



1 Antenna Test Result

1.1 Test Information

Brand Name	
Model Name	
Test Standard	ANSI C63.5: 2006
Applicant	
Applicant Address	
Sample Received	Apr. 18, 2013
Test Date	Apr. 18, 2013
Test Result No.	340944-y
Remark	

1.2 Testing Location

Testing Location			
<input type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-318-0055	
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085	
Testing Site No.			
05CH01-CB	-	-	-

1.3 Test Mode

The following tables are showing the test modes as the worst cases and recorded in this report.

Antenna Test Suites			
Description	Polarization		Test Channel
	Horizontal	Vertical	
Antenna Gain	✓	✓	BMT

Note: Test Channel: B (Bottom channel), M (Middle channel), and T (Top channel).



1.4 Test Frequency

EUT Channel	B	M	T
Frequency	2.402GHz	2.441GHz	2.48GHz

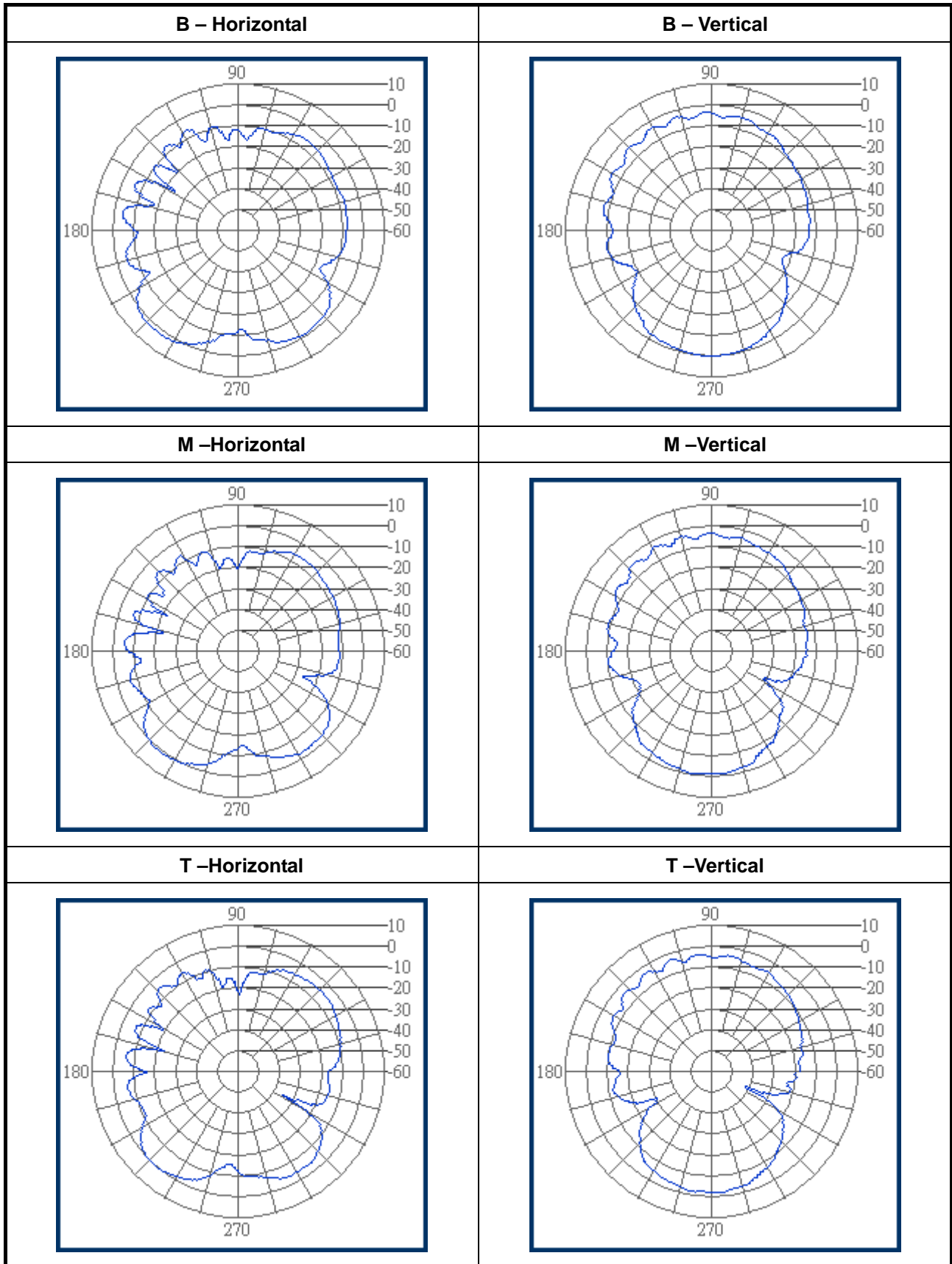
Note: Test Channel: B (Bottom channel), M (Middle channel), and T (Top channel).

1.5 Test Result of Antenna Gain

Polarization	Horizontal & Vertical	Temperature :	24 °C
Test Engineer :	kenneth	Relative Humidity :	61 %

Test Freq	Peak Gain (dBi)	Average Gain (dBi)	Beamwidth (°)	Plane
2.402GHz	PK 2.21 dBi	AV -5 dBi	Beam 30 °	Horizontal
2.441GHz	PK 1.22 dBi	AV -6.22 dBi	Beam 30 °	Horizontal
2.48GHz	PK 0.28 dBi	AV -6.72 dBi	Beam 26 °	Horizontal
2.402GHz	PK 0.44 dBi	AV -5.48 dBi	Beam 54 °	Vertical
2.441GHz	PK -0.74 dBi	AV -6.21 dBi	Beam 202 °	Vertical
2.48GHz	PK -1.7 dBi	AV -6.79 dBi	Beam 360 °	Vertical

1.6 Test Result of Antenna Gain Pattern





2 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Until	Remark
Spectrum Analyzer	R&S	FSU	100015	9kHz ~ 26.5GHz	08-Dec-11	08-Dec-13	05CH01-CB
Spectrum Analyzer	R&S	FSP	100023	9kHz ~ 30GHz	08-Dec-11	08-Dec-13	05CH01-CB
Power Meter	R&S	NRVD	100764	-	08-Dec-11	08-Dec-13	05CH01-CB
Power Sensor	R&S	NRV-Z51	100458	DC ~ 18GHz	08-Dec-11	08-Dec-13	05CH01-CB
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	08-Dec-11	08-Dec-13	05CH01-CB
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	08-Dec-11	08-Dec-13	05CH01-CB
Temp. and Humidity	Giant Force	GTH-225-20-S	MAB0103-001	N/A	08-Dec-11	08-Dec-13	05CH01-CB
RF Cable-01	Huber&Suhner	SUCOFLEX 103	N/A	0.5m	08-Dec-11	08-Dec-13	05CH01-CB
RF Cable-02	Huber&Suhner	SUCOFLEX 103	N/A	0.5m	08-Dec-11	08-Dec-13	05CH01-CB
RF Cable-03	Huber&Suhner	SUCOFLEX 103	N/A	0.5m	08-Dec-11	08-Dec-13	05CH01-CB
RF Cable-04	Huber&Suhner	SUCOFLEX 103	N/A	0.5m	08-Dec-11	08-Dec-13	05CH01-CB
RF Cable-05	Huber&Suhner	SUCOFLEX 103	N/A	0.5m	08-Dec-11	08-Dec-13	05CH01-CB
Vector Signal Generator, #	R&S	SMU200A	102098	100kHz ~ 6GHz	08-Dec-11	08-Dec-13	05CH01-CB
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	08-Dec-11	08-Dec-13	05CH01-CB
WiMAX BSE, #	Agilent	E6651	MY47310158	N/A	08-Dec-11	08-Dec-13	05CH01-CB
Band Reject Filter	Wainwright Instruments	WRJC 2500/2690	N/A	N/A	N/A	N/A	05CH01-CB
Low Pass Filter	Wainwright Instruments	WLKS1000C9/4 0SS	N/A	N/A	N/A	N/A	05CH01-CB
High Pass Filter	Wainwright Instruments	WHK 3.2/18G-10SS	N/A	N/A	N/A	N/A	05CH01-CB
High Pass Filter	Wainwright Instruments	WHKX 4.5/18G-10SS	N/A	N/A	N/A	N/A	05CH01-CB
RF Power Splitter	MCLI	PS2-17	N/A	2 Way	N/A	N/A	05CH01-CB



Antenna Test Result

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Until	Remark