

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: P1334592

Luminaire Tested: P3A02R20B2750DE010 E3A451WMH_2700K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334592
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_2700K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 2700K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

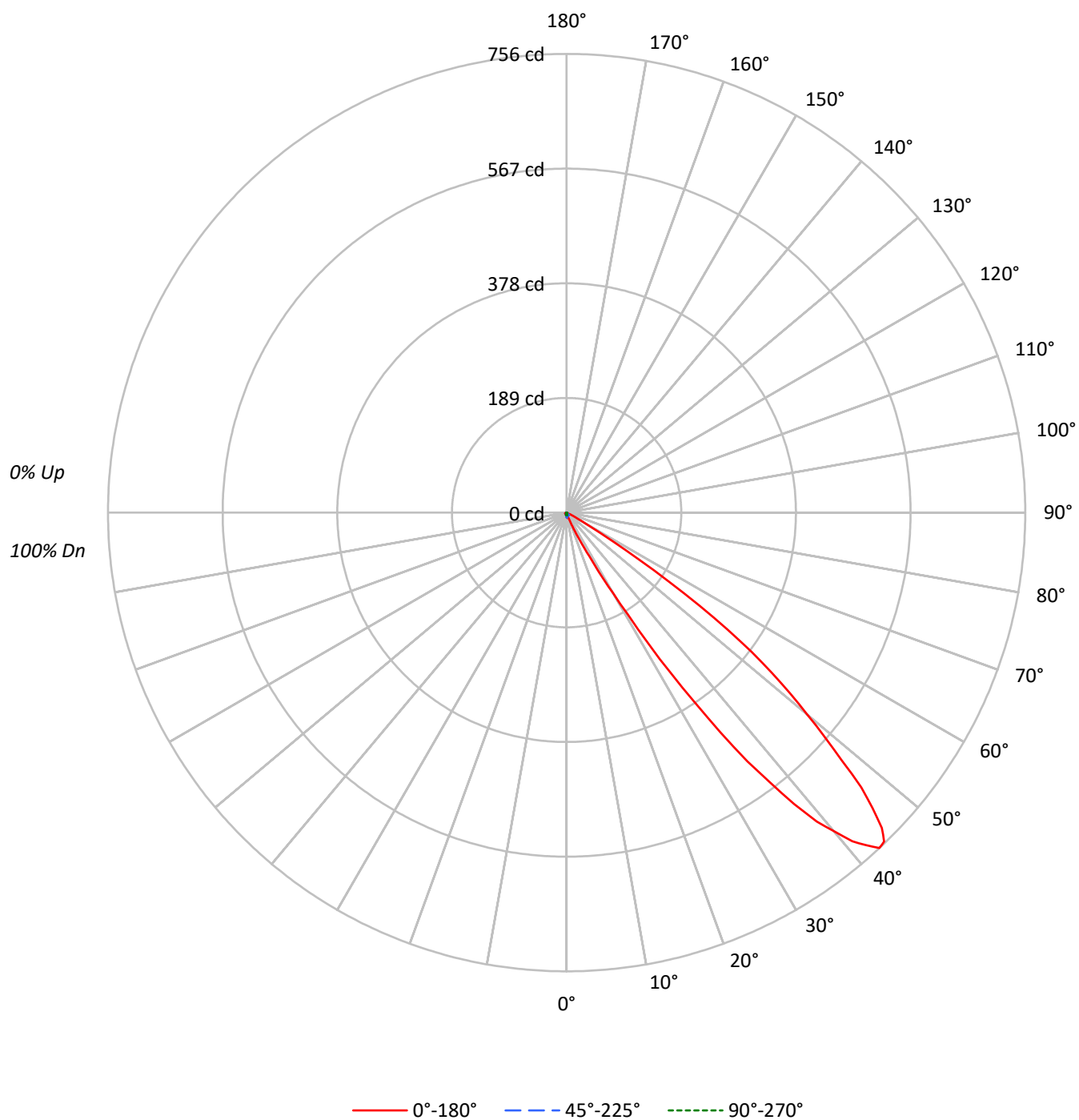
Lumens per Lamp: N/A
Luminaire Lumens: 105.1 lumens
Efficiency: N/A
Efficacy: 36.2 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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°	1601	1601	1601	1601	1601
5°	1871	1739	1497	1299	1255
10°	1848	1581	1180	1002	980
15°	1612	1203	863	817	840
20°	2404	1003	653	700	770
25°	10307	1040	508	629	750
30°	38993	1266	430	608	734
35°	118240	1526	402	616	776
40°	196053	1517	344	658	830
45°	227869	1054	310	682	899
50°	176881	580	307	716	1023
55°	102381	382	306	803	1109
60°	17323	88	263	833	1228
65°	1349	0	311	934	1401
70°	192	0	385	1026	1603
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: 227869 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°	4.2	4.0
30°-40°	26.8	25.5
40°-50°	49.0	46.7
50°-60°	20.2	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°	32.9	31.3
0°-60°	102.1	97.2
0°-90°	105.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	105.1	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°	43	4	2	3	3	28
35°	442	6	2	2	3	280
45°	735	3	1	2	3	528
55°	268	1	1	2	3	234
65°	3	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°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
2.5°	8.0	8.0	8.0	7.9	7.9	8.0	7.9	7.9	7.9	7.9	7.8
5°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.4	8.4	8.3	7.9
7.5°	8.7	8.7	8.7	8.7	8.6	8.6	8.6	8.6	8.5	8.4	7.7
10°	8.3	8.3	8.3	8.2	8.2	8.2	8.1	8.1	8.0	7.9	7.1
12.5°	7.5	7.5	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.1	6.2
15°	7.1	7.1	7.1	7.0	7.0	6.9	6.8	6.7	6.6	6.4	5.3
17.5°	7.7	7.7	7.6	7.6	7.4	7.2	7.1	6.8	6.6	6.3	4.7
20°	10.3	10.4	10.0	9.7	9.5	8.9	8.6	8.1	7.7	7.2	4.3
22.5°	20.7	20.3	19.6	18.6	17.3	16.2	14.2	12.6	11.5	10.1	4.2
25°	42.6	42.2	40.4	38.8	34.8	31.8	27.5	24.1	20.5	17.1	4.3
27.5°	81.0	78.3	77.9	70.7	65.1	57.2	49.0	42.1	35.8	28.8	4.6
30°	154.0	151.0	140.2	129.4	114.5	97.6	81.5	66.5	54.0	42.6	5.0
31°	195.5	198.4	185.8	164.0	142.0	120.4	98.4	79.3	63.2	49.0	5.2
32°	257.0	244.0	230.7	208.3	176.3	148.7	121.1	93.6	72.3	55.9	5.4
33°	315.1	307.5	287.1	259.2	220.8	182.1	146.2	110.5	83.6	64.3	5.5
34°	377.0	368.7	352.2	312.1	270.0	219.2	171.4	130.0	97.0	72.5	5.6
35°	441.7	438.1	406.3	371.6	319.8	258.5	201.7	151.3	110.1	80.0	5.7
36°	506.7	495.3	470.4	419.7	365.6	294.9	233.5	171.1	123.4	88.9	5.7
37°	555.6	553.1	520.1	470.7	407.1	333.8	260.9	193.1	136.9	96.5	5.7
38°	609.6	599.5	566.0	515.7	446.2	369.4	289.6	212.3	149.6	103.4	5.6
39°	655.1	640.0	606.3	556.5	480.4	396.5	312.4	230.8	160.8	109.1	5.5
40°	684.9	674.4	639.2	583.3	511.3	422.0	335.5	246.1	169.2	113.5	5.3
41°	717.8	700.4	665.6	609.3	533.8	444.5	350.0	256.2	175.7	116.3	5.1
42°	737.4	723.2	681.8	626.8	549.9	457.4	361.8	263.9	179.7	117.8	4.7
43°	755.8	736.4	696.2	636.9	560.6	466.4	367.3	267.4	180.6	117.8	4.2
44°	753.3	734.9	693.2	638.3	562.9	469.1	369.5	267.5	179.2	116.3	3.7
45°	734.8	716.6	679.0	626.3	554.5	463.9	365.0	263.6	175.3	113.8	3.4
46°	701.0	682.8	654.0	606.2	538.7	452.0	354.4	255.0	168.9	109.6	3.0
47°	664.2	646.5	617.0	573.7	511.7	430.9	339.1	242.9	160.0	103.6	2.7
48°	610.8	599.7	570.1	533.1	474.3	397.9	312.3	223.3	147.9	95.8	2.3
49°	563.6	552.0	526.0	486.3	425.6	359.4	280.2	199.4	132.2	87.1	2.0
50°	518.5	508.4	484.4	439.5	381.6	312.9	236.9	169.3	112.5	76.4	1.7
51°	474.4	466.8	442.4	401.1	342.3	277.2	205.2	141.0	93.0	63.3	1.6
52°	430.1	429.2	402.7	361.0	304.1	241.6	174.5	119.0	78.8	53.2	1.5
53°	382.5	376.7	353.6	316.1	261.5	204.5	147.9	100.4	67.9	45.3	1.3
54°	328.2	321.8	296.9	263.1	213.6	167.5	119.2	81.1	56.5	38.3	1.2
55°	267.8	256.9	238.8	204.1	166.9	127.8	92.1	64.2	45.2	31.9	1.0
56°	203.2	192.2	182.1	156.5	122.5	95.3	68.6	49.2	35.3	25.2	0.9
57°	141.3	140.7	124.0	104.4	81.9	64.9	47.0	34.7	25.0	19.5	0.7
58°	91.7	88.6	78.0	66.6	53.6	40.6	30.2	23.6	17.0	13.3	0.6
59°	64.2	58.1	52.4	44.4	33.7	25.6	19.4	15.1	11.7	9.3	0.4
60°	39.5	38.2	34.3	27.0	21.9	18.1	14.5	11.2	8.6	6.6	0.2
62.5°	11.2	11.4	10.4	9.2	7.9	6.8	6.1	5.2	4.3	3.5	0.0
65°	2.6	2.5	2.7	2.5	2.3	2.3	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°	7.3	7.3	7.3	7.3	7.3	7.3
2.5°	7.6	7.2	6.9	6.6	6.5	6.5
5°	7.4	6.8	6.2	5.9	5.7	5.7
7.5°	6.8	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	3.6	3.6	3.7	3.7
17.5°	3.7	3.2	3.1	3.3	3.5	3.5
20°	3.2	2.8	2.8	3.0	3.2	3.3
22.5°	2.7	2.4	2.5	2.8	3.1	3.2
25°	2.4	2.1	2.3	2.6	2.9	3.1
27.5°	2.0	1.9	2.1	2.5	2.9	3.0
30°	1.7	1.7	2.0	2.4	2.8	2.9
31°	1.6	1.6	2.0	2.4	2.8	2.9
32°	1.5	1.6	1.9	2.4	2.8	2.9
33°	1.4	1.5	1.9	2.3	2.8	2.9
34°	1.3	1.5	1.9	2.3	2.8	2.9
35°	1.2	1.5	1.9	2.3	2.8	2.9
36°	1.1	1.4	1.8	2.3	2.8	2.9
37°	1.0	1.4	1.8	2.3	2.8	2.9
38°	0.9	1.3	1.8	2.3	2.8	2.9
39°	0.9	1.3	1.7	2.3	2.7	2.9
40°	0.8	1.2	1.7	2.3	2.7	2.9
41°	0.7	1.2	1.7	2.2	2.7	2.9
42°	0.6	1.1	1.6	2.2	2.7	2.9
43°	0.5	1.1	1.6	2.2	2.7	2.9
44°	0.5	1.0	1.6	2.2	2.7	2.9
45°	0.4	1.0	1.6	2.2	2.7	2.9
46°	0.3	1.0	1.6	2.2	2.7	2.9
47°	0.3	0.9	1.5	2.2	2.7	2.9
48°	0.2	0.9	1.5	2.2	2.7	2.9
49°	0.2	0.9	1.5	2.2	2.7	3.0
50°	0.2	0.9	1.5	2.1	2.7	3.0
51°	0.1	0.9	1.5	2.1	2.7	3.0
52°	0.1	0.9	1.4	2.1	2.8	3.0
53°	0.1	0.8	1.4	2.1	2.8	3.0
54°	0.1	0.8	1.4	2.1	2.8	2.9
55°	0.1	0.8	1.4	2.1	2.7	2.9
56°	0.1	0.7	1.4	2.1	2.7	2.9
57°	0.1	0.7	1.3	2.0	2.7	2.8
58°	0.1	0.7	1.3	2.0	2.7	2.8
59°	0.1	0.7	1.3	2.0	2.6	2.8
60°	0.2	0.6	1.2	1.9	2.6	2.8
62.5°	0.2	0.6	1.2	1.9	2.5	2.7
65°	0.2	0.6	1.1	1.8	2.5	2.7



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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	2.4	2.6
70°	0.2	0.6	1.0	1.6	2.3	2.5
72.5°	0.3	0.5	0.9	1.5	2.2	2.4
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)