

Embedded Antenna Spec

Aristotle Enterprises Inc.

Outline



Specimen Information
 Antenna description & product photo

•Radiation Pattern and Gain Test

Test configuration

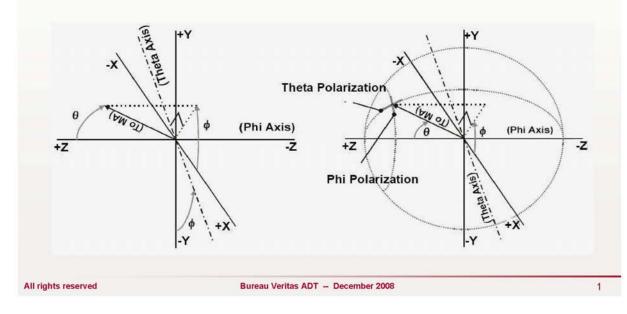
Test result



Spherical Pattern Measurement



▶ Defining rotational axes and polarization directions in terms of a spherical coordinate system in the AUT reference frame avoids confusion between different test systems





Chamber Configuration & Test Setup ► Typical Setup—Great circle—Free Space Low Reflectivity **DUT Positioner Dual Polarized** Measurement Antenna Pos. Direction θ-pol of Rotation φ-pol θ-axis Pos. Direction Shielded Anechoic Chamber All rights reserved Bureau Veritas ADT -- December 2008



CTIA OTA / Wi-Fi CWG-RF / WiMAX RPT Facility



➤ Manufacture : ETS-Lindgren

➤ Model: AMS8500

>Internal Dimensions:

7.32x3.66x3.45 m (Lx W x H)

➤ Measurement Distance: 4.86 m

> Frequency Range: 400MHz ~ 6GHz

➤ Shielding Effectiveness: >100 dB.

➤ Quiet Zone Performance:

OTA: <0.59dB (worst frequency)

•CWG-RF: <0.66dB

RPT: <0.47dB(worst frequency)

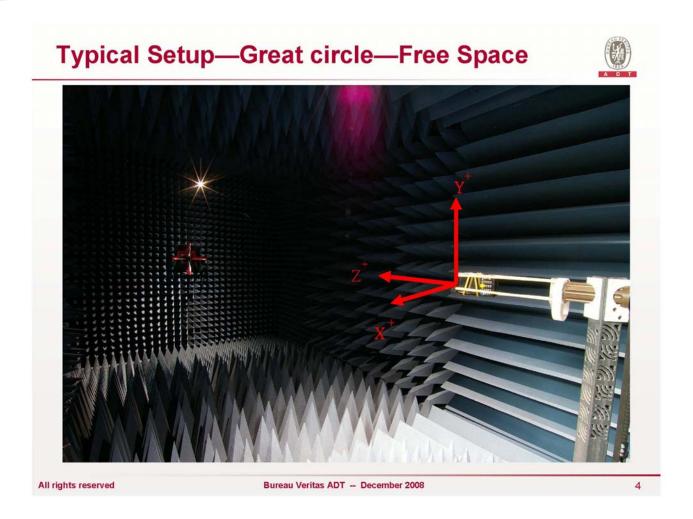
Real one stop service for CTIA OTA, Wi-Fi CWG-RF, WiMAX RPT and Passive Antenna pattern.

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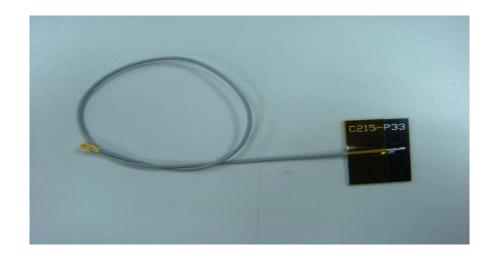




Antenna Information

RFA-02-P33-70-200-K

Frequency	2400/2450/2500MHz		
Polarization	Linear, vertical		
Type	Dipole		
Impedance	50 Ω		
Temperature	- 10°C to +55°C		
Connector	I-PEX		
Cable	OD=1.13 /L=200mm		



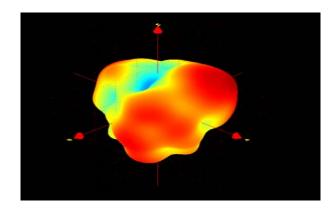


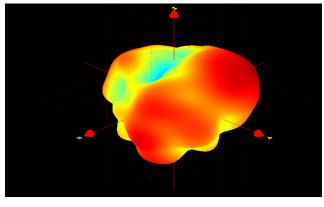


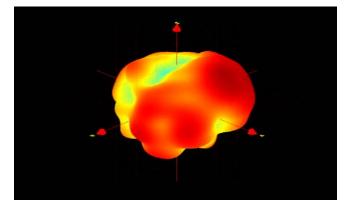
Gain Table

Frequency	Efficiency	Avg. Gain (dB)	Peak Gain (dB)
2400MHz	65.28%	-1.85	2.78
2450MHz	72.08%	-1.42	2.87
2500MHz	68.27%	-1.66	2.13









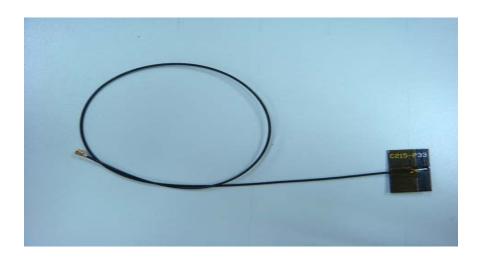
2400MHz 2450MHz 2500MHz

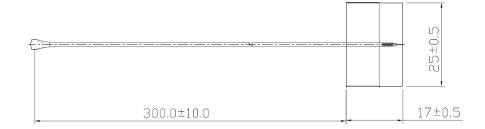


Antenna Information

RFA-02-P33-70B-350-K

Frequency	2400/2450/2500MHz		
Polarization	Linear, vertical		
Type	Dipole		
Impedance	50 Ω		
Temperature	- 10°C to +55°C		
Connector	I-PEX		
Cable	OD=1.13 / L=350mm		

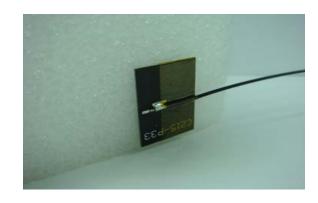


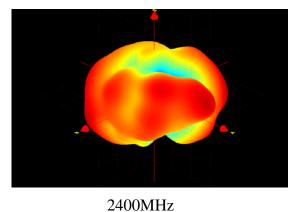


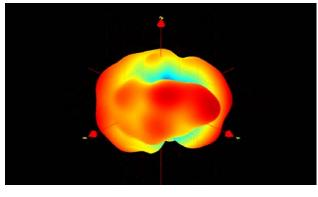


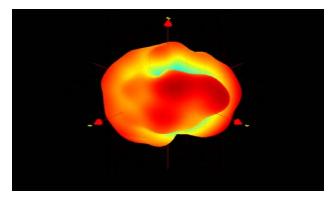
Gain Table

Frequency	Efficiency	Avg. Gain (dB)	Peak Gain (dB)
2400MHz	58.70%	-2.31	1.67
2450MHz	70.09%	-1.54	2.61
2500MHz	68.69%	-1.63	2.82









2450MHz 2500MHz