ARIA2110 Antenna Check Sheet

Revision History:

Version	Date	Change Description
1.0	2023/01/10	New Release

Contents

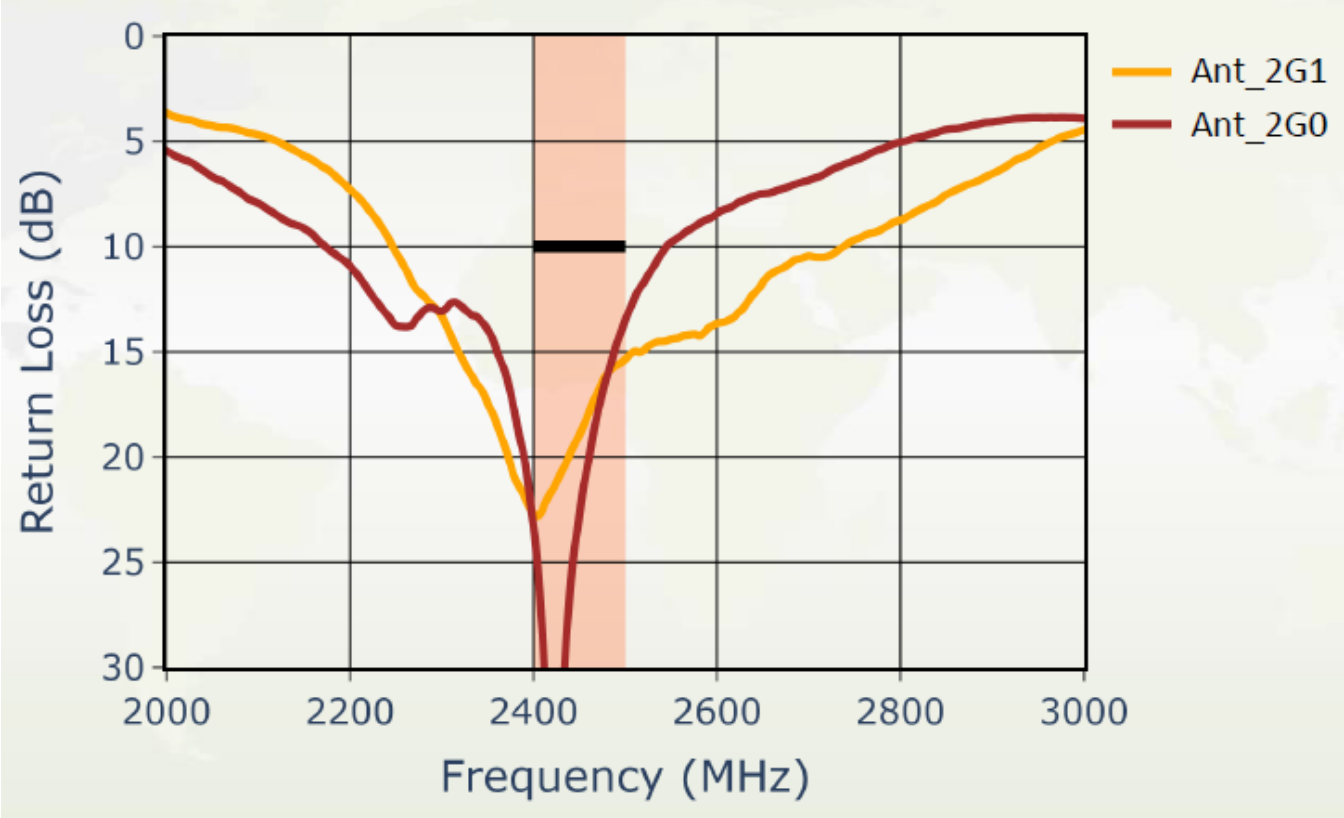
Antenna Specification

Ant.	Antenna. model	Antenna type	Antenna Gain (dBi)	Frequency Range from MHz to MHz	Connector type	Cable length (cm)	Remark
#1	290-20486	Dipole	3.6	2400-2500	IPEX	22.5	2G0 Black
#2	290-20487	Dipole	3.6	2400-2500	IPEX	11	2G1 White
#3	290-20490	Dipole	B1:3.1 B2:3.1 B3:3.1 B4:3.3	5150-5850	IPEX	13	5G0 Blue
#4	290-20489	Dipole	B1:3.5 B2:4.3 B3:4.2 B4:3.5	5150-5850	IPEX	11	5G1 Gray

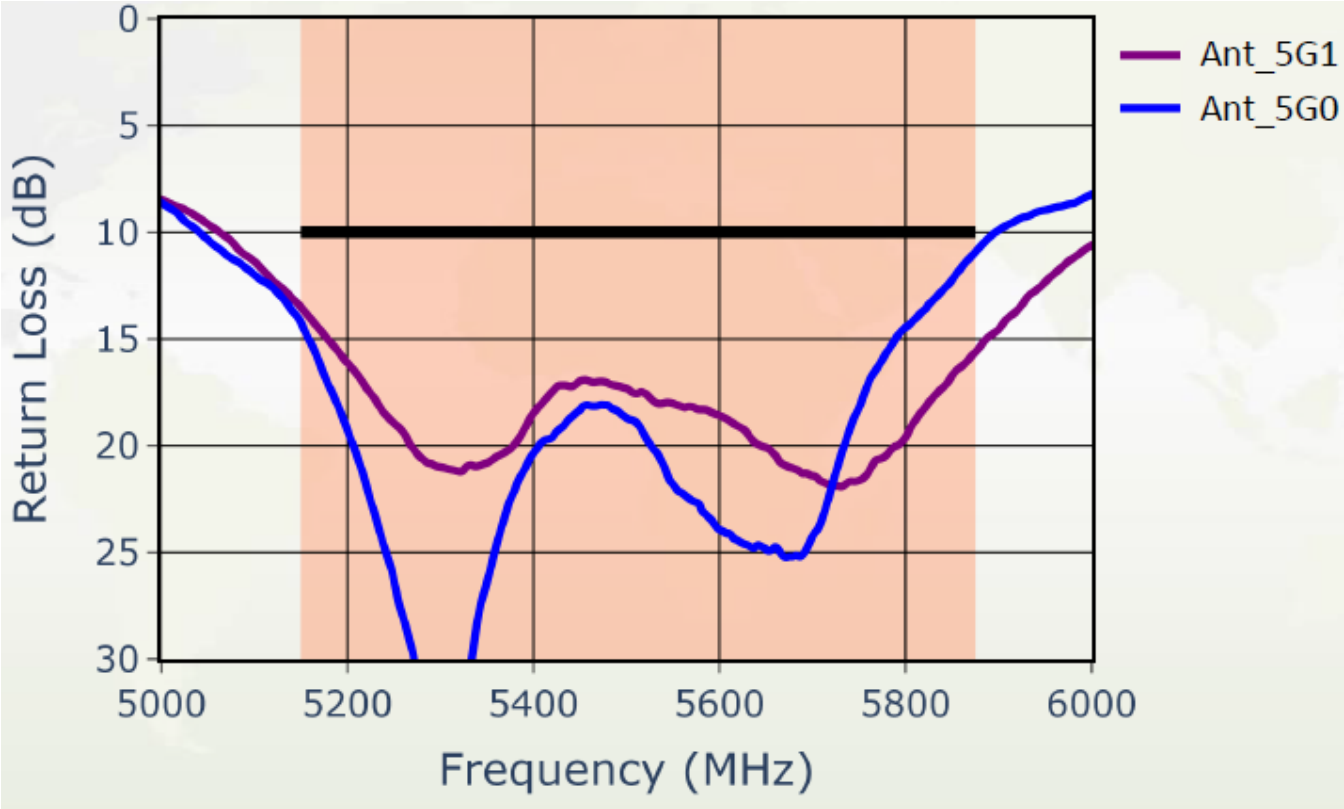
Test Result:

Return Loss

2G0/2G1

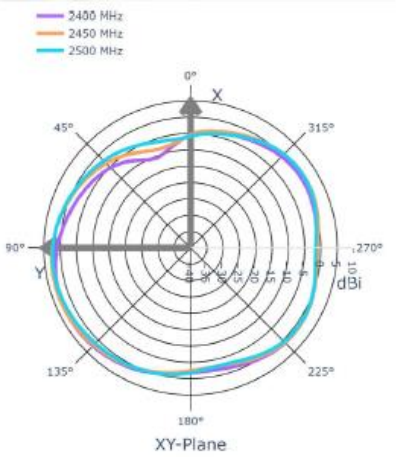


5G0/5G1

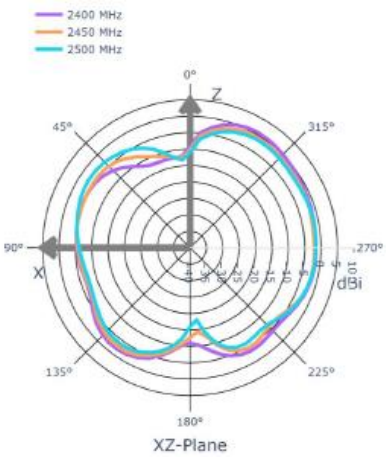

Ant_5G1
Ant_5G0
Return Loss (dB)
0
5
10
15
20
25
30
5000
5200
5400
5600
5800
6000
Frequency (MHz)

2D Radiation Patterns:

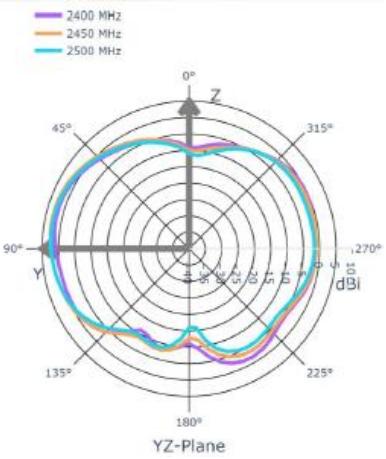
2G0



XY-Plane

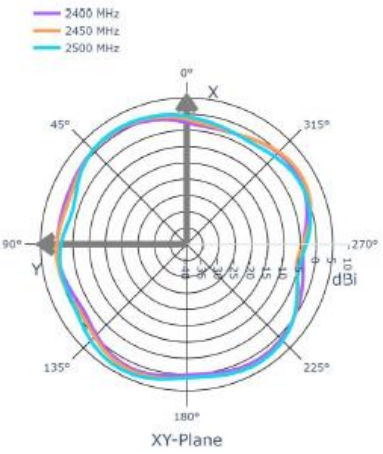


XZ-Plane

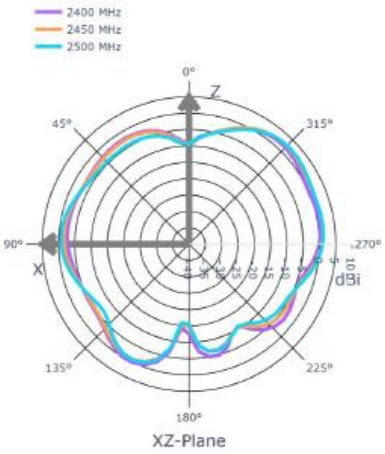


YZ-Plane

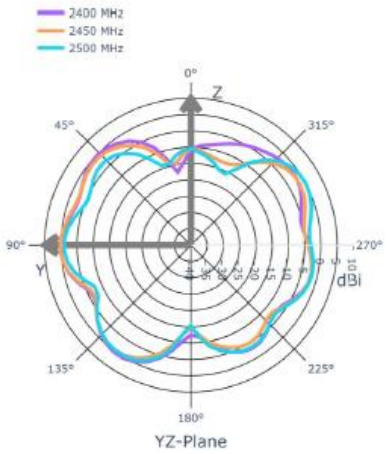
2G1



XY-Plane

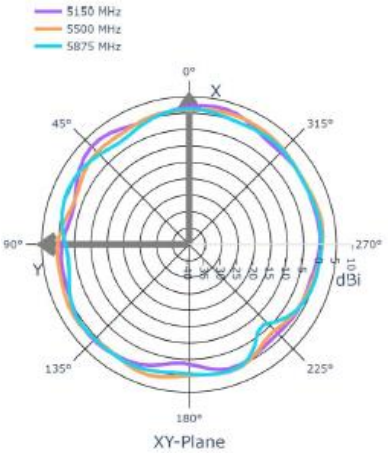


XZ-Plane

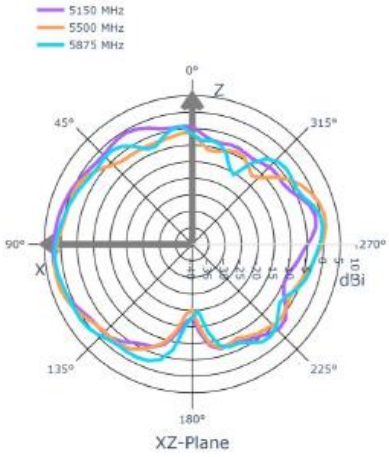


YZ-Plane

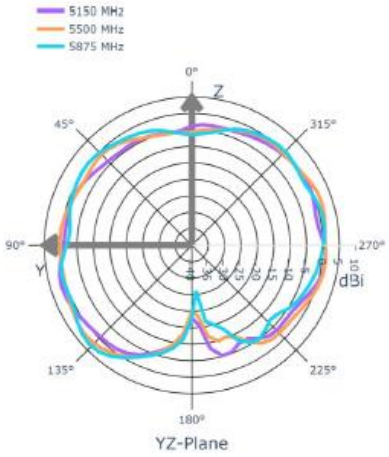
5G0



XY-Plane

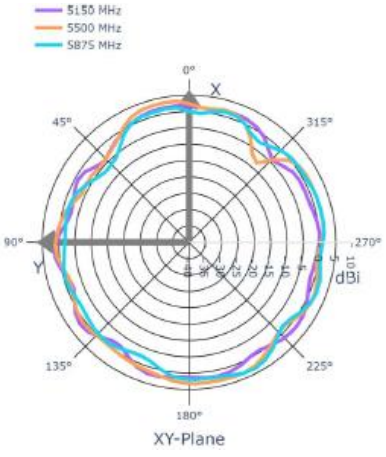


XZ-Plane

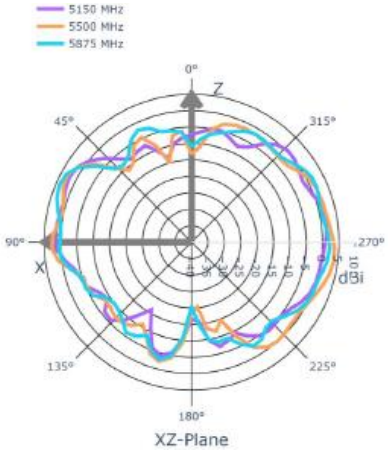


YZ-Plane

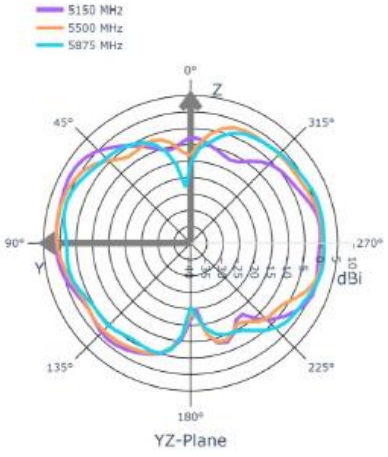
5G1



XY-Plane



XZ-Plane



YZ-Plane

Antenna Gain Table:

Frequency(MHz)	2G0(dBi)	2G1(dBi)
2400	3.6	2.4
2410	3.6	2.6
2419	3.6	2.8
2428	3.6	2.8
2437	3.5	2.7
2446	3.5	2.9
2455	3.4	3.0
2464	3.3	3.1
2473	3.1	3.3
2482	3.0	3.4
2491	2.9	3.6
2500	2.8	3.6

Frequency(MHz)	5G0(dBi)	5G1(dBi)
5150	2.9	3.1
5216	3.1	3.5
5282	3.1	4.1
5348	2.9	4.3
5414	2.8	4.3
5480	2.9	4.2
5546	3.0	4.0
5612	3.1	3.7
5678	3.1	3.2
5744	3.2	3.2
5810	3.3	3.5
5875	3.4	4.0

Above Peak Gain=internal antenna peak gain-path loss+Chamber's receiving Rx peak gain.

Antenna Vendor information:

HONGBO WIRELESS COMMUNICATION TECHNOLOGY CO., LTD.
Address: No. 120, Sec. 2, Fuxing 3rd Rd., Zhubei City, Hsinchu County 302502 , Taiwan

泓博通訊
HONGBO TELECOMMUNICATION

Antenna Vendor :HONGBO
Test date: 2022/01/03
Test Engineer: White and Jack
Address of test site: No. 120, Sec. 2, Fuxing 3rd Rd., Zhubei City, Hsinchu County 302502 , Taiwan
Measurement Setup:

Reflection Coefficient Measurement:

-Instrument :Keysight VNA E5071C
-Setup:
VNA RF port connect to DUT

Pattern Measurement:

-Chamber: Satimo SG24
-Test Program :Wave Studio 22.1.7
-Setup Photo: See Appendix.

Test instrument calibration information:

Vendor	Model	Calibrated Date	Calibrated Until
Keysight	VNA E5071C	2021/10/18	2022/10/17

Appendix

Antenna Vendor :HONGBO
Test date: 2022/01/03
Test Engineer : White and Jack
Measurement Setup:

Reflection Coefficient Measurement:

-Instrument :Keysight VNA E5071C

-Setup:

VNA RF port connect to DUT

Pattern Measurement:

-Chamber: Satimo SG24

-Test Program :Wave Studio 22.1.7