

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: P1344900

Luminaire Tested: P3A13R309027DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344900
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: P3A13R309027DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

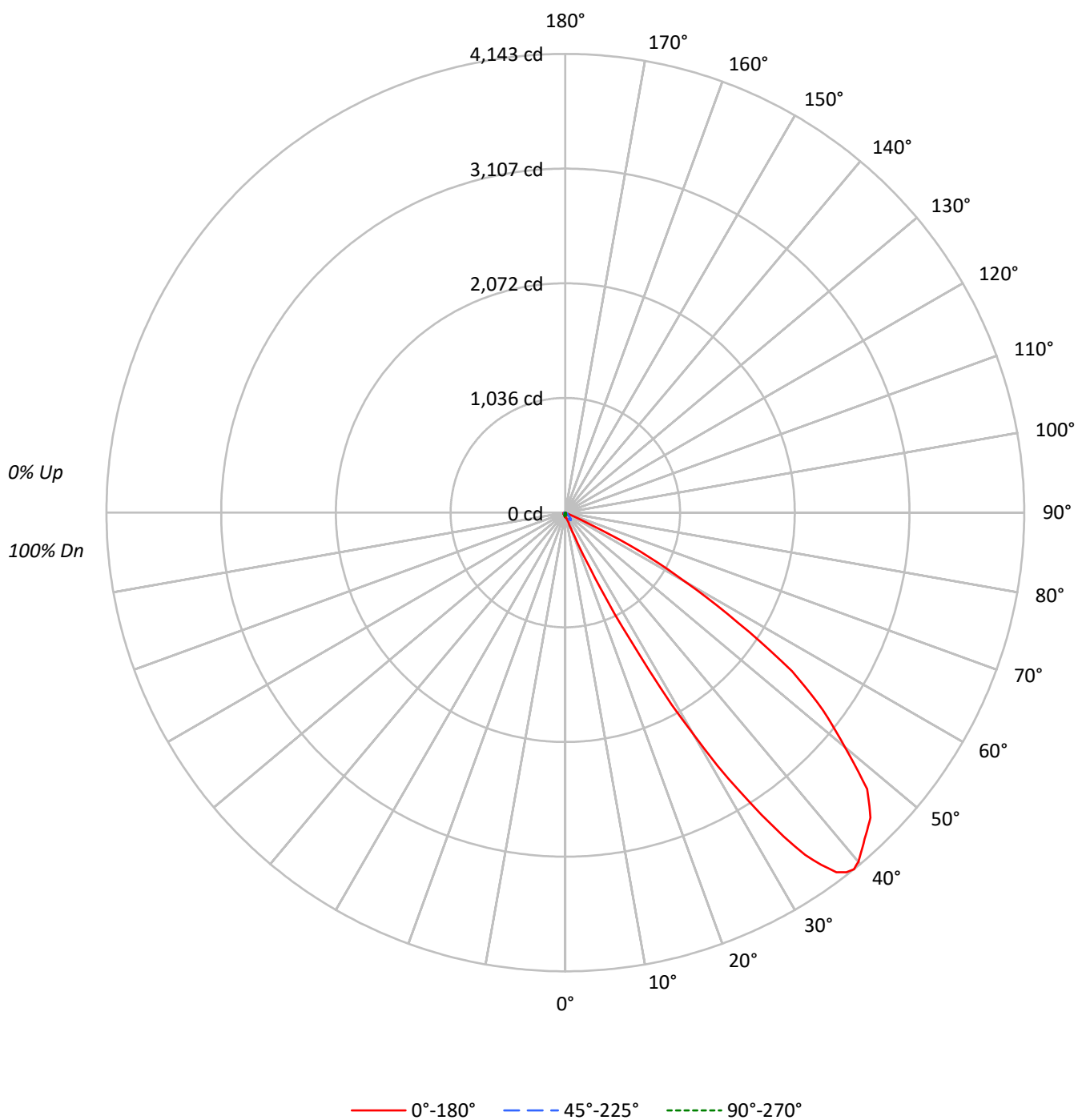
Lumens per Lamp: N/A
Luminaire Lumens: 1077.0 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	9144	9144	9144	9144	9144
5°	9795	9575	8981	8188	7990
10°	10710	9485	7882	7081	6858
15°	15641	9467	6583	5971	6175
20°	39367	10384	5087	5087	5717
25°	182841	12944	3944	4621	5274
30°	582090	17927	2988	4355	5292
35°	1010030	21844	2436	4122	5354
40°	1177950	21812	1832	4151	5467
45°	1208063	15474	1985	4497	5923
50°	1123443	8665	1535	4640	6823
55°	954843	4511	1720	5199	7646
60°	551447	1184	1974	5570	8377
65°	112489	0	2335	6590	9391
70°	1731	577	2885	7565	11028
75°	1525	763	3050	7710	13047
80°	1137	1137	4546	9218	14901
85°	0	2264	9057	9057	18367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1208063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.8	0.4
10°-20°	10.9	1.0
20°-30°	62.1	5.8
30°-40°	290.1	26.9
40°-50°	410.2	38.1
50°-60°	252.4	23.4
60°-70°	38.4	3.6
70°-80°	6.1	0.6
80°-90°	3.0	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°	76.7	7.1
0°-40°	366.8	34.1
0°-60°	1029.4	95.6
0°-90°	1077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1077.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	42	42	42	42	42	
5°	44	44	41	37	36	4
15°	69	42	29	26	27	25
25°	756	54	16	19	22	465
35°	3773	82	9	15	20	2264
45°	3896	50	6	14	19	2953
55°	2498	12	4	14	20	2125
65°	217	0	4	13	18	392
75°	2	1	4	9	15	2
85°	0	1	4	4	7	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°	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7
2.5°	42.6	42.6	43.5	43.5	42.6	43.5	43.5	43.5	41.7	40.8	39.0
5°	44.5	44.5	44.5	45.4	44.5	44.5	43.5	42.6	40.8	38.1	37.2
7.5°	46.3	46.3	45.4	46.3	45.4	45.4	43.5	41.7	39.0	36.3	34.5
10°	48.1	48.1	47.2	47.2	46.3	46.3	42.6	39.9	35.4	32.7	31.8
12.5°	53.5	53.5	52.6	51.7	49.9	49.0	41.7	37.2	31.8	29.0	28.1
15°	68.9	68.0	66.2	63.5	59.0	58.1	41.7	34.5	29.0	26.3	26.3
17.5°	94.4	93.4	90.7	83.5	75.3	72.6	41.7	30.8	25.4	23.6	23.6
20°	168.7	161.5	147.9	129.7	110.7	100.7	44.5	27.2	21.8	20.9	21.8
21°	220.5	213.2	196.0	166.0	132.5	121.6	46.3	26.3	20.9	20.0	21.8
22°	300.3	292.1	256.7	215.9	167.8	148.8	47.2	24.5	19.1	19.1	20.9
23°	419.1	405.5	345.7	280.3	209.6	182.4	49.0	23.6	18.1	19.1	20.0
24°	548.9	537.1	469.0	371.1	267.6	228.6	50.8	22.7	17.2	17.2	19.1
25°	755.7	742.1	621.4	468.1	339.3	274.9	53.5	20.9	16.3	16.3	19.1
26°	1023.3	960.7	800.2	603.3	418.2	344.7	56.2	20.0	15.4	16.3	18.1
27°	1277.4	1225.7	1045.1	773.9	517.1	423.7	59.9	19.1	14.5	15.4	18.1
28°	1611.2	1538.6	1310.9	978.9	651.4	512.6	63.5	18.1	13.6	15.4	17.2
29°	1985.0	1883.4	1608.5	1209.3	802.9	612.4	67.1	17.2	12.7	14.5	17.2
30°	2298.9	2203.6	1928.7	1482.4	977.1	743.9	70.8	16.3	11.8	14.5	17.2
31°	2667.2	2523.0	2190.0	1713.7	1126.8	875.5	74.4	14.5	10.9	13.6	16.3
32°	2965.7	2865.0	2511.2	1975.0	1323.6	1020.6	77.1	13.6	10.9	13.6	16.3
33°	3254.2	3119.0	2777.0	2225.4	1501.4	1169.4	79.8	12.7	10.0	12.7	16.3
34°	3530.0	3405.7	3028.3	2427.7	1669.3	1310.9	81.6	10.9	10.0	12.7	15.4
35°	3773.1	3628.9	3249.7	2625.5	1841.7	1439.8	81.6	10.0	9.1	11.8	15.4
36°	3931.0	3827.6	3442.0	2820.5	1997.7	1562.2	81.6	9.1	8.2	11.8	14.5
37°	4066.2	3945.5	3596.2	2970.2	2112.9	1660.2	81.6	8.2	8.2	11.8	14.5
38°	4121.5	4018.1	3702.4	3102.7	2220.9	1760.0	80.7	7.3	7.3	10.9	14.5
39°	4143.3	4050.7	3782.2	3197.9	2300.7	1827.1	78.9	6.4	7.3	10.9	14.5
40°	4115.1	4045.3	3823.0	3259.6	2364.2	1876.1	76.2	5.4	6.4	10.9	14.5
42.5°	3999.0	3952.8	3814.0	3321.3	2418.6	1912.4	66.2	3.6	6.4	10.0	14.5
45°	3895.6	3844.8	3722.3	3256.9	2347.9	1840.7	49.9	1.8	6.4	10.0	14.5
47.5°	3695.1	3663.4	3567.2	3092.7	2192.7	1679.3	35.4	0.9	5.4	9.1	13.6
50°	3293.2	3263.3	3136.3	2685.4	1886.1	1419.8	25.4	0.9	4.5	9.1	13.6
52.5°	2933.0	2901.3	2718.9	2232.7	1448.8	1040.6	16.3	0.9	4.5	9.1	13.6
55°	2497.6	2442.2	2202.7	1694.7	1027.0	697.7	11.8	0.9	4.5	8.2	13.6
57.5°	1848.9	1768.2	1554.1	1155.8	591.5	378.3	6.4	0.9	4.5	8.2	13.6
60°	1257.4	1209.3	972.5	609.7	252.2	159.7	2.7	0.9	4.5	8.2	12.7
62.5°	762.1	701.3	489.0	259.5	108.9	72.6	0.0	1.8	4.5	8.2	12.7
65°	216.8	192.3	127.9	59.0	30.8	23.6	0.0	1.8	4.5	8.2	12.7
67.5°	7.3	7.3	7.3	6.4	4.5	4.5	0.9	1.8	4.5	8.2	11.8
70°	2.7	2.7	2.7	1.8	1.8	0.9	0.9	1.8	4.5	7.3	11.8
72.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	1.8	3.6	6.4	10.9
75°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	2.7	3.6	6.4	9.1
77.5°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	2.7	3.6	5.4	9.1
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.7	3.6	5.4	7.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.9	2.7	3.6	3.6	5.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.7	3.6	2.7	3.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.7	2.7	2.7	1.8
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):

	157.5°	180°
0°	41.7	41.7
2.5°	39.0	39.0
5°	36.3	36.3
7.5°	33.6	33.6
10°	30.8	30.8
12.5°	29.0	29.0
15°	26.3	27.2
17.5°	24.5	25.4
20°	23.6	24.5
21°	23.6	24.5
22°	22.7	23.6
23°	22.7	23.6
24°	21.8	22.7
25°	20.9	21.8
26°	20.9	21.8
27°	20.9	21.8
28°	20.0	21.8
29°	20.0	20.9
30°	20.0	20.9
31°	19.1	20.9
32°	19.1	20.9
33°	19.1	20.0
34°	18.1	20.0
35°	18.1	20.0
36°	18.1	20.0
37°	18.1	19.1
38°	18.1	20.0
39°	18.1	19.1
40°	18.1	19.1
42.5°	18.1	19.1
45°	18.1	19.1
47.5°	18.1	20.0
50°	18.1	20.0
52.5°	18.1	20.0
55°	18.1	20.0
57.5°	18.1	19.1
60°	18.1	19.1
62.5°	17.2	19.1
65°	17.2	18.1
67.5°	17.2	18.1
70°	16.3	17.2
72.5°	15.4	16.3
75°	13.6	15.4
77.5°	12.7	13.6
80°	10.9	11.8



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	9.1	9.1
85°	6.4	7.3
87.5°	3.6	3.6
90°	0.0	0.0

(END OF REPORT)