

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: P1339839

Luminaire Tested: P3A09R159024DE010 E3CA301MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-59)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R159024DE010 E3CA301MW
Description: 3in Adjustable LED luminaire with, R15 optic, 2400K CCT AND, 90CRI , E3CA301MW TRIM
Light Source: -
Ballast/Driver: -

Summary

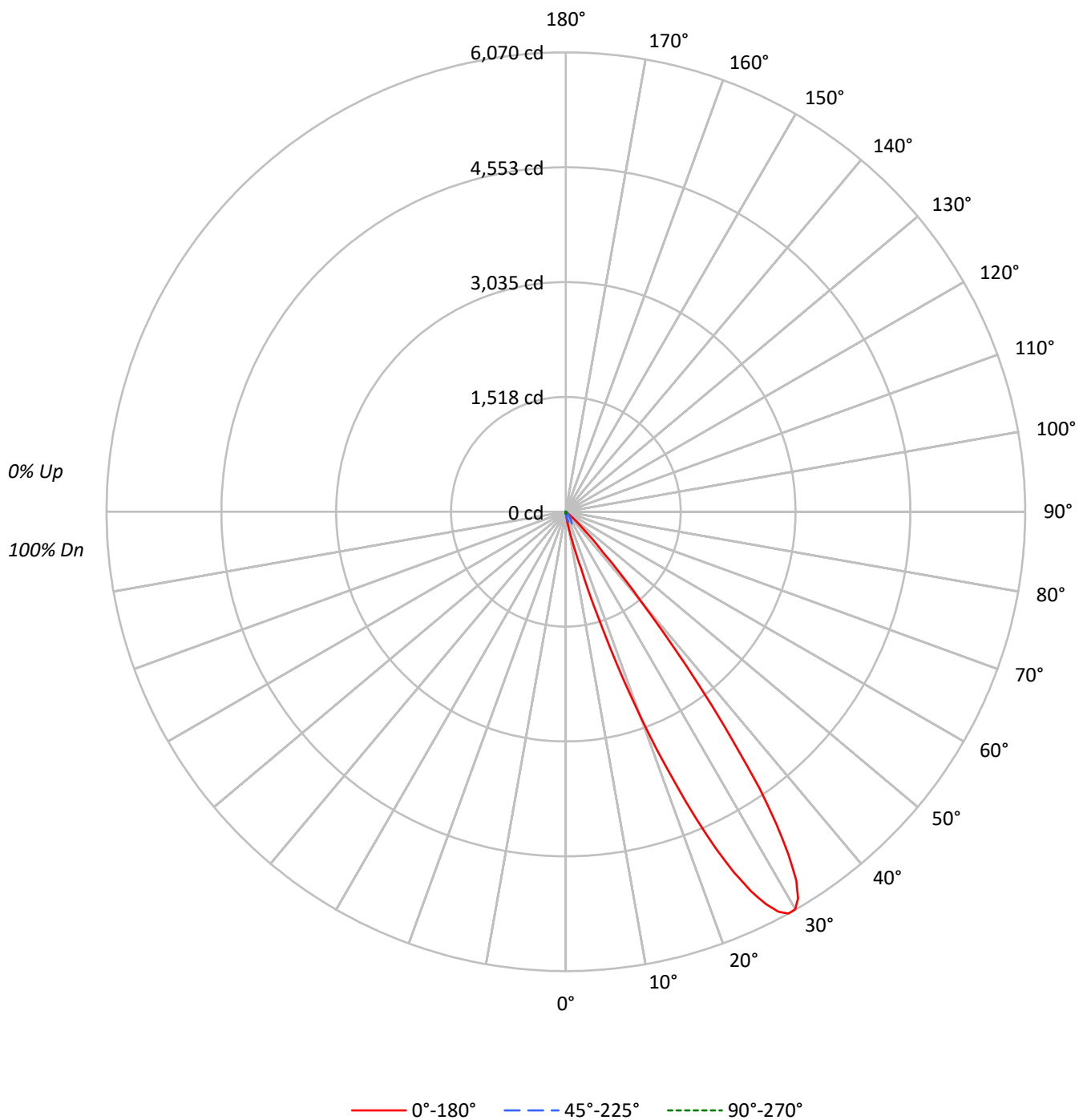
Lumens per Lamp: N/A
Luminaire Lumens: 662.9 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 2.35 / 0.49 / 1.26
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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

TEST NUMBER: P1339839

CATALOG NUMBER: P3A09R159024DE010 E3CA301MW

Luminous Intensity Polar Plot



TEST NUMBER: P1339839

CATALOG NUMBER: P3A09R159024DE010 E3CA301MW

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	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92		
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83		
3	99	92	86	81	97	90	85	81	88	83	79	85	81	78	83	80	77	75		
4	93	84	78	73	91	83	77	72	81	75	71	79	74	70	77	73	70	68		
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61		
6	81	71	64	59	80	70	63	58	68	62	58	67	61	57	65	61	57	55		
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50		
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45		
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	42	41		
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	47	42	39	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4802	4802	4802	4802	4802
5°	10368	7660	4534	2421	1981
10°	45958	14495	3585	1002	713
15°	173781	33530	2497	431	295
20°	668348	47254	1493	140	140
25°	1270960	44325	774	0	0
30°	1535350	35752	329	0	0
35°	1197468	24333	161	0	0
40°	436990	11994	172	0	172
45°	112198	3597	186	0	403
50°	18933	443	205	205	648
55°	2447	0	497	726	1223
60°	263	263	833	1140	1710
65°	311	311	1349	1660	2024
70°	385	385	1667	1667	2052
75°	508	508	2203	1610	2203
80°	0	758	2399	1642	2399
85°	0	1510	4780	1510	1510

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 112198 cd/sqm

TEST NUMBER: P1339839

CATALOG NUMBER: P3A09R159024DE010 E3CA301MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.0	0.5
10°-20°	50.8	7.7
20°-30°	281.8	42.5
30°-40°	272.2	41.1
40°-50°	47.3	7.1
50°-60°	3.4	0.5
60°-70°	2.0	0.3
70°-80°	1.6	0.2
80°-90°	0.8	0.1
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°	335.6	50.6
0°-40°	607.8	91.7
0°-60°	658.5	99.3
0°-90°	662.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	662.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	47	35	21	11	9	9
15°	766	148	11	2	1	341
25°	5253	183	3	0	0	2349
35°	4473	91	1	0	0	2573
45°	362	12	1	0	1	389
55°	6	0	1	2	3	13
65°	1	1	3	3	4	1
75°	1	1	3	2	3	0
85°	0	1	2	1	1	0
90°	0	0	0	0	0	

TEST NUMBER: P1339839

CATALOG NUMBER: P3A09R159024DE010 E3CA301MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9
2.5°	32.2	31.0	31.6	31.6	31.6	31.6	31.6	30.3	30.3	31.0	27.7
5°	47.1	47.1	46.4	47.1	47.1	46.4	45.1	44.5	44.5	43.2	34.8
7.5°	94.2	92.9	92.9	91.6	85.1	83.2	81.9	78.7	72.9	71.6	45.1
10°	206.4	207.0	202.5	196.7	196.1	186.4	183.2	177.4	166.4	155.4	65.1
12.5°	374.7	366.3	355.4	356.0	337.3	330.9	316.0	299.9	283.1	265.7	107.1
15°	765.5	741.7	755.9	721.0	681.7	637.2	592.0	535.3	486.9	435.3	147.7
17.5°	1612.3	1635.5	1596.2	1447.2	1355.6	1247.9	1096.4	950.0	824.9	724.3	180.6
20°	2864.1	2898.3	2764.8	2635.2	2412.7	2170.2	1917.4	1631.0	1356.9	1119.6	202.5
21°	3387.2	3366.5	3311.7	3104.1	2847.4	2566.2	2256.6	1940.6	1608.5	1300.2	204.4
22°	3892.8	3902.5	3774.8	3557.4	3290.4	2978.9	2601.0	2210.8	1852.9	1447.2	201.2
23°	4396.5	4427.5	4258.5	4054.7	3718.7	3367.2	2929.9	2508.8	2066.4	1615.6	194.8
24°	4862.8	4841.5	4727.4	4470.7	4111.4	3700.0	3245.9	2735.2	2241.8	1759.4	189.6
25°	5253.0	5250.4	5071.1	4821.5	4410.7	3954.7	3454.3	2920.3	2392.1	1856.8	183.2
26°	5572.2	5520.0	5378.7	5074.3	4668.7	4187.5	3625.2	3055.0	2476.5	1905.8	176.7
27°	5818.6	5781.2	5591.6	5274.9	4851.2	4319.1	3734.8	3122.1	2515.2	1921.9	168.3
28°	5984.3	5943.7	5741.8	5415.5	4951.8	4401.7	3792.8	3150.5	2515.2	1906.4	160.6
29°	6070.1	6014.6	5813.4	5463.9	4975.0	4411.3	3778.7	3122.8	2475.9	1858.7	151.6
30°	6063.7	5994.6	5783.8	5420.0	4906.0	4332.0	3699.3	3022.8	2386.9	1787.8	141.2
31°	5959.2	5881.8	5646.4	5271.7	4763.5	4182.4	3549.7	2888.7	2265.0	1695.5	130.9
32°	5747.0	5649.0	5419.4	5046.0	4544.2	3958.6	3332.4	2681.6	2082.5	1560.7	120.0
33°	5401.3	5302.6	5056.3	4706.1	4247.5	3674.8	3044.1	2459.1	1874.8	1400.1	110.9
34°	4968.6	4878.3	4666.1	4313.3	3873.5	3315.6	2712.6	2151.5	1659.4	1240.8	101.3
35°	4473.3	4329.4	4137.2	3858.0	3429.1	2868.0	2354.6	1865.1	1437.6	1073.8	90.9
36°	3803.2	3829.0	3625.2	3283.4	2928.0	2488.1	1995.4	1554.9	1202.2	915.2	81.9
37°	3209.2	3168.6	3038.9	2774.5	2464.9	2028.3	1672.3	1318.2	1011.3	773.9	72.2
38°	2588.8	2597.8	2470.7	2267.6	1960.6	1667.8	1346.0	1082.8	846.2	658.5	63.2
39°	2026.4	2019.3	1985.1	1796.8	1518.8	1326.6	1090.6	897.7	704.9	555.3	53.5
40°	1526.6	1538.2	1458.2	1344.7	1182.8	1024.8	868.7	715.9	583.0	468.2	41.9
42.5°	742.3	760.4	707.5	678.5	606.9	545.0	459.8	375.4	319.2	276.0	18.7
45°	361.8	351.5	347.0	332.8	316.0	282.5	250.2	214.8	187.7	161.9	11.6
47.5°	185.1	179.9	179.9	174.1	168.3	157.4	141.2	129.6	116.7	100.6	4.5
50°	55.5	54.8	54.2	54.8	52.9	54.8	56.1	56.8	51.6	50.9	1.3
52.5°	21.9	22.6	21.9	23.9	23.9	23.2	23.9	23.2	22.6	20.0	0.0
55°	6.4	6.4	6.4	6.4	6.4	6.4	7.1	7.7	7.1	7.7	0.0
57.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0
60°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6
62.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
65°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
67.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
70°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
72.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
75°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6



TEST NUMBER: P1339839

CATALOG NUMBER: P3A09R159024DE010 E3CA301MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1339839

CATALOG NUMBER: P3A09R159024DE010 E3CA301MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	21.9	21.9	21.9	21.9	21.9	21.9
2.5°	25.8	22.6	18.7	15.5	14.2	13.5
5°	27.7	20.6	14.2	11.0	9.7	9.0
7.5°	29.7	18.7	11.0	7.7	5.8	5.2
10°	31.0	16.1	8.4	4.5	3.2	3.2
12.5°	31.0	12.9	5.8	2.6	1.9	1.9
15°	30.3	11.0	3.9	1.9	1.3	1.3
17.5°	29.7	8.4	2.6	1.3	0.6	1.3
20°	27.7	6.4	1.3	0.6	0.6	0.6
21°	27.1	5.8	1.3	0.6	0.6	0.6
22°	25.8	5.2	0.6	0.0	0.6	0.6
23°	24.5	3.9	0.6	0.0	0.0	0.0
24°	22.6	3.2	0.6	0.0	0.0	0.0
25°	21.3	3.2	0.6	0.0	0.0	0.0
26°	20.0	1.9	0.0	0.0	0.0	0.0
27°	18.1	1.3	0.0	0.0	0.0	0.0
28°	16.8	1.3	0.0	0.0	0.0	0.0
29°	14.8	1.3	0.0	0.0	0.0	0.0
30°	12.9	1.3	0.0	0.0	0.0	0.0
31°	10.3	0.6	0.0	0.0	0.0	0.0
32°	8.4	0.6	0.0	0.0	0.0	0.0
33°	5.8	0.6	0.0	0.0	0.0	0.0
34°	3.9	0.6	0.0	0.0	0.0	0.0
35°	3.2	0.6	0.0	0.0	0.0	0.0
36°	1.9	0.6	0.0	0.0	0.0	0.6
37°	1.9	0.6	0.0	0.0	0.0	0.6
38°	1.3	0.6	0.0	0.0	0.0	0.6
39°	0.6	0.6	0.0	0.0	0.0	0.6
40°	0.6	0.6	0.0	0.0	0.0	0.6
42.5°	0.0	0.6	0.0	0.0	0.6	1.3
45°	0.0	0.6	0.0	0.0	0.6	1.3
47.5°	0.0	0.6	0.0	0.0	1.3	1.3
50°	0.0	0.6	0.6	0.6	1.3	1.9
52.5°	0.0	1.3	0.6	1.3	1.9	2.6
55°	0.6	1.3	1.3	1.9	2.6	3.2
57.5°	0.6	1.9	1.9	2.6	3.2	3.2
60°	1.3	1.9	2.6	2.6	3.9	3.9
62.5°	1.3	2.6	2.6	2.6	3.9	3.9
65°	1.3	2.6	2.6	3.2	3.9	3.9
67.5°	1.3	2.6	2.6	2.6	3.2	3.9
70°	1.3	2.6	1.9	2.6	3.2	3.2
72.5°	1.3	2.6	1.9	1.9	2.6	3.2
75°	1.3	2.6	1.9	1.9	2.6	2.6
77.5°	1.3	1.9	1.9	1.3	1.9	1.9
80°	1.3	1.9	1.3	1.3	1.9	1.9



TEST NUMBER: P1339839

CATALOG NUMBER: P3A09R159024DE010 E3CA301MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	1.3	1.9	1.3	0.6	1.3	1.3
85°	1.3	1.9	1.3	0.6	0.6	0.6
87.5°	1.3	1.9	0.6	0.0	0.0	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)