

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: P1345414

Luminaire Tested: P3A13R359027DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345414
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: P3A13R359027DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 90CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

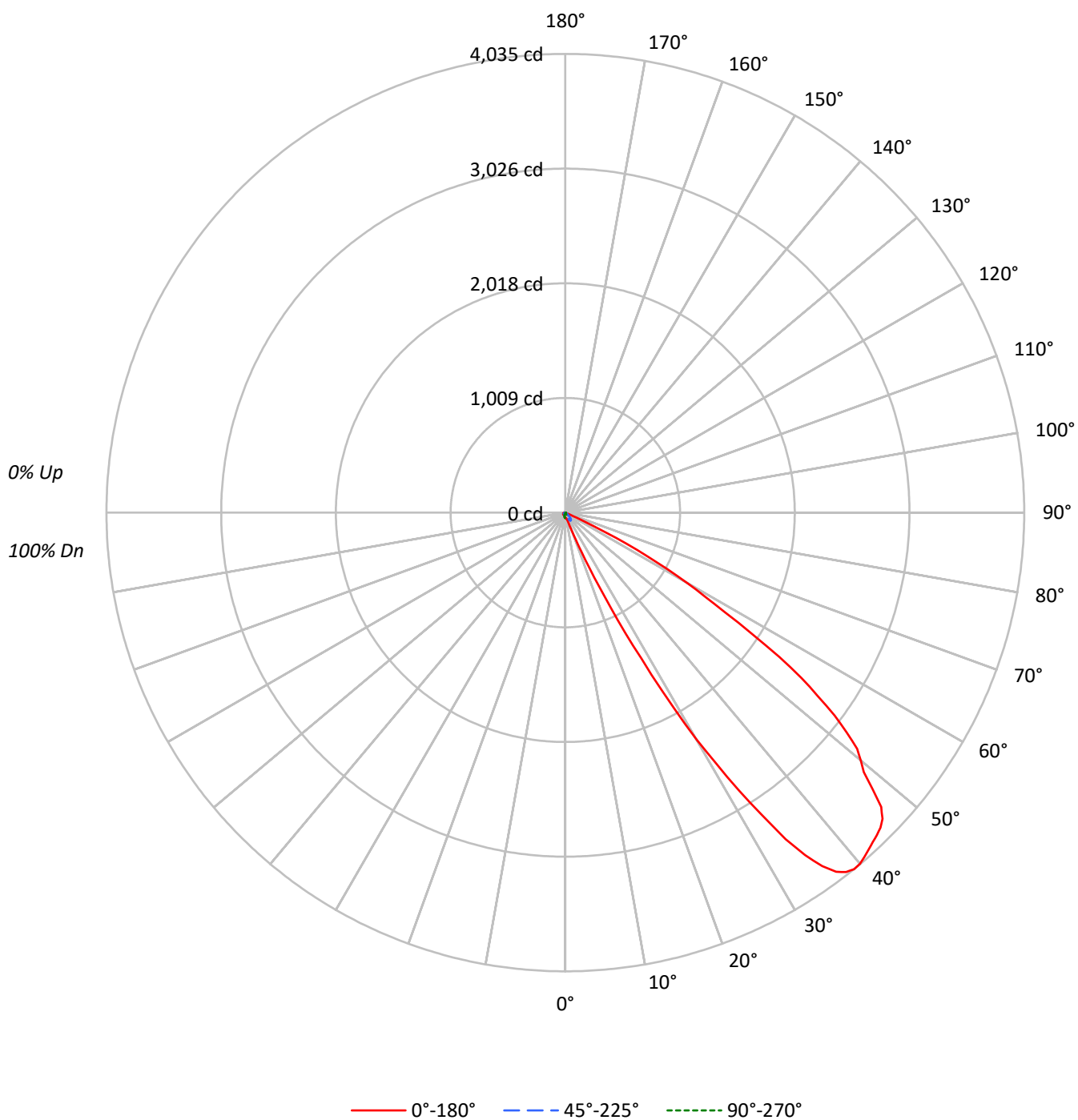
Lumens per Lamp: N/A
Luminaire Lumens: 1005.0 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	10153	10153	10153	10153	10153
5°	10984	10786	9993	8981	8783
10°	11512	10510	8884	7682	7682
15°	16481	10307	7219	6583	6788
20°	41280	11014	5717	5717	6347
25°	191624	14057	4379	5274	5928
30°	582545	19066	3444	4836	5976
35°	984545	22111	2918	4604	5836
40°	1154077	21812	2347	4666	6240
45°	1215382	15474	1985	5055	6760
50°	1156875	9279	1842	5254	7437
55°	969409	3823	2064	5887	8678
60°	542720	789	2368	6754	9561
65°	93655	467	2335	7524	10844
70°	1731	577	2885	8142	12246
75°	1525	763	3813	9235	13810
80°	1137	1137	4546	10355	16037
85°	0	2264	9057	11322	18367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1223999 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°	61.7	6.1
30°-40°	266.3	26.5
40°-50°	379.9	37.8
50°-60°	235.3	23.4
60°-70°	35.8	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°	77.7	7.7
0°-40°	344.0	34.2
0°-60°	959.2	95.4
0°-90°	1005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1005.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	46	46	46	46	46	
5°	50	49	45	41	40	5
15°	73	45	32	29	30	26
25°	792	58	18	22	24	474
35°	3678	83	11	17	22	2208
45°	3919	50	6	16	22	2961
55°	2536	10	5	15	23	2160
65°	180	1	4	14	21	369
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°	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3
2.5°	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	46.3	45.4
5°	49.9	49.9	49.0	49.0	49.0	49.0	49.0	49.0	47.2	45.4	42.6
7.5°	50.8	50.8	49.9	49.9	49.9	49.9	49.0	48.1	46.3	42.6	39.9
10°	51.7	51.7	51.7	51.7	50.8	49.9	49.0	47.2	44.5	39.9	37.2
12.5°	58.1	58.1	57.2	55.3	53.5	51.7	49.9	46.3	40.8	36.3	33.6
15°	72.6	71.7	69.9	67.1	63.5	59.0	55.3	45.4	37.2	31.8	29.9
17.5°	101.6	99.8	97.1	88.0	79.8	71.7	64.4	45.4	33.6	28.1	26.3
20°	176.9	177.8	158.8	137.0	118.8	98.9	80.7	47.2	29.9	24.5	23.6
22.5°	369.2	354.7	309.4	256.7	196.0	151.5	114.3	51.7	26.3	20.9	20.9
25°	792.0	736.7	626.9	473.6	333.9	236.8	166.0	58.1	23.6	18.1	19.1
27.5°	1446.1	1396.2	1175.8	885.5	587.9	357.4	225.0	66.2	20.9	15.4	17.2
30°	2300.7	2162.8	1875.2	1451.6	982.5	547.1	302.1	75.3	17.2	13.6	16.3
31°	2567.5	2503.9	2153.8	1679.3	1151.3	649.6	334.8	78.0	16.3	13.6	15.4
32°	2884.1	2771.6	2457.7	1928.8	1322.7	741.2	373.8	80.7	15.4	11.8	15.4
33°	3167.1	3058.3	2676.3	2148.3	1496.0	845.5	415.5	81.7	13.6	11.8	14.5
34°	3464.7	3315.9	2937.6	2377.8	1673.8	958.0	453.6	82.6	12.7	10.9	14.5
35°	3677.9	3529.1	3162.6	2559.3	1827.2	1057.8	497.2	82.6	11.8	10.9	13.6
36°	3843.0	3712.4	3356.7	2746.2	1979.6	1147.6	531.6	82.6	10.0	10.0	13.6
37°	3956.4	3832.1	3487.4	2906.8	2095.7	1227.5	562.5	82.6	9.1	10.0	13.6
38°	4011.8	3908.3	3613.5	3023.8	2208.2	1290.1	587.0	80.7	8.2	9.1	12.7
39°	4035.3	3951.0	3690.6	3122.7	2292.6	1344.5	605.1	78.9	7.3	9.1	12.7
40°	4031.7	3958.2	3734.1	3190.7	2360.6	1381.7	615.1	76.2	6.4	8.2	12.7
41°	4010.9	3947.3	3756.8	3248.8	2401.4	1407.1	617.8	73.5	5.4	8.2	11.8
42°	3987.3	3929.2	3764.1	3279.6	2427.7	1415.3	610.6	69.9	5.4	7.3	11.8
43°	3962.8	3909.2	3764.1	3289.6	2434.1	1409.8	598.8	63.5	4.5	7.3	11.8
44°	3942.8	3892.0	3752.3	3286.9	2420.5	1389.0	577.0	56.2	3.6	7.3	11.8
45°	3919.2	3869.3	3736.9	3269.6	2394.2	1353.6	549.8	49.9	2.7	6.4	11.8
46°	3877.5	3838.5	3709.7	3234.3	2352.4	1304.6	515.3	45.4	1.8	6.4	10.9
47°	3796.7	3763.2	3657.0	3181.6	2297.1	1246.5	479.9	40.8	1.8	6.4	10.9
48°	3634.4	3633.4	3551.8	3083.7	2209.1	1174.0	442.7	36.3	1.8	6.4	10.9
49°	3477.4	3461.1	3359.5	2911.3	2083.0	1086.9	403.7	32.7	0.9	6.4	10.9
50°	3391.2	3355.8	3188.9	2708.1	1921.5	966.2	362.0	27.2	0.9	5.4	10.9
51°	3301.4	3250.6	3053.7	2524.8	1729.2	850.1	316.6	21.8	0.9	5.4	10.0
52°	3139.0	3090.9	2870.5	2349.7	1542.3	731.2	273.1	18.1	0.9	5.4	10.9
53°	2963.9	2895.0	2655.5	2157.4	1378.1	626.0	228.6	15.4	0.9	5.4	10.0
54°	2743.5	2712.6	2437.7	1921.5	1185.7	524.4	187.8	12.7	0.9	5.4	10.0
55°	2535.7	2490.3	2204.6	1680.2	1011.6	430.0	157.0	10.0	0.9	5.4	10.0
56°	2270.8	2202.7	1935.1	1458.8	834.6	346.6	132.5	8.2	0.9	5.4	10.0
57°	1955.1	1882.5	1671.1	1213.0	655.0	264.0	110.7	6.4	0.9	5.4	10.0
58°	1653.9	1591.3	1364.5	936.3	493.5	183.3	91.6	4.5	0.9	4.5	10.0
59°	1428.9	1359.9	1134.9	720.3	342.9	135.2	68.9	3.6	0.9	5.4	10.0
60°	1237.5	1148.6	913.6	557.9	245.0	97.1	50.8	1.8	1.8	5.4	10.0
62.5°	713.1	629.6	436.4	226.8	100.7	49.9	24.5	0.9	1.8	5.4	10.0
65°	180.5	160.6	104.3	49.0	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°	6.4	6.4	6.4	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	8.2
72.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	2.7	4.5	7.3
75°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	2.7	4.5	7.3
77.5°	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	2.7	3.6	6.4
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°	46.3	46.3	46.3
2.5°	43.5	43.5	43.5
5°	40.8	40.8	39.9
7.5°	38.1	37.2	37.2
10°	34.5	34.5	34.5
12.5°	31.8	31.8	31.8
15°	29.0	29.9	29.9
17.5°	26.3	28.1	28.1
20°	24.5	26.3	27.2
22.5°	22.7	24.5	25.4
25°	21.8	23.6	24.5
27.5°	20.0	22.7	24.5
30°	19.1	21.8	23.6
31°	19.1	21.8	22.7
32°	18.1	21.8	22.7
33°	18.1	21.8	22.7
34°	18.1	20.9	22.7
35°	17.2	20.9	21.8
36°	17.2	20.9	21.8
37°	17.2	20.9	22.7
38°	17.2	20.9	21.8
39°	16.3	20.9	21.8
40°	16.3	20.9	21.8
41°	16.3	20.9	21.8
42°	16.3	20.9	21.8
43°	16.3	20.9	21.8
44°	16.3	20.0	21.8
45°	16.3	20.0	21.8
46°	16.3	20.9	21.8
47°	16.3	20.9	22.7
48°	16.3	20.0	21.8
49°	15.4	20.0	21.8
50°	15.4	20.0	21.8
51°	15.4	20.9	22.7
52°	15.4	20.9	22.7
53°	15.4	20.9	22.7
54°	15.4	20.9	21.8
55°	15.4	20.9	22.7
56°	15.4	20.9	21.8
57°	15.4	20.9	21.8
58°	15.4	20.0	21.8
59°	15.4	20.0	21.8
60°	15.4	20.0	21.8
62.5°	14.5	20.0	21.8
65°	14.5	19.1	20.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	13.6	19.1	20.0
70°	12.7	18.1	19.1
72.5°	11.8	17.2	18.1
75°	10.9	15.4	16.3
77.5°	9.1	13.6	15.4
80°	8.2	11.8	12.7
82.5°	6.4	10.0	10.9
85°	4.5	7.3	7.3
87.5°	1.8	3.6	3.6
90°	0.0	0.0	0.0

(END OF REPORT)