

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: P1344932

Luminaire Tested: P3A13R309030DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344932
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: P3A13R309030DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

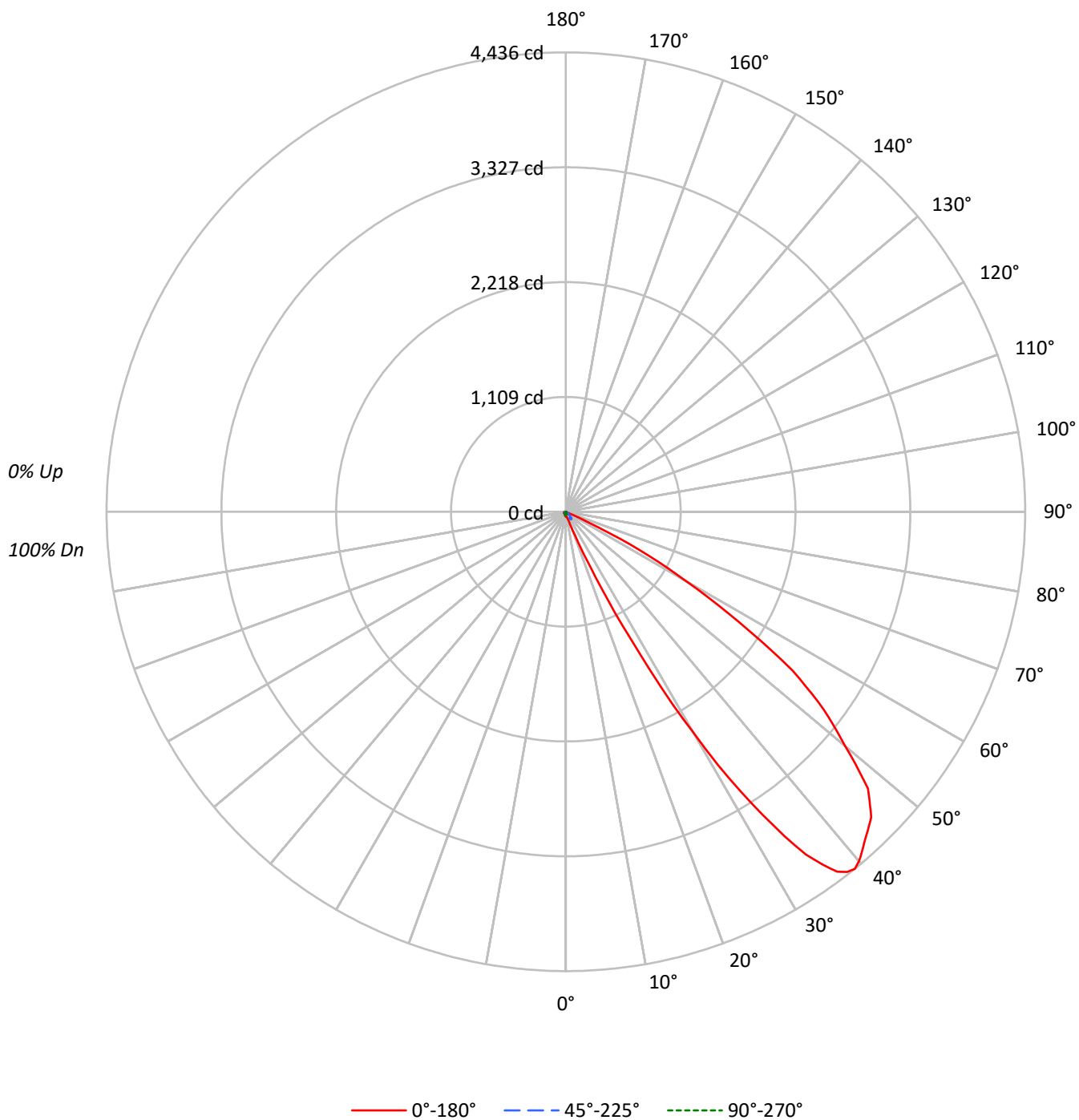
Lumens per Lamp: N/A
Luminaire Lumens: 1153.0 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	100		
1	110	106	102	99	108	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	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	9802	9802	9802	9802	9802
5°	10478	10258	9619	8761	8541
10°	11467	10153	8439	7571	7348
15°	16754	10148	7060	6402	6606
20°	42167	11108	5437	5437	6114
25°	195737	13864	4234	4936	5637
30°	623159	19193	3190	4684	5646
35°	1081316	23396	2597	4417	5729
40°	1261077	23358	1947	4437	5840
45°	1293313	16560	2109	4807	6326
50°	1202724	9279	1672	4981	7300
55°	1022205	4817	1873	5582	8181
60°	590347	1272	2149	5964	8947
65°	120428	0	2542	7057	10066
70°	1859	641	3142	8078	11861
75°	1610	847	3304	8218	13979
80°	1263	1263	4925	9850	15911
85°	0	2516	9812	9812	19625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1293313 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.0	0.4
10°-20°	11.6	1.0
20°-30°	66.5	5.8
30°-40°	310.6	26.9
40°-50°	439.2	38.1
50°-60°	270.2	23.4
60°-70°	41.2	3.6
70°-80°	6.5	0.6
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°	82.2	7.1
0°-40°	392.7	34.1
0°-60°	1102.1	95.6
0°-90°	1153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1153.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	45	45	45	45	45	
5°	48	47	44	40	39	5
15°	74	45	31	28	29	26
25°	809	57	18	20	23	498
35°	4039	87	10	16	21	2424
45°	4170	53	7	16	20	3162
55°	2674	13	5	15	21	2275
65°	232	0	5	14	19	420
75°	2	1	4	10	16	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°	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
2.5°	45.6	45.6	46.6	46.6	45.6	46.6	46.6	46.6	44.7	43.7	41.8
5°	47.6	47.6	47.6	48.6	47.6	47.6	46.6	45.6	43.7	40.8	39.8
7.5°	49.5	49.5	48.6	49.5	48.6	48.6	46.6	44.7	41.8	38.8	36.9
10°	51.5	51.5	50.5	50.5	49.5	49.5	45.6	42.7	37.9	35.0	34.0
12.5°	57.3	57.3	56.3	55.4	53.4	52.4	44.7	39.8	34.0	31.1	30.1
15°	73.8	72.8	70.9	68.0	63.1	62.2	44.7	36.9	31.1	28.2	28.2
17.5°	101.0	100.0	97.1	89.4	80.6	77.7	44.7	33.0	27.2	25.3	25.3
20°	180.7	172.9	158.3	138.9	118.5	107.8	47.6	29.1	23.3	22.3	23.3
21°	236.0	228.2	209.8	177.7	141.8	130.1	49.5	28.2	22.3	21.4	23.3
22°	321.5	312.7	274.9	231.2	179.7	159.3	50.5	26.2	20.4	20.4	22.3
23°	448.7	434.1	370.0	300.1	224.4	195.2	52.4	25.3	19.4	20.4	21.4
24°	587.6	575.0	502.1	397.2	286.5	244.8	54.4	24.3	18.5	18.5	20.4
25°	809.0	794.5	665.3	501.2	363.2	294.3	57.3	22.3	17.5	17.5	20.4
26°	1095.6	1028.5	856.6	645.9	447.7	369.1	60.2	21.4	16.5	17.5	19.4
27°	1367.5	1312.1	1118.9	828.5	553.6	453.6	64.1	20.4	15.5	16.5	19.4
28°	1724.9	1647.2	1403.4	1048.0	697.3	548.7	68.0	19.4	14.6	16.5	18.5
29°	2125.1	2016.3	1722.0	1294.7	859.5	655.6	71.9	18.5	13.6	15.5	18.5
30°	2461.1	2359.1	2064.9	1587.0	1046.0	796.4	75.8	17.5	12.6	15.5	18.5
31°	2855.4	2701.0	2344.6	1834.7	1206.3	937.2	79.6	15.5	11.7	14.6	17.5
32°	3175.0	3067.2	2688.4	2114.4	1417.0	1092.6	82.6	14.6	11.7	14.6	17.5
33°	3483.8	3339.1	2973.0	2382.4	1607.4	1251.9	85.5	13.6	10.7	13.6	17.5
34°	3779.1	3646.0	3242.0	2599.0	1787.1	1403.4	87.4	11.7	10.7	13.6	16.5
35°	4039.4	3885.0	3479.0	2810.8	1971.6	1541.4	87.4	10.7	9.7	12.6	16.5
36°	4208.4	4097.7	3684.9	3019.6	2138.7	1672.5	87.4	9.7	8.7	12.6	15.5
37°	4353.1	4223.9	3850.0	3179.8	2262.0	1777.4	87.4	8.7	8.7	12.6	15.5
38°	4412.3	4301.6	3963.6	3321.6	2377.6	1884.2	86.4	7.8	7.8	11.7	15.5
39°	4435.6	4336.6	4049.1	3423.6	2463.1	1956.1	84.5	6.8	7.8	11.7	15.5
40°	4405.5	4330.8	4092.8	3489.7	2531.0	2008.5	81.6	5.8	6.8	11.7	15.5
42.5°	4281.2	4231.7	4083.1	3555.7	2589.3	2047.4	70.9	3.9	6.8	10.7	15.5
45°	4170.5	4116.1	3985.0	3486.7	2513.6	1970.6	53.4	1.9	6.8	10.7	15.5
47.5°	3955.9	3921.9	3818.9	3311.0	2347.5	1797.8	37.9	1.0	5.8	9.7	14.6
50°	3525.6	3493.5	3357.6	2874.9	2019.2	1520.0	27.2	1.0	4.9	9.7	14.6
52.5°	3140.0	3106.0	2910.8	2390.2	1551.1	1114.0	17.5	1.0	4.9	9.7	14.6
55°	2673.8	2614.6	2358.2	1814.3	1099.4	746.9	12.6	1.0	4.9	8.7	14.6
57.5°	1979.4	1892.9	1663.7	1237.4	633.2	405.0	6.8	1.0	4.9	8.7	14.6
60°	1346.1	1294.7	1041.2	652.7	270.0	170.9	2.9	1.0	4.9	8.7	13.6
62.5°	815.8	750.8	523.5	277.8	116.5	77.7	0.0	1.9	4.9	8.7	13.6
65°	232.1	205.9	136.9	63.1	33.0	25.3	0.0	1.9	4.9	8.7	13.6
67.5°	7.8	7.8	7.8	6.8	4.9	4.9	1.0	1.9	4.9	8.7	12.6
70°	2.9	2.9	2.9	1.9	1.9	1.0	1.0	1.9	4.9	7.8	12.6
72.5°	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.9	3.9	6.8	11.7
75°	1.9	1.9	1.9	1.0	1.0	1.0	1.0	2.9	3.9	6.8	9.7
77.5°	1.9	1.9	1.9	1.0	1.0	1.0	1.0	2.9	3.9	5.8	9.7
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.9	3.9	5.8	7.8



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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	2.9	3.9	3.9	5.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.9	3.9	2.9	3.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.9	2.9	2.9	1.9
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°	44.7	44.7
2.5°	41.8	41.8
5°	38.8	38.8
7.5°	35.9	35.9
10°	33.0	33.0
12.5°	31.1	31.1
15°	28.2	29.1
17.5°	26.2	27.2
20°	25.3	26.2
21°	25.3	26.2
22°	24.3	25.3
23°	24.3	25.3
24°	23.3	24.3
25°	22.3	23.3
26°	22.3	23.3
27°	22.3	23.3
28°	21.4	23.3
29°	21.4	22.3
30°	21.4	22.3
31°	20.4	22.3
32°	20.4	22.3
33°	20.4	21.4
34°	19.4	21.4
35°	19.4	21.4
36°	19.4	21.4
37°	19.4	20.4
38°	19.4	21.4
39°	19.4	20.4
40°	19.4	20.4
42.5°	19.4	20.4
45°	19.4	20.4
47.5°	19.4	21.4
50°	19.4	21.4
52.5°	19.4	21.4
55°	19.4	21.4
57.5°	19.4	20.4
60°	19.4	20.4
62.5°	18.5	20.4
65°	18.5	19.4
67.5°	18.5	19.4
70°	17.5	18.5
72.5°	16.5	17.5
75°	14.6	16.5
77.5°	13.6	14.6
80°	11.7	12.6

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	9.7	9.7
85°	6.8	7.8
87.5°	3.9	3.9
90°	0.0	0.0

(END OF REPORT)