

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: P1340005

Luminaire Tested: P3A09R159827DE010 E3CA301MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1340005
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: P3A09R159827DE010 E3CA301MW
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 98CRI , E3CA301MW TRIM
Light Source: -
Ballast/Driver: -

Summary

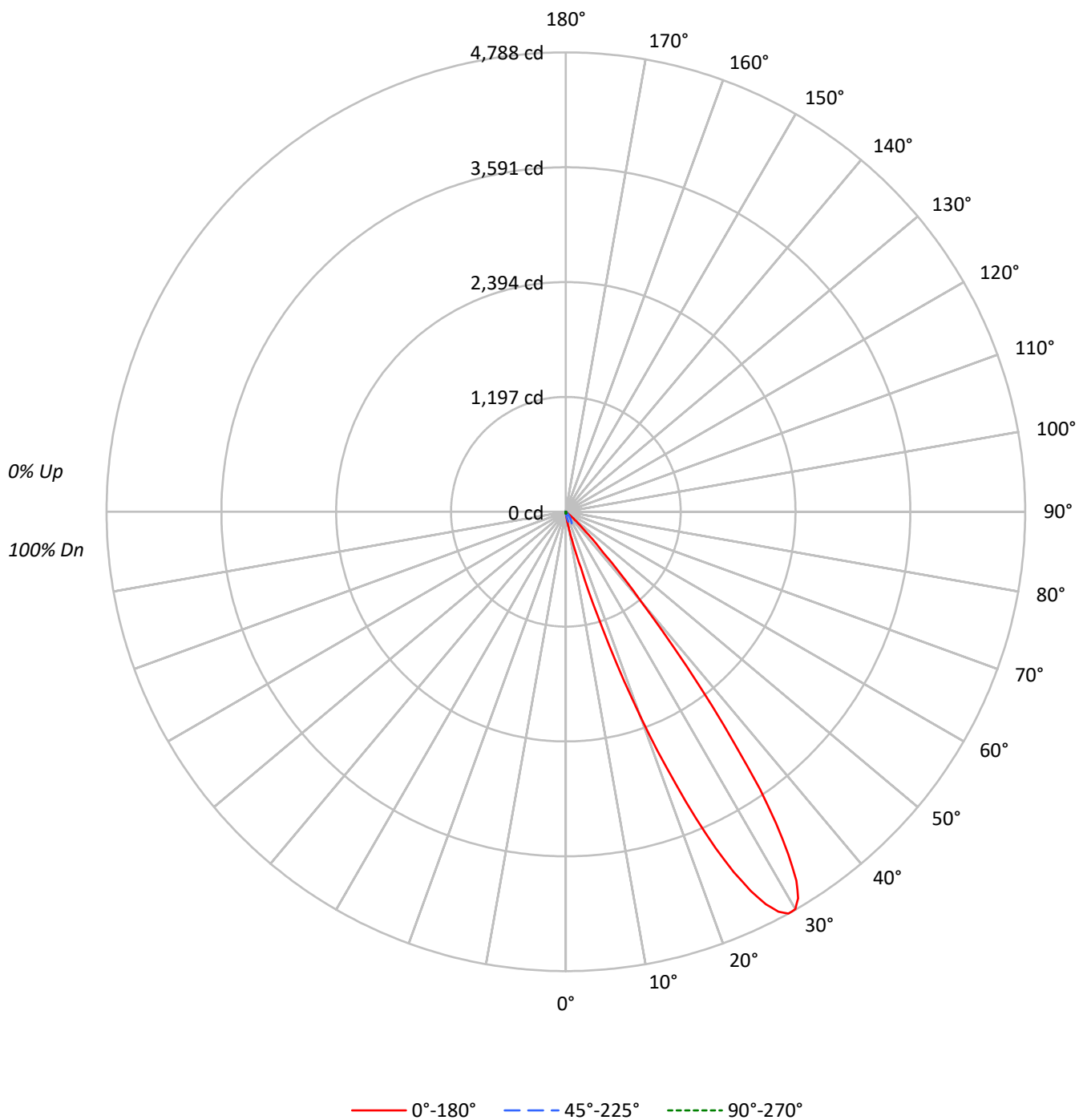
Lumens per Lamp: N/A
Luminaire Lumens: 522.9 lumens
Efficiency: N/A
Efficacy: 47.5 lumens/watt
Spacing Criteria (0/90/45): 2.35 / 0.49 / 1.26
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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: P1340005

CATALOG NUMBER: P3A09R159827DE010 E3CA301MW

Luminous Intensity Polar Plot



TEST NUMBER: P1340005

CATALOG NUMBER: P3A09R159827DE010 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°	3794	3794	3794	3794	3794
5°	8166	6053	3588	1893	1563
10°	36250	11445	2828	802	557
15°	137095	26447	1952	341	227
20°	527216	37267	1190	117	117
25°	1002566	34962	605	0	0
30°	1211123	28207	253	0	0
35°	944606	19194	134	0	0
40°	344703	9475	143	0	143
45°	88505	2853	155	0	310
50°	14942	341	171	171	512
55°	1950	0	382	573	956
60°	219	219	658	877	1360
65°	259	259	1038	1297	1608
70°	321	321	1282	1282	1603
75°	424	424	1694	1271	1694
80°	0	631	1894	1263	1894
85°	0	1258	3774	1258	1258

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 88505 cd/sqm

TEST NUMBER: P1340005

CATALOG NUMBER: P3A09R159827DE010 E3CA301MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.4	0.5
10°-20°	40.1	7.7
20°-30°	222.3	42.5
30°-40°	214.7	41.1
40°-50°	37.3	7.1
50°-60°	2.7	0.5
60°-70°	1.6	0.3
70°-80°	1.3	0.2
80°-90°	0.6	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°	264.7	50.6
0°-40°	479.5	91.7
0°-60°	519.5	99.3
0°-90°	522.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	522.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	17	17	17	17	17	
5°	37	28	16	9	7	7
15°	604	116	9	2	1	269
25°	4144	144	2	0	0	1853
35°	3529	72	0	0	0	2029
45°	285	9	0	0	1	307
55°	5	0	1	2	2	10
65°	0	0	2	2	3	0
75°	0	0	2	2	2	0
85°	0	0	2	0	0	0
90°	0	0	0	0	0	

TEST NUMBER: P1340005

CATALOG NUMBER: P3A09R159827DE010 E3CA301MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
2.5°	25.4	24.4	24.9	24.9	24.9	24.9	24.9	23.9	23.9	24.4	21.9
5°	37.1	37.1	36.6	37.1	37.1	36.6	35.6	35.1	35.1	34.1	27.5
7.5°	74.3	73.3	73.3	72.2	67.2	65.6	64.6	62.1	57.5	56.5	35.6
10°	162.8	163.3	159.7	155.2	154.7	147.0	144.5	139.9	131.3	122.6	51.4
12.5°	295.6	289.0	280.3	280.8	266.1	261.0	249.3	236.6	223.3	209.6	84.5
15°	603.9	585.1	596.3	568.8	537.7	502.6	467.0	422.3	384.1	343.4	116.5
17.5°	1271.9	1290.2	1259.2	1141.6	1069.4	984.4	864.9	749.4	650.7	571.3	142.4
20°	2259.3	2286.3	2181.0	2078.7	1903.2	1711.9	1512.5	1286.6	1070.4	883.2	159.7
21°	2671.9	2655.7	2612.4	2448.6	2246.1	2024.3	1780.1	1530.8	1268.8	1025.6	161.3
22°	3070.8	3078.4	2977.7	2806.3	2595.6	2349.9	2051.8	1744.0	1461.6	1141.6	158.7
23°	3468.1	3492.6	3359.3	3198.5	2933.4	2656.2	2311.2	1979.0	1630.0	1274.4	153.6
24°	3836.0	3819.2	3729.1	3526.6	3243.3	2918.7	2560.5	2157.6	1768.4	1387.9	149.6
25°	4143.7	4141.7	4000.3	3803.4	3479.3	3119.6	2724.9	2303.6	1886.9	1464.7	144.5
26°	4395.6	4354.4	4243.0	4002.8	3682.8	3303.3	2859.7	2409.9	1953.6	1503.3	139.4
27°	4589.9	4560.4	4410.8	4161.0	3826.8	3407.1	2946.2	2462.8	1984.1	1516.1	132.8
28°	4720.7	4688.6	4529.4	4272.0	3906.2	3472.2	2991.9	2485.2	1984.1	1503.9	126.7
29°	4788.3	4744.6	4585.9	4310.1	3924.5	3479.8	2980.8	2463.4	1953.1	1466.2	119.6
30°	4783.2	4728.8	4562.4	4275.5	3870.0	3417.3	2918.2	2384.5	1882.9	1410.2	111.4
31°	4700.8	4639.8	4454.1	4158.5	3757.6	3299.2	2800.1	2278.7	1786.7	1337.5	103.3
32°	4533.4	4456.1	4275.0	3980.4	3584.6	3122.7	2628.7	2115.4	1642.7	1231.2	94.6
33°	4260.8	4182.9	3988.6	3712.3	3350.6	2898.8	2401.3	1939.9	1478.9	1104.5	87.5
34°	3919.4	3848.2	3680.8	3402.5	3055.5	2615.5	2139.8	1697.2	1309.0	978.8	79.9
35°	3528.7	3415.2	3263.6	3043.3	2705.0	2262.4	1857.4	1471.3	1134.0	847.1	71.7
36°	3000.1	3020.4	2859.7	2590.0	2309.7	1962.7	1574.1	1226.6	948.3	721.9	64.6
37°	2531.5	2499.5	2397.2	2188.6	1944.4	1600.0	1319.2	1039.9	797.7	610.5	57.0
38°	2042.1	2049.2	1949.0	1788.8	1546.6	1315.6	1061.8	854.2	667.5	519.4	49.9
39°	1598.5	1592.9	1565.9	1417.4	1198.1	1046.5	860.3	708.2	556.1	438.0	42.2
40°	1204.2	1213.4	1150.3	1060.7	933.0	808.4	685.3	564.7	459.9	369.4	33.1
42.5°	585.6	599.8	558.1	535.2	478.7	429.9	362.7	296.1	251.8	217.7	14.8
45°	285.4	277.3	273.7	262.5	249.3	222.8	197.4	169.4	148.0	127.7	9.2
47.5°	146.0	141.9	141.9	137.4	132.8	124.1	111.4	102.3	92.1	79.4	3.6
50°	43.8	43.2	42.7	43.2	41.7	43.2	44.3	44.8	40.7	40.2	1.0
52.5°	17.3	17.8	17.3	18.8	18.8	18.3	18.8	18.3	17.8	15.8	0.0
55°	5.1	5.1	5.1	5.1	5.1	5.1	5.6	6.1	5.6	6.1	0.0
57.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
60°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5
62.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
67.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5



TEST NUMBER: P1340005

CATALOG NUMBER: P3A09R159827DE010 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	0.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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: P1340005

CATALOG NUMBER: P3A09R159827DE010 E3CA301MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	17.3	17.3	17.3	17.3	17.3	17.3
2.5°	20.3	17.8	14.8	12.2	11.2	10.7
5°	21.9	16.3	11.2	8.6	7.6	7.1
7.5°	23.4	14.8	8.6	6.1	4.6	4.1
10°	24.4	12.7	6.6	3.6	2.5	2.5
12.5°	24.4	10.2	4.6	2.0	1.5	1.5
15°	23.9	8.6	3.1	1.5	1.0	1.0
17.5°	23.4	6.6	2.0	1.0	0.5	1.0
20°	21.9	5.1	1.0	0.5	0.5	0.5
21°	21.4	4.6	1.0	0.5	0.5	0.5
22°	20.3	4.1	0.5	0.0	0.5	0.5
23°	19.3	3.1	0.5	0.0	0.0	0.0
24°	17.8	2.5	0.5	0.0	0.0	0.0
25°	16.8	2.5	0.5	0.0	0.0	0.0
26°	15.8	1.5	0.0	0.0	0.0	0.0
27°	14.2	1.0	0.0	0.0	0.0	0.0
28°	13.2	1.0	0.0	0.0	0.0	0.0
29°	11.7	1.0	0.0	0.0	0.0	0.0
30°	10.2	1.0	0.0	0.0	0.0	0.0
31°	8.1	0.5	0.0	0.0	0.0	0.0
32°	6.6	0.5	0.0	0.0	0.0	0.0
33°	4.6	0.5	0.0	0.0	0.0	0.0
34°	3.1	0.5	0.0	0.0	0.0	0.0
35°	2.5	0.5	0.0	0.0	0.0	0.0
36°	1.5	0.5	0.0	0.0	0.0	0.5
37°	1.5	0.5	0.0	0.0	0.0	0.5
38°	1.0	0.5	0.0	0.0	0.0	0.5
39°	0.5	0.5	0.0	0.0	0.0	0.5
40°	0.5	0.5	0.0	0.0	0.0	0.5
42.5°	0.0	0.5	0.0	0.0	0.5	1.0
45°	0.0	0.5	0.0	0.0	0.5	1.0
47.5°	0.0	0.5	0.0	0.0	1.0	1.0
50°	0.0	0.5	0.5	0.5	1.0	1.5
52.5°	0.0	1.0	0.5	1.0	1.5	2.0
55°	0.5	1.0	1.0	1.5	2.0	2.5
57.5°	0.5	1.5	1.5	2.0	2.5	2.5
60°	1.0	1.5	2.0	2.0	3.1	3.1
62.5°	1.0	2.0	2.0	2.0	3.1	3.1
65°	1.0	2.0	2.0	2.5	3.1	3.1
67.5°	1.0	2.0	2.0	2.0	2.5	3.1
70°	1.0	2.0	1.5	2.0	2.5	2.5
72.5°	1.0	2.0	1.5	1.5	2.0	2.5
75°	1.0	2.0	1.5	1.5	2.0	2.0
77.5°	1.0	1.5	1.5	1.0	1.5	1.5
80°	1.0	1.5	1.0	1.0	1.5	1.5



TEST NUMBER: P1340005

CATALOG NUMBER: P3A09R159827DE010 E3CA301MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	1.0	1.5	1.0	0.5	1.0	1.0
85°	1.0	1.5	1.0	0.5	0.5	0.5
87.5°	1.0	1.5	0.5	0.0	0.0	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)