

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: P1344356

Luminaire Tested: P3A13R20W2N902765DE010 E3CA301MW_6500K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344356
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_6500K
Description: 3in Adjustable Tunable White LED luminaire with, R20 optic, 6500K CCT AND, 90CRI ,
E3CA301MW TRIM
Light Source: -
Ballast/Driver: -

Summary

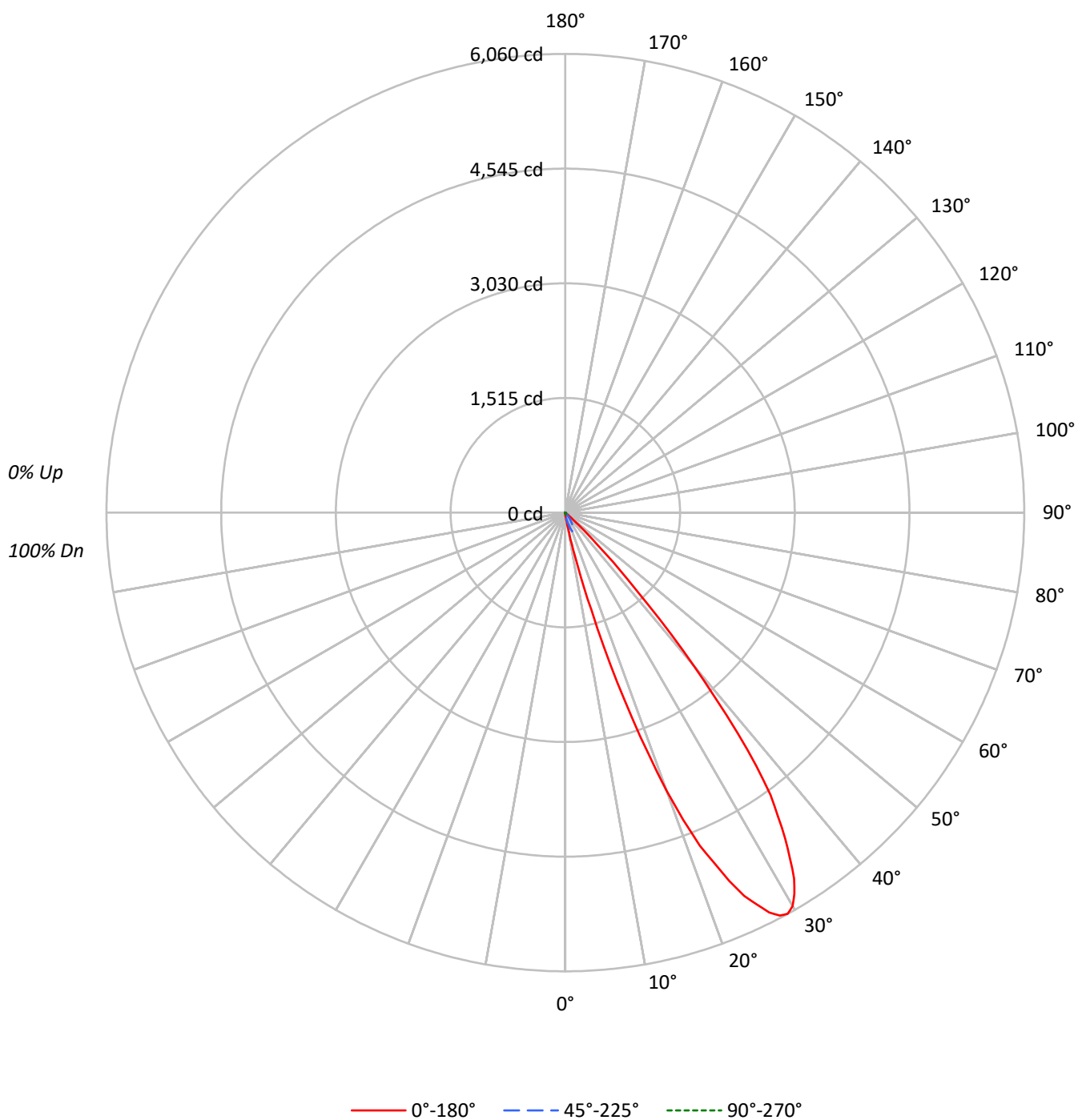
Lumens per Lamp: N/A
Luminaire Lumens: 850.0 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 2.3 / 0.53 / 1.19
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			0
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°	6425	6425	6425	6425	6425
5°	14770	11028	6119	3742	3236
10°	46537	19238	4988	2071	1536
15°	301455	35528	3678	704	182
20°	909822	60812	2520	0	0
25°	1351215	61383	1500	0	0
30°	1519500	46665	582	0	0
35°	1311050	27867	402	0	0
40°	754929	9504	0	0	0
45°	184143	3814	248	0	248
50°	22106	1058	273	273	785
55°	2944	0	573	573	1185
60°	351	0	1009	1009	1710
65°	415	415	1608	1608	2387
70°	513	513	1988	1988	2500
75°	0	678	2626	1949	2626
80°	0	1010	2904	1894	2904
85°	0	2013	5787	2013	2013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2.5°

Vertical Angle: 45°

Luminance: 185322 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.9	0.5
10°-20°	78.8	9.3
20°-30°	343.3	40.4
30°-40°	345.8	40.7
40°-50°	69.4	8.2
50°-60°	3.5	0.4
60°-70°	2.3	0.3
70°-80°	2.0	0.2
80°-90°	1.0	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°	426.0	50.1
0°-40°	771.8	90.8
0°-60°	844.7	99.4
0°-90°	850.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	850.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	29	29	29	29	29	
5°	67	50	28	17	15	11
15°	1328	156	16	3	1	520
25°	5585	254	6	0	0	2518
35°	4898	104	2	0	0	2914
45°	594	12	1	0	1	647
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°	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
2.5°	44.0	44.0	43.2	43.2	42.4	43.2	41.6	42.4	42.4	41.6	37.8
5°	67.1	68.6	67.9	67.9	67.1	67.9	66.3	64.8	63.2	63.2	50.1
7.5°	110.3	109.5	108.0	108.7	106.4	104.9	103.3	102.6	97.9	95.6	65.5
10°	209.0	213.6	209.8	209.0	195.1	194.3	185.1	172.0	160.4	154.2	86.4
12.5°	575.3	600.0	561.4	542.9	532.1	490.5	472.7	427.2	383.3	350.1	109.5
15°	1327.9	1388.8	1311.0	1316.4	1251.6	1132.8	1028.7	939.3	833.6	727.2	156.5
17.5°	2601.9	2552.5	2510.1	2438.4	2306.5	2132.2	1907.8	1680.3	1483.7	1277.8	218.2
20°	3898.9	3855.0	3758.6	3602.0	3433.9	3175.6	2908.8	2567.2	2236.3	1926.3	260.6
21°	4345.4	4330.8	4172.7	4076.3	3817.2	3570.4	3262.7	2897.2	2524.7	2157.7	267.6
22°	4744.1	4656.2	4571.4	4428.7	4171.2	3902.8	3560.4	3175.6	2771.5	2363.6	268.4
23°	5020.2	4980.1	4899.9	4738.7	4482.7	4167.3	3806.4	3403.9	2978.2	2509.3	266.0
24°	5325.6	5274.7	5157.5	4969.3	4711.0	4399.4	3987.6	3588.2	3125.5	2631.9	259.9
25°	5584.7	5505.3	5366.4	5163.6	4881.4	4559.8	4145.7	3706.9	3228.0	2714.5	253.7
26°	5752.8	5709.6	5531.5	5310.9	5008.6	4677.0	4254.4	3797.9	3294.4	2752.2	243.7
27°	5927.8	5848.4	5673.4	5419.7	5091.9	4753.4	4316.1	3841.9	3317.5	2753.8	231.3
28°	6028.1	5941.7	5743.5	5476.7	5145.9	4795.8	4351.6	3855.8	3312.9	2729.9	216.7
29°	6059.7	5951.0	5757.4	5486.0	5159.0	4798.9	4346.2	3835.7	3272.0	2671.3	199.7
30°	6001.1	5890.1	5706.5	5442.0	5117.4	4760.3	4296.1	3769.4	3199.5	2587.2	184.3
31°	5873.1	5779.0	5601.6	5336.4	5024.8	4670.1	4182.7	3660.7	3076.1	2474.6	166.6
32°	5704.2	5611.7	5437.4	5197.6	4880.6	4522.8	4027.7	3491.0	2931.1	2306.5	148.8
33°	5450.5	5397.3	5240.7	5011.7	4694.8	4312.3	3819.5	3288.2	2724.5	2119.9	133.4
34°	5193.7	5126.6	5017.1	4766.5	4425.6	4043.9	3548.1	3008.3	2472.3	1910.9	118.8
35°	4897.6	4857.5	4685.5	4485.0	4142.6	3752.4	3259.7	2736.0	2178.5	1678.0	104.1
36°	4610.7	4549.0	4353.1	4141.1	3808.7	3386.9	2900.3	2408.3	1924.8	1459.8	88.7
37°	4194.3	4100.2	3960.6	3737.0	3348.3	2989.0	2544.8	2088.3	1612.5	1223.8	71.7
38°	3704.6	3660.7	3467.1	3241.9	2920.4	2579.5	2139.9	1752.8	1330.2	1021.8	54.8
39°	3127.0	3126.2	2941.2	2778.5	2463.8	2156.9	1760.5	1422.8	1098.1	822.8	42.4
40°	2637.3	2546.3	2432.2	2227.9	1986.5	1725.8	1378.8	1113.5	852.1	663.2	33.2
42.5°	1382.7	1375.0	1307.9	1154.4	1019.5	866.0	688.6	573.7	448.8	365.5	20.8
45°	593.8	597.6	551.4	528.2	475.8	411.8	347.8	290.0	248.3	201.3	12.3
47.5°	150.4	144.2	142.7	148.1	148.1	143.4	128.8	121.1	111.8	102.6	6.9
50°	64.8	63.2	61.7	61.7	57.8	55.5	51.7	47.0	43.2	38.6	3.1
52.5°	23.9	24.7	25.4	24.7	24.7	23.9	23.9	23.1	20.8	18.5	1.5
55°	7.7	7.7	7.7	8.5	8.5	9.3	9.3	9.3	9.3	8.5	0.0
57.5°	1.5	1.5	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°	29.3	29.3	29.3	29.3	29.3	29.3
2.5°	33.9	30.1	25.4	21.6	20.8	20.0
5°	37.8	27.8	20.8	17.0	15.4	14.7
7.5°	40.9	25.4	17.0	12.3	10.8	10.0
10°	42.4	22.4	13.9	9.3	6.9	6.9
12.5°	43.2	19.3	10.0	6.2	3.9	3.9
15°	42.4	16.2	7.7	3.1	0.8	0.8
17.5°	38.6	13.1	4.6	0.8	0.0	0.0
20°	33.2	10.8	3.1	0.0	0.0	0.0
21°	31.6	9.3	2.3	0.0	0.0	0.0
22°	29.3	8.5	1.5	0.0	0.0	0.0
23°	27.0	7.7	1.5	0.0	0.0	0.0
24°	24.7	6.9	0.8	0.0	0.0	0.0
25°	23.1	6.2	0.8	0.0	0.0	0.0
26°	21.6	5.4	0.8	0.0	0.0	0.0
27°	19.3	4.6	0.0	0.0	0.0	0.0
28°	17.7	3.9	0.0	0.0	0.0	0.0
29°	15.4	3.1	0.0	0.0	0.0	0.0
30°	13.1	2.3	0.0	0.0	0.0	0.0
31°	10.8	2.3	0.0	0.0	0.0	0.0
32°	9.3	1.5	0.0	0.0	0.0	0.0
33°	7.7	1.5	0.0	0.0	0.0	0.0
34°	6.9	1.5	0.0	0.0	0.0	0.0
35°	6.2	1.5	0.0	0.0	0.0	0.0
36°	4.6	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	1.5
50°	0.0	0.8	0.8	0.8	1.5	2.3
52.5°	0.0	1.5	0.8	0.8	2.3	2.3
55°	0.8	1.5	0.8	1.5	3.1	3.1
57.5°	0.8	1.5	1.5	2.3	3.1	3.9
60°	1.5	2.3	2.3	2.3	3.9	3.9
62.5°	1.5	2.3	3.1	3.1	3.9	4.6
65°	1.5	3.1	3.1	3.1	3.9	4.6
67.5°	2.3	3.1	3.1	3.1	3.9	4.6
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°	1.5	2.3	2.3	1.5	2.3	2.3
80°	1.5	2.3	1.5	1.5	2.3	2.3



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	1.5	2.3	1.5	0.8	1.5	1.5
85°	1.5	2.3	1.5	0.8	0.8	0.8
87.5°	1.5	2.3	1.5	0.8	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)