

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: P1337084

Luminaire Tested: P3A05R20B2750DE010 E3A451WMH_3500K

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337084
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 E3A451WMH_3500K
Description: 3in Adjustable Boosted Cyan Tunable White LED luminaire with, R20 optic, 3500K CCT AND, 80CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

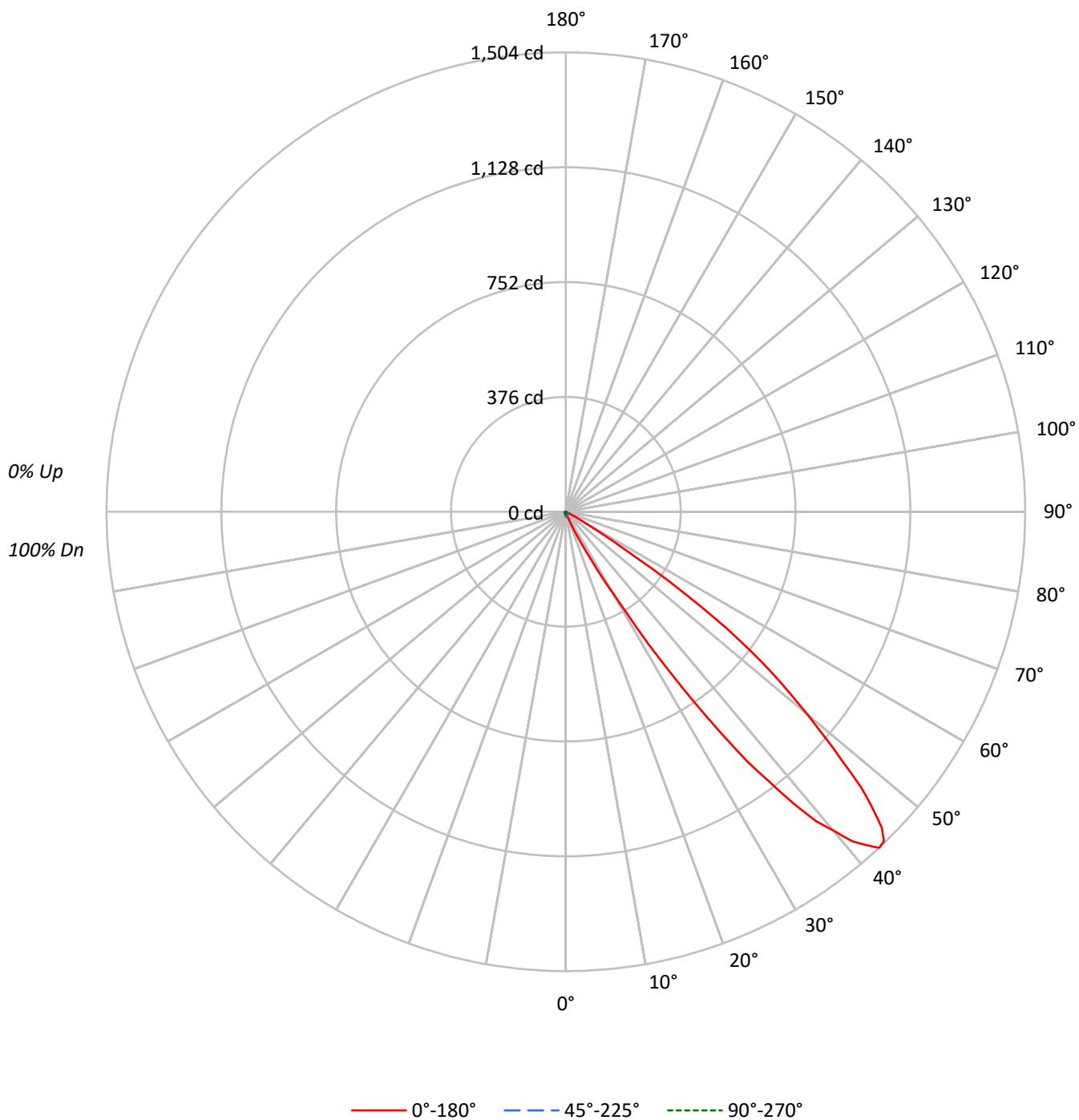
Lumens per Lamp: N/A
Luminaire Lumens: 209.0 lumens
Efficiency: N/A
Efficacy: 35.4 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.52 / 1.14
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	3180	3180	3180	3180	3180
5°	3720	3456	2994	2597	2509
10°	3674	3140	2360	2004	1959
15°	3201	2406	1748	1612	1703
20°	4760	2007	1283	1377	1517
25°	20517	2081	992	1234	1476
30°	77632	2532	836	1190	1443
35°	235328	3052	776	1205	1526
40°	390245	3034	687	1288	1632
45°	453597	2078	620	1333	1768
50°	352091	1126	614	1399	2013
55°	203806	765	612	1567	2179
60°	34471	175	526	1623	2412
65°	2646	0	623	1816	2750
70°	385	0	769	1988	3142
75°	339	169	847	2288	3643
80°	253	253	1263	2526	4167
85°	503	503	2013	2516	4529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 453597 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.6
10°-20°	2.6	1.3
20°-30°	8.3	4.0
30°-40°	53.3	25.5
40°-50°	97.6	46.7
50°-60°	40.1	19.2
60°-70°	3.4	1.6
70°-80°	1.7	0.8
80°-90°	0.8	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°	12.2	5.8
0°-40°	65.5	31.3
0°-60°	203.1	97.2
0°-90°	209.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	209.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	17	16	14	12	11	2
15°	14	11	8	7	8	4
25°	85	9	4	5	6	56
35°	879	11	3	4	6	556
45°	1463	7	2	4	6	1050
55°	533	2	2	4	6	466
65°	5	0	1	4	5	17
75°	0	0	1	3	4	0
85°	0	0	1	1	2	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°	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
2.5°	15.9	15.9	15.9	15.7	15.7	15.9	15.7	15.7	15.7	15.7	15.5
5°	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.7	16.7	16.5	15.7
7.5°	17.3	17.3	17.3	17.3	17.1	17.1	17.1	17.1	16.9	16.7	15.3
10°	16.5	16.5	16.5	16.3	16.3	16.3	16.1	16.1	15.9	15.7	14.1
12.5°	14.9	14.9	14.9	14.9	14.7	14.7	14.5	14.5	14.3	14.1	12.4
15°	14.1	14.1	14.1	13.9	13.9	13.7	13.6	13.4	13.2	12.8	10.6
17.5°	15.3	15.3	15.1	15.1	14.7	14.3	14.1	13.6	13.2	12.6	9.4
20°	20.4	20.6	19.8	19.2	18.9	17.7	17.1	16.1	15.3	14.3	8.6
22.5°	41.2	40.5	39.1	36.9	34.4	32.2	28.3	25.1	23.0	20.0	8.4
25°	84.8	84.1	80.3	77.2	69.3	63.2	54.8	47.9	40.9	34.0	8.6
27.5°	161.3	156.0	155.0	140.6	129.6	113.9	97.6	83.9	71.3	57.4	9.2
30°	306.6	300.5	279.1	257.5	227.8	194.3	162.2	132.4	107.4	84.8	10.0
31°	389.1	395.0	369.8	326.4	282.6	239.6	195.8	157.9	125.7	97.6	10.4
32°	511.5	485.7	459.2	414.6	351.0	296.0	241.0	186.4	144.0	111.4	10.8
33°	627.1	612.0	571.6	516.0	439.6	362.4	291.1	220.0	166.4	128.1	11.0
34°	750.5	733.8	701.0	621.2	537.4	436.2	341.2	258.7	193.1	144.4	11.2
35°	879.1	872.1	808.8	739.7	636.6	514.6	401.5	301.1	219.2	159.3	11.4
36°	1008.6	985.8	936.3	835.3	727.7	587.1	464.7	340.6	245.7	177.0	11.4
37°	1106.0	1100.9	1035.3	936.9	810.4	664.5	519.3	384.4	272.4	192.1	11.4
38°	1213.4	1193.2	1126.6	1026.4	888.2	735.4	576.5	422.5	297.8	205.8	11.2
39°	1304.0	1273.9	1206.7	1107.8	956.1	789.2	621.8	459.4	320.1	217.2	11.0
40°	1363.3	1342.5	1272.4	1161.0	1017.8	840.0	667.8	489.8	336.8	225.9	10.6
41°	1428.7	1394.1	1324.8	1212.8	1062.6	884.8	696.7	509.9	349.8	231.6	10.2
42°	1467.8	1439.5	1357.2	1247.6	1094.6	910.4	720.2	525.2	357.7	234.5	9.4
43°	1504.3	1465.8	1385.7	1267.8	1115.8	928.4	731.0	532.3	359.4	234.5	8.4
44°	1499.4	1462.9	1379.8	1270.6	1120.5	933.7	735.6	532.5	356.7	231.6	7.5
45°	1462.7	1426.3	1351.5	1246.6	1103.6	923.3	726.5	524.6	349.0	226.5	6.7
46°	1395.3	1359.2	1301.8	1206.6	1072.2	899.8	705.5	507.5	336.3	218.2	5.9
47°	1322.0	1286.9	1228.2	1141.9	1018.6	857.7	675.1	483.6	318.4	206.2	5.3
48°	1215.8	1193.8	1134.9	1061.2	944.1	791.9	621.6	444.5	294.4	190.7	4.5
49°	1121.9	1098.7	1047.1	967.9	847.1	715.3	557.8	396.9	263.2	173.4	3.9
50°	1032.1	1011.9	964.2	874.8	759.5	622.8	471.6	337.0	223.9	152.0	3.3
51°	944.3	929.2	880.5	798.4	681.3	551.7	408.5	280.7	185.0	126.1	3.1
52°	856.2	854.4	801.6	718.5	605.3	480.8	347.3	236.9	156.9	105.9	2.9
53°	761.3	749.9	703.7	629.1	520.5	407.0	294.4	199.7	135.1	90.2	2.6
54°	653.3	640.5	591.0	523.6	425.2	333.3	237.3	161.4	112.5	76.2	2.4
55°	533.1	511.3	475.3	406.2	332.1	254.4	183.3	127.9	90.0	63.4	2.0
56°	404.4	382.6	362.4	311.5	243.7	189.7	136.5	98.0	70.3	50.1	1.8
57°	281.3	280.1	246.9	207.8	163.0	129.2	93.5	69.1	49.7	38.9	1.4
58°	182.5	176.4	155.2	132.6	106.7	80.7	60.1	46.9	33.8	26.5	1.2
59°	127.9	115.7	104.3	88.4	67.2	50.9	38.7	30.1	23.4	18.5	0.8
60°	78.6	76.0	68.4	53.8	43.6	35.9	28.9	22.2	17.1	13.2	0.4
62.5°	22.4	22.8	20.6	18.3	15.7	13.6	12.2	10.4	8.6	6.9	0.0
65°	5.1	4.9	5.3	4.9	4.5	4.5	3.9	3.5	3.1	2.9	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°	1.6	1.6	1.4	1.4	1.4	1.2	1.2	1.0	1.0	0.8	0.0
70°	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.2	0.0
72.5°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.2	0.4	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85°	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.0	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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°	14.5	14.5	14.5	14.5	14.5	14.5
2.5°	15.1	14.3	13.7	13.2	13.0	13.0
5°	14.7	13.6	12.4	11.8	11.4	11.4
7.5°	13.6	12.2	11.0	10.4	10.2	10.2
10°	12.2	10.6	9.4	9.0	9.0	8.8
12.5°	10.6	9.0	8.2	8.1	8.1	8.1
15°	8.8	7.7	7.1	7.1	7.3	7.5
17.5°	7.5	6.3	6.1	6.5	6.9	6.9
20°	6.3	5.5	5.5	5.9	6.3	6.5
22.5°	5.3	4.7	4.9	5.5	6.1	6.3
25°	4.7	4.1	4.5	5.1	5.7	6.1
27.5°	3.9	3.7	4.1	4.9	5.7	5.9
30°	3.3	3.3	3.9	4.7	5.5	5.7
31°	3.1	3.1	3.9	4.7	5.5	5.7
32°	2.9	3.1	3.7	4.7	5.5	5.7
33°	2.7	2.9	3.7	4.5	5.5	5.7
34°	2.6	2.9	3.7	4.5	5.5	5.7
35°	2.4	2.9	3.7	4.5	5.5	5.7
36°	2.2	2.7	3.5	4.5	5.5	5.7
37°	2.0	2.7	3.5	4.5	5.5	5.7
38°	1.8	2.6	3.5	4.5	5.5	5.7
39°	1.8	2.6	3.3	4.5	5.3	5.7
40°	1.6	2.4	3.3	4.5	5.3	5.7
41°	1.4	2.4	3.3	4.3	5.3	5.7
42°	1.2	2.2	3.1	4.3	5.3	5.7
43°	1.0	2.2	3.1	4.3	5.3	5.7
44°	1.0	2.0	3.1	4.3	5.3	5.7
45°	0.8	2.0	3.1	4.3	5.3	5.7
46°	0.6	2.0	3.1	4.3	5.3	5.7
47°	0.6	1.8	2.9	4.3	5.3	5.7
48°	0.4	1.8	2.9	4.3	5.3	5.7
49°	0.4	1.8	2.9	4.3	5.3	5.9
50°	0.4	1.8	2.9	4.1	5.3	5.9
51°	0.2	1.8	2.9	4.1	5.3	5.9
52°	0.2	1.8	2.7	4.1	5.5	5.9
53°	0.2	1.6	2.7	4.1	5.5	5.9
54°	0.2	1.6	2.7	4.1	5.5	5.7
55°	0.2	1.6	2.7	4.1	5.3	5.7
56°	0.2	1.4	2.7	4.1	5.3	5.7
57°	0.2	1.4	2.6	3.9	5.3	5.5
58°	0.2	1.4	2.6	3.9	5.3	5.5
59°	0.2	1.4	2.6	3.9	5.1	5.5
60°	0.4	1.2	2.4	3.7	5.1	5.5
62.5°	0.4	1.2	2.4	3.7	4.9	5.3
65°	0.4	1.2	2.2	3.5	4.9	5.3



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.0	2.0	3.3	4.7	5.1
70°	0.4	1.2	2.0	3.1	4.5	4.9
72.5°	0.6	1.0	1.8	2.9	4.3	4.7
75°	0.6	1.0	1.8	2.7	4.1	4.3
77.5°	0.8	1.0	1.6	2.4	3.7	3.9
80°	0.8	1.0	1.4	2.0	3.1	3.3
82.5°	0.8	1.0	1.0	1.6	2.4	2.6
85°	0.6	0.8	0.8	1.0	1.6	1.8
87.5°	0.6	0.8	0.6	0.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)