

FCC PART 15 SUBPART C TEST REPORT

for

Modular WLAN Access Point

Model No.: KWG6000

FCC ID: WNQ-KWG6000

of

Applicant: Formosa Wireless Systems Corp.

**Address: 3F, No. 31, Lane 216, Gongyuan Rd., HsinChu City, 30069,
Taiwan**

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1

A2LA Accredited No.: 2732.01



Report No.: W6D21009-10909-P-15

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C.
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Worldwide Testing Services(Taiwan) Co., Ltd.

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1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services(Taiwan) Co., Ltd.

Specific Conditions:

Usage of the hereunder tested device in combination with other integrated or external antennas requires at least additional output power measurements, spurious emission measurements, conducted emission measurements (AC supply lines) and radio frequency exposure evaluations for each individual configuration performed, for certification by FCC.

The test sample is able to work according to IEEE 802.11 b/g/n.

This report is related to FCC Part 15 C (DSSS and OFDM device).

Tester:

September 27, 2010

Robert Ren

Date

WTS-Lab.

Name

Signature

Technical responsibility for area of testing:

September 27, 2010

Chang Tse-Ming

Date

WTS

Name

Signature



Worldwide Testing Services(Taiwan) Co., Ltd.

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1.2 Testing laboratory

1.2.1 Location

OATS

No.5-1, Shuang Sing Village,
LiShuei Rd., Wanli Township,
Taipei County 207, Taiwan (R.O.C.)

Company

Worldwide Testing Services(Taiwan) Co., Ltd.

6F, NO. 58, LANE 188, RUEY-KUANG RD.

NEIHU, TAIPEI 114, TAIWAN R.O.C.

Tel : 886-2-66068877

Fax : 886-2-66068879

1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2732.01

FCC filed test laboratory Reg. No. 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1



Test location, where different from Worldwide Testing Services (Taiwan) Co., Ltd. :

Name: ./.

Accredited number: ./.

Street: ./.

Town: ./.

Country: ./.

Telephone: ./.

Fax: ./.

1.3 Details of approval holder

Name: Formosa Wireless Systems Corp.

Street: 3F, No. 31, Lane 216, Gongyuan Rd.,

Town: HsinChu City, 30069

Country: Taiwan

Telephone: +886-3-5616277

Fax: +886-3-5616275



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1.4 Application details

Date of receipt of test item: ./.

Date of test: From April 23, 2010 to May 11, 2010

1.5 General information of Test item

Type of test item: Modular WLAN Access Point

Model Number: KWG6000

Brand Name: Formosa

Hardware: WL-WEJ-03-03

Software: V2.1

Multi-listing model number: ./.

Photos: see Appendix

Technical data:

Frequency band: 2.4 GHz – 2.4835 GHz

11b, 11g, 11n 20MHz

Frequency (ch 1 or A): 2.412 GHz

Frequency (ch 6 or B): 2.437 GHz

Frequency (ch 11 or C): 2.462 GHz

11n 40MHz

Frequency (ch 1 or A): 2.422 GHz

Frequency (ch 4 or B): 2.437 GHz

Frequency (ch 7 or C): 2.452 GHz

Number of Channels: 11b, 11g, 11n 20MHz: 11

11n 40MHz: 7

Operation modes: duplex

Modulation Type: DSSS / OFDM

Fixed point-to-point operation: ☐ Yes / ☒ No

Type of Antenna: Antenna a: Dipole Antenna ; Antenna b: Dipole Antenna

Antenna gain: Antenna a: 2 dBi ; Antenna b: 2 dBi

Power supply: Adaptor (I/P: AC 100-240 V / 50-60 Hz / 0.6 A,
O/P: 48 V / 0.4 A)

Emission designator: 11b: DSSS: 17M3G1D
11g: OFDM: 19M4W7D
11n 20MHz: OFDM: 19M2W7D
11n 40MHz: OFDM: 37M8W7D



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Host device: none

Classification :

Fixed Device	<input checked="" type="checkbox"/>
Mobile Device (Human Body distance > 20cm)	<input type="checkbox"/>
Portable Device (Human Body distance < 20cm)	<input type="checkbox"/>
Modular Radio Device	<input type="checkbox"/>

Transmitter

Unom

Mode A (DSSS)

Power (ch 1 or A): Conducted: 26.47 dBm
Power (ch 6 or B): Conducted: 26.12 dBm
Power (ch 11 or C): Conducted: 29.37 dBm

Mode B (OFDM)

Power (ch 1 or A): Conducted: 23.02 dBm
Power (ch 6 or B): Conducted: 27.29 dBm
Power (ch 11 or C): Conducted: 24.17 dBm

Mode C (OFDM)

Power (ch 1 or A): Conducted: 23.55 dBm
Power (ch 6 or B): Conducted: 23.64 dBm
Power (ch 11 or C): Conducted: 23.54 dBm

Mode D (OFDM)

Power (ch 1 or A): Conducted: 22.95 dBm
Power (ch 4 or B): Conducted: 22.95 dBm
Power (ch 7 or C): Conducted: 23.02 dBm

Manufacturer: (if different from Approval Holder)

Name: ./.
Street: ./.
Town: ./.
Country: ./.

1.6 Test standards

Technical standard : FCC RULES PART 15 SUBPART C § 15.247 (2009-10)

Additional Information:

- (1) The provided test sample KWG6000 is be able to work with modulation DSSS, OFDM.
- (2) There are four testing modes in the test report.
Mode A: IEEE 802.11b
Mode B: IEEE 802.11g
Mode C: IEEE 802.11n 20 MHz
Mode D: IEEE 802.11n 40 MHz



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2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.



or

The deviations as specified in 2.5 were ascertained in the course of the tests performed.



2.2 Test environment

Temperature: 23 °C

Relative humidity content: 20 ... 75 %

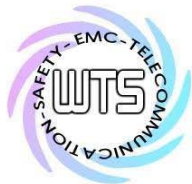
Air pressure: 86 ... 103 kPa

Power supply: Adaptor (I/P: AC 100-240 V / 50-60 Hz / 0.6 A,
O/P: 48 V / 0.4 A)

Extreme conditions parameters: ./.

Special Statement:

- 1. This EUT is a multi-listing based on the original test reports Nr. W6M21004-10574-P-15**
- 2. The relevant Circuitry, PCB Layout, Inner element, and Function of the EUT are exactly the same as the original test reports Nr. W6M21004-10574-P-15 The differences between them are the approval holder and model no. Therefore the test result is also based on the original test reports Nr. W6M21004-10574-P-15 without retesting.**

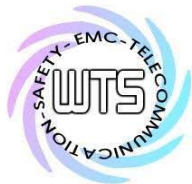


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2.3 Test Equipment List

No.	Test equipment	Type	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2009/9/10	2010/9/9
ETSTW-CE 004	ZWEILEITER-V- NETZNACHBILDUNG TWO- LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2010/3/2	2011/3/1
ETSTW-CE 005	Line-Impedance Stabilisation Network	NNBM 8126D	137	Schwarzbeck	2009/9/9	2010/9/8
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	2010/5/8	2011/5/7
ETSTW-CE 007	SPECTRUM ANALYZER 5GHz	FSB	849670/001	R&S	Pre-test Use NCR	
ETSTW-CE 008	HF-EICHLITUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Function Test	
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2009/7/21	2010/7/20
ETSTW-CE 015	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T8-02	20307	FCC	2009/9/12	2010/9/11
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2009/9/9	2010/9/8
ETSTW-RE 002	Function Generator	33220A	MY43004982	Agilent	Function Test	
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2009/10/1	2010/9/30
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2009/9/18	2010/9/17
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2009/9/11	2010/9/10
ETSTW-RE 006	Attenuator 10dB	50HF-010-5N-1	None	STEP	2010/3/5	2011/3/4
ETSTW-RE 010	ABSORBING CLAMP	MDS 21	3469	Schwarzbeck	2009/9/11	2010/9/10
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	Function Test	
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Function Test	
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2009/10/1	2010/9/30
ETSTW-RE 020	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	Function Test	
ETSTW-RE 021	SWEEP GENERATOR	SWM05	835130/010	R&S	2009/8/19	2010/8/18
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	EMCO	2009/8/14	2011/8/13
ETSTW-RE 028	Log-Periodic Dipole Array Antenna	3148	34429	EMCO	2010/4/14	2011/4/13
ETSTW-RE 029	Biconical Antenna	3109	33524	EMCO	2010/4/14	2011/4/13
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	EMCO	2010/3/2	2011/3/1
ETSTW-RE 032	Millivoltmeter	URV 55	849086/013	R&S	2009/8/23	2010/8/22
ETSTW-RE 033	WaveRunner 6000A Serise Oscilloscope	WAVERUNNER 6100A	LCRY0604P14508	LeCroy	2009/6/15	2010/6/14
ETSTW-RE 034	Power Sensor	URV5-Z4	839313/006	R&S	2009/8/23	2010/8/22
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2010/1/13	2011/1/12
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2010/4/29	2011/4/28
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2009/5/21	2010/5/20
ETSTW-RE 047	PSA SERIES SPECTRUM ANALYZER	E4445A	MY46181369	Agilent	2009/6/15	2010/6/14
ETSTW-RE 048	Triple Loop Antenna	HXYZ 9170	HXYZ 9170-134	Schwarzbeck	2009/8/31	2010/8/30
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	2010/4/13	2011/4/12



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ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2010/3/5	2011/3/4
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2010/3/5	2011/3/4
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2009/6/10	2010/6/09
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	Pre-test Use NCR	
ETSTW-RE 061	Amplifier Module	CHC 1	None	ETS	2009/11/12	2010/11/11
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2009/11/12	2010/11/11
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function Test	
ETSTW-RE 065	Amplifier	AMF-6F-18002650-25-10P	941608	MITEQ	2010/4/13	2011/4/12
ETSTW-RE 066	Highpass Filter	H1G013G1	206015	MICROWAVE CIRCUITS, INC.	2010/3/5	2011/3/4
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2009/10/2	2010/10/1
ETSTW-RE 073	Power Meter	N1911A	MY45100769	Agilent	2010/1/7	2011/1/6
ETSTW-RE 074	Power Sensor	N1921A	MY45241198	Agilent	2010/1/7	2011/1/6
ETSTW-RE 081	Highpass Filter	H03G13G1	4260-02 DC0428	MICROWAVE CIRCUITS, INC.	2010/3/5	2011/3/4
ETSTW-RE 091	Match Pad	MDCS1500	None	WOKEN	Function Test	
ETSTW-RE 092	Match Pad	MDCS1510	None	WOKEN	Function Test	
ETSTW-RE 096	SIGNAL GENERATOR	SMIQ 03B	102274	R&S	2009/6/5	2010/6/4
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2010/3/5	2011/3/4
ETSTW-RE 105	2.4GHz Notch Filter	NO124411	39555	MICROWAVE CIRCUITS, INC.	2010/3/25	2011/3/24
ETSTW-RE 106	Humidity Temperature Meter	TES-1366	091011113	TES	2010/3/25	2011/3/24
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2009/9/22	2010/9/21
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849-822/851-40/12+9SS	3	WI	Function Test	
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	Function Test	
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5-1875.5/1884.5-32/5SS	3	WI	Function Test	
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1-904.25-50/8SS	1	WI	Function Test	
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2009/9/21	2010/9/20
ETSTW-Cable 002	Microwave Cable	SUCOFLEX 104 (S_Cable 7)	238093	HUBER+SUHNER	2009/9/16	2010/9/15
ETSTW-Cable 003	Microwave Cable	SUCOFLEX 104 (S_Cable 11)	209953	HUBER+SUHNER	2009/9/16	2010/9/15
ETSTW-Cable 006	Microwave Cable	SUCOFLEX 104 (S_Cable 8)	238095	HUBER+SUHNER	2010/3/5	2011/3/4
ETSTW-Cable 010	BNC Cable	5 M BNC Cable	None	JYE BAO CO.,LTD.	2010/3/5	2011/3/4
ETSTW-Cable 011	BNC Cable	BNC Cable 1	None	JYE BAO CO.,LTD.	2009/8/20	2010/8/19
ETSTW-Cable 012	BNC Cable	BNC Cable 2	None	JYE BAO CO.,LTD.	2009/8/20	2010/8/19
ETSTW-Cable 013	Microwave Cable	SUCOFLEX 104 (S_Cable 5)	232345	HUBER+SUHNER	2010/3/5	2011/3/4
ETSTW-Cable 022	N TYPE Cable	OATS Cable 3	0002	JYE BAO CO.,LTD.	2010/3/5	2011/3/4
ETSTW-Cable 039	Microwave Cable	SUCOFLEX 104 (S_Cable 19)	316739	HUBER+SUHNER	2010/3/5	2011/3/4
WTSTW-SW 001	EMI TEST SOFTWARE	Harmonics-1000	None	EMC PARTNER	HARCS Version 4.16 Firmware Version 2.18	



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WTSTW-SW 002	EMI TEST SOFTWARE	EZ EMC	None	Farad	Version ETS-03A1
WTSTW-SW 003	EMS TEST SOFTWARE	i2	None	AUDIX	Version 3.2007-8-17b
WTSTW-SW 005	GSM Fading Level Correction	GSMFadLevCor	None	R&S	Version 1.66



2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-2003 using a 50 μ H LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

RADIATION INTERFERENCE: The test procedure used was according to ANSI STANDARD C63.4-2003 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB μ V) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

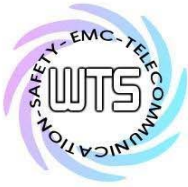
Freq (MHz)	METER READING + ACF + CABLE LOSS (to the receiver) = FS
33	20 dB μ V + 10.36 dB + 6 dB = 36.36 dB μ V/m @3m

The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2003 Section 13.1.2. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.
- (4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

Measurements were made by Worldwide Testing Services(Taiwan) Co., Ltd. at the registered open field test site located at No.5-1, Shuang Sing Village, LiShuei Rd., Wanli Township, Taipei County 207, Taiwan (R.O.C.) The Registration Number: 930600.



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When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

Average = Peak + Duty Factor

Duty Factor = $20 \log (\text{dwell time}/T)$

T = 100ms when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

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3 Test results (enclosure)

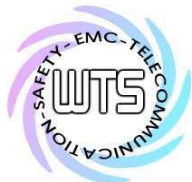
TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)(3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Equivalent radiated Power	15.247(b)(3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spurious Emissions radiated – Transmitter operating	15.247(c): 15.209	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Band Edge Measurement	15.247(c)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum 6 dB Bandwidth	15.247(a)(2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Peak Power Spectral Density	15.247(d)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiated Emission from Digital Part	15.109	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power Line Conducted Emission	15.207	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Note:

1. This EUT is 2*2 spatial MIMO (2Tx&2Rx) without beam forming function. That operates dual chain configuration. The Pre-test was performed to determine the worst case mode from all possible combinations between all available modulations, data rates, bandwidths, and spatial stream modes.
2. The worst case mode was base on the investigations by measuring the peak and average power according to the description above. The detail of chosen mode for full testing are as below:

Mode	Available channel	Chosen Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1,6,11	DSSS	DQPSK, DBPSK	up to 11
802.11g	1 to 11	1,6,11	OFDM	BPSK, QPSK, 16QAM, 64QAM	up to 54
802.11n (20MHz)	1 to 11	1,6,11	OFDM	BPSK, QPSK, 16QAM, 64QAM	up to 300
802.11n (40MHz)	1 to 7	1,4,7	OFDM	BPSK, QPSK, 16QAM, 64QAM	up to 300

3. For 802.11n both antennas operate simultaneously, when performed the relevant conducted measurement(ex. RF output power, peak power spectral density....and so on), we basically use a splitter to combine each antenna port in order to get the total measuring results.



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3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

The power was measured with modulation (declared by the applicant).

Mode A:

Antenna Port I:

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	[dBm]	[dBm]	[dBm]
		26.47	26.12	29.37

Antenna Port II:

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	[dBm]	[dBm]	[dBm]
		26.10	26.01	26.33

Mode B:

Antenna Port I:

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	[dBm]	[dBm]	[dBm]
		22.99	27.18	23.44

Antenna Port II:

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	[dBm]	[dBm]	[dBm]
		23.02	27.29	24.17



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Mode C:

Antenna Port I+II:

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	[dBm]	[dBm]	[dBm]
		23.55	23.64	23.54

Mode D:

Antenna Port I+II:

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	[dBm]	[dBm]	[dBm]
		22.95	22.95	23.02

Mode A

Test condition $T_{nom} = \text{--}^{\circ}\text{C}, V_{nom} = \text{--} \text{ V}$	Signal Field strength TX highest power mode $\text{dB } \mu\text{ V/m}$
Frequency [MHz]	--
--	

Mode B

Test condition $T_{nom} = \text{--}^{\circ}\text{C}, V_{nom} = \text{--} \text{ V}$	Signal Field strength TX highest power mode $\text{dB } \mu\text{ V/m}$
Frequency [MHz]	--
--	

Mode C

Test condition $T_{nom} = \text{--}^{\circ}\text{C}, V_{nom} = \text{--} \text{ V}$	Signal Field strength TX highest power mode $\text{dB } \mu\text{ V/m}$
Frequency [MHz]	--
--	



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Mode D

Test condition $T_{nom} = \text{-- } ^\circ\text{C}, V_{nom} = \text{-- } \text{V}$	Signal Field strength TX highest power mode $\text{dB } \mu\text{V/m}$
Frequency [MHz]	--
--	

Limits:

Frequency MHz	Power dBm
902 - 928	30
2400 – 2483.5	30
5725 – 5850	30

In case of employing transmitter antennas having antenna gain > 6 dBi and using fixed point-to point operation consider §15.247 (b)(4)

Test equipment used: ETSTW-RE 055

Explanation: The diagrams for the peak output power measurements are included in Appendix.



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3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

EIRP = 29.37 dBm + 2 dBi

= 31.37 dBm

Limit: EIRP = +36 dBm for Antenna gain <6dBi

Test equipment used: ETSTW-RE 055

3.3 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

$$S = \frac{PG}{4\pi R^2}$$

S – Power Density

P – Output power ERP

R – Distance

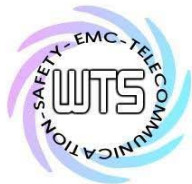
D – Cable Loss

AG – Antenna Gain

Item	Unit	Value	Remarks
P	mW	864.968	Peak value
D	dB		
AG	dBi	2	
G		1.6	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.2753	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm ²)
1500 – 100.000	1.0



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3.4 Transmitter Radiated Emissions in Restricted Bands

FCC Rules: 15.247 (c), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 26500 MHz.

For radiated emission tests, the analyzer setting was as followings:

Frequency \leq 1 GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements)

Frequency $>$ 1 GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements)

Frequency $>$ 1 GHz , RBW:1 MHz , VBW: 10 Hz (Average measurements)

Limits.

For frequencies below 1GHz:

Frequency of Emission (MHz)	Field strength (microvolts/meter)	Field Strength (dB microvolts/meter)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above	500	54.0

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of Digit Transmission Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the setting shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty cycle correction = $20 \log (\text{dwell time} / 100\text{ms})$

Note: No duty cycle correction was added to the reading of this EUT.

Explanation: see attached diagrams in Appendix.



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3.5 Spurious Emissions (tx)

Spurious emission was measured with modulation (declared by manufacturer).

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))

FCC Rule: 15.247(c), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement.

Limits:

For frequencies above 1GHz (Peak measurements).

Modified Limit for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

For frequencies above 1GHz (Average measurements).

Max. reading – 20dB

Max. reading – 20 dB

Guidance on Measurement of Digit Transmission Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty Cycle correction = $20 \log (\text{dwell time}/100\text{ms})$

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 018, ETSTW-RE 028,
ETSTW-RE 029, ETSTW-RE 030, ETSTW-RE 042, ETSTW-RE 043,
ETSTW-RE 044

Note: No duty cycle correction was added to the reading of EUT.



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SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance with point 2.3.

Calculation of test results:

Such factors like antenna correction, cable loss, external attenuation etc. are already included in the provided measurement results. This is done by using validated test software and calibrated test system according the accreditation requirements.

The peak and average spurious emission plots was measured with the average limits.

In the Table being listed the critical peak and average value and exhibit the compliance with the above calculated Limits.

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Correction Factor".

Summary table with radiated data of the test plots

Mode A

Antenna Port I with antenna a:

Model: KWG6000

Date: 2010/4/23

Mode: 802.11b CH1

Temperature: 24 °C Engineer: Robert

Polarization: Horizontal

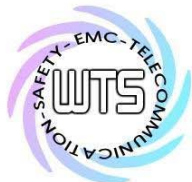
Humidity: 60 %

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.47	peak	15.21	37.68	43.50	-5.82	140	150
406.6132	12.39	peak	19.01	31.40	46.00	-14.60	120	150
984.5691	6.37	peak	29.02	35.39	54.00	-18.61	340	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	51.11	---	-3.26	47.85	---	74.00	54.00	-26.15	180	150
4825.6510	63.40	54.40	-4.25	59.15	50.15	74.00	54.00	-3.85	180	150
7236.0000	47.64	---	-0.76	46.88	---	74.00	54.00	-27.12	230	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
170.6813	25.42	peak	14.80	40.22	43.50	-3.28	130	150
406.6132	13.22	peak	19.01	32.23	46.00	-13.77	170	150
983.1662	7.47	peak	29.00	36.47	54.00	-17.53	230	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	48.82	---	-3.26	45.56	---	74.00	54.00	-28.44	110	150
4825.6510	59.34	52.34	-4.25	55.09	48.09	74.00	54.00	-5.91	200	150
7236.0000	47.47	---	-0.76	46.71	---	74.00	54.00	-27.29	310	150

Mode: 802.11b CH6

Polarization: Horizontal

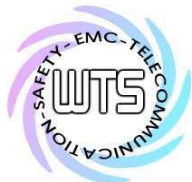
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.48	peak	15.21	37.69	43.50	-5.81	170	150
406.6132	13.74	peak	19.01	32.75	46.00	-13.25	120	150
981.7635	5.40	peak	28.98	34.38	54.00	-19.62	180	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.80	---	-3.08	47.72	---	74.00	54.00	-26.28	180	150
4873.7480	60.65	52.76	-2.09	58.56	50.67	74.00	54.00	-3.33	190	150
7311.0000	47.56	---	1.07	48.63	---	74.00	54.00	-25.37	260	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
168.5170	25.66	peak	14.98	40.64	43.50	-2.86	170	150
403.8077	12.87	peak	18.93	31.80	46.00	-14.20	160	150
610.0200	6.15	peak	23.67	29.82	46.00	-16.18	120	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	48.71	---	-3.08	45.63	---	74.00	54.00	-28.37	120	150
4873.7480	56.33	50.83	-4.09	52.24	46.74	74.00	54.00	-7.26	160	150
7311.0000	48.30	---	-0.93	47.37	---	74.00	54.00	-26.63	230	150



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Mode: 802.11b CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.62	peak	15.21	37.83	43.50	-5.67	180	150
406.6132	12.93	peak	19.01	31.94	46.00	-14.06	260	150
978.9578	6.06	peak	28.95	35.01	54.00	-18.99	150	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	48.75	---	-2.89	45.86	---	74.00	74.00	-28.14	230	150
4927.7020	65.33	54.90	-4.03	61.30	50.87	74.00	54.00	-3.13	190	150
7386.0000	47.74	---	-1.03	46.71	---	74.00	54.00	-27.29	160	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	24.63	peak	15.08	39.71	43.50	-3.79	100	150
405.2105	12.65	peak	18.97	31.62	46.00	-14.38	240	150
976.1522	5.93	peak	28.91	34.84	54.00	-19.16	270	150

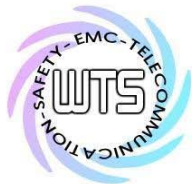
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	47.87	---	-2.89	44.98	---	74.00	54.00	-29.02	170	150
4923.9220	67.11	54.49	-4.03	63.08	50.46	74.00	54.00	-3.54	250	150
7386.0000	46.71	---	-1.03	45.68	---	74.00	54.00	-28.32	120	150

Antenna Port I with antenna b:

Mode: 802.11b CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.47	peak	15.21	37.68	43.50	-5.82	170	150
405.2105	12.67	peak	18.97	31.64	46.00	-14.36	160	150
973.3467	6.70	peak	28.87	35.57	54.00	-18.43	200	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	50.61	---	-3.26	47.35	---	74.00	54.00	-26.65	200	150
4827.6360	63.90	52.88	-4.25	59.65	48.63	74.00	54.00	-5.37	320	150
7236.0000	46.68	---	-0.76	45.92	---	74.00	54.00	-28.08	210	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.3528	26.28	peak	15.11	41.39	43.50	-2.11	160	150
406.6132	13.22	peak	19.01	32.23	46.00	-13.77	160	150
978.9578	6.08	peak	28.95	35.03	54.00	-18.97	200	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	49.77	---	-3.26	46.51	---	74.00	54.00	-27.49	320	150
4827.6430	66.94	54.71	-4.25	62.69	50.46	74.00	54.00	-3.54	210	150
7236.0000	47.02	---	-0.76	46.26	---	74.00	54.00	-27.74	110	150

Mode: 802.11b CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.48	peak	15.21	37.69	43.50	-5.81	180	150
405.2105	13.01	peak	18.97	31.98	46.00	-14.02	220	150
962.1242	5.76	peak	28.73	34.49	54.00	-19.51	170	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.67	---	-3.08	47.59	---	74.00	54.00	-26.41	160	150
4873.9300	63.59	49.75	-4.09	59.50	45.66	74.00	54.00	-8.34	320	150
7311.0000	47.28	---	-0.93	46.35	---	74.00	54.00	-27.65	350	150



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Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
168.5170	25.66	peak	14.98	40.64	43.50	-2.86	190	150
409.4190	15.78	peak	19.09	34.87	46.00	-11.13	340	150
971.9438	7.86	peak	28.86	36.72	54.00	-17.28	280	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	49.51	---	-3.08	46.43	---	74.00	54.00	-27.57	170	150
4873.8720	66.54	54.81	-4.09	62.45	50.72	74.00	54.00	-3.28	220	150
7311.0000	47.31	---	-0.93	46.38	---	74.00	54.00	-27.62	120	150

Mode: 802.11b CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.62	peak	15.21	37.83	43.50	-5.67	120	150
406.6132	12.93	peak	19.01	31.94	46.00	-14.06	160	150
960.7214	8.38	peak	28.71	37.09	54.00	-16.91	250	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	49.43	---	-2.89	46.54	---	74.00	54.00	-27.46	120	150
4924.1490	62.53	49.45	-4.03	58.50	45.42	74.00	54.00	-8.58	320	150
7386.0000	47.38	---	-1.03	46.35	---	74.00	54.00	-27.65	100	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	26.13	peak	15.08	41.21	43.50	-2.29	140	150
406.6132	13.72	peak	19.01	32.73	46.00	-13.27	140	150
973.3467	7.62	peak	28.87	36.49	54.00	-17.51	180	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	48.10	---	-2.89	45.21	---	74.00	54.00	-28.79	170	150
4923.9240	66.24	53.51	-4.03	62.21	49.48	74.00	54.00	-4.52	220	150
7386.0000	47.42	---	-1.03	46.39	---	74.00	54.00	-27.61	130	150

Antenna Port II with antenna a

Mode: 802.11b CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.1884	22.40	peak	15.25	37.65	43.50	-5.85	310	150
406.6132	13.57	peak	19.01	32.58	46.00	-13.42	340	150
983.1662	6.33	peak	29.00	35.33	54.00	-18.67	240	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	49.40	---	-3.26	46.14	---	74.00	54.00	-27.86	170	150
4824.1770	65.36	53.81	-4.26	61.10	49.55	74.00	54.00	-4.45	190	150
7236.0000	46.52	---	-0.76	45.76	---	74.00	54.00	-28.24	140	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	25.96	peak	15.08	41.04	43.50	-2.46	170	150
406.6132	13.19	peak	19.01	32.20	46.00	-13.80	120	150
973.3467	5.72	peak	28.87	34.59	54.00	-19.41	130	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	48.35	---	-3.26	45.09	---	74.00	54.00	-28.91	190	150
4825.6510	60.91	52.91	-4.25	56.66	48.66	74.00	54.00	-5.34	320	150
7236.0000	46.48	---	-0.76	45.72	---	74.00	54.00	-28.28	240	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Mode: 802.11b CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2705	22.48	peak	15.18	37.66	43.50	-5.84	240	150
405.2105	12.26	peak	18.97	31.23	46.00	-14.77	150	150
978.9578	6.37	peak	28.95	35.32	54.00	-18.68	190	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.11	---	-3.08	47.03	---	74.00	54.00	-26.97	120	150
4872.9230	67.08	54.24	-4.09	62.99	50.15	74.00	54.00	-3.85	190	150
7311.0000	47.90	---	-0.93	46.97	---	74.00	54.00	-27.03	280	150

Polarization: Vertical

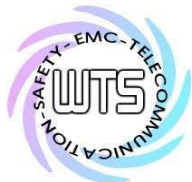
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
171.2224	24.73	peak	14.74	39.47	43.50	-4.03	340	150
406.6132	12.91	peak	19.01	31.92	46.00	-14.08	140	150
988.7776	6.74	peak	29.07	35.81	54.00	-18.19	190	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	48.71	---	-3.08	45.63	---	74.00	54.00	-28.37	170	150
4873.8780	66.81	54.98	-4.09	62.72	50.89	74.00	54.00	-3.11	250	150
7311.0000	46.66	---	-0.93	45.73	---	74.00	54.00	-28.27	130	150

Mode: 802.11b CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.52	peak	15.21	37.73	43.50	-5.77	240	150
408.0160	13.90	peak	19.05	32.95	46.00	-13.05	140	150
978.9578	5.37	peak	28.95	34.32	54.00	-19.68	320	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	48.75	---	-2.89	45.86	---	74.00	54.00	-28.14	140	150
4927.7020	67.83	54.90	-4.03	63.80	50.87	74.00	54.00	-3.13	190	150
7386.0000	47.74	---	-1.03	46.71	---	74.00	54.00	-27.29	160	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	25.92	peak	15.08	41.00	43.50	-2.50	300	150
406.6132	13.25	peak	19.01	32.26	46.00	-13.74	300	150
980.3606	5.41	peak	28.96	34.37	54.00	-19.63	180	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	47.87	---	-2.89	44.98	---	74.00	54.00	-29.02	170	150
4921.8440	67.11	53.11	-4.03	63.08	49.08	74.00	54.00	-4.92	190	150
7386.0000	46.71	---	-1.03	45.68	---	74.00	54.00	-28.32	120	150

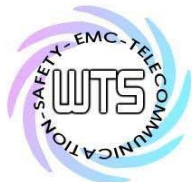
Antenna Port II with antenna b

Mode: 802.11b CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.1884	22.40	peak	15.25	37.65	43.50	-5.85	310	150
406.6132	13.57	peak	19.01	32.58	46.00	-13.42	150	150
990.1803	6.01	peak	29.09	35.10	54.00	-18.90	340	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	49.40	---	-3.26	46.14	---	74.00	54.00	-27.86	170	150
4824.1770	65.36	51.81	-4.26	61.10	47.55	74.00	54.00	-6.45	190	150
7236.0000	46.52	---	-0.76	45.76	---	74.00	54.00	-28.24	290	150



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Registration number: W6D21009-10909-P-15

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Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	25.96	peak	15.08	41.04	43.50	-2.46	170	150
405.2105	12.92	peak	18.97	31.89	46.00	-14.11	340	150
1000.0000	10.06	peak	29.22	39.28	54.00	-14.72	120	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	48.35	---	-3.26	45.09	---	74.00	54.00	-28.91	190	150
4824.0030	70.92	54.08	-4.26	66.66	49.82	74.00	54.00	-4.18	250	150
7236.0000	46.48	---	-0.76	45.72	---	74.00	54.00	-28.28	240	150

Mode: 802.11b CH6

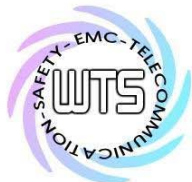
Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2705	22.48	peak	15.18	37.66	43.50	-5.84	240	150
408.0160	13.76	peak	19.05	32.81	46.00	-13.19	140	150
978.9578	6.37	peak	28.95	35.32	54.00	-18.68	170	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.11	---	-3.08	47.03	---	74.00	54.00	-26.97	120	150
4873.9230	67.08	54.24	-4.09	62.99	50.15	74.00	54.00	-3.85	190	150
7311.0000	47.90	---	-0.93	46.97	---	74.00	54.00	-27.03	280	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
171.2224	24.73	peak	14.74	39.47	43.50	-4.03	340	150
408.0160	13.88	peak	19.05	32.93	46.00	-13.07	140	150
970.5411	6.16	peak	28.84	35.00	54.00	-19.00	190	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	48.71	---	-3.08	45.63	---	74.00	54.00	-28.37	170	150
4873.8780	71.81	55.98	-4.09	67.72	51.89	74.00	54.00	-2.11	250	150
7311.0000	46.66	---	-0.93	45.73	---	74.00	54.00	-28.27	130	150

Mode: 802.11b CH11

Polarization: Horizontal

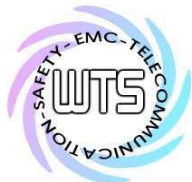
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.52	peak	15.21	37.73	43.50	-5.77	240	150
406.6132	13.15	peak	19.01	32.16	46.00	-13.84	320	150
973.3467	5.62	peak	28.87	34.49	54.00	-19.51	140	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	48.75	---	-2.89	45.86	---	74.00	54.00	-28.14	230	150
4927.7020	67.83	54.90	-4.03	63.80	50.87	74.00	54.00	-3.13	190	150
7386.0000	47.74	---	-1.03	46.71	---	74.00	54.00	-27.29	160	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	25.92	peak	15.08	41.00	43.50	-2.50	300	150
406.6132	13.25	peak	19.01	32.26	46.00	-13.74	250	150
984.5691	6.26	peak	29.02	35.28	54.00	-18.72	340	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	47.87	---	-2.89	44.98	---	74.00	54.00	-29.02	170	150
4923.9220	70.61	54.49	-4.03	66.58	50.46	74.00	54.00	-3.54	250	150
7386.0000	46.71	---	-1.03	45.68	---	74.00	54.00	-28.32	120	150



Worldwide Testing Services(Taiwan) Co., Ltd.

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FCC ID: WNQ-KWG6000

Mode B

Antenna Port I with antenna a:

Mode: 802.11g CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.65	peak	15.21	37.86	43.50	-5.64	220	150
405.2105	11.76	peak	18.97	30.73	46.00	-15.27	340	150
960.7214	8.30	peak	28.71	37.01	54.00	-16.99	270	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	51.33	---	-3.26	48.07	---	74.00	54.00	-25.93	170	150
4825.6510	63.92	51.79	-4.25	59.67	47.54	74.00	54.00	-6.46	35	150
7236.0000	46.19	---	-0.76	45.43	---	74.00	54.00	-28.57	120	150

Polarization: Vertical

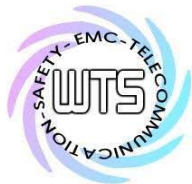
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.3528	27.09	peak	15.11	42.20	43.50	-1.30	110	150
406.6132	13.27	peak	19.01	32.28	46.00	-13.72	200	150
984.5691	6.01	peak	29.02	35.03	54.00	-18.97	130	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	49.25	---	-3.26	45.99	---	74.00	54.00	-28.01	190	150
4825.4300	58.38	49.62	-4.25	54.13	45.37	74.00	54.00	-8.63	35	150
7236.0000	48.15	---	-0.76	47.39	---	74.00	54.00	-26.61	300	150

Mode: 802.11g CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.67	peak	15.21	37.88	43.50	-5.62	120	150
405.2105	12.93	peak	18.97	31.90	46.00	-14.10	320	150
981.7635	5.84	peak	28.98	34.82	54.00	-19.18	140	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	49.59	---	-3.08	46.51	---	74.00	54.00	-27.49	300	150
4875.3130	60.33	52.85	-4.08	56.25	48.77	74.00	54.00	-5.23	35	150
7311.0000	47.80	---	-0.93	46.87	---	74.00	54.00	-27.13	150	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2706	26.00	peak	15.18	41.18	43.50	-2.32	280	150
406.6132	12.88	peak	19.01	31.89	46.00	-14.11	230	150
964.9298	5.64	peak	28.76	34.40	54.00	-19.60	180	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	49.08	---	-3.08	46.00	---	74.00	54.00	-28.00	290	150
4865.7310	56.37	50.37	-4.12	52.25	46.25	74.00	54.00	-7.75	35	150
7311.0000	47.83	---	-0.93	46.90	---	74.00	54.00	-27.10	130	150

Mode: 802.11g CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2706	22.80	peak	15.18	37.98	43.50	-5.52	300	150
403.8077	12.62	peak	18.93	31.55	46.00	-14.45	200	150
964.9298	6.17	peak	28.76	34.93	54.00	-19.07	190	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.54	---	-3.08	47.46	---	74.00	54.00	-26.54	250	150
4881.2160	59.89	49.45	-4.06	55.83	45.39	74.00	54.00	-8.61	100	150
7386.0000	47.93	---	-1.03	46.90	---	74.00	54.00	-27.10	170	150



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Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
167.9760	26.04	peak	15.01	41.05	43.50	-2.45	190	150
403.8077	11.69	peak	18.93	30.62	46.00	-15.38	300	150
967.7355	6.14	peak	28.80	34.94	54.00	-19.06	170	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	49.86	---	-2.89	46.97	---	74.00	54.00	-27.03	200	150
4921.8440	59.14	50.14	-4.03	55.11	46.11	74.00	54.00	-7.89	260	150
7386.0000	47.16	---	-1.03	46.13	---	74.00	54.00	-27.87	320	150

Antenna Port I with antenna b :

Mode: 802.11g CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.65	peak	15.21	37.86	43.50	-5.64	180	150
406.6132	12.94	peak	19.01	31.95	46.00	-14.05	270	150
976.1522	5.55	peak	28.91	34.46	54.00	-19.54	340	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	50.79	---	-3.26	47.53	---	74.00	54.00	-26.47	130	150
4825.5660	57.57	46.26	-4.25	53.32	42.01	74.00	54.00	-11.99	320	150
7236.0000	46.97	---	-0.76	46.21	---	74.00	54.00	-27.79	330	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.3528	25.59	peak	15.11	40.70	43.50	-2.80	180	150
406.6132	13.27	peak	19.01	32.28	46.00	-13.72	200	150
981.7635	7.97	peak	28.98	36.95	54.00	-17.05	130	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	49.49	---	-3.26	46.23	---	74.00	54.00	-27.77	190	150
4825.6470	61.55	49.26	-4.25	57.30	45.01	74.00	54.00	-8.99	35	150
7236.0000	47.70	---	-0.76	46.94	---	74.00	54.00	-27.06	150	150

Mode: 802.11g CH6

Polarization: Horizontal

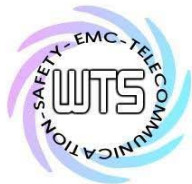
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.67	peak	15.21	37.88	43.50	-5.62	290	150
408.0160	13.08	peak	19.05	32.13	46.00	-13.87	320	150
987.3748	7.03	peak	29.06	36.09	54.00	-17.91	140	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.62	---	-3.08	47.54	---	74.00	54.00	-26.46	170	150
4873.7480	55.58	49.58	-4.09	51.49	45.49	74.00	54.00	-8.51	35	150
7311.0000	47.75	---	-0.93	46.82	---	74.00	54.00	-27.18	120	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2705	24.50	peak	15.18	39.68	43.50	-3.82	260	150
410.8217	15.78	peak	19.13	34.91	46.00	-19.09	270	150
970.5411	5.87	peak	28.84	34.71	54.00	-19.29	110	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	49.58	---	-3.08	46.50	---	74.00	54.00	-27.50	140	150
4877.8450	59.33	49.39	-4.08	55.25	45.31	74.00	54.00	-8.69	35	150
7311.0000	46.70	---	-0.93	45.77	---	74.00	54.00	-28.23	130	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Mode: 802.11g CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2705	22.80	peak	15.18	37.98	43.50	-5.52	170	150
408.0160	14.24	peak	19.05	33.29	46.00	-12.71	190	150
980.3606	6.28	peak	28.96	35.24	54.00	-18.76	200	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	49.43	---	-2.89	46.54	---	74.00	54.00	-27.46	120	150
4928.0550	58.36	47.85	-4.03	54.33	43.82	74.00	54.00	-10.18	35	150
7386.0000	47.46	---	-1.03	46.43	---	74.00	54.00	-27.57	170	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
167.9760	25.04	peak	15.01	40.05	43.50	-3.45	170	150
406.6132	12.83	peak	19.01	31.84	46.00	-14.16	170	150
977.5551	5.00	peak	28.93	33.93	54.00	-20.07	300	150

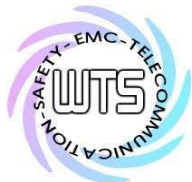
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	47.97	---	-2.89	45.08	---	74.00	54.00	-28.92	120	150
4925.7650	58.66	48.70	-4.03	54.63	44.67	74.00	54.00	-9.33	35	150
7386.0000	47.23	---	-1.03	46.20	---	74.00	54.00	-27.80	130	150

Antenna Port II with antenna a

Mode: 802.11g CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
159.8598	21.11	peak	15.51	36.62	43.50	-6.88	270	150
406.6132	12.94	peak	19.01	31.95	46.00	-14.05	340	150
973.3467	5.56	peak	28.87	34.43	54.00	-19.57	270	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	50.79	---	-3.26	47.53	---	74.00	54.00	-26.47	130	150
4825.5660	57.57	49.26	-4.25	53.32	45.01	74.00	54.00	-8.99	320	150
7236.0000	46.97	---	-0.76	46.21	---	74.00	54.00	-27.79	330	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
171.2222	25.13	peak	14.74	39.87	43.50	-3.63	140	150
405.2105	13.03	peak	18.97	32.00	46.00	-14.00	130	150
981.7635	7.97	peak	28.98	36.95	54.00	-17.05	210	150

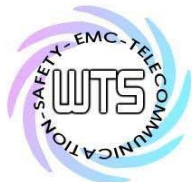
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	49.49	---	-3.26	46.23	---	74.00	54.00	-27.77	190	150
4817.6350	59.58	50.29	-4.28	55.30	46.01	74.00	54.00	-7.99	35	150
7236.0000	47.70	---	-0.76	46.94	---	74.00	54.00	-27.06	150	150

Mode: 802.11g CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.67	peak	15.21	37.88	43.50	-5.62	290	150
406.6132	12.80	peak	19.01	31.81	46.00	-14.19	320	150
974.7495	5.64	peak	28.89	34.53	54.00	-19.47	140	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	52.62	---	-3.08	49.54	---	74.00	54.00	-24.46	300	150
4873.7480	55.58	48.58	-4.09	51.49	44.49	74.00	54.00	-9.51	35	150
7311.0000	47.75	---	-0.93	46.82	---	74.00	54.00	-27.18	120	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2705	24.50	peak	15.18	39.68	43.50	-3.82	260	150
406.6132	12.88	peak	19.01	31.89	46.00	-14.11	270	150
971.9438	6.00	peak	28.86	34.86	54.00	-19.14	140	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	49.58	---	-3.08	46.50	---	74.00	54.00	-27.50	140	150
4877.8450	59.33	49.39	-4.08	55.25	45.31	74.00	54.00	-8.69	35	150
7311.0000	46.70	---	-0.93	45.77	---	74.00	54.00	-28.23	130	150

Mode: 802.11g CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2705	22.80	peak	15.18	37.98	43.50	-5.52	170	150
405.2105	12.29	peak	18.97	31.26	46.00	-14.74	190	150
978.9578	5.71	peak	28.95	34.66	54.00	-19.34	200	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	49.43	---	-2.89	46.54	---	74.00	54.00	-27.46	120	150
4928.0550	58.36	49.85	-4.03	54.33	45.82	74.00	54.00	-8.18	250	150
7386.0000	47.46	---	-1.03	46.43	---	74.00	54.00	-27.57	170	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
167.9760	25.04	peak	15.01	40.05	43.50	-3.45	170	150
405.2105	12.34	peak	18.97	31.31	46.00	-14.69	300	150
980.3606	5.80	peak	28.96	34.76	54.00	-19.24	170	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	47.97	---	-2.89	45.08	---	74.00	54.00	-28.92	120	150
4925.7650	58.66	47.70	-4.03	54.63	43.67	74.00	54.00	-10.33	35	150
7386.0000	47.23	---	-1.03	46.20	---	74.00	54.00	-27.80	130	150

Antenna Port II with antenna b

Mode: 802.11g CH1

Polarization: Horizontal

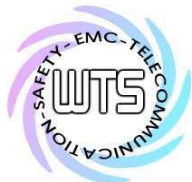
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.75	peak	15.21	37.96	43.50	-5.54	190	150
405.2105	12.29	peak	18.97	31.26	46.00	-14.74	140	150
967.7355	5.60	peak	28.80	34.40	54.00	-19.60	320	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	49.43	---	-3.26	46.17	---	74.00	54.00	-27.83	190	150
4825.7020	59.38	50.29	-4.25	55.13	46.04	74.00	54.00	-7.96	35	150
7236.0000	47.60	---	-0.76	46.84	---	74.00	54.00	-27.16	190	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.3528	26.20	peak	15.11	41.31	43.50	-2.19	270	150
406.6132	13.12	peak	19.01	32.13	46.00	-13.87	160	150
981.7635	5.62	peak	28.98	34.60	54.00	-19.40	140	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	48.82	---	-3.26	45.56	---	74.00	54.00	-28.44	190	150
4824.8430	64.47	54.03	-4.26	60.21	49.77	74.00	54.00	-4.23	35	150
7236.0000	46.45	---	-0.76	45.69	---	74.00	54.00	-28.31	120	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Mode: 802.11g CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	14.75	peak	15.08	29.83	43.50	-13.67	320	150
413.6272	16.37	peak	19.20	35.57	46.00	-10.43	190	150
992.9860	7.65	peak	29.13	36.78	54.00	-17.22	320	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.33	---	-3.08	47.25	---	74.00	54.00	-26.75	140	150
4877.9650	59.85	48.83	-4.07	55.78	44.76	74.00	54.00	-9.24	180	150
7311.0000	47.11	---	-0.93	46.18	---	74.00	54.00	-27.82	260	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
167.4348	25.30	peak	15.05	40.35	43.50	-3.15	130	150
413.6272	16.08	peak	19.20	35.28	46.00	-10.72	230	150
984.5691	7.04	peak	29.02	36.06	54.00	-17.94	320	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	48.55	---	-3.08	45.47	---	74.00	54.00	-28.53	160	150
4875.7470	63.34	53.22	-4.08	59.26	49.14	74.00	54.00	-4.86	35	150
7311.0000	46.70	---	-0.93	45.77	---	74.00	54.00	-28.23	160	150

Mode: 802.11g CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.74	peak	15.21	37.95	43.50	-5.55	320	150
405.2105	12.27	peak	18.97	31.24	46.00	-14.76	140	150
974.7495	6.01	peak	28.89	34.90	54.00	-19.10	330	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	49.30	---	-2.89	46.41	---	74.00	54.00	-27.59	350	150
4925.6660	61.12	51.66	-4.03	57.09	47.63	74.00	54.00	-6.37	190	150
7386.0000	48.13	---	-1.03	47.10	---	74.00	54.00	-26.90	120	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.8117	23.47	peak	15.15	38.62	43.50	-4.88	180	150
408.0160	14.65	peak	19.05	33.70	46.00	-12.30	190	150
987.3748	7.26	peak	29.06	36.32	54.00	-17.68	210	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	48.37	---	-2.89	45.48	---	74.00	54.00	-28.52	130	150
4927.7300	62.97	52.39	-4.03	58.94	48.36	74.00	54.00	-5.64	250	150
7386.0000	47.25	---	-1.03	46.22	---	74.00	54.00	-27.78	130	150

Mode C

Antenna Port I + II with antenna a

Mode: 802.11n 20 CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.95	peak	15.21	38.16	43.50	-5.34	290	150
413.6272	15.39	peak	19.20	34.59	46.00	-11.41	120	150
969.1382	6.28	peak	28.82	35.10	54.00	-18.90	340	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	51.27	---	-3.26	48.01	---	74.00	54.00	-25.99	160	150
4825.6510	62.01	50.26	-4.25	57.76	46.01	74.00	54.00	-7.99	210	150
7236.0000	47.84	---	-0.76	47.08	---	74.00	54.00	-26.92	290	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.8117	26.23	peak	15.15	41.38	43.50	-2.12	180	150
408.0160	14.10	peak	19.05	33.15	46.00	-12.85	350	150
970.5411	6.21	peak	28.84	35.05	54.00	-18.95	150	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	47.93	---	-3.26	44.67	---	74.00	54.00	-29.33	120	150
4817.6350	58.86	50.85	-4.28	54.58	46.57	74.00	54.00	-7.43	210	150
7236.0000	47.05	---	-0.76	46.29	---	74.00	54.00	-27.71	320	150

Mode: 802.11n 20 CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
167.4348	14.81	peak	15.05	29.86	43.50	-13.64	130	150
406.6132	12.75	peak	19.01	31.76	46.00	-14.24	170	150
976.1522	6.61	peak	28.91	35.52	54.00	-18.48	240	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.52	---	-3.08	47.44	---	74.00	54.00	-26.56	180	150
4877.8250	59.36	50.25	-4.08	55.28	46.17	74.00	54.00	-7.83	100	150
7311.0000	47.89	---	-0.93	46.96	---	74.00	54.00	-27.04	160	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	26.42	peak	15.21	41.63	43.50	-1.87	180	150
409.4190	14.31	peak	19.09	33.40	46.00	-12.60	170	150
983.1662	5.63	peak	29.00	34.63	54.00	-19.37	250	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	49.53	---	-3.08	46.45	---	74.00	54.00	-27.55	260	150
4873.7480	55.40	45.40	-4.09	51.31	41.31	74.00	54.00	-12.69	260	150
7311.0000	47.47	---	-0.93	46.54	---	74.00	54.00	-27.46	110	150

Mode: 802.11n 20 CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	14.40	peak	15.21	29.61	43.50	-13.89	140	150
402.4048	11.60	peak	18.90	30.50	46.00	-15.50	170	150
960.7214	6.80	peak	28.71	35.51	54.00	-18.49	300	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	49.07	---	-2.89	46.18	---	74.00	54.00	-27.82	120	150
4928.8600	61.81	54.80	-4.03	57.77	50.77	74.00	54.00	-3.23	180	150
7356.0000	47.40	---	-0.99	46.41	---	74.00	54.00	-27.59	140	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	25.48	peak	15.08	40.56	43.50	-2.94	170	150
406.6132	13.68	peak	19.01	32.69	46.00	-13.31	160	150
978.9578	5.50	peak	28.95	34.45	54.00	-19.55	140	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	46.96	---	-2.89	44.07	---	74.00	54.00	-29.93	100	150
4921.8440	58.83	50.83	-4.03	54.80	46.80	74.00	54.00	-7.20	180	150
7356.0000	47.39	---	-0.99	46.40	---	74.00	54.00	-27.60	250	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Antenna Port I + II with antenna b

Mode: 802.11n 20 CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	22.95	peak	15.21	38.16	43.50	-5.34	340	150
412.2243	15.29	peak	19.17	34.46	46.00	-11.36	120	150
987.3748	6.18	peak	29.06	35.24	54.00	-18.76	340	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	50.34	---	-3.26	47.08	---	74.00	54.00	-26.92	190	150
4825.6820	60.22	48.30	-4.25	55.97	44.05	74.00	54.00	-9.95	350	150
7236.0000	47.50	---	-0.76	46.74	---	74.00	54.00	-27.26	110	150

Polarization: Vertical

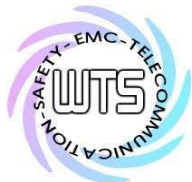
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.8117	26.23	peak	15.15	41.38	43.50	-2.12	130	150
412.2243	16.12	peak	19.17	35.29	46.00	-10.71	350	150
978.9578	7.52	peak	28.95	36.47	54.00	-17.53	140	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	48.43	---	-3.26	45.17	---	74.00	54.00	-28.83	190	150
4825.9470	64.58	53.53	-4.25	60.33	49.28	74.00	54.00	-4.72	35	150
7236.0000	46.85	---	-0.76	46.09	---	74.00	54.00	-27.91	290	150

Mode: 802.11n 20 CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	14.39	peak	15.21	29.60	43.50	-13.90	300	150
406.6132	12.75	peak	19.01	31.76	46.00	-14.24	270	150
987.3748	5.68	peak	29.06	34.74	54.00	-19.26	140	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	51.82	---	-3.08	48.74	---	74.00	54.00	-25.26	180	150
4873.7480	58.20	47.61	-4.09	54.11	43.53	74.00	54.00	-10.47	180	150
7311.0000	47.59	---	-0.93	46.66	---	74.00	54.00	-27.34	350	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.3528	24.35	peak	15.11	39.46	43.50	-4.04	320	150
406.6132	13.84	peak	19.01	32.85	46.00	-13.15	170	150
981.7635	6.01	peak	28.98	34.99	54.00	-19.01	260	150

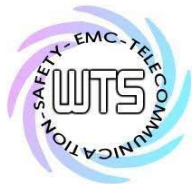
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	48.60	---	-3.08	45.52	---	74.00	54.00	-28.48	230	150
4873.7480	62.75	53.38	-4.09	58.66	49.30	74.00	54.00	-4.70	210	150
7311.0000	46.18	---	-0.93	45.25	---	74.00	54.00	-28.75	260	150

Mode: 802.11n 20 CH11

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	14.40	peak	15.21	29.61	43.50	-13.89	140	150
406.6132	12.90	peak	19.01	31.91	46.00	-14.09	300	150
980.3606	5.85	peak	28.96	34.81	54.00	-19.19	170	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	49.34	---	-2.89	46.45	---	74.00	54.00	-27.55	130	150
4921.8440	60.60	49.06	-4.03	56.57	45.03	74.00	54.00	-8.97	190	150
7386.0000	47.01	---	-1.03	45.98	---	74.00	54.00	-28.02	170	150



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Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8937	25.48	peak	15.08	40.56	43.50	-2.94	190	150
405.2105	12.76	peak	18.97	31.73	46.00	-14.27	140	150
966.3327	5.06	peak	28.78	33.84	54.00	-20.16	160	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3282.5650	47.29	---	-2.89	44.40	---	74.00	54.00	-29.60	130	150
4921.8440	62.93	52.45	-4.03	58.90	48.42	74.00	54.00	-5.58	210	150
7386.0000	47.20	---	-1.03	46.17	---	74.00	54.00	-27.83	140	150

Mode D

Antenna Port I + II with antenna a

Mode: 802.11n 40 CH1

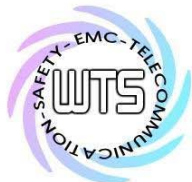
Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.8938	23.21	peak	15.08	38.29	43.50	-5.21	160	150
408.0160	14.24	peak	19.05	33.29	46.00	-12.71	320	150
980.3606	5.84	peak	28.96	34.80	54.00	-19.20	170	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3230.4610	51.42	---	-3.19	48.23	---	74.00	54.00	-25.77	190	150
4841.6830	56.95	46.97	-4.20	52.75	42.77	74.00	54.00	-11.23	110	150
7266.0000	47.12	---	-0.83	46.29	---	74.00	54.00	-27.71	250	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2706	25.38	peak	15.18	40.56	43.50	-2.94	120	150
406.6132	12.73	peak	19.01	31.74	46.00	-14.26	190	150
980.3606	5.12	peak	28.96	34.08	54.00	-19.92	140	150



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3218.4370	47.98	---	-3.26	44.72	---	74.00	54.00	-29.28	340	150
4825.6510	57.26	45.26	-4.25	53.01	41.01	74.00	54.00	-12.99	220	150
7266.0000	46.52	---	-0.83	45.69	---	74.00	54.00	-28.31	170	150

Mode: 802.11n 40 CH4

Polarization: Horizontal

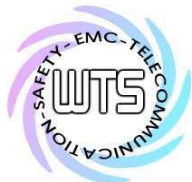
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.8117	23.47	peak	15.15	38.62	43.50	-4.88	320	150
405.2105	12.26	peak	18.97	31.23	46.00	-14.77	110	150
977.5551	5.81	peak	28.93	34.74	54.00	-19.26	170	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.57	---	-3.08	47.49	---	74.00	54.00	-26.51	170	150
4855.2910	62.38	50.76	-4.15	58.23	46.61	74.00	54.00	-7.39	100	150
7311.0000	47.01	---	-0.93	46.08	---	74.00	54.00	-27.92	300	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.8117	27.07	peak	15.15	42.22	43.50	-1.28	170	150
405.2105	12.59	peak	18.97	31.56	46.00	-14.44	170	150
983.1662	7.30	peak	29.00	36.30	54.00	-17.70	240	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	48.91	---	-3.08	45.83	---	74.00	54.00	-28.17	120	150
4881.7640	54.05	---	-4.06	49.99	---	74.00	54.00	-24.01	170	150
7311.0000	46.97	---	-0.93	46.04	---	74.00	54.00	-27.96	350	150



Worldwide Testing Services(Taiwan) Co., Ltd.

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Mode: 802.11n 40 CH7

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2706	23.12	peak	15.18	38.30	43.50	-5.20	180	150
406.6132	12.94	peak	19.01	31.95	46.00	-14.05	230	150
980.3606	6.82	peak	28.96	35.78	54.00	-18.22	160	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3270.5410	48.49	---	-2.96	45.53	---	74.00	54.00	-28.47	180	150
4905.8120	59.29	50.29	-4.01	55.28	46.28	74.00	54.00	-7.72	210	150
7356.0000	47.45	---	-0.99	46.46	---	74.00	54.00	-27.54	230	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.7295	25.60	peak	15.21	40.81	43.50	-2.69	180	150
408.0160	13.80	peak	19.05	32.85	46.00	-13.15	100	150
974.7495	6.92	peak	28.89	35.81	54.00	-18.19	290	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3270.5410	48.89	---	-2.96	45.93	---	74.00	54.00	-28.07	190	150
4905.7260	58.53	47.25	-4.01	54.52	43.24	74.00	54.00	-10.76	210	150
7356.0000	49.91	---	-0.99	48.92	---	74.00	54.00	-25.08	140	150

Antenna Port I + II with antenna b

Mode: 802.11n 40 CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
172.8456	24.20	peak	14.54	38.74	43.50	-4.76	170	150
405.2105	12.04	peak	18.97	31.01	46.00	-14.99	320	150
978.9578	6.46	peak	28.95	35.41	54.00	-18.59	170	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3230.4610	50.91	---	-3.19	47.72	---	74.00	54.00	-26.28	160	150
4847.7970	57.27	45.03	-4.18	53.09	40.85	74.00	54.00	-13.15	180	150
7266.0000	47.82	---	-0.83	46.99	---	74.00	54.00	-27.01	130	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2705	25.87	peak	15.18	41.05	43.50	-2.45	240	150
408.0160	14.02	peak	19.05	33.07	46.00	-12.93	140	150
978.9578	5.21	peak	28.95	34.16	54.00	-19.84	100	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3230.4610	48.79	---	-3.19	45.60	---	74.00	54.00	-28.40	320	150
4842.9900	61.36	48.64	-4.19	57.17	44.45	74.00	54.00	-9.55	210	150
7266.0000	46.68	---	-0.83	45.85	---	74.00	54.00	-28.15	120	150

Mode: 802.11n 40 CH4

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.8117	23.47	peak	15.15	38.62	43.50	-4.88	170	150
408.0160	14.18	peak	19.05	33.23	46.00	-12.77	140	150
981.7635	5.66	peak	28.98	34.64	54.00	-19.36	170	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	50.59	---	-3.08	47.51	---	74.00	54.00	-26.49	130	150
4874.1640	58.83	46.76	-4.09	54.74	42.67	74.00	54.00	-11.33	180	150
7311.0000	47.09	---	-0.93	46.16	---	74.00	54.00	-27.84	230	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
171.2223	23.31	peak	14.74	38.05	43.50	-5.45	170	150
406.6132	13.94	peak	19.01	32.95	46.00	-13.05	170	150
973.3467	5.07	peak	28.87	33.94	54.00	-20.06	240	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3250.5010	49.90	---	-3.08	46.82	---	74.00	54.00	-27.18	130	150
4874.3610	61.59	51.14	-4.09	57.50	47.05	74.00	54.00	-6.95	210	150
7311.0000	46.65	---	-0.93	45.72	---	74.00	54.00	-28.28	250	150

Mode: 802.11n 40 CH7

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
165.2705	23.12	peak	15.18	38.30	43.50	-5.20	180	150
406.6132	12.94	peak	19.01	31.95	46.00	-14.05	230	150
973.3467	5.44	peak	28.87	34.31	54.00	-19.69	160	150

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3270.5410	50.60	---	-2.96	47.64	---	74.00	54.00	-26.36	230	150
4907.7620	57.41	46.30	-4.01	53.40	42.29	74.00	54.00	-11.71	180	150
7356.0000	46.71	---	-0.99	45.72	---	74.00	54.00	-28.28	130	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
164.1884	23.70	peak	15.25	38.95	43.50	-4.55	180	150
403.8077	12.68	peak	18.93	31.61	46.00	-14.39	290	150
981.7635	6.62	peak	28.98	35.60	54.00	-18.40	100	150



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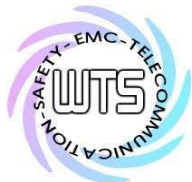
FCC ID: WNQ-KWG6000

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
3270.5410	47.86	---	-2.96	44.90	---	74.00	54.00	-29.10	190	150
4908.197	60.34	50.86	-4.01	56.33	46.85	74.00	54.00	-7.15	250	150
7356	47.12	---	-0.99	46.13	---	74.00	54.00	-27.87	140	150

- Note**
1. **Correction Factor = Antenna factor + Cable loss - Preamplifier**
 2. **The formula of measured value as: Test Result = Reading + Correction Factor**
 3. **Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average**
 4. **All not in the table noted test results are more than 20 dB below the relevant limits.**
 5. **See the attached diagram as appendix.**

TEST RESULT (Transmitter): The unit DOES meet the FCC requirements.

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 018, ETSTW-RE 028,
ETSTW-RE 029, ETSTW-RE 030, ETSTW-RE 042, ETSTW-RE 043,
ETSTW-RE 044



3.6 Radiated Emission on the band edge

According to FCC rules part 15 subpart C §15.247(c) in any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required.

In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.

Mode A:

Antenna Port I:

Test conditions		Attenuation at or outside band-edges	
		Lower Band-edge	Upper Band-edge
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	40.75 dB	47.96 dB

Antenna Port II:

Test conditions		Attenuation at or outside band-edges	
		Lower Band-edge	Upper Band-edge
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	41.24 dB	48.18 dB

Mode B:

Antenna Port I:

Test conditions		Attenuation at or outside band-edges	
		Lower Band-edge	Upper Band-edge
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	35.82 dB	43.93 dB

Antenna Port II:

Test conditions		Attenuation at or outside band-edges	
		Lower Band-edge	Upper Band-edge
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	35.46 dB	44.85 dB

Mode C:

Antenna Port I+II:

Test conditions		Attenuation at or outside band-edges	
		Lower Band-edge	Upper Band-edge
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	34.19 dB	37.05 dB



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Mode D:

Antenna Port I+II:

Test conditions		Attenuation at or outside band-edges	
		Lower Band-edge	Upper Band-edge
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	32.35 dB	30.14 dB

Limit:

Frequency Range / MHz	Limit
902 – 928	- 20 dB
2400 – 2483.5	
5725 - 5850	

Test equipment used: ETSTW-RE 055

Explanation: Please see attached diagram as appendix.



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FCC ID: WNQ-KWG6000

3.7 Minimum 6 dB Bandwidth

The analyzer ResBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK reading was taken, two markers were set 6 dB below the maximum level on the right and the left side of the emission.

The 6 dB bandwidth is the frequency difference between the two markers.

Mode A:

Antenna Port I:

Test conditions		6 dB Bandwidth		
		Channel 1	Channel 6	Channel 11
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	11.582051282MHz	11.08974358MHz	11.570512821MHz

Antenna Port II:

Test conditions		6 dB Bandwidth		
		Channel 1	Channel 6	Channel 11
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	11.987179487MHz	11.314102564MHz	11.730769231MHz

Mode B:

Antenna Port I:

Test conditions		6 dB Bandwidth		
		Channel 1	Channel 6	Channel 11
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	16.538461538MHz	16.634615385MHz	16.666666667MHz

Antenna Port II:

Test conditions		6 dB Bandwidth		
		Channel 1	Channel 6	Channel 11
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	16.602564103MHz	16.538461538MHz	16.634615385MHz

Mode C:

Antenna Port I+II:

Test conditions		6 dB Bandwidth		
		Channel 1	Channel 4	Channel 7
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	17.788461538MHz	17.756410256MHz	17.724358974MHz



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Mode D:

Antenna Port I+II:

Test conditions		6 dB Bandwidth		
		Channel 1	Channel 4	Channel 7
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	35.897435897MHz	35.833333333MHz	35.897435897MHz

Limits:

Frequency Range MHz	Limits
902-928	min 500 kHz
2400-2483.5	min 500 kHz
5725-5850	min 500 kHz

Test equipment used: ETSTW-RE 055

Explanation: see attached diagrams in Appendix.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

3.8 Peak Power Spectral Density

Peak Power Spectral density is a measured at low, middle and high channel.

The peak output power is measured with a measurement bandwidth of 10 MHz and displayed on diagram together with Peak Power Spectral Density result which was measured with a bandwidth of 3 kHz, appreciate frequency span and sweep time.

Mode A:

Antenna Port I:

Test conditions		Peak Power Spectral Density (3 kHz)		
		Channel 1 [dBm]	Channel 6 [dBm]	Channel 11 [dBm]
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	-5.08	-7.30	-7.14

Antenna Port II:

Test conditions		Peak Power Spectral Density (3 kHz)		
		Channel 1 [dBm]	Channel 6 [dBm]	Channel 11 [dBm]
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	-6.12	-4.97	-7.17

Mode B:

Antenna Port I:

Test conditions		Peak Power Spectral Density (3 kHz)		
		Channel 1 [dBm]	Channel 6 [dBm]	Channel 11 [dBm]
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	-11.32	-11.50	-11.34

Antenna Port II:

Test conditions		Peak Power Spectral Density (3 kHz)		
		Channel 1 [dBm]	Channel 6 [dBm]	Channel 11 [dBm]
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	-11.73	-11.42	-11.05



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Mode C:

Antenna Port I+II:

Test conditions		Peak Power Spectral Density (3 kHz)		
		Channel 1 [dBm]	Channel 6 [dBm]	Channel 11 [dBm]
$T_{nom}=23^{\circ}\text{C}$	$V_{nom}=120\text{ V}$	-11.79	-12.41	-11.60

Mode D:

Antenna Port I+II:

Test conditions		Peak Power Spectral Density (3 kHz)		
		Channel 1 [dBm]	Channel 4 [dBm]	Channel 7 [dBm]
$T_{nom}=23^{\circ}\text{C}$	$V_{nom}=120\text{ V}$	-14.12	-13.17	-12.76

Limits:

Frequency Range MHz	dBm
902-928	8
2400-2483.5	8
5725-5850	8

Test equipment used: ETSTW-RE 055

Explanation: see attached diagrams in Appendix.



Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

3.9 Radiated Emission from Digital Part

FCC Rule: 15.109

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission (MHz)	Field Strength (microvolts/meter)	Field Strength (dBmicrovolts/meter)
30 – 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.0
Above 960	500	54.0

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 028, ETSTW-RE 029,
ETSTW-RE 030, ETSTW-RE 042, ETSTW-RE 043

Explanation: The test results are listed in the separated test report no. W6D21009-10909-P-15B.



Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

3.9 Power Line Conducted Emission

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

Frequency	Level (dBμV)	
	quasi-peak	average
150 kHz	lower limit line	Lower limit line

Model: KWG6000 Date: 2010/5/4
 Mode: Temperature: 24 °C Engineer: Robert
 Polarization: N Humidity: 60 %

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV)		Limit (dBuV)		Margin (dB)
	QP	Ave.		QP	Ave.	QP	Ave.	
0.1502	43.36	19.42	10.74	54.10	30.16	65.99	55.99	-11.89
0.2164	37.60	22.54	10.75	48.35	33.29	62.96	52.96	-14.61
0.3620	29.00	23.52	10.70	39.70	34.22	58.68	48.68	-14.46
1.4487	26.39	21.99	10.25	36.64	32.24	56.00	46.00	-13.76
4.8467	31.28	27.12	10.19	41.47	37.31	56.00	46.00	-8.69
7.7428	30.83	27.33	10.24	41.07	37.57	60.00	50.00	-12.43

Polarization: L1

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV)		Limit (dBuV)		Margin (dB)
	QP	Ave.		QP	Ave.	QP	Ave.	
0.1501	43.39	17.03	10.75	54.14	27.78	65.99	55.99	-11.85
0.2892	32.15	20.20	10.72	42.87	30.92	60.55	50.55	-17.68
1.2320	29.18	20.48	10.32	39.50	30.80	56.00	46.00	-15.20
2.1444	30.40	29.07	10.10	40.50	39.17	56.00	46.00	-6.83
4.8487	20.92	15.73	10.22	31.14	25.95	56.00	46.00	-20.05
15.2441	20.86	14.30	10.84	31.70	25.14	60.00	50.00	-24.86



Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000

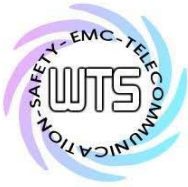
- Note:**
- 1. The formula of measured value as: Test Result = Reading + Correction Factor**
 - 2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss**
 - 3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average**
 - 4. All not in the table noted test results are more than 20 dB below the relevant limits.**

Limits:

Frequency of Emission (MHz)	Conducted Limit (dBUV)	
	Quasi Peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

Test equipment used: ETSTW-CE 001, ETSTW-CE 004, ETSTW-CE 006

Explanation: see attached diagrams in Appendix.



Appendix

Measurement diagrams

1. Peak Output Power
2. Spurious Emissions radiated
3. Band Edge Measurement
4. Minimum 6dB Bandwidth
5. Peak Power Spectral Density
6. Power Line Conducted Emission



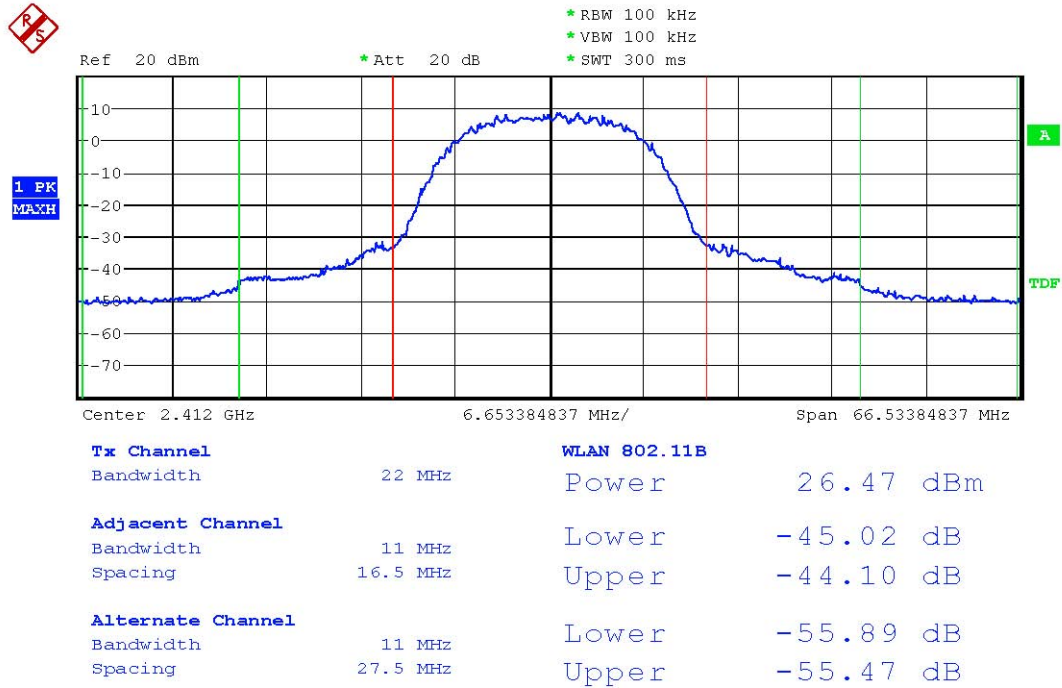
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000

Peak Output Power

Mode A:

Antenna Port I:



MAX OUTPUT POWER 802.11b CH1

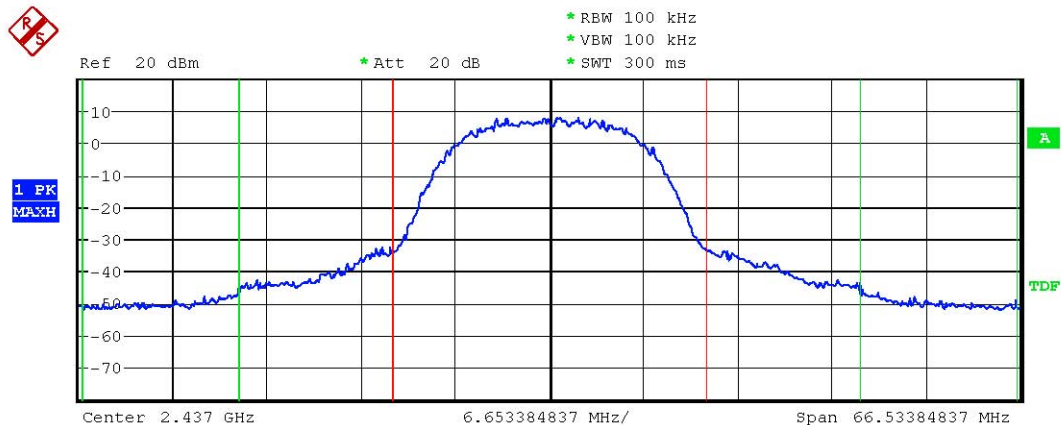
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Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



Tx Channel

Bandwidth 22 MHz

Adjacent Channel

Bandwidth 11 MHz

Spacing 16.5 MHz

Alternate Channel

Bandwidth 11 MHz

Spacing 27.5 MHz

WLAN 802.11B

Power 26.12 dBm

Lower -45.41 dB

Upper -44.59 dB

Lower -56.46 dB

Upper -56.06 dB

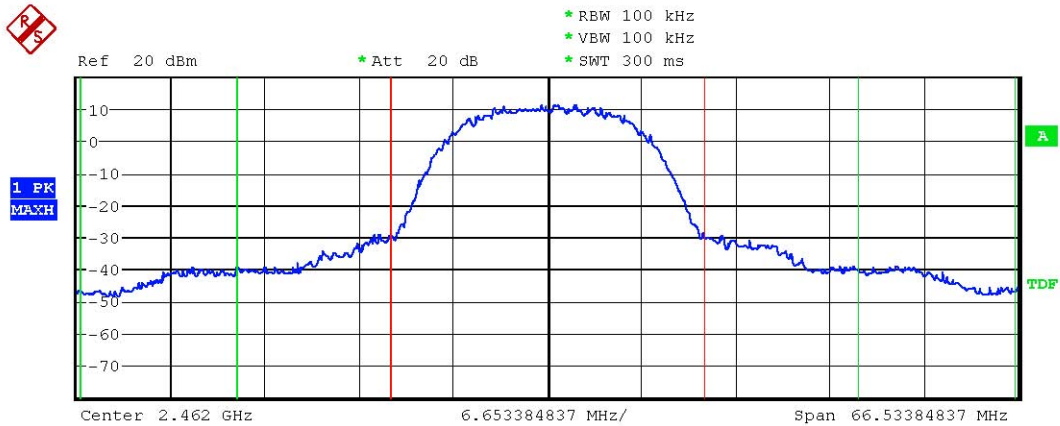
MAX OUTPUT POWER 802.11b CH6

Date: 7.MAY.2010 08:32:09



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Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



Tx Channel

Bandwidth 22 MHz

Adjacent Channel

Bandwidth 11 MHz
Spacing 16.5 MHz

Alternate Channel

Bandwidth 11 MHz
Spacing 27.5 MHz

WLAN 802.11B

Power 29.37 dBm

Lower -44.89 dB

Upper -43.63 dB

Lower -52.61 dB

Upper -51.96 dB

MAX OUTPUT POWER 802.11b CH11

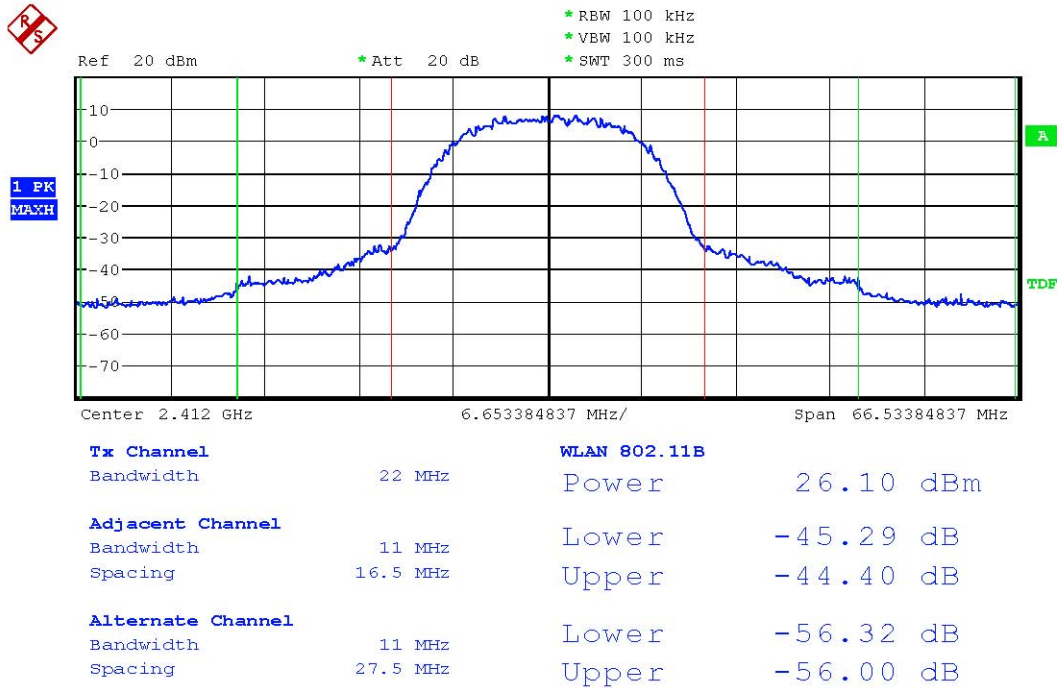
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Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000

Antenna Port II:



MAX OUTPUT POWER 802.11b CH1

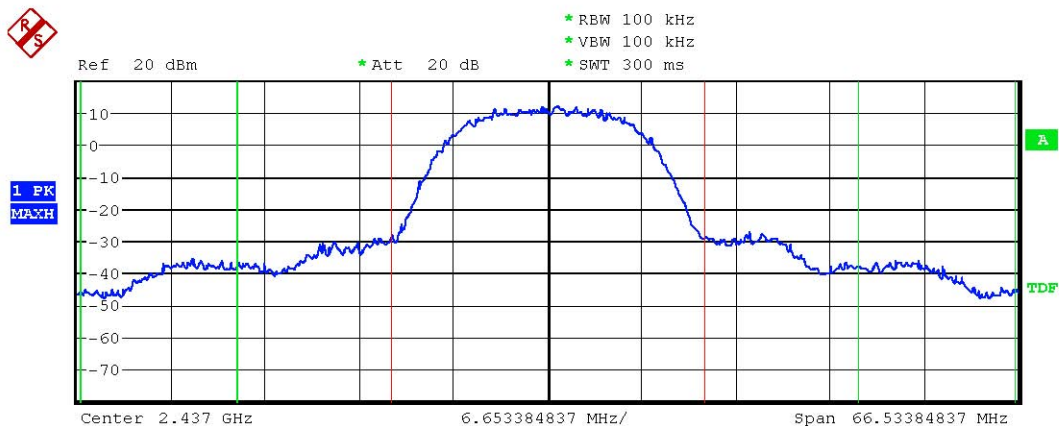
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Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



Tx Channel		WLAN 802.11B	
Bandwidth	22 MHz	Power	26.01 dBm
Adjacent Channel		Lower	-43.94 dB
Bandwidth	11 MHz	Upper	-41.88 dB
Spacing	16.5 MHz		
Alternate Channel		Lower	-50.08 dB
Bandwidth	11 MHz	Upper	-50.13 dB
Spacing	27.5 MHz		

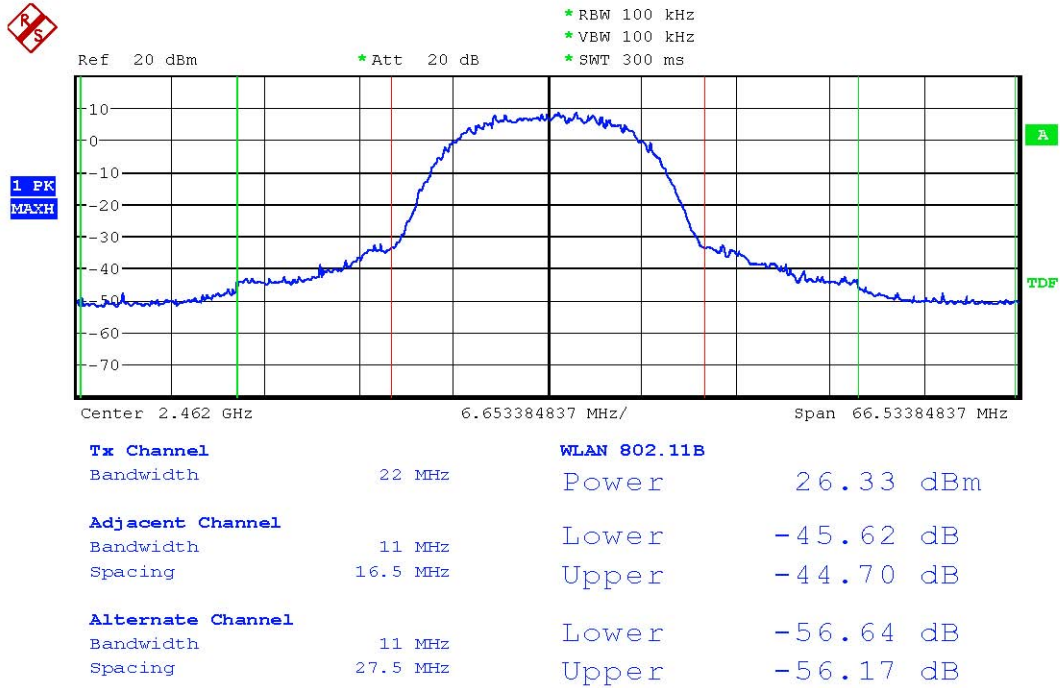
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Date: 7.MAY.2010 09:30:34



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Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



MAX OUTPUT POWER 802.11b CH11

Date: 7.MAY.2010 09:30:59

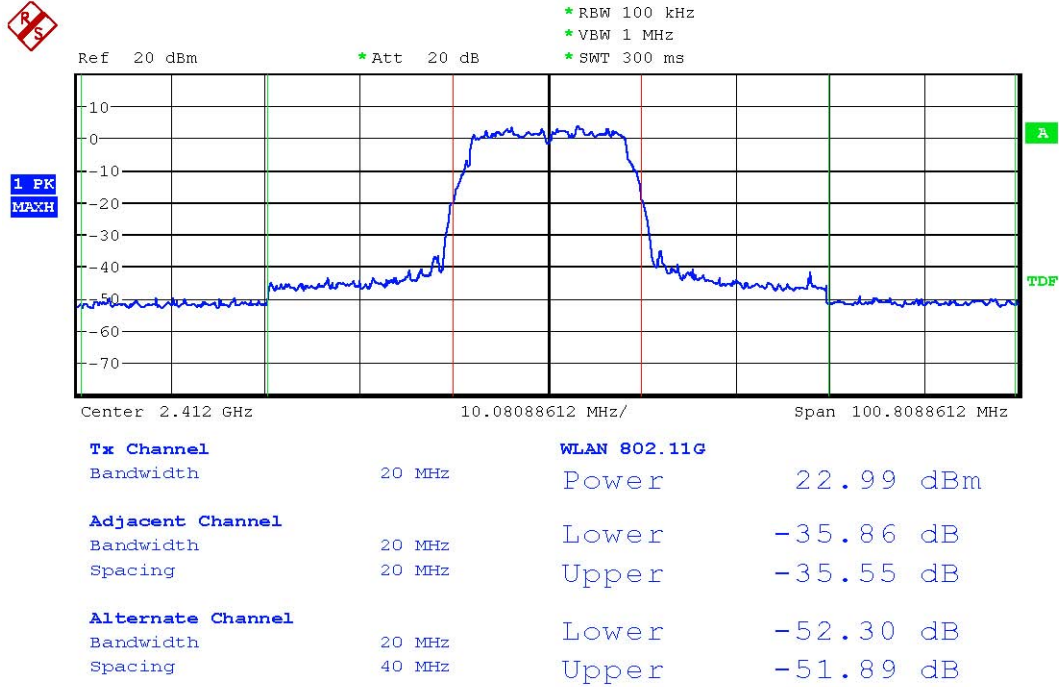


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000

Mode B:

Antenna Port I:



MAX OUTPUT POWER 802.11g CH1

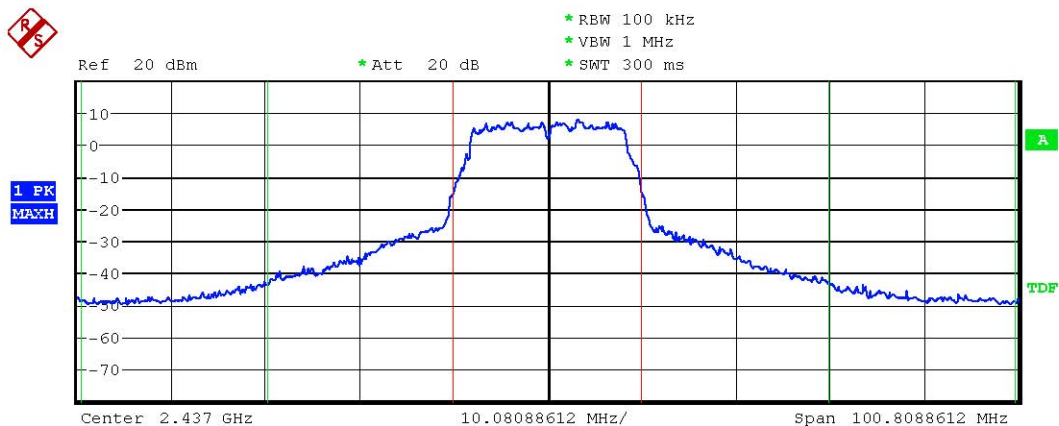
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



Tx Channel		WLAN 802.11G	
Bandwidth	20 MHz	Power	27.18 dBm
Adjacent Channel		Lower	-33.43 dB
Bandwidth	20 MHz	Upper	-33.40 dB
Spacing	20 MHz		
Alternate Channel		Lower	-51.96 dB
Bandwidth	20 MHz	Upper	-51.75 dB
Spacing	40 MHz		

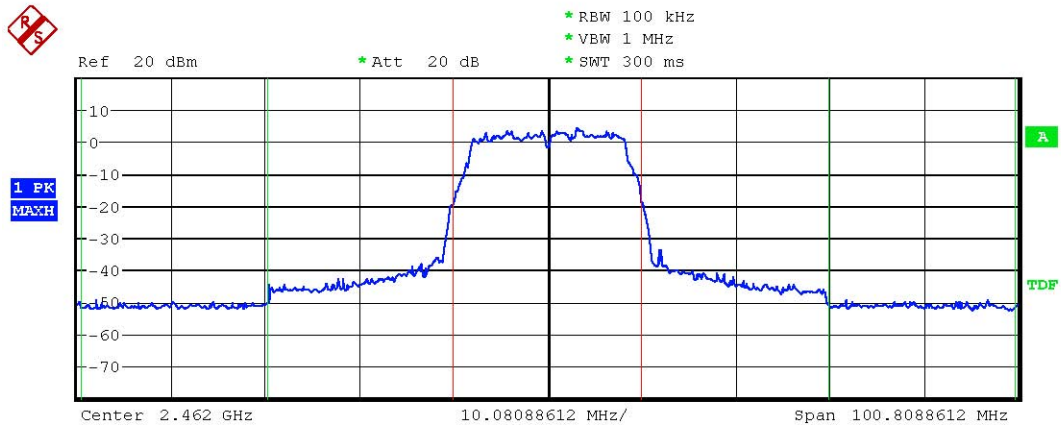
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Date: 7.MAY.2010 08:38:29



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



Tx Channel		WLAN 802.11G	
Bandwidth	20 MHz	Power	23.44 dBm
Adjacent Channel		Lower	-35.57 dB
Bandwidth	20 MHz	Upper	-35.55 dB
Spacing	20 MHz		
Alternate Channel		Lower	-52.28 dB
Bandwidth	20 MHz	Upper	-52.18 dB
Spacing	40 MHz		

MAX OUTPUT POWER 802.11g CH11

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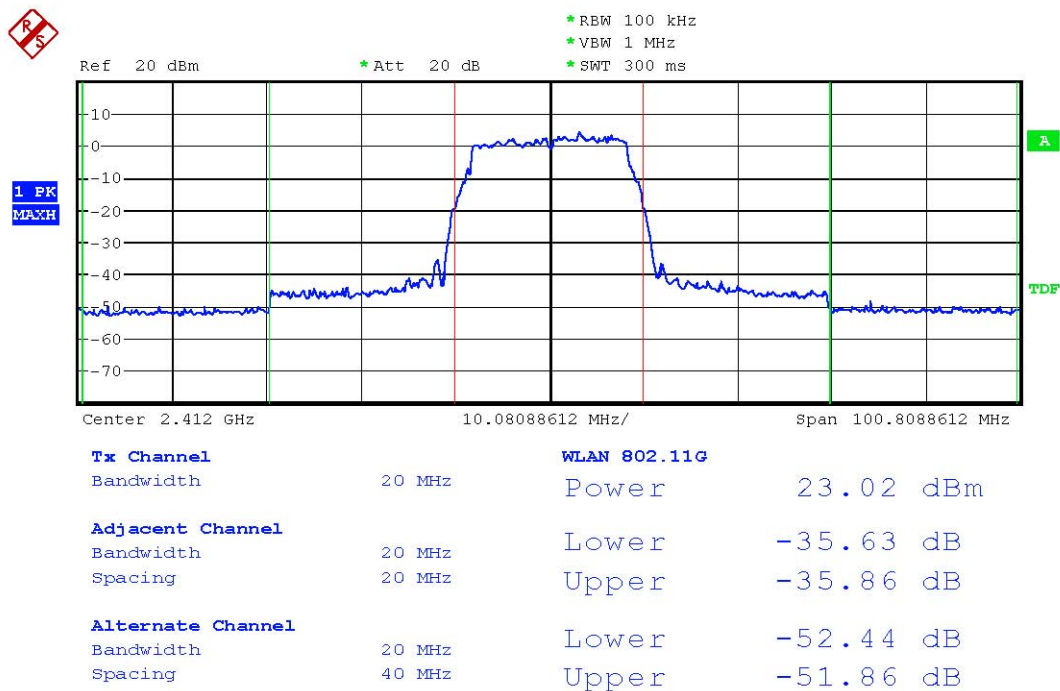


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Antenna Port II:



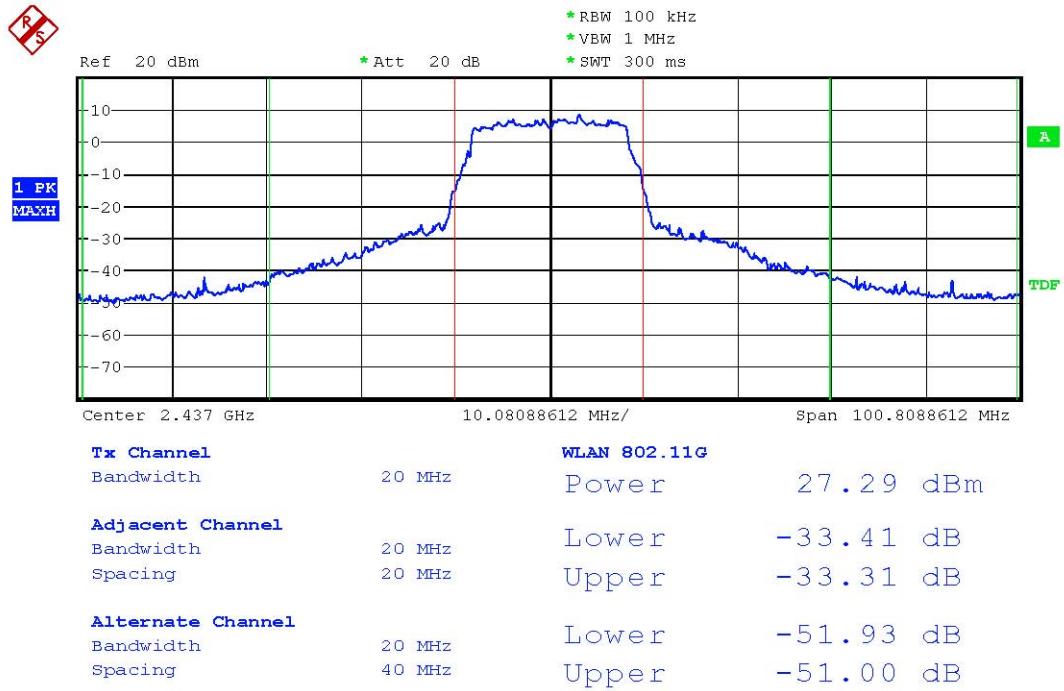
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Date: 7.MAY.2010 09:28:56



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



MAX OUTPUT POWER 802.11g CH6

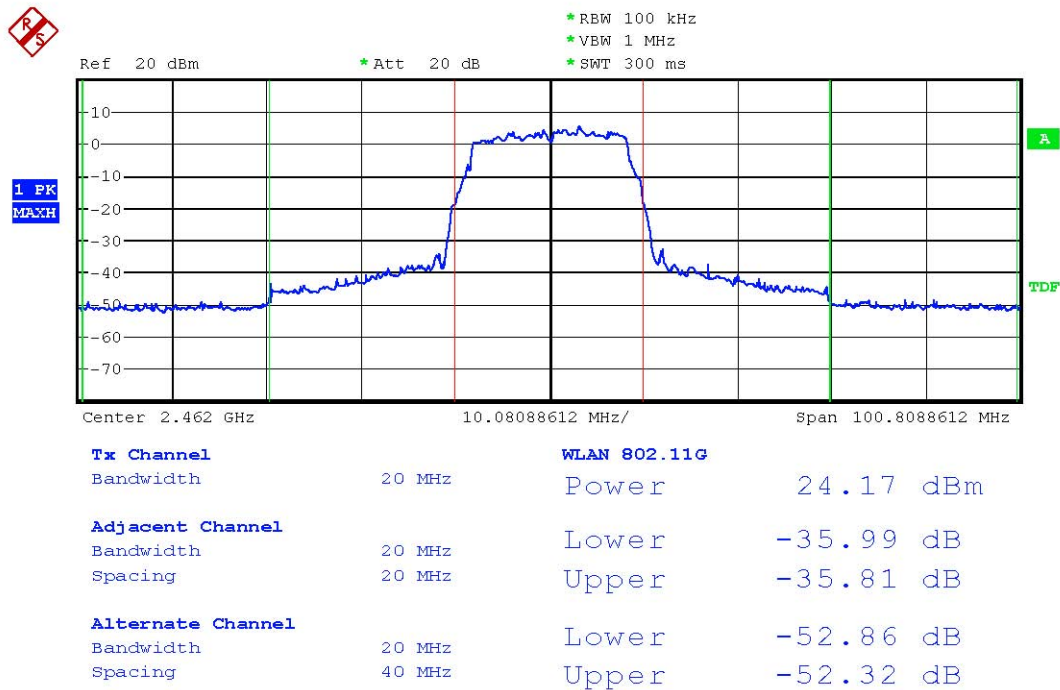
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



MAX OUTPUT POWER 802.11g CH11

Date: 7.MAY.2010 09:28:13

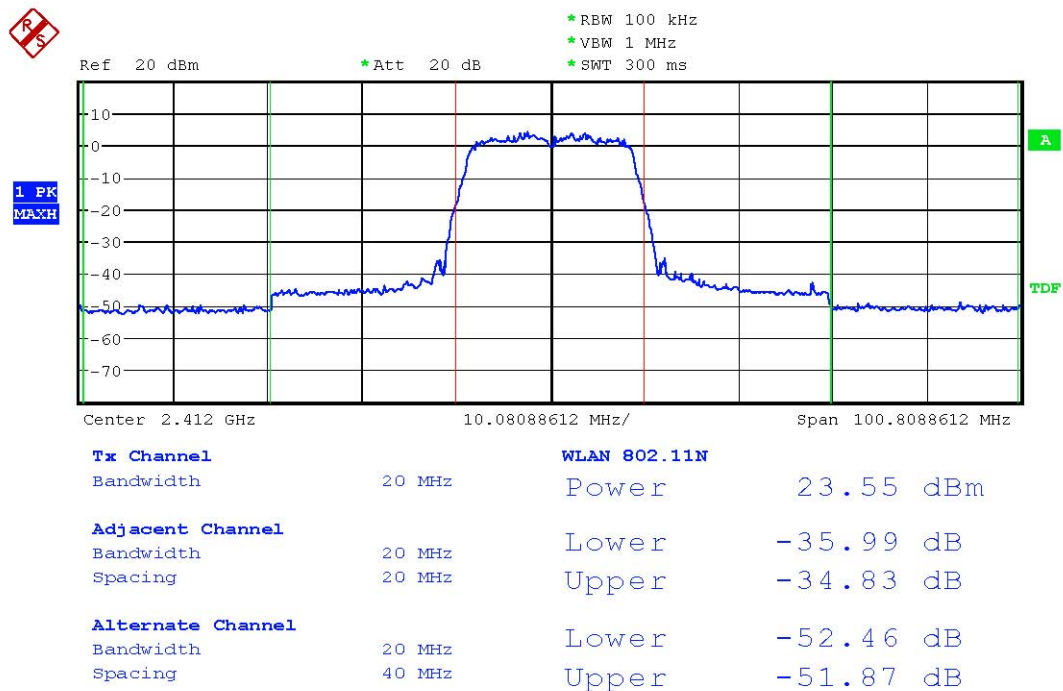


Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Mode C:

Antenna Port I+II:



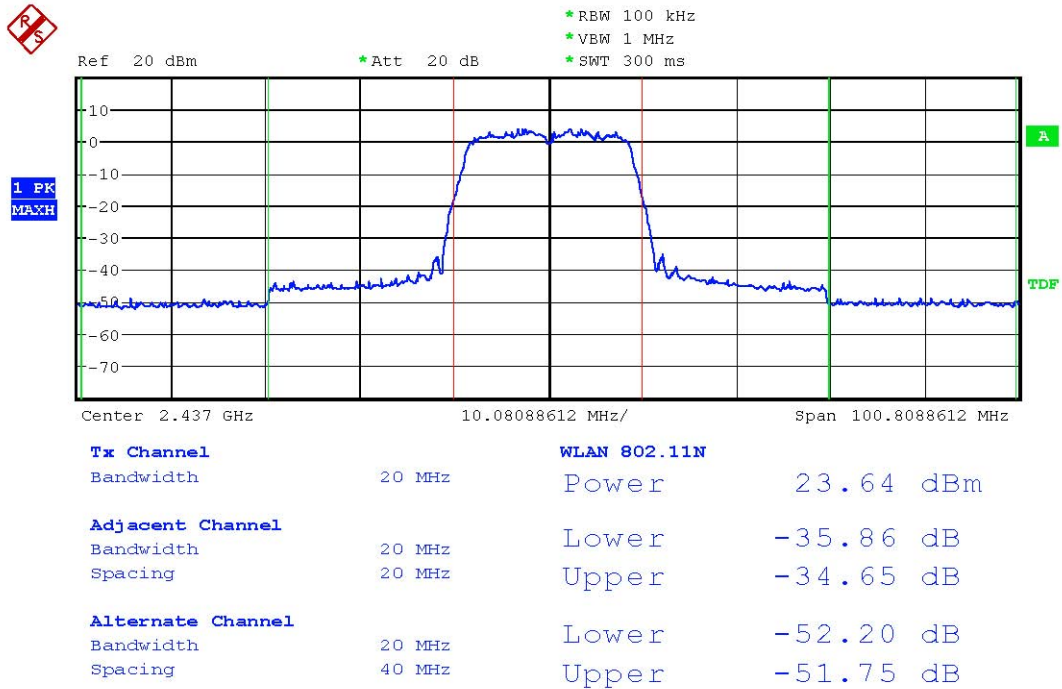
MAX OUTPUT POWER 802.11n 20MHz CH1

Date: 7.MAY.2010 09:48:59



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



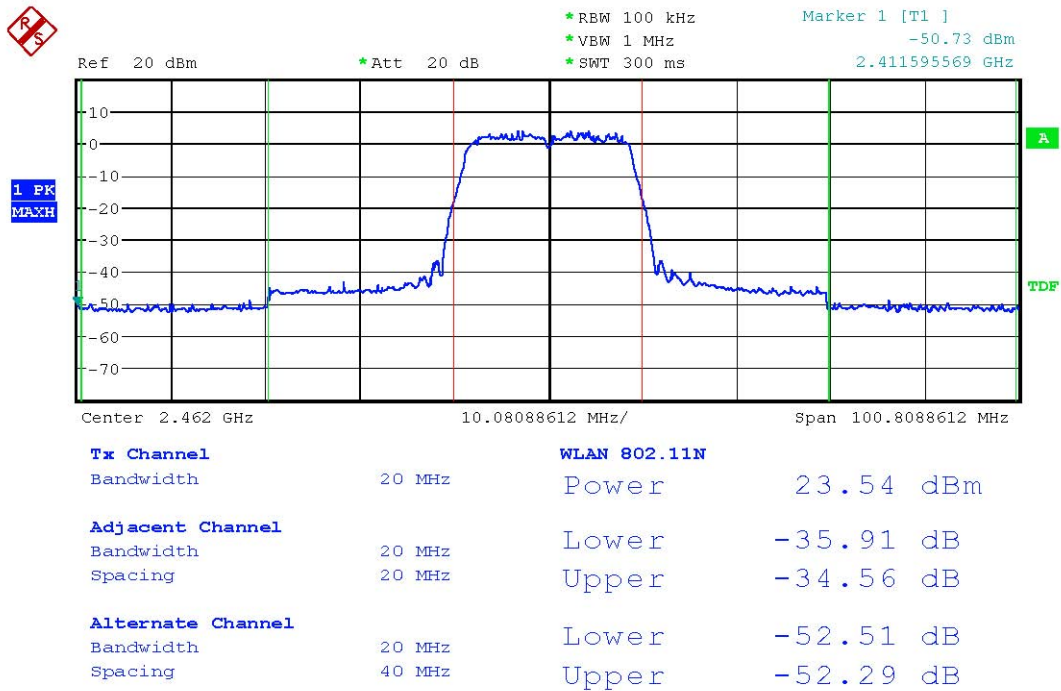
MAX OUTPUT POWER 802.11n 20MHz CH6

Date: 7.MAY.2010 09:48:13



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



MAX OUTPUT POWER 802.11n 20MHz CH11

Date: 7.MAY.2010 09:50:08



Worldwide Testing Services(Taiwan) Co., Ltd.

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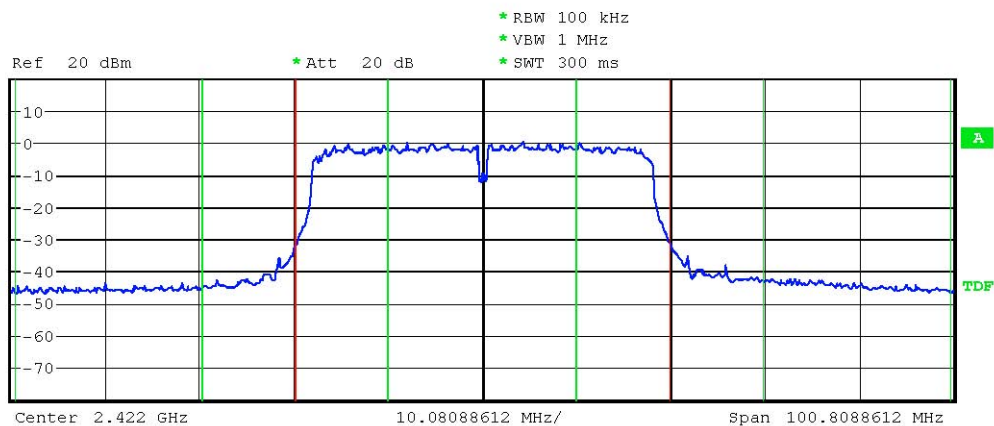
FCC ID: WNQ-KWG6000

Mode D:

Antenna Port I+II:



1 PK
MAXH



Tx Channel		WLAN 802.11N	
Bandwidth	40 MHz	Power	22.95 dBm
Adjacent Channel		Lower	-7.01 dB
Bandwidth	20 MHz	Upper	-6.62 dB
Spacing	20 MHz		
Alternate Channel		Lower	-46.14 dB
Bandwidth	20 MHz	Upper	-44.90 dB
Spacing	40 MHz		

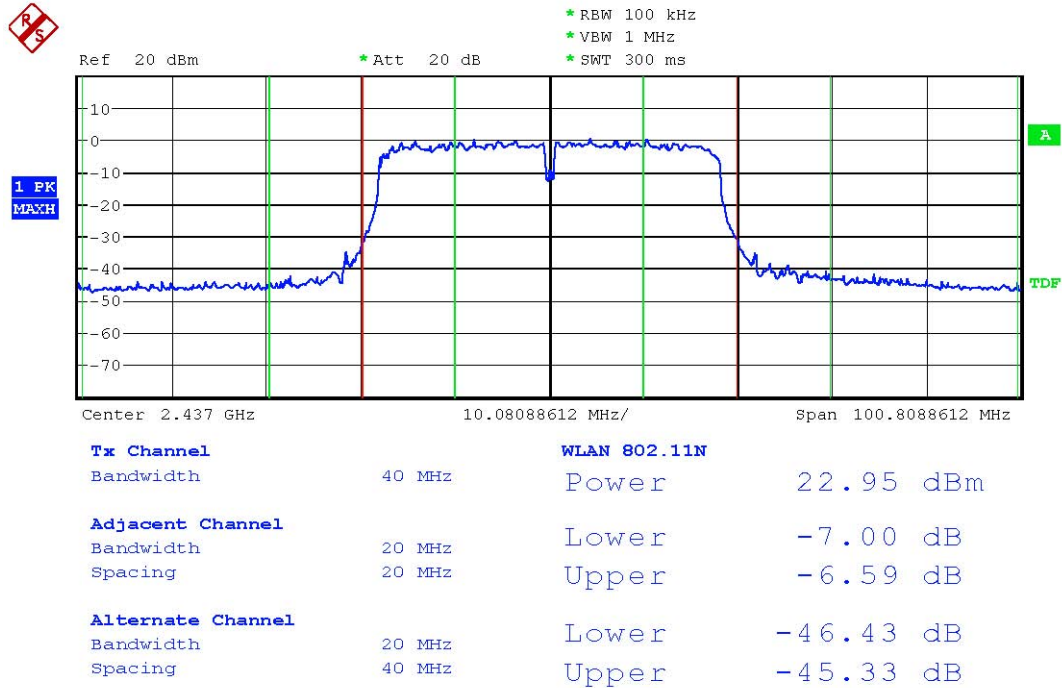
MAX OUTPUT POWER 802.11n 40MHz CH1

Date: 7.MAY.2010 09:52:01



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



MAX OUTPUT POWER 802.11n 40MHz CH4

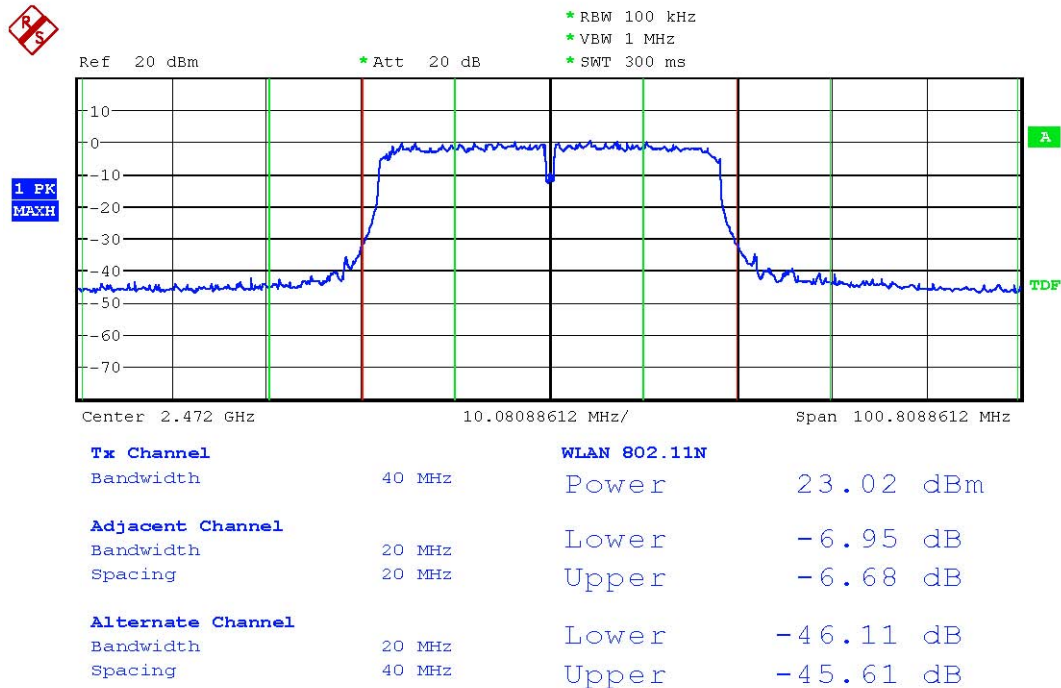
Date: 7.MAY.2010 09:52:37



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



MAX OUTPUT POWER 802.11n 40MHz CH7

Date: 7.MAY.2010 09:53:46



Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000

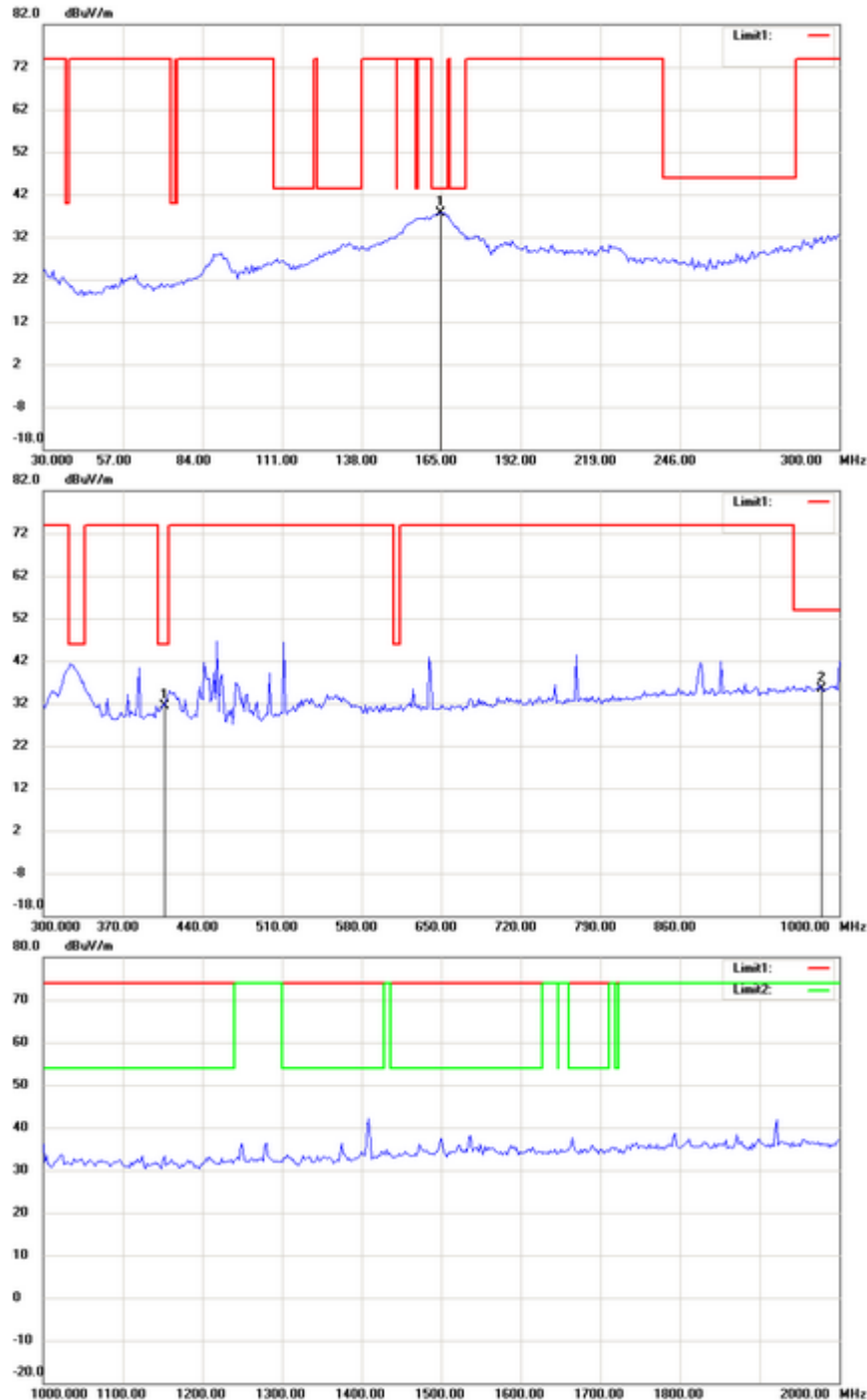
Spurious Emissions radiated

Mode A

Antenna Port I with antenna a:

CH1

Antenna Polarization H

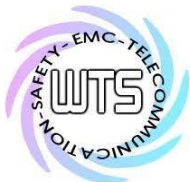


Up Line: Peak Limit Line

Down Line: Ave Limit Line

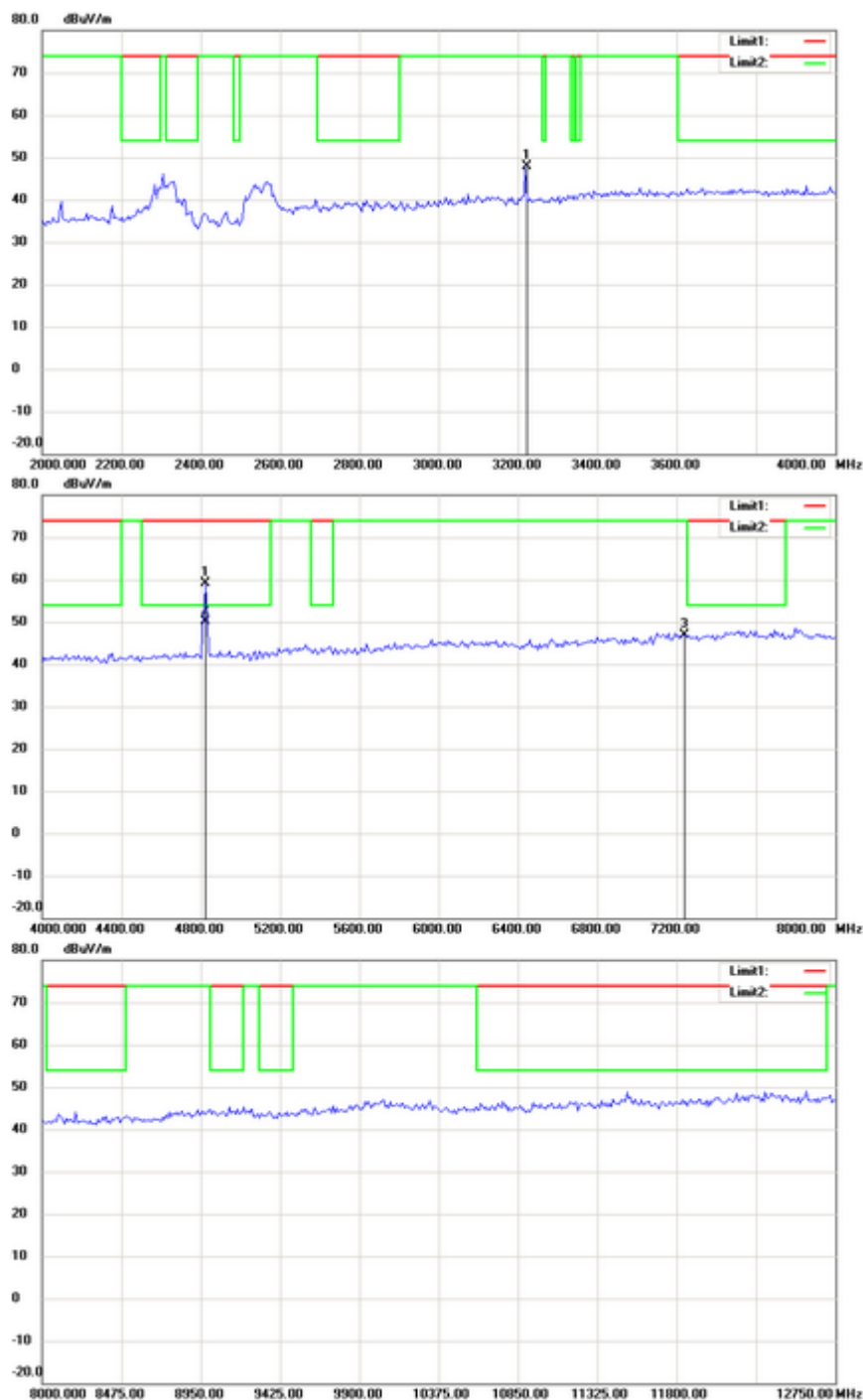
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6D21009-10909-P-15

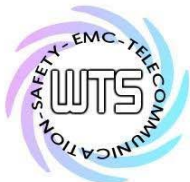
FCC ID: WNQ-KWG6000



Up Line: Peak Limit Line
Down Line: Ave Limit Line

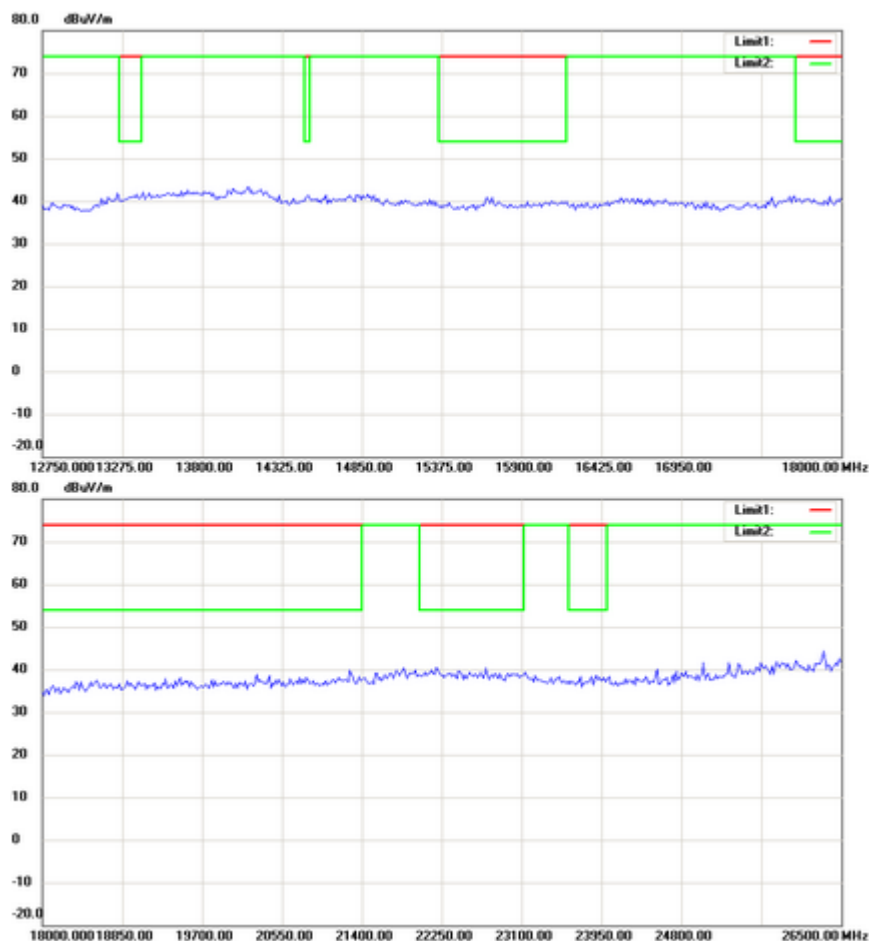
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

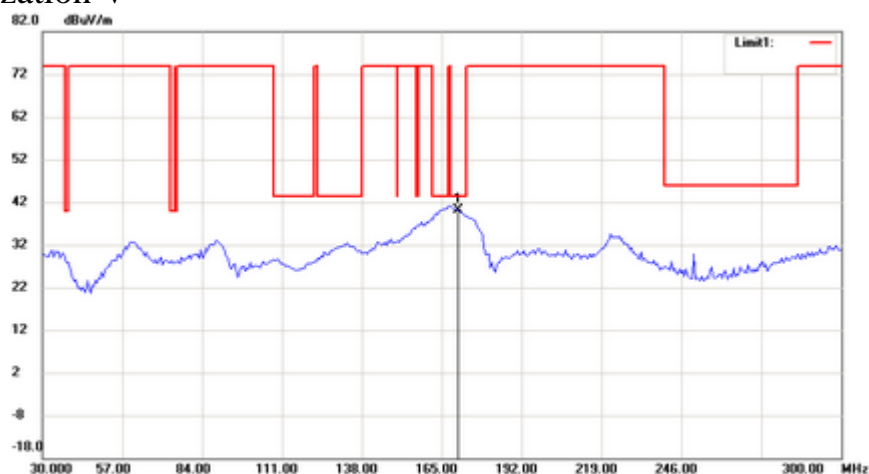


Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



Antenna Polarization V



Up Line: Peak Limit Line

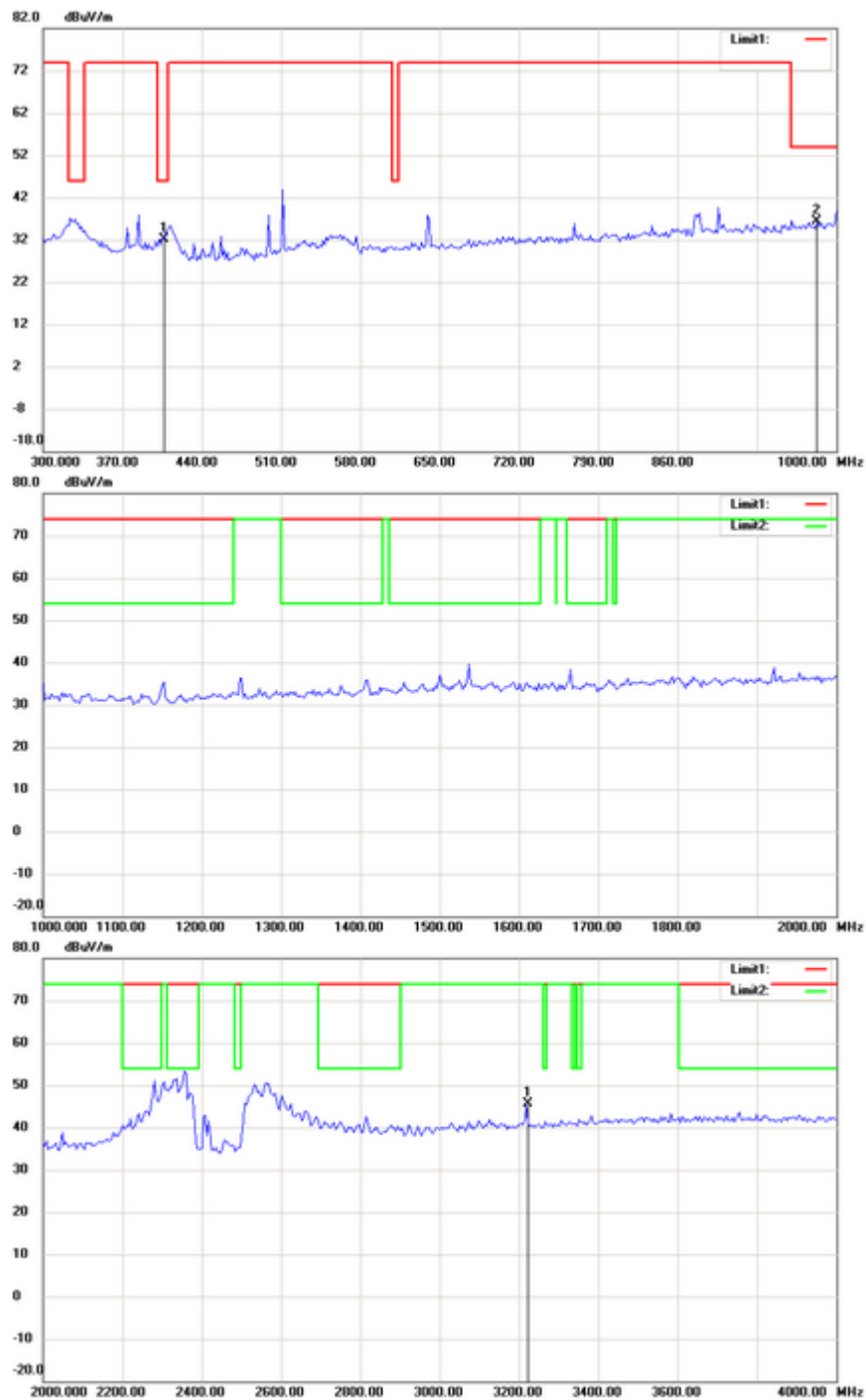
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



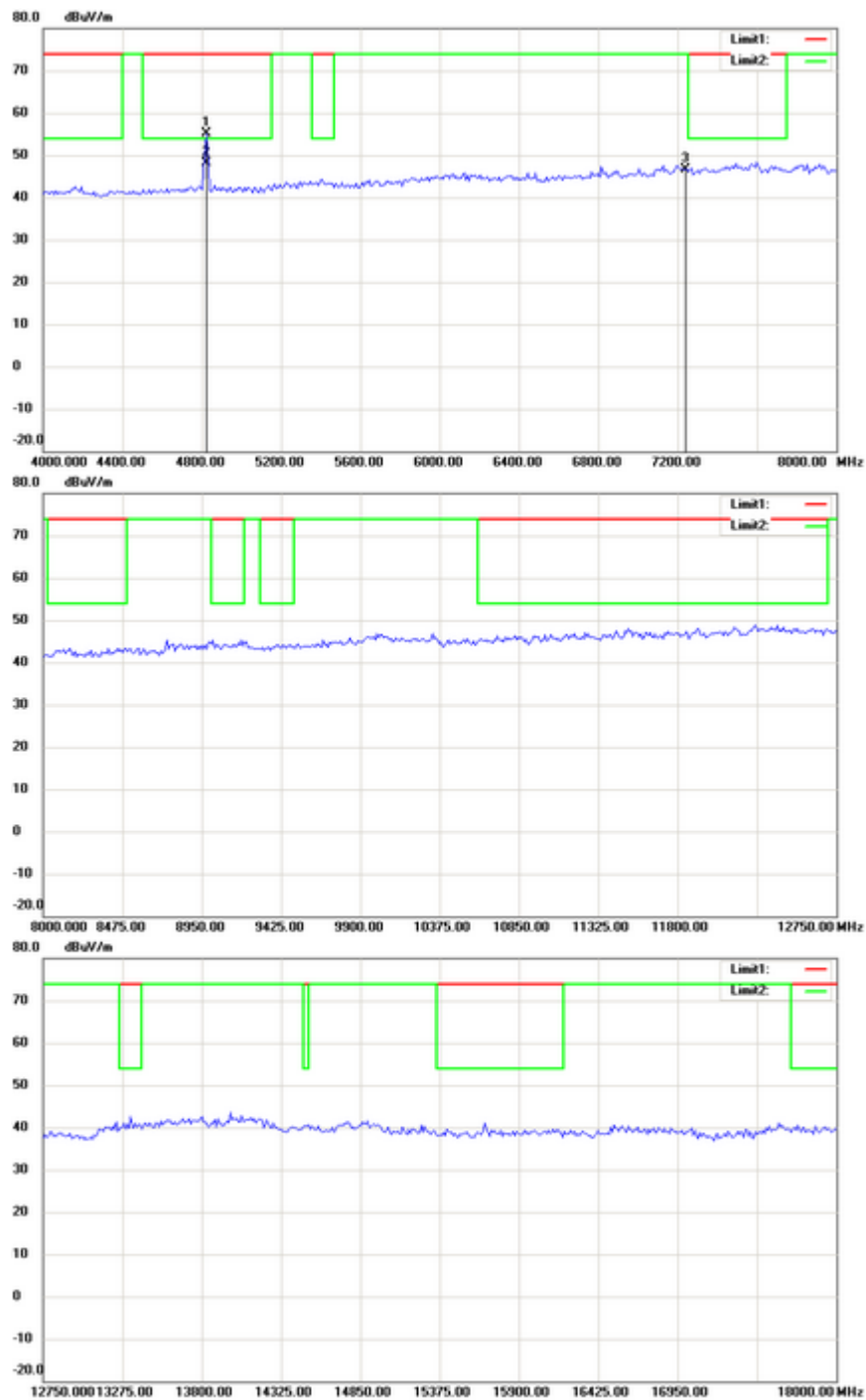
Up Line: Peak Limit Line
Down Line: Ave Limit Line
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



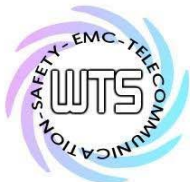
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



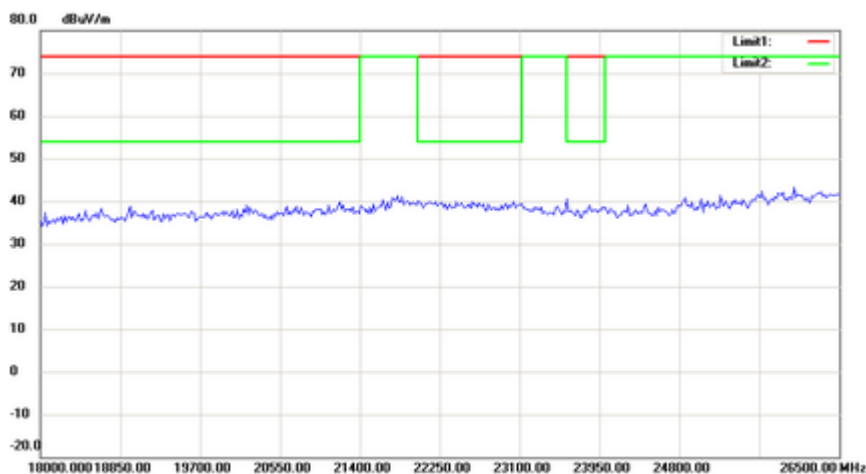
Up Line: Peak Limit Line
Down Line: Ave Limit Line
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



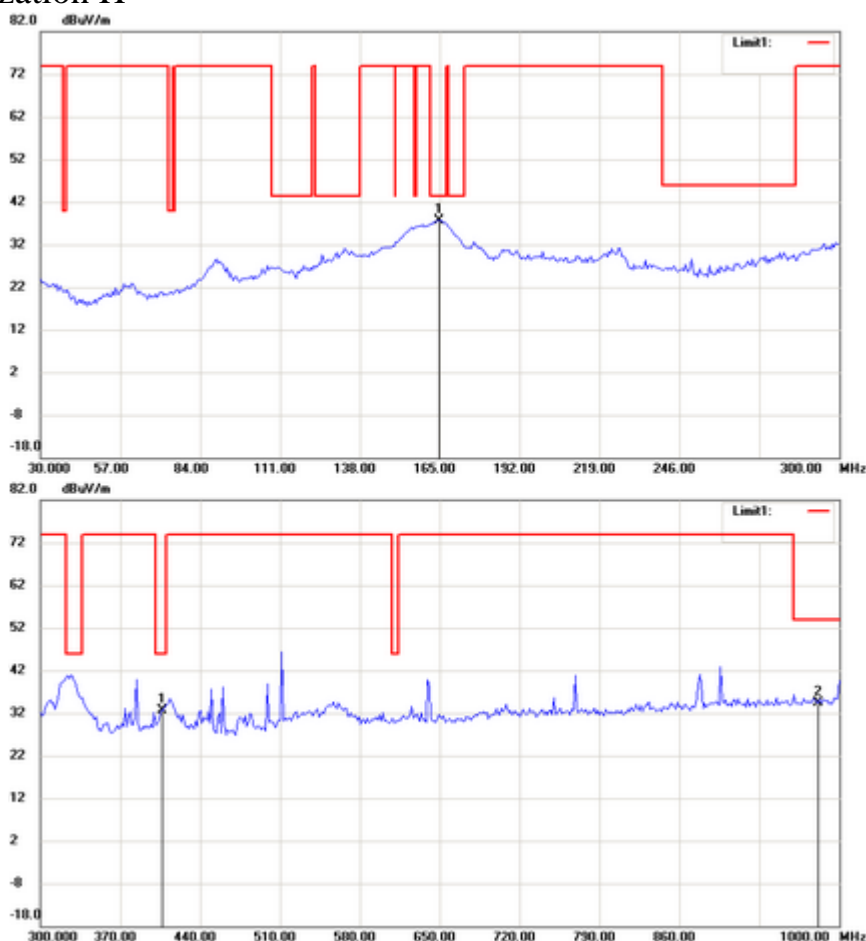
Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



CH6

Antenna Polarization H

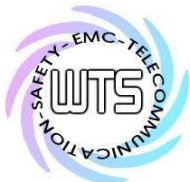


Up Line: Peak Limit Line

Down Line: Ave Limit Line

Note:

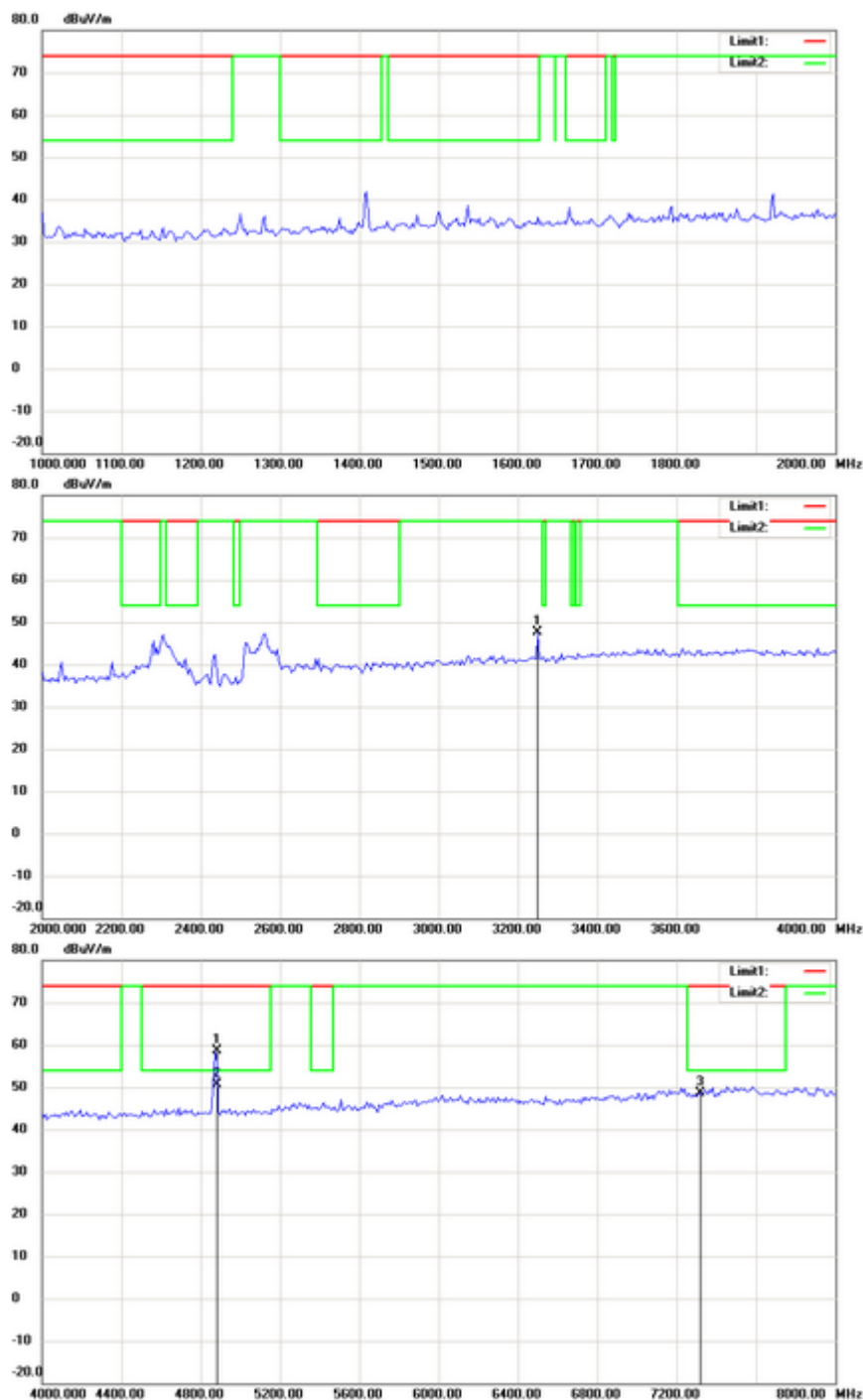
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

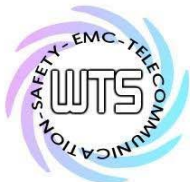


Up Line: Peak Limit Line

Down Line: Ave Limit Line

Note:

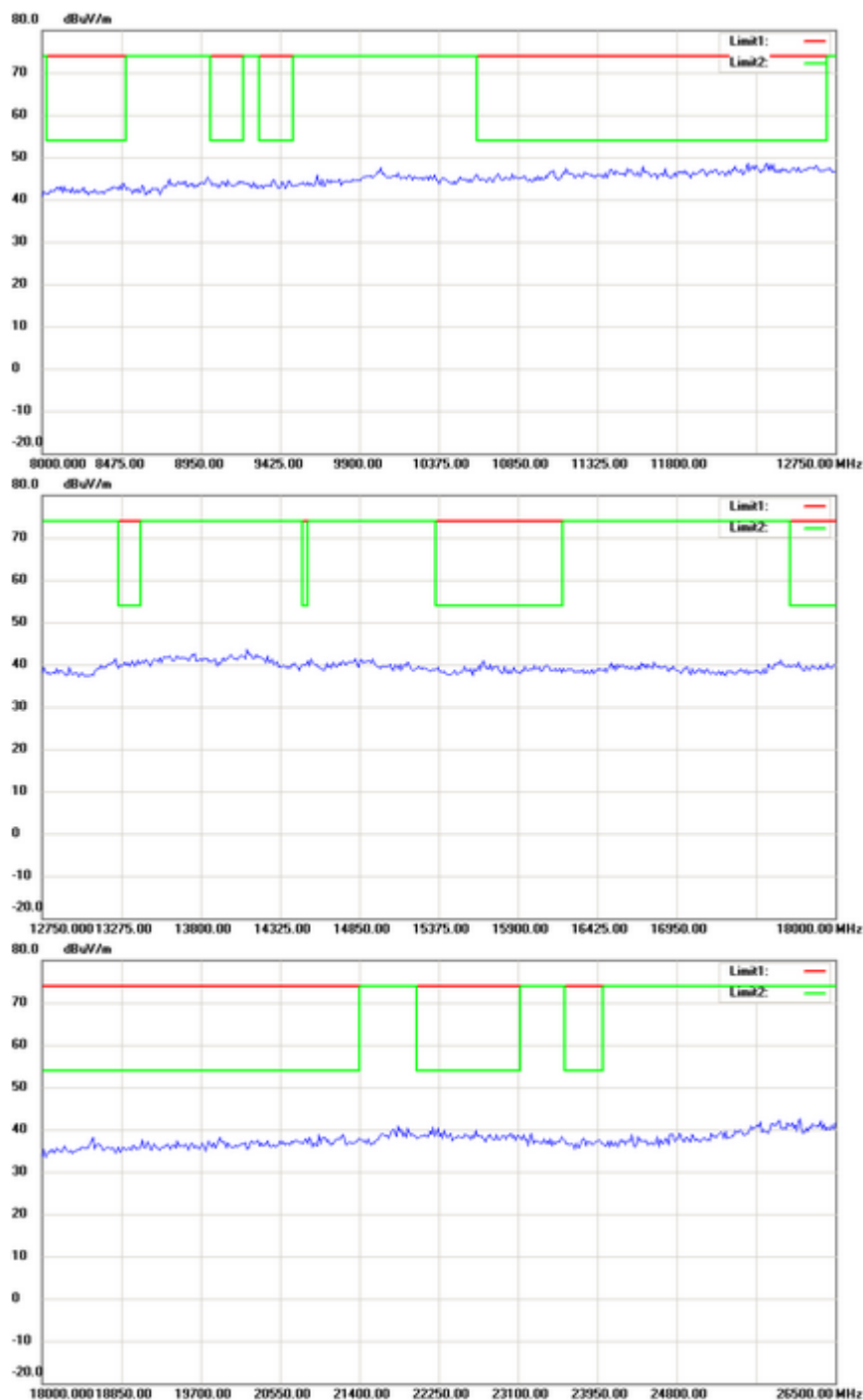
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

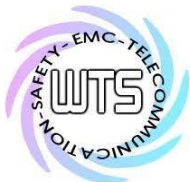


Up Line: Peak Limit Line

Down Line: Ave Limit Line

Note:

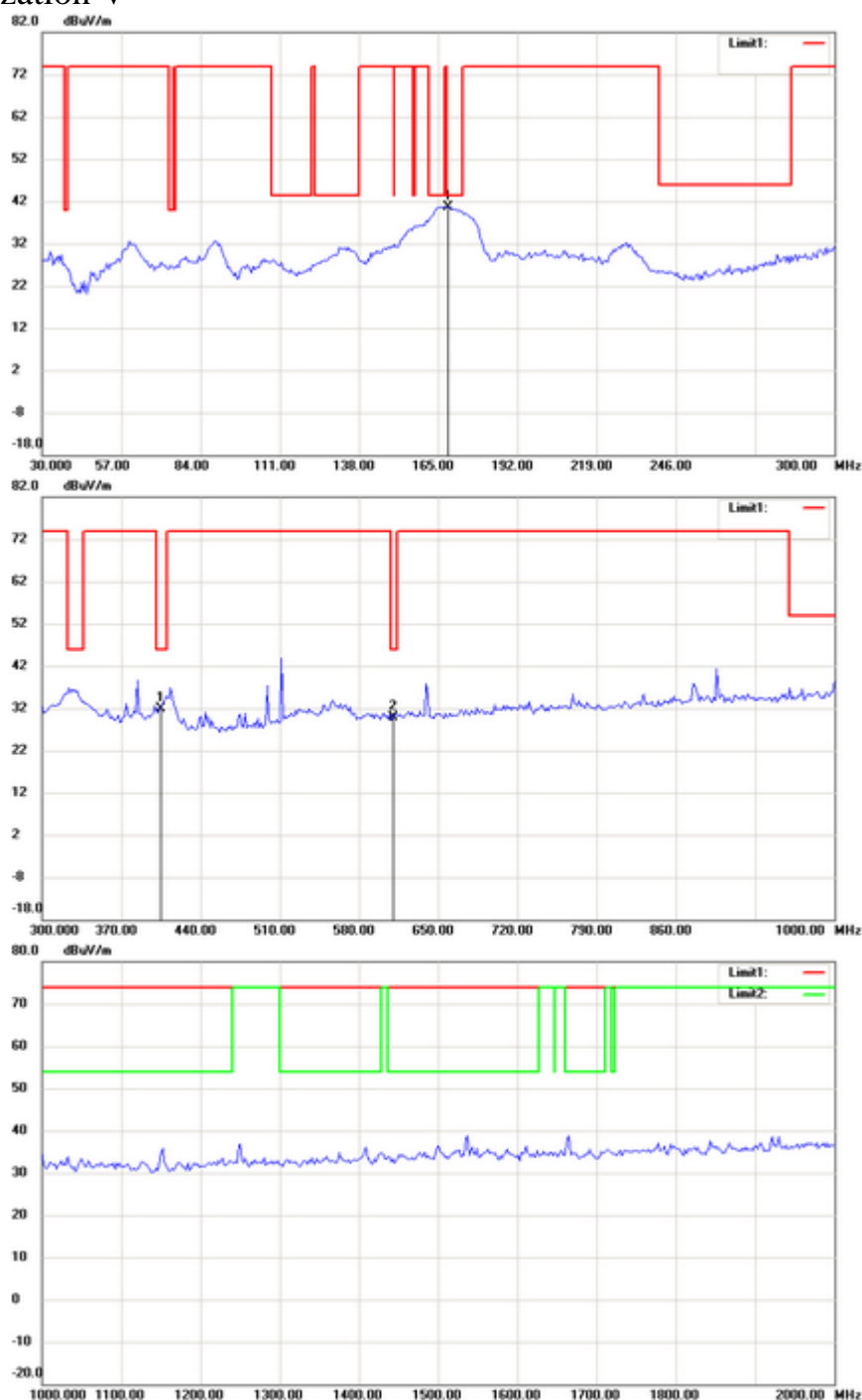
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000

Antenna Polarization V



Up Line: Peak Limit Line

Down Line: Ave Limit Line

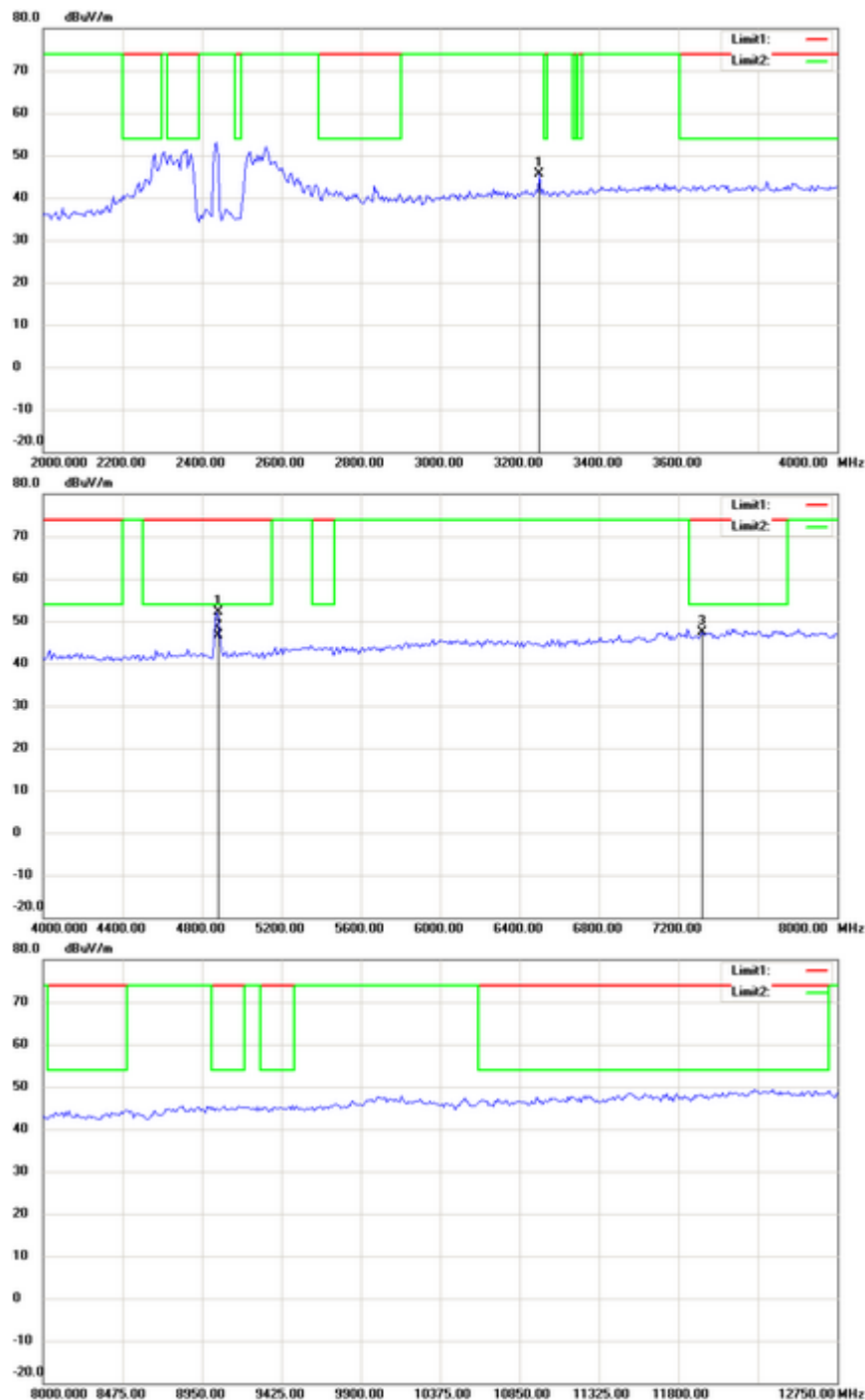
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



Up Line: Peak Limit Line
Down Line: Ave Limit Line

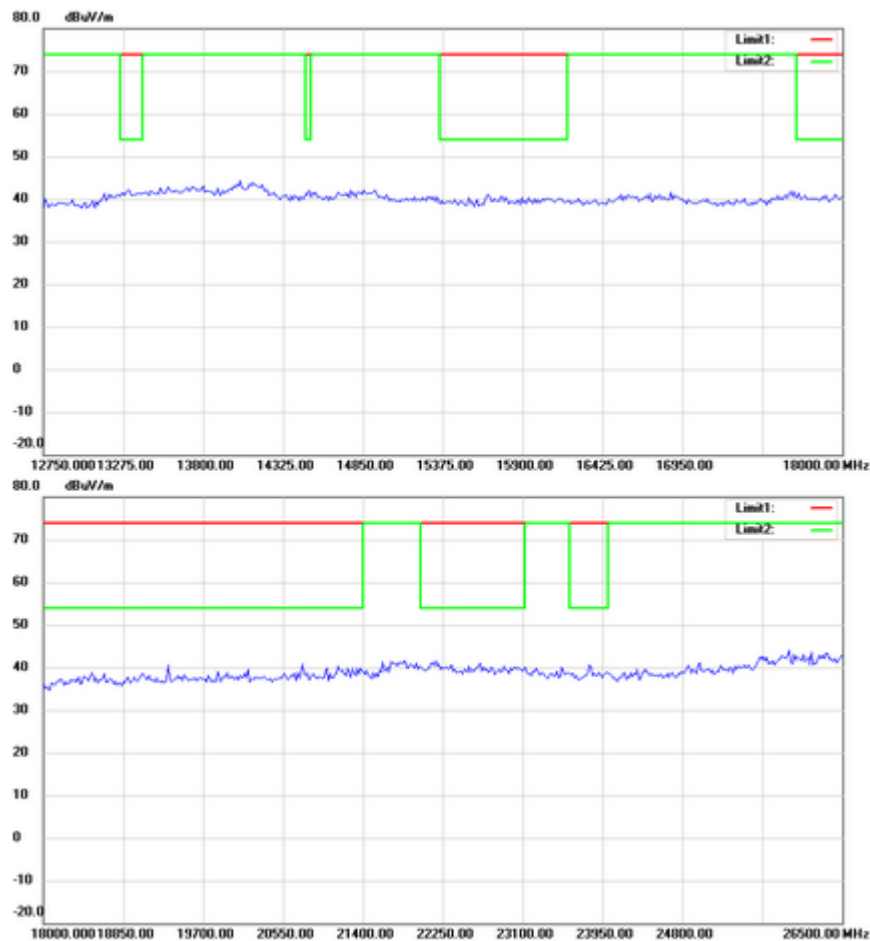
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



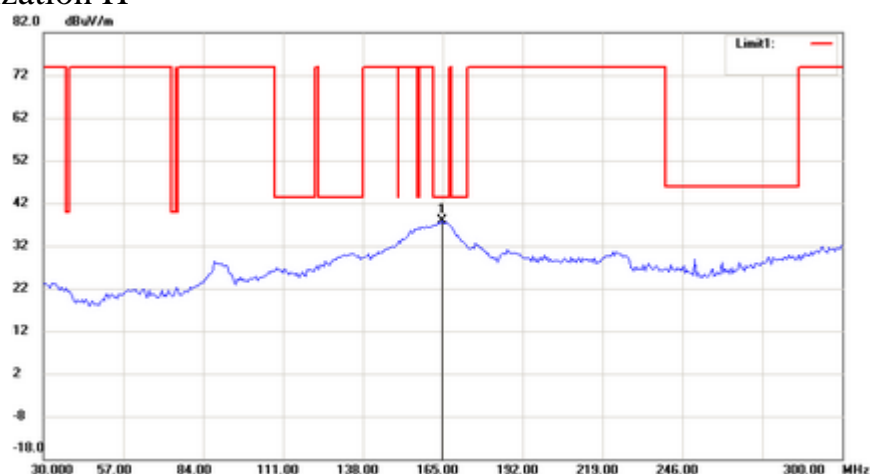
Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



CH11

Antenna Polarization H



Up Line: Peak Limit Line

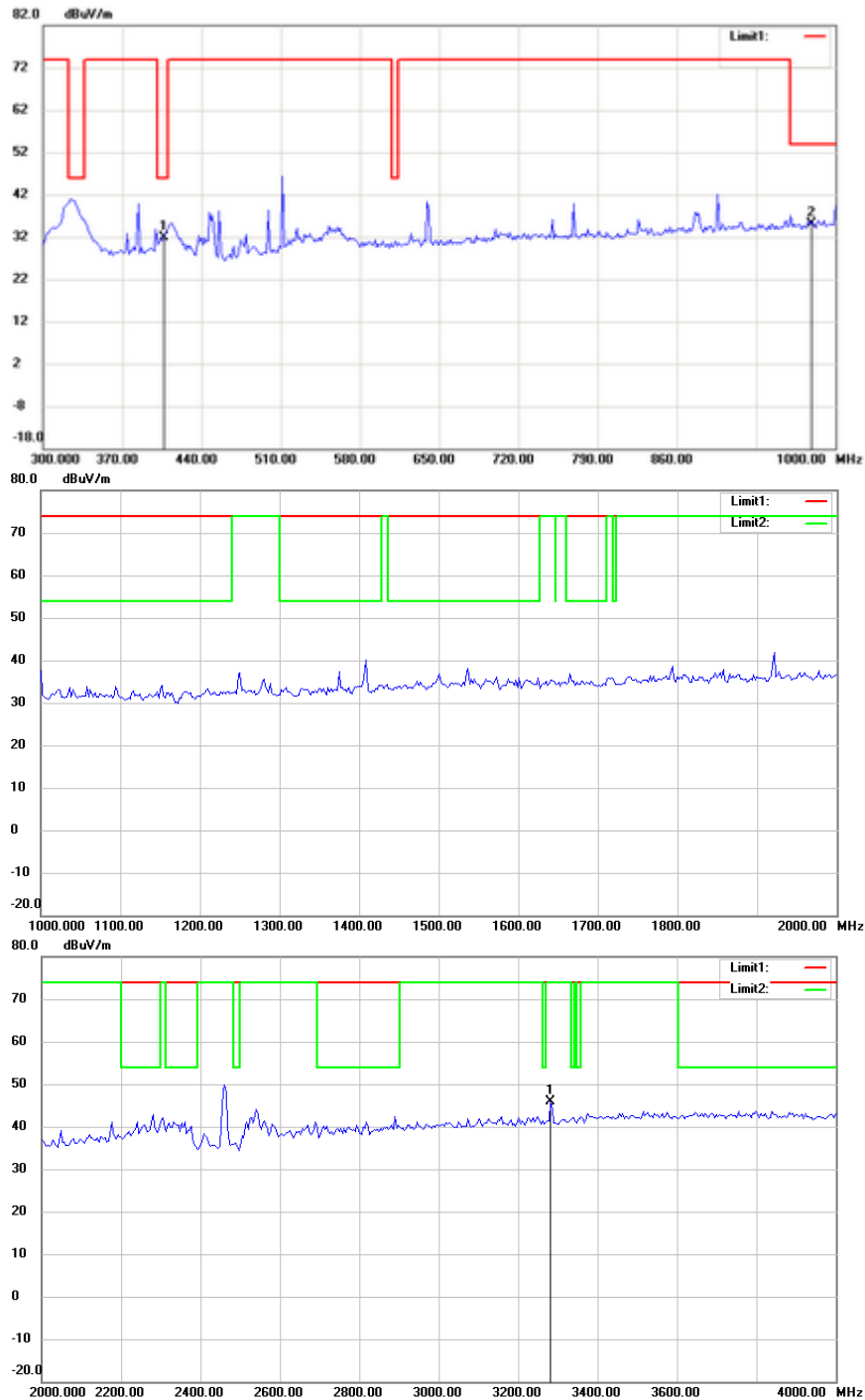
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6D21009-10909-P-15
FCC ID: WNQ-KWG6000



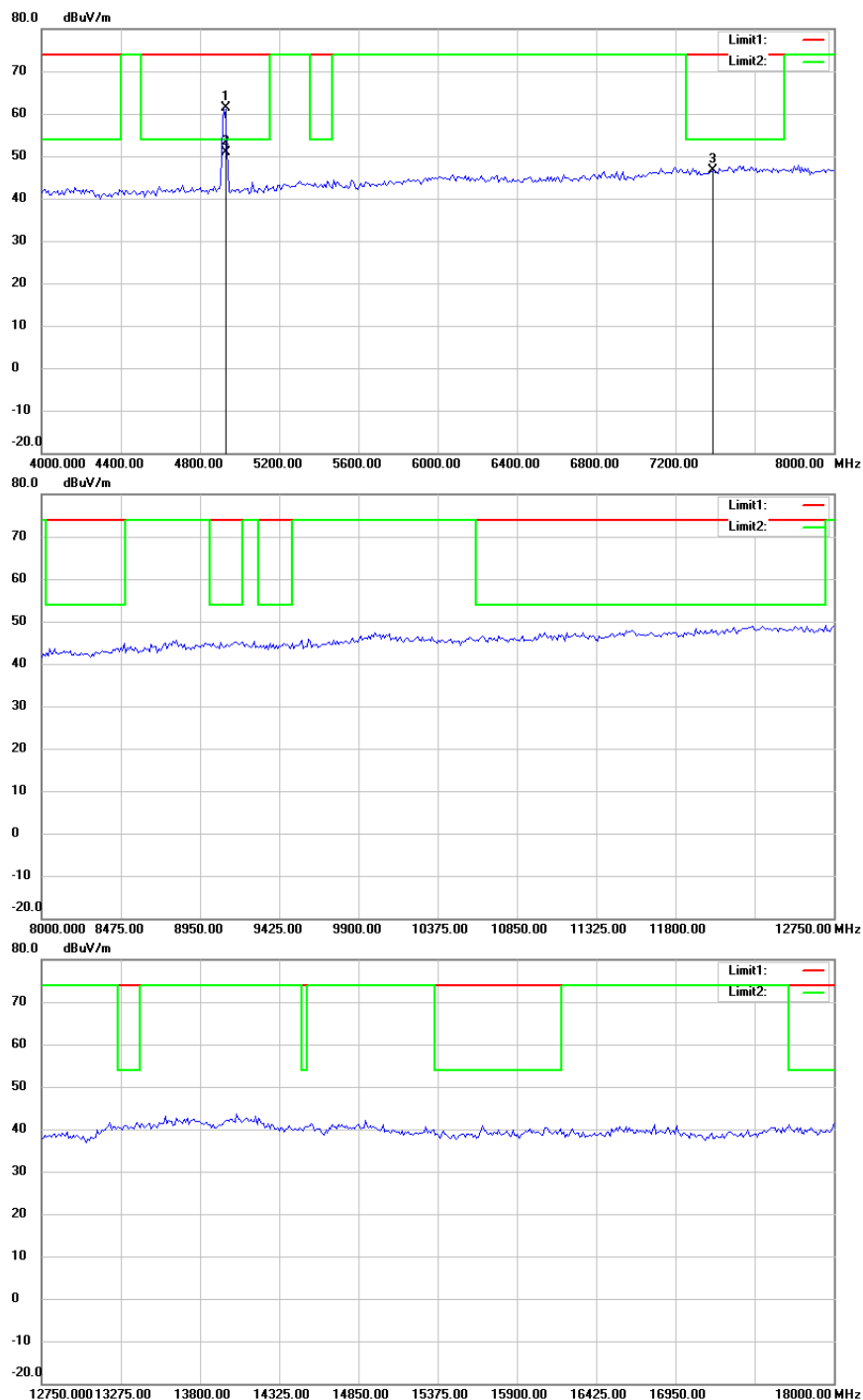
Up Line: Peak Limit Line
Down Line: Ave Limit Line
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



Up Line: Peak Limit Line
Down Line: Ave Limit Line

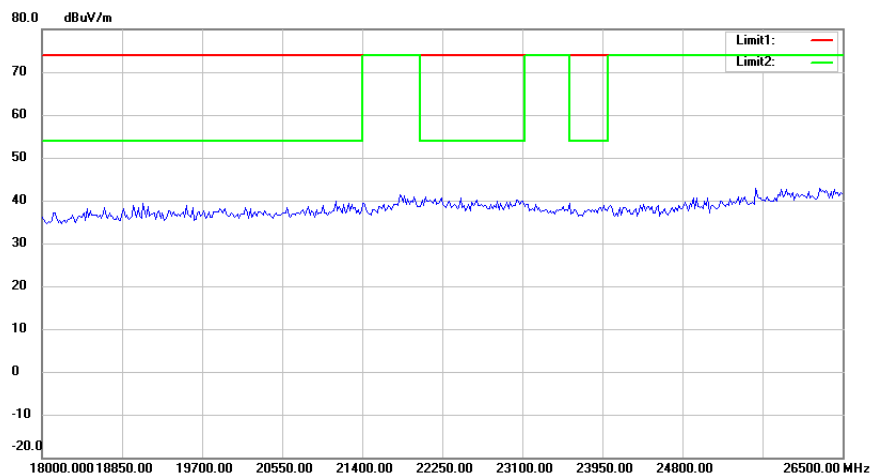
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

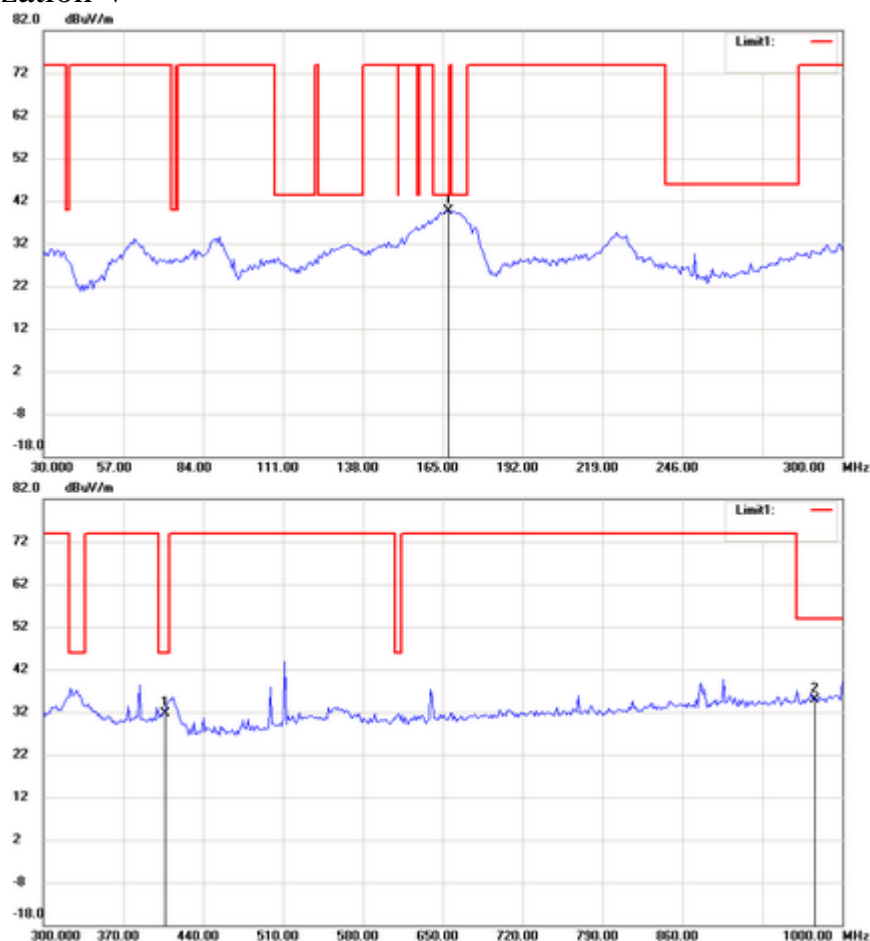


Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



Antenna Polarization V

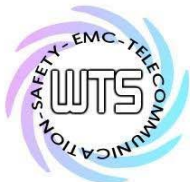


Up Line: Peak Limit Line

Down Line: Ave Limit Line

Note:

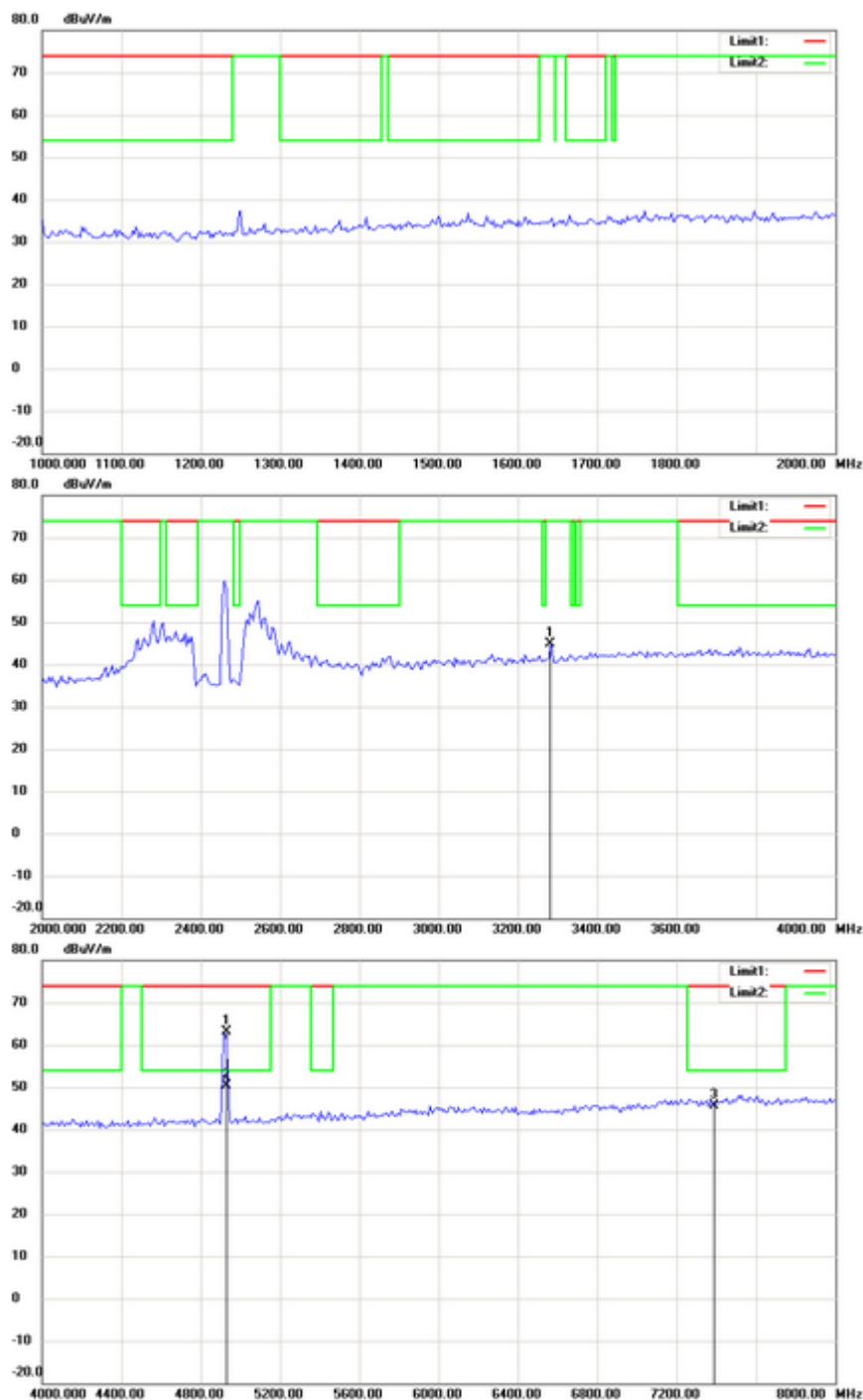
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21009-10909-P-15

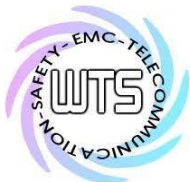
FCC ID: WNQ-KWG6000



Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

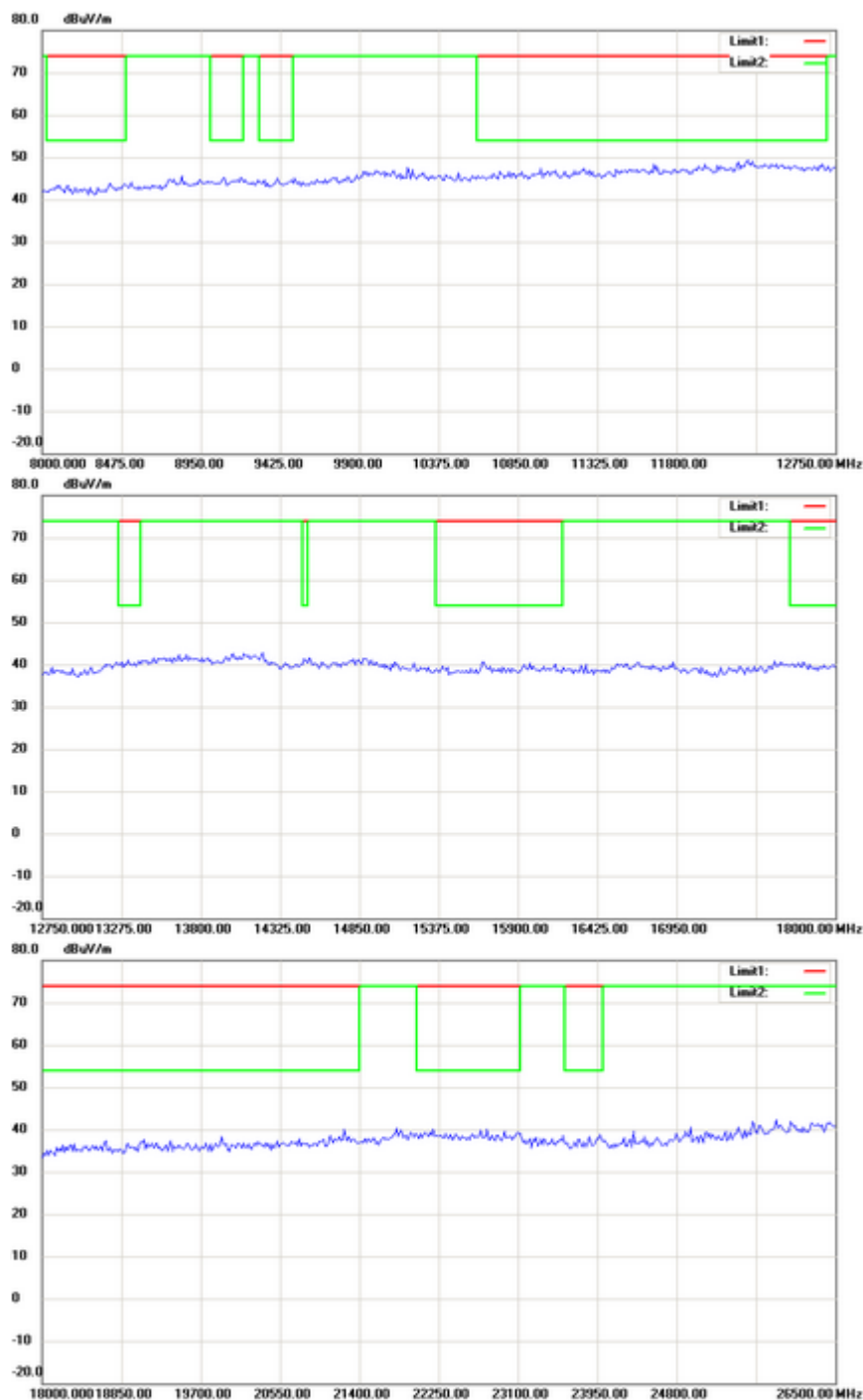
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6D21009-10909-P-15

FCC ID: WNQ-KWG6000



Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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