

Antenna Test Report

Report No. : TEOT2504000466E4

Applicant Name : JTS PROFESSIONAL CO., LTD.
Manufacturer Name : JTS PROFESSIONAL CO., LTD.

Product Name : ANT-AH-1
Model Number : ANT-AH-1

Measurements performed at
SGS Taiwan Ltd.
Hwaya District, Taiwan

Issued Date : April 24, 2025

	Name	Date & Signature	Distribution
Prepared by:	Nandi Chen Sr. Engineer	<i>Nandi Chen</i> April 24, 2025	
Approved by:	Shawn Yen Supervisor	<i>Shawn Yen</i> April 24, 2025	

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Revision Version

Report Number	Revision	Date	Memo
TEOT2504000466E4	00	2025/04/24	Initial creation of test report.

This test report contains a reference to the previous version test report that it replaces.

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Measurement System Information

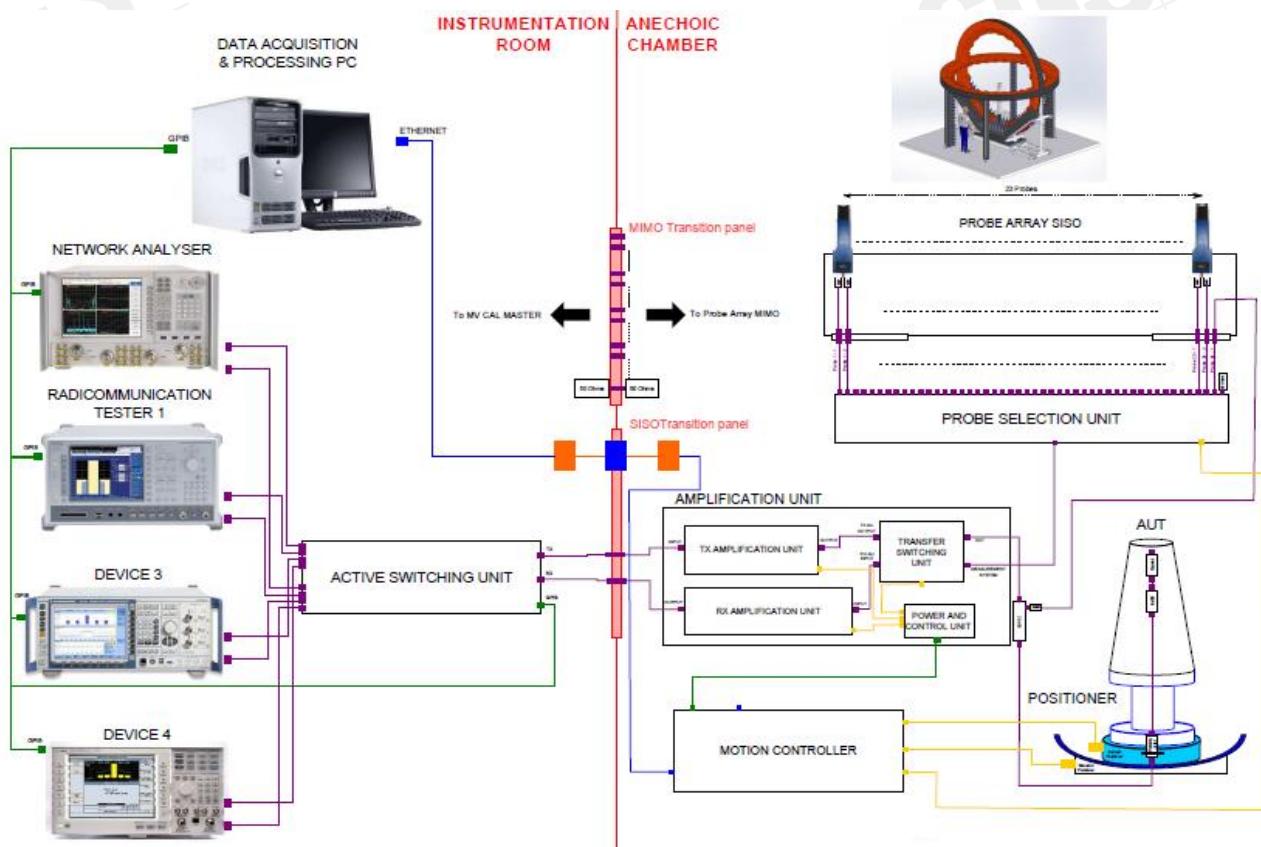
General Information

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

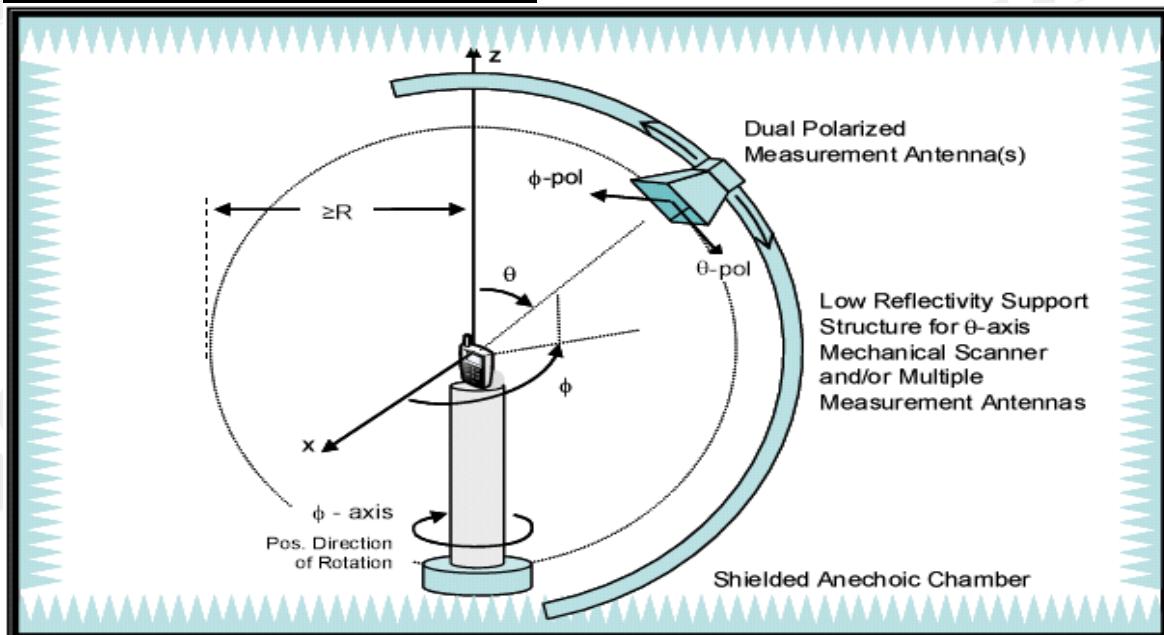


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Measurements are performed in a MVG **Stargate-24-L** with the StarAct interface for a base station simulator. The **Stargate-24-L** has 23 probe antennas mounted with equal spacing on a circular arch. Electronic switching of the probe antennas provides 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.

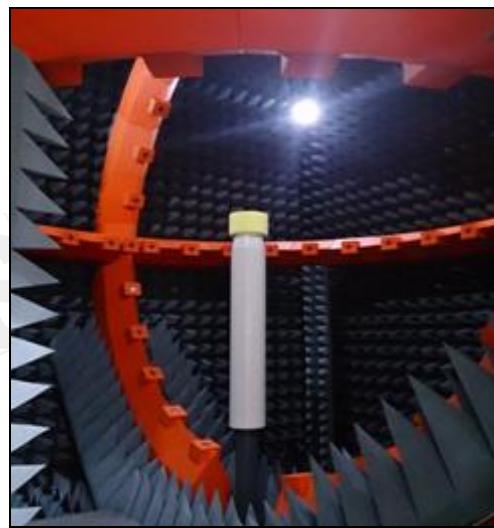
Typical Setup for MVG Stargate-24-L:



Instruments View



Inside View



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Testing Laboratory: Identification of the Responsible Test Laboratory.**● OTA Laboratory:****SGS Taiwan Ltd. Wireless Laboratory**

No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803.

Telephone: +886 2 2299 3279

Fax: +886 2 2298 0488

Internet: <http://www.tw.sgs.com>

● Testing Location:

No. 2, Keji 1st Rd., Hwaya Technology Park, Guishan District, Taoyuan City, Taiwan 33383.

Details of Applicant:

Applicant's name:	JTS PROFESSIONAL CO., LTD.
Applicant's address:	No. 148, Gongye 9th Rd., Dali Dist., Taichung City 412037, Taiwan
Contact person:	Mina Chen
Telephone:	04-24938803
Fax:	04-24914890
E-mail:	minachen@jts.com.tw

Details of Manufacturer:

Applicant's name:	JTS PROFESSIONAL CO., LTD.
Applicant's address:	No. 148, Gongye 9th Rd., Dali Dist., Taichung City 412037, Taiwan
Contact person:	Mina Chen
Telephone:	04-24938803
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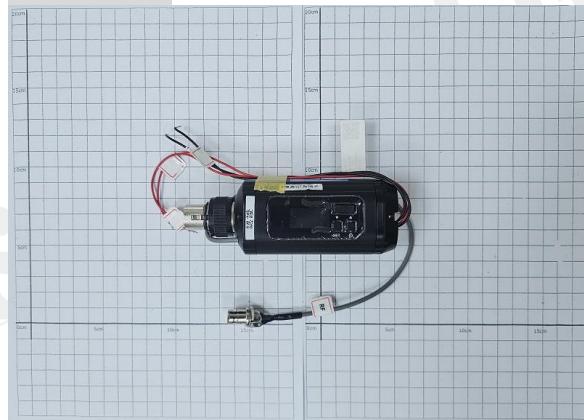
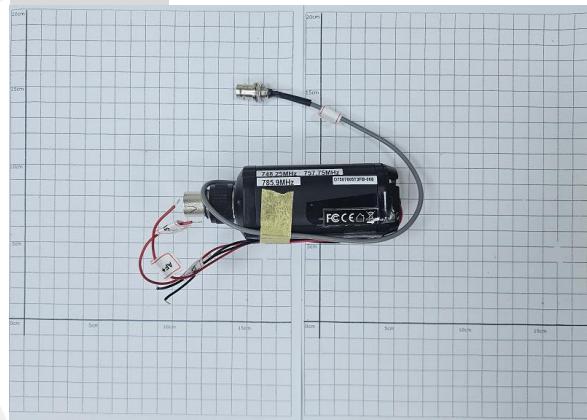
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Details of EUT:

Device Description:	ANT-AH-1
Device Manufacturer:	JTS PROFESSIONAL CO., LTD.
Device Model:	ANT-AH-1
Hardware Version:	N/A
Software Version:	N/A
Frequency Point:	470 MHz, 515 MHz, 620 MHz, 780 MHz, 828 MHz, 864 MHz, 925 MHz, 931 MHz, 937 MHz
Antenna Type:	PCB Antenna

Duration of Tests:

Sample Receive Date:	2025-04-08
Test Starting Date:	2025-04-09
Test Ending Date:	2025-04-09
Report Issued Date:	2025-04-24

Photographs of EUT:**Front View****Back View**

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List of Equipment

Equipment Summary Sheet

Equipment Description	Manufacturer	Identification no.	Current calibration date	Next calibration date
Network Analyzer	Agilent	E5071C	2024/07/05	2025/07/04
Stargate-24-L probe array	MVG	Stargate-24-L	2024/08/14	2025/08/13
Measurement software	MVG	Wave Studio v23.3.2	N/A	N/A

Antenna Gain and Efficiency

ANT-AH-1				
Frequency (MHz)	Efficiency (%)	Average Gain (dBi)	Peak Gain (dBi)	Directivity (dBi)
470	1.05%	-19.78	-13.63	6.15
515	0.29%	-25.32	-22.16	3.16
620	0.53%	-22.72	-17.80	4.92
780	2.68%	-15.72	-10.06	5.66
828	3.60%	-14.44	-9.49	4.96
864	4.41%	-13.56	-7.72	5.84
925	1.31%	-18.83	-14.63	4.20
931	1.20%	-19.22	-15.14	4.08
937	1.14%	-19.45	-15.01	4.44

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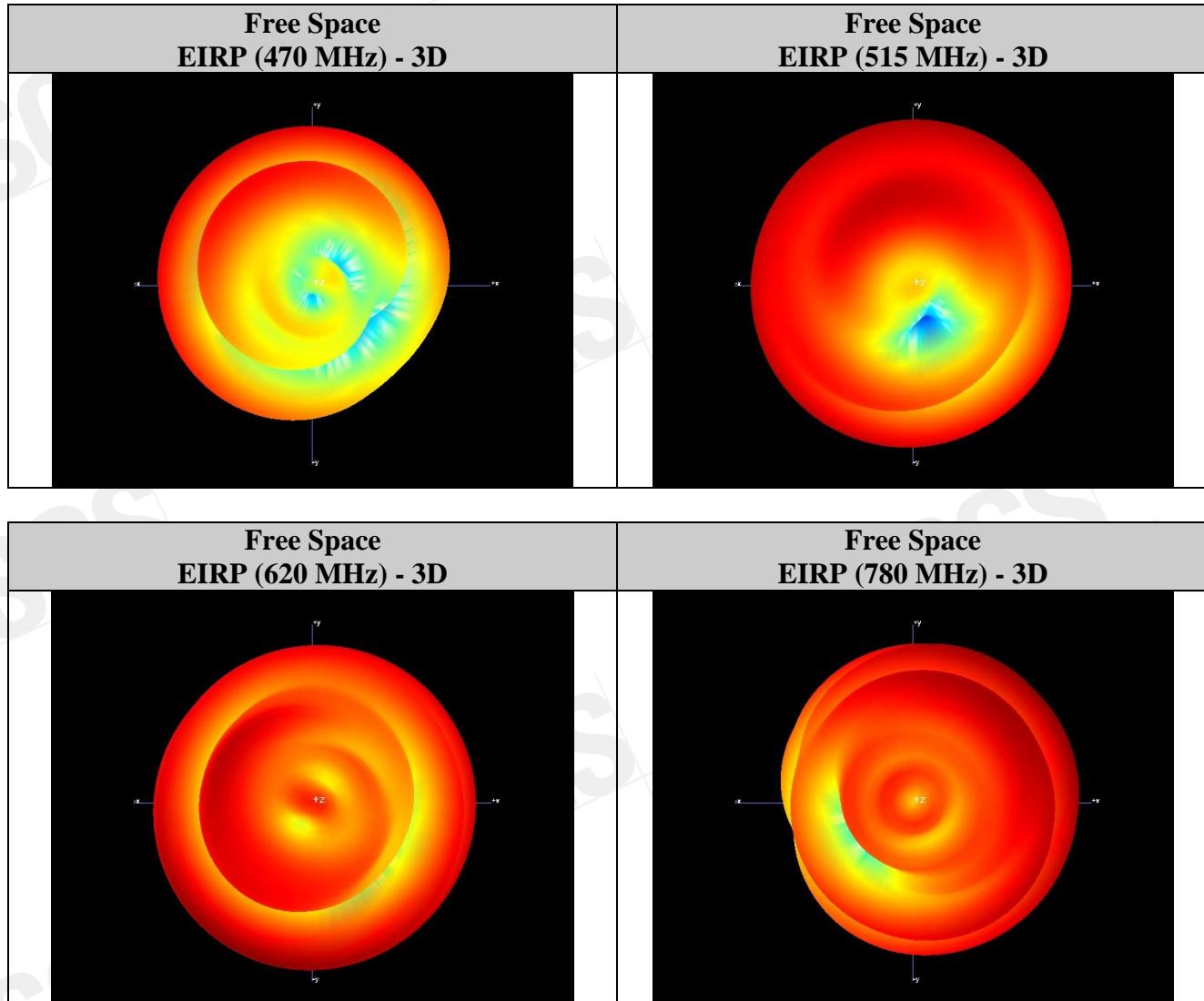
Test Setup**Front View****Side View**

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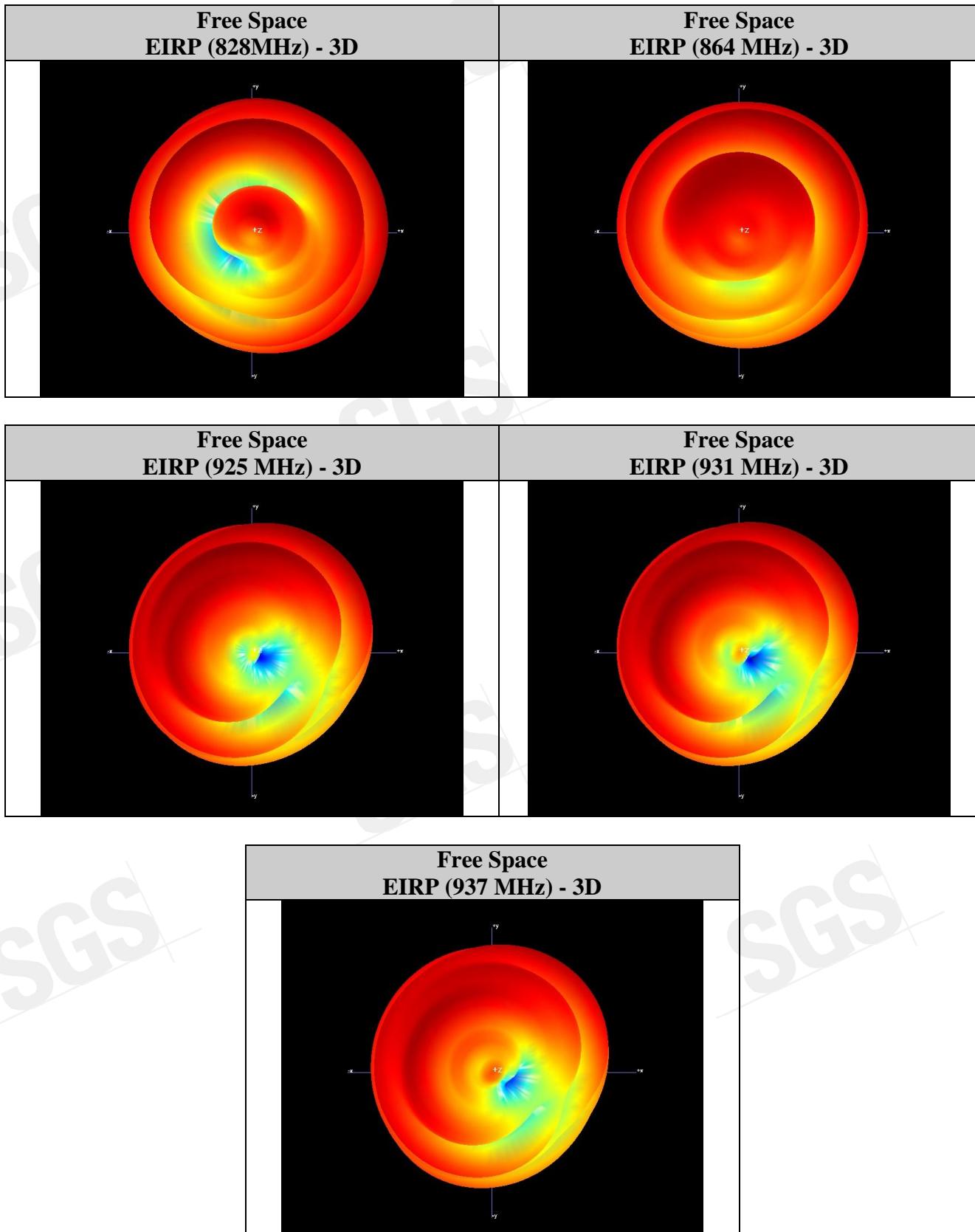
Antenna 3D Plot Matrix

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



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