

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: P1345060

Luminaire Tested: P3A13R309827DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R309827DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 98CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

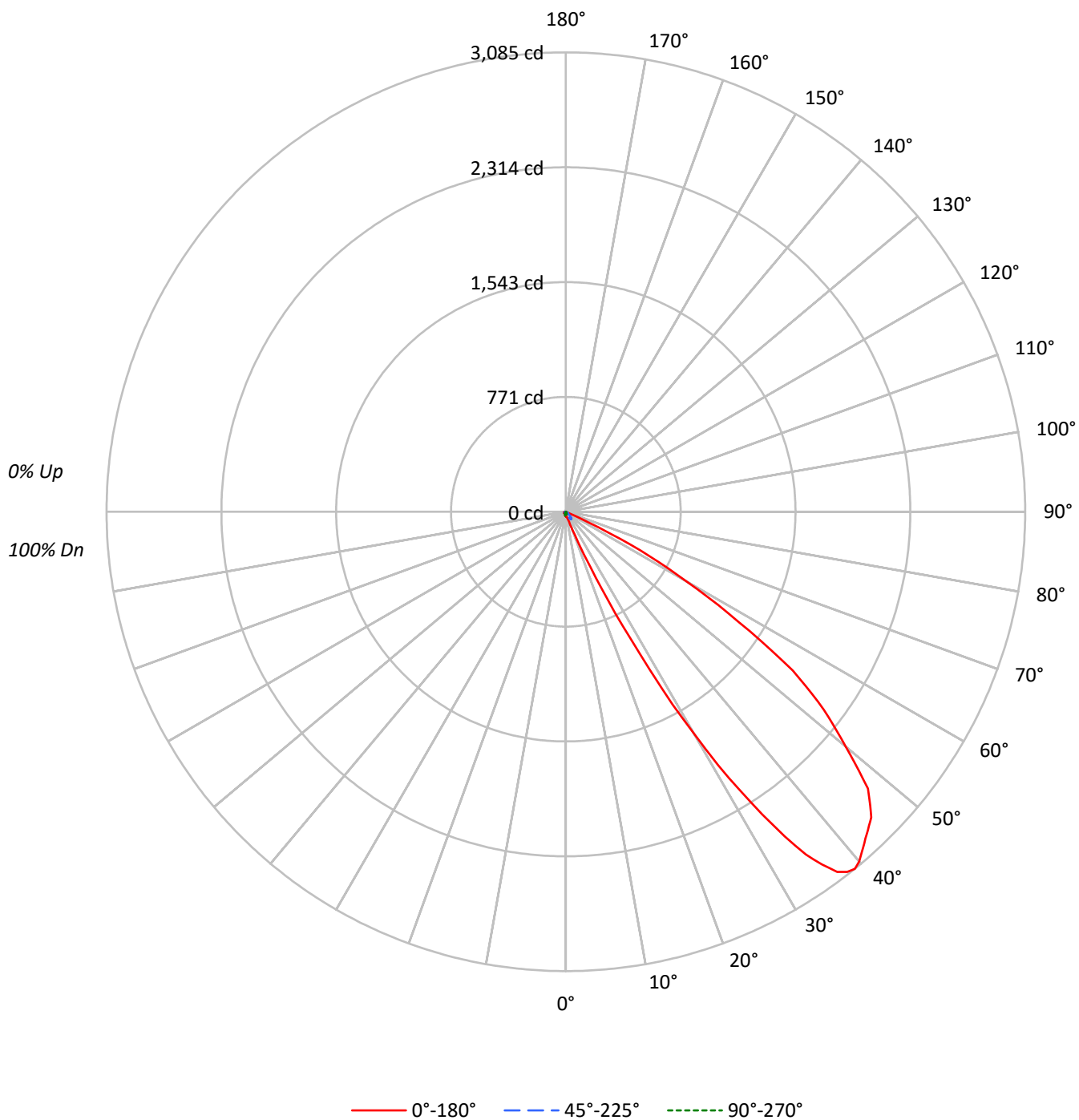
Lumens per Lamp: N/A
Luminaire Lumens: 802.0 lumens
Efficiency: N/A
Efficacy: 55.3 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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			0
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	100	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61	61	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50	50	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42	42	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35	35	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29	29	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24	24	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20	20	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6820	6820	6820	6820	6820
5°	7286	7132	6692	6097	5943
10°	7971	7081	5856	5255	5121
15°	11646	7060	4904	4450	4608
20°	29333	7724	3780	3780	4247
25°	136169	9654	2952	3436	3920
30°	433459	13344	2228	3241	3925
35°	752135	16276	1820	3078	3989
40°	877186	16230	1345	3092	4065
45°	899597	11536	1458	3349	4404
50°	836578	6448	1160	3446	5083
55°	711009	3364	1300	3861	5696
60°	410625	877	1491	4166	6228
65°	83796	0	1764	4929	7005
70°	1282	449	2180	5642	8207
75°	1186	593	2288	5761	9743
80°	884	884	3410	6819	11113
85°	0	1761	6793	6793	13586

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 899597 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.8	0.4
10°-20°	8.1	1.0
20°-30°	46.3	5.8
30°-40°	216.0	26.9
40°-50°	305.5	38.1
50°-60°	187.9	23.4
60°-70°	28.6	3.6
70°-80°	4.5	0.6
80°-90°	2.3	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°	57.1	7.1
0°-40°	273.2	34.1
0°-60°	766.6	95.6
0°-90°	802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	802.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31	31	31	31	31	
5°	33	32	30	28	27	3
15°	51	31	22	20	20	18
25°	563	40	12	14	16	346
35°	2810	61	7	12	15	1686
45°	2901	37	5	11	14	2199
55°	1860	9	3	10	15	1583
65°	162	0	3	10	14	292
75°	1	1	3	7	12	1
85°	0	1	3	3	5	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
2.5°	31.8	31.8	32.4	32.4	31.8	32.4	32.4	32.4	31.1	30.4	29.0
5°	33.1	33.1	33.1	33.8	33.1	33.1	32.4	31.8	30.4	28.4	27.7
7.5°	34.5	34.5	33.8	34.5	33.8	33.8	32.4	31.1	29.0	27.0	25.7
10°	35.8	35.8	35.1	35.1	34.5	34.5	31.8	29.7	26.3	24.3	23.6
12.5°	39.9	39.9	39.2	38.5	37.2	36.5	31.1	27.7	23.6	21.6	20.9
15°	51.3	50.7	49.3	47.3	43.9	43.2	31.1	25.7	21.6	19.6	19.6
17.5°	70.3	69.6	67.6	62.2	56.1	54.0	31.1	23.0	18.9	17.6	17.6
20°	125.7	120.3	110.1	96.6	82.4	75.0	33.1	20.3	16.2	15.5	16.2
21°	164.2	158.8	145.9	123.6	98.6	90.5	34.5	19.6	15.5	14.9	16.2
22°	223.6	217.5	191.2	160.8	125.0	110.8	35.1	18.2	14.2	14.2	15.5
23°	312.1	302.0	257.4	208.8	156.1	135.8	36.5	17.6	13.5	14.2	14.9
24°	408.7	399.9	349.3	276.3	199.3	170.2	37.8	16.9	12.8	12.8	14.2
25°	562.8	552.6	462.8	348.6	252.7	204.7	39.9	15.5	12.2	12.2	14.2
26°	762.0	715.4	595.9	449.3	311.4	256.7	41.9	14.9	11.5	12.2	13.5
27°	951.2	912.7	778.3	576.3	385.1	315.5	44.6	14.2	10.8	11.5	13.5
28°	1199.8	1145.8	976.2	728.9	485.1	381.7	47.3	13.5	10.1	11.5	12.8
29°	1478.1	1402.5	1197.8	900.5	597.9	456.0	50.0	12.8	9.5	10.8	12.8
30°	1711.9	1641.0	1436.3	1103.9	727.6	554.0	52.7	12.2	8.8	10.8	12.8
31°	1986.2	1878.8	1630.8	1276.2	839.1	651.9	55.4	10.8	8.1	10.1	12.2
32°	2208.4	2133.5	1870.0	1470.7	985.7	760.0	57.4	10.1	8.1	10.1	12.2
33°	2423.3	2322.6	2067.9	1657.2	1118.1	870.8	59.5	9.5	7.4	9.5	12.2
34°	2628.6	2536.1	2255.1	1807.8	1243.1	976.2	60.8	8.1	7.4	9.5	11.5
35°	2809.7	2702.3	2419.9	1955.1	1371.4	1072.1	60.8	7.4	6.8	8.8	11.5
36°	2927.2	2850.2	2563.1	2100.4	1487.6	1163.3	60.8	6.8	6.1	8.8	10.8
37°	3027.9	2938.1	2678.0	2211.8	1573.4	1236.3	60.8	6.1	6.1	8.8	10.8
38°	3069.1	2992.1	2757.0	2310.5	1653.8	1310.6	60.1	5.4	5.4	8.1	10.8
39°	3085.3	3016.4	2816.5	2381.4	1713.2	1360.6	58.8	4.7	5.4	8.1	10.8
40°	3064.4	3012.4	2846.9	2427.3	1760.5	1397.1	56.7	4.1	4.7	8.1	10.8
42.5°	2977.9	2943.5	2840.1	2473.3	1801.1	1424.1	49.3	2.7	4.7	7.4	10.8
45°	2900.9	2863.1	2771.9	2425.3	1748.4	1370.7	37.2	1.4	4.7	7.4	10.8
47.5°	2751.6	2728.0	2656.3	2303.0	1632.9	1250.5	26.3	0.7	4.1	6.8	10.1
50°	2452.3	2430.0	2335.4	1999.7	1404.5	1057.3	18.9	0.7	3.4	6.8	10.1
52.5°	2184.1	2160.5	2024.7	1662.6	1078.9	774.9	12.2	0.7	3.4	6.8	10.1
55°	1859.8	1818.6	1640.3	1262.0	764.7	519.5	8.8	0.7	3.4	6.1	10.1
57.5°	1376.8	1316.7	1157.3	860.7	440.5	281.7	4.7	0.7	3.4	6.1	10.1
60°	936.3	900.5	724.2	454.0	187.8	118.9	2.0	0.7	3.4	6.1	9.5
62.5°	567.5	522.2	364.1	193.2	81.1	54.0	0.0	1.4	3.4	6.1	9.5
65°	161.5	143.2	95.3	43.9	23.0	17.6	0.0	1.4	3.4	6.1	9.5
67.5°	5.4	5.4	5.4	4.7	3.4	3.4	0.7	1.4	3.4	6.1	8.8
70°	2.0	2.0	2.0	1.4	1.4	0.7	0.7	1.4	3.4	5.4	8.8
72.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	1.4	2.7	4.7	8.1
75°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	2.0	2.7	4.7	6.8
77.5°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	2.0	2.7	4.1	6.8
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7	4.1	5.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.7	0.7	0.7	0.0	0.0	0.0	0.7	2.0	2.7	2.7	4.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.0	2.7	2.0	2.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.0	2.0	2.0	1.4
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):

	157.5°	180°
0°	31.1	31.1
2.5°	29.0	29.0
5°	27.0	27.0
7.5°	25.0	25.0
10°	23.0	23.0
12.5°	21.6	21.6
15°	19.6	20.3
17.5°	18.2	18.9
20°	17.6	18.2
21°	17.6	18.2
22°	16.9	17.6
23°	16.9	17.6
24°	16.2	16.9
25°	15.5	16.2
26°	15.5	16.2
27°	15.5	16.2
28°	14.9	16.2
29°	14.9	15.5
30°	14.9	15.5
31°	14.2	15.5
32°	14.2	15.5
33°	14.2	14.9
34°	13.5	14.9
35°	13.5	14.9
36°	13.5	14.9
37°	13.5	14.2
38°	13.5	14.9
39°	13.5	14.2
40°	13.5	14.2
42.5°	13.5	14.2
45°	13.5	14.2
47.5°	13.5	14.9
50°	13.5	14.9
52.5°	13.5	14.9
55°	13.5	14.9
57.5°	13.5	14.2
60°	13.5	14.2
62.5°	12.8	14.2
65°	12.8	13.5
67.5°	12.8	13.5
70°	12.2	12.8
72.5°	11.5	12.2
75°	10.1	11.5
77.5°	9.5	10.1
80°	8.1	8.8

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	6.8	6.8
85°	4.7	5.4
87.5°	2.7	2.7
90°	0.0	0.0

(END OF REPORT)