Antenna OTA Test Report

For

AIYATO-L1

Customer	深圳四博智联科技有限公司	Demo	AIYATO-L1
Band	2.4G	Color	黑色
PRS PN		Version	V1.0
Issued by	Jason	Checked by	Mem
Confirmed by	Zhang	Date	2022.03.20

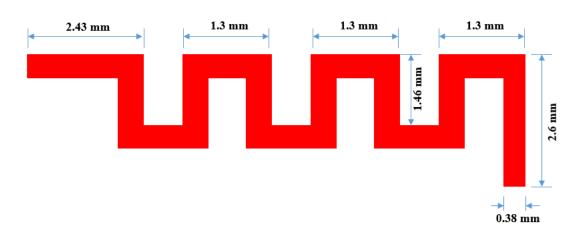
—. TEST INSTRUMENTATION

CHAMBER	SATIMO Chamber
Wireless Networking Test Set	Agilent E5071C
NETWORK ANALYZER	Agilent 8753D
TEMPERATURE	20±3℃
HUMIDITY	50±20%rh
GROUND RESISTANCE	<0.5R





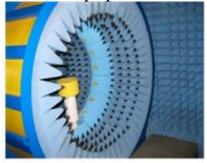
AIYATO-L1 WiFi Module



Antenna Dimension for AIYATO-L1







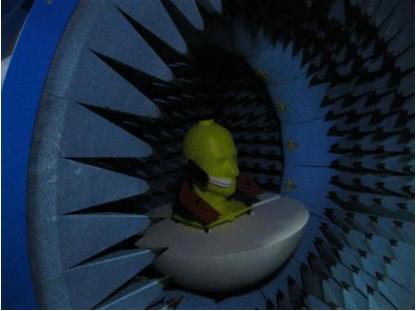




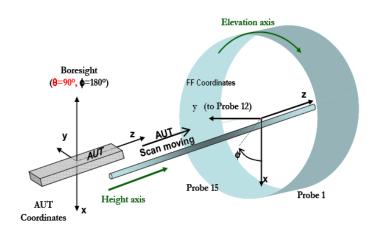


PRS

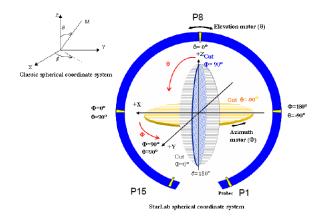
Percsson Communication Equipment Co., Ltd



Coordinate system – Cylindrical geometry



Coordinate system - Spherical geometry





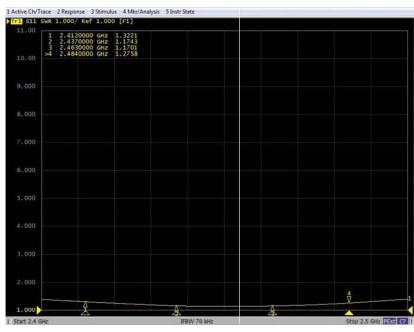
二. Test Results

2.1 Gain and Efficiency

Test Item	Freq (MHz)	Efficiency (%)	Gain (dBi)	Note
	2400	51. 22	1.72	
	2412	50. 68	2. 21	
	2417	56. 51	1.88	
	2422	57. 78	1.67	
Gain	2427	60. 76	1.89	
	2432	60. 11	1.80	
	2437	55. 32	1.64	V4:1
	2442	55. 23	1. 93	
	2447	52. 99	1. 78	Vertical 30°
	2452	50. 01	2. 12	30
	2457	52. 34	2. 13	
	2462	51. 32	2. 28	
	2467	52. 33	2. 24	
	2472	55. 67	2. 33	
	2477	52. 12	2. 42	
	2482	60. 23	2. 57	
	2500	59. 65	2. 22	

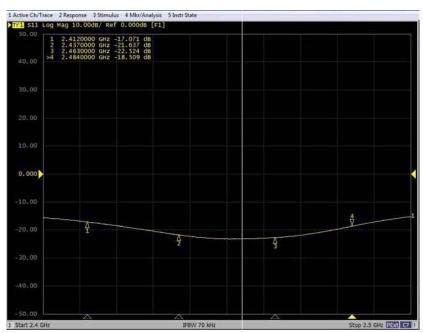
2.2 VSWR (Voltage Standing Wave Ration)





Frequency(MHz)	2412	2437	2463	2484
VSWR	1.12	1.05	1.01	1.11

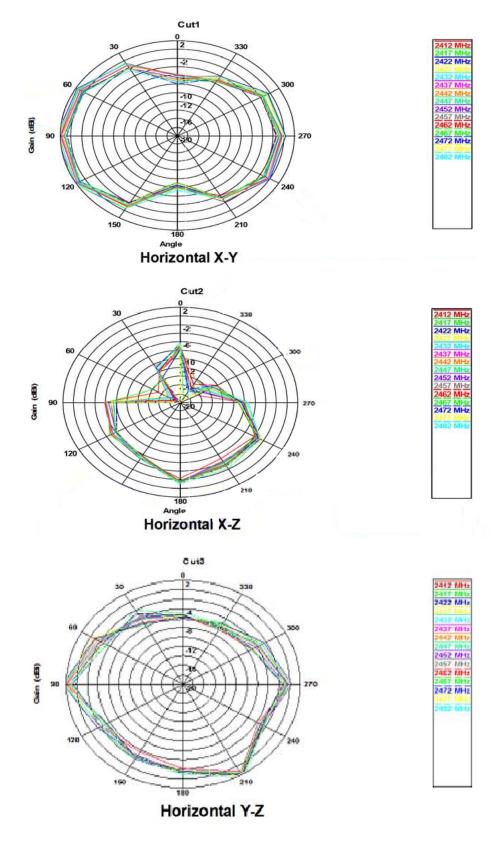
2.3 Antenna S11



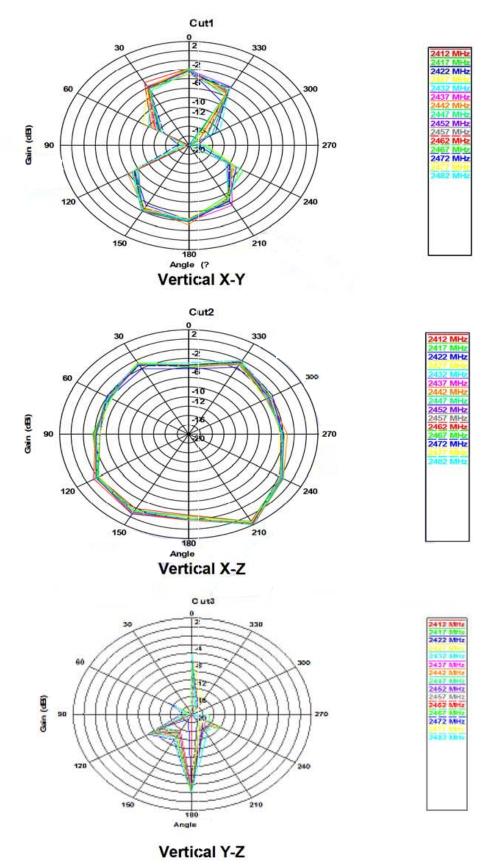
Frequency(MHz)	2412	2437	2463	2484
S11 (dB)	-15.01	-19.65	-20.52	-16.51



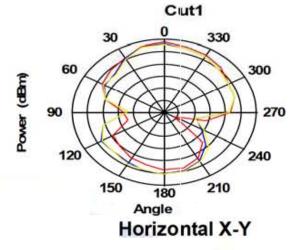
三. 2-D pattern Plots



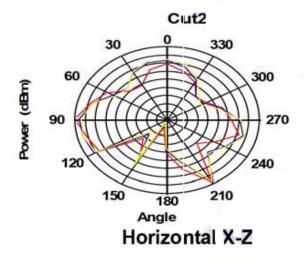




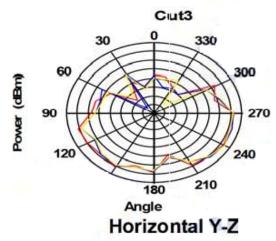






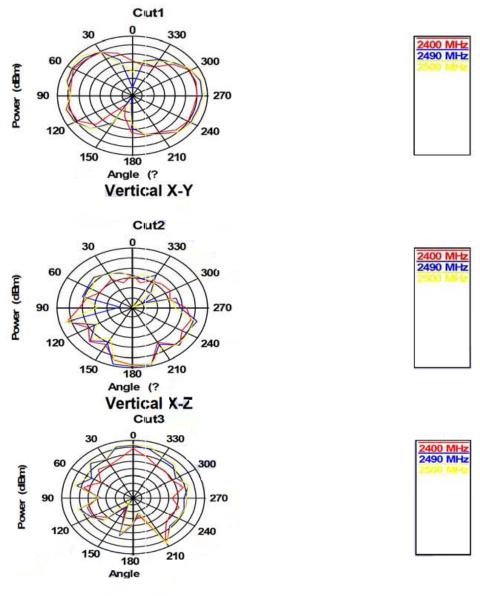












Vertical Y-Z