

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: P1344353

Luminaire Tested: P3A13R20W2N902765DE010 E3CA301MW_3500K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344353
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-60)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R20W2N902765DE010 E3CA301MW_3500K
Description: 3in Adjustable Tunable White LED luminaire with, R20 optic, 3500K CCT AND, 90CRI ,
E3CA301MW TRIM
Light Source: -
Ballast/Driver: -

Summary

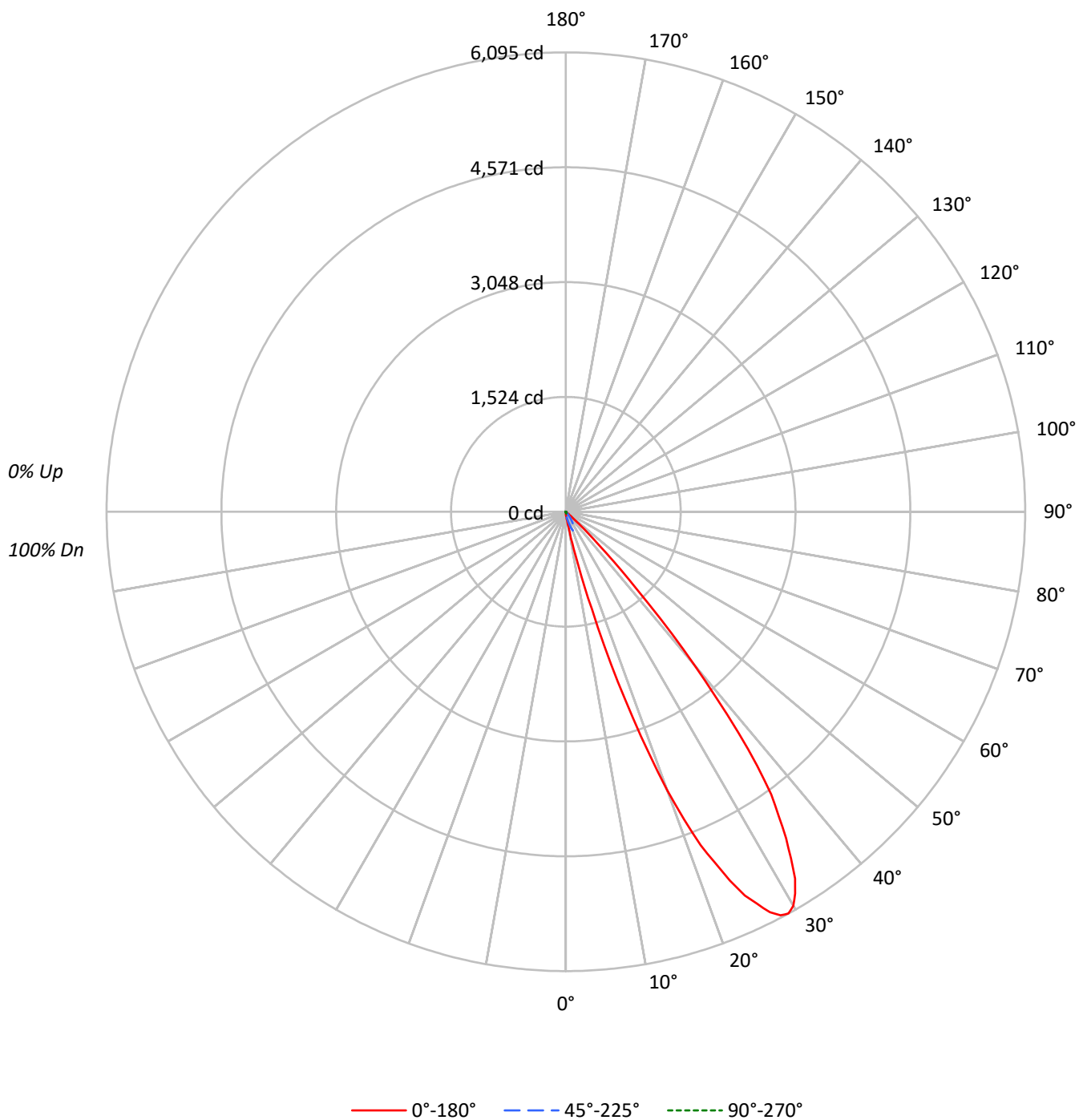
Lumens per Lamp: N/A
Luminaire Lumens: 855.1 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 2.29 / 0.53 / 1.19
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 12.3
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	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	76	71	79	74	71	77	73	70	68		
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61		
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55		
7	76	65	58	53	74	64	57	53	63	57	52	62	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	43	41		
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6469	6469	6469	6469	6469
5°	14858	11094	6141	3764	3236
10°	46804	19349	5010	2071	1559
15°	303225	35755	3700	704	182
20°	915190	61185	2544	0	0
25°	1359151	61746	1500	0	0
30°	1528438	46944	582	0	0
35°	1318759	28027	428	0	0
40°	759394	9561	0	0	0
45°	185229	3845	248	0	248
50°	22242	1058	273	273	785
55°	2982	0	612	612	1185
60°	351	0	1009	1009	1710
65°	415	415	1608	1608	2439
70°	513	513	1988	1988	2500
75°	0	678	2626	1949	2626
80°	0	1010	2904	2020	2904
85°	0	2013	5787	2013	2013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2.5°

Vertical Angle: 45°

Luminance: 186438 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.9	0.5
10°-20°	79.2	9.3
20°-30°	345.4	40.4
30°-40°	347.8	40.7
40°-50°	69.8	8.2
50°-60°	3.5	0.4
60°-70°	2.3	0.3
70°-80°	2.0	0.2
80°-90°	1.1	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°	428.6	50.1
0°-40°	776.4	90.8
0°-60°	849.6	99.4
0°-90°	855.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	855.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	30	30	30	30	30	
5°	68	50	28	17	15	11
15°	1336	158	16	3	1	523
25°	5618	255	6	0	0	2533
35°	4926	105	2	0	0	2931
45°	597	12	1	0	1	650
55°	8	0	2	2	3	14
65°	1	1	3	3	5	1
75°	0	1	3	2	3	0
85°	0	1	2	1	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
2.5°	44.2	44.2	43.4	43.4	42.7	43.4	41.9	42.7	42.7	41.9	38.0
5°	67.5	69.0	68.3	68.3	67.5	68.3	66.7	65.2	63.6	63.6	50.4
7.5°	110.9	110.1	108.6	109.4	107.0	105.5	103.9	103.2	98.5	96.2	65.9
10°	210.2	214.9	211.0	210.2	196.2	195.5	186.2	173.0	161.3	155.1	86.9
12.5°	578.7	603.5	564.7	546.1	535.2	493.3	475.5	429.7	385.5	352.2	110.1
15°	1335.7	1397.0	1318.7	1324.1	1258.9	1139.5	1034.8	944.8	838.5	731.5	157.5
17.5°	2617.2	2567.5	2524.9	2452.7	2320.1	2144.8	1919.1	1690.2	1492.4	1285.3	219.5
20°	3921.9	3877.7	3780.7	3623.2	3454.1	3194.3	2925.9	2582.3	2249.5	1937.7	262.2
21°	4371.0	4356.3	4197.2	4100.3	3839.7	3591.4	3281.9	2914.3	2539.6	2170.4	269.2
22°	4772.0	4683.6	4598.3	4454.8	4195.7	3925.8	3581.3	3194.3	2787.8	2377.5	269.9
23°	5049.7	5009.4	4928.7	4766.6	4509.1	4191.8	3828.8	3423.9	2995.7	2524.1	267.6
24°	5356.9	5305.7	5187.8	4998.5	4738.7	4425.3	4011.1	3609.3	3143.9	2647.4	261.4
25°	5617.5	5537.6	5398.0	5194.0	4910.1	4586.6	4170.1	3728.7	3247.0	2730.4	255.2
26°	5786.6	5743.2	5564.0	5342.2	5038.1	4704.5	4279.5	3820.3	3313.7	2768.4	245.1
27°	5962.7	5882.8	5706.7	5451.5	5121.9	4781.3	4341.5	3864.5	3337.0	2770.0	232.7
28°	6063.6	5976.7	5777.3	5508.9	5176.2	4824.0	4377.2	3878.4	3332.4	2745.9	218.0
29°	6095.4	5986.0	5791.3	5518.2	5189.4	4827.1	4371.8	3858.3	3291.2	2687.0	200.9
30°	6036.4	5924.7	5740.1	5474.0	5147.5	4788.3	4321.4	3791.6	3218.3	2602.4	185.4
31°	5907.6	5813.0	5634.6	5367.8	5054.4	4697.6	4207.3	3682.2	3094.2	2489.2	167.5
32°	5737.8	5644.7	5469.4	5228.1	4909.3	4549.4	4051.4	3511.5	2948.4	2320.1	149.7
33°	5482.6	5429.0	5271.6	5041.2	4722.4	4337.6	3842.0	3307.5	2740.5	2132.4	134.2
34°	5224.3	5156.8	5046.6	4794.5	4451.7	4067.7	3568.9	3026.0	2486.9	1922.2	119.5
35°	4926.4	4886.1	4713.1	4511.4	4167.0	3774.5	3278.8	2752.1	2191.3	1687.9	104.7
36°	4637.8	4575.8	4378.8	4165.4	3831.1	3406.8	2917.4	2422.5	1936.1	1468.4	89.2
37°	4219.0	4124.3	3983.9	3759.0	3368.0	3006.6	2559.8	2100.6	1622.0	1231.0	72.1
38°	3726.4	3682.2	3487.5	3261.0	2937.5	2594.7	2152.5	1763.1	1338.1	1027.8	55.1
39°	3145.4	3144.6	2958.5	2794.8	2478.3	2169.6	1770.9	1431.1	1104.6	827.7	42.7
40°	2652.9	2561.3	2446.5	2241.0	1998.2	1736.0	1386.9	1120.1	857.1	667.1	33.4
42.5°	1390.8	1383.1	1315.6	1161.2	1025.5	871.1	692.7	577.1	451.5	367.7	20.9
45°	597.3	601.2	554.6	531.3	478.6	414.2	349.8	291.7	249.8	202.5	12.4
47.5°	151.3	145.1	143.5	148.9	148.9	144.3	129.5	121.8	112.5	103.2	7.0
50°	65.2	63.6	62.1	62.1	58.2	55.8	52.0	47.3	43.4	38.8	3.1
52.5°	24.0	24.8	25.6	24.8	24.8	24.0	24.0	23.3	20.9	18.6	1.6
55°	7.8	7.8	7.8	8.5	8.5	9.3	9.3	9.3	9.3	8.5	0.0
57.5°	1.6	1.6	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	0.0
60°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
62.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
72.5°	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
75°	0.0	0.0	0.0	0.8	0.0	0.8	0.8	0.0	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8



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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	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	29.5	29.5	29.5	29.5	29.5	29.5
2.5°	34.1	30.3	25.6	21.7	20.9	20.2
5°	38.0	27.9	20.9	17.1	15.5	14.7
7.5°	41.1	25.6	17.1	12.4	10.9	10.1
10°	42.7	22.5	14.0	9.3	7.0	7.0
12.5°	43.4	19.4	10.1	6.2	3.9	3.9
15°	42.7	16.3	7.8	3.1	0.8	0.8
17.5°	38.8	13.2	4.7	0.8	0.0	0.0
20°	33.4	10.9	3.1	0.0	0.0	0.0
21°	31.8	9.3	2.3	0.0	0.0	0.0
22°	29.5	8.5	1.6	0.0	0.0	0.0
23°	27.1	7.8	1.6	0.0	0.0	0.0
24°	24.8	7.0	0.8	0.0	0.0	0.0
25°	23.3	6.2	0.8	0.0	0.0	0.0
26°	21.7	5.4	0.8	0.0	0.0	0.0
27°	19.4	4.7	0.0	0.0	0.0	0.0
28°	17.8	3.9	0.0	0.0	0.0	0.0
29°	15.5	3.1	0.0	0.0	0.0	0.0
30°	13.2	2.3	0.0	0.0	0.0	0.0
31°	10.9	2.3	0.0	0.0	0.0	0.0
32°	9.3	1.6	0.0	0.0	0.0	0.0
33°	7.8	1.6	0.0	0.0	0.0	0.0
34°	7.0	1.6	0.0	0.0	0.0	0.0
35°	6.2	1.6	0.0	0.0	0.0	0.0
36°	4.7	0.8	0.0	0.0	0.0	0.0
37°	3.9	0.8	0.0	0.0	0.0	0.0
38°	3.1	0.8	0.0	0.0	0.0	0.0
39°	2.3	0.0	0.0	0.0	0.0	0.0
40°	2.3	0.0	0.0	0.0	0.0	0.0
42.5°	0.8	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.8	0.0	0.0	0.8	0.8
47.5°	0.0	0.8	0.0	0.0	0.8	1.6
50°	0.0	0.8	0.8	0.8	1.6	2.3
52.5°	0.0	1.6	0.8	0.8	2.3	2.3
55°	0.8	1.6	0.8	1.6	3.1	3.1
57.5°	0.8	1.6	1.6	2.3	3.1	3.9
60°	1.6	2.3	2.3	2.3	3.9	3.9
62.5°	1.6	2.3	3.1	3.1	3.9	4.7
65°	1.6	3.1	3.1	3.1	3.9	4.7
67.5°	2.3	3.1	3.1	3.1	3.9	4.7
70°	2.3	3.1	3.1	3.1	3.9	3.9
72.5°	2.3	3.1	2.3	3.1	3.1	3.9
75°	2.3	3.1	2.3	2.3	3.1	3.1
77.5°	1.6	2.3	2.3	1.6	2.3	2.3
80°	1.6	2.3	1.6	1.6	2.3	2.3



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	1.6	2.3	1.6	0.8	1.6	1.6
85°	1.6	2.3	1.6	0.8	0.8	0.8
87.5°	1.6	2.3	1.6	0.8	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)