

Measurement System Information

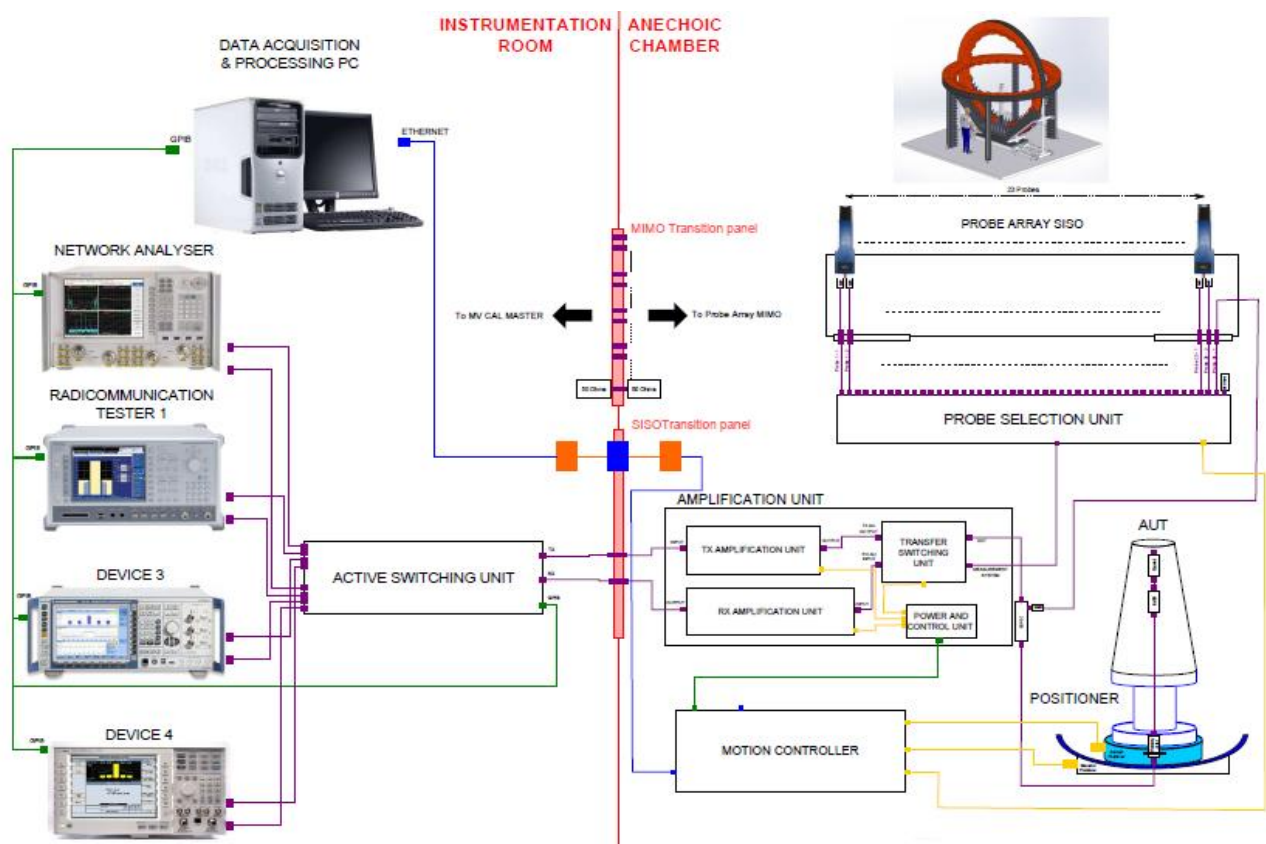
General Information

Testing Condition:

- Temperature: $22 \pm 3^\circ\text{C}$
- Humidity: $< 80\%$

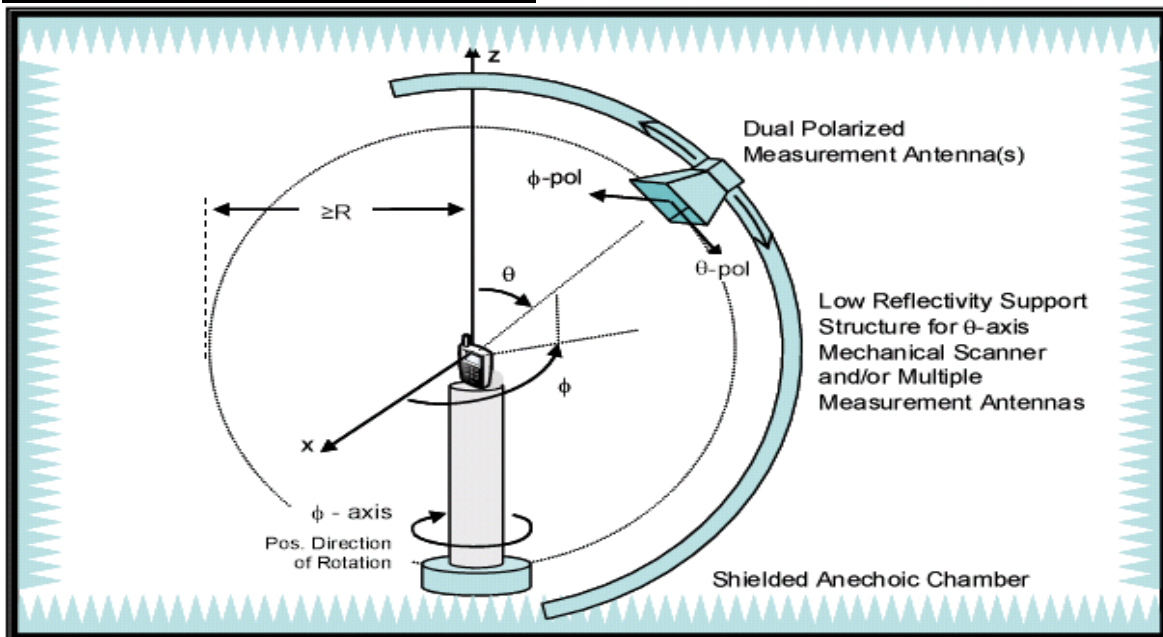
Measurement Facility:

- Measurement Chamber: MVG 3D fully anechoic chamber and its measuring system (Stargate-24-L)
- Base Station Simulator: Anritsu MT8820C (or R&S CMU200)
- Network Analyzer: Agilent E5071C



Measurements are performed in a MVG **Stargate-24-L** with the StarAct interface for a base station simulator. The **Stargate-24-L** has 23 probe antennas mounted with equal spacing on a circular arch. Electronic switching of the probe antennas provides outstanding measurement speed. The geometry of the setup, with only a Styrofoam column within 1.6 meters of the EUT, ensures minimum interference and low ripple on the measured radiation patterns. The DUT is placed on top of the pedestal, in the center of the system.

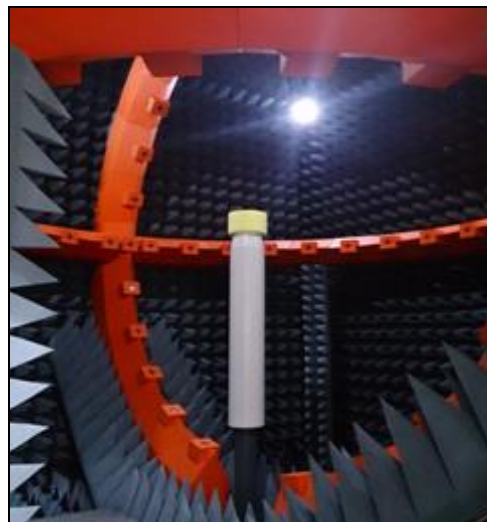
Typical Setup for MVG Stargate-24-L:



Instruments View



Inside View



Details of Applicant:

Applicant's name:	
Applicant's address:	
Contact person:	
Telephone:	
Fax:	
E-mail:	

Details of Manufacturer:

Applicant's name:	
Applicant's address:	
Contact person:	
Telephone:	
Fax:	
E-mail:	

Manufacturer: Shenzhen Dream Intelligent iot Co., LTD

**Address: Shenzhen Guangming District Fenghuang Street Tangwei community
Guangming Avenue and Dongchang Road intersection southeast side of South Taiyun
Chuanggu Park 2 501**

Details of EUT:

Device Description:	
Device Manufacturer:	
Device Model:	PCB ANT
Hardware Version:	N/A
Software Version:	N/A
Frequency Range:	2400MHz ~ 2500MHz Step size: 10MHz
Antenna Type:	PCB

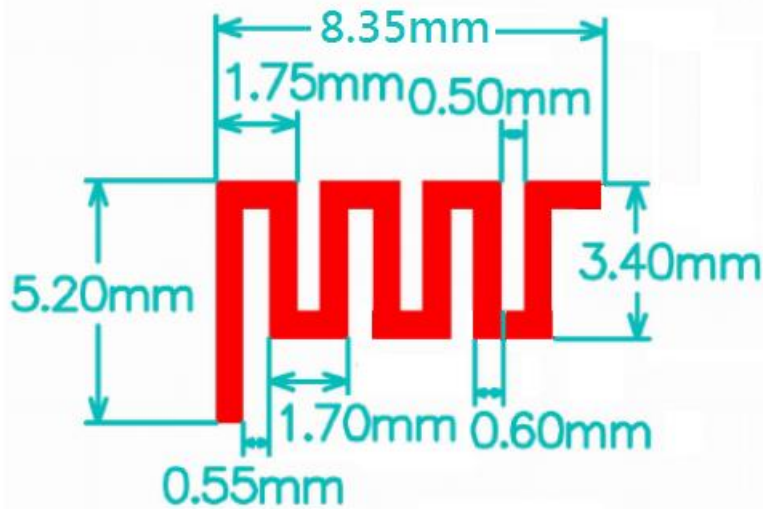
Duration of Tests:

Sample Receive Date:	2022-11-29
Test Starting Date:	2022-11-30
Test Ending Date:	2022-11-30
Report Issued Date:	2022-12-05

Photographs of EUT:



Antenna Size



List of Equipment

Equipment Summary Sheet

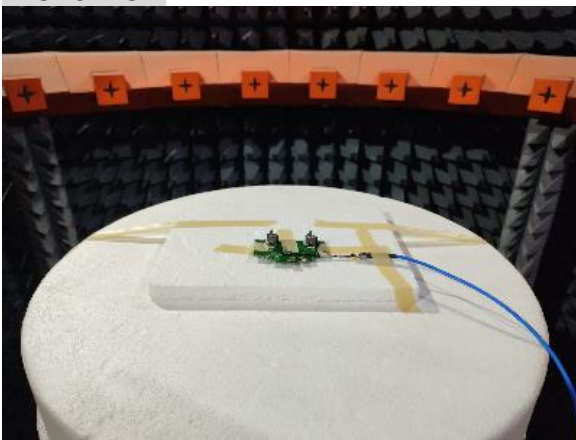
Equipment Description	Manufacturer	Identification no.	Current calibration date	Next calibration date
Universal Radio Communication tester	Anritsu	MT8820C	2022/10/14	2023/10/13
Network Analyzer	Agilent	E5071C	2021/01/12	2023/01/11
Sleeve Dipole	MVG	SD740	2022/01/07	2025/01/06
Dual Ridge Horn	MVG	SH800	2022/11/09	2023/11/08
Stargate-24-L probe array	MVG	Stargate-24-L	2022/08/26	2023/08/25
Measurement software	MVG	SPM V1.9	N/A	N/A

Antenna Gain and Efficiency

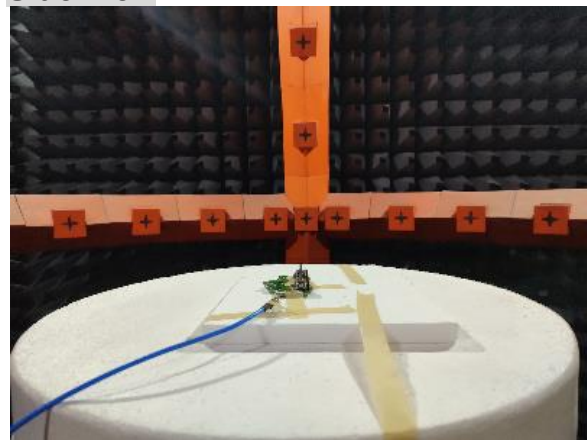
Freq(MHz)	Peak Gain. dBi	Efficiency	Average . dBi
2400.00	-1.73	19.03%	-7.21
2410.00	-1.84	19.16%	-7.18
2420.00	-1.74	19.74%	-7.05
2430.00	-1.16	22.68%	-6.44
2440.00	-0.68	25.10%	-6.00
2450.00	-0.53	27.35%	-5.63
2460.00	-0.58	28.68%	-5.42
2470.00	-0.17	31.61%	-5.00
2480.00	0.04	32.16%	-4.93
2490.00	0.03	31.82%	-4.97
2500.00	0.22	32.71%	-4.85

Test Setup

Front View

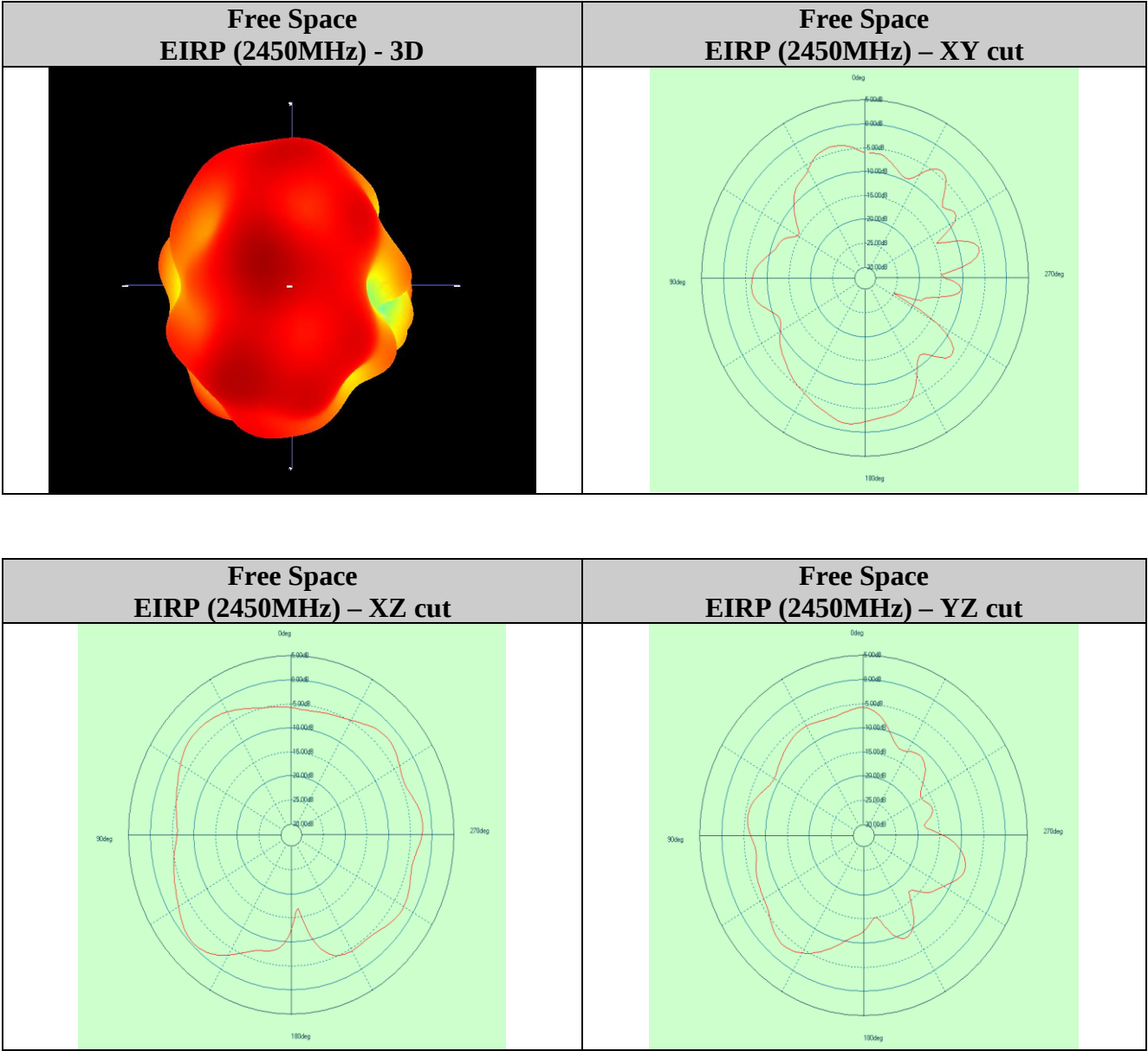


Side View



Antenna 3D Plot Matrix

All plots in this section show the total EIRP ($EIRP_{\theta} + EIRP_{\phi}$) with the +x-axis pointing out of the page, +y-axis pointing right, and +z-axis pointing up.



End of Report