

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: P1344871

Luminaire Tested: P3A13R25W2N902765DE010 E3CA451MW_3500K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344871
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 E3CA451MW_3500K
Description: 3in Adjustable Tunable White LED luminaire with, R25 optic, 3500K CCT AND, 90CRI ,
E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

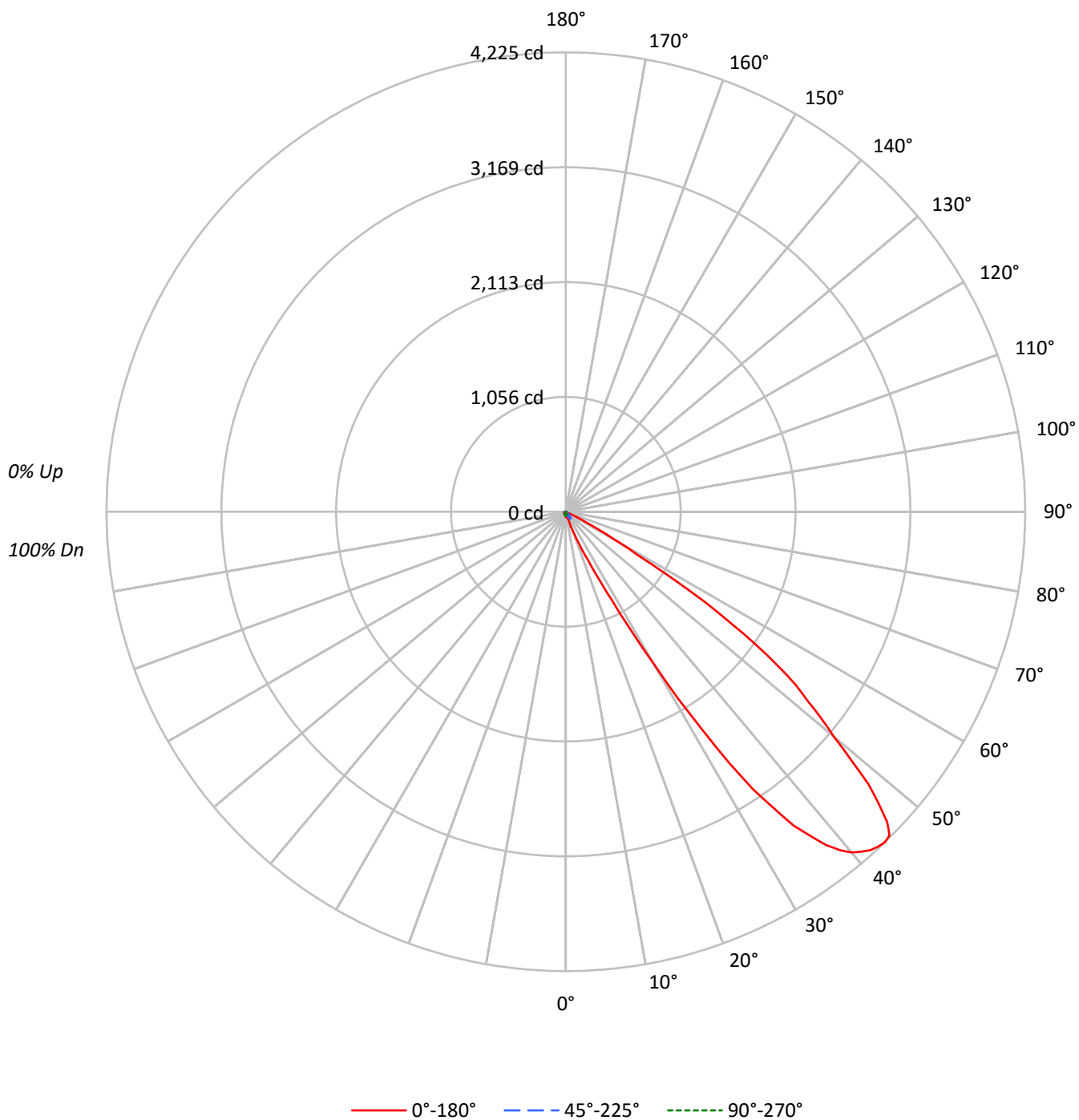
Lumens per Lamp: N/A
Luminaire Lumens: 881.1 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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					0		
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		0				
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°	9868	9868	9868	9868	9868
5°	11270	10742	9553	8541	8364
10°	11222	10176	8105	7081	7081
15°	12486	8808	6334	5993	6334
20°	44151	8681	4877	5064	5600
25°	126999	11057	3944	4694	5444
30°	405151	17066	3140	4507	5495
35°	887400	20130	2704	4363	5595
40°	1170622	18206	2233	4437	5983
45°	1305469	12746	2171	4807	6481
50°	1098881	6618	2115	5015	7130
55°	821572	2676	2064	5620	7990
60°	254322	702	2061	6140	8859
65°	21740	0	2439	6434	9651
70°	1475	513	2500	7437	10963
75°	1356	678	3304	7879	12454
80°	1010	1010	4925	8840	14648
85°	2013	2013	7799	9812	15599

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1305469 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.0	0.5
10°-20°	10.4	1.2
20°-30°	48.7	5.5
30°-40°	234.7	26.6
40°-50°	367.8	41.8
50°-60°	188.6	21.4
60°-70°	17.8	2.0
70°-80°	6.0	0.7
80°-90°	3.0	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°	63.2	7.2
0°-40°	297.8	33.8
0°-60°	854.2	97.0
0°-90°	881.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	881.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	45	45	45	45	45	
5°	51	49	43	39	38	5
15°	55	39	28	26	28	23
25°	525	46	16	19	22	326
35°	3315	75	10	16	21	2012
45°	4210	41	7	16	21	3080
55°	2149	7	5	15	21	1789
65°	42	0	5	12	19	131
75°	2	1	4	9	15	2
85°	1	1	3	4	6	1
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°	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
2.5°	48.8	48.8	48.8	48.8	48.8	48.8	48.1	48.1	48.8	48.1	48.1
5°	51.2	51.2	51.2	51.2	51.2	51.2	51.2	50.4	50.4	50.4	48.8
7.5°	51.9	51.2	51.2	51.2	51.2	51.2	51.2	51.2	50.4	50.4	48.1
10°	50.4	50.4	50.4	50.4	49.6	49.6	49.6	48.8	48.8	48.8	45.7
12.5°	50.4	50.4	50.4	50.4	49.6	49.6	48.8	48.8	48.1	47.3	41.9
15°	55.0	55.0	55.0	54.3	53.5	52.7	51.9	51.2	50.4	48.8	38.8
17.5°	80.6	78.3	77.5	74.4	70.5	66.7	63.6	60.5	57.4	55.0	37.2
20°	189.2	188.4	184.5	175.2	165.1	153.5	141.9	128.7	110.1	97.7	37.2
22.5°	327.9	323.3	316.3	309.3	291.5	270.6	248.9	224.0	200.0	174.4	39.5
25°	524.9	535.7	512.4	493.8	462.8	424.8	383.8	349.6	306.2	265.9	45.7
27.5°	912.5	919.5	873.7	813.2	741.1	661.3	583.8	525.6	452.8	386.1	57.4
30°	1600.1	1607.1	1530.4	1401.7	1252.8	1121.8	944.3	788.4	645.0	534.2	67.4
31°	1997.1	1942.8	1853.6	1728.8	1540.4	1342.7	1129.6	941.2	759.8	614.0	70.5
32°	2342.1	2337.4	2233.5	2044.4	1855.2	1611.0	1346.6	1100.9	878.4	694.6	72.9
33°	2749.1	2718.1	2571.5	2393.2	2142.8	1897.1	1555.9	1275.3	1000.1	784.6	74.4
34°	3075.5	2991.7	2931.3	2727.4	2463.0	2149.8	1784.6	1459.8	1152.0	871.4	75.2
35°	3315.0	3297.2	3179.3	2989.4	2720.4	2400.2	2031.2	1651.3	1279.2	972.2	75.2
36°	3568.5	3513.5	3398.7	3226.6	2964.6	2633.6	2219.6	1817.2	1427.3	1062.9	74.4
37°	3727.4	3694.9	3580.9	3403.4	3146.8	2830.5	2430.4	1992.4	1545.1	1153.6	72.9
38°	3891.0	3825.1	3712.7	3542.9	3291.0	2994.1	2583.2	2127.3	1653.6	1233.4	70.5
39°	4004.2	3936.0	3821.3	3652.2	3405.7	3111.1	2704.1	2242.0	1748.2	1293.1	67.4
40°	4089.5	4023.6	3907.3	3733.6	3490.2	3203.4	2804.9	2343.6	1827.3	1345.1	63.6
41°	4142.2	4081.0	3965.5	3792.6	3548.4	3256.1	2870.8	2409.5	1880.8	1380.0	59.7
42°	4186.4	4123.6	4005.8	3829.0	3584.0	3301.1	2911.1	2451.4	1917.2	1397.8	56.6
43°	4211.2	4148.4	4033.7	3853.0	3605.7	3322.0	2932.8	2470.8	1929.6	1395.5	51.2
44°	4225.2	4160.0	4044.5	3863.9	3615.0	3327.4	2934.4	2466.9	1921.1	1376.9	46.5
45°	4209.7	4145.3	4033.7	3853.0	3598.8	3310.4	2918.9	2445.9	1888.5	1340.4	41.1
46°	4108.9	4059.3	3956.9	3791.0	3547.6	3266.9	2879.3	2405.6	1838.1	1295.5	34.9
47°	3931.3	3891.8	3792.6	3669.3	3449.1	3187.1	2806.4	2328.9	1767.6	1228.0	27.9
48°	3746.1	3687.9	3595.7	3469.3	3283.2	3043.7	2686.3	2216.5	1660.6	1139.6	24.8
49°	3472.4	3438.3	3356.9	3215.8	3061.5	2850.6	2516.5	2072.3	1529.6	1043.5	21.7
50°	3221.2	3197.9	3084.0	2980.1	2816.5	2619.6	2286.2	1882.3	1366.8	924.1	19.4
51°	3025.1	2997.2	2915.0	2785.5	2611.1	2382.4	2068.4	1635.8	1179.9	782.2	15.5
52°	2820.4	2804.9	2732.0	2598.7	2427.3	2199.4	1856.7	1426.5	998.5	661.3	12.4
53°	2652.9	2630.5	2541.3	2422.7	2237.4	2001.7	1627.3	1231.9	845.8	555.9	10.9
54°	2408.7	2399.4	2342.1	2218.0	2017.2	1760.6	1419.5	1037.3	705.5	471.4	9.3
55°	2149.0	2118.0	2059.9	1961.4	1776.9	1537.3	1179.2	859.8	570.6	396.9	7.0
56°	1832.7	1831.2	1727.3	1645.1	1481.5	1227.2	941.9	671.4	463.6	331.0	6.2
57°	1530.4	1481.5	1381.5	1300.1	1124.1	931.1	699.3	503.1	362.8	268.2	4.7
58°	1131.9	1106.3	1079.9	960.5	797.7	659.7	499.3	353.5	268.2	204.7	3.1
59°	768.3	767.5	736.5	645.8	552.0	410.9	311.7	240.3	184.5	150.4	2.3
60°	579.9	565.9	503.9	444.2	347.3	259.7	184.5	141.9	114.7	96.9	1.6
62.5°	203.1	210.9	185.3	153.5	117.1	96.1	73.6	59.7	48.8	39.5	0.0
65°	41.9	45.7	39.5	37.2	29.5	25.6	22.5	19.4	16.3	14.0	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°	5.4	4.7	4.7	4.7	3.9	3.9	3.9	3.9	3.1	3.1	0.8
70°	2.3	2.3	2.3	2.3	2.3	2.3	1.6	1.6	1.6	1.6	0.8
72.5°	2.3	2.3	2.3	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
85°	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	45.0	45.0	45.0	45.0	45.0	45.0
2.5°	47.3	45.7	43.4	42.6	41.9	41.9
5°	46.5	43.4	41.1	38.8	38.0	38.0
7.5°	44.2	40.3	37.2	35.7	34.9	34.1
10°	41.9	36.4	33.3	31.8	31.8	31.8
12.5°	37.2	32.6	29.5	28.7	29.5	29.5
15°	33.3	27.9	26.4	26.4	27.1	27.9
17.5°	28.7	24.8	23.3	24.0	24.8	25.6
20°	25.6	20.9	20.9	21.7	24.0	24.0
22.5°	22.5	18.6	18.6	20.9	22.5	23.3
25°	20.2	16.3	17.1	19.4	21.7	22.5
27.5°	17.1	14.0	15.5	18.6	20.9	21.7
30°	14.7	12.4	14.7	17.8	20.2	21.7
31°	14.0	11.6	14.7	17.1	20.2	21.7
32°	12.4	11.6	14.0	17.1	20.2	20.9
33°	11.6	10.9	14.0	17.1	20.2	20.9
34°	10.9	10.1	13.2	17.1	20.2	20.9
35°	9.3	10.1	13.2	16.3	19.4	20.9
36°	8.5	9.3	13.2	16.3	19.4	20.9
37°	7.8	9.3	12.4	16.3	19.4	20.9
38°	7.0	8.5	12.4	16.3	19.4	20.9
39°	6.2	8.5	11.6	16.3	19.4	20.9
40°	5.4	7.8	11.6	15.5	19.4	20.9
41°	5.4	7.8	11.6	15.5	19.4	20.9
42°	4.7	7.8	11.6	15.5	19.4	20.9
43°	3.9	7.0	11.6	15.5	19.4	20.9
44°	3.1	7.0	10.9	15.5	19.4	20.9
45°	3.1	7.0	10.9	15.5	19.4	20.9
46°	2.3	6.2	10.9	15.5	19.4	20.9
47°	1.6	6.2	10.9	14.7	19.4	20.9
48°	1.6	6.2	10.9	14.7	19.4	20.9
49°	1.6	6.2	10.1	14.7	19.4	20.9
50°	1.6	6.2	10.1	14.7	19.4	20.9
51°	0.8	5.4	10.1	14.7	19.4	20.9
52°	0.8	5.4	10.1	14.7	19.4	21.7
53°	0.8	5.4	10.1	14.7	19.4	20.9
54°	0.8	5.4	9.3	14.7	19.4	20.9
55°	0.8	5.4	9.3	14.7	19.4	20.9
56°	0.8	4.7	9.3	14.0	19.4	20.9
57°	1.6	4.7	9.3	14.0	19.4	20.2
58°	1.6	4.7	9.3	14.0	18.6	20.2
59°	1.6	4.7	9.3	14.0	18.6	20.2
60°	1.6	4.7	8.5	14.0	18.6	20.2
62.5°	1.6	4.7	8.5	13.2	17.8	19.4
65°	1.6	4.7	7.8	12.4	17.8	18.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.6	3.9	7.8	11.6	17.1	17.8
70°	2.3	3.9	7.0	11.6	16.3	17.1
72.5°	2.3	3.9	7.0	10.1	14.7	16.3
75°	2.3	3.9	6.2	9.3	14.0	14.7
77.5°	2.3	3.9	5.4	8.5	12.4	13.2
80°	3.1	3.9	4.7	7.0	10.9	11.6
82.5°	3.1	3.9	3.9	5.4	8.5	9.3
85°	2.3	3.1	3.1	3.9	5.4	6.2
87.5°	2.3	3.1	2.3	1.6	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)