	8.6	2.0
70°-80°	2.9	0.7
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°	30.5	7.2
0°-40°	144.0	33.8
0°-60°	413.0	97.0
0°-90°	426.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	426.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	25	24	21	19	18	2
15°	27	19	14	13	14	11
25°	254	22	8	9	11	157
35°	1603	36	5	8	10	973
45°	2036	20	3	8	10	1489
55°	1039	3	3	7	10	865
65°	20	0	2	6	9	63
75°	1	0	2	4	7	1
85°	0	0	2	2	3	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
2.5°	23.6	23.6	23.6	23.6	23.6	23.6	23.2	23.2	23.6	23.2	23.2
5°	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.4	24.4	24.4	23.6
7.5°	25.1	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.4	24.4	23.2
10°	24.4	24.4	24.4	24.4	24.0	24.0	24.0	23.6	23.6	23.6	22.1
12.5°	24.4	24.4	24.4	24.4	24.0	24.0	23.6	23.6	23.2	22.9	20.2
15°	26.6	26.6	26.6	26.2	25.9	25.5	25.1	24.7	24.4	23.6	18.7
17.5°	39.0	37.9	37.5	36.0	34.1	32.2	30.7	29.2	27.7	26.6	18.0
20°	91.5	91.1	89.2	84.7	79.8	74.2	68.6	62.2	53.2	47.2	18.0
22.5°	158.6	156.3	152.9	149.6	141.0	130.8	120.3	108.3	96.7	84.3	19.1
25°	253.8	259.0	247.8	238.8	223.8	205.4	185.6	169.1	148.1	128.6	22.1
27.5°	441.2	444.6	422.5	393.2	358.4	319.8	282.3	254.2	218.9	186.7	27.7
30°	773.7	777.1	740.0	677.8	605.8	542.4	456.6	381.2	311.9	258.3	32.6
31°	965.7	939.4	896.3	836.0	744.9	649.3	546.2	455.1	367.4	296.9	34.1
32°	1132.5	1130.2	1080.0	988.5	897.1	779.0	651.1	532.3	424.7	335.9	35.2
33°	1329.3	1314.3	1243.4	1157.2	1036.1	917.3	752.4	616.7	483.6	379.4	36.0
34°	1487.1	1446.6	1417.4	1318.8	1191.0	1039.5	863.0	705.9	557.1	421.4	36.4
35°	1602.9	1594.3	1537.3	1445.5	1315.4	1160.6	982.2	798.5	618.5	470.1	36.4
36°	1725.5	1698.9	1643.4	1560.2	1433.5	1273.4	1073.3	878.7	690.1	513.9	36.0
37°	1802.4	1786.6	1731.5	1645.7	1521.6	1368.7	1175.2	963.4	747.1	557.8	35.2
38°	1881.5	1849.6	1795.3	1713.2	1591.3	1447.7	1249.1	1028.6	799.6	596.4	34.1
39°	1936.2	1903.2	1847.7	1766.0	1646.8	1504.4	1307.5	1084.1	845.3	625.3	32.6
40°	1977.4	1945.6	1889.3	1805.4	1687.7	1549.0	1356.3	1133.2	883.6	650.4	30.7
41°	2002.9	1973.3	1917.5	1833.9	1715.8	1574.5	1388.1	1165.1	909.4	667.3	28.9
42°	2024.3	1993.9	1937.0	1851.5	1733.0	1596.2	1407.6	1185.3	927.1	675.9	27.4
43°	2036.3	2005.9	1950.4	1863.1	1743.5	1606.3	1418.1	1194.7	933.1	674.8	24.7
44°	2043.0	2011.6	1955.7	1868.4	1748.0	1608.9	1418.9	1192.8	928.9	665.8	22.5
45°	2035.5	2004.4	1950.4	1863.1	1740.1	1600.7	1411.4	1182.7	913.2	648.2	19.9
46°	1986.8	1962.8	1913.3	1833.1	1715.4	1579.7	1392.3	1163.2	888.8	626.4	16.9
47°	1901.0	1881.8	1833.9	1774.3	1667.8	1541.1	1357.0	1126.1	854.7	593.8	13.5
48°	1811.4	1783.3	1738.6	1677.5	1587.6	1471.7	1298.9	1071.8	803.0	551.1	12.0
49°	1679.0	1662.5	1623.2	1555.0	1480.4	1378.4	1216.8	1002.0	739.6	504.6	10.5
50°	1557.6	1546.3	1491.2	1441.0	1361.9	1266.7	1105.5	910.2	660.9	446.8	9.4
51°	1462.7	1449.2	1409.5	1346.9	1262.6	1152.0	1000.2	791.0	570.6	378.2	7.5
52°	1363.8	1356.3	1321.0	1256.6	1173.7	1063.5	897.8	689.8	482.8	319.8	6.0
53°	1282.8	1271.9	1228.8	1171.5	1081.9	967.9	786.9	595.7	409.0	268.8	5.2
54°	1164.7	1160.2	1132.5	1072.5	975.4	851.3	686.4	501.6	341.1	227.9	4.5
55°	1039.1	1024.1	996.0	948.4	859.2	743.4	570.2	415.7	275.9	191.9	3.4
56°	886.2	885.4	835.2	795.5	716.4	593.4	455.5	324.6	224.2	160.1	3.0
57°	740.0	716.4	668.0	628.7	543.6	450.2	338.1	243.3	175.4	129.7	2.2
58°	547.3	534.9	522.2	464.5	385.7	319.0	241.4	170.9	129.7	99.0	1.5
59°	371.5	371.1	356.1	312.3	266.9	198.7	150.7	116.2	89.2	72.7	1.1
60°	280.4	273.7	243.7	214.8	167.9	125.6	89.2	68.6	55.5	46.9	0.7
62.5°	98.2	102.0	89.6	74.2	56.6	46.5	35.6	28.9	23.6	19.1	0.0
65°	20.2	22.1	19.1	18.0	14.2	12.4	10.9	9.4	7.9	6.7	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	2.6	2.2	2.2	2.2	1.9	1.9	1.9	1.9	1.5	1.5	0.4
70°	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.4
72.5°	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
85°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	21.7	21.7	21.7	21.7	21.7	21.7
2.5°	22.9	22.1	21.0	20.6	20.2	20.2
5°	22.5	21.0	19.9	18.7	18.4	18.4
7.5°	21.4	19.5	18.0	17.2	16.9	16.5
10°	20.2	17.6	16.1	15.4	15.4	15.4
12.5°	18.0	15.7	14.2	13.9	14.2	14.2
15°	16.1	13.5	12.7	12.7	13.1	13.5
17.5°	13.9	12.0	11.2	11.6	12.0	12.4
20°	12.4	10.1	10.1	10.5	11.6	11.6
22.5°	10.9	9.0	9.0	10.1	10.9	11.2
25°	9.7	7.9	8.2	9.4	10.5	10.9
27.5°	8.2	6.7	7.5	9.0	10.1	10.5
30°	7.1	6.0	7.1	8.6	9.7	10.5
31°	6.7	5.6	7.1	8.2	9.7	10.5
32°	6.0	5.6	6.7	8.2	9.7	10.1
33°	5.6	5.2	6.7	8.2	9.7	10.1
34°	5.2	4.9	6.4	8.2	9.7	10.1
35°	4.5	4.9	6.4	7.9	9.4	10.1
36°	4.1	4.5	6.4	7.9	9.4	10.1
37°	3.7	4.5	6.0	7.9	9.4	10.1
38°	3.4	4.1	6.0	7.9	9.4	10.1
39°	3.0	4.1	5.6	7.9	9.4	10.1
40°	2.6	3.7	5.6	7.5	9.4	10.1
41°	2.6	3.7	5.6	7.5	9.4	10.1
42°	2.2	3.7	5.6	7.5	9.4	10.1
43°	1.9	3.4	5.6	7.5	9.4	10.1
44°	1.5	3.4	5.2	7.5	9.4	10.1
45°	1.5	3.4	5.2	7.5	9.4	10.1
46°	1.1	3.0	5.2	7.5	9.4	10.1
47°	0.7	3.0	5.2	7.1	9.4	10.1
48°	0.7	3.0	5.2	7.1	9.4	10.1
49°	0.7	3.0	4.9	7.1	9.4	10.1
50°	0.7	3.0	4.9	7.1	9.4	10.1
51°	0.4	2.6	4.9	7.1	9.4	10.1
52°	0.4	2.6	4.9	7.1	9.4	10.5
53°	0.4	2.6	4.9	7.1	9.4	10.1
54°	0.4	2.6	4.5	7.1	9.4	10.1
55°	0.4	2.6	4.5	7.1	9.4	10.1
56°	0.4	2.2	4.5	6.7	9.4	10.1
57°	0.7	2.2	4.5	6.7	9.4	9.7
58°	0.7	2.2	4.5	6.7	9.0	9.7
59°	0.7	2.2	4.5	6.7	9.0	9.7
60°	0.7	2.2	4.1	6.7	9.0	9.7
62.5°	0.7	2.2	4.1	6.4	8.6	9.4
65°	0.7	2.2	3.7	6.0	8.6	9.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	1.9	3.7	5.6	8.2	8.6
70°	1.1	1.9	3.4	5.6	7.9	8.2
72.5°	1.1	1.9	3.4	4.9	7.1	7.9
75°	1.1	1.9	3.0	4.5	6.7	7.1
77.5°	1.1	1.9	2.6	4.1	6.0	6.4
80°	1.5	1.9	2.2	3.4	5.2	5.6
82.5°	1.5	1.9	1.9	2.6	4.1	4.5
85°	1.1	1.5	1.5	1.9	2.6	3.0
87.5°	1.1	1.5	1.1	0.7	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)