

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: P1344966

Luminaire Tested: P3A13R309040DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344966
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: P3A13R309040DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 90CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

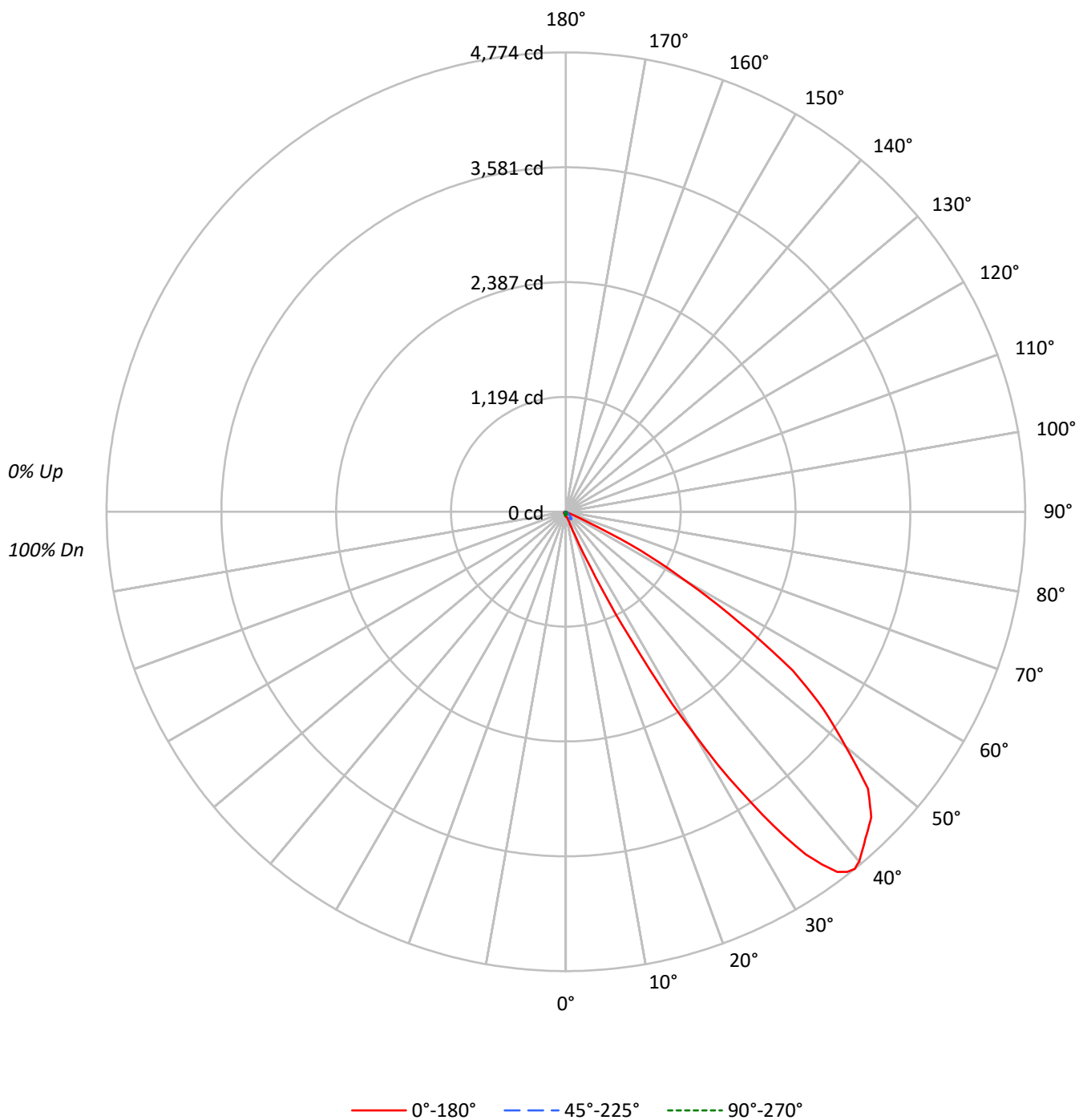
Lumens per Lamp: N/A
Luminaire Lumens: 1241.0 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	108	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	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	26	26	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10547	10547	10547	10547	10547
5°	11270	11050	10346	9443	9201
10°	12336	10933	9085	8149	7905
15°	18025	10919	7605	6879	7128
20°	45364	11948	5857	5857	6581
25°	210690	14928	4549	5323	6073
30°	670736	20636	3444	5039	6077
35°	1163846	25190	2811	4765	6157
40°	1357343	25133	2090	4780	6298
45°	1392020	17831	2264	5179	6822
50°	1294525	9995	1774	5356	7846
55°	1100233	5199	1988	6002	8793
60°	635432	1360	2281	6403	9648
65°	129612	0	2698	7575	10844
70°	1988	641	3334	8719	12759
75°	1779	847	3558	8896	15081
80°	1263	1263	5304	10607	17174
85°	0	2516	10567	10567	21134

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1392020 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.3	0.4
10°-20°	12.5	1.0
20°-30°	71.6	5.8
30°-40°	334.3	26.9
40°-50°	472.7	38.1
50°-60°	290.8	23.4
60°-70°	44.3	3.6
70°-80°	7.0	0.6
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°	88.4	7.1
0°-40°	422.7	34.1
0°-60°	1186.2	95.6
0°-90°	1241.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1241.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	48	48	48	48	48	
5°	51	50	47	43	42	5
15°	79	48	34	30	31	28
25°	871	62	19	22	25	536
35°	4348	94	10	18	23	2609
45°	4489	58	7	17	22	3403
55°	2878	14	5	16	23	2449
65°	250	0	5	15	21	452
75°	2	1	4	10	18	2
85°	0	1	4	4	8	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°	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
2.5°	49.1	49.1	50.2	50.2	49.1	50.2	50.2	50.2	48.1	47.0	45.0
5°	51.2	51.2	51.2	52.3	51.2	51.2	50.2	49.1	47.0	43.9	42.9
7.5°	53.3	53.3	52.3	53.3	52.3	52.3	50.2	48.1	45.0	41.8	39.7
10°	55.4	55.4	54.4	54.4	53.3	53.3	49.1	46.0	40.8	37.6	36.6
12.5°	61.7	61.7	60.6	59.6	57.5	56.4	48.1	42.9	36.6	33.5	32.4
15°	79.4	78.4	76.3	73.2	67.9	66.9	48.1	39.7	33.5	30.3	30.3
17.5°	108.7	107.7	104.5	96.2	86.8	83.6	48.1	35.5	29.3	27.2	27.2
20°	194.4	186.1	170.4	149.5	127.5	116.0	51.2	31.4	25.1	24.0	25.1
21°	254.0	245.7	225.8	191.3	152.6	140.1	53.3	30.3	24.0	23.0	25.1
22°	346.0	336.6	295.8	248.8	193.4	171.4	54.4	28.2	22.0	22.0	24.0
23°	483.0	467.3	398.3	323.0	241.5	210.1	56.4	27.2	20.9	22.0	23.0
24°	632.4	618.9	540.5	427.6	308.4	263.4	58.5	26.1	19.9	19.9	22.0
25°	870.8	855.1	716.1	539.4	391.0	316.7	61.7	24.0	18.8	18.8	22.0
26°	1179.2	1107.0	922.0	695.2	481.9	397.2	64.8	23.0	17.8	18.8	20.9
27°	1471.9	1412.3	1204.3	891.7	595.9	488.2	69.0	22.0	16.7	17.8	20.9
28°	1856.6	1772.9	1510.6	1127.9	750.6	590.6	73.2	20.9	15.7	17.8	19.9
29°	2287.3	2170.2	1853.4	1393.5	925.1	705.6	77.4	19.9	14.6	16.7	19.9
30°	2649.0	2539.2	2222.4	1708.1	1125.9	857.2	81.5	18.8	13.6	16.7	19.9
31°	3073.4	2907.2	2523.5	1974.7	1298.3	1008.8	85.7	16.7	12.5	15.7	18.8
32°	3417.3	3301.3	2893.6	2275.8	1525.2	1176.0	88.9	15.7	12.5	15.7	18.8
33°	3749.7	3594.0	3199.9	2564.3	1730.1	1347.5	92.0	14.6	11.5	14.6	18.8
34°	4067.5	3924.3	3489.4	2797.4	1923.5	1510.6	94.1	12.5	11.5	14.6	17.8
35°	4347.7	4181.5	3744.5	3025.3	2122.1	1659.0	94.1	11.5	10.5	13.6	17.8
36°	4529.6	4410.4	3966.1	3250.0	2301.9	1800.1	94.1	10.5	9.4	13.6	16.7
37°	4685.3	4546.3	4143.8	3422.5	2434.7	1913.0	94.1	9.4	9.4	13.6	16.7
38°	4749.1	4629.9	4266.1	3575.2	2559.1	2028.0	93.0	8.4	8.4	12.5	16.7
39°	4774.2	4667.6	4358.1	3684.9	2651.0	2105.4	90.9	7.3	8.4	12.5	16.7
40°	4741.8	4661.3	4405.2	3756.0	2724.2	2161.8	87.8	6.3	7.3	12.5	16.7
42.5°	4608.0	4554.7	4394.7	3827.1	2786.9	2203.6	76.3	4.2	7.3	11.5	16.7
45°	4488.8	4430.3	4289.1	3752.9	2705.4	2121.0	57.5	2.1	7.3	11.5	16.7
47.5°	4257.8	4221.2	4110.4	3563.7	2526.6	1935.0	40.8	1.0	6.3	10.5	15.7
50°	3794.7	3760.2	3613.8	3094.3	2173.3	1636.0	29.3	1.0	5.2	10.5	15.7
52.5°	3379.7	3343.1	3133.0	2572.6	1669.4	1199.0	18.8	1.0	5.2	10.5	15.7
55°	2877.9	2814.1	2538.1	1952.7	1183.4	803.9	13.6	1.0	5.2	9.4	15.7
57.5°	2130.5	2037.4	1790.7	1331.8	681.6	435.9	7.3	1.0	5.2	9.4	15.7
60°	1448.9	1393.5	1120.6	702.5	290.6	184.0	3.1	1.0	5.2	9.4	14.6
62.5°	878.1	808.1	563.5	299.0	125.4	83.6	0.0	2.1	5.2	9.4	14.6
65°	249.8	221.6	147.4	67.9	35.5	27.2	0.0	2.1	5.2	9.4	14.6
67.5°	8.4	8.4	8.4	7.3	5.2	5.2	1.0	2.1	5.2	9.4	13.6
70°	3.1	3.1	3.1	2.1	2.1	1.0	1.0	2.1	5.2	8.4	13.6
72.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	2.1	4.2	7.3	12.5
75°	2.1	2.1	2.1	1.0	1.0	1.0	1.0	3.1	4.2	7.3	10.5
77.5°	2.1	2.1	2.1	1.0	1.0	1.0	1.0	3.1	4.2	6.3	10.5
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.1	4.2	6.3	8.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	3.1	4.2	4.2	6.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.1	4.2	3.1	4.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.1	3.1	3.1	2.1
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°	48.1	48.1
2.5°	45.0	45.0
5°	41.8	41.8
7.5°	38.7	38.7
10°	35.5	35.5
12.5°	33.5	33.5
15°	30.3	31.4
17.5°	28.2	29.3
20°	27.2	28.2
21°	27.2	28.2
22°	26.1	27.2
23°	26.1	27.2
24°	25.1	26.1
25°	24.0	25.1
26°	24.0	25.1
27°	24.0	25.1
28°	23.0	25.1
29°	23.0	24.0
30°	23.0	24.0
31°	22.0	24.0
32°	22.0	24.0
33°	22.0	23.0
34°	20.9	23.0
35°	20.9	23.0
36°	20.9	23.0
37°	20.9	22.0
38°	20.9	23.0
39°	20.9	22.0
40°	20.9	22.0
42.5°	20.9	22.0
45°	20.9	22.0
47.5°	20.9	23.0
50°	20.9	23.0
52.5°	20.9	23.0
55°	20.9	23.0
57.5°	20.9	22.0
60°	20.9	22.0
62.5°	19.9	22.0
65°	19.9	20.9
67.5°	19.9	20.9
70°	18.8	19.9
72.5°	17.8	18.8
75°	15.7	17.8
77.5°	14.6	15.7
80°	12.5	13.6

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	10.5	10.5
85°	7.3	8.4
87.5°	4.2	4.2
90°	0.0	0.0

(END OF REPORT)