

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: P1337856

Luminaire Tested: P3A05R309035DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337856
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: P3A05R309035DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

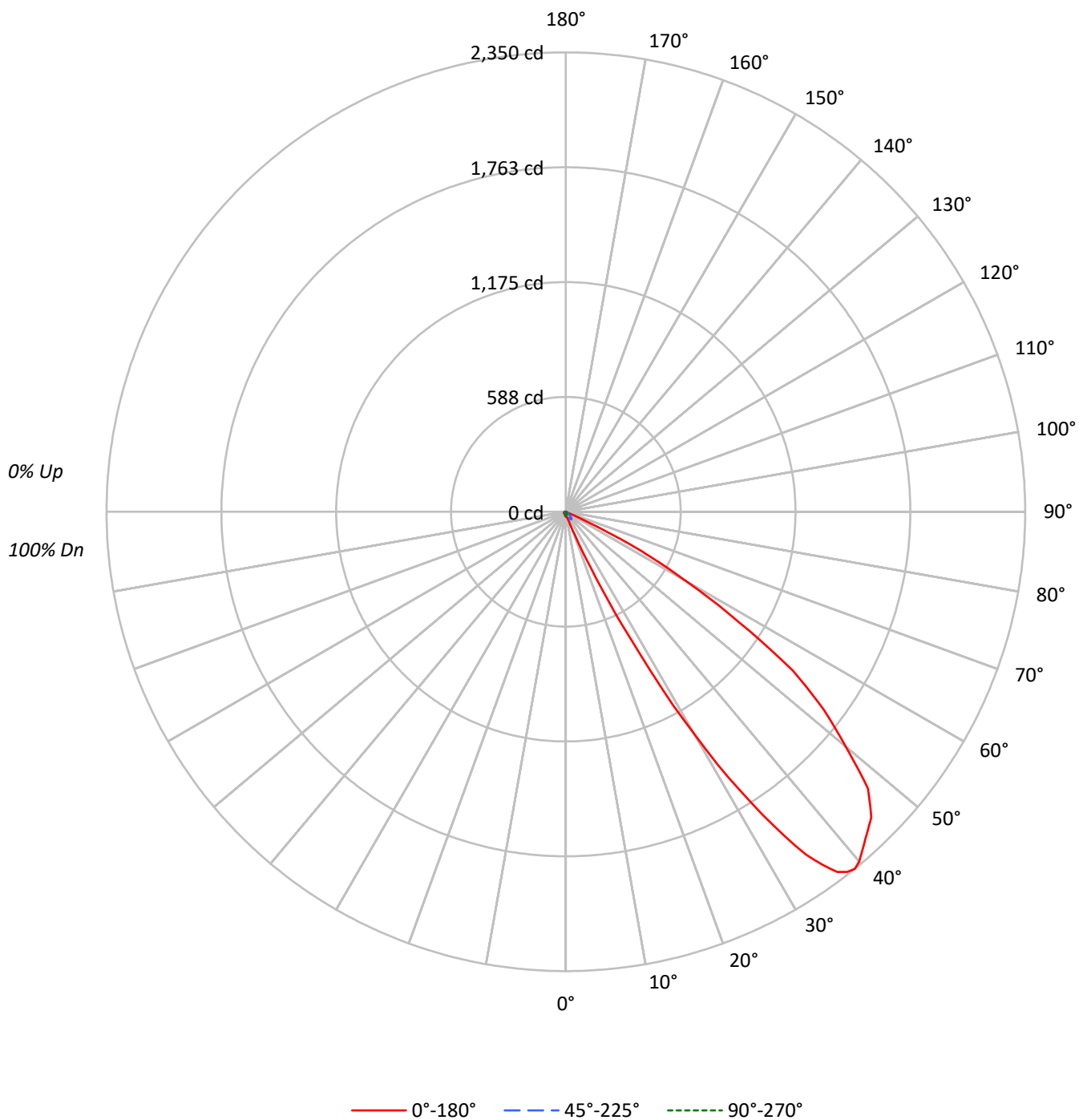
Lumens per Lamp: N/A
Luminaire Lumens: 611.0 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5197	5197	5197	5197	5197
5°	5547	5437	5107	4644	4534
10°	6079	5388	4476	4008	3897
15°	8876	5380	3746	3383	3496
20°	22332	5881	2894	2894	3244
25°	103724	7355	2250	2613	3000
30°	330228	10153	1696	2481	2988
35°	573022	12394	1365	2329	3025
40°	668281	12366	1031	2347	3092
45°	685342	8776	1116	2543	3349
50°	637352	4912	887	2627	3855
55°	541687	2561	994	2944	4320
60°	312826	658	1140	3158	4736
65°	63820	0	1349	3736	5344
70°	962	321	1667	4296	6283
75°	847	424	1779	4321	7371
80°	631	631	2652	5177	8461
85°	0	1258	5284	5284	10315

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 685342 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.1	0.4
10°-20°	6.2	1.0
20°-30°	35.2	5.8
30°-40°	164.6	26.9
40°-50°	232.7	38.1
50°-60°	143.2	23.4
60°-70°	21.8	3.6
70°-80°	3.4	0.6
80°-90°	1.7	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°	43.5	7.1
0°-40°	208.1	34.1
0°-60°	584.0	95.6
0°-90°	611.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	611.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	24	24	24	24	24	
5°	25	25	23	21	21	2
15°	39	24	16	15	15	14
25°	429	30	9	11	12	264
35°	2141	46	5	9	11	1285
45°	2210	28	4	8	11	1675
55°	1417	7	3	8	11	1206
65°	123	0	3	7	10	223
75°	1	0	2	5	9	1
85°	0	0	2	2	4	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°	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
2.5°	24.2	24.2	24.7	24.7	24.2	24.7	24.7	24.7	23.7	23.2	22.1
5°	25.2	25.2	25.2	25.7	25.2	25.2	24.7	24.2	23.2	21.6	21.1
7.5°	26.2	26.2	25.7	26.2	25.7	25.7	24.7	23.7	22.1	20.6	19.6
10°	27.3	27.3	26.8	26.8	26.2	26.2	24.2	22.6	20.1	18.5	18.0
12.5°	30.4	30.4	29.9	29.3	28.3	27.8	23.7	21.1	18.0	16.5	16.0
15°	39.1	38.6	37.6	36.0	33.5	32.9	23.7	19.6	16.5	14.9	14.9
17.5°	53.5	53.0	51.5	47.4	42.7	41.2	23.7	17.5	14.4	13.4	13.4
20°	95.7	91.6	83.9	73.6	62.8	57.1	25.2	15.4	12.4	11.8	12.4
21°	125.1	120.9	111.2	94.2	75.1	69.0	26.2	14.9	11.8	11.3	12.4
22°	170.4	165.7	145.7	122.5	95.2	84.4	26.8	13.9	10.8	10.8	11.8
23°	237.8	230.1	196.1	159.0	118.9	103.5	27.8	13.4	10.3	10.8	11.3
24°	311.4	304.7	266.1	210.5	151.8	129.7	28.8	12.9	9.8	9.8	10.8
25°	428.7	421.0	352.6	265.6	192.5	155.9	30.4	11.8	9.3	9.3	10.8
26°	580.6	545.0	453.9	342.3	237.3	195.6	31.9	11.3	8.7	9.3	10.3
27°	724.7	695.3	592.9	439.0	293.4	240.4	34.0	10.8	8.2	8.7	10.3
28°	914.1	872.9	743.7	555.3	369.5	290.8	36.0	10.3	7.7	8.7	9.8
29°	1126.1	1068.5	912.5	686.1	455.5	347.4	38.1	9.8	7.2	8.2	9.8
30°	1304.2	1250.2	1094.2	841.0	554.3	422.0	40.1	9.3	6.7	8.2	9.8
31°	1513.2	1431.3	1242.4	972.2	639.2	496.7	42.2	8.2	6.2	7.7	9.3
32°	1682.5	1625.4	1424.6	1120.5	750.9	579.0	43.7	7.7	6.2	7.7	9.3
33°	1846.2	1769.5	1575.4	1262.5	851.8	663.4	45.3	7.2	5.7	7.2	9.3
34°	2002.6	1932.1	1718.0	1377.3	947.0	743.7	46.3	6.2	5.7	7.2	8.7
35°	2140.6	2058.7	1843.6	1489.5	1044.8	816.8	46.3	5.7	5.1	6.7	8.7
36°	2230.1	2171.4	1952.7	1600.1	1133.3	886.3	46.3	5.1	4.6	6.7	8.2
37°	2306.8	2238.3	2040.2	1685.1	1198.7	941.9	46.3	4.6	4.6	6.7	8.2
38°	2338.2	2279.5	2100.4	1760.2	1259.9	998.5	45.8	4.1	4.1	6.2	8.2
39°	2350.5	2298.0	2145.7	1814.2	1305.2	1036.6	44.8	3.6	4.1	6.2	8.2
40°	2334.6	2295.0	2168.9	1849.2	1341.3	1064.4	43.2	3.1	3.6	6.2	8.2
42.5°	2268.7	2242.5	2163.7	1884.2	1372.1	1084.9	37.6	2.1	3.6	5.7	8.2
45°	2210.0	2181.2	2111.7	1847.7	1332.0	1044.3	28.3	1.0	3.6	5.7	8.2
47.5°	2096.3	2078.3	2023.7	1754.5	1244.0	952.7	20.1	0.5	3.1	5.1	7.7
50°	1868.3	1851.3	1779.3	1523.5	1070.0	805.5	14.4	0.5	2.6	5.1	7.7
52.5°	1664.0	1645.9	1542.5	1266.6	821.9	590.3	9.3	0.5	2.6	5.1	7.7
55°	1416.9	1385.5	1249.6	961.4	582.6	395.8	6.7	0.5	2.6	4.6	7.7
57.5°	1048.9	1003.1	881.6	655.7	335.6	214.6	3.6	0.5	2.6	4.6	7.7
60°	713.3	686.1	551.7	345.9	143.1	90.6	1.5	0.5	2.6	4.6	7.2
62.5°	432.3	397.8	277.4	147.2	61.8	41.2	0.0	1.0	2.6	4.6	7.2
65°	123.0	109.1	72.6	33.5	17.5	13.4	0.0	1.0	2.6	4.6	7.2
67.5°	4.1	4.1	4.1	3.6	2.6	2.6	0.5	1.0	2.6	4.6	6.7
70°	1.5	1.5	1.5	1.0	1.0	0.5	0.5	1.0	2.6	4.1	6.7
72.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	2.1	3.6	6.2
75°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.1	3.6	5.1
77.5°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.1	3.1	5.1
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.1	3.1	4.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	1.5	2.1	2.1	3.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.1	1.5	2.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	1.5	1.5	1.0
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°	23.7	23.7
2.5°	22.1	22.1
5°	20.6	20.6
7.5°	19.0	19.0
10°	17.5	17.5
12.5°	16.5	16.5
15°	14.9	15.4
17.5°	13.9	14.4
20°	13.4	13.9
21°	13.4	13.9
22°	12.9	13.4
23°	12.9	13.4
24°	12.4	12.9
25°	11.8	12.4
26°	11.8	12.4
27°	11.8	12.4
28°	11.3	12.4
29°	11.3	11.8
30°	11.3	11.8
31°	10.8	11.8
32°	10.8	11.8
33°	10.8	11.3
34°	10.3	11.3
35°	10.3	11.3
36°	10.3	11.3
37°	10.3	10.8
38°	10.3	11.3
39°	10.3	10.8
40°	10.3	10.8
42.5°	10.3	10.8
45°	10.3	10.8
47.5°	10.3	11.3
50°	10.3	11.3
52.5°	10.3	11.3
55°	10.3	11.3
57.5°	10.3	10.8
60°	10.3	10.8
62.5°	9.8	10.8
65°	9.8	10.3
67.5°	9.8	10.3
70°	9.3	9.8
72.5°	8.7	9.3
75°	7.7	8.7
77.5°	7.2	7.7
80°	6.2	6.7

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	5.1	5.1
85°	3.6	4.1
87.5°	2.1	2.1
90°	0.0	0.0

(END OF REPORT)