

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: P1345526

Luminaire Tested: P3A13R359730DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345526
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: P3A13R359730DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

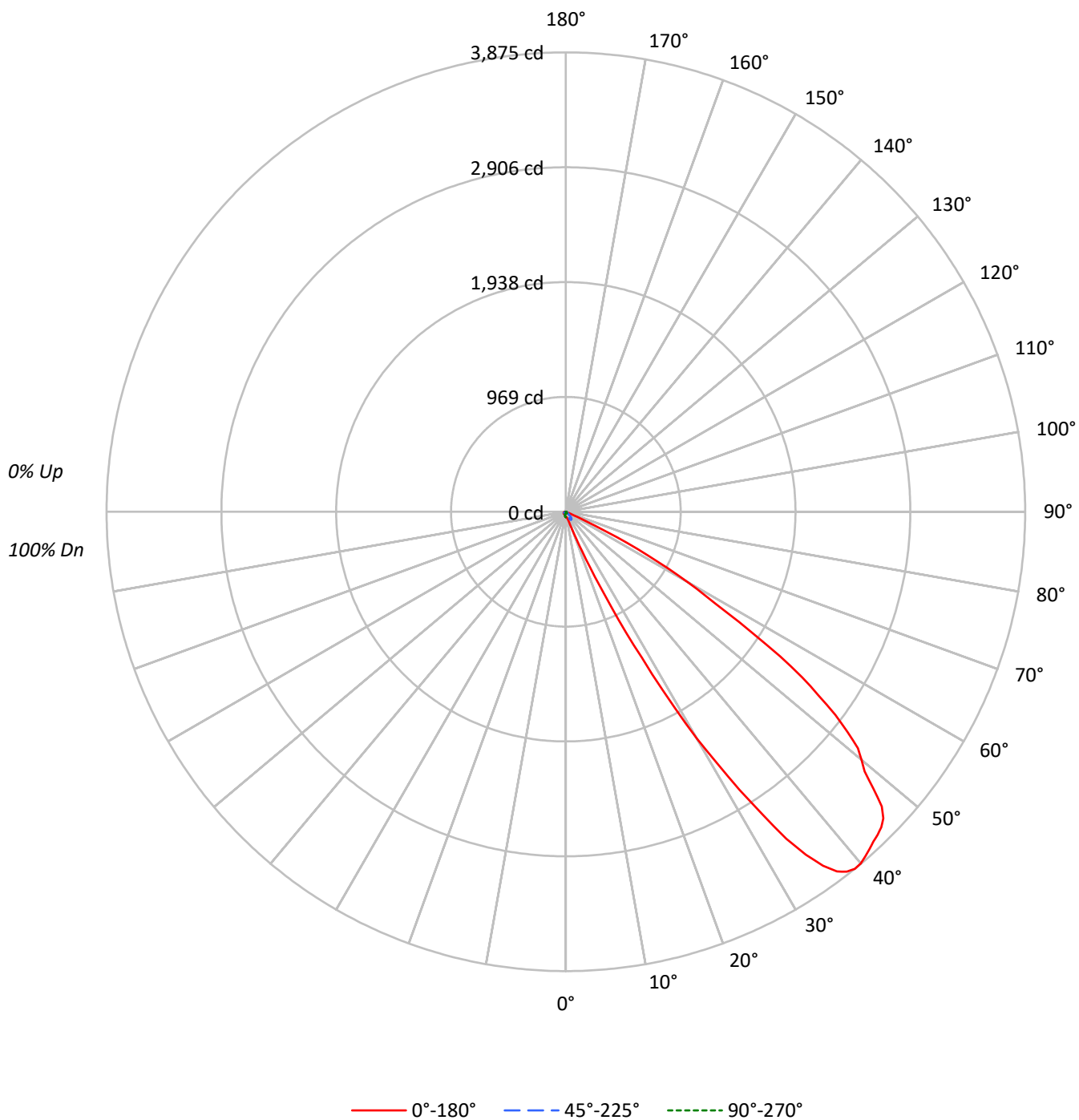
Lumens per Lamp: N/A
Luminaire Lumens: 965.0 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	9736	9736	9736	9736	9736
5°	10544	10346	9597	8629	8431
10°	11066	10087	8528	7370	7370
15°	15823	9898	6924	6334	6515
20°	39647	10571	5484	5484	6091
25°	184003	13501	4210	5057	5686
30°	559377	18307	3317	4634	5722
35°	945355	21228	2811	4444	5595
40°	1108162	20954	2233	4494	5983
45°	1167005	14854	1892	4869	6481
50°	1110821	8904	1774	5049	7130
55°	930834	3670	1988	5658	8334
60°	521099	746	2281	6491	9166
65°	89971	467	2283	7212	10377
70°	1667	577	2821	7822	11733
75°	1440	763	3728	8896	13302
80°	1137	1137	4420	9850	15406
85°	0	2264	8806	11070	17612

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1175291 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.0	0.4
10°-20°	11.4	1.2
20°-30°	59.2	6.1
30°-40°	255.7	26.5
40°-50°	364.8	37.8
50°-60°	225.9	23.4
60°-70°	34.4	3.6
70°-80°	6.4	0.7
80°-90°	3.2	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°	74.6	7.7
0°-40°	330.3	34.2
0°-60°	921.0	95.4
0°-90°	965.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	965.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	44	44	44	44	44	
5°	48	47	44	39	38	5
15°	70	44	30	28	29	25
25°	760	56	17	21	24	455
35°	3532	79	10	17	21	2120
45°	3763	48	6	16	21	2843
55°	2435	10	5	15	22	2074
65°	173	1	4	14	20	354
75°	2	1	4	10	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°	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
2.5°	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	44.4	43.6
5°	47.9	47.9	47.0	47.0	47.0	47.0	47.0	47.0	45.3	43.6	40.9
7.5°	48.8	48.8	47.9	47.9	47.9	47.9	47.0	46.2	44.4	40.9	38.3
10°	49.7	49.7	49.7	49.7	48.8	47.9	47.0	45.3	42.7	38.3	35.7
12.5°	55.8	55.8	54.9	53.1	51.4	49.7	47.9	44.4	39.2	34.8	32.2
15°	69.7	68.8	67.1	64.5	61.0	56.6	53.1	43.6	35.7	30.5	28.7
17.5°	97.6	95.8	93.2	84.5	76.7	68.8	61.8	43.6	32.2	27.0	25.3
20°	169.9	170.7	152.4	131.5	114.1	95.0	77.5	45.3	28.7	23.5	22.6
22.5°	354.5	340.6	297.1	246.5	188.2	145.5	109.8	49.7	25.3	20.0	20.0
25°	760.5	707.3	601.9	454.7	320.6	227.4	159.4	55.8	22.6	17.4	18.3
27.5°	1388.6	1340.7	1129.0	850.2	564.5	343.2	216.0	63.6	20.0	14.8	16.6
30°	2209.2	2076.7	1800.6	1393.8	943.4	525.3	290.1	72.3	16.6	13.1	15.7
31°	2465.3	2404.3	2068.0	1612.4	1105.5	623.7	321.4	74.9	15.7	13.1	14.8
32°	2769.3	2661.3	2359.9	1852.0	1270.1	711.7	358.9	77.5	14.8	11.3	14.8
33°	3041.1	2936.5	2569.8	2062.8	1436.5	811.9	399.0	78.4	13.1	11.3	13.9
34°	3326.8	3183.9	2820.7	2283.2	1607.2	919.9	435.6	79.3	12.2	10.5	13.9
35°	3531.5	3388.7	3036.7	2457.4	1754.4	1015.7	477.4	79.3	11.3	10.5	13.1
36°	3690.1	3564.6	3223.1	2636.9	1900.8	1102.0	510.5	79.3	9.6	9.6	13.1
37°	3799.0	3679.6	3348.6	2791.1	2012.3	1178.6	540.1	79.3	8.7	9.6	13.1
38°	3852.1	3752.8	3469.7	2903.4	2120.3	1238.7	563.6	77.5	7.8	8.7	12.2
39°	3874.7	3793.7	3543.7	2998.4	2201.3	1291.0	581.0	75.8	7.0	8.7	12.2
40°	3871.3	3800.7	3585.5	3063.7	2266.7	1326.7	590.6	73.2	6.1	7.8	12.2
41°	3851.2	3790.2	3607.3	3119.5	2305.9	1351.1	593.2	70.6	5.2	7.8	11.3
42°	3828.6	3772.8	3614.3	3149.1	2331.1	1358.9	586.3	67.1	5.2	7.0	11.3
43°	3805.0	3753.7	3614.3	3158.7	2337.2	1353.7	574.9	61.0	4.4	7.0	11.3
44°	3785.9	3737.1	3602.9	3156.1	2324.1	1333.7	554.0	54.0	3.5	7.0	11.3
45°	3763.2	3715.3	3588.1	3139.5	2298.9	1299.7	527.9	47.9	2.6	6.1	11.3
46°	3723.2	3685.7	3562.0	3105.5	2258.8	1252.7	494.8	43.6	1.7	6.1	10.5
47°	3645.6	3613.4	3511.5	3055.0	2205.7	1196.9	460.8	39.2	1.7	6.1	10.5
48°	3489.7	3488.8	3410.4	2960.9	2121.2	1127.2	425.1	34.8	1.7	6.1	10.5
49°	3339.0	3323.3	3225.8	2795.4	2000.1	1043.6	387.6	31.4	0.9	6.1	10.5
50°	3256.2	3222.3	3062.0	2600.3	1845.0	927.7	347.6	26.1	0.9	5.2	10.5
51°	3170.0	3121.2	2932.2	2424.3	1660.4	816.2	304.0	20.9	0.9	5.2	9.6
52°	3014.1	2967.9	2756.2	2256.2	1480.9	702.1	262.2	17.4	0.9	5.2	10.5
53°	2845.9	2779.7	2549.8	2071.5	1323.2	601.1	219.5	14.8	0.9	5.2	9.6
54°	2634.3	2604.6	2340.7	1845.0	1138.6	503.5	180.3	12.2	0.9	5.2	9.6
55°	2434.8	2391.2	2116.8	1613.3	971.3	412.9	150.7	9.6	0.9	5.2	9.6
56°	2180.4	2115.1	1858.1	1400.8	801.4	332.8	127.2	7.8	0.9	5.2	9.6
57°	1877.3	1807.6	1604.6	1164.7	628.9	253.5	106.3	6.1	0.9	5.2	9.6
58°	1588.1	1527.9	1310.2	899.0	473.9	176.0	88.0	4.4	0.9	4.4	9.6
59°	1372.0	1305.8	1089.8	691.7	329.3	129.8	66.2	3.5	0.9	5.2	9.6
60°	1188.2	1102.8	877.2	535.7	235.2	93.2	48.8	1.7	1.7	5.2	9.6
62.5°	684.7	604.6	419.0	217.8	96.7	47.9	23.5	0.9	1.7	5.2	9.6
65°	173.4	154.2	100.2	47.0	27.0	16.6	8.7	0.9	1.7	4.4	8.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	6.1	6.1	6.1	5.2	4.4	3.5	1.7	0.9	1.7	4.4	8.7
70°	2.6	2.6	2.6	1.7	1.7	0.9	0.9	0.9	1.7	4.4	7.8
72.5°	1.7	1.7	1.7	1.7	0.9	0.9	0.9	0.9	2.6	4.4	7.0
75°	1.7	1.7	1.7	1.7	0.9	0.9	0.9	0.9	2.6	4.4	7.0
77.5°	1.7	1.7	0.9	0.9	0.9	0.9	0.9	0.9	2.6	3.5	6.1
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.6	3.5	5.2
82.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.6	3.5	4.4
85°	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.9	2.6	3.5	3.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.6	3.5	2.6
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°	44.4	44.4	44.4
2.5°	41.8	41.8	41.8
5°	39.2	39.2	38.3
7.5°	36.6	35.7	35.7
10°	33.1	33.1	33.1
12.5°	30.5	30.5	30.5
15°	27.9	28.7	28.7
17.5°	25.3	27.0	27.0
20°	23.5	25.3	26.1
22.5°	21.8	23.5	24.4
25°	20.9	22.6	23.5
27.5°	19.2	21.8	23.5
30°	18.3	20.9	22.6
31°	18.3	20.9	21.8
32°	17.4	20.9	21.8
33°	17.4	20.9	21.8
34°	17.4	20.0	21.8
35°	16.6	20.0	20.9
36°	16.6	20.0	20.9
37°	16.6	20.0	21.8
38°	16.6	20.0	20.9
39°	15.7	20.0	20.9
40°	15.7	20.0	20.9
41°	15.7	20.0	20.9
42°	15.7	20.0	20.9
43°	15.7	20.0	20.9
44°	15.7	19.2	20.9
45°	15.7	19.2	20.9
46°	15.7	20.0	20.9
47°	15.7	20.0	21.8
48°	15.7	19.2	20.9
49°	14.8	19.2	20.9
50°	14.8	19.2	20.9
51°	14.8	20.0	21.8
52°	14.8	20.0	21.8
53°	14.8	20.0	21.8
54°	14.8	20.0	20.9
55°	14.8	20.0	21.8
56°	14.8	20.0	20.9
57°	14.8	20.0	20.9
58°	14.8	19.2	20.9
59°	14.8	19.2	20.9
60°	14.8	19.2	20.9
62.5°	13.9	19.2	20.9
65°	13.9	18.3	20.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	13.1	18.3	19.2
70°	12.2	17.4	18.3
72.5°	11.3	16.6	17.4
75°	10.5	14.8	15.7
77.5°	8.7	13.1	14.8
80°	7.8	11.3	12.2
82.5°	6.1	9.6	10.5
85°	4.4	7.0	7.0
87.5°	1.7	3.5	3.5
90°	0.0	0.0	0.0

(END OF REPORT)