

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: P1344849

Luminaire Tested: P3A13R25W2N902765DE010 E3A451WMH_5000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344849
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_5000K
Description: 3in Adjustable Tunable White LED luminaire with, R25 optic, 5000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

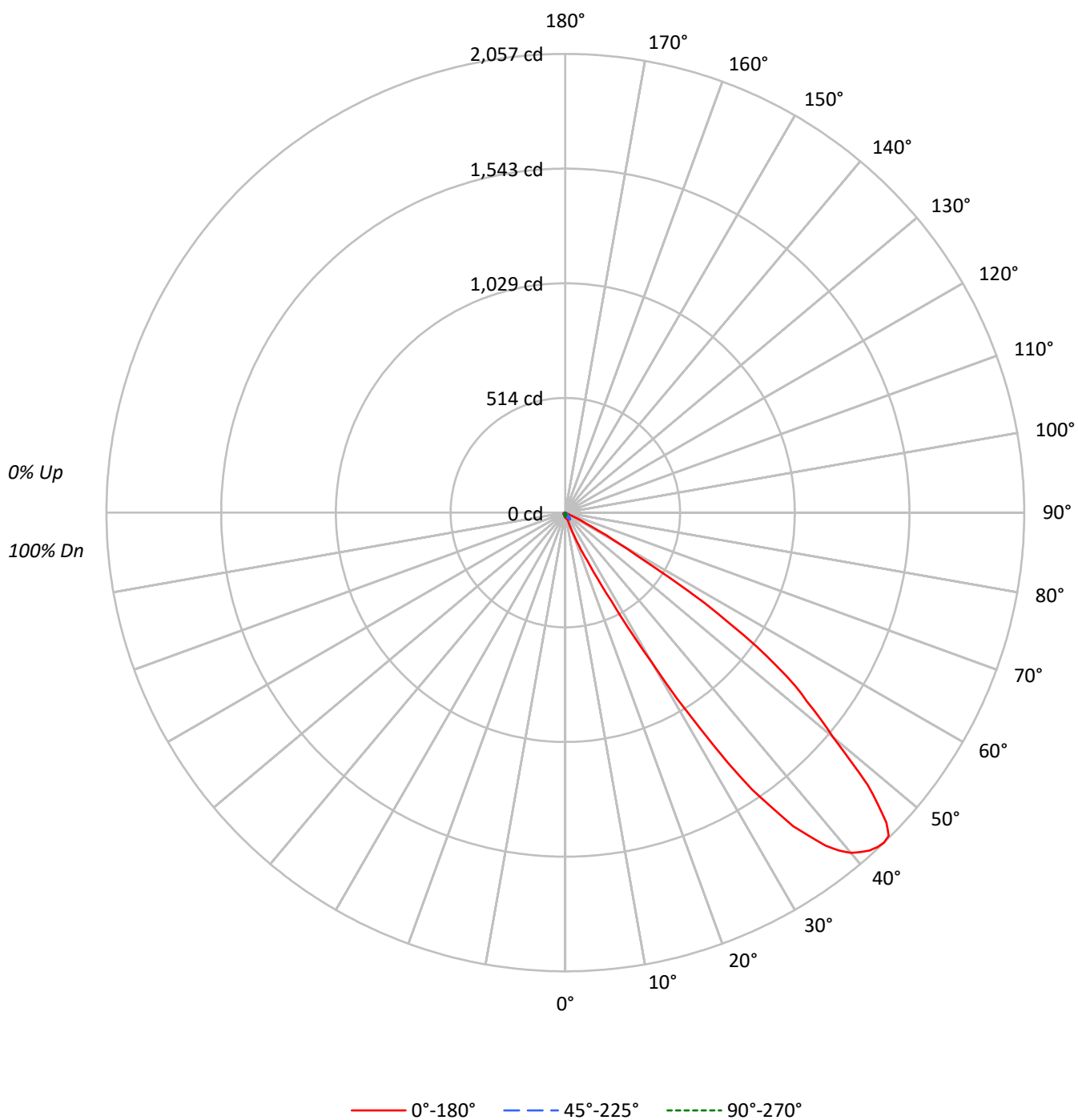
Lumens per Lamp: N/A
Luminaire Lumens: 429.0 lumens
Efficiency: N/A
Efficacy: 34.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			0
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°	4802	4802	4802	4802	4802
5°	5481	5239	4644	4160	4072
10°	5455	4965	3941	3451	3451
15°	6084	4291	3087	2906	3087
20°	21492	4224	2380	2474	2730
25°	61842	5395	1911	2274	2637
30°	197296	8305	1519	2203	2684
35°	432109	9798	1312	2115	2730
40°	570039	8874	1088	2176	2920
45°	635694	6202	1054	2357	3163
50°	535112	3207	1023	2456	3480
55°	400081	1300	994	2753	3900
60°	123850	351	1009	2982	4298
65°	10585	0	1193	3113	4722
70°	705	256	1218	3654	5321
75°	678	339	1610	3813	6100
80°	505	505	2399	4293	7198
85°	1006	1006	3774	4780	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 635694 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.5
10°-20°	5.1	1.2
20°-30°	23.7	5.5
30°-40°	114.3	26.6
40°-50°	179.1	41.8
50°-60°	91.8	21.4
60°-70°	8.7	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°	30.8	7.2
0°-40°	145.0	33.8
0°-60°	416.0	97.0
0°-90°	429.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	429.0	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°	256	22	8	9	11	159
35°	1614	37	5	8	10	980
45°	2050	20	3	8	10	1500
55°	1046	3	3	7	10	871
65°	20	0	2	6	9	64
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°	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9
2.5°	23.8	23.8	23.8	23.8	23.8	23.8	23.4	23.4	23.8	23.4	23.4
5°	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.5	24.5	24.5	23.8
7.5°	25.3	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.5	24.5	23.4
10°	24.5	24.5	24.5	24.5	24.2	24.2	24.2	23.8	23.8	23.8	22.3
12.5°	24.5	24.5	24.5	24.5	24.2	24.2	23.8	23.8	23.4	23.0	20.4
15°	26.8	26.8	26.8	26.4	26.0	25.7	25.3	24.9	24.5	23.8	18.9
17.5°	39.3	38.1	37.8	36.2	34.4	32.5	31.0	29.4	27.9	26.8	18.1
20°	92.1	91.7	89.8	85.3	80.4	74.7	69.1	62.7	53.6	47.6	18.1
22.5°	159.7	157.4	154.0	150.6	141.9	131.8	121.2	109.1	97.4	84.9	19.3
25°	255.6	260.9	249.5	240.5	225.4	206.9	186.9	170.3	149.1	129.5	22.3
27.5°	444.3	447.7	425.5	396.0	360.9	322.0	284.3	256.0	220.5	188.0	27.9
30°	779.2	782.6	745.2	682.5	610.1	546.3	459.8	383.9	314.1	260.1	32.8
31°	972.5	946.0	902.6	841.8	750.1	653.8	550.0	458.3	370.0	299.0	34.4
32°	1140.5	1138.2	1087.6	995.5	903.4	784.5	655.7	536.1	427.7	338.2	35.5
33°	1338.7	1323.5	1252.2	1165.4	1043.4	923.8	757.7	621.0	487.0	382.0	36.2
34°	1497.6	1456.8	1427.4	1328.1	1199.3	1046.8	869.0	710.9	561.0	424.3	36.6
35°	1614.2	1605.5	1548.2	1455.7	1324.7	1168.8	989.1	804.1	622.9	473.4	36.6
36°	1737.7	1710.9	1655.0	1571.2	1443.6	1282.4	1080.8	884.9	695.0	517.6	36.2
37°	1815.1	1799.2	1743.7	1657.3	1532.3	1378.3	1183.5	970.2	752.4	561.7	35.5
38°	1894.7	1862.6	1807.9	1725.2	1602.5	1457.9	1257.9	1035.9	805.2	600.6	34.4
39°	1949.8	1916.6	1860.7	1778.4	1658.4	1514.9	1316.8	1091.8	851.3	629.7	32.8
40°	1991.4	1959.3	1902.6	1818.1	1699.5	1559.9	1365.8	1141.2	889.8	655.0	31.0
41°	2017.0	1987.2	1931.0	1846.8	1727.9	1585.5	1397.9	1173.3	915.8	672.0	29.1
42°	2038.6	2008.0	1950.6	1864.5	1745.2	1607.4	1417.5	1193.7	933.6	680.7	27.6
43°	2050.6	2020.1	1964.2	1876.2	1755.8	1617.6	1428.1	1203.1	939.6	679.5	24.9
44°	2057.4	2025.7	1969.5	1881.5	1760.3	1620.3	1428.9	1201.2	935.5	670.5	22.7
45°	2049.9	2018.5	1964.2	1876.2	1752.4	1612.0	1421.3	1191.0	919.6	652.7	20.0
46°	2000.8	1976.6	1926.8	1846.0	1727.5	1590.8	1402.1	1171.4	895.1	630.8	17.0
47°	1914.4	1895.1	1846.8	1786.8	1679.5	1551.9	1366.6	1134.0	860.7	598.0	13.6
48°	1824.1	1795.8	1750.9	1689.4	1598.8	1482.1	1308.1	1079.3	808.6	554.9	12.1
49°	1690.9	1674.3	1634.6	1565.9	1490.8	1388.1	1225.4	1009.1	744.8	508.1	10.6
50°	1568.6	1557.2	1501.7	1451.1	1371.5	1275.6	1113.3	916.6	665.5	450.0	9.4
51°	1473.0	1459.5	1419.4	1356.4	1271.5	1160.1	1007.2	796.5	574.6	380.9	7.6
52°	1373.4	1365.8	1330.3	1265.4	1182.0	1071.0	904.1	694.6	486.2	322.0	6.0
53°	1291.8	1280.9	1237.5	1179.7	1089.5	974.7	792.4	599.9	411.9	270.7	5.3
54°	1172.9	1168.4	1140.5	1080.1	982.3	857.3	691.2	505.1	343.5	229.5	4.5
55°	1046.5	1031.4	1003.0	955.1	865.3	748.6	574.2	418.7	277.8	193.3	3.4
56°	892.4	891.7	841.1	801.1	721.4	597.6	458.7	326.9	225.8	161.2	3.0
57°	745.2	721.4	672.7	633.1	547.4	453.4	340.5	245.0	176.7	130.6	2.3
58°	551.2	538.7	525.9	467.7	388.5	321.3	243.1	172.1	130.6	99.7	1.5
59°	374.1	373.7	358.6	314.5	268.8	200.1	151.8	117.0	89.8	73.2	1.1
60°	282.4	275.6	245.4	216.3	169.1	126.5	89.8	69.1	55.9	47.2	0.8
62.5°	98.9	102.7	90.2	74.7	57.0	46.8	35.9	29.1	23.8	19.3	0.0
65°	20.4	22.3	19.3	18.1	14.3	12.5	10.9	9.4	7.9	6.8	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	2.3	2.3	2.3	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	0.8	0.8	0.8	0.8	0.4
72.5°	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4
75°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	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	0.8
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°	21.9	21.9	21.9	21.9	21.9	21.9
2.5°	23.0	22.3	21.1	20.8	20.4	20.4
5°	22.7	21.1	20.0	18.9	18.5	18.5
7.5°	21.5	19.6	18.1	17.4	17.0	16.6
10°	20.4	17.7	16.2	15.5	15.5	15.5
12.5°	18.1	15.9	14.3	14.0	14.3	14.3
15°	16.2	13.6	12.8	12.8	13.2	13.6
17.5°	14.0	12.1	11.3	11.7	12.1	12.5
20°	12.5	10.2	10.2	10.6	11.7	11.7
22.5°	10.9	9.1	9.1	10.2	10.9	11.3
25°	9.8	7.9	8.3	9.4	10.6	10.9
27.5°	8.3	6.8	7.6	9.1	10.2	10.6
30°	7.2	6.0	7.2	8.7	9.8	10.6
31°	6.8	5.7	7.2	8.3	9.8	10.6
32°	6.0	5.7	6.8	8.3	9.8	10.2
33°	5.7	5.3	6.8	8.3	9.8	10.2
34°	5.3	4.9	6.4	8.3	9.8	10.2
35°	4.5	4.9	6.4	7.9	9.4	10.2
36°	4.2	4.5	6.4	7.9	9.4	10.2
37°	3.8	4.5	6.0	7.9	9.4	10.2
38°	3.4	4.2	6.0	7.9	9.4	10.2
39°	3.0	4.2	5.7	7.9	9.4	10.2
40°	2.6	3.8	5.7	7.6	9.4	10.2
41°	2.6	3.8	5.7	7.6	9.4	10.2
42°	2.3	3.8	5.7	7.6	9.4	10.2
43°	1.9	3.4	5.7	7.6	9.4	10.2
44°	1.5	3.4	5.3	7.6	9.4	10.2
45°	1.5	3.4	5.3	7.6	9.4	10.2
46°	1.1	3.0	5.3	7.6	9.4	10.2
47°	0.8	3.0	5.3	7.2	9.4	10.2
48°	0.8	3.0	5.3	7.2	9.4	10.2
49°	0.8	3.0	4.9	7.2	9.4	10.2
50°	0.8	3.0	4.9	7.2	9.4	10.2
51°	0.4	2.6	4.9	7.2	9.4	10.2
52°	0.4	2.6	4.9	7.2	9.4	10.6
53°	0.4	2.6	4.9	7.2	9.4	10.2
54°	0.4	2.6	4.5	7.2	9.4	10.2
55°	0.4	2.6	4.5	7.2	9.4	10.2
56°	0.4	2.3	4.5	6.8	9.4	10.2
57°	0.8	2.3	4.5	6.8	9.4	9.8
58°	0.8	2.3	4.5	6.8	9.1	9.8
59°	0.8	2.3	4.5	6.8	9.1	9.8
60°	0.8	2.3	4.2	6.8	9.1	9.8
62.5°	0.8	2.3	4.2	6.4	8.7	9.4
65°	0.8	2.3	3.8	6.0	8.7	9.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	1.9	3.8	5.7	8.3	8.7
70°	1.1	1.9	3.4	5.7	7.9	8.3
72.5°	1.1	1.9	3.4	4.9	7.2	7.9
75°	1.1	1.9	3.0	4.5	6.8	7.2
77.5°	1.1	1.9	2.6	4.2	6.0	6.4
80°	1.5	1.9	2.3	3.4	5.3	5.7
82.5°	1.5	1.9	1.9	2.6	4.2	4.5
85°	1.1	1.5	1.5	1.9	2.6	3.0
87.5°	1.1	1.5	1.1	0.8	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)