



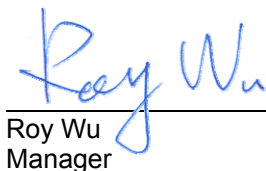
FCC Test Report

According to

47 CFR Part 15 Subpart C

Equipment : Bluetooth Headset
Trade Name : MOTOROLA
Model No. : H620 & H560
FCC ID : OHH-MT08
Filing Type : Certification
Applicant : Cal-Comp Electronics (Thailand) Co., Ltd.
191/54, 57, 18th FL, Rachadapisek Road., Klongtoey, Bangkok,
Thailand

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- The data shown in this test report were carried out on Jun. 11, 2008 at **Sporton International Inc. LAB.**
- Report No.: FR852105, Report Version: Rev. 02


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Report Version: Rev. 02

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History of This Test Report

Report Issue Date: Jun. 20, 2008

Report No.	Description

1. General Description of Equipment under Test

1.1 Applicant

Cal-Comp Electronics (Thailand) Co., Ltd.

191/54, 57, 18thFL, Rachadapisek Road., Klongtoey, Bangkok, Thailand

1.2 Manufacturer

Cal-Comp Electronics (Thailand) Co., Ltd.

191/54, 57, 18thFL, Rachadapisek Road., Klongtoey, Bangkok, Thailand

1.3 Basic Description of Equipment under Test

Equipment		Bluetooth Headset
Trade Name		MOTOROLA
Model Name		H620 & H560
FCC ID		OHH-MT08
AC Adapter	Brand Name	MOTOROLA
	Model Name	MFP5334A
	Power Rating	I/P:100-240Vac, 50-60Hz, 0.15A
	AC Power Cord Type	1.8 meter non-shielded cable without ferrite core
Battery	Brand Name	MOTOROLA
	Model Name	1332T

Remark: Above EUT's information was declared by manufacturer. Please refer to the specifications of manufacturer or User's Manual for more detailed features description.

1.4 Feature of Equipment under Test

Product Feature & Specification			
DUT Type :	Bluetooth Headset		
Trade Name :	MOTOROLA		
Model Name :	H620 & H560		
FCC ID :	OHH-MT08		
Tx Frequency :	2400 MHz ~ 2483.5 MHz		
Rx Frequency :	2400 MHz ~ 2483.5 MHz		
Number of Channels :	79		
Carrier Frequency of Each Channel :	2402+n*1 MHz; n=0~78		
Channel Spacing :	1 MHz		
Maximum Output Power to Antenna :	Bluetooth: -3.52 dBm (1Mbps) Bluetooth EDR: -1.16dBm (2Mbps) / -0.50dBm (3Mbps)		
Type of Antenna Connector :	N/A		
Antenna Type :	PCB Antenna		
Antenna Gain :	-1 dBi		
HW Version :	H620 / H560 : H620-MB-V06		
SW Version :	H620 : Chromium_(Trace_Disabled)_BCM2044A1_MP_001.002.029.0147 H560 : Cobalt H560 (Trace Disabled) BCM2044SA1_MP_001.002.029.0203		
Type of Modulation :	Bluetooth (1Mbps) : GFSK Bluetooth EDR (2Mbps) : $\pi/4$ -DQPSK Bluetooth EDR (3Mbps) : 8-DPSK		
Function Type :	Transmitter		Transceiver V
DUT Stage :	Identical Prototype		

Remark : The Models H620 and H520 are identical, the only difference between them are outer appearances.

2. Test Configuration of Equipment under Test

2.1 Test Manner

- The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
- The data rate, 3Mbps, was chosen to being tested, due to the highest RF output power.

Channel	Frequency	Data Rate / Modulation		
		GFSK	$\pi/4$ -DQPSK	8-DPSK
		1Mbps	2Mbps	3Mbps
Ch00	2400MHz	-4.44 dBm	-2.05 dBm	-1.67 dBm
Ch39	2441MHz	-3.92 dBm	-1.63 dBm	-0.99 dBm
Ch78	2480MHz	-3.52 dBm	-1.16 dBm	-0.50 dBm

Bluetooth uses frequency hopping spread spectrum (FHSS) operation which also facilitates Bluetooth multiple access and coexistence among other types of wireless systems. The basic frequency-hopping pattern is a pseudo-random ordering of 79 channel frequencies in the ISM band and the hopping rate is nominally 1600 hops per second. The EDR modulation format uses one of two types of DPSK ($\pi/4$ -DQPSK or 8-DPSK) in the payload section of the packet. As shown in figure, the EDR packet begins using GFSK modulation during the access code and header portions of the packet but changes to DPSK modulation after the guard time. Changing to a DPSK format allows increased data rates of 2 Mb/s or 3 Mb/s.

- The EUT is programmed to transmit signal continuously for all testings.
- Frequency range investigated: conduction 150 KHz to 30 MHz, radiation 30 MHz to 25000 MHz.

2.2 Test Mode

Application	Test Mode
Radiated Emission	BT Tx (EDR 3Mbps)
	Mode 1: CH00_2402 MHz for H620
	Mode 2: CH39_2441 MHz for H620
	Mode 3: CH78_2480 MHz for H620
	Mode 4: Charging Mode for H620
	Mode 5: CH00_2402 MHz for H560
	Mode 6: CH39_2441 MHz for H560
	Mode 7: CH78_2480 MHz for H560
	Mode 8: Charging Mode for H560
Conducted Emission	Mode 1: Charging Mode for H620

Remark:

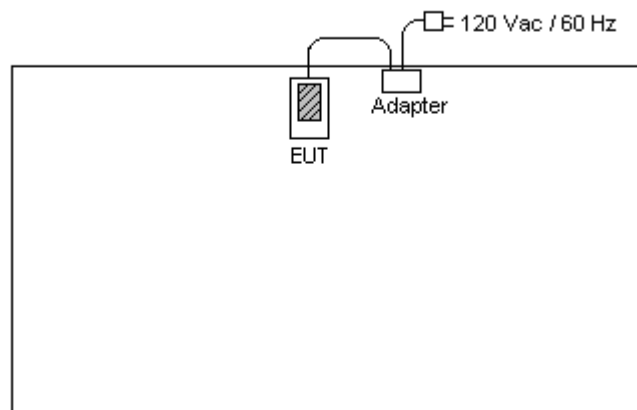
- Only the BT EDR 3Mbps was testing for radiated emission, due to the highest RF output power.
- The models H650 and H560 have the same RF chipset and PCB layout, only the H650 was used for conducted emission testing.

2.3 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	D400	E2K24GBRL	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

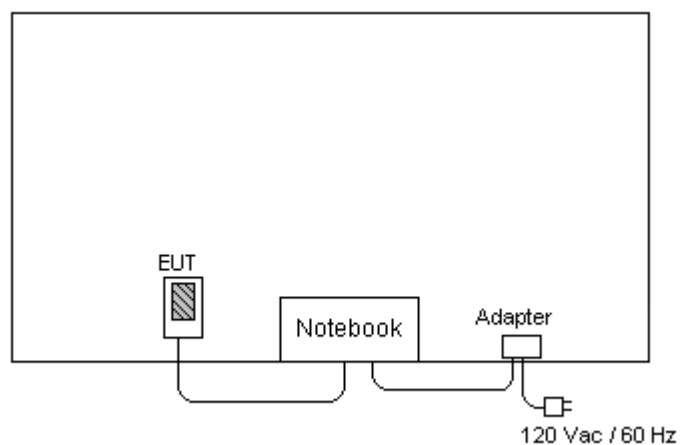
2.4 Connection Diagram of Test System

<Conducted Emission>

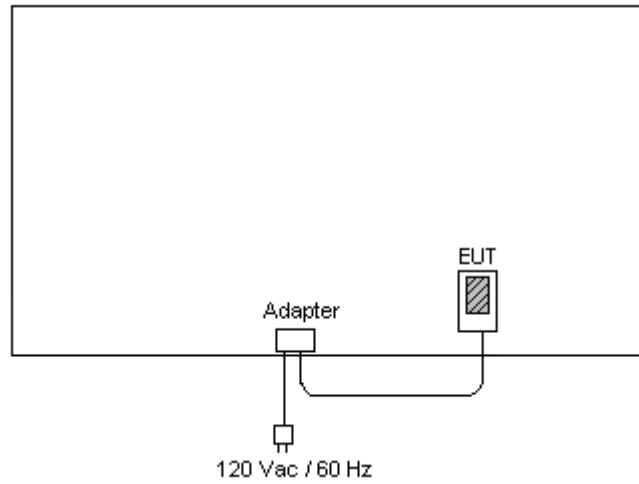


<Radiated Emission >

BT Tx Mode



Charging Mode



3. RF Utility

Programmed RF utility "Bluetool" installed in notebook provides functions like channel selection and power level for continuous transmitting and receiving signal.

4. General Information of Test

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-328-4978
Test Site No : CO04-HY, 03CH06-HY
FCC Designation No : TW1022

4.1 Test Voltage

AC 120V / 60Hz

4.2 Standard for Methods of Measurement

ANSI C63.4-2003

4.3 Test Compliance

47 CFR Part 15 Subpart C

4.4 Frequency Range

- a. Conduction: from 150 kHz to 30 MHz
- b. Radiation: from 30 MHz to 25000 MHz

4.5 Test Distance

The test distance of radiated emission from antenna to EUT is 3 m.

5. Test Data and Test Result

5.1 List of Measurements and Examinations

The Emission Mode: Bluetooth

FCC Rule	Description of Test	Result
15.207	Conducted Emission	Pass
15.247(a)(1)(iii)	Hopping Channel Bandwidth	Pass
15.247(a)(1)	Hopping Channel Separation	Pass
15.247(a)(1)(iii)	Number of Hopping Frequency	Pass
15.247(a)(1)(iii)	Dwell Time of Each Frequency	Pass
15.247(b)(1)	Output Power	Pass
15.247(d)	100 KHz Bandwidth of Frequency Band Edges	Pass
15.247(d)	Radiated Emission	Pass
15.203 15.247(b)(4)	Antenna Requirement	Pass

5.2 Band Edges Measurement

5.2.1 Measuring Instruments

As described in chapter 6 of this test report.

5.2.2 Test Procedure

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set both RBW and VBW of spectrum analyzer to 100 KHz with suitable frequency span including 100 KHz bandwidth from band edge.
3. The band edges was measured and recorded.

5.2.3 Test Result

- Application Type : Bluetooth
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren

Test Result in BT lower band	:	PASS
Test Result in BT higher band	:	PASS
Test Result in BT EDR(2Mbps) lower band	:	PASS
Test Result in BT EDR(2Mbps) higher band	:	PASS
Test Result in BT EDR(3Mbps) lower band	:	PASS
Test Result in BT EDR(3Mbps) higher band	:	PASS

5.2.4 Note on Band Edge Emission

➤ BT(3Mbps) for H620

CH00 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2383.53	39.38	-14.62	54.00	39.30	31.83	3.92	35.68	100	248	Average
2383.53	50.22	-23.78	74.00	50.14	31.83	3.92	35.68	100	0	Peak

CH00 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2327.86	39.23	-14.77	54.00	39.31	31.76	3.82	35.67	107	193	Average
2327.86	51.61	-22.39	74.00	51.69	31.76	3.82	35.67	100	0	Peak

CH78 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	42.61	-11.39	54.00	42.28	31.98	4.05	35.70	100	267	Average
2483.50	56.57	-17.43	74.00	56.27	31.98	4.05	35.70	100	0	Peak

CH78 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	43.60	-10.40	54.00	43.27	31.98	4.05	35.70	100	190	Average
2483.50	59.79	-14.21	74.00	59.46	31.98	4.05	35.70	100	0	Peak

➤ BT(3Mbps) for H560
CH00 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2382.01	44.24	-29.76	74.00	44.14	31.86	3.92	35.68	100	0	Peak
2382.01	30.52	-23.48	54.00	30.44	31.83	3.92	35.68	100	228	Average

CH00 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2322.73	44.30	-29.70	74.00	44.38	31.76	3.82	35.67	100	0	Peak
2322.73	30.43	-23.57	54.00	30.51	31.76	3.82	35.67	105	191	Average

CH78 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	56.40	-17.60	74.00	56.07	31.98	4.05	35.70	100	0	Peak
2483.50	33.34	-20.66	54.00	33.01	31.98	4.05	35.70	100	227	Average

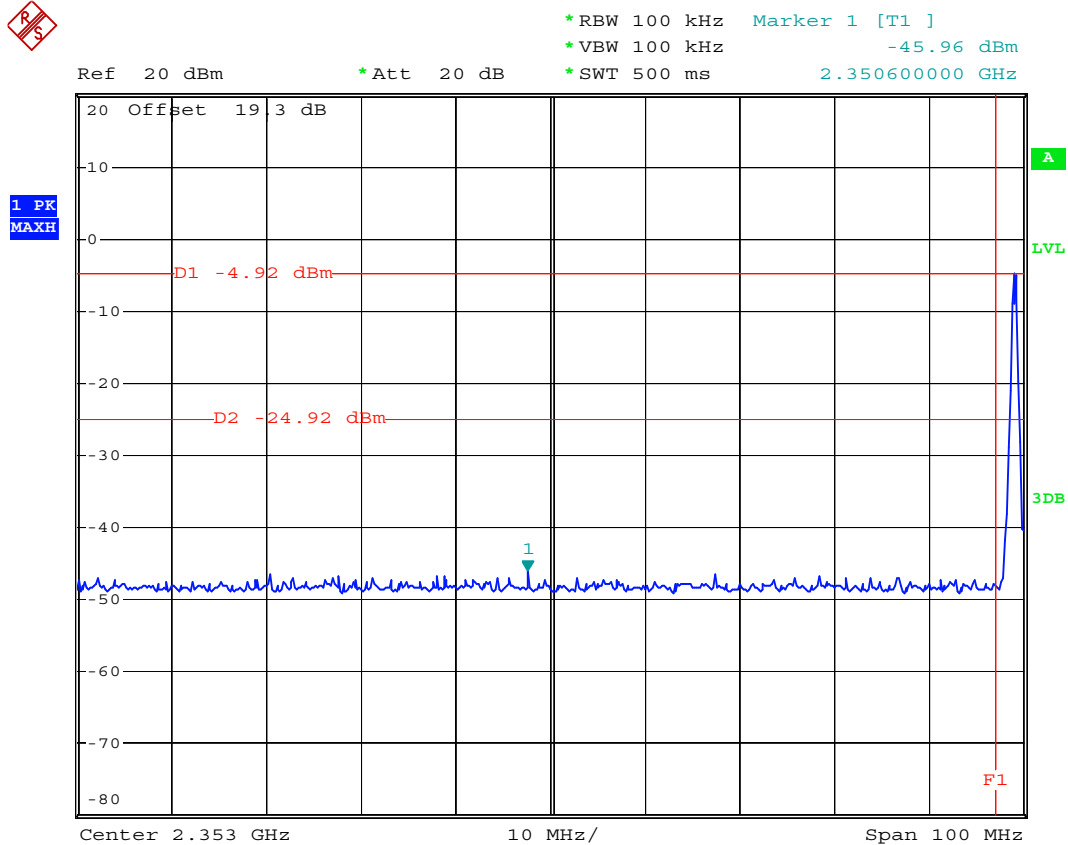
CH78 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	52.22	-21.78	74.00	51.89	31.98	4.05	35.70	100	0	Peak
2483.50	32.71	-21.29	54.00	32.38	31.98	4.05	35.70	176	165	Average

5.2.5 20dB Band Edge

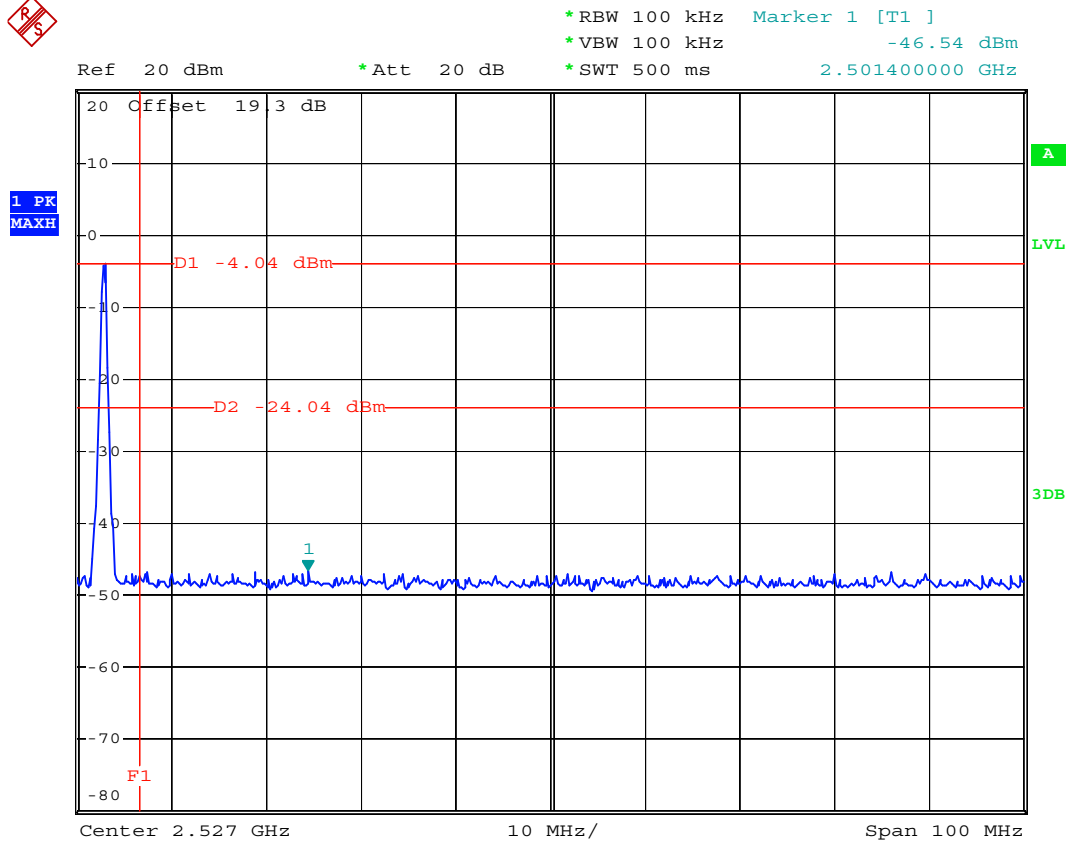
BT(1Mbps)

CH00



Date: 6.JUN.2008 21:27:14

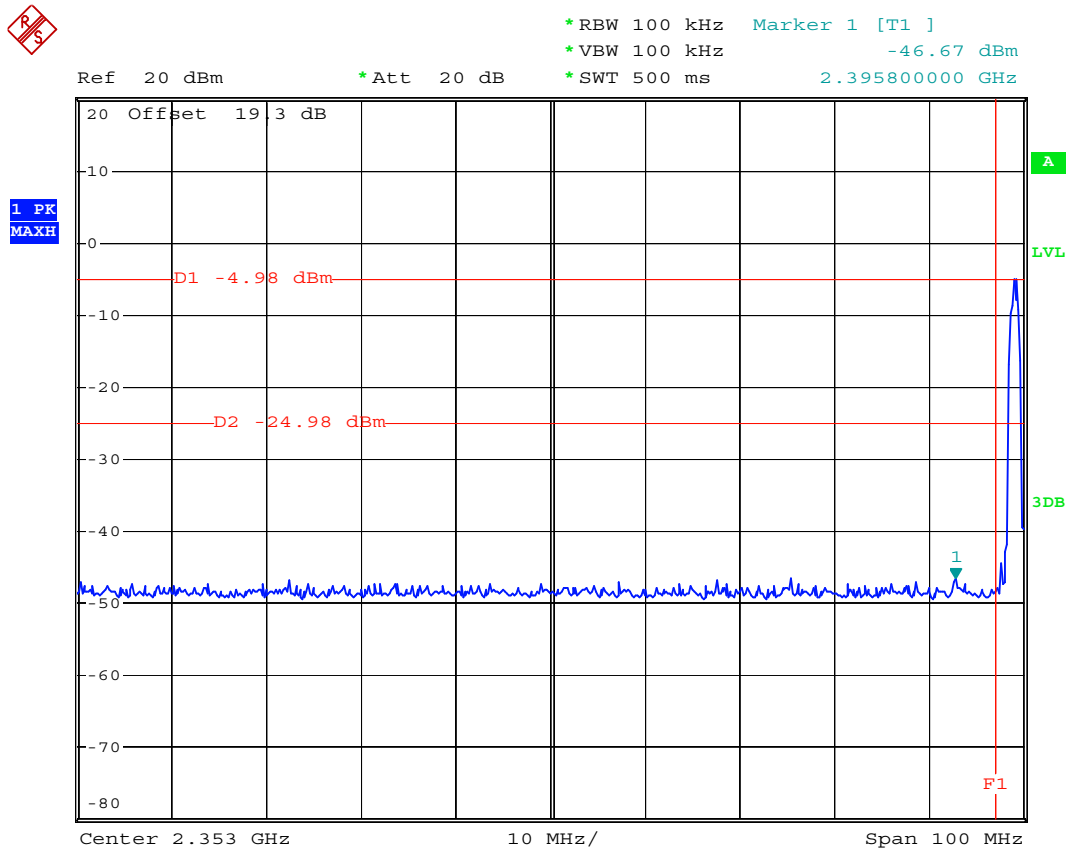
CH78



Date: 6.JUN.2008 21:25:44

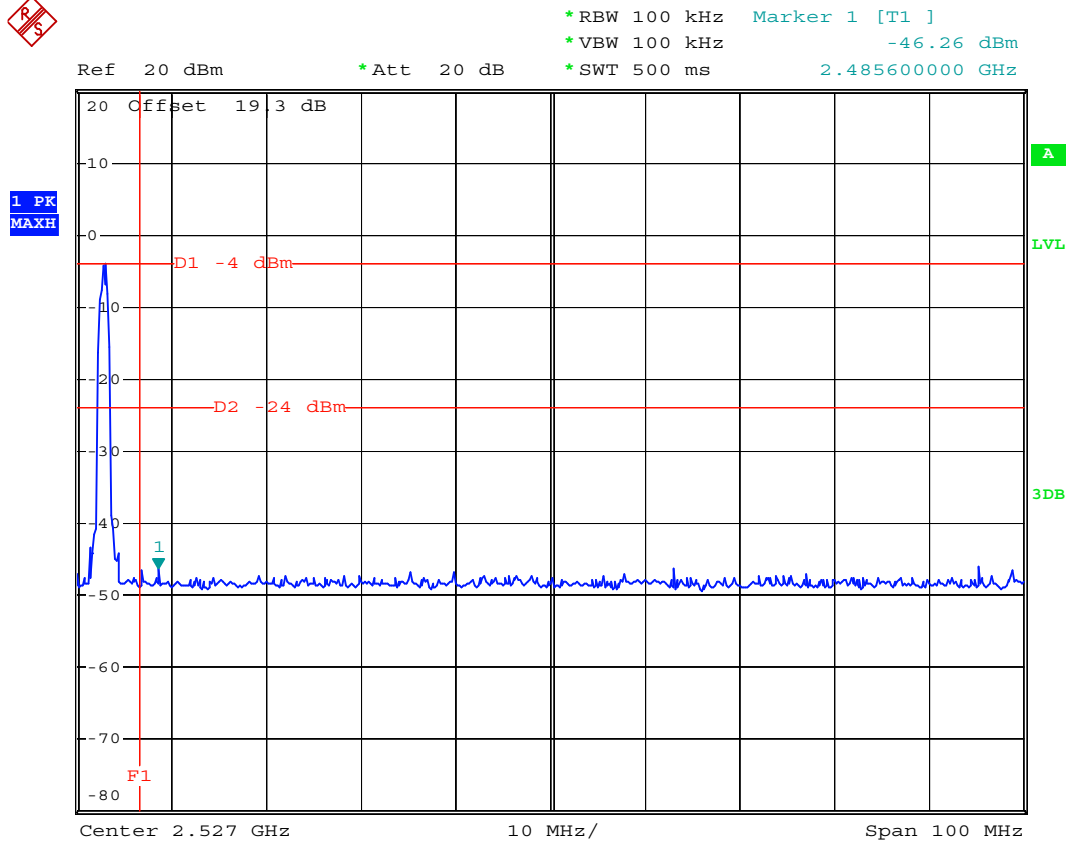
BT(2Mbps)

CH00



Date: 6.JUN.2008 21:56:22

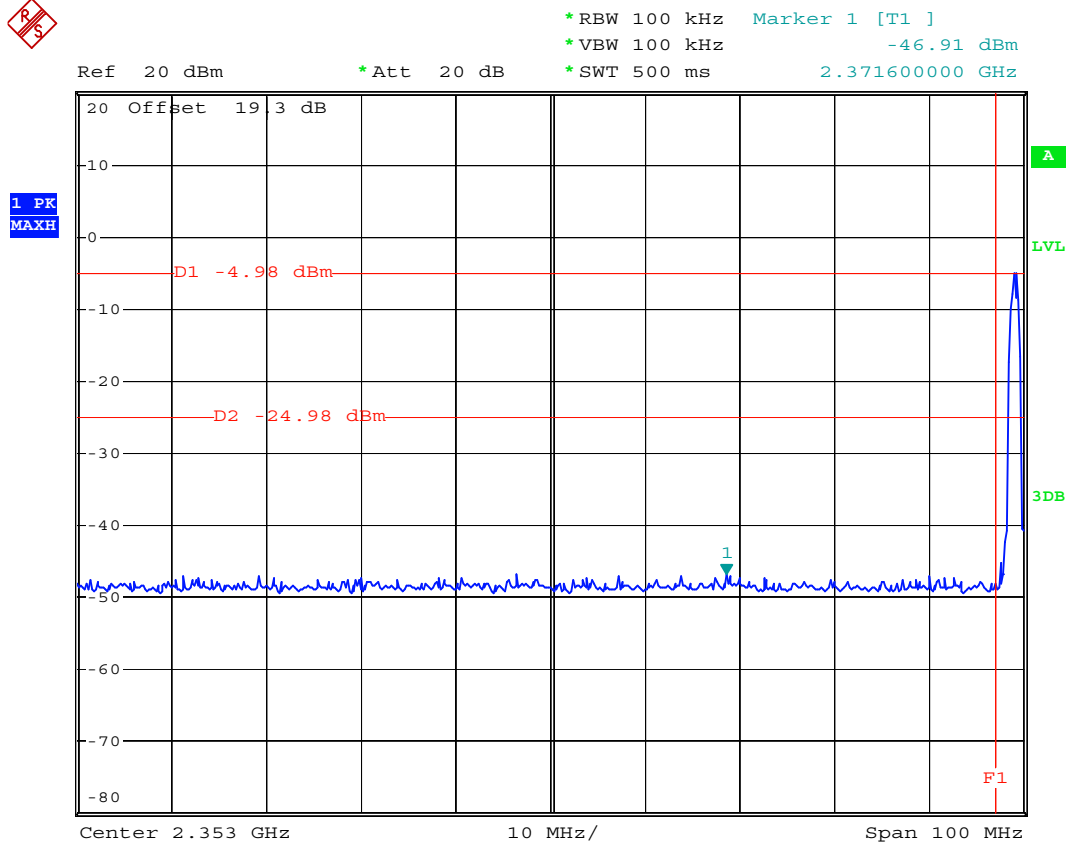
CH78



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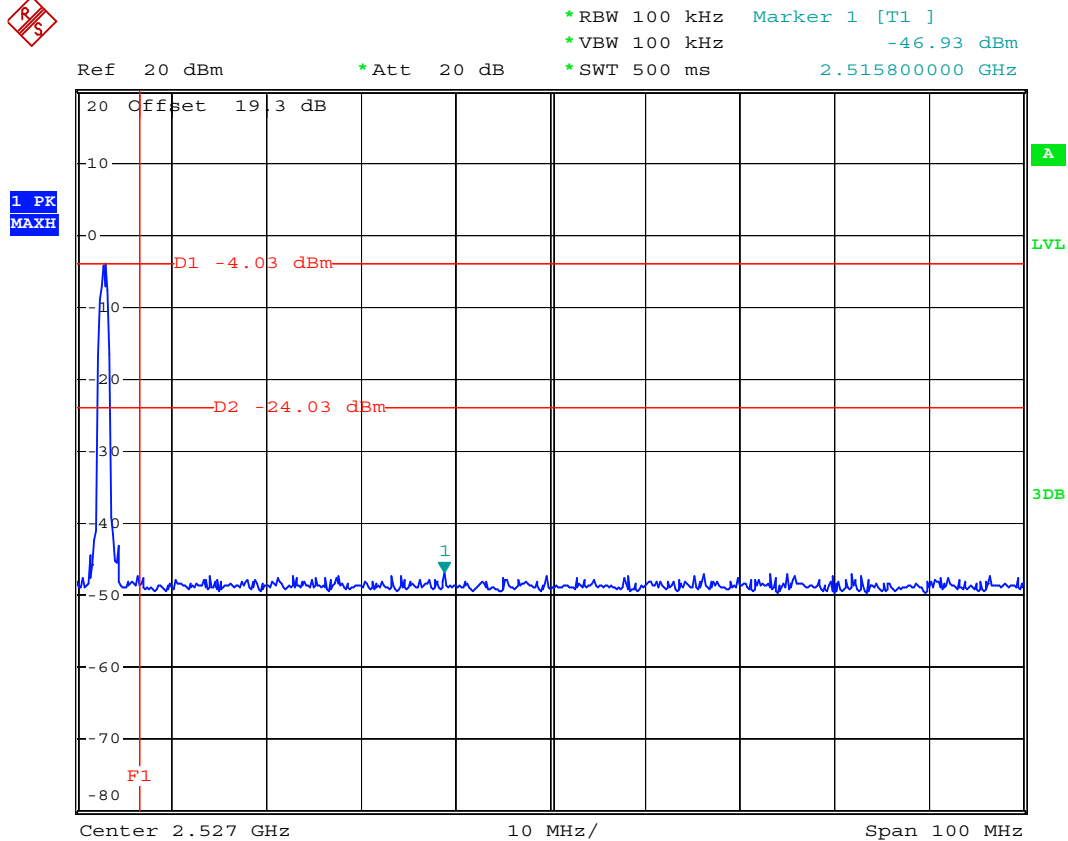
BT(3Mbps)

CH00



Date: 6.JUN.2008 22:11:27

CH78



Date: 6.JUN.2008 22:09:50

5.3 Hopping Channel Separation

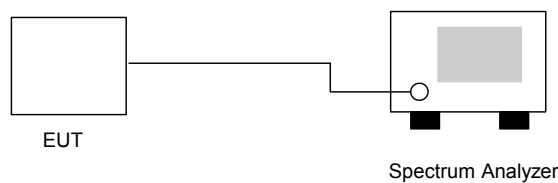
5.3.1 Measuring Instruments

As described in chapter 6 of this test report.

5.3.2 Test Procedure

1. The output of EUT was connected to the spectrum analyzer by a low loss cable..
2. Set RBW of spectrum analyzer to 30 KHz and VBW to 100 KHz.
3. The Hopping Channel Separation is defined as the channel is separated with the next channel.

5.3.3 Test Setup Layout



5.3.4 Test Result : The spectrum analyzer plots are attached as below

- Application Type : BT
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren

Channel	Frequency (MHz)	Carrier Frequency Separation (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	1.004	0.628	Mode 1
39	2441	1.004	0.632	Mode 2
78	2480	1.004	0.622	Mode 3

Remark: Hopping Channel Separation shall be greater 2/3 of 20dB bandwidth.

- Application Type : BT EDR(2Mbps)
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren

Channel	Frequency (MHz)	Carrier Frequency Separation (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	1.000	0.843	Mode 4
39	2441	1.000	0.856	Mode 5
78	2480	1.000	0.859	Mode 6

Remark: Hopping Channel Separation shall be greater 2/3 of 20dB bandwidth.

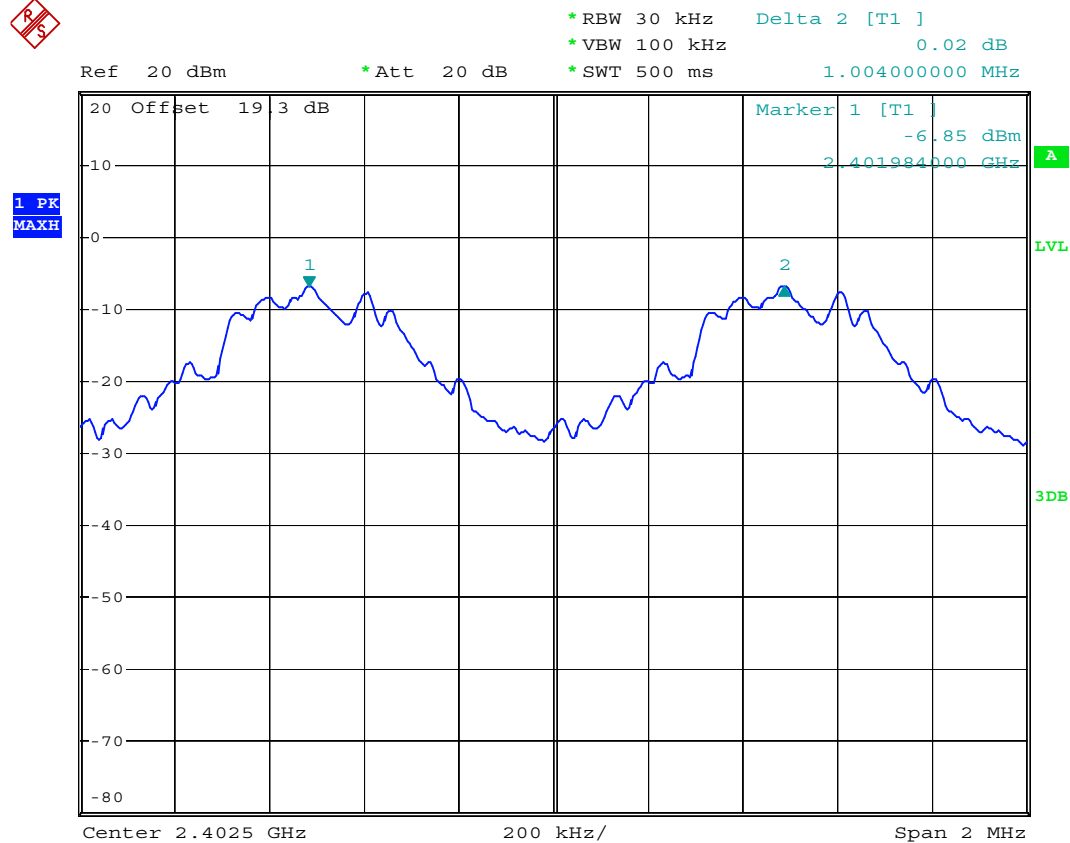
- Application Type : BT EDR(3Mbps)
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren

Channel	Frequency (MHz)	Carrier Frequency Separation (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	1.000	0.840	Mode 7
39	2441	1.000	0.843	Mode 8
78	2480	1.000	0.840	Mode 9

Remark: Hopping Channel Separation shall be greater 2/3 of 20dB bandwidth.

5.3.5 Hopping Channel Separation

Mode 1



Date: 6.JUN.2008 21:28:22

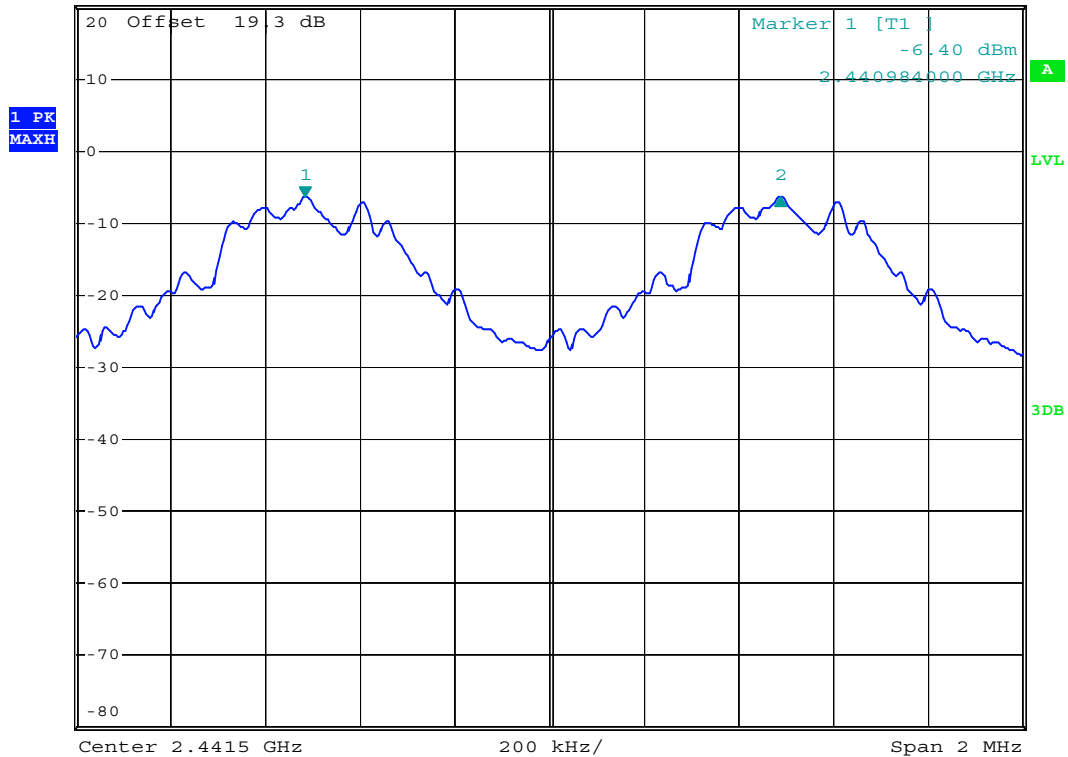
Mode 2



*RBW 30 kHz Delta 2 [T1]
 *VBW 100 kHz -0.03 dB
 *SWT 500 ms 1.004000000 MHz

Ref 20 dBm

*Att 20 dB



Date: 6.JUN.2008 21:29:09

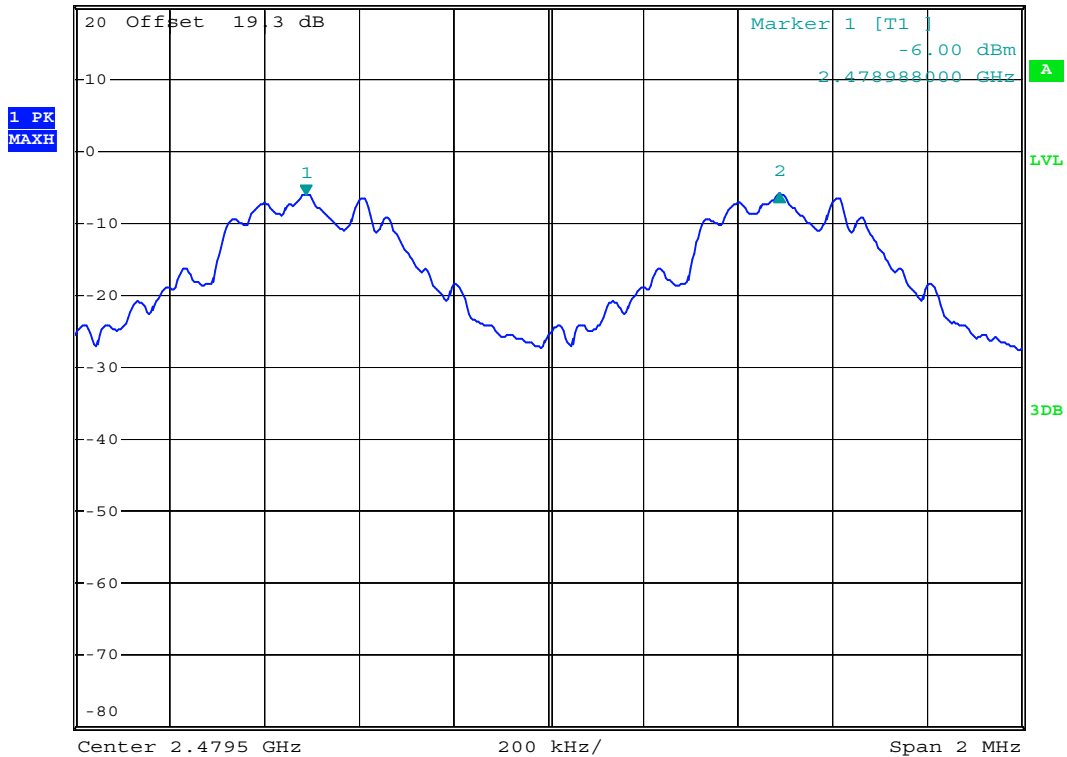
Mode 3



*RBW 30 kHz Delta 2 [T1]
 *VBW 100 kHz 0.06 dB
 *SWT 500 ms 1.000000000 MHz

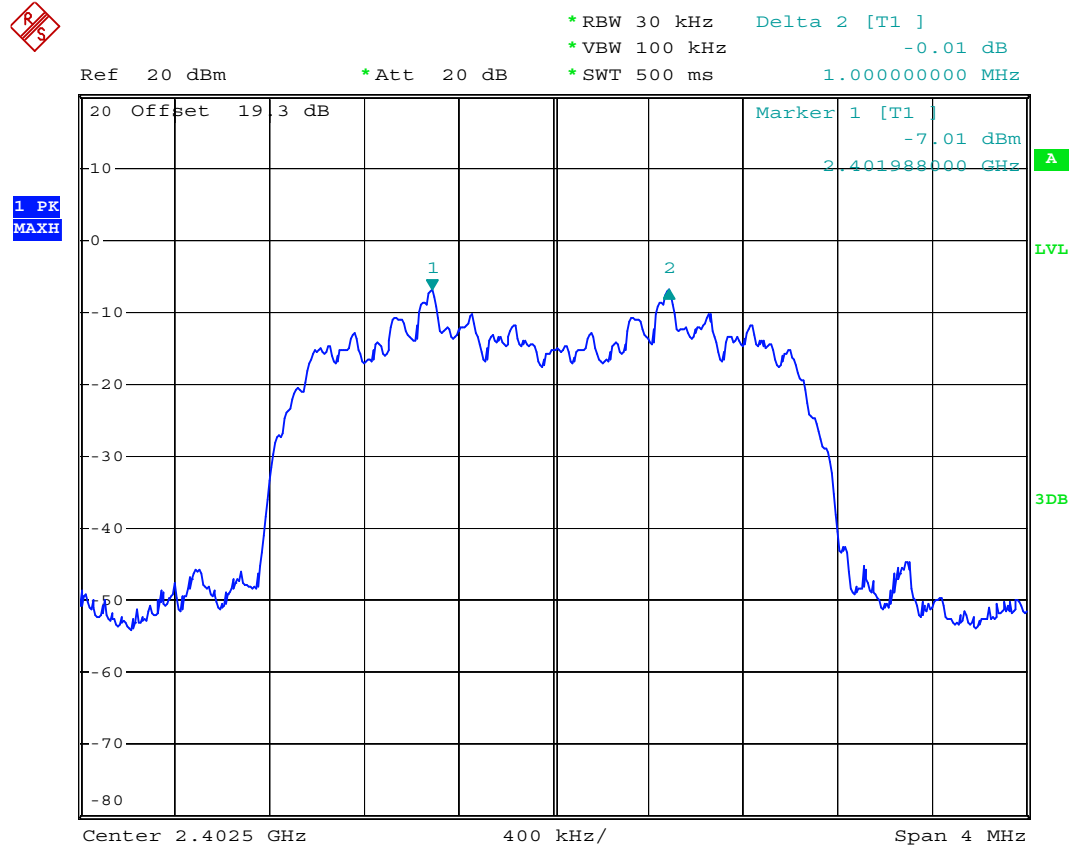
Ref 20 dBm

*Att 20 dB



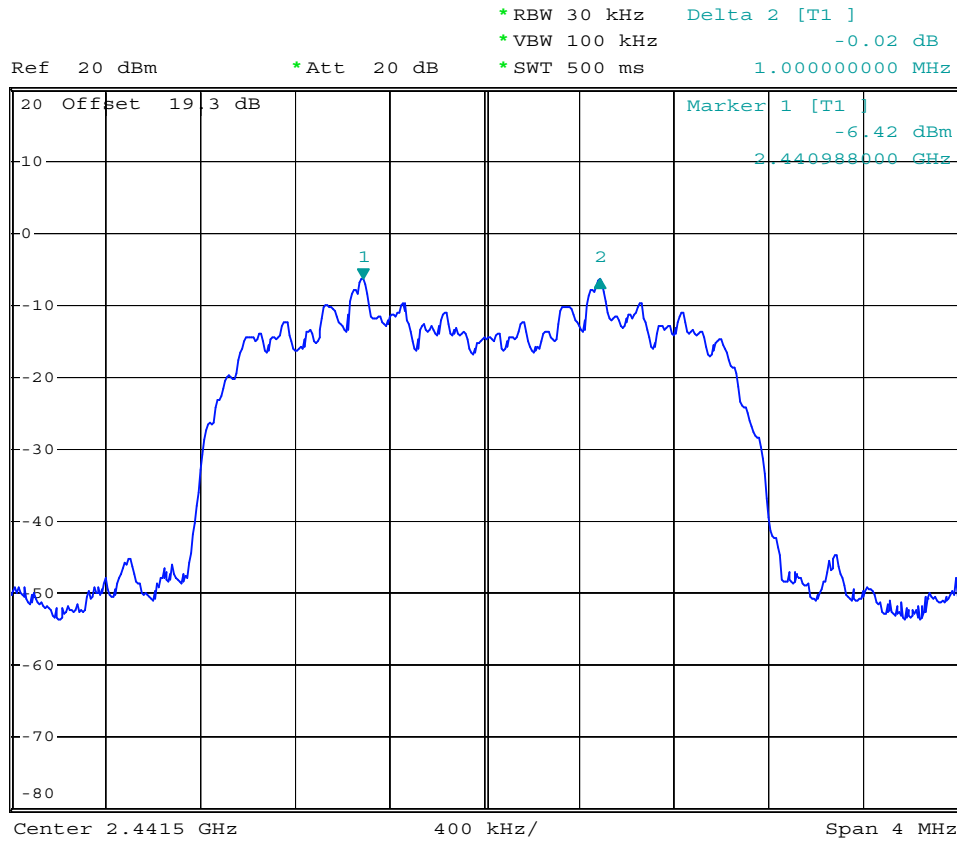
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Mode 4



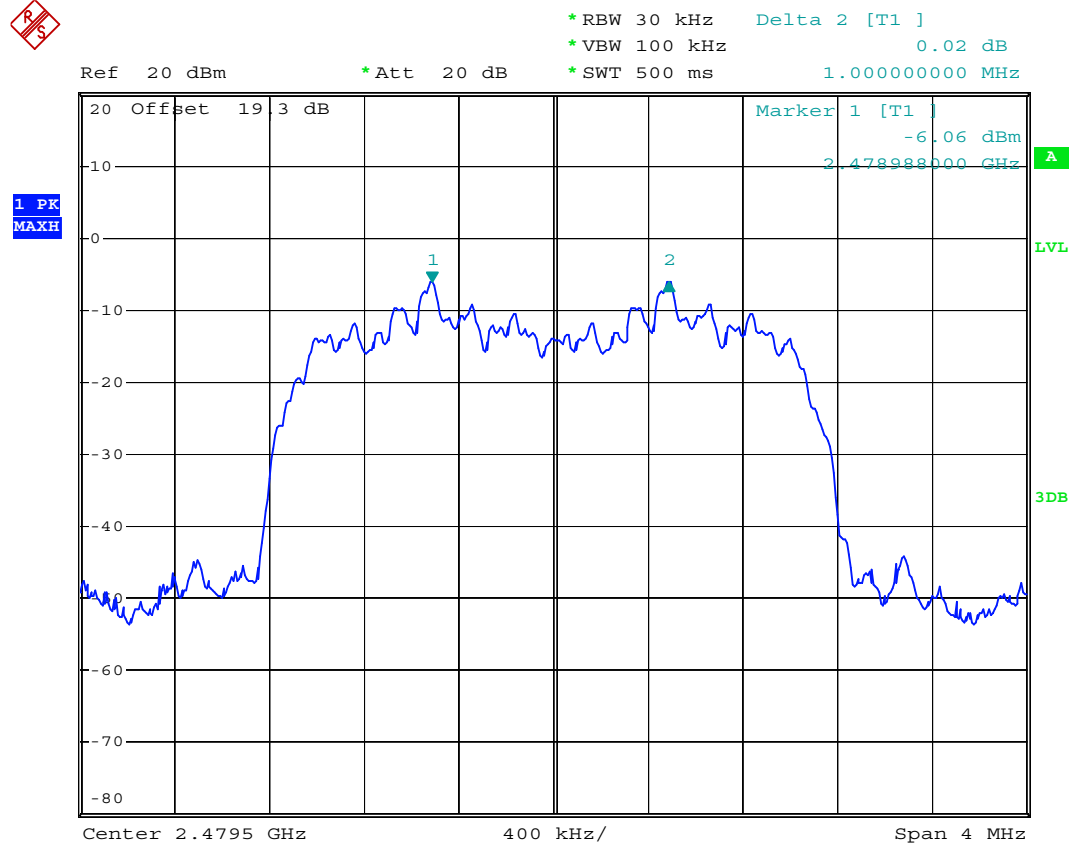
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Mode 5



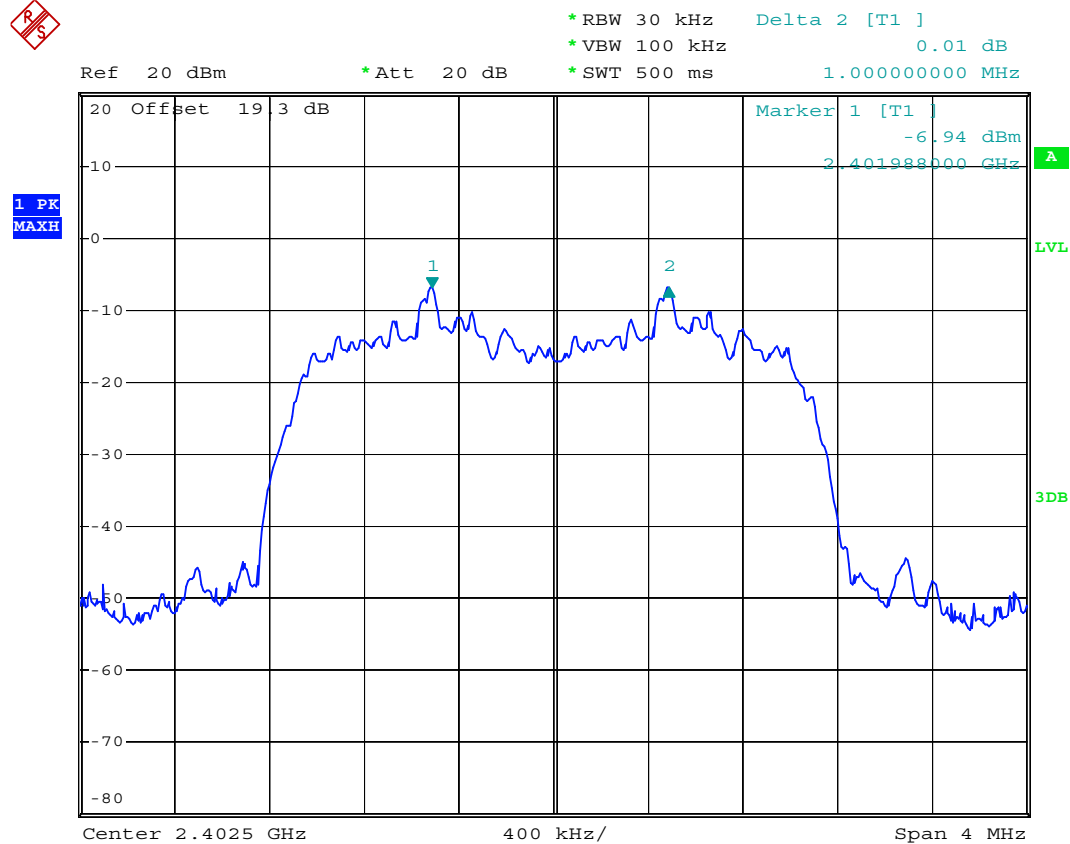
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Mode 6



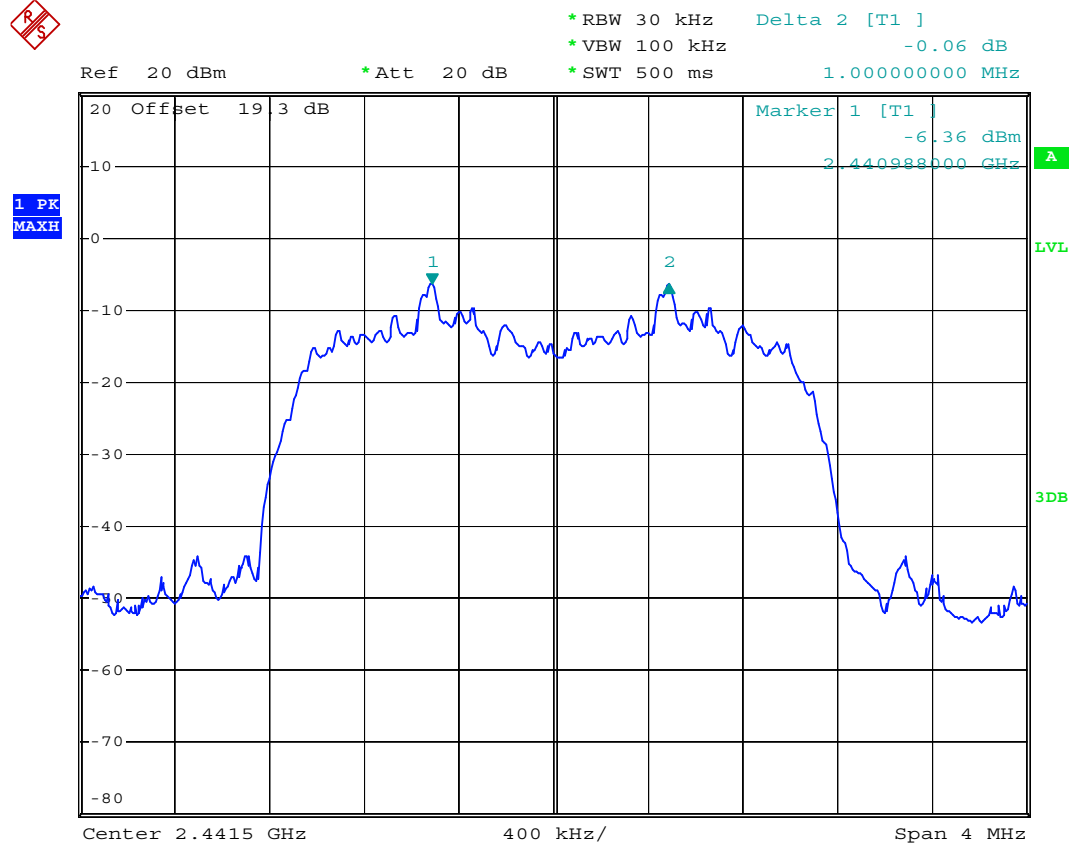
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Mode 7



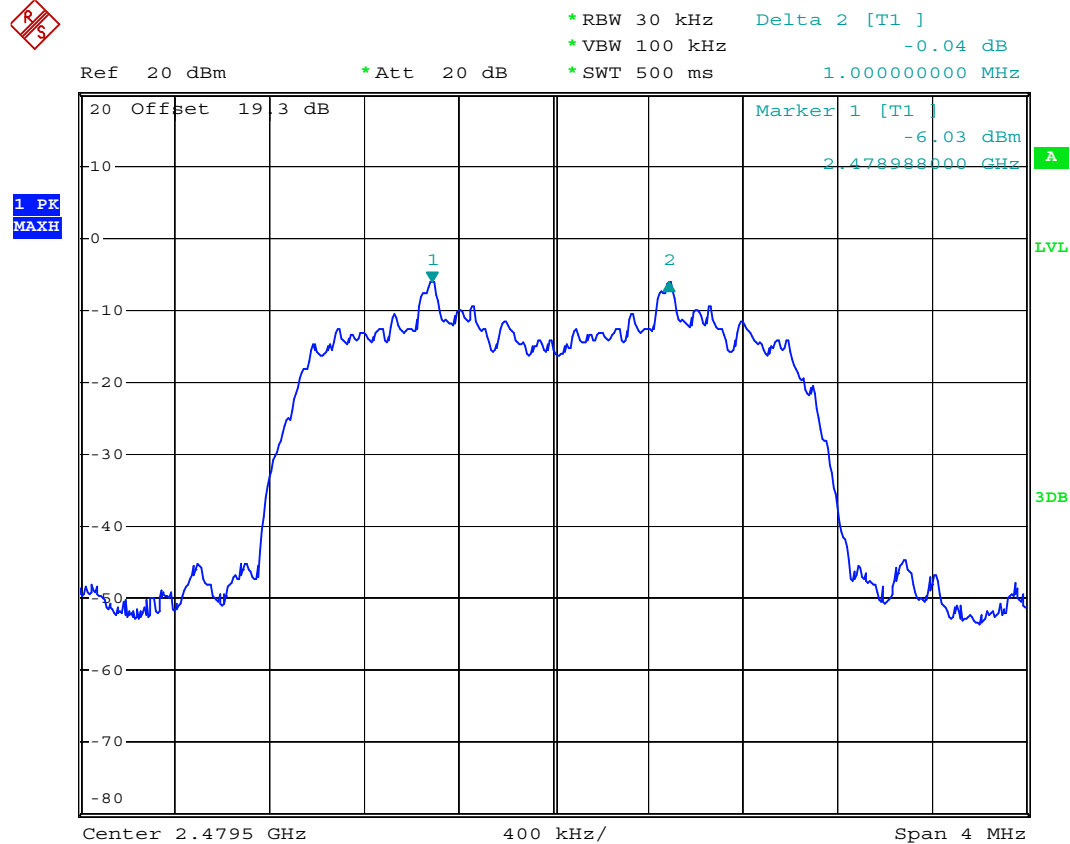
Date: 6.JUN.2008 22:13:14

Mode 8



Date: 6.JUN.2008 22:15:35

Mode 9



Date: 6.JUN.2008 22:16:19

5.4 Number of Hopping Frequency

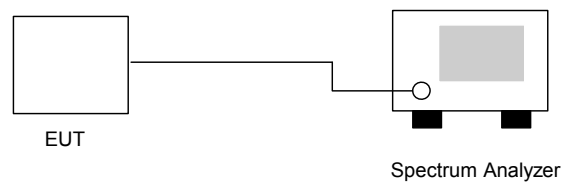
5.4.1 Measuring Instruments

As described in chapter 6 of this test report.

5.4.2 Test Procedure

- a. The output of EUT was connected to the spectrum analyzer by a low loss cable.
- b. Set RBW of spectrum analyzer to 100 KHz and VBW to 100 KHz.
- c. The number of hopping frequency used is defined as the device has the numbers of total channel.

5.4.3 Test Setup Layout



5.4.4 Test Result : See spectrum analyzer plots below

- Application Type : BT
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren

Number of Hopping Frequency (Channel)	Limits (Channel)
79	15

- Application Type : BT EDR(2Mbps)
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren

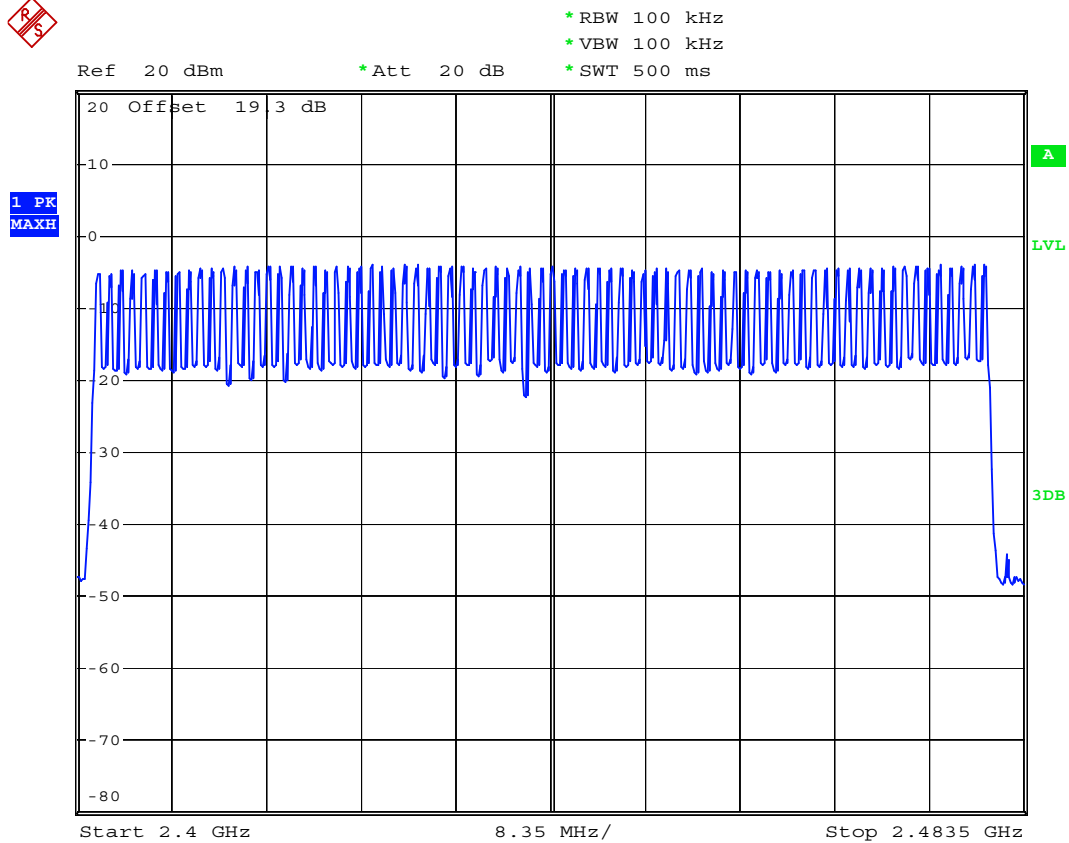
Number of Hopping Frequency (Channel)	Limits (Channel)
79	15

- Application Type : BT EDR(3Mbps)
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren

Number of Hopping Frequency (Channel)	Limits (Channel)
79	15

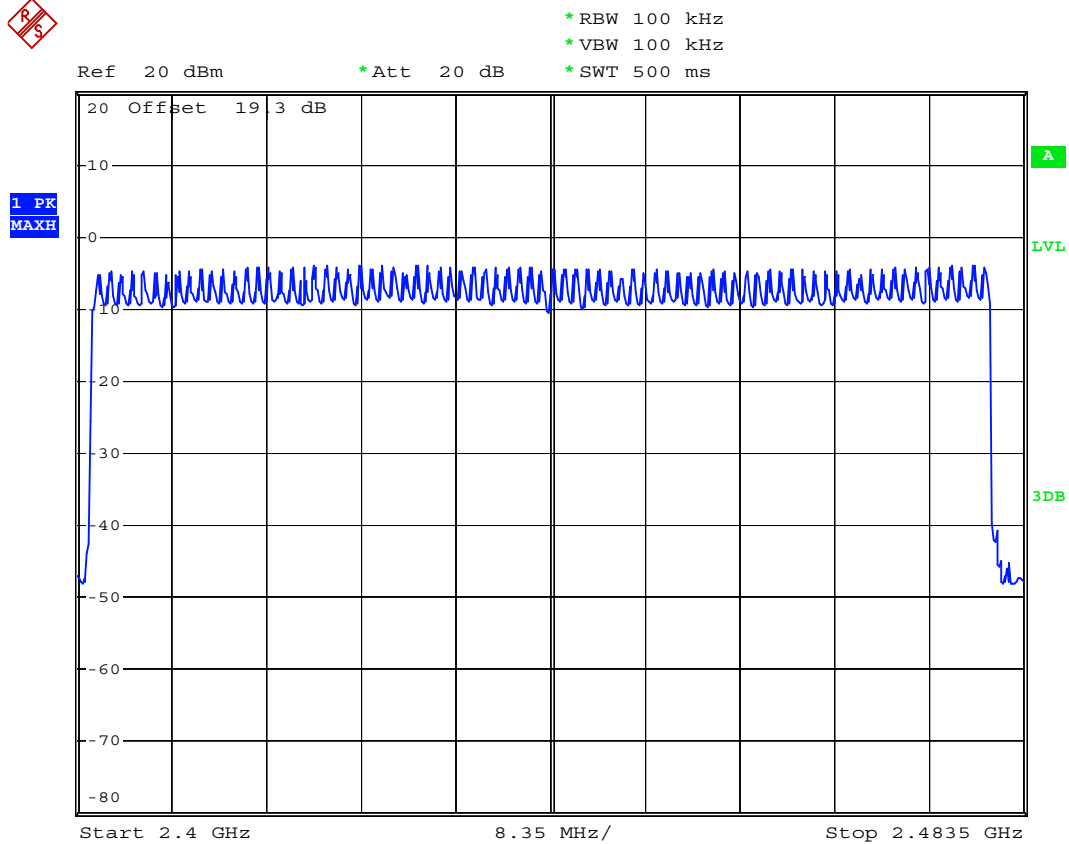
5.4.5 Number of Hopping Frequency

BT



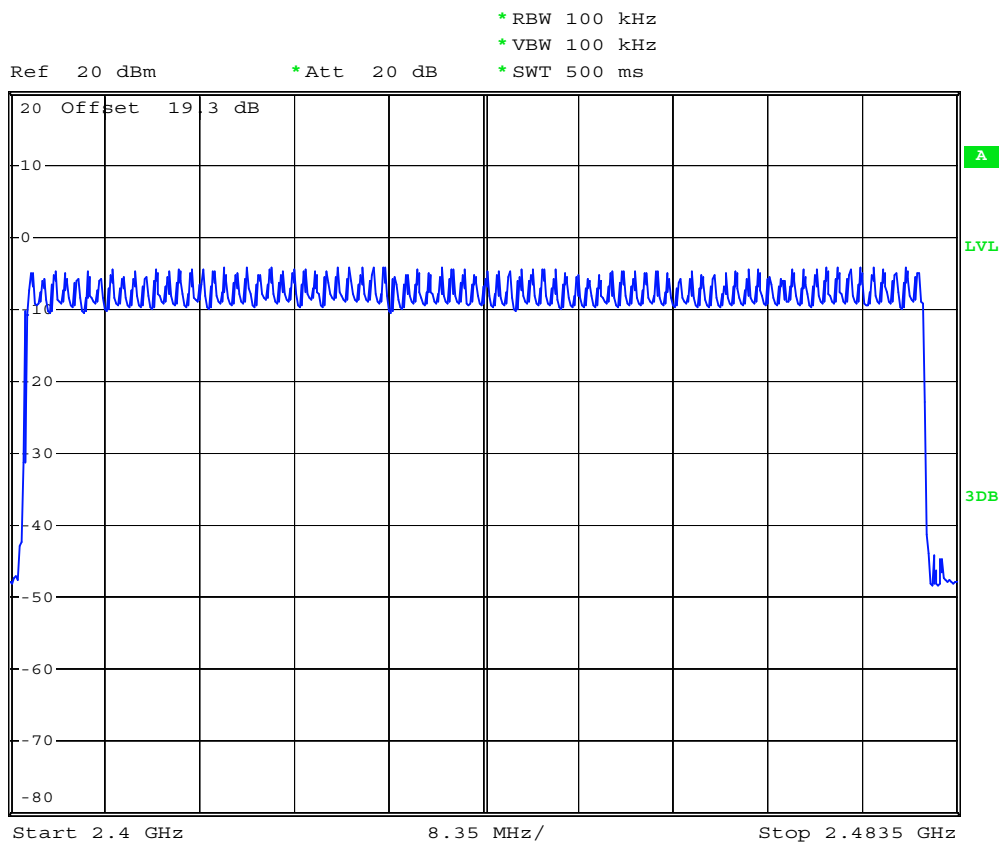
Date: 6.JUN.2008 21:37:57

BT EDR(2Mbps)



Date: 6.JUN.2008 21:43:43

BT EDR(3Mbps)



Date: 6.JUN.2008 21:48:10

5.5 Hopping Channel Bandwidth

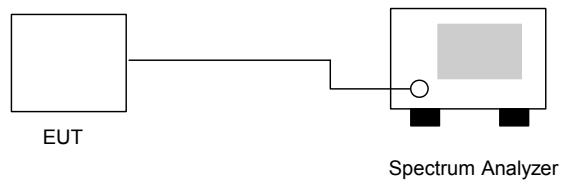
5.5.1 Measuring Instruments

As described in chapter 6 of this test report.

5.5.2 Test Procedure

- The transmitter output was connected to the spectrum analyzer by a low loss cable.
- Set RBW of spectrum analyzer to 30 KHz and VBW to 300 KHz.
- The Hopping Channel bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20 dB.

5.5.3 Test Setup Layout



5.5.4 Test Result : See spectrum analyzer plots below

- Application Type : BT
- Temperature : 28~29℃
- Relative Humidity : 46~47%
- Test Engineer : Darren

Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Plot Ref. No.
00	2402	0.942	Mode 1
39	2441	0.948	Mode 2
78	2480	0.933	Mode 3

- Application Type : BT EDR(2Mbps)
- Temperature : 28~29℃
- Relative Humidity : 46~47%
- Test Engineer : Darren

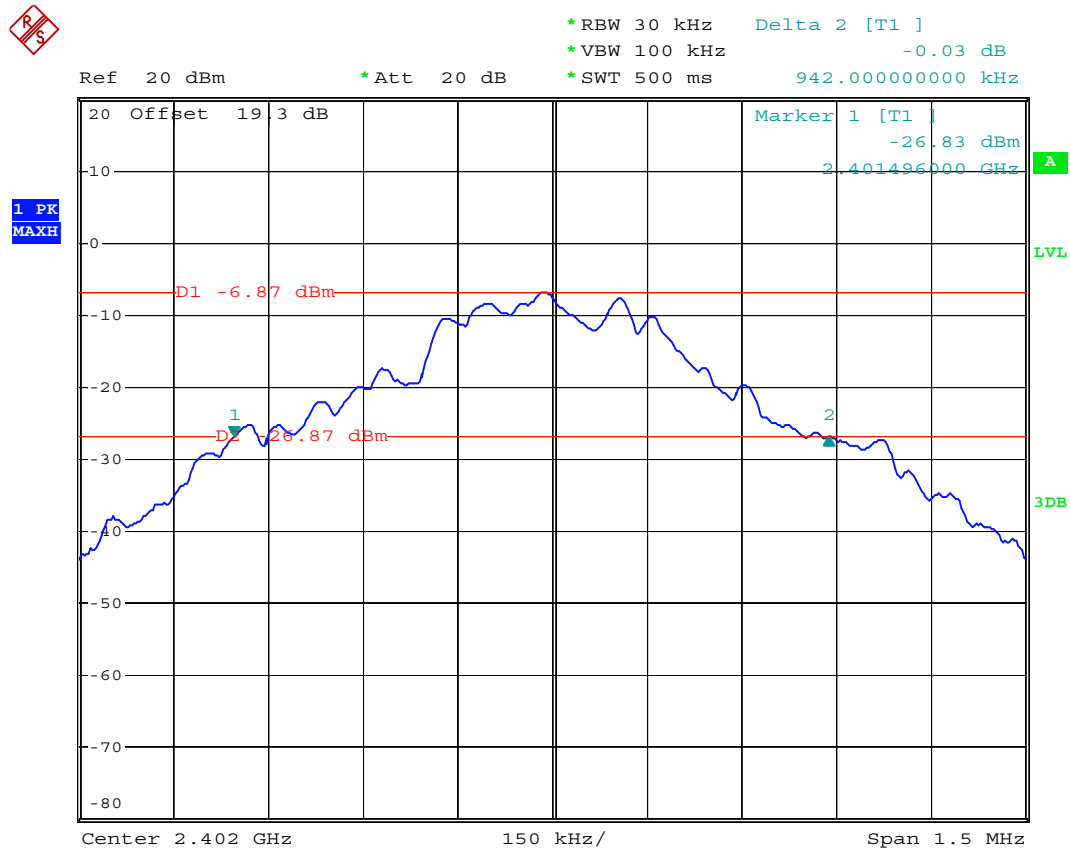
Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Plot Ref. No.
00	2402	1.264	Mode 4
39	2441	1.284	Mode 5
78	2480	1.288	Mode 6

- Application Type : BT EDR(3Mbps)
- Temperature : 28~29℃
- Relative Humidity : 46~47%
- Test Engineer : Darren

Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Plot Ref. No.
00	2402	1.260	Mode 7
39	2441	1.264	Mode 8
78	2480	1.260	Mode 9

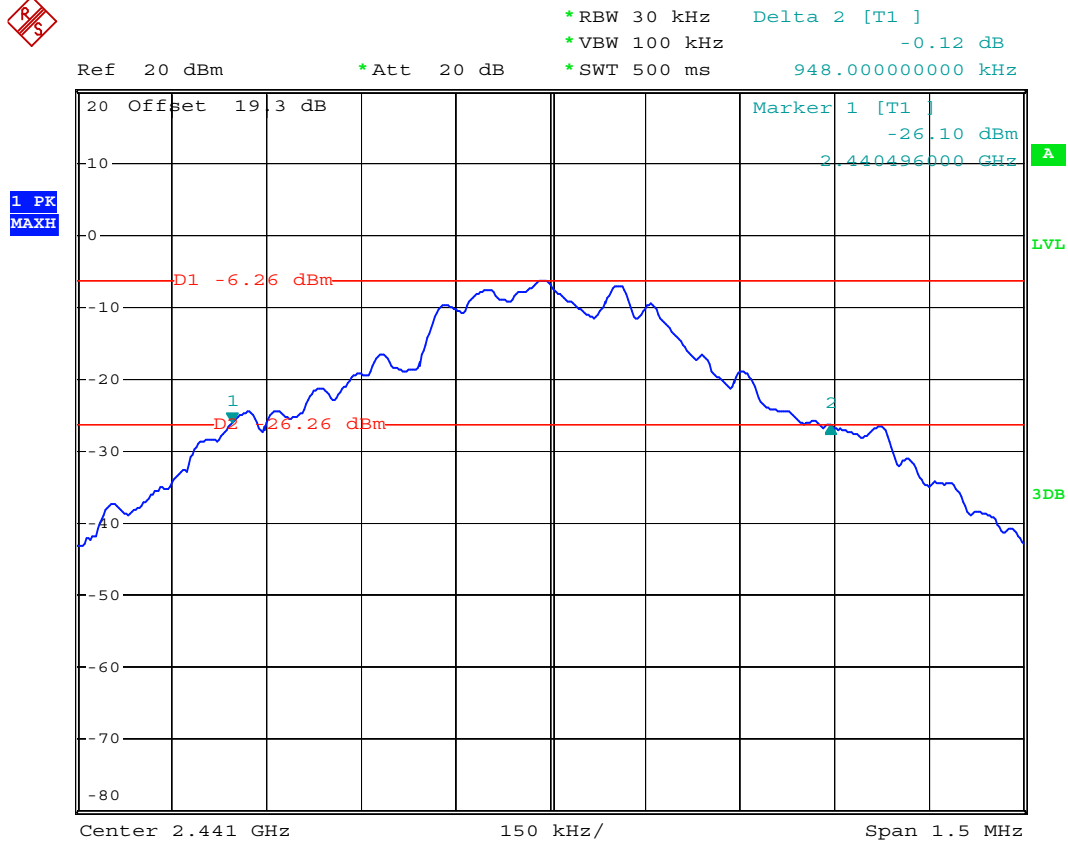
5.5.5 Hopping Channel Bandwidth

Mode 1



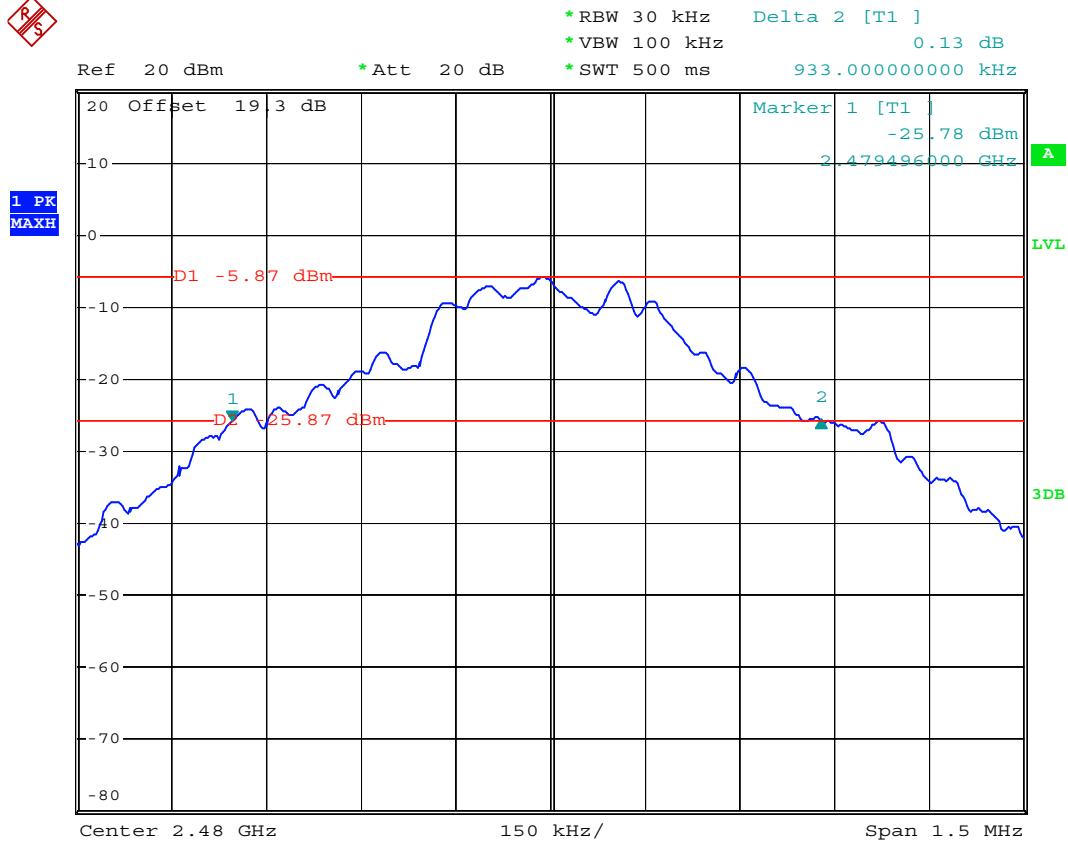
Date: 6.JUN.2008 21:20:40

Mode 2



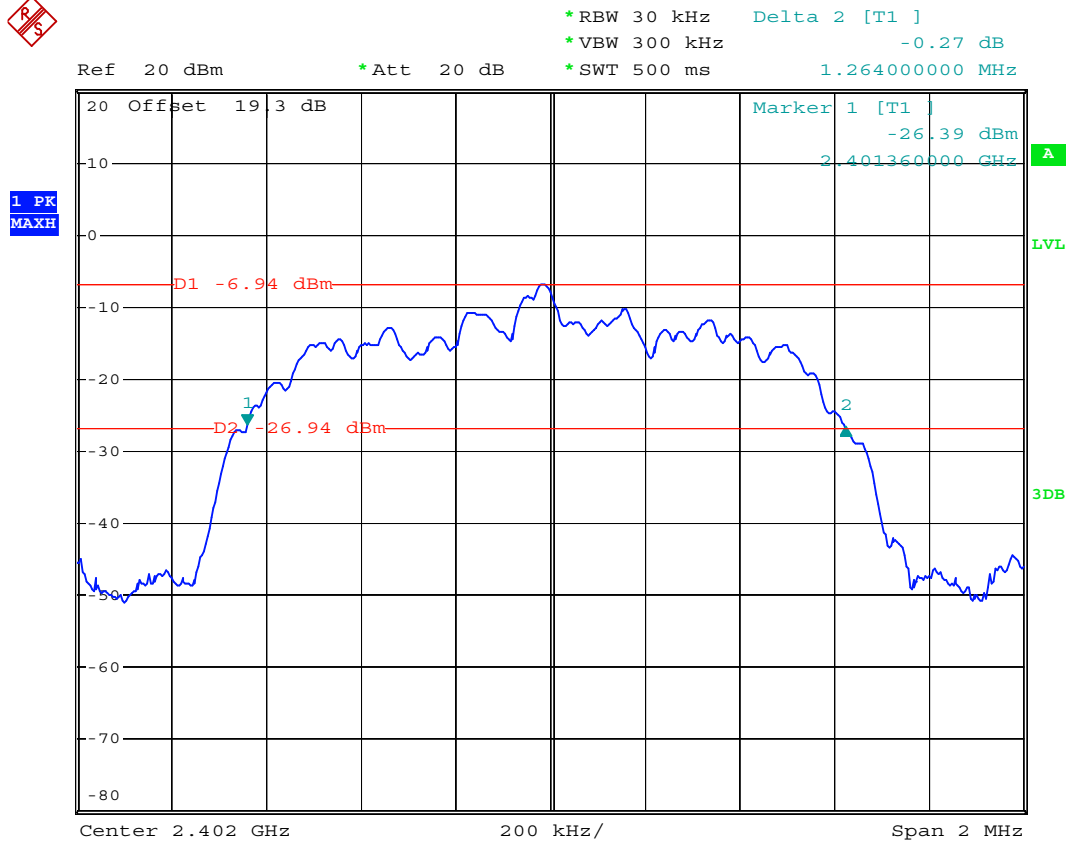
Date: 6.JUN.2008 21:22:46

Mode 3



Date: 6.JUN.2008 21:24:25

Mode 4

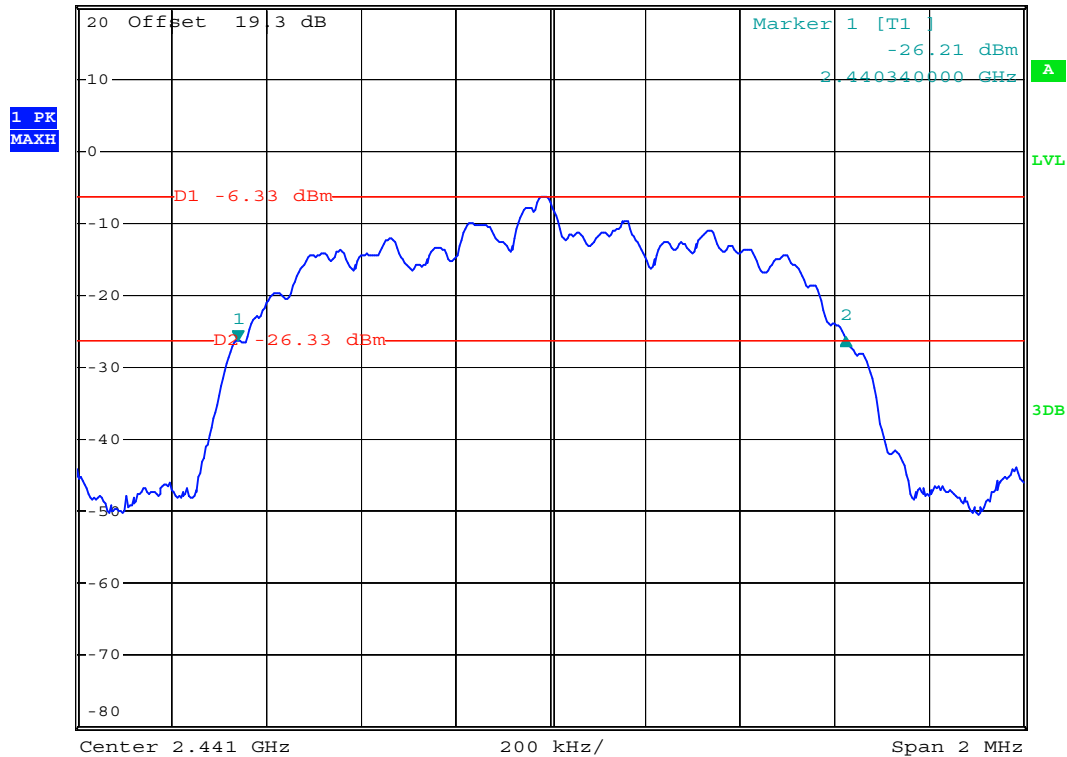


Date: 6.JUN.2008 21:55:28

Mode 5

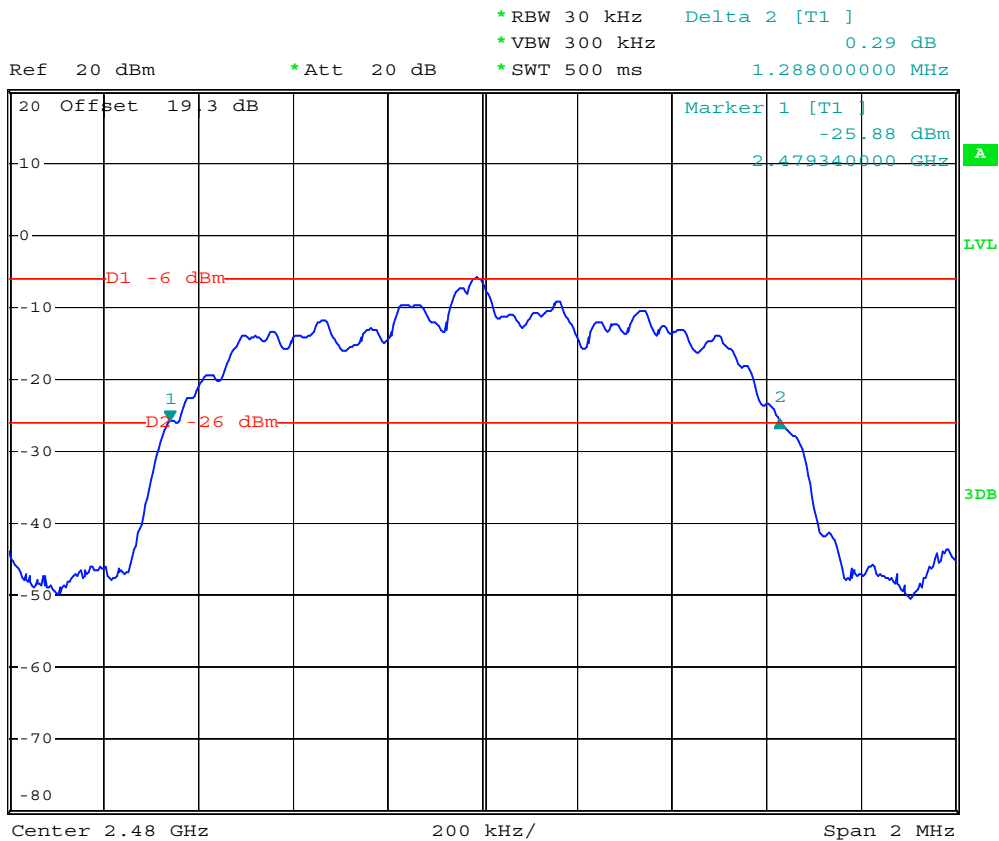


Ref 20 dBm *Att 20 dB *RBW 30 kHz Delta 2 [T1]
 *VBW 300 kHz 0.33 dB
 *SWT 500 ms 1.284000000 MHz



Date: 6.JUN.2008 21:54:32

Mode 6

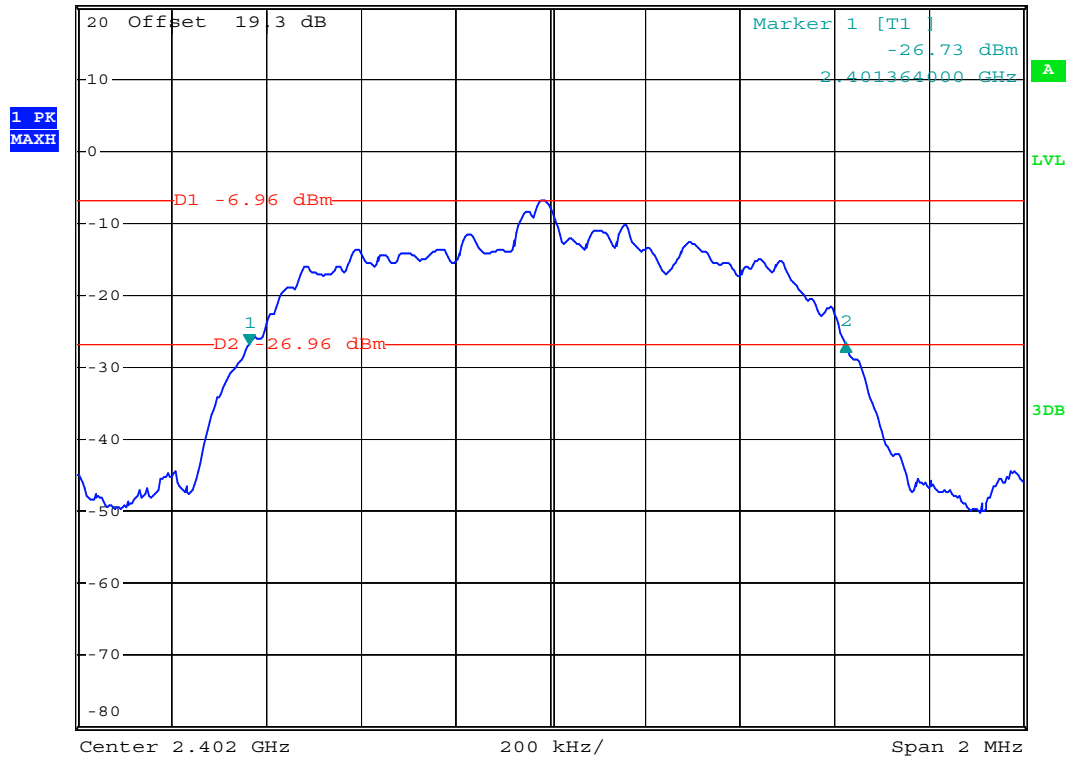


Date: 6.JUN.2008 21:53:18

Mode 7



Ref 20 dBm *Att 20 dB *RBW 30 kHz Delta 2 [T1]
 *VBW 300 kHz 0.07 dB
 *SWT 500 ms 1.260000000 MHz

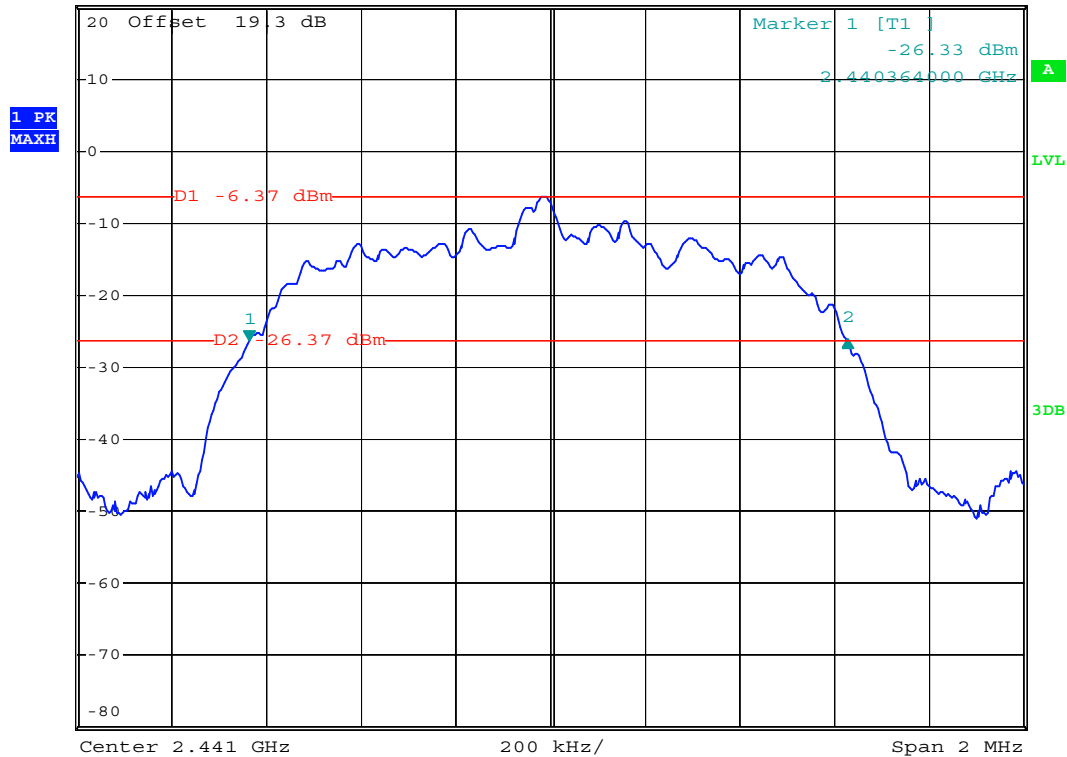


Date: 6.JUN.2008 22:06:45

Mode 8



Ref 20 dBm *Att 20 dB *RBW 30 kHz Delta 2 [T1]
 *VBW 300 kHz 0.19 dB
 *SWT 500 ms 1.264000000 MHz



Date: 6.JUN.2008 22:07:46

Mode 9

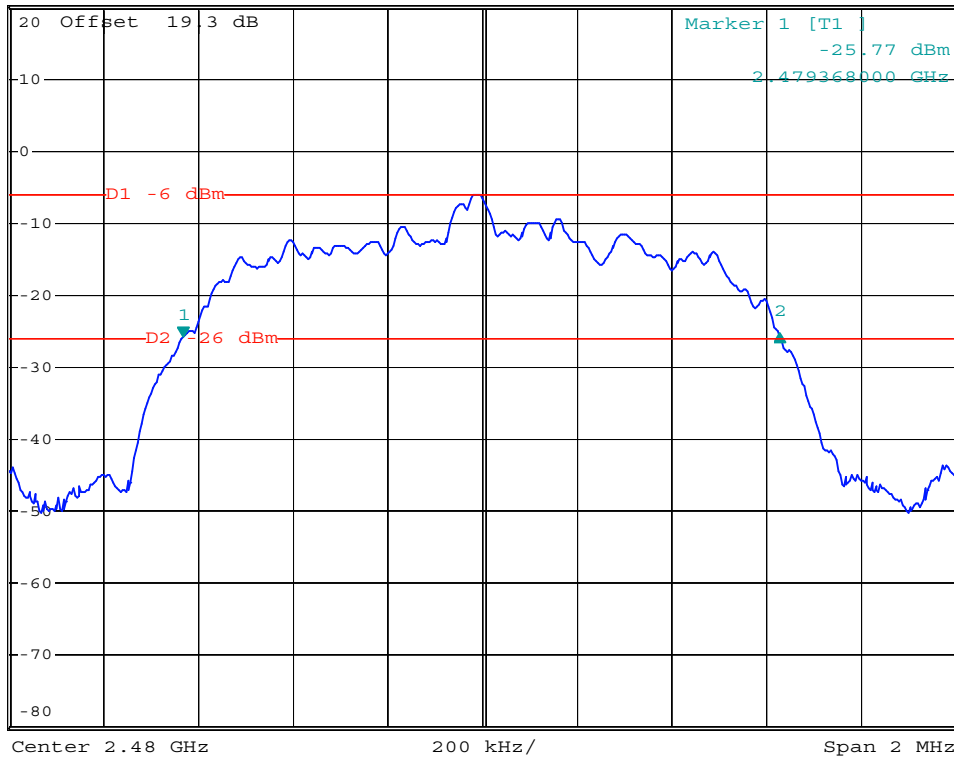


*RBW 30 kHz Delta 2 [T1]
 *VBW 300 kHz 0.39 dB
 *SWT 500 ms 1.260000000 MHz

Ref 20 dBm

*Att 20 dB

1 PK
MAXH



Date: 6.JUN.2008 22:09:10

5.6 Dwell Time of Each Frequency

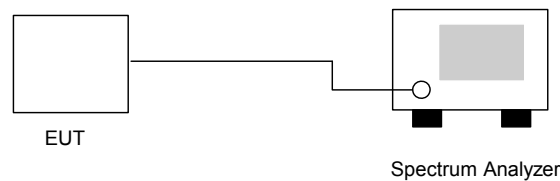
5.6.1 Measuring Instruments

As described in chapter 6 of this test report.

5.6.2 Test Procedure

- The transmitter output was connected to the spectrum analyzer by a low loss cable.
- Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- The calculate $= 79 * 0.4 * (1600/79) * t$ (t = the time duration of one single pulse)

5.6.3 Test Setup Layout



5.6.4 Test Result : See spectrum analyzer plots below

- Application Type : BT
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren

CH39

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.4	492	0.146	0.4

- Application Type : BT EDR(2Mbps)
- Temperature : 28~29℃
- Relative Humidity : 46~47%
- Test Engineer : Darren

CH39

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.8	500	0.155	0.4

- Application Type : BT EDR(3Mbps)
- Temperature : 28~29℃
- Relative Humidity : 46~47%
- Test Engineer : Darren

CH39

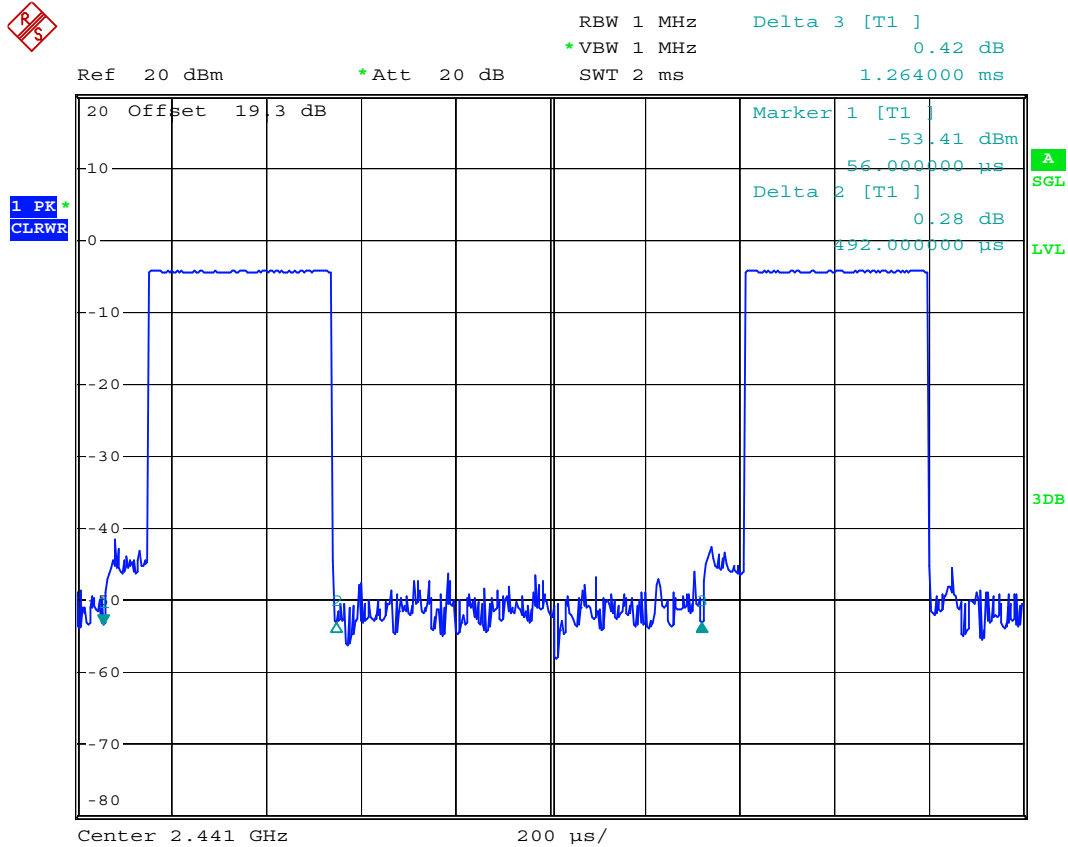
Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.0	500	0.142	0.4

※ Remark:

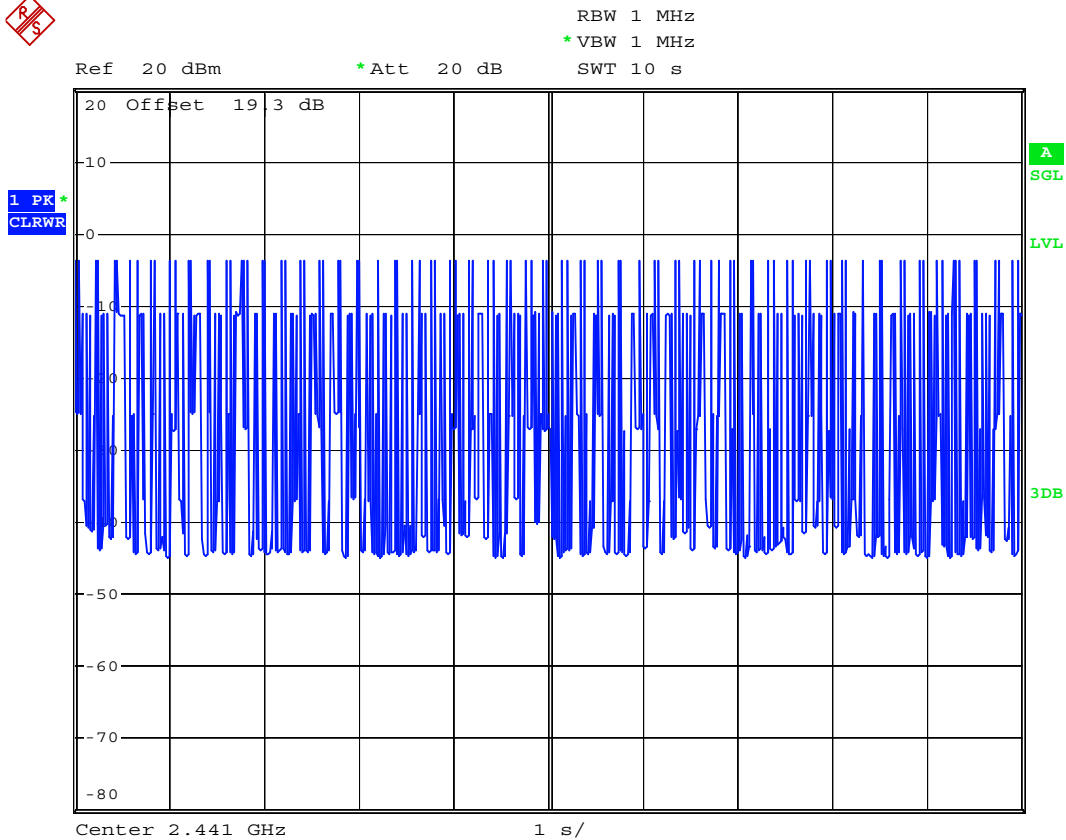
1. Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
2. 79 channels come from the Hopping Channel number.
3. Average Hopping Channel = hops/sweep time
4. t: Package Transfer Time(us)

5.6.5 Dwell Time

DH1 (CH39)

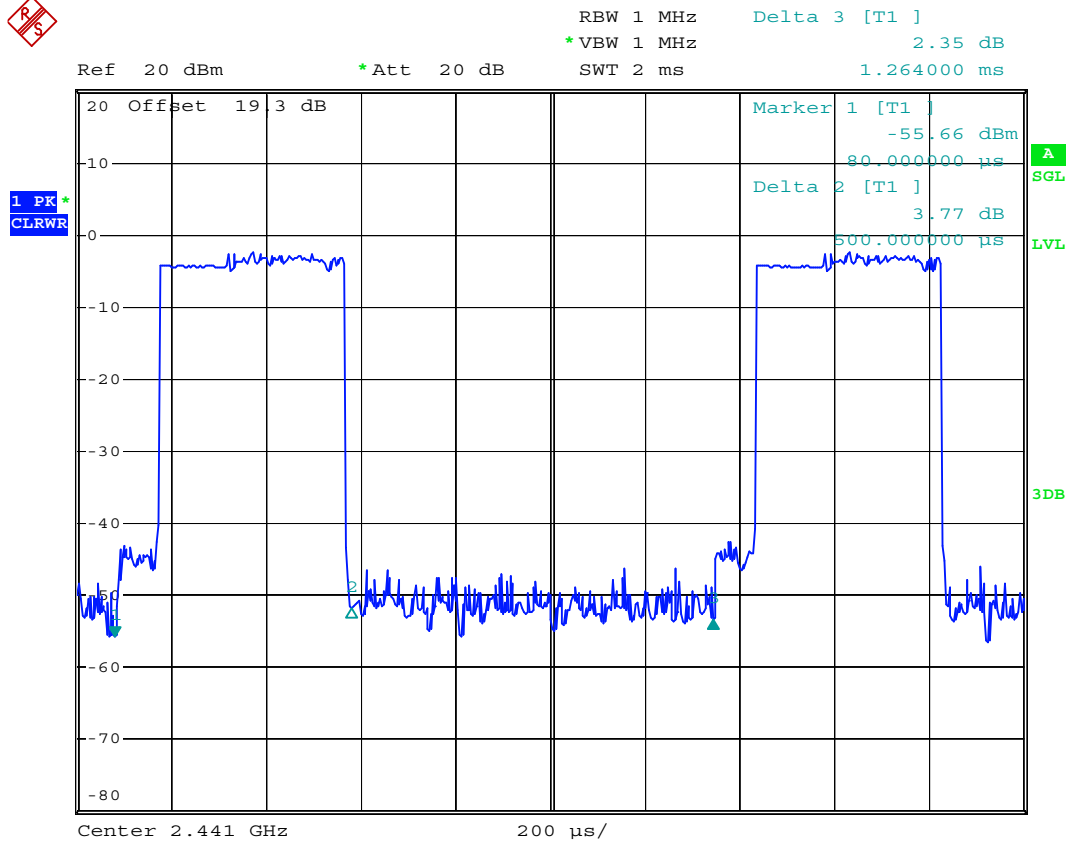


Date: 5.JUN.2008 22:53:31

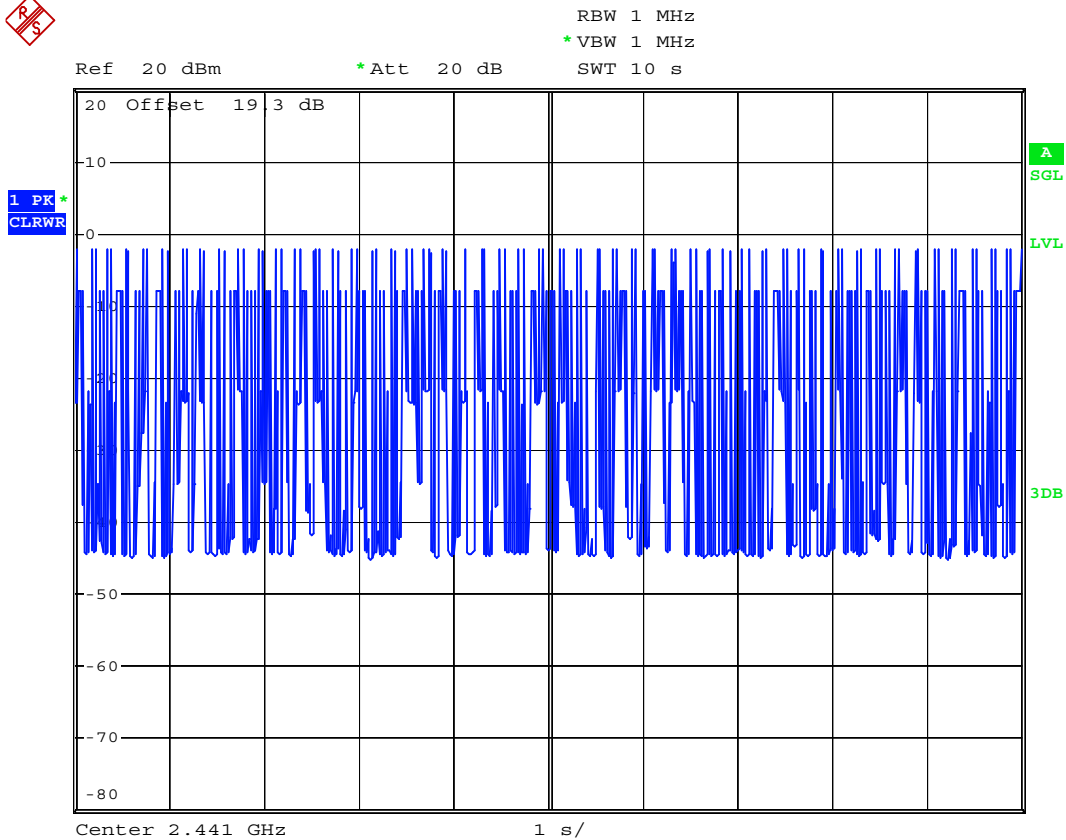


Date: 6.JUN.2008 21:32:20

2DH1 (CH39)

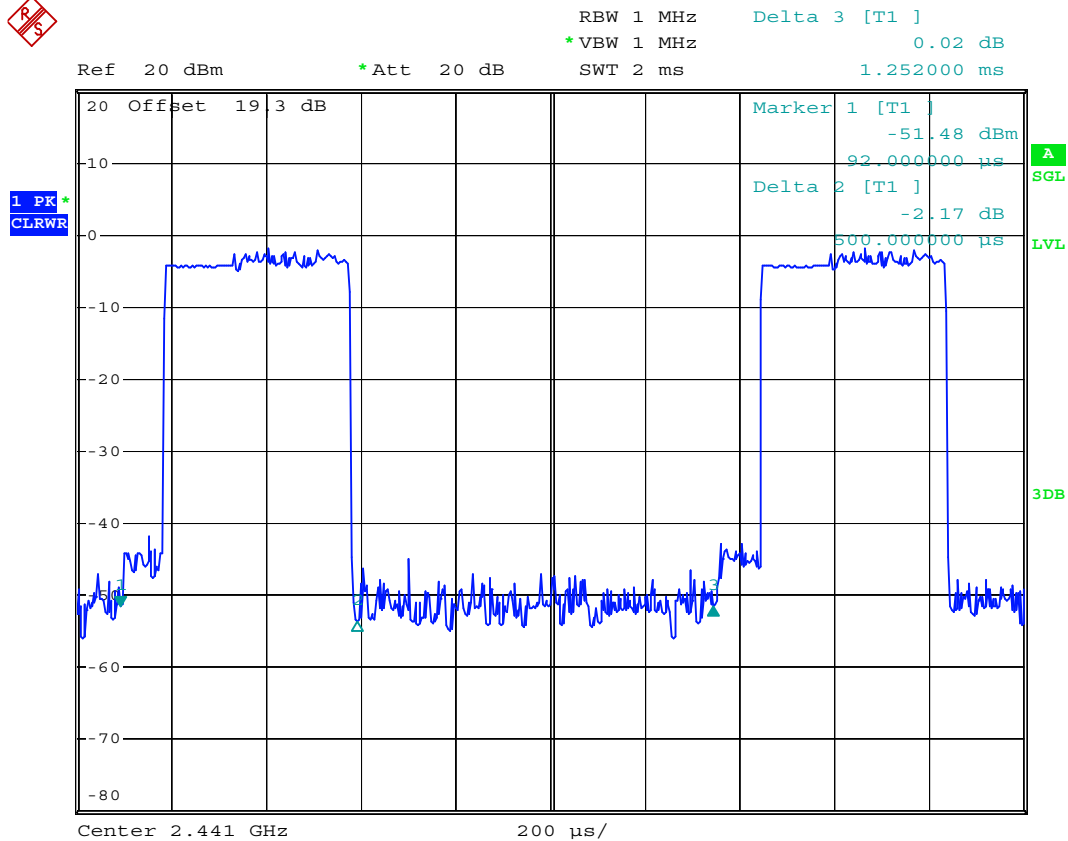


Date: 5.JUN.2008 22:54:18

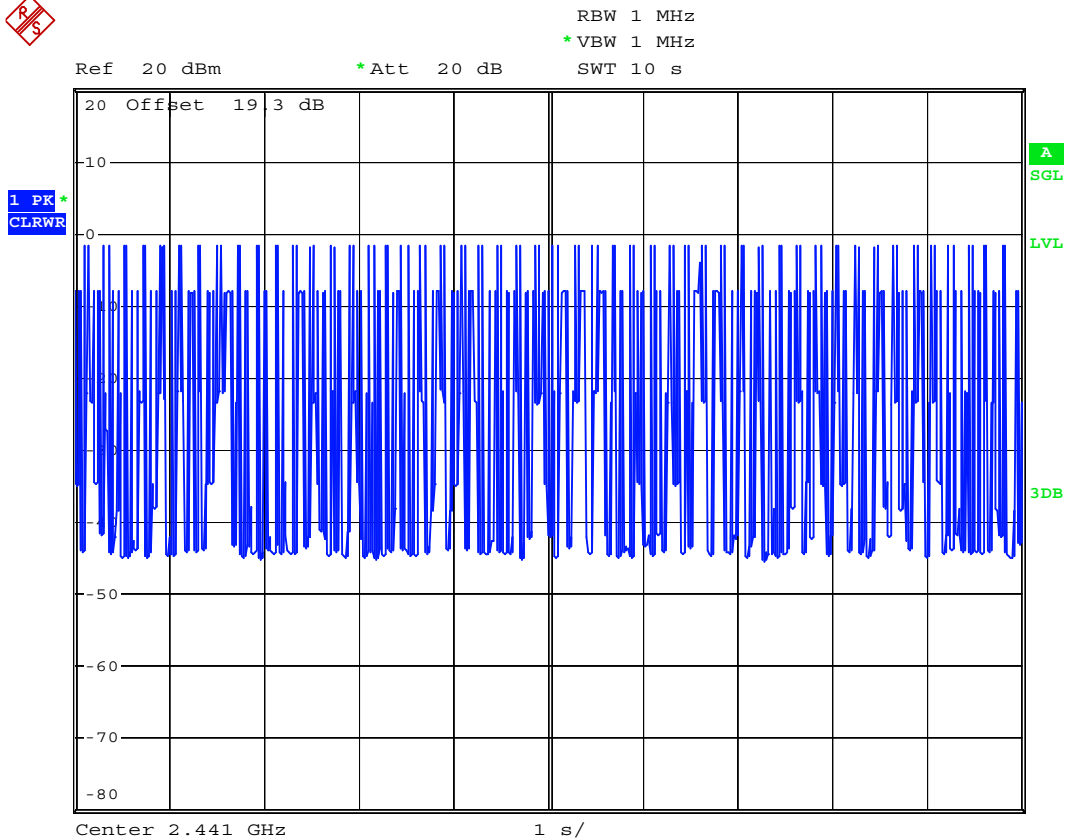


Date: 6.JUN.2008 22:02:25

3DH1 (CH39)



Date: 5.JUN.2008 22:55:29



Date: 6.JUN.2008 22:02:57

5.7 Peak Output Power Measurement

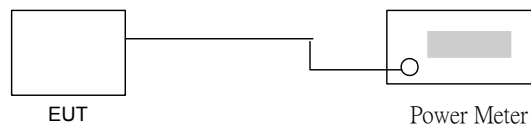
5.7.1 Measuring Instruments

As described in chapter 6 of this test report.

5.7.2 Test Procedure

The antenna port (RF output) of the EUT was connected to the input (RF input) of a spectrum analyzer for BT measurement. RBW and VBW are set to 3MHz. The cable loss has been offset before testing.

5.7.3 Test Setup Layout



5.7.4 Test Result

- Application Type : BT
- Temperature : 28~29℃
- Relative Humidity : 46~47%
- Test Engineer : Darren

▪ BT(1Mbps)

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
00	2402	-4.44	1W/30 dBm
39	2441	-3.92	1W/30 dBm
78	2480	-3.52	1W/30 dBm

▪ BT EDR(2Mbps)

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
00	2402	-2.05	1W/30 dBm
39	2441	-1.63	1W/30 dBm
78	2480	1.16	1W/30 dBm

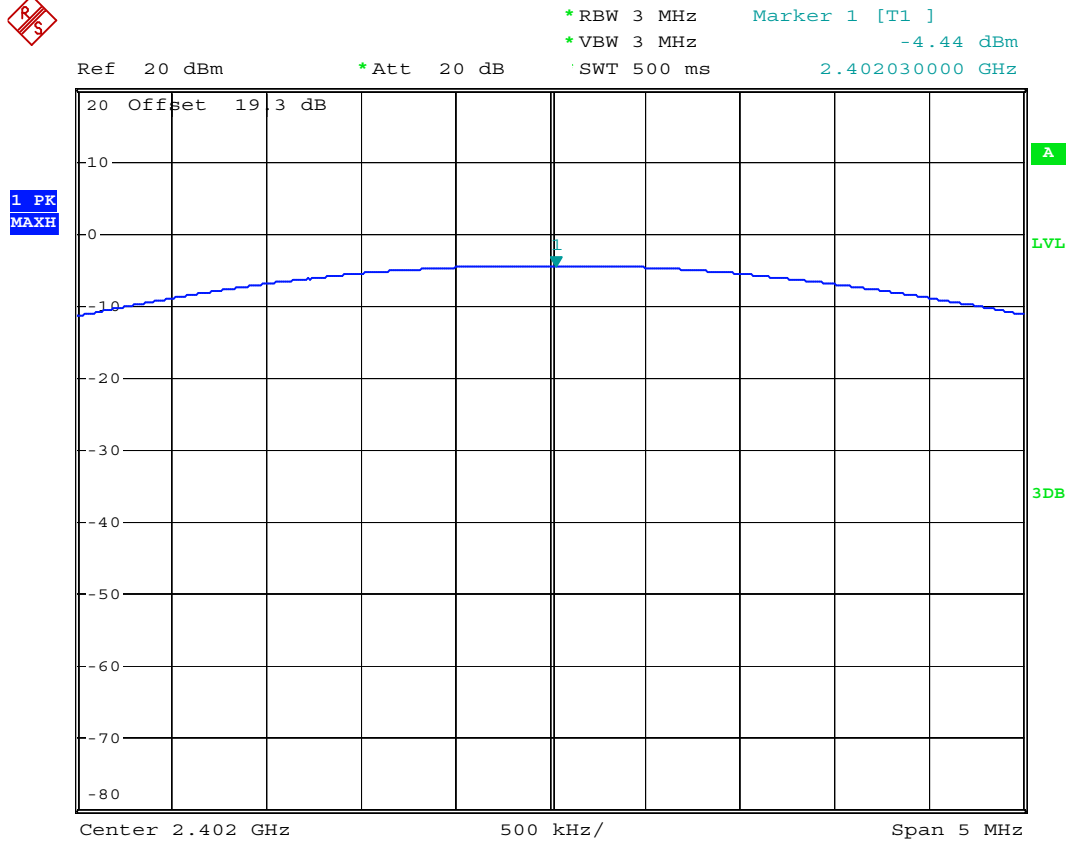
▪ BT EDR(3Mbps)

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
00	2402	-1.67	1W/30 dBm
39	2441	-0.99	1W/30 dBm
78	2480	-0.50	1W/30 dBm

5.7.5 Output Power

BT(1Mbps)

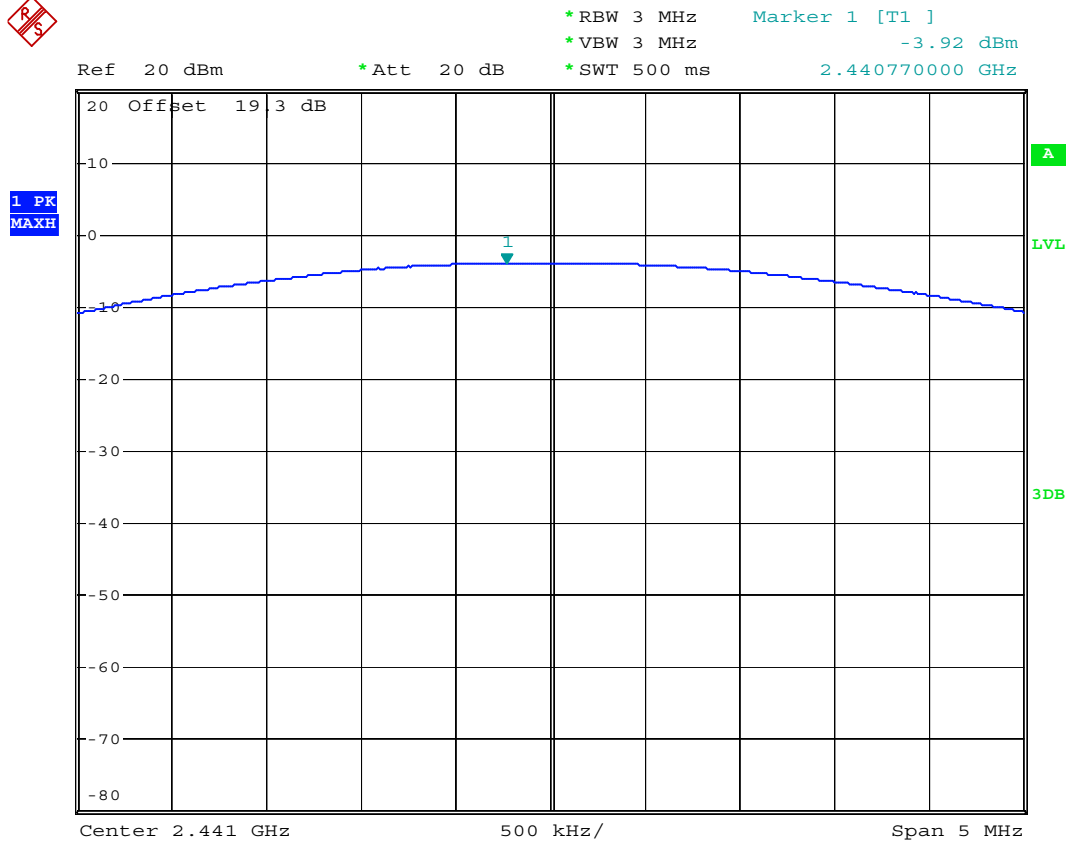
Mode : CH00 (2402MHz)



Date: 5.JUN.2008 22:18:56

BT(1Mbps)

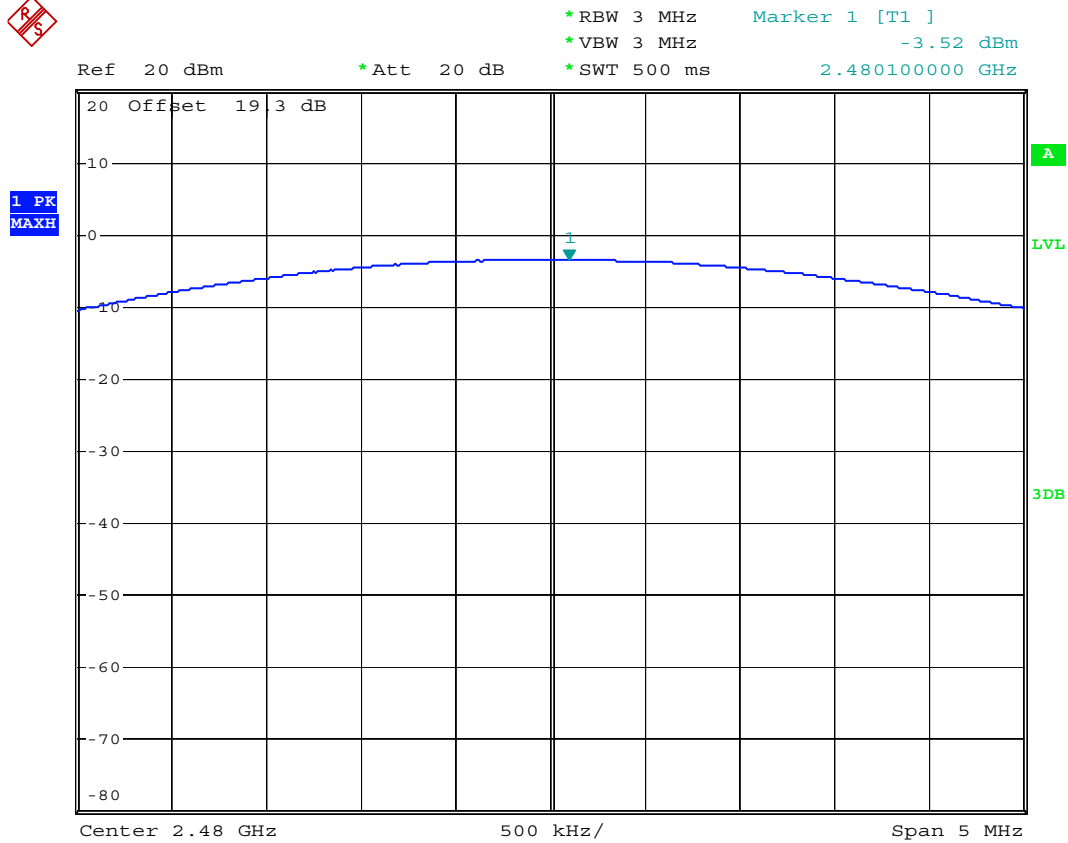
Mode : CH39 (2441MHz)



Date: 5.JUN.2008 22:19:38

Bluetooth(1Mbps)

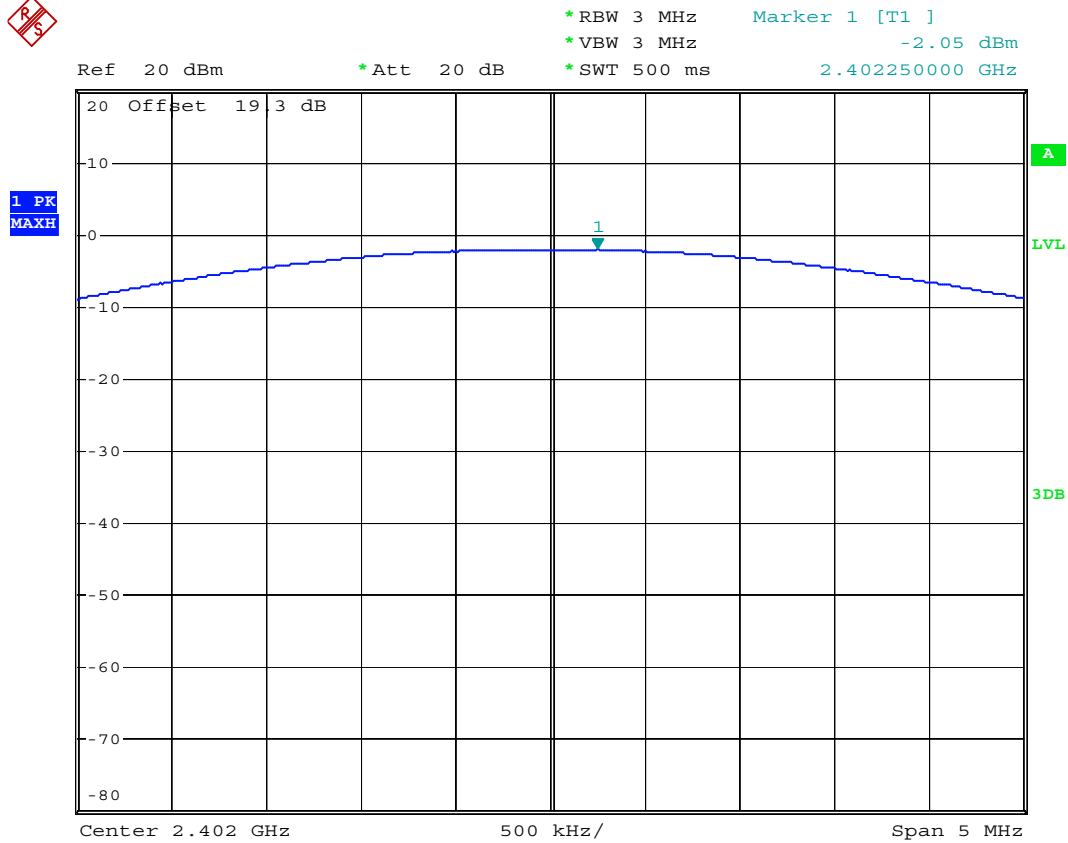
Mode : CH78 (2480MHz)



Date: 5.JUN.2008 22:20:04

Bluetooth(2Mbps)

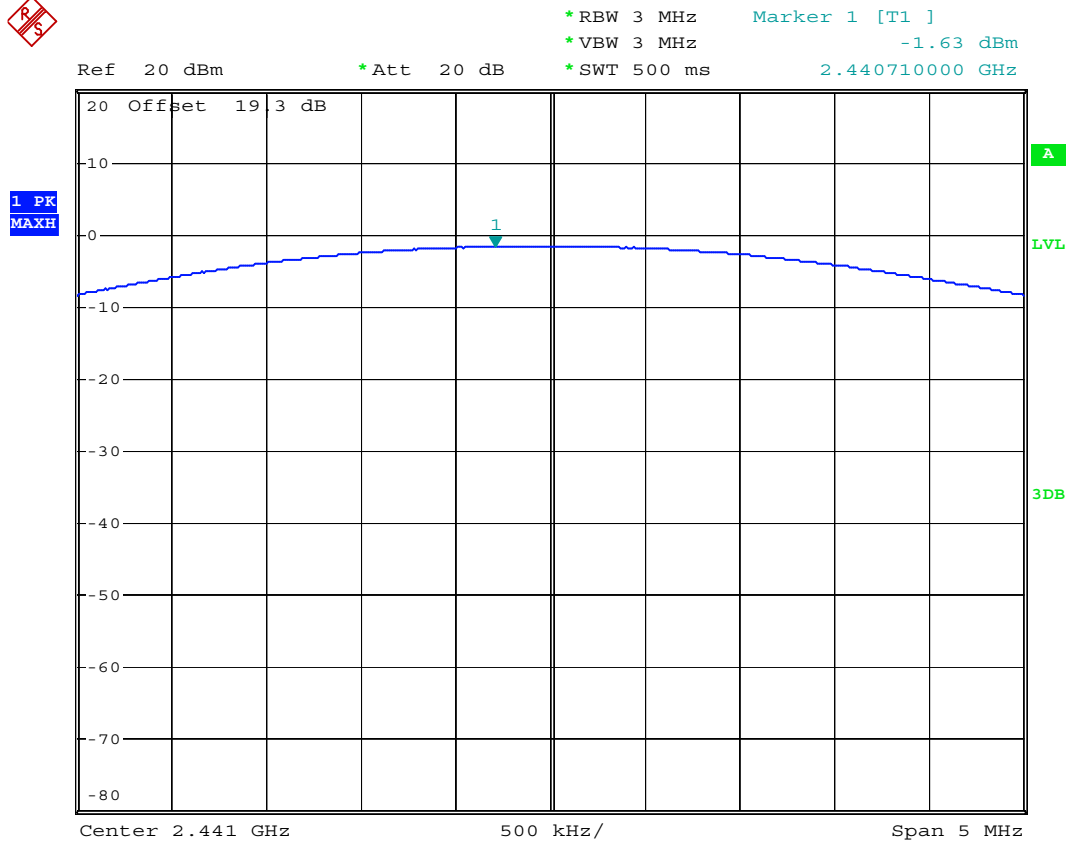
Mode : CH00 (2402MHz)



Date: 5.JUN.2008 22:21:47

Bluetooth(2Mbps)

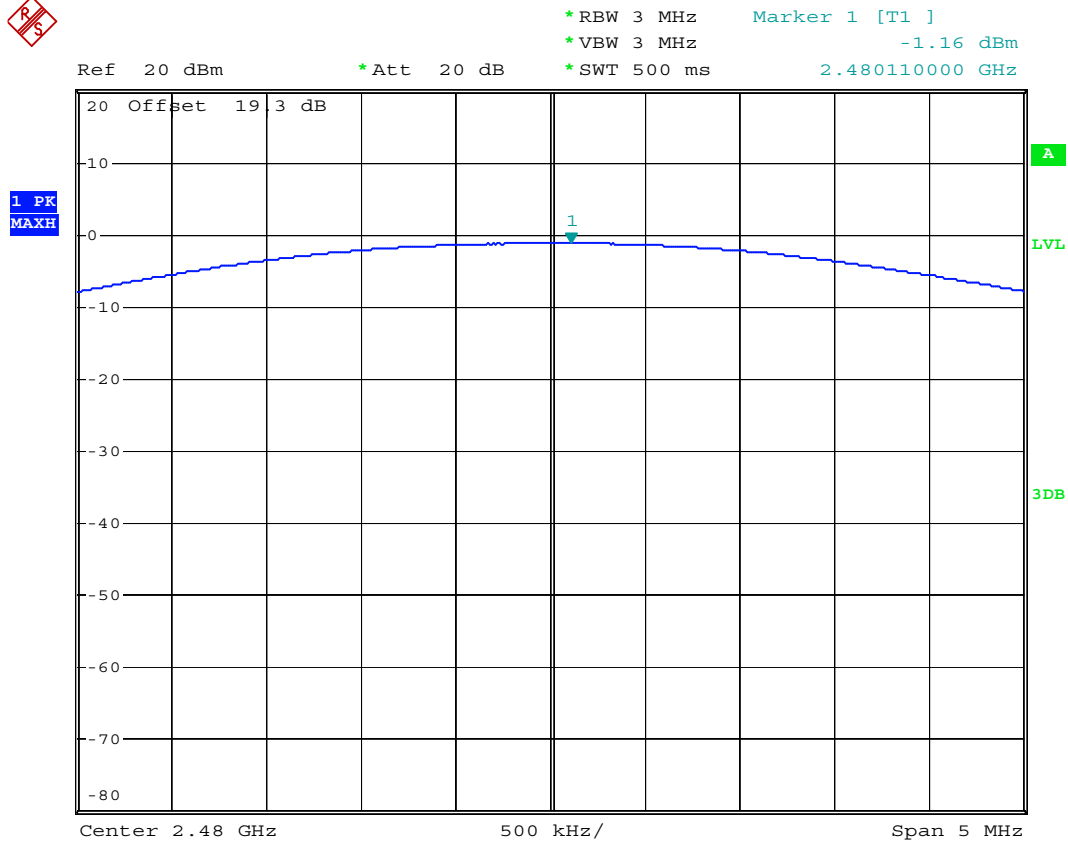
Mode : CH39 (2441MHz)



Date: 5.JUN.2008 22:21:01

Bluetooth(2Mbps)

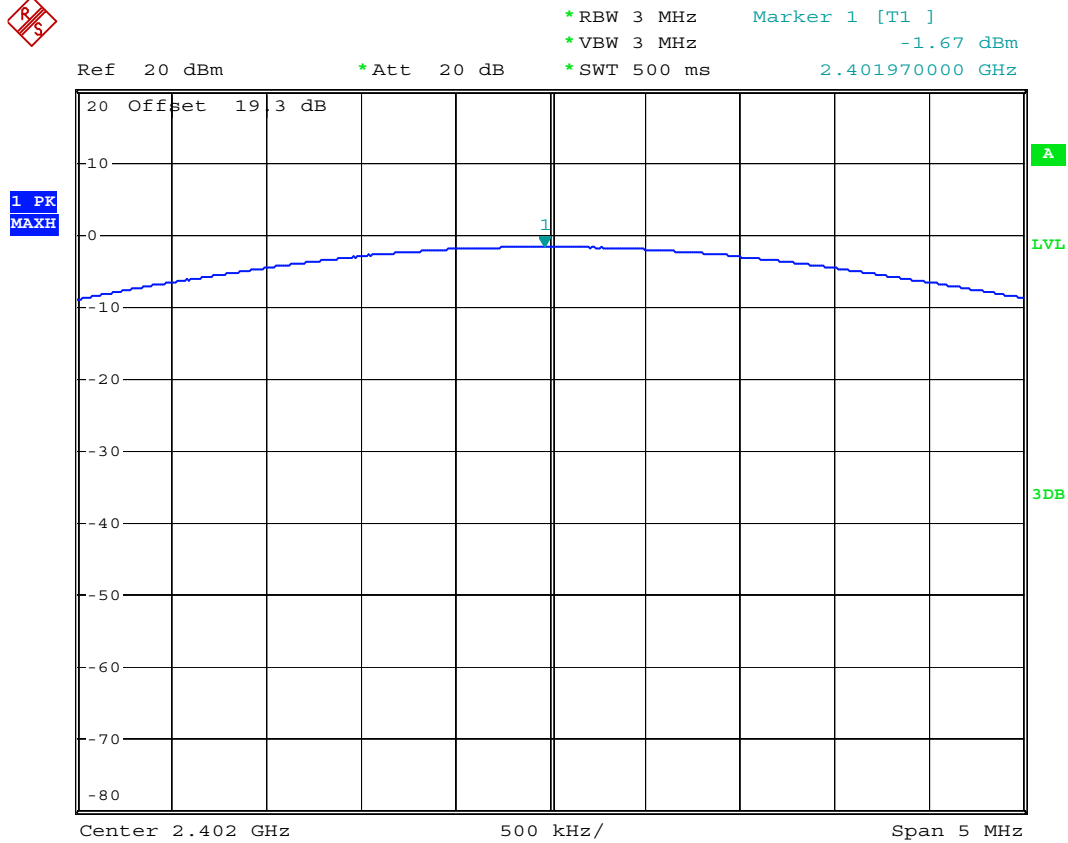
Mode : CH78 (2480MHz)



Date: 5.JUN.2008 22:20:32

Bluetooth(3Mbps)

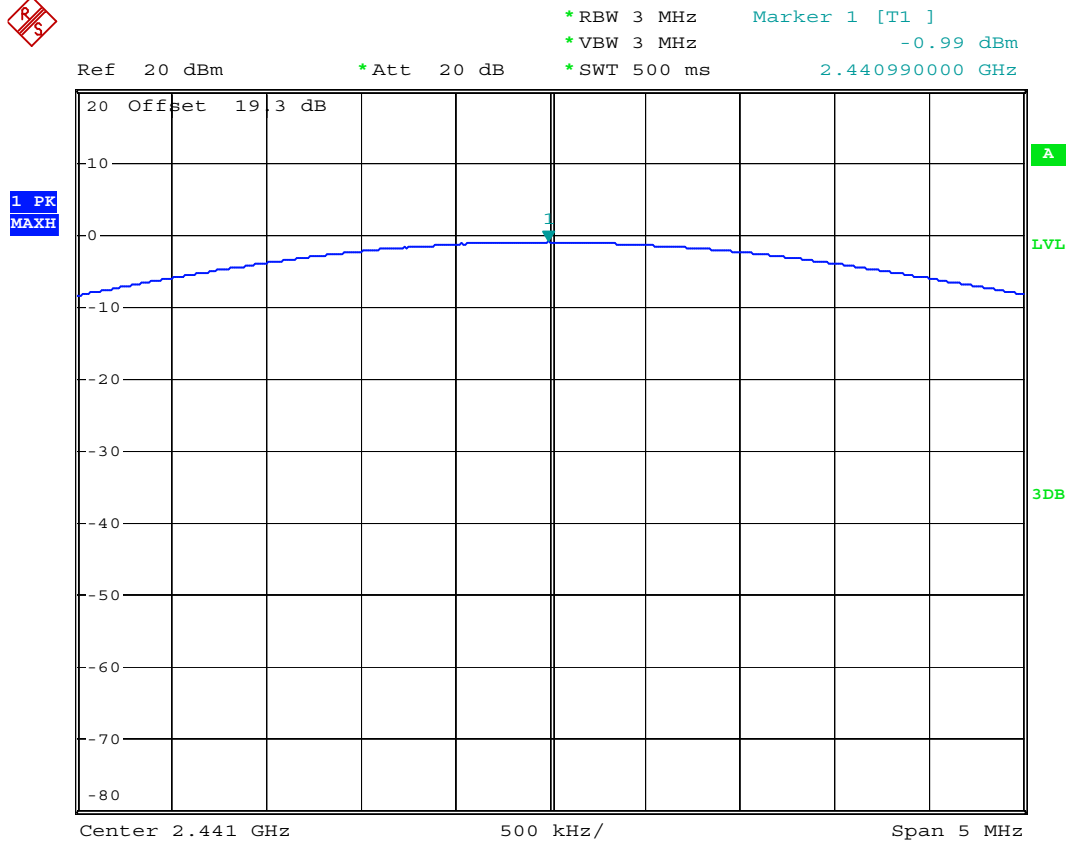
Mode : CH00 (2402MHz)



Date: 5.JUN.2008 22:22:18

Bluetooth(3Mbps)

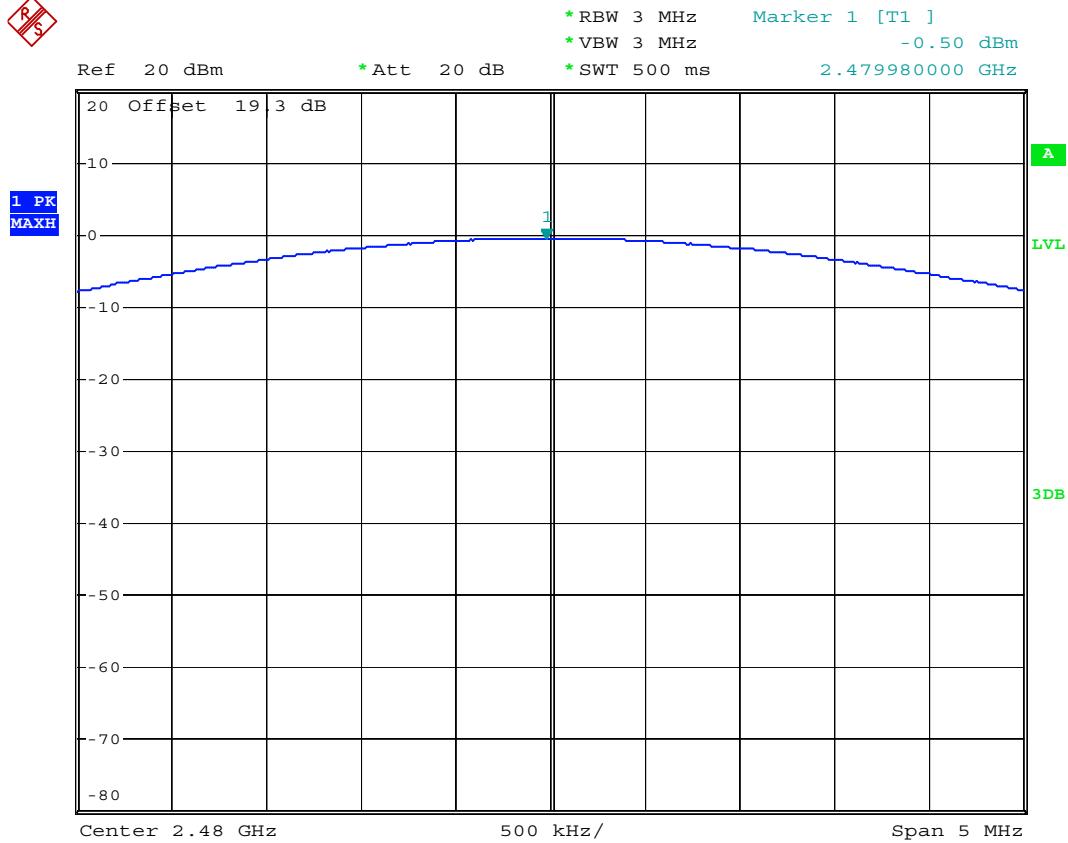
Mode : CH39 (2441MHz)



Date: 5.JUN.2008 22:22:46

Bluetooth(3Mbps)

Mode : CH78 (2480MHz)



Date: 5.JUN.2008 22:23:15

5.8 Conducted Emission

5.8.1 Measuring Instruments

As described in chapter 6 of this test Report.

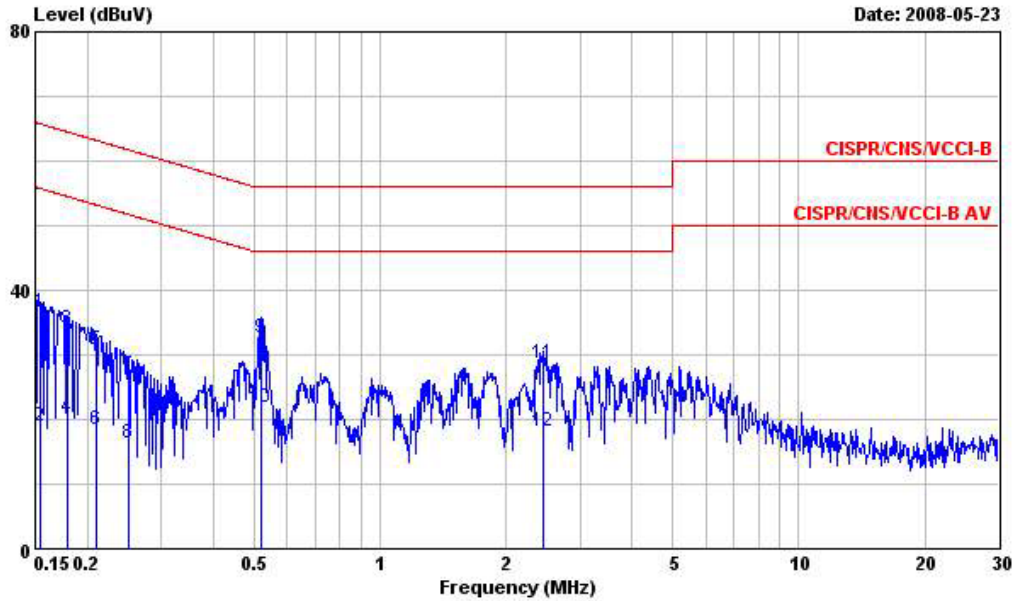
5.8.2 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power port of a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 KHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

5.8.3 Test Data

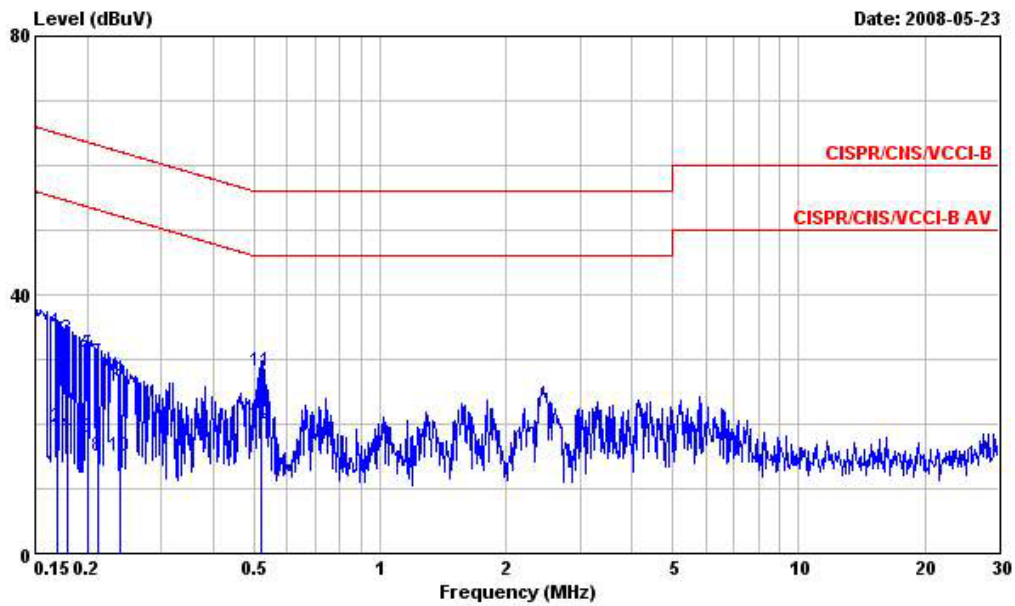
- Temperature : 28~29°C
- Relative Humidity : 46~47%
- Test Engineer : Darren
- Test Mode : Mode 1

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : CO04-HY
Condition : CISPR/CNS/VCCI-B LISN 2008 0416 99041 LINE
EUT : Bluetooth Headset
POWER: 120V/60Hz
Model : FR852105
Memo : Model

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.1540270	36.46	-29.32	65.78	36.23	0.09	0.14	QP
2	0.1540270	18.98	-36.80	55.78	18.75	0.09	0.14	Average
3	0.1786590	33.93	-30.62	64.55	33.70	0.09	0.14	QP
4	0.1786590	20.24	-34.31	54.55	20.01	0.09	0.14	Average
5	0.2094380	30.75	-32.48	63.23	30.48	0.09	0.18	QP
6	0.2094380	18.46	-34.77	53.23	18.19	0.09	0.18	Average
7	0.2507790	26.88	-34.85	61.73	26.46	0.09	0.33	QP
8	0.2507790	16.23	-35.50	51.73	15.81	0.09	0.33	Average
9	0.5182420	32.57	-23.43	56.00	31.82	0.10	0.65	QP
10	0.5182420	21.90	-24.10	46.00	21.15	0.10	0.65	Average
11	2.460	28.73	-27.27	56.00	28.19	0.14	0.40	QP
12	2.460	18.27	-27.73	46.00	17.73	0.14	0.40	Average



Site : CO04-HY
Condition : CISPR/CNS/VCCI-B LISN 2008 0416 99041 NEUTRAL
EUT : Bluetooth Headset
POWER: 120V/60Hz
Model : FR852105
Memo : Model

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1694400	34.28	-30.71	64.99	34.06	0.08	0.14	QP
2	0.1694400	19.55	-35.44	54.99	19.33	0.08	0.14	Average
3	0.1786590	33.18	-31.37	64.55	32.96	0.08	0.14	QP
4	0.1786590	18.43	-36.12	54.55	18.21	0.08	0.14	Average
5	0.2007470	30.68	-32.90	63.58	30.45	0.08	0.15	QP
6	0.2007470	17.78	-35.80	53.58	17.55	0.08	0.15	Average
7	0.2116700	29.41	-33.73	63.14	29.14	0.08	0.19	QP
8	0.2116700	14.91	-38.23	53.14	14.64	0.08	0.19	Average
9	0.2403720	26.53	-35.55	62.08	26.15	0.08	0.30	QP
10	0.2403720	15.02	-37.06	52.08	14.64	0.08	0.30	Average
11	0.5182420	28.20	-27.80	56.00	27.45	0.10	0.65	QP
12	0.5182420	19.99	-26.01	46.00	19.24	0.10	0.65	Average

5.9 Radiated Emission Measurement

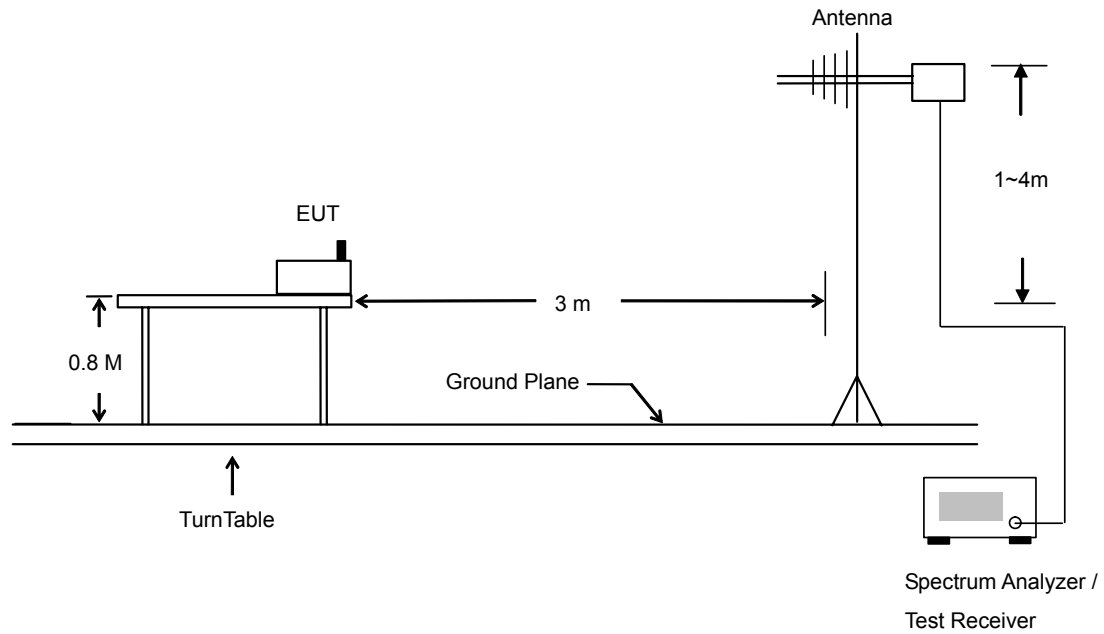
5.9.1 Measuring Instruments

As described in chapter 6 of this Report.

5.9.2 Test Procedures

1. The EUT was placed on a rotatable table top 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. For testing below 1GHz, If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the quasi-peak method and reported.
8. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

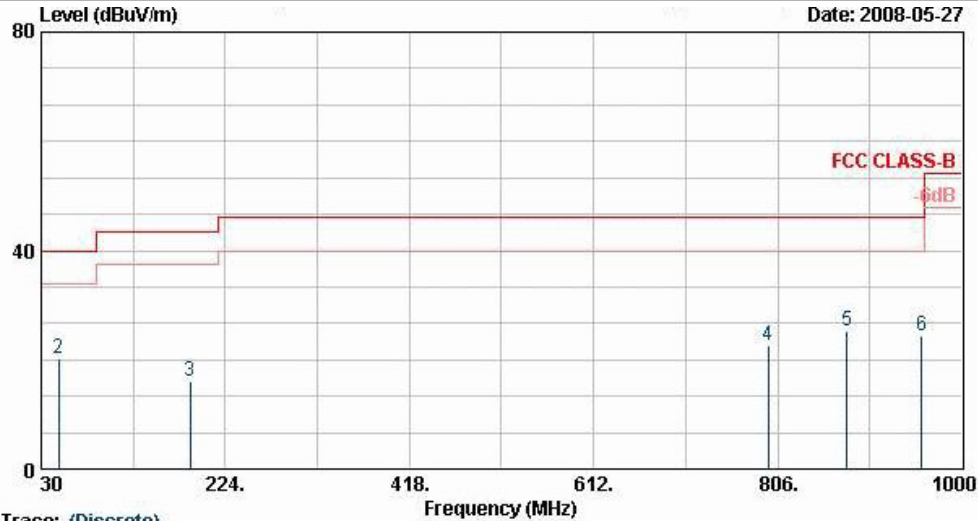
5.9.3 Typical Test Setup Layout of Radiated Emission



5.9.4 Test Data

- Temperature : 25~26°C
- Relating Humidity : 45~47%
- Test Engineer : Derek
- Test Mode : Mode 1
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.

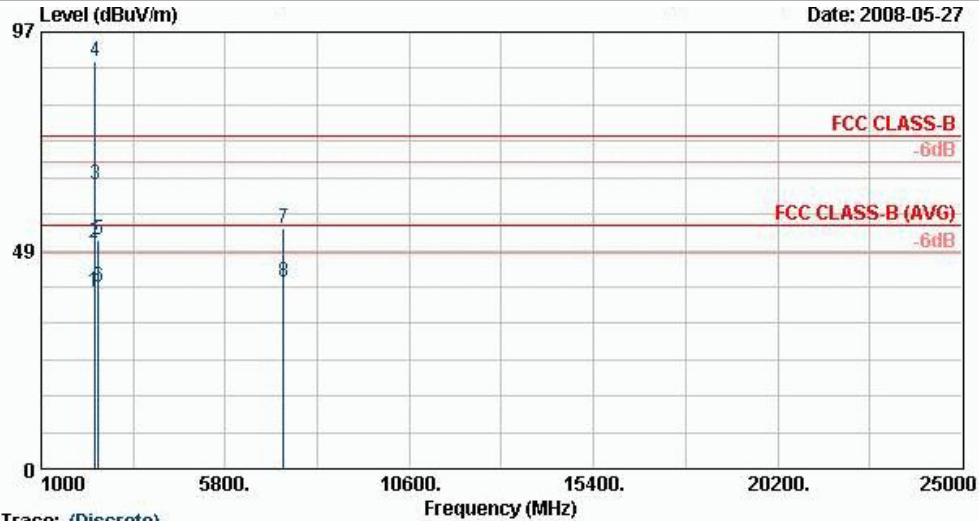


Trace: (Discrete)
 Site : 03CH06-HV
 Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
 EUT : Bluetooth Headset
 Power : From System
 Model : FR 852105
 Memo : Mode 1
 Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	30.00	21.95	-18.05	40.00	35.49	19.66	0.30	33.50	100	126 Peak
2	48.63	20.12	-19.88	40.00	43.90	9.06	0.30	33.14	---	---
3	187.14	16.15	-27.35	43.50	39.66	9.39	0.60	33.49	---	---
4	796.30	22.51	-23.49	46.00	34.11	19.78	1.20	32.58	---	---
5	878.90	25.15	-20.85	46.00	36.22	20.38	1.30	32.75	---	---
6	957.30	24.48	-21.52	46.00	34.65	20.94	1.27	32.38	---	---

- Polarization : Horizontal (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

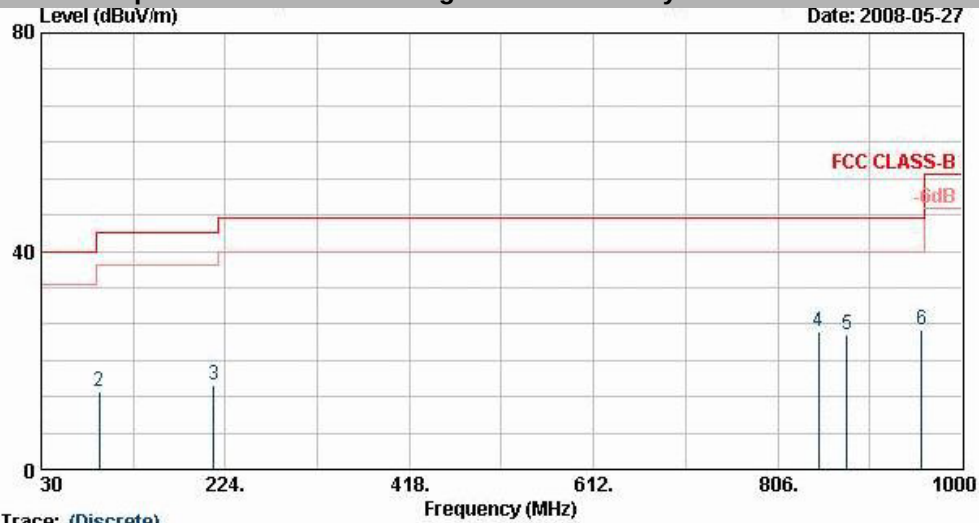
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 1
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2383.53	39.38	-14.62	54.00	39.30	31.83	3.92	35.68	100	248 Average
2	2383.53	50.22	-23.78	74.00	50.14	31.83	3.92	35.68	100	0 Peak
3 X	2402.00	63.03			62.93	31.86	3.92	35.68	100	248 Average
4 X	2402.00	90.54			90.45	31.86	3.92	35.68	100	0 Peak
5	2494.00	51.00	-23.00	74.00	50.65	32.00	4.05	35.70	100	0 Peak
6	2494.00	40.52	-13.48	54.00	40.17	32.00	4.05	35.70	100	248 Average
7	7311.00	53.38	-20.62	74.00	46.62	35.68	7.20	36.12	100	0 Peak
8	7311.00	41.54	-12.46	54.00	34.78	35.68	7.20	36.12	100	125 Average

Remark: #3 and #4 are Fundamental Signals

- Polarization : Vertical (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



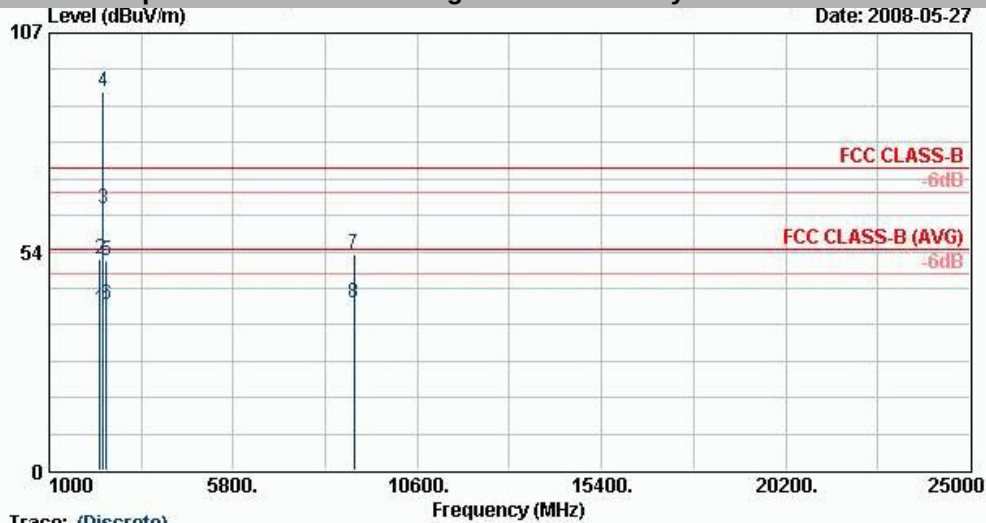
Trace: (Discrete)

Site : 03CH06-RY
Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 1
Plane : E2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	22.14	-17.86	40.00	35.68	19.66	0.30	33.50	100	125	Peak
2	91.29	14.33	-29.17	43.50	37.90	9.23	0.50	33.30	---	---	Peak
3	211.98	15.43	-28.07	43.50	38.27	10.04	0.62	33.51	---	---	Peak
4	848.80	25.40	-20.60	46.00	36.71	20.16	1.20	32.68	---	---	Peak
5	878.90	24.70	-21.30	46.00	35.77	20.38	1.30	32.75	---	---	Peak
6	957.30	25.55	-20.45	46.00	35.72	20.94	1.27	32.38	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

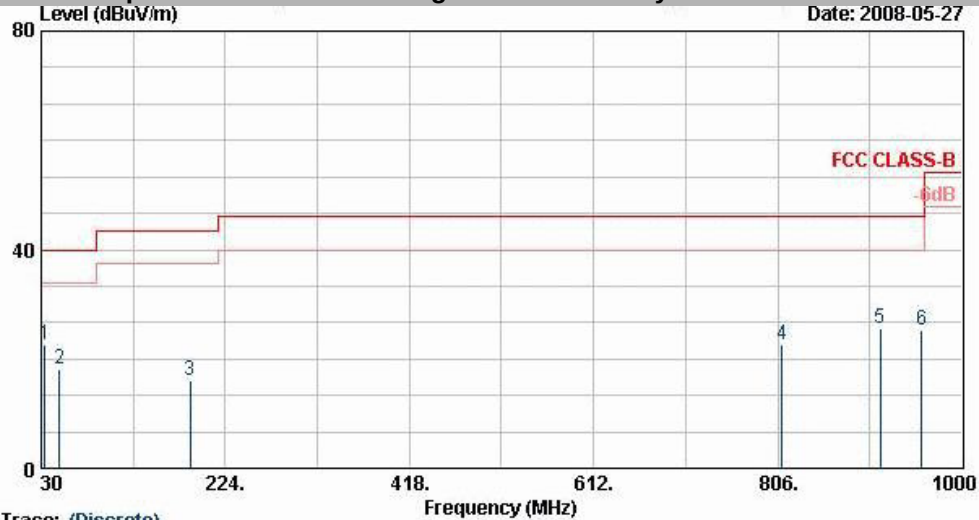
Site : D3CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 1
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV		dB		deg	
1	2327.86	39.23	-14.77	54.00	39.31	31.76	3.82	35.67	107	193 Average
2	2327.86	51.61	-22.39	74.00	51.69	31.76	3.82	35.67	100	0 Peak
3 X	2402.00	63.95			63.85	31.86	3.92	35.68	107	193 Average
4 @	2402.00	92.56			92.47	31.86	3.92	35.68	100	0 Peak
5	2494.00	51.18	-22.82	74.00	50.83	32.00	4.05	35.70	100	0 Peak
6	2494.00	40.50	-13.50	54.00	40.15	32.00	4.05	35.70	107	193 Average
7	8946.00	53.04	-20.96	74.00	45.46	36.41	7.74	36.57	100	0 Peak
8	8946.00	41.07	-12.93	54.00	33.49	36.41	7.74	36.57	100	152 Average

Remark: #3 and #4 are Fundamental Signals

- Test Mode : Mode 2
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



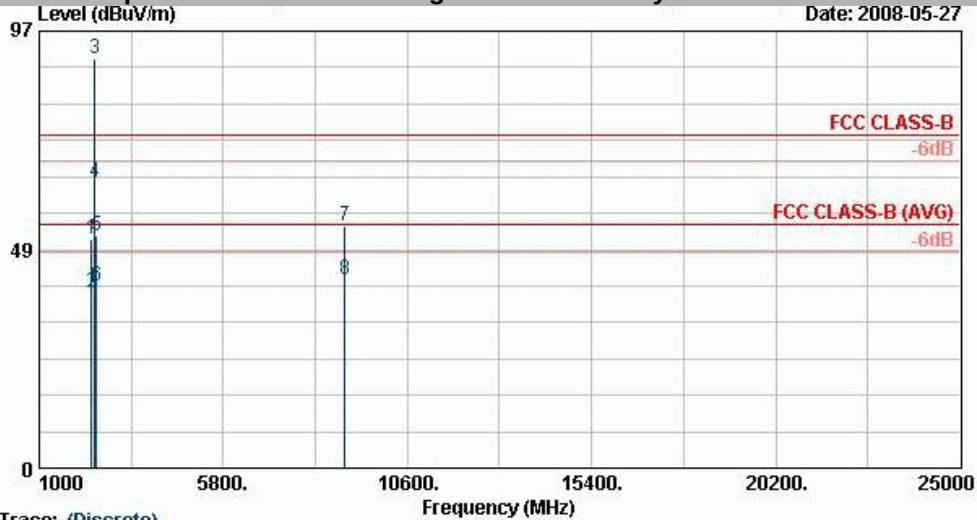
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(051121) HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 2
Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	33.78	22.63	-17.37	40.00	38.83	16.84	0.30	33.34	100	104	Peak
2	49.44	18.28	-21.72	40.00	42.55	8.57	0.30	33.14	---	---	Peak
3	187.14	16.03	-27.47	43.50	39.53	9.39	0.60	33.49	---	---	Peak
4	810.30	22.59	-23.41	46.00	34.08	19.89	1.20	32.58	---	---	Peak
5	913.90	25.45	-20.55	46.00	36.26	20.63	1.26	32.70	---	---	Peak
6	957.30	25.43	-20.57	46.00	35.60	20.94	1.27	32.38	---	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

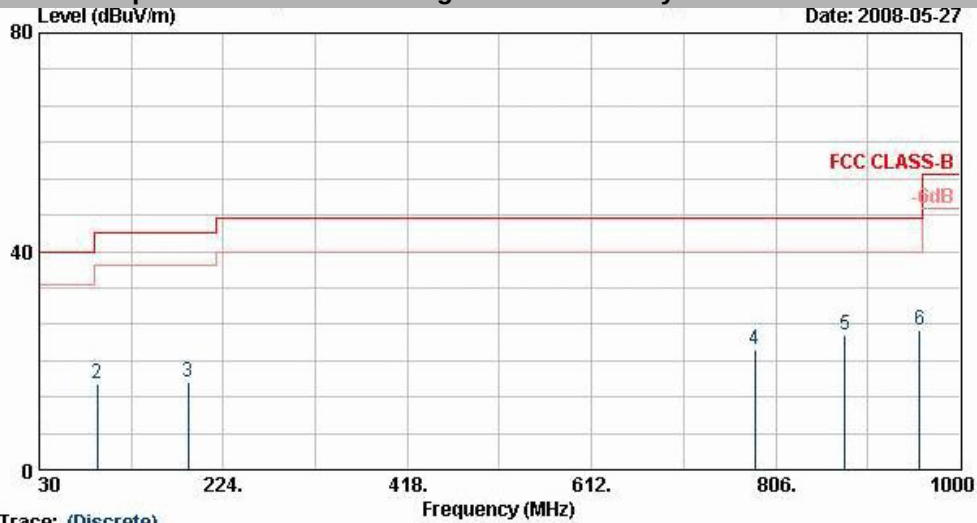
Site : D3CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 2
Plane : E2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2368.00	50.68	-23.31	74.00	50.68	31.81	3.89	35.68	100	0	Peak
2	2368.00	38.87	-15.13	54.00	38.85	31.81	3.89	35.68	103	229	Average
3 X	2441.00	90.98			90.76	31.93	3.99	35.69	100	0	Peak
4 X	2441.00	63.45			63.23	31.93	3.99	35.69	103	229	Average
5	2484.00	51.41	-22.59	74.00	51.08	31.98	4.05	35.70	100	0	Peak
6	2484.00	40.35	-13.65	54.00	40.02	31.98	4.05	35.70	103	229	Average
7	8967.00	53.75	-20.25	74.00	46.10	36.45	7.77	36.57	100	0	Peak
8	8967.00	41.65	-12.35	54.00	34.00	36.45	7.77	36.57	100	121	Average

Remark: #3 and #4 are Fundamental Signals

- Polarization : Vertical (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



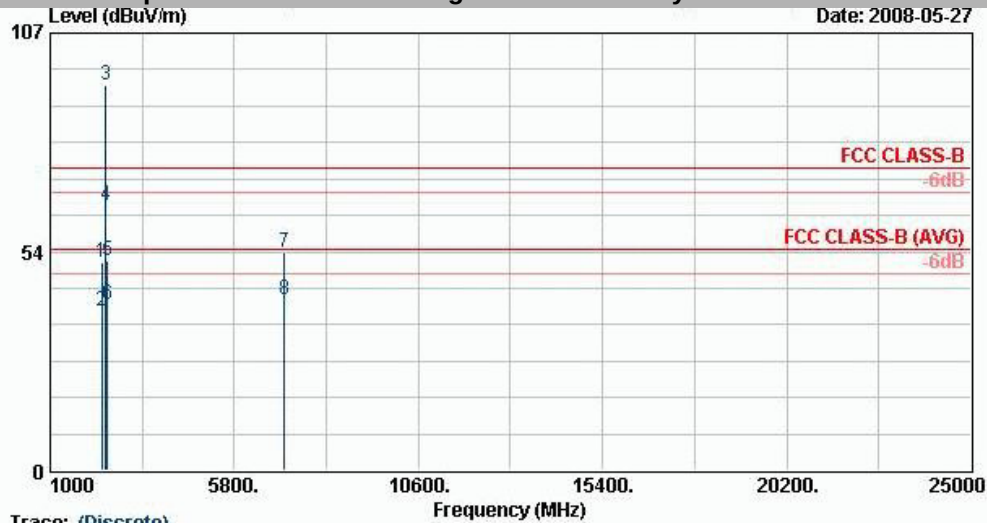
Trace: (Discrete)

Site : 03CH06-RY
Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 2
Plane : E2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	22.63	-17.37	40.00	36.17	19.66	0.30	33.50	100	234	Peak
2	91.29	15.65	-27.85	43.50	39.23	9.23	0.50	33.30	---	---	Peak
3	187.14	15.95	-27.55	43.50	39.46	9.39	0.60	33.49	---	---	Peak
4	784.40	22.15	-23.85	46.00	33.93	19.68	1.20	32.65	---	---	Peak
5	878.90	24.83	-21.17	46.00	35.90	20.38	1.30	32.75	---	---	Peak
6	957.30	25.48	-20.52	46.00	35.65	20.94	1.27	32.38	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

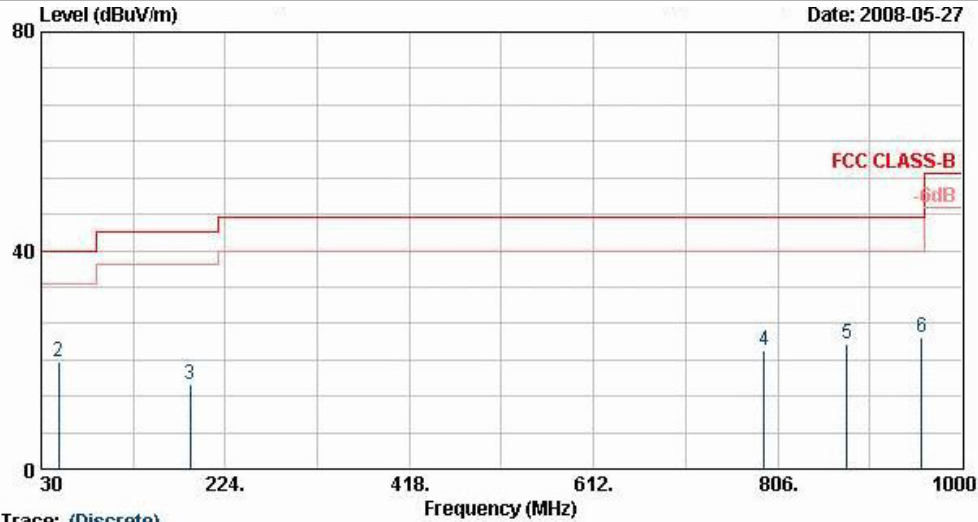
Site : D3CH06-HV
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 2
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2334.00	50.83	-23.17	74.00	50.88	31.76	3.86	35.67	100	0 Peak
2	2334.00	38.91	-15.09	54.00	38.96	31.76	3.86	35.67	100	192 Average
3 @	2441.00	94.09			93.87	31.93	3.99	35.69	100	0 Peak
4 X	2441.00	64.86			64.64	31.93	3.99	35.69	100	192 Average
5	2494.00	51.37	-22.63	74.00	51.02	32.00	4.05	35.70	100	0 Peak
6	2494.00	40.44	-13.56	54.00	40.09	32.00	4.05	35.70	100	192 Average
7	7107.00	53.49	-20.51	74.00	46.65	35.76	7.12	36.04	100	0 Peak
8	7107.00	41.68	-12.32	54.00	34.84	35.76	7.12	36.04	100	136 Average

Remark: #3 and #4 are Fundamental Signals

- Test Mode : Mode 3
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



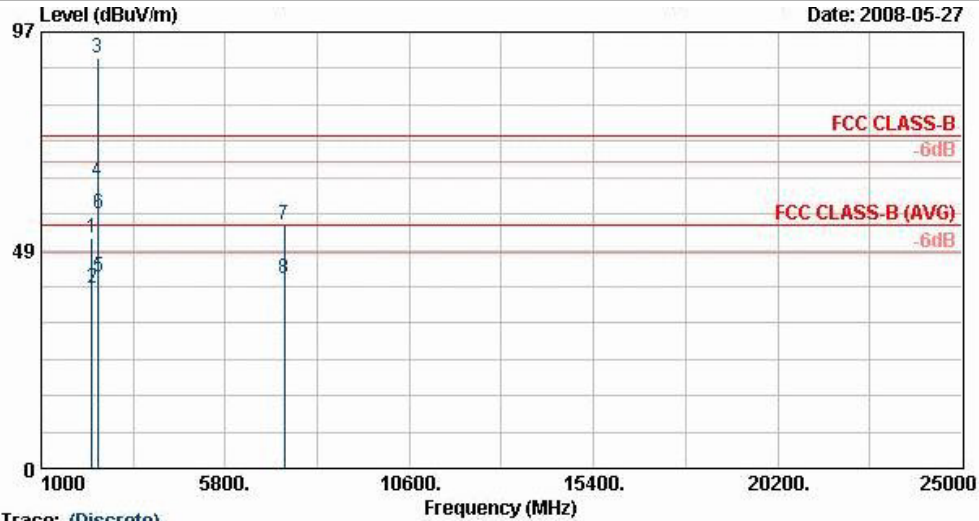
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 3
Plane : E2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	22.06	-17.94	40.00	35.60	19.66	0.30	33.50	100	198	Peak
2	48.63	19.67	-20.33	40.00	43.45	9.06	0.30	33.14	---	---	Peak
3	187.14	15.33	-28.17	43.50	38.83	9.39	0.60	33.49	---	---	Peak
4	791.40	21.76	-24.24	46.00	33.44	19.74	1.20	32.61	---	---	Peak
5	878.90	22.97	-23.03	46.00	34.04	20.38	1.30	32.75	---	---	Peak
6	957.30	23.94	-22.06	46.00	34.11	20.94	1.27	32.38	---	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

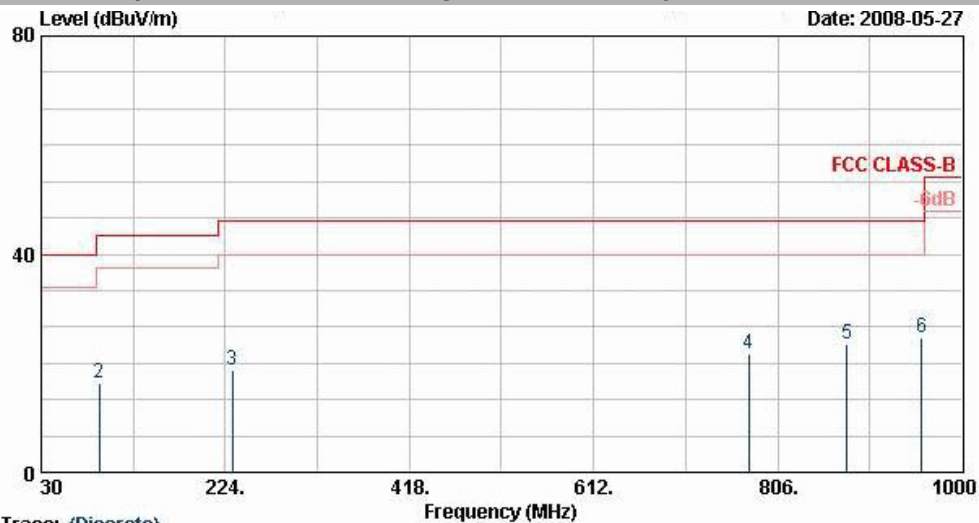
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 3
Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2318.00	51.17	-22.83	74.00	51.25	31.76	3.82	35.67	100	0	Peak
2	2318.00	40.14	-13.86	54.00	40.22	31.76	3.82	35.67	100	267	Average
3 X	2480.00	91.19			90.86	31.98	4.05	35.70	100	0	Peak
4 X	2480.00	63.68			63.35	31.98	4.05	35.70	100	267	Average
5	2483.50	42.61	-11.39	54.00	42.28	31.98	4.05	35.70	100	267	Average
6	2483.50	56.57	-17.43	74.00	56.24	31.98	4.05	35.70	100	0	Peak
7	7347.00	54.02	-19.98	74.00	47.28	35.66	7.21	36.14	100	0	Peak
8	7347.00	42.04	-11.96	54.00	35.31	35.66	7.21	36.14	100	187	Average

Remark: #3 and #4 are Fundamental Signals

- Polarization : Vertical (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



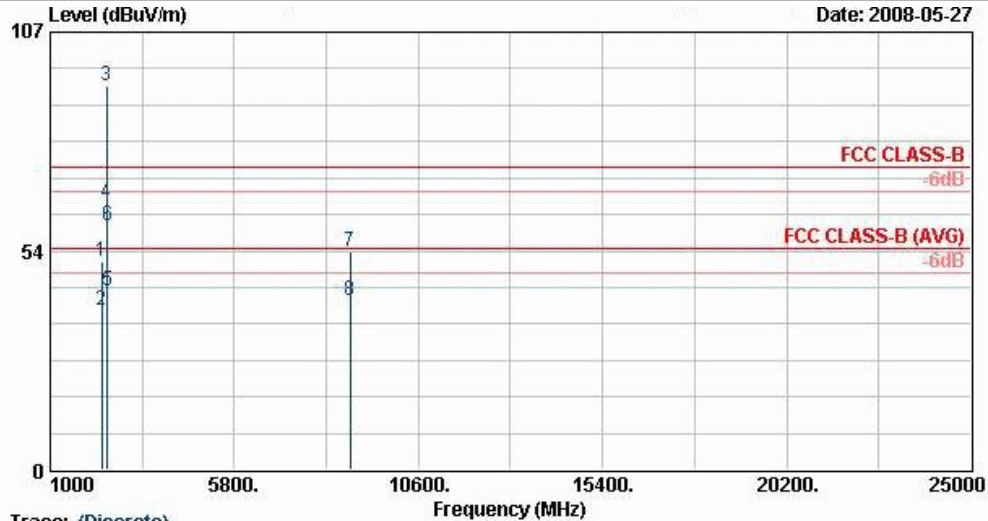
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 3
Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	23.13	-16.87	40.00	36.67	19.66	0.30	33.50	100	304	Peak
2	91.29	16.45	-27.05	43.50	40.02	9.23	0.50	33.30	---	---	Peak
3	231.69	18.84	-27.16	46.00	40.43	11.18	0.70	33.47	---	---	Peak
4	775.30	21.73	-24.27	46.00	33.71	19.59	1.15	32.71	---	---	Peak
5	878.90	23.47	-22.53	46.00	34.54	20.38	1.30	32.75	---	---	Peak
6	957.30	24.82	-21.18	46.00	34.99	20.94	1.27	32.38	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

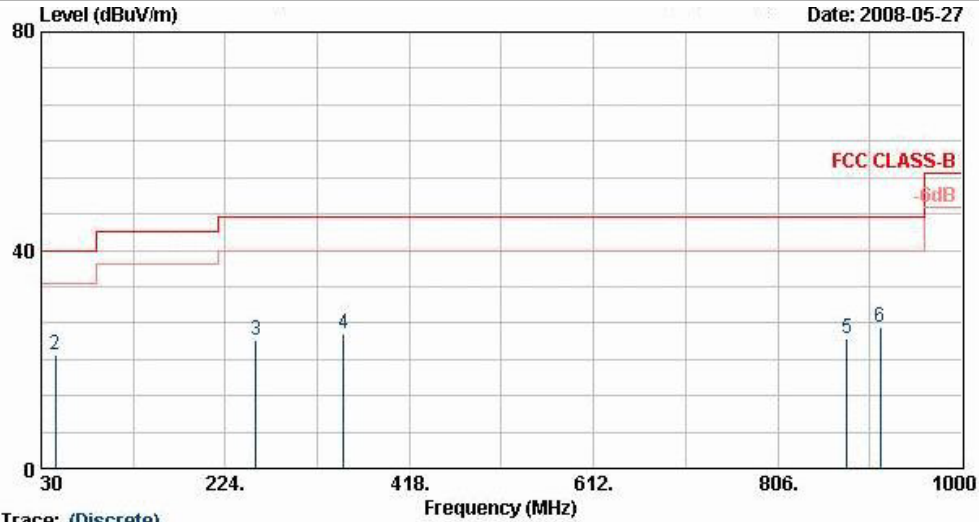
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105
Memo : Mode 3
Plane : E2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Factor	Cable Loss	Preamplifier Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2334.00	51.10	-22.90	74.00	51.15	31.76	3.86	35.67	100	0	Peak
2	2334.00	38.95	-15.05	54.00	39.00	31.76	3.86	35.67	100	190	Average
3 @	2480.00	94.06			93.73	31.98	4.05	35.70	100	0	Peak
4 X	2480.00	65.19			64.86	31.98	4.05	35.70	100	190	Average
5	2483.50	43.60	-10.40	54.00	43.27	31.98	4.05	35.70	100	190	Average
6	2483.50	59.79	-14.21	74.00	59.46	31.98	4.05	35.70	100	0	Peak
7	8826.00	53.19	-20.81	74.00	45.85	36.24	7.59	36.50	100	0	Peak
8	8826.00	41.38	-12.62	54.00	34.04	36.24	7.59	36.50	100	85	Average

Remark: #3 and #4 are Fundamental Signals

- Test Mode : Mode 4
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

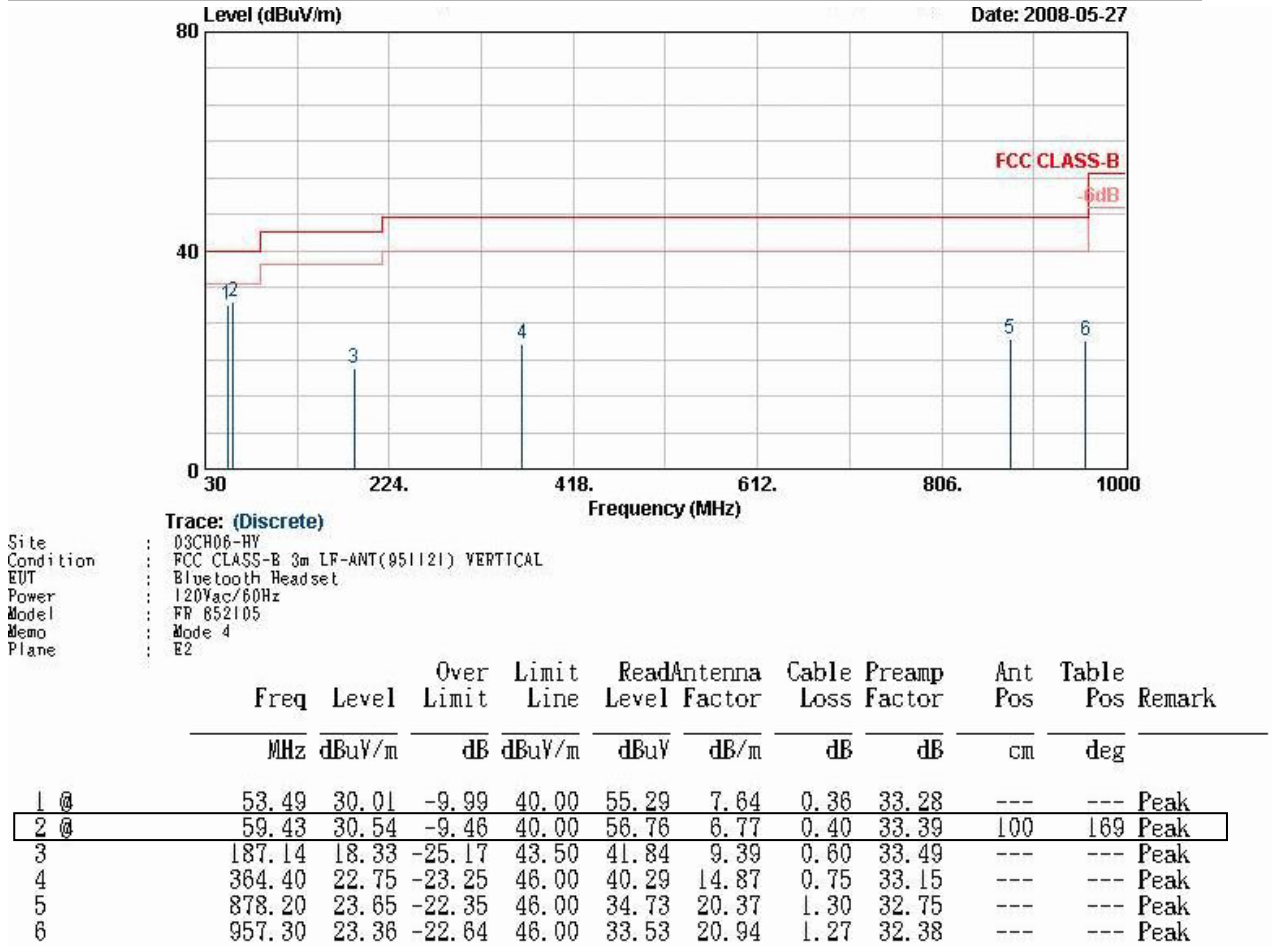
Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : Bluetooth Headset
Power : 120Vac/60Hz
Model : FR 852105
Memo : Mode 4
Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	30.00	21.41	-18.59	40.00	34.95	19.66	0.30	33.50	100	138	Peak
2	45.39	20.76	-19.24	40.00	43.05	10.53	0.30	33.12	---	---	Peak
3	255.99	23.57	-22.43	46.00	43.92	12.38	0.70	33.42	---	---	Peak
4	348.30	24.79	-21.21	46.00	42.74	14.45	0.80	33.20	---	---	Peak
5	878.90	23.74	-22.26	46.00	34.81	20.38	1.30	32.75	---	---	Peak
6	913.90	25.86	-20.14	46.00	36.67	20.63	1.26	32.70	---	---	Peak

Remark: The spurious emission above 1 GHz is too low to be taken.

- Polarization : Vertical (30MHz-1GHz)

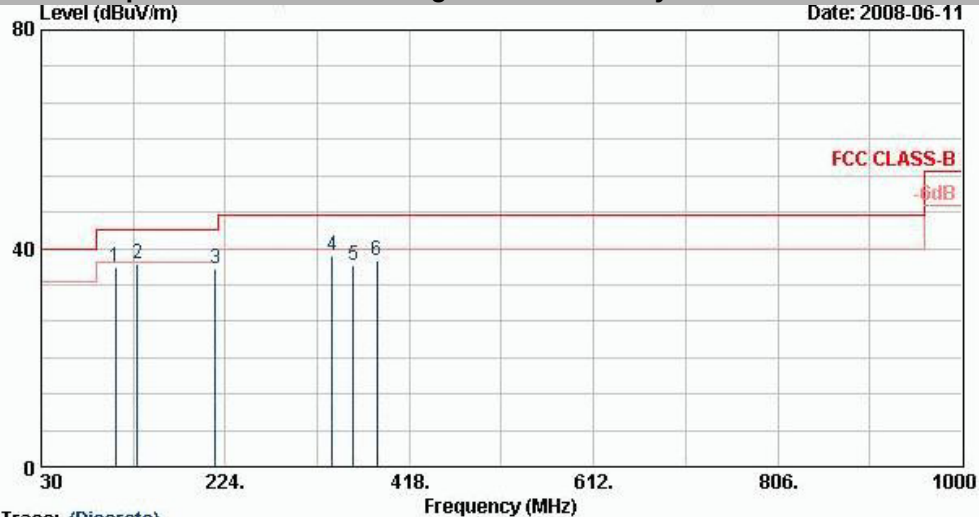
■ The test that passed at minimum margin was marked by the boldface in the following table.



Remark: The spurious emission above 1 GHz is too low to be taken.

- Test Mode : Mode 5
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



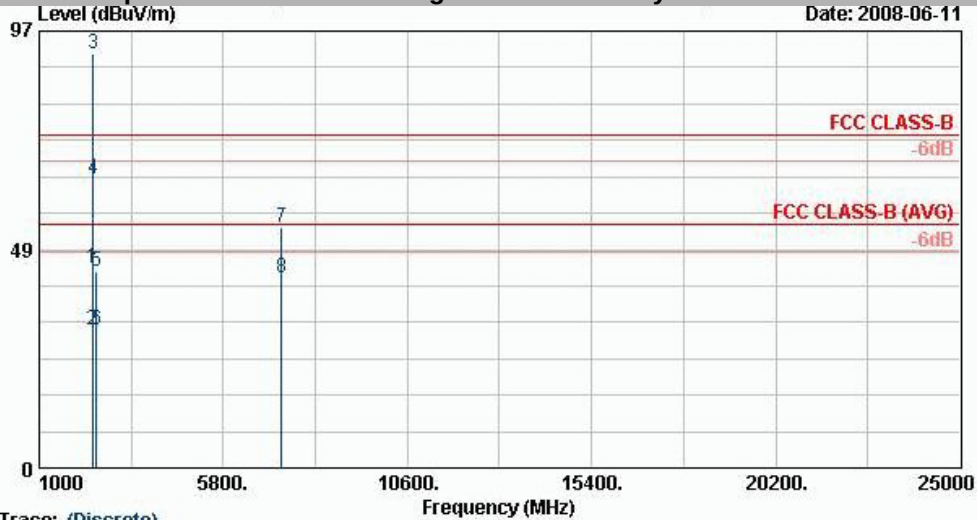
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 1
Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	108.03	36.72	-6.78	43.50	58.21	11.60	0.50	33.59	---	---	Peak
2 @	131.52	37.15	-6.35	43.50	58.44	11.54	0.50	33.33	100	134	Peak
3	213.33	36.17	-7.33	43.50	58.94	10.10	0.63	33.50	---	---	Peak
4	336.40	38.75	-7.25	46.00	57.03	14.15	0.80	33.23	---	---	Peak
5	358.80	37.00	-9.00	46.00	54.74	14.72	0.71	33.17	---	---	Peak
6	383.30	37.75	-8.25	46.00	54.64	15.34	0.87	33.10	---	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

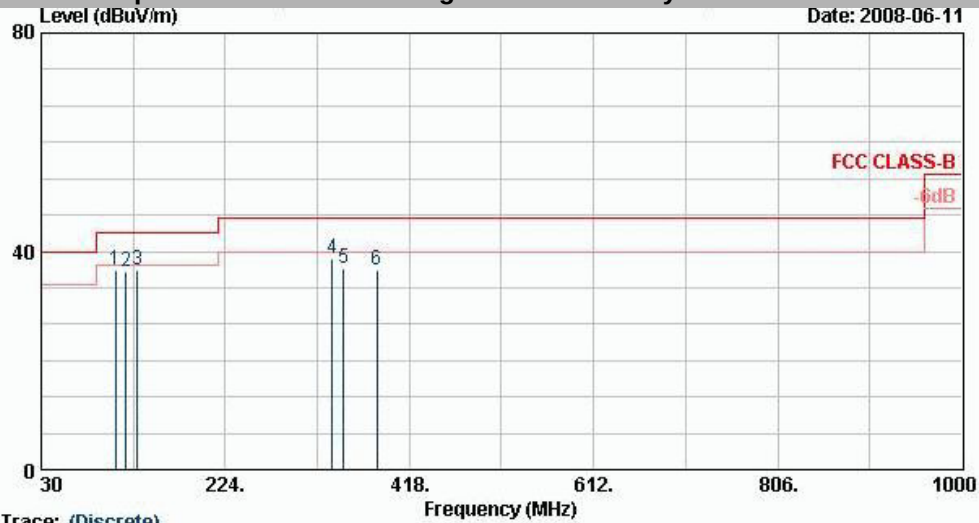
Site : D3CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 1
Plane : E2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2382.01	44.24	-29.76	74.00	44.14	31.86	3.92	35.68	100	0	Peak
2	2382.01	30.52	-23.48	54.00	30.44	31.83	3.92	35.68	100	228	Average
3 @	2402.00	91.97			91.85	31.88	3.92	35.68	100	0	Peak
4 @	2402.00	64.35			64.25	31.86	3.92	35.68	100	228	Average
5	2494.00	43.72	-30.28	74.00	43.37	32.00	4.05	35.70	100	0	Peak
6	2494.00	30.78	-23.22	54.00	30.43	32.00	4.05	35.70	100	228	Average
7	7317.00	53.20	-20.80	74.00	46.46	35.67	7.20	36.13	100	0	Peak
8	7317.00	42.05	-11.95	54.00	35.31	35.67	7.20	36.13	100	209	Average

Remark: #3 and #4 are Fundamental Signals

- Polarization : Vertical (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



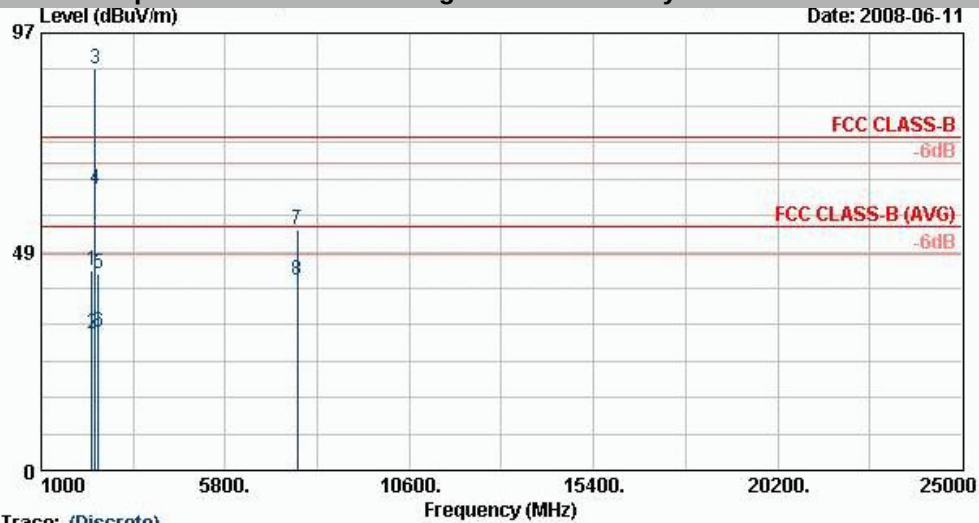
Trace: (Discrete)

Site : 03CH06-RY
Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 1
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	108.03	36.48	-7.02	43.50	57.98	11.60	0.50	33.59	---	Peak
2	119.64	36.18	-7.32	43.50	56.59	12.50	0.50	33.42	---	Peak
3	131.52	36.66	-6.84	43.50	57.96	11.54	0.50	33.33	100	182 Peak
4	336.40	38.61	-7.39	46.00	56.89	14.15	0.80	33.23	---	Peak
5	348.30	36.90	-9.10	46.00	54.85	14.45	0.80	33.20	---	Peak
6	383.30	36.51	-9.49	46.00	53.40	15.34	0.87	33.10	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

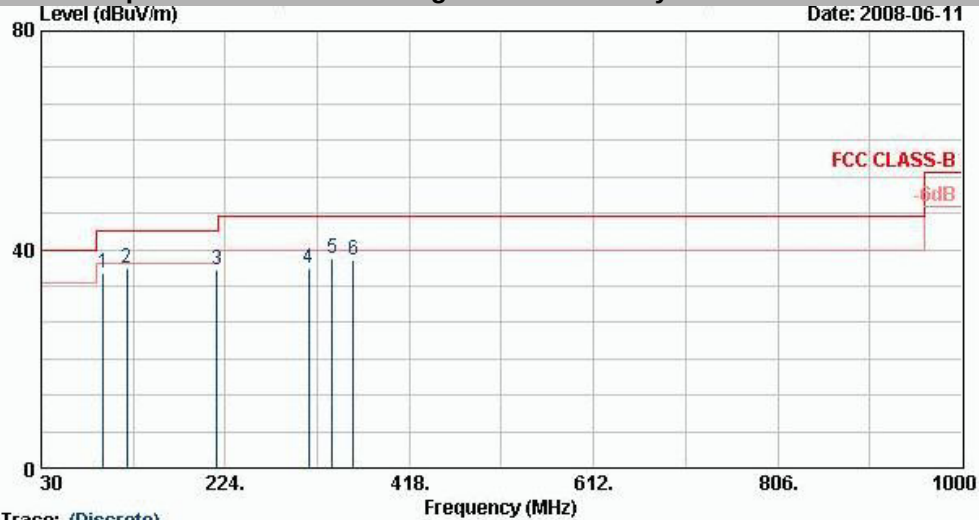
Site : D3CH06-HV
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 1
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2322.73	44.30	-29.70	74.00	44.38	31.76	3.82	35.67	100	0 Peak
2	2322.73	30.43	-23.57	54.00	30.51	31.76	3.82	35.67	105	191 Average
3 @	2402.00	89.01			88.89	31.88	3.92	35.68	100	0 Peak
4 @	2402.00	62.42			62.32	31.86	3.92	35.68	105	191 Average
5	2500.00	43.73	-30.27	74.00	43.38	32.00	4.05	35.70	100	0 Peak
6	2500.00	30.80	-23.20	54.00	30.45	32.00	4.05	35.70	105	191 Average
7	7677.00	53.34	-20.66	74.00	46.59	35.64	7.35	36.24	100	0 Peak
8	7677.00	42.25	-11.76	54.00	35.49	35.64	7.35	36.24	100	143 Average

Remark: #3 and #4 are Fundamental Signals

- Test Mode : Mode 6
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



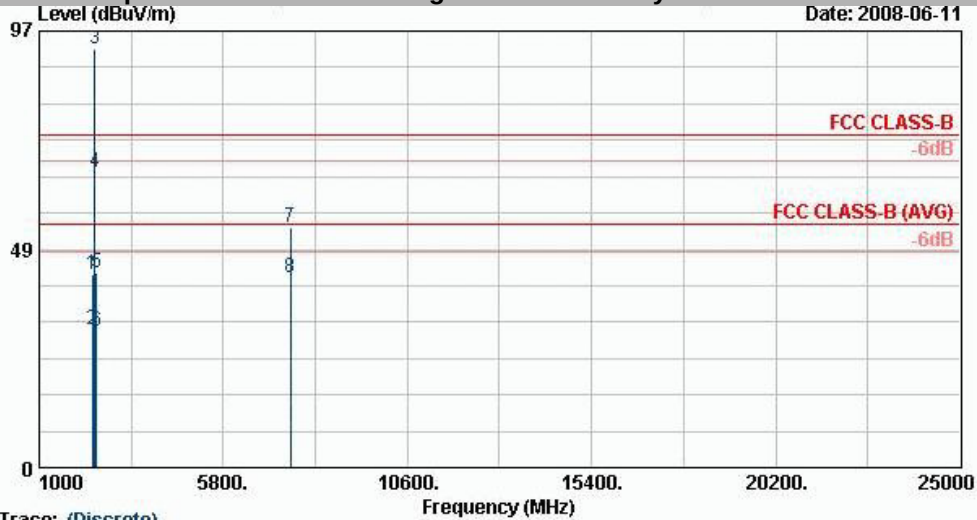
Trace: (Discrete)

Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
 EUT : Bluetooth Headset
 Power : From System
 Model : FR 852105-01
 Memo : Mode 2
 Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	95.61	35.59	-7.91	43.50	58.22	10.21	0.50	33.34	---	---	Peak
2	120.18	36.43	-7.07	43.50	58.74	12.58	0.50	33.39	100	254	Peak
3	215.49	36.21	-7.29	43.50	58.84	10.21	0.65	33.50	---	---	Peak
4	311.90	36.51	-9.49	46.00	55.48	13.53	0.80	33.30	---	---	Peak
5	336.40	38.22	-7.78	46.00	56.51	14.15	0.80	33.23	---	---	Peak
6	358.80	38.00	-8.00	46.00	55.74	14.72	0.71	33.17	---	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

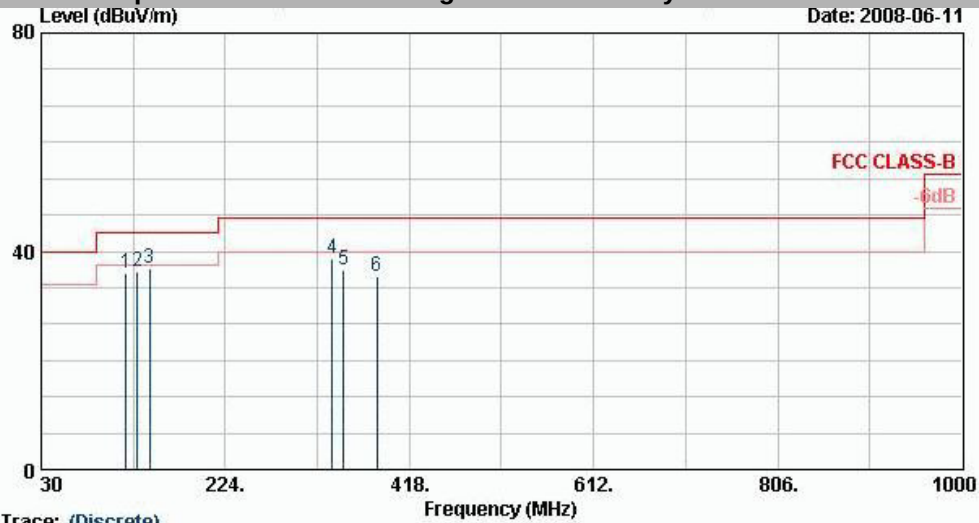
Site : D3CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 2
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamplifier	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2390.00	42.82	-31.18	74.00	42.72	31.86	3.92	35.68	100	0	Peak
2	2390.00	30.72	-23.28	54.00	30.62	31.86	3.92	35.68	103	227	Average
3 @	2441.00	92.95			92.73	31.93	3.99	35.69	100	0	Peak
4 X	2441.00	65.59			65.37	31.93	3.99	35.69	103	227	Average
5	2486.00	43.42	-30.58	74.00	43.09	31.98	4.05	35.70	100	0	Peak
6	2486.00	30.37	-23.63	54.00	30.04	31.98	4.05	35.70	103	227	Average
7	7557.00	53.23	-20.77	74.00	46.53	35.61	7.29	36.21	100	0	Peak
8	7557.00	42.12	-11.88	54.00	35.42	35.61	7.29	36.21	100	116	Average

Remark: #3 and #4 are Fundamental Signals

- Polarization : Vertical (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



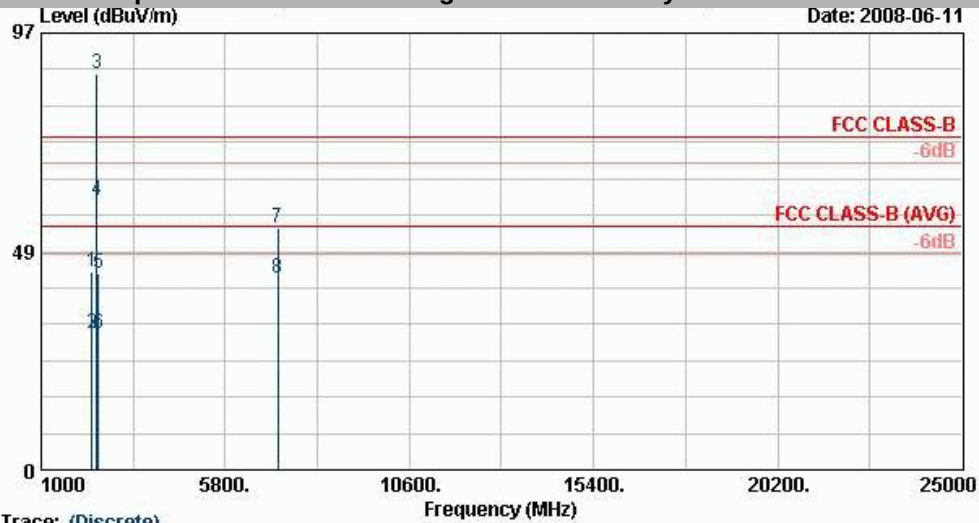
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 2
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	119.64	35.90	-7.60	43.50	56.31	12.50	0.50	33.42	---	Peak
2	131.79	36.20	-7.30	43.50	57.49	11.54	0.50	33.33	---	Peak
3	143.94	36.74	-6.76	43.50	59.49	10.30	0.54	33.59	100	161 Peak
4	336.40	38.62	-7.38	46.00	56.90	14.15	0.80	33.23	---	Peak
5	348.30	36.51	-9.49	46.00	54.46	14.45	0.80	33.20	---	Peak
6	383.30	35.49	-10.51	46.00	52.38	15.34	0.87	33.10	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

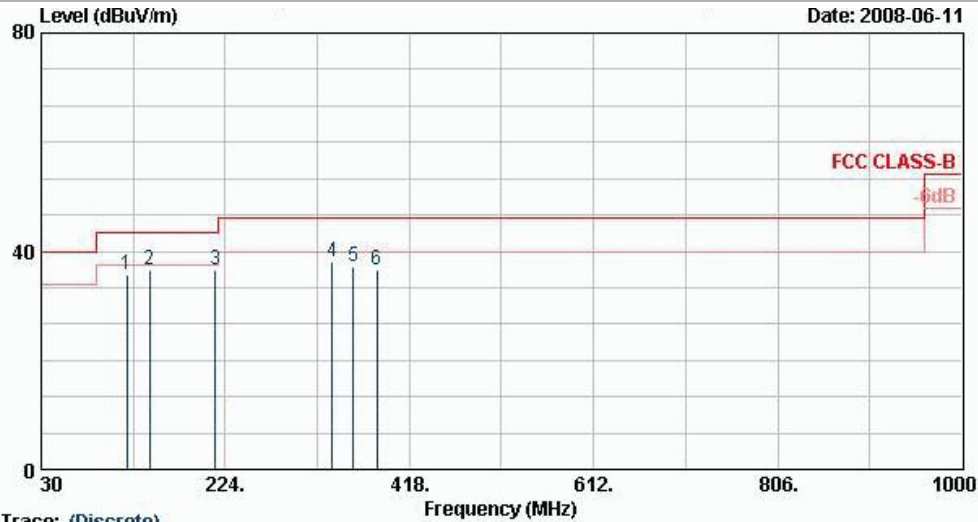
Site : D3CH06-RV
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 2
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV		dB		deg	
1	2326.00	43.92	-30.08	74.00	44.00	31.76	3.82	35.67	100	0 Peak
2	2326.00	30.25	-23.75	54.00	30.33	31.76	3.82	35.67	100	189 Average
3 @	2441.00	88.06			87.83	31.93	3.99	35.69	100	0 Peak
4 X	2441.00	59.82			59.60	31.93	3.99	35.69	100	189 Average
5	2484.00	43.48	-30.52	74.00	43.15	31.98	4.05	35.70	100	0 Peak
6	2484.00	30.44	-23.56	54.00	30.11	31.98	4.05	35.70	100	189 Average
7	7167.00	53.73	-20.27	74.00	46.92	35.73	7.15	36.07	100	0 Peak
8	7167.00	42.52	-11.48	54.00	35.71	35.73	7.15	36.07	100	207 Average

Remark: #3 and #4 are Fundamental Signals

- Test Mode : Mode 7
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



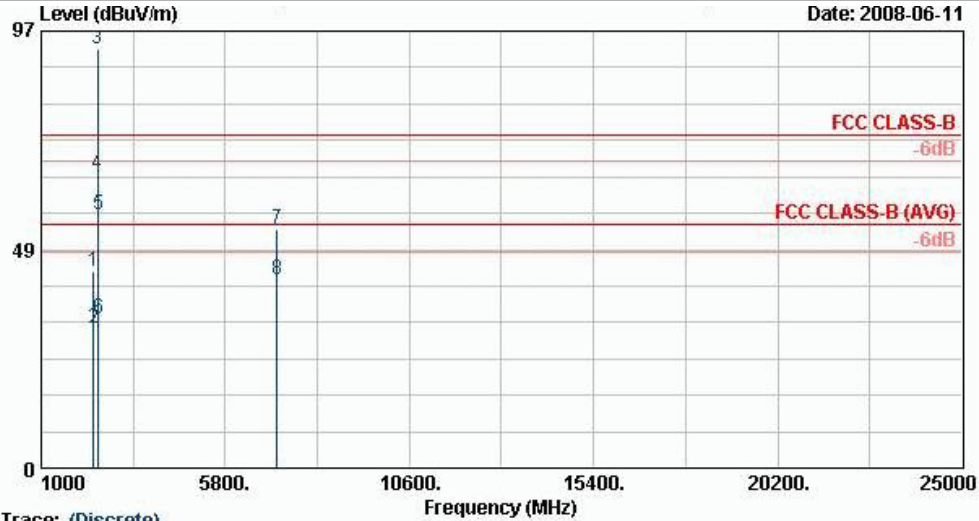
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 3
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1	119.91	35.56	-7.94	43.50	55.87	12.58	0.50	33.39	---	Peak
2	143.94	36.65	-6.85	43.50	59.40	10.30	0.54	33.59	100	Peak
3	213.33	36.51	-6.99	43.50	59.28	10.10	0.63	33.50	---	Peak
4	336.40	38.17	-7.83	46.00	56.45	14.15	0.80	33.23	---	Peak
5	358.80	37.07	-8.93	46.00	54.80	14.72	0.71	33.17	---	Peak
6	383.30	36.48	-9.52	46.00	53.37	15.34	0.87	33.10	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

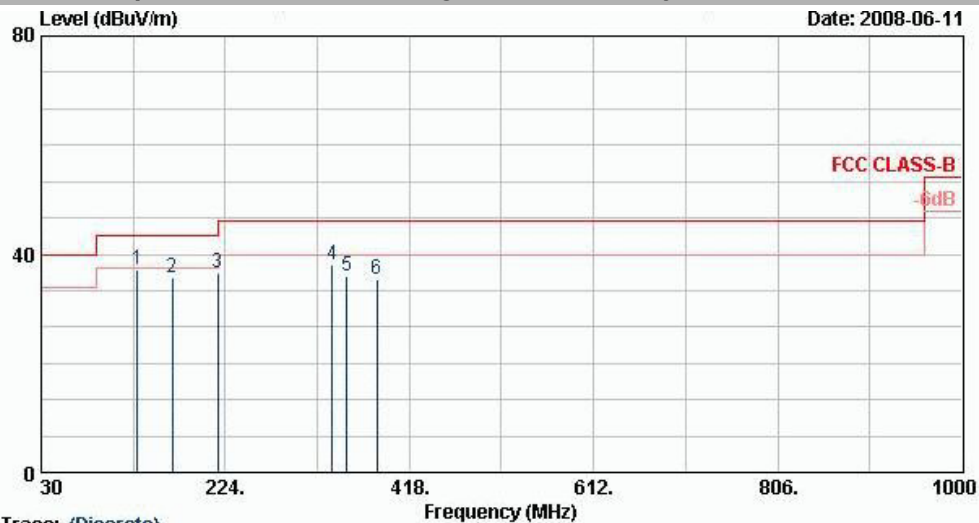
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 3
Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2366.00	43.67	-30.33	74.00	43.65	31.81	3.89	35.68	100	0	Peak
2	2366.00	30.85	-23.15	54.00	30.83	31.81	3.89	35.68	100	227	Average
3 @	2480.00	92.86			92.53	31.98	4.05	35.70	100	0	Peak
4 X	2480.00	65.12			64.79	31.98	4.05	35.70	100	227	Average
5	2483.50	56.40	-17.60	74.00	56.07	31.98	4.05	35.70	100	0	Peak
6	2483.50	33.34	-20.66	54.00	33.01	31.98	4.05	35.70	100	227	Average
7	7152.00	53.14	-20.86	74.00	46.32	35.74	7.14	36.06	100	0	Peak
8	7152.00	42.00	-12.00	54.00	35.18	35.74	7.14	36.06	100	120	Average

Remark: #3 and #4 are Fundamental Signals

- Polarization : Vertical (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



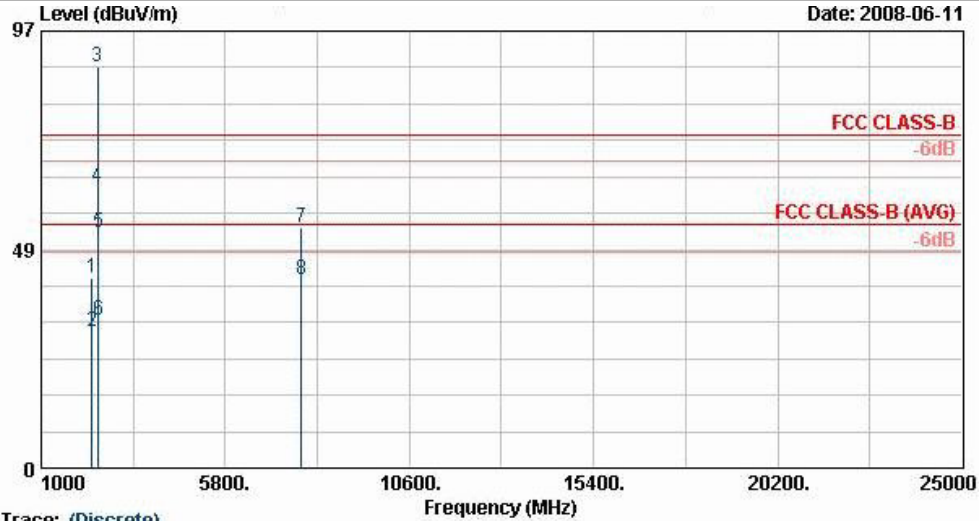
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 3
Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	131.79	37.15	-6.35	43.50	58.44	11.54	0.50	33.33	100	171	Peak
2	168.24	35.65	-7.85	43.50	58.54	9.94	0.60	33.44	---	---	Peak
3	216.03	36.45	-9.55	46.00	59.01	10.27	0.66	33.50	---	---	Peak
4	336.40	37.97	-8.03	46.00	56.25	14.15	0.80	33.23	---	---	Peak
5	351.80	35.84	-10.16	46.00	53.70	14.55	0.78	33.19	---	---	Peak
6	383.30	35.50	-10.50	46.00	52.38	15.34	0.87	33.10	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

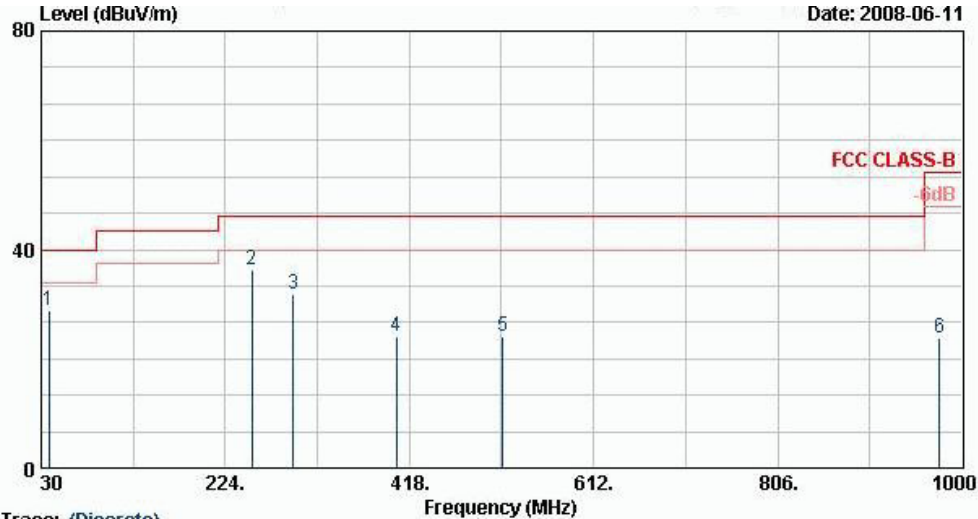
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : Bluetooth Headset
Power : From System
Model : FR 852105-01
Memo : Mode 3
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Antenna Level	Cable Factor	Preamp Loss	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2324.00	42.30	-31.70	74.00	42.38	31.76	3.82	35.67	100	0 Peak
2	2324.00	30.36	-23.64	54.00	30.44	31.76	3.82	35.67	176	165 Average
3 @	2480.00	89.13			88.80	31.98	4.05	35.70	100	0 Peak
4 X	2480.00	62.41			62.08	31.98	4.05	35.70	176	165 Average
5	2483.50	52.22	-21.78	74.00	51.89	31.98	4.05	35.70	100	0 Peak
6	2483.50	32.71	-21.29	54.00	32.38	31.98	4.05	35.70	176	165 Average
7	7782.00	53.19	-20.81	74.00	46.38	35.66	7.41	36.26	100	0 Peak
8	7782.00	41.95	-12.05	54.00	35.14	35.66	7.41	36.26	100	215 Average

Remark: #3 and #4 are Fundamental Signals

- Test Mode : Mode 8
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



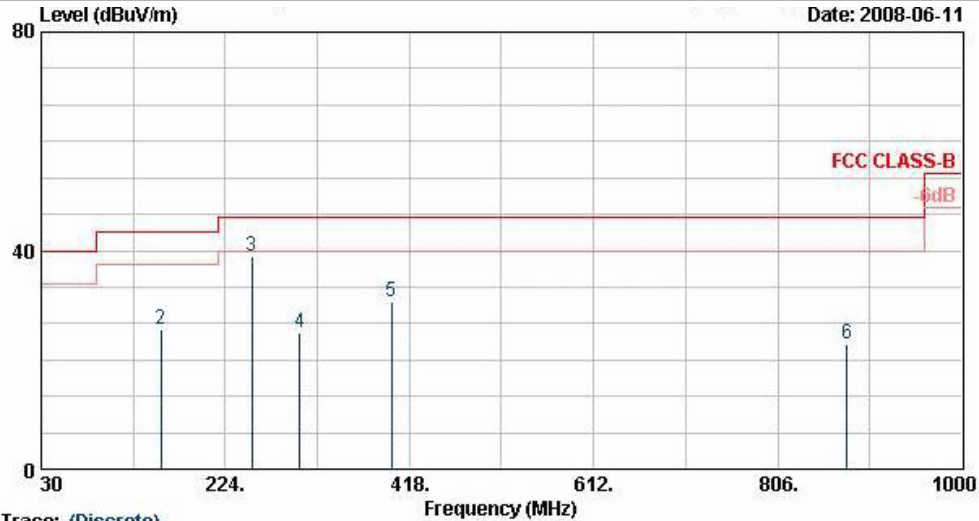
Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : Bluetooth Headset
Power : 120Vac/60Hz
Model : FR 852105-01
Memo : Mode 4
Plane : E2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	37.83	28.81	-11.19	40.00	47.20	14.56	0.30	33.24	---	---	Peak
2	251.94	36.31	-9.69	46.00	56.73	12.31	0.70	33.43	100	224	Peak
3	295.68	31.71	-14.29	46.00	51.23	13.14	0.70	33.35	---	---	Peak
4	404.30	23.96	-22.04	46.00	40.29	15.84	0.90	33.06	---	---	Peak
5	516.30	24.09	-21.91	46.00	38.78	17.59	1.00	33.27	---	---	Peak
6	976.90	23.75	-30.25	54.00	33.62	21.07	1.30	32.24	---	---	Peak

Remark: The spurious emission above 1 GHz is too low to be taken.

- Polarization : Vertical (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
EUT : Bluetooth Headset
Power : 120Vac/60Hz
Model : FR 652105-01
Memo : Mode 4
Plane : E2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	22.23	-17.77	40.00	35.77	19.66	0.30	33.50	---	---	Peak
2	156.09	25.56	-17.94	43.50	48.24	10.24	0.60	33.52	---	---	Peak
3 @	251.94	38.87	-7.13	46.00	59.29	12.31	0.70	33.43	100	131	Peak
4	302.80	25.06	-20.94	46.00	44.38	13.28	0.73	33.33	---	---	Peak
5	399.40	30.51	-15.49	46.00	46.90	15.76	0.90	33.05	---	---	Peak
6	878.90	22.80	-23.20	46.00	33.87	20.38	1.30	32.75	---	---	Peak

Remark: The spurious emission above 1 GHz is too low to be taken.

5.10 Antenna Requirements

5.10.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no other antenna except assembled by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

5.10.2 Antenna Connected Construction

The antenna used in this product is PCB Antenna for BT and it is considered to meet antenna requirement of FCC.

5.10.3 Antenna Gain

The antenna gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

6. List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMC Receiver	R&S	ESCS 30	100359	9kHz – 2.75GHz	Mar. 03, 2008	Mar. 02, 2009	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2008	Mar. 29, 2009	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2008	Mar. 21, 2009	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2008	Apr. 19, 2009	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz – 30MHz	Mar. 27, 2008	Mar. 26, 2009	Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	N/A	Conduction (CO04-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211028	9KHz-26.5GHz	Oct. 17, 2007	Oct. 16, 2008	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 26, 2007	Jul. 25, 2008	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Dec. 01, 2007	Nov. 30, 2008	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00075962	1G~18G	Aug. 29, 2007	Aug. 28, 2008	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-251	14G - 40G	Oct. 17, 2007	Oct. 16, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 22, 2007	Nov. 21, 2008	Radiation (03CH06-HY)
Pre Amplifier	EMEC	PA303	PA303-SMA-059	100K~3GHz	Nov. 26, 2007	Nov. 25, 2008	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	103937	Third-Band	Oct. 19, 2007	Oct. 18, 2008	Radiation (03CH06-HY)

7. Uncertainty Evaluation

Uncertainty of Conducted Emission Measurement (150 KHz ~ 30 MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
Combined standard uncertainty Uc(y)	1.13		
Measuring uncertainty for a level of Confidence of 95% U=2Uc(y)	2.26		

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.11	Normal(k=2)	0.06
Antenna factor calibration	0.91	Normal(k=2)	0.46
Cable loss calibration	0.12	Normal(k=2)	0.06
Pre Amplifier Gain calibration	0.15	Normal(k=2)	0.08
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.52	Rectangular	0.88
Mismatch	+0.45/-0.48	U-shaped	0.33
Combined standard uncertainty Uc(y)	1.30		
Measuring uncertainty for a level of Confidence of 95% U=2Uc(y)	2.60		

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Contribution	Uncertainty of x_i		$u(x_i)$	C_i	$C_i * u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20 \log(1 - \Gamma_1 \Gamma_2)$	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty $U_c(y)$	2.36				
Measuring uncertainty for a level of Confidence of 95% $U = 2U_c(y)$	4.72				

The measured result is : $y \text{ dBuV} \pm U \text{ dB}$
for a level of confidence of approximately 95% , ($k = 2$)

Appendix A. Photographs of EUT

Please refer to Sporton report number EP852105 as below.