

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: P1337100

Luminaire Tested: P3A05R20B2750DE010 E3CA451MMS_4000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337100
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_4000K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 4000K CCT AND, 80CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

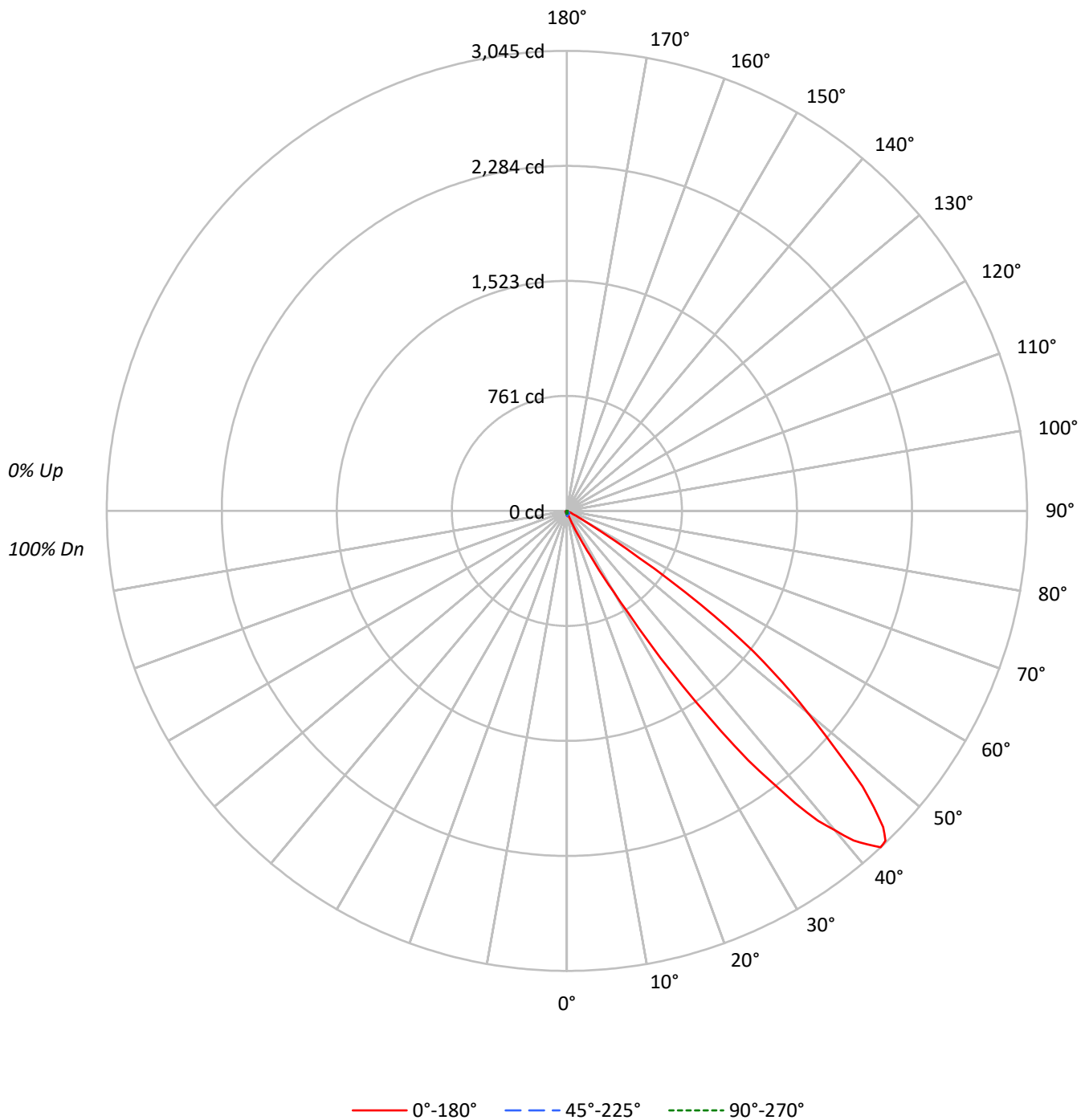
Lumens per Lamp: N/A
Luminaire Lumens: 423.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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				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	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°	6447	6447	6447	6447	6447
5°	7528	7000	6031	5261	5085
10°	7437	6368	4787	4075	3986
15°	6493	4881	3519	3246	3428
20°	9638	4084	2590	2777	3057
25°	41543	4234	2008	2492	2976
30°	157113	5140	1722	2405	2912
35°	476305	6184	1606	2436	3078
40°	789823	6154	1374	2605	3292
45°	918018	4186	1240	2698	3566
50°	712642	2320	1228	2831	4060
55°	412468	1529	1223	3173	4396
60°	69731	351	1053	3333	4868
65°	5344	0	1245	3736	5552
70°	769	0	1539	4103	6347
75°	678	339	1694	4745	7371
80°	505	505	2526	5051	8587
85°	1006	1006	4026	5032	9057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 918018 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°	16.9	4.0
30°-40°	107.9	25.5
40°-50°	197.4	46.7
50°-60°	81.1	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°	24.7	5.8
0°-40°	132.6	31.3
0°-60°	411.1	97.2
0°-90°	423.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	423.0	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	22	16	14	15	9
25°	172	18	8	10	12	113
35°	1779	23	6	9	12	1126
45°	2960	14	4	9	12	2126
55°	1079	4	3	8	12	943
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°	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
2.5°	32.2	32.2	32.2	31.8	31.8	32.2	31.8	31.8	31.8	31.8	31.4
5°	34.2	34.2	34.2	34.2	34.2	34.2	34.2	33.8	33.8	33.4	31.8
7.5°	35.0	35.0	35.0	35.0	34.6	34.6	34.6	34.6	34.2	33.8	31.0
10°	33.4	33.4	33.4	33.0	33.0	33.0	32.6	32.6	32.2	31.8	28.6
12.5°	30.2	30.2	30.2	30.2	29.8	29.8	29.4	29.4	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	21.5
17.5°	31.0	31.0	30.6	30.6	29.8	29.0	28.6	27.4	26.6	25.4	19.1
20°	41.3	41.7	40.1	39.0	38.2	35.8	34.6	32.6	31.0	29.0	17.5
22.5°	83.5	81.9	79.1	74.7	69.6	65.2	57.2	50.9	46.5	40.5	17.1
25°	171.7	170.1	162.6	156.2	140.3	128.0	110.9	97.0	82.7	68.8	17.5
27.5°	326.4	315.6	313.6	284.6	262.4	230.6	197.6	169.7	144.3	116.1	18.7
30°	620.5	608.2	564.9	521.1	461.1	393.1	328.4	267.9	217.4	171.7	20.3
31°	787.5	799.4	748.5	660.7	572.0	485.0	396.3	319.6	254.4	197.6	21.1
32°	1035.1	983.1	929.4	839.2	710.4	599.1	487.8	377.2	291.4	225.4	21.9
33°	1269.3	1238.7	1156.8	1044.3	889.7	733.4	589.1	445.2	336.7	259.2	22.3
34°	1518.9	1485.1	1418.8	1257.4	1087.6	882.9	690.5	523.5	390.8	292.2	22.7
35°	1779.3	1765.0	1637.0	1497.1	1288.4	1041.5	812.5	609.4	443.6	322.4	23.1
36°	2041.3	1995.2	1895.0	1690.7	1472.8	1188.2	940.5	689.3	497.3	358.2	23.1
37°	2238.4	2228.1	2095.3	1896.2	1640.2	1344.8	1051.0	777.9	551.4	388.8	23.1
38°	2455.9	2414.9	2280.2	2077.4	1797.6	1488.3	1166.7	855.1	602.6	416.6	22.7
39°	2639.1	2578.3	2442.4	2242.0	1935.1	1597.2	1258.6	929.8	648.0	439.7	22.3
40°	2759.2	2717.1	2575.1	2349.7	2060.0	1700.2	1351.6	991.4	681.7	457.1	21.5
41°	2891.6	2821.6	2681.3	2454.7	2150.6	1790.8	1410.0	1032.0	708.0	468.7	20.7
42°	2970.7	2913.4	2746.9	2525.1	2215.4	1842.5	1457.7	1063.0	723.9	474.6	19.1
43°	3044.6	2966.7	2804.5	2566.0	2258.3	1879.1	1479.6	1077.3	727.5	474.6	17.1
44°	3034.7	2960.7	2792.6	2571.6	2267.9	1889.8	1488.7	1077.7	721.9	468.7	15.1
45°	2960.3	2886.8	2735.3	2523.1	2233.7	1868.7	1470.4	1061.8	706.4	458.3	13.5
46°	2824.0	2750.8	2634.8	2442.0	2170.1	1821.0	1427.9	1027.2	680.6	441.6	11.9
47°	2675.7	2604.6	2485.7	2311.2	2061.5	1736.0	1366.3	978.7	644.4	417.4	10.7
48°	2460.7	2416.1	2296.9	2147.8	1910.9	1602.8	1258.2	899.6	595.9	386.0	9.1
49°	2270.6	2223.7	2119.2	1959.0	1714.5	1447.8	1129.0	803.4	532.7	351.0	8.0
50°	2089.0	2048.0	1951.4	1770.6	1537.2	1260.5	954.4	682.1	453.2	307.7	6.8
51°	1911.3	1880.7	1782.1	1615.9	1379.0	1116.6	826.8	568.1	374.5	255.2	6.4
52°	1732.8	1729.2	1622.3	1454.1	1225.2	973.1	702.8	479.4	317.6	214.3	6.0
53°	1540.8	1517.7	1424.3	1273.3	1053.4	823.7	595.9	404.3	273.5	182.5	5.2
54°	1322.2	1296.3	1196.1	1059.8	860.6	674.6	480.2	326.8	227.8	154.2	4.8
55°	1078.9	1034.7	962.0	822.1	672.2	514.8	370.9	258.8	182.1	128.4	4.0
56°	818.5	774.4	733.4	630.5	493.3	384.0	276.3	198.4	142.3	101.4	3.6
57°	569.2	566.9	499.7	420.6	329.9	261.6	189.2	139.9	100.6	78.7	2.8
58°	369.3	357.0	314.0	268.3	215.9	163.4	121.6	95.0	68.4	53.7	2.4
59°	258.8	234.1	211.1	178.9	136.0	103.0	78.3	60.8	47.3	37.4	1.6
60°	159.0	153.8	138.3	108.9	88.2	72.7	58.4	44.9	34.6	26.6	0.8
62.5°	45.3	46.1	41.7	37.0	31.8	27.4	24.6	21.1	17.5	13.9	0.0
65°	10.3	9.9	10.7	9.9	9.1	9.1	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°	29.4	29.4	29.4	29.4	29.4	29.4
2.5°	30.6	29.0	27.8	26.6	26.2	26.2
5°	29.8	27.4	25.0	23.9	23.1	23.1
7.5°	27.4	24.6	22.3	21.1	20.7	20.7
10°	24.6	21.5	19.1	18.3	18.3	17.9
12.5°	21.5	18.3	16.7	16.3	16.3	16.3
15°	17.9	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°	8.0	7.6	8.3	9.9	11.5	11.9
30°	6.8	6.8	8.0	9.5	11.1	11.5
31°	6.4	6.4	8.0	9.5	11.1	11.5
32°	6.0	6.4	7.6	9.5	11.1	11.5
33°	5.6	6.0	7.6	9.1	11.1	11.5
34°	5.2	6.0	7.6	9.1	11.1	11.5
35°	4.8	6.0	7.6	9.1	11.1	11.5
36°	4.4	5.6	7.2	9.1	11.1	11.5
37°	4.0	5.6	7.2	9.1	11.1	11.5
38°	3.6	5.2	7.2	9.1	11.1	11.5
39°	3.6	5.2	6.8	9.1	10.7	11.5
40°	3.2	4.8	6.8	9.1	10.7	11.5
41°	2.8	4.8	6.8	8.7	10.7	11.5
42°	2.4	4.4	6.4	8.7	10.7	11.5
43°	2.0	4.4	6.4	8.7	10.7	11.5
44°	2.0	4.0	6.4	8.7	10.7	11.5
45°	1.6	4.0	6.4	8.7	10.7	11.5
46°	1.2	4.0	6.4	8.7	10.7	11.5
47°	1.2	3.6	6.0	8.7	10.7	11.5
48°	0.8	3.6	6.0	8.7	10.7	11.5
49°	0.8	3.6	6.0	8.7	10.7	11.9
50°	0.8	3.6	6.0	8.3	10.7	11.9
51°	0.4	3.6	6.0	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	8.0	10.7	11.1
58°	0.4	2.8	5.2	8.0	10.7	11.1
59°	0.4	2.8	5.2	8.0	10.3	11.1
60°	0.8	2.4	4.8	7.6	10.3	11.1
62.5°	0.8	2.4	4.8	7.6	9.9	10.7
65°	0.8	2.4	4.4	7.2	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	6.8	9.5	10.3
70°	0.8	2.4	4.0	6.4	9.1	9.9
72.5°	1.2	2.0	3.6	6.0	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	7.6	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)