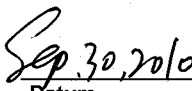
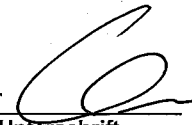
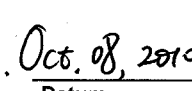
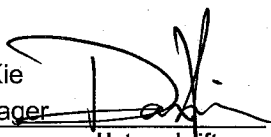


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<b>Auftraggeber:</b> <i>Client:</i>		NeuroSky, Inc. 125 South Market Street, #900, San Jose, CA 95113, USA			
<b>Gegenstand der Prüfung:</b> MindWave headset <i>Test item:</i>					
<b>Bezeichnung:</b> <i>Identification:</i>		MW001		<b>Certificate Number:</b> FCC ID: XG9MW1 <i>Certificate Number</i> IC : 8899A-MW001	
<b>Wareneingangs-Nr.:</b> <i>Receipt No.:</i>		173053282		<b>Eingangsdatum:</b> May 24, 2010 <i>Date of receipt:</i>	
<b>Prüfort:</b> <i>Testing location:</i>		TÜV Rheinland (Guangdong) Ltd. EMC Laboratory  Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou 510650,  P. R. China		Listed test laboratory according to FCC rules section 2.948 and RSS-Gen, for measuring devices.	
<b>Prüfgrundlage:</b> <i>Test specification:</i>		ANSI C63.4: 2003  FCC Part 15: July 10, 2008, Subpart C section 15.249  RSS-GEN Issue 2, June 2007 RSS-210 Issue 7, June 2007 RSS-102 Issue 2, November 2005			
<b>Prüfergebnis:</b> <i>Test Result:</i>		Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>			
<b>Prüflaboratorium:</b> <i>Testing Laboratory:</i>		TÜV Rheinland (Guangdong) Ltd.			
<b>geprüft/ tested by:</b>		<b>kontrolliert/ reviewed by:</b>			
<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">   <b>Sep 30, 2010</b>  Datum Date </div> <div style="text-align: center;"> <b>Ken Kuang</b>  Project Engineer  Name/Stellung Name/Position </div> <div style="text-align: center;">   Unterschrift Signature </div> </div>		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">   <b>Oct. 08, 2010</b>  Datum Date </div> <div style="text-align: center;"> <b>Liangdong Xie</b>  Project Manager  Name/Stellung Name/Position </div> <div style="text-align: center;">   Unterschrift Signature </div> </div>			
<b>Sonstiges/ Other Aspects:</b>					
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <b>Abkürzungen:</b>  P(ass) = entspricht Prüfgrundlage  F(ail) = entspricht nicht Prüfgrundlage  N/A = nicht anwendbar  N/T = nicht getestet </div> <div style="width: 48%;"> <b>Abbreviations:</b>  P(ass) = passed  F(ail) = failed  N/A = not applicable  N/T = not tested </div> </div>					
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</p> <p><i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i></p>					

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## Test Summary

FCC and IC test specification		Test items	Result
FCC rules	RSS rules		
Part 15 Per Section 15.249(a)(d)(e)	RSS-210 Issue 7 Section A2.9	Transmitter Radiated Emission(fundamental and spurious)	Pass
--	RSS-210 Issue 7 Section 2.3	Receiver Radiated Spurious Emission	Pass
Part 15 Per Section 15.203	--	Antenna Requirement	Pass
Part 2 Per Section 2.1049	RSS-GEN Issue 2 Section 4.6.1	20dB Bandwidth	Pass
Part 15 Per Section 15.205	RSS-210 Issue 7 Section 2.2	Band Edge Emission	Pass
--	RSS-102 Issue 2 Section 2.5.1	Exemption from Routine Evaluation Limits – SAR Evaluation	Pass

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## **1 General Remarks**

### **1.1 Complementary Materials**

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test result

## **2 Test Sites**

### **2.1 Test Facilities**

**TÜV Rheinland (Guangdong) Ltd. EMC Laboratory**

Guangzhou Auto Market, Yuan Gang Section of Guangshan Road  
Guangzhou 510650

P. R. China

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## 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

Kind of Equipment	Type	Manufacturer	S/N	Calibrated until	Calibrated Interval
EMI Test Receiver	ESCI-3	Rohde & Schwarz	100216	2011-03-16	1 year
Spectrum Analyzer	FSP30	Rohde & Schwarz	100286	2011-03-16	1 year
Loop Antenna	HFH2-Z2	Rohde & Schwarz	100111	2011-03-16	1 year
Trilog-Broadband Antenna	VULB9168	SCHWARZBECK MESS- ELEKTRONIK	209	2011-08-21	2 years
Double-Ridged Waveguide Horn Antenna	HF906	Rohde & Schwarz	100385	2011-08-24	2 years
Pre-amplifier	AFS42-00101800-25-S-42	MITEQ	1101599	2011-03-16	2 years
Band Reject Filter	BRM50702	Micro-Tronics	023	2011-03-16	2 years
Standard Gain Horn Antenna	3160-09	EMCO	21642	2014-06-26	5 years
Pre-amplifier	AFS33-18002650-30-8P-44	MITEQ	1108282	2011-03-16	2 years
3m Anechoic Chamber	N/A	Albatross Project GmbH	N/A	2011-03-16	1 year
Spectrum Analyzer	E4404B	Agilent	MY414 40753	2011-03-16	1 year

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

Uncertainty for conducted emissions measurements is  $\pm 2.68\text{dB}$ .

Uncertainty for radiated emissions measurements is  $\pm 4.94\text{dB}$  (30MHz-1GHz),  $\pm 4.88\text{dB}$  (>1GHz).

The reported expanded uncertainty is based on a standard uncertainty multiply by a coverage factor  $k=2$ , providing a level of confidence of approximately 95%.

## 2.6 Location of original data

The original copies of test data taken during actual testing were attached at Appendix 1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Guangdong) file for certification follow-up purposes.

## 2.7 Status of facility used for testing

TÜV Rheinland (Guangdong) Ltd. EMC Laboratory; Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou 510650, P. R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements, the register no. 833845

TÜV Rheinland (Guangdong) Ltd. EMC Laboratory; Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou 510650, P. R. China is listed on Certification and Engineering Bureau of Canada, whose file number is IC 2932C.

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### 3 General Product Information

MindWave is a brain-computer interface device which consists of a wireless headset (model: MW001) and a USB dongle (model: MW002).

The headset detects the brainwaves from the forehead and ear clip sensor. Brainwave signals are captured, converted to digital data, processed and transmitted wirelessly to the USB dongle. The USB dongle receives the transmitted signal and extracts the data to be used by the application software.

This report is for MW001 only.

#### 3.1 Product Function and Intended Use

Refer to user manual for more information.

#### 3.2 Ratings and System Details

Frequency range	:	2419.9MHz – 2470.9MHz (unlicensed ISM band)
Number of employed channels	:	256 channels
Modulation Type	:	MSK
Mode of RF Operation (Simplex/ Duplex)	:	Duplex
Type of antenna	:	Integral antenna
Power supply	:	DC 1.5V(1XAAA battery)

\* Channel center frequency point list (MHz):

2419.9999, 2420.1999, 2420.3998, 2420.5998, 2420.7997, 2420.9997, 2421.1996, 2421.3996, 2421.5995, 2421.7995, 2421.9994, 2422.1994, 2422.3993, 2422.5993, 2422.7992, 2422.9992, 2423.1991, 2423.3991, 2423.5990, 2423.7990, 2423.9989, 2424.1989, 2424.3988, 2424.5988, 2424.7987, 2424.9987, 2425.1986, 2425.3986, 2425.5985, 2425.7985, 2425.9984, 2426.1984, 2426.3983, 2426.5983, 2426.7982, 2426.9982, 2427.1982, 2427.3981, 2427.5981, 2427.7980, 2427.9980, 2428.1979, 2428.3979, 2428.5978, 2428.7978, 2428.9977, 2429.1977, 2429.3976, 2429.5976, 2429.7975, 2429.9975, 2430.1974, 2430.3974, 2430.5973, 2430.7973, 2430.9972, 2431.1972, 2431.3971, 2431.5971, 2431.7970, 2431.9970, 2432.1969, 2432.3969, 2432.5968, 2432.7968, 2432.9967, 2433.1967, 2433.3966, 2433.5966, 2433.7965, 2433.9965, 2434.1964, 2434.3964, 2434.5963, 2434.7963, 2434.9962, 2435.1962, 2435.3961, 2435.5961, 2435.7961, 2435.9960, 2436.1960, 2436.3959, 2436.5959, 2436.7958, 2436.9958, 2437.1957, 2437.3957, 2437.5956, 2437.7956, 2437.9955, 2438.1955, 2438.3954, 2438.5954, 2438.7953, 2438.9953, 2439.1952, 2439.3952, 2439.5951, 2439.7951, 2439.9950, 2440.1950, 2440.3949, 2440.5949, 2440.7948, 2440.9948, 2441.1947, 2441.3947, 2441.5946, 2441.7946, 2441.9945, 2442.1945, 2442.3944, 2442.5944, 2442.7943, 2442.9943, 2443.1942, 2443.3942, 2443.5941, 2443.7941, 2443.9940, 2444.1940, 2444.3940, 2444.5939, 2444.7939, 2444.9938, 2445.1938, 2445.3937, 2445.5937, 2445.7936, 2445.9936, 2446.1935, 2446.3935, 2446.5934, 2446.7934, 2446.9933, 2447.1933, 2447.3932, 2447.5932, 2447.7931, 2447.9931, 2448.1930, 2448.3930, 2448.5929, 2448.7929, 2448.9928, 2449.1928, 2449.3927, 2449.5927, 2449.7926, 2449.9926, 2450.1925, 2450.3925, 2450.5924, 2450.7924, 2450.9923, 2451.1923, 2451.3922, 2451.5922, 2451.7921, 2451.9921, 2452.1920, 2452.3920, 2452.5919, 2452.7919, 2452.9919, 2453.1918, 2453.3918, 2453.5917, 2453.7917, 2453.9916,

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2454.1916, 2454.3915, 2454.5915, 2454.7914, 2454.9914, 2455.1913, 2455.3913, 2455.5912, 2455.7912, 2455.9911, 2456.1911, 2456.3910, 2456.5910, 2456.7909, 2456.9909, 2457.1908, 2457.3908, 2457.5907, 2457.7907, 2457.9906, 2458.1906, 2458.3905, 2458.5905, 2458.7904, 2458.9904, 2459.1903, 2459.3903, 2459.5902, 2459.7902, 2459.9901, 2460.1901, 2460.3900, 2460.5900, 2460.7899, 2460.9899, 2461.1898, 2461.3898, 2461.5898, 2461.7897, 2461.9897, 2462.1896, 2462.3896, 2462.5895, 2462.7895, 2462.9894, 2463.1894, 2463.3893, 2463.5893, 2463.7892, 2463.9892, 2464.1891, 2464.3891, 2464.5890, 2464.7890, 2464.9889, 2465.1889, 2465.3888, 2465.5888, 2465.7887, 2465.9887, 2466.1886, 2466.3886, 2466.5885, 2466.7885, 2466.9884, 2467.1884, 2467.3883, 2467.5883, 2467.7882, 2467.9882, 2468.1881, 2468.3881, 2468.5880, 2468.7880, 2468.9879, 2469.1879, 2469.3878, 2469.5878, 2469.7878, 2469.9877, 2470.1877, 2470.3876, 2470.5876, 2470.7875, 2470.9875

**Note:**

1. The above information is declared by the manufacturer.
2. In this report:  
Low Channel = 2419.9999MHz  
Middle Channel = 2445.5937 MHz  
High Channel = 2470.9875 MHz



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### **3.3 Independent Operation Modes**

RF Transmitting and receiving

For further information refer to User Manual

### **3.4 Submitted Documents**

Operation Description  
Block Diagram  
Schematics  
FCC and IC label and its location  
User Manual  
Internal Photos  
External Photos  
Application form

## **4 Test Set-up and Operation Mode**

### **4.1 Principle of Configuration Selection**

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### **4.2 Test Operation and Test Software**

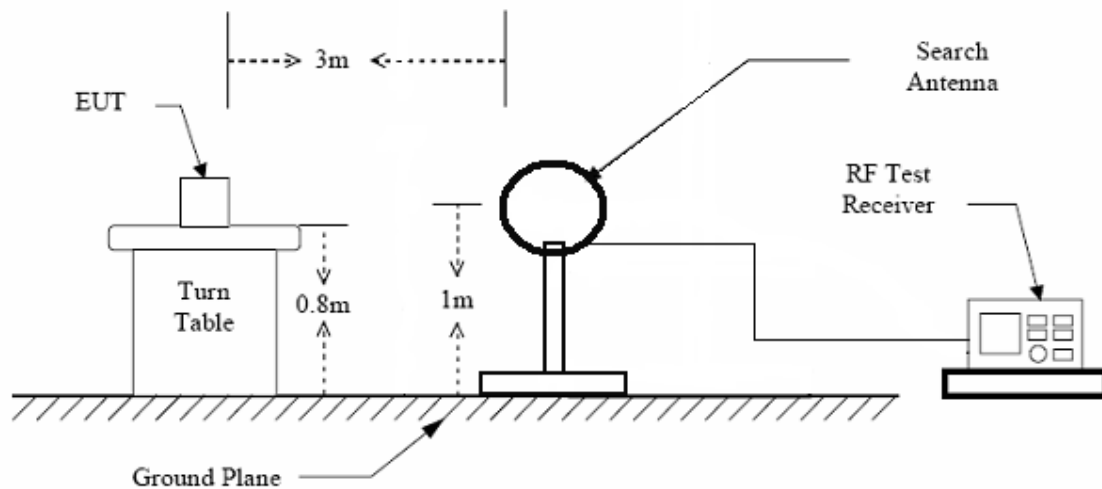
Refer to test set-up in chapter 5.

### **4.3 Special Accessories and Auxiliary Equipment**

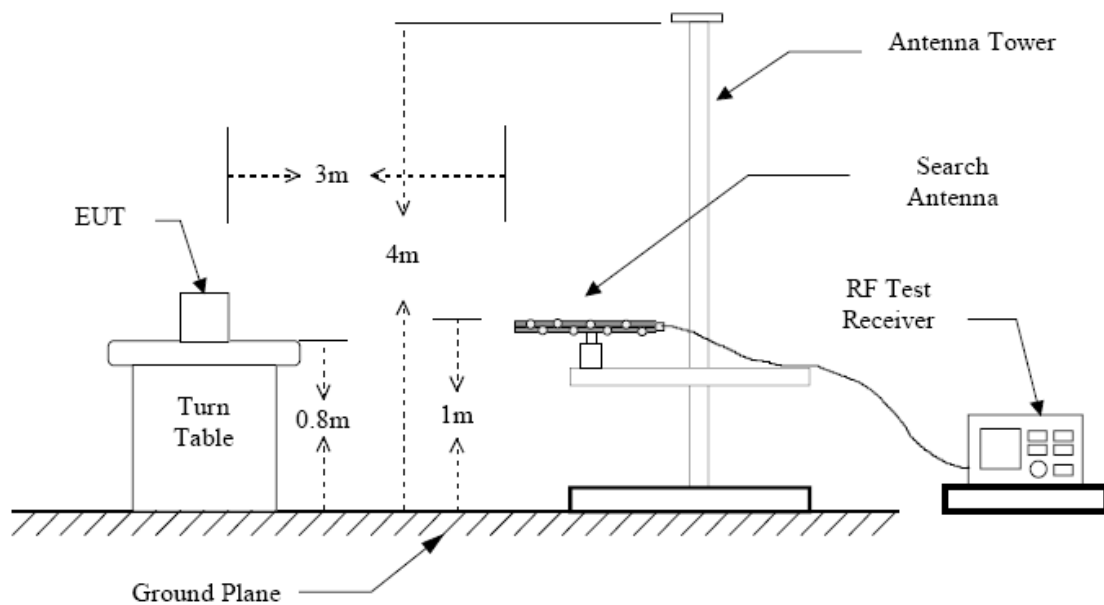
None.

## 4.5 Test set-up

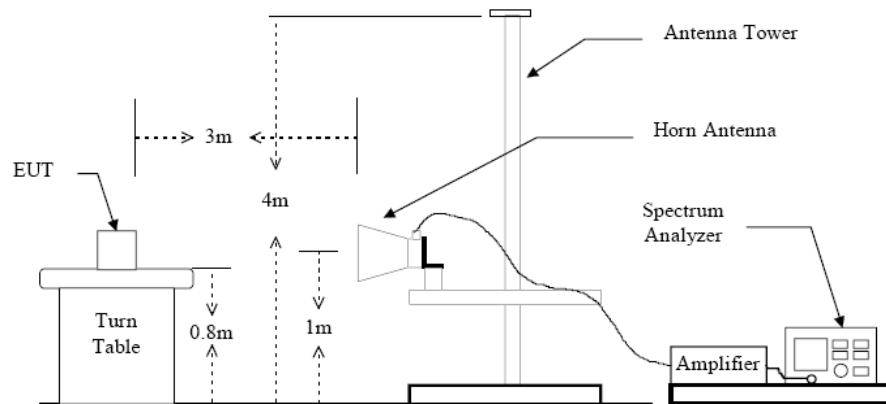
### Diagram 1 of Configuration for Testing Radiated Emission below 30MHz



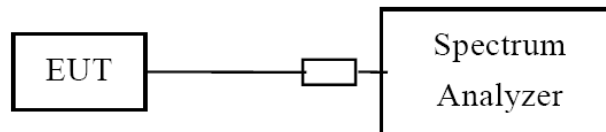
### Diagram 2 of Configuration for Testing Radiated Emission from 30MHz to 1 GHz



**Diagram 3 of Configuration for Testing Radiated Emission above 1 GHz**



**Diagram 4 of Configuration for Testing other test items**



## 5 Test Results

### 5.1 Transmitter Radiated Emission (fundamental and spurious)

**RESULT:**

**Pass**

Date of testing	:	Sep.14, 2010
Test specification	:	FCC Part 15 Per Section 15.249(a)(d)(e) RSS-210 Per Section A2.9
Limits	:	FCC Part 15 Per Section 15.249(a)(d)(e) RSS-210 Per Section A2.9
Test procedure	:	Procedure specified in ANSI C63.4/RSS-Gen were followed
Deviations from Standard Test procedures	:	None
Kind of test site	:	3m Semi-anechoic chamber
Operation mode	:	Transmitting
Power supply	:	DC 1.5V
Temperature	:	23°C
Humidity	:	50%

**Test procedure:**

1. The EUT was placed on the top of a rotatable table 0.8 meters above the ground with 3-orthogonal direction and be kept close enough to the receiving antenna. The table was rotated 360 degrees to determine the suspected emission frequency and the position of the worst radiation case with both horizontal and vertical antenna polarization.
2. The EUT was then set 3 meters away from the receiving antenna, which was mounted on a variable-height antenna tower.
3. For each suspected emission frequency recorded in step 1, the EUT was arranged to its worst case and:  
for tests below 30MHz the loop antenna is positioned with its plane vertical and the center of it is 1m above the ground. During the tests it is rotated about its vertical axis for maximum response at each azimuth about the EUT;  
for tests above 30MHz the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to read the maximum emission.
4. The RBW and VBW of the test receiver were 120 kHz and 120 kHz for Quasi-peak detection at frequency below 1GHz.  
The RBW and VBW of the test receiver were 1MHz and 3MHz for Peak detection at frequency above 1GHz.  
For Average measurement at frequency above 1GHz. The resolution bandwidth of the test receiver was 1MHz, video bandwidth is 10Hz. If the peak value was below the AV limit, AV measurement was skipped.

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**Table 2: Radiated Emission (Transmitting at low channel)**

Frequency	QP	AV	PK	Polarity	Limit			Remark
					QP	AV	PK	
[MHz]	[dBμ V/m]			(H/V)	[dBμ V/m]			
2420.35	N/A	--	66.0	H	N/A	94	114	fundamental
4840.00	N/A	--	53.1	H	N/A	54	74	
5230.00	N/A	--	51.5	H	N/A	54	74	
7260.00	N/A	50.9	54.7	H	N/A	54	74	
2420.35	N/A	--	69.2	V	N/A	94	114	fundamental
4840.00	N/A	--	51.8	V	N/A	54	74	
5230.00	N/A	--	52.5	V	N/A	54	74	
7260.00	N/A	--	53.1	V	N/A	54	74	
*)---								

**Table 3: Radiated Emission (Transmitting at middle channel)**

Frequency	QP	AV	PK	Polarity	Limit			Remark
					QP	AV	PK	
[MHz]	[dBµ V/m]			(H/V)	[dBµ V/m]			
2445.50	N/A	--	68.3	H	N/A	94	114	fundamental
4891.00	N/A	--	52.0	H	N/A	54	74	
5231.00	N/A	--	50.9	H	N/A	54	74	
7337.00	N/A	47.6	54.5	H	N/A	54	74	
2445.50	N/A	--	71.2	V	N/A	94	114	fundamental
4891.00	N/A	--	51.6	V	N/A	54	74	
5230.00	N/A	--	49.3	V	N/A	54	74	
7337.00	N/A	--	53.0	V	N/A	54	74	
*)---								

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**Table 4: Radiated Emission (Transmitting at high channel)**

Frequency	QP	AV	PK	Polarity	Limit			Remark
					QP	AV	PK	
[MHz]	[dBμ V/m]			(H/V)	[dBμ V/m]			
2471.07	N/A	--	66.6	H	N/A	94	114	fundamental
4942.00	N/A	--	51.5	H	N/A	54	74	
5233.00	N/A	--	51.6	H	N/A	54	74	
7413.00	N/A	--	52.9	H	N/A	54	74	
2471.07	N/A	--	70.5	V	N/A	94	114	fundamental
4942.00	N/A	--	51.6	V	N/A	54	74	
7413.00	N/A	--	52.1	V	N/A	54	74	
11729.00	N/A	--	48.5	V	N/A	54	74	
*)---								

\*) Measurement is made from 22MHz to 26 GHz. Disturbances other than those mentioned above are small or not detectable.

## 5.2 Receiver Radiated Spurious Emission

**RESULT:**

## Pass

Date of testing	:	Sep. 14, 2010
Test specification	:	RSS-210 Per Section 2.3
Limits	:	RSS-210 Per Section 2.3
		RSS-Gen Per Section 7.2.3.2
Test procedure	:	Procedure specified in ANSI C63.4/RSS-Gen were followed
Deviations from Standard Test procedures	:	None
Kind of test site	:	3m Semi-anechoic chamber
Operation mode	:	Receiving
Power supply	:	DC 1.5V
Temperature	:	23°C
Humidity	:	50%

**Test procedure:**

1. The EUT was placed on the top of a rotatable table 0.8 meters above the ground with 3-orthogonal direction and be kept close enough to the receiving antenna. The table was rotated 360 degrees to determine the suspected emission frequency and the position of the worst radiation case with both horizontal and vertical antenna polarization.
2. The EUT was then set 3 meters away from the receiving antenna, which was mounted on a variable-height antenna tower.
3. For each suspected emission frequency recorded in step 1, the EUT was arranged to its worst case that the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to read the maximum emission.

**Table 5: Receiver Radiated Emission (receiving at middle channel)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dB $\mu$ V/m]			(H/V)	[dB $\mu$ V/m]		
4923.00	N/A	--	50.8	H	N/A	54	74
5230.00	N/A	--	48.7	H	N/A	54	74
10063.00	N/A	--	47.3	H	N/A	54	74
2643.00	N/A	--	36.8	V	N/A	54	74
4923.00	N/A	--	47.5	V	N/A	54	74
5231.00	N/A	--	51.2	V	N/A	54	74

\*) Measurement is made from 30 MHz to 8GHz. Disturbances other than those mentioned above are small or not detectable.



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### **5.3 Antenna requirement**

**RESULT:**

**Pass**

Date of testing : ---  
Test specification : FCC Part 15 Per Section 15.203

According to 15.203, intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

As the antenna is permanently mounted on RF Board, there is no possibility of replacement.

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## 5.4 20dB Bandwidth

### RESULT:

**Pass**

Date of testing : Sep. 14, 2010  
Test specification : FCC Part 2.1049  
Limits : No limit  
Deviations from Standard Test procedures : None  
Test procedure : Procedure specified in ANSI C63.4/RSS-Gen were followed  
Operation mode : Transmitting  
Kind of test site : Shielded room  
Power supply : DC 1.5V  
Temperature : 23°C  
Humidity : 50%

### Test procedure:

1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: Centered Frequency= measured channel, RBW=10kHz, VBW>RBW.
4. Mark the peak power frequency point and the -20dB upper and lower frequency points.
5. Read the frequency delta value between the -20dB upper and lower frequency points.
6. Repeat step 2 to 5 until all the channels required are finished.

**Table 6: 20dB Bandwidth**

Channel	20dB Bandwidth (kHz)	99% occupied bandwidth (kHz)
Low	764	841
Mid	761	771
High	729	769

Please refer to Appendix 1 for the plot.

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## **5.5 Band Edge Emission**

### **RESULT:**

**Pass**

Date of testing	:	Sep. 14, 2010
Test specification	:	FCC Part 15 Per Section 15.205 RSS-210 Issue 7 2.2
Limits	:	FCC Part 15 Per Section 15.205 - The field strength of emissions appearing within restricted bands shall not exceed the limits shown in Section 15.209 RSS-210 Section 2.2 - Unwanted emissions falling into restricted bands of Table 1 shall meet Tables 2 and 3 limits
Deviations from Standard Test procedures	:	None
Test Procedure	:	Procedure specified in ANSI C63.4/RSS-Gen were followed
Kind of test site	:	3m Semi-anechoic chamber
Operation mode	:	Transmitting
Power supply	:	DC 1.5V
Temperature	:	23°C
Humidity	:	50%

### **Test procedure:**

The band edge radiated emission was measured according to the procedure in clause 5.1 of this report.

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**Table 7: Band Edges Emission in the Restricted Bands**

<b>Frequency</b> [MHz]	<b>PK</b> [dB $\mu$ V/m]	<b>AV</b> [dB $\mu$ V/m]	<b>Polarity</b> (H/V)	<b>PK limit</b> [dB $\mu$ V/m]	<b>AV limit</b> [dB $\mu$ V/m]
2390.25	54.65	48.26	H	74	54
2483.5	53.73	50.56	V	74	54
<b>Remark: --</b>					

**\* Note:** Please refer to the Appendix 1 for the plot.

Disturbances other than those mentioned above are small or not detectable.

## 5.6 Exemption from Routine Evaluation Limits – SAR Evaluation

**RESULT:**

**Pass**

Date of testing : Sep. 14, 2010  
Test specification : RSS-102 Issue 2 Section 2.5.1  
Limits : RSS-102 Issue 2 Section 2.5.1  
SAR evaluation is required if the separation distance between the user and the device is less than or equal to 20 cm, except when the device operates:  
above 2.2 GHz up to 3 GHz inclusively and its output power (i.e. the higher of the conducted or radiated (e.i.r.p.) source-based time-averaged output power) is less than, or equal to 20 mW for General Public Use and 100 mW for Controlled Use

**Table 8: e.i.r.p**

Mode	Channel	Field strength	e.i.r.p	Limit
		(dBµV/m)	(mW)	(mW)
transmitting	Low	69.2	0.003	20
	Mid	71.2	0.004	20
	High	70.5	0.003	20

Since the calculation above showed the e.i.r.p of the device is less than 20mW, the SAR evaluation is not required.

## 6 Photographs of the Test Set-Up

**Photograph 1: Set-up for Radiation Measurement below 1GHz**



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**Photograph 2: Set-up for Radiation Measurement above 1GHz**



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## Band Edge Emission

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

## EMC Test Record (EMISSION)

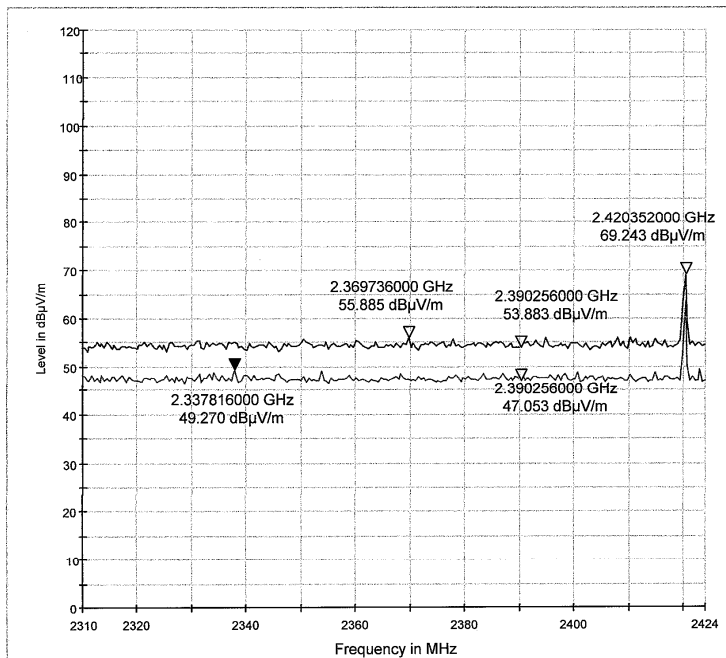
### Test Information

Manufacturer:	/
Test Item:	Wireless Headset
Identification	MW001
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx and Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	DC 1.5V
Receipt No.:	173053282
Report No.	/
Result:	
Comment:	Vertical

### Subrange 1

Frequency Range:	2GHz – 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 14/09/2010 - Time: 20:39:23

Tested by:



Reviewed by:



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TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

## EMC Test Record (EMISSION)

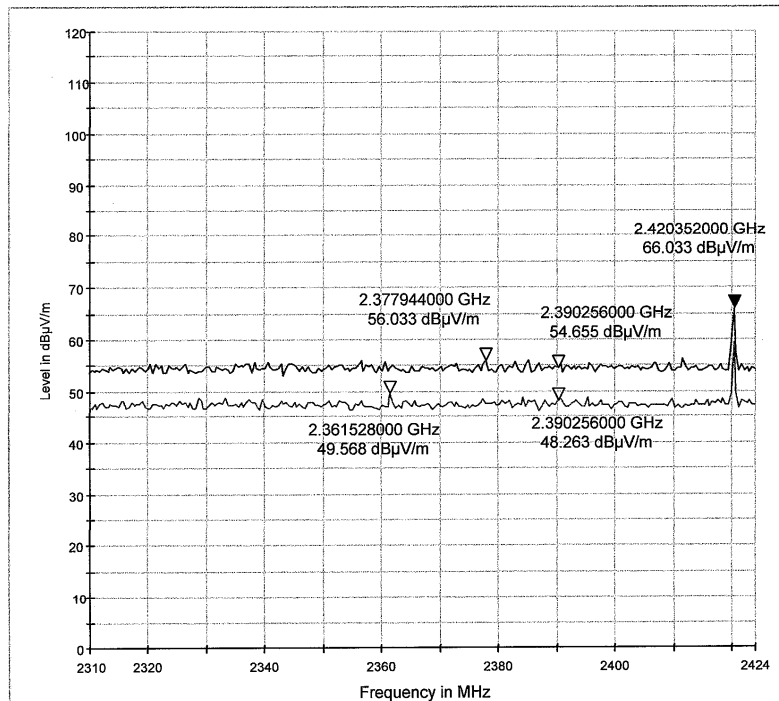
### Test Information

Manufacturer: /  
Test Item: Wireless Headset  
Identification: MW001  
Test Standard: FCC Part 15  
Test Detail: Band edge  
Operation Mode: Tx and Low channel  
Climate Condition: 23 °C; 50 %RH; 101 kPa.  
Test Voltage / Freq. : DC 1.5V  
Receipt No.: 173053282  
Report No. : /  
Result:  
Comment: Horizontal



#### Subrange 1

Frequency Range: 2GHz – 3GHz  
Receiver: TUV FSP 30  
Transducer: TUV SAC HF906 / TUV FSP 30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 14/09/2010 - Time: 20:36:34

Tested by:  Reviewed by: 

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TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

## EMC Test Record (EMISSION)

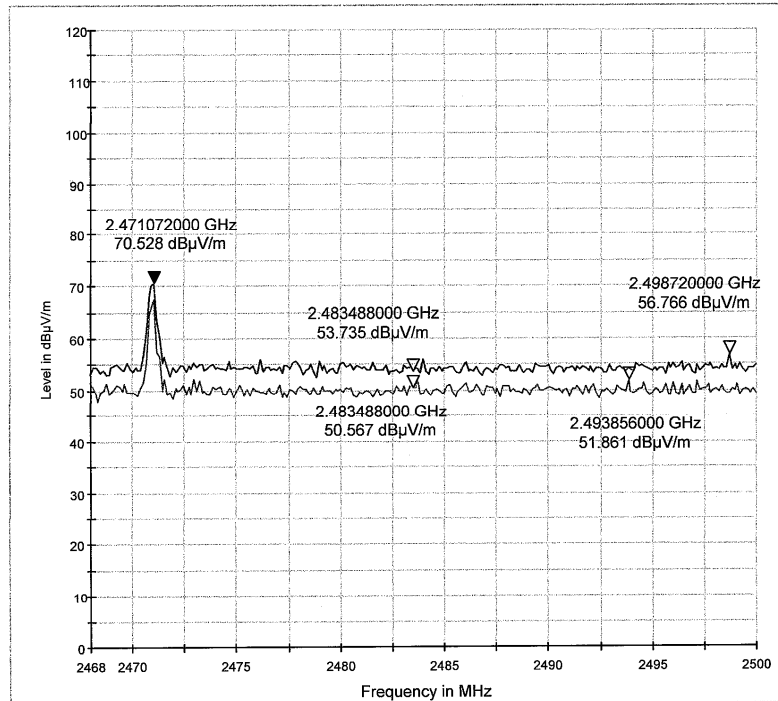
### Test Information

Manufacturer: /  
Test Item: Wireless Headset  
Identification: MW001  
Test Standard: FCC Part 15  
Test Detail: Band edge  
Operation Mode: Tx and High channel  
Climate Condition: 23 °C; 50 %RH; 101 kPa.  
Test Voltage / Freq.: DC 1.5V  
Receipt No.: 173053282  
Report No.: /  
Result:  
Comment: Vertical

#### Subrange 1

Frequency Range: 2GHz – 3GHz  
Receiver: TUV FSP 30  
Transducer: TUV SAC HF906 / TUV FSP 30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 14/09/2010 - Time: 20:43:32

Tested by:



Reviewed by:



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TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

## EMC Test Record (EMISSION)

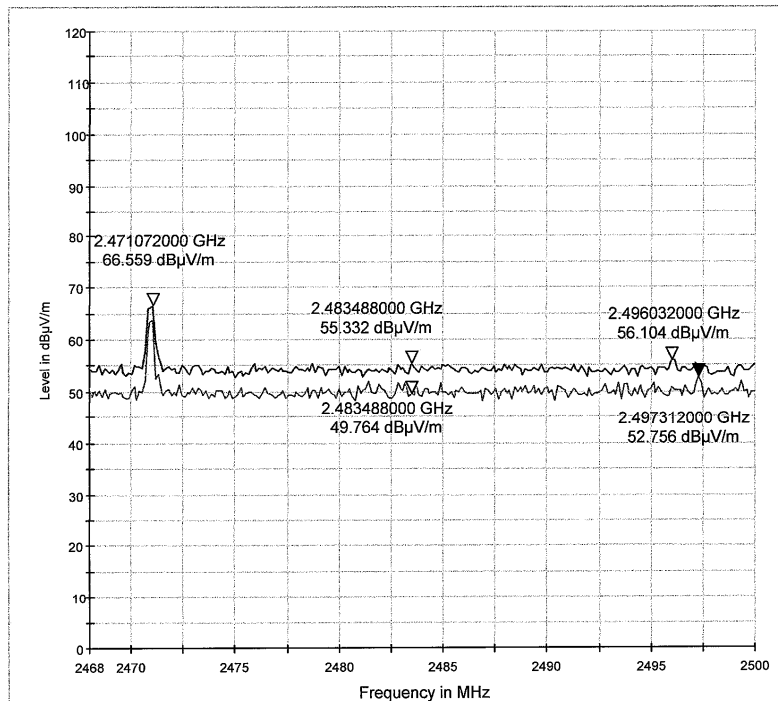
### Test Information

Manufacturer: /  
Test Item: Wireless Headset  
Identification: MW001  
Test Standard: FCC Part 15  
Test Detail: Band edge  
Operation Mode: Tx and High channel  
Climate Condition: 23 °C; 50 %RH; 101 kPa.  
Test Voltage / Freq.: DC 1.5V  
Receipt No.: 173053282  
Report No.: /  
Result:  
Comment: Horizontal

#### Subrange 1

Frequency Range: 2GHz – 3GHz  
Receiver: TUV FSP 30  
Transducer: TUV SAC HF906 / TUV FSP 30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 14/09/2010 - Time: 20:46:35

Tested by:



Reviewed by:



Prüfbericht - Nr.:

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Test Report no.

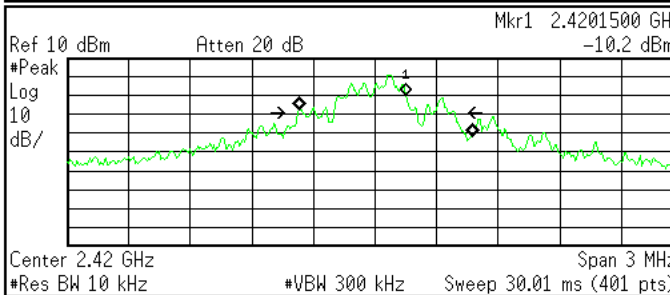
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### 20dB bandwidth (low channel)

 Agilent

Ch Freq 2.42 GHz Trig Free  
Occupied Bandwidth



Occupied Bandwidth  
841.1239 kHz

Occ BW % Pwr 99.00 %  
x dB -20.00 dB

Transmit Freq Error 49.351 kHz  
x dB Bandwidth 763.966 kHz

Span

Span  
3.00000000 MHz

Span Zoom

Full Span

Zero Span

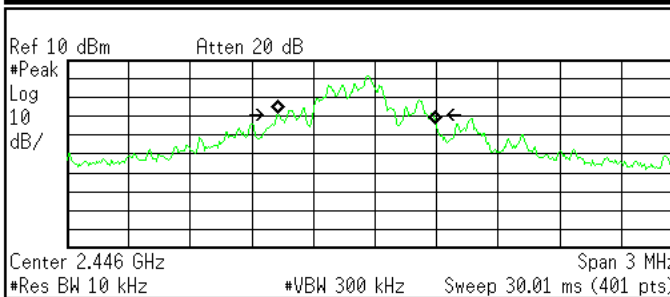
Last Span

Zone>

### 20dB bandwidth (Middle channel)

 Agilent

Ch Freq 2.4455 GHz Trig Free  
Occupied Bandwidth



Occupied Bandwidth  
770.6849 kHz

Occ BW % Pwr 99.00 %  
x dB -20.00 dB

Transmit Freq Error -90.440 kHz  
x dB Bandwidth 761.179 kHz

Measure

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier  
Power

Power Stat  
CCDF

More  
1 of 2

Prüfbericht - Nr.:

16023691 001

Test Report no.

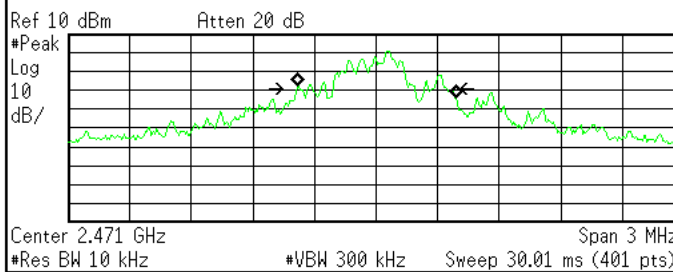
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20dB bandwidth (High channel)

 Agilent

Ch Freq 2.471 GHz Trig Free  
Occupied Bandwidth



Occupied Bandwidth  
769.0050 kHz

Occ BW % Pwr 99.00 %  
x dB -20.00 dB

Transmit Freq Error 2.807 kHz  
x dB Bandwidth 729.421 kHz

Freq/Channel

Center Freq  
2.47100000 GHz

Start Freq  
2.46950000 GHz

Stop Freq  
2.47250000 GHz

CF Step  
300.000000 kHz  
Auto Man

Freq Offset  
0.00000000 Hz

Signal Track  
On Off

Scale Type  
Log Lin