

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: P1337099

Luminaire Tested: P3A05R20B2750DE010 E3CA451MMS_3500K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R20B2750DE010 E3CA451MMS_3500K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 3500K CCT AND, 80CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

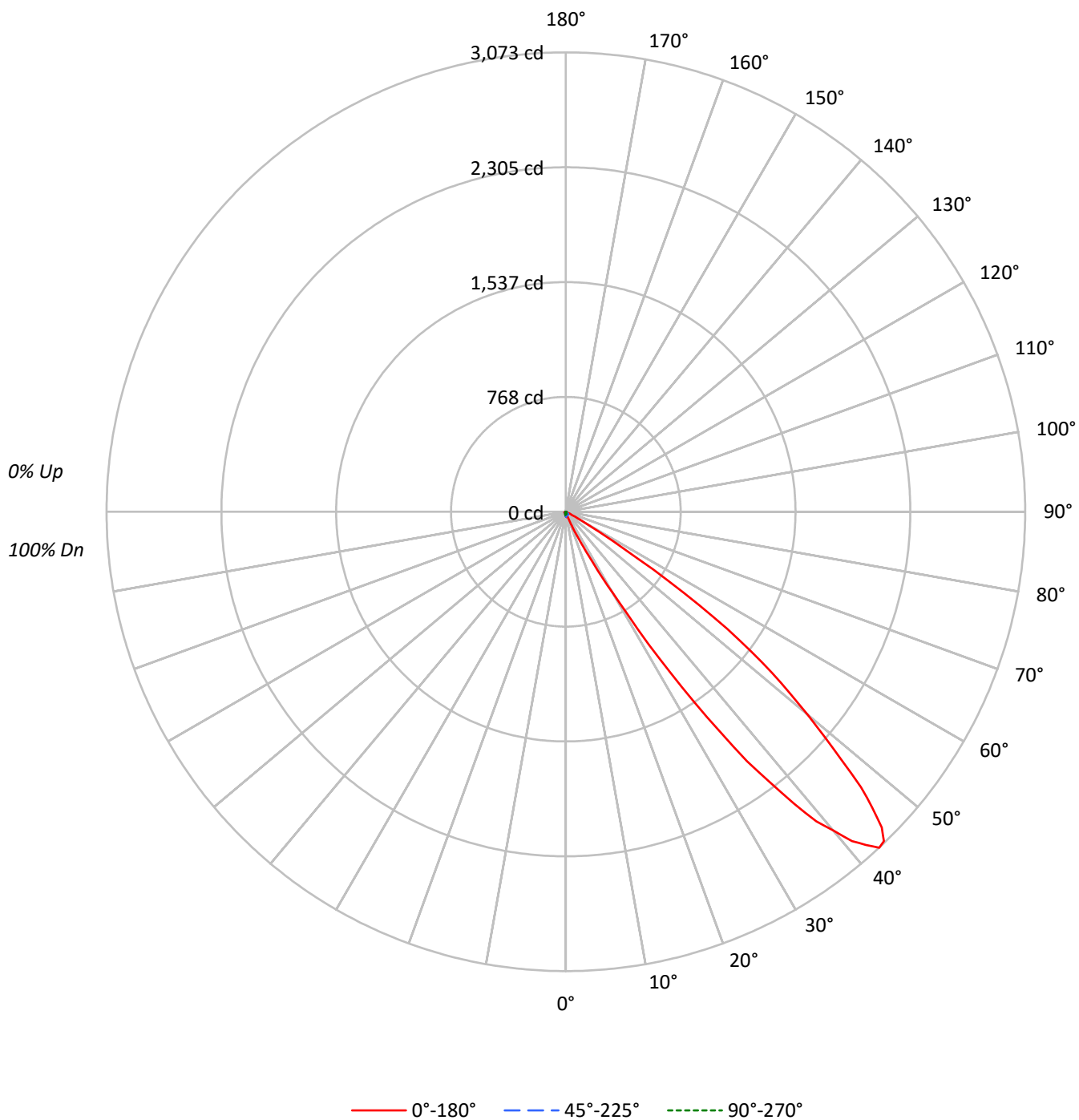
Lumens per Lamp: N/A
Luminaire Lumens: 426.9 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 5.9
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	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6513	6513	6513	6513	6513
5°	7594	7066	6097	5305	5129
10°	7504	6435	4832	4119	4030
15°	6561	4926	3541	3269	3451
20°	9731	4130	2614	2800	3080
25°	41954	4283	2032	2516	3000
30°	158607	5191	1722	2431	2937
35°	480802	6237	1606	2463	3105
40°	797294	6212	1374	2634	3321
45°	926701	4217	1240	2729	3597
50°	719362	2320	1228	2866	4094
55°	416367	1529	1223	3211	4435
60°	70389	351	1053	3333	4912
65°	5396	0	1245	3736	5604
70°	769	0	1539	4103	6411
75°	678	339	1694	4745	7456
80°	505	505	2526	5051	8587
85°	1006	1006	4026	5032	9057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 926701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.6
10°-20°	5.3	1.3
20°-30°	17.0	4.0
30°-40°	108.9	25.5
40°-50°	199.3	46.7
50°-60°	81.9	19.2
60°-70°	6.9	1.6
70°-80°	3.4	0.8
80°-90°	1.6	0.4
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°	24.9	5.8
0°-40°	133.8	31.3
0°-60°	415.0	97.2
0°-90°	426.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	426.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	30	30	30	30	30	
5°	34	32	28	24	23	3
15°	29	22	16	14	15	9
25°	173	18	8	10	12	114
35°	1796	23	6	9	12	1137
45°	2988	14	4	9	12	2146
55°	1089	4	3	8	12	952
65°	10	0	2	7	11	34
75°	1	0	2	6	9	1
85°	0	0	2	2	4	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°	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
2.5°	32.5	32.5	32.5	32.1	32.1	32.5	32.1	32.1	32.1	32.1	31.7
5°	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.1	34.1	33.7	32.1
7.5°	35.3	35.3	35.3	35.3	34.9	34.9	34.9	34.9	34.5	34.1	31.3
10°	33.7	33.7	33.7	33.3	33.3	33.3	32.9	32.9	32.5	32.1	28.9
12.5°	30.5	30.5	30.5	30.5	30.1	30.1	29.7	29.7	29.3	28.9	25.3
15°	28.9	28.9	28.9	28.5	28.5	28.1	27.7	27.3	26.9	26.1	21.7
17.5°	31.3	31.3	30.9	30.9	30.1	29.3	28.9	27.7	26.9	25.7	19.3
20°	41.7	42.1	40.5	39.3	38.5	36.1	34.9	32.9	31.3	29.3	17.7
22.5°	84.3	82.7	79.9	75.4	70.2	65.8	57.8	51.4	46.9	40.9	17.3
25°	173.4	171.7	164.1	157.7	141.7	129.2	112.0	97.9	83.5	69.4	17.7
27.5°	329.5	318.6	316.6	287.3	264.8	232.7	199.4	171.3	145.7	117.2	18.9
30°	626.4	614.0	570.2	526.1	465.5	396.9	331.5	270.5	219.5	173.4	20.5
31°	794.9	807.0	755.6	666.9	577.4	489.6	400.1	322.6	256.8	199.4	21.3
32°	1044.9	992.4	938.2	847.1	717.1	604.7	492.4	380.8	294.1	227.5	22.1
33°	1281.3	1250.4	1167.7	1054.2	898.1	740.4	594.7	449.4	339.9	261.6	22.5
34°	1533.3	1499.2	1432.2	1269.2	1097.9	891.2	697.0	528.5	394.5	294.9	22.9
35°	1796.1	1781.7	1652.5	1511.2	1300.5	1051.4	820.2	615.2	447.8	325.4	23.3
36°	2060.6	2014.0	1912.9	1706.6	1486.7	1199.4	949.4	695.8	502.0	361.6	23.3
37°	2259.6	2249.2	2115.1	1914.1	1655.7	1357.5	1061.0	785.3	556.6	392.5	23.3
38°	2479.1	2437.8	2301.7	2097.1	1814.6	1502.4	1177.8	863.2	608.3	420.5	22.9
39°	2664.1	2602.7	2465.5	2263.2	1953.4	1612.3	1270.5	938.6	654.1	443.8	22.5
40°	2785.3	2742.7	2599.5	2372.0	2079.4	1716.3	1364.4	1000.8	688.2	461.5	21.7
41°	2918.9	2848.3	2706.6	2477.9	2170.9	1807.8	1423.3	1041.7	714.7	473.1	20.9
42°	2998.8	2941.0	2772.8	2548.9	2236.3	1859.9	1471.5	1073.0	730.7	479.1	19.3
43°	3073.4	2994.8	2831.0	2590.3	2279.7	1896.8	1493.6	1087.5	734.3	479.1	17.3
44°	3063.4	2988.7	2819.0	2595.9	2289.3	1907.7	1502.8	1087.9	728.7	473.1	15.2
45°	2988.3	2914.1	2761.2	2546.9	2254.8	1886.4	1484.3	1071.8	713.1	462.7	13.6
46°	2850.7	2776.9	2659.7	2465.1	2190.6	1838.3	1441.4	1036.9	687.0	445.8	12.0
47°	2701.0	2629.2	2509.2	2333.0	2081.0	1752.4	1379.2	988.0	650.5	421.3	10.8
48°	2483.9	2439.0	2318.6	2168.1	1929.0	1618.0	1270.1	908.1	601.5	389.6	9.2
49°	2292.1	2244.8	2139.2	1977.5	1730.7	1461.5	1139.6	811.0	537.7	354.3	8.0
50°	2108.7	2067.4	1969.9	1787.3	1551.7	1272.5	963.5	688.6	457.5	310.6	6.8
51°	1929.4	1898.5	1798.9	1631.2	1392.0	1127.2	834.7	573.4	378.0	257.6	6.4
52°	1749.2	1745.6	1637.6	1467.9	1236.7	982.3	709.5	483.9	320.6	216.3	6.0
53°	1555.4	1532.1	1437.8	1285.3	1063.4	831.5	601.5	408.1	276.1	184.2	5.2
54°	1334.7	1308.6	1207.5	1069.8	868.8	681.0	484.7	329.9	229.9	155.7	4.8
55°	1089.1	1044.5	971.1	829.8	678.6	519.7	374.4	261.2	183.8	129.6	4.0
56°	826.2	781.7	740.4	636.4	498.0	387.6	278.9	200.2	143.7	102.3	3.6
57°	574.6	572.2	504.4	424.6	333.1	264.0	191.0	141.3	101.5	79.5	2.8
58°	372.8	360.3	317.0	270.9	217.9	164.9	122.8	95.9	69.0	54.2	2.4
59°	261.2	236.4	213.1	180.6	137.2	103.9	79.1	61.4	47.8	37.7	1.6
60°	160.5	155.3	139.6	110.0	89.1	73.4	59.0	45.3	34.9	26.9	0.8
62.5°	45.7	46.5	42.1	37.3	32.1	27.7	24.9	21.3	17.7	14.0	0.0
65°	10.4	10.0	10.8	10.0	9.2	9.2	8.0	7.2	6.4	6.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	3.2	3.2	2.8	2.8	2.8	2.4	2.4	2.0	2.0	1.6	0.0
70°	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.4	0.4	0.0
72.5°	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4
75°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
77.5°	0.8	0.8	0.8	0.8	0.8	0.4	0.8	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
85°	0.4	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.0	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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°	29.7	29.7	29.7	29.7	29.7	29.7
2.5°	30.9	29.3	28.1	26.9	26.5	26.5
5°	30.1	27.7	25.3	24.1	23.3	23.3
7.5°	27.7	24.9	22.5	21.3	20.9	20.9
10°	24.9	21.7	19.3	18.5	18.5	18.1
12.5°	21.7	18.5	16.9	16.5	16.5	16.5
15°	18.1	15.6	14.4	14.4	14.8	15.2
17.5°	15.2	12.8	12.4	13.2	14.0	14.0
20°	12.8	11.2	11.2	12.0	12.8	13.2
22.5°	10.8	9.6	10.0	11.2	12.4	12.8
25°	9.6	8.4	9.2	10.4	11.6	12.4
27.5°	8.0	7.6	8.4	10.0	11.6	12.0
30°	6.8	6.8	8.0	9.6	11.2	11.6
31°	6.4	6.4	8.0	9.6	11.2	11.6
32°	6.0	6.4	7.6	9.6	11.2	11.6
33°	5.6	6.0	7.6	9.2	11.2	11.6
34°	5.2	6.0	7.6	9.2	11.2	11.6
35°	4.8	6.0	7.6	9.2	11.2	11.6
36°	4.4	5.6	7.2	9.2	11.2	11.6
37°	4.0	5.6	7.2	9.2	11.2	11.6
38°	3.6	5.2	7.2	9.2	11.2	11.6
39°	3.6	5.2	6.8	9.2	10.8	11.6
40°	3.2	4.8	6.8	9.2	10.8	11.6
41°	2.8	4.8	6.8	8.8	10.8	11.6
42°	2.4	4.4	6.4	8.8	10.8	11.6
43°	2.0	4.4	6.4	8.8	10.8	11.6
44°	2.0	4.0	6.4	8.8	10.8	11.6
45°	1.6	4.0	6.4	8.8	10.8	11.6
46°	1.2	4.0	6.4	8.8	10.8	11.6
47°	1.2	3.6	6.0	8.8	10.8	11.6
48°	0.8	3.6	6.0	8.8	10.8	11.6
49°	0.8	3.6	6.0	8.8	10.8	12.0
50°	0.8	3.6	6.0	8.4	10.8	12.0
51°	0.4	3.6	6.0	8.4	10.8	12.0
52°	0.4	3.6	5.6	8.4	11.2	12.0
53°	0.4	3.2	5.6	8.4	11.2	12.0
54°	0.4	3.2	5.6	8.4	11.2	11.6
55°	0.4	3.2	5.6	8.4	10.8	11.6
56°	0.4	2.8	5.6	8.4	10.8	11.6
57°	0.4	2.8	5.2	8.0	10.8	11.2
58°	0.4	2.8	5.2	8.0	10.8	11.2
59°	0.4	2.8	5.2	8.0	10.4	11.2
60°	0.8	2.4	4.8	7.6	10.4	11.2
62.5°	0.8	2.4	4.8	7.6	10.0	10.8
65°	0.8	2.4	4.4	7.2	10.0	10.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	2.0	4.0	6.8	9.6	10.4
70°	0.8	2.4	4.0	6.4	9.2	10.0
72.5°	1.2	2.0	3.6	6.0	8.8	9.6
75°	1.2	2.0	3.6	5.6	8.4	8.8
77.5°	1.6	2.0	3.2	4.8	7.6	8.0
80°	1.6	2.0	2.8	4.0	6.4	6.8
82.5°	1.6	2.0	2.0	3.2	4.8	5.2
85°	1.2	1.6	1.6	2.0	3.2	3.6
87.5°	1.2	1.6	1.2	0.8	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)