

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: P1334593

Luminaire Tested: P3A02R20B2750DE010 E3A451WMH_3000K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334593
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: P3A02R20B2750DE010 E3A451WMH_3000K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 3000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

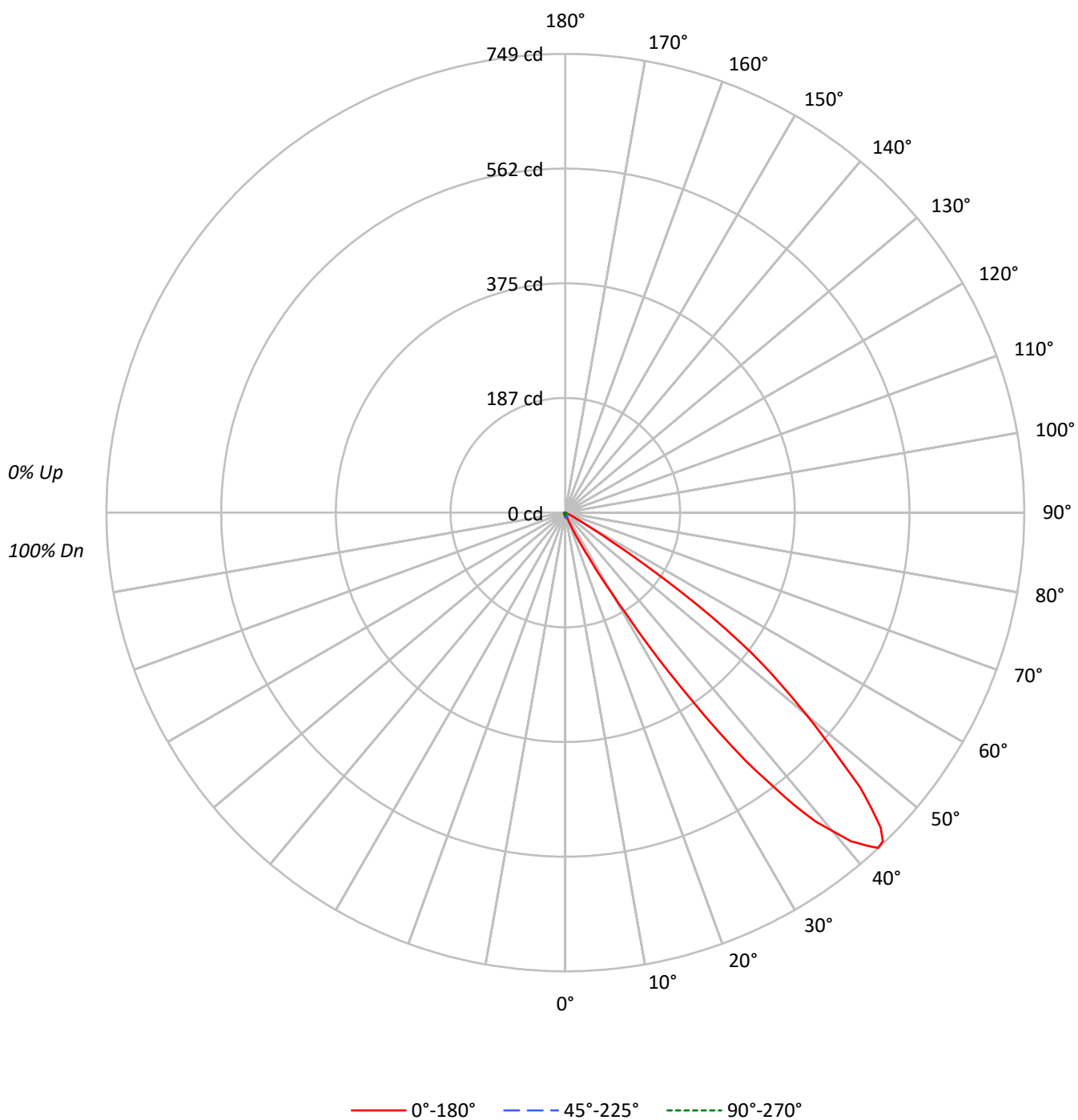
Lumens per Lamp: N/A
Luminaire Lumens: 104.0 lumens
Efficiency: N/A
Efficacy: 35.9 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 2.9
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
RCR																			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87	87
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61	61
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51	51
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42	42
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35	35
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29	29
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25	25
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	22	21	21
10	48	34	25	20	47	33	25	20	32	25	19	31	24	19	30	24	19	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1579	1579	1579	1579	1579
5°	1849	1717	1475	1299	1255
10°	1826	1559	1180	1002	980
15°	1589	1203	863	795	840
20°	2380	1003	630	677	747
25°	10210	1040	508	605	726
30°	38639	1266	430	582	709
35°	117115	1526	402	589	750
40°	194192	1517	344	630	802
45°	225698	1023	310	682	868
50°	175210	580	307	716	989
55°	101425	382	306	803	1070
60°	17148	88	263	833	1184
65°	1297	0	311	934	1349
70°	192	0	385	1026	1539
75°	169	85	424	1186	1864
80°	126	126	631	1263	2147
85°	252	252	1006	1258	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 225698 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.6
10°-20°	1.3	1.2
20°-30°	4.1	4.0
30°-40°	26.5	25.5
40°-50°	48.5	46.7
50°-60°	20.0	19.2
60°-70°	1.7	1.6
70°-80°	0.9	0.8
80°-90°	0.4	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°	6.1	5.8
0°-40°	32.6	31.3
0°-60°	101.1	97.2
0°-90°	104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	104.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7	7	7	7	7	
5°	8	8	7	6	6	1
15°	7	5	4	4	4	2
25°	42	4	2	2	3	28
35°	438	6	2	2	3	277
45°	728	3	1	2	3	523
55°	265	1	1	2	3	232
65°	2	0	1	2	3	8
75°	0	0	0	1	2	0
85°	0	0	0	0	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°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
2.5°	7.9	7.9	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.7
5°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.3	8.3	8.2	7.8
7.5°	8.6	8.6	8.6	8.6	8.5	8.5	8.5	8.5	8.4	8.3	7.6
10°	8.2	8.2	8.2	8.1	8.1	8.1	8.0	8.0	7.9	7.8	7.0
12.5°	7.4	7.4	7.4	7.4	7.3	7.3	7.2	7.2	7.1	7.0	6.2
15°	7.0	7.0	7.0	6.9	6.9	6.8	6.7	6.6	6.5	6.4	5.3
17.5°	7.6	7.6	7.5	7.5	7.3	7.1	7.0	6.7	6.5	6.3	4.7
20°	10.2	10.3	9.9	9.6	9.4	8.8	8.5	8.0	7.6	7.1	4.3
22.5°	20.5	20.1	19.4	18.4	17.1	16.0	14.1	12.5	11.4	10.0	4.2
25°	42.2	41.8	40.0	38.4	34.5	31.5	27.3	23.8	20.3	16.9	4.3
27.5°	80.2	77.6	77.1	70.0	64.5	56.7	48.6	41.7	35.5	28.5	4.6
30°	152.6	149.5	138.9	128.1	113.4	96.7	80.7	65.9	53.5	42.2	5.0
31°	193.6	196.5	184.0	162.4	140.6	119.2	97.4	78.6	62.6	48.6	5.2
32°	254.5	241.7	228.5	206.3	174.7	147.3	119.9	92.8	71.6	55.4	5.4
33°	312.1	304.5	284.4	256.8	218.7	180.3	144.8	109.5	82.8	63.7	5.5
34°	373.4	365.1	348.8	309.1	267.4	217.1	169.8	128.7	96.1	71.8	5.6
35°	437.5	433.9	402.5	368.1	316.8	256.1	199.8	149.8	109.1	79.3	5.7
36°	501.9	490.5	465.9	415.7	362.1	292.1	231.2	169.5	122.3	88.1	5.7
37°	550.3	547.8	515.2	466.2	403.3	330.6	258.4	191.3	135.6	95.6	5.7
38°	603.8	593.7	560.6	510.8	442.0	365.9	286.9	210.2	148.2	102.4	5.6
39°	648.9	633.9	600.5	551.2	475.8	392.7	309.4	228.6	159.3	108.1	5.5
40°	678.4	668.0	633.1	577.7	506.5	418.0	332.3	243.8	167.6	112.4	5.3
41°	710.9	693.7	659.2	603.5	528.7	440.3	346.7	253.7	174.1	115.2	5.1
42°	730.4	716.3	675.4	620.8	544.7	453.0	358.4	261.3	178.0	116.7	4.7
43°	748.6	729.4	689.5	630.9	555.2	462.0	363.8	264.9	178.9	116.7	4.2
44°	746.1	727.9	686.6	632.3	557.6	464.6	366.0	265.0	177.5	115.2	3.7
45°	727.8	709.8	672.5	620.3	549.2	459.5	361.5	261.1	173.7	112.7	3.3
46°	694.3	676.3	647.8	600.4	533.5	447.7	351.1	252.5	167.3	108.6	2.9
47°	657.9	640.4	611.1	568.2	506.9	426.8	335.9	240.6	158.4	102.6	2.6
48°	605.0	594.0	564.7	528.1	469.8	394.1	309.3	221.2	146.5	94.9	2.2
49°	558.3	546.7	521.0	481.6	421.5	356.0	277.6	197.5	131.0	86.3	2.0
50°	513.6	503.5	479.8	435.3	377.9	309.9	234.7	167.7	111.4	75.6	1.7
51°	469.9	462.4	438.1	397.3	339.0	274.5	203.3	139.7	92.1	62.7	1.6
52°	426.0	425.1	398.9	357.5	301.2	239.3	172.8	117.9	78.1	52.7	1.5
53°	378.8	373.2	350.2	313.0	259.0	202.5	146.5	99.4	67.2	44.9	1.3
54°	325.1	318.7	294.1	260.6	211.6	165.9	118.1	80.3	56.0	37.9	1.2
55°	265.3	254.4	236.5	202.1	165.3	126.6	91.2	63.6	44.8	31.6	1.0
56°	201.2	190.4	180.3	155.0	121.3	94.4	67.9	48.8	35.0	24.9	0.9
57°	140.0	139.4	122.9	103.4	81.1	64.3	46.5	34.4	24.7	19.4	0.7
58°	90.8	87.8	77.2	66.0	53.1	40.2	29.9	23.4	16.8	13.2	0.6
59°	63.6	57.6	51.9	44.0	33.4	25.3	19.3	15.0	11.6	9.2	0.4
60°	39.1	37.8	34.0	26.8	21.7	17.9	14.4	11.0	8.5	6.5	0.2
62.5°	11.1	11.3	10.3	9.1	7.8	6.7	6.1	5.2	4.3	3.4	0.0
65°	2.5	2.4	2.6	2.4	2.2	2.2	2.0	1.8	1.6	1.5	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°	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.0
70°	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0
72.5°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
75°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
77.5°	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85°	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
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°	7.2	7.2	7.2	7.2	7.2	7.2
2.5°	7.5	7.1	6.8	6.5	6.5	6.5
5°	7.3	6.7	6.2	5.9	5.7	5.7
7.5°	6.7	6.1	5.5	5.2	5.1	5.1
10°	6.1	5.3	4.7	4.5	4.5	4.4
12.5°	5.3	4.5	4.1	4.0	4.0	4.0
15°	4.4	3.8	3.5	3.5	3.6	3.7
17.5°	3.7	3.1	3.0	3.2	3.4	3.4
20°	3.1	2.7	2.7	2.9	3.1	3.2
22.5°	2.6	2.3	2.4	2.7	3.0	3.1
25°	2.3	2.1	2.2	2.5	2.8	3.0
27.5°	2.0	1.9	2.1	2.4	2.8	2.9
30°	1.7	1.7	2.0	2.3	2.7	2.8
31°	1.6	1.6	2.0	2.3	2.7	2.8
32°	1.5	1.6	1.9	2.3	2.7	2.8
33°	1.4	1.5	1.9	2.2	2.7	2.8
34°	1.3	1.5	1.9	2.2	2.7	2.8
35°	1.2	1.5	1.9	2.2	2.7	2.8
36°	1.1	1.4	1.8	2.2	2.7	2.8
37°	1.0	1.4	1.8	2.2	2.7	2.8
38°	0.9	1.3	1.8	2.2	2.7	2.8
39°	0.9	1.3	1.7	2.2	2.6	2.8
40°	0.8	1.2	1.7	2.2	2.6	2.8
41°	0.7	1.2	1.7	2.2	2.6	2.8
42°	0.6	1.1	1.6	2.2	2.6	2.8
43°	0.5	1.1	1.6	2.2	2.6	2.8
44°	0.5	1.0	1.6	2.2	2.6	2.8
45°	0.4	1.0	1.6	2.2	2.6	2.8
46°	0.3	1.0	1.6	2.2	2.6	2.8
47°	0.3	0.9	1.5	2.2	2.6	2.8
48°	0.2	0.9	1.5	2.2	2.6	2.8
49°	0.2	0.9	1.5	2.2	2.6	2.9
50°	0.2	0.9	1.5	2.1	2.6	2.9
51°	0.1	0.9	1.5	2.1	2.6	2.9
52°	0.1	0.9	1.4	2.1	2.7	2.9
53°	0.1	0.8	1.4	2.1	2.7	2.9
54°	0.1	0.8	1.4	2.1	2.7	2.8
55°	0.1	0.8	1.4	2.1	2.6	2.8
56°	0.1	0.7	1.4	2.1	2.6	2.8
57°	0.1	0.7	1.3	2.0	2.6	2.7
58°	0.1	0.7	1.3	2.0	2.6	2.7
59°	0.1	0.7	1.3	2.0	2.5	2.7
60°	0.2	0.6	1.2	1.9	2.5	2.7
62.5°	0.2	0.6	1.2	1.9	2.4	2.6
65°	0.2	0.6	1.1	1.8	2.4	2.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.2	0.5	1.0	1.7	2.3	2.5
70°	0.2	0.6	1.0	1.6	2.2	2.4
72.5°	0.3	0.5	0.9	1.5	2.2	2.3
75°	0.3	0.5	0.9	1.4	2.1	2.2
77.5°	0.4	0.5	0.8	1.2	1.9	2.0
80°	0.4	0.5	0.7	1.0	1.6	1.7
82.5°	0.4	0.5	0.5	0.8	1.2	1.3
85°	0.3	0.4	0.4	0.5	0.8	0.9
87.5°	0.3	0.4	0.3	0.2	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)