

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: P1344774

Luminaire Tested: P3A13R25W2N902750DE010 E3CA451MW_2700K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344774
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: P3A13R25W2N902750DE010 E3CA451MW_2700K
Description: 3in Adjustable Tunable White LED luminaire with, R25 optic, 2700K CCT AND, 90CRI ,
E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

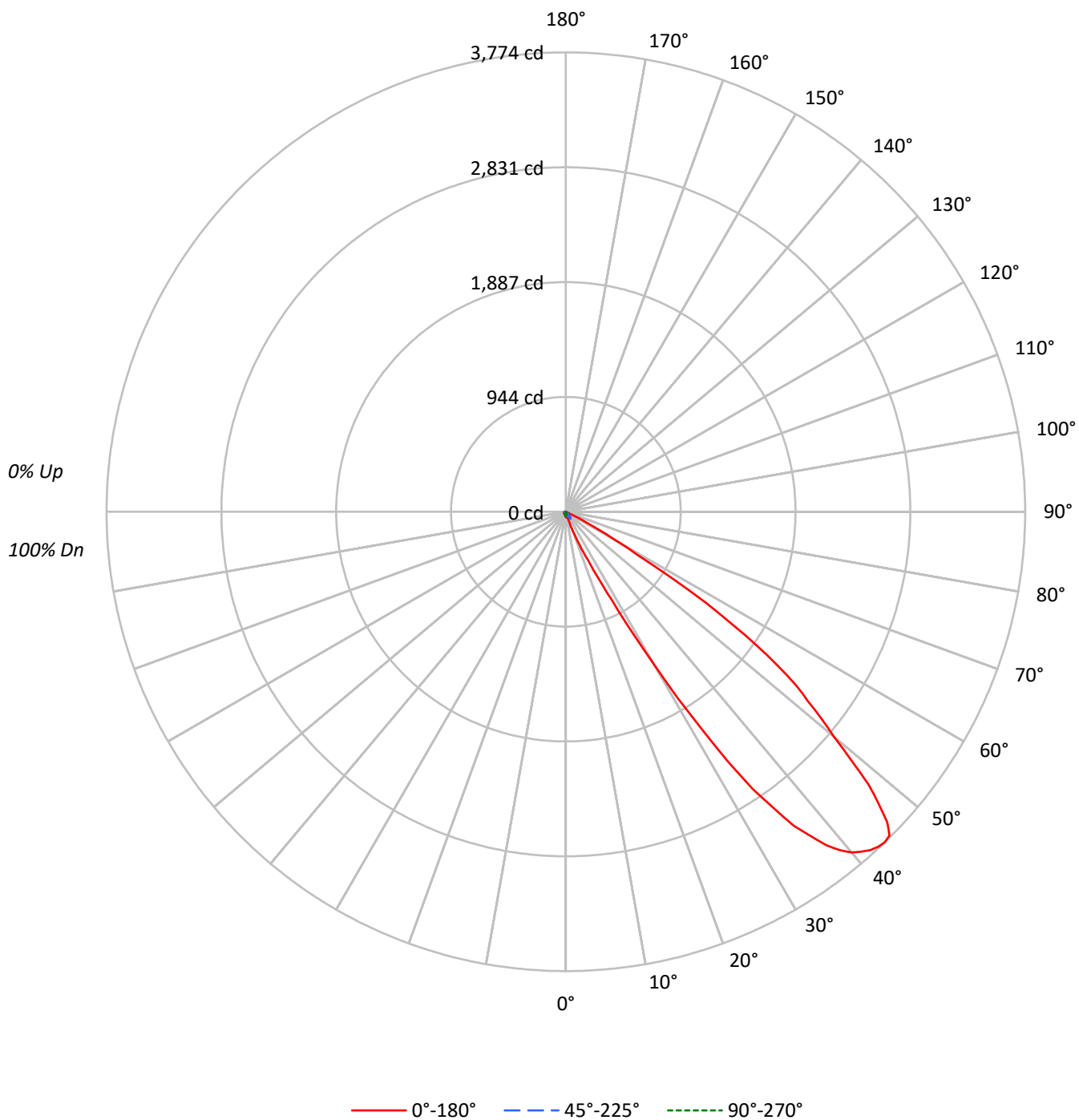
Lumens per Lamp: N/A
Luminaire Lumens: 787.0 lumens
Efficiency: N/A
Efficacy: 64.0 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	8815	8815	8815	8815	8815
5°	10059	9597	8541	7616	7462
10°	10020	9107	7237	6324	6324
15°	11169	7855	5653	5335	5653
20°	39437	7747	4364	4527	5017
25°	113450	9896	3508	4186	4863
30°	361929	15268	2811	4026	4912
35°	792717	17989	2409	3882	5006
40°	1045731	16259	1975	3979	5353
45°	1166168	11381	1923	4311	5799
50°	981631	5902	1876	4503	6379
55°	733909	2370	1835	5046	7149
60°	227175	614	1842	5482	7894
65°	19405	0	2179	5759	8613
70°	1346	449	2244	6668	9745
75°	1186	593	2965	7032	11184
80°	884	884	4420	7829	13133
85°	1761	1761	7045	8806	13838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1166168 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.6	0.5
10°-20°	9.3	1.2
20°-30°	43.5	5.5
30°-40°	209.6	26.6
40°-50°	328.6	41.8
50°-60°	168.5	21.4
60°-70°	15.9	2.0
70°-80°	5.4	0.7
80°-90°	2.7	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°	56.4	7.2
0°-40°	266.0	33.8
0°-60°	763.1	97.0
0°-90°	787.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	787.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	40	40	40	40	40	
5°	46	44	39	35	34	4
15°	49	35	25	24	25	21
25°	469	41	14	17	20	291
35°	2961	67	9	14	19	1798
45°	3760	37	6	14	19	2752
55°	1920	6	5	13	19	1598
65°	37	0	4	11	17	117
75°	1	1	4	8	13	2
85°	1	1	3	4	6	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°	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
2.5°	43.6	43.6	43.6	43.6	43.6	43.6	42.9	42.9	43.6	42.9	42.9
5°	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.0	45.0	45.0	43.6
7.5°	46.4	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.0	45.0	42.9
10°	45.0	45.0	45.0	45.0	44.3	44.3	44.3	43.6	43.6	43.6	40.9
12.5°	45.0	45.0	45.0	45.0	44.3	44.3	43.6	43.6	42.9	42.2	37.4
15°	49.2	49.2	49.2	48.5	47.8	47.1	46.4	45.7	45.0	43.6	34.6
17.5°	72.0	69.9	69.3	66.5	63.0	59.6	56.8	54.0	51.2	49.2	33.2
20°	169.0	168.3	164.8	156.5	147.5	137.1	126.7	115.0	98.3	87.3	33.2
22.5°	292.9	288.8	282.6	276.3	260.4	241.7	222.3	200.1	178.7	155.8	35.3
25°	468.9	478.5	457.8	441.1	413.4	379.5	342.8	312.3	273.6	237.5	40.9
27.5°	815.1	821.4	780.5	726.5	662.1	590.7	521.5	469.5	404.4	344.9	51.2
30°	1429.4	1435.6	1367.1	1252.1	1119.1	1002.1	843.5	704.3	576.2	477.2	60.3
31°	1784.0	1735.5	1655.9	1544.4	1376.1	1199.5	1009.0	840.7	678.7	548.5	63.0
32°	2092.2	2088.0	1995.2	1826.2	1657.3	1439.1	1202.9	983.4	784.6	620.5	65.1
33°	2455.8	2428.1	2297.2	2137.9	1914.2	1694.6	1389.9	1139.2	893.4	700.9	66.5
34°	2747.3	2672.5	2618.5	2436.4	2200.2	1920.4	1594.2	1304.1	1029.1	778.4	67.2
35°	2961.3	2945.4	2840.1	2670.4	2430.1	2144.1	1814.5	1475.1	1142.7	868.4	67.2
36°	3187.8	3138.6	3036.1	2882.4	2648.3	2352.6	1982.7	1623.3	1275.0	949.5	66.5
37°	3329.7	3300.7	3198.8	3040.3	2811.0	2528.5	2171.1	1779.8	1380.2	1030.5	65.1
38°	3475.9	3417.0	3316.6	3164.9	2939.8	2674.6	2307.5	1900.3	1477.2	1101.8	63.0
39°	3577.0	3516.0	3413.5	3262.6	3042.3	2779.2	2415.6	2002.8	1561.7	1155.2	60.3
40°	3653.2	3594.3	3490.4	3335.3	3117.8	2861.6	2505.6	2093.6	1632.3	1201.6	56.8
41°	3700.2	3645.5	3542.3	3387.9	3169.8	2908.7	2564.5	2152.4	1680.1	1232.7	53.3
42°	3739.7	3683.6	3578.4	3420.5	3201.6	2948.8	2600.5	2189.8	1712.7	1248.7	50.6
43°	3761.9	3705.8	3603.3	3441.9	3221.0	2967.5	2619.9	2207.1	1723.7	1246.6	45.7
44°	3774.4	3716.2	3613.0	3451.6	3229.3	2972.4	2621.3	2203.7	1716.1	1230.0	41.6
45°	3760.5	3703.0	3603.3	3441.9	3214.8	2957.2	2607.4	2185.0	1687.0	1197.4	36.7
46°	3670.5	3626.1	3534.7	3386.5	3169.1	2918.4	2572.1	2149.0	1642.0	1157.2	31.2
47°	3511.9	3476.6	3387.9	3277.8	3081.1	2847.0	2507.0	2080.4	1579.0	1097.0	24.9
48°	3346.4	3294.4	3212.0	3099.1	2932.9	2718.9	2399.7	1980.0	1483.4	1018.0	22.2
49°	3101.9	3071.4	2998.7	2872.7	2734.8	2546.5	2248.0	1851.2	1366.4	932.2	19.4
50°	2877.5	2856.7	2754.9	2662.1	2516.0	2340.1	2042.3	1681.5	1221.0	825.5	17.3
51°	2702.3	2677.4	2604.0	2488.3	2332.5	2128.2	1847.7	1461.3	1054.0	698.8	13.9
52°	2519.5	2505.6	2440.5	2321.4	2168.3	1964.7	1658.6	1274.3	892.0	590.7	11.1
53°	2369.9	2349.8	2270.2	2164.2	1998.7	1788.1	1453.6	1100.4	755.6	496.6	9.7
54°	2151.7	2143.4	2092.2	1981.4	1802.0	1572.8	1268.0	926.6	630.2	421.1	8.3
55°	1919.7	1892.0	1840.1	1752.1	1587.3	1373.3	1053.4	768.0	509.7	354.6	6.2
56°	1637.2	1635.8	1543.0	1469.6	1323.4	1096.3	841.4	599.7	414.1	295.7	5.5
57°	1367.1	1323.4	1234.1	1161.4	1004.2	831.7	624.7	449.5	324.1	239.6	4.2
58°	1011.1	988.3	964.7	858.1	712.6	589.4	446.0	315.8	239.6	182.8	2.8
59°	686.3	685.6	657.9	576.9	493.1	367.0	278.4	214.7	164.8	134.4	2.1
60°	518.0	505.6	450.2	396.8	310.3	232.0	164.8	126.7	102.5	86.6	1.4
62.5°	181.4	188.4	165.5	137.1	104.6	85.9	65.8	53.3	43.6	35.3	0.0
65°	37.4	40.9	35.3	33.2	26.3	22.9	20.1	17.3	14.5	12.5	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°	4.8	4.2	4.2	4.2	3.5	3.5	3.5	3.5	2.8	2.8	0.7
70°	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	1.4	0.7
72.5°	2.1	2.1	2.1	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
85°	0.7	0.7	0.7	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	40.2	40.2	40.2	40.2	40.2	40.2
2.5°	42.2	40.9	38.8	38.1	37.4	37.4
5°	41.6	38.8	36.7	34.6	33.9	33.9
7.5°	39.5	36.0	33.2	31.9	31.2	30.5
10°	37.4	32.5	29.8	28.4	28.4	28.4
12.5°	33.2	29.1	26.3	25.6	26.3	26.3
15°	29.8	24.9	23.5	23.5	24.2	24.9
17.5°	25.6	22.2	20.8	21.5	22.2	22.9
20°	22.9	18.7	18.7	19.4	21.5	21.5
22.5°	20.1	16.6	16.6	18.7	20.1	20.8
25°	18.0	14.5	15.2	17.3	19.4	20.1
27.5°	15.2	12.5	13.9	16.6	18.7	19.4
30°	13.2	11.1	13.2	15.9	18.0	19.4
31°	12.5	10.4	13.2	15.2	18.0	19.4
32°	11.1	10.4	12.5	15.2	18.0	18.7
33°	10.4	9.7	12.5	15.2	18.0	18.7
34°	9.7	9.0	11.8	15.2	18.0	18.7
35°	8.3	9.0	11.8	14.5	17.3	18.7
36°	7.6	8.3	11.8	14.5	17.3	18.7
37°	6.9	8.3	11.1	14.5	17.3	18.7
38°	6.2	7.6	11.1	14.5	17.3	18.7
39°	5.5	7.6	10.4	14.5	17.3	18.7
40°	4.8	6.9	10.4	13.9	17.3	18.7
41°	4.8	6.9	10.4	13.9	17.3	18.7
42°	4.2	6.9	10.4	13.9	17.3	18.7
43°	3.5	6.2	10.4	13.9	17.3	18.7
44°	2.8	6.2	9.7	13.9	17.3	18.7
45°	2.8	6.2	9.7	13.9	17.3	18.7
46°	2.1	5.5	9.7	13.9	17.3	18.7
47°	1.4	5.5	9.7	13.2	17.3	18.7
48°	1.4	5.5	9.7	13.2	17.3	18.7
49°	1.4	5.5	9.0	13.2	17.3	18.7
50°	1.4	5.5	9.0	13.2	17.3	18.7
51°	0.7	4.8	9.0	13.2	17.3	18.7
52°	0.7	4.8	9.0	13.2	17.3	19.4
53°	0.7	4.8	9.0	13.2	17.3	18.7
54°	0.7	4.8	8.3	13.2	17.3	18.7
55°	0.7	4.8	8.3	13.2	17.3	18.7
56°	0.7	4.2	8.3	12.5	17.3	18.7
57°	1.4	4.2	8.3	12.5	17.3	18.0
58°	1.4	4.2	8.3	12.5	16.6	18.0
59°	1.4	4.2	8.3	12.5	16.6	18.0
60°	1.4	4.2	7.6	12.5	16.6	18.0
62.5°	1.4	4.2	7.6	11.8	15.9	17.3
65°	1.4	4.2	6.9	11.1	15.9	16.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.4	3.5	6.9	10.4	15.2	15.9
70°	2.1	3.5	6.2	10.4	14.5	15.2
72.5°	2.1	3.5	6.2	9.0	13.2	14.5
75°	2.1	3.5	5.5	8.3	12.5	13.2
77.5°	2.1	3.5	4.8	7.6	11.1	11.8
80°	2.8	3.5	4.2	6.2	9.7	10.4
82.5°	2.8	3.5	3.5	4.8	7.6	8.3
85°	2.1	2.8	2.8	3.5	4.8	5.5
87.5°	2.1	2.8	2.1	1.4	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)