

Antenna Test Report

Report No.: EO/2011/B0024
Test Plan: Non-compliance with ISO17025
Applicant Name: ARESON Technology Corp.
Manufacturer Name: Dongguan Hong Sheng Electronic Corp.
Product Name: 2.4GHz wireless dongle
Model Number: meadline2 type antenna
Measurements performed at
SGS Taiwan Ltd.
Taipei, Taiwan
Issued Date: December 16, 2011

	Name	Date & Signature
Prepared by:	Dragon Wu Asst. Supervisor	<i>Dragon Wu</i> December 16, 2011
Approved by:	Nick Hsu Supervisor	<i>Nick Hsu</i> December 16, 2011

Distribution

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Measurement System Information

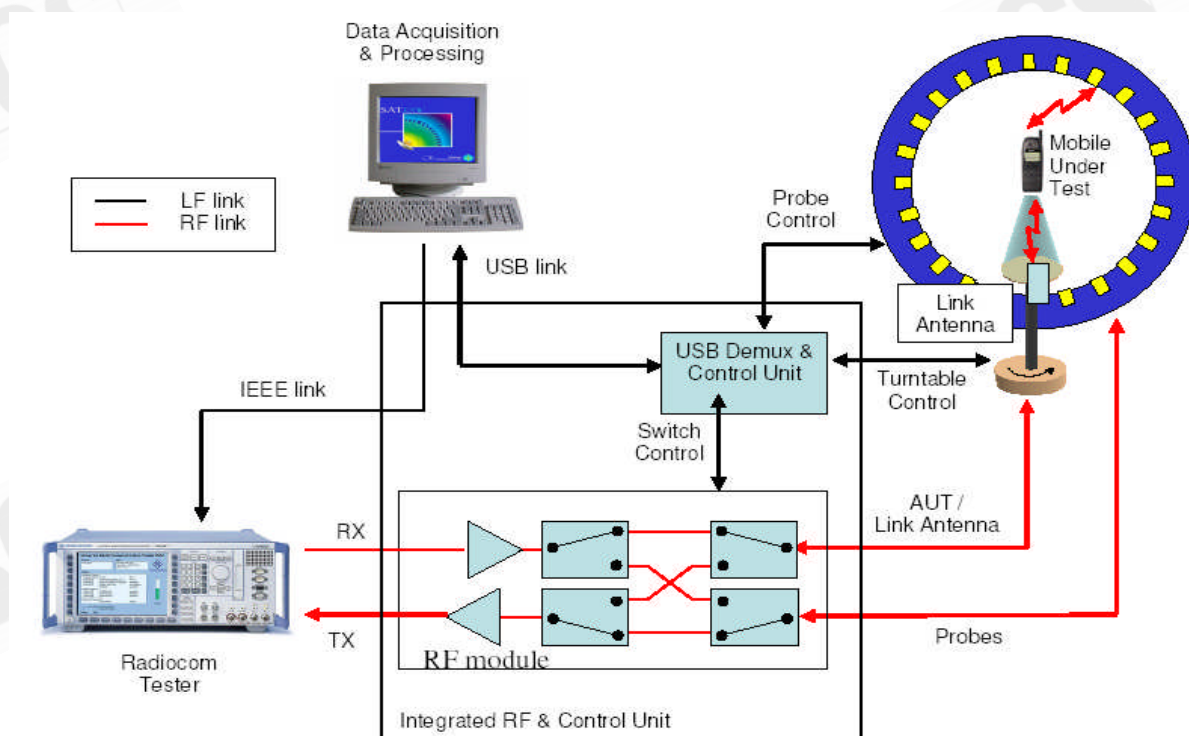
General Information

Testing Condition:

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

Measurement Facility:

- Measurement Chamber: Satimo 3D fully anechoic chamber and its measuring system (Stargate-24)
- Base Station Simulator: Agilent E5515C (or R&S CMU200)
- Network Analyzer: Agilent E5071C

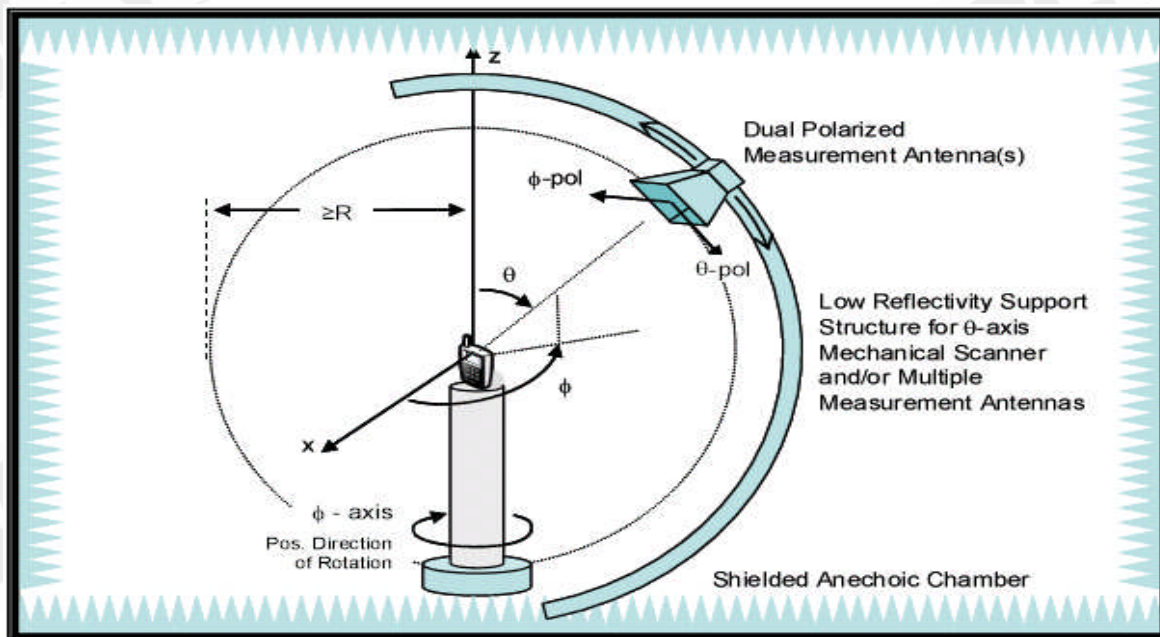


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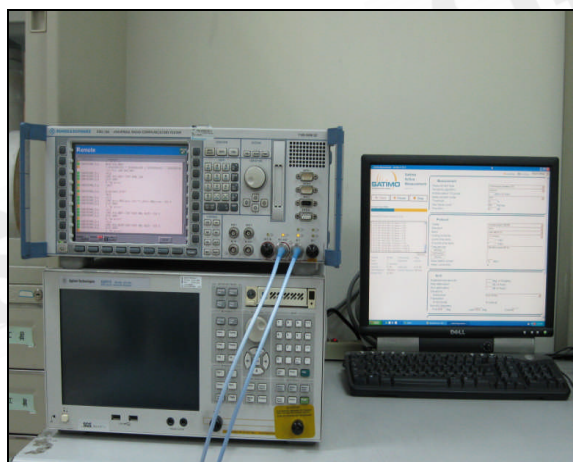
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Measurements are performed in a Satimo **Stargate-24** with the StarAct interface for a base station simulator. The **Stargate-24** has 23 probe antennas mounted with equal spacing on a circular arch. Electronic switching of the probe antennas provides outstanding measurement speed. The geometry of the setup, with only a Styrofoam column within 1.2 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.

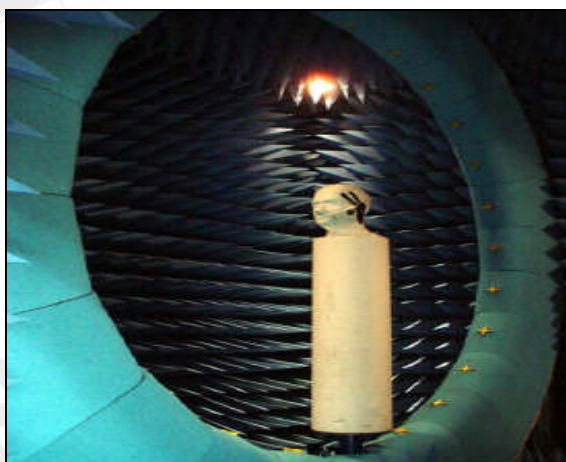
Typical Setup for Satimo Stargate-24:



Instruments View



Inside View



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Testing Laboratory: Identification of the Responsible Test Laboratory.

- **OTA Laboratory:**
SGS Taiwan Ltd. Electronics & Communication Laboratory
5F, No.134, Wu Kung Road, Wuku Industrial zone, Taipei County, Taiwan 248, R.O.C.
Telephone: +886 2 2299 3279
Fax: +886 2 2298 0488
Internet: <http://www.tw.sgs.com>
- **Testing Location:**
5F, No.134, Wu Kung Road, Wuku Industrial zone, Taipei County, Taiwan 248, R.O.C.

Details of Applicant:

Applicant's name:	ARESON Technology Corp.
Applicant's address:	11F, No.646, Sec.5, Chongsin Rd., San Chung Dist., New Taipei City 241, Taiwan (R.O.C)
Contact person:	Kevin Hsu
Telephone:	2999-0505#321
Fax:	2999-0606
E-mail:	kevin@areson.com.tw

Details of Manufacturer:

Manufacturer's name:	Dongguan Hong Sheng Electronic Corp.
Manufacturer's address:	Shahu Village ,Tangxia Township , Dongguan 523725 Guangdong China
Contact person:	Kevin Hsu
Telephone:	2999-0505
Fax:	2999-0606
E-mail:	kevin@areson.com.tw

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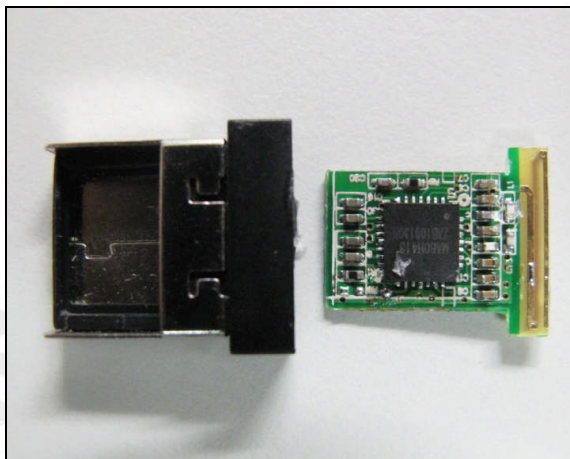
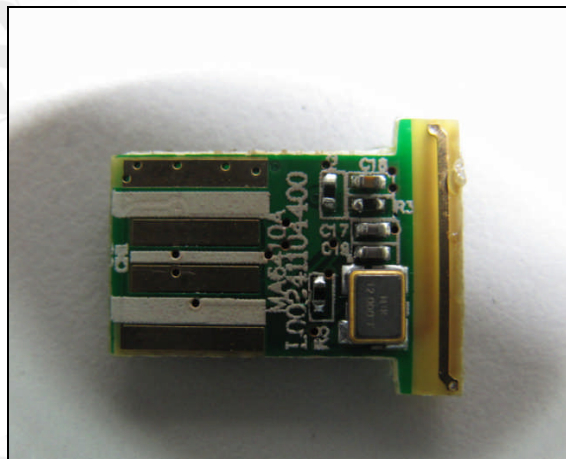
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Details of EUT:

Device Description:	2.4GHz wireless dongle
Device Manufacturer:	ARESON Technology Corp.
Device Model:	Meadline2 type antenna
Hardware Version:	Ver00
Software Version:	Version 105
IMEI:	N/A
FCC ID:	N/A
Frequency Range:	2400MHz ~ 2500MHz Step size: 10MHz
Antenna Type:	Internal antenna

Duration of Tests:

Sample Receive Date:	2011-12-13
Test Starting Date:	2011-12-14
Test Ending Date:	2011-12-14
Report Issued Date:	2011-12-16

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

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Equipment Summary Sheet

Equipment Description	Manufacturer	Identification no.	Current calibration date	Next calibration date
Universal Radio Communication tester	Rohde & Schwarz	CMU200	2011/04/01	2012/04/01
Network Analyzer	Agilent	E5071C	2011/01/06	2012/01/06
Dual Ridge Horn	Satimo	SH800	2011/07/15	2012/07/15
Stargate-24 probe array	Satimo	Stargate-24	2011/07/15	2012/07/15
Measurement software	Satimo	SAM V2.14.1	N/A	N/A

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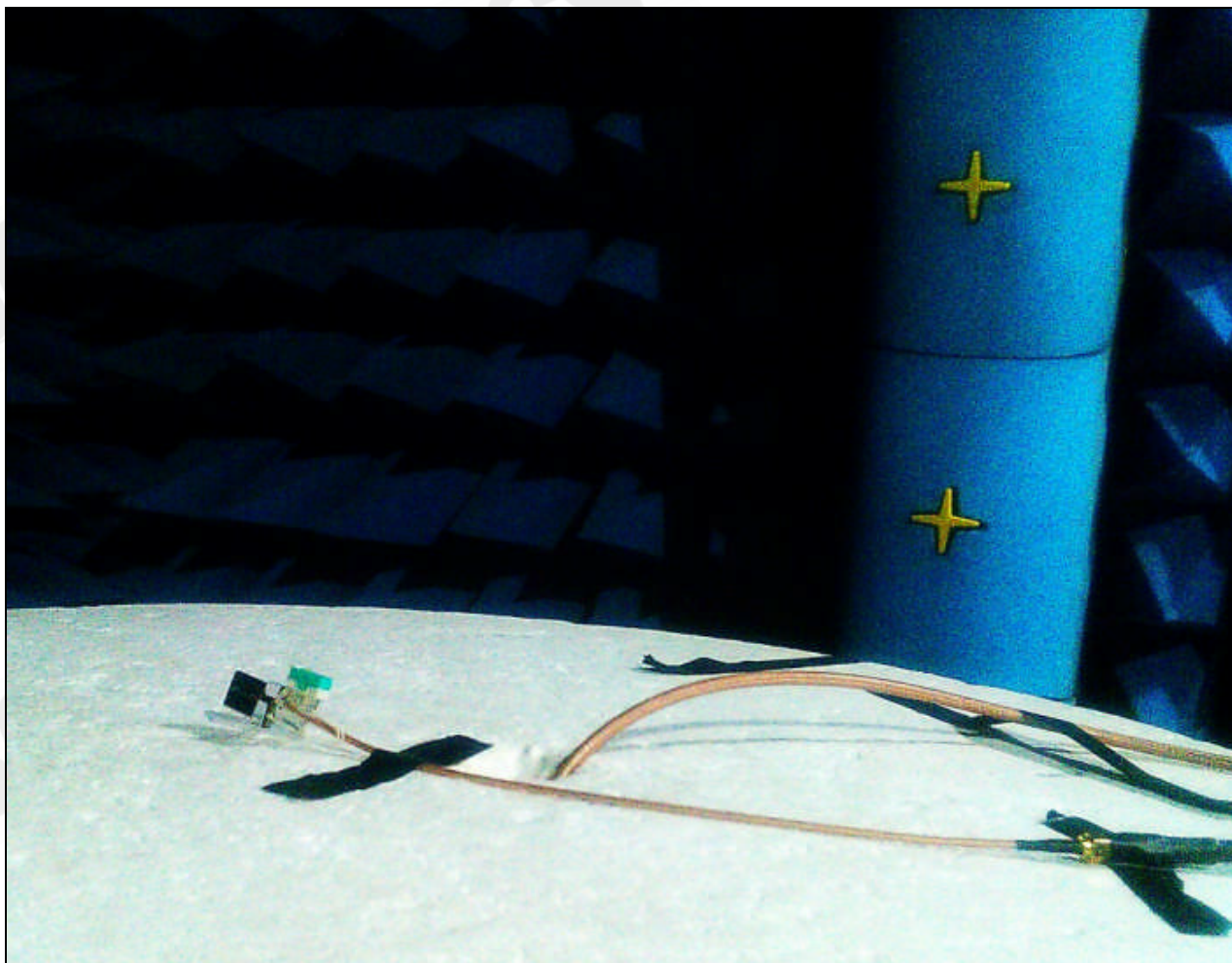
Antenna Gain and Efficiency

Freq. (MHz)	Peak gain (dBi)	Efficiency (%)	Avg. gain (dBi)
2400	5.50	55.84%	-2.53
2410	5.23	54.35%	-2.65
2420	4.83	52.84%	-2.77
2430	4.46	52.31%	-2.81
2440	4.00	50.37%	-2.98
2450	3.63	49.54%	-3.05
2460	3.27	49.49%	-3.06
2470	2.86	47.60%	-3.22
2480	2.64	46.08%	-3.36
2490	2.39	44.28%	-3.54
2500	1.98	42.29%	-3.74

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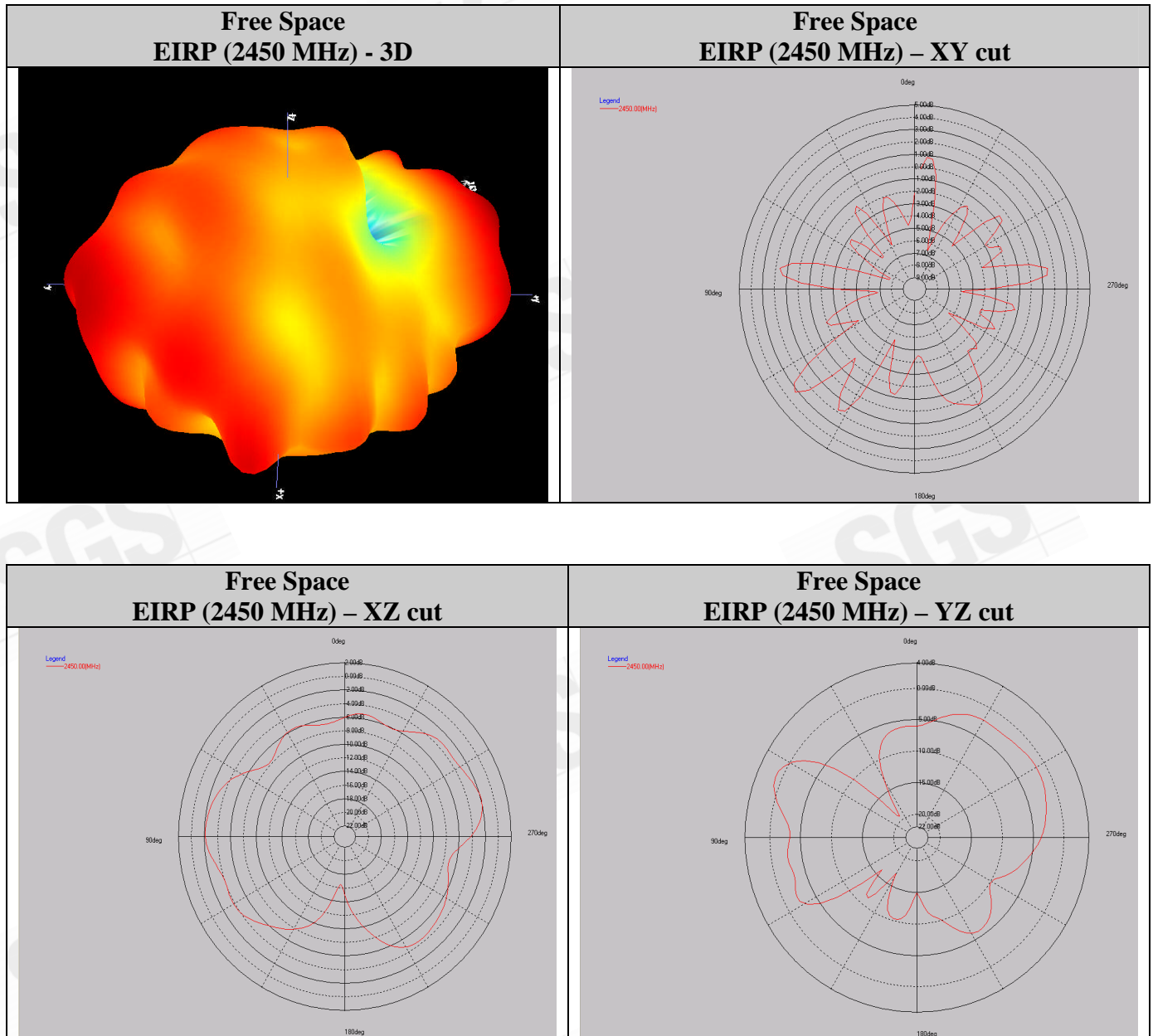
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Antenna 3D Plot Matrix

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



End of Report

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