

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: P1345542

Luminaire Tested: P3A13R359735DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R359735DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

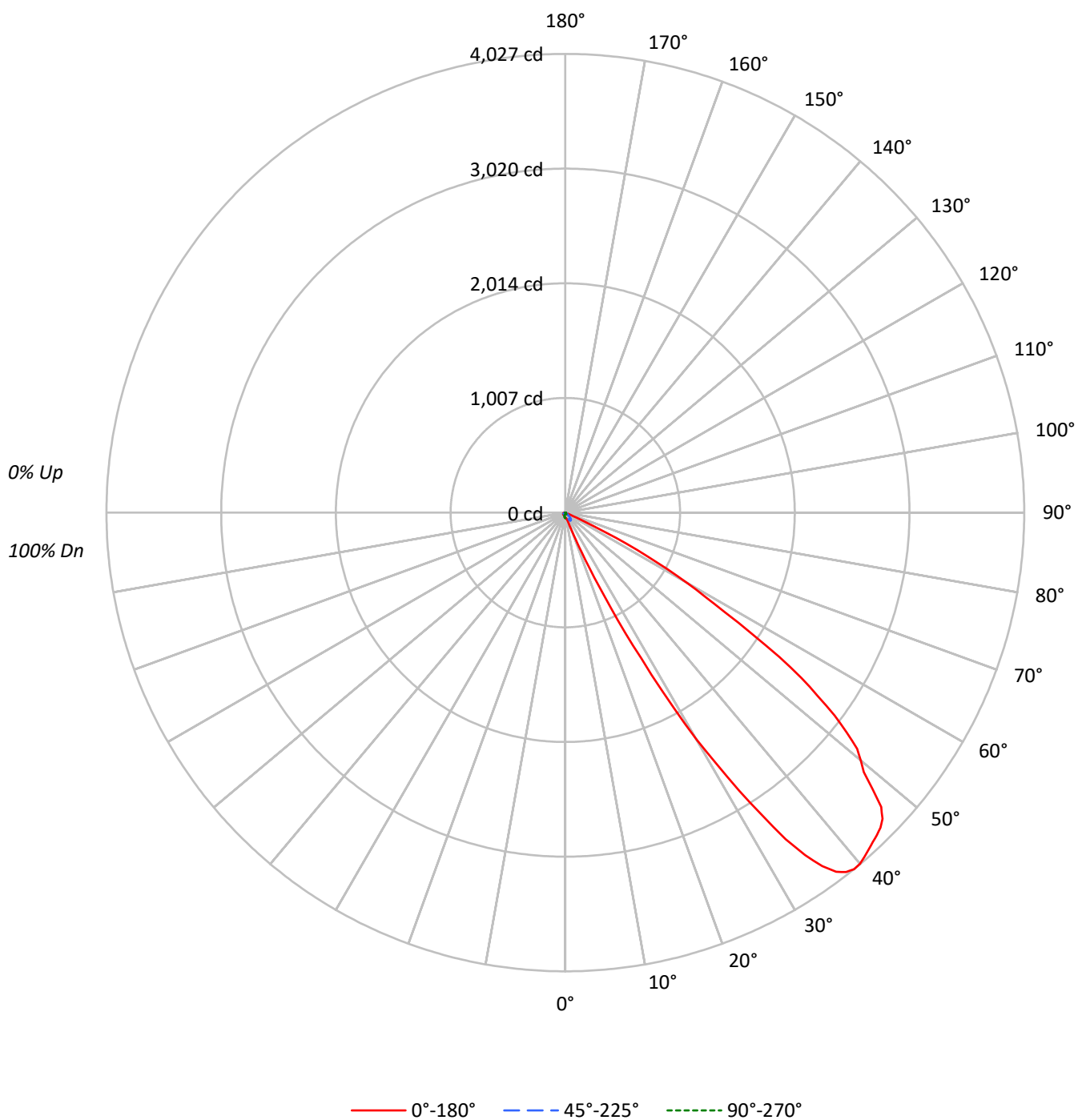
Lumens per Lamp: N/A
Luminaire Lumens: 1003.0 lumens
Efficiency: N/A
Efficacy: 68.7 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	26	26	24
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	22	22	20
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10131	10131	10131	10131	10131
5°	10962	10764	9971	8959	8761
10°	11489	10487	8862	7660	7660
15°	16436	10284	7196	6583	6788
20°	41210	10991	5694	5694	6347
25°	191237	14009	4379	5250	5904
30°	581406	19041	3444	4811	5950
35°	982591	22058	2918	4604	5809
40°	1151787	21784	2319	4666	6212
45°	1212963	15443	1954	5055	6729
50°	1154589	9279	1842	5254	7403
55°	967497	3823	2064	5887	8640
60°	541623	789	2368	6754	9517
65°	93499	467	2335	7524	10792
70°	1731	577	2885	8142	12182
75°	1525	763	3813	9235	13810
80°	1137	1137	4546	10229	16037
85°	0	2264	9057	11322	18115

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1221568 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.2	0.4
10°-20°	11.8	1.2
20°-30°	61.5	6.1
30°-40°	265.8	26.5
40°-50°	379.1	37.8
50°-60°	234.8	23.4
60°-70°	35.7	3.6
70°-80°	6.7	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°	77.5	7.7
0°-40°	343.3	34.2
0°-60°	957.2	95.4
0°-90°	1003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1003.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	46	46	46	46	46	
5°	50	49	45	41	40	5
15°	72	45	32	29	30	26
25°	790	58	18	22	24	473
35°	3671	82	11	17	22	2204
45°	3911	50	6	16	22	2955
55°	2531	10	5	15	23	2155
65°	180	1	4	14	21	368
75°	2	1	4	11	16	2
85°	0	1	4	4	7	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
2.5°	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	46.2	45.3
5°	49.8	49.8	48.9	48.9	48.9	48.9	48.9	48.9	47.1	45.3	42.6
7.5°	50.7	50.7	49.8	49.8	49.8	49.8	48.9	48.0	46.2	42.6	39.8
10°	51.6	51.6	51.6	51.6	50.7	49.8	48.9	47.1	44.4	39.8	37.1
12.5°	57.9	57.9	57.0	55.2	53.4	51.6	49.8	46.2	40.7	36.2	33.5
15°	72.4	71.5	69.7	67.0	63.4	58.9	55.2	45.3	37.1	31.7	29.9
17.5°	101.4	99.6	96.9	87.8	79.7	71.5	64.3	45.3	33.5	28.1	26.3
20°	176.6	177.5	158.4	136.7	118.6	98.7	80.6	47.1	29.9	24.4	23.5
22.5°	368.5	354.0	308.7	256.2	195.6	151.2	114.1	51.6	26.3	20.8	20.8
25°	790.4	735.2	625.6	472.6	333.2	236.3	165.7	57.9	23.5	18.1	19.0
27.5°	1443.2	1393.4	1173.4	883.7	586.7	356.7	224.5	66.1	20.8	15.4	17.2
30°	2296.2	2158.5	1871.5	1448.7	980.6	546.0	301.5	75.2	17.2	13.6	16.3
31°	2562.3	2499.0	2149.5	1675.9	1149.0	648.3	334.1	77.9	16.3	13.6	15.4
32°	2878.3	2766.1	2452.8	1924.9	1320.1	739.7	373.0	80.6	15.4	11.8	15.4
33°	3160.8	3052.2	2671.0	2144.0	1493.0	843.9	414.7	81.5	13.6	11.8	14.5
34°	3457.8	3309.3	2931.8	2373.1	1670.5	956.1	452.7	82.4	12.7	10.9	14.5
35°	3670.6	3522.1	3156.3	2554.2	1823.5	1055.7	496.2	82.4	11.8	10.9	13.6
36°	3835.4	3705.0	3350.1	2740.7	1975.6	1145.4	530.6	82.4	10.0	10.0	13.6
37°	3948.5	3824.5	3480.4	2901.0	2091.5	1225.0	561.4	82.4	9.1	10.0	13.6
38°	4003.8	3900.6	3606.3	3017.8	2203.8	1287.5	585.8	80.6	8.1	9.1	12.7
39°	4027.3	3943.1	3683.3	3116.5	2288.0	1341.8	603.9	78.8	7.2	9.1	12.7
40°	4023.7	3950.4	3726.7	3184.4	2355.9	1379.0	613.9	76.1	6.3	8.1	12.7
41°	4002.9	3939.5	3749.4	3242.3	2396.7	1404.3	616.6	73.3	5.4	8.1	11.8
42°	3979.3	3921.4	3756.6	3273.1	2422.9	1412.5	609.3	69.7	5.4	7.2	11.8
43°	3954.9	3901.5	3756.6	3283.1	2429.2	1407.0	597.6	63.4	4.5	7.2	11.8
44°	3935.0	3884.3	3744.8	3280.3	2415.7	1386.2	575.8	56.1	3.6	7.2	11.8
45°	3911.4	3861.6	3729.4	3263.1	2389.4	1350.9	548.7	49.8	2.7	6.3	11.8
46°	3869.8	3830.8	3702.3	3227.8	2347.8	1302.0	514.3	45.3	1.8	6.3	10.9
47°	3789.2	3755.7	3649.8	3175.3	2292.5	1244.1	479.0	40.7	1.8	6.3	10.9
48°	3627.1	3626.2	3544.7	3077.5	2204.7	1171.6	441.8	36.2	1.8	6.3	10.9
49°	3470.5	3454.2	3352.8	2905.5	2078.8	1084.7	402.9	32.6	0.9	6.3	10.9
50°	3384.5	3349.2	3182.6	2702.7	1917.7	964.3	361.3	27.2	0.9	5.4	10.9
51°	3294.8	3244.1	3047.7	2519.8	1725.7	848.4	316.0	21.7	0.9	5.4	10.0
52°	3132.8	3084.8	2864.8	2345.0	1539.2	729.8	272.5	18.1	0.9	5.4	10.9
53°	2958.0	2889.2	2650.2	2153.1	1375.3	624.7	228.2	15.4	0.9	5.4	10.0
54°	2738.0	2707.2	2432.9	1917.7	1183.4	523.3	187.4	12.7	0.9	5.4	10.0
55°	2530.7	2485.4	2200.2	1676.8	1009.5	429.2	156.6	10.0	0.9	5.4	10.0
56°	2266.3	2198.4	1931.3	1455.9	833.0	345.9	132.2	8.1	0.9	5.4	10.0
57°	1951.2	1878.8	1667.8	1210.5	653.7	263.5	110.5	6.3	0.9	5.4	10.0
58°	1650.6	1588.1	1361.8	934.4	492.5	182.9	91.4	4.5	0.9	4.5	10.0
59°	1426.0	1357.2	1132.7	718.9	342.2	134.9	68.8	3.6	0.9	5.4	10.0
60°	1235.0	1146.3	911.8	556.8	244.5	96.9	50.7	1.8	1.8	5.4	10.0
62.5°	711.7	628.4	435.5	226.4	100.5	49.8	24.4	0.9	1.8	5.4	10.0
65°	180.2	160.3	104.1	48.9	28.1	17.2	9.1	0.9	1.8	4.5	9.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	6.3	6.3	6.3	5.4	4.5	3.6	1.8	0.9	1.8	4.5	9.1
70°	2.7	2.7	2.7	1.8	1.8	0.9	0.9	0.9	1.8	4.5	8.1
72.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	2.7	4.5	7.2
75°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	2.7	4.5	7.2
77.5°	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	2.7	3.6	6.3
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.7	3.6	5.4
82.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.7	3.6	4.5
85°	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.9	2.7	3.6	3.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.7	3.6	2.7
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):

	135°	157.5°	180°
0°	46.2	46.2	46.2
2.5°	43.5	43.5	43.5
5°	40.7	40.7	39.8
7.5°	38.0	37.1	37.1
10°	34.4	34.4	34.4
12.5°	31.7	31.7	31.7
15°	29.0	29.9	29.9
17.5°	26.3	28.1	28.1
20°	24.4	26.3	27.2
22.5°	22.6	24.4	25.4
25°	21.7	23.5	24.4
27.5°	19.9	22.6	24.4
30°	19.0	21.7	23.5
31°	19.0	21.7	22.6
32°	18.1	21.7	22.6
33°	18.1	21.7	22.6
34°	18.1	20.8	22.6
35°	17.2	20.8	21.7
36°	17.2	20.8	21.7
37°	17.2	20.8	22.6
38°	17.2	20.8	21.7
39°	16.3	20.8	21.7
40°	16.3	20.8	21.7
41°	16.3	20.8	21.7
42°	16.3	20.8	21.7
43°	16.3	20.8	21.7
44°	16.3	19.9	21.7
45°	16.3	19.9	21.7
46°	16.3	20.8	21.7
47°	16.3	20.8	22.6
48°	16.3	19.9	21.7
49°	15.4	19.9	21.7
50°	15.4	19.9	21.7
51°	15.4	20.8	22.6
52°	15.4	20.8	22.6
53°	15.4	20.8	22.6
54°	15.4	20.8	21.7
55°	15.4	20.8	22.6
56°	15.4	20.8	21.7
57°	15.4	20.8	21.7
58°	15.4	19.9	21.7
59°	15.4	19.9	21.7
60°	15.4	19.9	21.7
62.5°	14.5	19.9	21.7
65°	14.5	19.0	20.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	13.6	19.0	19.9
70°	12.7	18.1	19.0
72.5°	11.8	17.2	18.1
75°	10.9	15.4	16.3
77.5°	9.1	13.6	15.4
80°	8.1	11.8	12.7
82.5°	6.3	10.0	10.9
85°	4.5	7.2	7.2
87.5°	1.8	3.6	3.6
90°	0.0	0.0	0.0

(END OF REPORT)