

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: P1337097

Luminaire Tested: P3A05R20B2750DE010 E3CA451MMS_2700K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337097
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_2700K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 2700K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

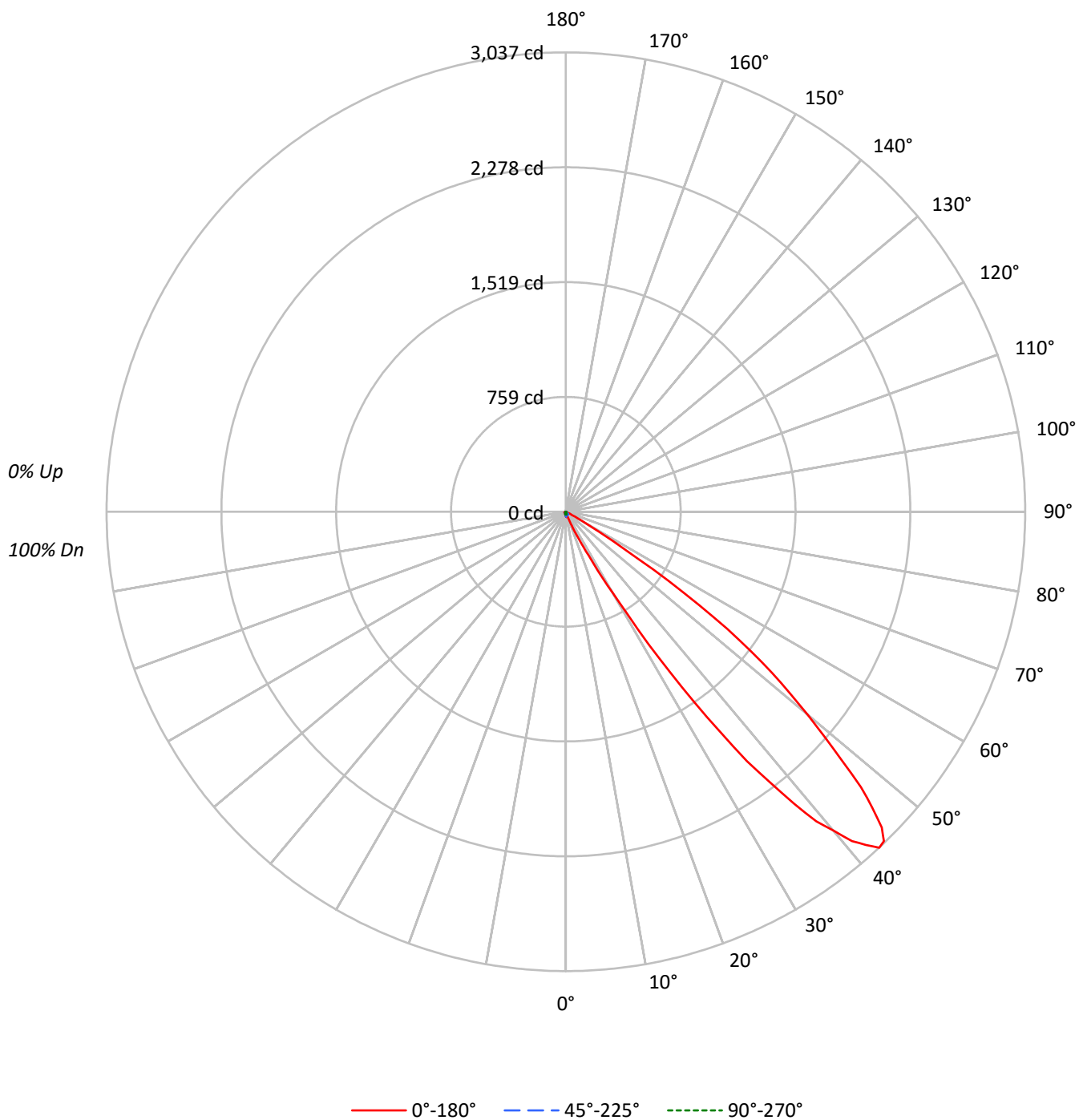
Lumens per Lamp: N/A
Luminaire Lumens: 422.0 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	0		
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°	6425	6425	6425	6425	6425
5°	7506	6978	6031	5239	5063
10°	7415	6368	4765	4052	3963
15°	6493	4858	3519	3246	3428
20°	9614	4060	2590	2777	3057
25°	41446	4210	2008	2492	2976
30°	156758	5115	1696	2405	2912
35°	475181	6157	1579	2436	3078
40°	787962	6126	1374	2605	3292
45°	915847	4186	1240	2698	3566
50°	710936	2286	1228	2831	4060
55°	411474	1529	1223	3173	4396
60°	69556	351	1053	3289	4868
65°	5344	0	1245	3684	5552
70°	769	0	1539	4039	6347
75°	678	339	1694	4745	7371
80°	505	505	2526	5051	8461
85°	1006	1006	4026	5032	9057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 915847 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.5	0.6
10°-20°	5.3	1.3
20°-30°	16.8	4.0
30°-40°	107.6	25.5
40°-50°	197.0	46.7
50°-60°	80.9	19.2
60°-70°	6.8	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°	24.6	5.8
0°-40°	132.3	31.3
0°-60°	410.2	97.2
0°-90°	422.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	422.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	29	29	29	29	29	
5°	34	32	27	24	23	3
15°	29	21	16	14	15	9
25°	171	17	8	10	12	113
35°	1775	23	6	9	12	1124
45°	2953	14	4	9	12	2120
55°	1076	4	3	8	12	941
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°	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
2.5°	32.1	32.1	32.1	31.7	31.7	32.1	31.7	31.7	31.7	31.7	31.3
5°	34.1	34.1	34.1	34.1	34.1	34.1	34.1	33.7	33.7	33.3	31.7
7.5°	34.9	34.9	34.9	34.9	34.5	34.5	34.5	34.5	34.1	33.7	30.9
10°	33.3	33.3	33.3	32.9	32.9	32.9	32.5	32.5	32.1	31.7	28.6
12.5°	30.1	30.1	30.1	30.1	29.7	29.7	29.3	29.3	29.0	28.6	25.0
15°	28.6	28.6	28.6	28.2	28.2	27.8	27.4	27.0	26.6	25.8	21.4
17.5°	30.9	30.9	30.5	30.5	29.7	29.0	28.6	27.4	26.6	25.4	19.0
20°	41.2	41.6	40.1	38.9	38.1	35.7	34.5	32.5	30.9	29.0	17.4
22.5°	83.3	81.7	78.9	74.6	69.4	65.0	57.1	50.8	46.4	40.5	17.1
25°	171.3	169.7	162.2	155.9	140.0	127.7	110.6	96.8	82.5	68.6	17.4
27.5°	325.6	314.9	312.9	284.0	261.7	230.0	197.1	169.3	144.0	115.8	18.6
30°	619.1	606.8	563.5	519.9	460.0	392.2	327.6	267.3	216.9	171.3	20.2
31°	785.6	797.5	746.8	659.1	570.7	483.8	395.4	318.9	253.8	197.1	21.0
32°	1032.7	980.7	927.2	837.2	708.7	597.6	486.6	376.4	290.7	224.9	21.8
33°	1266.3	1235.7	1154.1	1041.8	887.5	731.7	587.7	444.2	335.9	258.6	22.2
34°	1515.3	1481.6	1415.4	1254.4	1085.0	880.8	688.9	522.3	389.8	291.5	22.6
35°	1775.1	1760.8	1633.1	1493.5	1285.3	1039.0	810.6	608.0	442.6	321.6	23.0
36°	2036.4	1990.4	1890.5	1686.7	1469.3	1185.4	938.3	687.7	496.1	357.3	23.0
37°	2233.1	2222.8	2090.4	1891.7	1636.3	1341.6	1048.6	776.1	550.1	387.9	23.0
38°	2450.1	2409.2	2274.8	2072.5	1793.3	1484.8	1164.0	853.0	601.2	415.6	22.6
39°	2632.9	2572.2	2436.6	2236.7	1930.6	1593.5	1255.6	927.6	646.4	438.6	22.2
40°	2752.7	2710.6	2569.1	2344.2	2055.1	1696.2	1348.4	989.1	680.1	456.1	21.4
41°	2884.7	2814.9	2674.9	2448.9	2145.5	1786.6	1406.7	1029.5	706.3	467.6	20.6
42°	2963.6	2906.5	2740.4	2519.1	2210.1	1838.2	1454.3	1060.5	722.2	473.5	19.0
43°	3037.4	2959.7	2797.9	2559.9	2253.0	1874.6	1476.1	1074.7	725.7	473.5	17.1
44°	3027.5	2953.7	2786.0	2565.5	2262.5	1885.3	1485.2	1075.1	720.2	467.6	15.1
45°	2953.3	2880.0	2728.9	2517.1	2228.4	1864.3	1467.0	1059.3	704.7	457.3	13.5
46°	2817.3	2744.3	2628.5	2436.2	2164.9	1816.7	1424.5	1024.8	678.9	440.6	11.9
47°	2669.4	2598.4	2479.8	2305.7	2056.7	1731.9	1363.0	976.4	642.9	416.4	10.7
48°	2454.8	2410.4	2291.4	2142.7	1906.4	1599.0	1255.2	897.5	594.5	385.1	9.1
49°	2265.3	2218.5	2114.2	1954.4	1710.5	1444.3	1126.3	801.5	531.4	350.2	7.9
50°	2084.0	2043.2	1946.8	1766.4	1533.6	1257.6	952.2	680.5	452.1	307.0	6.7
51°	1906.8	1876.2	1777.9	1612.1	1375.7	1114.0	824.9	566.7	373.6	254.6	6.3
52°	1728.7	1725.1	1618.4	1450.7	1222.3	970.8	701.2	478.3	316.9	213.8	5.9
53°	1537.1	1514.1	1420.9	1270.2	1050.9	821.7	594.5	403.3	272.8	182.0	5.2
54°	1319.0	1293.3	1193.3	1057.3	858.6	673.0	479.1	326.0	227.2	153.9	4.8
55°	1076.3	1032.3	959.7	820.1	670.6	513.6	370.0	258.2	181.6	128.1	4.0
56°	816.6	772.5	731.7	629.0	492.2	383.1	275.6	197.9	142.0	101.1	3.6
57°	567.9	565.5	498.5	419.6	329.2	261.0	188.8	139.6	100.3	78.5	2.8
58°	368.4	356.1	313.3	267.7	215.3	163.0	121.4	94.8	68.2	53.5	2.4
59°	258.2	233.6	210.6	178.5	135.6	102.7	78.1	60.7	47.2	37.3	1.6
60°	158.6	153.5	138.0	108.7	88.0	72.6	58.3	44.8	34.5	26.6	0.8
62.5°	45.2	46.0	41.6	36.9	31.7	27.4	24.6	21.0	17.4	13.9	0.0
65°	10.3	9.9	10.7	9.9	9.1	9.1	7.9	7.1	6.3	5.9	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°	29.3	29.3	29.3	29.3	29.3	29.3
2.5°	30.5	29.0	27.8	26.6	26.2	26.2
5°	29.7	27.4	25.0	23.8	23.0	23.0
7.5°	27.4	24.6	22.2	21.0	20.6	20.6
10°	24.6	21.4	19.0	18.2	18.2	17.8
12.5°	21.4	18.2	16.7	16.3	16.3	16.3
15°	17.8	15.5	14.3	14.3	14.7	15.1
17.5°	15.1	12.7	12.3	13.1	13.9	13.9
20°	12.7	11.1	11.1	11.9	12.7	13.1
22.5°	10.7	9.5	9.9	11.1	12.3	12.7
25°	9.5	8.3	9.1	10.3	11.5	12.3
27.5°	7.9	7.5	8.3	9.9	11.5	11.9
30°	6.7	6.7	7.9	9.5	11.1	11.5
31°	6.3	6.3	7.9	9.5	11.1	11.5
32°	5.9	6.3	7.5	9.5	11.1	11.5
33°	5.6	5.9	7.5	9.1	11.1	11.5
34°	5.2	5.9	7.5	9.1	11.1	11.5
35°	4.8	5.9	7.5	9.1	11.1	11.5
36°	4.4	5.6	7.1	9.1	11.1	11.5
37°	4.0	5.6	7.1	9.1	11.1	11.5
38°	3.6	5.2	7.1	9.1	11.1	11.5
39°	3.6	5.2	6.7	9.1	10.7	11.5
40°	3.2	4.8	6.7	9.1	10.7	11.5
41°	2.8	4.8	6.7	8.7	10.7	11.5
42°	2.4	4.4	6.3	8.7	10.7	11.5
43°	2.0	4.4	6.3	8.7	10.7	11.5
44°	2.0	4.0	6.3	8.7	10.7	11.5
45°	1.6	4.0	6.3	8.7	10.7	11.5
46°	1.2	4.0	6.3	8.7	10.7	11.5
47°	1.2	3.6	5.9	8.7	10.7	11.5
48°	0.8	3.6	5.9	8.7	10.7	11.5
49°	0.8	3.6	5.9	8.7	10.7	11.9
50°	0.8	3.6	5.9	8.3	10.7	11.9
51°	0.4	3.6	5.9	8.3	10.7	11.9
52°	0.4	3.6	5.6	8.3	11.1	11.9
53°	0.4	3.2	5.6	8.3	11.1	11.9
54°	0.4	3.2	5.6	8.3	11.1	11.5
55°	0.4	3.2	5.6	8.3	10.7	11.5
56°	0.4	2.8	5.6	8.3	10.7	11.5
57°	0.4	2.8	5.2	7.9	10.7	11.1
58°	0.4	2.8	5.2	7.9	10.7	11.1
59°	0.4	2.8	5.2	7.9	10.3	11.1
60°	0.8	2.4	4.8	7.5	10.3	11.1
62.5°	0.8	2.4	4.8	7.5	9.9	10.7
65°	0.8	2.4	4.4	7.1	9.9	10.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	2.0	4.0	6.7	9.5	10.3
70°	0.8	2.4	4.0	6.3	9.1	9.9
72.5°	1.2	2.0	3.6	5.9	8.7	9.5
75°	1.2	2.0	3.6	5.6	8.3	8.7
77.5°	1.6	2.0	3.2	4.8	7.5	7.9
80°	1.6	2.0	2.8	4.0	6.3	6.7
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)