

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: P1344473

Luminaire Tested: P3A13R259050DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344473
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: P3A13R259050DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 5000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

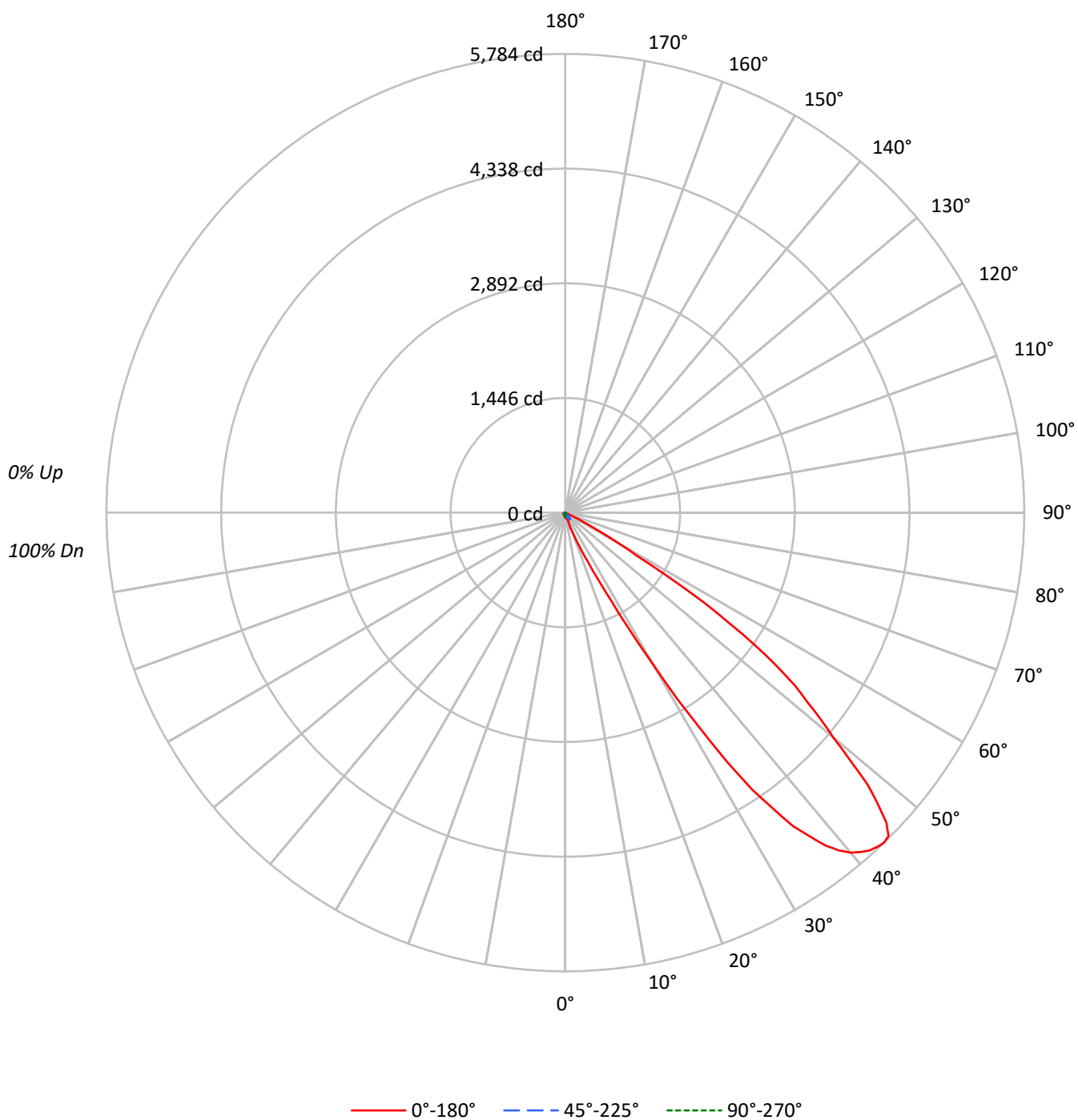
Lumens per Lamp: N/A
Luminaire Lumens: 1206.0 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	13508	13508	13508	13508	13508
5°	15408	14726	13075	11688	11446
10°	15364	13939	11111	9686	9686
15°	17094	12055	8672	8195	8672
20°	60415	11878	6697	6931	7677
25°	173841	15146	5395	6412	7452
30°	554617	23371	4304	6178	7520
35°	1214761	27546	3694	5970	7683
40°	1602459	24904	3034	6069	8215
45°	1787038	17428	2977	6574	8900
50°	1504258	9040	2900	6891	9791
55°	1124662	3670	2829	7723	10972
60°	348130	921	2807	8377	12104
65°	29731	0	3321	8821	13231
70°	2052	705	3398	10194	14938
75°	1779	932	4490	10760	17114
80°	1389	1389	6693	12123	20078
85°	2768	2768	10567	13335	21386

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1787038 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.5	0.5
10°-20°	14.2	1.2
20°-30°	66.7	5.5
30°-40°	321.2	26.6
40°-50°	503.5	41.8
50°-60°	258.1	21.4
60°-70°	24.3	2.0
70°-80°	8.2	0.7
80°-90°	4.1	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°	86.4	7.2
0°-40°	407.7	33.8
0°-60°	1169.4	97.0
0°-90°	1206.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1206.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	62	62	62	62	62	
5°	70	67	59	53	52	7
15°	75	53	38	36	38	32
25°	718	63	22	26	31	446
35°	4538	103	14	22	29	2755
45°	5763	56	10	21	29	4217
55°	2942	10	7	20	29	2449
65°	57	0	6	17	26	179
75°	2	1	5	13	20	3
85°	1	1	4	5	8	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°	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6
2.5°	66.9	66.9	66.9	66.9	66.9	66.9	65.8	65.8	66.9	65.8	65.8
5°	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.0	69.0	69.0	66.9
7.5°	71.1	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.0	69.0	65.8
10°	69.0	69.0	69.0	69.0	67.9	67.9	67.9	66.9	66.9	66.9	62.6
12.5°	69.0	69.0	69.0	69.0	67.9	67.9	66.9	66.9	65.8	64.7	57.3
15°	75.3	75.3	75.3	74.3	73.2	72.2	71.1	70.0	69.0	66.9	53.1
17.5°	110.4	107.2	106.1	101.9	96.6	91.3	87.0	82.8	78.5	75.3	50.9
20°	258.9	257.9	252.6	239.8	226.0	210.1	194.2	176.2	150.7	133.7	50.9
22.5°	448.9	442.5	433.0	423.4	399.0	370.4	340.7	306.7	273.8	238.8	54.1
25°	718.5	733.3	701.5	676.0	633.6	581.6	525.3	478.6	419.2	364.0	62.6
27.5°	1249.1	1258.6	1196.0	1113.3	1014.6	905.2	799.1	719.5	619.8	528.5	78.5
30°	2190.4	2200.0	2094.9	1918.7	1715.0	1535.6	1292.6	1079.3	883.0	731.2	92.3
31°	2733.8	2659.5	2537.5	2366.6	2108.7	1838.1	1546.2	1288.4	1040.0	840.5	96.6
32°	3206.0	3199.7	3057.5	2798.5	2539.6	2205.3	1843.4	1507.0	1202.4	950.9	99.8
33°	3763.2	3720.7	3520.2	3276.1	2933.3	2596.9	2129.9	1745.8	1369.0	1074.0	101.9
34°	4210.0	4095.4	4012.6	3733.5	3371.6	2942.9	2443.0	1998.3	1577.0	1192.8	102.9
35°	4537.9	4513.5	4352.2	4092.2	3723.9	3285.6	2780.5	2260.5	1751.1	1330.8	102.9
36°	4884.9	4809.6	4652.5	4416.9	4058.2	3605.1	3038.4	2487.6	1953.8	1455.0	101.9
37°	5102.5	5057.9	4901.9	4658.9	4307.6	3874.6	3327.0	2727.4	2115.1	1579.1	99.8
38°	5326.4	5236.2	5082.3	4849.9	4505.0	4098.6	3536.1	2912.1	2263.6	1688.5	96.6
39°	5481.4	5388.0	5230.9	4999.6	4662.1	4258.8	3701.6	3069.1	2393.1	1770.2	92.3
40°	5598.1	5507.9	5348.7	5111.0	4777.8	4385.1	3839.6	3208.2	2501.4	1841.3	87.0
41°	5670.3	5586.4	5428.3	5191.6	4857.3	4457.3	3929.8	3298.4	2574.6	1889.0	81.7
42°	5730.8	5644.8	5483.5	5241.5	4906.2	4518.8	3985.0	3355.7	2624.5	1913.4	77.5
43°	5764.7	5678.8	5521.7	5274.4	4935.9	4547.5	4014.7	3382.2	2641.5	1910.3	70.0
44°	5783.8	5694.7	5536.5	5289.3	4948.6	4554.9	4016.8	3376.9	2629.8	1884.8	63.7
45°	5762.6	5674.5	5521.7	5274.4	4926.3	4531.5	3995.6	3348.2	2585.2	1834.9	56.2
46°	5624.6	5556.7	5416.6	5189.5	4856.3	4472.1	3941.5	3293.1	2516.2	1773.4	47.8
47°	5381.6	5327.5	5191.6	5022.9	4721.5	4362.8	3841.7	3188.0	2419.7	1681.0	38.2
48°	5128.0	5048.4	4922.1	4749.1	4494.4	4166.5	3677.2	3034.1	2273.2	1560.0	34.0
49°	4753.3	4706.7	4595.2	4402.1	4190.9	3902.2	3444.8	2836.7	2093.8	1428.4	29.7
50°	4409.5	4377.7	4221.7	4079.5	3855.5	3586.0	3129.6	2576.7	1871.0	1265.0	26.5
51°	4141.0	4102.8	3990.3	3813.1	3574.3	3261.2	2831.4	2239.2	1615.2	1070.8	21.2
52°	3860.8	3839.6	3739.9	3557.3	3322.8	3010.8	2541.7	1952.7	1366.9	905.2	17.0
53°	3631.6	3600.8	3478.8	3316.4	3062.8	2740.2	2227.6	1686.3	1157.8	760.9	14.9
54°	3297.3	3284.6	3206.0	3036.2	2761.4	2410.1	1943.2	1420.0	965.7	645.2	12.7
55°	2941.8	2899.3	2819.7	2685.0	2432.4	2104.5	1614.2	1176.9	781.1	543.4	9.6
56°	2508.8	2506.7	2364.5	2252.0	2028.1	1680.0	1289.4	919.0	634.6	453.2	8.5
57°	2094.9	2028.1	1891.2	1779.7	1538.8	1274.6	957.2	688.8	496.7	367.2	6.4
58°	1549.4	1514.4	1478.3	1314.9	1092.0	903.1	683.4	483.9	367.2	280.2	4.2
59°	1051.7	1050.6	1008.2	884.0	755.6	562.5	426.6	329.0	252.6	205.9	3.2
60°	793.8	774.7	689.8	608.1	475.4	355.5	252.6	194.2	157.1	132.7	2.1
62.5°	278.0	288.7	253.6	210.1	160.2	131.6	100.8	81.7	66.9	54.1	0.0
65°	57.3	62.6	54.1	50.9	40.3	35.0	30.8	26.5	22.3	19.1	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°	7.4	6.4	6.4	6.4	5.3	5.3	5.3	5.3	4.2	4.2	1.1
70°	3.2	3.2	3.2	3.2	3.2	3.2	2.1	2.1	2.1	2.1	1.1
72.5°	3.2	3.2	3.2	2.1	2.1	2.1	2.1	2.1	2.1	1.1	1.1
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1
85°	1.1	1.1	1.1	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
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°	61.6	61.6	61.6	61.6	61.6	61.6
2.5°	64.7	62.6	59.4	58.4	57.3	57.3
5°	63.7	59.4	56.2	53.1	52.0	52.0
7.5°	60.5	55.2	50.9	48.8	47.8	46.7
10°	57.3	49.9	45.6	43.5	43.5	43.5
12.5°	50.9	44.6	40.3	39.3	40.3	40.3
15°	45.6	38.2	36.1	36.1	37.1	38.2
17.5°	39.3	34.0	31.8	32.9	34.0	35.0
20°	35.0	28.7	28.7	29.7	32.9	32.9
22.5°	30.8	25.5	25.5	28.7	30.8	31.8
25°	27.6	22.3	23.3	26.5	29.7	30.8
27.5°	23.3	19.1	21.2	25.5	28.7	29.7
30°	20.2	17.0	20.2	24.4	27.6	29.7
31°	19.1	15.9	20.2	23.3	27.6	29.7
32°	17.0	15.9	19.1	23.3	27.6	28.7
33°	15.9	14.9	19.1	23.3	27.6	28.7
34°	14.9	13.8	18.0	23.3	27.6	28.7
35°	12.7	13.8	18.0	22.3	26.5	28.7
36°	11.7	12.7	18.0	22.3	26.5	28.7
37°	10.6	12.7	17.0	22.3	26.5	28.7
38°	9.6	11.7	17.0	22.3	26.5	28.7
39°	8.5	11.7	15.9	22.3	26.5	28.7
40°	7.4	10.6	15.9	21.2	26.5	28.7
41°	7.4	10.6	15.9	21.2	26.5	28.7
42°	6.4	10.6	15.9	21.2	26.5	28.7
43°	5.3	9.6	15.9	21.2	26.5	28.7
44°	4.2	9.6	14.9	21.2	26.5	28.7
45°	4.2	9.6	14.9	21.2	26.5	28.7
46°	3.2	8.5	14.9	21.2	26.5	28.7
47°	2.1	8.5	14.9	20.2	26.5	28.7
48°	2.1	8.5	14.9	20.2	26.5	28.7
49°	2.1	8.5	13.8	20.2	26.5	28.7
50°	2.1	8.5	13.8	20.2	26.5	28.7
51°	1.1	7.4	13.8	20.2	26.5	28.7
52°	1.1	7.4	13.8	20.2	26.5	29.7
53°	1.1	7.4	13.8	20.2	26.5	28.7
54°	1.1	7.4	12.7	20.2	26.5	28.7
55°	1.1	7.4	12.7	20.2	26.5	28.7
56°	1.1	6.4	12.7	19.1	26.5	28.7
57°	2.1	6.4	12.7	19.1	26.5	27.6
58°	2.1	6.4	12.7	19.1	25.5	27.6
59°	2.1	6.4	12.7	19.1	25.5	27.6
60°	2.1	6.4	11.7	19.1	25.5	27.6
62.5°	2.1	6.4	11.7	18.0	24.4	26.5
65°	2.1	6.4	10.6	17.0	24.4	25.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.1	5.3	10.6	15.9	23.3	24.4
70°	3.2	5.3	9.6	15.9	22.3	23.3
72.5°	3.2	5.3	9.6	13.8	20.2	22.3
75°	3.2	5.3	8.5	12.7	19.1	20.2
77.5°	3.2	5.3	7.4	11.7	17.0	18.0
80°	4.2	5.3	6.4	9.6	14.9	15.9
82.5°	4.2	5.3	5.3	7.4	11.7	12.7
85°	3.2	4.2	4.2	5.3	7.4	8.5
87.5°	3.2	4.2	3.2	2.1	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)