

Prüfbericht - Nr.: 17019444 001 <i>Test Report No.:</i>			Seite 1 von 42 <i>Page 1 of 42</i>				
Auftraggeber: <i>Client:</i>			BLUETREK TECHNOLOGIES LTD. 8/F, Tai Yip Building 141 Thomson Road, Wanchai, Hong Kong				
Gegenstand der Prüfung: Bluetooth Stereo Headset <i>Test item:</i>							
Bezeichnung: <i>Identification:</i>		BLUETREK MusiCALL		Serien-Nr.: n.a. <i>Serial No.:</i>			
Wareneingangs-Nr.: <i>Receipt No.:</i>		163073422		Eingangsdatum: 2011-01-25 <i>Date of receipt:</i>			
Prüfart: <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					
Prüfgrundlage: <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					
Prüfergebnis: <i>Test Result:</i>		Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>					
Prüflaboratorium: <i>Testing Laboratory:</i>		TÜV Rheinland (Shenzhen) Co., Ltd.					
geprüft/ tested by:			kontrolliert/ reviewed by:				
 2011-03-15 Winnie Hou/Project Engineer			 2011-03-29 Shawn Peng/Manager				
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</i>		
Sonstiges/ Other Aspects:							
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Abkürzungen: P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar NIT = nicht getestet </td> <td style="width: 50%; vertical-align: top;"> Abbreviations: P(ass) = passed F(ail) = failed N/A = not applicable NIT = not tested </td> </tr> </table>						Abkürzungen: P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar NIT = nicht getestet	Abbreviations: P(ass) = passed F(ail) = failed N/A = not applicable NIT = not tested
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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. <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

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1. General Remarks

1.1 Complementary Materials

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

Appendix 1: Test Result 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
Spurious emission and Radiated emission				
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
Radio Test Suite				
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.

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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:	BLUETREK MusiCALL
FCC ID	QITC5RM

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	0.0028W (4.53dBm)

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	Example of a 79 hopping sequence in data mode: 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,
Receiver input bandwidth	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. 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. 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. That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

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

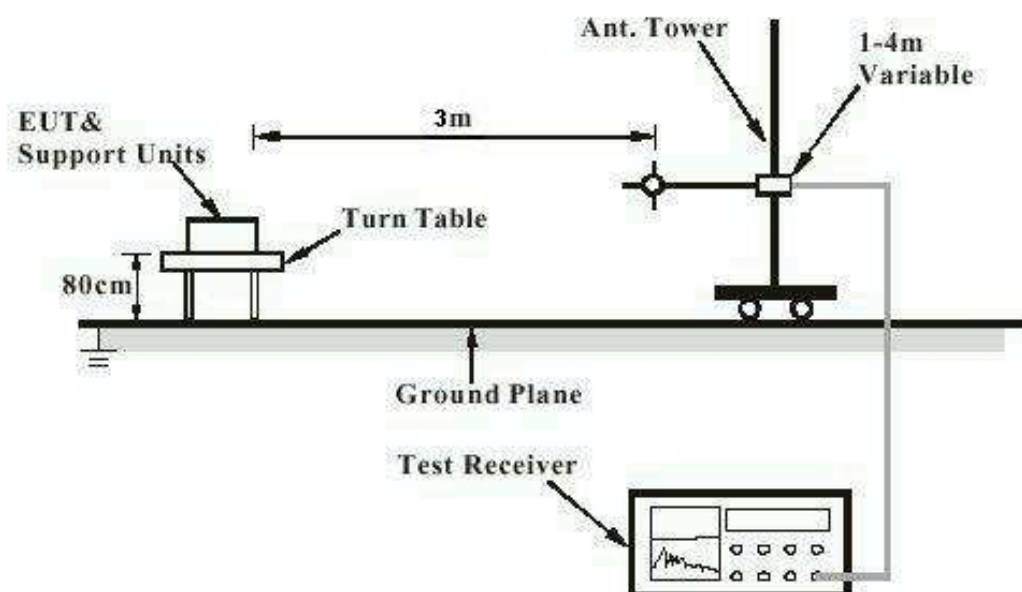


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

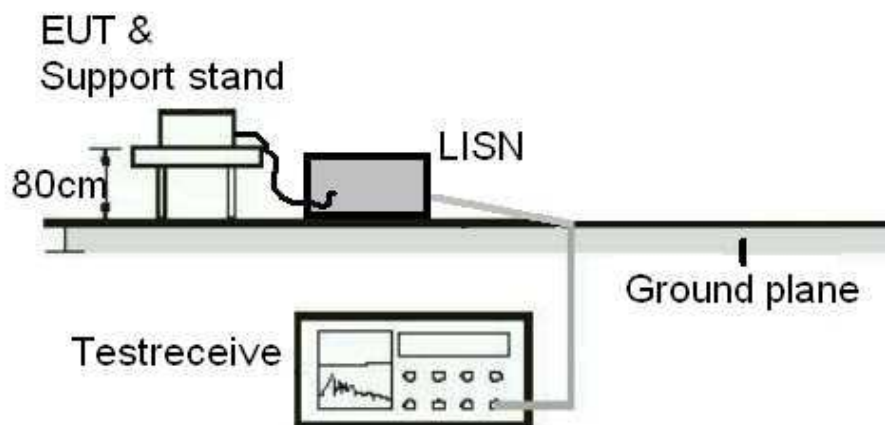
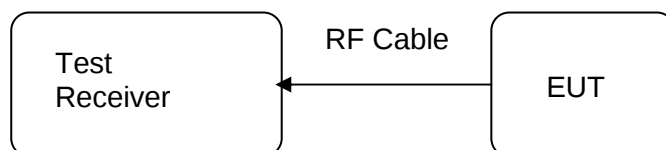


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test date	:	2011-02-15
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 : 2010-02-22
 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
		(dBm)	(W)	(W)
Low Channel	2402	3.84	0.00242	1
Middle Channel	2441	4.53	0.00284	1
High Channel	2480	3.76	0.00238	1

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

Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2402	2.10	0.00162	1
Middle Channel	2441	2.96	0.00198	1
High Channel	2480	2.28	0.00169	1

5.1.3 20dB Bandwidth

RESULT:
Passed

Date of testing : 2010-02-22
 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

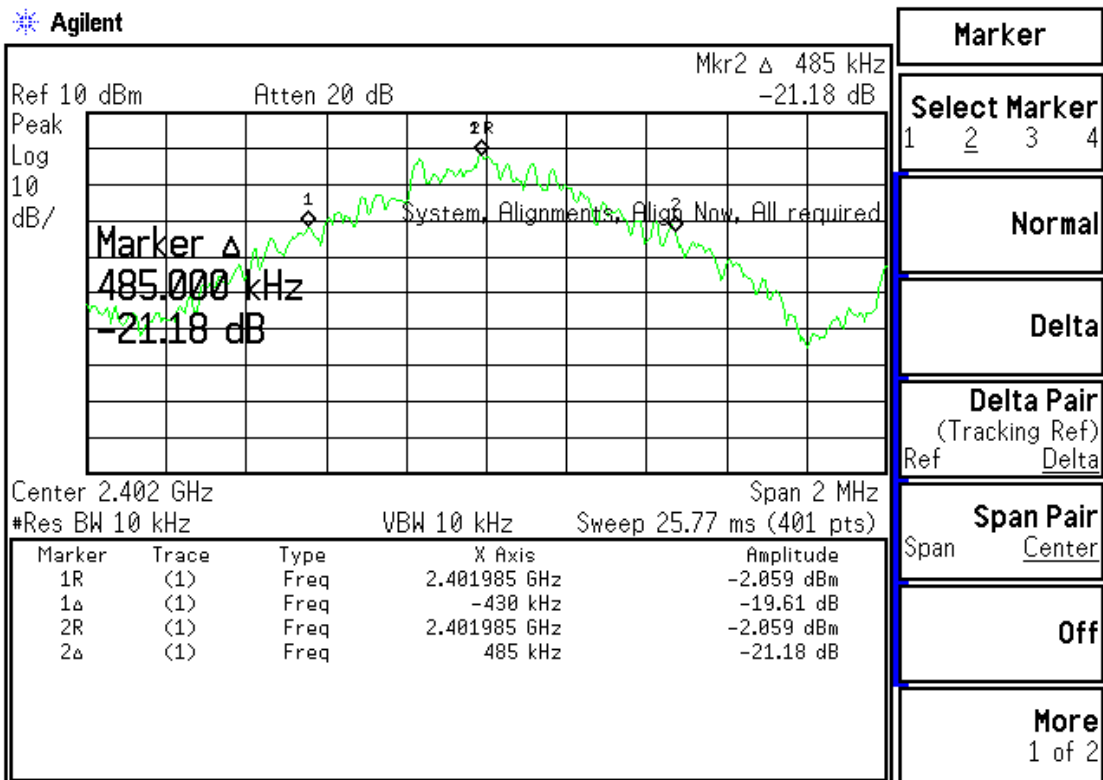
Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	915	/	Pass
Mid Channel	2441	915	/	Pass
High Channel	2480	865	/	Pass

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

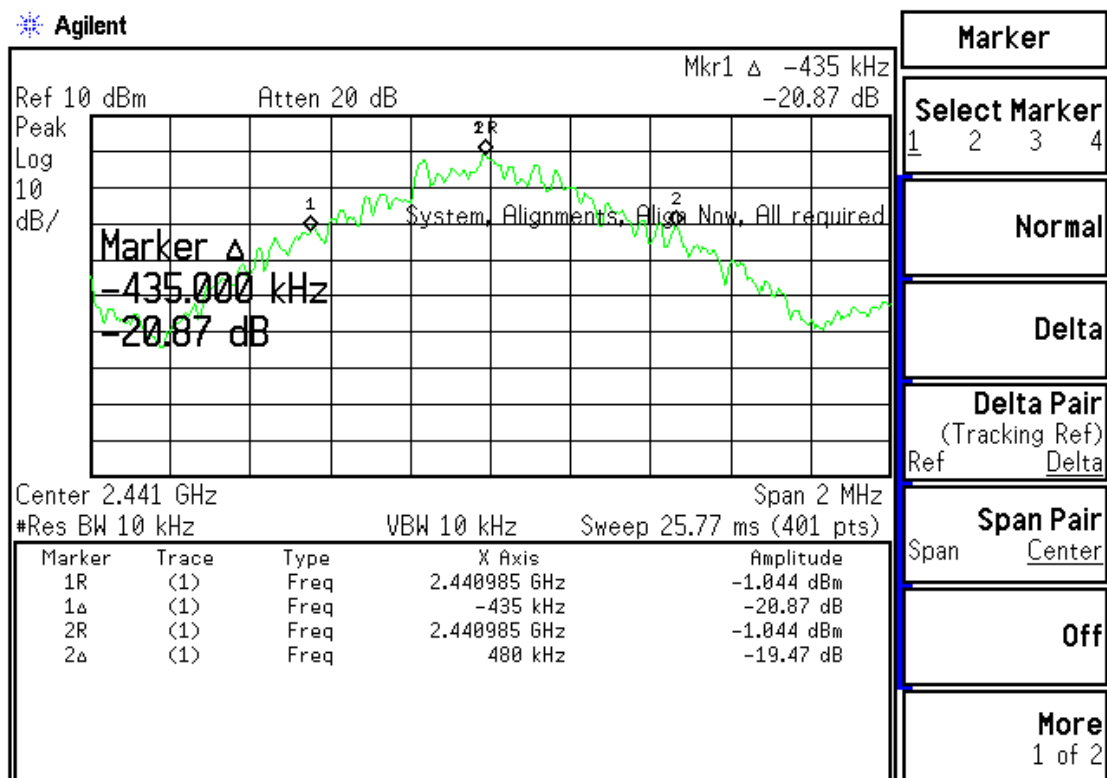
Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Result
Low Channel	2402	1.27	/	Pass
Mid Channel	2441	1.30	/	Pass
High Channel	2480	1.30	/	Pass

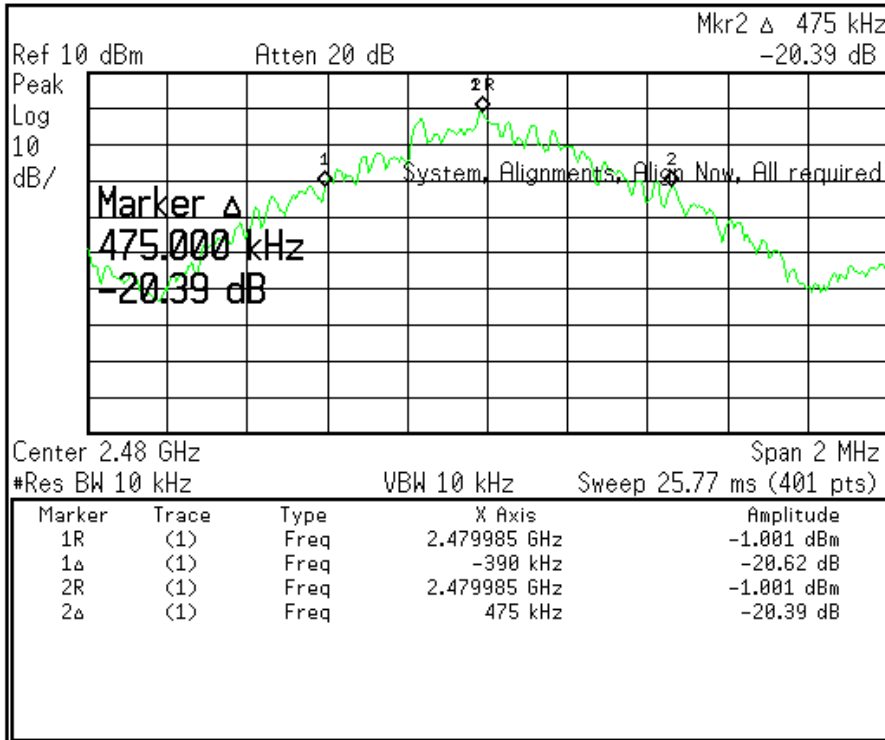
Test Plot of 20dB Bandwidth, GFSK modulation

Low Channel



Middle Channel



High Channel
 Agilent

Marker
Select Marker

1 2 3 4

Normal
Delta
Delta Pair

(Tracking Ref)

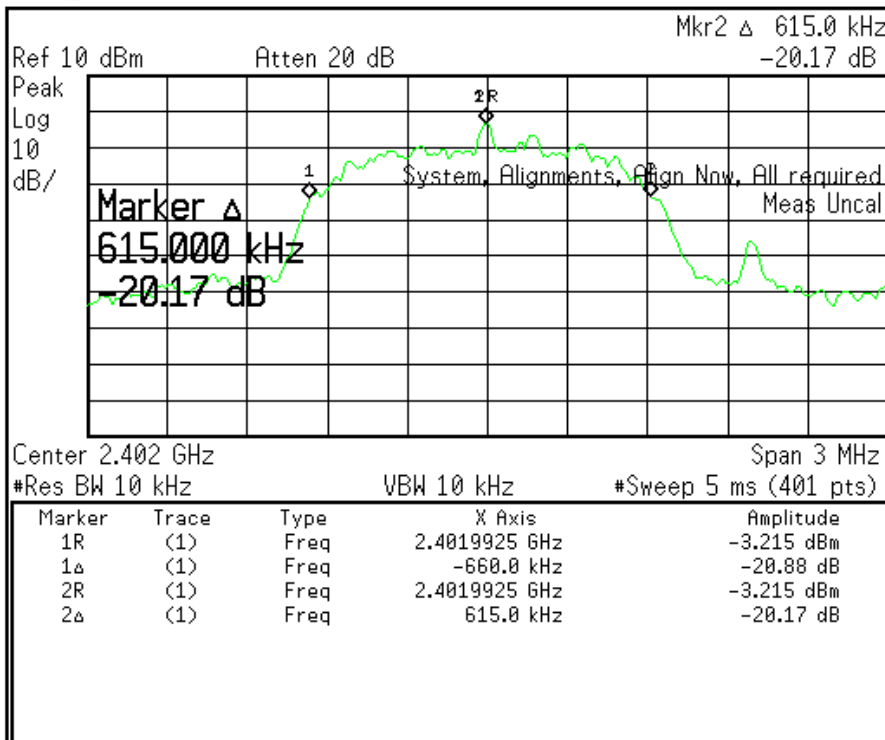
Ref Delta

Span Pair

Span Center

Off
More

1 of 2

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

Marker
Select Marker

1 2 3 4

Normal
Delta
Delta Pair

(Tracking Ref)

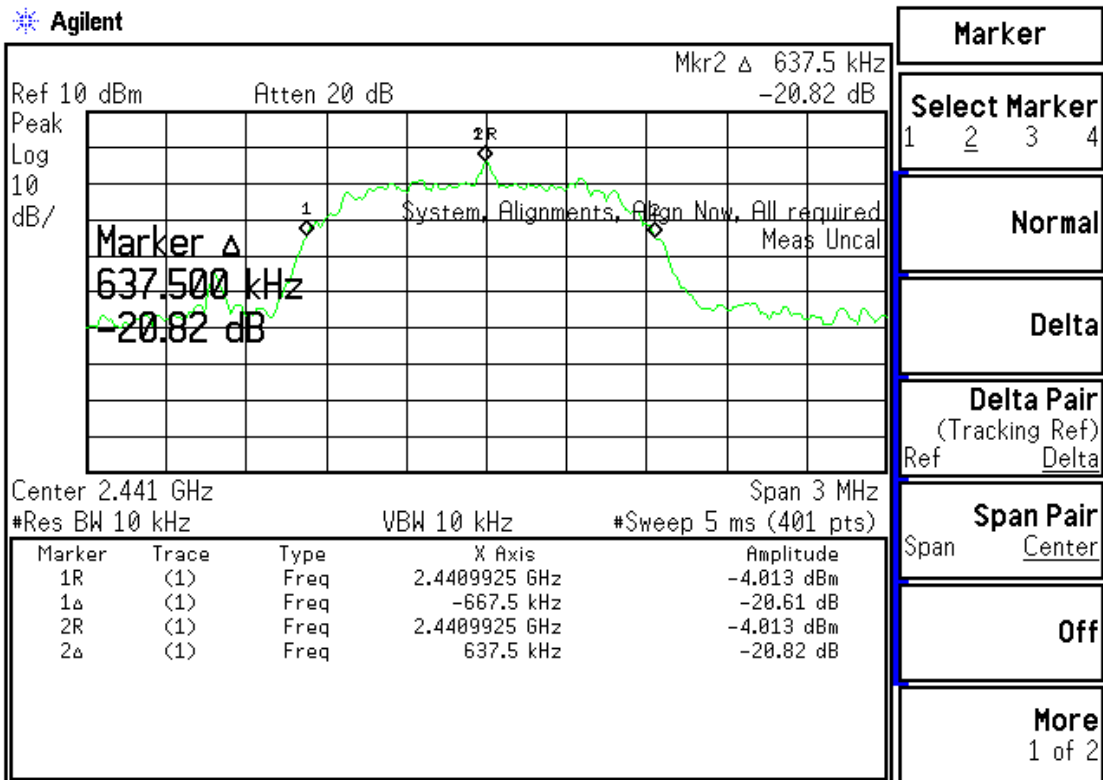
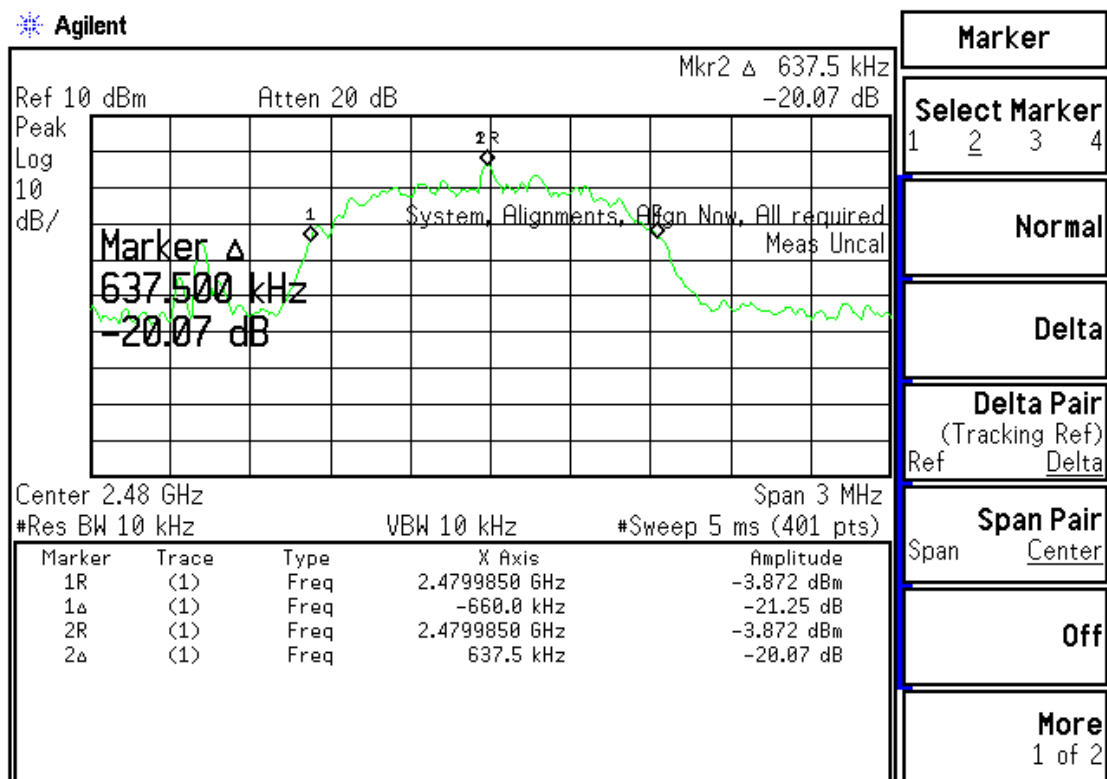
Ref Delta

Span Pair

Span Center

Off
More

1 of 2

Middle Channel

High Channel


5.1.4 Conducted spurious emissions measured in 100kHz Bandwidth

RESULT:**Passed**

Date of testing	:	2011-02-22
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

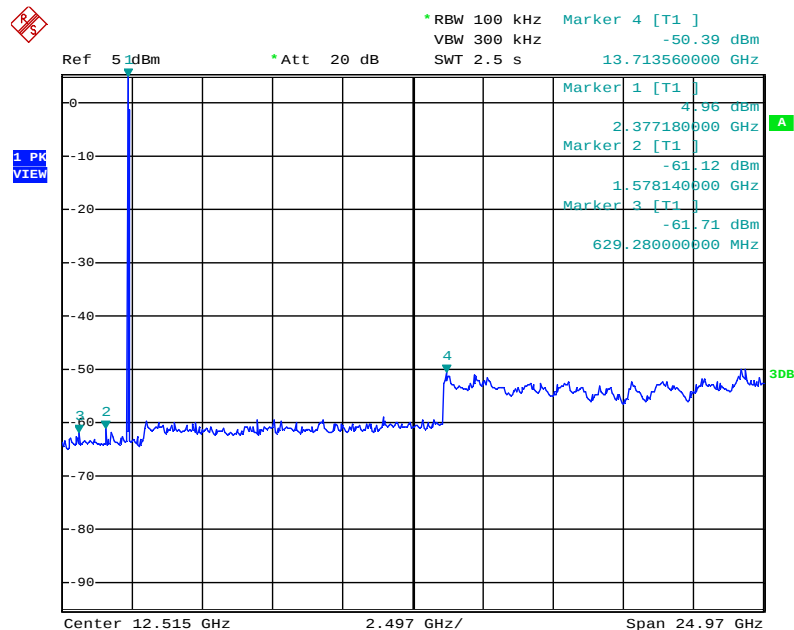
Test setup

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.

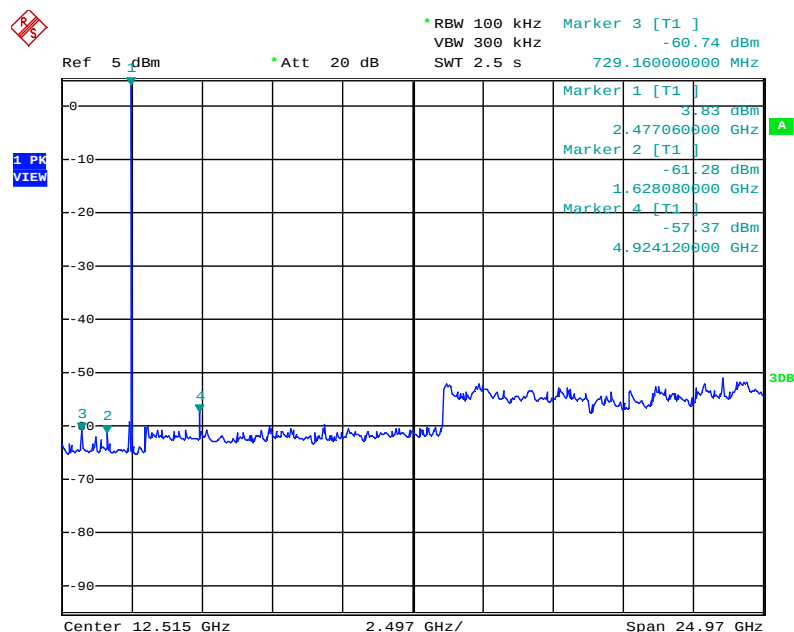
Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

Low Channel



Date: 22.FEB.2011 07:19:10

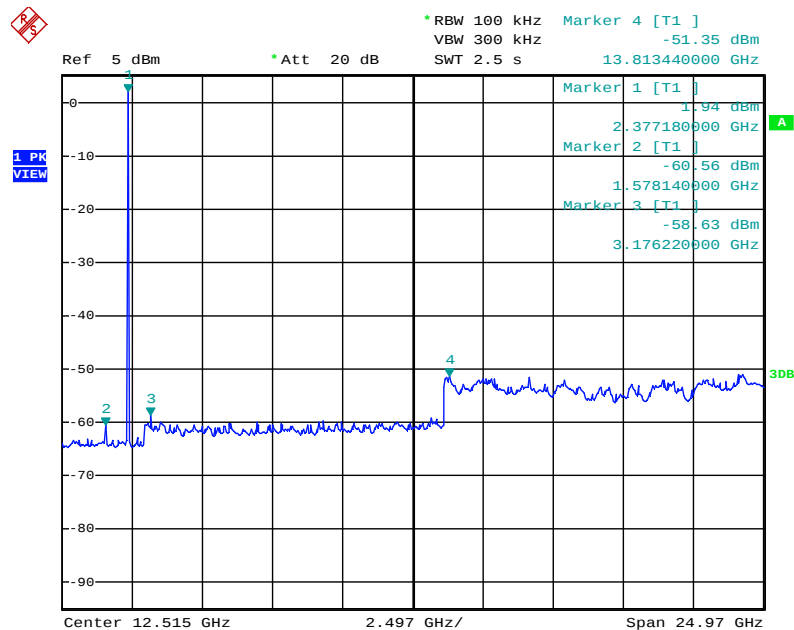
High Channel



Date: 22.FEB.2011 07:15:43

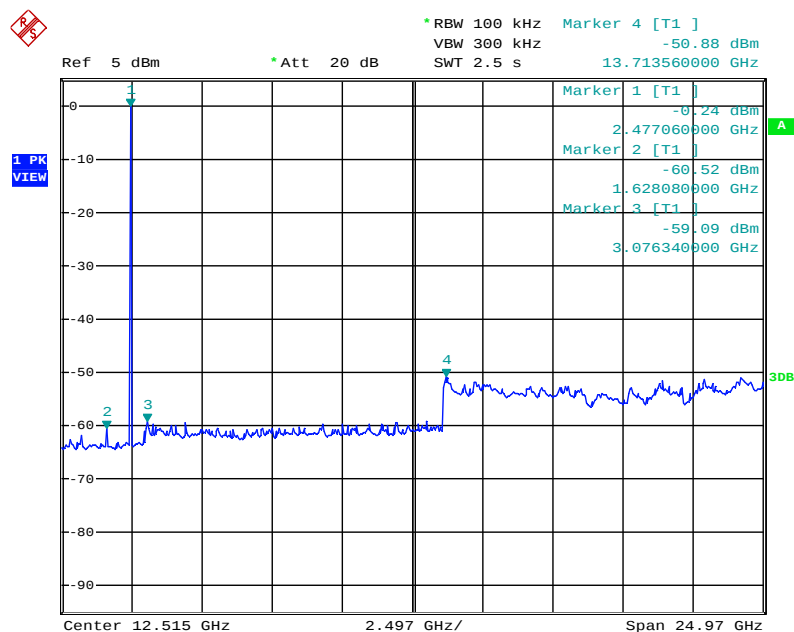
Test Plot of 100kHz Bandwidth of Frequency Band Edge, 8DPSK modulation

Low Channel



Date: 22.FEB.2011 07:08:45

High Channel



Date: 22.FEB.2011 07:12:59

5.1.5 Spurious Emission

RESULT:**Passed**

Date of testing	:	2011-02-15 to 2011-02-24
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 : 2011-02-22
 Test standard : FCC part 15.247(a)(1)
 Basic standard : ANSI C63.4: 2003
 Limit : $\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth, whichever is greater

Test setup

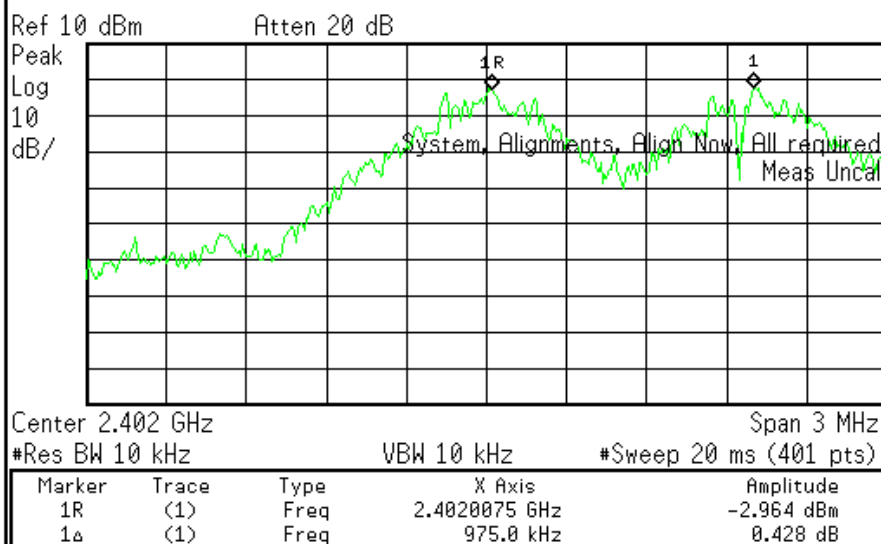
Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 22°C
 Relative humidity : 52%
 Atmospheric pressure : 101 kPa

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 20dB bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2442			
High Channel	2480	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2479			

Test Plot of Frequency Separation

Low Channel

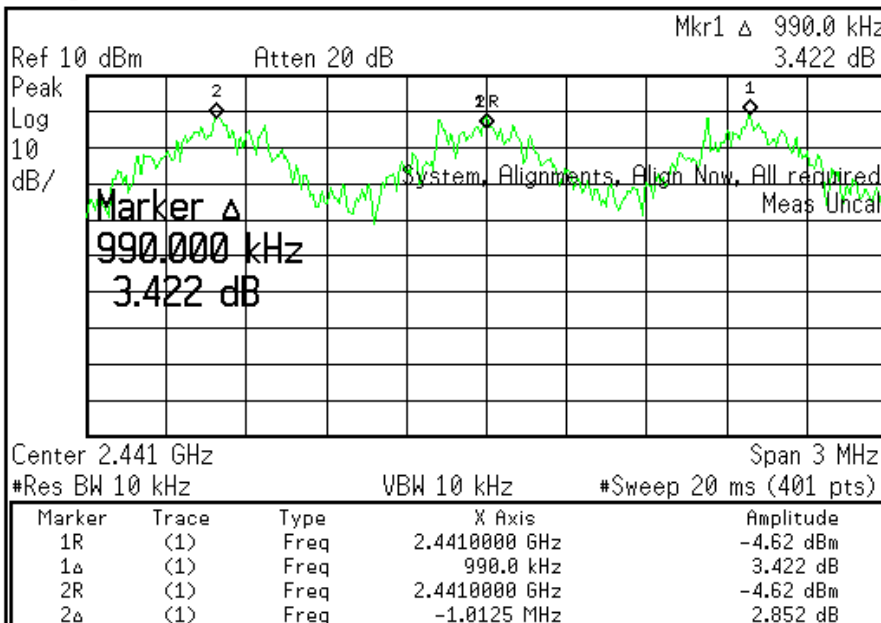
 Agilent

Marker
Select Marker
 1 2 3 4

Normal
Delta
Delta Pair
 (Tracking Ref)
 Ref Delta

Span Pair
 Span Center

Off
More
 1 of 2

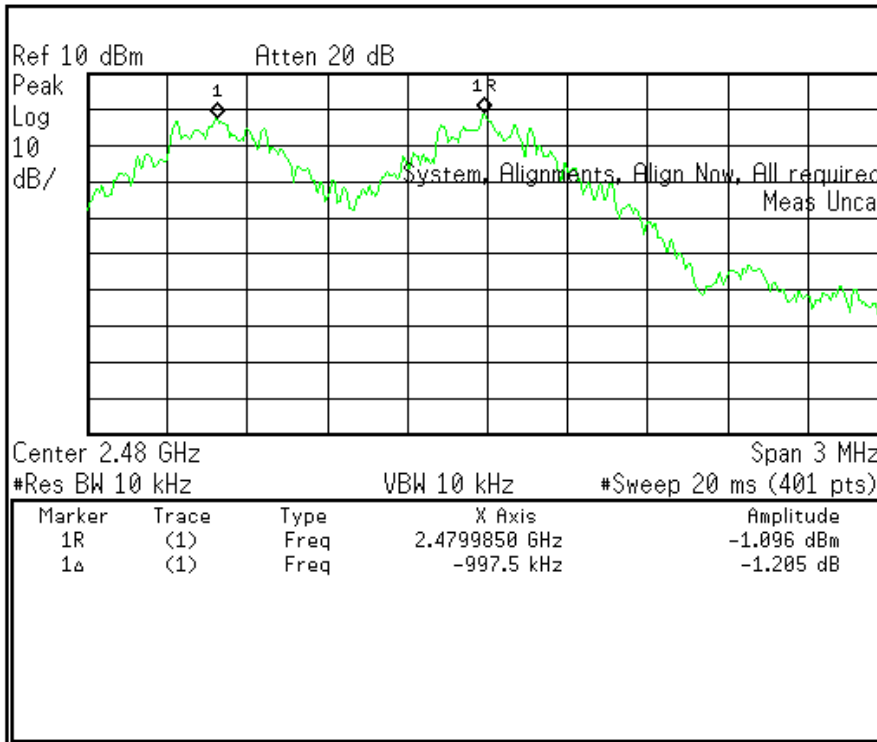
Middle Channel

 Agilent

Marker
Select Marker
 1 2 3 4

Normal
Delta
Delta Pair
 (Tracking Ref)
 Ref Delta

Span Pair
 Span Center

Off
More
 1 of 2

High Channel
 **Agilent**

Marker
Select Marker

1 2 3 4

Normal
Delta
Delta Pair

(Tracking Ref)

Ref Delta

Span Pair

Span Center

Off
More

1 of 2

5.1.7 Number of hopping frequency

RESULT:**Passed**

Date of testing : 2011-02-22
Test standard : FCC part 15.247(a)(1)(iii)
Basic standard : ANSI C63.4: 2003
Limits : ≥ 15 non-overlapping channels
Kind of test site : Shield room

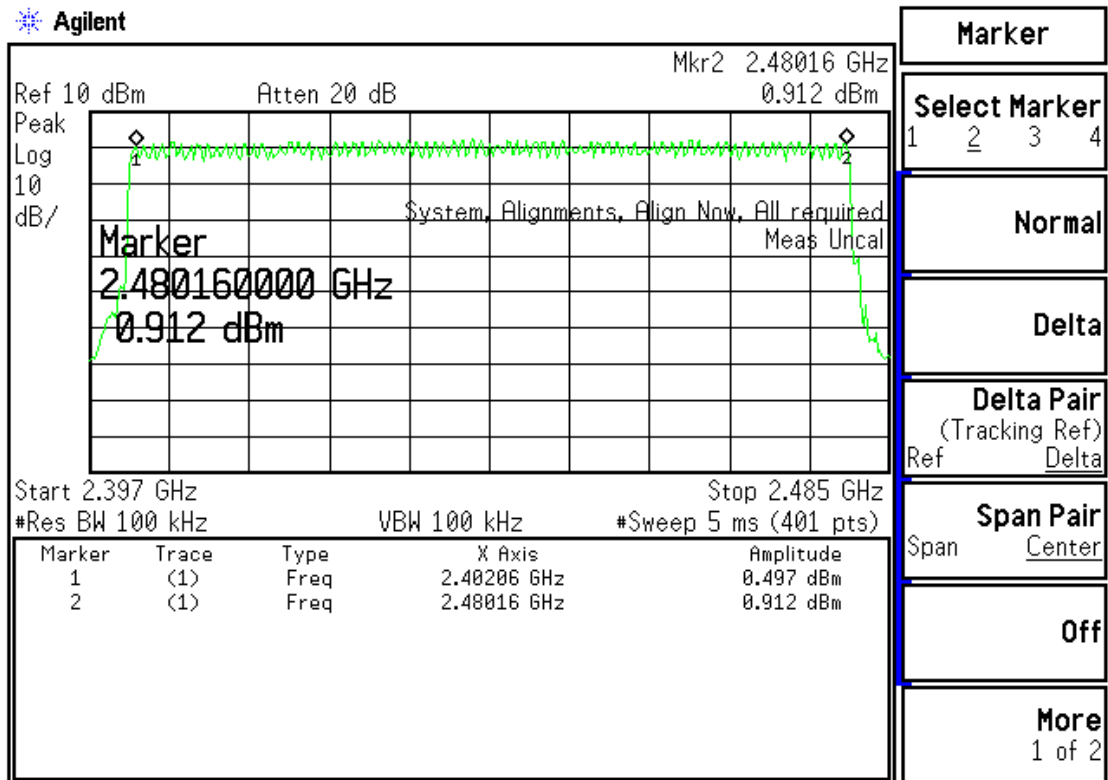
Test setup

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	≥ 15	Pass

Test Plot of Number of hopping frequencies



5.1.8 Time of Occupancy

RESULT:
Passed

Date of testing : 2011-02-22
 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	0.530	0.170	0.4	Pass
	DH3	1.587	0.254	0.4	Pass
	DH5	3.075	0.328	0.4	Pass
Mid Channel	DH1	0.540	0.173	0.4	Pass
	DH3	1.562	0.250	0.4	Pass
	DH5	3.075	0.328	0.4	Pass
High Channel	DH1	0.540	0.173	0.4	Pass
	DH3	1.575	0.252	0.4	Pass
	DH5	3.100	0.331	0.4	Pass

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

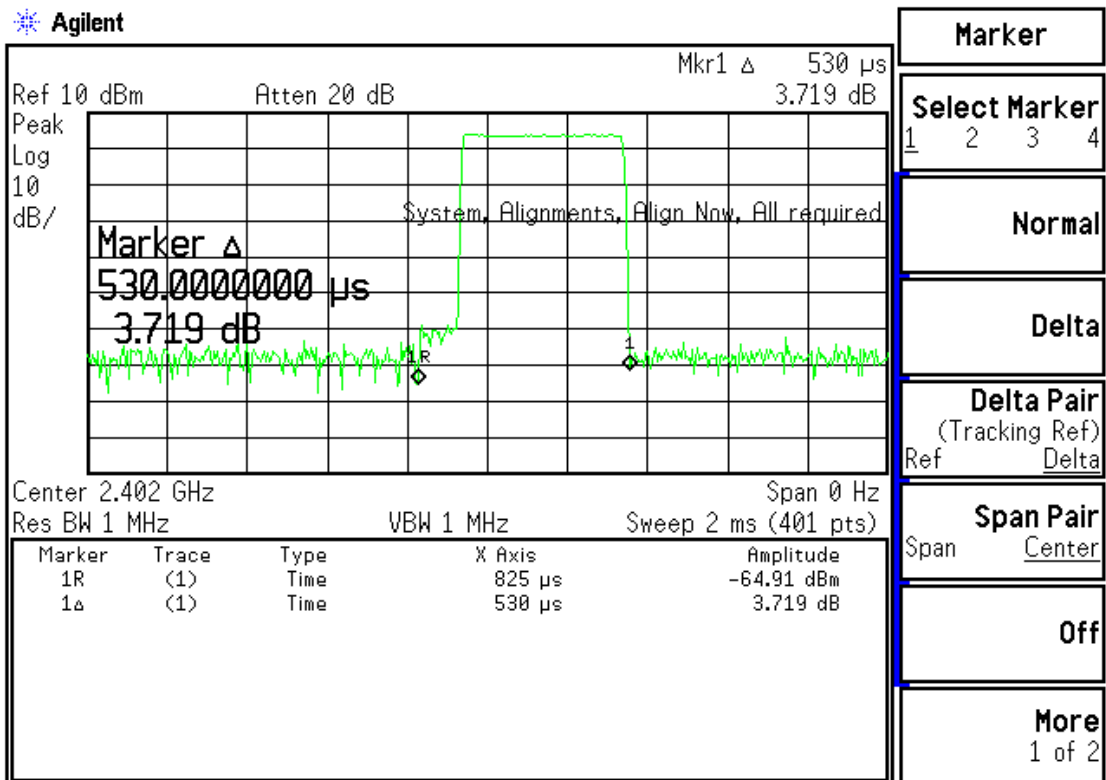
Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.555	0.178	0.4	Pass
	DH3	1.825	0.292	0.4	Pass
	DH5	3.100	0.331	0.4	Pass
Mid Channel	DH1	0.555	0.178	0.4	Pass
	DH3	1.850	0.296	0.4	Pass
	DH5	3.075	0.328	0.4	Pass
High Channel	DH1	0.555	0.178	0.4	Pass
	DH3	1.812	0.290	0.4	Pass
	DH5	3.150	0.336	0.4	Pass

Note:

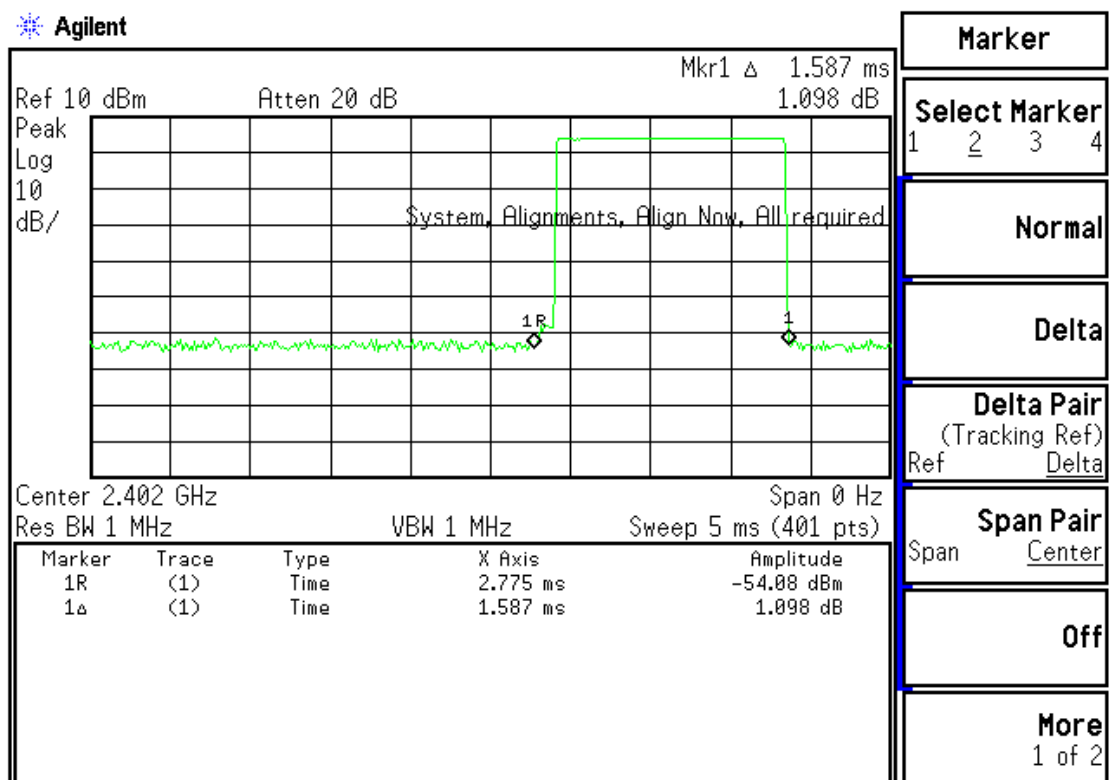
$$\text{Dwell time} = \text{Pulse width} \times (\text{Hopping rate} / \text{Number of channels}) \times \text{Period}$$
$$\text{Period} = 0.4 \text{ (seconds/ channel)} \times 79 \text{ (channel)} = 31.6 \text{ seconds}$$

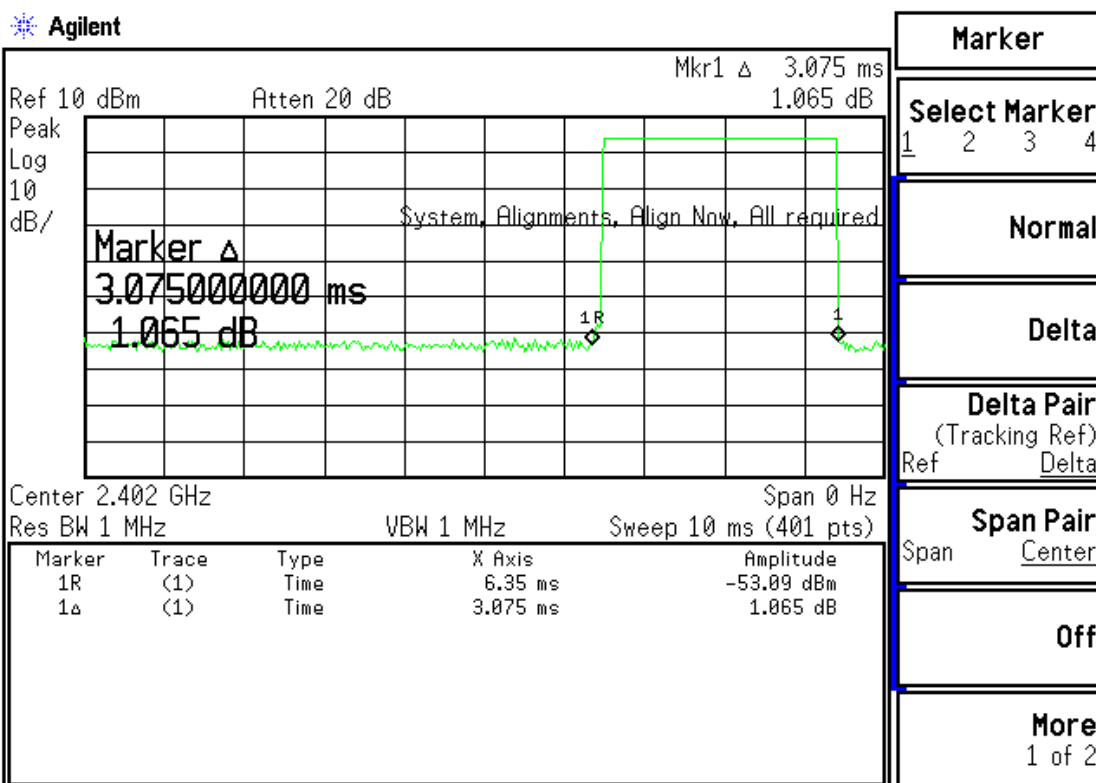
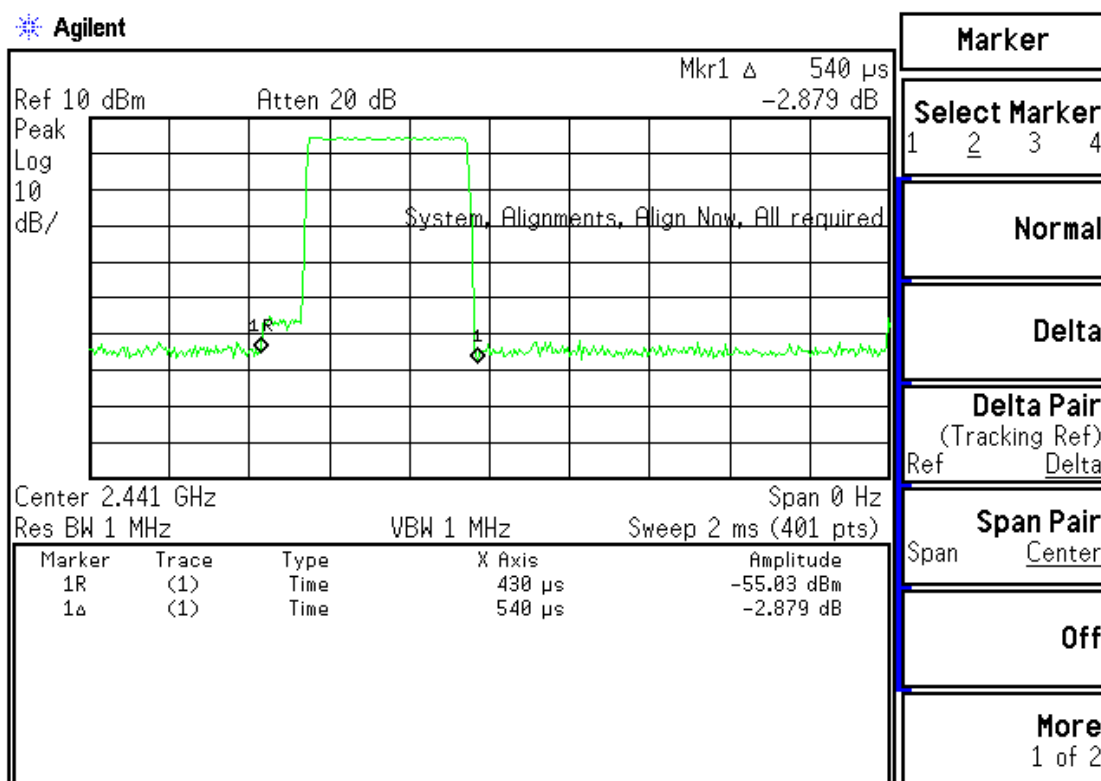
Test Plot of Time of Occupancy, GFSK modulation

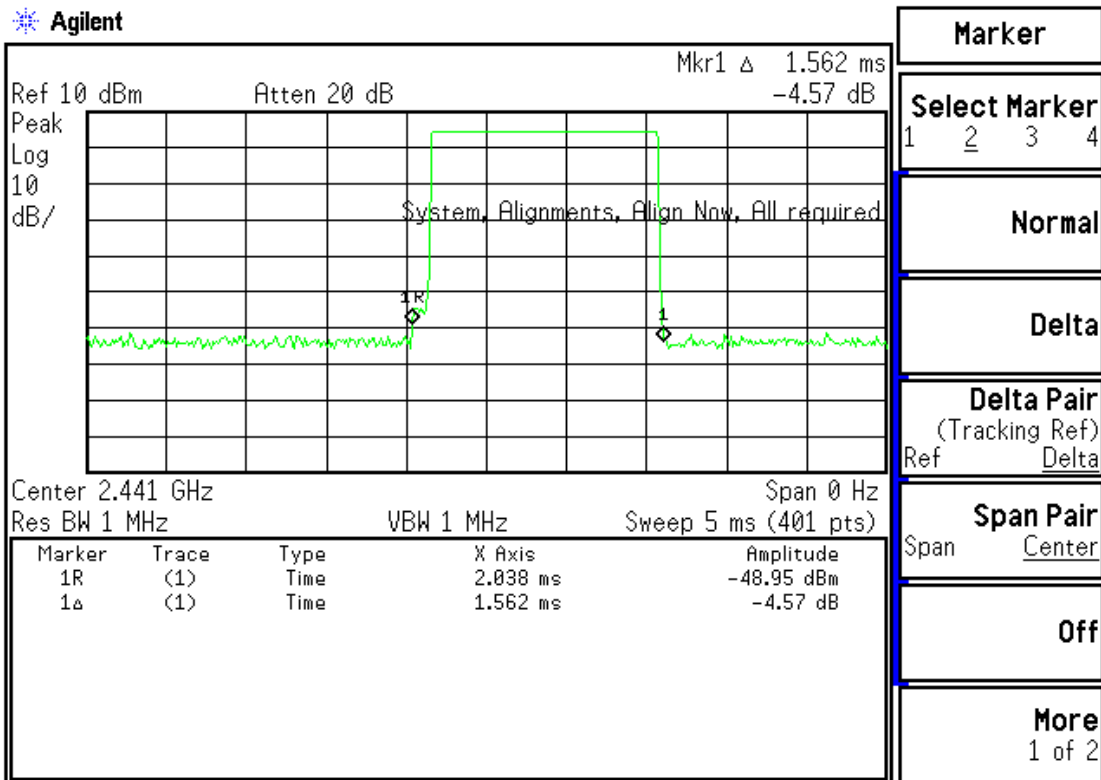
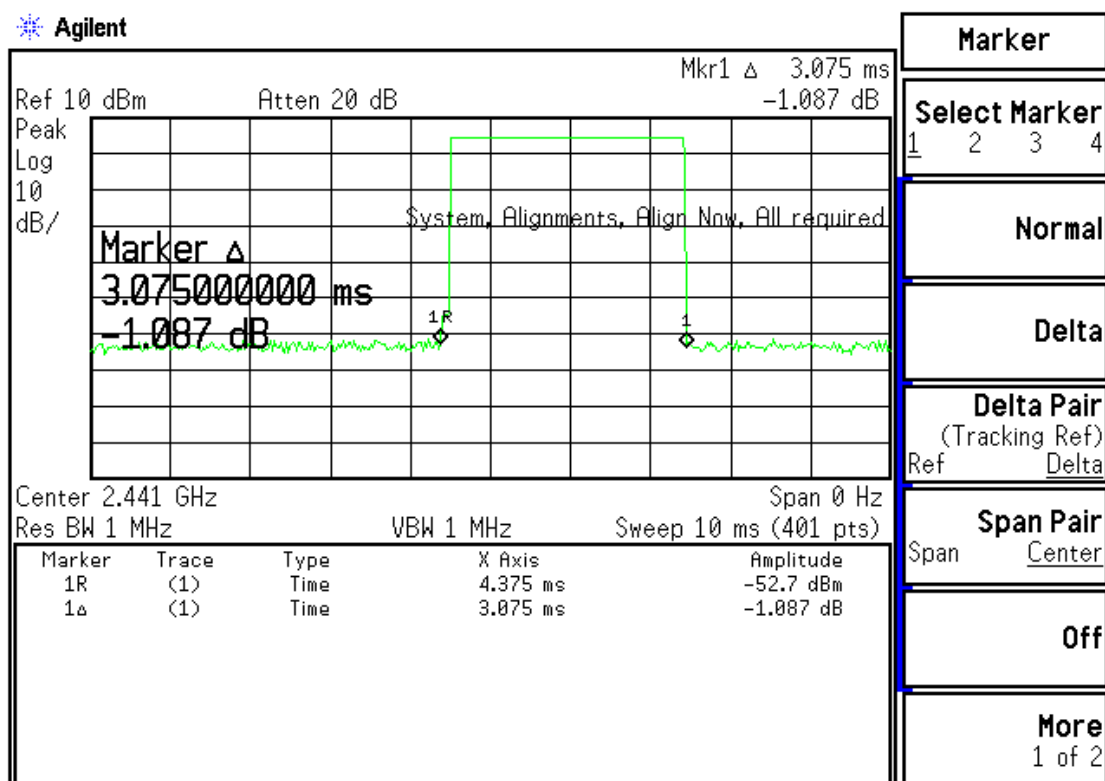
Low Channel- DH1

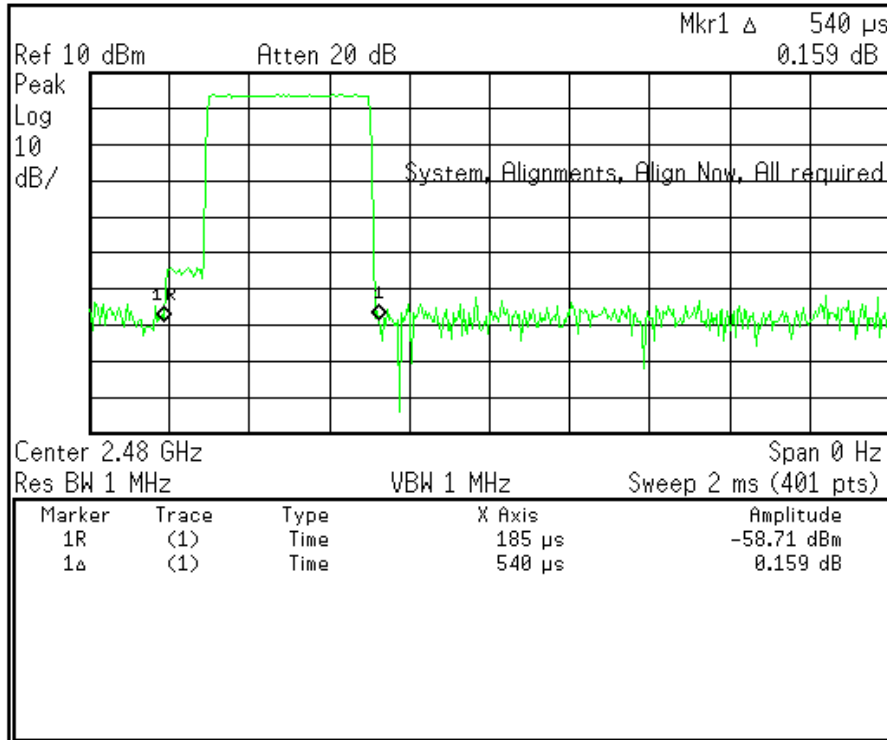


Low Channel- DH3



Low Channel- DH5

Middle Channel- DH1


Middle Channel- DH3

Middle Channel- DH5


High Channel- DH1
 Agilent

Marker
Select Marker

1 2 3 4

Normal
Delta
Delta Pair

(Tracking Ref)

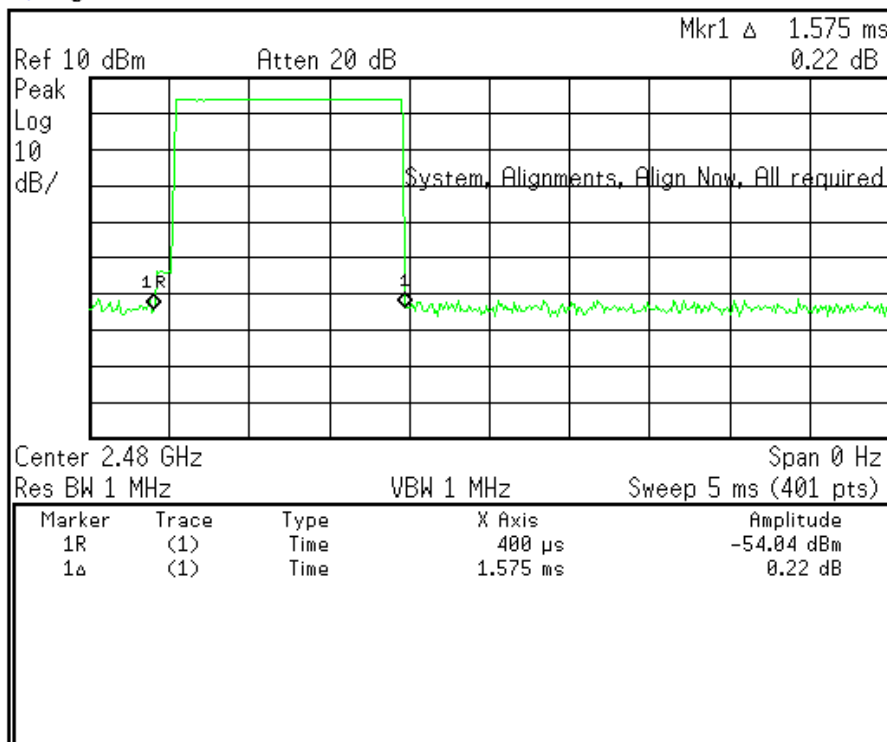
Ref Delta

Span Pair

Span Center

Off
More

1 of 2

High Channel- DH3
 Agilent

Marker
Select Marker

1 2 3 4

Normal
Delta
Delta Pair

(Tracking Ref)

Ref Delta

Span Pair

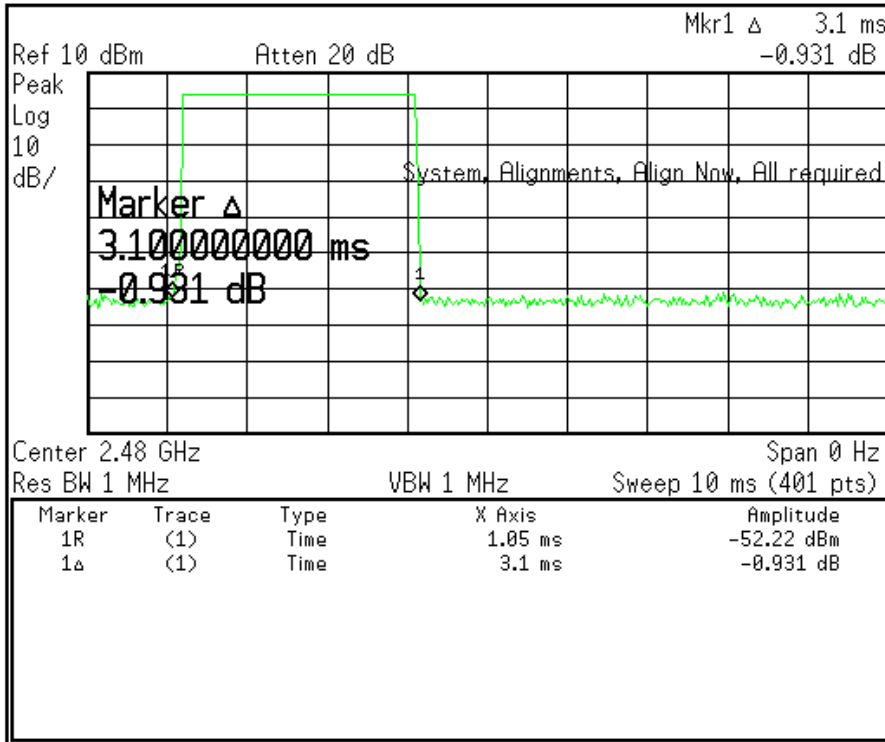
Span Center

Off
More

1 of 2

High Channel- DH5

Agilent



Marker

Select Marker
1 2 3 4

Normal

Delta

Delta Pair
(Tracking Ref)
Ref Delta

Span Pair
Span Center

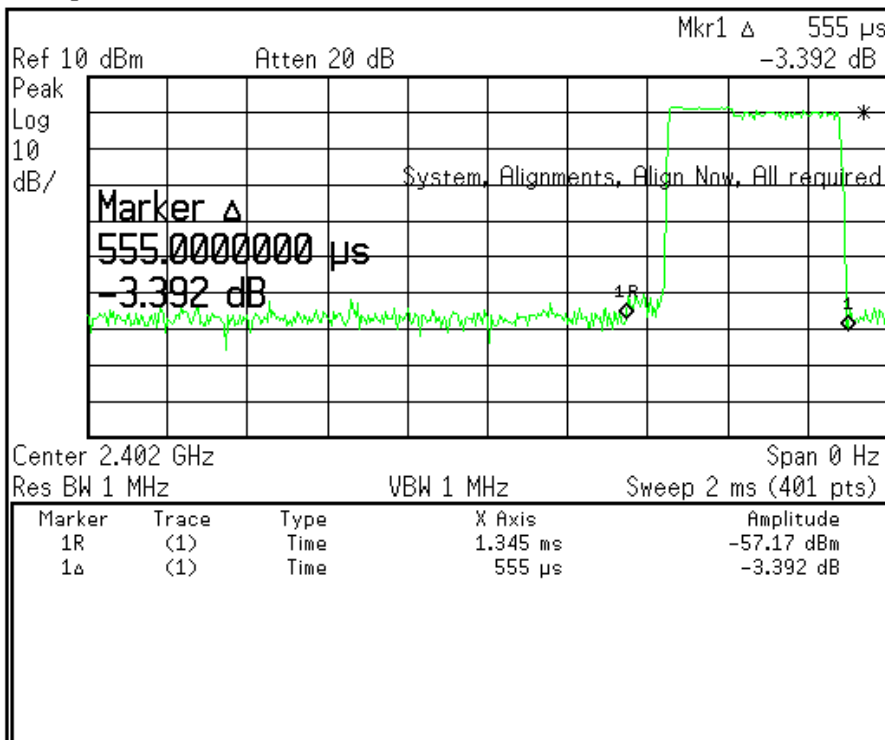
Off

More
1 of 2

Test Plot of Time of Occupancy, 8DPSK modulation

Low Channel- DH1

Agilent



Marker

Select Marker
1 2 3 4

Normal

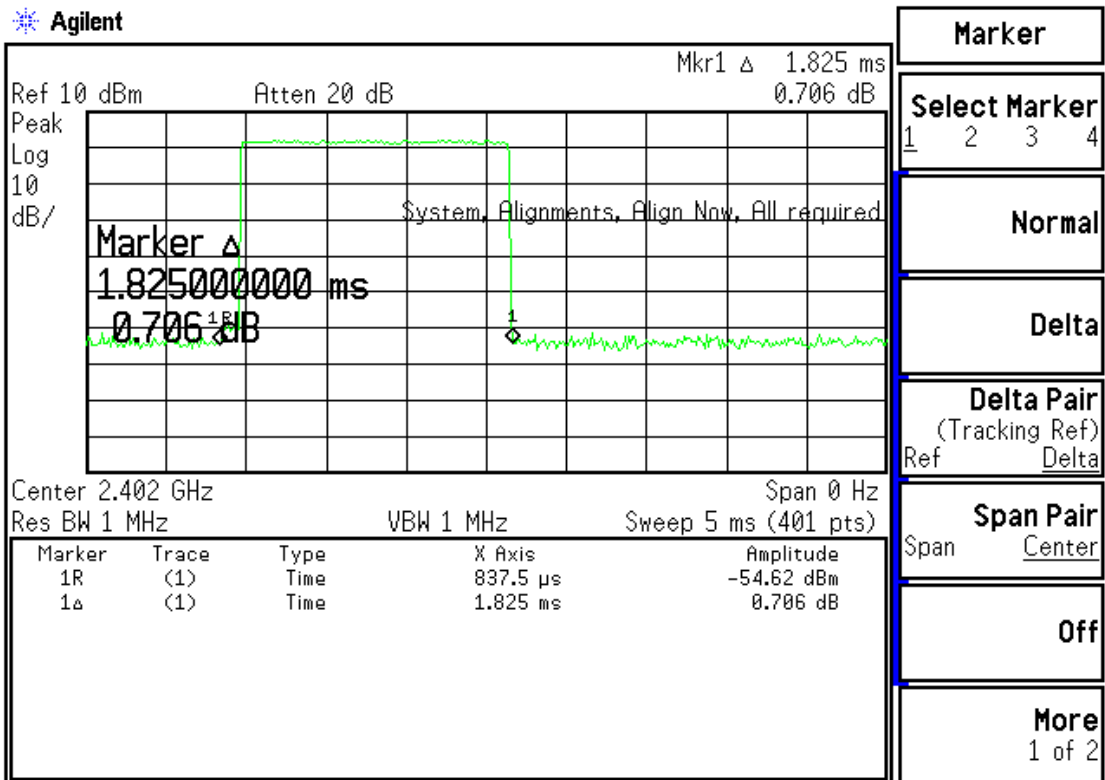
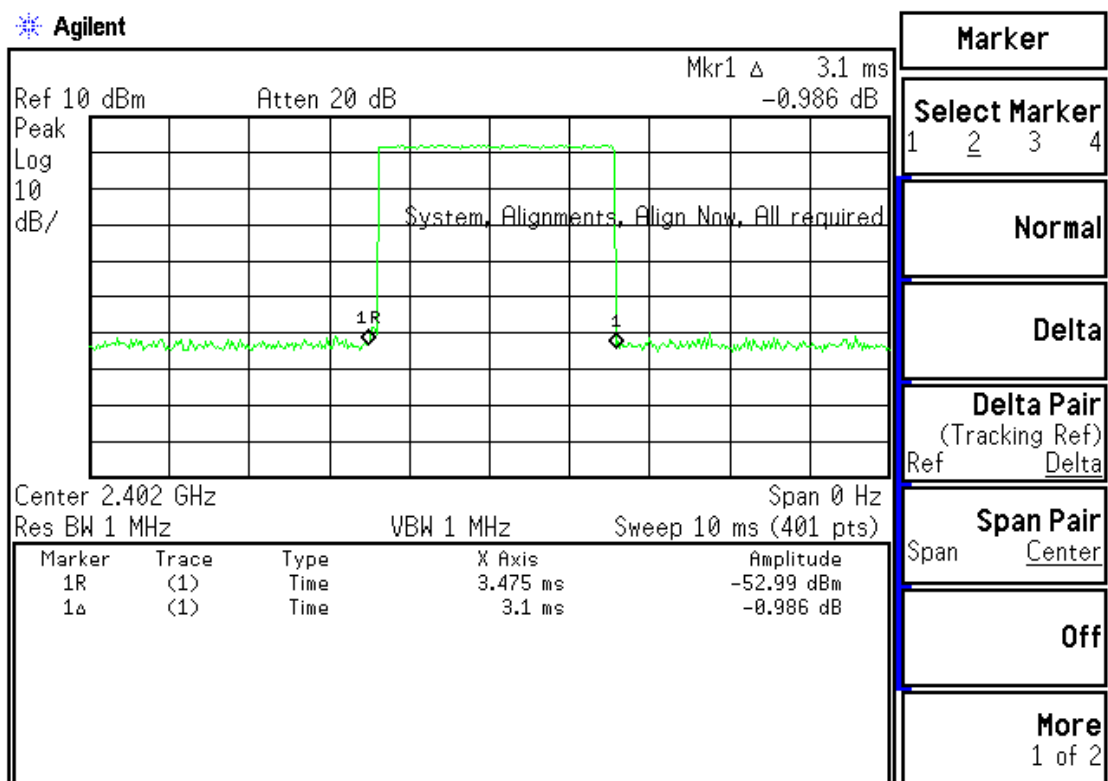
Delta

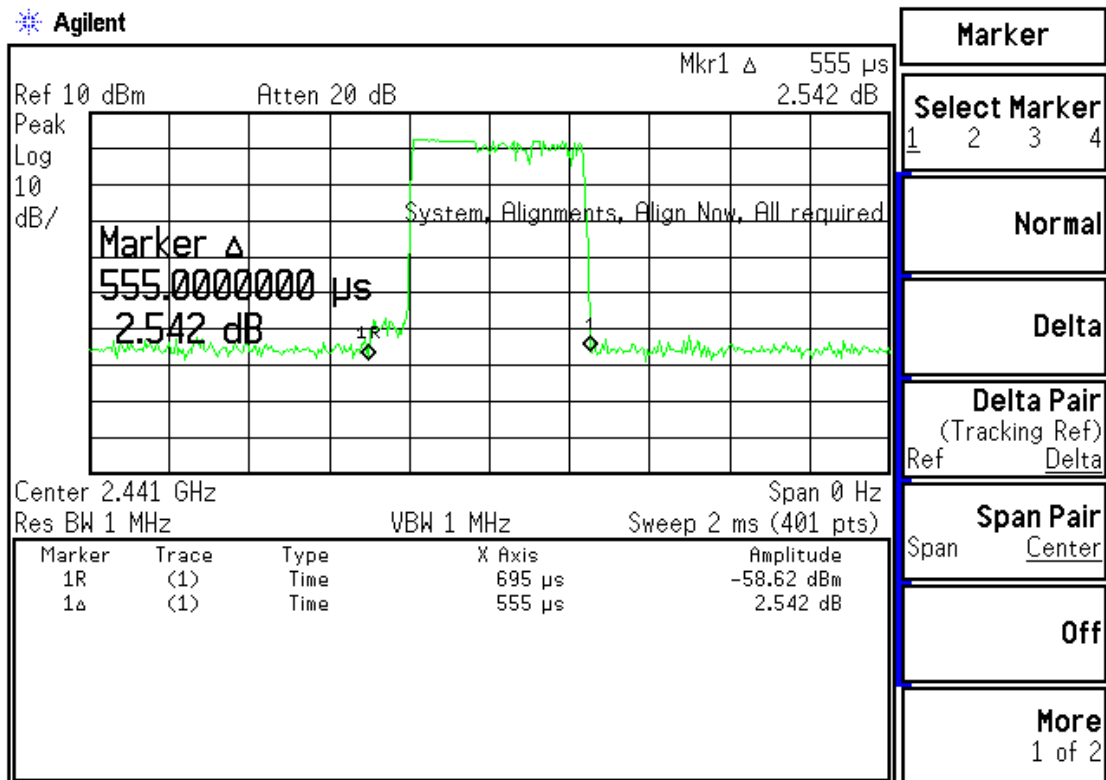
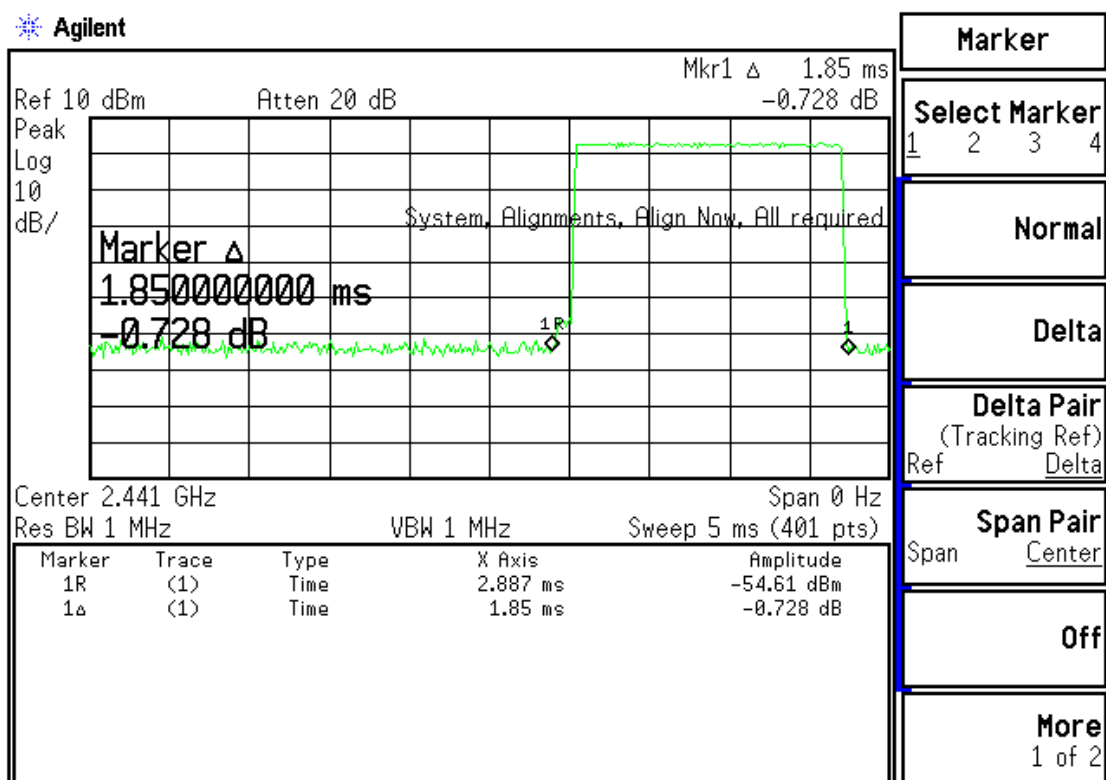
Delta Pair
(Tracking Ref)
Ref Delta

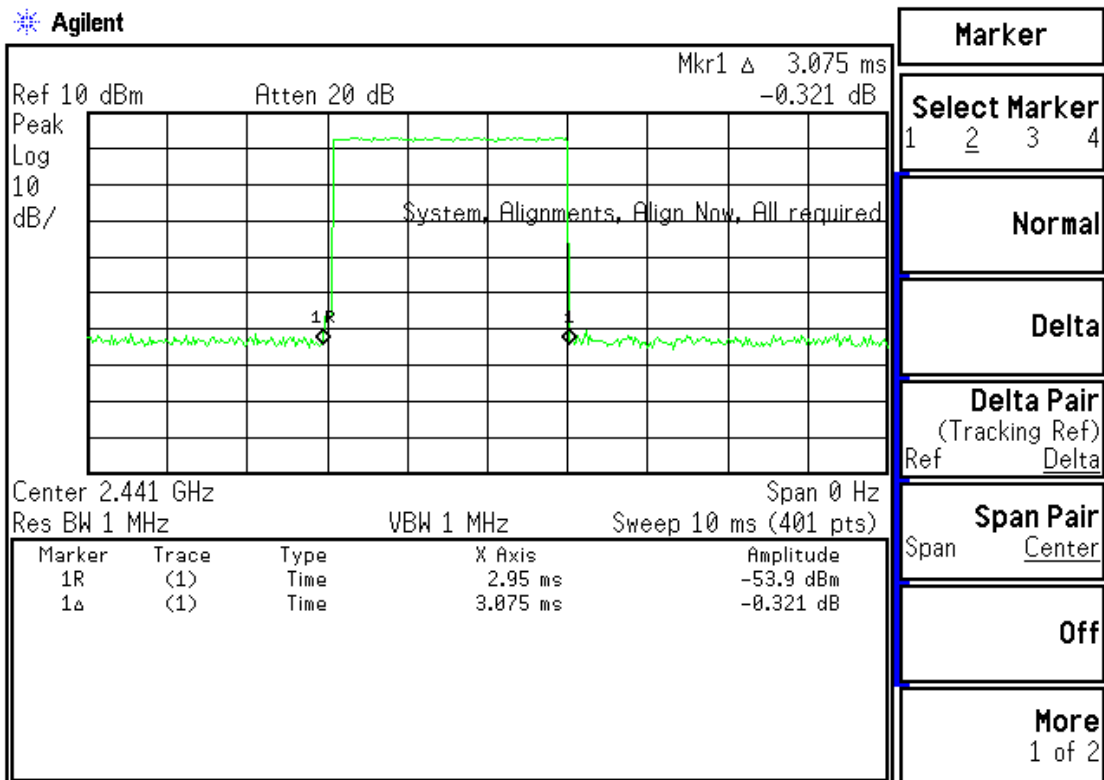
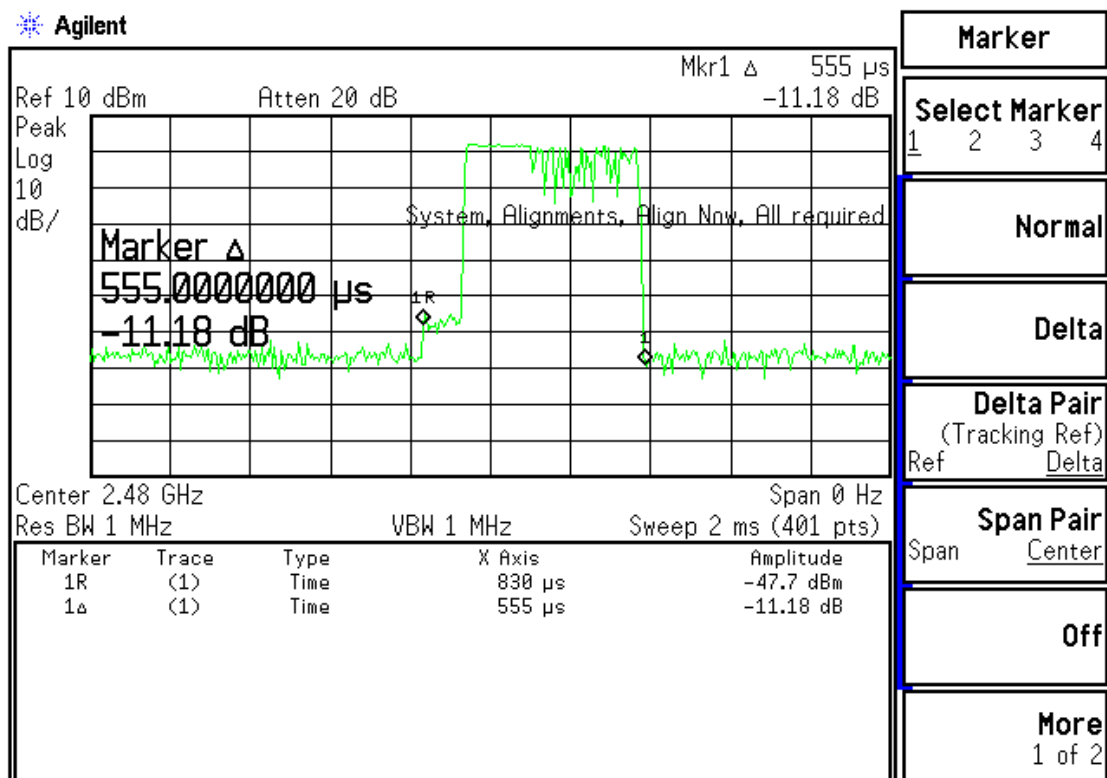
Span Pair
Span Center

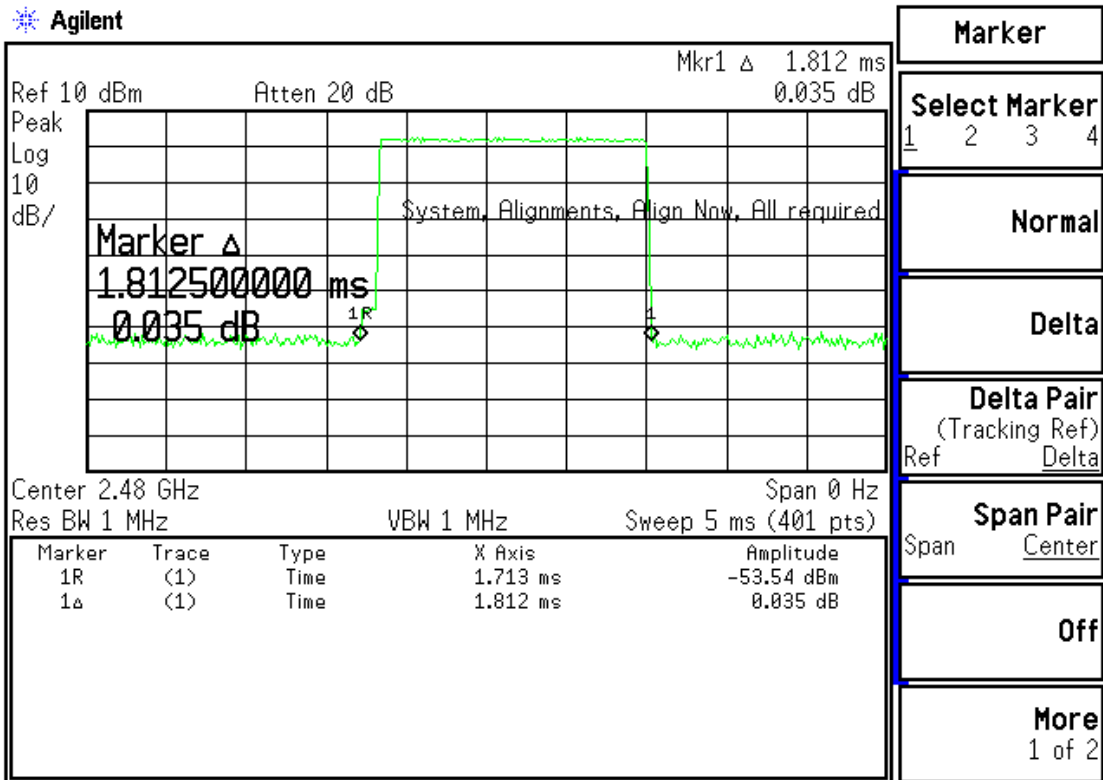
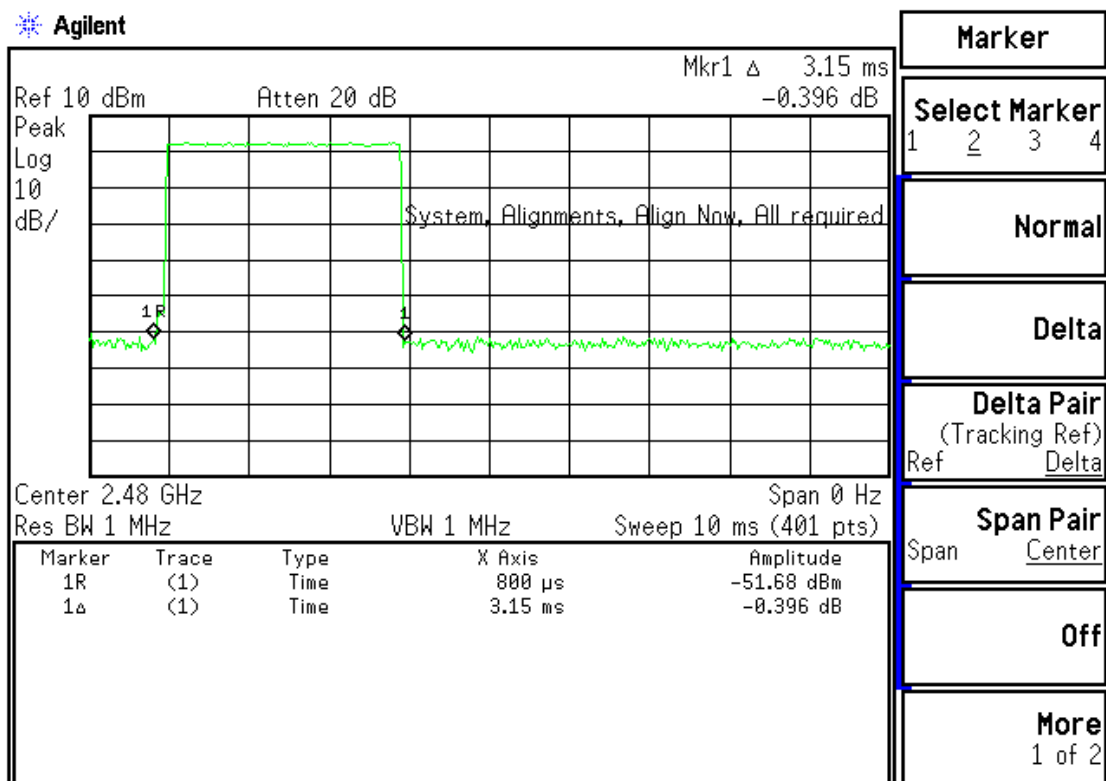
Off

More
1 of 2

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.
 $0.0028\text{mW} < 25(=60/2.4)\text{mW}$, 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

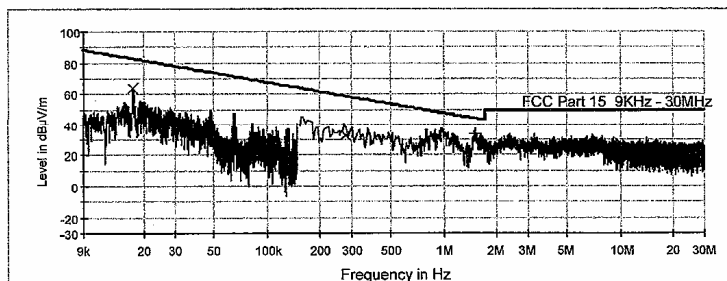
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBuV/m)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
0.017320	---	63.3	20.7	---	---	H
0.278000	---	32.9	20.9	---	---	H
1.518000	33.9	---	20.2	10.1	44.0	H
6.930000	28.0	---	21.9	21.5	49.5	H

Date: 24/02/2011 - Time: 22:41:11

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

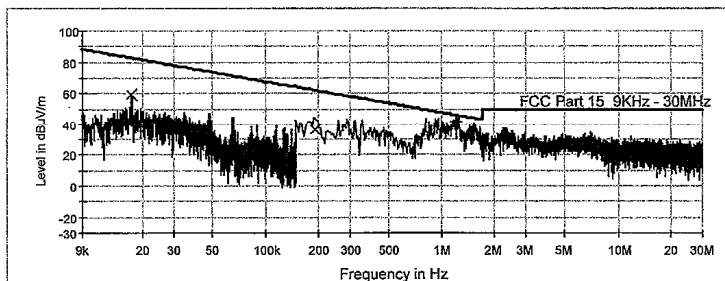
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	---	59.5	20.7	---	---	V
0.190000	---	36.6	20.8	---	---	V
1.230000	41.2	---	20.3	4.6	45.8	V
2.318000	33.0	---	20.3	16.5	49.5	V

Date: 24/02/2011 - Time: 22:33:29

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

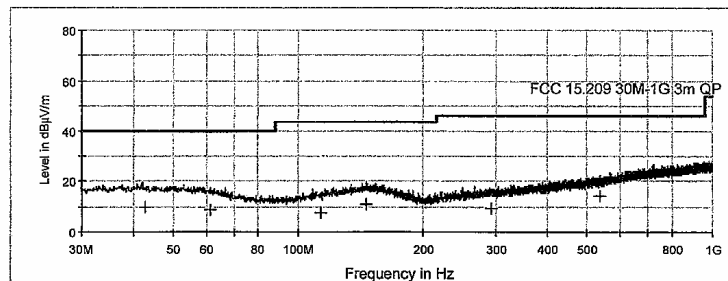
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
43.100000	9.6	13.9	30.4	40.0	H
61.750000	8.9	12.5	31.1	40.0	H
113.400000	7.9	11.5	35.6	43.5	H
146.750000	10.9	14.0	32.6	43.5	H
292.750000	9.0	12.7	37.0	46.0	H
539.000000	14.4	17.2	31.6	46.0	H

Date: 15/02/2011 - Time: 18:45:06

Tested by:  2011.2.15
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

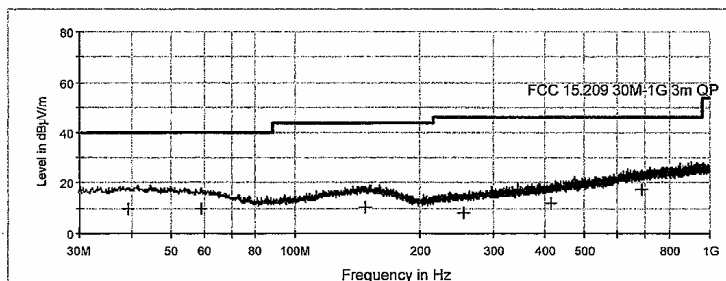
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
39.800000	9.7	14.0	30.3	40.0	V
59.200000	9.6	12.9	30.4	40.0	V
148.600000	10.5	14.1	33.0	43.5	V
256.600000	7.9	11.7	38.1	46.0	V
413.500000	11.8	15.1	34.2	46.0	V
689.000000	17.6	19.5	28.4	46.0	V

Date: 15/02/2011 - Time: 19:12:30

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

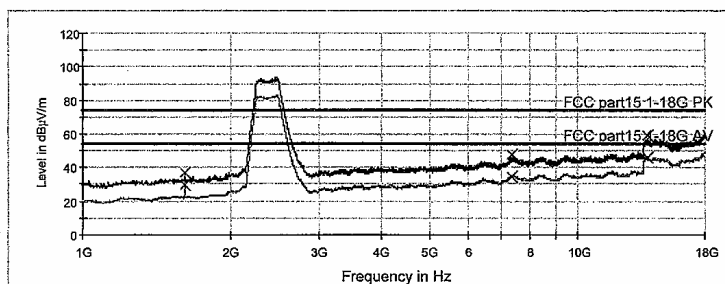
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
1615.000000	36.9	-13.9	37.1	74.0	H
7358.000000	47.2	0.5	26.8	74.0	H
13837.000000	58.4	9.5	15.6	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1615.000000	29.4	-13.9	24.6	54.0	H
7358.000000	34.5	0.5	19.5	54.0	H
13837.000000	45.7	9.5	8.3	54.0	H

Date: 15/02/2011 - Time: 21:11:00

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

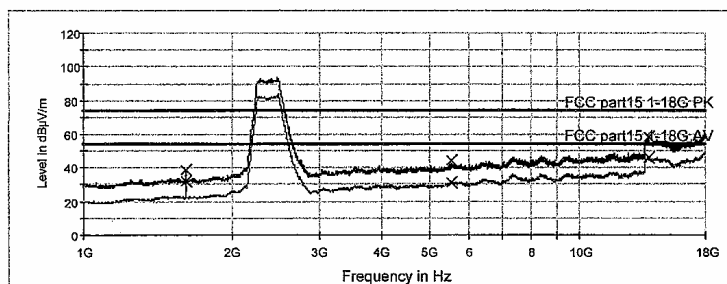
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1615.000000	38.2	-13.9	35.8	74.0	V
5552.000000	43.9	-3.8	30.1	74.0	V
13848.000000	58.3	9.6	15.7	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1615.000000	31.6	-13.9	22.4	54.0	V
5552.000000	30.8	-3.8	23.2	54.0	V
13848.000000	45.7	9.6	8.3	54.0	V

Date: 15/02/2011 - Time: 21:06:19

Tested by:  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

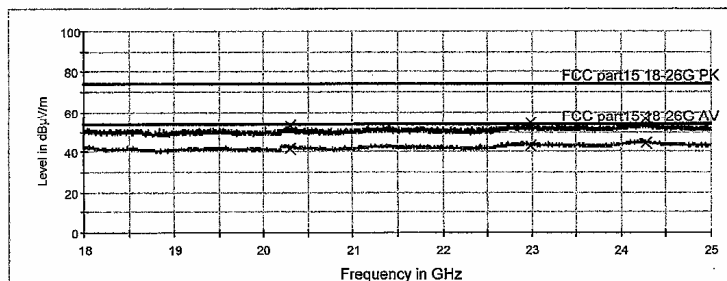
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
20295.000000	53.2	5.6	20.8	74.0	H
22996.000000	54.5	6.5	19.6	74.0	H
24286.000000	56.3	6.9	17.7	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
20295.000000	41.6	5.6	12.4	54.0	H
22996.000000	42.6	6.5	11.4	54.0	H
24286.000000	43.9	6.9	10.1	54.0	H

Date: 24/02/2011 - Time: 20:39:56

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

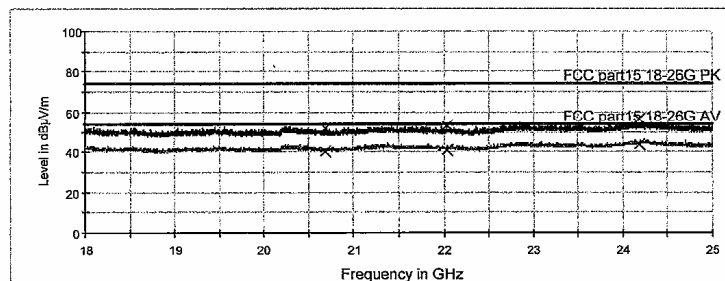
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
20694.000000	52.0	5.7	22.0	74.0	V
22036.000000	52.8	6.1	21.2	74.0	V
24194.000000	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
20694.000000	40.4	5.7	13.6	54.0	V
22036.000000	40.8	6.1	13.2	54.0	V
24194.000000	43.8	6.9	10.2	54.0	V

Date: 24/02/2011 - Time: 20:48:50

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

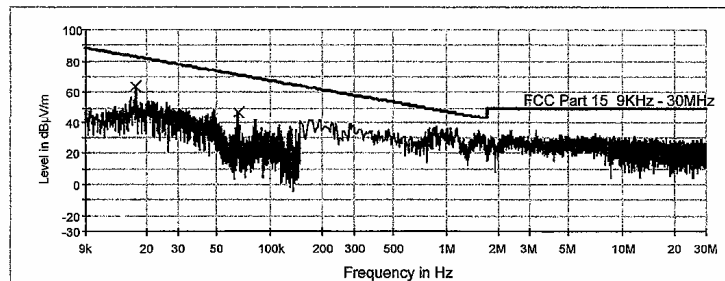
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	---	63.4	20.7	---	---	H
0.065720	---	46.5	20.3	---	---	H
0.878000	33.1	---	20.3	15.6	48.7	H
7.066000	27.8	---	21.9	21.7	49.6	H

Date: 24/02/2011 - Time: 22:45:56

Tested by:  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

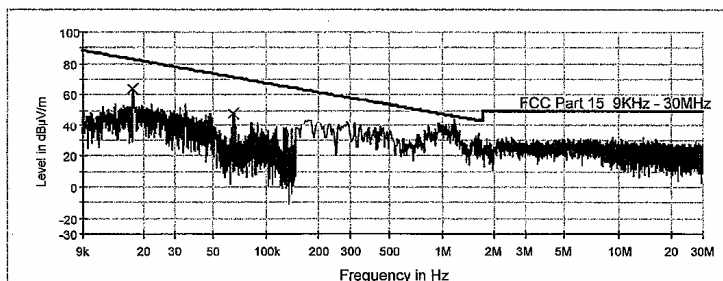
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	---	64.1	20.7	---	---	V
0.065640	---	48.0	20.3	---	---	V
1.186000	41.0	---	20.3	5.1	46.1	V
7.322000	26.8	---	21.9	22.7	49.5	V

Date: 24/02/2011 - Time: 22:50:58

Tested by:  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

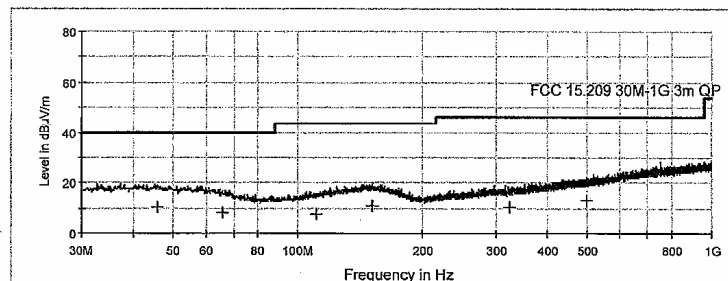
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
46.000000	10.5	13.7	29.5	40.0	H
66.150000	8.2	11.6	31.8	40.0	H
111.350000	7.5	11.3	36.0	43.5	H
151.750000	10.9	14.2	32.6	43.5	H
325.350000	10.2	13.4	35.8	46.0	H
496.950000	13.3	16.5	32.7	46.0	H

Date: 15/02/2011 - Time: 18:24:08

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

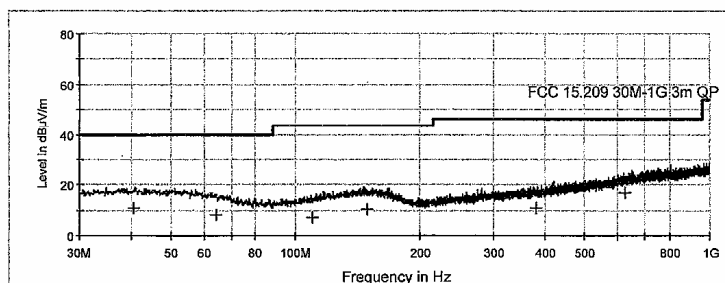
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
40.900000	10.7	14.0	29.3	40.0	V
64.950000	8.1	11.9	31.9	40.0	V
110.150000	7.3	11.1	36.2	43.5	V
149.450000	10.4	14.2	33.1	43.5	V
380.400000	11.0	14.4	35.0	46.0	V
629.200000	16.8	18.9	29.2	46.0	V

Date: 15/02/2011 - Time: 18:29:53

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

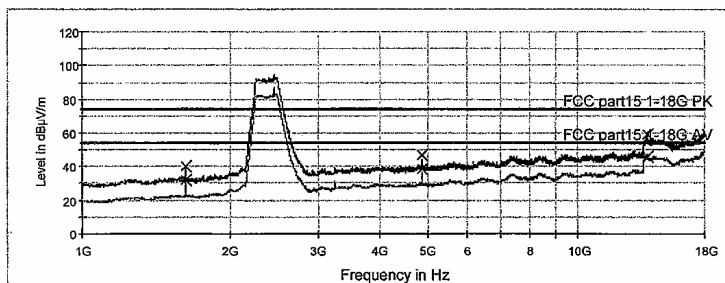
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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	40.3	-13.8	33.7	74.0	H
4882.000000	46.6	-5.6	27.4	74.0	H
13837.000000	58.4	9.5	15.6	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	32.0	-13.8	22.0	54.0	H
4882.000000	38.0	-5.6	16.0	54.0	H
13837.000000	45.8	9.5	8.2	54.0	H

Date: 15/02/2011 - Time: 20:46:30

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

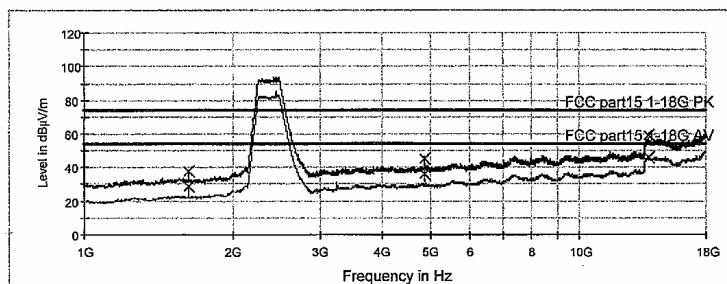
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1627.000000	37.7	-13.8	36.3	74.0	V
4882.000000	45.3	-5.6	28.7	74.0	V
13841.000000	59.0	9.5	15.0	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1627.000000	28.4	-13.8	25.6	54.0	V
4882.000000	35.6	-5.6	18.4	54.0	V
13841.000000	45.9	9.5	8.1	54.0	V

Date: 15/02/2011 - Time: 20:30:34

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

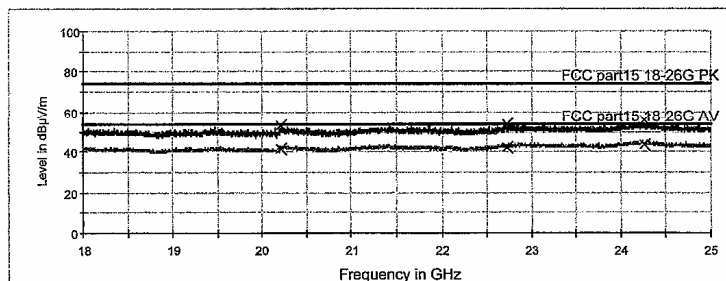
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
20205.000000	53.1	5.6	20.9	74.0	H
22722.000000	54.0	6.3	20.0	74.0	H
24268.000000	56.0	6.9	18.0	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Polarization
20205.000000	41.4	5.6	12.6	54.0	H
22722.000000	42.1	6.3	11.9	54.0	H
24268.000000	43.8	6.9	10.2	54.0	H

Date: 24/02/2011 - Time: 20:56:39

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

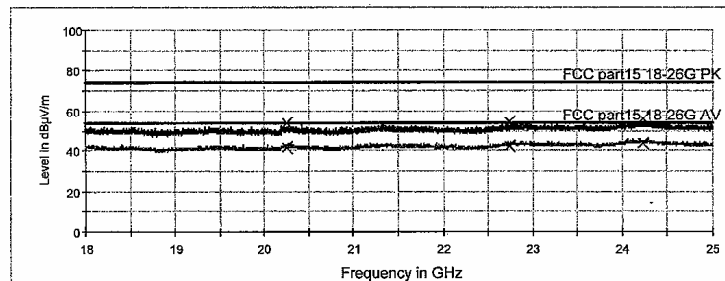
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
20261.000000	53.7	5.6	20.3	74.0	V
22743.000000	54.2	6.4	19.8	74.0	V
24229.000000	55.9	6.9	18.1	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
20261.000000	41.4	5.6	12.6	54.0	V
22743.000000	42.4	6.4	11.6	54.0	V
24229.000000	43.9	6.9	10.1	54.0	V

Date: 24/02/2011 - Time: 20:52:34

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

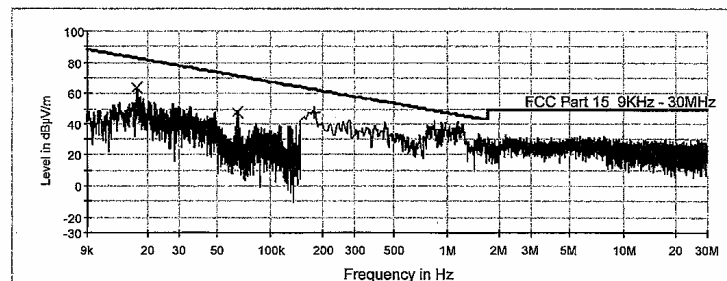
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	---	64.0	20.7	---	---	H
0.065640	---	47.7	20.3	---	---	H
0.178000	47.4	---	20.8	15.2	62.6	H
0.850000	36.1	---	20.4	12.9	49.0	H

Date: 24/02/2011 - Time: 22:56:33

Tested by:  Reviewed by: _____

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

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

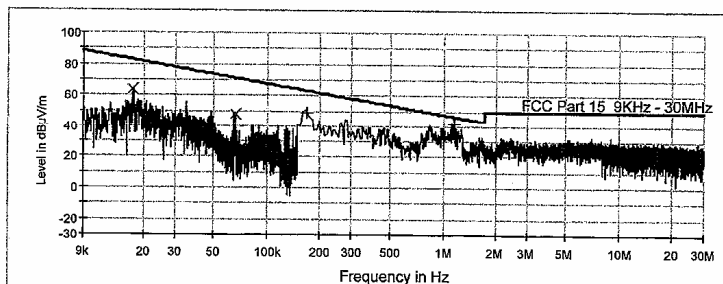
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	---	63.9	20.7	---	---	V
0.065720	---	47.5	20.3	---	---	V
0.170000	48.7	---	20.7	14.3	63.0	V
1.154000	41.4	---	20.3	5.0	46.4	V

Date: 24/02/2011 - Time: 22:54:10

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

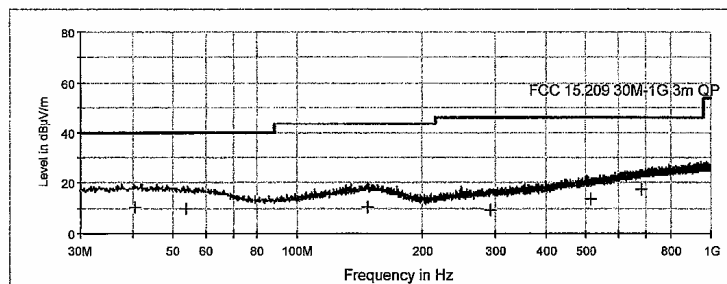
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
40.650000	10.4	14.0	29.6	40.0	H
54.000000	9.9	13.2	30.1	40.0	H
148.950000	10.4	14.1	33.1	43.5	H
293.250000	9.1	12.7	36.9	46.0	H
513.050000	13.6	16.8	32.4	46.0	H
683.550000	17.4	19.5	28.6	46.0	H

Date: 15/02/2011 - Time: 18:39:19

Tested by:  2.15 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

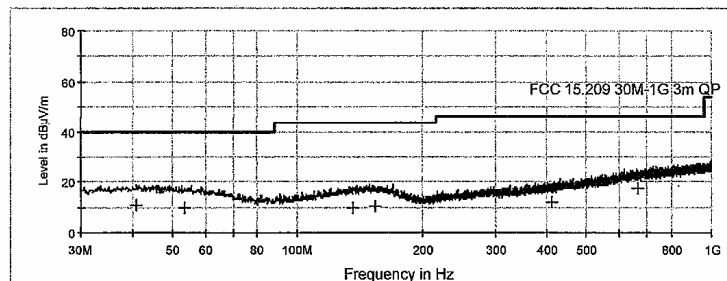
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
41.050000	10.8	14.0	29.2	40.0	V
53.650000	9.8	13.2	30.2	40.0	V
136.950000	9.6	13.3	33.9	43.5	V
164.300000	10.3	14.2	33.2	43.5	V
410.600000	11.9	15.0	34.1	46.0	V
668.250000	17.2	19.3	28.8	46.0	V

Date: 15/02/2011 - Time: 18:36:16

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

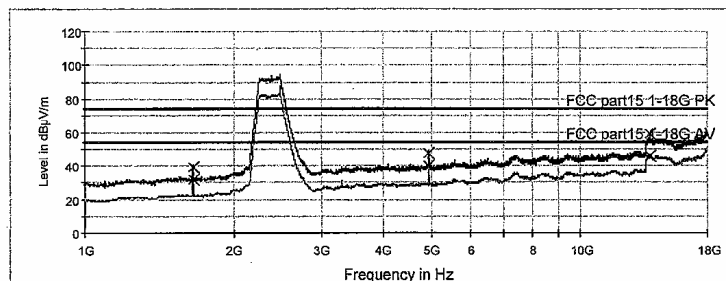
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1652.000000	39.4	-13.6	34.6	74.0	H
4960.000000	47.3	-5.8	26.7	74.0	H
13814.000000	58.5	9.2	15.5	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1652.000000	31.6	-13.6	22.4	54.0	H
4960.000000	40.1	-5.8	13.9	54.0	H
13814.000000	45.7	9.2	8.3	54.0	H

Date: 15/02/2011 - Time: 20:53:18

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

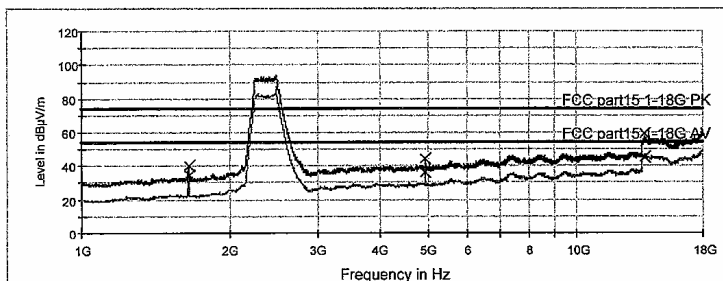
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusicALL
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: 163073422 300
Report No: 17019444 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	40.4	-13.6	33.6	74.0	V
4960.000000	44.1	-5.8	29.9	74.0	V
13795.000000	58.5	9.0	15.5	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	34.6	-13.6	19.4	54.0	V
4960.000000	36.1	-5.8	17.9	54.0	V
13795.000000	45.3	9.0	8.7	54.0	V

Date: 15/02/2011 - Time: 20:58:48

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

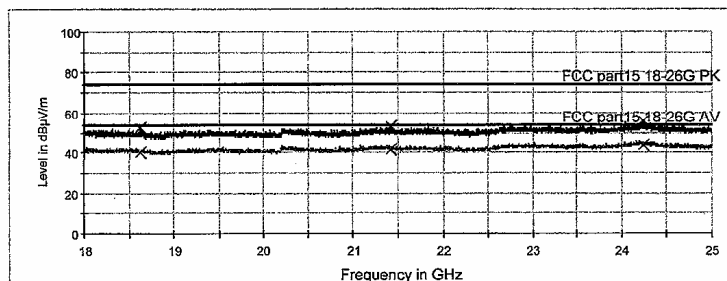
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
18637.000000	52.2	5.0	21.8	74.0	H
21424.000000	53.2	5.9	20.8	74.0	H
24248.000000	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
18637.000000	40.3	5.0	13.7	54.0	H
21424.000000	41.6	5.9	12.4	54.0	H
24248.000000	43.8	6.9	10.2	54.0	H

Date: 24/02/2011 - Time: 21:03:03

Tested by:  2011.2.24 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

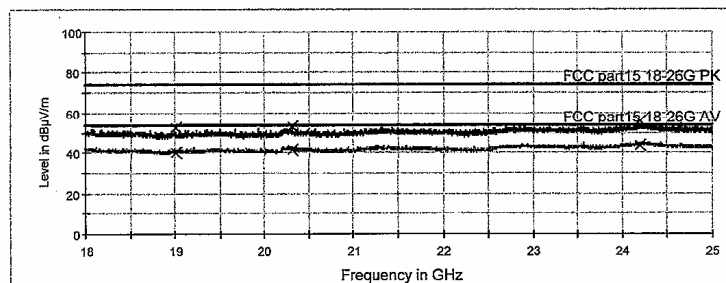
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
19006.000000	52.1	5.1	21.9	74.0	V
20315.000000	52.9	5.6	21.1	74.0	V
24209.000000	55.7	6.9	18.3	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19006.000000	40.1	5.1	13.9	54.0	V
20315.000000	41.4	5.6	12.6	54.0	V
24209.000000	43.9	6.9	10.1	54.0	V

Date: 24/02/2011 - Time: 21:07:01

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

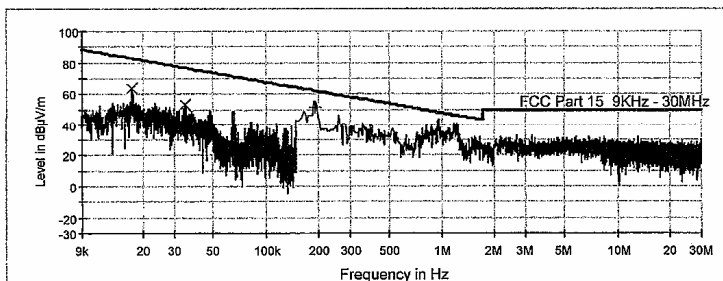
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBuV/m)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
0.017320	---	63.7	20.7	---	---	H
0.034920	---	63.5	20.2	---	---	H
0.190000	51.1	---	20.8	10.9	62.0	H
0.958000	39.5	---	20.3	8.5	48.0	H

Date: 24/02/2011 - Time: 22:58:37

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

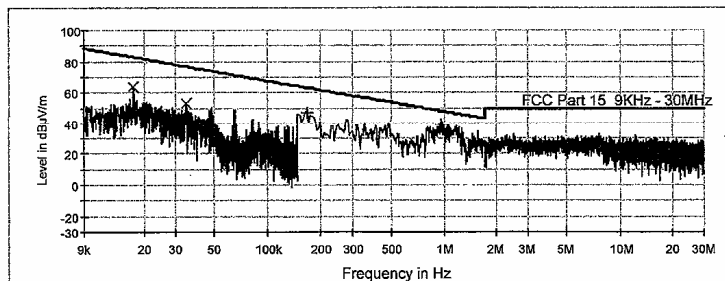
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusicALL
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:	163073422 300
Report No:	17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	---	64.1	20.7	---	---	V
0.034920	---	53.3	20.2	---	---	V
0.170000	46.9	---	20.7	16.1	63.0	V
0.966000	39.1	---	20.3	8.8	47.9	V

Date: 24/02/2011 - Time: 23:02:24

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

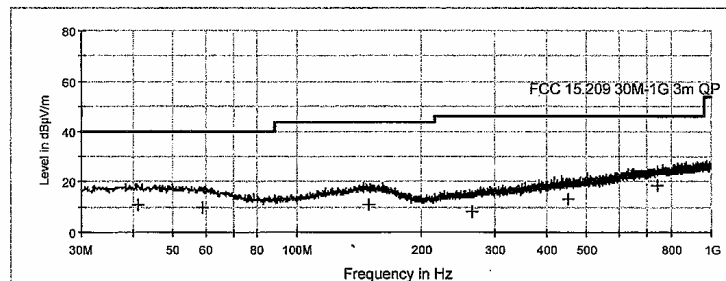
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
41.300000	10.9	14.0	29.1	40.0	H
59.200000	9.6	12.9	30.4	40.0	H
150.050000	10.6	14.2	32.9	43.5	H
265.850000	8.3	12.0	37.7	46.0	H
451.600000	13.1	16.0	32.9	46.0	H
742.100000	18.3	20.2	27.7	46.0	H

Date: 15/02/2011 - Time: 18:13:35

Tested by:  2011.2.15 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

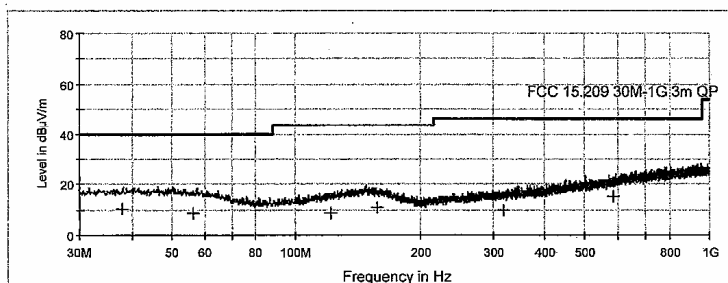
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
38.000000	10.6	13.8	29.4	40.0	V
56.550000	8.9	13.0	31.1	40.0	V
122.050000	8.8	12.4	34.7	43.5	V
157.800000	10.7	14.1	32.8	43.5	V
319.650000	9.9	13.3	36.1	46.0	V
585.700000	15.2	18.0	30.8	46.0	V

Date: 15/02/2011 - Time: 18:07:47

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

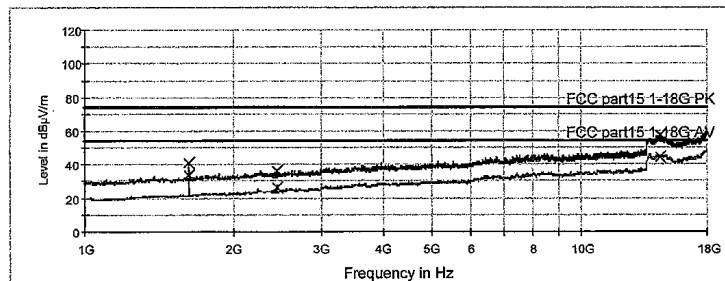
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1627.000000	40.6	-14.7	33.4	74.0	H
2441.000000	35.6	-12.1	38.4	74.0	H
14458.000000	56.8	8.8	17.2	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1627.000000	33.4	-14.7	20.6	54.0	H
2441.000000	26.1	-12.1	27.9	54.0	H
14458.000000	44.0	8.8	10.0	54.0	H

Date: 15/02/2011 - Time: 22:25:42

Tested by:  2.15
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

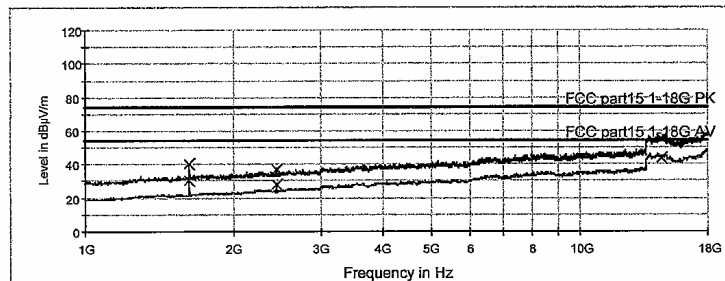
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusicALL
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: 163073422 300
Report No: 17019444 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	40.2	-14.7	33.8	74.0	V
2441.000000	37.1	-12.1	36.9	74.0	V
14561.000000	55.1	7.9	18.9	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	30.4	-14.7	23.6	54.0	V
2441.000000	28.0	-12.1	26.0	54.0	V
14561.000000	43.4	7.9	10.6	54.0	V

Date: 15/02/2011 - Time: 22:21:38

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

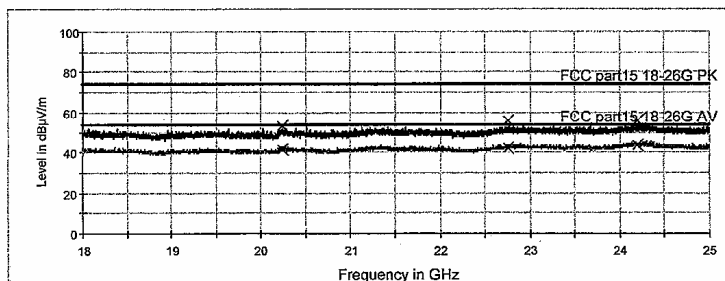
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 25.5 3160-09



Limit and Margin PK

Frequency (MHz)	MaxPeak (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
20234.000000	53.2	5.6	20.8	74.0	H
22766.000000	55.5	6.4	18.5	74.0	H
24209.000000	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
20234.000000	41.5	5.6	12.5	54.0	H
22766.000000	42.5	6.4	11.5	54.0	H
24209.000000	43.7	6.9	10.3	54.0	H

Date: 24/02/2011 - Time: 21:13:44

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

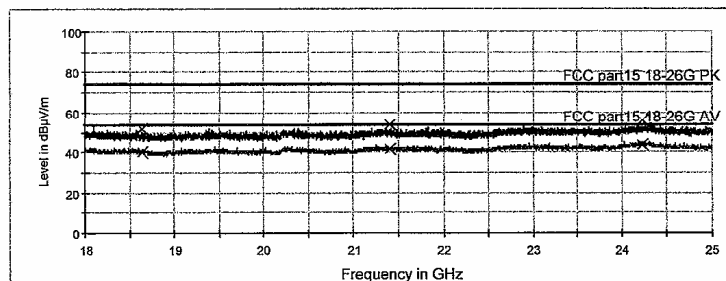
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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	52.0	5.0	22.0	74.0	V
21404.000000	53.8	5.9	20.2	74.0	V
24238.000000	56.0	6.9	18.0	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
18642.000000	40.3	5.0	13.7	54.0	V
21404.000000	41.7	5.9	12.3	54.0	V
24238.000000	43.8	6.9	10.2	54.0	V

Date: 24/02/2011 - Time: 21:11:00

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

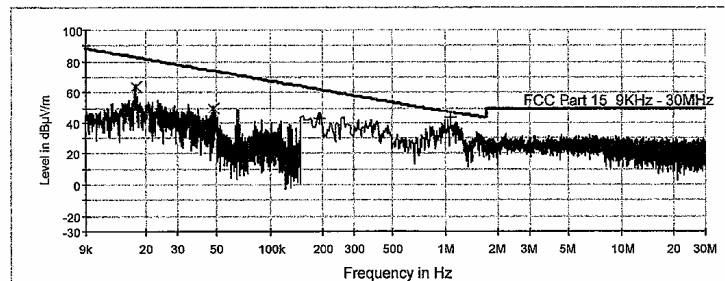
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017400	---	63.7	20.7	---	---	H
0.048280	---	49.5	19.8	---	---	H
0.190000	42.6	---	20.8	19.4	62.0	H
1.078000	43.0	---	20.3	4.0	47.0	H

Date: 24/02/2011 - Time: 23:09:53

Tested by:  2011.2.24 Checked 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

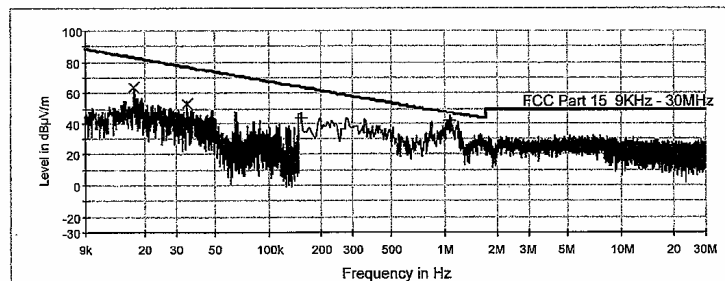
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	---	63.6	20.7	---	---	V
0.034920	---	53.0	20.2	---	---	V
0.154000	43.2	---	20.7	20.6	63.8	V
1.086000	42.0	---	20.3	4.9	46.9	V

Date: 24/02/2011 - Time: 23:07:43

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

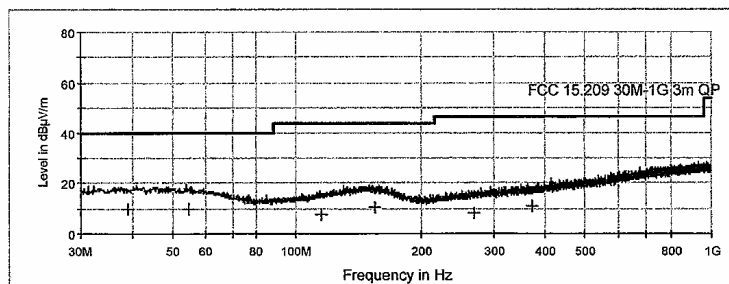
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
55.000000	9.7	13.2	30.3	40.0	H
115.350000	7.8	11.7	35.7	43.5	H
155.750000	10.4	14.1	33.1	43.5	H
271.050000	8.4	12.1	37.6	46.0	H
372.300000	11.2	14.2	34.8	46.0	H

Date: 15/02/2011 - Time: 16:58:00

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

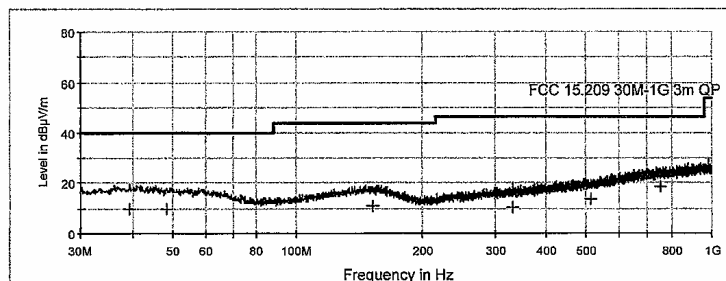
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
39.600000	9.7	14.0	30.3	40.0	V
48.550000	9.6	13.6	30.4	40.0	V
153.200000	10.9	14.2	32.6	43.5	V
331.200000	10.3	13.5	35.7	46.0	V
513.550000	13.6	16.8	32.4	46.0	V
753.750000	18.3	20.3	27.7	46.0	V

Date: 15/02/2011 - Time: 16:53:06

Tested by:  Reviewed by: _____

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

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

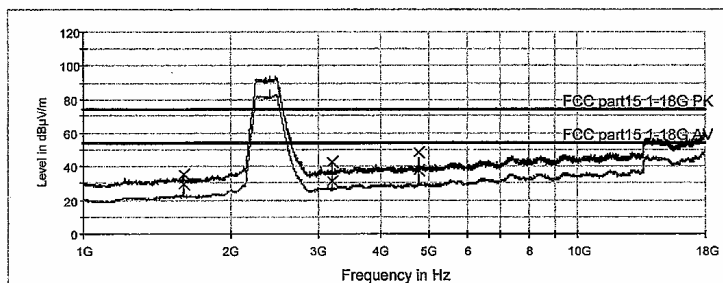
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
3204.000000	42.1	-9.2	31.9	74.0	H
4804.000000	47.9	-5.5	26.1	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1601.000000	29.4	-14.0	24.6	54.0	H
3204.000000	31.1	-9.2	22.9	54.0	H
4804.000000	37.9	-5.5	16.1	54.0	H

Date: 15/02/2011 - Time: 21:52:31

Tested by:  Reviewed by: _____

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

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

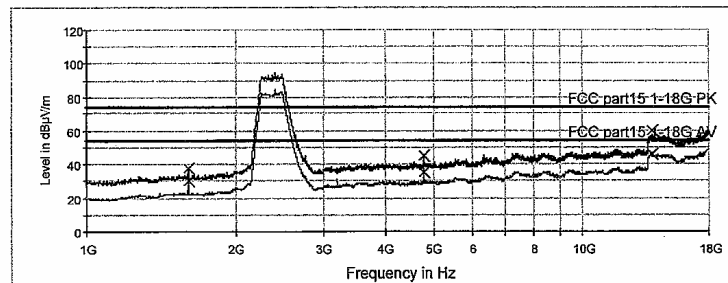
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 183073422 300
Report No: 17019444 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 (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1601.000000	37.4	-14.0	36.6	74.0	V
4804.000000	44.9	-5.5	29.1	74.0	V
13816.000000	59.7	9.3	14.3	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1601.000000	30.4	-14.0	23.6	54.0	V
4804.000000	34.8	-5.5	19.2	54.0	V
13816.000000	45.6	9.3	8.4	54.0	V

Date: 15/02/2011 - Time: 21:44:20

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

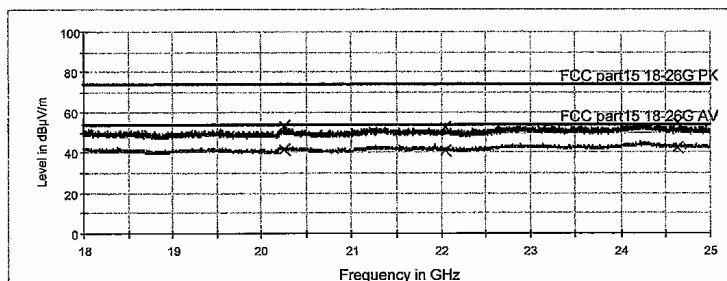
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
20264.000000	53.0	5.6	21.0	74.0	H
22047.000000	52.7	6.1	21.3	74.0	H
24628.000000	54.3	7.0	19.7	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
20264.000000	41.4	5.6	12.6	54.0	H
22047.000000	41.0	6.1	13.0	54.0	H
24628.000000	42.4	7.0	11.6	54.0	H

Date: 24/02/2011 - Time: 21:27:28

Tested by:  Checked: _____ 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

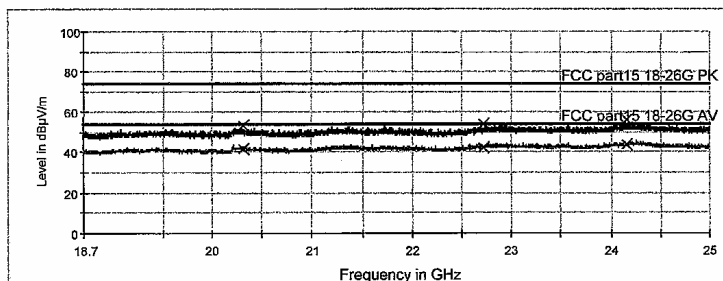
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
20311.000000	53.1	5.6	20.9	74.0	V
22718.000000	53.6	6.3	20.4	74.0	V
24157.000000	55.5	6.9	18.5	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
20311.000000	41.5	5.6	12.5	54.0	V
22718.000000	42.0	6.3	12.0	54.0	V
24157.000000	43.6	6.9	10.4	54.0	V

Date: 24/02/2011 - Time: 21:29:50

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

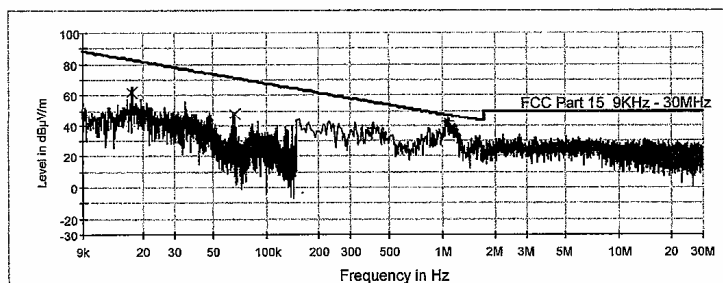
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusicALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	---	62.2	20.7	---	---	H
0.065720	---	47.8	20.3	---	---	H
0.406000	37.9	---	20.8	17.5	55.4	H
1.074000	42.8	---	20.3	4.2	47.0	H

Date: 24/02/2011 - Time: 23:15:35

Tested by:  Reviewed by: _____

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

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

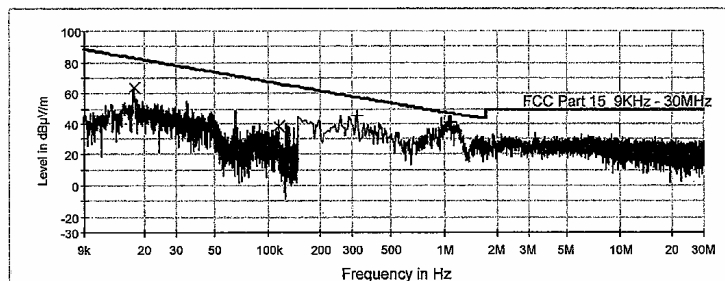
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017400	---	63.6	20.7	---	---	V
0.115480	---	38.3	21.0	---	---	V
0.322000	45.2	---	20.8	12.2	57.4	V
1.082000	40.4	---	20.3	6.5	46.9	V

Date: 24/02/2011 - Time: 23:13:39

Tested by:  Checked: _____ 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

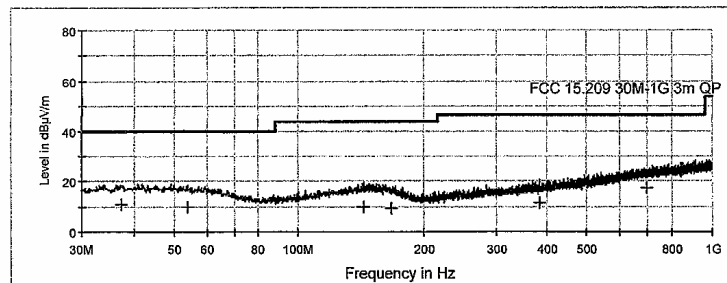
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusicALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
37.400000	10.7	13.7	29.3	40.0	H
54.000000	10.0	13.2	30.0	40.0	H
144.600000	10.1	13.8	33.4	43.5	H
168.250000	9.3	13.4	34.2	43.5	H
383.700000	11.7	14.4	34.3	46.0	H
700.400000	17.6	19.6	28.4	46.0	H

Date: 15/02/2011 - Time: 17:18:54

Tested by:  2011.2.15 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

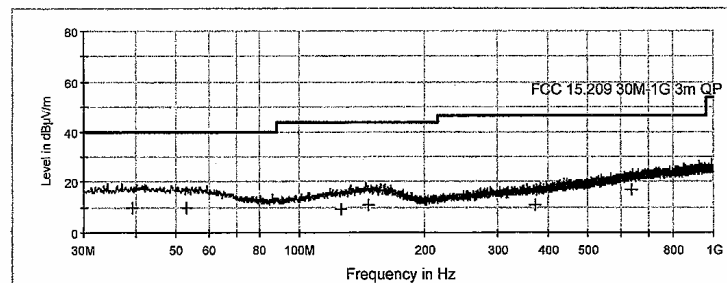
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
39.450000	9.6	14.0	30.4	40.0	V
53.300000	9.6	13.3	30.4	40.0	V
126.500000	9.0	12.6	34.5	43.5	V
147.000000	11.0	14.0	32.5	43.5	V
371.200000	11.0	14.2	35.0	46.0	V
636.750000	16.9	18.9	29.1	46.0	V

Date: 15/02/2011 - Time: 17:22:21

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

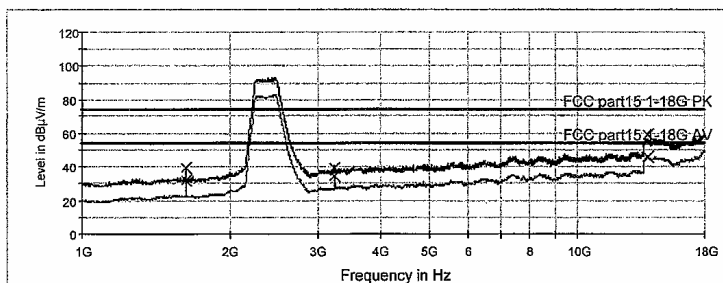
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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	39.1	-13.8	34.9	74.0	H
3253.000000	39.4	-8.5	34.6	74.0	H
13852.000000	58.6	9.6	15.4	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	31.5	-13.8	22.5	54.0	H
3253.000000	34.1	-8.5	19.9	54.0	H
13852.000000	45.6	9.6	8.4	54.0	H

Date: 15/02/2011 - Time: 21:34:04

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

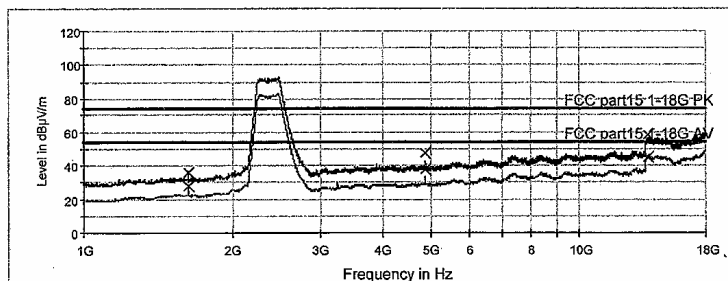
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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	36.3	-13.9	37.7	74.0	V
4882.000000	47.0	-5.6	27.0	74.0	V
13793.000000	58.0	9.0	16.0	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1625.000000	28.1	-13.9	25.9	54.0	V
4882.000000	37.6	-5.6	16.4	54.0	V
13793.000000	45.2	9.0	8.8	54.0	V

Date: 15/02/2011 - Time: 21:38:27

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

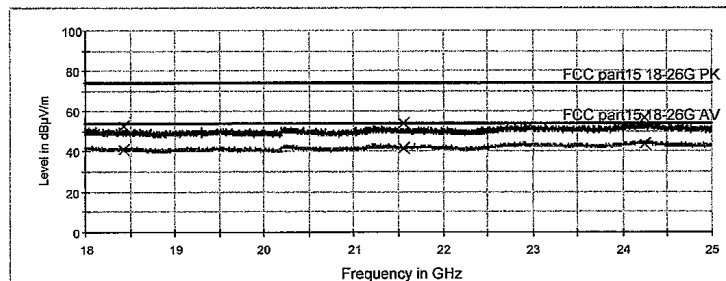
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
18435.000000	52.4	4.9	21.6	74.0	H
21560.000000	53.7	6.0	20.3	74.0	H
24241.000000	56.2	6.9	17.8	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
18435.000000	40.5	4.9	13.5	54.0	H
21560.000000	41.5	6.0	12.5	54.0	H
24241.000000	43.8	6.9	10.2	54.0	H

Date: 24/02/2011 - Time: 21:25:18

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

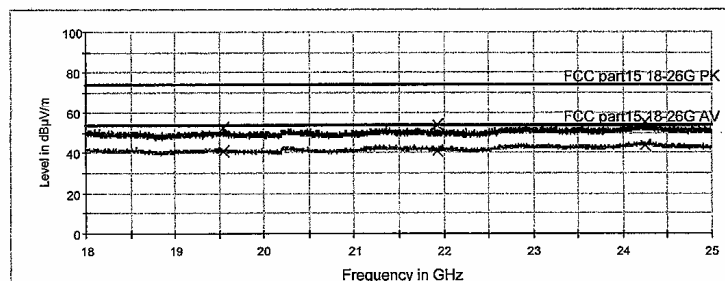
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate		
Test Item:	Bluetooth Headset		
Identification:	BLUETREK MusiCALL		
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:	163073422 300		
Report No:	17019444 001		
Result:	Pass		
Comment:	Test distance is 3m, Vertical		

Subrange 1	18GHz-25GHz
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
19558.000000	52.3	5.4	21.7	74.0	V
21925.000000	53.4	6.1	20.6	74.0	V
24248.000000	55.4	6.9	18.6	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
19558.000000	40.6	5.4	13.4	54.0	V
21925.000000	40.9	6.1	13.1	54.0	V
24248.000000	43.8	6.9	10.2	54.0	V

Date: 24/02/2011 - Time: 21:23:03

Tested by:  Reviewed by: _____

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

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

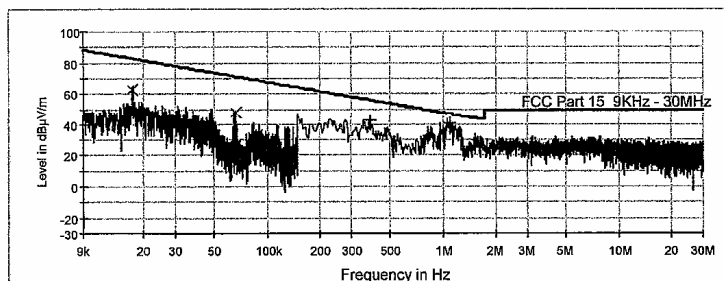
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017320	—	62.6	20.7	—	—	H
0.065720	—	47.4	20.3	—	—	H
0.386000	42.1	—	20.8	13.8	55.9	H
1.094000	40.3	—	20.3	6.5	46.8	H

Date: 24/02/2011 - Time: 23:21:43

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

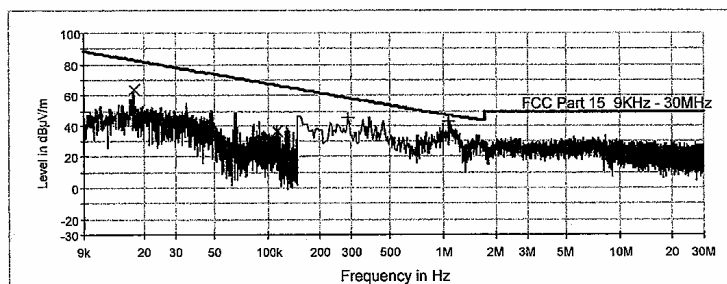
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusicALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017400	---	63.3	20.7	---	---	V
0.113000	---	36.1	21.0	---	---	V
0.290000	44.9	---	20.9	13.5	58.4	V
1.086000	42.3	---	20.3	4.6	46.9	V

Date: 24/02/2011 - Time: 23:17:43

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

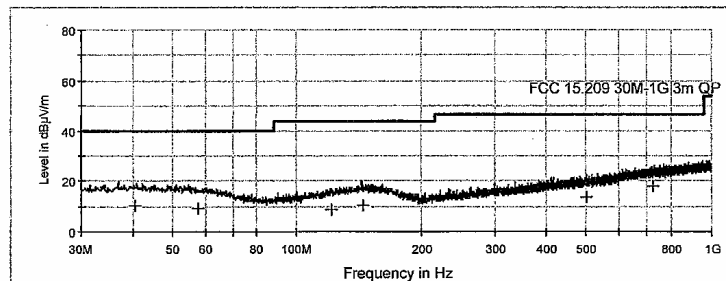
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
40.650000	10.4	14.0	29.6	40.0	H
57.900000	9.5	12.9	30.5	40.0	H
121.800000	8.8	12.3	34.7	43.5	H
145.550000	10.2	13.9	33.3	43.5	H
502.250000	13.5	16.5	32.5	46.0	H
724.400000	18.2	20.0	27.8	46.0	H

Date: 15/02/2011 - Time: 17:38:35

Tested by:  2011.2.15 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

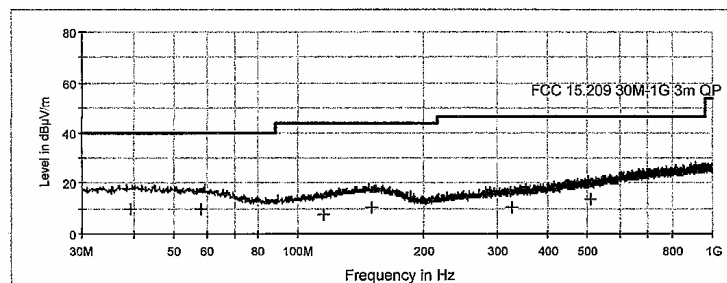
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
39.600000	9.7	14.0	30.3	40.0	V
58.250000	9.7	12.9	30.3	40.0	V
115.100000	7.8	11.7	35.7	43.5	V
150.400000	10.4	14.2	33.1	43.5	V
326.100000	10.3	13.4	35.7	46.0	V
508.800000	13.6	16.7	32.4	46.0	V

Date: 15/02/2011 - Time: 17:28:32

Tested by:  2012.15 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

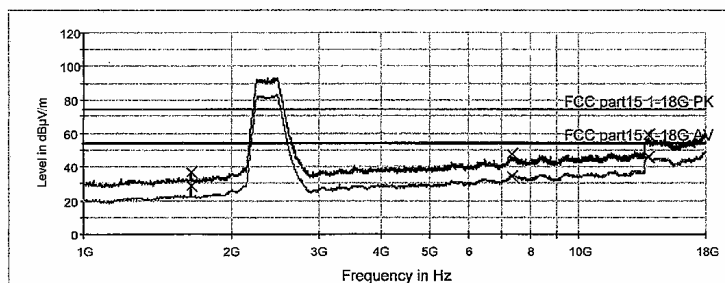
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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	37.1	-13.6	36.9	74.0	H
7343.000000	47.7	0.5	26.3	74.0	H
13861.000000	58.5	9.4	15.5	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1652.000000	28.3	-13.6	25.7	54.0	H
7343.000000	34.4	0.5	19.6	54.0	H
13861.000000	45.4	9.4	8.6	54.0	H

Date: 15/02/2011 - Time: 21:58:18

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

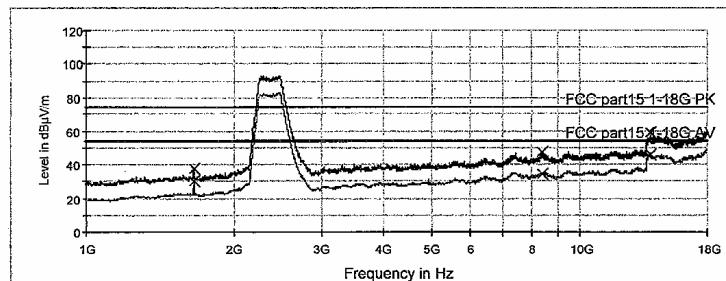
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1652.000000	37.6	-13.6	36.4	74.0	V
8404.000000	47.7	2.0	26.3	74.0	V
13839.000000	58.9	9.5	15.1	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1652.000000	30.1	-13.6	23.9	54.0	V
8404.000000	34.6	2.0	19.4	54.0	V
13839.000000	45.6	9.5	8.4	54.0	V

Date: 15/02/2011 - Time: 22:01:49

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

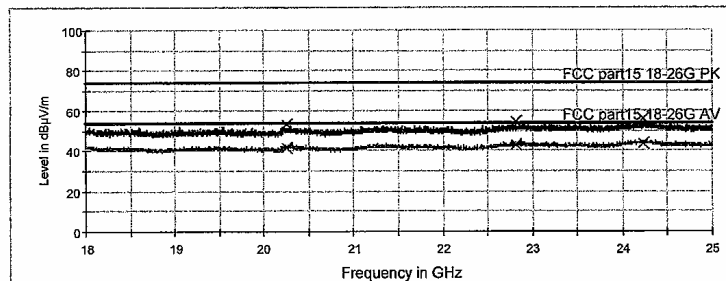
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
20252.000000	53.3	5.6	20.7	74.0	H
22827.000000	54.4	6.4	19.6	74.0	H
24232.000000	55.9	6.9	18.1	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
20252.000000	41.4	5.6	12.6	54.0	H
22827.000000	42.5	6.4	11.5	54.0	H
24232.000000	43.8	6.9	10.2	54.0	H

Date: 24/02/2011 - Time: 21:32:09

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

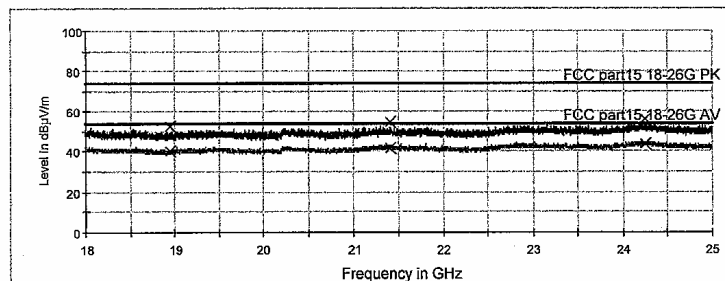
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
18957.000000	52.0	5.1	22.0	74.0	V
21414.000000	54.5	5.9	19.5	74.0	V
24241.000000	55.7	6.9	18.3	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
18957.000000	40.1	5.1	13.9	54.0	V
21414.000000	41.6	5.9	12.4	54.0	V
24241.000000	43.8	6.9	10.2	54.0	V

Date: 24/02/2011 - Time: 21:35:36

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

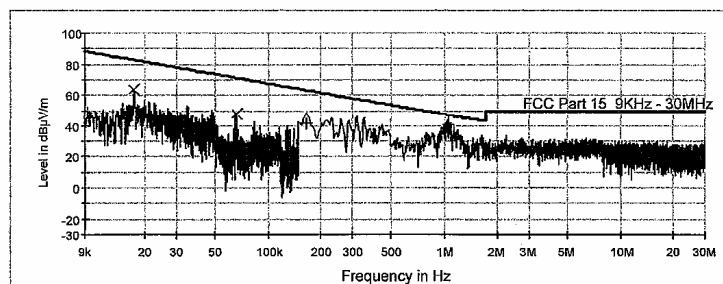
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBuV/m)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
0.017320	---	63.7	20.7	---	---	H
0.065720	---	47.9	20.3	---	---	H
0.166000	41.9	---	20.7	21.3	63.2	H
1.058000	41.1	---	20.3	6.0	47.1	H

Date: 24/02/2011 - Time: 23:23:46

Tested by:  Reviewed by: _____

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

TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

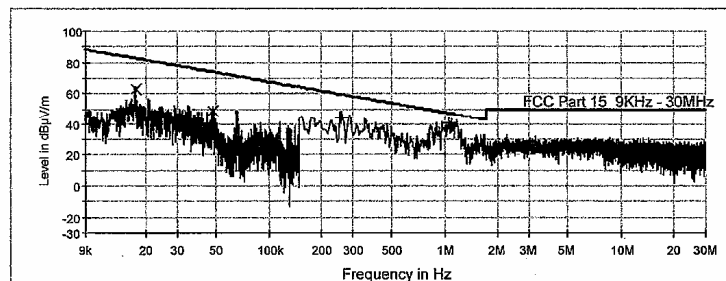
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 HFH2-Z2 / TUV ESCI3

Pre TUV 9K to 30M HFH2-Z2



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
0.017400	---	63.2	20.7	---	---	V
0.048360	---	48.5	19.8	---	---	V
0.258000	44.7	---	20.9	14.7	59.4	V
1.054000	40.8	---	20.3	6.4	47.2	V

Date: 24/02/2011 - Time: 23:26:02

Tested  2011.2.24 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

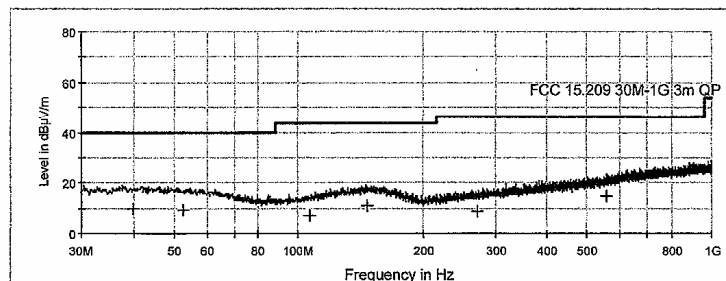
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
40.050000	9.9	14.1	30.1	40.0	H
53.050000	9.5	13.3	30.6	40.0	H
107.000000	7.0	10.8	36.5	43.5	H
147.350000	10.9	14.0	32.6	43.5	H
271.750000	8.5	12.2	37.5	46.0	H
557.450000	14.8	17.5	31.2	46.0	H

Date: 15/02/2011 - Time: 17:59:12

Tested by  Checked  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

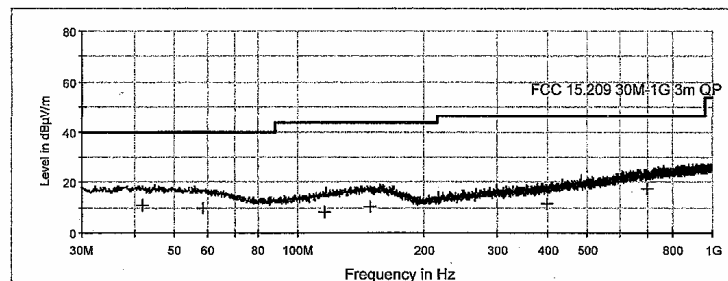
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
41.900000	10.8	13.9	29.2	40.0	V
59.000000	9.7	12.9	30.3	40.0	V
116.450000	8.3	11.8	35.2	43.5	V
149.650000	10.5	14.2	33.0	43.5	V
398.500000	11.4	14.7	34.6	46.0	V
697.100000	17.6	19.6	28.4	46.0	V

Date: 15/02/2011 - Time: 18:04:19

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

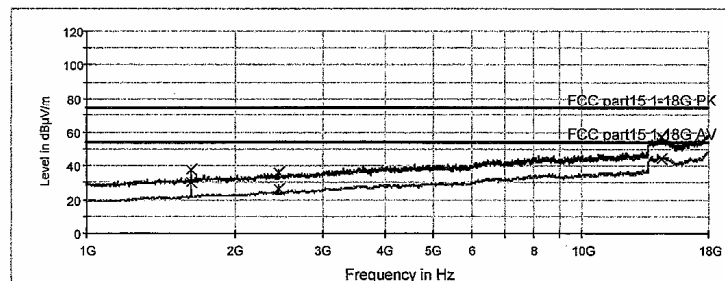
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1627.000000	37.4	-14.7	36.6	74.0	H
2441.000000	35.7	-12.1	38.3	74.0	H
14515.000000	57.1	9.0	16.9	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
1627.000000	30.5	-14.7	23.5	54.0	H
2441.000000	26.1	-12.1	27.9	54.0	H
14515.000000	44.0	9.0	10.0	54.0	H

Date: 15/02/2011 - Time: 22:37:43

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

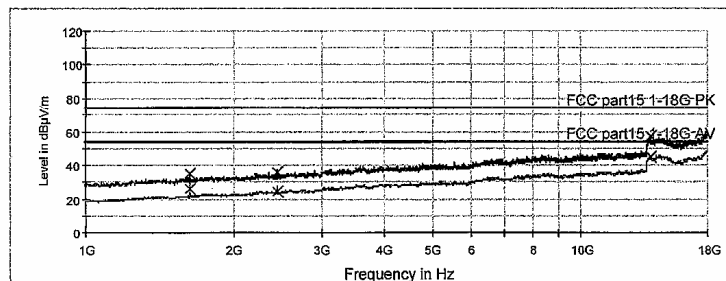
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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	35.1	-14.7	38.9	74.0	V
2441.000000	35.6	-12.1	38.4	74.0	V
13854.000000	57.5	8.9	16.5	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
1627.000000	26.4	-14.7	27.6	54.0	V
2441.000000	24.3	-12.1	29.7	54.0	V
13854.000000	44.5	8.9	9.5	54.0	V

Date: 15/02/2011 - Time: 22:41:08

Tested by:  2011.2.15 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

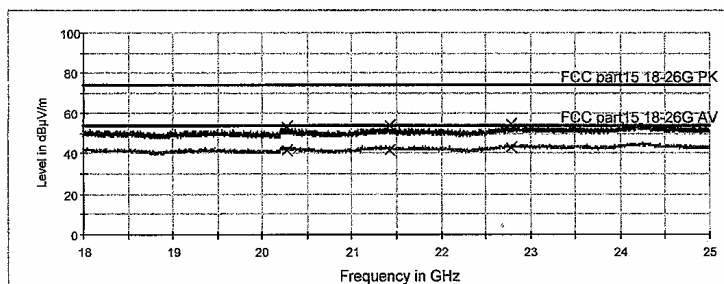
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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 (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
20270.000000	53.3	5.6	20.7	74.0	H
21416.000000	54.0	5.9	20.0	74.0	H
22785.000000	54.1	6.4	19.9	74.0	H

Limit and Margin AV

Frequency (MHz)	Average (dBuV/m)	Corr (dB)	Margin (dB)	Limit (dBuV/m)	Polarization
20270.000000	41.5	5.6	12.5	54.0	H
21416.000000	41.6	5.9	12.4	54.0	H
22785.000000	42.7	6.4	11.3	54.0	H

Date: 24/02/2011 - Time: 21:16:35

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

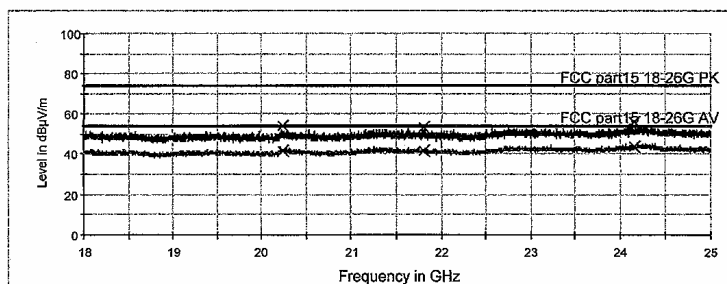
EMC Test Record (Emission)

Common Information

Manufacturer: K-Mate
Test Item: Bluetooth Headset
Identification: BLUETREK MusiCALL
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: 163073422 300
Report No: 17019444 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
20235.000000	54.0	5.6	20.0	74.0	V
21806.000000	53.3	6.0	20.7	74.0	V
24156.000000	55.7	6.9	18.3	74.0	V

Limit and Margin AV

Frequency (MHz)	Average (dBµV/m)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Polarization
20235.000000	41.5	5.6	12.5	54.0	V
21806.000000	41.4	6.0	12.6	54.0	V
24156.000000	43.5	6.9	10.5	54.0	V

Date: 24/02/2011 - Time: 21:20:47

Tested by:  Reviewed by: _____

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

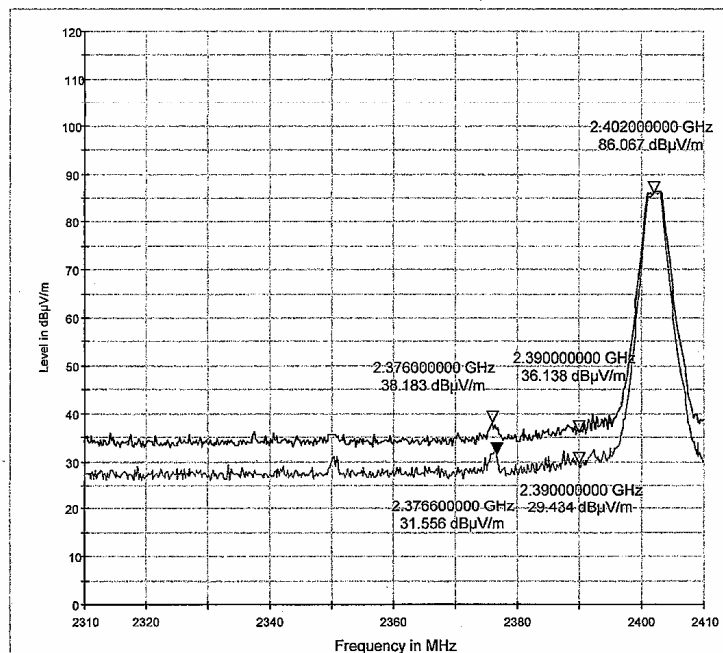
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusiCALL
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:	163073422 300
Report No:	17019444 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: 24/02/2011 - Time: 20:00:59

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

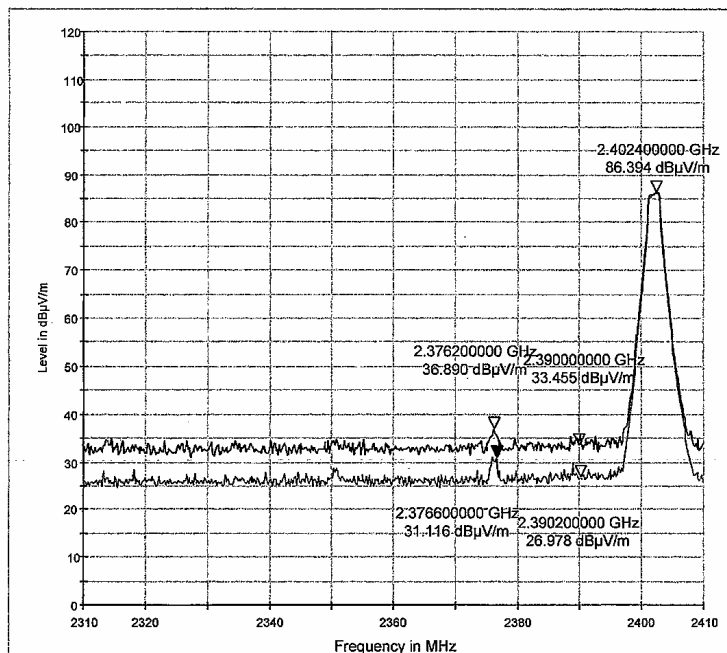
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusiCALL
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:	163073422 300
Report No:	17019444 001
Result:	Pass
Comment:	Test distance is 3m, Vertical

Subrange 1	2GHz-3GHz
Frequency Range:	2GHz-3GHz
Receiver:	TUV FSP30
Transducer:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906

Pre TUV 1 to 18G HF906



Date: 15/02/2011 - Time: 23:49:21

Tested by:  Reviewed by: _____

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

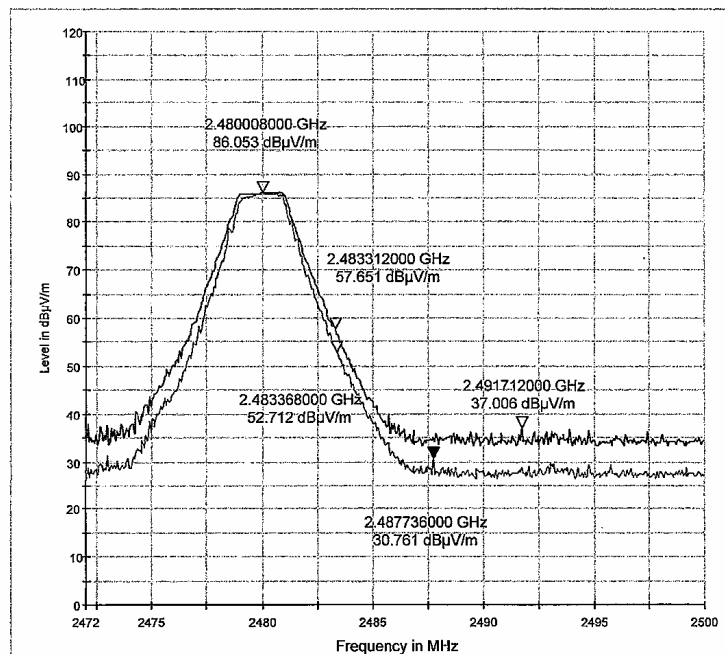
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusiCALL
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:	163073422 300
Report No:	17019444 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: 24/02/2011 - Time: 20:15:35

Tested by:  2011.2.24
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

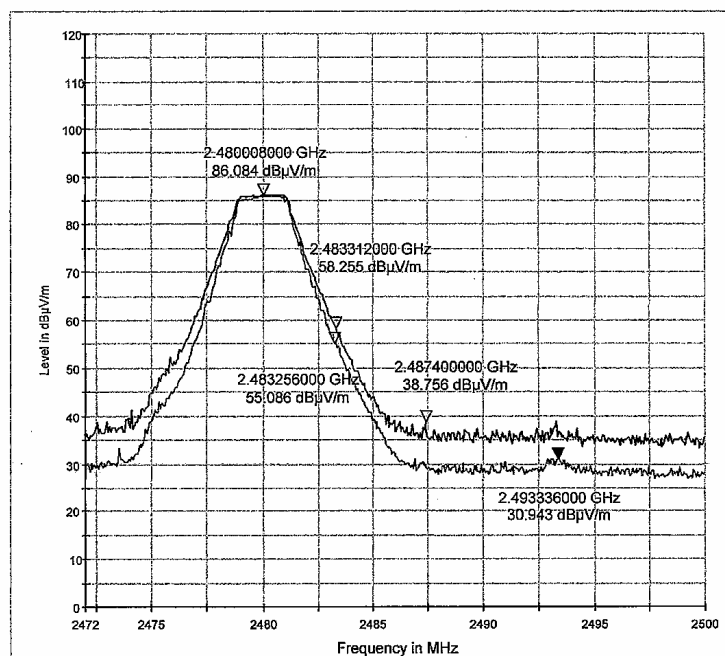
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusiCALL
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:	163073422 300
Report No:	17019444 001
Result:	Pass
Comment:	Test distance is 3m, Horizontal

Subrange 1	2GHz-3GHz
Frequency Range:	TUV FSP30
Receiver:	TUV SAC HF906/ TUV FSP30-TUV SAC HF906
Transducer:	

Pre TUV 1 to 18G HF906



Date: 24/02/2011 - Time: 20:12:53

Tested by:  Reviewed by: _____

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

TUV Rheinland (Guangdong) Ltd.

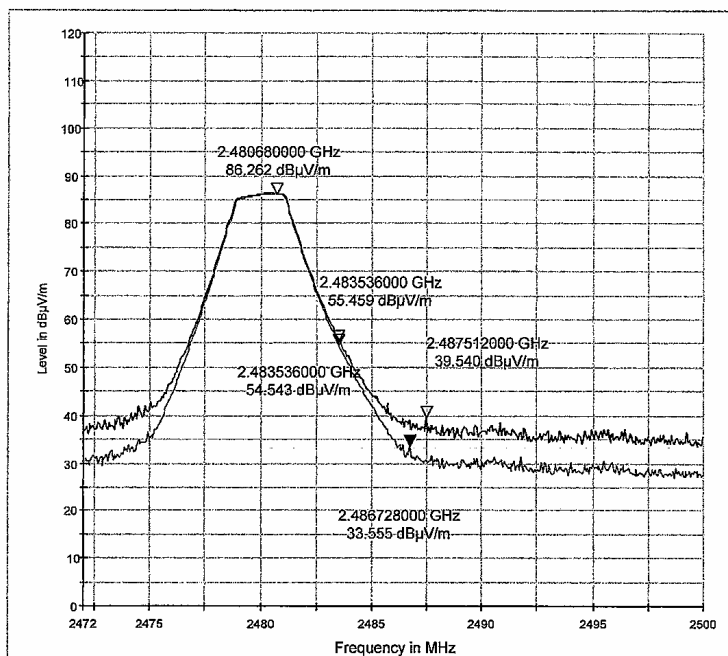
EMC Test Service Hotline: +86-20-28391188

EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusiCALL
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:	163073422 300
Report No:	17019444 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: 15/02/2011 - Time: 23:35:48

Tested by: 

Reviewed by: _____

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

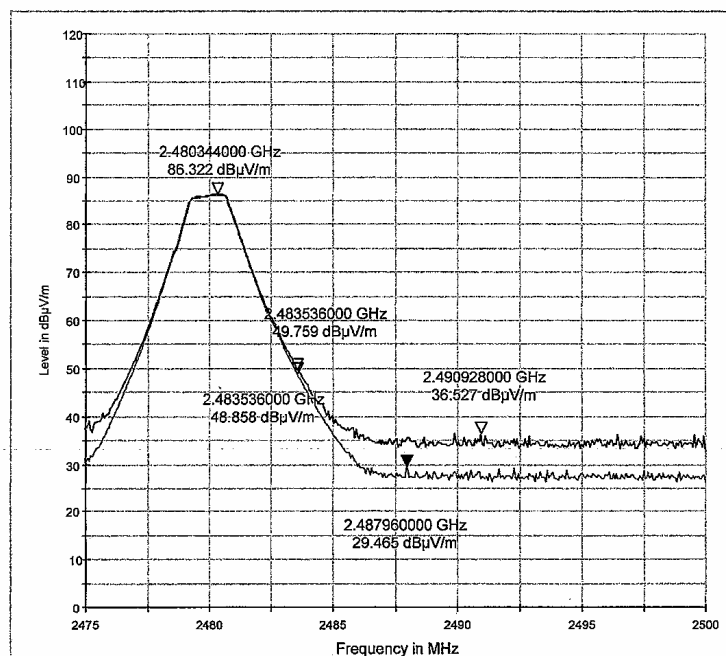
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusiCALL
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:	163073422 300
Report No:	17019444 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: 15/02/2011 - Time: 23:28:09

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

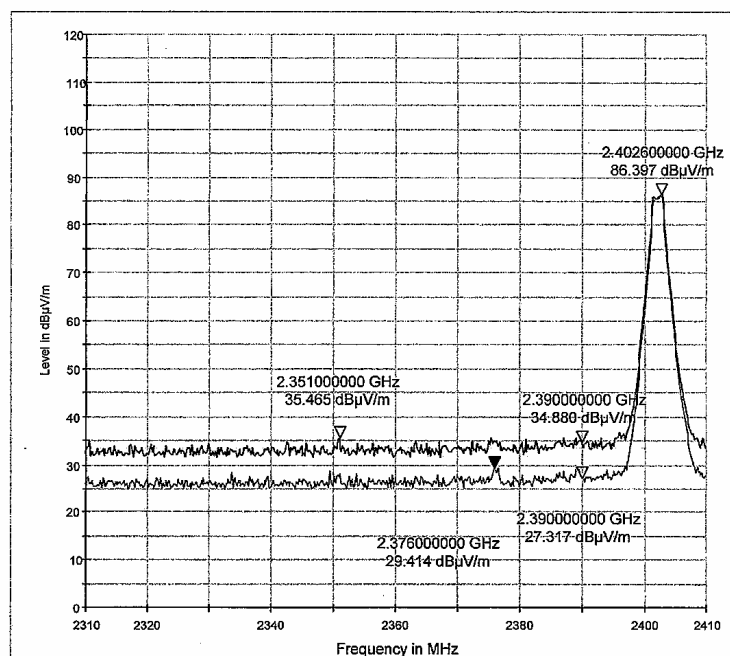
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusiCALL
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:	163073422 300
Report No:	17019444 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: 15/02/2011 - Time: 23:43:00

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

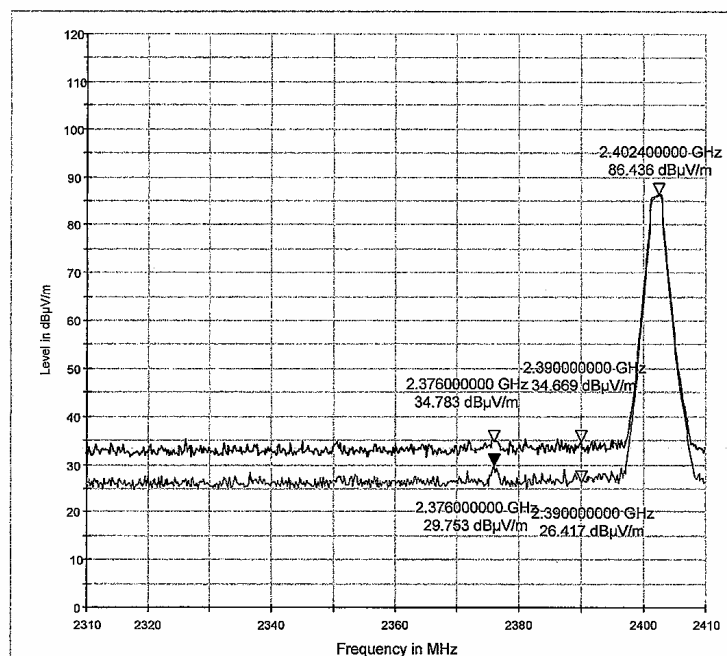
EMC Test Record (Emission)

Common Information

Manufacturer:	K-Mate
Test Item:	Bluetooth Headset
Identification:	BLUETREK MusicALL
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:	163073422 300
Report No:	17019444 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: 15/02/2011 - Time: 23:44:59

Tested by:  Reviewed by: _____