



<b>Prüfbericht - Nr.: 17019029 001</b>		Seite 1 von 42			
<i>Test Report No.:</i>		<i>Page 1 of 42</i>			
<b>Auftraggeber:</b> <i>Client:</i>	Zhongshan K-mate General Elec. Co., Ltd. Fuwan Industrial Zone, Fuwan South Road, Sunwen East Road, East District, 528403 Zhongshan, Guangdong, P.R. China				
<b>Gegenstand der Prüfung:</b> <i>Test item:</i>	Bluetooth Stereo Headset				
<b>Bezeichnung:</b> <i>Identification:</i>	BTH002-KMA04	<b>Serien-Nr.:</b> <i>Serial No.:</i>	n.a.		
<b>Wareneingangs-Nr.:</b> <i>Receipt No.:</i>	163072045	<b>Eingangsdatum:</b> <i>Date of receipt:</i>	2010-12-24		
<b>Prüfört:</b> <i>Testing location:</i>	TÜV Rheinland (Guangdong) Ltd. EMC Laboratory Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou, P.R. China FCC Registration No.: 833845				
<b>Prüfgrundlage:</b> <i>Test specification:</i>	FCC CFR47 Part 15: Subpart C Section 15.247 FCC CFR47 Part 15: Subpart C Section 15.207 FCC CFR47 Part 15: Subpart C Section 15.209 FCC CFR47 Part 15: Subpart B Section 15.107 FCC CFR47 Part 15: Subpart B Section 15.109				
<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 (Shenzhen) Co., Ltd.				
<b>geprüft/ tested by:</b>	<b>kontrolliert/ reviewed by:</b>				
 2011-03-15 Winnie Hou/Project Engineer	 2011-03-29 Shawn Peng/Manager				
<i>Datum</i> Date	<i>Name/Stellung</i> Name/Position	<i>Unterschrift</i> Signature	<i>Datum</i> Date	<i>Name/Stellung</i> Name/Position	<i>Unterschrift</i> Signature
<b>Sonstiges/ Other Aspects:</b>					
<b>Abkürzungen:</b> P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar NIT = nicht getestet			<b>Abbreviations:</b> P(ass) = passed F(ail) = failed N/A = not applicable NIT = not tested		
<b>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.</b> <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>					

## TEST SUMMARY

**5.1.1 ANTENNA REQUIREMENT***RESULT: Passed***5.1.2 PEAK OUTPUT POWER***RESULT: Passed***5.1.3 20DB BANDWIDTH***RESULT: Passed***5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHZ BANDWIDTH***RESULT: Passed***5.1.5 SPURIOUS EMISSION***RESULT: Passed***5.1.6 FREQUENCY SEPARATION***RESULT: Passed***5.1.7 NUMBER OF HOPPING FREQUENCY***RESULT: Passed***5.1.8 TIME OF OCCUPANCY***RESULT: Passed***6.1.1 ELECTROMAGNETIC FIELDS***RESULT: Passed*

## Contents

<b>1.</b>	<b>GENERAL REMARKS .....</b>	<b>4</b>
<b>1.1</b>	<b>COMPLEMENTARY MATERIALS .....</b>	<b>4</b>
<b>2.</b>	<b>TEST SITES .....</b>	<b>4</b>
<b>2.1</b>	<b>TEST FACILITIES .....</b>	<b>4</b>
<b>2.2</b>	<b>LIST OF TEST AND MEASUREMENT INSTRUMENTS.....</b>	<b>5</b>
<b>2.3</b>	<b>TRACEABILITY .....</b>	<b>6</b>
<b>2.4</b>	<b>CALIBRATION .....</b>	<b>6</b>
<b>2.5</b>	<b>MEASUREMENT UNCERTAINTY.....</b>	<b>6</b>
<b>2.6</b>	<b>LOCATION OF ORIGINAL DATA.....</b>	<b>6</b>
<b>2.7</b>	<b>STATUS OF FACILITY USED FOR TESTING.....</b>	<b>6</b>
<b>3.</b>	<b>GENERAL PRODUCT INFORMATION .....</b>	<b>8</b>
<b>3.1</b>	<b>PRODUCT FUNCTION AND INTENDED USE.....</b>	<b>8</b>
<b>3.2</b>	<b>RATINGS AND SYSTEM DETAILS .....</b>	<b>8</b>
<b>3.3</b>	<b>INDEPENDENT OPERATION MODES .....</b>	<b>9</b>
<b>3.4</b>	<b>NOISE GENERATING AND NOISE SUPPRESSING PARTS .....</b>	<b>10</b>
<b>3.5</b>	<b>SUBMITTED DOCUMENTS .....</b>	<b>10</b>
<b>4.</b>	<b>TEST SET-UP AND OPERATION MODES .....</b>	<b>11</b>
<b>4.1</b>	<b>PRINCIPLE OF CONFIGURATION SELECTION.....</b>	<b>11</b>
<b>4.2</b>	<b>TEST OPERATION AND TEST SOFTWARE .....</b>	<b>11</b>
<b>4.3</b>	<b>SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT .....</b>	<b>11</b>
<b>4.4</b>	<b>COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....</b>	<b>12</b>
<b>4.5</b>	<b>TEST SETUP DIAGRAM .....</b>	<b>12</b>
<b>5.</b>	<b>TEST RESULTS .....</b>	<b>14</b>
<b>5.1</b>	<b>TRANSMITTER REQUIREMENT &amp; TEST SUITES .....</b>	<b>14</b>
5.1.1	<i>Antenna Requirement.....</i>	<i>14</i>
5.1.2	<i>Peak Output Power.....</i>	<i>15</i>
5.1.3	<i>20dB Bandwidth.....</i>	<i>16</i>
5.1.4	<i>Conducted spurious emissions measured in 100kHz Bandwidth.....</i>	<i>20</i>
5.1.5	<i>Spurious Emission .....</i>	<i>23</i>
5.1.6	<i>Frequency Separation.....</i>	<i>24</i>
5.1.7	<i>Number of hopping frequency.....</i>	<i>27</i>
5.1.8	<i>Time of Occupancy .....</i>	<i>29</i>
<b>6.</b>	<b>SAFETY HUMAN EXPOSURE .....</b>	<b>40</b>
<b>6.1</b>	<b>RADIO FREQUENCY EXPOSURE COMPLIANCE.....</b>	<b>40</b>
6.1.1	<i>Electromagnetic Fields.....</i>	<i>40</i>
<b>7.</b>	<b>PHOTOGRAPHS OF THE TEST SET-UP .....</b>	<b>41</b>
<b>8.</b>	<b>LIST OF TABLES .....</b>	<b>43</b>
<b>9.</b>	<b>LIST OF PHOTOGRAPHS .....</b>	<b>43</b>

## 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 of Radiated Emissions

## 2. Test Sites

### 2.1 Test Facilities

TÜV Rheinland (Guangdong) Ltd.  
EMC Laboratory

Guangzhou Auto Market,  
Yuan Gang Section of Guangshan Road,  
Guangzhou, P.R. China

FCC Registration No.: 833845

## 2.2 List of Test and Measurement Instruments

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

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
<b>Spurious emission and Radiated emission</b>				
EMI Test Receiver	Rohde & Schwarz	ESCI-3	100216	2011-03-16
Spectrum Analyzer	Rohde & Schwarz	FSP30	100286	2011-03-16
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100111	2012-03-16
Trilog-Broadband Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	209	2011-08-21
Double-Ridged Waveguide Horn Antenna	Rohde & Schwarz	HF906	100385	2011-08-24
Pre-amplifier	MITEQ	AFS42-00101800-25-S-42	1101599	2011-07-31
Standard Gain Horn Antenna	EMCO	3160-09	21642	2014-06-26
Pre-amplifier	MITEQ	AFS33-18002650-30-8P-44	1108282	2011-03-16
3m Anechoic Chamber	Albatross Project GmbH	N/A	N/A	2011-04-16
<b>Radio Test Suite</b>				
Receiver	Rohde & Schwarz	ESCI	100178	2011-09-26
Spectrum analyzer	Agilent	E4404B	MY41440753	2011-09-26

## 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

**Table 2: Emission Measurement Uncertainty**

Measurement Type	Frequency	Uncertainty
AC Power Line Conducted Emission	150kHz - 30MHz	±3.0dB
Antenna Port Conducted Emission	< 1GHz	±0.39dB
	> 1GHz	±0.68dB
Radiated Emission	30MHz - 1GHz	±4.7dB
	> 1GHz	±4.5dB

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Guangdong) Ltd. test facility located at Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

**Produkte**

*Products*

**Prüfbericht - Nr.: 17019029 001**  
*Test Report No.*

**Seite 7 von 43**  
*Page 7 of 43*

### 3. General Product Information

#### 3.1 Product Function and Intended Use

The EUT is Bluetooth stereo headset. It operates at 2.4GHz ISM frequency band. For details refer to the User Manual, Technical Description and Circuit Diagram.

#### 3.2 Ratings and System Details

Table 3: Rating of EUT

Kind of Equipment:	Bluetooth Stereo Headset
Type Designation:	BTH002-KMA04
FCC ID	WAD-BTH002-KMA04

Table 4: Technical Specification of EUT

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Channel separation	1MHz
Extreme Temperature Range	-20°C to +45°C
Operation Voltage	DC 3.7V (via Lithium Battery)
Modulation	FHSS, GFSK, 8DPSK, $\pi/4$ DQPSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	0dBi
RF Output Power	0.0030W (4.71dBm)



**Table 5: Frequency hopping information**

Technical Specification	Description
Hopping Range	The customer declares that the maximum frequency of this device is: 2402-2480MHz. This is according the Bluetooth Core Specification V2.1+EDR for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04-E).
Hopping Sequence	<p>Example of a 79 hopping sequence in data mode:</p> <p>33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73,07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56,69,62,71,64, 7,25,27,66,57,70,74,61,78,63,10,41,05,43,15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,</p>
Receiver input bandwidth	<p>The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master.</p> <p>Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings.</p> <p>Repeating of a packer has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case.</p> <p>That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.</p>

### 3.3 Independent Operation Modes

The basic operation modes are:

- A. Transmitting
  - 1. Low channel
  - 2. Middle channel
  - 3. High channel
- B. Receiving
- C. Standby
- D. Off

### **3.4 Noise Generating and Noise Suppressing Parts**

Refer to the Circuit Diagram.

### **3.5 Submitted Documents**

- Bill of Material
- PCB Layout
- Photo Document
- Technical Description
- Circuit Diagram
- Instruction Manual
- Rating Label

## 4. Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2003.

Full test was applied on all test modes, but only worst case was shown.

### 4.3 Special Accessories and Auxiliary Equipment

The EUT was tested with following accessories

Description	Manufacturer	Type	S/N
Notebook	lenovo	X60	L3-CG041 07/04

## 4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

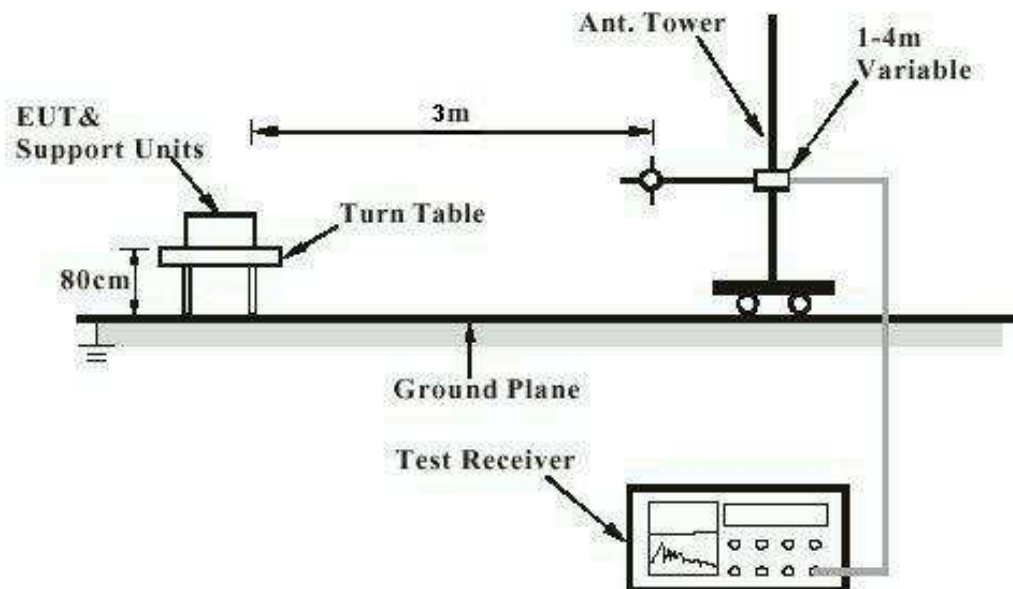


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

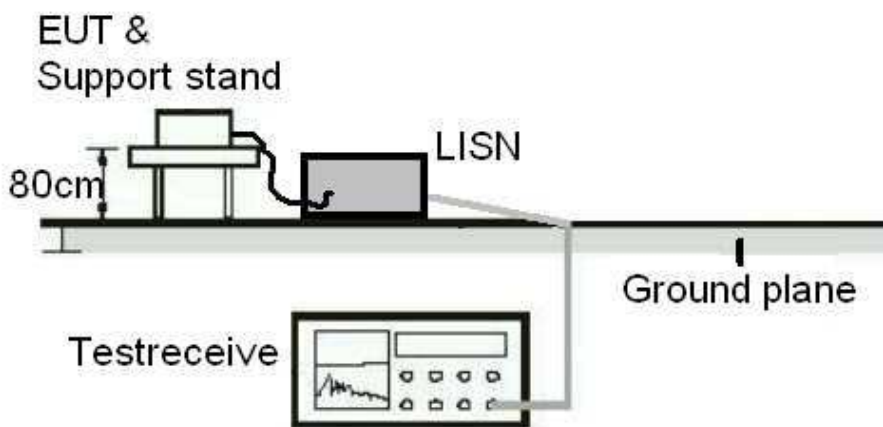
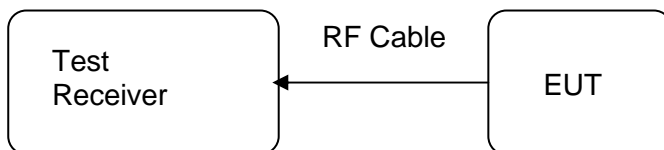


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



## 5. Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

**RESULT:** **Passed**

Test date : 2011-01-10  
Test standard : FCC Part 15.247(b)(4) and Part 15.203  
Limit : the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 0dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply the provision.

Refer to EUT photo for details.

## 5.1.2 Peak Output Power

**RESULT:**
**Passed**

Test date : 2011-01-10  
 Test standard : FCC Part 15.247(b)(1)  
 Basic standard : ANSI C63.4: 2003  
 Limit : 1 Watt  
 Kind of test site : Shielded room

**Test setup**

Test Channel : Low/ Middle/ High  
 Operation Mode : A  
 Ambient temperature : 22°C  
 Relative humidity : 52%  
 Atmospheric pressure : 101 kPa

**Table 6: Test result of Peak Output Power, GFSK modulation**

Channel	Channel Frequency (MHz)	Peak Output Power		Limit (W)
		(dBm)	(W)	
Low Channel	2402	4.71	0.00296	1
Middle Channel	2441	3.97	0.00249	1
High Channel	2480	2.82	0.00191	1

**Table 7: Test result of Peak Output Power, 8DPSK modulation**

Channel	Channel Frequency (MHz)	Peak Output Power		Limit (W)
		(dBm)	(W)	
Low Channel	2402	3.14	0.00206	1
Middle Channel	2441	2.41	0.00174	1
High Channel	2480	0.81	0.00121	1

### 5.1.3 20dB Bandwidth

**RESULT:**
**Passed**

Date of testing : 2011-01-10  
 Test standard : FCC Part 15.247(a)(1)  
 Basic standard : ANSI C63.4: 2003  
 Kind of test site : Shielded room

**Test setup**

Test Channel : Low/ Middle/ High  
 Operation Mode : A  
 Ambient temperature : 22°C  
 Relative humidity : 52%  
 Atmospheric pressure : 101 kPa

**Table 8: Test result of 20dB Bandwidth, GFSK modulation**

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	825	/	Pass
Mid Channel	2441	825	/	Pass
High Channel	2480	825	/	Pass

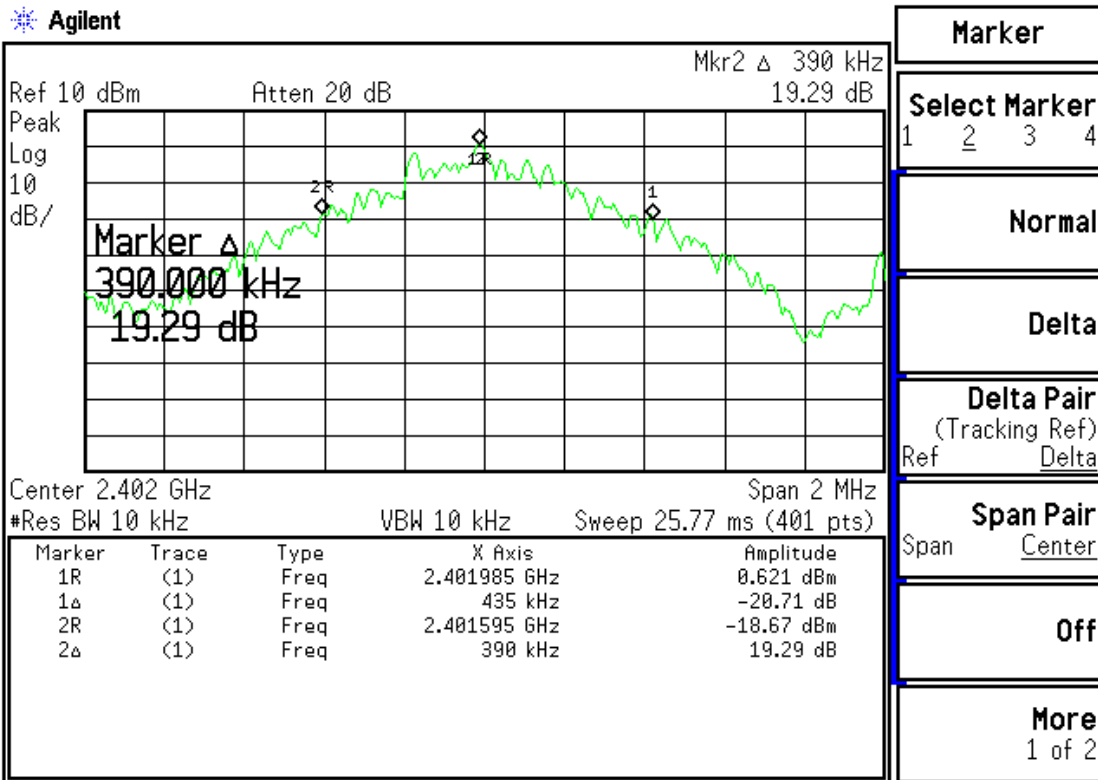
**Table 9: Test result of 20dB Bandwidth, 8DPSK modulation**

Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Result
Low Channel	2402	1.19	/	Pass
Mid Channel	2441	1.19	/	Pass
High Channel	2480	1.18	/	Pass

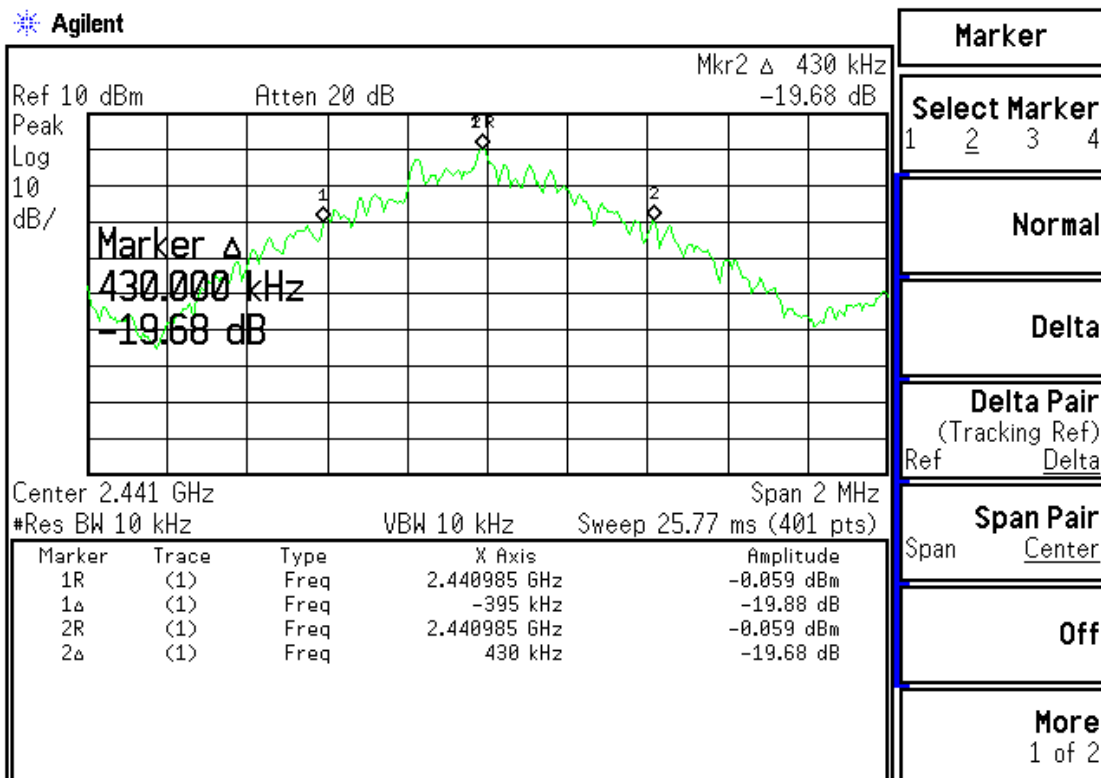


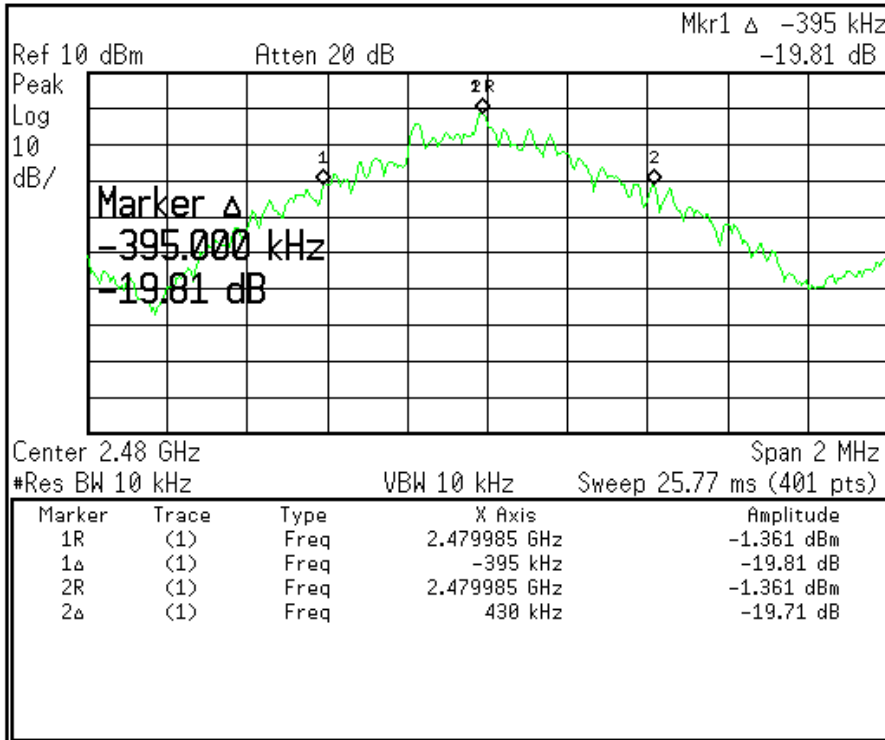
### Test Plot of 20dB Bandwidth, GFSK modulation

#### Low Channel

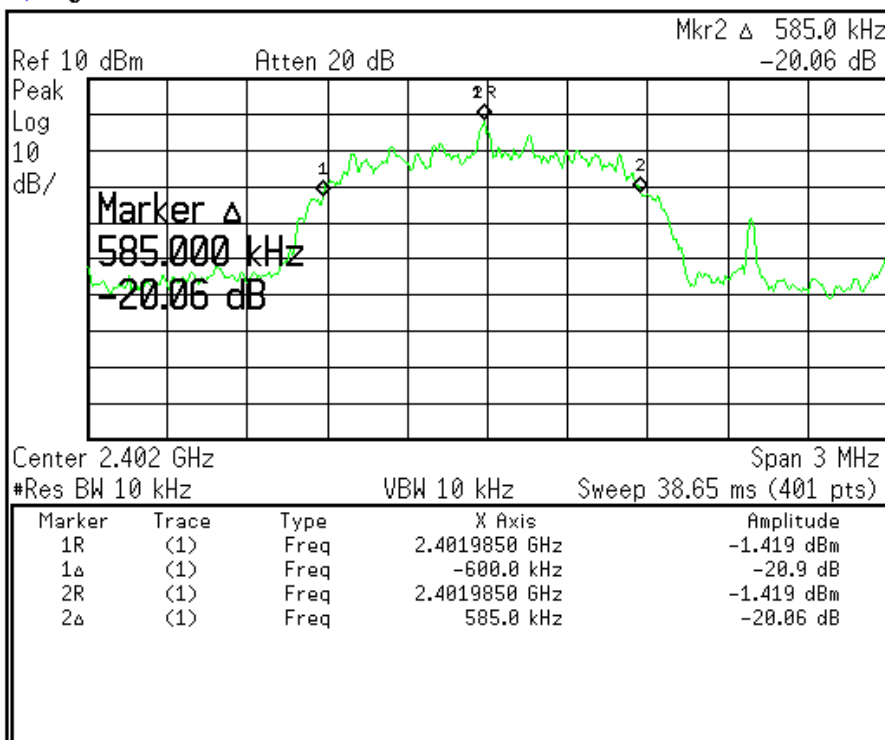


#### Middle Channel

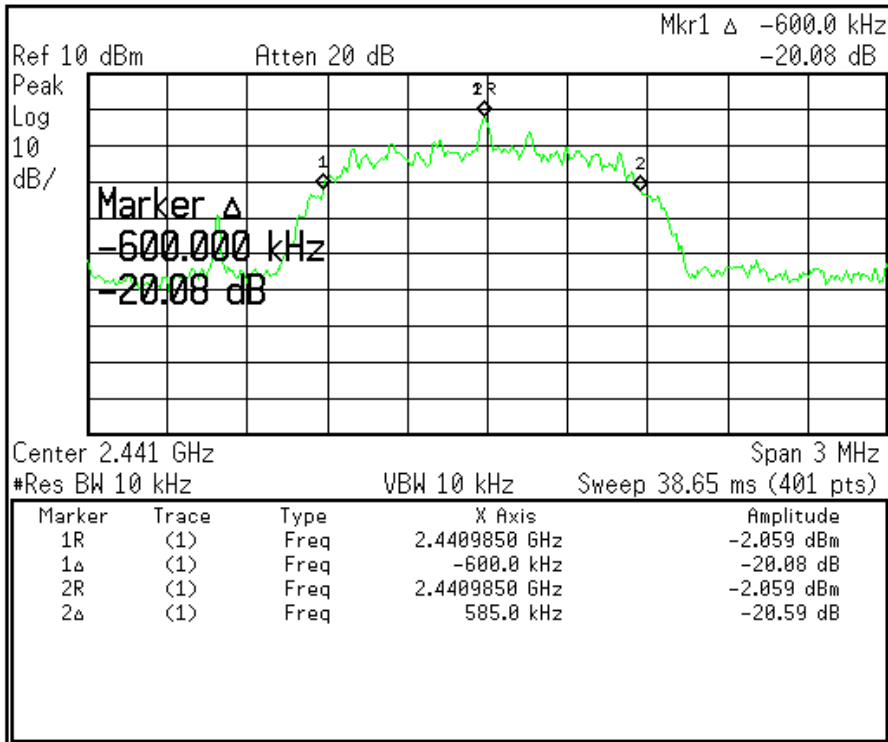


**High Channel**
 **Agilent**


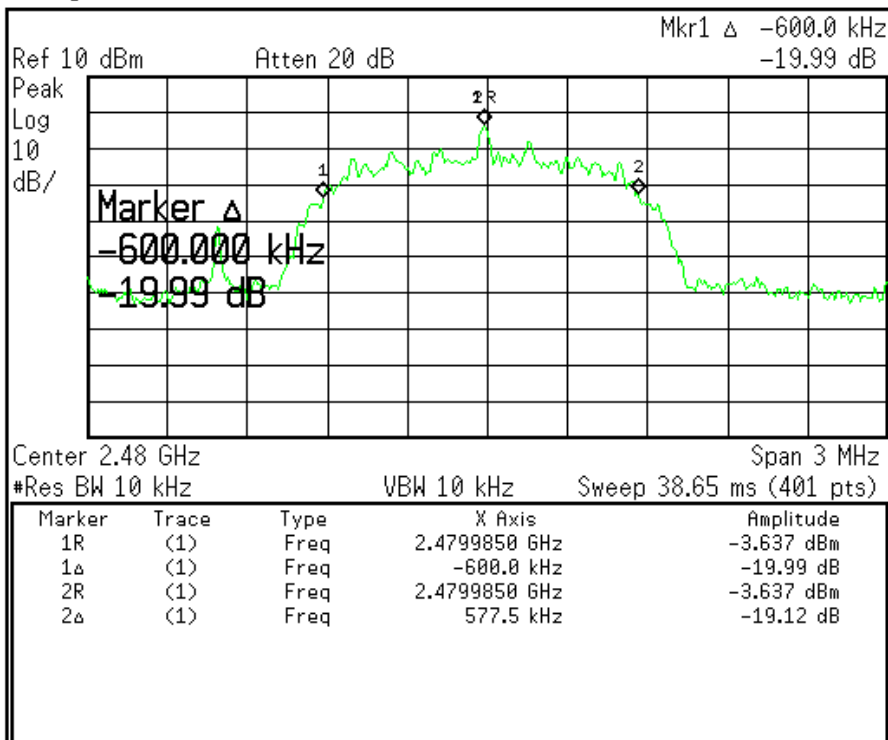
<b>Marker</b>			
<b>Select Marker</b>			
1	2	3	4
<b>Normal</b>			
<b>Delta</b>			
<b>Delta Pair</b> (Tracking Ref)			
Ref	Delta		
<b>Span Pair</b>			
Span	Center		
<b>Off</b>			
<b>More</b> 1 of 2			

**Test Plot of 20dB Bandwidth, 8DPSK modulation**
**Low Channel**
 **Agilent**


<b>Marker</b>			
<b>Select Marker</b>			
1	2	3	4
<b>Normal</b>			
<b>Delta</b>			
<b>Delta Pair</b> (Tracking Ref)			
Ref	Delta		
<b>Span Pair</b>			
Span	Center		
<b>Off</b>			
<b>More</b> 1 of 2			

**Middle Channel**
 **Agilent**


<b>Marker</b>
<b>Select Marker</b> 1 2 3 4
<b>Normal</b>
<b>Delta</b>
<b>Delta Pair</b> (Tracking Ref) Ref      Delta
<b>Span Pair</b> Span      Center
<b>Off</b>
<b>More</b> 1 of 2

**High Channel**
 **Agilent**


<b>Marker</b>
<b>Select Marker</b> 1 2 3 4
<b>Normal</b>
<b>Delta</b>
<b>Delta Pair</b> (Tracking Ref) Ref      Delta
<b>Span Pair</b> Span      Center
<b>Off</b>
<b>More</b> 1 of 2

## 5.1.4 Conducted spurious emissions measured in 100kHz Bandwidth

**RESULT:****Passed**

Date of testing : 2011-01-14  
Test standard : FCC part 15.247(d)  
Basic standard : ANSI C63.4: 2003  
Limit : 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power)  
Kind of test site : Shield room

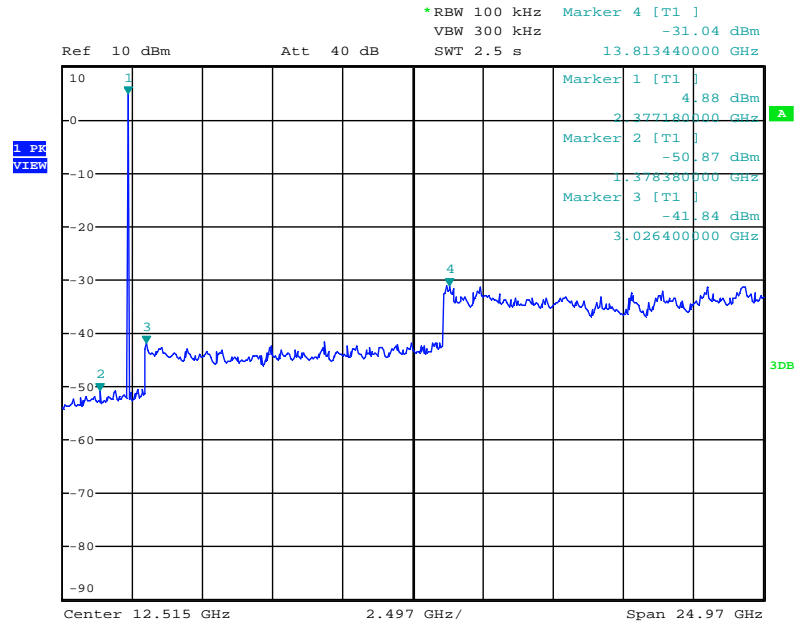
**Test setup**

Test Channel : Low/ High  
Operation mode : A  
Ambient temperature : 22°C  
Relative humidity : 52%  
Atmospheric pressure : 101 kPa

All emissions are more than 20dB below fundamental, details refer to following test plot, and compliance is achieved as well.

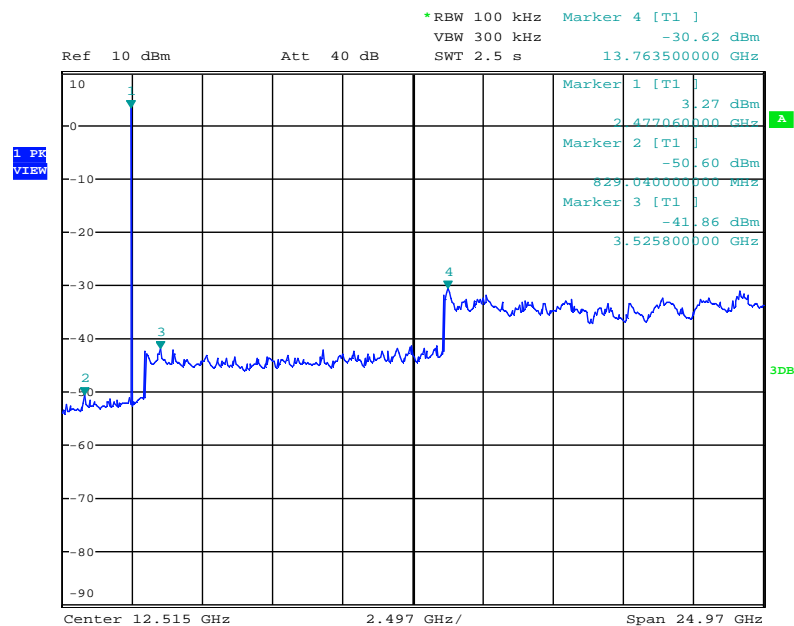
## Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

### Low Channel



Date: 14.JAN.2011 04:26:12

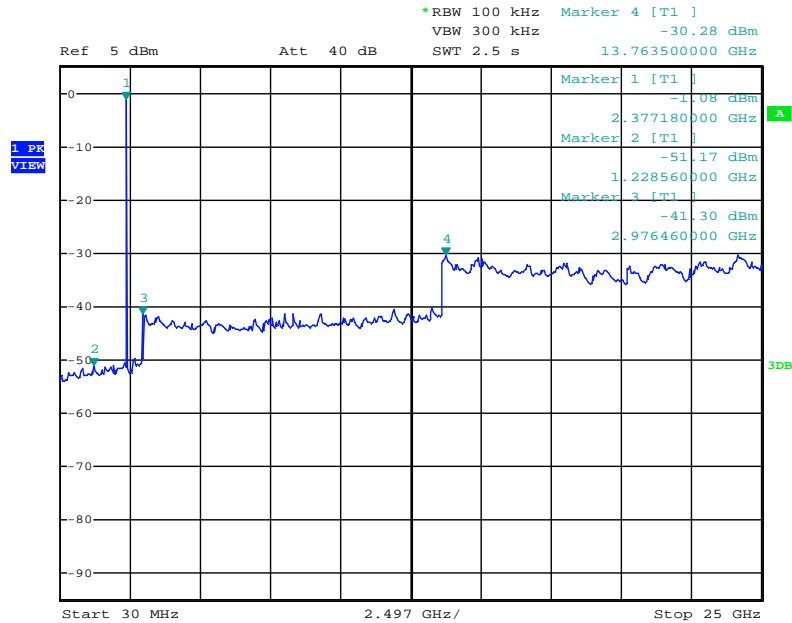
### High Channel



Date: 14.JAN.2011 04:30:07

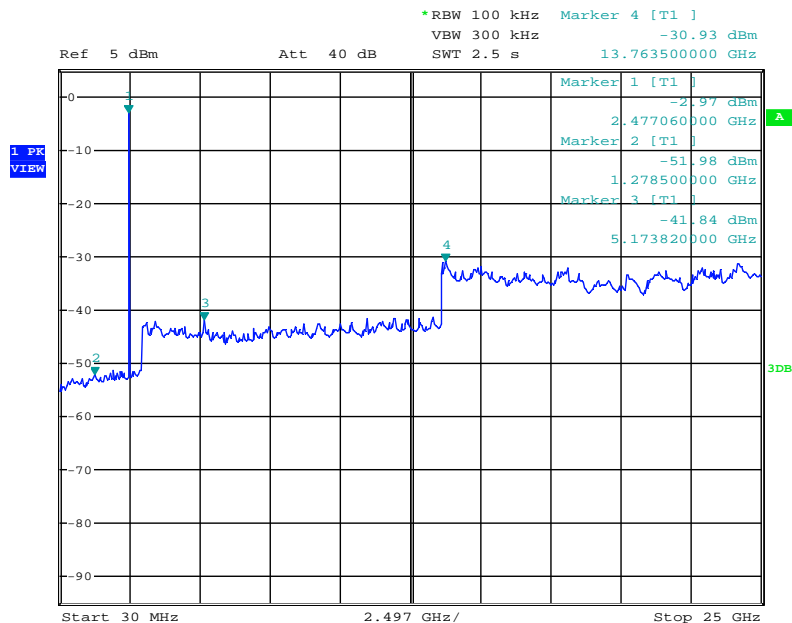
## Test Plot of 100kHz Bandwidth of Frequency Band Edge, 8DPSK modulation

### Low Channel



Date: 28.JAN.2011 02:20:05

### High Channel



Date: 28.JAN.2011 02:39:59

## 5.1.5 Spurious Emission

**RESULT:****Passed**

Date of testing	:	2011-01-10 to 2011-01-14
Test standard	:	FCC part 15.247(d)
Basic standard	:	ANSI C63.4: 2003
Limits	:	Refer to 15.209(a) of FCC part 15.247(d) In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	:	3m Semi-Anechoic Chamber

**Test setup**

Test Channel	:	Low/ Middle/ High
Operation mode	:	A, C
Ambient temperature	:	23°C
Relative humidity	:	50%
Atmospheric pressure	:	101 kPa

Remark: Testing was carried out within frequency range 9kHz to the tenth harmonics. For details refer to Appendix 1. The Radiated Emissions testing was performed in the X, Y and Z axis mode. The X Axis mode is the worst-case recorded in this test report.

### 5.1.6 Frequency Separation

**RESULT:**
**Passed**

Date of testing : 2011-01-13  
 Test standard : FCC part 15.247(a)(1)  
 Basic standard : ANSI C63.4: 2003  
 Limit :  $\geq 25\text{kHz}$  or  $2/3$  of  $20\text{dB}$  bandwidth, whichever is greater

**Test setup**

Test Channel : Low/ Middle/ High  
 Operation Mode : A  
 Ambient temperature :  $22^{\circ}\text{C}$   
 Relative humidity : 52%  
 Atmospheric pressure : 101 kPa

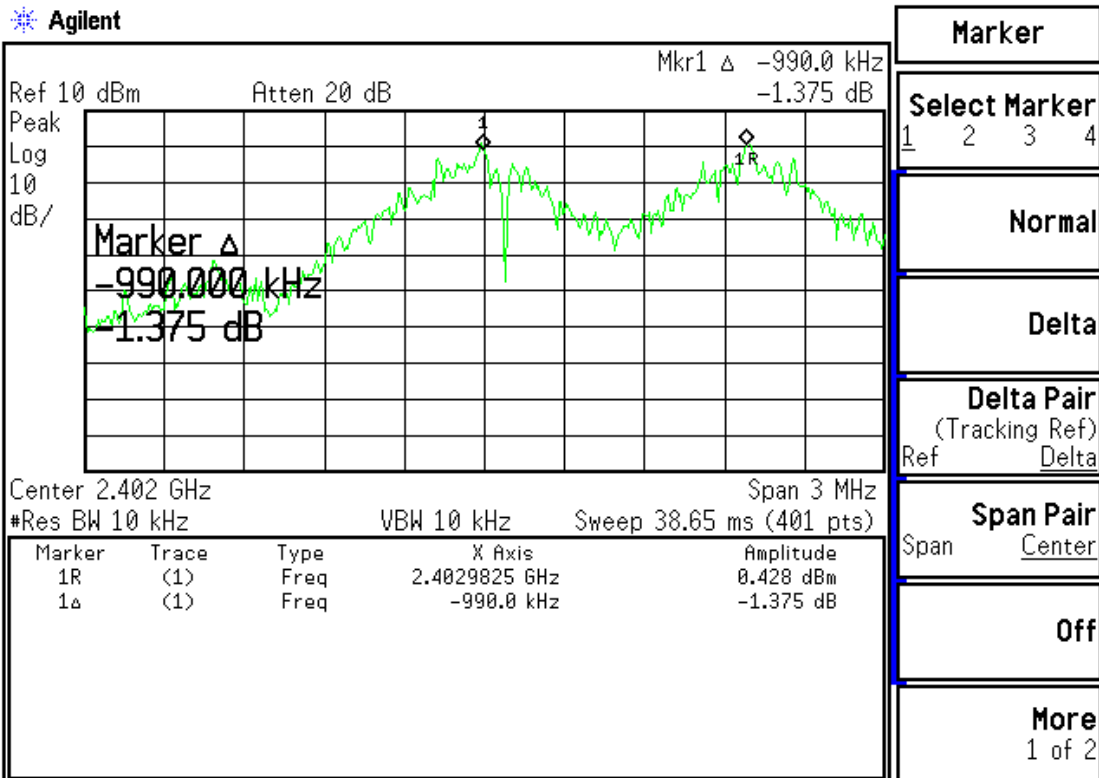
**Table 10: Test result of Frequency Separation**

Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1	$\geq 25\text{kHz}$ or $2/3$ of $20\text{dB}$ bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1	$\geq 25\text{kHz}$ or $2/3$ of $20\text{dB}$ bandwidth	Pass
Adjacency Channel	2442			
High Channel	2480	1	$\geq 25\text{kHz}$ or $2/3$ of $20\text{dB}$ bandwidth	Pass
Adjacency Channel	2479			

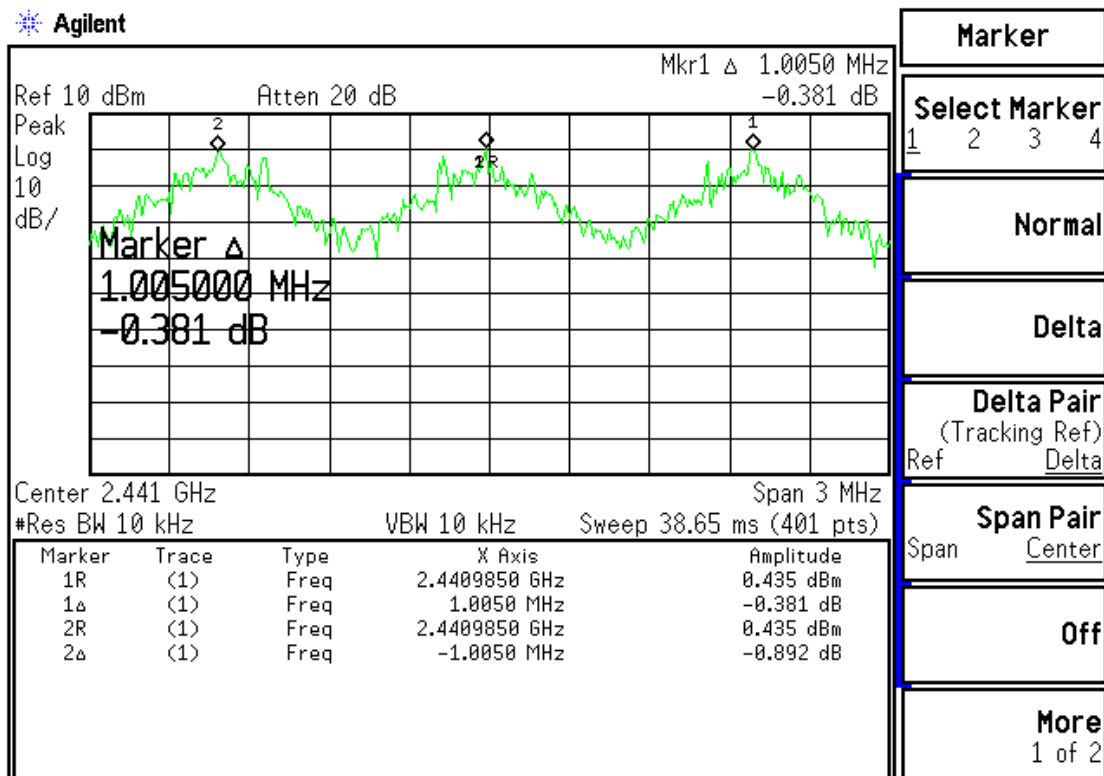


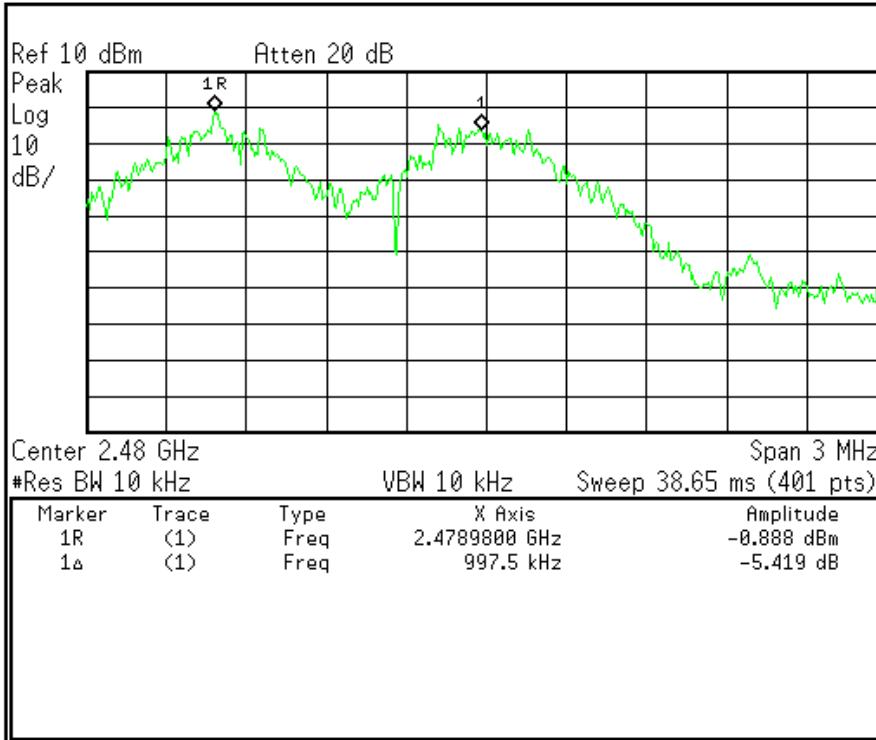
## Test Plot of Frequency Separation

### Low Channel



### Middle Channel



**High Channel**
 **Agilent**


<b>Marker</b>
<b>Select Marker</b> 1   2   3   4
<b>Normal</b>
<b>Delta</b>
<b>Delta Pair</b> (Tracking Ref) Ref      Delta
<b>Span Pair</b> Span      Center
<b>Off</b>
<b>More</b> 1 of 2

### 5.1.7 Number of hopping frequency

**RESULT:****Passed**

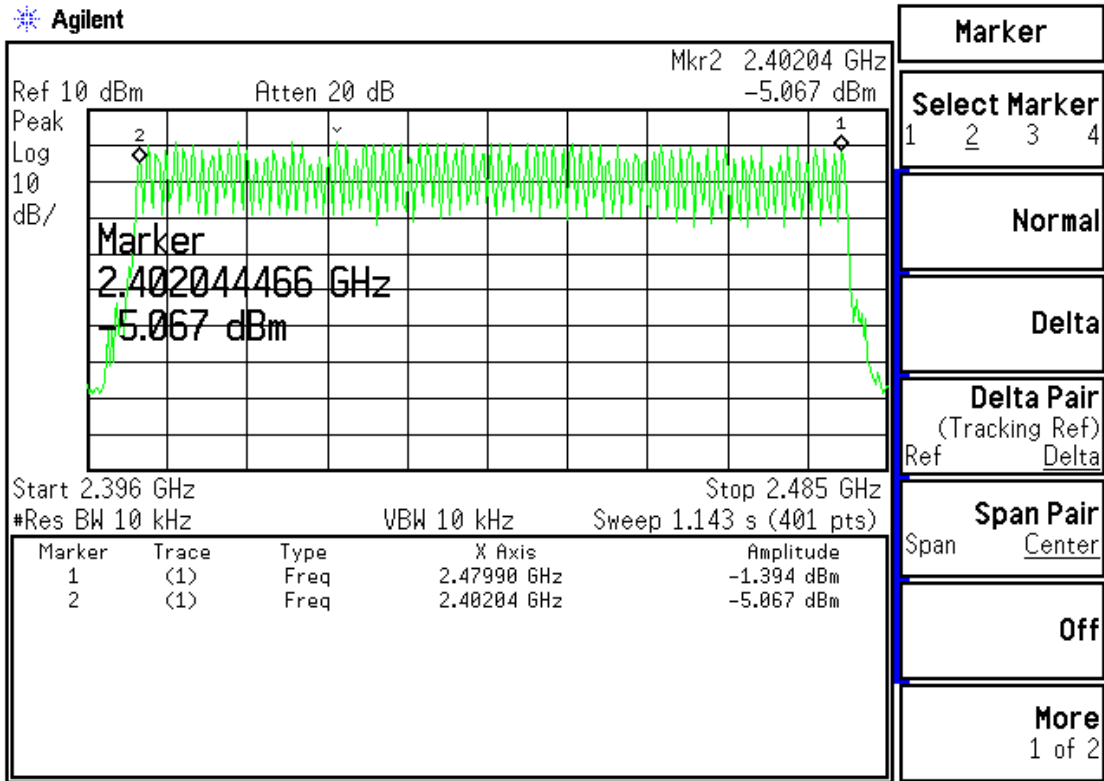
Date of testing : 2011-01-13  
Test standard : FCC part 15.247(a)(1)(iii)  
Basic standard : ANSI C63.4: 2003  
Limits :  $\geq 15$  non-overlapping channels  
Kind of test site : Shield room

**Test setup**

Test Channel : Low/ Middle/ High  
Operation Mode : A  
Ambient temperature : 22°C  
Relative humidity : 52%  
Atmospheric pressure : 101 kPa

**Table 11: Test result of Number of hopping frequency**

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
<u>2400</u> to <u>2483.5</u> MHz	79	$\geq 15$	Pass

**Test Plot of Number of hopping frequencies**


### 5.1.8 Time of Occupancy

**RESULT:**
**Passed**

Date of testing : 2011-01-13  
 Test standard : FCC part 15.247(a)(1)(iii)  
 Basic standard : ANSI C63.4: 2003  
 Limits : 0.4s  
 Kind of test site : Shield room

**Test setup**

Test Channel : Low/ Middle/ High  
 Operation Mode : A  
 Ambient temperature : 22°C  
 Relative humidity : 52%  
 Atmospheric pressure : 101 kPa

**Table 12: Test result of Time of Occupancy, GFSK Modulation**

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.570	0.182	0.4	Pass
	DH3	1.620	0.259	0.4	Pass
	DH5	3.120	0.332	0.4	Pass
Mid Channel	DH1	0.560	0.179	0.4	Pass
	DH3	1.580	0.253	0.4	Pass
	DH5	3.120	0.333	0.4	Pass
High Channel	DH1	0.560	0.179	0.4	Pass
	DH3	1.580	0.253	0.4	Pass
	DH5	3.090	0.330	0.4	Pass

**Table 13: Test result of Time of Occupancy, 8DPSK Modulation**

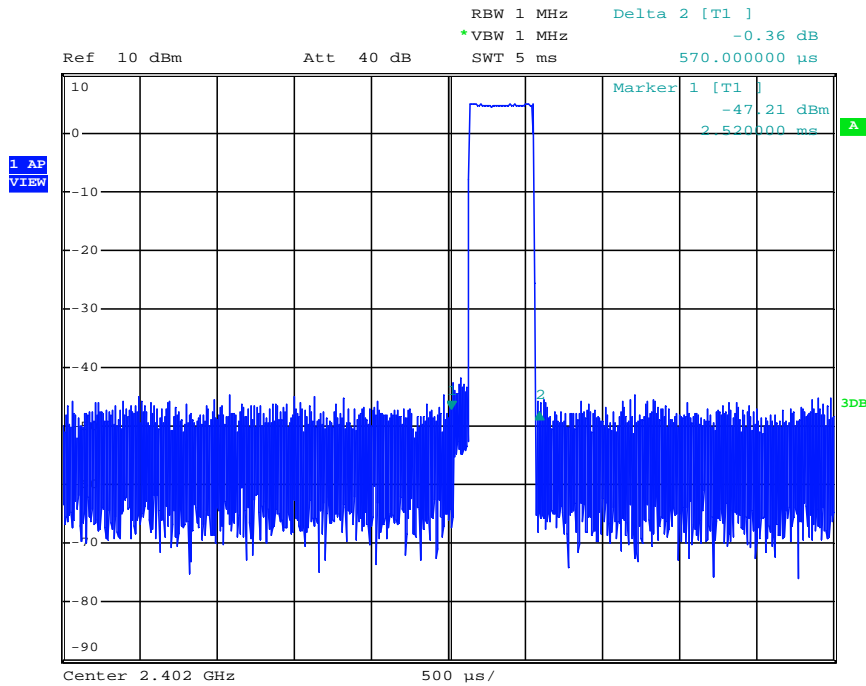
Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.576	0.184	0.4	Pass
	DH3	1.840	0.294	0.4	Pass
	DH5	3.060	0.326	0.4	Pass
Mid Channel	DH1	0.582	0.186	0.4	Pass
	DH3	1.860	0.298	0.4	Pass
	DH5	3.120	0.333	0.4	Pass
High Channel	DH1	0.582	0.186	0.4	Pass
	DH3	1.840	0.294	0.4	Pass
	DH5	3.120	0.333	0.4	Pass

Note:

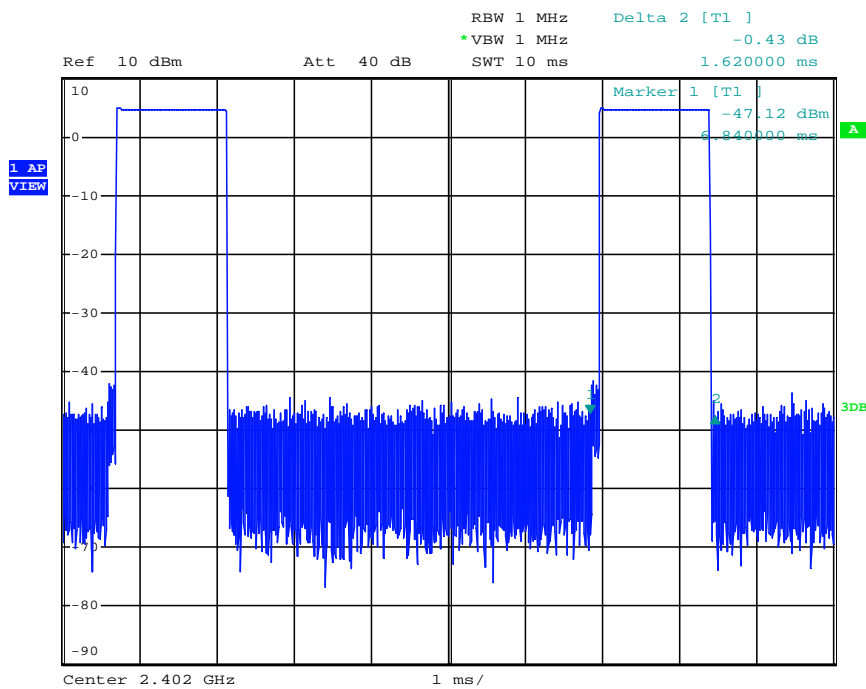
Dwell time = Pulse width x (Hopping rate / Number of channels) x Period

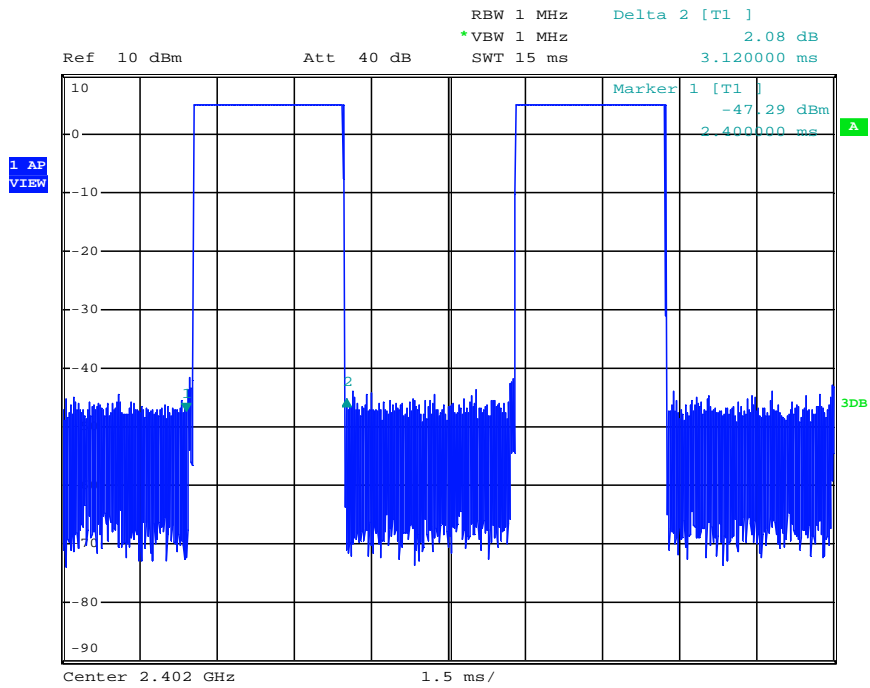
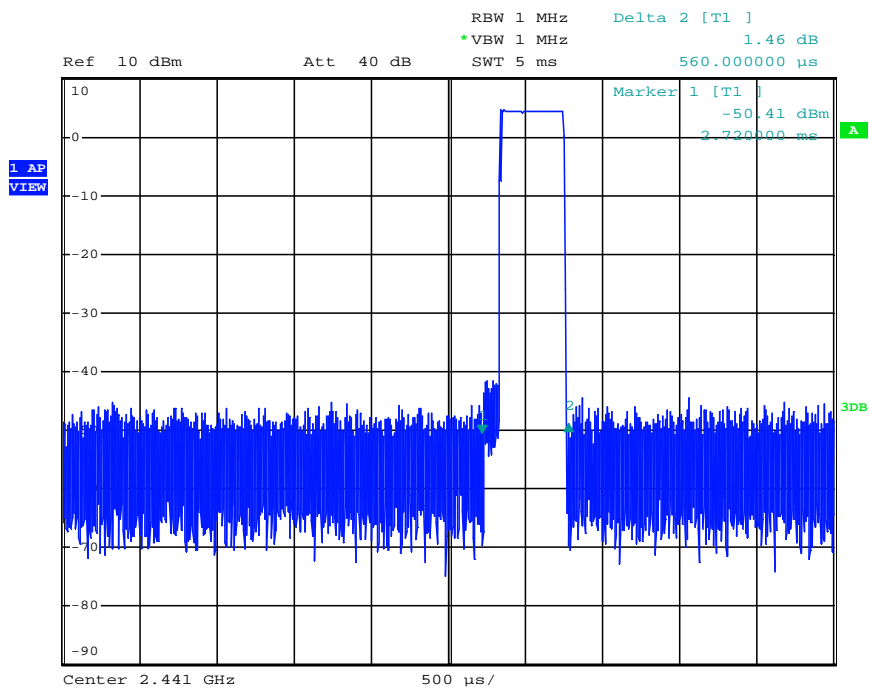
Period = 0.4 (seconds/ channel) x 79 (channel) = 31.6 seconds

### Test Plot of Time of Occupancy, GFSK modulation Low Channel- DH1

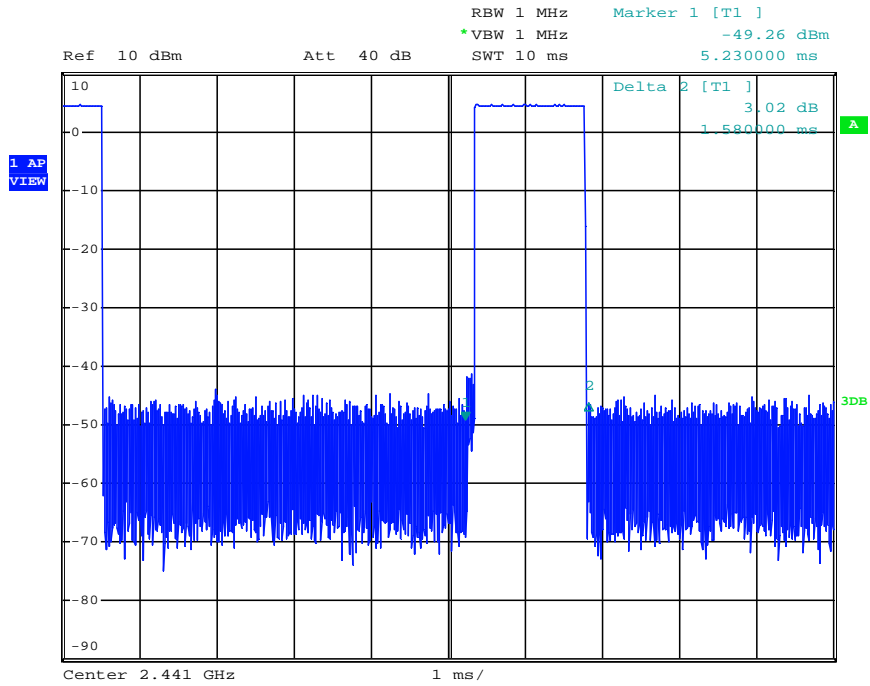
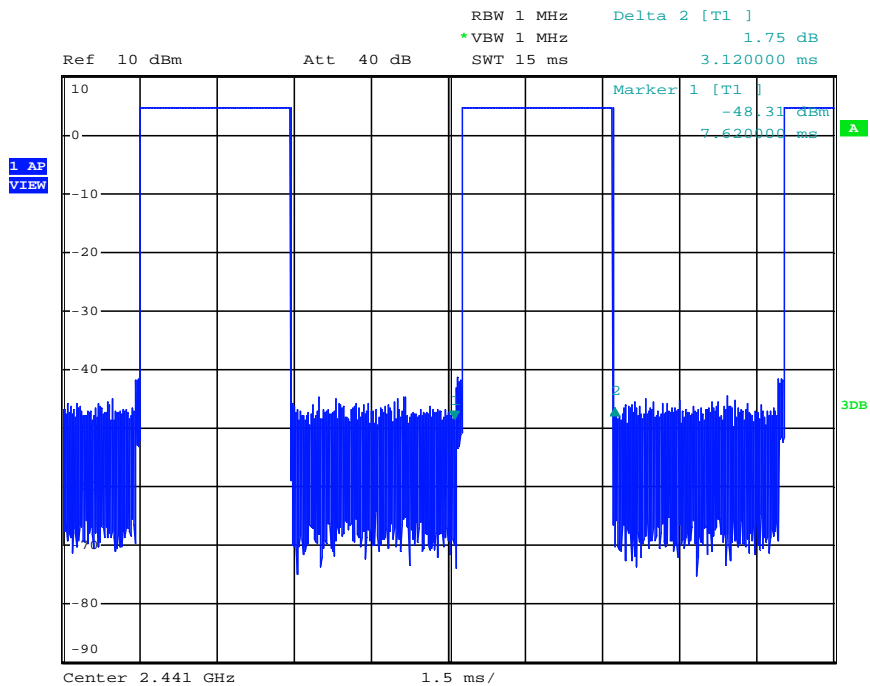


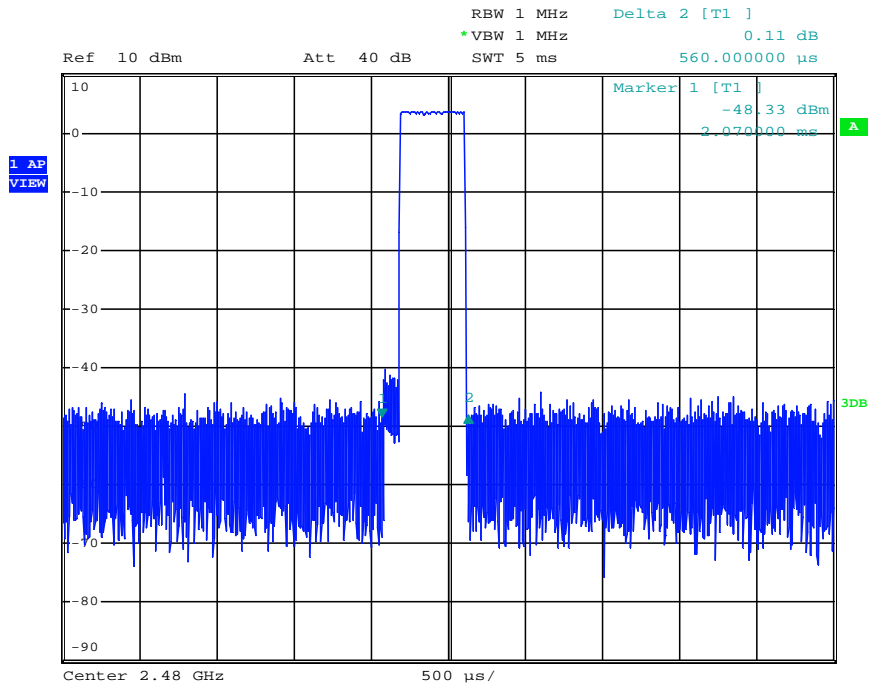
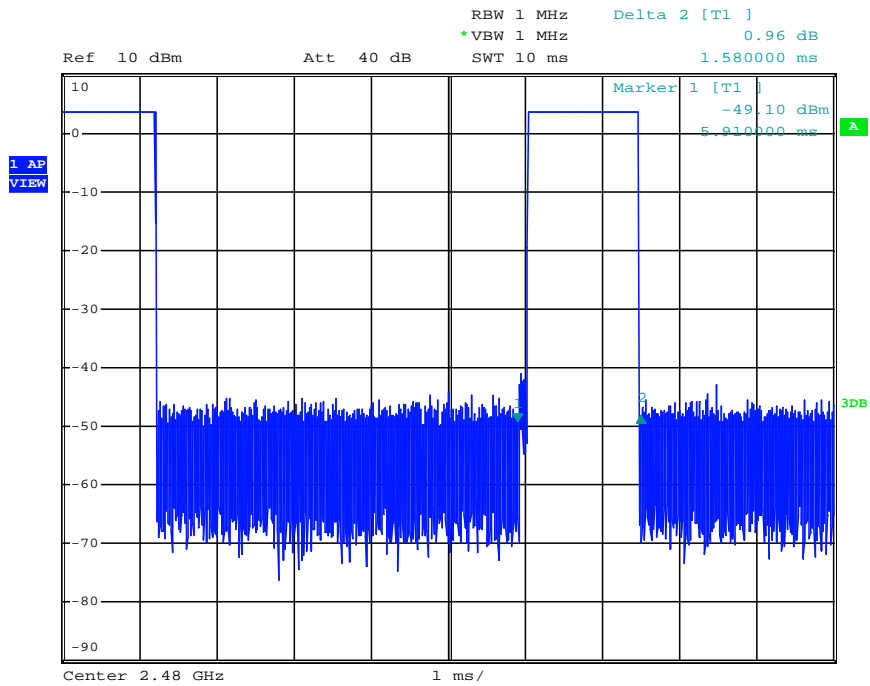
### Low Channel- DH3

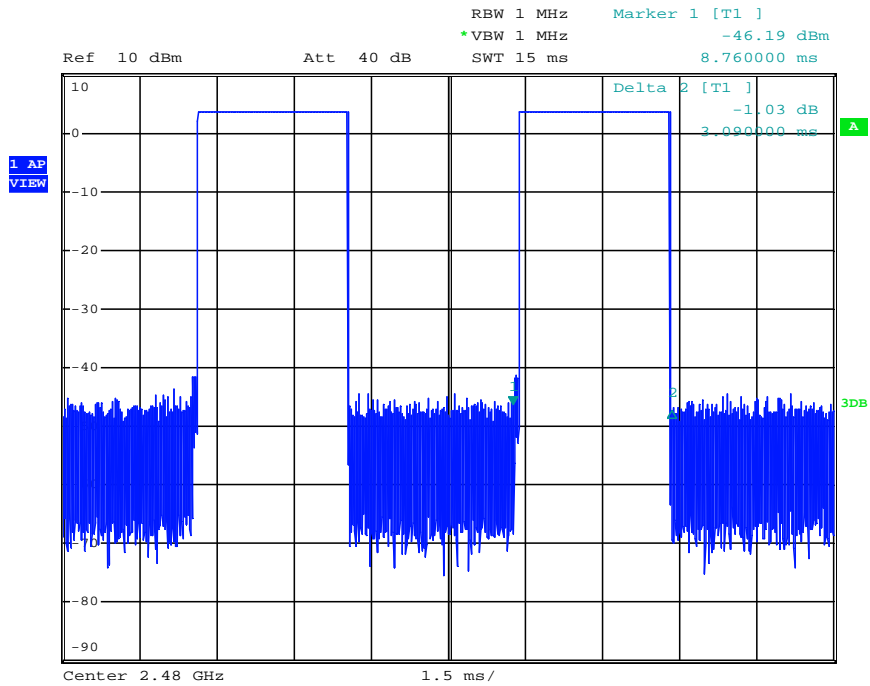
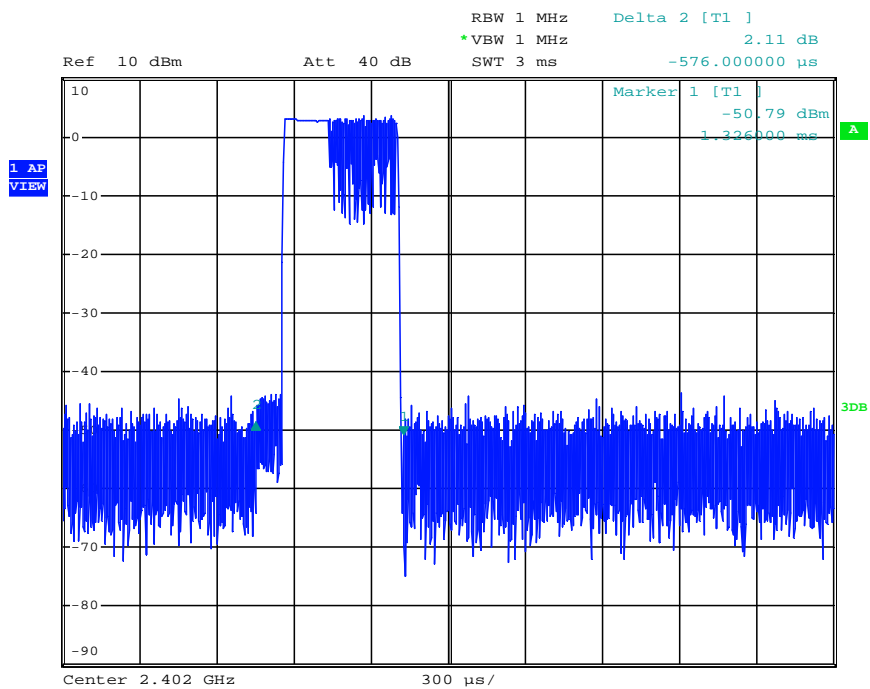


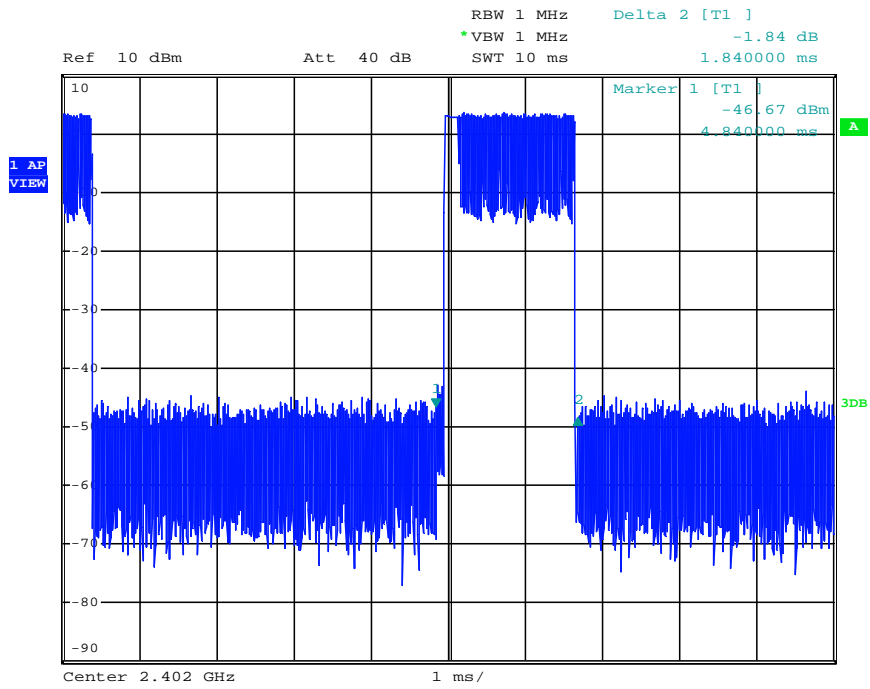
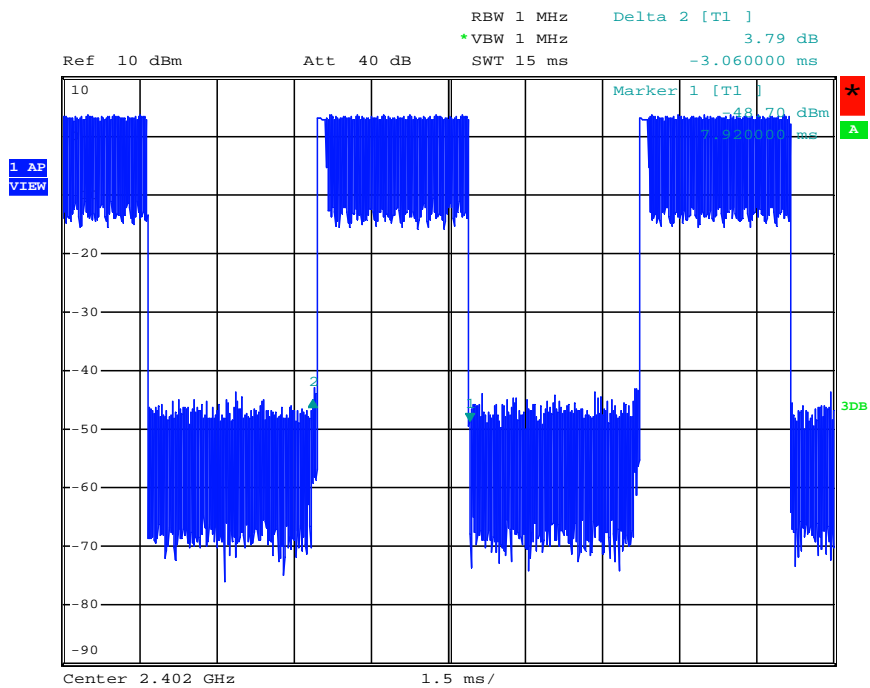
**Low Channel- DH5**

**Middle Channel- DH1**


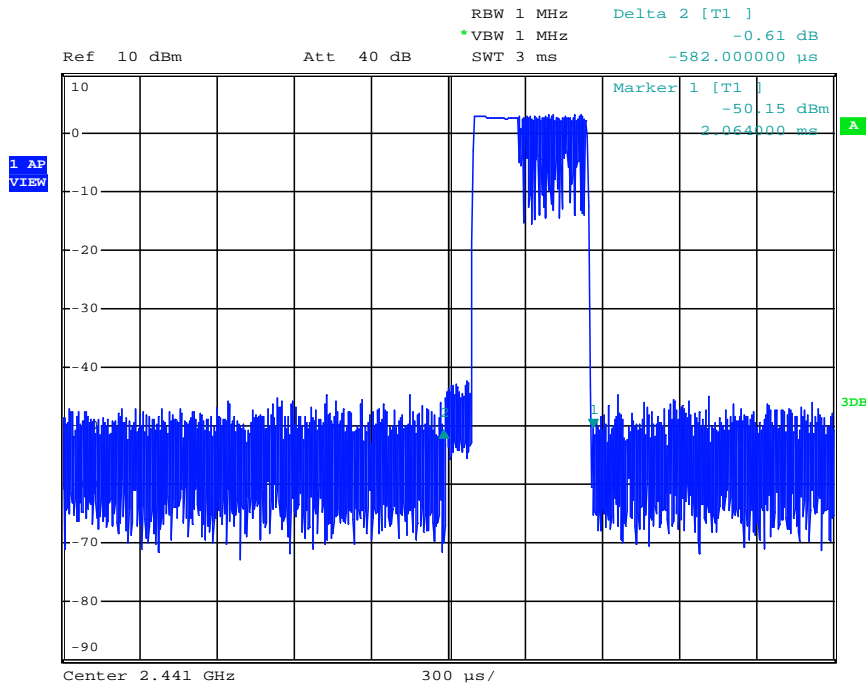
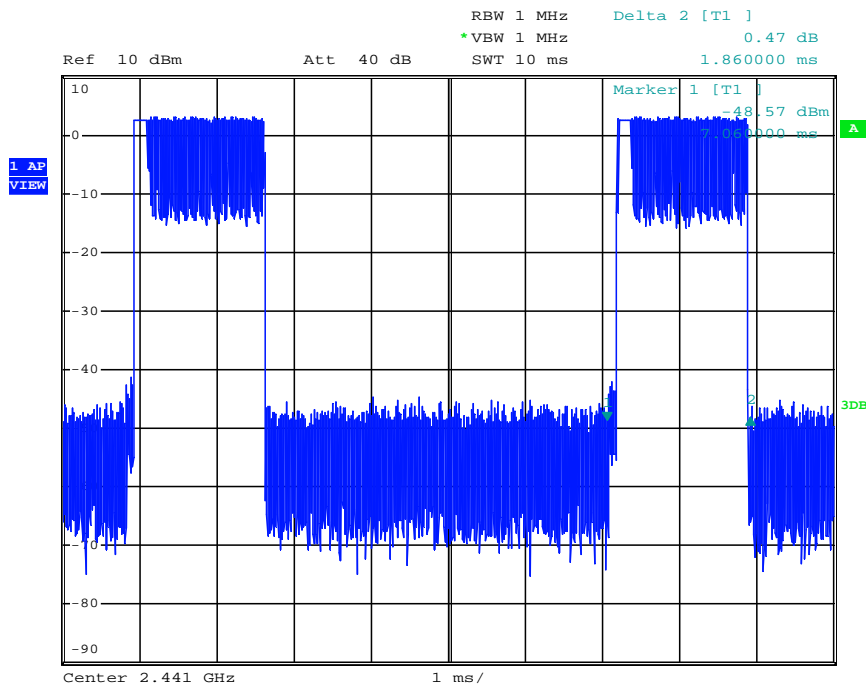


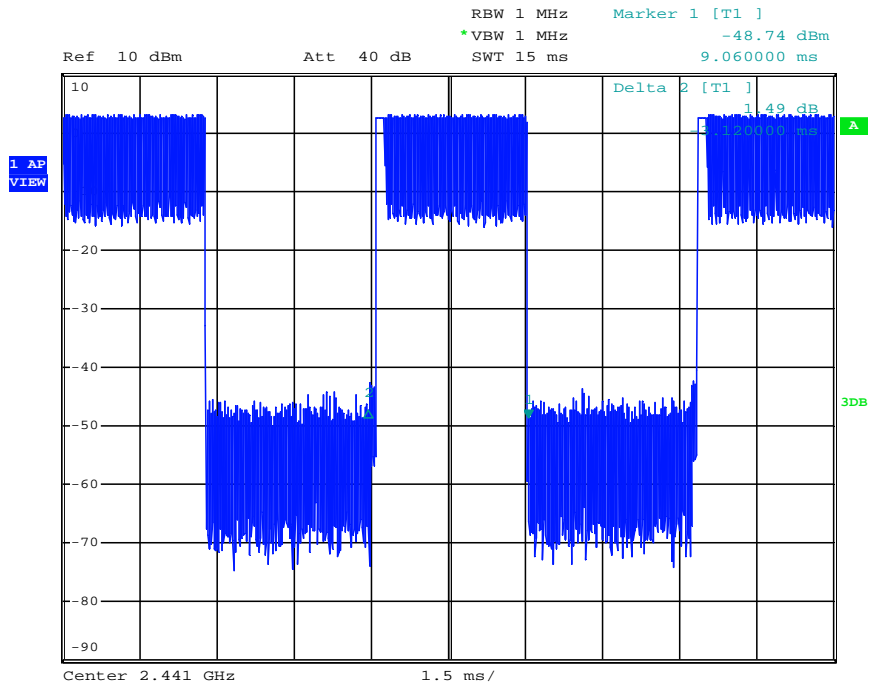
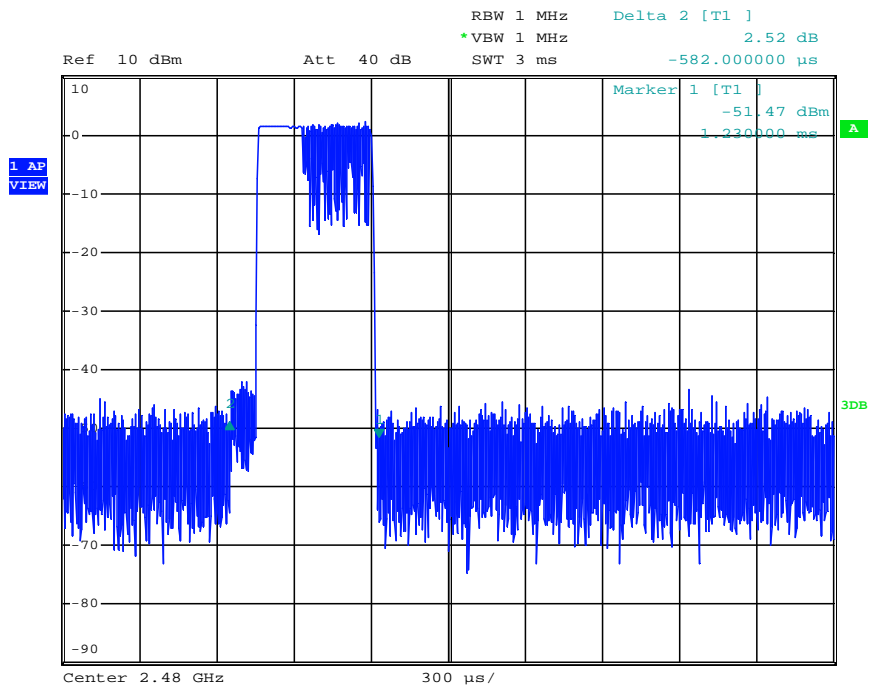
**Middle Channel- DH3**

**Middle Channel- DH5**


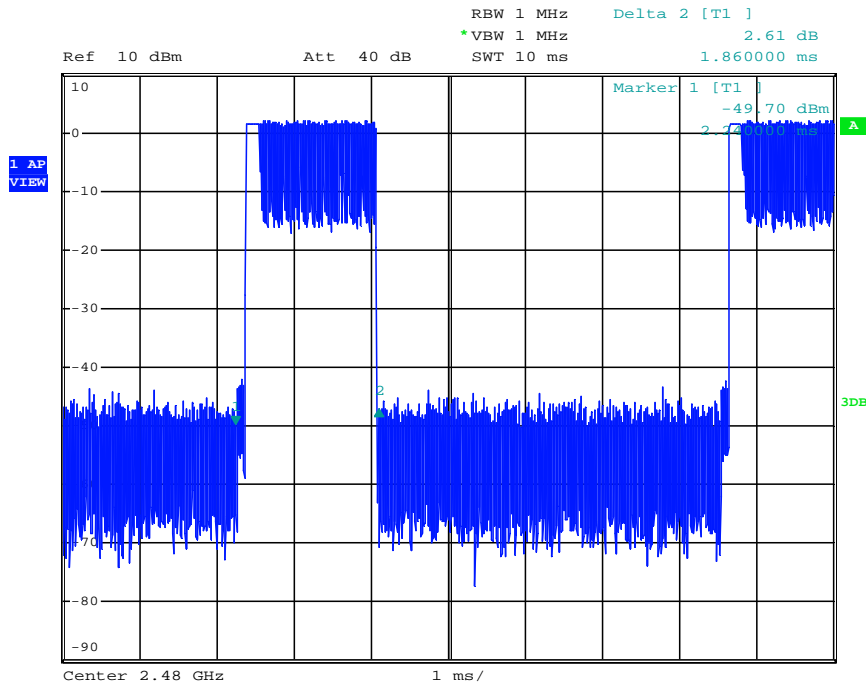
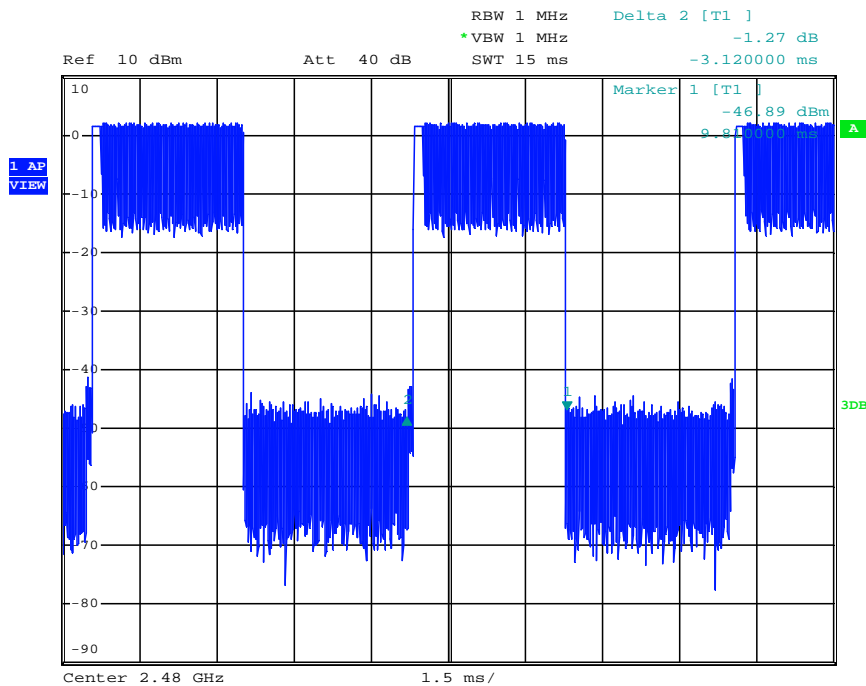
**High Channel- DH1**

**High Channel- DH3**


**High Channel- DH5**

**Test Plot of Time of Occupancy, 8DPSK modulation**  
**Low Channel- DH1**


**Low Channel- DH3**

**Low Channel- DH5**


**Middle Channel- DH1**

**Middle Channel- DH3**


**Middle Channel- DH5**

**High Channel- DH1**


**High Channel- DH3**

**High Channel- DH5**


## 6. Safety Human exposure

### 6.1 Radio Frequency Exposure Compliance

#### 6.1.1 Electromagnetic Fields

**RESULT:****Passed**

Test standard : FCC KDB Publication 447498

Since maximum peak output power of the transmitter is  $<60/f(\text{GHz})\text{mW}$ , i.e.  $0.0030\text{mW} < 25(=60/2.4)\text{mW}$ , hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile Portable RF Exposure.



## 7. Photographs of the Test Set-Up

Photograph 1: Set-up for Spurious Emissions (9kHz-30MHz)



Photograph 2: Set-up for Spurious Emissions (30MHz-1GHz)





**Photograph 3: Set-up for Spurious Emissions (1GHz-18GHz)**



**Photograph 4: Set-up for Spurious Emissions (18GHz-26GHz)**



## Test Plot of Spurious emission of A.1 – GFSK modulation Horizontal (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

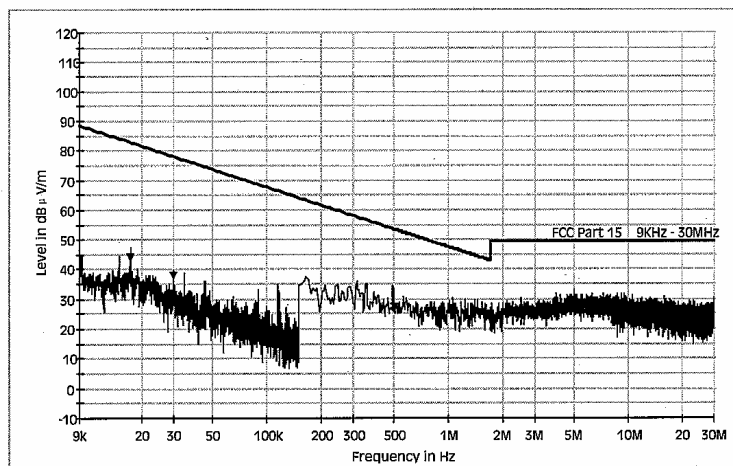
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel(BDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery
Receipt No.:	163072045 100&300
Report No.	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Horizontal

#### Subrange 1

Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	44.1	20.8	H
0.030040	---	38.0	20.5	H
0.498000	28.6	---	20.8	H
4.998000	27.4	---	22.0	H

Date: 14/01/2011 - Time: 03:05:13 PM

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.1 – GFSK modulation Vertical (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

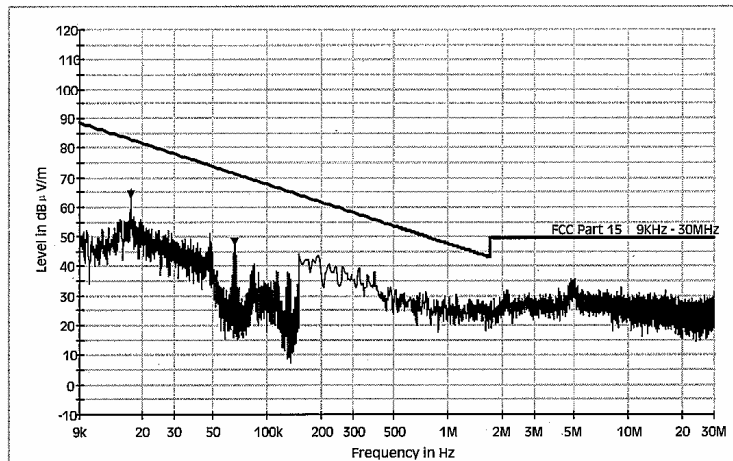
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (EMISSION)

#### Test Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage / Freq. : DC 3.7V by li-ion battery  
 Receipt No.: 163072045 100&300  
 Report No.: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 9kHz - 30MHz  
 Receiver: TUV ESCI 3  
 Transducer: TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dB;µV/m)	Average (dB;µV/m)	Corr. (dB)	Polarity
0.017320	---	63.9	20.8	V
0.065640	---	48.1	20.4	V
2.138000	26.9	---	20.4	V
5.078000	30.6	---	22.0	V

Date: 14/01/2011 - Time: 03:11:53 PM

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.1 – GFSK modulation Horizontal (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

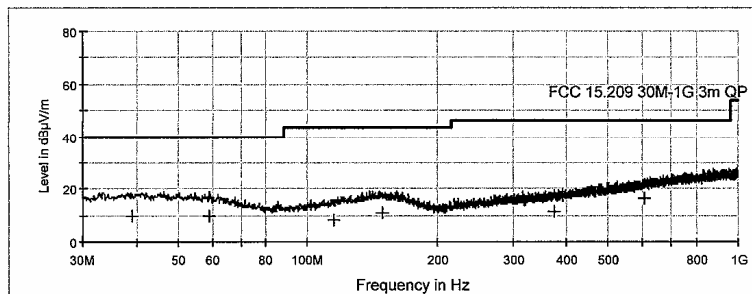
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
39.350000	9.6	14.0	30.4	40.0	H
59.450000	9.5	12.8	30.5	40.0	H
115.500000	8.0	11.7	35.5	43.5	H
149.800000	10.6	14.2	32.9	43.5	H
374.450000	11.5	14.3	34.5	46.0	H
606.050000	16.4	18.4	29.6	46.0	H

Date: 10/01/2011 - Time: 18:13:13

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of A.1 – GFSK modulation Vertical (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

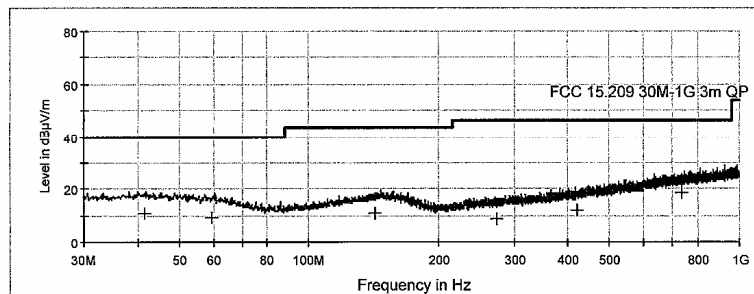
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
41.650000	11.0	14.0	29.0	40.0	V
59.700000	9.4	12.8	30.6	40.0	V
142.750000	10.7	13.7	32.8	43.5	V
274.700000	8.6	12.2	37.4	46.0	V
419.600000	12.1	15.2	33.9	46.0	V
737.850000	18.3	20.2	27.7	46.0	V

Date: 10/01/2011 - Time: 18:09:34

Tested by: 

Reviewed by: 





## Test Plot of Spurious emission of A.1 – GFSK modulation Horizontal (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

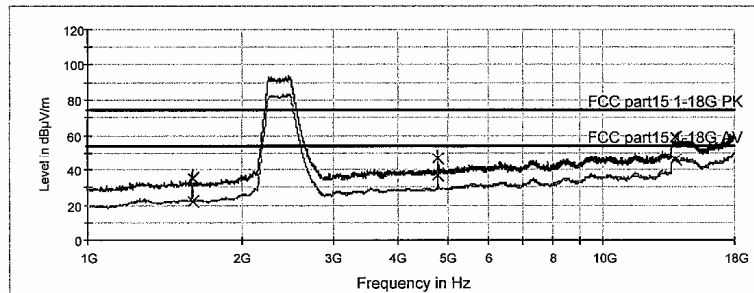
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	35.3	-14.0	38.7	74.0	H
4804.000000	46.3	-5.5	27.7	74.0	H
13867.000000	58.7	9.2	15.3	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	22.4	-14.0	31.6	54.0	H
4804.000000	36.6	-5.5	17.4	54.0	H
13867.000000	45.9	9.2	8.1	54.0	H

Date: 10/01/2011 - Time: 21:04:40

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of A.1 – GFSK modulation Vertical (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

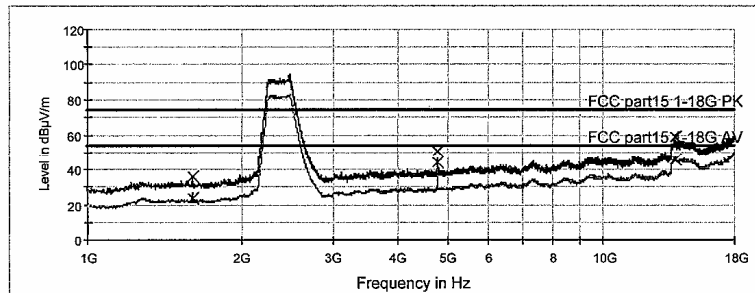
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	36.0	-14.0	38.0	74.0	V
4804.000000	50.3	-5.5	23.7	74.0	V
13867.000000	58.7	9.2	15.3	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	23.3	-14.0	30.7	54.0	V
4804.000000	44.3	-5.5	9.7	54.0	V
13867.000000	45.9	9.2	8.1	54.0	V

Date: 10/01/2011 - Time: 21:00:00

Tested by:  1.10

Reviewed by: 





## Test Plot of Spurious emission of A.1 – GFSK modulation Horizontal (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

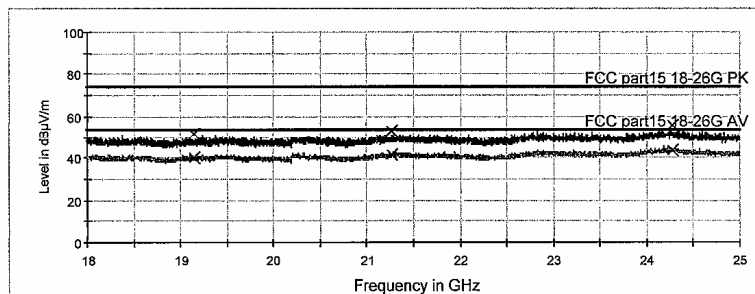
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19145.000000	51.9	5.2	22.1	74.0	H
21277.000000	53.2	5.9	20.8	74.0	H
24274.000000	55.7	6.9	18.3	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19145.000000	40.1	5.2	13.9	54.0	H
21277.000000	41.3	5.9	12.7	54.0	H
24274.000000	43.7	6.9	10.3	54.0	H

Date: 11/01/2011 - Time: 22:16:48

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.1 – GFSK modulation Vertical (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

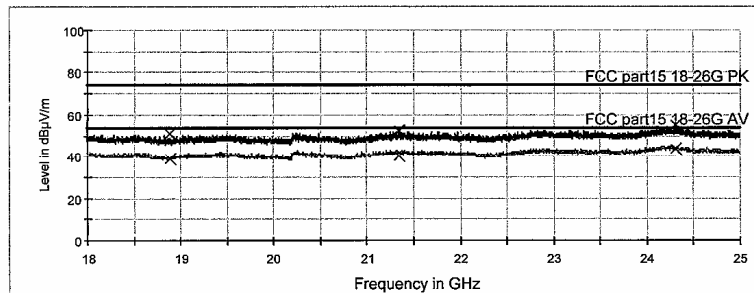
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18894.000000	51.2	5.1	22.8	74.0	V
21350.000000	52.2	5.0	21.8	74.0	V
24313.000000	55.0	6.9	19.0	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18894.000000	38.9	5.1	15.1	54.0	V
21350.000000	40.4	5.0	13.6	54.0	V
24313.000000	43.5	6.9	10.5	54.0	V

Date: 11/01/2011 - Time: 22:12:59

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.2 – GFSK modulation Horizontal (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

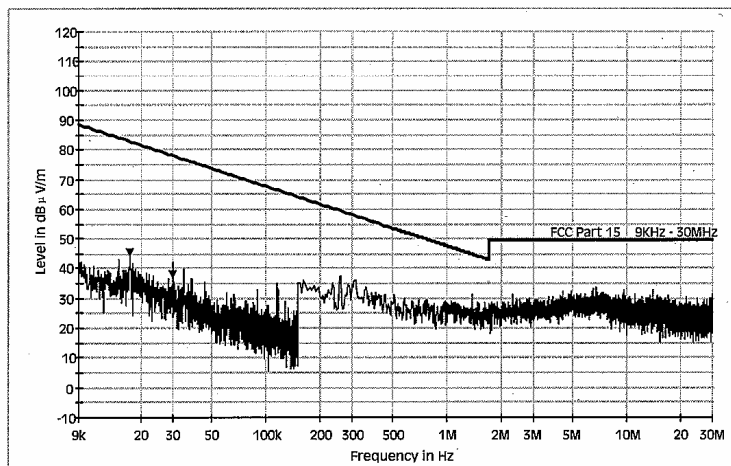
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate		
Test Item:	Bluetooth Headset		
Identification	BTH002-KMA04		
Test Standard:	FCC Part 15		
Test Detail:	RE		
Operation Mode:	Tx @ Mid channel(BDR)		
Climate Condition:	23 °C;	50 %RH;	101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery		
Receipt No.:	163072045 100&300		
Report No.	17019029 001		
Result:	Pass		
Comment:	Test distance is 3m, Horizontal		

Subrange 1	9kHz - 30MHz
Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	45.5	20.8	H
0.030120	---	37.7	20.5	H
1.382000	25.9	---	20.4	H
6.742000	26.9	---	22.0	H

Date: 14/01/2011 - Time: 03:18:24 PM

Tested by:

2011.1.18

Reviewed by:



## Test Plot of Spurious emission of A.2 – GFSK modulation Vertical (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

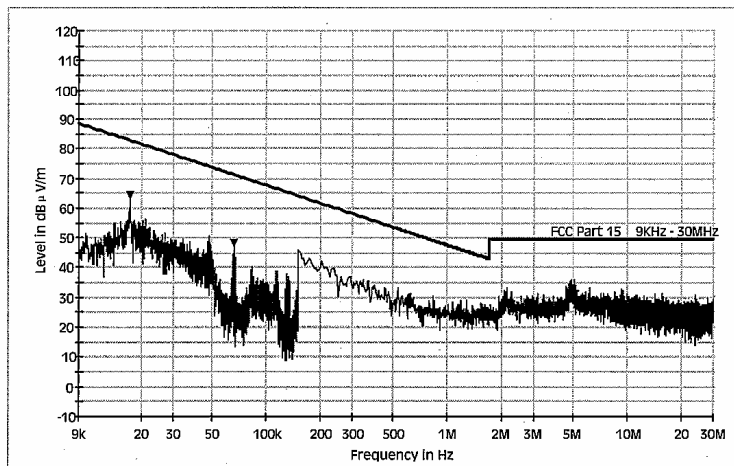
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Mid channe(BDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery
Receipt No.:	163072045 100&300
Report No.:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Vertical

#### Subrange 1


Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017320	---	64.0	20.8	V
0.065640	---	48.3	20.4	V
2.170000	28.9	---	20.4	V
5.038000	32.3	---	22.0	V

Date: 14/01/2011 - Time: 03:29:14 PM

Tested by:  2011.1.18

Reviewed by:



## Test Plot of Spurious emission of A.2 – GFSK modulation Horizontal (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

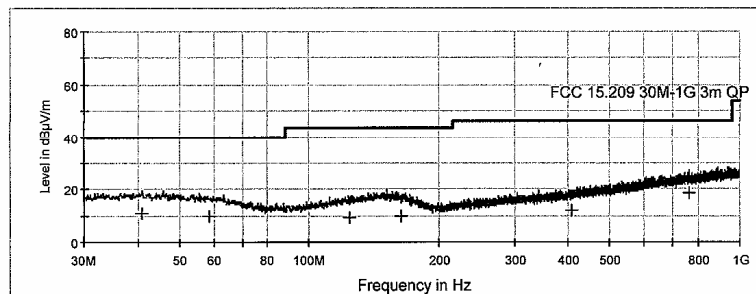
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
41.150000	11.0	14.0	29.0	40.0	H
58.750000	9.8	12.9	30.2	40.0	H
124.800000	9.1	12.5	34.4	43.5	H
164.200000	9.9	13.7	33.6	43.5	H
407.700000	12.1	14.9	33.9	46.0	H
766.350000	18.5	20.4	27.5	46.0	H

Date: 10/01/2011 - Time: 17:40:34

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of A.2 – GFSK modulation Vertical (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

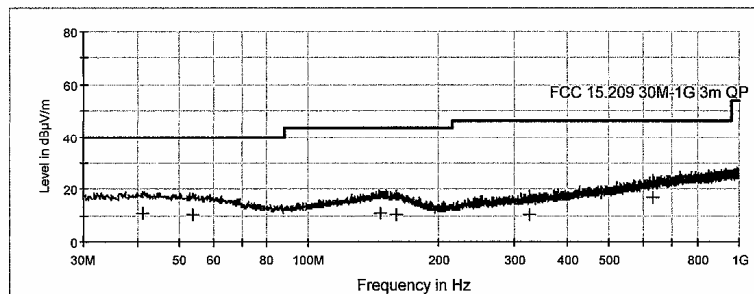
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
41.400000	11.0	14.0	29.0	40.0	V
54.150000	10.1	13.2	29.9	40.0	V
147.600000	10.9	14.0	32.6	43.5	V
160.450000	10.4	14.1	33.1	43.5	V
327.550000	10.2	13.5	35.8	46.0	V
631.400000	17.0	18.9	29.0	46.0	V

Date: 10/01/2011 - Time: 17:44:56

Tested by:  Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.2 – GFSK modulation Horizontal (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

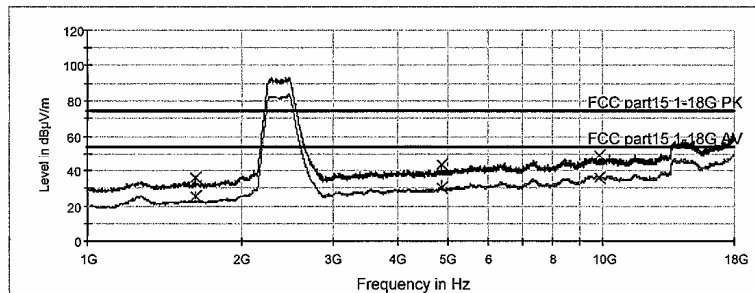
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	35.8	-13.8	38.2	74.0	H
4882.000000	43.0	-5.6	31.0	74.0	H
9843.000000	48.9	5.4	25.1	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	25.1	-13.8	28.9	54.0	H
4882.000000	29.9	-5.6	24.1	54.0	H
9843.000000	35.7	5.4	18.3	54.0	H

Date: 10/01/2011 - Time: 20:34:16

Tested by:

Reviewed by:



## Test Plot of Spurious emission of A.2 – GFSK modulation Vertical (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

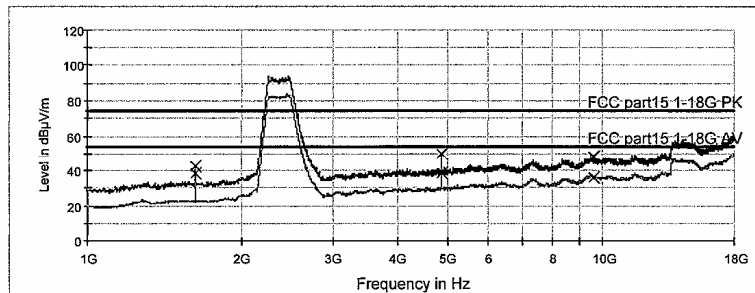
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	42.4	-13.8	31.6	74.0	V
4882.000000	50.2	-5.6	23.8	74.0	V
9843.000000	48.5	4.8	25.5	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	38.5	-13.8	15.5	54.0	V
4882.000000	38.4	-5.6	15.6	54.0	V
9843.000000	35.8	4.8	18.2	54.0	V

Date: 10/01/2011 - Time: 20:19:03

Tested by:  Reviewed by: 





## Test Plot of Spurious emission of A.2 – GFSK modulation Horizontal (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

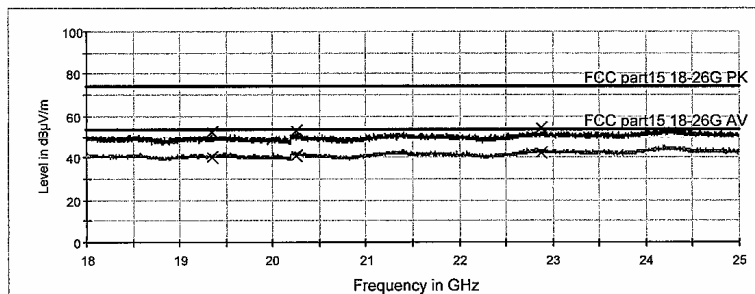
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19355.000000	52.2	5.3	21.8	74.0	H
20255.000000	52.8	5.6	21.2	74.0	H
22877.000000	54.2	6.4	19.8	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19355.000000	40.0	5.3	14.0	54.0	H
20255.000000	40.9	5.6	13.1	54.0	H
22877.000000	42.0	6.4	12.0	54.0	H

Date: 11/01/2011 - Time: 22:23:55

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.2 – GFSK modulation Vertical (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

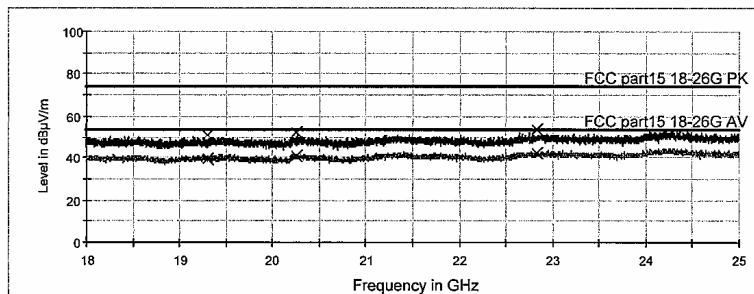
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19309.000000	51.4	5.3	22.6	74.0	V
20260.000000	52.7	5.6	21.3	74.0	V
22834.000000	53.8	6.4	20.2	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19309.000000	39.7	5.3	14.3	54.0	V
20260.000000	40.8	5.6	13.2	54.0	V
22834.000000	42.1	6.4	11.9	54.0	V

Date: 11/01/2011 - Time: 22:27:12

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of A.3 – GFSK modulation Horizontal (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

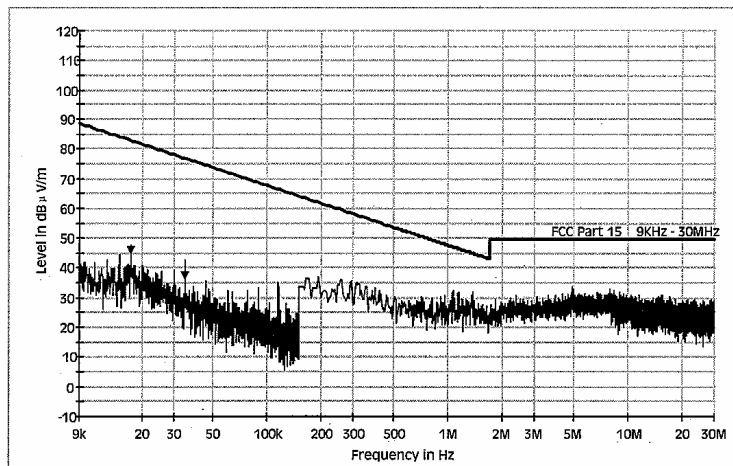
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (EMISSION)

#### Test Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage / Freq.: DC 3.7V by li-ion battery  
 Receipt No.: 163072045 100&300  
 Report No.: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 9kHz - 30MHz  
 Receiver: TUV ESCI 3  
 Transducer: TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	46.0	20.8	H
0.034920	---	37.5	20.3	H
1.150000	25.9	---	20.4	H
4.850000	27.3	---	21.9	H

Date: 14/01/2011 - Time: 02:31:19 PM

Tested by:

Reviewed by:

WLC  
2011.1.18

WLC  
2011.1.19  
Checked

## Test Plot of Spurious emission of A.3 – GFSK modulation Vertical (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

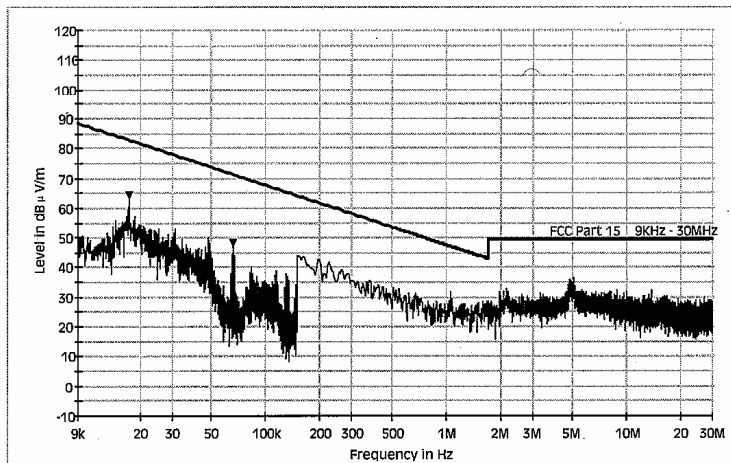
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel(BDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery
Receipt No.:	163072045 100&300
Report No.:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Vertical

#### Subrange 1

Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017320	---	64.2	20.8	V
0.065640	---	48.3	20.4	V
2.142000	28.5	---	20.4	V
5.050000	31.4	---	22.0	V

Date: 14/01/2011 - Time: 02:50:39 PM

Tested by: 

Reviewed by: 



## Test Plot of Spurious emission of A.3 – GFSK modulation Horizontal (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

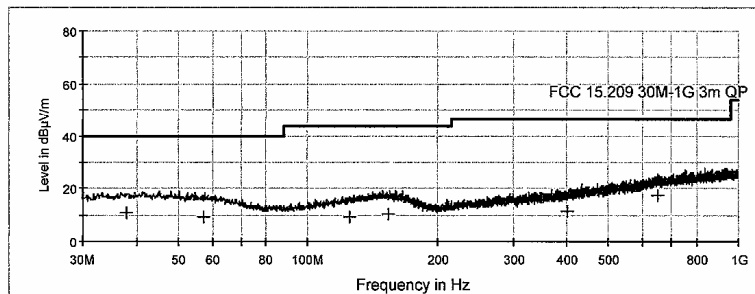
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
38.000000	10.7	13.8	29.3	40.0	H
57.650000	9.5	13.0	30.5	40.0	H
125.650000	9.2	12.6	34.3	43.5	H
153.900000	10.5	14.2	33.0	43.5	H
401.250000	11.6	14.7	34.4	46.0	H
652.250000	17.1	19.1	28.9	46.0	H

Date: 10/01/2011 - Time: 18:05:45

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.3 – GFSK modulation Vertical (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

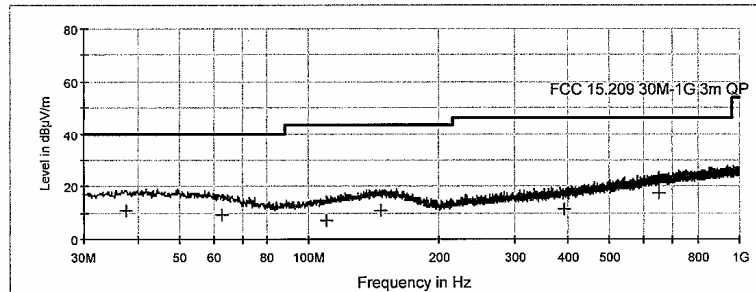
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
37.650000	10.8	13.8	29.2	40.0	V
63.100000	9.1	12.2	30.9	40.0	V
110.650000	7.3	11.2	36.2	43.5	V
147.500000	11.0	14.0	32.5	43.5	V
394.250000	11.5	14.6	34.5	46.0	V
653.250000	17.2	19.1	28.8	46.0	V

Date: 10/01/2011 - Time: 18:01:38

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.3 – GFSK modulation Horizontal (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

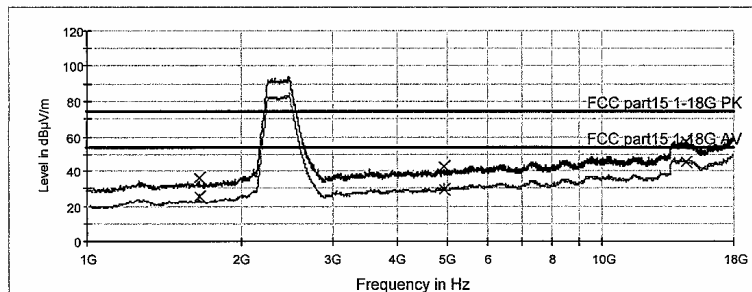
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	36.2	-13.6	37.8	74.0	H
4959.000000	42.3	-5.8	31.7	74.0	H
14580.000000	57.4	9.2	16.6	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	25.6	-13.6	28.4	54.0	H
4959.000000	29.4	-5.8	24.6	54.0	H
14580.000000	44.7	9.2	9.3	54.0	H

Date: 10/01/2011 - Time: 20:44:49

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.3 – GFSK modulation Vertical (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

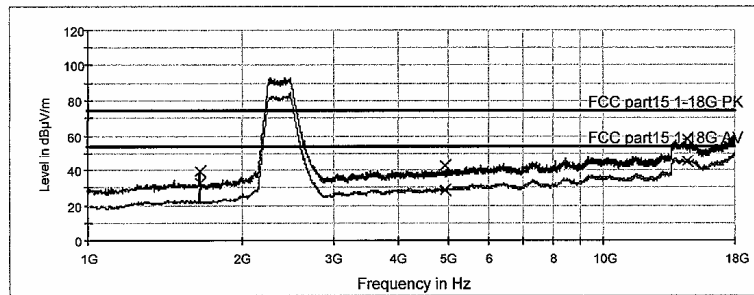
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	39.0	-13.6	35.0	74.0	H
4959.000000	42.3	-5.8	31.7	74.0	H
14580.000000	58.3	9.2	15.7	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	32.4	-13.6	21.6	54.0	H
4959.000000	28.9	-5.8	25.1	54.0	H
14580.000000	44.6	9.2	9.4	54.0	H

Date: 10/01/2011 - Time: 20:48:27

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_





## Test Plot of Spurious emission of A.3 – GFSK modulation Horizontal (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

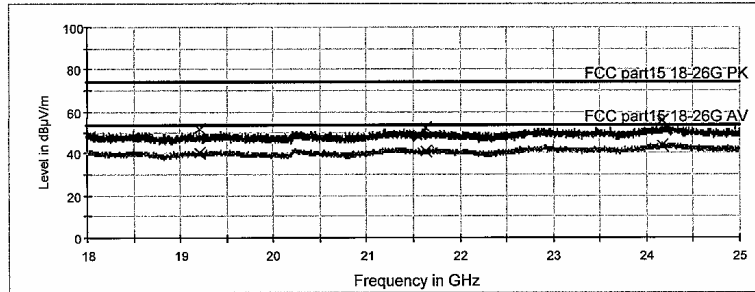
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19216.000000	51.9	5.3	22.1	74.0	H
21631.000000	52.5	6.0	21.5	74.0	H
24178.000000	55.8	6.9	18.2	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19216.000000	39.9	5.3	14.1	54.0	H
21631.000000	41.0	6.0	13.0	54.0	H
24178.000000	43.4	6.9	10.6	54.0	H

Date: 11/01/2011 - Time: 22:35:00

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.3 – GFSK modulation Vertical (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

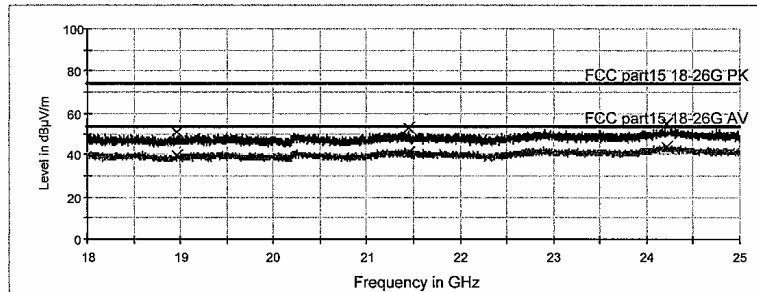
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18963.000000	51.0	5.1	23.0	74.0	V
21447.000000	52.8	5.9	21.2	74.0	V
24210.000000	55.3	6.9	18.7	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18963.000000	39.4	5.1	14.6	54.0	V
21447.000000	41.1	5.9	12.9	54.0	V
24210.000000	43.5	6.9	10.5	54.0	V

Date: 11/01/2011 - Time: 22:32:55

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of B – GFSK modulation Horizontal (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

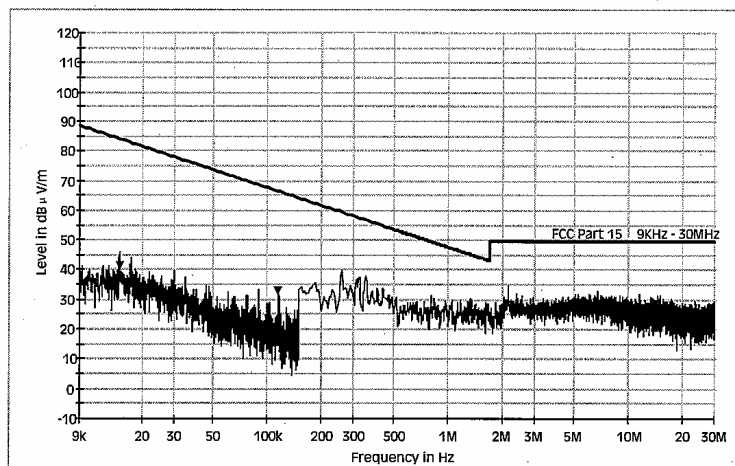
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Rx @ Mid channel(BDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery
Receipt No.:	163072045 100&300
Report No.	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Horizontal

#### Subrange 1

Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table\_Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.015080	---	41.1	20.5	H
0.115480	---	32.6	21.1	H
2.158000	29.4	---	20.4	H
6.786000	27.1	---	22.0	H

Date: 14/01/2011 - Time: 02:14:26 PM

Tested by:



Reviewed by:



## Test Plot of Spurious emission of B – GFSK modulation Vertical (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

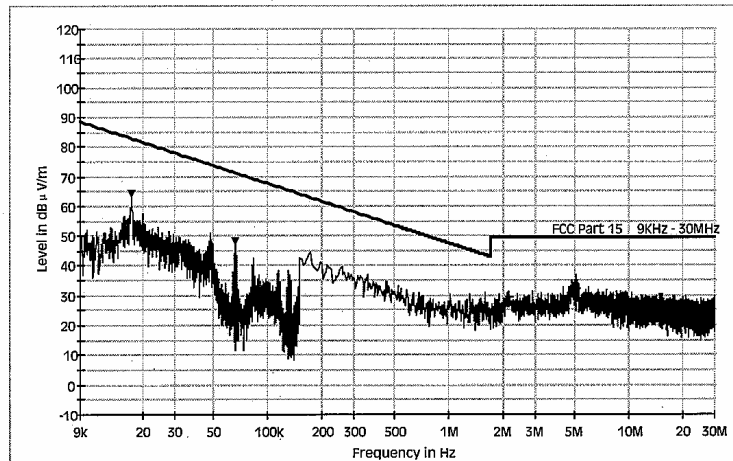
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate	
Test Item:	Bluetooth Headset	
Identification:	BTH002-KMA04	
Test Standard:	FCC Part 15	
Test Detail:	RE	
Operation Mode:	Rx @ Mid channel(BDR)	
Climate Condition:	23 °C;	50 %RH; 101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery	
Receipt No.:	163072045 100&300	
Report No.:	17019029 001	
Result:	Pass	
Comment:	Test distance is 3m, Vertical	

#### Subrange 1

Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Polarity
0.017320	---	64.0	20.8	V
0.065640	---	48.3	20.4	V
2.158000	29.2	---	20.4	V
5.050000	32.1	---	22.0	V

Date: 14/01/2011 - Time: 02:23:56 PM

Tested by:



Reviewed by:



## Test Plot of Spurious emission of B –GFSK modulation Horizontal (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

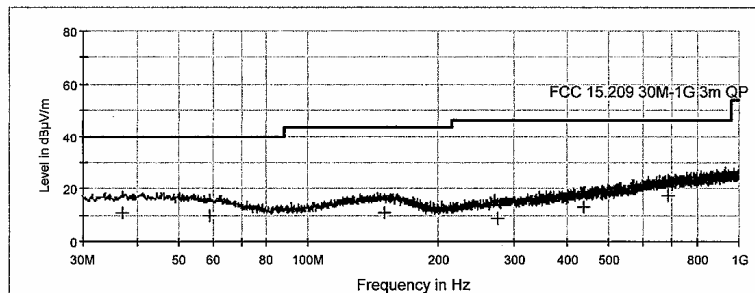
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
37.300000	10.9	13.7	29.1	40.0	H
59.350000	9.5	12.8	30.5	40.0	H
151.150000	10.7	14.2	32.8	43.5	H
277.000000	8.9	12.3	37.1	46.0	H
437.900000	13.1	15.7	32.9	46.0	H
685.700000	17.6	19.5	28.4	46.0	H

Date: 10/01/2011 - Time: 18:16:22

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of B – GFSK modulation Vertical (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

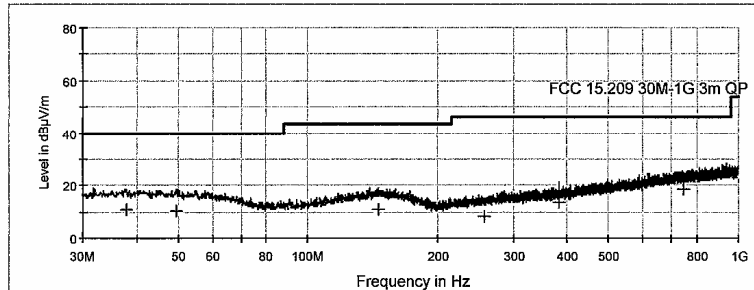
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
37.900000	10.7	13.8	29.3	40.0	V
49.650000	10.5	13.5	29.5	40.0	V
146.150000	10.7	13.9	32.8	43.5	V
257.850000	8.1	11.8	37.9	46.0	V
383.950000	13.7	14.4	32.3	46.0	V
745.850000	18.3	20.3	27.7	46.0	V

Date: 10/01/2011 - Time: 18:18:44

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of B – GFSK modulation Horizontal (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

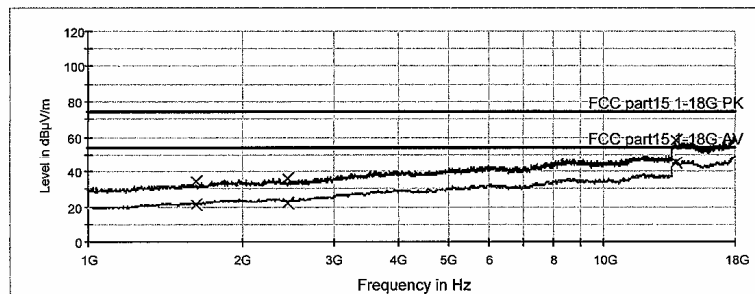
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	34.0	-15.3	40.0	74.0	H
2441.000000	35.9	-12.1	38.1	74.0	H
13848.000000	58.3	9.0	15.7	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	20.8	-15.3	33.2	54.0	H
2441.000000	22.3	-12.1	31.7	54.0	H
13848.000000	45.2	9.0	8.8	54.0	H

Date: 10/01/2011 - Time: 22:25:29

Tested by:



Reviewed by:



## Test Plot of Spurious emission of B – GFSK modulation Vertical (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

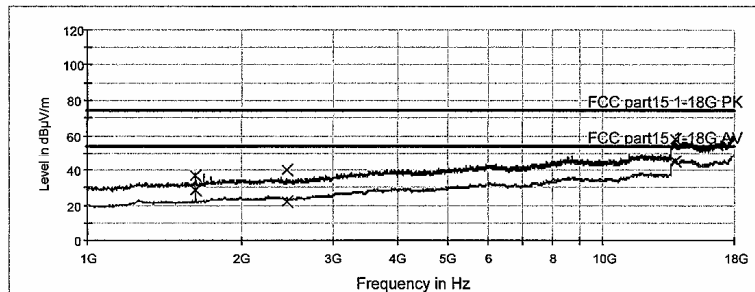
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	37.1	-14.7	36.9	74.0	V
2441.000000	39.7	-12.1	34.4	74.0	V
13848.000000	58.2	9.0	15.8	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	28.6	-14.7	25.4	54.0	V
2441.000000	22.4	-12.1	31.6	54.0	V
13848.000000	45.1	9.0	8.9	54.0	V

Date: 10/01/2011 - Time: 22:21:18

Tested by:  Reviewed by: 





## Test Plot of Spurious emission of B – GFSK modulation Horizontal (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

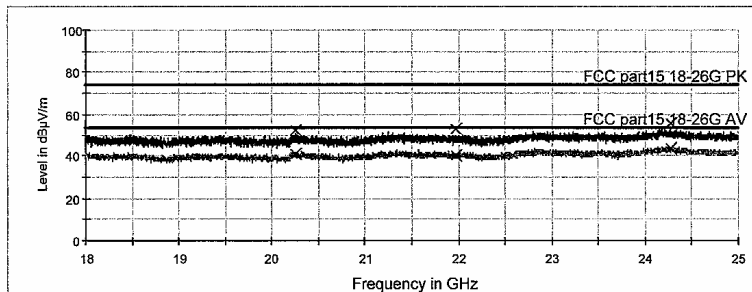
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 18GHz-26.5GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
20250.000000	52.5	5.6	21.5	74.0	H
21969.000000	53.3	6.1	20.7	74.0	H
24281.000000	55.6	6.9	18.4	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
20250.000000	40.9	5.6	13.1	54.0	H
21969.000000	40.3	6.1	13.7	54.0	H
24281.000000	43.5	6.9	10.5	54.0	H

Date: 11/01/2011 - Time: 22:40:56

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of B – GFSK modulation Vertical (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

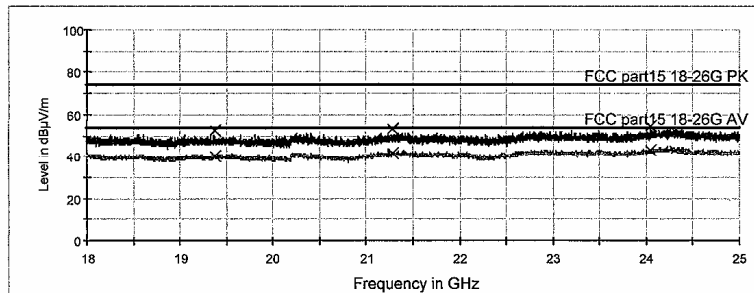
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(BDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 18GHz-26.5GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19376.000000	52.3	5.4	21.7	74.0	V
21278.000000	52.8	5.9	21.2	74.0	V
24045.000000	54.6	6.8	19.4	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19376.000000	40.0	5.4	14.0	54.0	V
21278.000000	41.4	5.9	12.6	54.0	V
24045.000000	42.7	6.8	11.3	54.0	V

Date: 11/01/2011 - Time: 22:59:01

Tested by: 

Reviewed by:



## Test Plot of Spurious emission of A.1 – 8DPSK modulation Horizontal (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

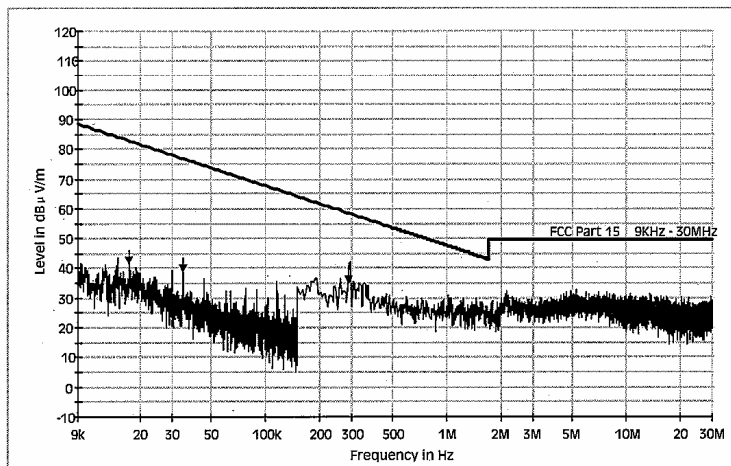
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel(EDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery
Receipt No.:	163072045 100&300
Report No.:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Horizontal

#### Subrange 1

Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV.ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	42.5	20.8	H
0.034920	---	39.7	20.3	H
0.290000	---	35.9	21.0	H
2.142000	29.8	---	20.4	H

Date: 14/01/2011 - Time: 01:33:16 PM

Tested by:



Reviewed by:



## Test Plot of Spurious emission of A.1 – 8DPSK modulation Vertical (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

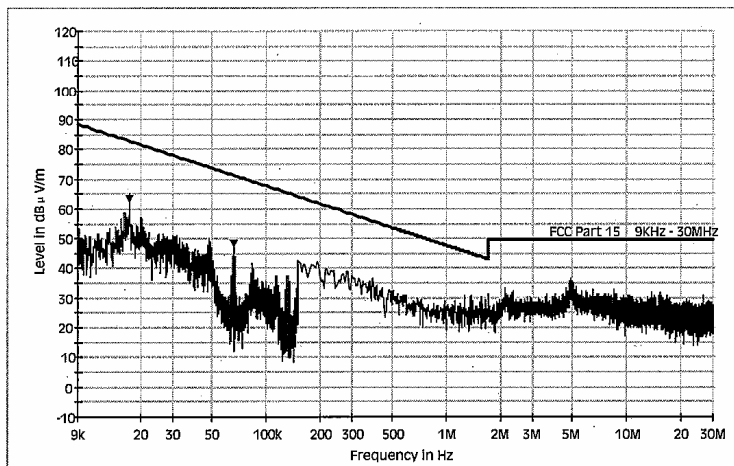
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate	
Test Item:	Bluetooth Headset	
Identification:	BTH002-KMA04	
Test Standard:	FCC Part 15	
Test Detail:	RE	
Operation Mode:	Tx @ Low channel(EDR)	
Climate Condition:	23 °C;	50 %RH; 101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery	
Receipt No.:	163072045 100&300	
Report No.:	17019029 001	
Result:	Pass	
Comment:	Test distance is 3m, Vertical	

#### Subrange 1

Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	63.4	20.8	H
0.065640	---	48.2	20.4	H
2.118000	28.9	---	20.4	H
4.874000	30.9	---	21.9	H

Date: 14/01/2011 - Time: 01:41:18 PM

Tested by:



Reviewed by:



## Test Plot of Spurious emission of A.1 – 8DPSK modulation Horizontal (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

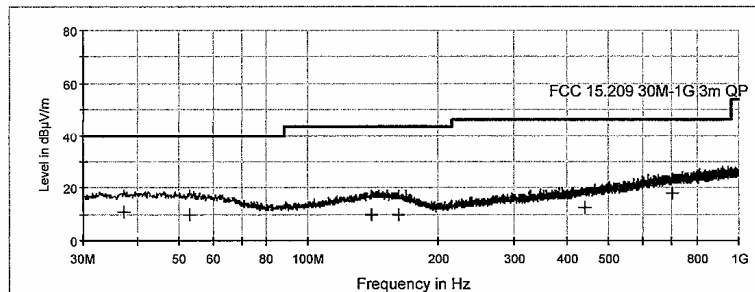
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168



FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
37.500000	10.9	13.8	29.1	40.0	H
53.300000	9.7	13.3	30.4	40.0	H
141.200000	10.0	13.6	33.5	43.5	H
163.150000	10.0	13.8	33.5	43.5	H
441.300000	12.7	15.8	33.3	46.0	H
703.800000	17.7	19.7	28.3	46.0	H

Date: 10/01/2011 - Time: 19:07:37

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.1 – 8DPSK modulation Vertical (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

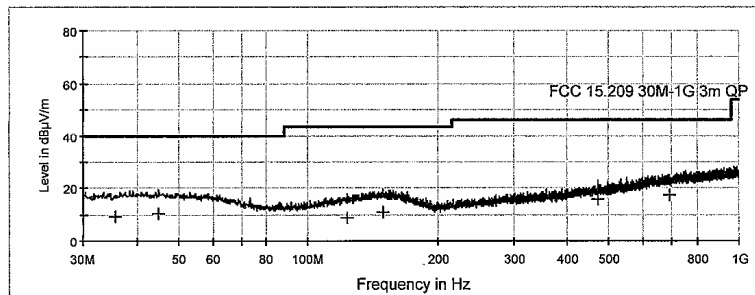
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
35.700000	9.3	13.5	30.7	40.0	V
45.150000	10.5	13.7	29.5	40.0	V
123.500000	8.7	12.4	34.9	43.5	V
150.050000	10.6	14.2	32.9	43.5	V
472.450000	15.9	16.2	30.1	46.0	V
694.450000	17.7	19.6	28.3	46.0	V

Date: 10/01/2011 - Time: 19:03:31

Tested by: Checked Reviewed by: Checked



## Test Plot of Spurious emission of A.1 – 8DPSK modulation Horizontal (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

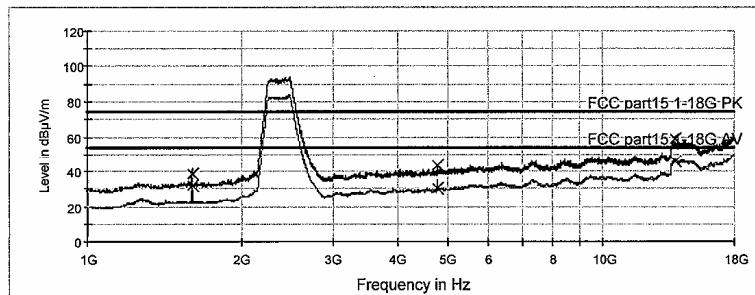
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	38.6	-14.0	35.4	74.0	H
4804.000000	43.0	-5.5	31.0	74.0	H
13867.000000	58.5	9.2	15.5	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	32.0	-14.0	22.0	54.0	H
4804.000000	30.5	-5.5	23.5	54.0	H
13867.000000	45.8	9.2	8.2	54.0	H

Date: 10/01/2011 - Time: 21:12:52

Tested by: [Signature] Reviewed by: [Signature]



## Test Plot of Spurious emission of A.1 – 8DPSK modulation Vertical (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

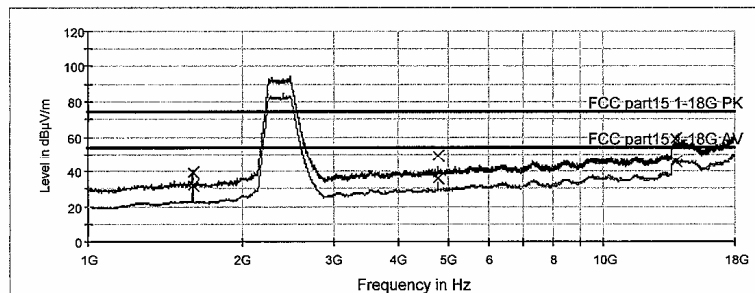
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	39.1	-14.0	34.9	74.0	V
4804.000000	48.9	-5.5	25.1	74.0	V
13867.000000	58.7	9.2	15.3	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	31.6	-14.0	22.4	54.0	V
4804.000000	35.8	-5.5	18.2	54.0	V
13867.000000	45.9	9.2	8.1	54.0	V

Date: 10/01/2011 - Time: 21:19:35

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_





## Test Plot of Spurious emission of A.1 – 8DPSK modulation Horizontal (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

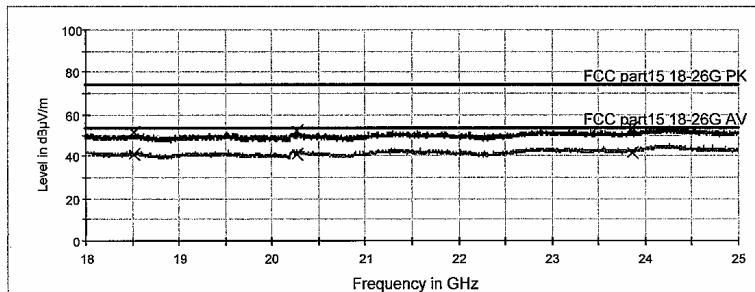
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18522.000000	52.0	5.0	22.0	74.0	H
20277.000000	52.4	5.6	21.6	74.0	H
23858.000000	53.7	6.7	20.3	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18522.000000	40.5	5.0	13.5	54.0	H
20277.000000	41.1	5.6	12.9	54.0	H
23858.000000	41.8	6.7	12.2	54.0	H

Date: 11/01/2011 - Time: 21:51:28

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.1 – 8DPSK modulation Vertical (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

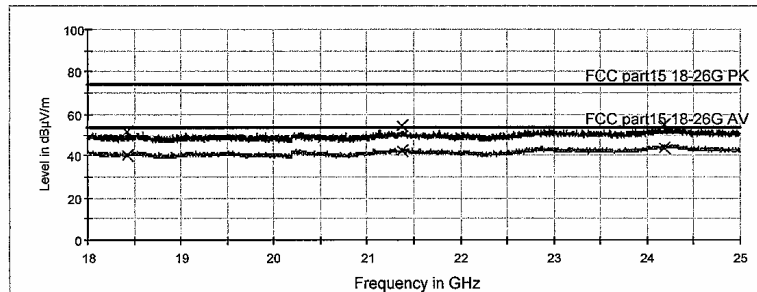
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Low channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18428.000000	51.9	4.9	22.1	74.0	V
21379.000000	54.3	5.9	19.7	74.0	V
24180.000000	55.3	6.9	18.7	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18428.000000	40.2	4.9	13.8	54.0	V
21379.000000	41.9	5.9	12.1	54.0	V
24180.000000	43.6	6.9	10.4	54.0	V

Date: 11/01/2011 - Time: 21:45:14

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.2 – 8DPSK modulation Horizontal (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

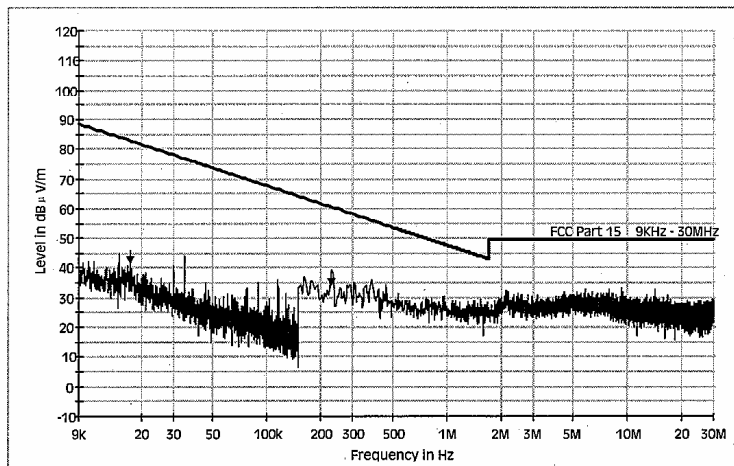
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate	
Test Item:	Bluetooth Headset	
Identification	BTH002-KMA04	
Test Standard:	FCC Part 15	
Test Detail:	RE	
Operation Mode:	Tx @ Mid channel(EDR)	
Climate Condition:	23 °C; 50 %RH;	101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery	
Receipt No.:	163072045 100&300	
Report No.	17019029 001	
Result:	Pass	
Comment:	Test distance is 3m, Horizontal	

#### Subrange 1

Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	42.6	20.8	H
0.230000	---	35.1	21.0	H
2.146000	29.0	---	20.4	H
9.298000	26.5	---	22.1	H

Date: 14/01/2011 - Time: 01:50:13 PM

Tested by: 2011.1.18  
Checked

Reviewed by: WLC



## Test Plot of Spurious emission of A.2 – 8DPSK modulation Vertical (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

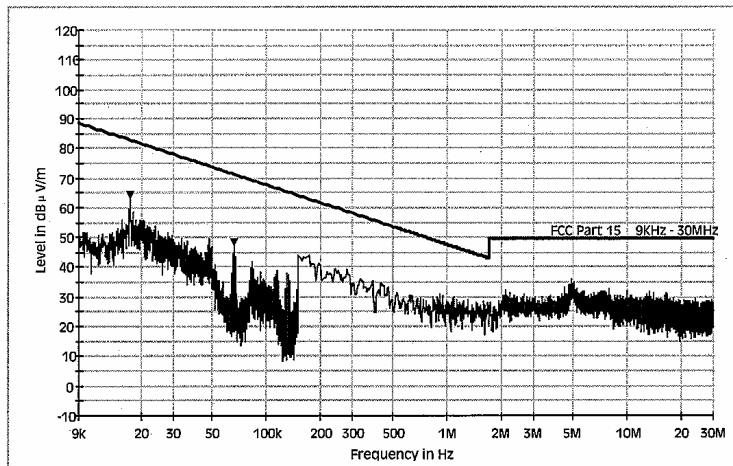
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer:	K-Mate		
Test Item:	Bluetooth Headset		
Identification	BTH002-KMA04		
Test Standard:	FCC Part 15		
Test Detail:	RE		
Operation Mode:	Tx @ Mid channel(EDR)		
Climate Condition:	23 °C;	50 %RH;	101 kPa.
Test Voltage / Freq. :	DC 3.7V by li-ion battery		
Receipt No.:	163072045 100&300		
Report No.	17019029 001		
Result:	Pass		
Comment:	Test distance is 3m, Vertical		

#### Subrange 1

Frequency Range:	9kHz - 30MHz
Receiver:	TUV ESCI 3
Transducer:	TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	64.0	20.8	H
0.065640	---	48.2	20.4	H
4.914000	31.7	---	22.0	H
13.262000	25.9	---	21.1	H

Date: 14/01/2011 - Time: 01:59:12 PM

Tested by:



Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.2 – 8DPSK modulation Horizontal (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

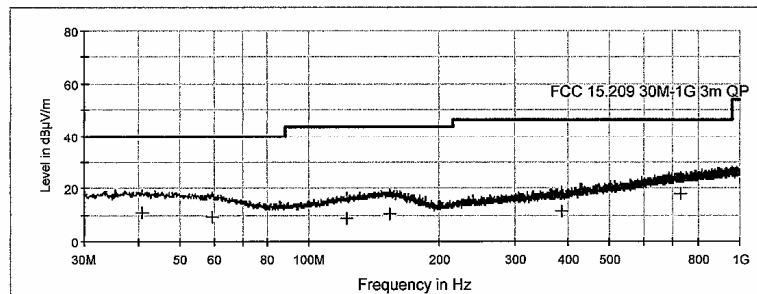
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168



FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
41.050000	10.9	14.0	29.1	40.0	H
59.600000	9.4	12.8	30.6	40.0	H
122.400000	8.7	12.4	34.8	43.5	H
154.050000	10.5	14.2	33.0	43.5	H
386.100000	11.2	14.5	34.8	46.0	H
732.650000	18.1	20.1	27.9	46.0	H

Date: 10/01/2011 - Time: 18:49:56

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.2 – 8DPSK modulation Vertical (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

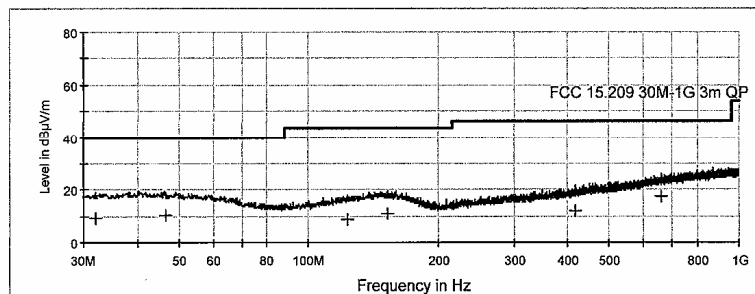
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
32.050000	9.5	13.3	30.5	40.0	V
46.600000	10.1	13.6	29.9	40.0	V
123.250000	8.6	12.4	34.9	43.5	V
153.300000	10.9	14.2	32.6	43.5	V
419.350000	12.1	15.2	33.9	46.0	V
661.350000	17.3	19.2	28.7	46.0	V

Date: 10/01/2011 - Time: 18:44:10

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.2 – 8DPSK modulation Horizontal (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

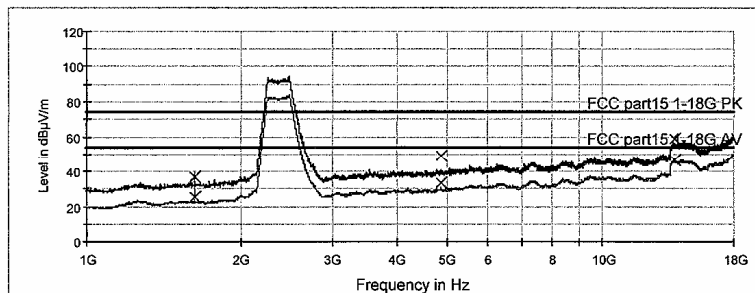
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1625.000000	37.1	-13.9	36.9	74.0	H
4882.000000	48.7	-5.6	25.3	74.0	H
13852.000000	59.1	9.6	14.9	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1625.000000	25.6	-13.9	28.4	54.0	H
4882.000000	33.4	-5.6	20.6	54.0	H
13852.000000	46.3	9.6	7.7	54.0	H

Date: 10/01/2011 - Time: 21:32:47

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.2 – 8DPSK modulation Vertical (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

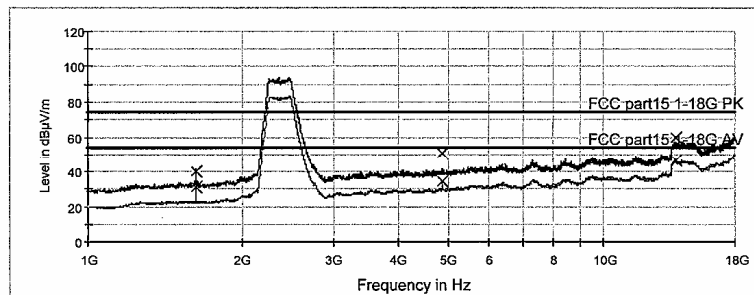
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1625.000000	40.2	-13.9	33.8	74.0	V
4882.000000	50.4	-5.6	23.6	74.0	V
13852.000000	59.4	9.6	14.6	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1625.000000	31.1	-13.9	22.9	54.0	V
4882.000000	33.9	-5.6	20.1	54.0	V
13852.000000	46.3	9.6	7.7	54.0	V

Date: 10/01/2011 - Time: 21:27:52

Tested by:  Reviewed by: 





## Test Plot of Spurious emission of A.2 – 8DPSK modulation Horizontal (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

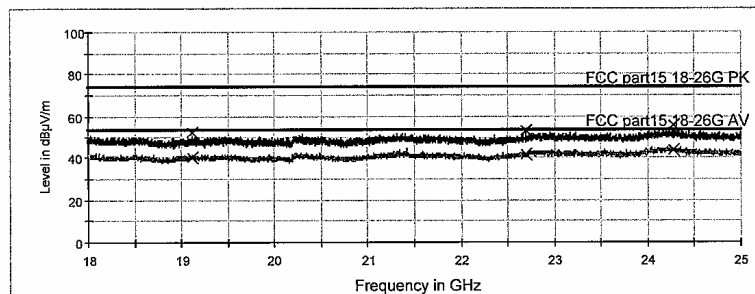
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26,5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19121.000000	52.1	5.2	21.9	74.0	H
22696.000000	53.3	6.3	20.7	74.0	H
24271.000000	55.5	6.9	18.5	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19121.000000	40.3	5.2	13.7	54.0	H
22696.000000	41.6	6.3	12.4	54.0	H
24271.000000	43.8	6.9	10.2	54.0	H

Date: 11/01/2011 - Time: 21:54:24

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.2 – 8DPSK modulation Vertical (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

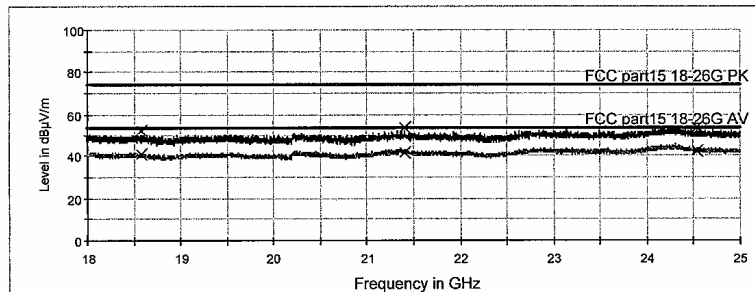
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18584.000000	52.5	5.0	21.5	74.0	V
21408.000000	53.8	5.9	20.2	74.0	V
24543.000000	54.0	7.0	20.0	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18584.000000	40.5	5.0	13.5	54.0	V
21408.000000	41.6	5.9	12.4	54.0	V
24543.000000	42.4	7.0	11.6	54.0	V

Date: 11/01/2011 - Time: 21:56:07

Tested by:  Reviewed by: 

WTC  
2011.1.19  
Checked

## Test Plot of Spurious emission of A.3 – 8DPSK modulation Horizontal (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

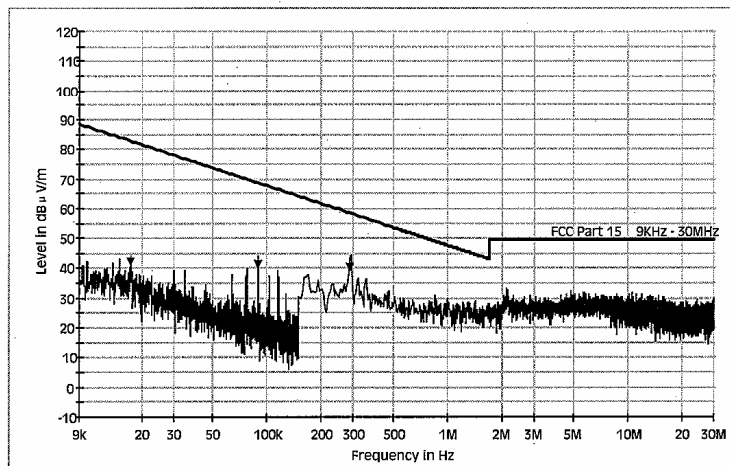
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (EMISSION)

#### Test Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage / Freq.: DC 3.7V by li-ion battery  
 Receipt No.: 163072045 100&300  
 Report No.: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 9kHz - 30MHz  
 Receiver: TUV ESCI 3  
 Transducer: TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	42.2	20.8	H
0.089320	---	41.1	21.0	H
0.290000	---	40.1	21.0	H
2.130000	28.8	---	20.4	H

Date: 14/01/2011 - Time: 01:23:06 PM

Tested by:



Reviewed by:



## Test Plot of Spurious emission of A.3 – 8DPSK modulation Vertical (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

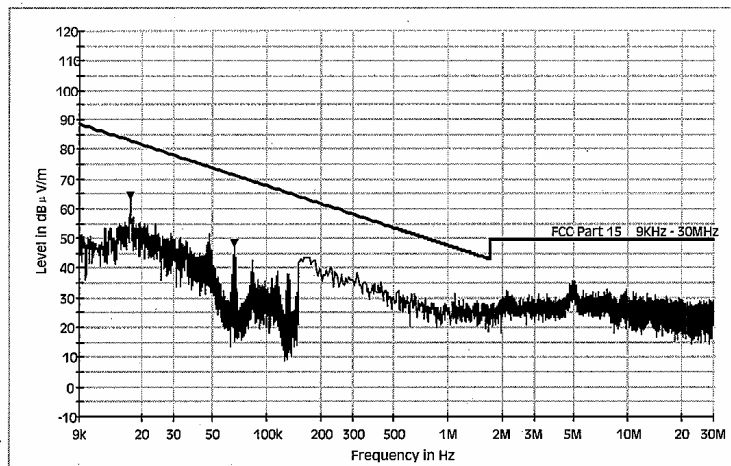
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (EMISSION)

#### Test Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage / Freq.: DC 3.7V by li-ion battery  
 Receipt No.: 163072045 100&300  
 Report No.: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 9kHz - 30MHz  
 Receiver: TUV ESCI 3  
 Transducer: TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table\_Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	64.0	20.8	H
0.065640	---	48.3	20.4	H
4.978000	30.9	---	22.0	H
9.862000	26.6	---	22.2	H

Date: 14/01/2011 - Time: 01:27:18 PM

Tested by:



Reviewed by:



## Test Plot of Spurious emission of A.3 – 8DPSK modulation Horizontal (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

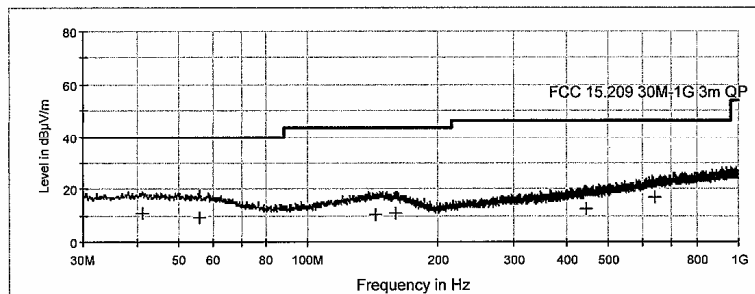
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168

FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
41.500000	11.0	14.0	29.0	40.0	H
56.200000	9.0	13.1	31.0	40.0	H
144.600000	10.1	13.8	33.4	43.5	H
160.950000	10.6	14.0	32.9	43.5	H
443.600000	12.6	15.8	33.4	46.0	H
639.400000	17.0	19.0	29.0	46.0	H

Date: 10/01/2011 - Time: 18:55:06

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.3 – 8DPSK modulation Vertical (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

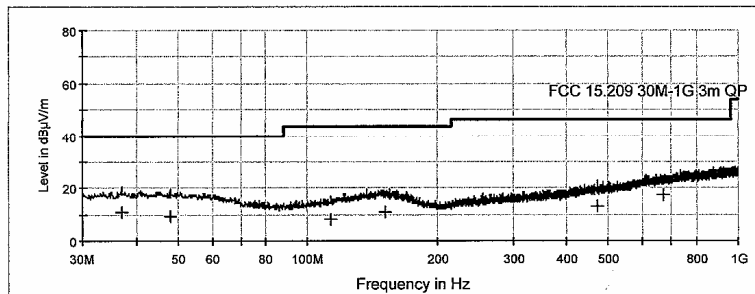
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168



FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
37.050000	10.7	13.7	29.3	40.0	V
48.050000	9.3	13.6	30.7	40.0	V
113.550000	8.0	11.5	35.5	43.5	V
151.750000	11.1	14.2	32.4	43.5	V
471.350000	13.0	16.2	33.0	46.0	V
671.900000	17.4	19.4	28.6	46.0	V

Date: 10/01/2011 - Time: 18:59:15

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of A.3 – 8DPSK modulation Horizontal (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

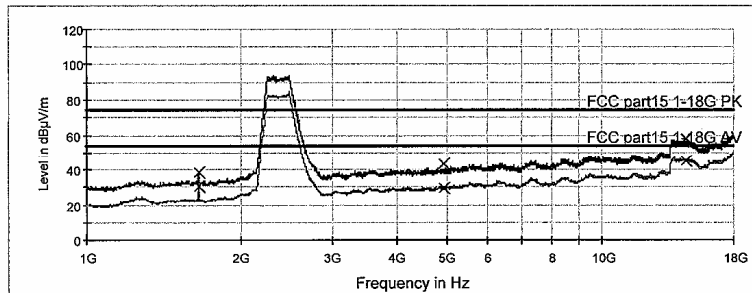
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	38.4	-13.6	35.6	74.0	H
4959.000000	42.9	-5.8	31.1	74.0	H
14580.000000	57.6	9.2	16.4	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	29.8	-13.6	24.2	54.0	H
4959.000000	29.4	-5.8	24.6	54.0	H
14580.000000	44.6	9.2	9.4	54.0	H

Date: 10/01/2011 - Time: 21:41:02

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.3 – 8DPSK modulation Vertical (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

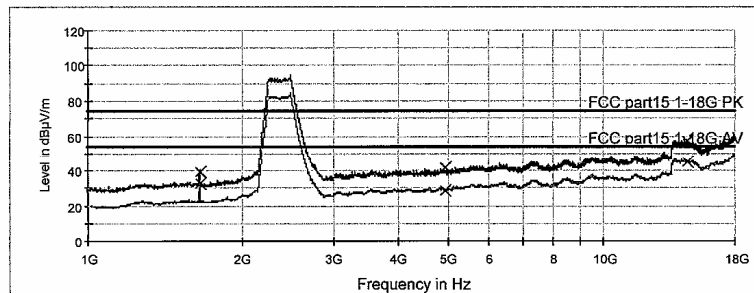
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	39.3	-13.6	34.7	74.0	V
4959.000000	41.8	-5.8	32.2	74.0	V
14580.000000	57.4	9.2	16.6	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	33.0	-13.6	21.0	54.0	V
4959.000000	28.9	-5.8	25.1	54.0	V
14580.000000	44.7	9.2	9.3	54.0	V

Date: 10/01/2011 - Time: 21:46:48

Tested by:  Reviewed by: 





## Test Plot of Spurious emission of A.3 – 8DPSK modulation Horizontal (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

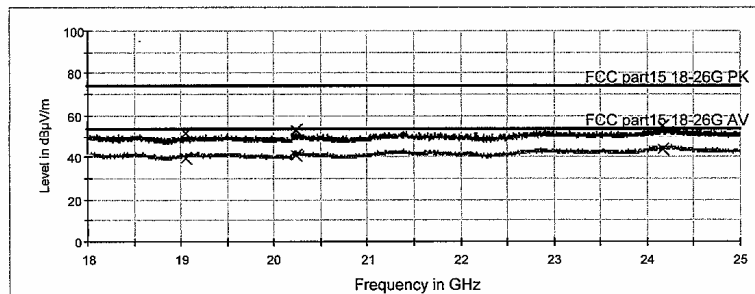
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19052.000000	51.8	5.1	22.2	74.0	H
20237.000000	53.4	5.6	20.6	74.0	H
24170.000000	55.0	6.9	19.0	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19052.000000	39.8	5.1	14.2	54.0	H
20237.000000	41.0	5.6	13.0	54.0	H
24170.000000	43.5	6.9	10.5	54.0	H

Date: 11/01/2011 - Time: 22:06:08

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of A.3 – 8DPSK modulation Vertical (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

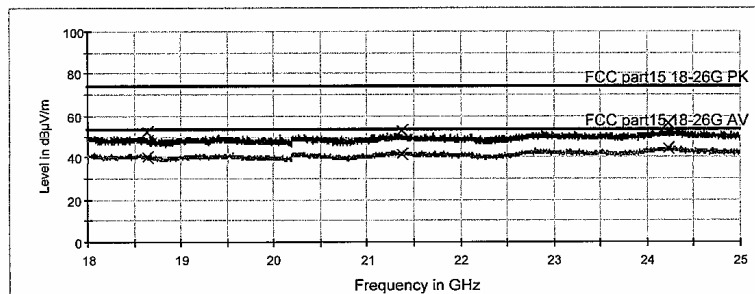
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Tx @ High channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 18GHz-25GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18642.000000	52.1	5.0	21.9	74.0	V
21381.000000	53.2	5.9	20.8	74.0	V
24228.000000	56.2	6.9	17.8	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18642.000000	40.0	5.0	14.0	54.0	V
21381.000000	41.6	5.9	12.4	54.0	V
24228.000000	43.9	6.9	10.1	54.0	V

Date: 11/01/2011 - Time: 22:09:08

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_



## Test Plot of Spurious emission of B – 8DPSK modulation Horizontal (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

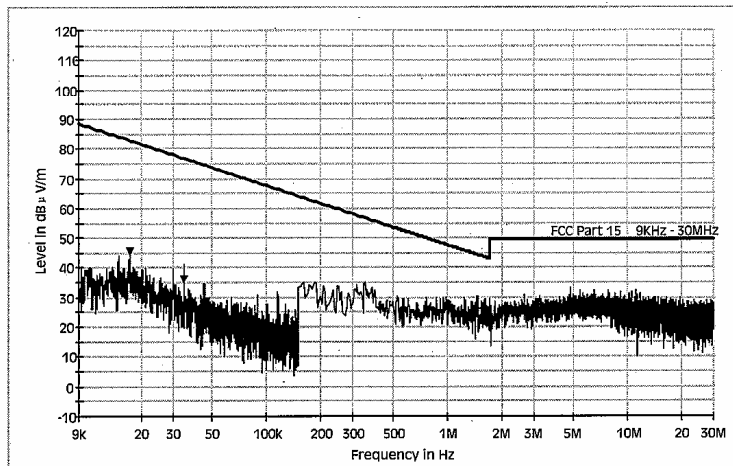
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage / Freq.: DC 3.7V by li-ion battery  
 Receipt No.: 163072045 100&300  
 Report No.: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

#### Subrange 1

Frequency Range: 9kHz - 30MHz  
 Receiver: TUV ESCI 3  
 Transducer: TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV SAC Active Loop Antenna ZN30900A



#### Result Table\_Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	45.3	20.6	H
0.034920	---	35.8	20.1	H
1.454000	25.9	---	21.6	H
4.774000	27.2	---	22.3	H

Date: 14/01/2011 - Time: 01:12:13 PM

Tested by:



Reviewed by:



## Test Plot of Spurious emission of B – 8DPSK modulation Vertical (9kHz – 30MHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service

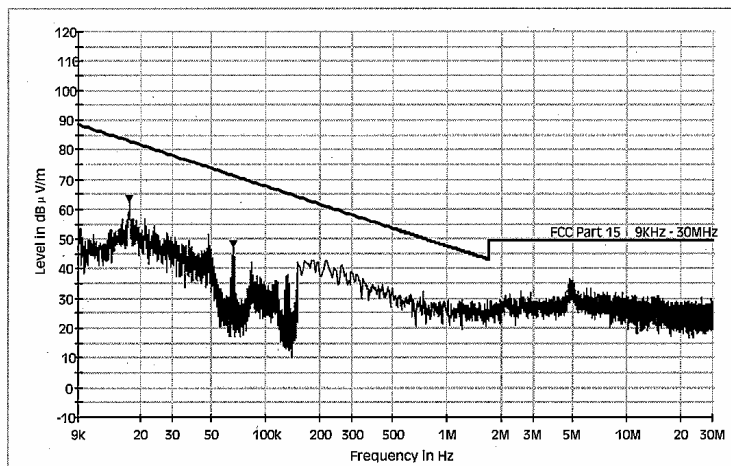
### EMC Test Record (EMISSION)

#### Test Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage / Freq.: DC 3.7V by li-ion battery  
 Receipt No.: 163072045 100&300  
 Report No.: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

#### Subrange 1

Frequency Range: 9kHz - 30MHz  
 Receiver: TUV ESCI 3  
 Transducer: TUV SAC Active Loop Antenna ZN30900A / TUV ESCI3 -TUV  
 SAC Active Loop Antenna ZN30900A



#### Result Table Single

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Polarity
0.017400	---	63.4	20.8	H
0.065640	---	48.4	20.4	H
4.806000	32.2	---	21.9	H
9.454000	26.6	---	22.1	H

Date: 14/01/2011 - Time: 01:16:53 PM

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of B –8DPSK modulation Horizontal (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

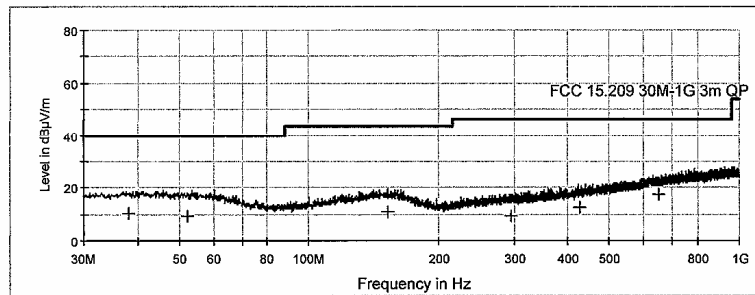
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168



FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
38.350000	10.4	13.9	29.6	40.0	H
52.550000	9.2	13.3	30.8	40.0	H
152.700000	11.1	14.2	32.4	43.5	H
295.550000	9.3	12.7	36.7	46.0	H
426.600000	12.3	15.4	33.8	46.0	H
652.000000	17.2	19.1	28.8	46.0	H

Date: 10/01/2011 - Time: 19:11:15

Tested by:  Reviewed by: 

## Test Plot of Spurious emission of B – 8DPSK modulation Vertical (30MHz – 1GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

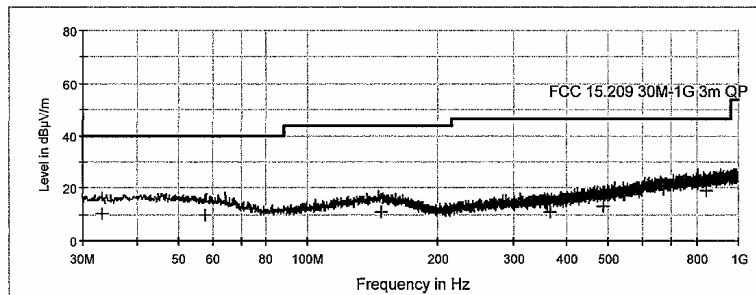
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth Headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 30M-1GHz  
 Receiver: TUV ESIB 26  
 Transducer: TUV SAC UVLB 9168/ TUV ESIB26-TUV SAC UVLB 9168



FCC 15.209 30M-1G sweep



#### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
33.400000	10.6	13.3	29.4	40.0	V
58.150000	9.7	12.9	30.3	40.0	V
148.200000	10.7	14.1	32.8	43.5	V
365.850000	10.8	14.1	35.2	46.0	V
487.600000	13.3	16.4	32.7	46.0	V
846.750000	18.9	21.0	27.1	46.0	V

Date: 10/01/2011 - Time: 19:14:01

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of B – 8DPSK modulation Horizontal (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

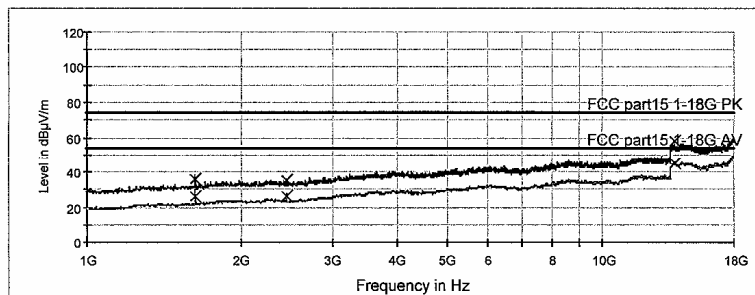
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	36.1	-14.7	37.9	74.0	V
2441.000000	34.9	-12.1	39.1	74.0	V
13848.000000	57.8	9.0	16.2	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	26.0	-14.7	28.0	54.0	V
2441.000000	26.4	-12.1	27.6	54.0	V
13848.000000	45.1	9.0	8.9	54.0	V

Date: 10/01/2011 - Time: 22:40:17

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of B – 8DPSK modulation Vertical (1GHz – 18GHz)

TUV Rheinland (Guangdong) Ltd.

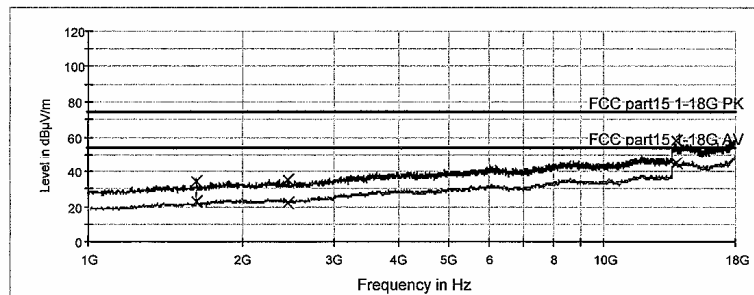
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical  
 Subrange 1  
 Frequency Range: 1GHz-18GHz  
 Receiver: TUV FSP30  
 Transducer: TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	34.7	-14.7	39.3	74.0	H
2441.000000	34.8	-12.1	39.2	74.0	H
13848.000000	57.9	9.0	16.1	74.0	H

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	22.6	-14.7	31.4	54.0	H
2441.000000	22.3	-12.1	31.7	54.0	H
13848.000000	45.1	9.0	8.9	54.0	H

Date: 10/01/2011 - Time: 22:33:52

Tested by:  Reviewed by: 



## Test Plot of Spurious emission of B – 8DPSK modulation Horizontal (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

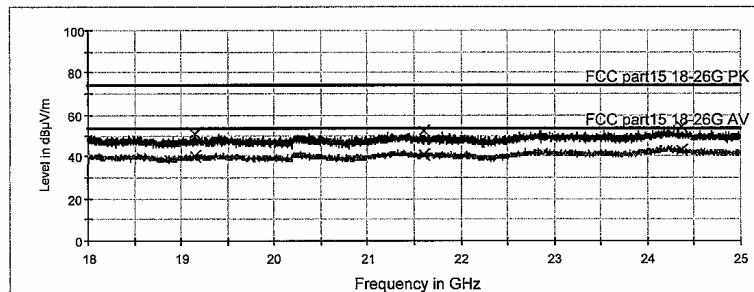
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Horizontal

Subrange 1  
 Frequency Range: 18GHz-26.5GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09



#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19152.000000	51.2	5.2	22.8	74.0	V
21609.000000	52.6	6.0	21.4	74.0	V
24368.000000	54.7	7.0	19.3	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19152.000000	39.8	5.2	14.2	54.0	V
21609.000000	40.8	6.0	13.2	54.0	V
24368.000000	43.1	7.0	10.9	54.0	V

Date: 11/01/2011 - Time: 23:03:00

Tested by: 

Reviewed by: 

## Test Plot of Spurious emission of B – 8DPSK modulation Vertical (18GHz – 26GHz)

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

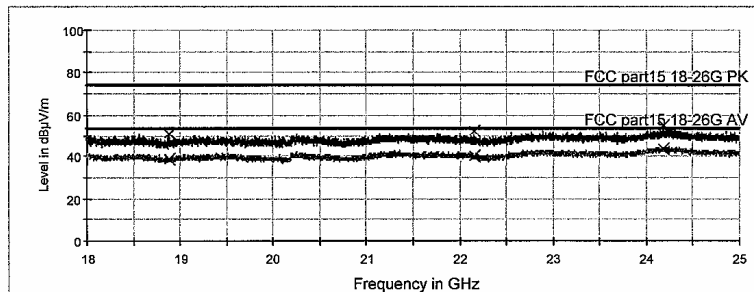
### EMC Test Record (Emission)

#### Common Information

Manufacturer: K-Mate  
 Test Item: Bluetooth headset  
 Identification: BTH002-KMA04  
 Test Standard: FCC Part 15  
 Test Detail: RE  
 Operation Mode: Rx @ Mid channel(EDR)  
 Climate Condition: 23 °C; 50 %RH; 101 kPa.  
 Test Voltage/ Freq: DC 3.7V by li-ion battery  
 Receipt No: 163072045 100&300  
 Report No: 17019029 001  
 Result: Pass  
 Comment: Test distance is 3m, Vertical

Subrange 1  
 Frequency Range: 18GHz-26.5GHz  
 Receiver: TUV 3160-09  
 Transducer: TUV SAC 3160-09/ TUV FSP30-TUV SAC 3160-09

Pre TUV 18 to 26.5 3160-09





#### Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18883.000000	51.6	5.1	22.4	74.0	V
22167.000000	52.1	6.1	21.9	74.0	V
24182.000000	54.3	6.9	19.7	74.0	V

#### Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18883.000000	39.5	5.1	14.5	54.0	V
22167.000000	41.0	6.1	13.0	54.0	V
24182.000000	42.1	6.9	11.9	54.0	V

Date: 11/01/2011 - Time: 23:00:41

Tested by:  Reviewed by: 

WLC  
2011.1.19  
Checked

## Test Plot of Radiated emissions in restricted bands, Mode A.1 – GFSK modulation, Horizontal

TUV Rheinland (Guangdong) Ltd.

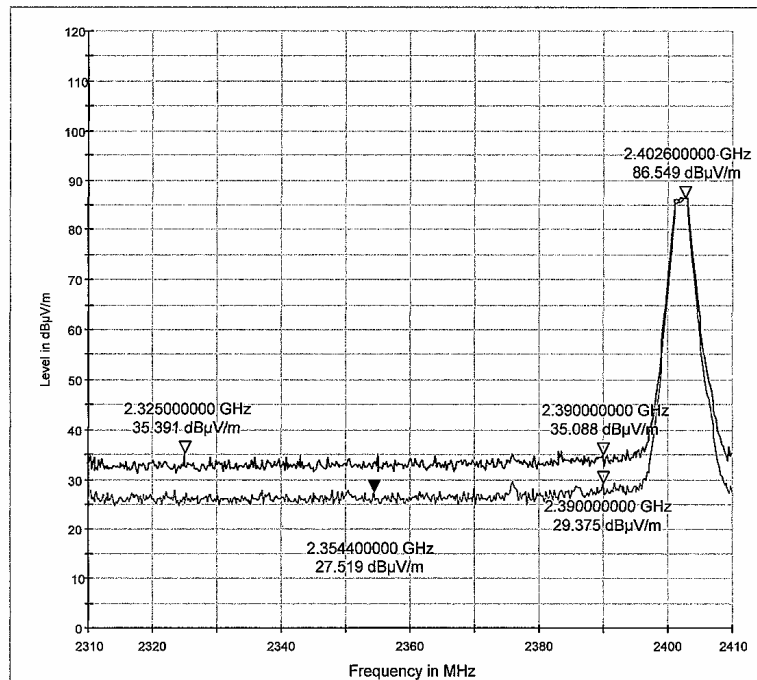
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx @ Low channel(BDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq:	DC 3.7V by li-ion battery
Receipt No:	163072045 100&300
Report No:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Horizontal
Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 10/01/2011 - Time: 23:48:30

Tested by:  Reviewed by: 



## Test Plot of Radiated emissions in restricted bands, Mode A.1 – GFSK modulation, Vertical

TUV Rheinland (Guangdong) Ltd.

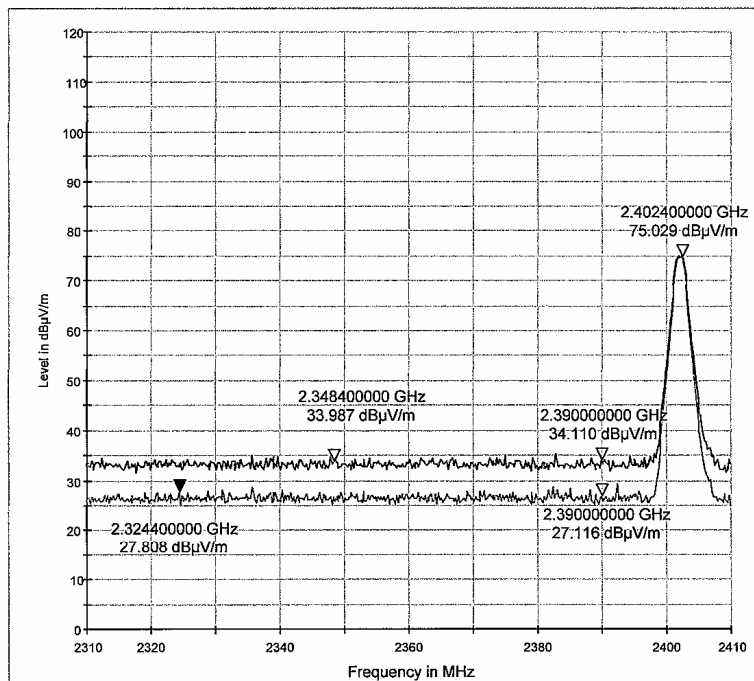
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx @ Low channel(BDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq:	DC 3.7V by li-ion battery
Receipt No:	163072045 100&300
Report No:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Vertical
Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 10/01/2011 - Time: 23:45:26

Tested by:  2011.1.19  
Checked

Reviewed by:  2011.1.19  
Checked

## Test Plot of Radiated emissions in restricted bands, Mode A.3 – GFSK modulation, Horizontal

TUV Rheinland (Guangdong) Ltd.

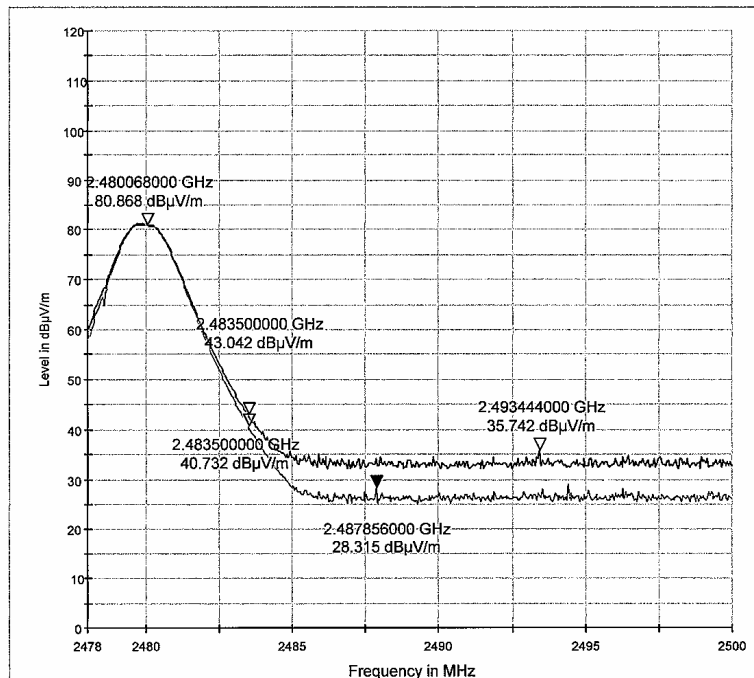
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)


#### Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx @ High channel(BDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq:	DC 3.7V by li-ion battery
Receipt No:	163072045 100&300
Report No:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Horizontal
Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 10/01/2011 - Time: 23:29:56

Tested by:  Reviewed by: \_\_\_\_\_



## Test Plot of Radiated emissions in restricted bands, Mode A.3 – GFSK modulation, Vertical

TUV Rheinland (Guangdong) Ltd.

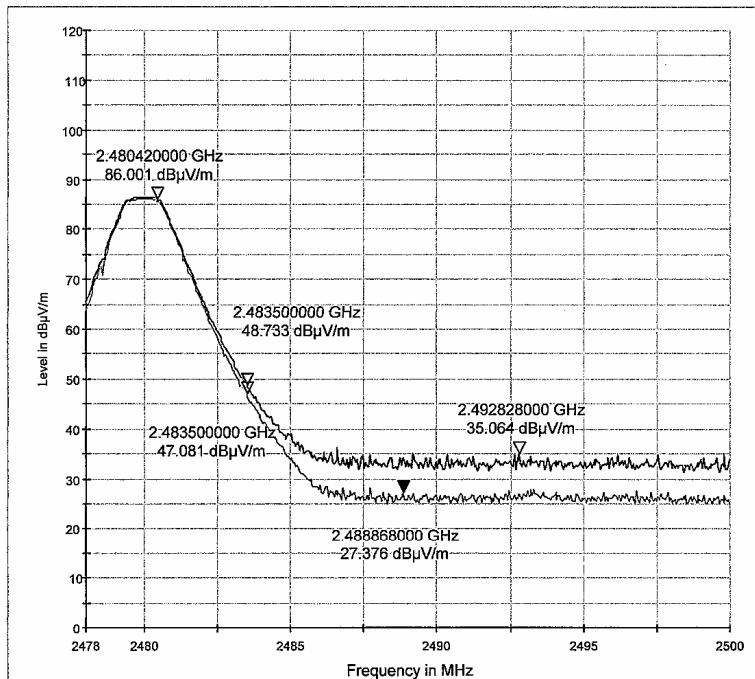
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)



#### Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx @ High channel(BDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq:	DC 3.7V by li-ion battery
Receipt No:	163072045 100&300
Report No:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Vertical
Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 10/01/2011 - Time: 23:35:41

Tested by:  Reviewed by: 



## Test Plot of Radiated emissions in restricted bands, Mode A.1 – 8DPSK modulation, Horizontal

TUV Rheinland (Guangdong) Ltd.

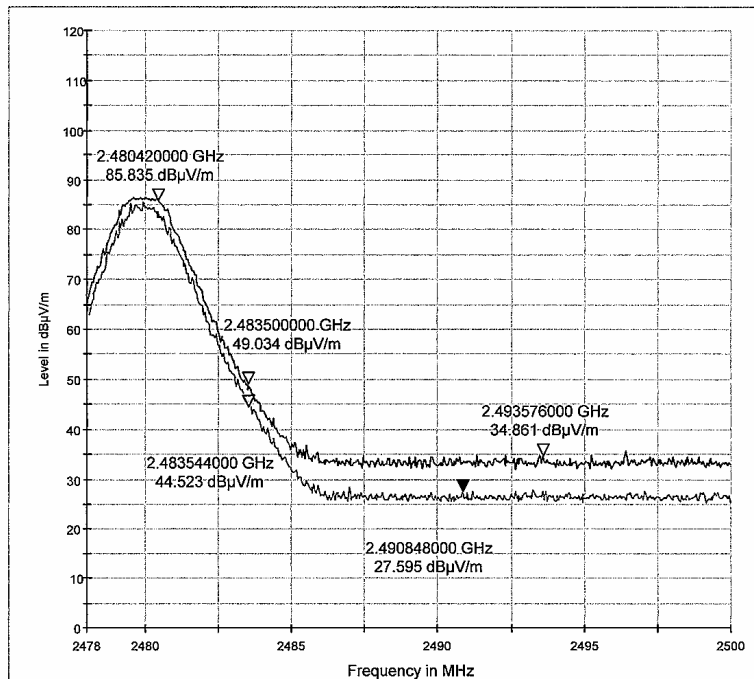
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)



#### Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx @ High channel(EDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq:	DC 3.7V by li-ion battery
Receipt No:	163072045 100&300
Report No:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Horizontal
Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 11/01/2011 - Time: 00:04:11

Tested by:  Reviewed by: 

W.L.C.  
2011.1.19

## Test Plot of Radiated emissions in restricted bands, Mode A.1 – 8DPSK modulation, Vertical

TUV Rheinland (Guangdong) Ltd.

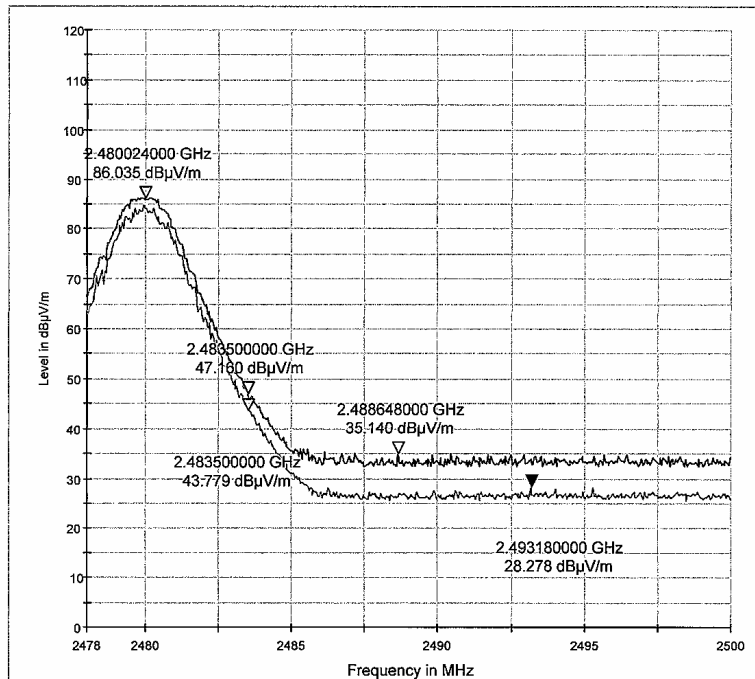
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)

#### Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx @ High channel(EDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq:	DC 3.7V by li-ion battery
Receipt No:	163072045 100&300
Report No:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Vertical
Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 11/01/2011 - Time: 00:01:29

Tested by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_





## Test Plot of Radiated emissions in restricted bands, Mode A.3 – 8DPSK modulation, Horizontal

TUV Rheinland (Guangdong) Ltd.

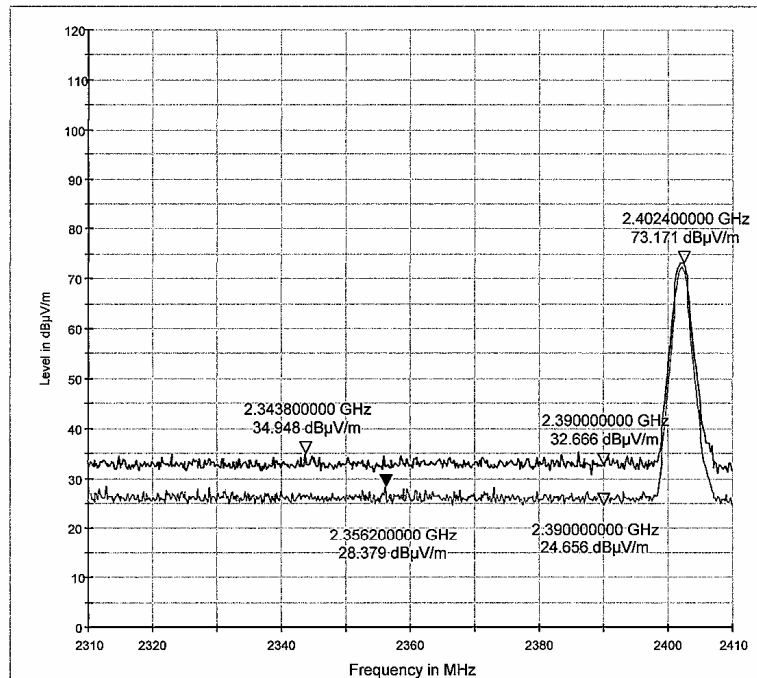
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)



#### Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx @ Low channel(EDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq:	DC 3.7V by li-ion battery
Receipt No:	163072045 100&300
Report No:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Vertical
Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 10/01/2011 - Time: 23:56:22

Tested by:  Reviewed by: 



## Test Plot of Radiated emissions in restricted bands, Mode A.3 – 8DPSK modulation, Vertical

TUV Rheinland (Guangdong) Ltd.

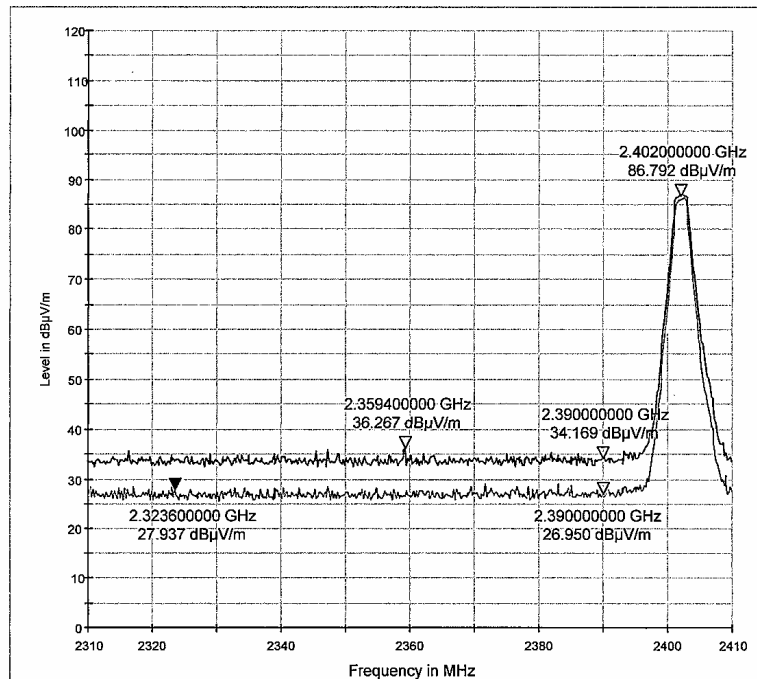
EMC Test Service Hotline: +86-20-28391188

### EMC Test Record (Emission)


#### Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth headset
Identification:	BTH002-KMA04
Test Standard:	FCC Part 15
Test Detail:	Band edge
Operation Mode:	Tx @ Low channel(EDR)
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage/ Freq:	DC 3.7V by li-ion battery
Receipt No:	163072045 100&300
Report No:	17019029 001
Result:	Pass
Comment:	Test distance is 3m, Horizontal
Subrange 1	
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 10/01/2011 - Time: 23:54:13

Tested by:  Reviewed by: 