

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: P1344430

Luminaire Tested: P3A13R259030DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344430
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: P3A13R259030DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

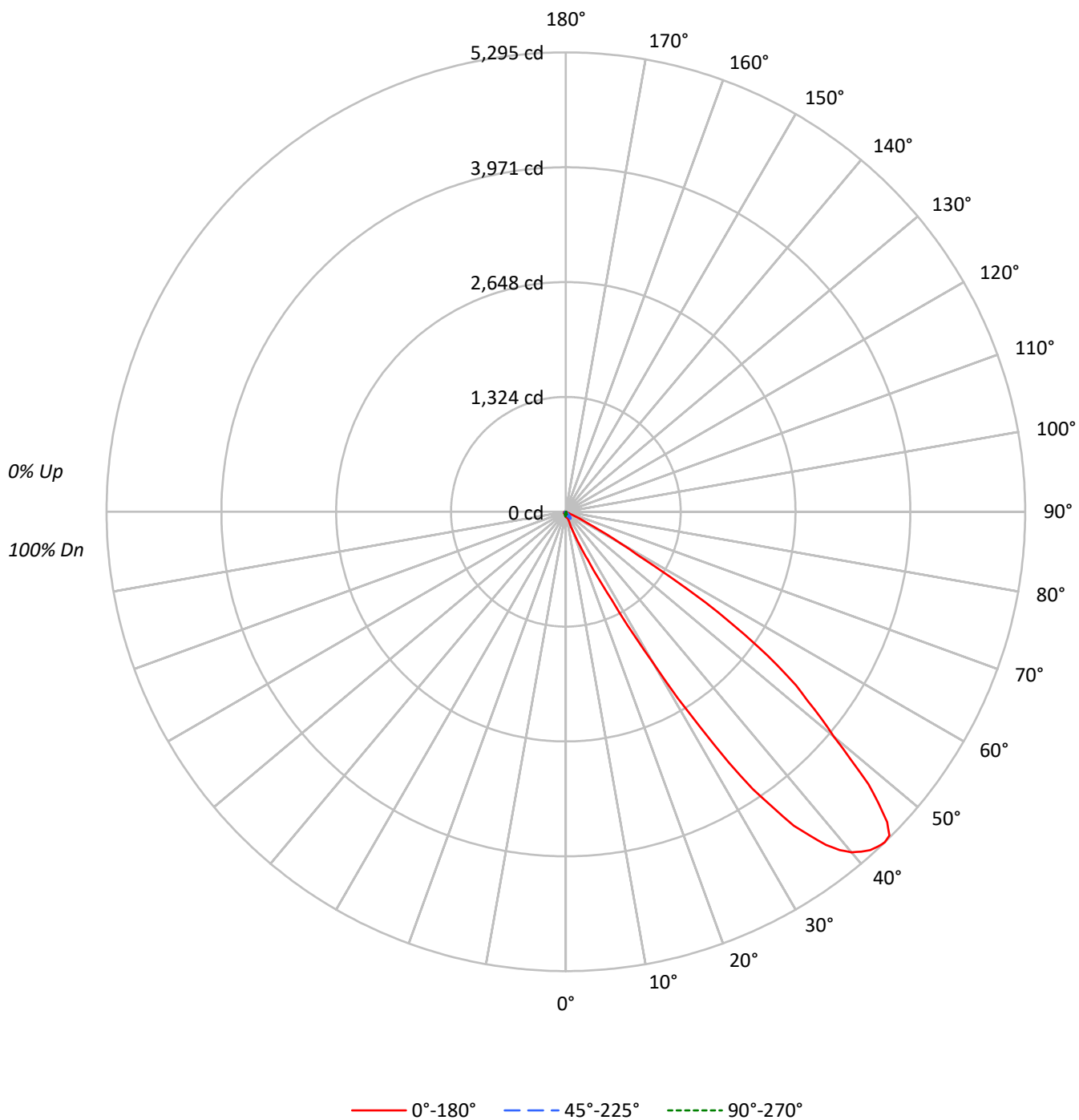
Lumens per Lamp: N/A
Luminaire Lumens: 1104.0 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			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°	12346	12346	12346	12346	12346
5°	14110	13471	11974	10698	10478
10°	14050	12759	10176	8862	8862
15°	15664	11033	7946	7492	7946
20°	55305	10874	6114	6347	7024
25°	159130	13864	4936	5879	6823
30°	507724	21396	3925	5646	6887
35°	1112020	25217	3373	5461	7014
40°	1466920	22814	2777	5553	7500
45°	1635891	15971	2698	6016	8125
50°	1377046	8290	2661	6311	8938
55°	1029545	3326	2600	7073	10016
60°	318703	833	2544	7675	11096
65°	27240	0	3009	8042	12089
70°	1859	641	3142	9361	13720
75°	1610	847	4151	9913	15674
80°	1263	1263	6188	10986	18437
85°	2516	2516	9812	12328	19625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1635891 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.0	0.5
10°-20°	13.0	1.2
20°-30°	61.1	5.5
30°-40°	294.1	26.6
40°-50°	460.9	41.8
50°-60°	236.3	21.4
60°-70°	22.3	2.0
70°-80°	7.5	0.7
80°-90°	3.8	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°	79.1	7.2
0°-40°	373.2	33.8
0°-60°	1070.4	97.0
0°-90°	1104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1104.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	56	56	56	56	56	
5°	64	61	54	49	48	6
15°	69	49	35	33	35	29
25°	658	57	20	24	28	408
35°	4154	94	13	20	26	2522
45°	5275	52	9	19	26	3860
55°	2693	9	7	18	26	2242
65°	52	0	6	16	23	164
75°	2	1	5	12	18	2
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°	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
2.5°	61.2	61.2	61.2	61.2	61.2	61.2	60.2	60.2	61.2	60.2	60.2
5°	64.1	64.1	64.1	64.1	64.1	64.1	64.1	63.1	63.1	63.1	61.2
7.5°	65.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	63.1	63.1	60.2
10°	63.1	63.1	63.1	63.1	62.2	62.2	62.2	61.2	61.2	61.2	57.3
12.5°	63.1	63.1	63.1	63.1	62.2	62.2	61.2	61.2	60.2	59.3	52.5
15°	69.0	69.0	69.0	68.0	67.0	66.1	65.1	64.1	63.1	61.2	48.6
17.5°	101.0	98.1	97.1	93.3	88.4	83.5	79.7	75.8	71.9	69.0	46.6
20°	237.0	236.1	231.2	219.6	206.9	192.4	177.8	161.3	138.0	122.4	46.6
22.5°	410.9	405.1	396.4	387.6	365.3	339.1	311.8	280.8	250.6	218.6	49.5
25°	657.7	671.3	642.2	618.8	580.0	532.4	480.9	438.1	383.7	333.2	57.3
27.5°	1143.4	1152.2	1094.9	1019.1	928.7	828.7	731.5	658.7	567.4	483.8	71.9
30°	2005.2	2013.9	1917.7	1756.5	1569.9	1405.8	1183.3	988.0	808.3	669.4	84.5
31°	2502.6	2434.6	2322.8	2166.4	1930.4	1682.6	1415.5	1179.4	952.1	769.4	88.4
32°	2934.9	2929.1	2798.9	2561.8	2324.8	2018.8	1687.5	1379.5	1100.7	870.5	91.3
33°	3444.9	3406.1	3222.4	2999.0	2685.2	2377.2	1949.8	1598.1	1253.2	983.2	93.3
34°	3853.9	3749.0	3673.2	3417.7	3086.4	2694.0	2236.4	1829.3	1443.6	1092.0	94.2
35°	4154.1	4131.8	3984.1	3746.1	3409.0	3007.7	2545.3	2069.3	1603.0	1218.3	94.2
36°	4471.8	4402.8	4259.0	4043.4	3715.0	3300.2	2781.4	2277.2	1788.5	1331.9	93.3
37°	4670.9	4630.1	4487.3	4264.9	3943.3	3546.9	3045.6	2496.7	1936.2	1445.6	91.3
38°	4875.9	4793.4	4652.5	4439.7	4124.0	3751.9	3237.0	2665.8	2072.2	1545.6	88.4
39°	5017.8	4932.3	4788.5	4576.7	4267.8	3898.6	3388.6	2809.6	2190.7	1620.5	84.5
40°	5124.6	5042.1	4896.3	4678.7	4373.7	4014.2	3514.9	2936.8	2289.8	1685.5	79.7
41°	5190.7	5113.9	4969.2	4752.5	4446.5	4080.3	3597.4	3019.4	2356.8	1729.3	74.8
42°	5246.1	5167.4	5019.7	4798.2	4491.2	4136.6	3648.0	3071.9	2402.5	1751.6	70.9
43°	5277.2	5198.5	5054.7	4828.3	4518.4	4162.9	3675.2	3096.2	2418.0	1748.7	64.1
44°	5294.6	5213.0	5068.3	4841.9	4530.1	4169.7	3677.1	3091.3	2407.4	1725.4	58.3
45°	5275.2	5194.6	5054.7	4828.3	4509.7	4148.3	3657.7	3065.1	2366.6	1679.7	51.5
46°	5148.9	5086.7	4958.5	4750.6	4445.6	4093.9	3608.1	3014.5	2303.4	1623.4	43.7
47°	4926.4	4876.9	4752.5	4598.1	4322.2	3993.8	3516.8	2918.4	2215.0	1538.8	35.0
48°	4694.3	4621.4	4505.8	4347.4	4114.3	3814.1	3366.2	2777.5	2080.9	1428.1	31.1
49°	4351.3	4308.6	4206.6	4029.8	3836.4	3572.2	3153.5	2596.8	1916.8	1307.6	27.2
50°	4036.6	4007.4	3864.6	3734.4	3529.4	3282.7	2864.9	2358.8	1712.7	1158.0	24.3
51°	3790.8	3755.8	3652.8	3490.6	3272.0	2985.4	2591.9	2049.9	1478.6	980.2	19.4
52°	3534.3	3514.9	3423.5	3256.4	3041.7	2756.1	2326.7	1787.5	1251.3	828.7	15.5
53°	3324.5	3296.3	3184.6	3035.9	2803.7	2508.4	2039.2	1543.7	1059.9	696.6	13.6
54°	3018.4	3006.8	2934.9	2779.4	2527.8	2206.3	1778.8	1299.9	884.1	590.7	11.7
55°	2693.0	2654.1	2581.3	2457.9	2226.7	1926.5	1477.6	1077.4	715.0	497.4	8.7
56°	2296.6	2294.7	2164.5	2061.5	1856.5	1537.9	1180.4	841.3	581.0	414.8	7.8
57°	1917.7	1856.5	1731.2	1629.2	1408.7	1166.8	876.3	630.5	454.7	336.1	5.8
58°	1418.4	1386.3	1353.3	1203.7	999.7	826.7	625.6	443.0	336.1	256.5	3.9
59°	962.8	961.8	922.9	809.3	691.7	514.9	390.5	301.2	231.2	188.5	2.9
60°	726.7	709.2	631.5	556.7	435.2	325.5	231.2	177.8	143.8	121.4	1.9
62.5°	254.5	264.2	232.2	192.4	146.7	120.5	92.3	74.8	61.2	49.5	0.0
65°	52.5	57.3	49.5	46.6	36.9	32.1	28.2	24.3	20.4	17.5	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°	6.8	5.8	5.8	5.8	4.9	4.9	4.9	4.9	3.9	3.9	1.0
70°	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9	1.9	1.9	1.0
72.5°	2.9	2.9	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0
75°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0
77.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.9
85°	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
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°	56.3	56.3	56.3	56.3	56.3	56.3
2.5°	59.3	57.3	54.4	53.4	52.5	52.5
5°	58.3	54.4	51.5	48.6	47.6	47.6
7.5°	55.4	50.5	46.6	44.7	43.7	42.7
10°	52.5	45.7	41.8	39.8	39.8	39.8
12.5°	46.6	40.8	36.9	35.9	36.9	36.9
15°	41.8	35.0	33.0	33.0	34.0	35.0
17.5°	35.9	31.1	29.1	30.1	31.1	32.1
20°	32.1	26.2	26.2	27.2	30.1	30.1
22.5°	28.2	23.3	23.3	26.2	28.2	29.1
25°	25.3	20.4	21.4	24.3	27.2	28.2
27.5°	21.4	17.5	19.4	23.3	26.2	27.2
30°	18.5	15.5	18.5	22.3	25.3	27.2
31°	17.5	14.6	18.5	21.4	25.3	27.2
32°	15.5	14.6	17.5	21.4	25.3	26.2
33°	14.6	13.6	17.5	21.4	25.3	26.2
34°	13.6	12.6	16.5	21.4	25.3	26.2
35°	11.7	12.6	16.5	20.4	24.3	26.2
36°	10.7	11.7	16.5	20.4	24.3	26.2
37°	9.7	11.7	15.5	20.4	24.3	26.2
38°	8.7	10.7	15.5	20.4	24.3	26.2
39°	7.8	10.7	14.6	20.4	24.3	26.2
40°	6.8	9.7	14.6	19.4	24.3	26.2
41°	6.8	9.7	14.6	19.4	24.3	26.2
42°	5.8	9.7	14.6	19.4	24.3	26.2
43°	4.9	8.7	14.6	19.4	24.3	26.2
44°	3.9	8.7	13.6	19.4	24.3	26.2
45°	3.9	8.7	13.6	19.4	24.3	26.2
46°	2.9	7.8	13.6	19.4	24.3	26.2
47°	1.9	7.8	13.6	18.5	24.3	26.2
48°	1.9	7.8	13.6	18.5	24.3	26.2
49°	1.9	7.8	12.6	18.5	24.3	26.2
50°	1.9	7.8	12.6	18.5	24.3	26.2
51°	1.0	6.8	12.6	18.5	24.3	26.2
52°	1.0	6.8	12.6	18.5	24.3	27.2
53°	1.0	6.8	12.6	18.5	24.3	26.2
54°	1.0	6.8	11.7	18.5	24.3	26.2
55°	1.0	6.8	11.7	18.5	24.3	26.2
56°	1.0	5.8	11.7	17.5	24.3	26.2
57°	1.9	5.8	11.7	17.5	24.3	25.3
58°	1.9	5.8	11.7	17.5	23.3	25.3
59°	1.9	5.8	11.7	17.5	23.3	25.3
60°	1.9	5.8	10.7	17.5	23.3	25.3
62.5°	1.9	5.8	10.7	16.5	22.3	24.3
65°	1.9	5.8	9.7	15.5	22.3	23.3



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.9	4.9	9.7	14.6	21.4	22.3
70°	2.9	4.9	8.7	14.6	20.4	21.4
72.5°	2.9	4.9	8.7	12.6	18.5	20.4
75°	2.9	4.9	7.8	11.7	17.5	18.5
77.5°	2.9	4.9	6.8	10.7	15.5	16.5
80°	3.9	4.9	5.8	8.7	13.6	14.6
82.5°	3.9	4.9	4.9	6.8	10.7	11.7
85°	2.9	3.9	3.9	4.9	6.8	7.8
87.5°	2.9	3.9	2.9	1.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)