

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: P1344506

Luminaire Tested: P3A13R259730DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344506
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: P3A13R259730DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

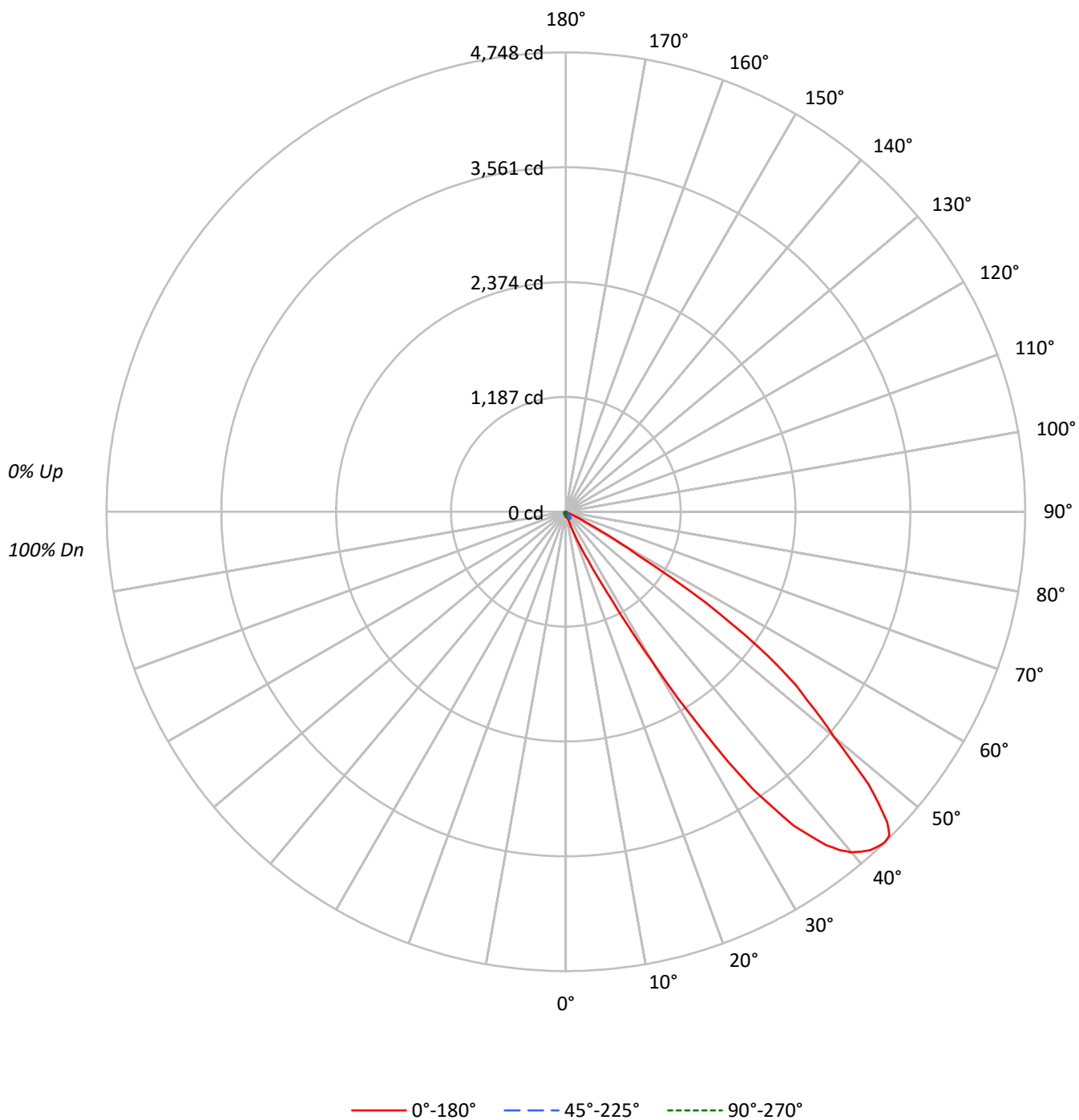
Lumens per Lamp: N/A
Luminaire Lumens: 990.0 lumens
Efficiency: N/A
Efficacy: 67.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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°	11074	11074	11074	11074	11074
5°	12657	12084	10742	9597	9399
10°	12603	11445	9107	7949	7949
15°	14052	9898	7128	6720	7128
20°	49611	9754	5484	5694	6301
25°	142702	12436	4428	5274	6121
30°	455285	19193	3520	5064	6178
35°	997207	22620	3025	4899	6291
40°	1315465	20438	2490	4981	6727
45°	1466974	14327	2419	5396	7288
50°	1234825	7437	2388	5663	8017
55°	923226	2982	2332	6346	8984
60°	285767	746	2281	6885	9955
65°	24387	0	2698	7212	10844
70°	1667	577	2821	8399	12310
75°	1440	763	3728	8896	14064
80°	1137	1137	5556	9850	16543
85°	2264	2264	8806	11070	17612

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1466974 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.5	0.5
10°-20°	11.7	1.2
20°-30°	54.8	5.5
30°-40°	263.7	26.6
40°-50°	413.3	41.8
50°-60°	211.9	21.4
60°-70°	20.0	2.0
70°-80°	6.7	0.7
80°-90°	3.4	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°	71.0	7.2
0°-40°	334.7	33.8
0°-60°	959.9	97.0
0°-90°	990.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	990.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	50	50	50	50	50	
5°	58	55	49	44	43	5
15°	62	44	31	30	31	26
25°	590	51	18	22	25	366
35°	3725	84	11	18	24	2261
45°	4730	46	8	17	24	3461
55°	2415	8	6	17	24	2010
65°	47	0	5	14	21	147
75°	2	1	4	10	17	2
85°	1	1	4	4	7	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°	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
2.5°	54.9	54.9	54.9	54.9	54.9	54.9	54.0	54.0	54.9	54.0	54.0
5°	57.5	57.5	57.5	57.5	57.5	57.5	57.5	56.6	56.6	56.6	54.9
7.5°	58.4	57.5	57.5	57.5	57.5	57.5	57.5	57.5	56.6	56.6	54.0
10°	56.6	56.6	56.6	56.6	55.8	55.8	55.8	54.9	54.9	54.9	51.4
12.5°	56.6	56.6	56.6	56.6	55.8	55.8	54.9	54.9	54.0	53.1	47.0
15°	61.9	61.9	61.9	61.0	60.1	59.2	58.4	57.5	56.6	54.9	43.6
17.5°	90.6	88.0	87.1	83.6	79.3	74.9	71.4	68.0	64.5	61.9	41.8
20°	212.6	211.7	207.3	196.9	185.6	172.5	159.4	144.6	123.7	109.8	41.8
22.5°	368.5	363.3	355.4	347.6	327.6	304.0	279.6	251.8	224.8	196.0	44.4
25°	589.8	602.0	575.8	554.9	520.1	477.4	431.2	392.9	344.1	298.8	51.4
27.5°	1025.4	1033.2	981.8	913.9	832.8	743.1	656.0	590.7	508.8	433.8	64.5
30°	1798.1	1805.9	1719.7	1575.1	1407.8	1260.6	1061.1	886.0	724.8	600.2	75.8
31°	2244.2	2183.2	2083.0	1942.7	1731.0	1508.9	1269.3	1057.6	853.8	690.0	79.3
32°	2631.8	2626.6	2509.9	2297.3	2084.7	1810.3	1513.2	1237.1	987.0	780.6	81.9
33°	3089.2	3054.3	2889.7	2689.3	2407.9	2131.8	1748.5	1433.1	1123.8	881.6	83.6
34°	3456.0	3361.9	3293.9	3064.8	2767.7	2415.8	2005.4	1640.4	1294.6	979.2	84.5
35°	3725.2	3705.1	3572.7	3359.3	3057.0	2697.2	2282.5	1855.6	1437.4	1092.5	84.5
36°	4010.0	3948.2	3819.2	3625.8	3331.4	2959.4	2494.2	2042.0	1603.8	1194.4	83.6
37°	4188.6	4152.0	4024.0	3824.5	3536.1	3180.7	2731.1	2238.9	1736.3	1296.3	81.9
38°	4372.4	4298.4	4172.1	3981.3	3698.1	3364.5	2902.8	2390.5	1858.2	1386.0	79.3
39°	4499.6	4423.0	4294.0	4104.1	3827.1	3496.0	3038.7	2519.4	1964.5	1453.1	75.8
40°	4595.5	4521.4	4390.7	4195.6	3922.0	3599.7	3151.9	2633.6	2053.4	1511.5	71.4
41°	4654.7	4585.9	4456.1	4261.8	3987.4	3658.9	3226.0	2707.6	2113.5	1550.7	67.1
42°	4704.4	4633.8	4501.4	4302.7	4027.4	3709.5	3271.3	2754.7	2154.4	1570.7	63.6
43°	4732.2	4661.7	4532.7	4329.7	4051.8	3733.0	3295.7	2776.4	2168.4	1568.1	57.5
44°	4747.9	4674.7	4544.9	4341.9	4062.3	3739.1	3297.4	2772.1	2158.8	1547.2	52.3
45°	4730.5	4658.2	4532.7	4329.7	4044.0	3719.9	3280.0	2748.6	2122.2	1506.3	46.2
46°	4617.2	4561.5	4446.5	4260.1	3986.5	3671.1	3235.6	2703.3	2065.6	1455.7	39.2
47°	4417.7	4373.3	4261.8	4123.3	3875.9	3581.4	3153.7	2617.0	1986.3	1379.9	31.4
48°	4209.5	4144.2	4040.5	3898.5	3689.4	3420.2	3018.6	2490.7	1866.1	1280.6	27.9
49°	3902.0	3863.7	3772.2	3613.6	3440.3	3203.3	2827.8	2328.7	1718.8	1172.6	24.4
50°	3619.7	3593.6	3465.5	3348.8	3165.0	2943.7	2569.1	2115.2	1535.9	1038.4	21.8
51°	3399.3	3368.0	3275.6	3130.1	2934.1	2677.1	2324.3	1838.2	1325.9	879.0	17.4
52°	3169.3	3151.9	3070.0	2920.2	2727.7	2471.5	2086.5	1603.0	1122.1	743.1	13.9
53°	2981.2	2955.9	2855.7	2722.4	2514.2	2249.4	1828.6	1384.3	950.5	624.6	12.2
54°	2706.7	2696.3	2631.8	2492.4	2266.8	1978.4	1595.1	1165.6	792.8	529.7	10.5
55°	2414.9	2380.1	2314.7	2204.1	1996.7	1727.5	1325.1	966.1	641.2	446.0	7.8
56°	2059.5	2057.7	1941.0	1848.6	1664.8	1379.1	1058.5	754.4	521.0	372.0	7.0
57°	1719.7	1664.8	1552.4	1461.0	1263.2	1046.3	785.8	565.4	407.7	301.4	5.2
58°	1271.9	1243.2	1213.5	1079.4	896.4	741.4	561.0	397.3	301.4	230.0	3.5
59°	863.3	862.5	827.6	725.7	620.3	461.7	350.2	270.1	207.3	169.0	2.6
60°	651.6	636.0	566.3	499.2	390.3	291.8	207.3	159.4	128.9	108.9	1.7
62.5°	228.2	237.0	208.2	172.5	131.5	108.0	82.8	67.1	54.9	44.4	0.0
65°	47.0	51.4	44.4	41.8	33.1	28.7	25.3	21.8	18.3	15.7	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°	6.1	5.2	5.2	5.2	4.4	4.4	4.4	4.4	3.5	3.5	0.9
70°	2.6	2.6	2.6	2.6	2.6	2.6	1.7	1.7	1.7	1.7	0.9
72.5°	2.6	2.6	2.6	1.7	1.7	1.7	1.7	1.7	1.7	0.9	0.9
75°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.9	0.9	0.9	0.9
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	0.9	0.9	0.9	0.9	0.9
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
82.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.7
85°	0.9	0.9	0.9	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
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°	50.5	50.5	50.5	50.5	50.5	50.5
2.5°	53.1	51.4	48.8	47.9	47.0	47.0
5°	52.3	48.8	46.2	43.6	42.7	42.7
7.5°	49.7	45.3	41.8	40.1	39.2	38.3
10°	47.0	40.9	37.5	35.7	35.7	35.7
12.5°	41.8	36.6	33.1	32.2	33.1	33.1
15°	37.5	31.4	29.6	29.6	30.5	31.4
17.5°	32.2	27.9	26.1	27.0	27.9	28.7
20°	28.7	23.5	23.5	24.4	27.0	27.0
22.5°	25.3	20.9	20.9	23.5	25.3	26.1
25°	22.7	18.3	19.2	21.8	24.4	25.3
27.5°	19.2	15.7	17.4	20.9	23.5	24.4
30°	16.6	13.9	16.6	20.0	22.7	24.4
31°	15.7	13.1	16.6	19.2	22.7	24.4
32°	13.9	13.1	15.7	19.2	22.7	23.5
33°	13.1	12.2	15.7	19.2	22.7	23.5
34°	12.2	11.3	14.8	19.2	22.7	23.5
35°	10.5	11.3	14.8	18.3	21.8	23.5
36°	9.6	10.5	14.8	18.3	21.8	23.5
37°	8.7	10.5	13.9	18.3	21.8	23.5
38°	7.8	9.6	13.9	18.3	21.8	23.5
39°	7.0	9.6	13.1	18.3	21.8	23.5
40°	6.1	8.7	13.1	17.4	21.8	23.5
41°	6.1	8.7	13.1	17.4	21.8	23.5
42°	5.2	8.7	13.1	17.4	21.8	23.5
43°	4.4	7.8	13.1	17.4	21.8	23.5
44°	3.5	7.8	12.2	17.4	21.8	23.5
45°	3.5	7.8	12.2	17.4	21.8	23.5
46°	2.6	7.0	12.2	17.4	21.8	23.5
47°	1.7	7.0	12.2	16.6	21.8	23.5
48°	1.7	7.0	12.2	16.6	21.8	23.5
49°	1.7	7.0	11.3	16.6	21.8	23.5
50°	1.7	7.0	11.3	16.6	21.8	23.5
51°	0.9	6.1	11.3	16.6	21.8	23.5
52°	0.9	6.1	11.3	16.6	21.8	24.4
53°	0.9	6.1	11.3	16.6	21.8	23.5
54°	0.9	6.1	10.5	16.6	21.8	23.5
55°	0.9	6.1	10.5	16.6	21.8	23.5
56°	0.9	5.2	10.5	15.7	21.8	23.5
57°	1.7	5.2	10.5	15.7	21.8	22.7
58°	1.7	5.2	10.5	15.7	20.9	22.7
59°	1.7	5.2	10.5	15.7	20.9	22.7
60°	1.7	5.2	9.6	15.7	20.9	22.7
62.5°	1.7	5.2	9.6	14.8	20.0	21.8
65°	1.7	5.2	8.7	13.9	20.0	20.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.7	4.4	8.7	13.1	19.2	20.0
70°	2.6	4.4	7.8	13.1	18.3	19.2
72.5°	2.6	4.4	7.8	11.3	16.6	18.3
75°	2.6	4.4	7.0	10.5	15.7	16.6
77.5°	2.6	4.4	6.1	9.6	13.9	14.8
80°	3.5	4.4	5.2	7.8	12.2	13.1
82.5°	3.5	4.4	4.4	6.1	9.6	10.5
85°	2.6	3.5	3.5	4.4	6.1	7.0
87.5°	2.6	3.5	2.6	1.7	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)