# FCC PART 15 SUBPART C TEST REPORT

for

**Bluetooth headset** 

Model No.: BT-06HS-T

FCC ID: SJ9-BT-06HS-T

of

Applicant: PLANEX COMMUNICATIONS INC.
Address: F Nissei Ebisu Bldg 2F.16-3 Higashi 3-chome, Shibuya-ku,
TOKYO 150-0011, Japan

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.: W6M21002-10441-C-1

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C. TEL: 886-2-66068877 FAX: 886-2-66068879 E-mail: wts@wts-lab.com

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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 is 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.

#### **Tester:**

March 5, 2010 Danny Sung

Date WTS-Lab. Name Signature

#### **Technical responsibility for area of testing:**

March 5, 2010 Chang Tse-Ming

Date WTS Name Signature

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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: PLANEX COMMUNICATIONS INC.

Street: F Nissei Ebisu Bldg 2F.16-3 Higashi 3-chome, Shibuya-ku,

Town: Tokyo 150-0011,

Country: Japan

Telephone: 81-3-5766-1300 Fax: 81-3-5766-1301

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## 1.4 Application details

Date of receipt of test item: February 22, 2010

Date of test: from February 23, 2010 to March 5, 2010

#### 1.5 General information of Test item

Type of test item: Bluetooth headset

Model Number: BT-06HS-T

Multi-listing model number: ./.

Brand name: PCI

Photos: see appendix

**Technical data** 

Frequency band: 2402 - 2480 MHz

Frequency (ch A): 2.402 GHz Frequency (ch B): 2.441 GHz Frequency (ch C): 2.480 GHz

**Transmitter** Unom

Normal Mode

Power ( ch A or ch 0): Conducted: 0.04 dBm Power ( ch B or ch 39): Conducted: -0.54 dBm Power ( ch C or ch 78): Conducted: -0.84 dBm

EDR Mode

Power (ch A or ch 0): Conducted: 2.64 dBm Power (ch B or ch 39): Conducted: 1.94 dBm Power (ch C or ch 78): Conducted: 1.70 dBm

Power supply: Battery 3.7 Vdc

Operation modes: duplex

Modulation Type: GFSK  $\cdot \pi / 4DQPSK \cdot 8DPSK$ 

Antenna Type: Multilayer Chip antenna

Antenna gain: 0 dBi

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Host device: none

Classification:

Fixed Device	
Mobile Device (Human Body distance > 20cm)	
Portable Device (Human Body distance < 20cm)	
Modular Radio Device	

**Manufacturer:** (if applicable)

Name: HI-PRO INTERNATIONAL R&D CO., LTD. Street: 3F., NO. 295, RUI GUANG RD., NEI HU,

Town: TAIPEI Country: TAIWAN

Additional information: ./.

#### 1.6 Test standards

Technical standard: FCC RULES PART 15 Subpart B / SUBPART C § 15.247 (2008-10)

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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 3 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

Details of power supply Battery 3.7 VDC

Extreme conditions parameters: test voltage : -- extreme

min : -- V max : -- V

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# 2.3 Test Equipment List

No.	Test equipment	Туре	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 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 004	ZWEILEITER-V- NETZNACHBILDUNG TWO- LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2009/3/27	2010/3/26
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	2009/5/9	2010/5/8
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	on 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 010	ABSORBING CLAMP	MDS 21	3469	Schwarzbeck	2009/9/11	2010/9/10
ETSTW-RE 011	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070165	МОТЕСН	Function	on Test
ETSTW-RE 017	Log-Periodic Antenna	HL025	352886/001	R&S	2009/5/4	2010/5/3
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	on 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	2009/4/15	2010/4/14
ETSTW-RE 029	Biconical Antenna	3109	33524	EMCO	2009/4/15	2010/4/14
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	EMCO	2009/3/23	2010/3/22
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	2009/5/5	2010/5/4
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	2009/4/14	2010/4/13
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2009/6/10	2010/6/09



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ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function	on Test
ETSTW-RE 065	Amplifier	AMF-6F- 18002650-25-10P	941608	MITEQ	2009/4/21	2010/4/20
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	НР	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 091	Match Pad	MDCS1500	None	WOKEN	Function	on Test
ETSTW-RE 092	Match Pad	MDCS1510	None	WOKEN	Function	on Test
ETSTW-RE 093	LUMPED ELEMENT POWER DIVIDER	PL2-10	146	MCLI	2010/3/5	2011/3/4
ETSTW-RE 095	Digital Thermo-Hygro Meter	0410	01	WISEWIND	2009/3/24	2010/3/23
ETSTW-RE 096	SIGNAL GENERATOR	SMIQ 03B	102274	R&S	2009/6/5	2010/6/4
ETSTW-RE 097	GPS SIGNAL GENERATOR	GSG-L1	06-0507-0311	Naviva	Function Test	
ETSTW-RS 010	Broadband Field Meter	NBM-520	C-0195	Narda	2009/09/29	2010/09/28
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2009/9/22	2010/9/21
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2009/9/21	2010/9/20
ETSTW-Cable 001	Microwave Cable	SUCOFLEX 104 (S Cable 1)	238094	HUBER+SUHNER	2009/9/16	2010/9/15
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

Worldwide Testing Services(Taiwan) Co., Ltd.

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#### 2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-2003 using a  $50\mu H$  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. The ambient, temperature of the UUT was 23°C with a humidity of 40 %.

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  $dB\mu V$ ) 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  $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} \text{ @3m}$ 

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 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 (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)	×	×	
Equivalent radiated Power	15.247(b)	×	×	
Spurious Emissions radiated – Transmitter operating	15.247(c)	×	×	
Spurious Emissions conducted – Transmitter operating	15.247			
Carrier Frequency Separation	15.247(a) (1)	×	×	
Number of Hopping Frequencies	15.247(a) (1)(i)	×	×	
Time of Occupancy (Dwell Time)	15.247(a) (1)(i)	×	×	
20 dB Bandwidth	15.247(a) (1)(i)	×	×	
Band-edge Compliance of RF Emission	15.247(c)	×	×	
Radiated Emissions from Digital Part and Receiver Section of Transceiver	15.109	×	×	
Power Line Conducted Emission	15.207(a)			

The follows is intended to leave blank.

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## 3.1 Peak Output Power (transmitter)

FCC Rule: 15.247

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).

#### Normal mode

	Conducted Power		
Test conditions	Channel A	Channel B	Channel C
	[dBm]	[dBm]	[dBm]
$T_{\text{nom}} = 23^{\circ}\text{C}$ $V_{\text{nom}} = 3.7 \text{ V}$	0.04	-0.54	-0.84

#### EDR mode

	Conducted Power			
Test conditions	Test conditions Channel A Channel B		Channel C	
	[dBm]	[dBm]	[dBm]	
$T_{\text{nom}} = 23^{\circ}\text{C}$ $V_{\text{nom}} = 3.7 \text{ V}$	2.64	1.94	1.70	

Test conditions		Radiated Power		
		tions Channel A Channel B Chann		Channel C
		[dBm]	[dBm]	[dBm]
$T_{\text{nom}} = 23^{\circ}\text{C}$	$V_{nom} = 3.7 \text{ V}$			

Test conditions	Signal Field strength TX highest power mode
$T_{\text{nom}} = 23^{\circ}\text{C}, \ V_{\text{nom}} = 3.7 \text{ V}$	$dB\mu V/m$
Frequency[MHz]	
Measurement uncertainty	< 3 dB

The diagrams for the field strength measurements are included in Appendix.

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# **Maximum Peak Output Power**

#### Limits:

Frequency	Number of hopping channels					
MHz	≥ 75	≥ 50	49 ≥ 25	74 ≥ 15		
902-928		30 dBm	24 dBm			
2400-2483.5 MHz	30 dBm	-		21 dBm		
5725-5850 MHz	30 dBm	-				

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

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

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### 3.2 RF Exposure Compliance Requirements

According to Supplement C, Edition 01-01 to OET Bulletin 65, Edition 97-01 this spread spectrum transmitter is categorically excluded from routine environmental evaluation because of the low power level, where there is a high likelihood of compliance with RF exposure standards.

The antenna used for this Bluetooth transceiver module must not be co-located or operating in conjunction with any other antenna or transmitter.

#### 3.3 Out of Band Radiated Emissions

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.

For frequencies below 1GHz:

Max. reading – 20 dB

Guidance on Measurement of FHSS 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." Here the correction was added to the limit instead subtracted from the reading.

Duty Cycle correction = 20 log (dwell time/100ms)
For frequencies above 1GHz (Peak measurements).
Limit = max. aver. reading-20dB +20dB(because Peak detector is used)

For frequencies above 1GHz (Average measurements).

Max. reading – 20 dB - duty cycle correction:

No duty cycle correction was added to the reading

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 017, ETSTW-RE 018, ETSTW-RE 021, ETSTW-RE 028, ETSTW-RE 030, ETSTW-RE 043, ETSTW-RE 064

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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 26000 MHz.

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

**RES BW VID BW** 

Frequency <1 GHz 100 kHz 100 kHz (Peak measurements) Frequency >1 GHz 1 MHz 1 MHz (Peak measurements)

1 MHz 1 MHz (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 960	500	54.0

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of FHSS Systems:

"If the emission is pulsed, modify the unit for continues operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation." Here the correction was added to the limit instead subtracted from the reading.

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

For frequencies above 1GHz (Average measurements).

Limit – duty cycle correction

No duty cycle correction was added to the reading.

 $54.0dB\mu V/m$ 

For frequencies above 1GHz (Peak measurements).

Limit + 20dB

 $54.0 dB \mu V/m + 20 dB = 74 dB \mu V/m$ 

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 017, ETSTW-RE 028, ETSTW-RE 029, ETSTW-RE 030, ETSTW-RE 042, ETSTW-RE 043, ETSTW-RE 064

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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))

SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance to 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 an 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 "Marker-Delta-Method" or the "Duty-Cycle Correction Factor".

#### Summary table with radiated data of the test plots

		BT-06HS- TX mode ( Horizontal	(CH0)		Date: Temperature: Humidity:	2010/2/25 24 60	°C %	Engineer:	Kevin
	Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
ĺ	172.3046	22.23	peak	14.60	36.83	43.50	-6.67	90	150
	408.0160	21.25	peak	19.05	40.30	46.00	-5.70	145	150

Frequency	Rea	ding	Factor	or Result @3m		Limit	Limit @3m		Table	
	(dB	uV)	(dB)	(dBuV/m)		(dBu	(dBuV/m)		Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
4801.6030	52.91		-4.78	48.13	-	74.00	54.00	-25.87	145	150
7206.0000	47.21		-0.77	46.44		74.00	54.00	-27.56	160	150
9608.0000	30.28		14.21	44.49		74.00	54.00	-29.51	140	150
12010.0000	32.2		16.87	49.07		74.00	54.00	-24.93	160	150



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FCC ID: SJ9-BT-06HS-T

Polarization: Vertical

	Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
1	127.9360	23.68	peak	14.32	38.00	43.50	-5.50	105	150
1	335.0701	15.29	peak	17.04	32.33	46.00	-13.67	120	150

Frequency	Read	ding	Factor	actor Result @3m		Limit @3m		Margin	Table	
,	(dBi	uV)	(dB)	(dBuV/m)		(dBuV/m)		_	Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
4801.6030	51.93		-4.78	47.15	-	74.00	54.00	-26.85	140	150
7206.0000	47.16		-0.77	46.39	-	74.00	54.00	-27.61	150	150
9608.0000	30.96		14.21	45.17		74.00	54.00	-28.83	160	150
12010.0000	31.14		16.87	48.01		74.00	54.00	-25.99	165	150

Mode:TX mode ( CH39 )Temperature: 24°CEngineer: KevinPolarization:HorizontalHumidity: 60%

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
172.3046	21.27	peak	14.60	35.87	43.50	-7.63	105	150
405.2105	20.67	peak	18.97	39.64	46.00	-6.36	130	150

Frequency	Rea	ding	Factor	r Result @3m		Limit	Limit @3m		Table	
	(dB	uV)	(dB) (dBuV/m)		(dBuV/m)		_	Degree	Ant. High	
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
4881.7640	54.55		-4.49	50.06		74.00	54.00	-23.94	140	150
7323.0000	47.60		-0.80	46.80		74.00	54.00	-27.20	150	150
9764.0000	30.23		14.89	45.12		74.00	54.00	-28.88	150	150
12205.0000	29.62		17.45	47.07		74.00	54.00	-26.93	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)
172.3046	24.19	peak	14.60	38.79	43.50	-4.71	110	150
998.5972	12.49	peak	29.20	41.69	54.00	-12.31	125	150



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Frequency	Rea	ding	Factor	Factor Result @3		Limit	Limit @3m		Table	
	(dB	uV)	(dB)	(dBu	V/m)	(dBuV/m)		_	Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
4881.7640	51.47		-4.49	46.98		74.00	54.00	-27.02	155	150
7323.0000	47.11		-0.80	46.31		74.00	54.00	-27.69	170	150
9764.0000	31.2		14.89	46.09		74.00	54.00	-27.91	130	150
12205.0000	31.27		17.45	48.72		74.00	54.00	-25.28	160	150

TX mode (CH78) °C Engineer: Kevin Temperature: 24 Mode:

Humidity: Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
172.3046	22.74	peak	14.60	37.34	43.50	-6.16	110	150
406.6132	21.24	peak	19.01	40.25	46.00	-5.75	120	150

Frequency	Rea	ding	Factor	or Result @3m		Limit	Limit @3m		Table	
	(dB	uV)	(dB)	(dBuV/m)		(dBuV/m)		_	Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
4961.9240	55.80		-4.49	51.31		74.00	54.00	-22.69	160	150
7440.0000	48.78		-0.85	47.93		74.00	54.00	-26.07	165	150
9920.0000	31.86		15.60	47.46		74.00	54.00	-26.54	160	150
12400.0000	30.25		17.62	47.87		74.00	54.00	-26.13	165	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	23.16	peak	14.80	37.96	43.50	-5.54	120	150
330.8618	16.71	peak	16.93	33.64	46.00	-12.36	140	150

Frequency	Rea	ding	Factor	Result	@3m	Limit	@3m	Margin	Table	
,	(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)		Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
4961.9240	56.04		-4.49	51.55		74.00	54.00	-22.45	145	150
7440.0000	47.26		-0.85	46.41		74.00	54.00	-27.59	150	150
9920.0000	30.78		15.60	46.38		74.00	54.00	-27.62	160	150
12400.0000	30.46		17.62	48.08		74.00	54.00	-25.92	170	150

FCC ID: SJ9-BT-06HS-T

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.

All other not noted test plots do not contain significant test results in relation to the limits.

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

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 017, ETSTW-RE 018, ETSTW-RE 021, ETSTW-RE 028, ETSTW-RE 030, ETSTW-RE 043, ETSTW-RE 064

Worldwide Testing Services(Taiwan) Co., Ltd.

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## 3.6 Carrier Frequency Separation

Carrier Frequency Separation was measured with modulation (declared by manufacturer).

According to FCC rules part 15 subpart C §15.247 frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or 20 dB bandwidth of the hopping channel, whichever is greater.

Test con	nditions	Channel Separation		
		Channel 0	Channel 0+1	
$T_{\text{nom}} = 23^{\circ}\text{C}$ $V_{\text{nom}} = 3.7 \text{ V}$		1000 kHz		

Test con	nditions	Channel Separation		
		Channel 39	Channel 39+1	
$T_{\text{nom}} = 23^{\circ}\text{C}$ $V_{\text{nom}} = 3.7 \text{ V}$		1000 kHz		

Test conditions		Channel Separation			
		Channel 78	Channel 78+1		
$T_{\text{nom}} = 23^{\circ}\text{C}$ $V_{\text{nom}} = 3.7 \text{ V}$		1000 kHz			

### **Limits:**

Frequency Range	Limits			
MHz	20 dB bandwidth < 25 kHz	20 dB bandwidth > 25 kHz		
902-928	25 kHz	20 dB bandwidth		
2400-2483.5 5725-5850.0	25 kHz	20 dB bandwidth		

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

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## 3.7 Number of Hopping Frequencies

According to FCC rules part 15 subpart C §15.247 frequency hopping systems operating in the 2400-2483.5 MHz band shall use at least 15 hopping frequencies. Frequency hopping systems in 5725-5850 MHz bands shall use least 75 hopping frequencies.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies; if the 20dB bandwidth of the hopping channel 250 kHz or greater, the system shall use at least 25 hopping frequencies.

Test conditions		Operating Mode	Number of Channels
$T_{nom}=23$ °C	$V_{nom} = 3.7 V$	normal transmitting	79

#### **Limits:**

Frequency Range	Limit	
MHz	20dB Bandwidth	Number of Channels
902-928 MHz	Bandwidth < 250 kHz	≥ 50
902-928 MHZ	Bandwidth ≥ 250 kHz	≥ 25
2400-2483.5	not defined	15
5725-5850.0 MHz	1 MHz	75

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

Explanation: See attached diagrams in appendix.

#### 3.7.1 Pseudorandom Frequency Hopping Sequence

The generation of the hopping sequence is determined by the Bluetooth cord specification and complies with the FCC requirements.

#### 3.7.2 Coordination of hopping sequences to other transmitters

According to the Bluetooth core specification V1.1 such a coordination is not possible. During scatternet function only one of the two hopping sequences will be used at a definite moment.

#### 3.7.3 System Receiver Hopping Capability

According to the Bluetooth core specification. The system receivers shift frequencies in synchronization with the transmitted signals.

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## 3.8 Time of Occupancy (Dwell Time)

Frequency hopping systems operating in the 5725-5850 MHz band shall use an average time of occupancy on any frequency not greater than 0.4 seconds within a 30 second period.

In 2400-2483.5 MHz band the average time of occupancy on any channel shall not be greater than 0.4 seconds multiplied by the number of hopping channels employed.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the average time of occupancy on any frequency shall not greater than 0.4 seconds within a 20 second period; if the 20dB bandwidth of the hopping channel is 250 kHz or greater, the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.

Test conditions	Operating mode	Measurement period	Time of Occupancy
$T_{\text{nom}} = 23^{\circ}\text{C}$	normal transmitting-DH 1	31.6 s	141.44 ms
V <sub>nom</sub> = 3.7 V Channel 0	normal transmitting-DH 3	31.6 s	270.72 ms
	normal transmitting-DH 5	31.6 s	325.05 ms

Test conditions	Operating mode	Measurement period	Time of Occupancy
$T_{\text{nom}} = 23^{\circ}\text{C}$	normal transmitting-DH 1	31.6 s	141.44 ms
$V_{nom} = 3.7 \text{ V}$	normal transmitting-DH 3	31.6 s	270.72 ms
Channel 39	normal transmitting-DH 5	31.6 s	325.05 ms

Test conditions	Operating mode	Measurement period	Time of Occupancy
$T_{\text{nom}} = 23^{\circ}\text{C}$	normal transmitting-DH 1	31.6 s	141.44 ms
$V_{nom} = 3.7 V$	normal transmitting-DH 3	31.6 s	270.72 ms
Channel 78	normal transmitting-DH 5	31.6 s	325.05 ms

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## Limits and measurement periods:

Frequency MHz	Number of channels	Measurement Periode	Limit
902 – 928	≥50	20 s	0.4 s
902 – 928	49 ≥ 25	10 s	0.4 s
2400 – 2483.5	≥ 15	0.4 s * number of used channels	0.4 s
5725- 5850	≥ 75	30 s	0.4s

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

Explanation: See attached diagrams in appendix, which show the On-time and the number of counted

events during the measurement period

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#### 3.9 20dB Bandwidth

Frequency hopping systems operating in the 5725-5850 MHz bands shall use a maximum 20dB bandwidth of 1 MHz.

The 20dB bandwidth is measured on the lowest, middle and highest hopping channel.

For frequency hopping systems operating in the 902-928 MHz band the maximum 20dB bandwidth of the hopping channel is 500 kHz.

#### Normal mode

Test conditions		20 dB Bandwidth			
		Channel A	Channel B	Channel C	
$T_{\text{nom}} = 23^{\circ}\text{C}$	$V_{\text{nom}} = 3.7 \text{ V}$	897.435897436 kHz	897.435897436 kHz	891.025641026 kHz	

#### EDR mode

Test co	onditions		20 dB Bandwidth	
		Channel A	Channel B	Channel C
$T_{\text{nom}} = 23^{\circ}\text{C}$	$V_{\text{nom}} = 3.7 \text{ V}$	1.275641026 MHz	1.269230769 MHz	1.269230769 MHz

#### **Limits:**

Frequency Range / MHz	Limit
902-928	≤ 500 kHz
2400-2483.5	not defined
5725-5850	≤ 1 MHz

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

Explanation: See attached diagrams in appendix.

### 3.9.1 System Receiver Input Bandwidth

It is determined in the Bluetooth core specification. The value matches to the bandwidth of transmitter signal.

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## 3.10 Band-edge Compliance of RF Emissions

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.

#### Normal mode

Test co	nditions		r outside band-edges Frequency
		Lower Band-edge	Upper Band-edge
$T_{\text{nom}} = 23^{\circ}\text{C}$ $V_{\text{nom}} = 3.7 \text{ V}$		51.51 dB	45.64 dB

Test co	nditions		r outside band-edges g Frequency
		Lower Band-edge	Upper Band-edge
$T_{\text{nom}} = 23$ °C $V_{\text{nom}} = 3.7$ V		51.53 dB	45.29 dB

#### EDR mode

Test co	nditions		r outside band-edges Frequency
		Lower Band-edge	Upper Band-edge
$T_{\text{nom}} = 23^{\circ}\text{C}$ $V_{\text{nom}} = 3.7 \text{ V}$		46.07 dB	39.32 dB

Test co	nditions		r outside band-edges g Frequency
		Lower Band-edge	Upper Band-edge
$T_{\text{nom}} = 23$ °C $V_{\text{nom}} = 3.7$ V		47.31 dB	39.44 dB

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## **Limits:**

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

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

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# 3.11 Radiated Emissions from Digital Part and Receiver Section of Transceiver

FCC Rule: 15.109

## Summary table with radiated data of the test plots

Model: BT-06HS-T Date: 2010/3/3

Mode: Digital part Temperature: 26 °C Engineer: Danny

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)
220.4610	4.42	peak	11.90	16.32	30.00	-13.68	100	290
300.0000	5.49	peak	15.53	21.02	37.00	-15.98	90	250
520.2405	0.11	peak	20.96	21.07	37.00	-15.93	135	200
691.3827	4.06	peak	24.21	28.27	37.00	-8.73	120	165

Frequency	Read	ding	Factor	r Result @3m		Limit	Limit @3m		Table	
	(dB	uV)	(dB)	(dBuV/m)		(dBuV/m)		_	Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
3627.2550	44.46		-1.75	42.71		74.00	54.00	-31.29	145	150
7503.0060	51.30		-0.74	50.56		74.00	54.00	-23.44	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)
85.7315	8.26	peak	8.47	16.73	30.00	-13.27	100	130
298.3768	5.91	peak	15.49	21.40	37.00	-15.60	110	245
973.3467	5.08	peak	28.33	33.41	37.00	-3.59	120	390
994.3888	4.46	peak	28.56	33.02	37.00	-3.98	130	395

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	Frequency	Reading		Factor	Result	@3m	Limit	Limit @3m		Table	
		(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)		Degree	Ant. High
	(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	3993.9880	43.47		-1.12	42.35	-	74.00	54.00	-31.65	165	150
	7535.0700	50.24		-0.70	49.54		74.00	54.00	-24.46	135	150



Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

Mode: RX mode (CH0) Temperature: 24 °C Engineer: Kevin

Polarization: Horizontal Humidity: 60 %

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Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
173.3867	24.42	peak	14.47	38.89	43.50	-4.61	105	150
185.2906	26.68	peak	13.05	39.73	43.50	-3.77	100	150
420.6413	21.74	peak	19.40	41.14	46.00	-4.86	140	150
524.4490	17.20	peak	21.60	38.80	46.00	-7.20	125	150

Frequency	Rea	ding	Factor	Result	@3m	Limit	@3m	Margin	Table	
	(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)	_	Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
3741.4830	45.40		-1.41	43.99		74.00	54.00	-30.01	135	150
7567.1340	48.37		-0.67	47.70		74.00	54.00	-26.30	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)
30.0000	19.59	peak	13.30	32.89	40.00	-7.11	95	150
177.1743	25.55	peak	14.01	39.56	43.50	-3.94	110	150
465.5310	14.34	peak	20.49	34.83	46.00	-11.17	130	150
541.2826	14.28	peak	21.97	36.25	46.00	-9.75	120	150

Frequency	Rea	ding	Factor	Result	@3m	Limit	@3m	Margin	Table	
	(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)		Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
3723.4470	45.54		-1.45	44.09	1	74.00	54.00	-29.91	155	150
7567.1340	48.34		-0.67	47.67		74.00	54.00	-26.33	170	150

Mode: RX mode ( CH39 ) Temperature: 24 °C Engineer: Kevin

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)
127.9360	15.37	peak	14.32	29.69	43.50	-13.81	95	150
175.0100	24.19	peak	14.27	38.46	43.50	-5.04	105	150
433.2665	21.80	peak	19.78	41.58	46.00	-4.42	130	150
541.2826	17.38	peak	21.97	39.35	46.00	-6.65	115	150



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Frequency	Rea	ding	Factor	Result	@3m	Limit	@3m	Margin	Table	
	(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)		Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
3705.4110	45.38		-1.49	43.89		74.00	54.00	-30.11	130	150
7631.2620	48.58		-0.65	47.93		74.00	54.00	-26.07	135	150

Polarization: Vertical

_									
	Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	130.1003	23.09	peak	14.50	37.59	43.50	-5.91	100	150
Ī	177.1743	25.72	peak	14.01	39.73	43.50	-3.77	120	150
Ī	531.4630	15.14	peak	21.75	36.89	46.00	-9.11	130	150
Ī	879.3586	11.57	peak	27.31	38.88	46.00	-7.12	120	150

Frequency	Rea	ding	Factor	Result	@3m	Limit	@3m	Margin	Table	
	(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)		Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
3723.4470	45.54		-1.45	44.09		74.00	54.00	-29.91	160	150
7567.1340	48.34		-0.67	47.67		74.00	54.00	-26.33	145	150

Engineer: Kevin Mode: RX mode (CH78) Temperature: 24 °C Polarization: Horizontal Humidity: % Table Ant. Margin Frequency Reading Factor Result Limit Detector Degree High (MHz) (dBuV) (dB) (dB) (dBuV/m) (dBuV/m) (Deg.) (cm) 127.9360 20.72 14.32 35.04 43.50 -8.46 150 peak 100 178.7975 25.67 13.81 39.48 43.50 -4.02 105 150 peak 437.4750 21.81 peak 19.90 41.71 46.00 -4.29 135 150 528.6574 16.87 peak 21.69 38.56 46.00 -7.44 140 150

Frequency	Rea	ding	Factor	Result	@3m	Limit	@3m	Margin	Table	
	(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)	_	Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1000.0000	57.47		-10.45	47.02		74.00	54.00	-26.98	135	150
7527.0540	49.03		-0.71	48.32		74.00	54.00	-25.68	140	150



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FCC ID: SJ9-BT-06HS-T

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
31.6233	20.32	peak	13.29	33.61	40.00	-6.39	100	150
173.3867	24.65	peak	14.47	39.12	43.50	-4.38	110	150
398.1965	16.31	peak	18.78	35.09	46.00	-10.91	125	150
553.9080	13.97	peak	22.26	36.23	46.00	-9.77	120	150

Ī	Frequency	Rea	ding	Factor	Result	@3m	Limit	@3m	Margin	Table	
		(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)		Degree	Ant. High
	(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	3723.4470	45.54		-1.45	44.09		74.00	54.00	-29.91	150	150
	7567.1340	48.34		-0.67	47.67		74.00	54.00	-26.33	145	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 attached diagrams in appendix.

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 017, ETSTW-RE 028, ETSTW-RE 029, ETSTW-RE 030, ETSTW-RE 042, ETSTW-RE 043, ETSTW-RE 064

FCC ID: SJ9-BT-06HS-T

#### 3.12 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)						
Trequency	quasi-peak	average					
150 kHz	lower limit line	Lower limit line					

Model:	BT-06HS-T	Date:		
Mode:		Temperature:	°C	Engineer:
Polarization: N		Humidity:	%	ū

Frequency (MHz)	Rea (dB	ding uV) Ave.	Factor (dB) Corr.		sult BuV) Ave.		mit uV) Ave.	Margin (dB)
(1711 12)	Qi	7100.	COII.	Qi	7100.	Q1	7100.	(uD)

Polarization: I 1

Frequency	Rea (dB	ding aV)	Factor (dB)		sult BuV)	Lir (dB	mit uV)	Margin
(MHz)	QP	Ave.	Corr.	QP	Ave.	QP	Ave.	(dB)
					1			

#### 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		

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.

5. The EUT is battery used, so this test is not required.

Test equipment used: ETSTW-CE 001, ETSTW-CE 003, ETSTW-CE 004, ETSTW-CE 006, ETSTW-RE 064

FCC ID: SJ9-BT-06HS-T

# **Appendix**

# A Measurement diagrams

- 1. Peak Output Power
- 2. Spurious Emissions radiated-TX & RX
- 3. Carrier Frequency Separation
- 4. Number of Hopping Frequencies
- 5. Time of Occupancy (Dwell Time)
- 6. 20dB Bandwidth
- 7. Band-edge Compliance of RF Conducted Emissions
- 8. Radiated Emissions from Digital Part

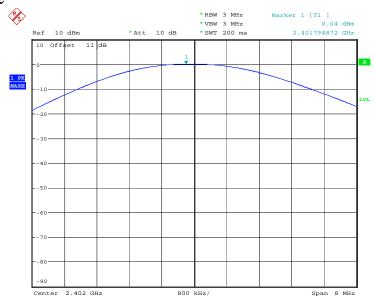
## **B** Photos

- 1. External Photos
- 2. Internal Photos
- 3. Set Up Photo of Radiated Emission
- 4. Set Up Photo of Conducted Emission

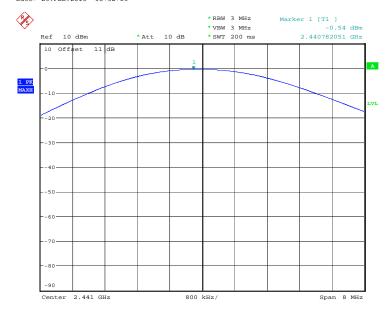
Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

# Peak Output Power Normal mode



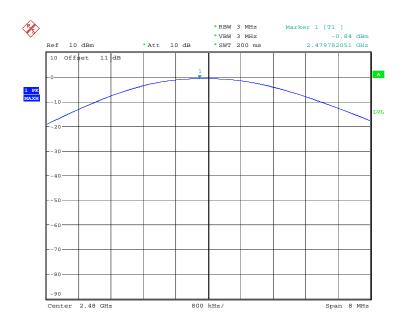
MAX OUTPUT POWER CH0
Date: 23.FEB.2010 08:52:15



MAX OUTPUT POWER CH39
Date: 23.FEB.2010 08:52:38

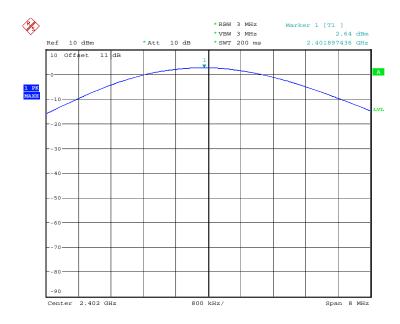
Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



MAX OUTPUT POWER CH78
Date: 23.FEB.2010 08:52:55

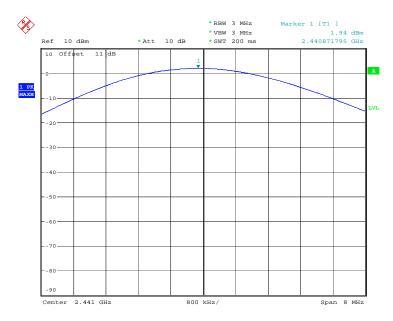
# EDR mode



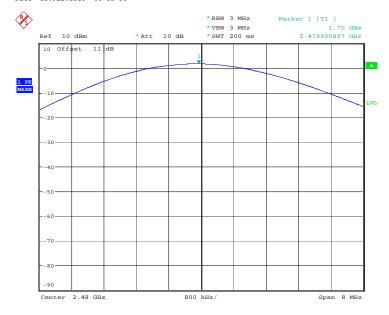
MAX OUTPUT POWER CH0 EDR MODE Date: 23.FEB.2010 08:53:55

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



MAX OUTPUT POWER CH39 EDR MODE Date: 23.FEB.2010 08:53:38



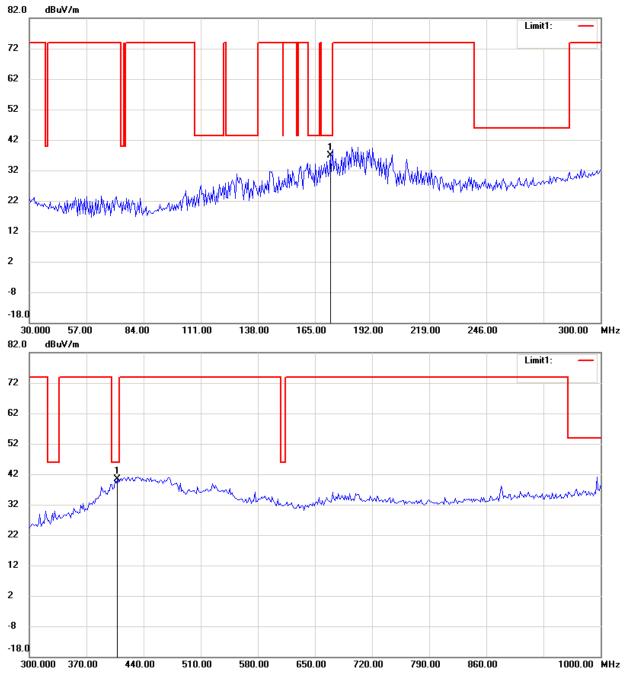
MAX OUTPUT POWER CH78 EDR MODE Date: 23.FEB.2010 08:53:19

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

# Spurious Emissions radiated TX-CH 0

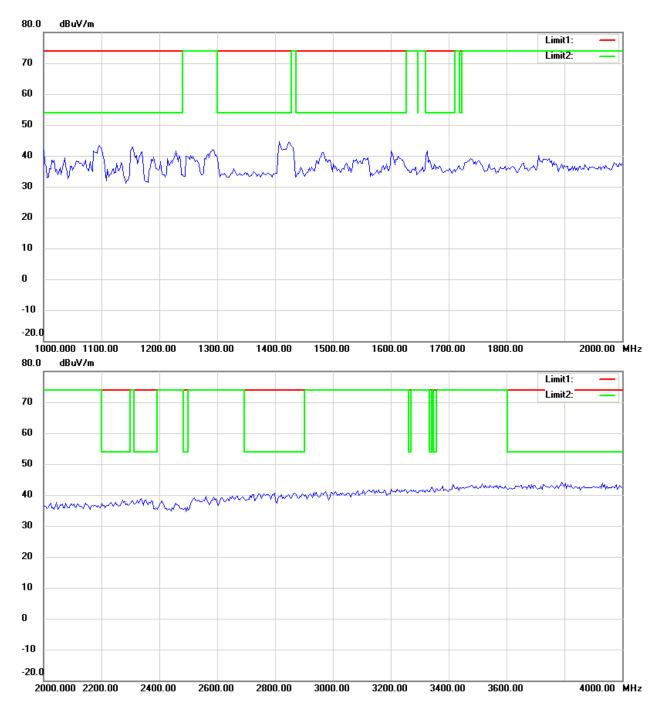
Antenna Polarization H



- 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: W6M21002-10441-C-1

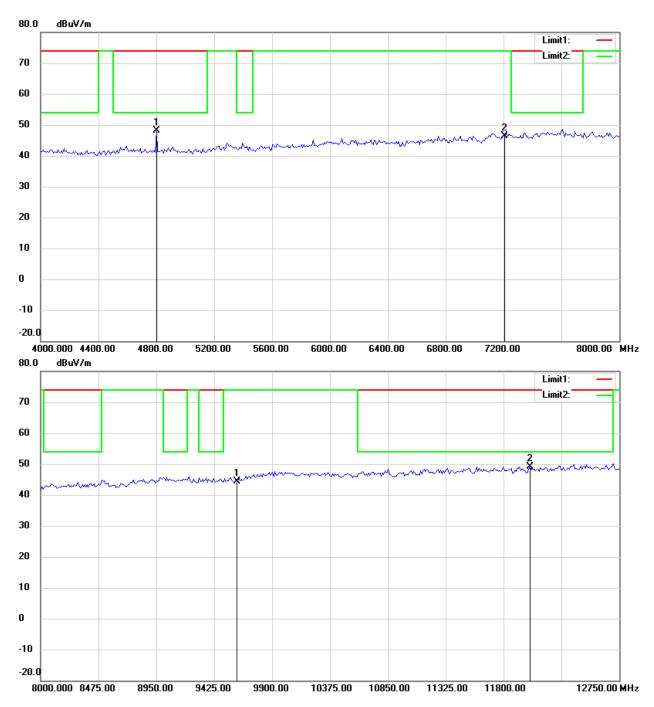
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

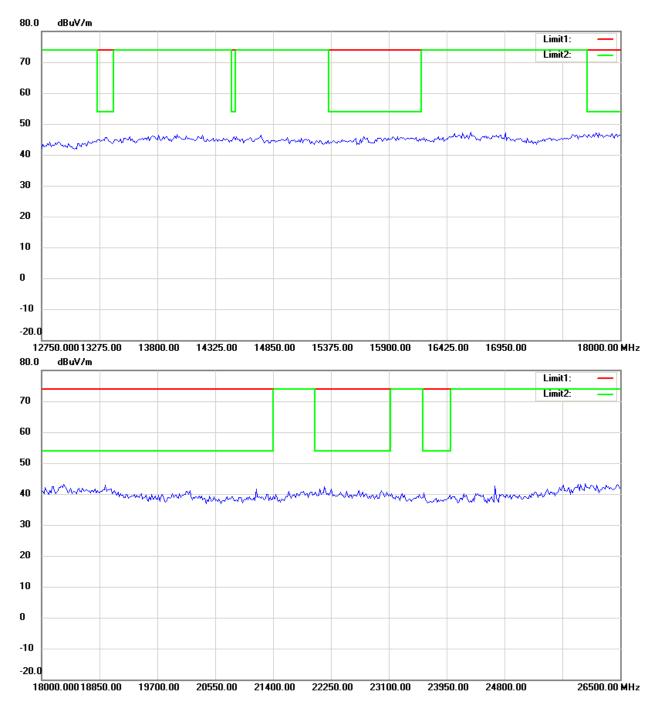
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



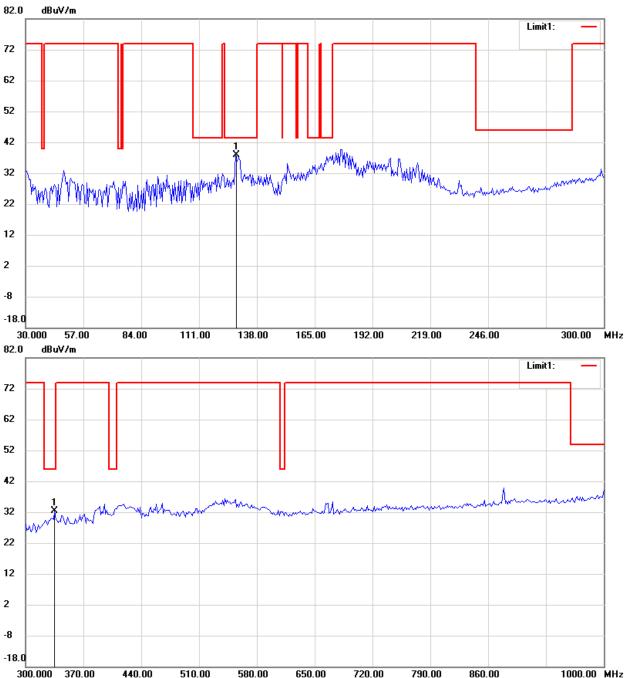
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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



Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

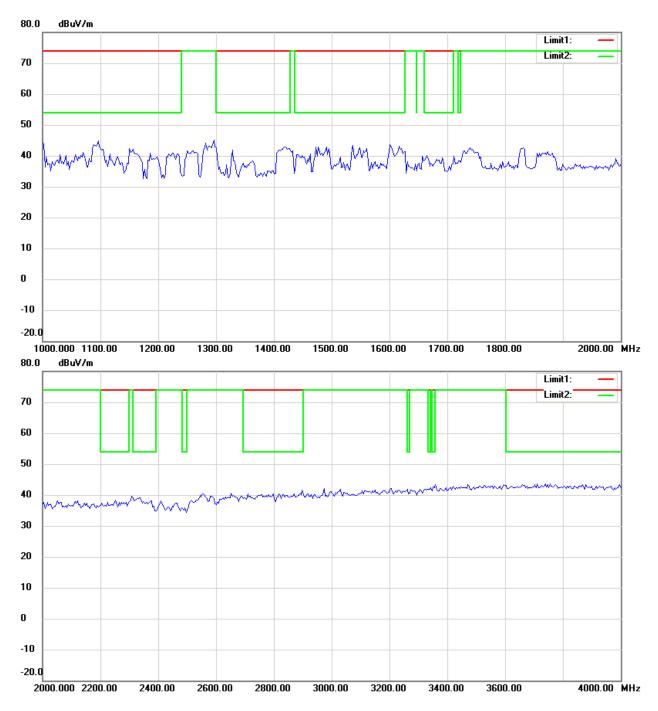
#### Antenna Polarization V



- 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: W6M21002-10441-C-1

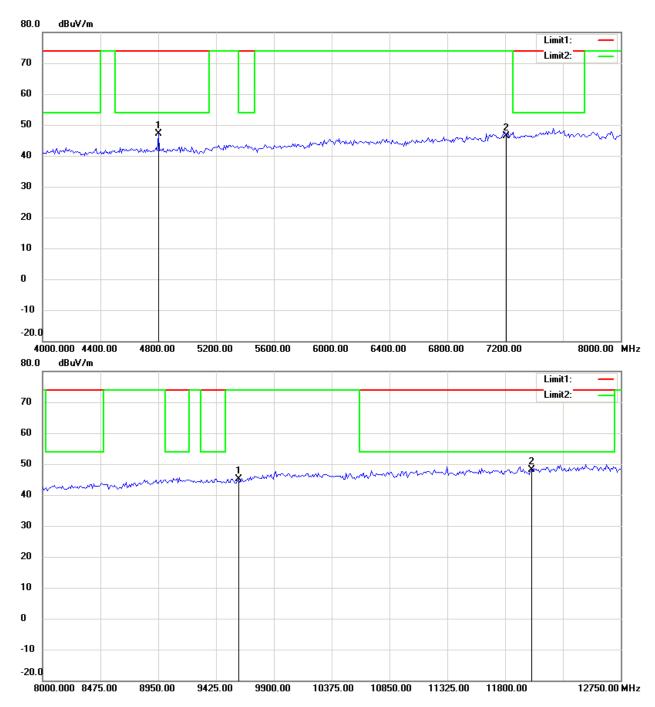
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

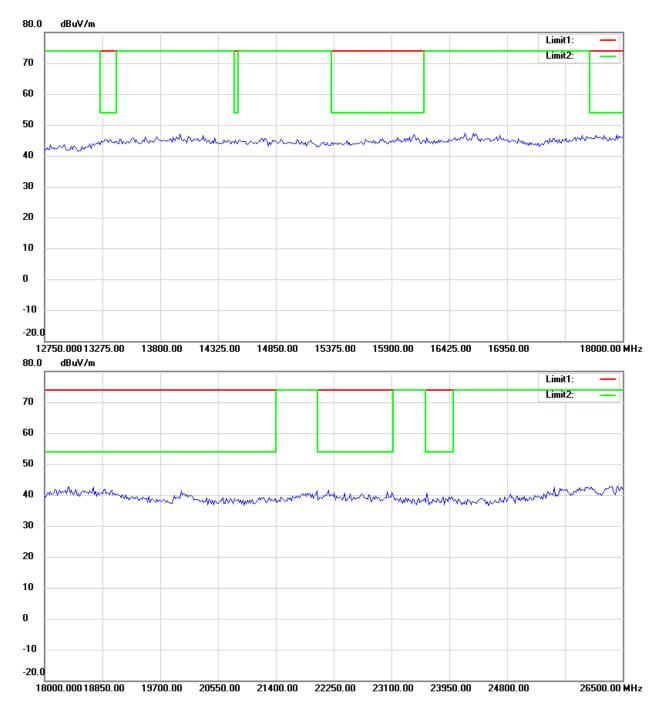
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



- 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.

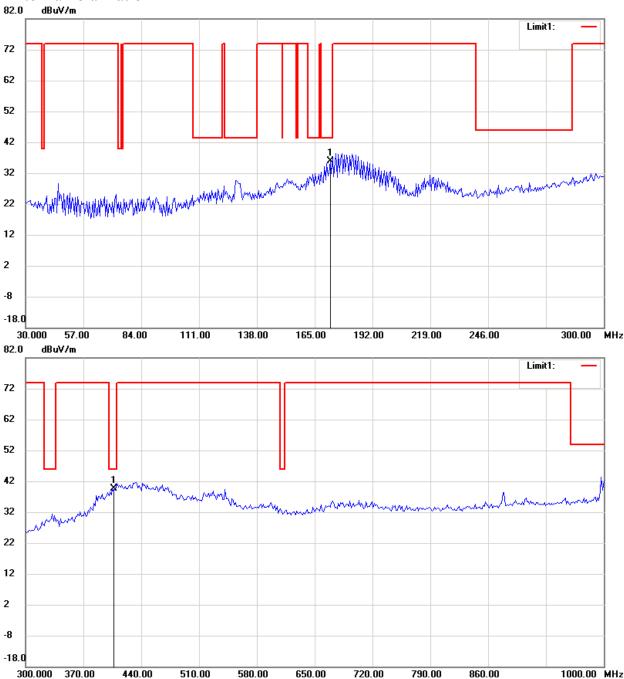


Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### TX-CH 39

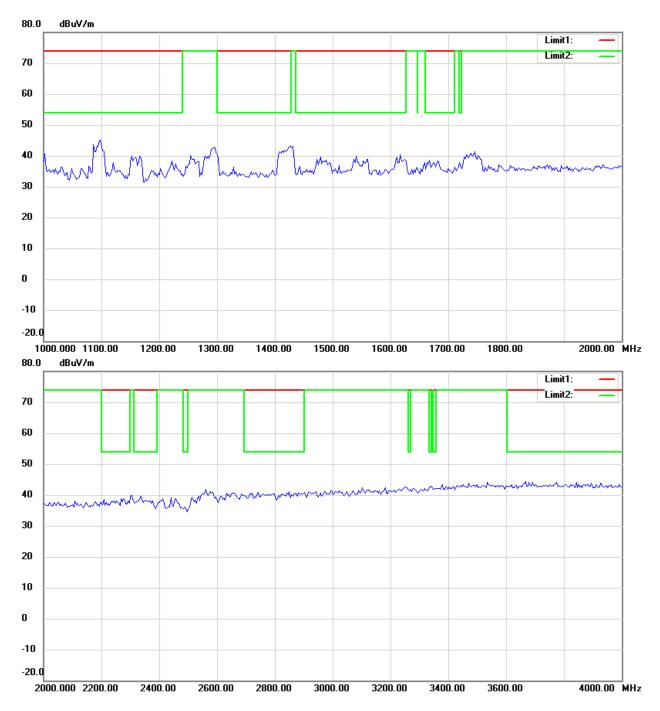
#### Antenna Polarization H



- 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: W6M21002-10441-C-1

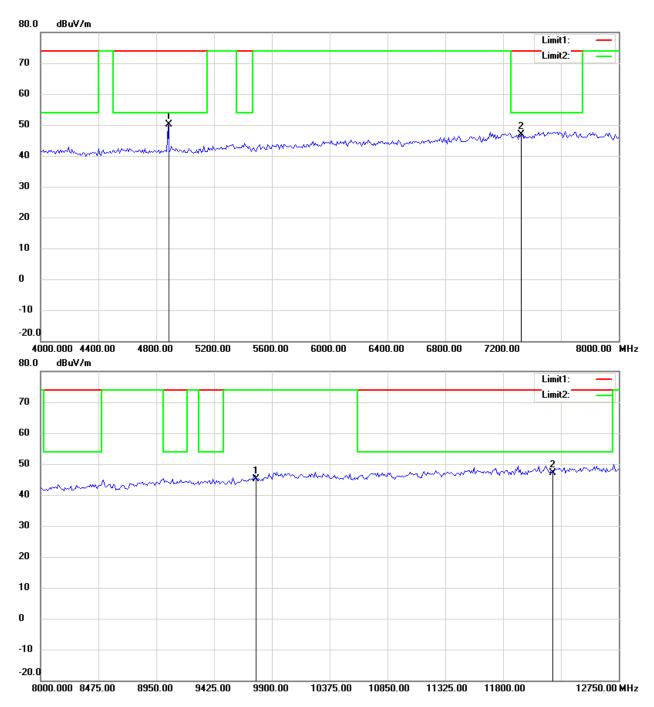
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

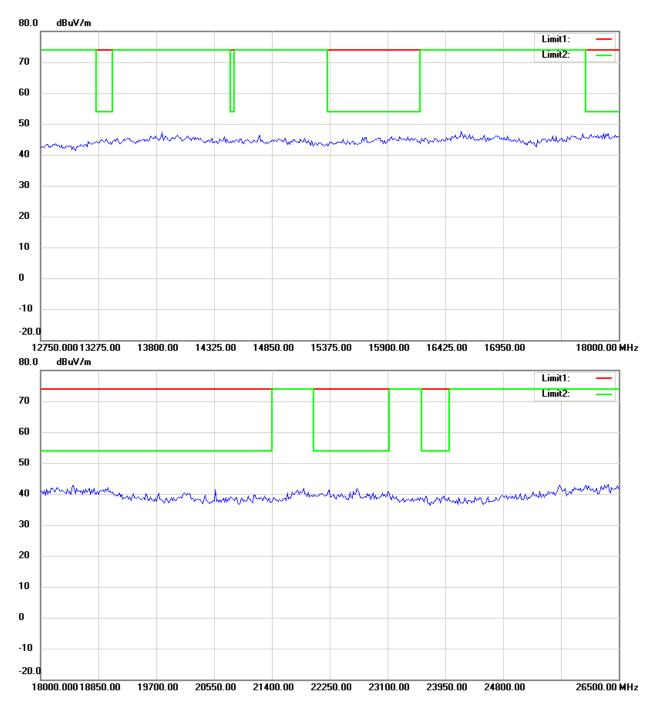
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

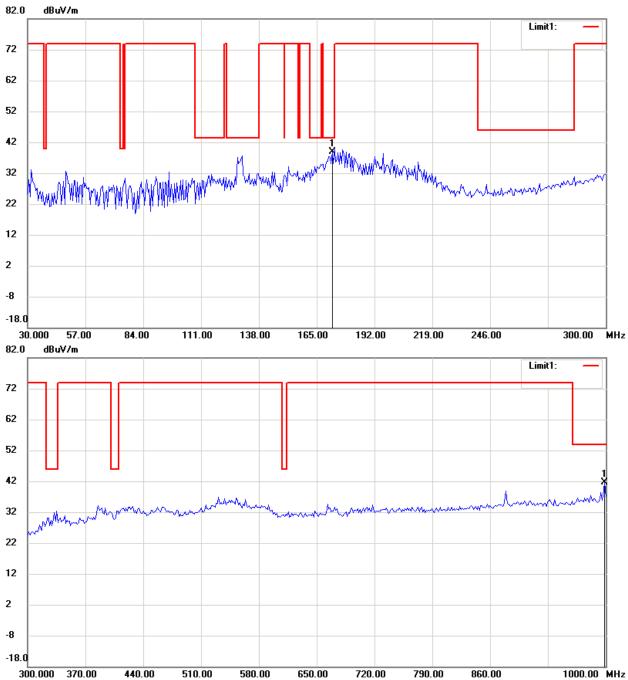


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

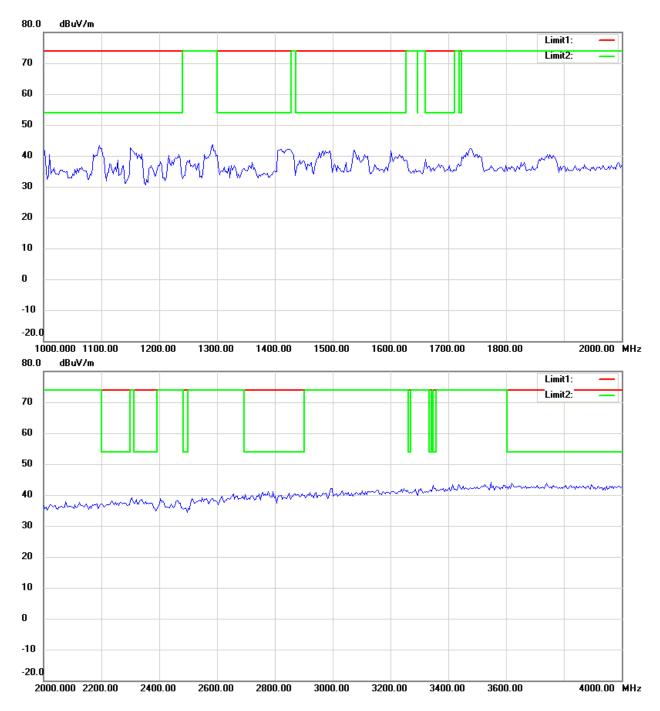
#### Antenna Polarization V



- 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: W6M21002-10441-C-1

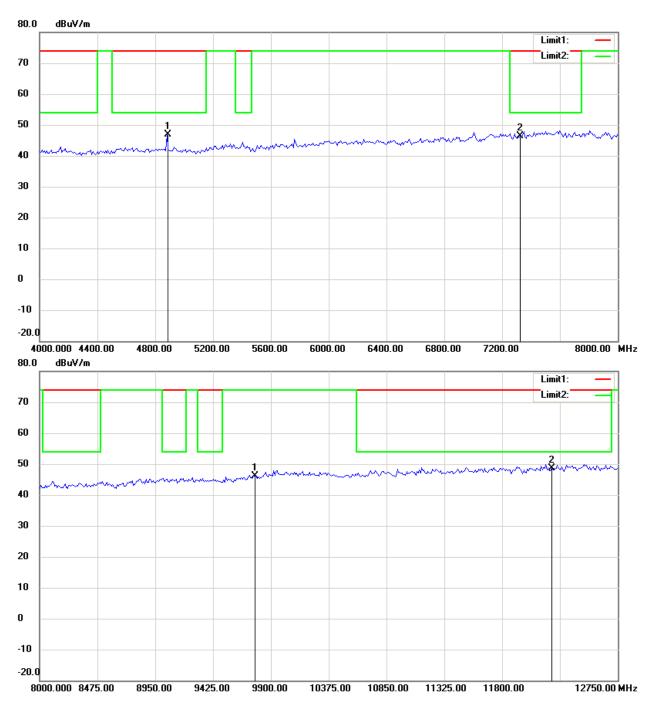
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

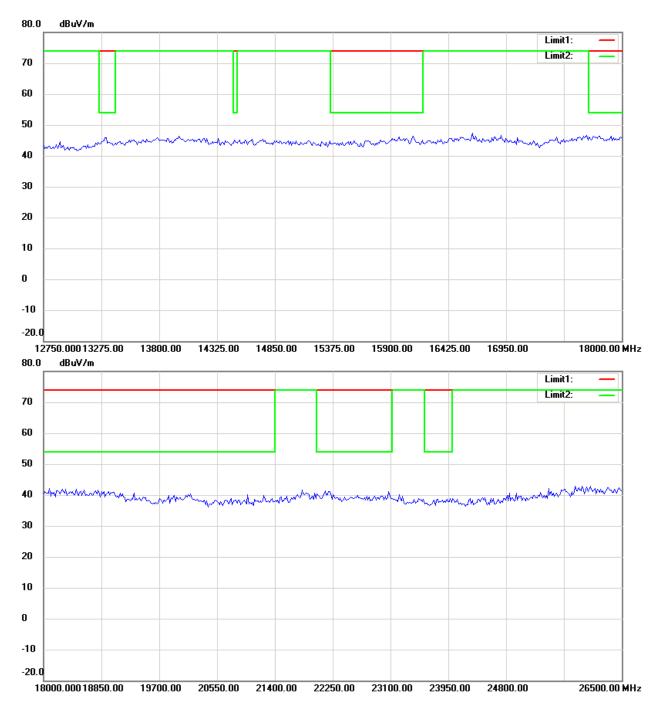
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



- 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.

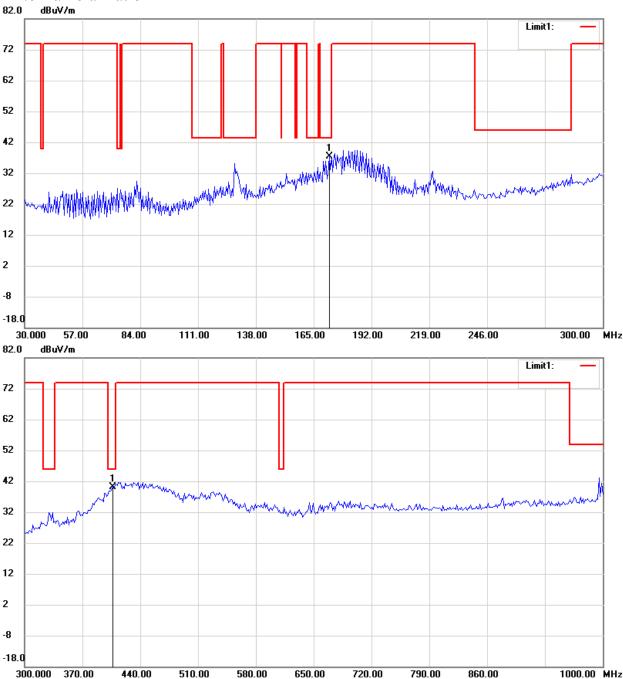


Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### TX-CH 78

#### Antenna Polarization H



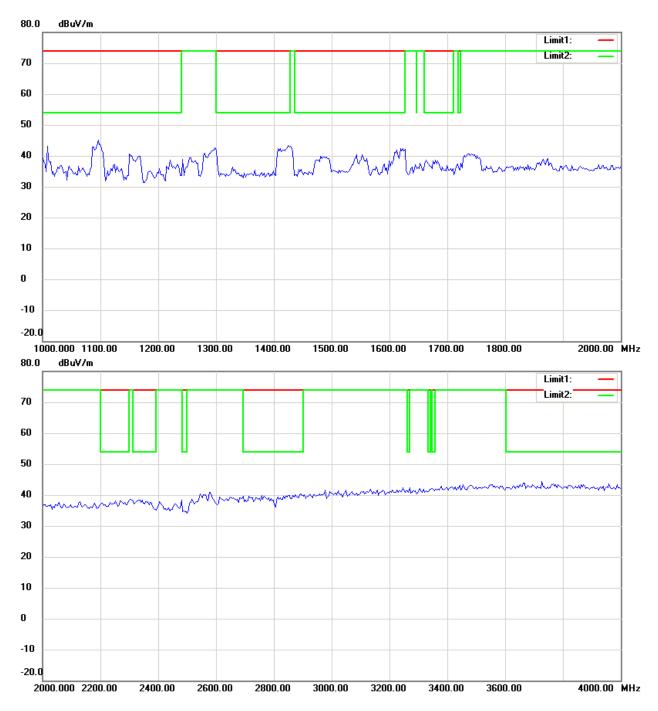
Up Line: Peak Limit Line Down Line: Ave Limit Line

#### 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: W6M21002-10441-C-1

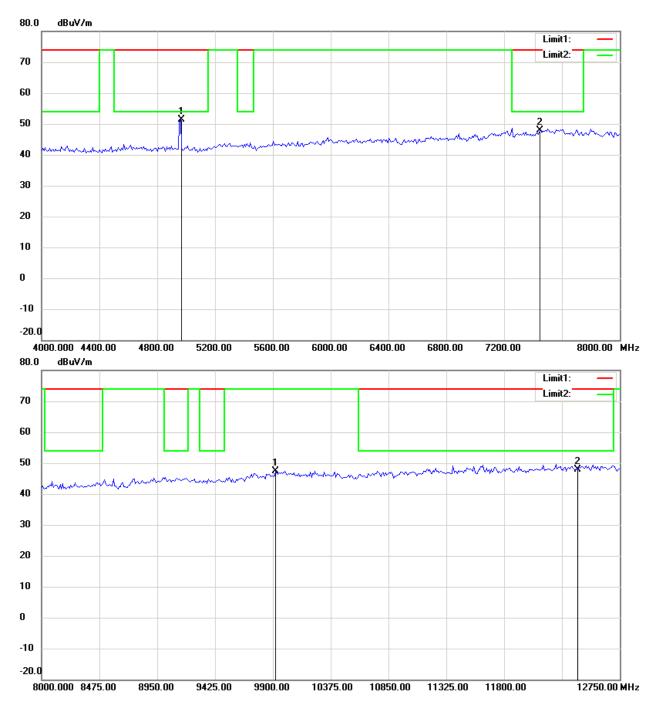
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

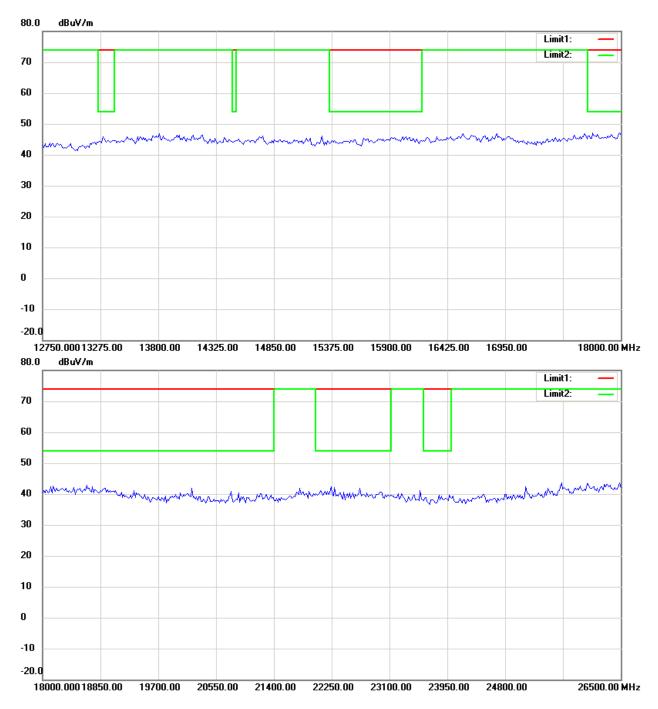
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



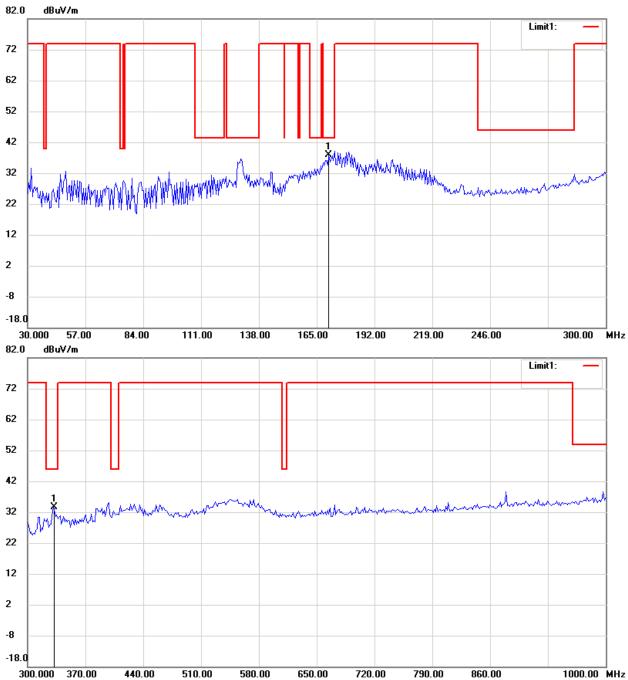
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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



Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

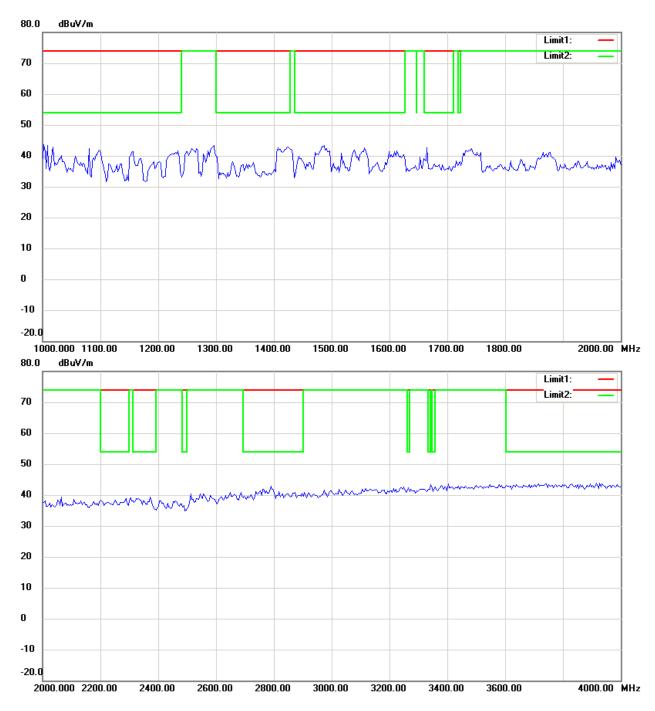
#### Antenna Polarization V



- 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: W6M21002-10441-C-1

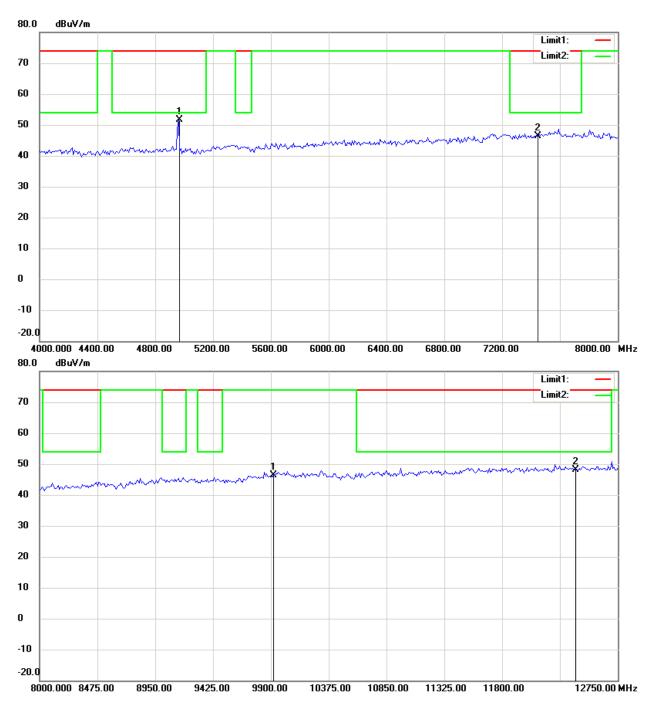
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

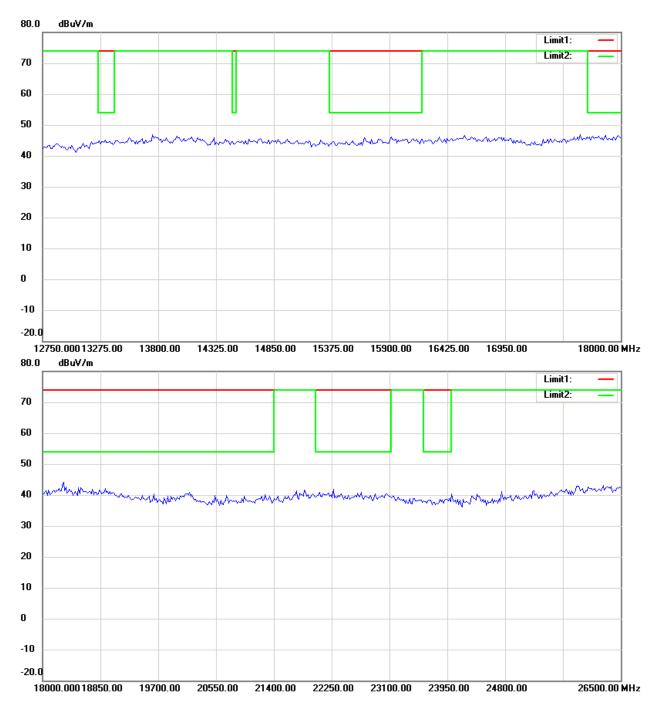
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



- 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.

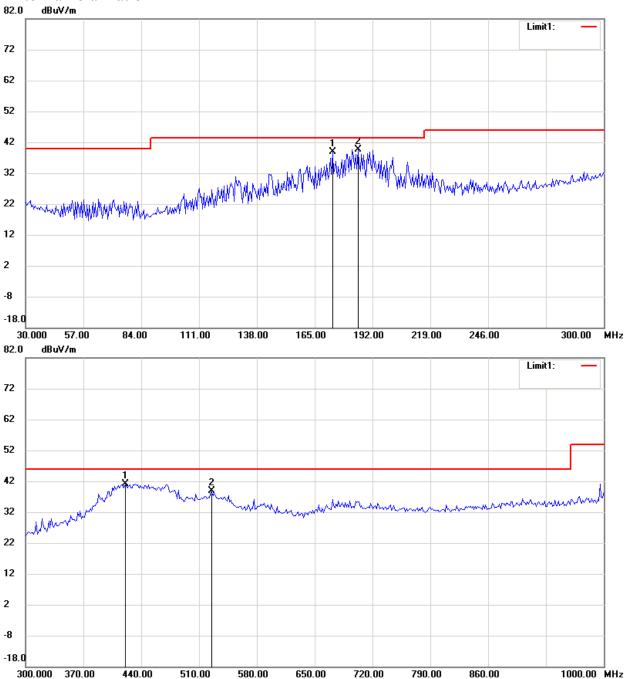


Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### RX-CH 0

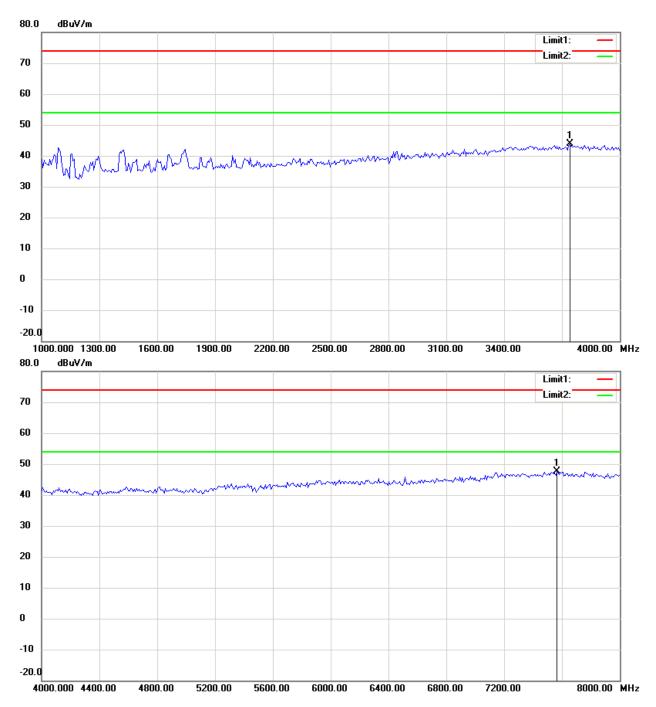
#### Antenna Polarization H



- 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: W6M21002-10441-C-1

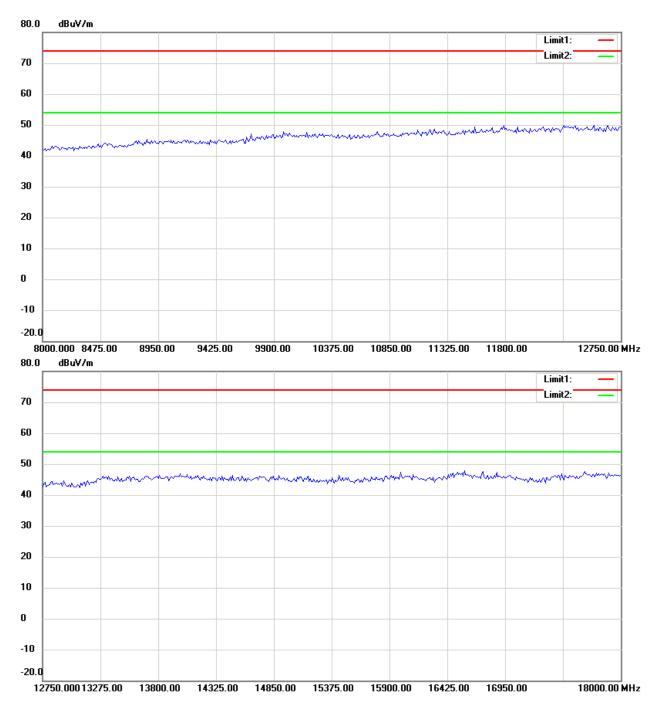
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

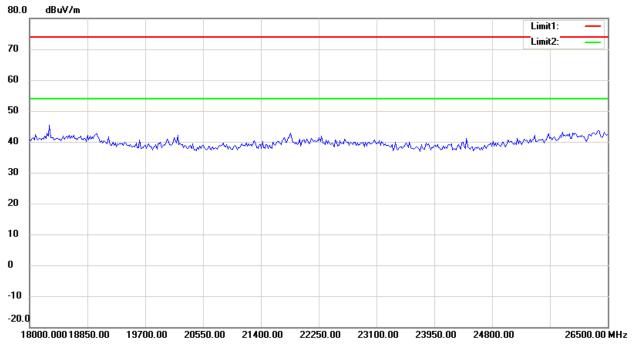
FCC ID: SJ9-BT-06HS-T



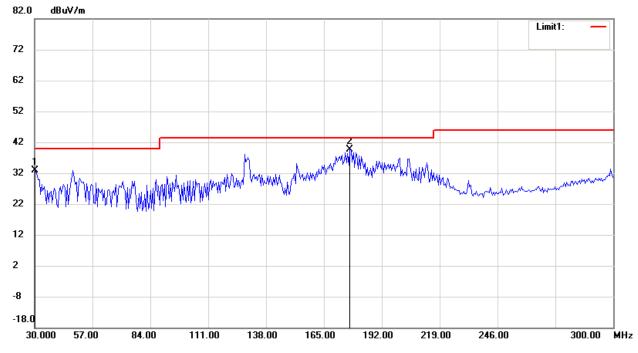
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



#### Antenna Polarization V



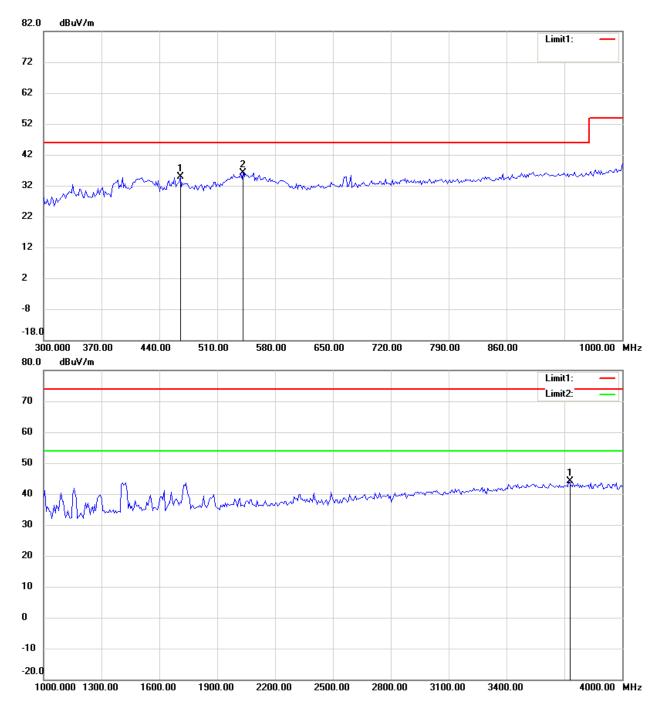
Up Line: Peak Limit Line Down Line: Ave Limit Line

#### 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: W6M21002-10441-C-1

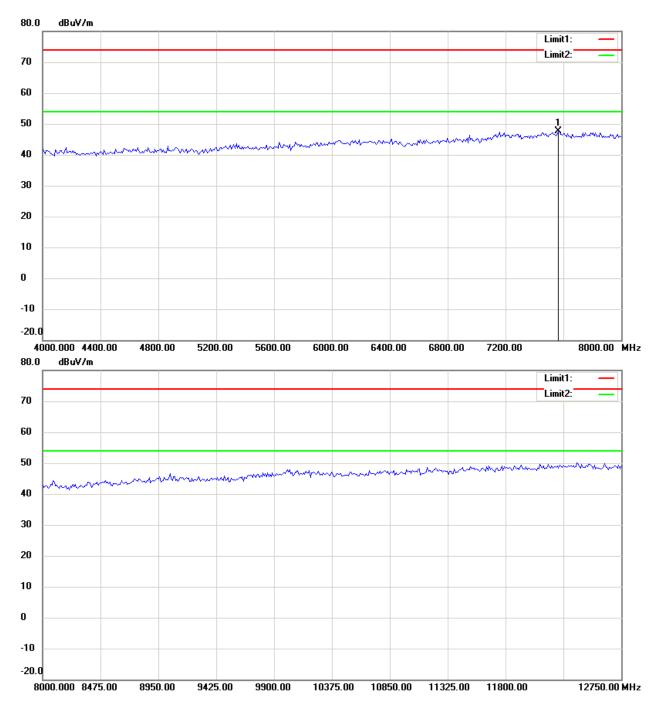
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

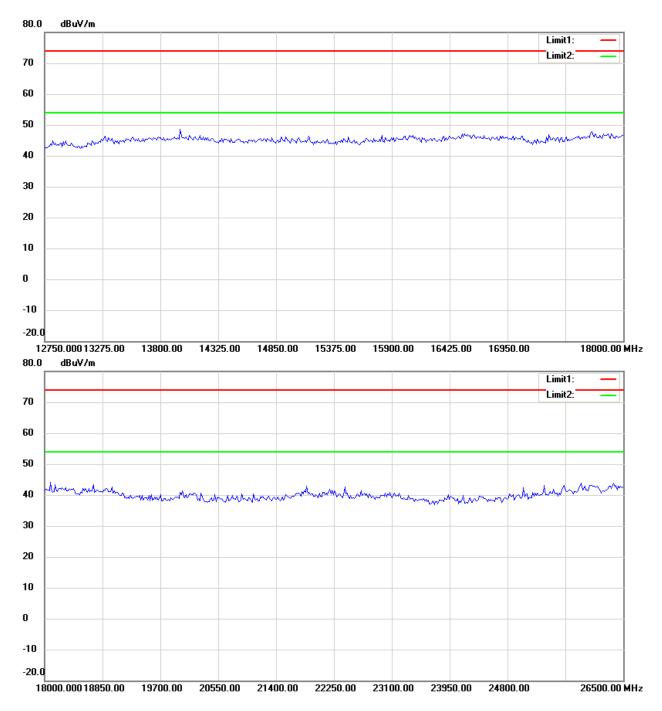
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



- 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.

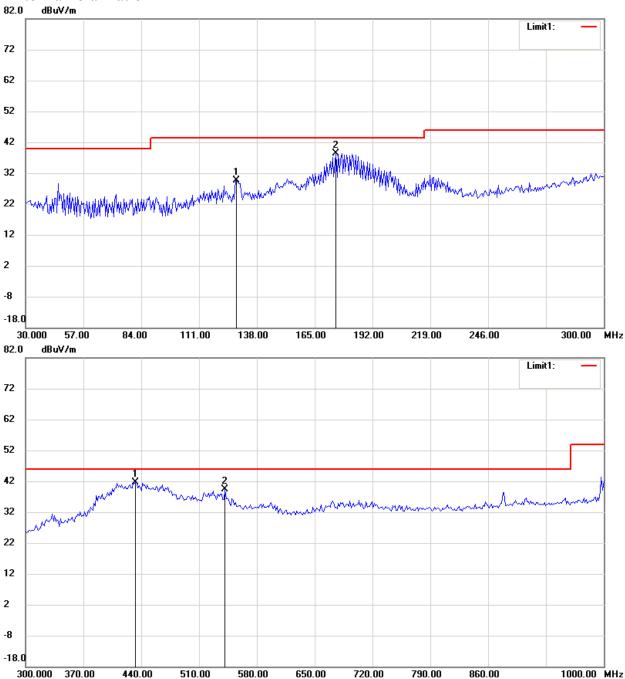


Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### **RX-CH 39**

#### Antenna Polarization H



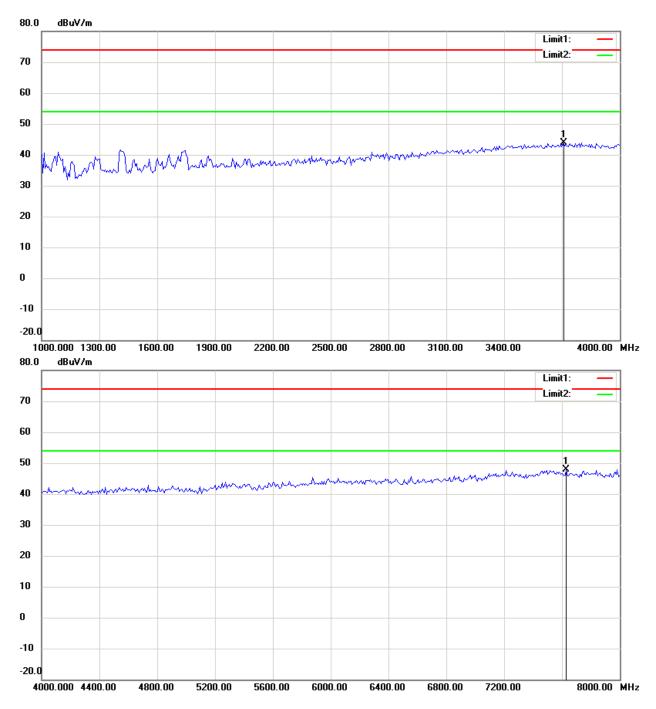
**Up Line: Peak Limit Line Down Line: Ave Limit Line Note:** 

#### 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: W6M21002-10441-C-1

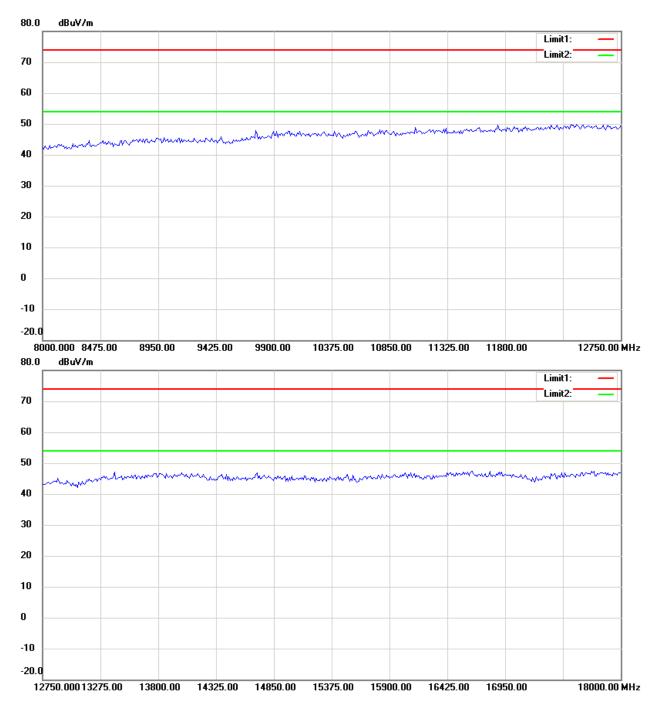
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

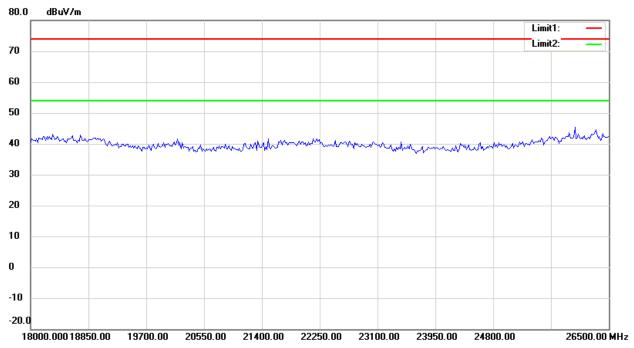
FCC ID: SJ9-BT-06HS-T



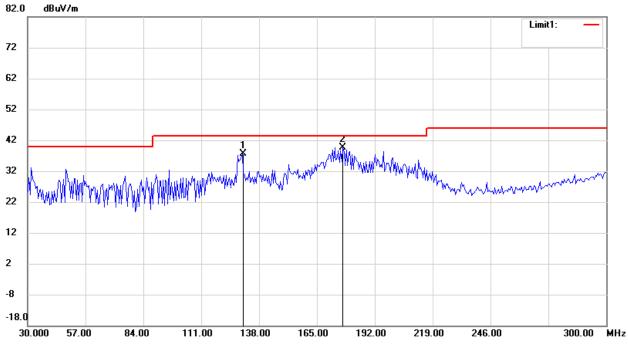
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



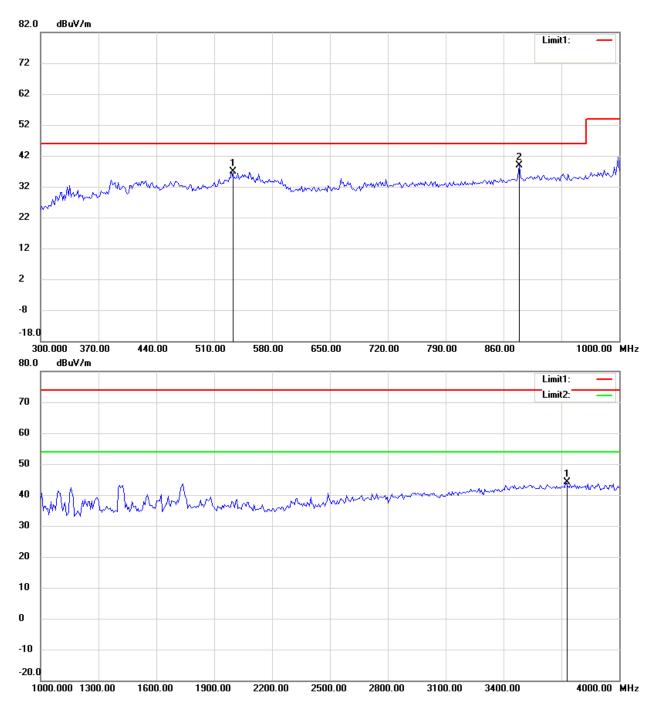
#### Antenna Polarization V



- 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: W6M21002-10441-C-1

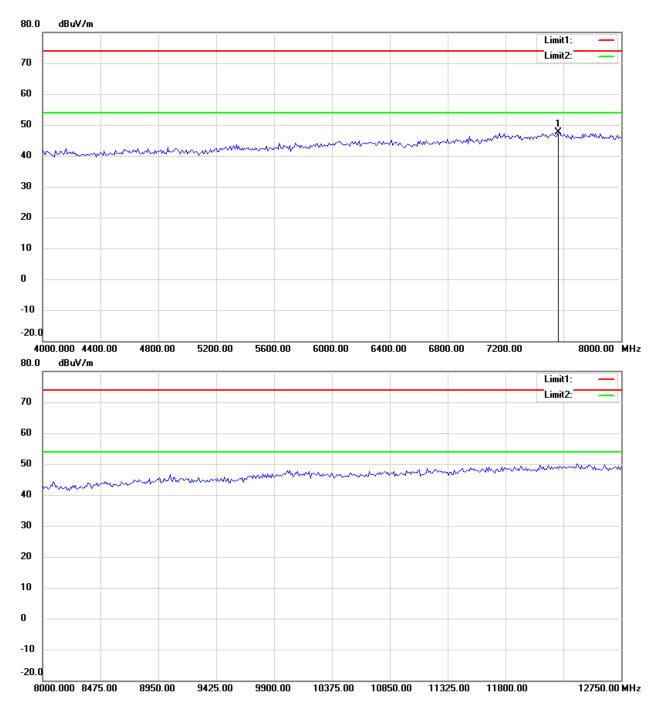
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

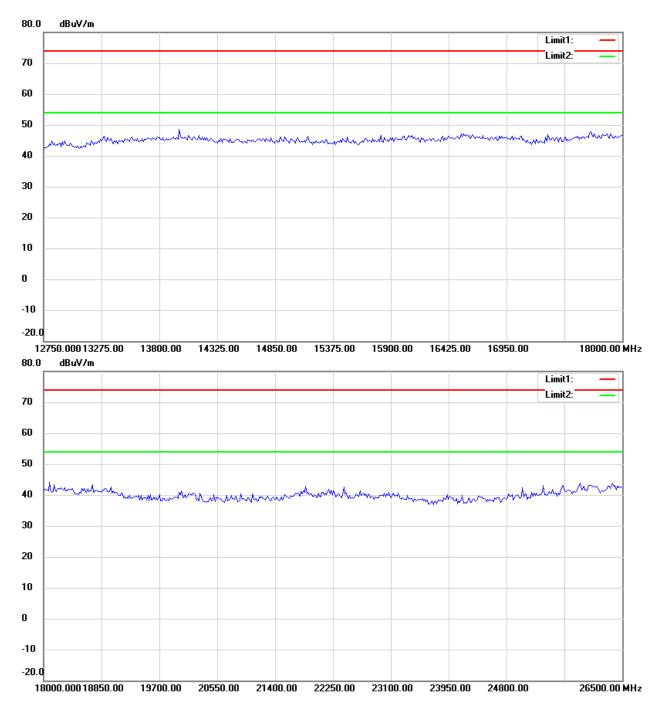
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



- 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.

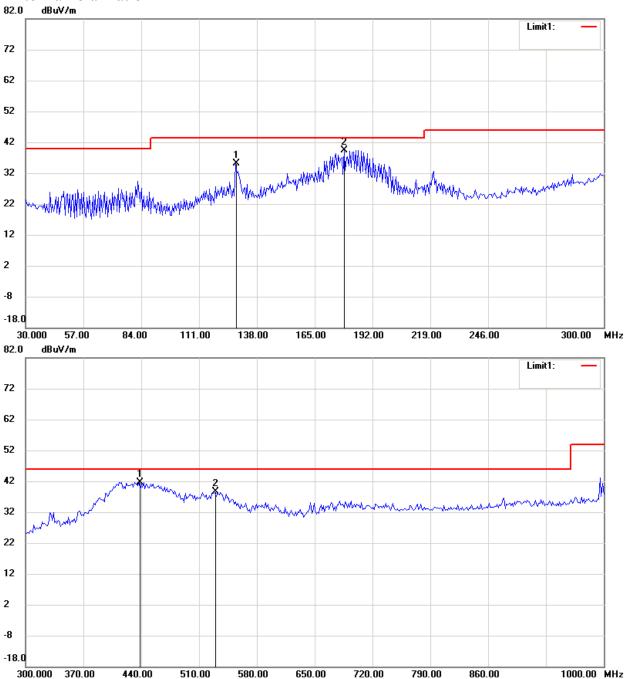


Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### **RX-CH 78**

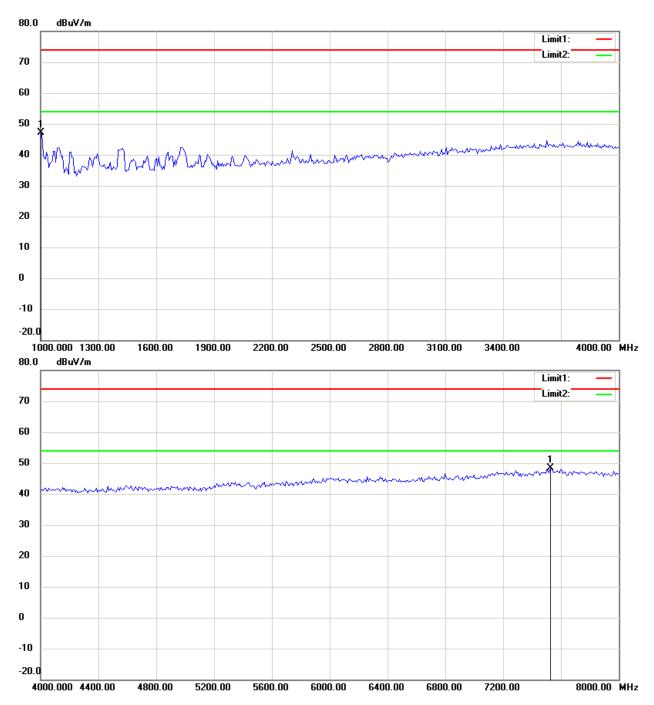
#### Antenna Polarization H



- 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: W6M21002-10441-C-1

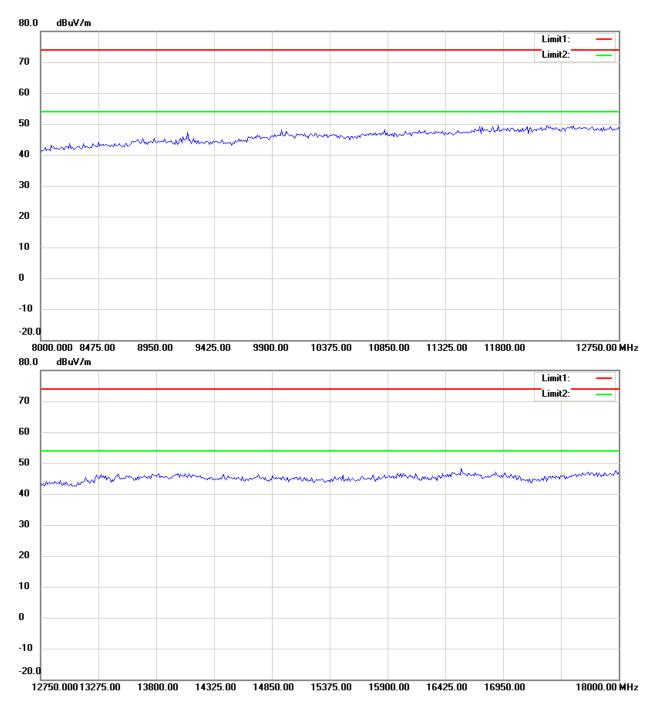
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

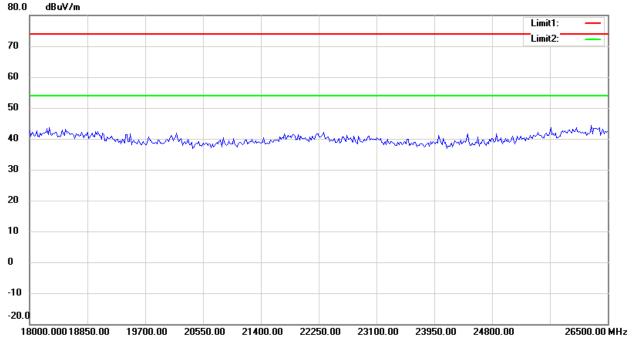
FCC ID: SJ9-BT-06HS-T



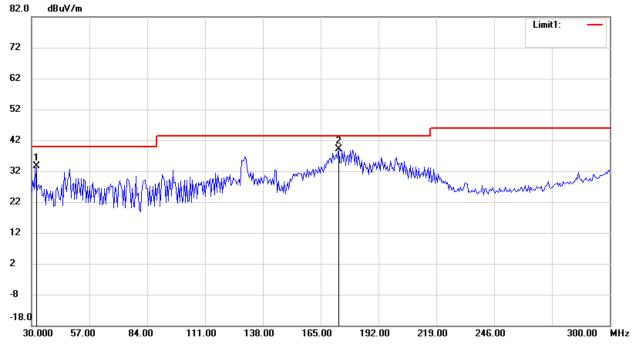
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



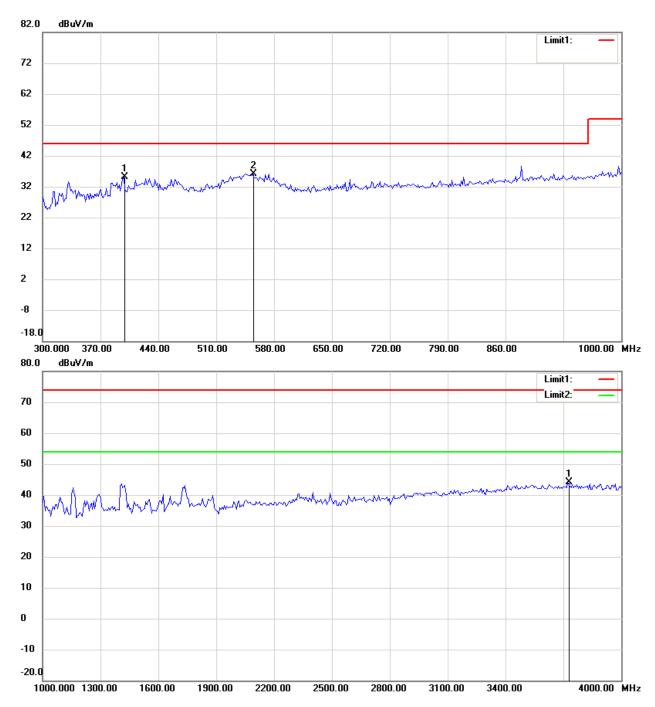
#### Antenna Polarization V



- 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: W6M21002-10441-C-1

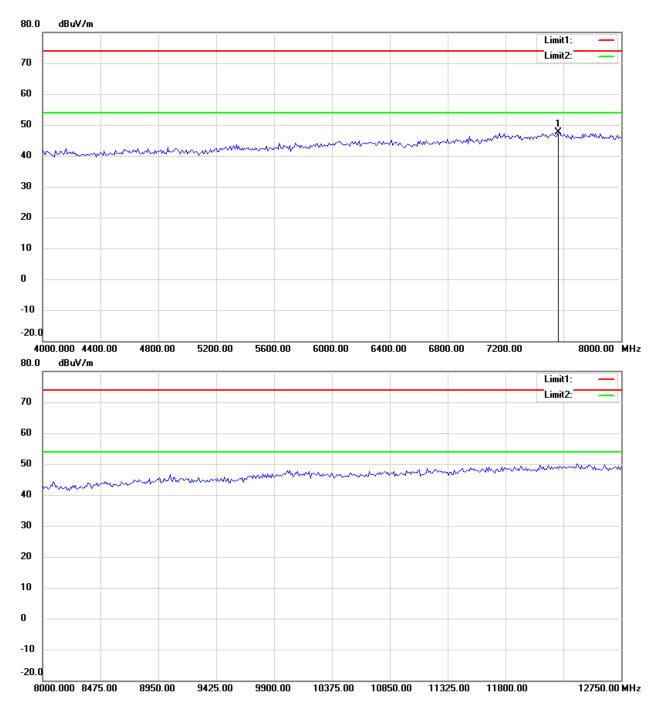
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

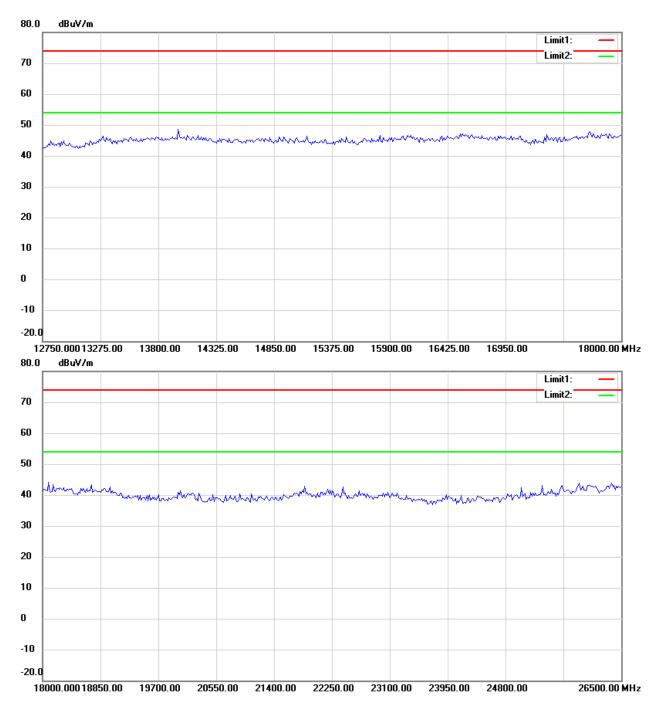
FCC ID: SJ9-BT-06HS-T



- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

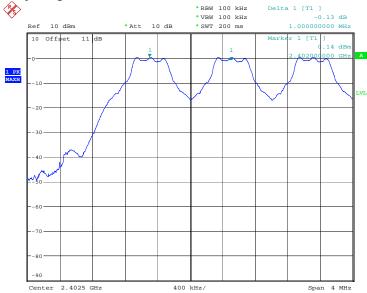


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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

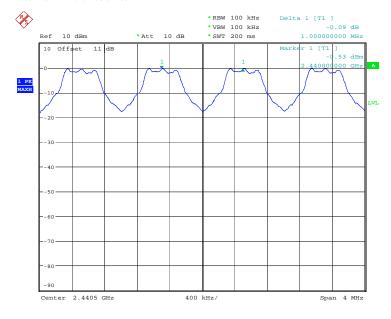
Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### Carrier Frequency Separation



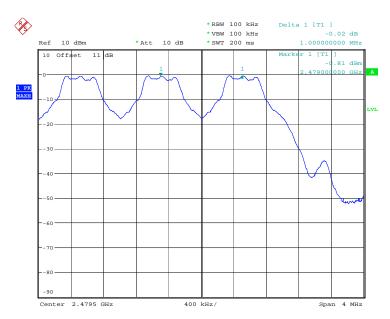
FREQUENCY SEPARATION CHO
Date: 23.FEB.2010 08:56:38



FREQUENCY SEPARATION CH39
Date: 23.FEB.2010 08:57:18

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



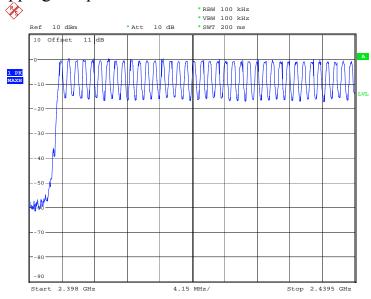
FREQUENCY SEPARATION CH78

Date: 23.FEB.2010 08:58:00

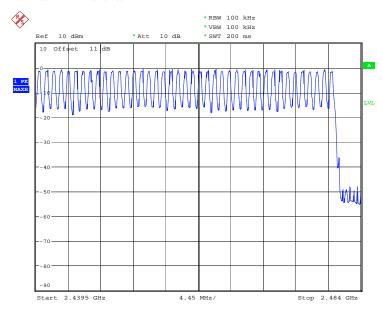
Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### Number of Hopping Frequencies



NUMBER OF HOPPING CH0-37 Date: 23.FEB.2010 09:07:33

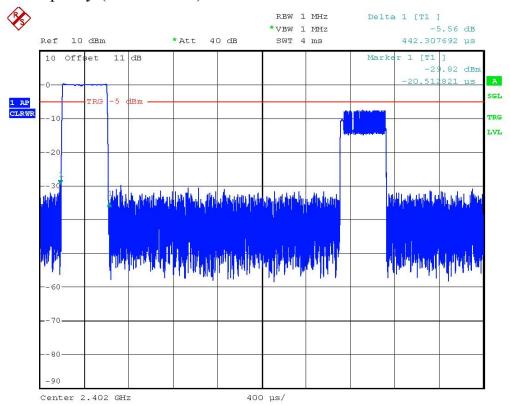


NUMBER OF HOPPING CH38-78 Date: 23.FEB.2010 09:06:42

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### Time of Occupancy (Dwell Time)

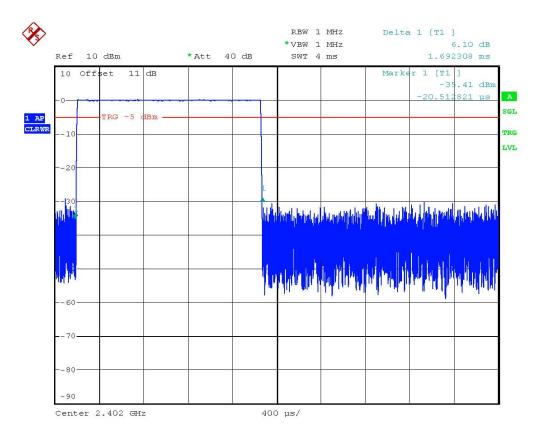


DWELL TIME CH0 DH1 (0.442ms  $\star$  320events = 141.44ms)

Date: 23.FEB.2010 09:09:38

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

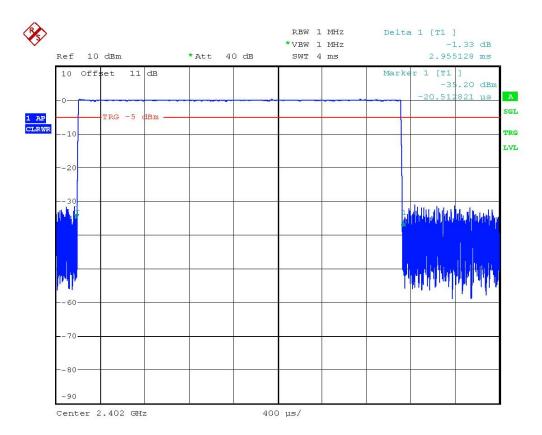


DWELL TIME CH0 DH3 (1.692ms \* 160events = 270.72ms)

Date: 23.FEB.2010 09:13:39

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

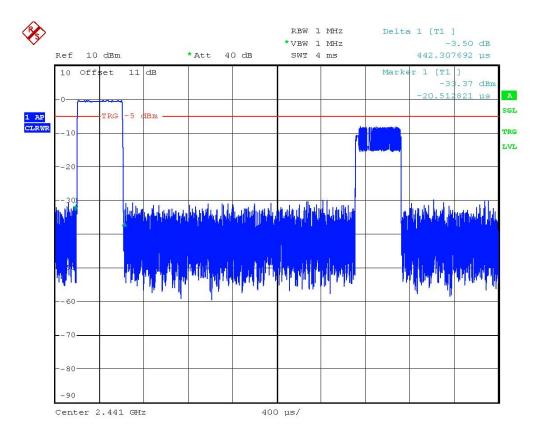


DWELL TIME CH0 DH5 (2.955ms \* 110events = 325.05ms)

Date: 23.FEB.2010 09:14:23

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

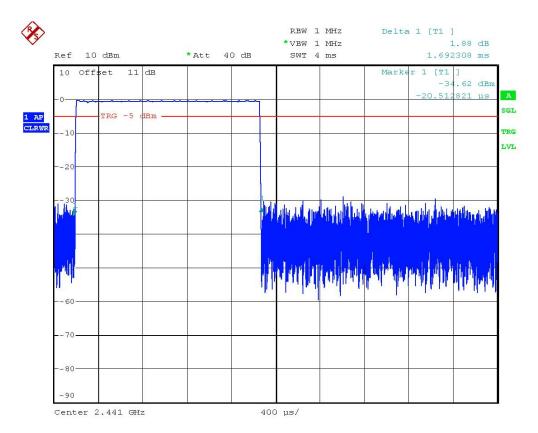


DWELL TIME CH39 DH1 (0.442ms \* 320events = 141.44ms)

Date: 23.FEB.2010 09:10:42

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

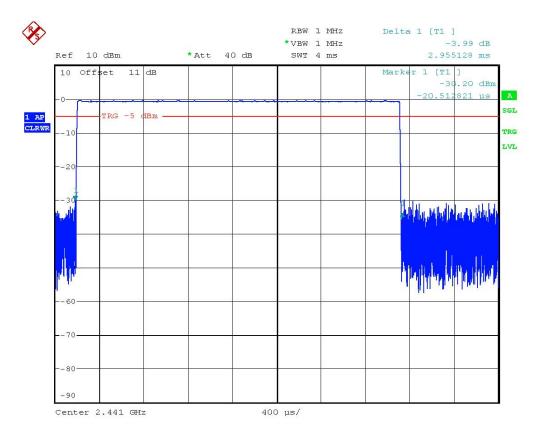


DWELL TIME CH39 DH3 (1.692ms \* 160events = 270.72ms)

Date: 23.FEB.2010 09:12:39

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

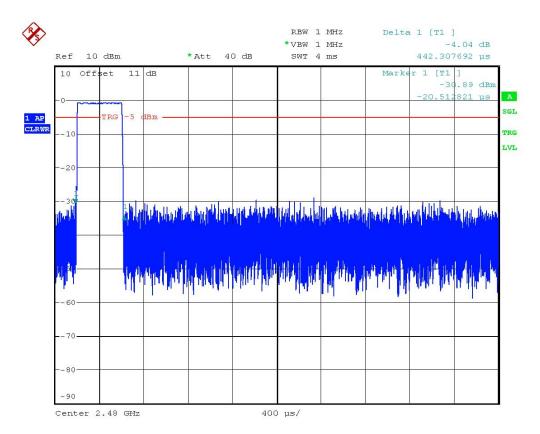


DWELL TIME CH39 DH5 (2.955ms \* 110events = 325.05ms)

Date: 23.FEB.2010 09:15:08

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

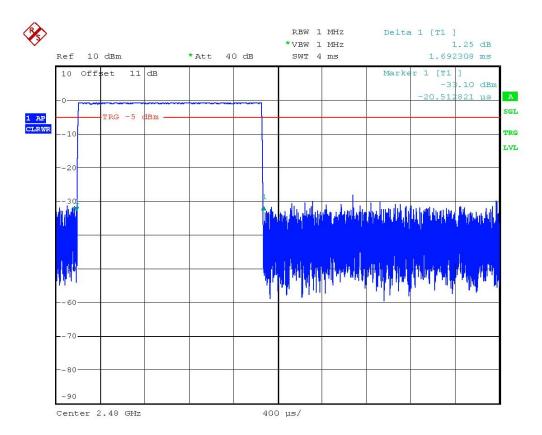


DWELL TIME CH78 DH1 (0.442ms \* 320events = 141.44ms)

Date: 23.FEB.2010 09:10:58

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

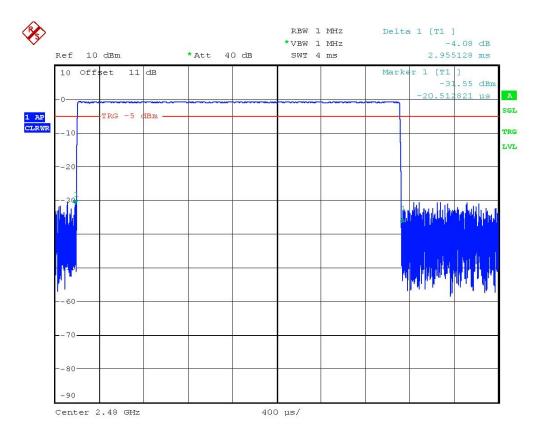


DWELL TIME CH78 DH3 (1.692ms \* 160events = 270.72ms)

Date: 23.FEB.2010 09:12:18

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



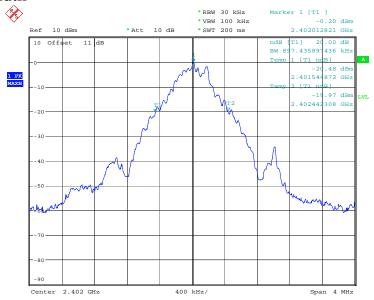
DWELL TIME CH78 DH5 (2.955ms \* 110events = 325.05ms)

Date: 23.FEB.2010 09:15:27

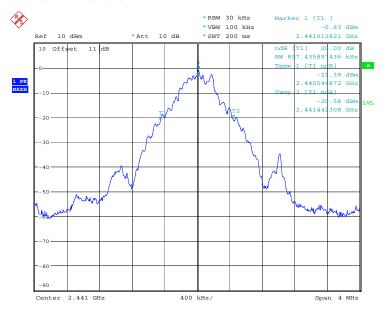
Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### 20dB Bandwidth



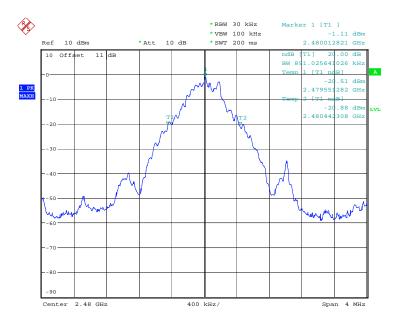
20DB BANDWIDTH CH0
Date: 23.FEB.2010 08:28:03



20DB BANDWIDTH CH39
Date: 23.FEB.2010 08:28:25

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



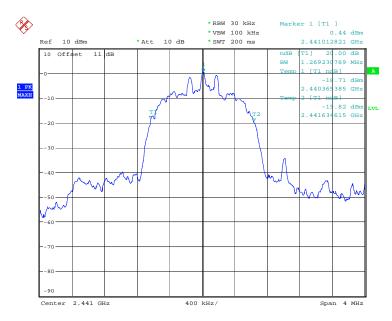
20DB BANDWIDTH CH78
Date: 23.FEB.2010 08:28:45



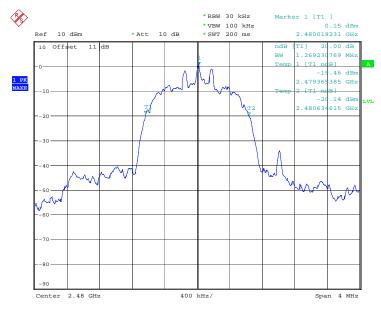
20DB BANDWIDTH CH0 EDR MODE Date: 23.FEB.2010 08:30:06

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



20DB BANDWIDTH CH39 EDR MODE Date: 23.FEB.2010 08:29:41

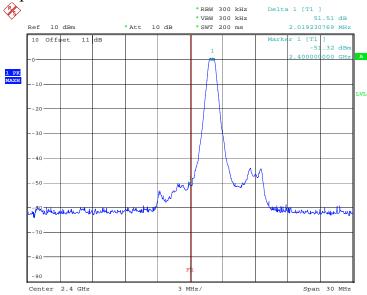


20DB BANDWIDTH CH78 EDR MODE Date: 23.FEB.2010 08:29:19

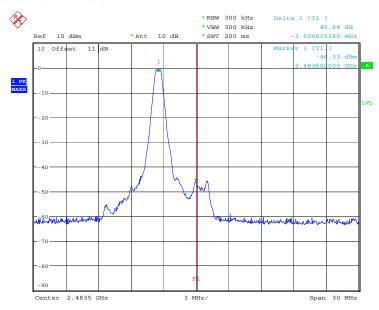
Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### Band-edge Compliance of RF Conducted Emissions



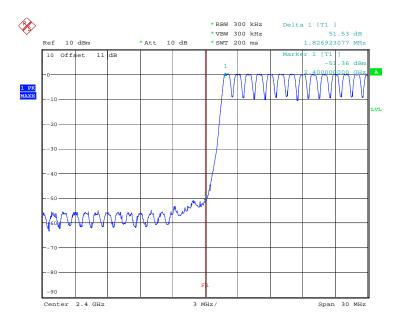
BAND EDGE CH0
Date: 23.FEB.2010 08:37:22



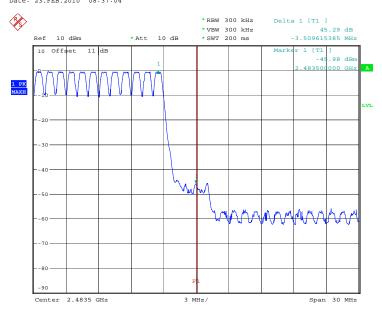
BAND EDGE CH78
Date: 23.FEB.2010 08:37:54

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



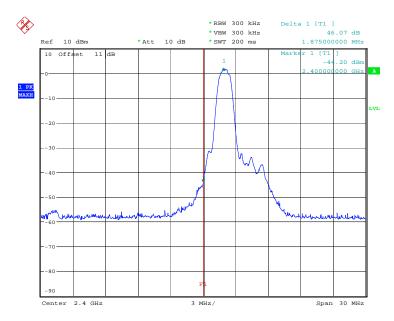
BAND EDGE CHO HOPPING MODE Date: 23.FEB.2010 08:37:04



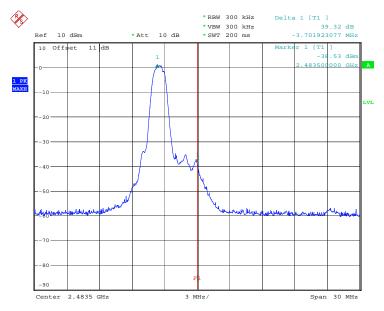
BAND EDGE CH78 HOPPING MODE Date: 23.FEB.2010 08:39:54

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



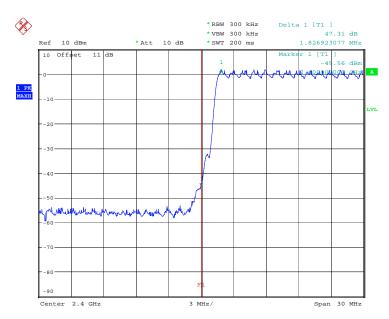
BAND EDGE CH0 EDR MODE
Date: 23.FEB.2010 08:30:54



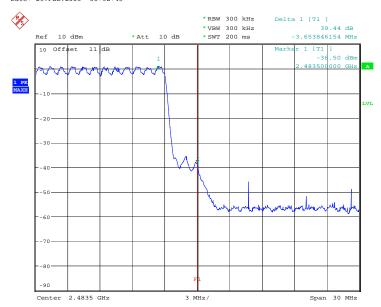
BAND EDGE CH78 EDR MODE
Date: 23.FEB.2010 08:40:26

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



BAND EDGE CH0 EDR HOPPING MODE Date: 23.FEB.2010 08:32:45

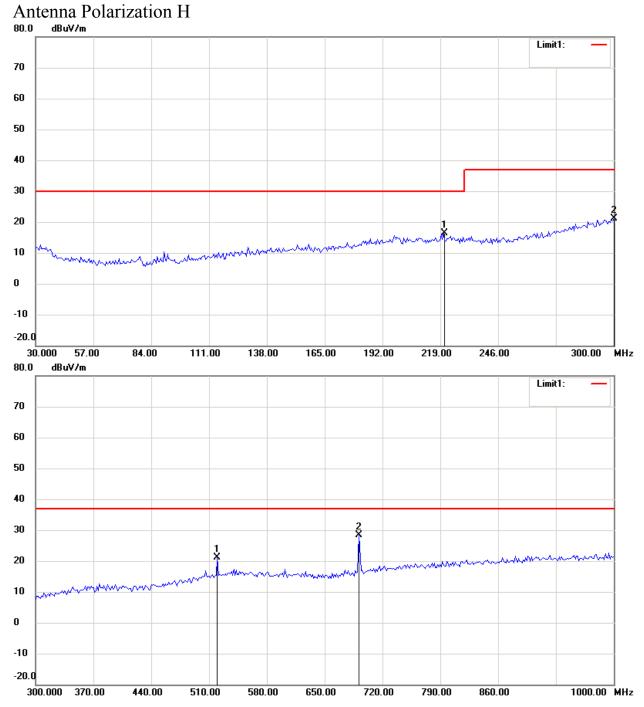


BAND EDGE CH78 EDR HOPPING MODE Date: 23.FEB.2010 08:45:53

Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

#### Radiated Emissions from Digital part



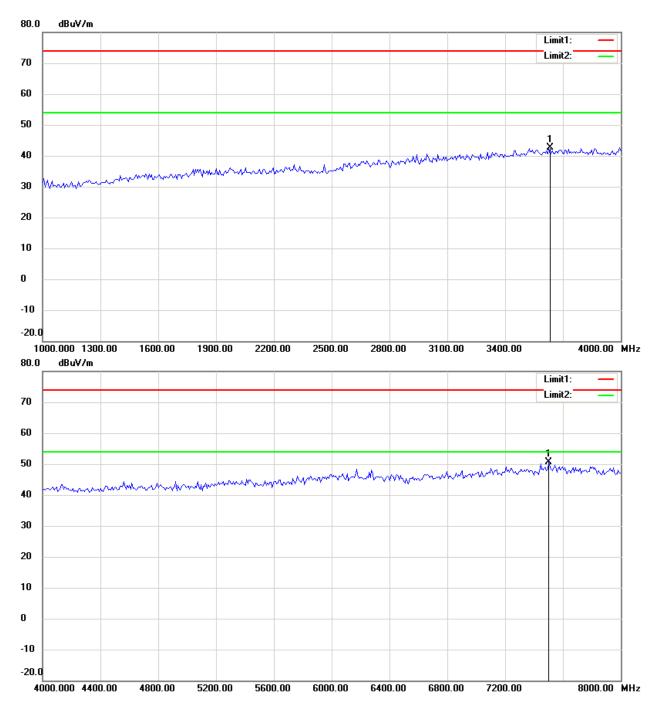
#### Note

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Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

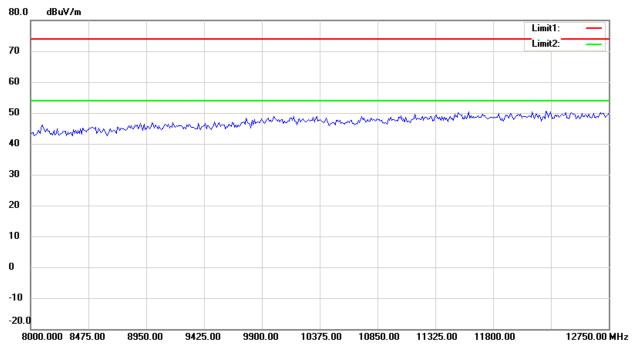


#### Note

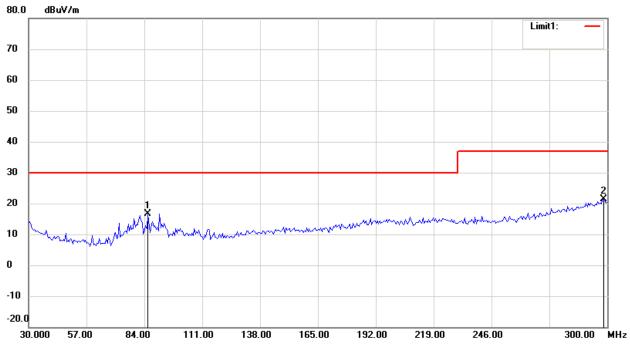
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T



#### Antenna Polarization V



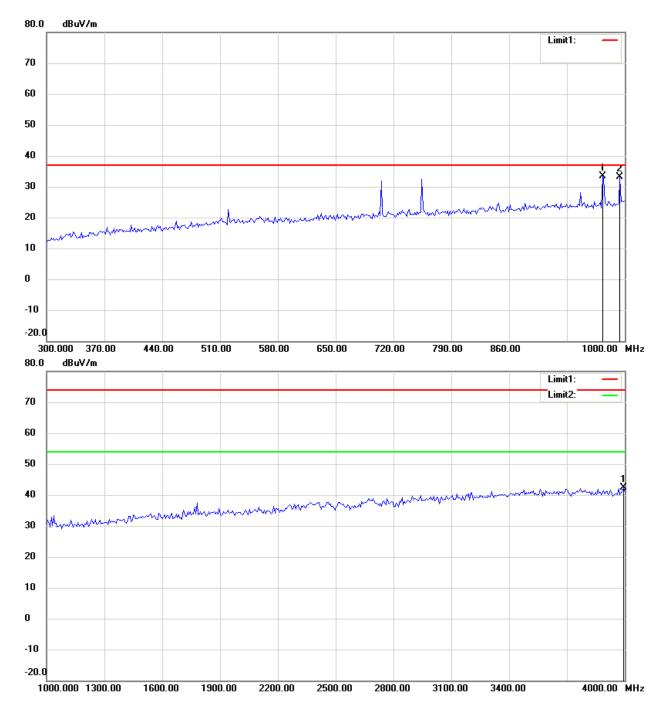
#### Note:

- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T

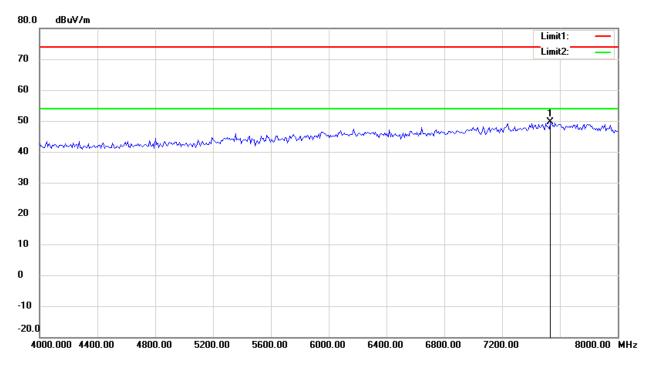


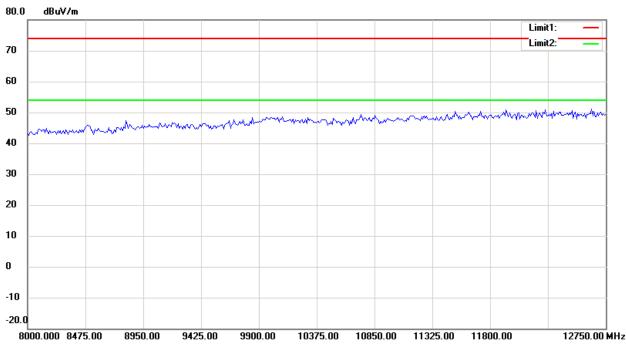
#### Note:

- 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: W6M21002-10441-C-1

FCC ID: SJ9-BT-06HS-T





#### 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: W6M21002-10441-C-1 FCC ID: SJ9-BT-06HS-T

#### **External Photos**























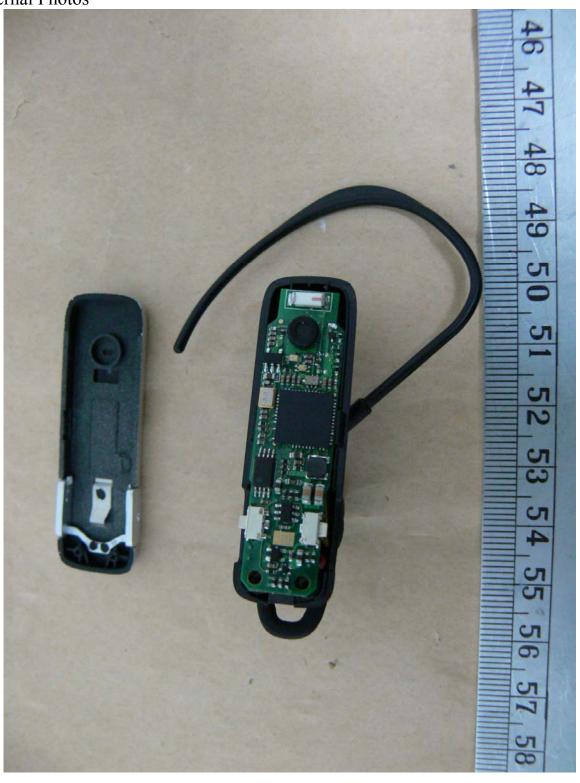




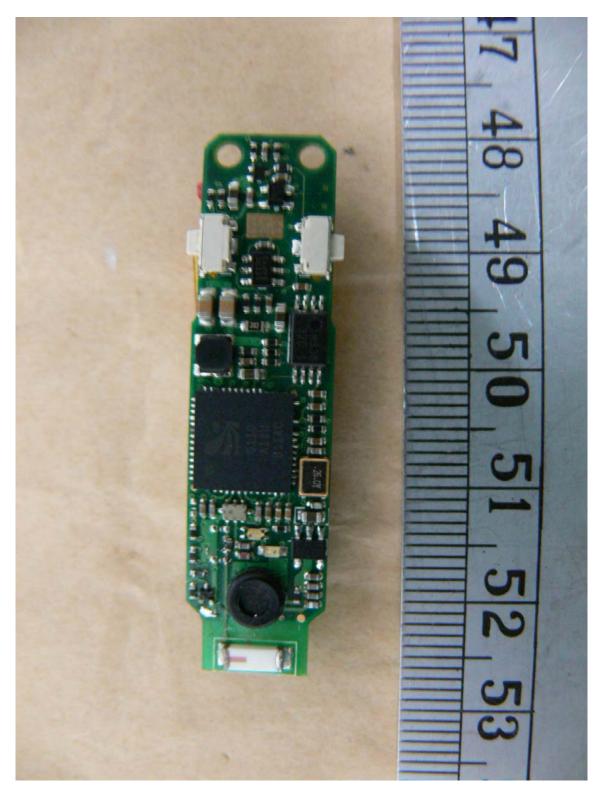


Registration number: W6M21002-10441-C-1 FCC ID: SJ9-BT-06HS-T

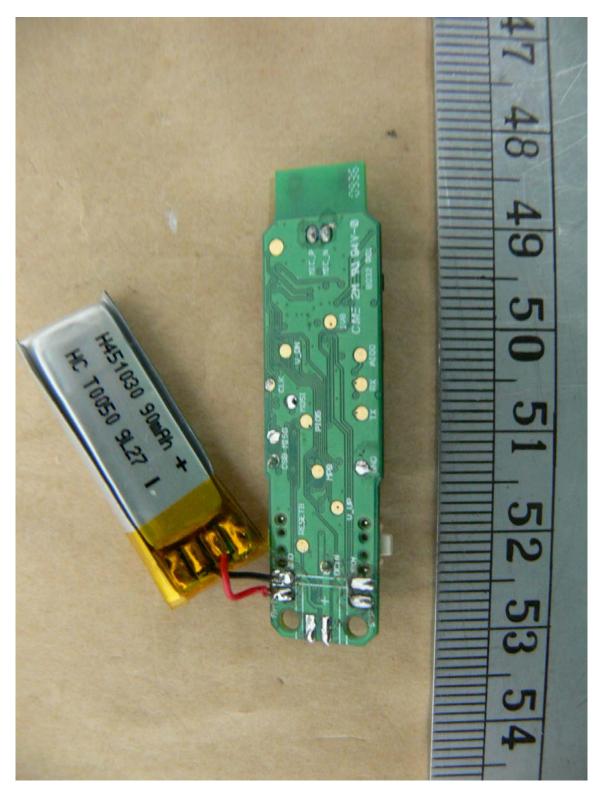
#### **Internal Photos**













Registration number: W6M21002-10441-C-1 FCC ID: SJ9-BT-06HS-T

Set Up Photo of Radiated Emission



