

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: P1344386

Luminaire Tested: P3A13R259024DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344386
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: P3A13R259024DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 2400K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

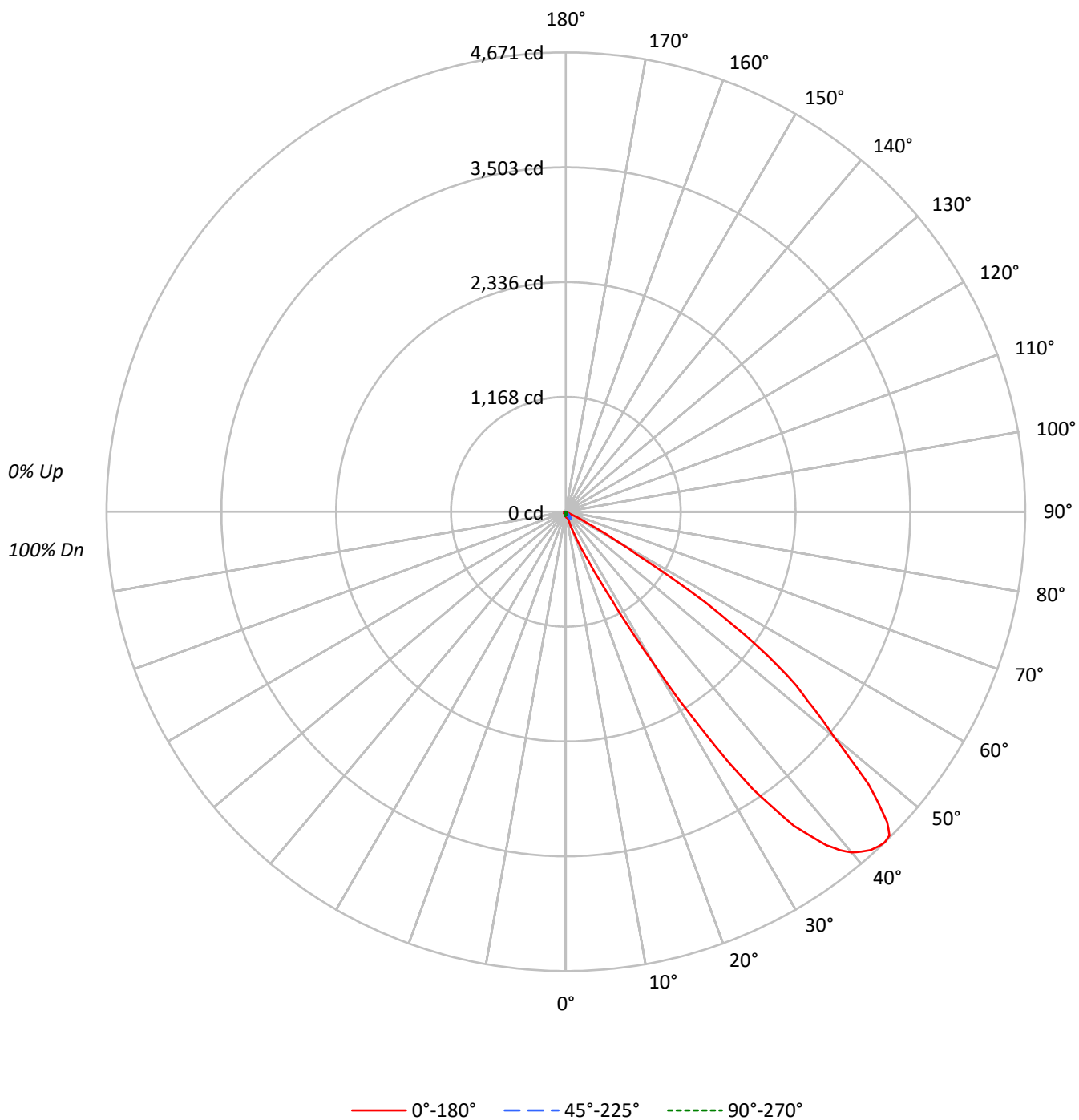
Lumens per Lamp: N/A
Luminaire Lumens: 974.0 lumens
Efficiency: N/A
Efficacy: 66.7 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	10898	10898	10898	10898	10898
5°	12459	11886	10566	9443	9245
10°	12402	11267	8973	7815	7815
15°	13825	9739	7015	6606	7015
20°	48794	9591	5390	5600	6207
25°	140403	12243	4355	5178	6025
30°	447917	18889	3469	4988	6077
35°	981065	22245	2971	4818	6184
40°	1294196	20123	2462	4895	6612
45°	1443251	14079	2388	5303	7164
50°	1214868	7300	2354	5561	7880
55°	908317	2944	2294	6232	8831
60°	281162	746	2237	6754	9780
65°	24023	0	2646	7108	10689
70°	1667	577	2757	8271	12117
75°	1440	763	3643	8727	13810
80°	1137	1137	5430	9723	16290
85°	2264	2264	8554	10819	17360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1443251 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.5	0.5
10°-20°	11.5	1.2
20°-30°	53.9	5.5
30°-40°	259.4	26.6
40°-50°	406.7	41.8
50°-60°	208.5	21.4
60°-70°	19.7	2.0
70°-80°	6.6	0.7
80°-90°	3.3	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°	69.8	7.2
0°-40°	329.3	33.8
0°-60°	944.4	97.0
0°-90°	974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	974.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	50	50	50	50	50	
5°	57	54	48	43	42	5
15°	61	43	31	29	31	26
25°	580	51	18	21	25	360
35°	3665	83	11	18	23	2225
45°	4654	45	8	17	23	3405
55°	2376	8	6	16	23	1978
65°	46	0	5	14	21	145
75°	2	1	4	10	16	2
85°	1	1	3	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°	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
2.5°	54.0	54.0	54.0	54.0	54.0	54.0	53.1	53.1	54.0	53.1	53.1
5°	56.6	56.6	56.6	56.6	56.6	56.6	56.6	55.7	55.7	55.7	54.0
7.5°	57.4	56.6	56.6	56.6	56.6	56.6	56.6	56.6	55.7	55.7	53.1
10°	55.7	55.7	55.7	55.7	54.9	54.9	54.9	54.0	54.0	54.0	50.6
12.5°	55.7	55.7	55.7	55.7	54.9	54.9	54.0	54.0	53.1	52.3	46.3
15°	60.9	60.9	60.9	60.0	59.1	58.3	57.4	56.6	55.7	54.0	42.9
17.5°	89.1	86.6	85.7	82.3	78.0	73.7	70.3	66.9	63.4	60.9	41.1
20°	209.1	208.3	204.0	193.7	182.6	169.7	156.8	142.3	121.7	108.0	41.1
22.5°	362.6	357.4	349.7	342.0	322.3	299.1	275.1	247.7	221.1	192.8	43.7
25°	580.3	592.3	566.5	546.0	511.7	469.7	424.3	386.6	338.6	294.0	50.6
27.5°	1008.8	1016.5	965.9	899.1	819.4	731.1	645.4	581.1	500.5	426.8	63.4
30°	1769.0	1776.8	1691.9	1549.6	1385.1	1240.2	1043.9	871.7	713.1	590.5	74.6
31°	2207.9	2147.9	2049.3	1911.3	1703.1	1484.5	1248.8	1040.5	840.0	678.8	78.0
32°	2589.3	2584.1	2469.3	2260.2	2051.0	1781.0	1488.8	1217.1	971.1	768.0	80.6
33°	3039.3	3005.0	2843.0	2645.9	2369.0	2097.3	1720.2	1409.9	1105.7	867.4	82.3
34°	3400.1	3307.5	3240.7	3015.3	2723.0	2376.7	1973.0	1613.9	1273.6	963.4	83.1
35°	3664.9	3645.2	3515.0	3305.0	3007.6	2653.6	2245.6	1825.6	1414.2	1074.8	83.1
36°	3945.2	3884.4	3757.5	3567.2	3277.5	2911.6	2453.9	2009.0	1577.9	1175.1	82.3
37°	4120.9	4084.9	3958.9	3762.7	3479.0	3129.3	2687.0	2202.7	1708.2	1275.4	80.6
38°	4301.8	4228.9	4104.6	3916.9	3638.4	3310.1	2855.8	2351.9	1828.2	1363.6	78.0
39°	4426.9	4351.5	4224.6	4037.8	3765.2	3439.5	2989.6	2478.7	1932.8	1429.6	74.6
40°	4521.2	4448.3	4319.8	4127.8	3858.7	3541.5	3101.0	2591.0	2020.2	1487.1	70.3
41°	4579.5	4511.8	4384.1	4192.9	3922.9	3599.8	3173.8	2663.9	2079.3	1525.6	66.0
42°	4628.3	4558.9	4428.6	4233.2	3962.4	3649.5	3218.4	2710.1	2119.6	1545.3	62.6
43°	4655.8	4586.3	4459.5	4259.8	3986.4	3672.7	3242.4	2731.6	2133.3	1542.8	56.6
44°	4671.2	4599.2	4471.5	4271.8	3996.6	3678.7	3244.1	2727.3	2123.9	1522.2	51.4
45°	4654.0	4582.9	4459.5	4259.8	3978.6	3659.8	3227.0	2704.1	2087.9	1481.9	45.4
46°	4542.6	4487.8	4374.6	4191.2	3922.1	3611.8	3183.3	2659.6	2032.2	1432.2	38.6
47°	4346.3	4302.6	4192.9	4056.6	3813.2	3523.5	3102.7	2574.7	1954.2	1357.6	30.9
48°	4141.5	4077.2	3975.2	3835.5	3629.8	3365.0	2969.8	2450.4	1835.9	1259.9	27.4
49°	3838.9	3801.2	3711.2	3555.2	3384.7	3151.5	2782.1	2291.0	1691.1	1153.7	24.0
50°	3561.2	3535.5	3409.5	3294.7	3113.8	2896.1	2527.6	2081.0	1511.1	1021.7	21.4
51°	3344.4	3313.5	3222.7	3079.5	2886.7	2633.9	2286.7	1808.5	1304.5	864.8	17.1
52°	3118.1	3101.0	3020.4	2873.0	2683.6	2431.6	2052.7	1577.1	1103.9	731.1	13.7
53°	2933.0	2908.1	2809.6	2678.4	2473.6	2213.0	1799.0	1361.9	935.1	614.5	12.0
54°	2663.0	2652.7	2589.3	2452.2	2230.2	1946.5	1569.3	1146.8	780.0	521.1	10.3
55°	2375.9	2341.6	2277.3	2168.5	1964.5	1699.6	1303.6	950.5	630.8	438.8	7.7
56°	2026.2	2024.5	1909.6	1818.8	1637.9	1356.8	1041.4	742.2	512.5	366.0	6.9
57°	1691.9	1637.9	1527.3	1437.4	1242.8	1029.4	773.1	556.3	401.1	296.6	5.1
58°	1251.4	1223.1	1193.9	1061.9	882.0	729.4	552.0	390.8	296.6	226.3	3.4
59°	849.4	848.5	814.2	714.0	610.3	454.3	344.6	265.7	204.0	166.3	2.6
60°	641.1	625.7	557.1	491.1	384.0	287.1	204.0	156.8	126.9	107.1	1.7
62.5°	224.6	233.1	204.8	169.7	129.4	106.3	81.4	66.0	54.0	43.7	0.0
65°	46.3	50.6	43.7	41.1	32.6	28.3	24.9	21.4	18.0	15.4	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°	6.0	5.1	5.1	5.1	4.3	4.3	4.3	4.3	3.4	3.4	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°	49.7	49.7	49.7	49.7	49.7	49.7
2.5°	52.3	50.6	48.0	47.1	46.3	46.3
5°	51.4	48.0	45.4	42.9	42.0	42.0
7.5°	48.9	44.6	41.1	39.4	38.6	37.7
10°	46.3	40.3	36.9	35.1	35.1	35.1
12.5°	41.1	36.0	32.6	31.7	32.6	32.6
15°	36.9	30.9	29.1	29.1	30.0	30.9
17.5°	31.7	27.4	25.7	26.6	27.4	28.3
20°	28.3	23.1	23.1	24.0	26.6	26.6
22.5°	24.9	20.6	20.6	23.1	24.9	25.7
25°	22.3	18.0	18.9	21.4	24.0	24.9
27.5°	18.9	15.4	17.1	20.6	23.1	24.0
30°	16.3	13.7	16.3	19.7	22.3	24.0
31°	15.4	12.9	16.3	18.9	22.3	24.0
32°	13.7	12.9	15.4	18.9	22.3	23.1
33°	12.9	12.0	15.4	18.9	22.3	23.1
34°	12.0	11.1	14.6	18.9	22.3	23.1
35°	10.3	11.1	14.6	18.0	21.4	23.1
36°	9.4	10.3	14.6	18.0	21.4	23.1
37°	8.6	10.3	13.7	18.0	21.4	23.1
38°	7.7	9.4	13.7	18.0	21.4	23.1
39°	6.9	9.4	12.9	18.0	21.4	23.1
40°	6.0	8.6	12.9	17.1	21.4	23.1
41°	6.0	8.6	12.9	17.1	21.4	23.1
42°	5.1	8.6	12.9	17.1	21.4	23.1
43°	4.3	7.7	12.9	17.1	21.4	23.1
44°	3.4	7.7	12.0	17.1	21.4	23.1
45°	3.4	7.7	12.0	17.1	21.4	23.1
46°	2.6	6.9	12.0	17.1	21.4	23.1
47°	1.7	6.9	12.0	16.3	21.4	23.1
48°	1.7	6.9	12.0	16.3	21.4	23.1
49°	1.7	6.9	11.1	16.3	21.4	23.1
50°	1.7	6.9	11.1	16.3	21.4	23.1
51°	0.9	6.0	11.1	16.3	21.4	23.1
52°	0.9	6.0	11.1	16.3	21.4	24.0
53°	0.9	6.0	11.1	16.3	21.4	23.1
54°	0.9	6.0	10.3	16.3	21.4	23.1
55°	0.9	6.0	10.3	16.3	21.4	23.1
56°	0.9	5.1	10.3	15.4	21.4	23.1
57°	1.7	5.1	10.3	15.4	21.4	22.3
58°	1.7	5.1	10.3	15.4	20.6	22.3
59°	1.7	5.1	10.3	15.4	20.6	22.3
60°	1.7	5.1	9.4	15.4	20.6	22.3
62.5°	1.7	5.1	9.4	14.6	19.7	21.4
65°	1.7	5.1	8.6	13.7	19.7	20.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.7	4.3	8.6	12.9	18.9	19.7
70°	2.6	4.3	7.7	12.9	18.0	18.9
72.5°	2.6	4.3	7.7	11.1	16.3	18.0
75°	2.6	4.3	6.9	10.3	15.4	16.3
77.5°	2.6	4.3	6.0	9.4	13.7	14.6
80°	3.4	4.3	5.1	7.7	12.0	12.9
82.5°	3.4	4.3	4.3	6.0	9.4	10.3
85°	2.6	3.4	3.4	4.3	6.0	6.9
87.5°	2.6	3.4	2.6	1.7	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)