

Test Report of
FCC Part 22, Part 24 and Part 15B
for FCC Certificate

On Behalf of

Cellstar I.L Ltd

Product Description: Mobile Phone

Brand Name: N/A

Model No.: KT618

FCC ID: WX2-KT618

Prepared for: Cellstar I.L Ltd

16 Haadasha st., Haifa, Israel

Prepared by: **Bontek Compliance Testing Laboratory Ltd**

1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road,
Nanshan, Shenzhen, China

Tel: 86-755-86337020

Fax: 86-755-86337028

Report No.: BCT08LP-933E

Issue Date: December 09, 2008

Test Date: November 25~December 21, 2008



Test by:

Kendy Wang

Reviewed By:

Tony Wu

Kendy Wang

Tony Wu

TABLE OF CONTENTS

1. GENERAL INFORMATION	4
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
1.2 RELATED SUBMITTAL(S) / GRANT (S)	4
1.3 TEST METHODOLOGY	4
1.4 TEST FACILITY	4
2. SYSTEM TEST CONFIGURATION	6
2.1 EUT CONFIGURATION.....	6
2.2 EUT EXERCISE	6
2.3 GENERAL TEST PROCEDURES.....	6
2.4 DESCRIPTION OF TEST MODES.....	6
2.5 INSTRUMENT CALIBRATION	6
2.6 LIST OF MEASURING EQUIPMENTS USED	7
3. TEST OF CONDUCTED EMISSION.....	9
3.1 APPLICABLE STANDARD	9
3.2 TEST SETUP DIAGRAM	9
3.3 TEST RESULT	9
4. TEST OF PEAK POWER.....	12
4.1 APPLICABLE STANDARD	12
4.2 EUT SETUP	12
4.3 TEST EQUIPMENT LIST AND DETAILS.....	12
4.4 TEST PROCEDURE.....	12
4.5 TEST RESULT	12
5. ERP & EIRP MEASUREMENT.....	14
5.1 APPLICABLE STANDARD	14
5.2 EUT SETUP	14
5.3 TEST EQUIPMENT LIST AND DETAILS.....	15
5.4 TEST PROCEDURE.....	16
5.5 TEST RESULT	16
6. TEST OF OCCUPIED BANDWIDTH.....	18
6.1 APPLICABLE STANDARD	18
6.2 EUT SETUP	18
6.3 TEST EQUIPMENT LIST AND DETAILS.....	18
6.4 TEST PROCEDURE.....	18
6.5 TEST RESULT	18
7. TEST OF OUT OF BAND EMISSION AT ANTENNA TERMINALS	24
7.1 APPLICABLE STANDARD	24
7.2 EUT SETUP	24
7.3 TEST EQUIPMENT LIST AND DETAILS.....	24
7.4 TEST PROCEDURE.....	24
7.5 TEST RESULT OF OUT OF BAND EMISSION AT ANTENNA TERMINALS	25
7.6 TEST RESULT OF BAND EDGE EMISSIONS	32
8. SPURIOUS RADIATION MEASUREMENT OF GSM MODE.....	35
8.1 APPLICABLE STANDARD	35
8.2 EUT SETUP	35
8.3 TEST EQUIPMENT LIST AND DETAILS.....	36
8.4 TEST PROCEDURE.....	37
8.5 TEST RESULT	37
9. FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT	41
9.1 APPLICABLE STANDARD	41
9.2 EUT SETUP	41
9.3 TEST EQUIPMENT LIST AND DETAILS.....	41

9.4 TEST PROCEDURE.....	41
9.5 TEST RESULT	42
10. FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT.....	43
10.1 APPLICABLE STANDARD	43
10.2 EUT SETUP.....	43
10.3 TEST EQUIPMENT LIST AND DETAILS.....	43
10.4 TEST PROCEDURE	43
10.5 TEST RESULT	44
11. SPURIOUS RADIATION MEASUREMENT OF OTHER MODE.....	45
11.1 APPLICABLE STANDARD	45
11.2 EUT SETUP.....	45
11.3 TEST EQUIPMENT LIST AND DETAILS.....	46
11.4 TEST PROCEDURE	46
11.5 CORRECTED AMPLITUDE & MARGIN CALCULATION.....	47
11.6 TEST RESULT	47

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Applicant: **Cellstar I.L Ltd**
Address of applicant: 16 Haadasha st., Haifa, Israel
Manufacturer: **KINGTECH TELECOM (HK) LIMITED**
Address of manufacturer: Floor 3, No.9, East Area of Shangxue Sci.&Tech.Industry Park, Buji Town, Longgang District, Shenzhen City, PRC

Equipment Under Test: **Mobile Phone**
Model No.: KT618
Cellular Phone Protocol GSM (PCS)
Frequency Band: TX: 824 ~ 849 MHz / 1850 ~ 1910 MHz
RX: 869 ~ 894 MHz / 1930 ~ 1990 MHz
Type of Emission: 252KGXW
Antenna Type: Built-in Antenna
Power Supply: DC 4.2 V from inner rechargeable Li-ion battery

*Remark: * The test data gathered are from the production sample provided by the manufacturer.*

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended to comply with Part 22, Part 24 and Part 15B of the FCC 47 CFR Rules. It is a test report based on the Electromagnetic Interference (EMI) tests performed on the EUT. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4 - 2003.

1.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 - 2003 and FCC CFR 47, 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057.

1.4 Test Facility

All measurement required was performed at laboratory of Bontek Compliance Testing Laboratory Ltd at 1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China and Compliance Certification Services Inc. (China Kunshan) Lab at 10#, Weiye Rd, Innovation Park Eco. & Tec. Development Zone, Kunshan City, JiangSu, (215300) China.

The test facility is recognized, certified, or accredited by the following organizations:

Bontek Compliance Testing Laboratory Ltd:**FCC – Registration No.: 338263**

Bontek Compliance Testing Laboratory Ltd EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 338263, March 24, 2008.

IC Registration No.: 126111

The 3m alternate test site of Bontek Compliance Testing Laboratory Ltd EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 126111 on March, 2008.

Compliance Certification Services Inc. (China Kunshan) Lab:

Test site at Compliance Certification Services Inc. (China Kunshan) Lab has been accredited as showed in following table.

Country	Agency	Logo
USA	A2LA	
USA	FCC	 93105, 90471

Additionally, Compliance Certification Services Inc. (China Kunshan) Lab is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200581-0).

2. SYSTEM TEST CONFIGURATION

The tests documented in this report were performed in accordance with ANSI C63.4-2003 and FCC CFR 47 Part 22 H and Part 24 E.

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

2.3 General Test Procedures

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 7.1 of ANSI C63.4-2003. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak detector mode.

Radiated Emissions

The EUT is placed on as turntable, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4-2003.

2.4 Description of Test Modes

The EUT had been tested under operating condition.

EUT staying in continuous transmitting mode was programmed. Channel Low, Mid and High were chosen for full testing.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz, which worst case was in normal link mode only. The field strength of spurious emission was measured as EUT stand-up position (H mode) and lie-down position (E1, E2 mode) for both GSM and GPRS with all power adaptors. The worst emission was found in stand-up position (H mode) and the worst case was recorded.

2.5 Instrument Calibration

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

2.6 List of Measuring Equipments Used

For Conducted Emission and other tests: Bontek Compliance Testing Laboratory Ltd

Items	Equipment	Manufacturer	Model No.	Serial No.	Last Cal	Calibration Period
1	EMI Test Receiver	R&S	ESCI	100687	2008/11/17	1 Year
2	EMI Test Receiver	R&S	ESPI	100097	2008/11/17	1 Year
3	Amplifier	HP	8447D	1937A024 92	2008/11/17	1 Year
4	3 phase Artificial Mains (L.I.S.N)	SCHWARZBECK	NSLK 8128	8128247	2008/11/17	1 Year
5	TRILOG Broadband Test-Antenna	SCHWARZBECK	VULB9163	9163-324	2008/11/17	1 Year
6	Horn Antenna	SCHWARZBECK	BBHA9120A	D69250	2008/11/17	1 Year
7	High Field Biconical Antenna	ELECTRO-METRICS	EM-6913	166	2008/11/17	1 Year
8	Log Periodic Antenna	ELECTRO-METRICS	EM-6950	811	2008/11/17	1 Year
9	Remote Active Vertical Antenna	ELECTRO-METRICS	EM-6892	304	2008/11/17	1 Year
10	Power Clamp	SCHWARZBECK	MDS-21	3812	2008/11/17	1 Year

For Radiated Emission test: Compliance Certification Services Inc. (China Kunshan) Lab:

Items	Equipment	Manufacturer	Model No.	Serial No.	Calibration Due
1	Peak and Avg Power Sensor	Agilent	E9327A	US40441788	07/30/2008
2	EPM-P Series Power Meter	Agilent	E4416A	QB41292714	07/30/2008
3	Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
4	Wireless communication test set	Agilent	8960	QB44051695	10/06/2008
5	Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
6	EMI Test Receiver	R&S	ESPI3	101026	11/11/2008
7	Pre-Amplifier	MINI-circuits	ZFL-1000VH2	d041703	12/13/2008
8	Pre-Amplifier	Miteq	NSP4000-NF	870731	01/28/2008
9	Bilog Antenna	Sunol	JB1	A110204-2	11/22/2008
10	Horn-antenna	SCHWARZBECK	BBHA9120D	D:266	02/01/2008
11	PSG Analog Signal Generator	Agilent	E8257C	MY43321570	12/19/2008

12	Wireless communication test set	Agilent	8960	QB44051695	10/06/2008
13	Turn Table	CT	CT123	4165	N.C.R
14	Antenna Tower	CT	CTERG23	3256	N.C.R
15	Controller	CT	CT1OO	95637	N.C.R
16	Site NSA	CCS	N/A	N/A	04/06/2008

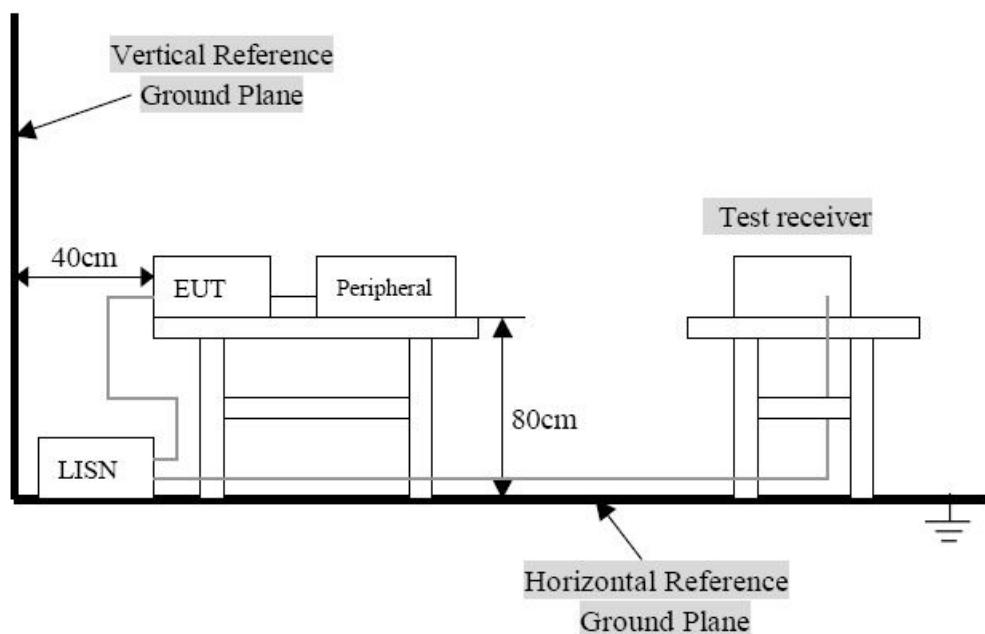
3. TEST OF CONDUCTED EMISSION

3.1 Applicable Standard

Section 15.207: For a Low-power Radio-frequency Device is designed to be connected to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency Range (MHz)	Limits (dBuV)	
	Quasi-Peak	Average
0.150~0.500	66~56	56~46
0.500~5.000	56	46
5.000~30.00	60	50

3.2 Test Setup Diagram



Remark: 1. The setup of EUT is according with per ANSI C63.4-2003 measurement procedure.
The specification used was with the FCC 15.207 limits.

2. The EUT was connected to a 120 VAC/ 60Hz power source.

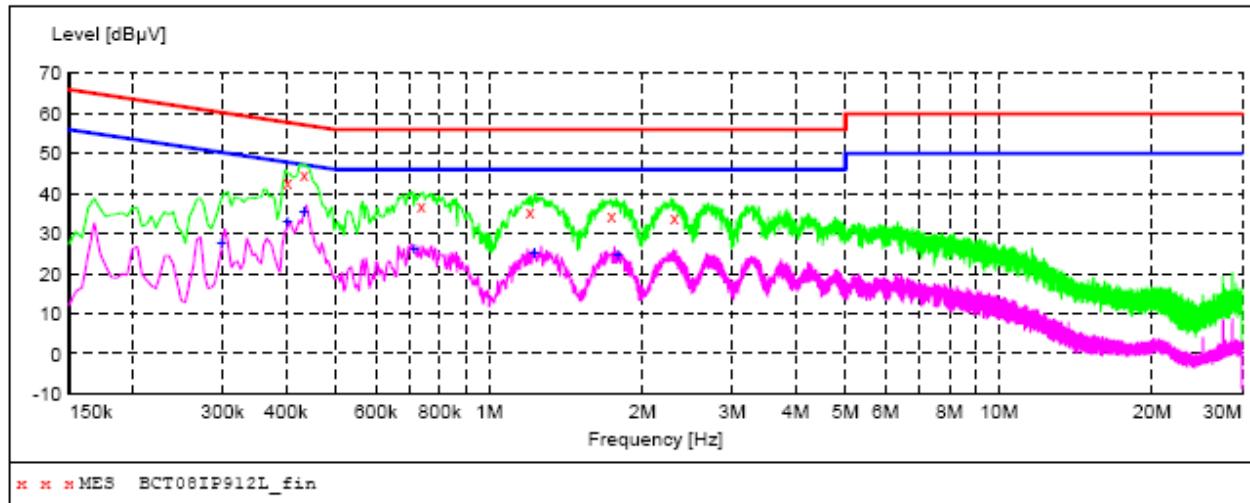
3.3 Test Result

Temperature (°C) : 23~25	EUT: Mobile Phone
Humidity (%RH) : 45~58	M/N: KT618
Barometric Pressure (mbar) : 950~1000	Operation Condition: Charging Mode

Conducted Emission from AC/DC Adaptor:

EUT: Mobile Phone
Operating Condition: Charging Mode
Test Site: Shielded Room
Operator: Andy
Test Specification: DC 3.7V from AC/DC adapter (AC 120V/60Hz)
Comment: Live Line

SCAN TABLE: "Voltage (150K-30M) FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "BCT08IP912L_fin"

12/5/2008 08:34

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.402000	42.90	10.4	58	14.9	QP	L1	GND
0.433500	45.10	10.3	57	12.1	QP	L1	GND
0.735000	37.10	10.2	56	18.9	QP	L1	GND
1.203000	35.60	10.3	56	20.4	QP	L1	GND
1.738500	34.60	10.2	56	21.4	QP	L1	GND
2.310000	34.00	10.2	56	22.0	QP	L1	GND

MEASUREMENT RESULT: "BCT08IP912L_fin2"

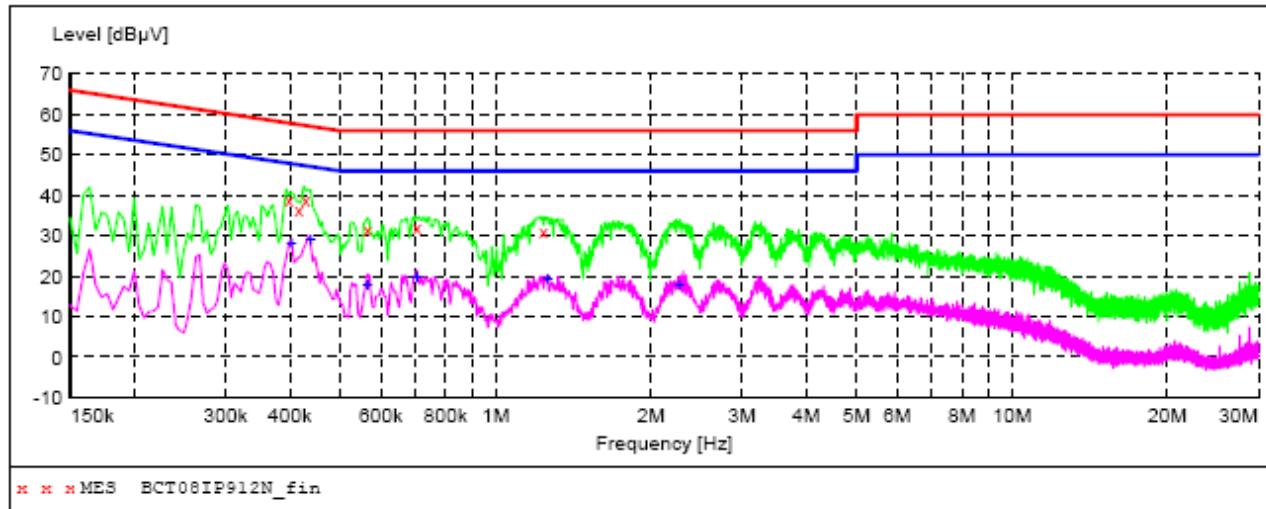
12/5/2008 08:34

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.298500	27.90	10.6	50	22.4	AV	L1	GND
0.402000	33.20	10.4	48	14.6	AV	L1	GND
0.433500	35.50	10.3	47	11.7	AV	L1	GND
0.712500	26.40	10.2	46	19.6	AV	L1	GND
1.225500	25.40	10.3	46	20.6	AV	L1	GND
1.788000	24.60	10.2	46	21.4	AV	L1	GND

Conducted Emission from AC/DC Adaptor:

EUT: Mobile Phone
Operating Condition: Charging Mode
Test Site: Shielded Room
Operator: Andy
Test Specification: DC 3.7V from AC/DC adapter (AC 120V/60Hz)
Comment: Neutral Line

SCAN TABLE: "Voltage (150K-30M) FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "BCT08IP912N_fin"

12/5/2008 08:29

Frequency MHz	Level dB _u V	Transd dB	Limit dB _u V	Margin dB	Detector	Line	PE
0.397500	38.90	10.4	58	19.0	QP	N	GND
0.415500	36.40	10.4	58	21.1	QP	N	GND
0.429000	38.80	10.3	57	18.5	QP	N	GND
0.564000	31.50	10.2	56	24.5	QP	N	GND
0.703500	32.20	10.2	56	23.8	QP	N	GND
1.239000	31.40	10.3	56	24.6	QP	N	GND

MEASUREMENT RESULT: "BCT08IP912N_fin2"

12/5/2008 08:29

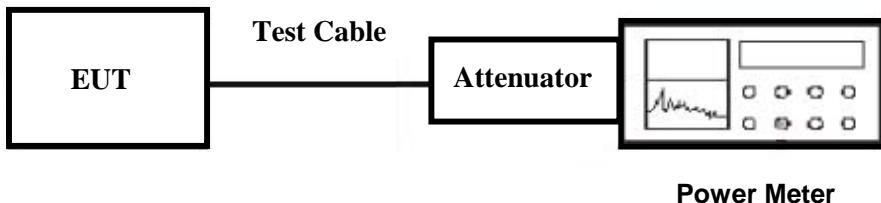
Frequency MHz	Level dB _u V	Transd dB	Limit dB _u V	Margin dB	Detector	Line	PE
0.402000	28.20	10.4	48	19.6	AV	N	GND
0.438000	29.00	10.3	47	18.1	AV	N	GND
0.564000	18.00	10.2	46	28.0	AV	N	GND
0.703500	20.10	10.2	46	25.9	AV	N	GND
1.261500	19.30	10.3	46	26.7	AV	N	GND
2.269500	18.10	10.2	46	27.9	AV	N	GND

4. TEST OF PEAK POWER

4.1 Applicable Standard

According to FCC § 2.1046.

4.2 EUT Setup



4.3 Test Equipment List and Details

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Peak and Avg Power Sensor	Agilent	E9327A	US40441788	07/30/2008
EPM-P Series Power Meter	Agilent	E4416A	QB41292714	07/30/2008
Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
Wireless Communication Test Set	Agilent	8960	QB44051695	10/06/2008

4.4 Test Procedure

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading.

4.5 Test Result

Temperature (°C) : 22~23	EUT: Mobile Phone
Humidity (%RH) : 50~54	M/N: KT618
Barometric Pressure (mbar) : 950~1000	Operation Condition: Tx Mode

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Factor (dB)	Peak Power (dBm)
GSM 850	128	824.20	7.84	22.00	29.84
	190	836.60	8.17		30.17
	251	848.80	8.36		30.36

Remark: The value of factor includes both the loss of cable and external attenuator

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Factor (dB)	Peak Power (dBm)
GSM 1900	512	1850.20	4.80	22.00	26.80
	661	1880.00	4.59		26.59
	810	1910.00	4.40		26.40

Remark: The value of factor includes both the loss of cable and external attenuator

5. ERP & EIRP MEASUREMENT

5.1 Applicable Standard

According to FCC §2.1046 and FCC 22.913(b): The Effective Radiated Power (ERP) of mobile transmitters must not exceed 7 Watts. FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

5.2 EUT Setup

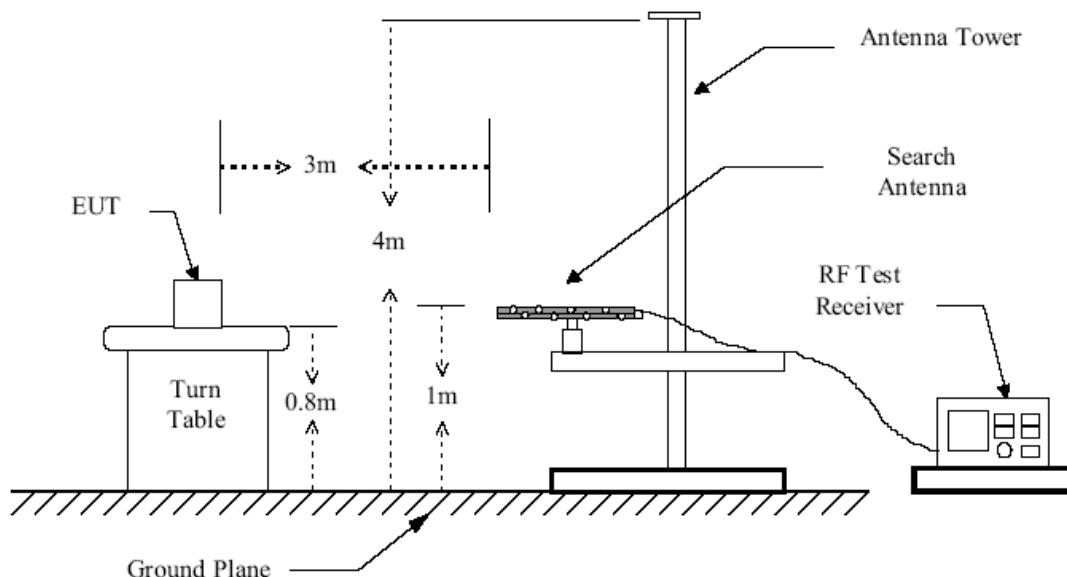


Figure 1 : Frequencies measured below 1 GHz configuration

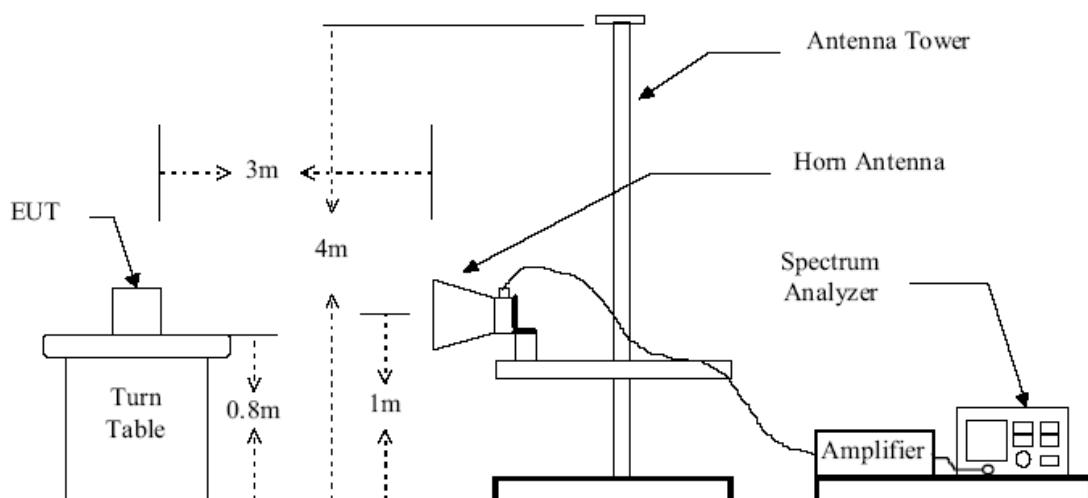


Figure 2 : Frequencies measured above 1 GHz configuration

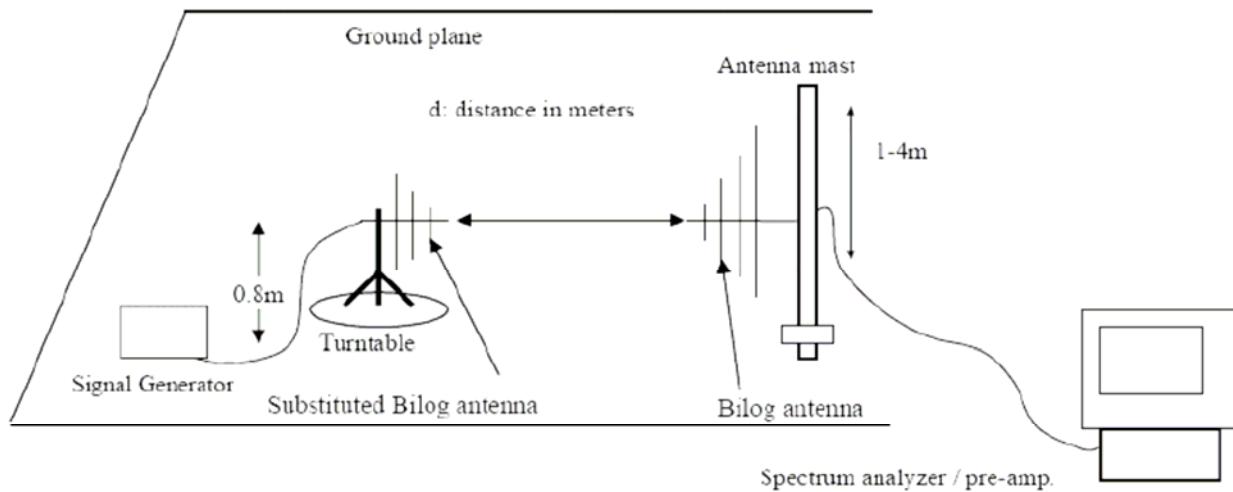


Figure 3: Substitution Method

5.3 Test Equipment List and Details

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
EMI Test Receiver	R&S	ESPI3	101026	11/11/2008
Pre-Amplifier	MINI-circuits	ZFL-1000VH2	d041703	12/13/2008
Pre-Amplifier	Miteq	NSP4000-NF	870731	01/28/2008
Bilog Antenna	Sunol	JB1	A110204-2	11/22/2008
Horn-antenna	SCHWARZBECK	BBHA9120D	D:266	02/01/2008
PSG Analog Signal Generator	Agilent	E8257C	MY43321570	12/19/2008
Wireless Communication Test Set	Agilent	8960	QB44051695	10/06/2008
Turn Table	CT	CT123	4165	N.C.R
Antenna Tower	CT	CTERG23	3256	N.C.R
Controller	CT	CT100	95637	N.C.R
Site NSA	CCS	N/A	N/A	04/06/2008

5.4 Test Procedure

The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.

During the measurement of the EUT, the resolution bandwidth was set to 3MHz and the average bandwidth was set to 3MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna. The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824-849MHz, and EIRP in frequency band 1851.25 –1910MHz were measured using a substitution method. The EUT was replaced by half-wave dipole (824-849MHz) or horn antenna (1851.25-1910MHz) connected to a signal generator. The spectrum analyzer reading was recorded and ERP/EIRP was calculated as follows:

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

5.5 Test Result

Temperature (°C) : 22~23	EUT: Mobile Phone
Humidity (%RH) : 50~54	M/N: KT618
Barometric Pressure (mbar) : 950~1000	Operation Condition: Tx Mode

GSM 850 Test Data:

EUT Pol.	Channel	Frequency (MHz)	Reading level (dBuV)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBd)	level Emission (dBm)	Limit (dBm)	Margin (dB)
H	128	824.20	129.31	V	27.55	2.87	4.05	28.73	38.5	-7.62
		824.20	118.62	H	21.83	2.87	4.05	23.01	38.5	-13.34
	190	836.60	129.75	V	27.97	2.88	4.25	29.34	38.5	-7.01
		836.60	119.13	H	22.04	2.88	4.25	23.41	38.5	-12.94
	251	848.80	129.33	V	27.67	2.94	4.35	29.08	38.5	-7.27
		848.80	118.79	H	22.82	2.94	4.35	24.23	38.5	-12.12

GSM 1900 Test Data:

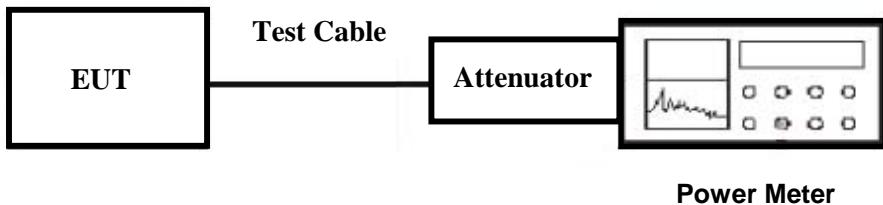
EUT Pol.	Channel	Frequency (MHz)	Reading level (dBuV)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	level Emission (dBm)	Limit (dBm)	Margin (dB)
H	512	1850.20	120.98	V	23.96	4.31	8.45	28.10	33	-4.90
		1850.20	118.77	H	19.65	4.31	8.45	23.79	33	-9.21
	661	1880.00	121.56	V	24.45	4.53	8.48	28.40	33	-4.60
		1880.00	119.23	H	20.32	4.53	8.48	24.27	33	-8.73
	810	1909.80	121.04	V	24.01	4.55	8.52	27.98	33	-5.02
		1909.80	119.89	H	19.76	4.55	8.52	23.73	33	-9.27

6. TEST OF OCCUPIED BANDWIDTH

6.1 Applicable Standard

According to § FCC 2.1049.

6.2 EUT Setup



6.3 Test Equipment List and Details

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
Wireless Communication Test Set	Agilent	8960	QB44051695	10/06/2008

6.4 Test Procedure

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW is set to 3 times the RBW, -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

The spectrum analyzer is set to: RBW = 3 kHz, VBW = 10 kHz, Span = 1 MHz, Sweep = auto

6.5 Test Result

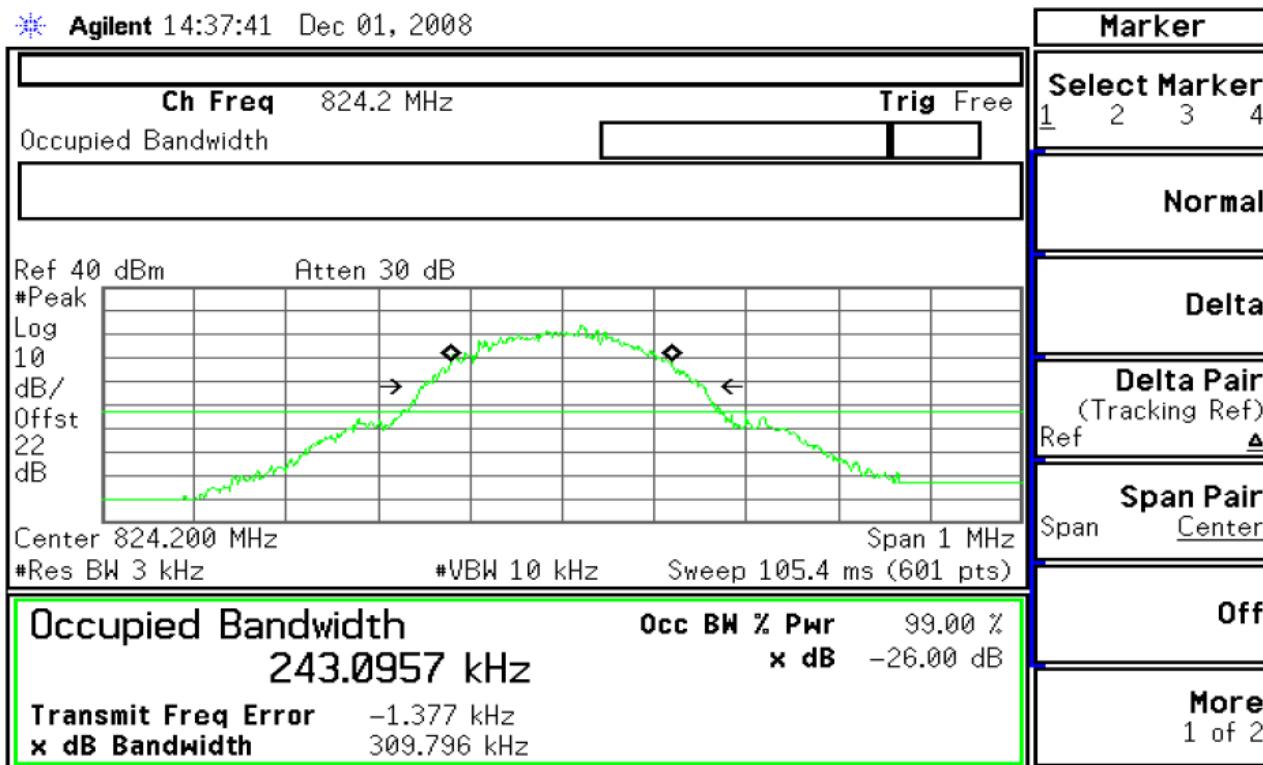
Temperature (°C) : 22~23	EUT: Mobile Phone
Humidity (%RH) : 50~54	M/N: KT618
Barometric Pressure (mbar) : 950~1000	Operation Condition: Tx Mode

Test Mode	Channel	Frequency (MHz)	Bandwidth (kHz)
GSM 850	128	824.20	243.10
	190	836.00	244.82
	251	848.00	242.63
	128	824.20	243.10

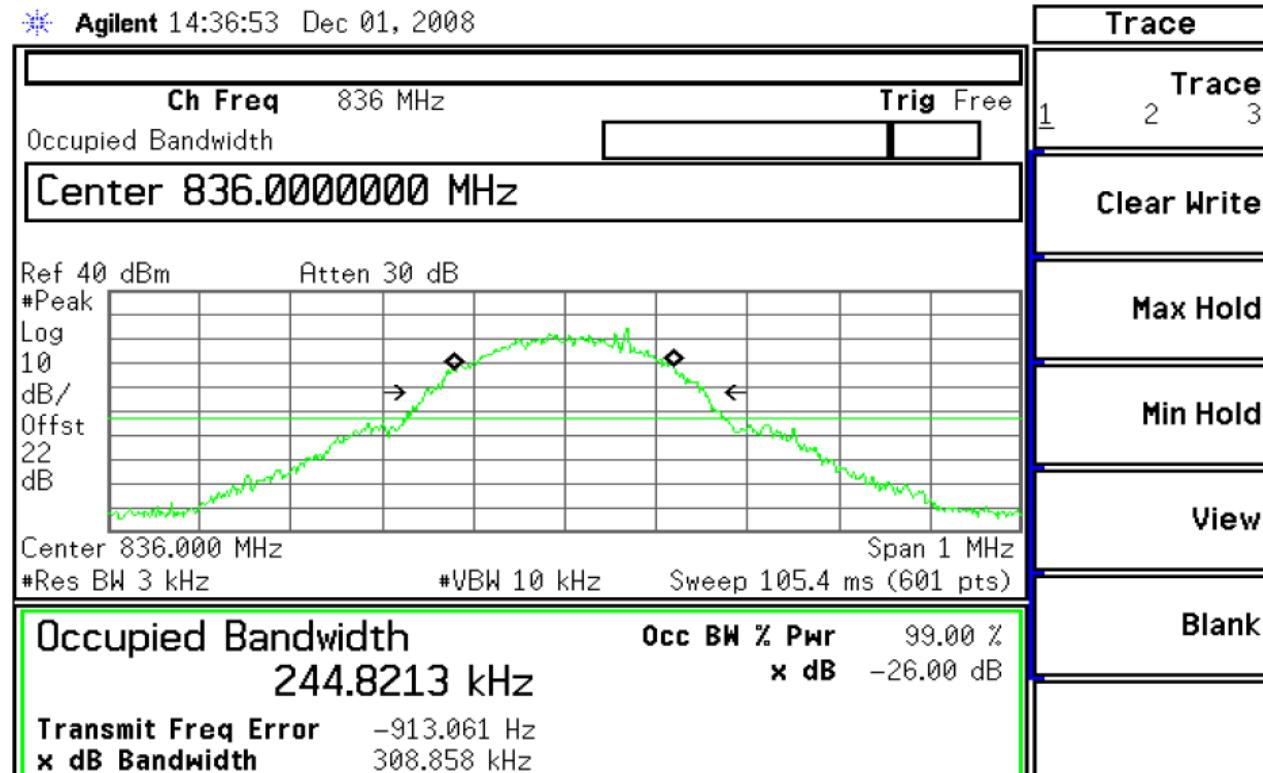
Test Mode	Channel	Frequency (MHz)	Bandwidth (kHz)
GSM 1900	512	1850.20	251.51
	661	1880.00	246.12
	810	1909.80	245.84
	512	1850.20	251.51

Test plots see following pages

GSM 850 (CH Low) :

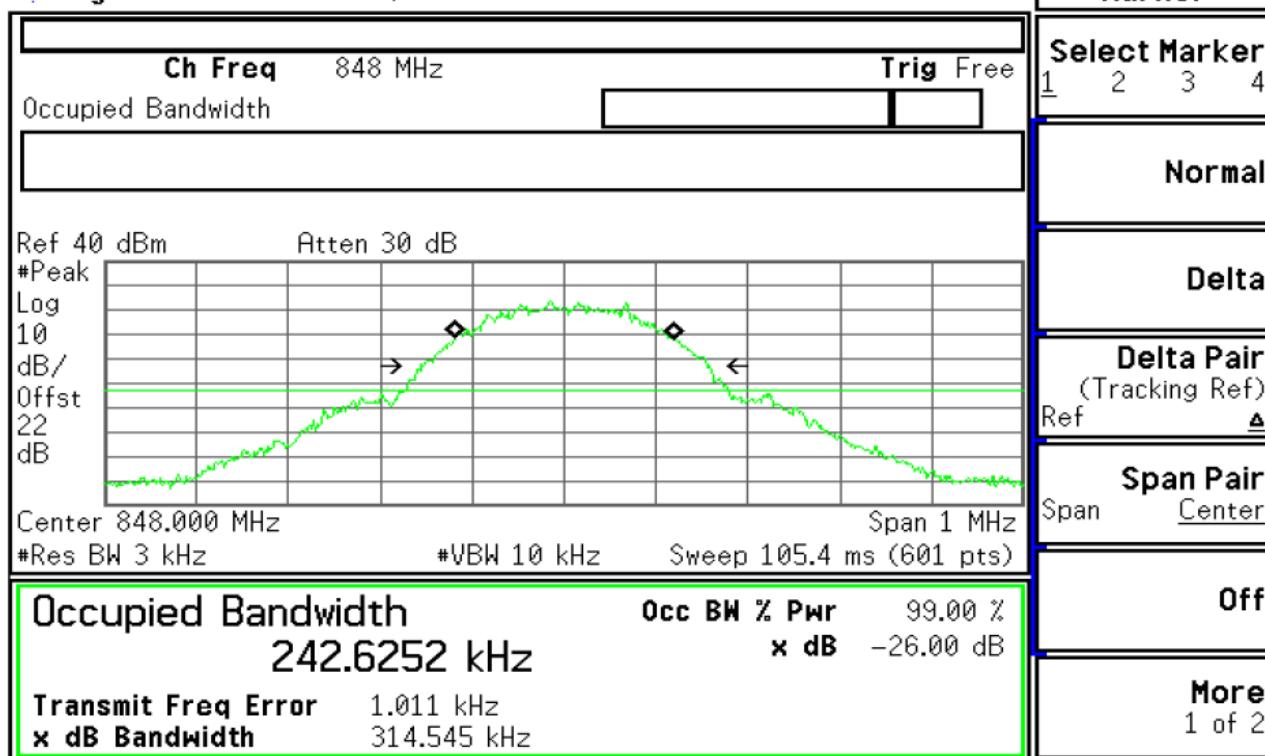


GSM 850 (CH Mid) :

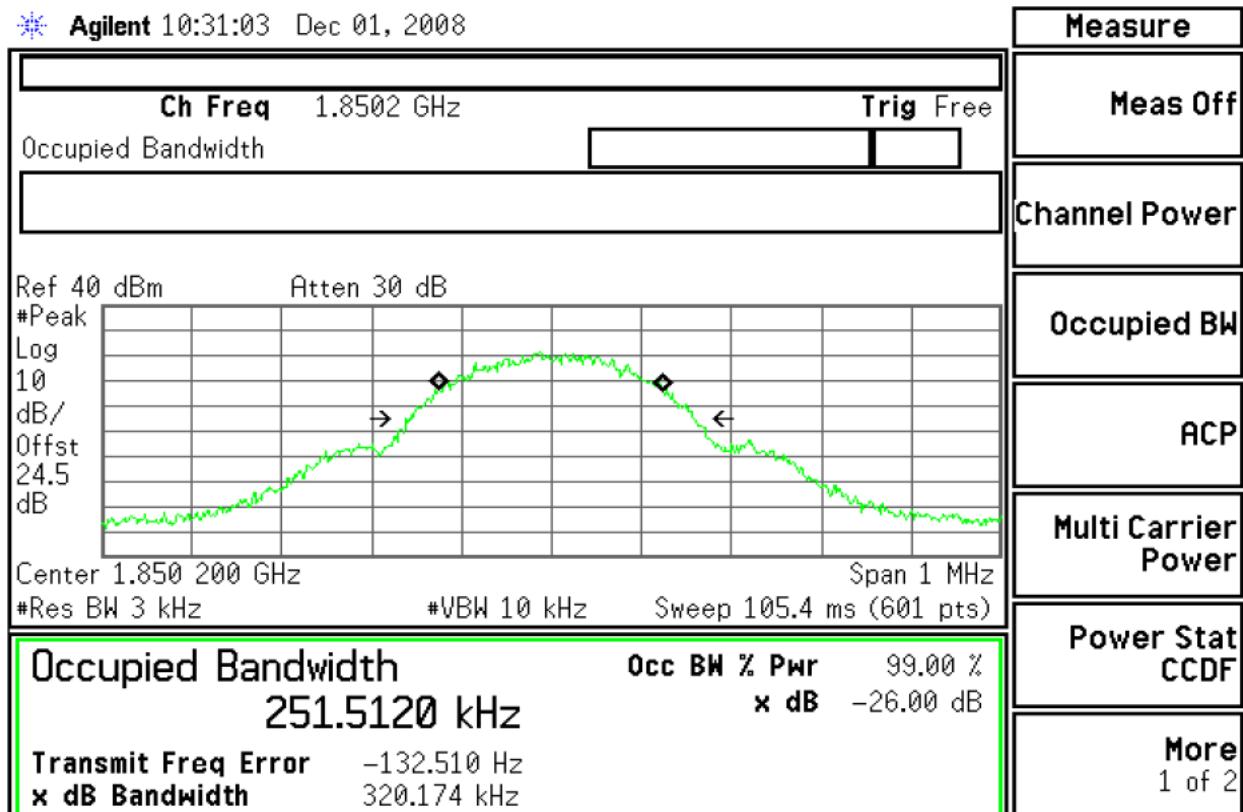


GSM 850 (CH High) :

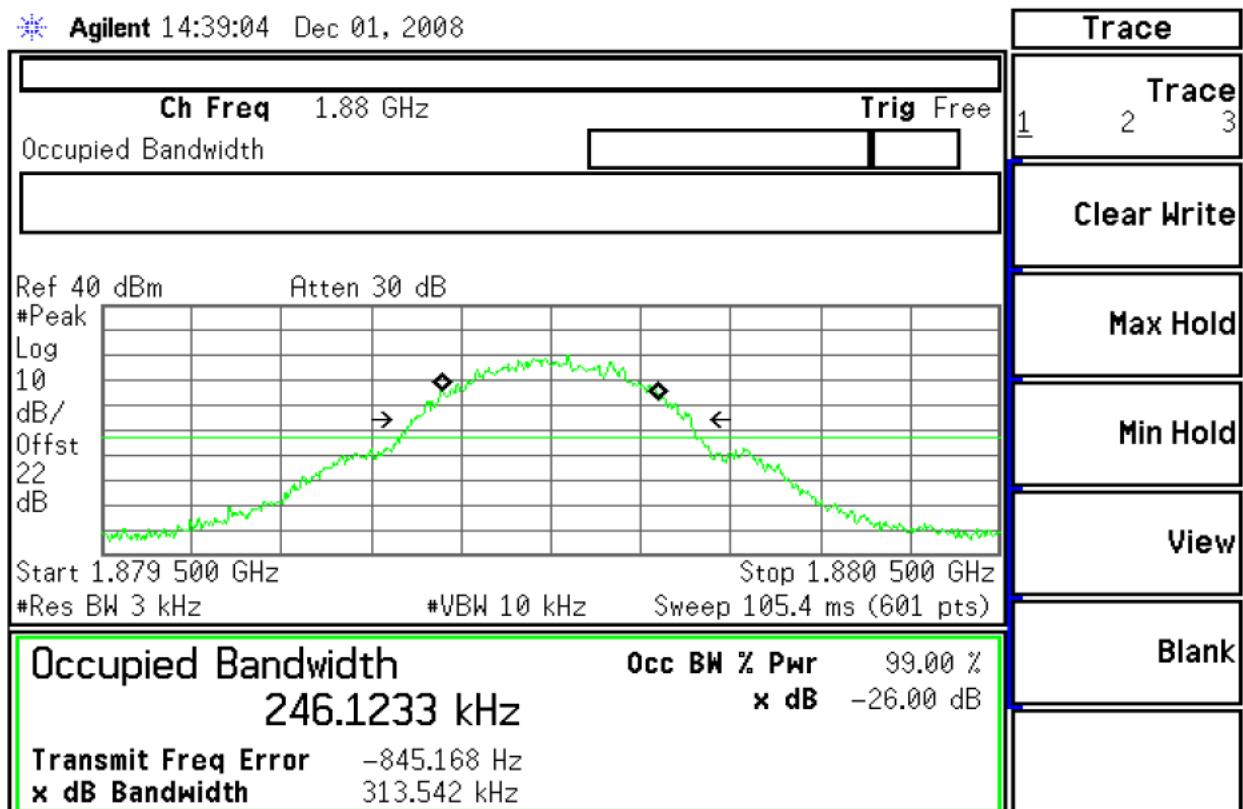
Agilent 14:35:59 Dec 01, 2008



GSM 1900(CH Low) :

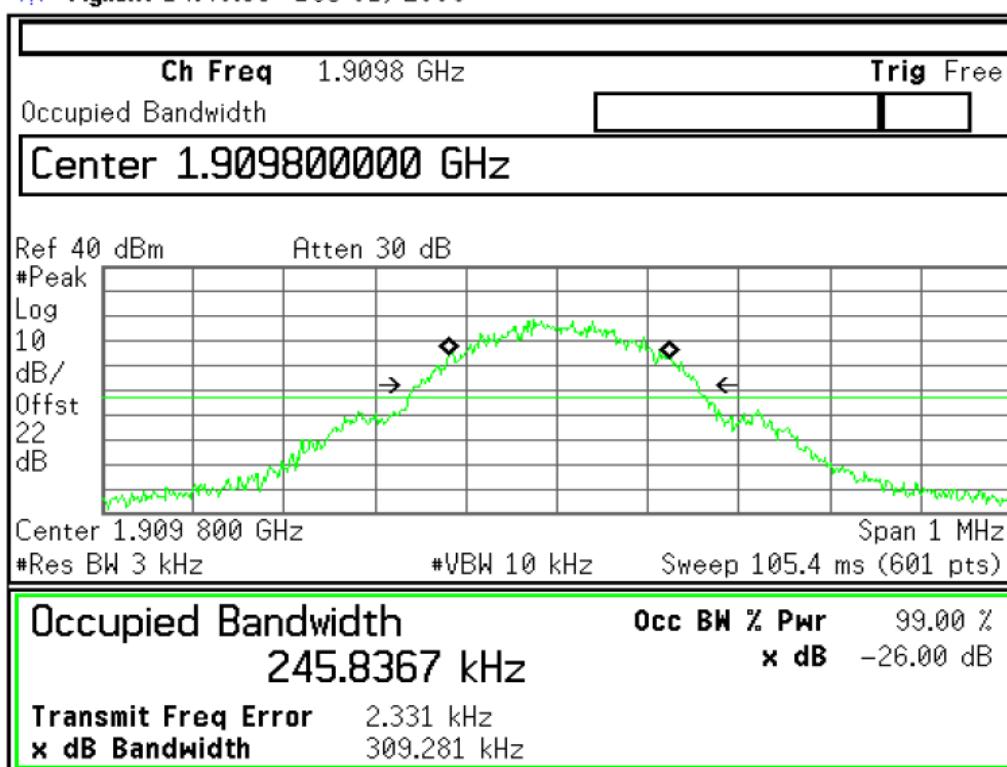


GSM 1900(CH Mid) :



GSM 1900(CH High) :

Agilent 14:40:33 Dec 01, 2008



7. TEST OF OUT OF BAND EMISSION AT ANTENNA TERMINALS

7.1 Applicable Standard

According to FCC § 2.1051, FCC § 2.2917(f), FCC § 22.917(f), FCC § 24.238(a).

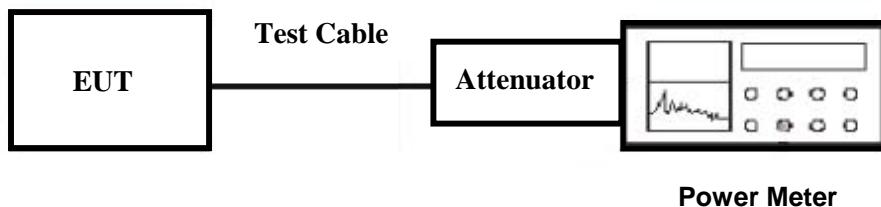
Out of Band Emissions:

The mean power of emission must be attenuated below the mean power of the non-modulated carrier (P) on any frequency twice or more than twice the fundamental frequency by at least $43 + 10 \log P$ dB.

Mobile Emissions in Base Frequency Range:

The mean power of any emissions appearing in the base station frequency range from cellular mobile transmitters operated must be attenuated to a level not exceed -80 dBm at the transmit antenna connector. Band Edge Requirements: In the 1MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1% of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the Out of band Emission

7.2 EUT Setup



7.3 Test Equipment List and Details

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
Wireless Communication Test Set	Agilent	8960	QB44051695	10/06/2008

7.4 Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

For the out of band: Set the RBW, VBW = 1MHz, Start=30MHz, Stop= 10 th harmonic. Limit = -13dBm

Band Edge Requirements (824 MHz and 849 MHz /1850MHz and 1910MHz): In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions. Limit, -13dBm.

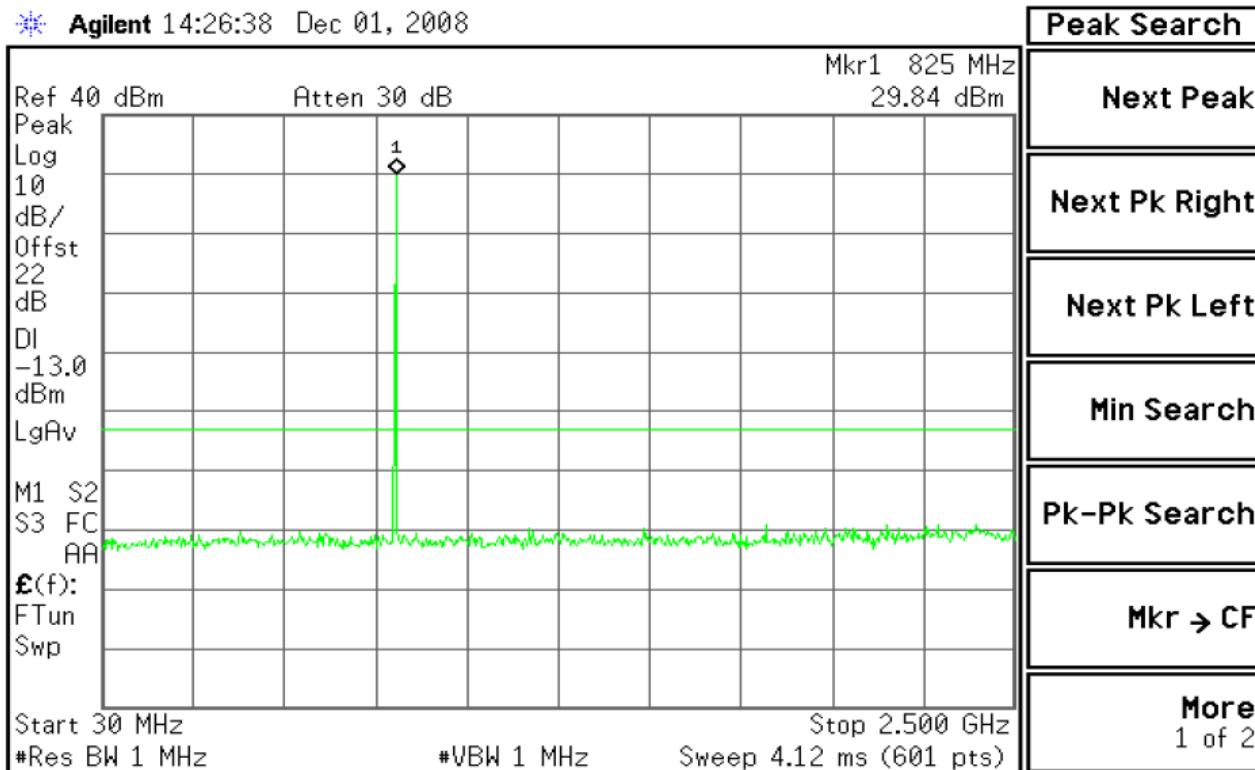
For the Band Edge: The spectrum analyzer is set to: RBW = 3 kHz, VBW = 10 kHz, Span = 1 MHz, Sweep = auto

7.5 Test Result of Out of Band emission at antenna terminals

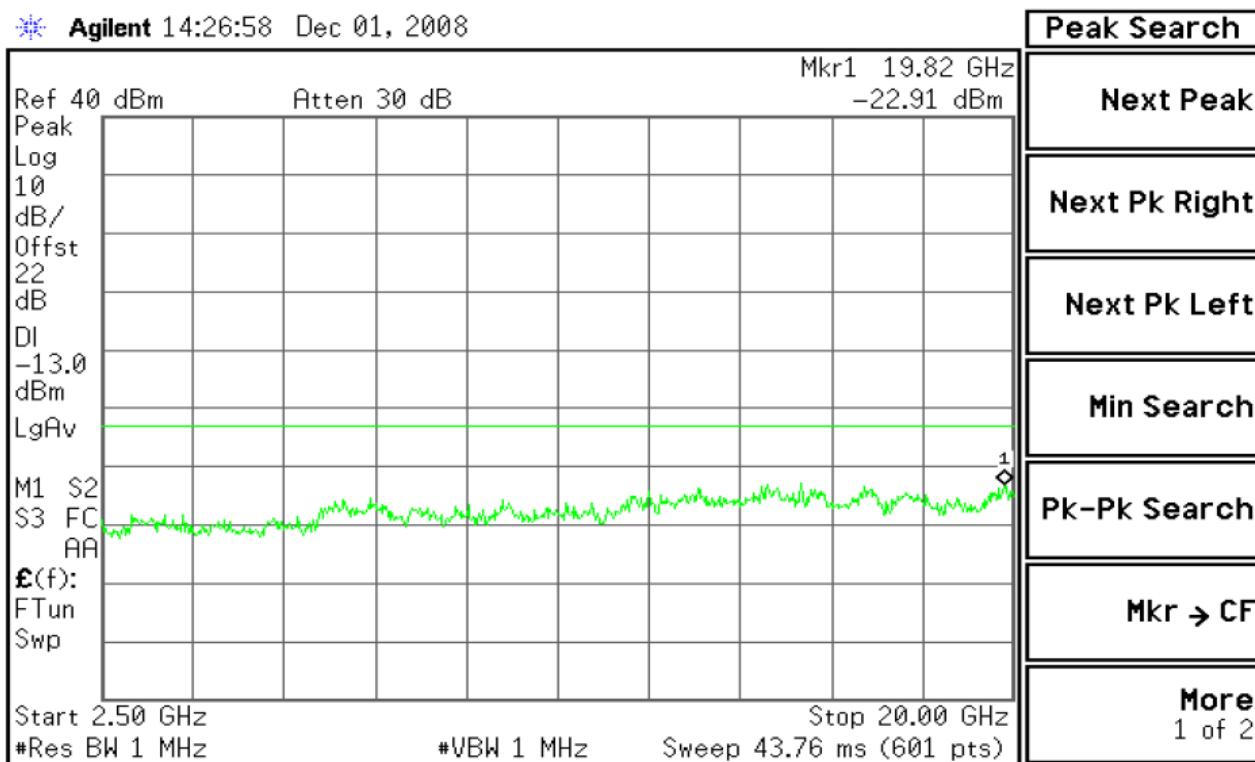
Temperature (°C) : 22~23	EUT: Mobile Phone
Humidity (%RH): 50~54	M/N: KT618
Barometric Pressure (mbar): 950~1000	Operation Condition: Tx Mode

Test plots see following pages

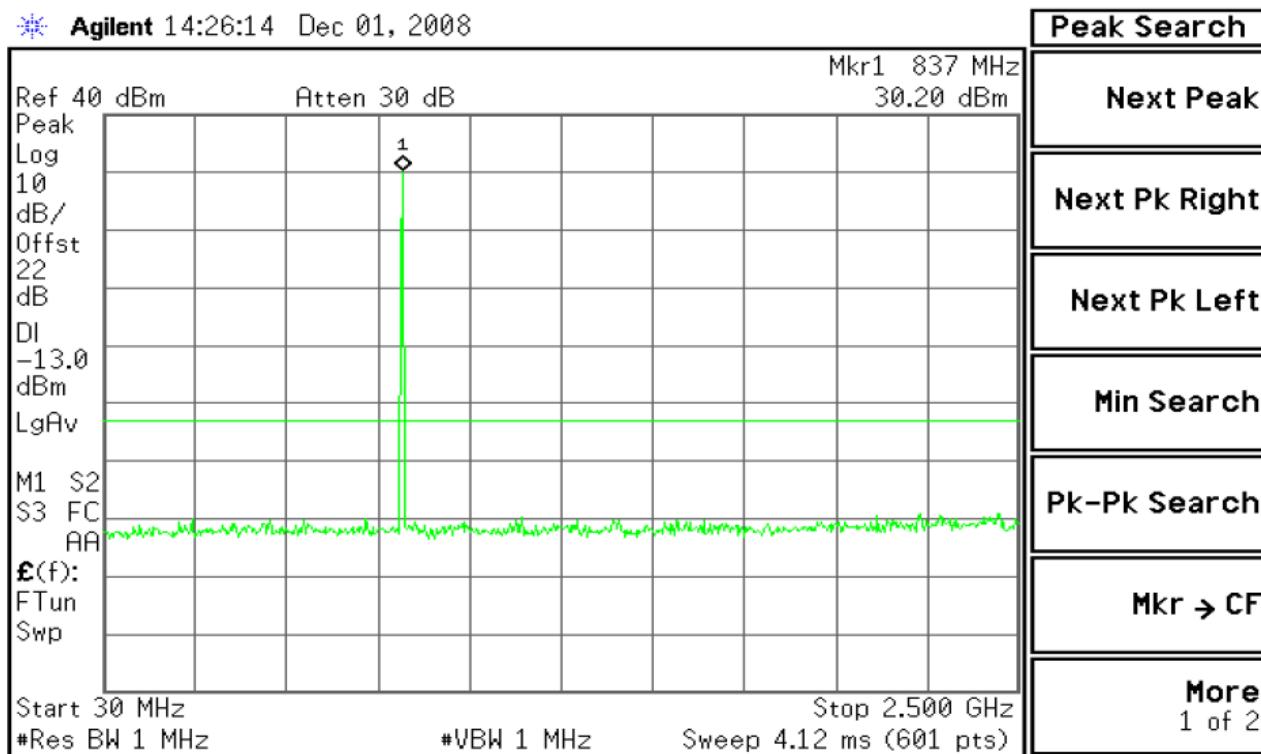
GSM 850: Out of Band emission at antenna terminals –CH Low (30MHz~2.5GHz)



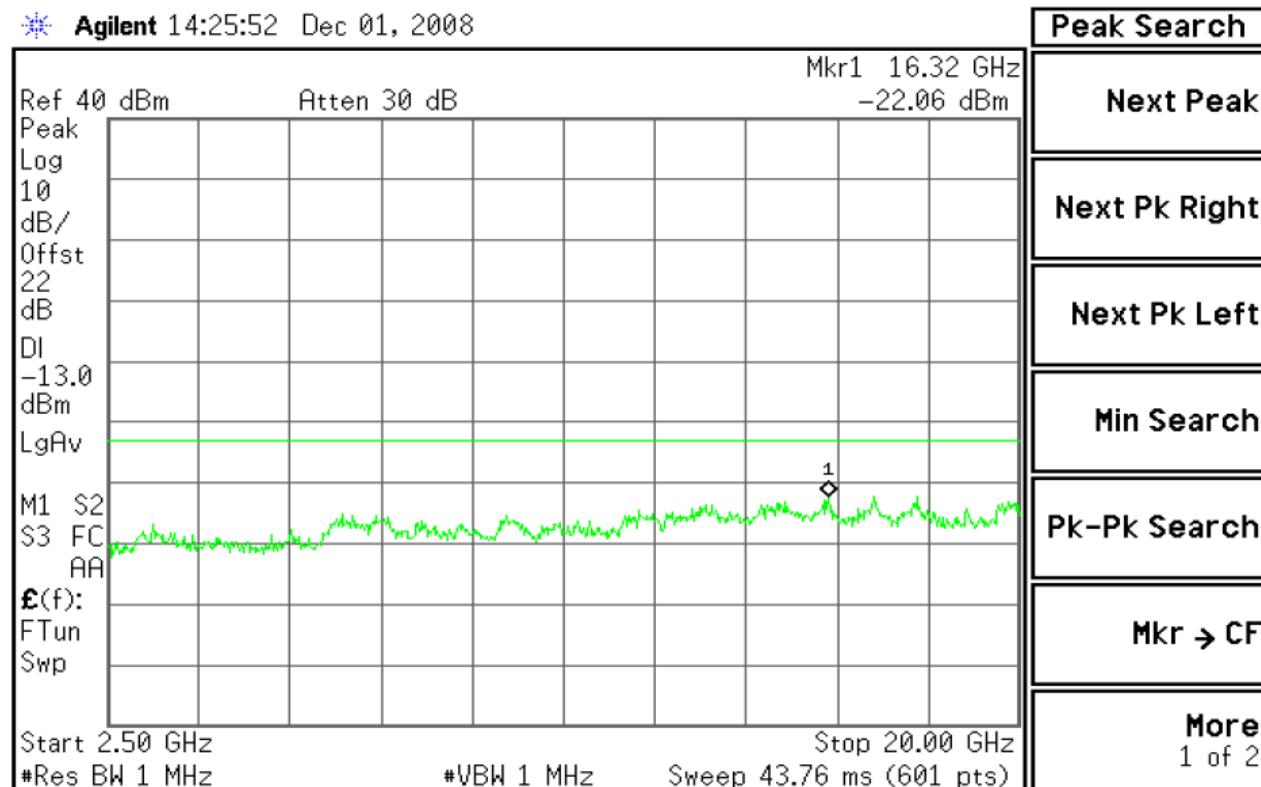
GSM 850: Out of Band emission at antenna terminals –CH Low (2.5GHz ~20GHz)



GSM 850: Out of Band emission at antenna terminals –CH Mid (30MHz~2.5GHz)

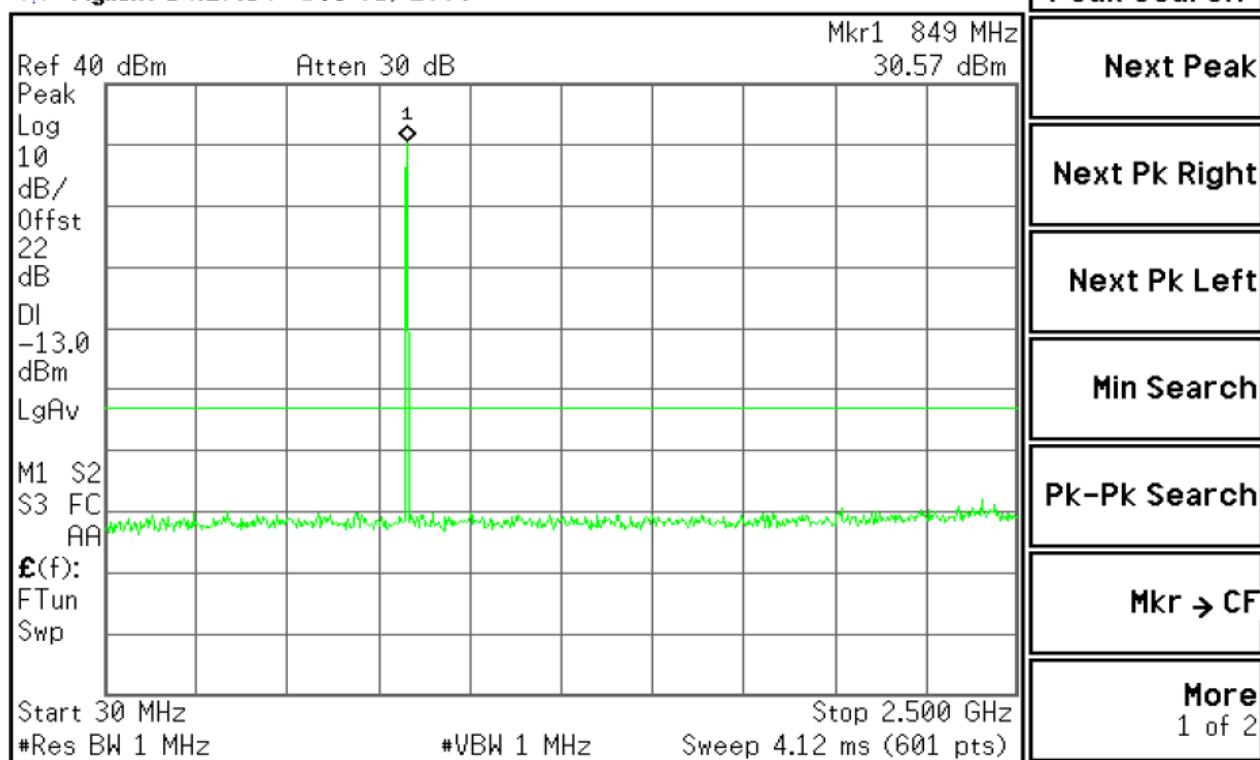


GSM 850: Out of Band emission at antenna terminals –CH Mid (2.5GHz ~20GHz)



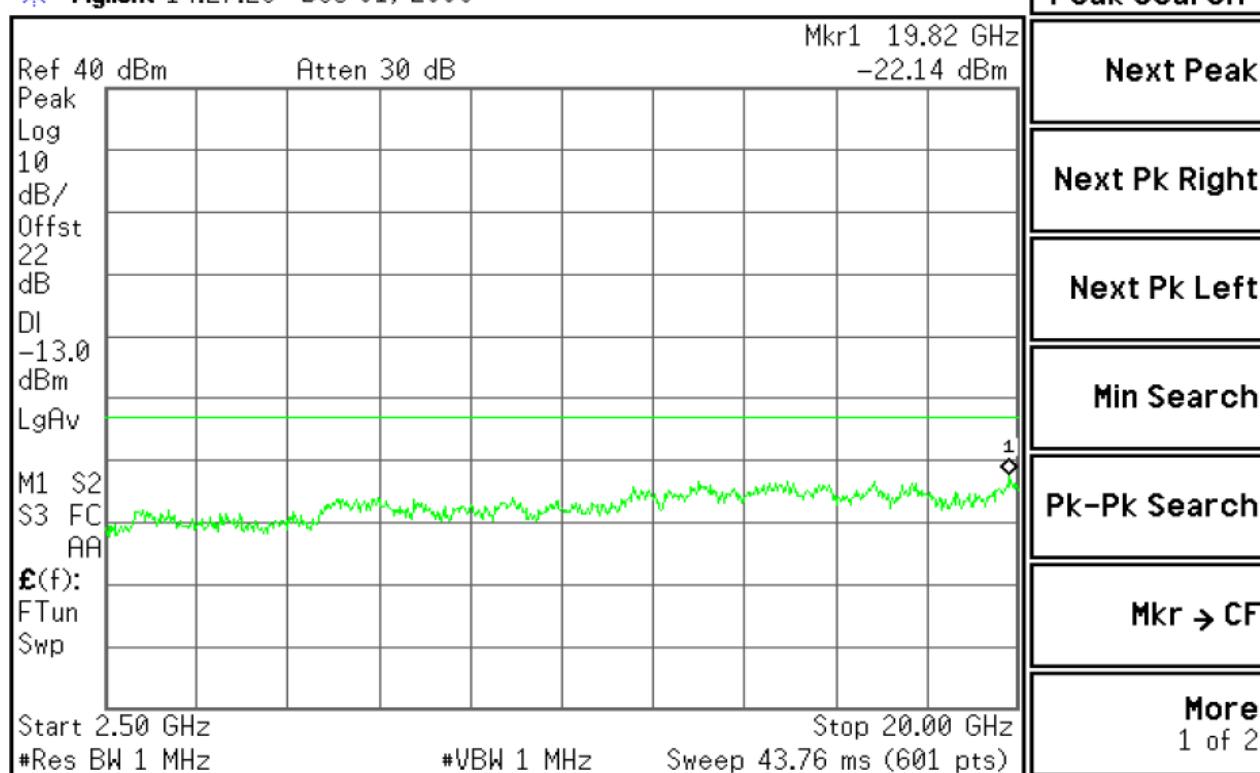
GSM 850: Out of Band emission at antenna terminals –CH High (30MHz~2.5GHz)

* Agilent 14:27:54 Dec 01, 2008

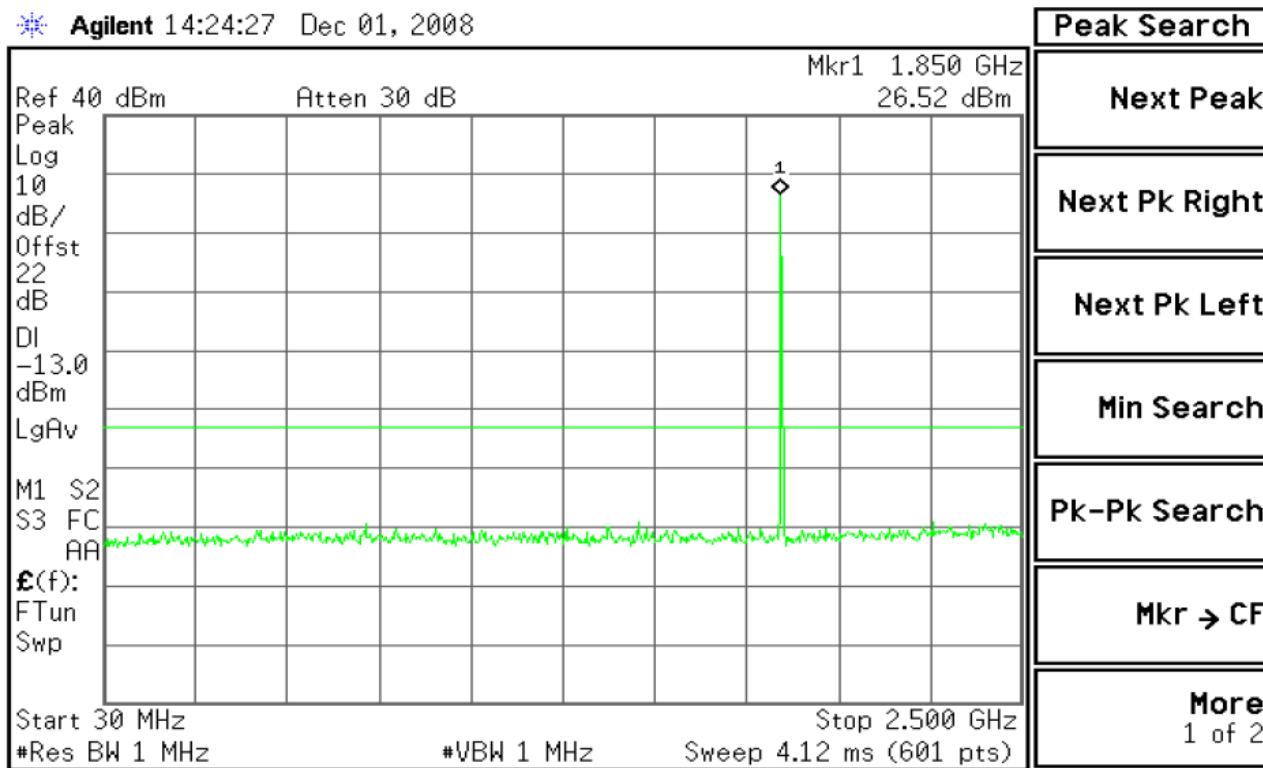


GSM 850: Out of Band emission at antenna terminals –CH High (2.5GHz ~20GHz)

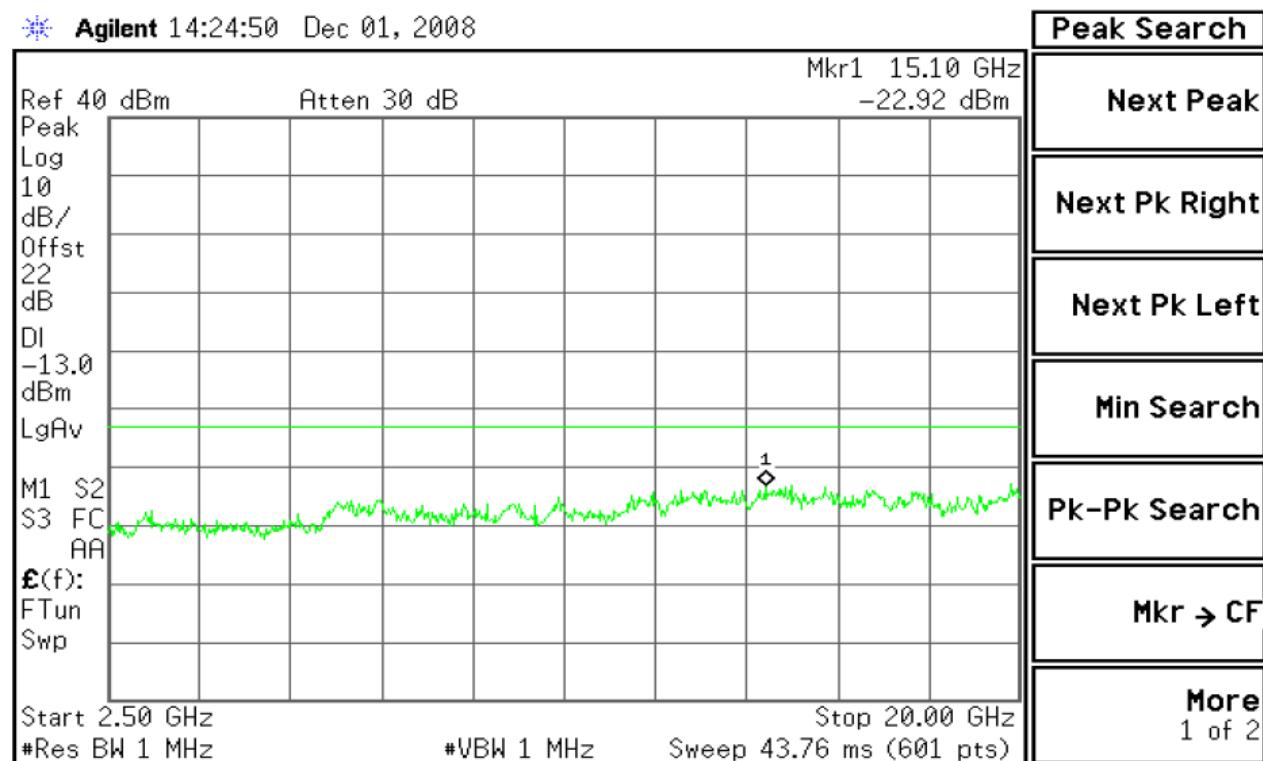
* Agilent 14:27:28 Dec 01, 2008



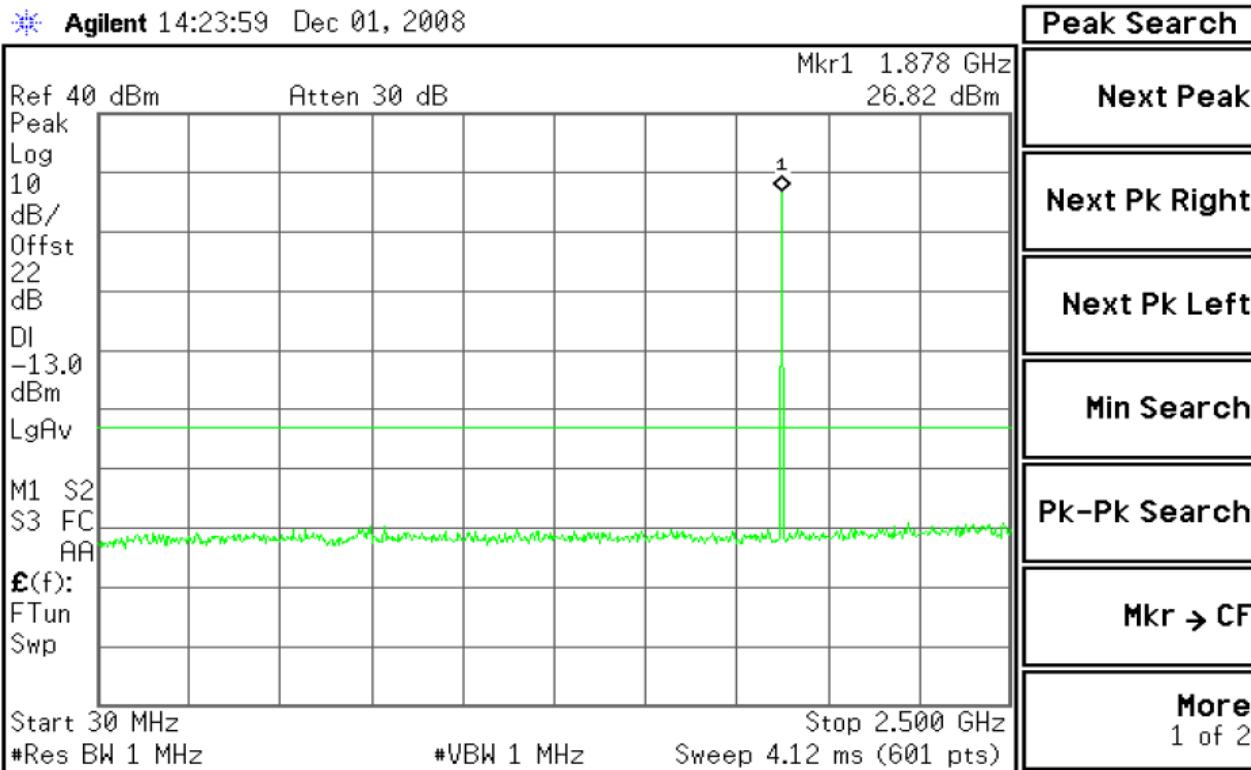
GSM 1900: Out of Band emission at antenna terminals -CH Low (30MHz~2.5GHz)



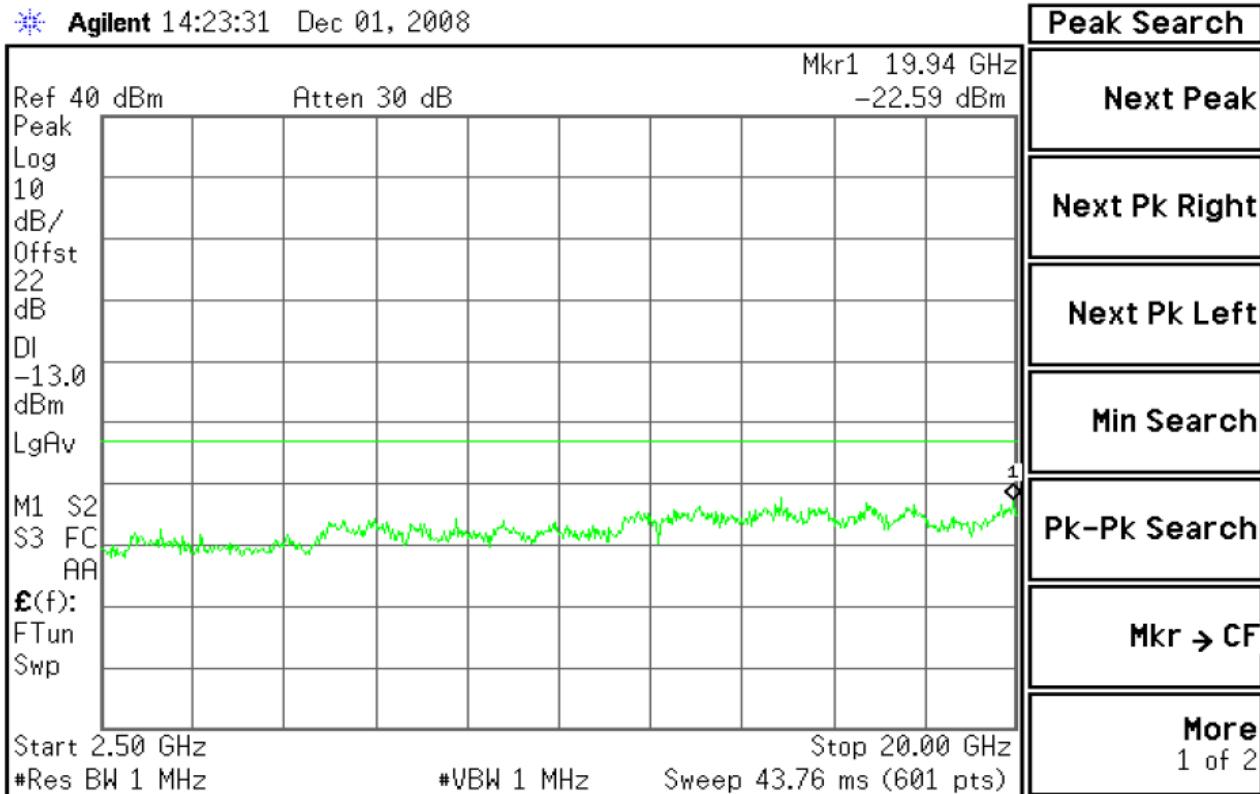
GSM 1900: Out of Band emission at antenna terminals -CH Low (2.5GHz ~20GHz)



GSM 1900: Out of Band emission at antenna terminals -CH Mid (30MHz~2.5GHz)

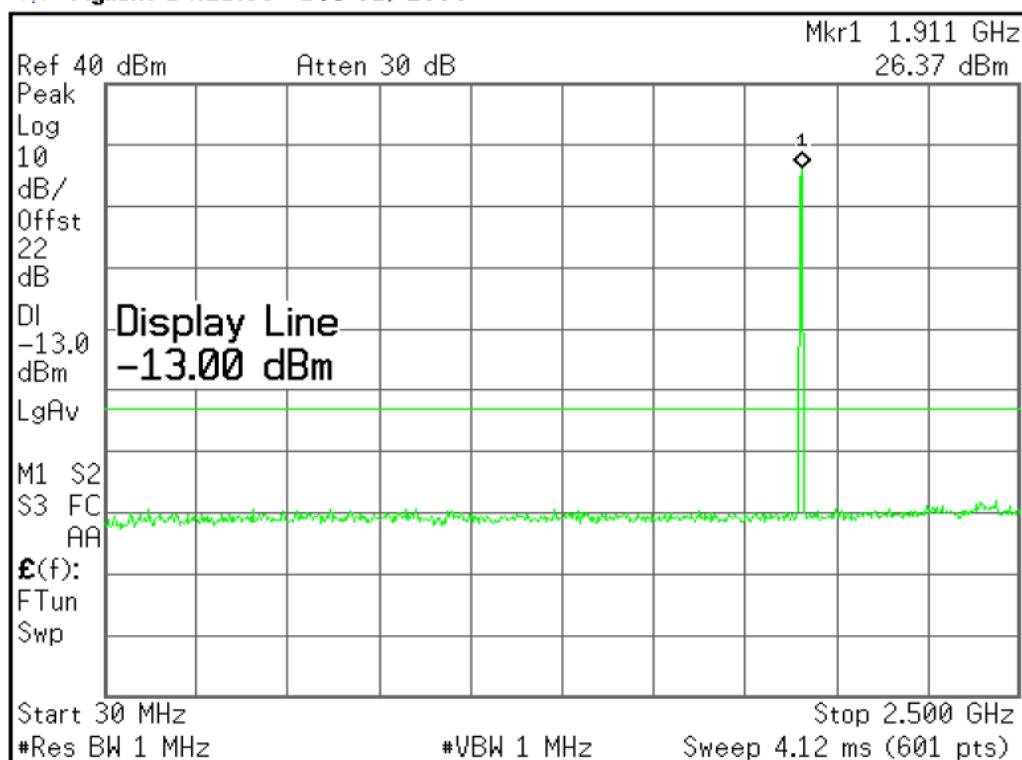


GSM 1900: Out of Band emission at antenna terminals -CH Mid (2.5GHz ~20GHz)



GSM 1900: Out of Band emission at antenna terminals -CH High (30MHz~2.5GHz)

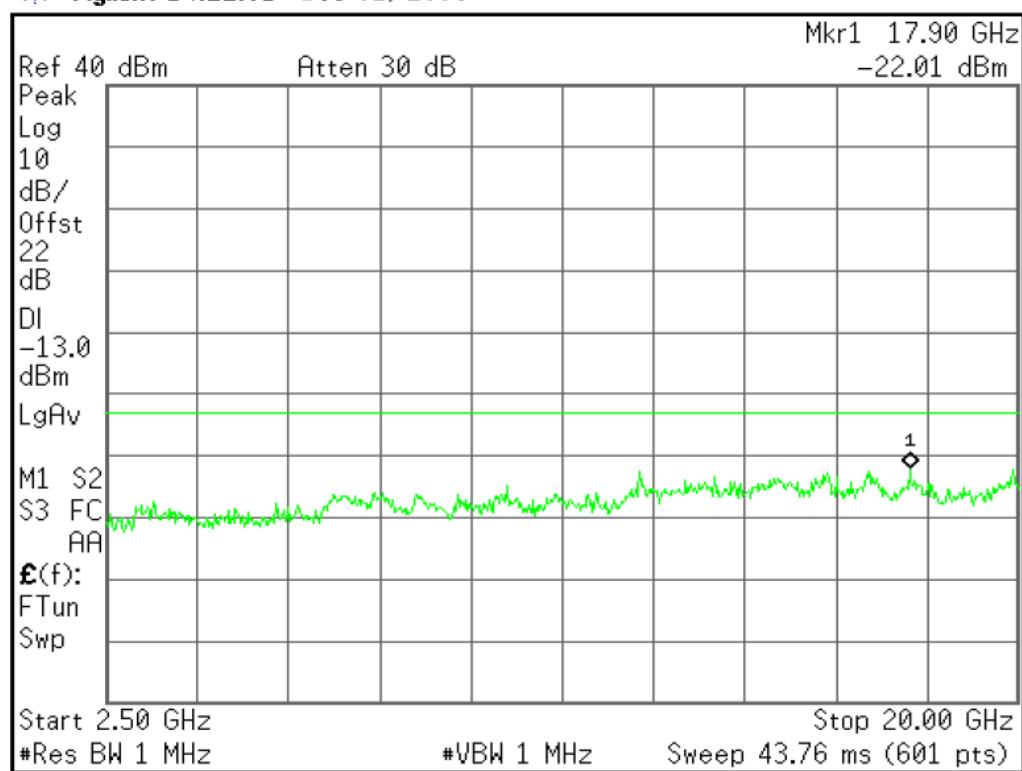
* Agilent 14:21:33 Dec 01, 2008



- Display
- Full Screen
- Display Line -13.00 dBm On Off
- Limits
- Active Fctn Position Center
- Title
- Preferences

GSM 1900: Out of Band emission at antenna terminals -CH High (2.5GHz ~20GHz)

* Agilent 14:22:01 Dec 01, 2008



- Peak Search
- Next Peak
- Next Pk Right
- Next Pk Left
- Min Search
- Pk-Pk Search
- Mkr → CF
- More 1 of 2

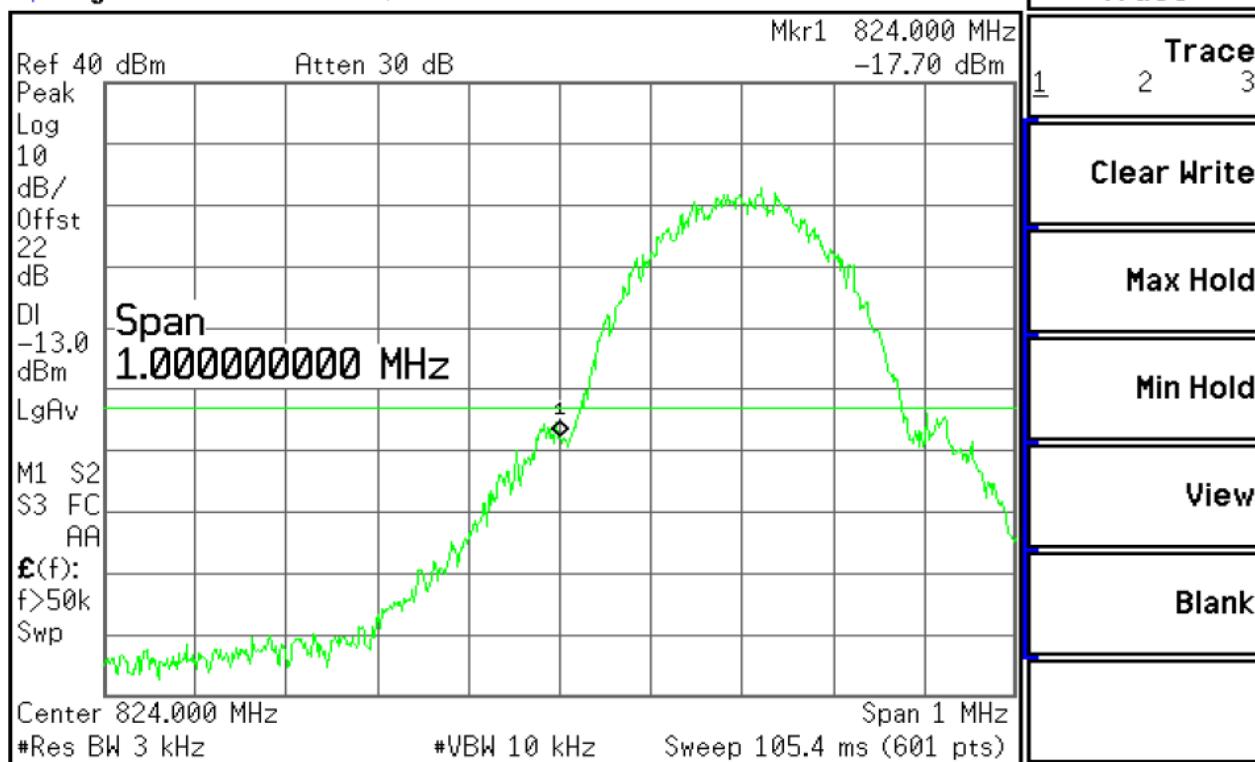
7.6 Test Result of Band Edge emissions

Temperature (°C) : 22~23	EUT: Mobile Phone
Humidity (%RH): 50~54	M/N: KT618
Barometric Pressure (mbar): 950~1000	Operation Condition: Tx Mode

Test plots see following pages

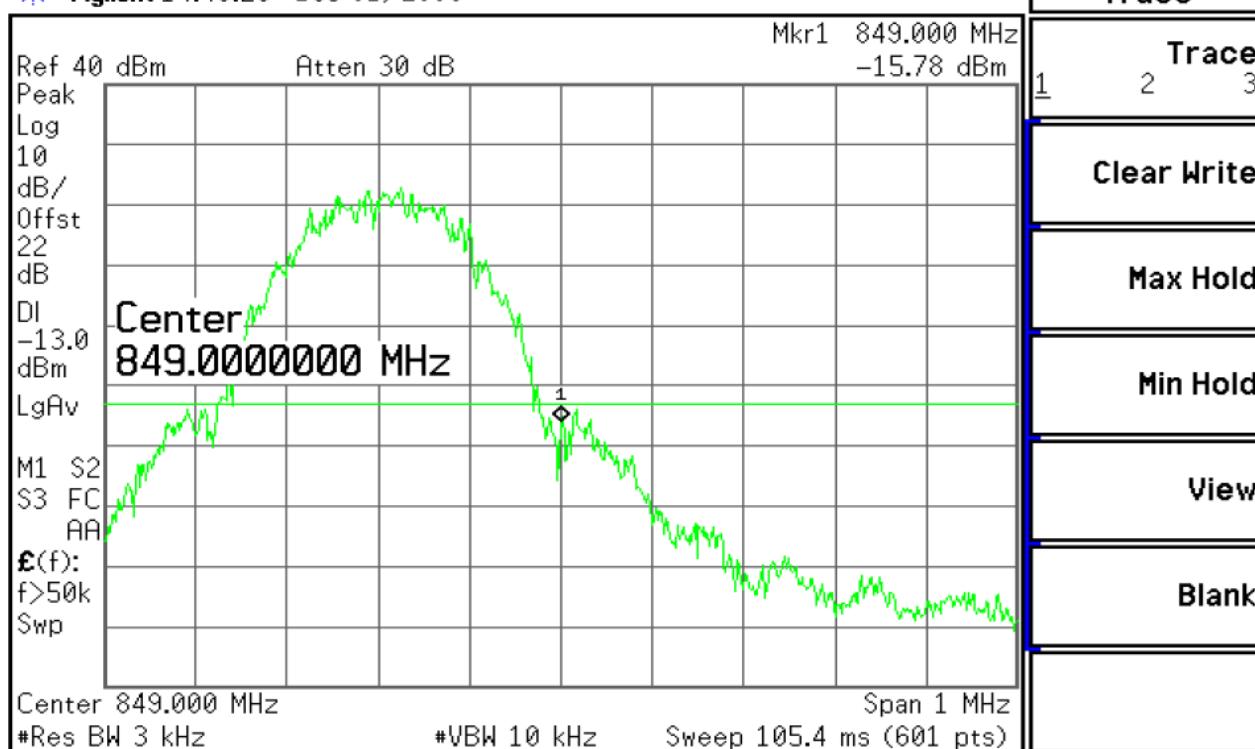
GSM 850: Band Edge emissions –CH Low

* Agilent 14:52:34 Dec 01, 2008

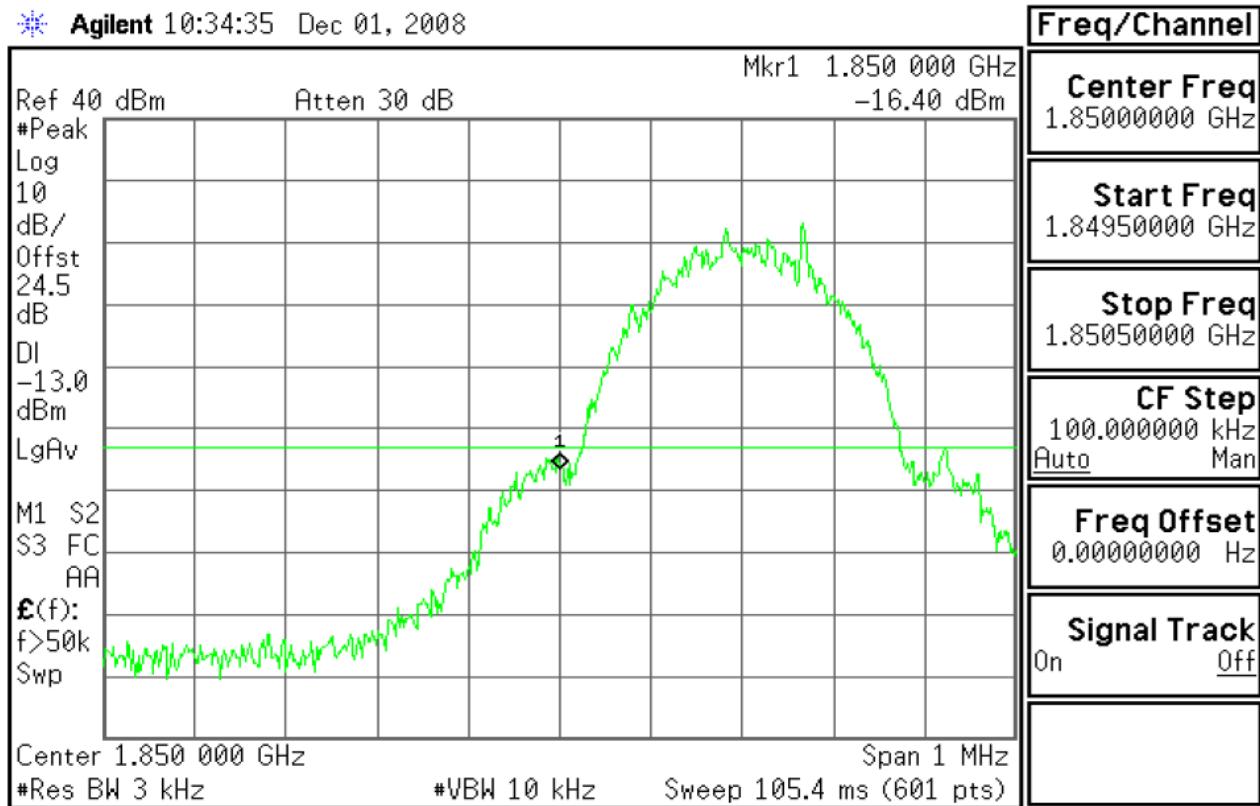


GSM 850: Band Edge emissions –CH High

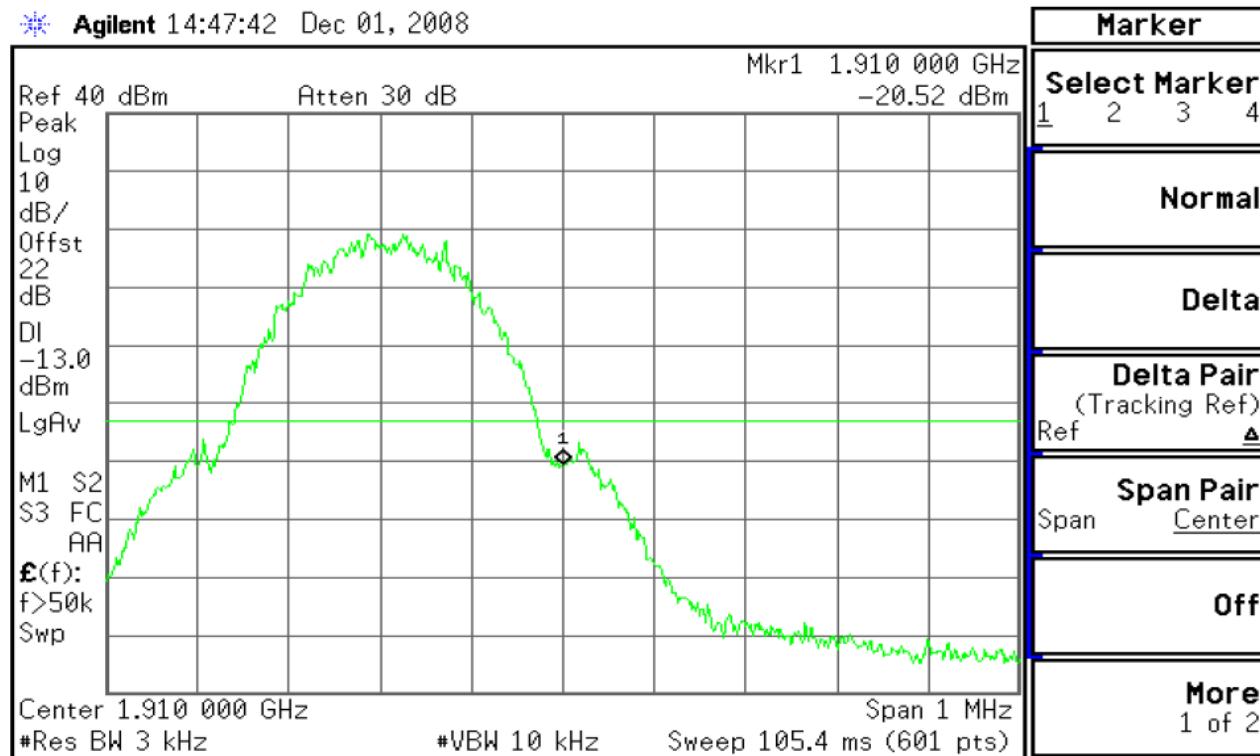
* Agilent 14:48:26 Dec 01, 2008



GSM 1900: Band Edge emissions -CH Low



GSM 1900: Band Edge emissions -CH High



8. SPURIOUS RADIATION MEASUREMENT OF GSM MODE

8.1 Applicable Standard

According to FCC §2.1053

8.2 EUT Setup

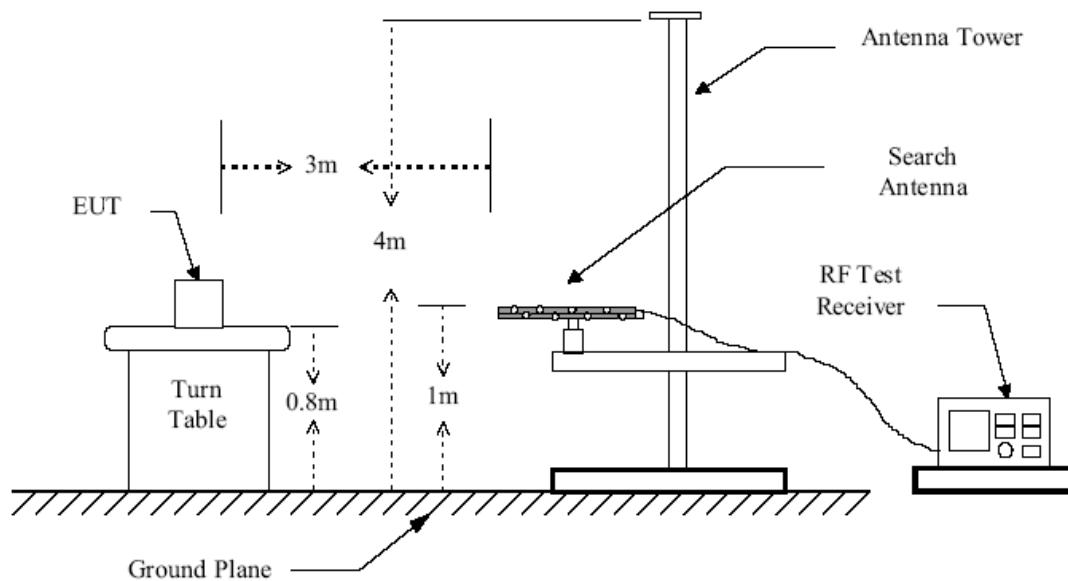


Figure 1 : Frequencies measured below 1 GHz configuration

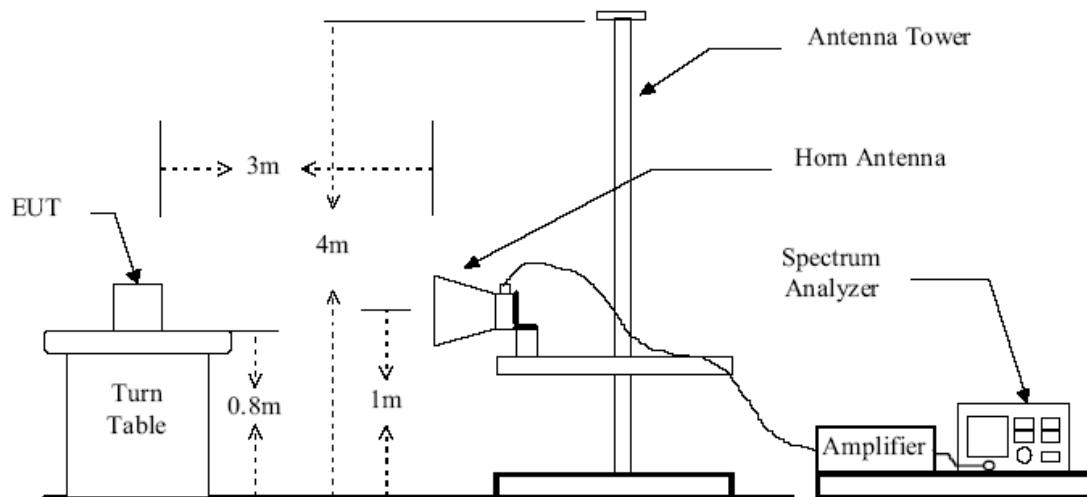


Figure 2 : Frequencies measured above 1 GHz configuration

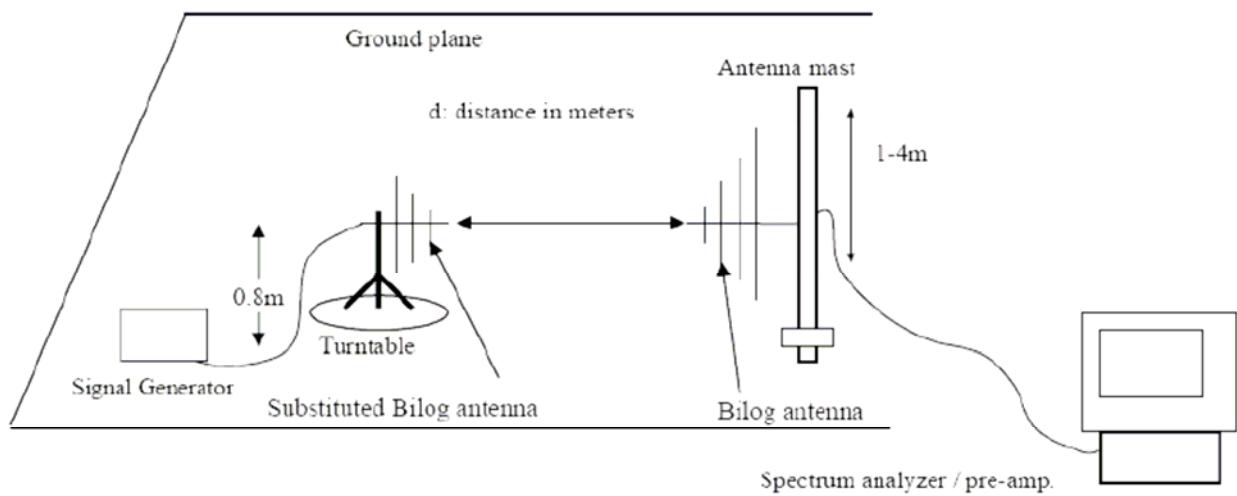


Figure 3: Substitution Method

8.3 Test Equipment List and Details

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
EMI Test Receiver	R&S	ESPI3	101026	11/11/2008
Pre-Amplifier	MINI-circuits	ZFL-1000VH2	d041703	12/13/2008
Pre-Amplifier	Miteq	NSP4000-NF	870731	01/28/2008
Bilog Antenna	Sunol	JB1	A110204-2	11/22/2008
Horn-antenna	SCHWARZBECK	BBHA9120D	D:266	02/01/2008
PSG Analog Signal Generator	Agilent	E8257C	MY43321570	12/19/2008
Wireless Communication Test Set	Agilent	8960	QB44051695	10/06/2008
Turn Table	CT	CT123	4165	N.C.R
Antenna Tower	CT	CTERG23	3256	N.C.R
Controller	CT	CT100	95637	N.C.R
Site NSA	CCS	N/A	N/A	04/06/2008

8.4 Test Procedure

The EUT was placed on a non-conductive, the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission were identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

8.5 Test Result

GSM 850: Radiated Spurious Emission Measurement Result Below 1GHz

No emissions to be recorded. (Since no specific emission noted beyond the background noise floor)

GSM 850: Radiated Spurious Emission Measurement Result Above 1GHz

Temperature (°C) : 22~23	EUT: Mobile Phone
Humidity (%RH) : 50~54	M/N: KT618
Barometric Pressure (mbar) : 950~1000	Operation Condition: GSM 850 / TX / CH128

Frequency (MHz)	Reading level (dBuV)	Antenna Polarization	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBd)	level Emission (dBm)	Limit (dBm)	Margin (dB)
1648.44	31.89	V	-81.56	4.01	7.86	-77.71	-13.00	-64.71
1648.58	33.66	H	-83.66	4.01	7.86	-79.81	-13.00	-66.81

Temperature (°C) : 22~23	EUT: Mobile Phone		
Humidity (%RH) : 50~54	M/N: KT618		
Barometric Pressure (mbar): 950~1000	Operation Condition: GSM 850 / TX / CH190		

Frequency (MHz)	Reading level (dBuV)	Antenna Polarization	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBd)	level Emission (dBm)	Limit (dBm)	Margin (dB)
1673.88	34.54	V	-76.56	4.21	7.95	-72.82	-13.00	-59.82
1673.76	35.73	H	-78.18	4.21	7.95	-74.44	-13.00	-61.44

Temperature (°C) : 22~23	EUT: Mobile Phone		
Humidity (%RH) : 50~54	M/N: KT618		
Barometric Pressure (mbar): 950~1000	Operation Condition: GSM 850 / TX / CH251		

Frequency (MHz)	Reading level (dBuV)	Antenna Polarization	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBd)	level Emission (dBm)	Limit (dBm)	Margin (dB)
1697.85	36.18	V	-74.17	4.53	8.12	-70.58	-13.00	-57.81
1697.13	34.72	H	-75.09	4.53	8.12	-71.50	-13.00	-58.50

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above shown only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
5. Spectrum setting:
 - a). Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b). AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

GSM 1900: Radiated Spurious Emission Measurement Result Below 1GHz

No emissions to be recorded. (Since no specific emission noted beyond the background noise floor)

GSM 1900: Radiated Spurious Emission Measurement Result Above 1GHz

Temperature (°C) : 22~23	EUT: Mobile Phone			
Humidity (%RH) : 50~54	M/N: KT618			
Barometric Pressure (mbar): 950~1000	Operation Condition: GSM1900 / TX / CH512			

Frequency (MHz)	Reading level (dBuV)	Antenna Polarization	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBd)	level Emission (dBm)	Limit (dBm)	Margin (dB)
3700.41	27.85	V	-74.24	6.65	13.40	-67.49	-13.00	-54.49
3700.44	25.62	H	-70.12	6.65	13.40	-63.37	-13.00	-50.37

Temperature (°C) : 22~23	EUT: Mobile Phone			
Humidity (%RH) : 50~54	M/N: KT618			
Barometric Pressure (mbar): 950~1000	Operation Condition: GSM1900 / TX / CH661			

Frequency (MHz)	Reading level (dBuV)	Antenna Polarization	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBd)	level Emission (dBm)	Limit (dBm)	Margin (dB)
3760.66	28.11	V	-74.33	6.75	13.56	-67.52	-13.00	-54.52
3759.85	25.57	H	-75.49	6.75	13.56	-68.68	-13.00	-55.68

Temperature (°C) : 22~23	EUT: Mobile Phone			
Humidity (%RH) : 50~54	M/N: KT618			
Barometric Pressure (mbar): 950~1000	Operation Condition: GSM 1900 / TX / CH810			

Frequency (MHz)	Reading level (dBuV)	Antenna Polarization	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBd)	level Emission (dBm)	Limit (dBm)	Margin (dB)
3819.82	27.91	V	-74.14	6.84	14.25	-66.73	-13.00	-53.73
3819.77	26.03	H	-73.54	6.84	14.25	-66.13	-13.00	-53.13

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

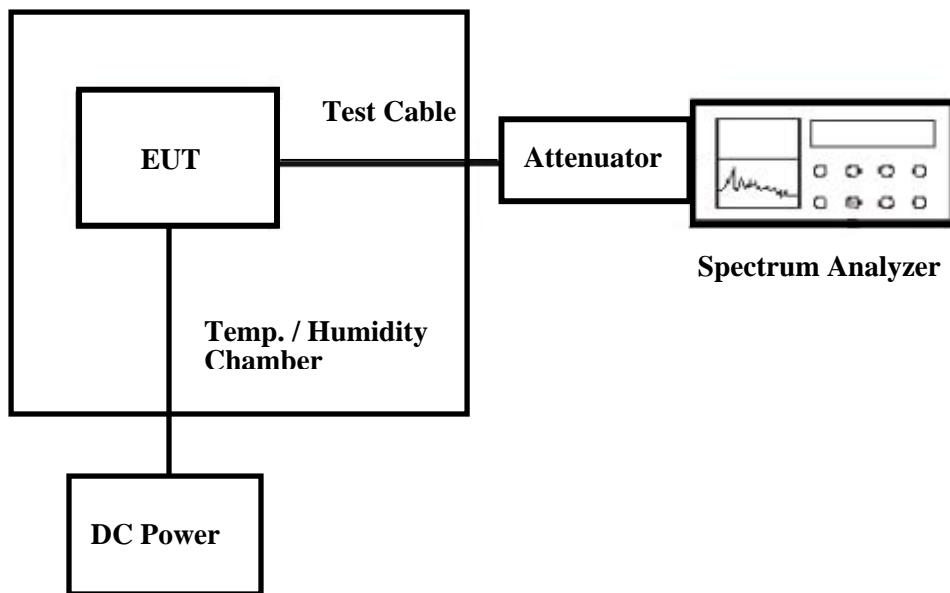
2. Measurements above shown only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
5. Spectrum setting:
 - a). Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b). AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

9. FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

9.1 Applicable Standard

According to FCC § 2.1055, FCC § 24.235. Frequency Tolerance: 2.5 ppm

9.2 EUT Setup



9.3 Test Equipment List and Details

Equipment	Manufacturer	Model	Serial Number	Calibration Due
DC Power Supply	GW instek	GPS-3303C	E903131	04/15/2008
Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
Wireless Communication Test Set	Agilent	8960	QB44051695	10/06/2008
Temp. / Humidity Chamber	Kingson	THS-M1	242	05/26/2008

9.4 Test Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20oC operating

frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C . After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of $+50^{\circ}\text{C}$ reached.

9.5 Test Result

Temperature ($^{\circ}\text{C}$) : 22~23	EUT: Mobile Phone
Humidity (%RH) : 50~54	M/N: KT618
Barometric Pressure (mbar) : 950~1000	Operation Condition: Tx Mode

Reference Frequency: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: $\pm 2.5 \text{ ppm} = 2091.5 \text{ Hz}$				
Power Supply V/DC	Environment Temperature ($^{\circ}\text{C}$)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836600021	39.00	2091.5
	40	836600025	43.00	
	30	836600019	37.00	
	20	836599982	0.00	
	10	836600023	41.00	
	0	836600021	39.00	
	-10	836600030	48.00	
	-20	836600028	46.00	
	-30	836600032	50.00	

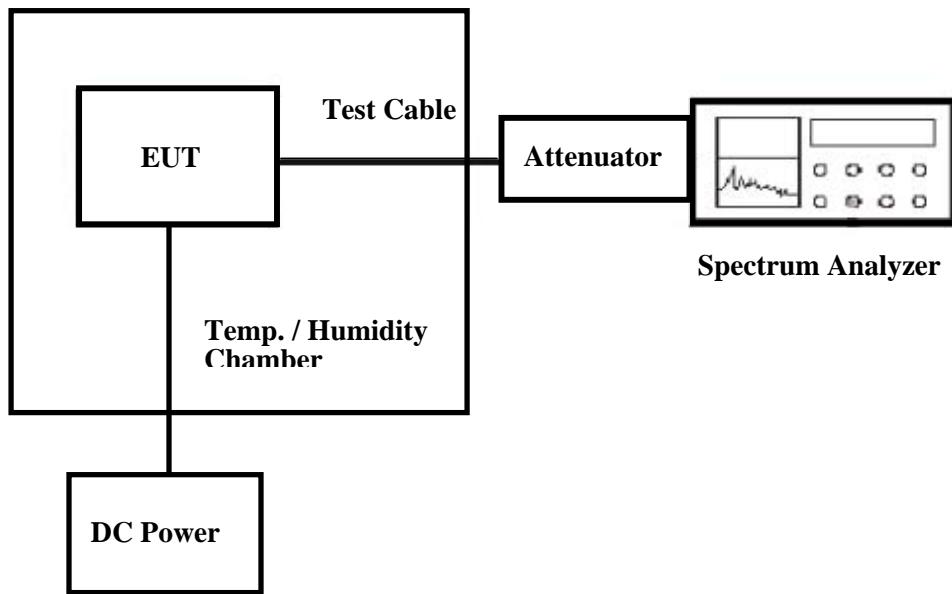
Reference Frequency: GSM Mid Channel 1880 MHz @ 20°C				
Limit: $\pm 2.5 \text{ ppm} = 4700 \text{ Hz}$				
Power Supply V/DC	Environment Temperature ($^{\circ}\text{C}$)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	1879999975	-38.00	4700
	40	1879999977	-36.00	
	30	1879999973	-40.00	
	20	1880000013	0.00	
	10	1879999986	-27.00	
	0	1879999974	-39.00	
	-10	1879999978	-35.00	
	-20	1879999980	-33.00	
	-30	1879999978	-35.00	

10. FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

10.1 Applicable Standard

According to FCC § 2.1055, FCC § 24.235, Frequency Tolerance: 2.5 ppm.

10.2 EUT Setup



10.3 Test Equipment List and Details

Equipment	Manufacturer	Model	Serial Number	Calibration Due
DC Power Supply	GW instek	GPS-3303C	E903131	04/15/2008
Spectrum Analyzer	Agilent	E4446A	MY44020154	08/16/2008
Wireless Communication Test Set	Agilent	8960	QB44051695	10/06/2008
Temp. / Humidity Chamber	Kingson	THS-M1	242	05/26/2008

10.4 Test Procedure

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

10.5 Test Result

Temperature (°C) : 22~23	EUT: Mobile Phone
Humidity (%RH) : 50~54	M/N: KT618
Barometric Pressure (mbar) : 950~1000	Operation Condition: Tx Mode

Reference Frequency: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2091.5Hz				
Power Supply V/DC	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.3	20	836599978	-3	2091.5
3.7		836599981	0	
3.2 (End Point)		836599974	-7	

Reference Frequency: GSM Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply V/DC	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.3	20	1880000028	7	4700
3.7		1880000021	0	
3.2 (End Point)		1880000022	1	

11. SPURIOUS RADIATION MEASUREMENT OF OTHER MODE

11.1 Applicable Standard

According to FCC Section 15.209 (a), the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

Note: (1) The tighter limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the test instrument antenna and the closest point of any part of the E.U.T.

11.2 EUT Setup

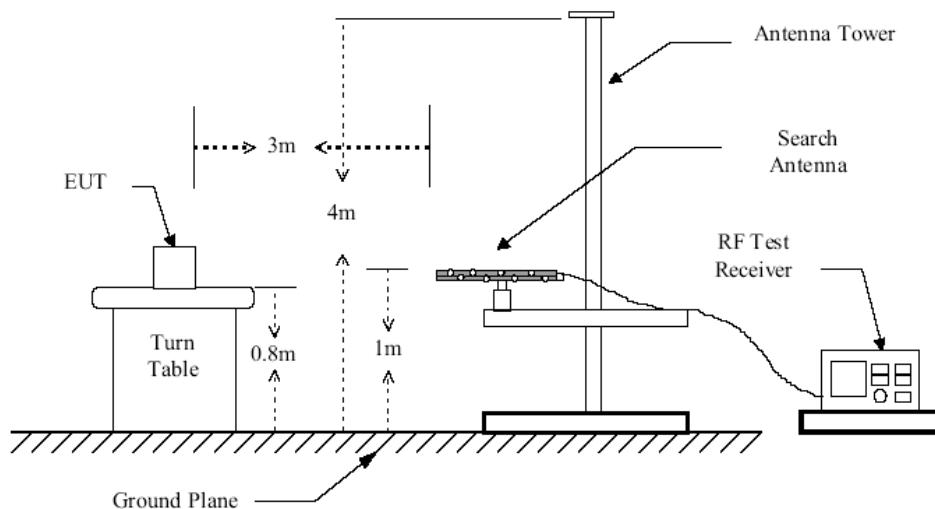


Figure 1 : Frequencies measured below 1 GHz configuration

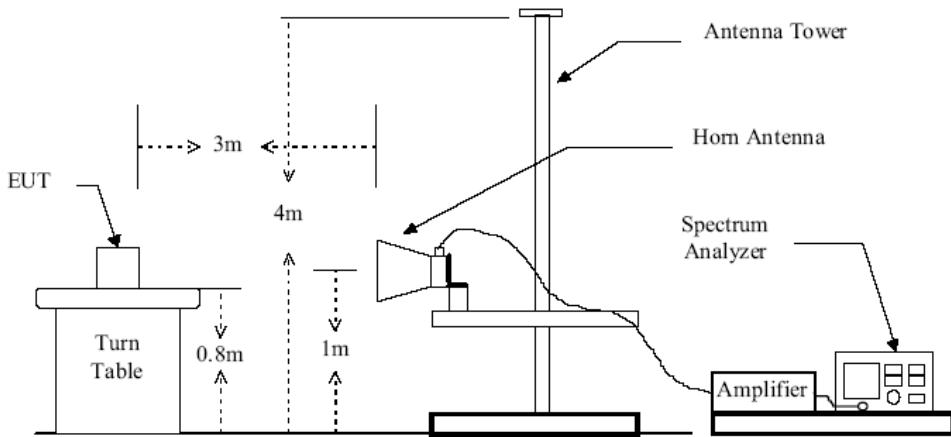


Figure 2 : Frequencies measured above 1 GHz configuration

11.3 Test Equipment List and Details

Equipment	Manufacturer	Model No.	Serial No.	Last Cal	Calibration Period
EMI Test Receiver	R&S	ESCI	100687	2008/11/17	1 Year
EMI Test Receiver	R&S	ESPI	100097	2008/11/17	1 Year
Amplifier	HP	8447D	1937A02492	2008/11/17	1 Year
TRILOG Broadband Test-Antenna	SCHWARZBECK	VULB9163	9163-324	2008/11/17	1 Year
Horn Antenna	SCHWARZBECK	BBHA9120A	D69250	2008/11/17	1 Year

11.4 Test Procedure

1. Configure the EUT according to ANSI C63.4.
2. The EUT was placed on the top of the turntable 0.8 meter above ground.
3. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
4. Power on the EUT and all the supporting units.
5. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
6. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.
7. For each suspected emission, the antenna tower was scanned (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.

8. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.

11.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of $-7\text{dB}\mu\text{V}$ means the emission is $7\text{dB}\mu\text{V}$ below the maximum limit for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Class B Limit}$$

11.6 Test Result

Temperature (°C) : 22~23	EUT: Mobile Phone
Humidity (%RH) : 50~54	M/N: KT618
Barometric Pressure (mbar) : 950~1000	Operation Condition: Charging Mode/ FM Mode

Remark: (1) When PK reading is less than relevant limit 20dB, the QP reading and AV reading will not be recorded.

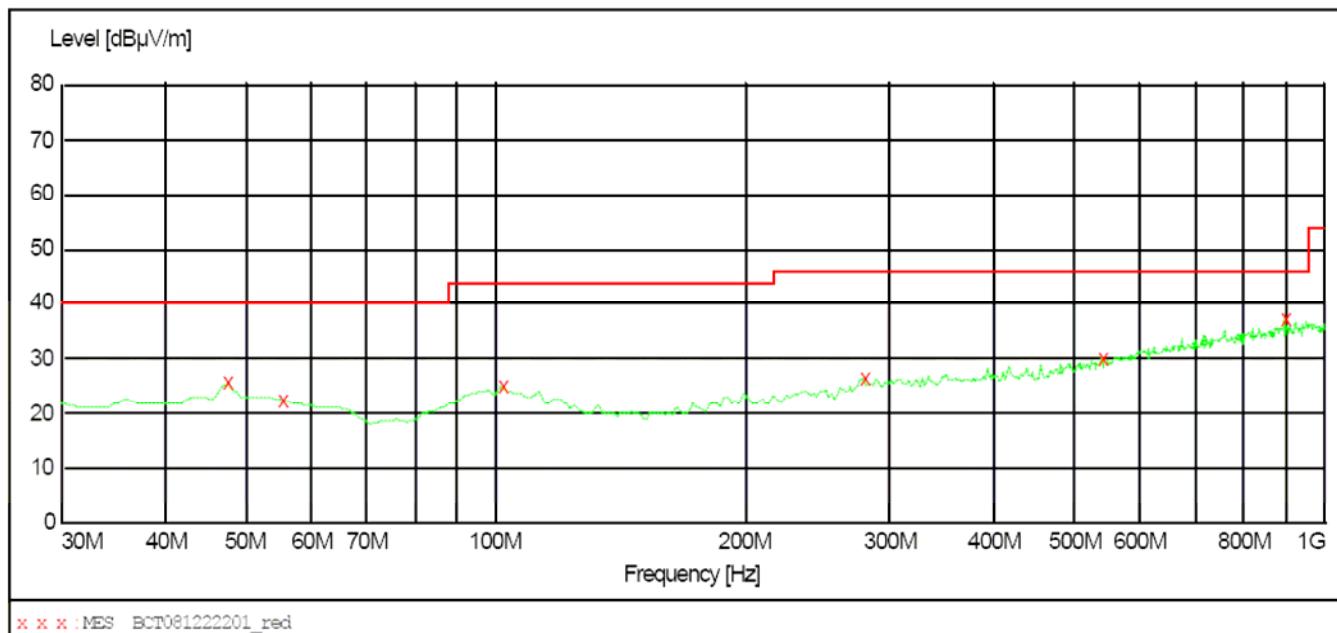
(2) Where QP reading is less than relevant AV limit, the AV reading will not be measured

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: Charging
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: AC 120V/60Hz from AC/DC adaptor
 Comment: Polarisation:H

SWEET TABLE: "test (30M-1G) 1"

Short Description:		Field Strength			
Start Frequency	Stop Frequency	Detector	Meas.	IF	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	VULB9163 NEW



MEASUREMENT RESULT: "BCT081222201_red"

12/22/2008 09:44

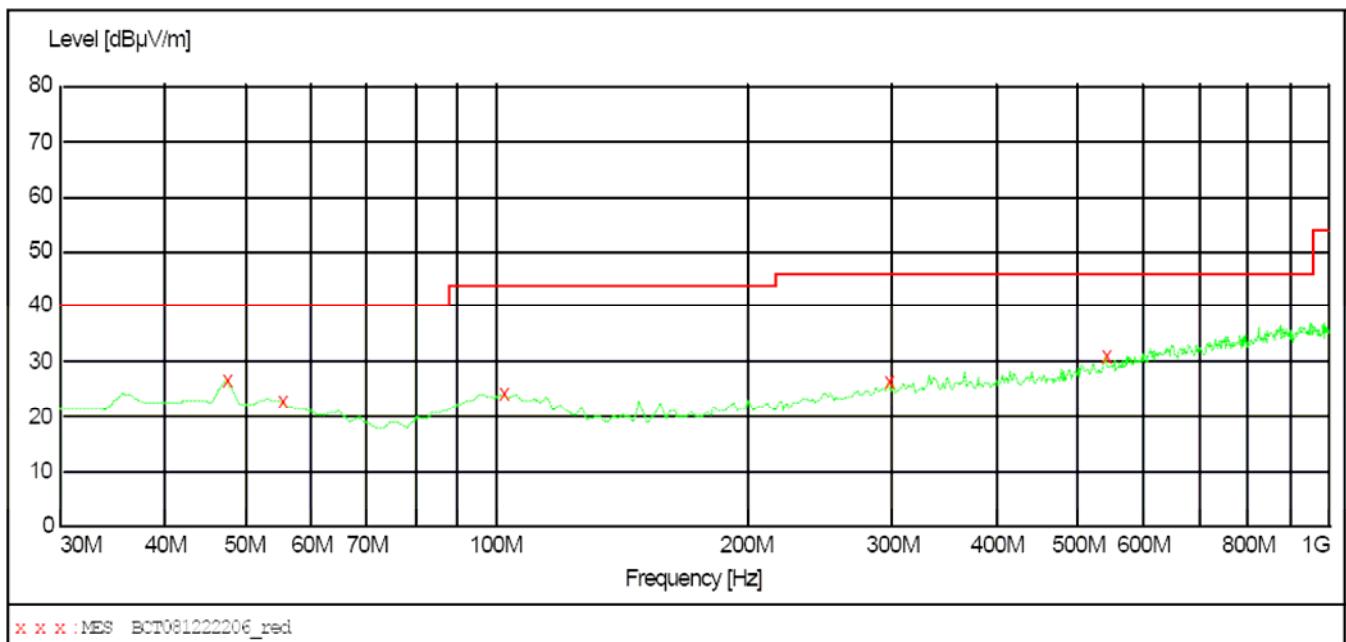
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. ---	Height cm	Azimuth deg	Polarization
47.460000	25.60	16.7	40.0	14.4	---	100.0	0.00	HORIZONTAL
55.220000	22.40	16.5	40.0	17.6	---	100.0	0.00	HORIZONTAL
101.780000	24.90	18.2	43.5	18.6	---	100.0	0.00	HORIZONTAL
278.320000	26.40	19.4	46.0	19.6	---	100.0	0.00	HORIZONTAL
540.220000	30.00	23.8	46.0	16.0	---	100.0	0.00	HORIZONTAL
895.240000	37.20	29.2	46.0	8.8	---	100.0	0.00	HORIZONTAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: Charging
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: AC 120V/60Hz from AC/DC adaptor
 Comment: Polarisation:V

SWEET TABLE: "test (30M-1G) 1"

Short Description:		Field Strength			
Start Frequency	Stop Frequency	Detector	Meas.	IF	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	VULB9163 NEW



MEASUREMENT RESULT: "BCT081222206_red"

12/22/2008 09:52

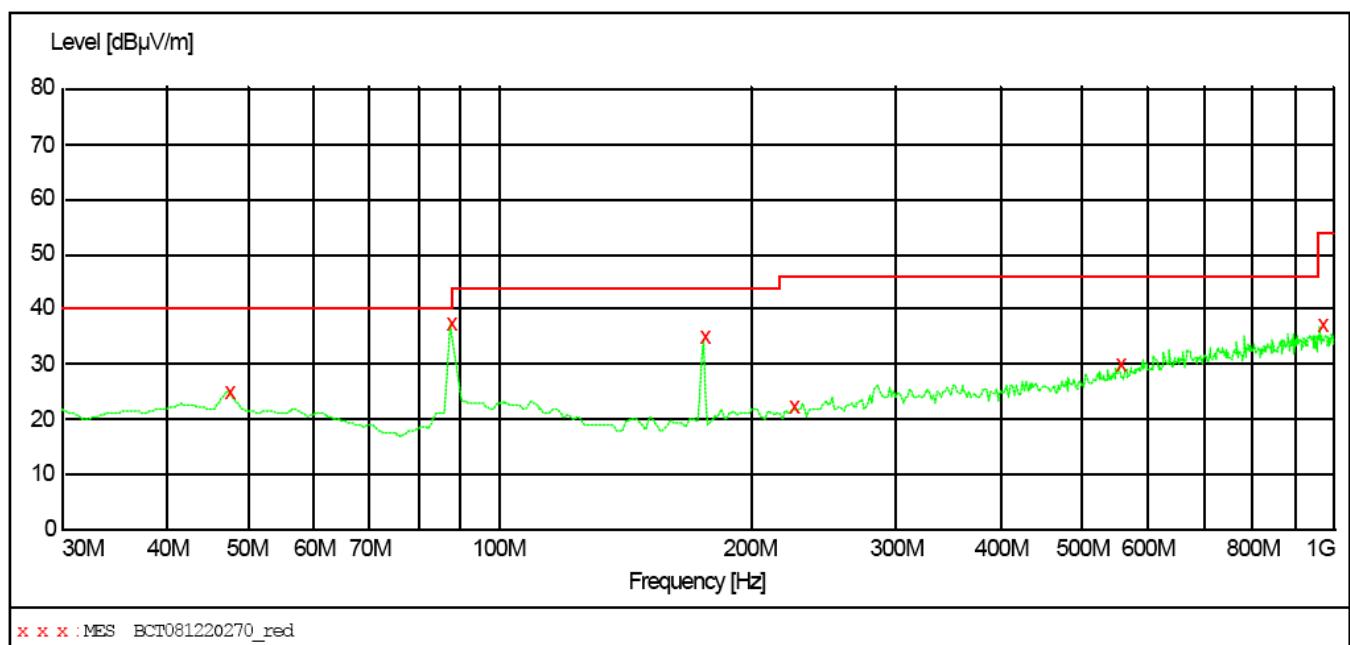
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. ---	Height cm	Azimuth deg	Polarization
47.460000	26.80	16.7	40.0	13.2	---	100.0	0.00	VERTICAL
55.220000	22.60	16.5	40.0	17.4	---	100.0	0.00	VERTICAL
101.780000	24.10	18.2	43.5	19.4	---	100.0	0.00	VERTICAL
295.780000	26.40	20.0	46.0	19.6	---	100.0	0.00	VERTICAL
540.220000	30.90	23.8	46.0	15.1	---	100.0	0.00	VERTICAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: FM receiving mode (88MHz)
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: DC 4.2 V from inner rechargeable Li-ion battery
 Comment: Polarisation:H

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength		
Start Frequency	Stop Frequency	Detector	Meas.	IF Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz VULB9163 NEW



MEASUREMENT RESULT: "BCT081220270_red"

12/20/2008 20:25

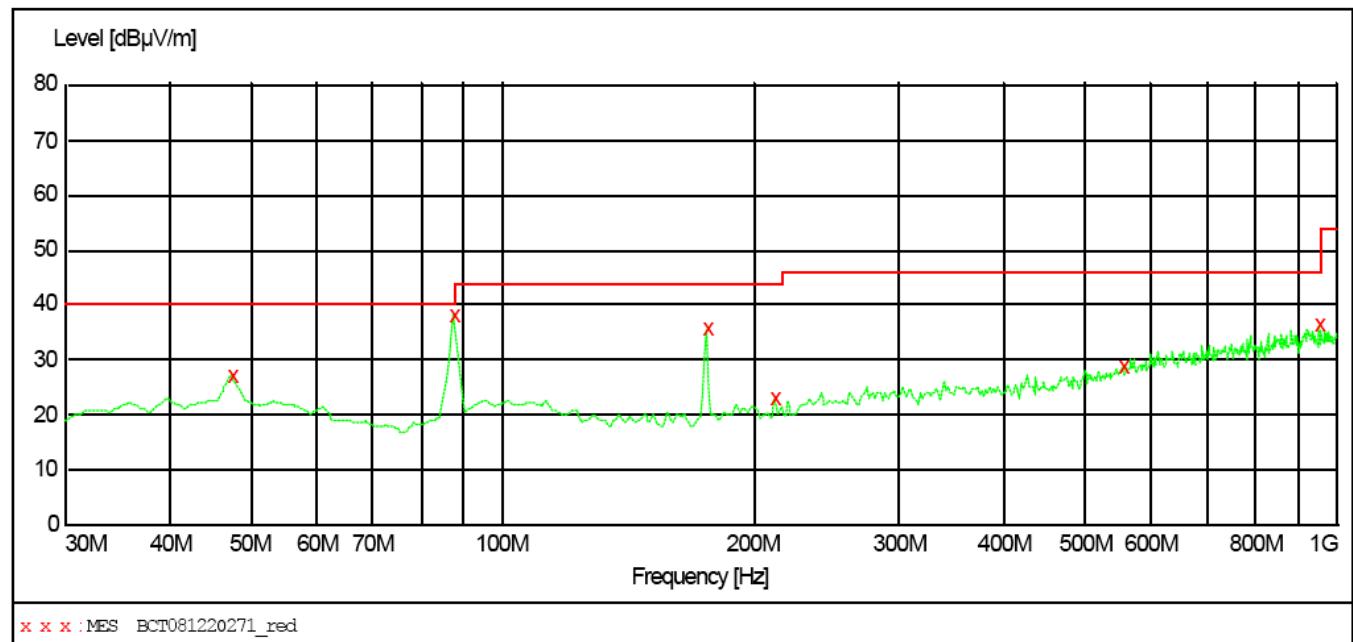
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. QP	Height cm	Azimuth deg	Polarization
47.460000	25.10	16.7	40.0	14.9	QP	100.0	0.00	HORIZONTAL
88.000000	37.40	17.0	40.0	2.6	QP	100.0	0.00	HORIZONTAL
175.500000	34.80	17.6	43.5	8.7	QP	100.0	0.00	HORIZONTAL
225.940000	22.20	17.4	46.0	23.8	QP	100.0	0.00	HORIZONTAL
553.800000	29.80	24.1	46.0	16.2	QP	100.0	0.00	HORIZONTAL
965.080000	36.90	29.8	54.0	17.1	QP	100.0	0.00	HORIZONTAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: FM receiving mode (88MHz)
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: DC 4.2 V from inner rechargeable Li-ion battery
 Comment: Polarisation:V

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength			
Start Frequency	Stop Frequency	Detector	Meas.	IF	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	VULB9163 NEW



MEASUREMENT RESULT: "BCT081220271_red"

12/20/2008 20:22

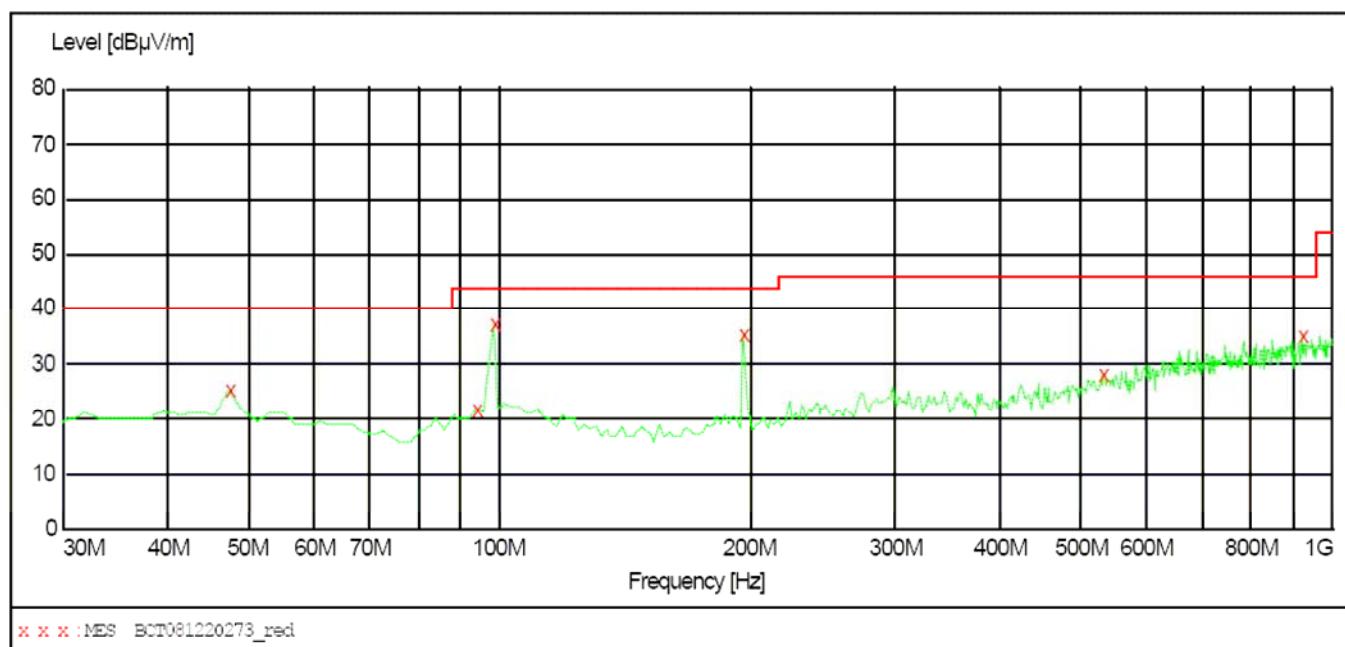
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. QP	Height cm	Azimuth deg	Polarization
47.460000	27.10	16.7	40.0	12.9	QP	100.0	0.00	VERTICAL
88.000000	38.20	15.7	40.0	1.8	QP	100.0	0.00	VERTICAL
175.500000	35.50	18.2	43.5	8.0	QP	100.0	0.00	VERTICAL
212.360000	23.10	16.9	43.5	20.4	QP	100.0	0.00	VERTICAL
553.800000	28.60	24.1	46.0	17.4	QP	100.0	0.00	VERTICAL
951.500000	36.40	29.7	46.0	9.6	QP	100.0	0.00	VERTICAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: FM receiving mode (98MHz)
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: DC 4.2 V from inner rechargeable Li-ion battery
 Comment: Polarisation:H

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength			
Start Frequency	Stop Frequency	Detector	Meas.	IF	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	VULB9163 NEW



MEASUREMENT RESULT: "BCT081220273_red"

12/20/2008 20:13

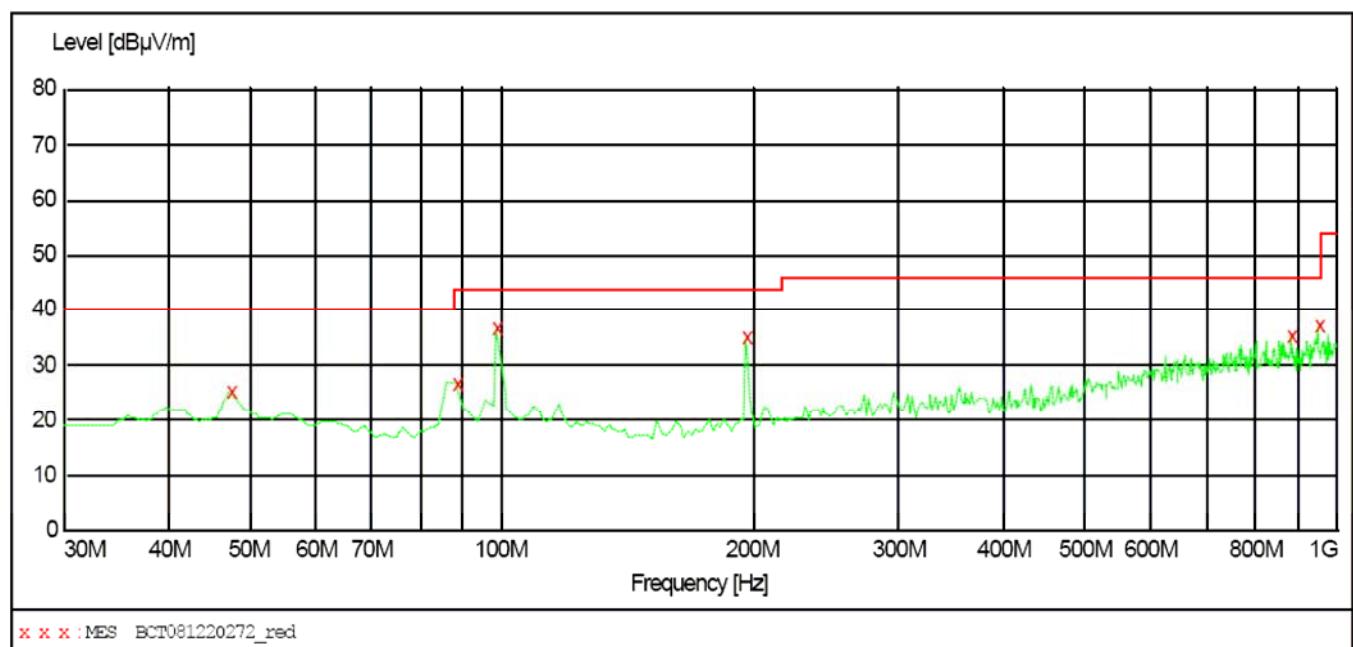
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. QP	Height cm	Azimuth deg	Polarization
47.460000	25.30	16.7	40.0	14.7	QP	100.0	0.00	HORIZONTAL
94.020000	21.70	17.8	43.5	21.8	QP	100.0	0.00	HORIZONTAL
98.000000	37.20	18.2	43.5	6.3	QP	100.0	0.00	HORIZONTAL
196.500000	35.30	17.2	43.5	8.2	QP	100.0	0.00	HORIZONTAL
528.580000	28.30	23.4	46.0	17.7	QP	100.0	0.00	HORIZONTAL
922.400000	35.00	29.4	46.0	11.0	QP	100.0	0.00	HORIZONTAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: FM receiving mode (98MHz)
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: DC 4.2 V from inner rechargeable Li-ion battery
 Comment: Polarisation:V

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength			
Start Frequency	Stop Frequency	Detector	Meas.	IF	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	VULB9163 NEW



MEASUREMENT RESULT: "BCT081220272_red"

12/20/2008 20:19

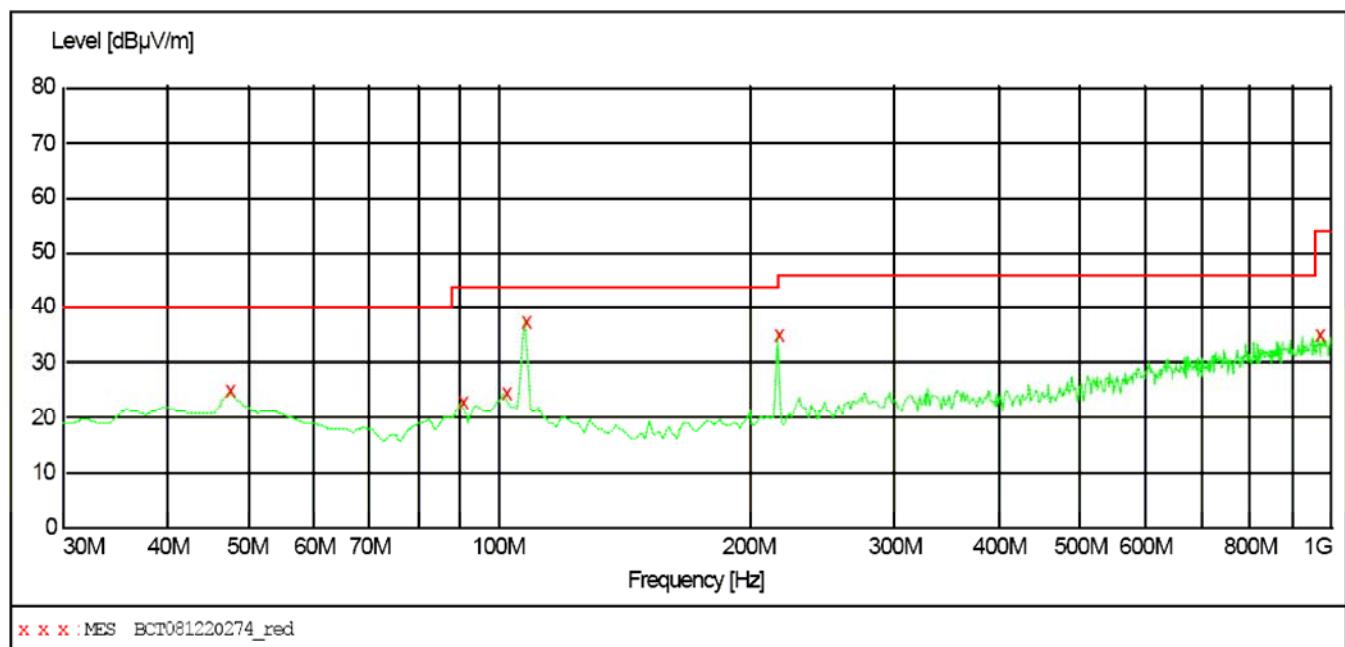
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. QP	Height cm	Azimuth deg	Polarization
47.460000	25.30	16.7	40.0	14.7	QP	100.0	0.00	VERTICAL
88.200000	26.80	16.4	43.5	16.7	QP	100.0	0.00	VERTICAL
98.000000	36.80	16.4	43.5	6.7	QP	100.0	0.00	VERTICAL
196.500000	35.00	16.9	43.5	8.5	QP	100.0	0.00	VERTICAL
885.540000	35.40	29.1	46.0	10.6	QP	100.0	0.00	VERTICAL
951.500000	37.00	29.7	46.0	9.0	QP	100.0	0.00	VERTICAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: FM receiving mode (108MHz)
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: DC 4.2 V from inner rechargeable Li-ion battery
 Comment: Polarisation:H

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength		
Start Frequency	Stop Frequency	Detector	Meas.	IF Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz VULB9163 NEW



MEASUREMENT RESULT: "BCT081220274_red"

12/20/2008 20:11

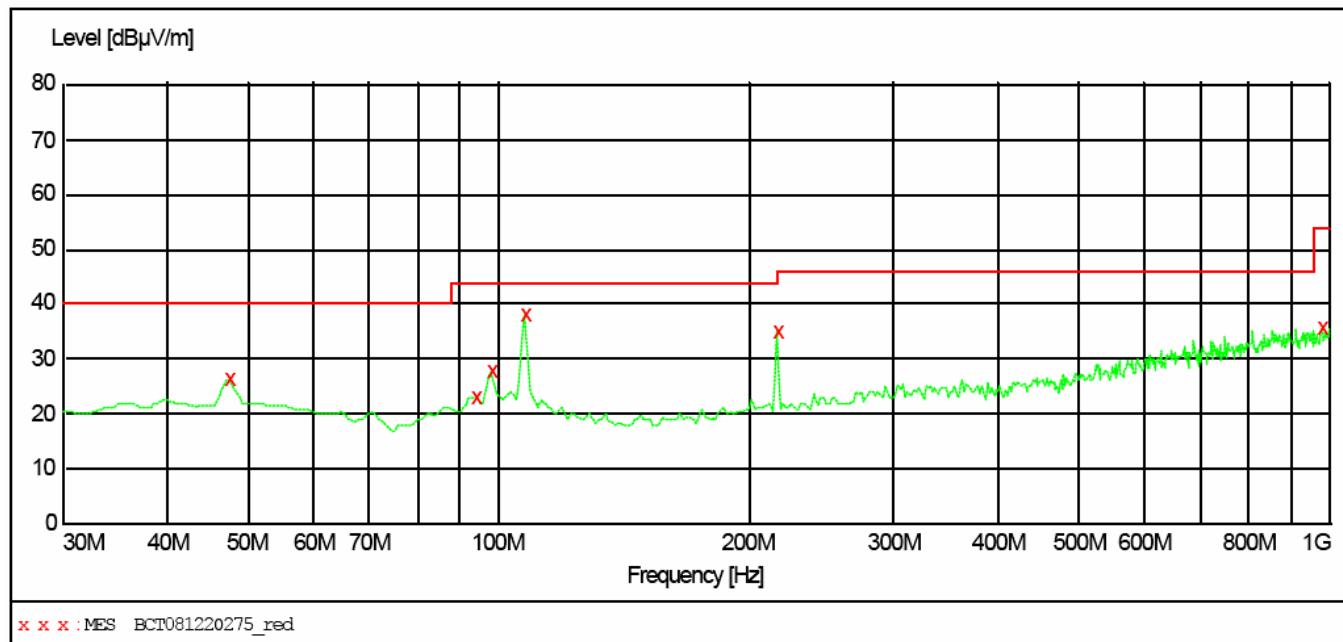
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. QP	Height cm	Azimuth deg	Polarization
47.460000	24.60	16.7	40.0	15.4	QP	100.0	0.00	HORIZONTAL
90.140000	22.70	17.0	43.5	20.8		100.0	0.00	HORIZONTAL
101.780000	24.50	18.2	43.5	19.0	QP	100.0	0.00	HORIZONTAL
108.000000	37.50	17.6	43.5	5.5	QP	100.0	0.00	HORIZONTAL
216.500000	35.00	23.9	46.0	18.7	QP	100.0	0.00	HORIZONTAL
970.900000	35.20	29.8	54.0	18.8	QP	100.0	0.00	HORIZONTAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: FM receiving mode (108MHz)
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: DC 4.2 V from inner rechargeable Li-ion battery
 Comment: Polarisation:V

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength			
Start Frequency	Stop Frequency	Detector	Meas.	IF	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	VULB9163 NEW



MEASUREMENT RESULT: "BCT081220275_red"

12/20/2008 20:06

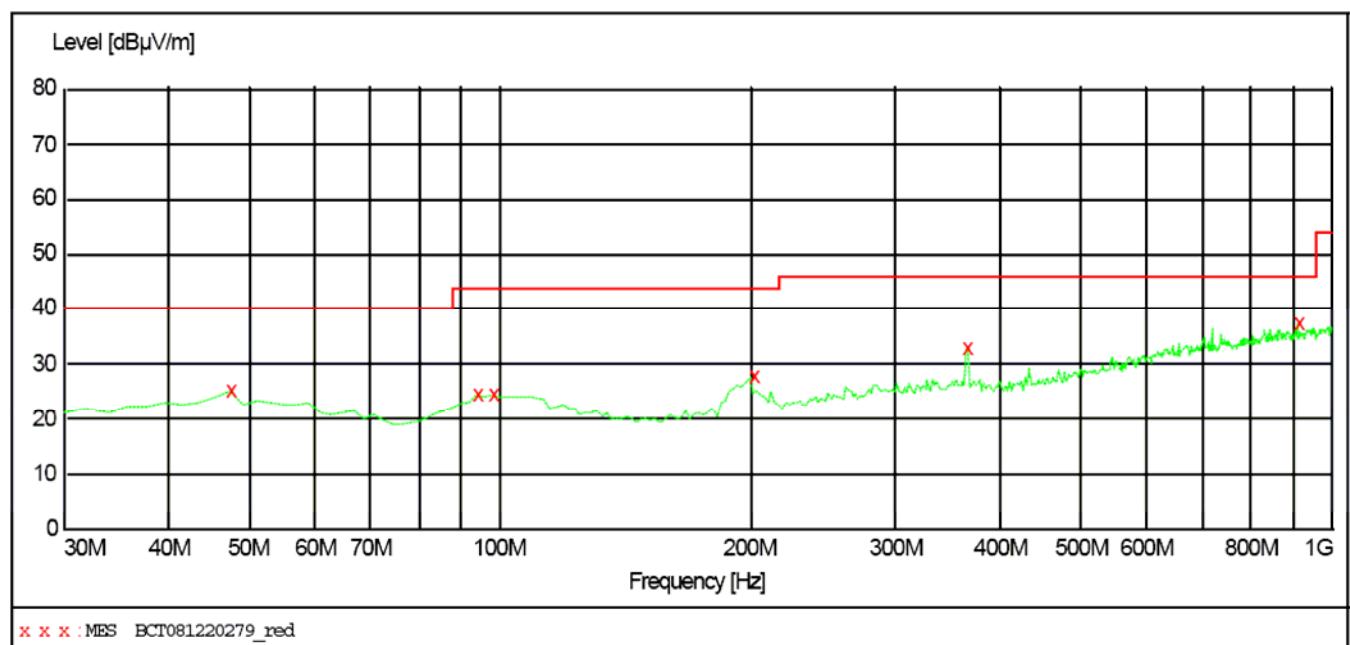
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. QP	Height cm	Azimuth deg	Polarization
47.460000	26.40	16.7	40.0	13.6	QP	100.0	0.00	VERTICAL
94.020000	23.00	17.8	43.5	17.0	QP	100.0	0.00	VERTICAL
97.900000	27.80	18.2	43.5	12.2	QP	100.0	0.00	VERTICAL
108.000000	38.00	16.9	43.5	5.5	QP	100.0	0.00	VERTICAL
216.500000	35.00	23.3	46.0	11.0	QP	100.0	0.00	VERTICAL
980.600000	35.70	29.9	54.0	18.3	QP	100.0	0.00	VERTICAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: MP3 playing mode
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: DC 4.2 V from inner rechargeable Li-ion battery
 Comment: Polarisation:H

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength			
Start Frequency	Stop Frequency	Detector	Meas.	IF	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	VULB9163 NEW



MEASUREMENT RESULT: "BCT081220279_red"

12/20/2008 20:25

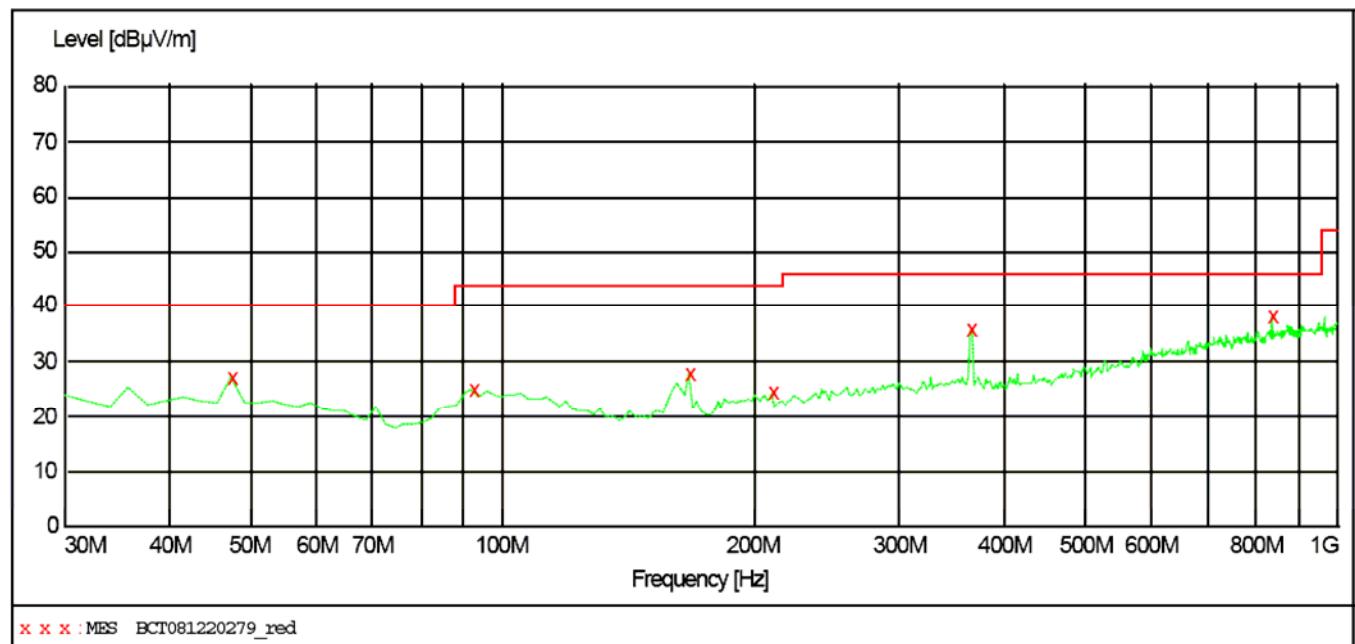
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. QP	Height cm	Azimuth deg	Polarization
47.460000	25.30	16.7	40.0	14.7	QP	100.0	0.00	HORIZONTAL
94.020000	24.50	17.8	43.5	19.0	QP	100.0	0.00	HORIZONTAL
97.900000	24.50	18.2	43.5	19.0	QP	100.0	0.00	HORIZONTAL
200.720000	27.70	16.9	43.5	15.8	QP	100.0	0.00	HORIZONTAL
365.620000	32.70	20.8	46.0	13.3	QP	100.0	0.00	HORIZONTAL
908.820000	37.50	29.3	46.0	8.5	QP	100.0	0.00	HORIZONTAL

RADIATED EMISSION TEST DATA

EUT: Mobile Phone
 Operating Condition: MP3 playing mode
 Test Site: 3m CHAMBER
 Operator: Jimmy
 Test Specification: DC 4.2 V from inner rechargeable Li-ion battery
 Comment: Polarisation:V

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength			
Start Frequency	Stop Frequency	Detector	Meas.	IF	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	VULB9163 NEW



MEASUREMENT RESULT: "BCT081220280_red"

12/20/2008 20:29

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Det. QP	Height cm	Azimuth deg	Polarization
47.460000	27.20	16.7	40.0	12.8	QP	100.0	0.00	VERTICAL
92.080000	25.00	17.4	43.5	18.5	QP	100.0	0.00	VERTICAL
167.740000	28.00	14.9	43.5	15.5	QP	100.0	0.00	VERTICAL
210.420000	24.40	16.9	43.5	19.1	QP	100.0	0.00	VERTICAL
365.620000	35.50	20.8	46.0	10.5	QP	100.0	0.00	VERTICAL
835.100000	38.00	28.5	46.0	8.0	QP	100.0	0.00	VERTICAL