

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: P1345558

Luminaire Tested: P3A13R359740DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345558
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: P3A13R359740DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

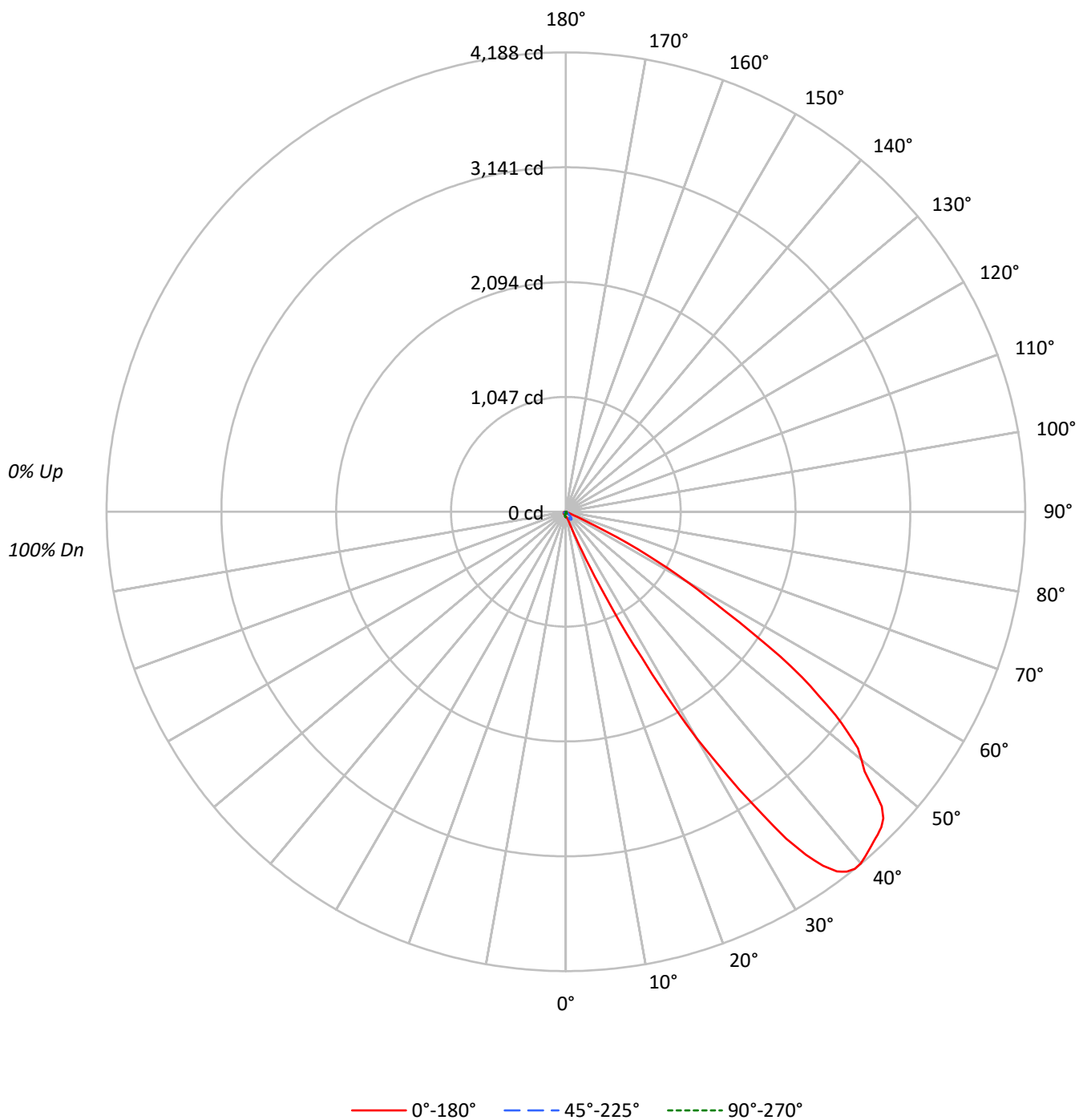
Lumens per Lamp: N/A
Luminaire Lumens: 1043.0 lumens
Efficiency: N/A
Efficacy: 71.4 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	10525	10525	10525	10525	10525
5°	11402	11182	10368	9333	9113
10°	11957	10911	9218	7971	7971
15°	17094	10692	7492	6833	7060
20°	42844	11434	5927	5927	6581
25°	198882	14590	4549	5468	6146
30°	604574	19775	3570	5013	6203
35°	1021781	22941	3025	4792	6050
40°	1197730	22642	2433	4838	6469
45°	1261340	16064	2047	5241	7008
50°	1200609	9620	1910	5458	7710
55°	1006072	3976	2141	6117	8984
60°	563200	833	2456	7017	9911
65°	97235	467	2439	7835	11259
70°	1795	577	3013	8463	12694
75°	1610	763	3982	9574	14318
80°	1137	1137	4799	10734	16669
85°	0	2264	9561	11825	18870

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1270275 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.3	0.4
10°-20°	12.3	1.2
20°-30°	64.0	6.1
30°-40°	276.4	26.5
40°-50°	394.2	37.8
50°-60°	244.2	23.4
60°-70°	37.2	3.6
70°-80°	6.9	0.7
80°-90°	3.5	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°	80.6	7.7
0°-40°	357.0	34.2
0°-60°	995.4	95.4
0°-90°	1043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1043.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	48	48	48	48	48	
5°	52	51	47	42	41	5
15°	75	47	33	30	31	27
25°	822	60	19	23	25	492
35°	3817	86	11	18	23	2292
45°	4067	52	7	17	23	3073
55°	2632	10	6	16	24	2241
65°	187	1	5	15	22	383
75°	2	1	5	11	17	2
85°	0	1	4	5	8	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°	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
2.5°	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	48.0	47.1
5°	51.8	51.8	50.8	50.8	50.8	50.8	50.8	50.8	49.0	47.1	44.3
7.5°	52.7	52.7	51.8	51.8	51.8	51.8	50.8	49.9	48.0	44.3	41.4
10°	53.7	53.7	53.7	53.7	52.7	51.8	50.8	49.0	46.1	41.4	38.6
12.5°	60.3	60.3	59.3	57.4	55.6	53.7	51.8	48.0	42.4	37.7	34.8
15°	75.3	74.4	72.5	69.7	65.9	61.2	57.4	47.1	38.6	33.0	31.1
17.5°	105.5	103.6	100.7	91.3	82.9	74.4	66.8	47.1	34.8	29.2	27.3
20°	183.6	184.5	164.8	142.2	123.3	102.6	83.8	49.0	31.1	25.4	24.5
22.5°	383.2	368.1	321.1	266.5	203.4	157.2	118.6	53.7	27.3	21.7	21.7
25°	822.0	764.5	650.6	491.5	346.5	245.7	172.3	60.3	24.5	18.8	19.8
27.5°	1500.8	1449.0	1220.2	918.9	610.1	371.0	233.5	68.7	21.7	16.0	17.9
30°	2387.7	2244.6	1946.1	1506.4	1019.7	567.7	313.5	78.1	17.9	14.1	16.9
31°	2664.5	2598.6	2235.2	1742.8	1194.8	674.1	347.4	81.0	16.9	14.1	16.0
32°	2993.1	2876.4	2550.6	2001.7	1372.8	769.2	387.9	83.8	16.0	12.2	16.0
33°	3286.9	3173.9	2777.5	2229.5	1552.6	877.5	431.2	84.7	14.1	12.2	15.1
34°	3595.7	3441.3	3048.7	2467.8	1737.1	994.3	470.8	85.7	13.2	11.3	15.1
35°	3817.0	3662.6	3282.2	2656.1	1896.2	1097.8	516.0	85.7	12.2	11.3	14.1
36°	3988.3	3852.7	3483.7	2850.0	2054.4	1191.0	551.7	85.7	10.4	10.4	14.1
37°	4106.0	3977.0	3619.2	3016.7	2174.9	1273.9	583.7	85.7	9.4	10.4	14.1
38°	4163.4	4056.1	3750.1	3138.1	2291.7	1338.9	609.2	83.8	8.5	9.4	13.2
39°	4187.9	4100.4	3830.1	3240.7	2379.2	1395.3	628.0	81.9	7.5	9.4	13.2
40°	4184.2	4107.9	3875.3	3311.4	2449.9	1434.0	638.4	79.1	6.6	8.5	13.2
41°	4162.5	4096.6	3898.9	3371.6	2492.2	1460.3	641.2	76.3	5.6	8.5	12.2
42°	4138.0	4077.8	3906.4	3403.6	2519.5	1468.8	633.7	72.5	5.6	7.5	12.2
43°	4112.6	4057.1	3906.4	3414.0	2526.1	1463.1	621.4	65.9	4.7	7.5	12.2
44°	4091.9	4039.2	3894.2	3411.2	2512.0	1441.5	598.8	58.4	3.8	7.5	12.2
45°	4067.4	4015.6	3878.2	3393.3	2484.7	1404.8	570.6	51.8	2.8	6.6	12.2
46°	4024.1	3983.6	3849.9	3356.6	2441.4	1353.9	534.8	47.1	1.9	6.6	11.3
47°	3940.3	3905.5	3795.3	3301.9	2384.0	1293.7	498.1	42.4	1.9	6.6	11.3
48°	3771.8	3770.8	3686.1	3200.3	2292.6	1218.3	459.5	37.7	1.9	6.6	11.3
49°	3608.9	3591.9	3486.5	3021.4	2161.8	1128.0	419.0	33.9	0.9	6.6	11.3
50°	3519.4	3482.7	3309.5	2810.5	1994.2	1002.7	375.7	28.2	0.9	5.6	11.3
51°	3426.2	3373.5	3169.2	2620.3	1794.6	882.2	328.6	22.6	0.9	5.6	10.4
52°	3257.7	3207.8	2979.0	2438.6	1600.6	758.9	283.4	18.8	0.9	5.6	11.3
53°	3076.0	3004.4	2755.9	2239.0	1430.2	649.7	237.3	16.0	0.9	5.6	10.4
54°	2847.2	2815.2	2529.9	1994.2	1230.6	544.2	194.9	13.2	0.9	5.6	10.4
55°	2631.6	2584.5	2287.9	1743.7	1049.8	446.3	162.9	10.4	0.9	5.6	10.4
56°	2356.7	2286.0	2008.3	1514.0	866.2	359.7	137.5	8.5	0.9	5.6	10.4
57°	2029.0	1953.7	1734.3	1258.8	679.8	274.0	114.9	6.6	0.9	5.6	10.4
58°	1716.4	1651.4	1416.1	971.7	512.2	190.2	95.1	4.7	0.9	4.7	10.4
59°	1482.9	1411.4	1177.9	747.6	355.9	140.3	71.6	3.8	0.9	5.6	10.4
60°	1284.2	1192.0	948.1	579.0	254.2	100.7	52.7	1.9	1.9	5.6	10.4
62.5°	740.0	653.4	452.9	235.4	104.5	51.8	25.4	0.9	1.9	5.6	10.4
65°	187.4	166.7	108.3	50.8	29.2	17.9	9.4	0.9	1.9	4.7	9.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	6.6	6.6	6.6	5.6	4.7	3.8	1.9	0.9	1.9	4.7	9.4
70°	2.8	2.8	2.8	1.9	1.9	0.9	0.9	0.9	1.9	4.7	8.5
72.5°	1.9	1.9	1.9	1.9	0.9	0.9	0.9	0.9	2.8	4.7	7.5
75°	1.9	1.9	1.9	1.9	0.9	0.9	0.9	0.9	2.8	4.7	7.5
77.5°	1.9	1.9	0.9	0.9	0.9	0.9	0.9	0.9	2.8	3.8	6.6
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.8	3.8	5.6
82.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.8	3.8	4.7
85°	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.9	2.8	3.8	3.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.8	3.8	2.8
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°	48.0	48.0	48.0
2.5°	45.2	45.2	45.2
5°	42.4	42.4	41.4
7.5°	39.5	38.6	38.6
10°	35.8	35.8	35.8
12.5°	33.0	33.0	33.0
15°	30.1	31.1	31.1
17.5°	27.3	29.2	29.2
20°	25.4	27.3	28.2
22.5°	23.5	25.4	26.4
25°	22.6	24.5	25.4
27.5°	20.7	23.5	25.4
30°	19.8	22.6	24.5
31°	19.8	22.6	23.5
32°	18.8	22.6	23.5
33°	18.8	22.6	23.5
34°	18.8	21.7	23.5
35°	17.9	21.7	22.6
36°	17.9	21.7	22.6
37°	17.9	21.7	23.5
38°	17.9	21.7	22.6
39°	16.9	21.7	22.6
40°	16.9	21.7	22.6
41°	16.9	21.7	22.6
42°	16.9	21.7	22.6
43°	16.9	21.7	22.6
44°	16.9	20.7	22.6
45°	16.9	20.7	22.6
46°	16.9	21.7	22.6
47°	16.9	21.7	23.5
48°	16.9	20.7	22.6
49°	16.0	20.7	22.6
50°	16.0	20.7	22.6
51°	16.0	21.7	23.5
52°	16.0	21.7	23.5
53°	16.0	21.7	23.5
54°	16.0	21.7	22.6
55°	16.0	21.7	23.5
56°	16.0	21.7	22.6
57°	16.0	21.7	22.6
58°	16.0	20.7	22.6
59°	16.0	20.7	22.6
60°	16.0	20.7	22.6
62.5°	15.1	20.7	22.6
65°	15.1	19.8	21.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	14.1	19.8	20.7
70°	13.2	18.8	19.8
72.5°	12.2	17.9	18.8
75°	11.3	16.0	16.9
77.5°	9.4	14.1	16.0
80°	8.5	12.2	13.2
82.5°	6.6	10.4	11.3
85°	4.7	7.5	7.5
87.5°	1.9	3.8	3.8
90°	0.0	0.0	0.0

(END OF REPORT)