

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: P1337098

Luminaire Tested: P3A05R20B2750DE010 E3CA451MMS_3000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337098
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_3000K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 3000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

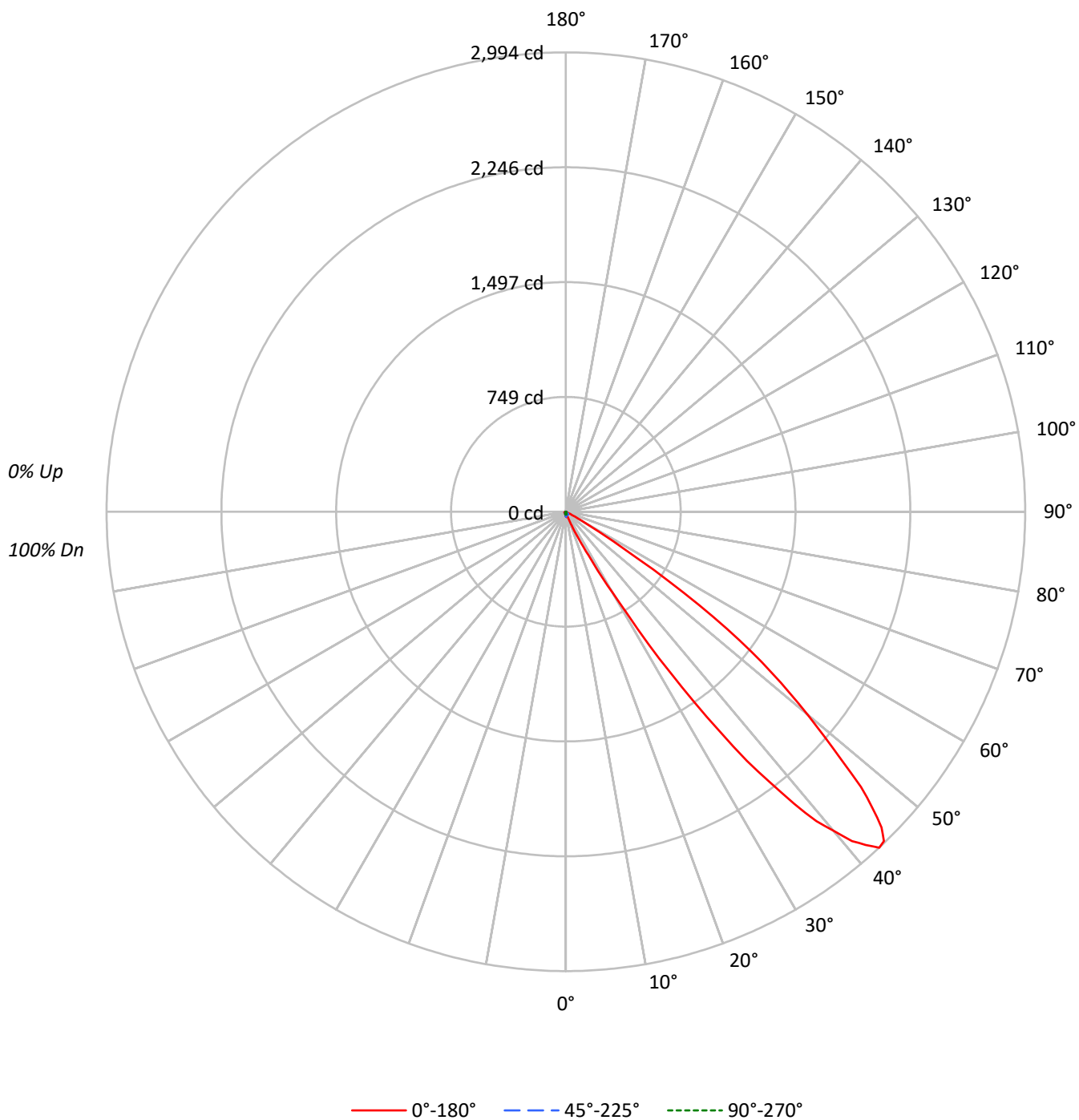
Lumens per Lamp: N/A
Luminaire Lumens: 416.0 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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°	6337	6337	6337	6337	6337
5°	7396	6890	5943	5173	4997
10°	7303	6257	4698	4008	3919
15°	6379	4790	3451	3201	3383
20°	9497	4014	2544	2730	3010
25°	40865	4162	1984	2468	2928
30°	154530	5039	1671	2380	2861
35°	468435	6077	1579	2409	3025
40°	776741	6040	1345	2576	3235
45°	902822	4124	1209	2667	3504
50°	700838	2252	1194	2797	3991
55°	405625	1491	1185	3135	4320
60°	68591	351	1009	3245	4780
65°	5292	0	1193	3632	5500
70°	769	0	1475	4039	6283
75°	678	339	1694	4660	7286
80°	505	505	2526	4925	8334
85°	1006	1006	4026	5032	8806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 902822 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.5	0.6
10°-20°	5.2	1.3
20°-30°	16.6	4.0
30°-40°	106.1	25.5
40°-50°	194.2	46.7
50°-60°	79.8	19.2
60°-70°	6.7	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°	24.3	5.8
0°-40°	130.4	31.3
0°-60°	404.3	97.2
0°-90°	416.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	416.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	29	29	29	29	29	
5°	34	31	27	24	23	3
15°	28	21	15	14	15	9
25°	169	17	8	10	12	111
35°	1750	23	6	9	11	1108
45°	2911	13	4	9	11	2090
55°	1061	4	3	8	11	927
65°	10	0	2	7	11	33
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°	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9
2.5°	31.7	31.7	31.7	31.3	31.3	31.7	31.3	31.3	31.3	31.3	30.9
5°	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.2	33.2	32.8	31.3
7.5°	34.4	34.4	34.4	34.4	34.0	34.0	34.0	34.0	33.6	33.2	30.5
10°	32.8	32.8	32.8	32.4	32.4	32.4	32.1	32.1	31.7	31.3	28.1
12.5°	29.7	29.7	29.7	29.7	29.3	29.3	28.9	28.9	28.5	28.1	24.6
15°	28.1	28.1	28.1	27.8	27.8	27.4	27.0	26.6	26.2	25.4	21.1
17.5°	30.5	30.5	30.1	30.1	29.3	28.5	28.1	27.0	26.2	25.0	18.8
20°	40.7	41.0	39.5	38.3	37.5	35.2	34.0	32.1	30.5	28.5	17.2
22.5°	82.1	80.5	77.8	73.5	68.4	64.1	56.3	50.0	45.7	39.9	16.8
25°	168.9	167.3	159.9	153.6	138.0	125.9	109.1	95.4	81.3	67.6	17.2
27.5°	321.0	310.4	308.5	279.9	258.0	226.7	194.3	166.9	141.9	114.2	18.4
30°	610.3	598.1	555.5	512.5	453.5	386.6	322.9	263.5	213.8	168.9	19.9
31°	774.5	786.2	736.1	649.7	562.6	476.9	389.8	314.3	250.2	194.3	20.7
32°	1018.0	966.8	914.0	825.3	698.6	589.2	479.7	371.0	286.6	221.7	21.5
33°	1248.3	1218.2	1137.6	1027.0	874.9	721.3	579.4	437.9	331.1	254.9	21.9
34°	1493.8	1460.6	1395.3	1236.6	1069.6	868.3	679.1	514.9	384.3	287.3	22.3
35°	1749.9	1735.8	1609.9	1472.3	1267.0	1024.3	799.1	599.3	436.3	317.1	22.7
36°	2007.5	1962.1	1863.6	1662.7	1448.4	1168.5	925.0	677.9	489.1	352.2	22.7
37°	2201.4	2191.2	2060.7	1864.8	1613.0	1322.6	1033.7	765.1	542.2	382.3	22.7
38°	2415.2	2375.0	2242.4	2043.1	1767.8	1463.7	1147.4	840.9	592.7	409.7	22.3
39°	2595.5	2535.7	2401.9	2204.9	1903.1	1570.8	1237.7	914.4	637.2	432.4	21.9
40°	2713.5	2672.1	2532.5	2310.9	2025.9	1672.1	1329.2	975.0	670.5	449.6	21.1
41°	2843.7	2774.9	2636.9	2414.1	2115.0	1761.2	1386.7	1014.9	696.3	460.9	20.3
42°	2921.5	2865.2	2701.4	2483.3	2178.7	1812.0	1433.6	1045.4	711.9	466.8	18.8
43°	2994.2	2917.6	2758.1	2523.5	2220.9	1848.0	1455.1	1059.5	715.4	466.8	16.8
44°	2984.5	2911.7	2746.4	2529.0	2230.3	1858.5	1464.1	1059.8	710.0	460.9	14.9
45°	2911.3	2839.0	2690.1	2481.3	2196.7	1837.8	1446.1	1044.2	694.7	450.8	13.3
46°	2777.3	2705.3	2591.2	2401.6	2134.2	1790.9	1404.3	1010.2	669.3	434.3	11.7
47°	2631.4	2561.5	2444.6	2272.9	2027.4	1707.2	1343.7	962.5	633.7	410.5	10.6
48°	2419.9	2376.1	2258.9	2112.3	1879.3	1576.3	1237.3	884.7	586.0	379.6	9.0
49°	2233.1	2186.9	2084.1	1926.6	1686.1	1423.8	1110.3	790.1	523.9	345.2	7.8
50°	2054.4	2014.1	1919.1	1741.3	1511.8	1239.7	938.7	670.9	445.7	302.6	6.6
51°	1879.7	1849.5	1752.6	1589.2	1356.2	1098.2	813.2	558.7	368.3	251.0	6.3
52°	1704.1	1700.6	1595.4	1430.1	1204.9	957.0	691.2	471.5	312.4	210.7	5.9
53°	1515.3	1492.6	1400.7	1252.2	1036.0	810.0	586.0	397.6	269.0	179.4	5.1
54°	1300.3	1274.9	1176.3	1042.3	846.4	663.4	472.3	321.4	224.0	151.7	4.7
55°	1061.0	1017.6	946.1	808.5	661.1	506.3	364.7	254.5	179.1	126.3	3.9
56°	805.0	761.6	721.3	620.0	485.2	377.7	271.7	195.1	140.0	99.7	3.5
57°	559.8	557.5	491.4	413.6	324.5	257.2	186.1	137.6	98.9	77.4	2.7
58°	363.2	351.1	308.8	263.9	212.3	160.7	119.6	93.4	67.2	52.8	2.3
59°	254.5	230.3	207.6	175.9	133.7	101.3	77.0	59.8	46.5	36.7	1.6
60°	156.4	151.3	136.0	107.1	86.8	71.5	57.5	44.2	34.0	26.2	0.8
62.5°	44.6	45.3	41.0	36.4	31.3	27.0	24.2	20.7	17.2	13.7	0.0
65°	10.2	9.8	10.6	9.8	9.0	9.0	7.8	7.0	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°	3.1	3.1	2.7	2.7	2.7	2.3	2.3	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°	28.9	28.9	28.9	28.9	28.9	28.9
2.5°	30.1	28.5	27.4	26.2	25.8	25.8
5°	29.3	27.0	24.6	23.5	22.7	22.7
7.5°	27.0	24.2	21.9	20.7	20.3	20.3
10°	24.2	21.1	18.8	18.0	18.0	17.6
12.5°	21.1	18.0	16.4	16.0	16.0	16.0
15°	17.6	15.2	14.1	14.1	14.5	14.9
17.5°	14.9	12.5	12.1	12.9	13.7	13.7
20°	12.5	10.9	10.9	11.7	12.5	12.9
22.5°	10.6	9.4	9.8	10.9	12.1	12.5
25°	9.4	8.2	9.0	10.2	11.3	12.1
27.5°	7.8	7.4	8.2	9.8	11.3	11.7
30°	6.6	6.6	7.8	9.4	10.9	11.3
31°	6.3	6.3	7.8	9.4	10.9	11.3
32°	5.9	6.3	7.4	9.4	10.9	11.3
33°	5.5	5.9	7.4	9.0	10.9	11.3
34°	5.1	5.9	7.4	9.0	10.9	11.3
35°	4.7	5.9	7.4	9.0	10.9	11.3
36°	4.3	5.5	7.0	9.0	10.9	11.3
37°	3.9	5.5	7.0	9.0	10.9	11.3
38°	3.5	5.1	7.0	9.0	10.9	11.3
39°	3.5	5.1	6.6	9.0	10.6	11.3
40°	3.1	4.7	6.6	9.0	10.6	11.3
41°	2.7	4.7	6.6	8.6	10.6	11.3
42°	2.3	4.3	6.3	8.6	10.6	11.3
43°	2.0	4.3	6.3	8.6	10.6	11.3
44°	2.0	3.9	6.3	8.6	10.6	11.3
45°	1.6	3.9	6.3	8.6	10.6	11.3
46°	1.2	3.9	6.3	8.6	10.6	11.3
47°	1.2	3.5	5.9	8.6	10.6	11.3
48°	0.8	3.5	5.9	8.6	10.6	11.3
49°	0.8	3.5	5.9	8.6	10.6	11.7
50°	0.8	3.5	5.9	8.2	10.6	11.7
51°	0.4	3.5	5.9	8.2	10.6	11.7
52°	0.4	3.5	5.5	8.2	10.9	11.7
53°	0.4	3.1	5.5	8.2	10.9	11.7
54°	0.4	3.1	5.5	8.2	10.9	11.3
55°	0.4	3.1	5.5	8.2	10.6	11.3
56°	0.4	2.7	5.5	8.2	10.6	11.3
57°	0.4	2.7	5.1	7.8	10.6	10.9
58°	0.4	2.7	5.1	7.8	10.6	10.9
59°	0.4	2.7	5.1	7.8	10.2	10.9
60°	0.8	2.3	4.7	7.4	10.2	10.9
62.5°	0.8	2.3	4.7	7.4	9.8	10.6
65°	0.8	2.3	4.3	7.0	9.8	10.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	2.0	3.9	6.6	9.4	10.2
70°	0.8	2.3	3.9	6.3	9.0	9.8
72.5°	1.2	2.0	3.5	5.9	8.6	9.4
75°	1.2	2.0	3.5	5.5	8.2	8.6
77.5°	1.6	2.0	3.1	4.7	7.4	7.8
80°	1.6	2.0	2.7	3.9	6.3	6.6
82.5°	1.6	2.0	2.0	3.1	4.7	5.1
85°	1.2	1.6	1.6	2.0	3.1	3.5
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)