FCC RF Test Report

APPLICANT	:	Trimble Navigation Limited
EQUIPMENT	:	Tablet PC
BRAND NAME	:	Trimble
MODEL NAME	:	Yuma 2
FCC ID	:	S9E-Y2C3
STANDARD	:	FCC 47 CFR Part 2, 22(H), 24(E), 27(L)
CLASSIFICATION	:	PCS Licensed Transmitter (PCB)

The product was received on Aug. 06, 2012 and completely tested on Nov. 02, 2012. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI / TIA / EIA-603-C-2004 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Jones Tsai

Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL INC.
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TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG280604	Rev. 01	Initial issue of report	Sep. 25, 2012
FG280604	Rev. 02	Update report for revising Peak to average ratio description in section 3.2	Oct. 04, 2012
FG280604	Rev. 03	Update report for adding CDMA2000 BC0 and CDMA2000 BC1	Nov. 08, 2012

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	§2.1046	N/A	Conducted Output Power	N/A	PASS	-
3.2	§24.232(d) §27.50(d)(5)	N/A	Peak-to-Average Ratio	< 13 dB	PASS	-
3.1	§22.913(a)(2)	RSS-132(4.4) SRSP-503(5.1.3)	Effective Radiated Power	< 7 Watts	PASS	-
3.1	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
3.1	§27.50(d)(4)	RSS-139 (6.4) SRSP-513(5.1.2)	Equivalent Isotropic Radiated Power	< 1 Watts	PASS	-
3.3	§2.1049 §22.917(a) §24.238(a) §27.53(g)	N/A	Occupied Bandwidth	N/A	PASS	-
3.4	§2.1051 §22.917(a) §24.238(a) §27.53(g)	RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-139 (6.5)	Band Edge Measurement	< 43+10log10(P[Watts])	PASS	-
3.5	§2.1051 §22.917(a) §24.238(a) §27.53(g)	RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-139 (6.5)	Conducted Emission	< 43+10log10(P[Watts])	PASS	-
3.6	§2.1053 §22.917(a) §24.238(a) §27.53(g)	RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-139 (6.5)	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	Under limit 2.01 dB at 5640.000 MHz
3.7	§2.1055 §22.355 §24.235 §27.54	RSS-132 (4.3) RSS-133 (6.3) RSS-139 (6.3)	Frequency Stability for Temperature & Voltage	< 2.5 ppm	PASS	-

1 General Description

1.1 Applicant

Trimble Navigation Limited
345 SW Avery, Corvallis, OR, US, 97333

1.2 Manufacturer

Trimble Navigation Limited
345 SW Avery, Corvallis, OR, US, 97333

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Tablet PC
Brand Name	Trimble
Model Name	Yuma 2
Integrated WWAN Module	Brand Name: Sierra Wireless Model Name: MC8355
FCC ID	S9E-Y2C3
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Product Specification subjective to this standard	
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band IV : 1712.4 MHz ~ 1752.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz CDMA2000 BC0: 824.70 MHz ~ 848.31 MHz CDMA2000 BC1: 1851.25 MHz ~ 1908.75 MHz
Rx Frequency	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band IV : 2112.4 MHz ~ 2152.6 MHz WCDMA Band II : 1932.4 MHz ~ 1987.6 MHz CDMA2000 BC0: 869.70 MHz ~ 893.31 MHz CDMA2000 BC1: 1931.25 MHz ~ 1988.75 MHz
Maximum Output Power to Antenna	GSM850 : 33.25 dBm GSM1900 : 30.75 dBm WCDMA Band V : 24.16 dBm WCDMA Band IV : 24.17 dBm WCDMA Band II : 24.44 dBm CDMA2000 BC0 : 23.73 dBm CDMA2000 BC1 : 23.72 dBm
Antenna Type	PIFA Antenna
Type of Modulation	GPRS: GMSK EDGE: 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) CDMA2000 : QPSK CDMA2000 1xEV-DO : 8PSK

1.4 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

FCC Rule	System	Type of Modulation	Maximum ERP/EIRP (W)	Frequency Tolerance (%, Hz, ppm)	Emission Designator
Part 22	GSM850 GPRS 8	GMSK	1.14	0.05 ppm	246KGXW
Part 22	GSM850 EDGE 8	8PSK	0.29	0.06 ppm	250KG7W
Part 22	WCDMA Band V RMC 12.2Kbps	QPSK	0.14	0.02 ppm	4M14F9W
Part 22	CDMA2000 BC0 1xEV-DO Rev. 0	QPSK	0.13	0.01 ppm	1M28F9W
Part 24	GSM1900 GPRS 8	GMSK	1.39	0.04 ppm	246KGXW
Part 24	GSM1900 EDGE 8	8PSK	0.52	0.05 ppm	250KG7W
Part 24	WCDMA Band II RMC 12.2Kbps	QPSK	0.33	0.02 ppm	4M18F9W
Part 24	CDMA2000 BC1 1xEV-DO Rev. 0	QPSK	0.28	0.01 ppm	1M28F9W
Part 27	WCDMA Band IV RMC 12.2Kbps	QPSK	0.36	0.03 ppm	4M16F9W

1.5 Testing Site

Test Site	SPORTON INTERNATIONAL INC.		
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.	**Sporton Site No.**		**FCC/IC Registration No.**
	TH02-HY	03CH07-HY	722060/4086B-1

1.6 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- Preliminary Guidance for Receiving Applications for Certification of 3G Device. May 9, 2006.
- 47 CFR Part 2, 22(H), 24(E), 27(L)
- ANSI / TIA / EIA-603-C-2004
- FCC KDB 971168 D01 Power Meas. License Digital Systems v01
- IC RSS-132 Issue 2
- IC RSS-133 Issue 5
- IC RSS-139 Issue 2

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.

2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

1.7 Ancillary Equipment List

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Agilent	8960	N/A	N/A	Unshielded, 1.8 m

2 Test Configuration of Equipment Under Test

2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range. and EUT is rotated on three test planes to find out the worst emission.

Frequency range investigated for radiated emission is as follows:

1. 30 MHz to 9000 MHz for GSM850, WCDMA Band V and CDMA2000 BC0.
2. 30 MHz to 18000 MHz for WCDMA Band IV.
3. 30 MHz to 19000 MHz for GSM1900, WCDMA Band II and CDMA2000 BC1.

Test Modes		
Band	**Radiated TCs**	
GSM 850	■ GPRS 8 Link + Battery 1 ■ EDGE 8 Link + Battery 1 ■ GPRS 8 Link + Battery 2	■ GPRS 8 Link ■ EDGE 8 Link
GSM 1900	■ GPRS 8 Link + Battery 1 ■ EDGE 8 Link + Battery 1 ■ GPRS 8 Link + Battery 2	■ GPRS 8 Link ■ EDGE 8 Link
WCDMA Band V	■ RMC 12.2Kbps Link + Battery 1	■ RMC 12.2Kbps Link
WCDMA Band IV	■ RMC 12.2Kbps Link + Battery 1 ■ RMC 12.2Kbps Link + Battery 2	■ RMC 12.2 Link
WCDMA Band II	■ RMC 12.2Kbps Link + Battery 1	■ RMC 12.2Kbps Link
CDMA2000 BC0	■ 1xEV-DO Rev. 0 Link Mode + Battery 1	■ 1xEV-DO Rev. 0 Link Mode
CDMA2000 BC1	■ 1xEV-DO Rev. 0 Link Mode + Battery 1	■ 1xEV-DO Rev. 0 Link Mode

Note: The maximum power levels are GPRS multi-slot class 8 mode for GMSK link, EDGE multi-slot class 8 mode for 8PSK link, RMC 12.2Kbps mode for WCDMA band V, RMC 12.2Kbps mode for WCDMA band IV, RMC 12.2Kbps mode for WCDMA band II, 1xEV-DO Rev. 0 RTAP 153.6K mode for CDMA2000 BC0, and 1xEV-DO Rev. 0 RTAP 153.6K mode for CDMA2000 BC1 only these modes were used for all tests.

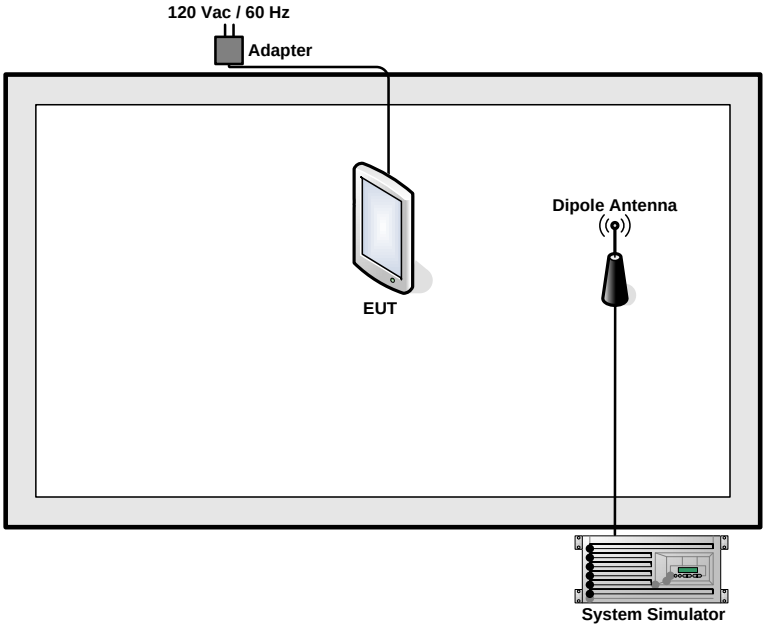
The conducted power tables are as follows:

Conducted Power (*Unit: dBm)						
Band	**GSM850**			**GSM1900**		
Channel	**128**	**189**	**251**	**512**	**661**	**810**
Frequency	**824.2**	**836.4**	**848.8**	**1850.2**	**1880**	**1909.8**
GPRS 8	33.20	**33.25**	32.96	**30.75**	30.68	30.64
GPRS 10	32.86	32.91	32.84	30.74	30.65	30.61
EGPRS 8	27.27	27.30	27.32	26.47	26.41	26.45
EGPRS 10	27.15	27.18	27.27	26.36	26.34	26.35

Conducted Power (*Unit: dBm)									
Band	**WCDMA Band V**			**WCDMA Band II**			**WCDMA Band IV**		
Tx Channel	**4132**	**4182**	**4233**	**9262**	**9400**	**9538**	**1312**	**1413**	**1513**
Rx Channel	**4357**	**4408**	**4458**	**9662**	**9800**	**9938**	**1537**	**1638**	**1738**
Frequency	**826.4**	**836.4**	**846.6**	**1852.4**	**1880**	**1907.6**	**1712.4**	**1732.6**	**1752.6**
RMC 12.2K	23.98	24.11	**24.16**	**24.44**	24.33	24.05	24.11	24.01	**24.17**
HSDPA Subtest-1	23.57	23.59	23.62	23.98	23.89	23.71	23.65	23.74	23.64
HSDPA Subtest-2	23.48	23.66	23.76	23.99	23.97	23.54	23.66	23.74	23.61
HSDPA Subtest-3	23.12	23.21	23.18	23.53	23.58	23.16	23.15	23.22	23.17
HSDPA Subtest-4	23.11	23.18	23.20	23.54	23.49	23.22	23.26	23.23	23.20
HSUPA Subtest-1	23.13	23.56	23.62	23.62	23.42	23.54	22.83	23.12	23.75
HSUPA Subtest-2	21.74	22.17	22.22	22.69	22.51	22.61	21.79	22.09	22.69
HSUPA Subtest-3	22.07	22.44	22.49	23.14	22.96	23.06	21.82	22.12	22.72
HSUPA Subtest-4	21.76	22.13	22.18	23.06	22.88	22.98	21.88	22.18	22.78
HSUPA Subtest-5	23.19	23.56	23.61	23.66	23.48	23.58	22.71	23.01	23.61

Conducted Power (*Unit: dBm)						
Band	**CDMA2000 BC0**			**CDMA2000 BC1**		
Channel	**1013**	**384**	**777**	**25**	**600**	**1175**
Frequency	**824.7**	**836.52**	**848.31**	**1851.25**	**1880**	**1908.75**
1xRTT RC1+SO55	23.63	23.55	23.43	23.63	23.30	22.85
1xRTT RC3+SO55	23.57	23.48	23.57	23.56	23.23	22.86
1xRTT RC3+SO32(+ F-SCH)	23.55	23.50	23.39	23.57	23.32	22.70
1xRTT RC3+SO32(+SCH)	23.54	23.45	23.41	23.59	23.31	22.83
1xEV-DO RTAP 153.6K	**23.73**	23.67	23.53	**23.72**	23.33	22.85
1xEV-DO RETAP 4096K	23.69	23.66	23.52	23.71	23.31	23.00

2.2 Connection Diagram of Test System



3 Test Result

3.1 Conducted Output Power and ERP/EIRP Measurement

3.1.1 Description of the Conducted Output Power and ERP/EIRP Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts and the EIRP of mobile transmitters are limited to 2 Watts. According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T – L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

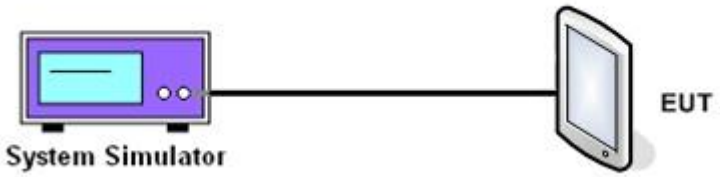
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The transmitter output port was connected to base station.
2. Set EUT at maximum power through base station.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Compare each band and different modulation combination to show the worst data rate.

3.1.4 Test Setup



3.1.5 Test Result of Conducted Output Power

Cellular Band (G_T - L_C = -0.85dB)									
Modes	GSM850 (GPRS 8)			GSM850 (EDGE 8)			WCDMA Band V (RMC 12.2Kbps)		
Channel	128 (Low)	189 (Mid)	251 (High)	128 (Low)	189 (Mid)	251 (High)	4132 (Low)	4182 (Mid)	4233 (High)
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8	826.4	836.4	846.6
Conducted Power (dBm)	33.20	33.25	32.96	27.27	27.30	27.32	23.98	24.11	24.16
Conducted Power (Watts)	2.09	2.11	1.98	0.53	0.54	0.54	0.25	0.26	0.26
Gain	-1.30	-0.52	-0.69	-1.30	-0.52	-0.69	-1.30	-0.52	-0.69
ERP(dBm)	29.75	30.58	30.12	23.82	24.63	24.48	20.53	21.44	21.32
ERP(Watts)	0.94	1.14	1.03	0.24	0.29	0.28	0.11	0.14	0.14

PCS Band (G_T - L_C = -1.87dB)									
Modes	GSM1900 (GPRS 8)			GSM1900 (EDGE 8)			WCDMA Band II (RMC 12.2Kbps)		
Channel	512 (Low)	661 (Mid)	810 (High)	512 (Low)	661 (Mid)	810 (High)	9262 (Low)	9400 (Mid)	9538 (High)
Frequency (MHz)	1850.2	1880	1909.8	1850.2	1880	1909.8	1852.4	1880	1907.6
Conducted Power (dBm)	30.75	30.68	30.64	26.47	26.41	26.45	24.44	24.33	24.05
Conducted Power (Watts)	1.19	1.17	1.16	0.44	0.44	0.44	0.28	0.27	0.25
Gain	0.69	-0.08	-0.28	0.69	-0.08	-0.28	0.69	-0.08	-0.28
EIRP(dBm)	31.44	30.60	30.36	27.16	26.33	26.17	25.13	24.25	23.77
EIRP(Watts)	1.39	1.15	1.09	0.52	0.43	0.41	0.33	0.27	0.24

AWS Band (G_T - L_C = -1.87dB)			
Modes	WCDMA Band IV (RMC 12.2Kbps)		
Channel	1312(Low)	1413 (Mid)	1513 (High)
Frequency (MHz)	1712.4	1732.6	1752.6
Conducted Power (dBm)	24.11	24.01	24.17
Conducted Power (Watts)	0.26	0.25	0.26
Gain	1.42	0.96	0.96
EIRP(dBm)	25.53	24.97	25.13
EIRP(Watts)	0.36	0.31	0.33

CDMA2000 BC0 (G_T - L_C = -0.52dB)			
Test Mode	CDMA 2000 1xEV-DO Rev. 0		
Test Status	RTAP 153.6K		
Channel	1013 (Low)	384 (Mid)	777 (High)
Frequency (MHz)	824.70	836.52	848.31
Conducted Power (dBm)	23.73	23.67	23.53
Conducted Power (Watts)	0.24	0.23	0.23
EIRP(dBm)	21.06	21.00	20.86
EIRP(Watts)	0.128	0.126	0.122

CDMA2000 BC1 (G_T - L_C = 0.69dB)			
Test Mode	CDMA 2000 1xEV-DO Rev. 0		
Test Status	RTAP 153.6K		
Channel	25 (Low)	600 (Mid)	1175 (High)
Frequency (MHz)	1851.25	1880.00	1908.75
Conducted Power (dBm)	23.72	23.33	22.85
Conducted Power (Watts)	0.24	0.22	0.19
EIRP(dBm)	24.41	24.02	23.54
EIRP(Watts)	0.276	0.252	0.226

Note: maximum burst average power for GSM, and maximum average power for WCDMA.

EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.2 Peak-to-Average Ratio

3.2.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

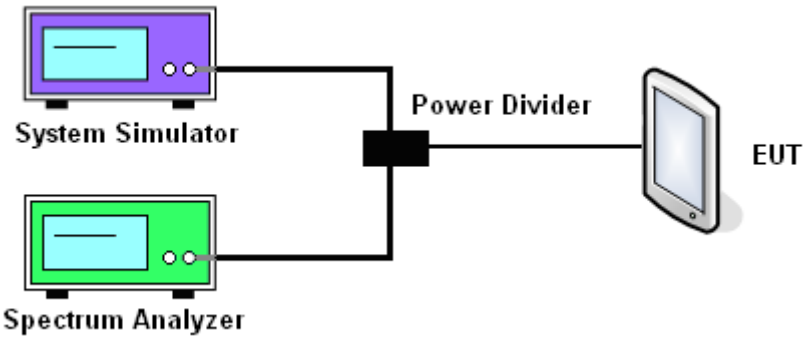
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. For GSM/EGPRS operating modes:
   a. Set the RBW = 1MHz, VBW = 1MHz, Peak detector in spectrum analyzer.
   b. Set EUT in maximum power output, and triggered the burst signal.
   c. Measured respectively the Peak level and Mean level, and the deviation was recorded as Peak to Average Ratio.
3. For UMTS operating modes:
   a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
   b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.

3.2.4 Test Setup



3.2.5 Test Result of Peak-to-Average Ratio

Cellular Band									
Modes	GSM850 (GPRS 8)			GSM850 (EDGE 8)			WCDMA Band V (RMC 12.2Kbps)		
Channel	128 (Low)	189 (Mid)	251 (High)	128 (Low)	189 (Mid)	251 (High)	4132 (Low)	4182 (Mid)	4233 (High)
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8	826.4	836.4	846.6
Peak-to-Average Ratio (dB)	0.09	0.10	0.10	0.50	0.47	0.58	3.20	3.12	3.00

PCS Band									
Modes	GSM1900 (GPRS 8)			GSM1900 (EDGE 8)			WCDMA Band II (RMC 12.2Kbps)		
Channel	512 (Low)	661 (Mid)	810 (High)	512 (Low)	661 (Mid)	810 (High)	9262 (Low)	9400 (Mid)	9538 (High)
Frequency (MHz)	1850.2	1880	1909.8	1850.2	1880	1909.8	1852.4	1880	1907.6
Peak-to-Average Ratio (dB)	0.10	0.09	0.06	0.53	0.51	0.47	3.44	3.48	3.48

AWS Band			
Modes	WCDMA Band IV (RMC 12.2Kbps)		
Channel	1312(Low)	1413 (Mid)	1513 (High)
Frequency (MHz)	1712.4	1732.6	1752.6
Peak-to-Average Ratio (dB)	2.92	2.88	3.00

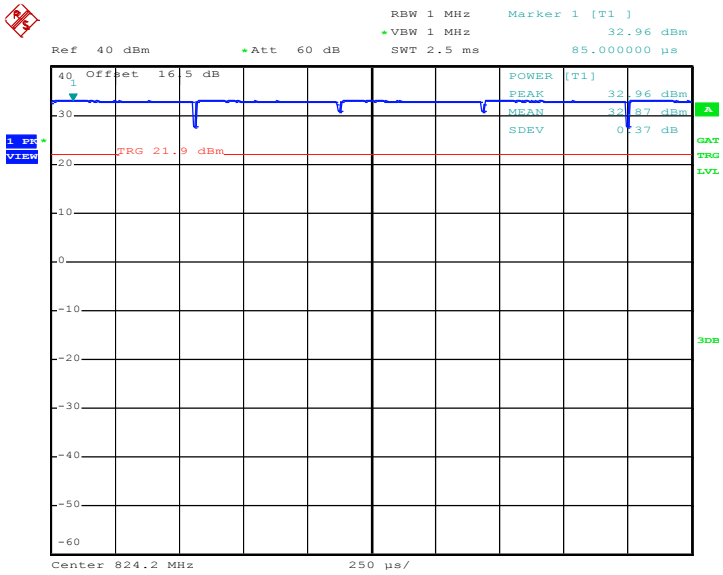
CDMA2000 BC0			
Modes	CDMA 2000 1xEV-DO Rev. 0		
Channel	1013 (Low)	384 (Mid)	777 (High)
Frequency (MHz)	824.70	836.52	848.31
Peak-to-Average Ratio (dB)	3.64	3.92	3.48

CDMA2000 BC1			
Modes	CDMA 2000 1xEV-DO Rev. 0		
Channel	25 (Low)	600 (Mid)	1175 (High)
Frequency (MHz)	1851.25	1880	1908.75
Peak-to-Average Ratio (dB)	3.24	3.40	3.96

3.2.6 Test Result (Plots) of Peak-to-Average Ratio

Band :	GSM 850	Test Mode :	GPRS 8 Link

Peak-to-Average Ratio on Channel 128 (824.2 MHz)



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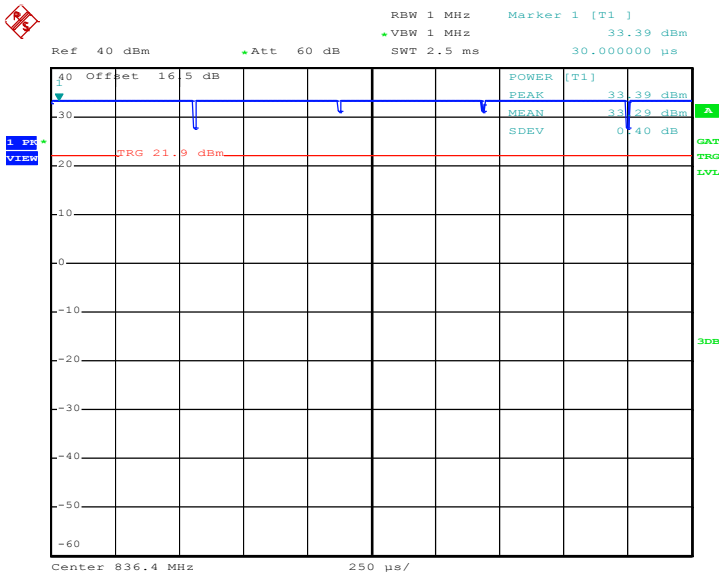
Peak-to-Average Ratio on Channel 189 (836.4 MHz)



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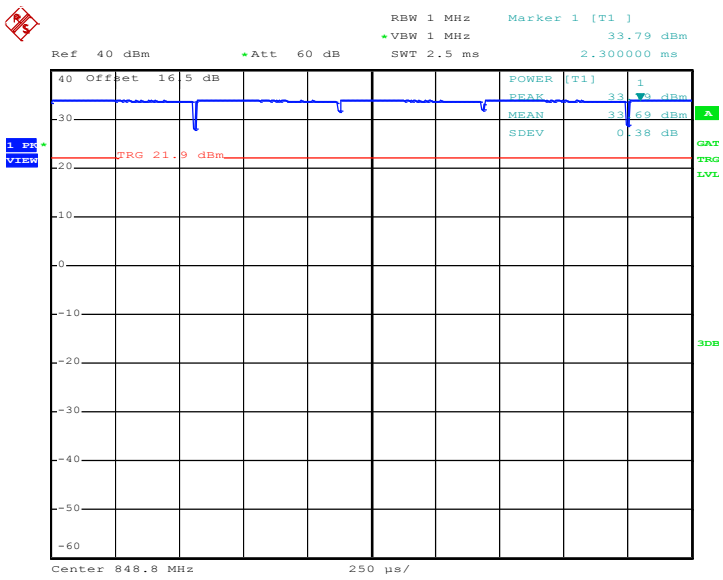
Peak-to-Average Ratio on Channel 251 (848.8 MHz)



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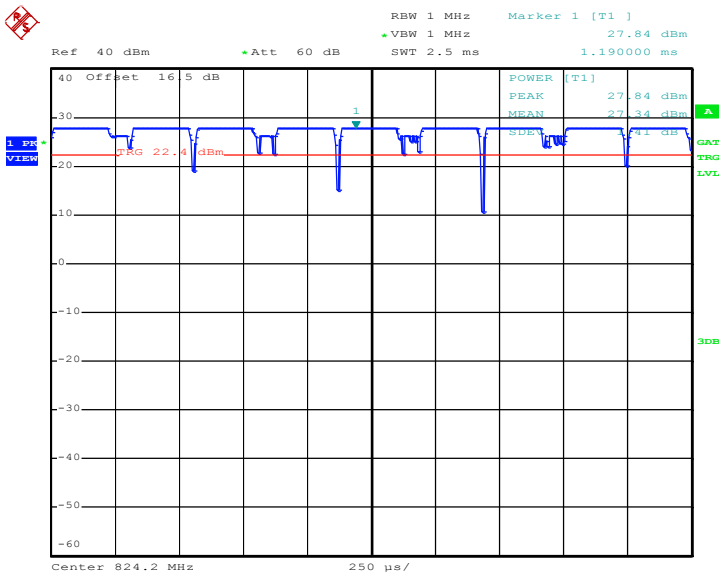
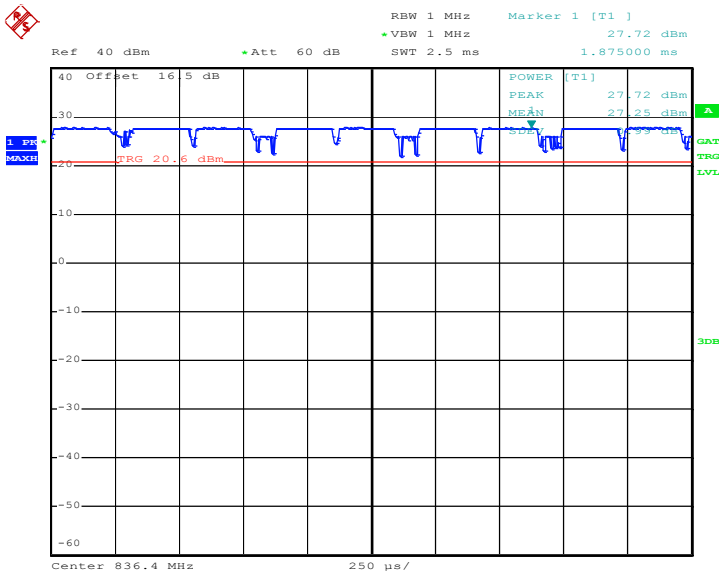
Band :	GSM 850	Test Mode :	EDGE 8 Link

Peak-to-Average Ratio on Channel 128 (824.2 MHz)



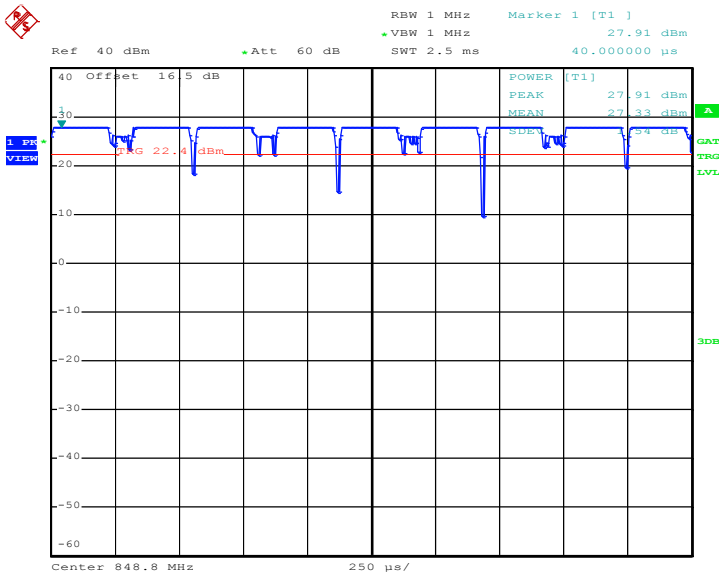
Date: 18.SEP.2012 10:32:10

Peak-to-Average Ratio on Channel 189 (836.4 MHz)



Date: 18.SEP.2012 10:51:13

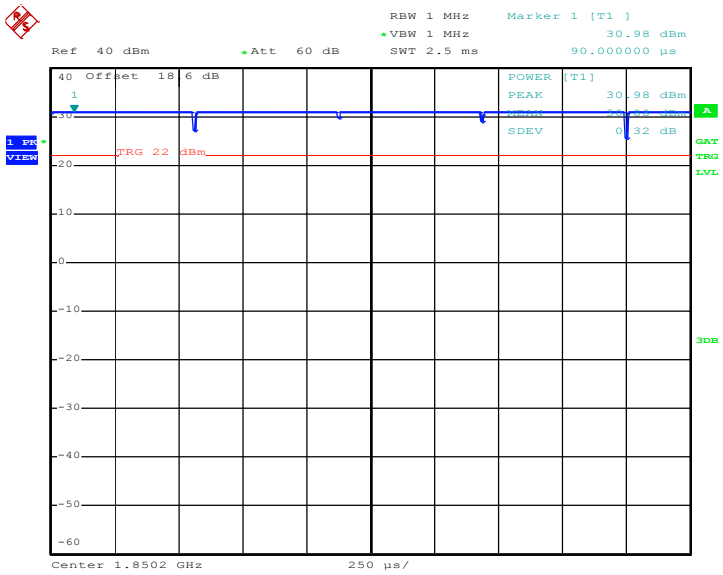
Peak-to-Average Ratio on Channel 251 (848.8 MHz)



Date: 18.SEP.2012 10:33:09

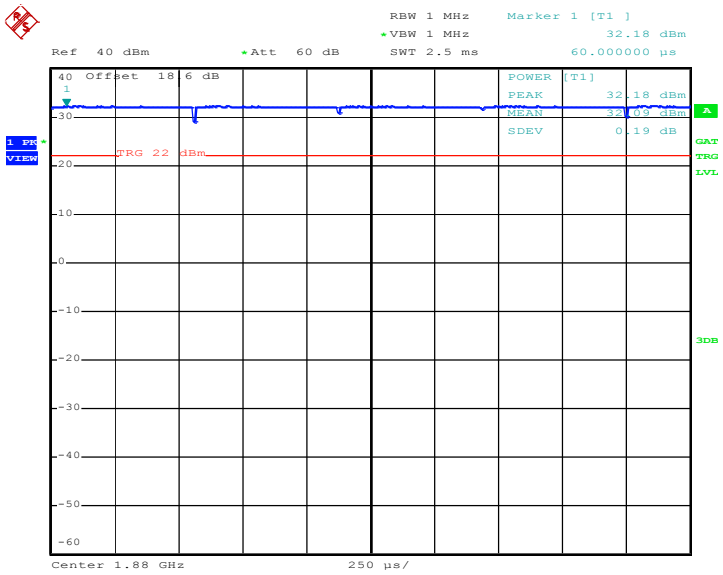
Band :	GSM 1900	Test Mode :	GPRS 8 Link

Peak-to-Average Ratio on Channel 512 (1850.2 MHz)



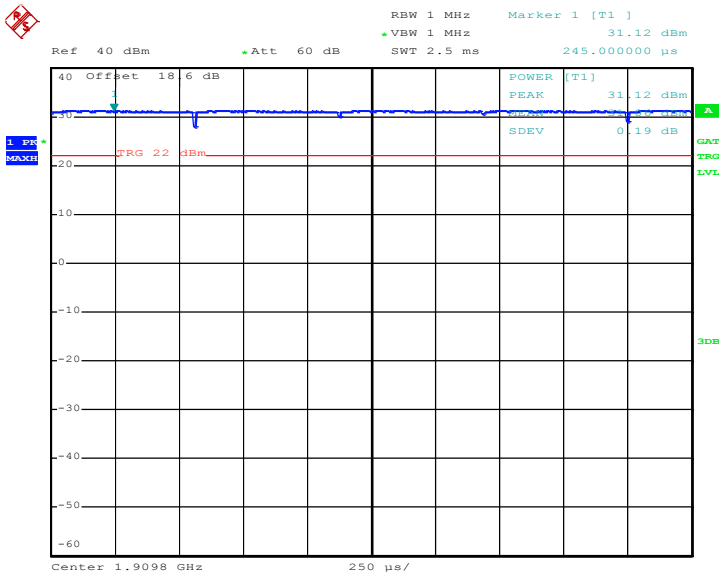
Date: 18.SEP.2012 14:41:43

Peak-to-Average Ratio on Channel 661 (1880.0 MHz)



Date: 18.SEP.2012 14:41:12

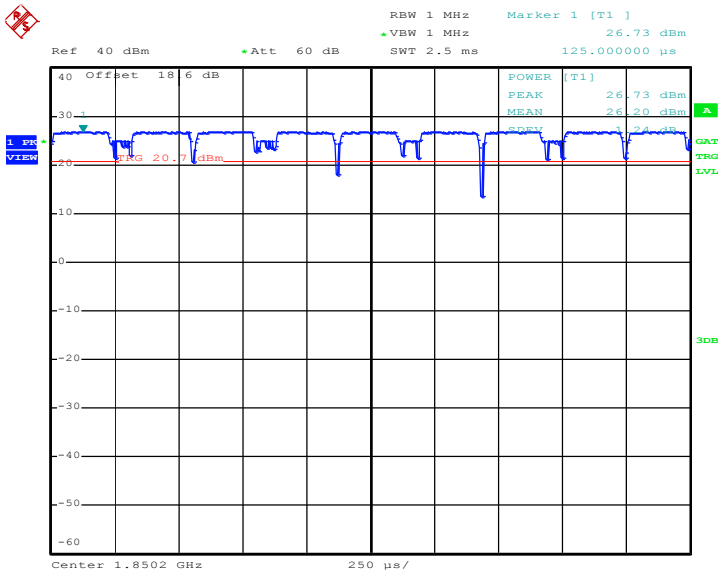
Peak-to-Average Ratio on Channel 810 (1909.8 MHz)



Date: 18.SEP.2012 14:40:22

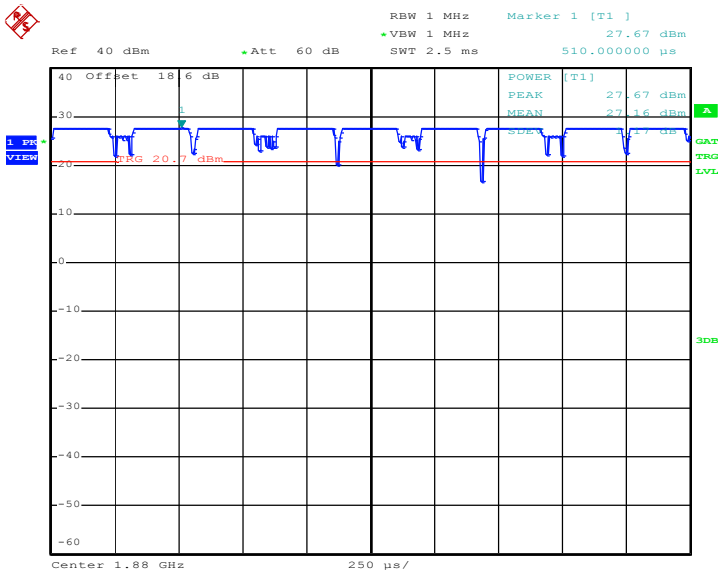
Band :	GSM 1900	Test Mode :	EDGE 8 Link

Peak-to-Average Ratio on Channel 512 (1850.2 MHz)



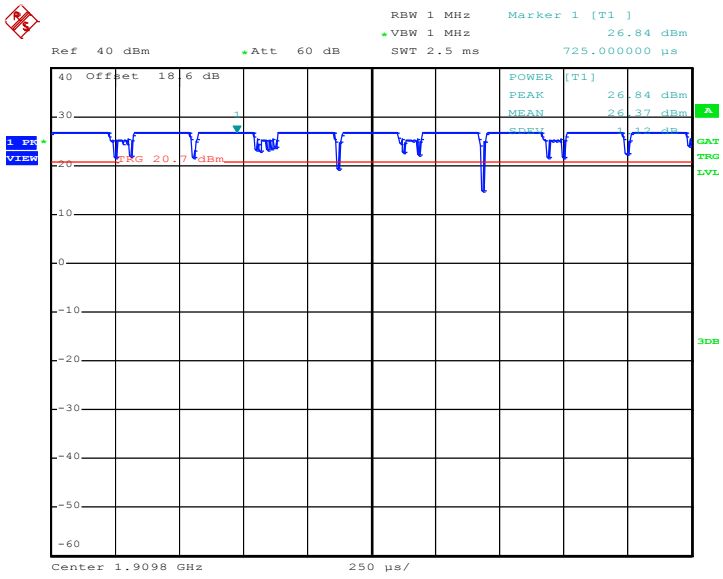
Date: 18.SEP.2012 15:10:03

Peak-to-Average Ratio on Channel 661 (1880.0 MHz)



Date: 18.SEP.2012 15:09:14

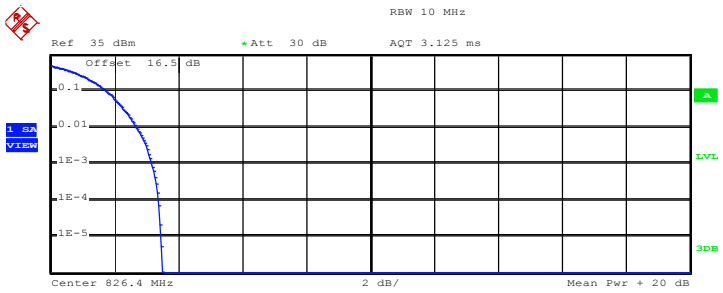
Peak-to-Average Ratio on Channel 810 (1909.8 MHz)



Date: 18.SEP.2012 15:08:16

Band :	WCDMA Band V	Test Mode :	RMC 12.2Kbps Link

Peak-to-Average Ratio on Channel 4132 (826.4 MHz)

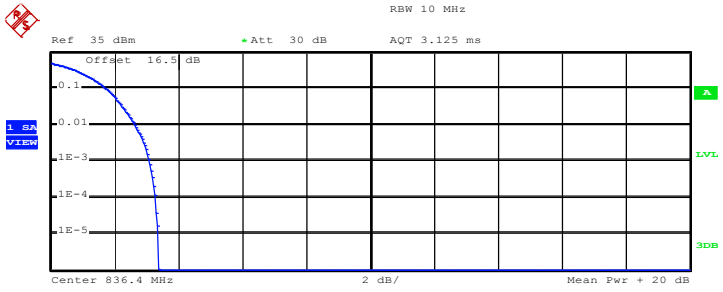


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	24.22 dBm
Peak	27.71 dBm
Crest	3.49 dB
10 %	1.76 dB
1 %	2.72 dB
.1 %	3.20 dB
.01 %	3.40 dB

Date: 18.SEP.2012 11:05:20

Peak-to-Average Ratio on Channel 4182 (836.4 MHz)

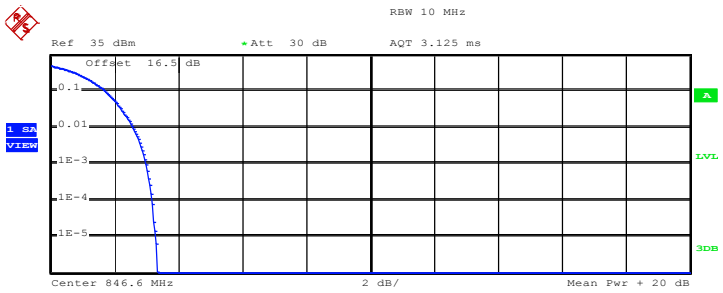


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	24.46 dBm
Peak	27.85 dBm
Crest	3.38 dB
10 %	1.76 dB
1 %	2.64 dB
.1 %	3.12 dB
.01 %	3.28 dB

Date: 18.SEP.2012 11:05:57

Peak-to-Average Ratio on Channel 4233 (846.6 MHz)



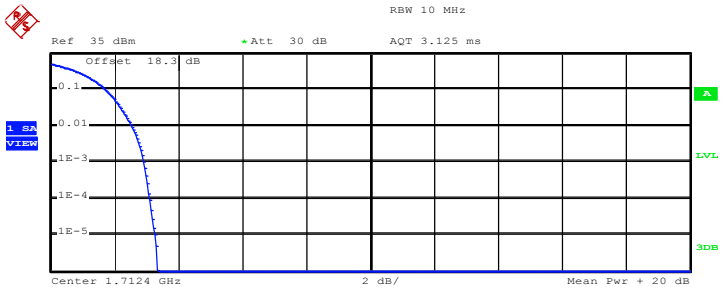
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	24.06 dBm
Peak	27.42 dBm
Crest	3.36 dB
10 %	1.72 dB
1 %	2.60 dB
.1 %	3.00 dB
.01 %	3.20 dB

Date: 18.SEP.2012 11:06:37

Band :	WCDMA Band IV	Test Mode :	RMC 12.2Kbps Link

Peak-to-Average Ratio on Channel 1312 (1712.4 MHz)

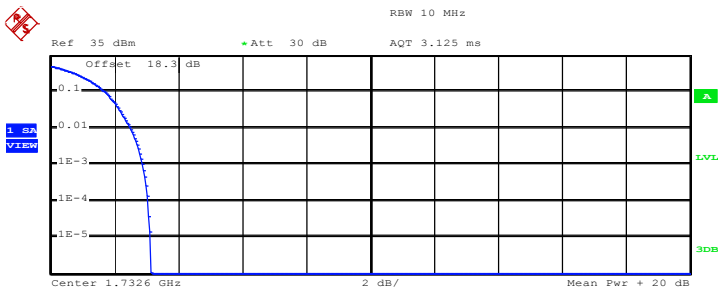


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	24.92 dBm
Peak	28.27 dBm
Crest	3.35 dB
10 %	1.72 dB
1 %	2.56 dB
.1 %	2.92 dB
.01 %	3.12 dB

Date: 18.SEP.2012 11:29:02

Peak-to-Average Ratio on Channel 1413 (1732.6 MHz)

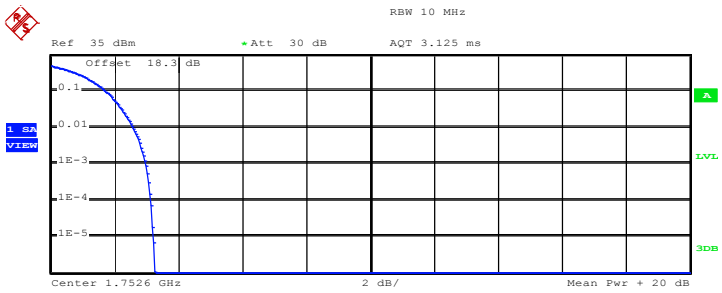


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	24.28 dBm
Peak	27.42 dBm
Crest	3.14 dB
10 %	1.72 dB
1 %	2.52 dB
.1 %	2.88 dB
.01 %	3.04 dB

Date: 18.SEP.2012 11:29:54

Peak-to-Average Ratio on Channel 1513 (1752.6 MHz)



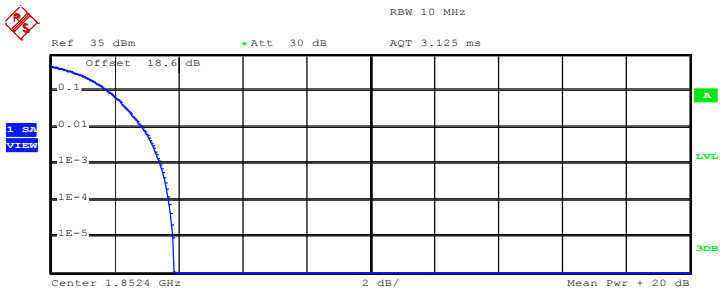
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	24.80 dBm
Peak	28.06 dBm
Crest	3.26 dB
10 %	1.72 dB
1 %	2.60 dB
.1 %	3.00 dB
.01 %	3.16 dB

Date: 18.SEP.2012 11:30:36

Band :	WCDMA Band II	Test Mode :	RMC 12.2Kbps Link

Peak-to-Average Ratio on Channel 9262 (1852.4 MHz)

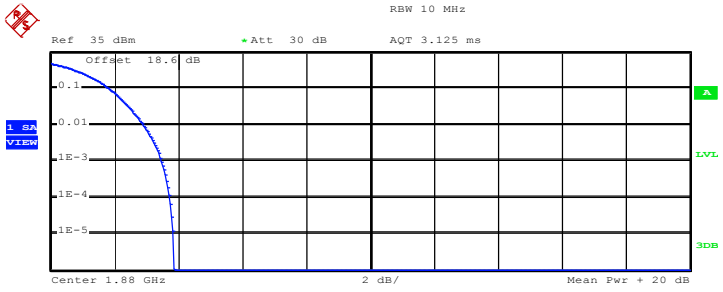


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	20.80 dBm
Peak	24.67 dBm
Crest	3.87 dB
10 %	1.84 dB
1 %	2.88 dB
.1 %	3.44 dB
.01 %	3.72 dB

Date: 18.SEP.2012 12:02:48

Peak-to-Average Ratio on Channel 9400 (1880.0 MHz)

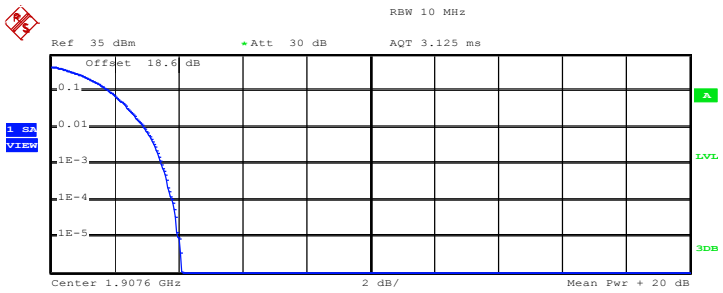


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	20.67 dBm
Peak	24.53 dBm
Crest	3.86 dB
10 %	1.84 dB
1 %	2.92 dB
.1 %	3.48 dB
.01 %	3.72 dB

Date: 18.SEP.2012 12:02:22

Peak-to-Average Ratio on Channel 9538 (1907.6 MHz)



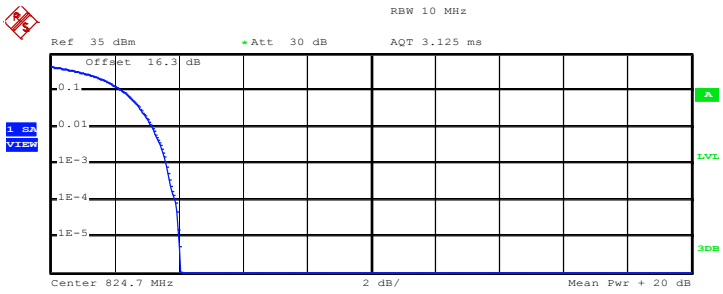
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	20.36 dBm
Peak	24.46 dBm
Crest	4.10 dB
10 %	1.88 dB
1 %	2.96 dB
.1 %	3.48 dB
.01 %	3.84 dB

Date: 18.SEP.2012 12:01:54

Band :	CDMA2000 BC0	Test Mode :	1xEV-DO Rev. 0 Link

Peak-to-Average Ratio on Channel 1013 (824.70 MHz)

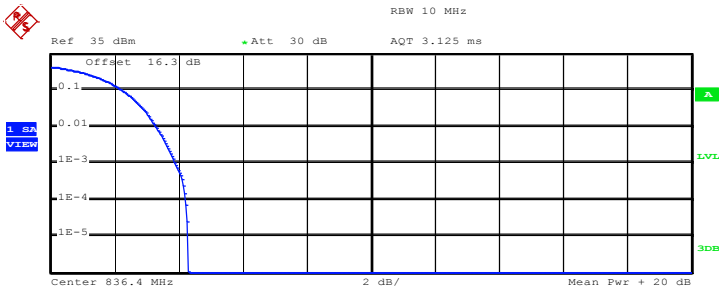


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	24.29 dBm
Peak	28.34 dBm
Crest	4.05 dB
10 %	2.28 dB
1 %	3.20 dB
.1 %	3.64 dB
.01 %	3.88 dB

Date: 2.NOV.2012 10:16:57

Peak-to-Average Ratio on Channel 384 (836.52 MHz)

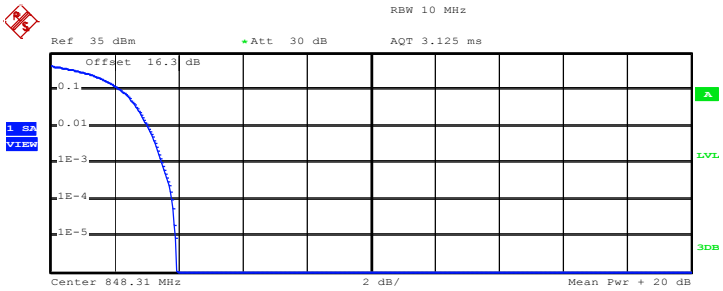


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	24.04 dBm
Peak	28.34 dBm
Crest	4.30 dB
10 %	2.28 dB
1 %	3.32 dB
.1 %	3.92 dB
.01 %	4.24 dB

Date: 2.NOV.2012 10:14:20

Peak-to-Average Ratio on Channel 777 (848.31 MHz)



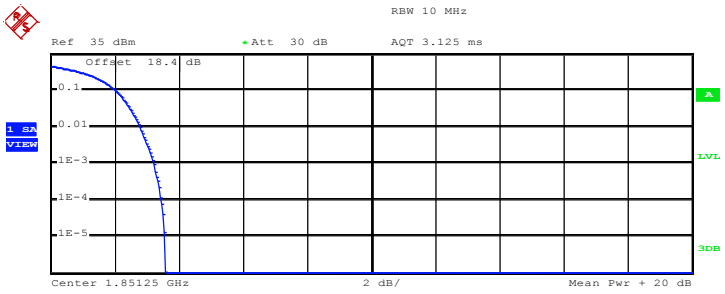
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	23.83 dBm
Peak	27.77 dBm
Crest	3.94 dB
10 %	2.20 dB
1 %	3.04 dB
.1 %	3.48 dB
.01 %	3.80 dB

Date: 2.NOV.2012 10:15:34

Band :	CDMA2000 BC1	Test Mode :	1xEV-DO Rev. 0 Link

Peak-to-Average Ratio on Channel 25 (1851.25 MHz)

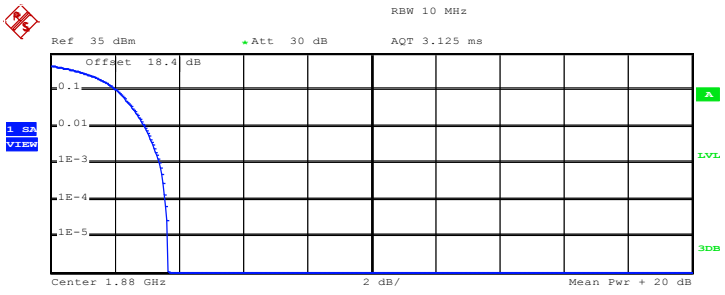


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	25.26 dBm
Peak	28.83 dBm
Crest	3.57 dB
10 %	2.04 dB
1 %	2.80 dB
.1 %	3.24 dB
.01 %	3.44 dB

Date: 2.NOV.2012 13:13:55

Peak-to-Average Ratio on Channel 600 (1880 MHz)

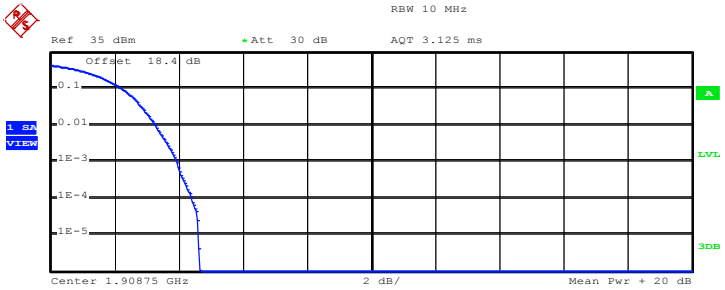


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	25.02 dBm
Peak	28.69 dBm
Crest	3.67 dB
10 %	2.08 dB
1 %	2.96 dB
.1 %	3.40 dB
.01 %	3.60 dB

Date: 2.NOV.2012 13:13:04

Peak-to-Average Ratio on Channel 1175 (1908.75 MHz)



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	23.77 dBm
Peak	28.41 dBm
Crest	4.64 dB
10 %	2.24 dB
1 %	3.28 dB
.1 %	3.96 dB
.01 %	4.40 dB

Date: 2.NOV.2012 13:15:03

3.3 Occupied Bandwidth and 26dB Bandwidth Measurement

3.3.1 Description of Occupied Bandwidth and 26dB Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

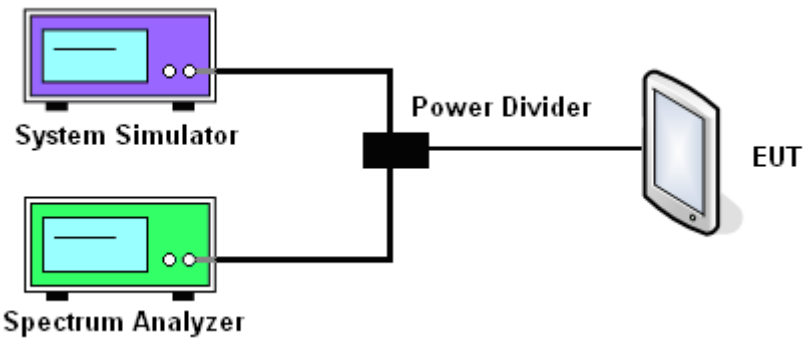
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The 99% occupied bandwidth and 26 dB bandwidth of the middle channel for the highest RF powers were measured.

3.3.4 Test Setup



3.3.5 Test Result of Occupied Bandwidth and 26dB Bandwidth

Cellular Band						
Modes	**GSM850 (GPRS 8)**			**GSM850 (EDGE 8)**		
Channel	**128 (Low)**	**189 (Mid)**	**251 (High)**	**128 (Low)**	**189 (Mid)**	**251 (High)**
Frequency (MHz)	**824.2**	**836.4**	**848.8**	**824.2**	**836.4**	**848.8**
99% OBW (KHz)	244	242	246	250	246	242
26dB BW (KHz)	314	316	314	304	298	302

PCS Band						
Modes	**GSM1900 (GPRS 8)**			**GSM1900 (EDGE 8)**		
Channel	**512 (Low)**	**661 (Mid)**	**810 (High)**	**512 (Low)**	**661 (Mid)**	**810 (High)**
Frequency (MHz)	**1850.2**	**1880**	**1909.8**	**1850.2**	**1880**	**1909.8**
99% OBW (KHz)	244	246	244	246	246	250
26dB BW (KHz)	308	310	304	310	298	304

Cellular Band			
Modes	**WCDMA Band V (RMC 12.2Kbps)**		
Channel	**4132 (Low)**	**4182 (Mid)**	**4233 (High)**
Frequency (MHz)	**826.4**	**836.4**	**846.6**
99% OBW (MHz)	4.12	4.14	4.12
26dB BW (MHz)	4.68	4.66	4.68

AWS Band			
Modes	**WCDMA Band IV (RMC 12.2Kbps)**		
Channel	**1312(Low)**	**1413 (Mid)**	**1513 (High)**
Frequency (MHz)	**1712.4**	**1732.6**	**1752.6**
99% OBW (MHz)	4.16	4.16	4.16
26dB BW (MHz)	4.60	4.68	4.68

PCS Band			
Modes	**WCDMA Band II (RMC 12.2Kbps)**		
Channel	**9262 (Low)**	**9400 (Mid)**	**9538 (High)**
Frequency (MHz)	**1852.4**	**1880**	**1907.6**
99% OBW (MHz)	4.14	4.18	4.16
26dB BW (MHz)	4.66	4.72	4.66

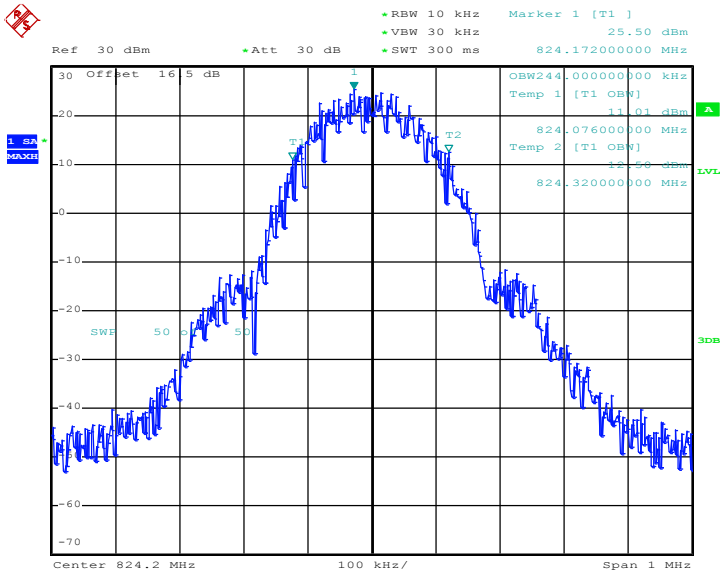
CDMA2000 BC0			
Test Mode	**CDMA 2000 1xEV-DO Rev. 0**		
Test Status	**RTAP 153.6K**		
Channel	**1013 (Low)**	**384 (Mid)**	**777 (High)**
Frequency (MHz)	**824.70**	**836.52**	**848.31**
99% OBW (MHz)	1.276	1.276	1.272
26dB BW (MHz)	1.424	1.428	1.436

CDMA2000 BC1			
Test Mode	**CDMA 2000 1xEV-DO Rev. 0**		
Test Status	**RTAP 153.6K**		
Channel	**25 (Low)**	**600 (Mid)**	**1175 (High)**
Frequency (MHz)	**1851.25**	**1880.00**	**1908.75**
99% OBW (MHz)	1.280	1.280	1.276
26dB BW (MHz)	1.444	1.436	1.436

3.3.6 Test Result (Plots) of Occupied Bandwidth and 26dB Bandwidth

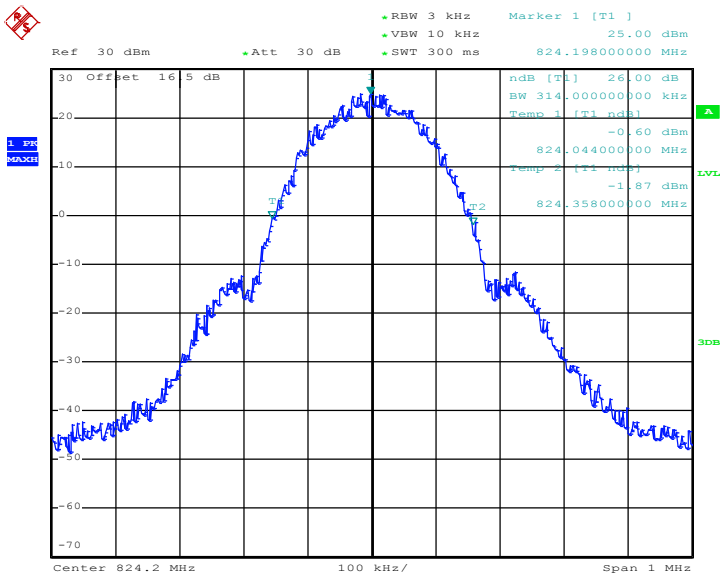
Band :	GSM 850	Test Mode :	GPRS 8 Link

99% Occupied Bandwidth Plot on Channel 128 (824.2 MHz)



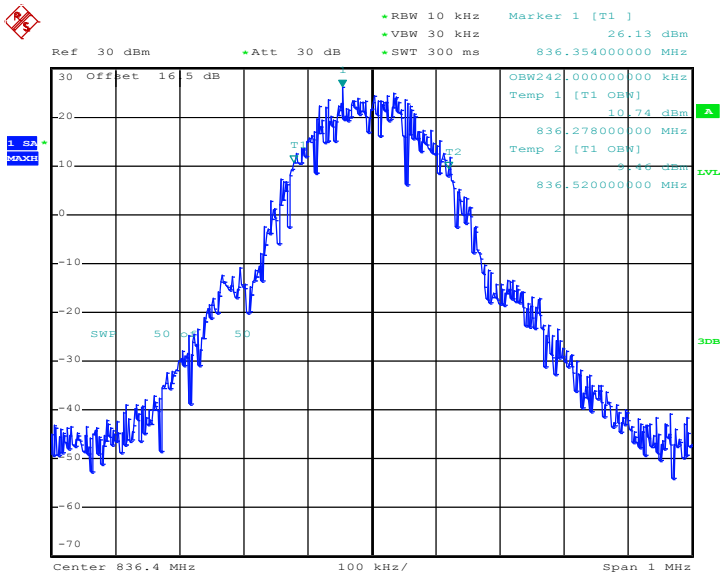
Date: 18.SEP.2012 09:56:21

26dB Bandwidth Plot on Channel 128 (824.2 MHz)



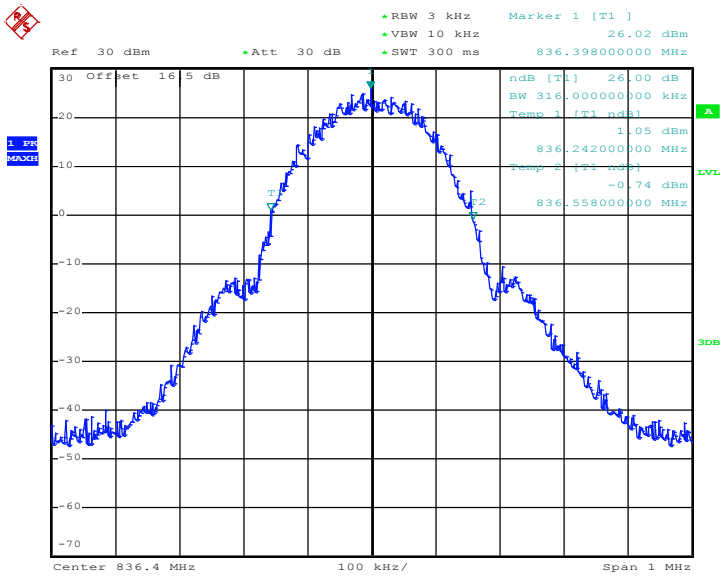
Date: 18.SEP.2012 09:42:56

99% Occupied Bandwidth Plot on Channel 189 (836.4 MHz)



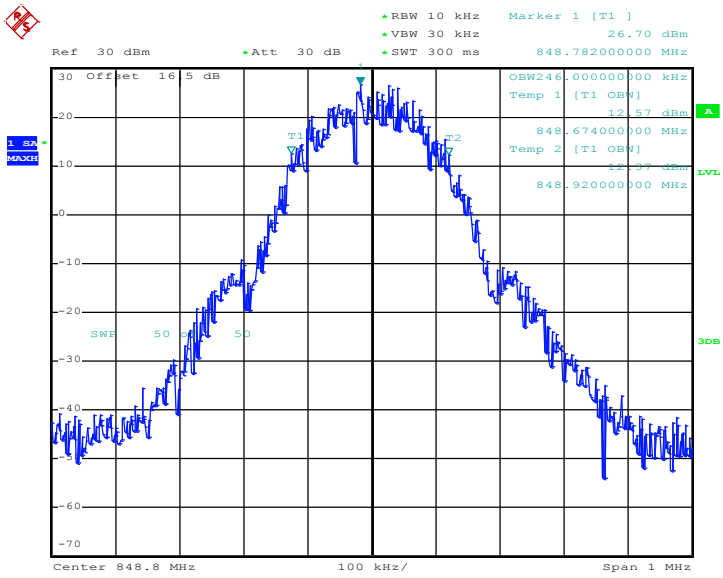
Date: 18.SEP.2012 09:54:07

26dB Bandwidth Plot on Channel 189 (836.4 MHz)



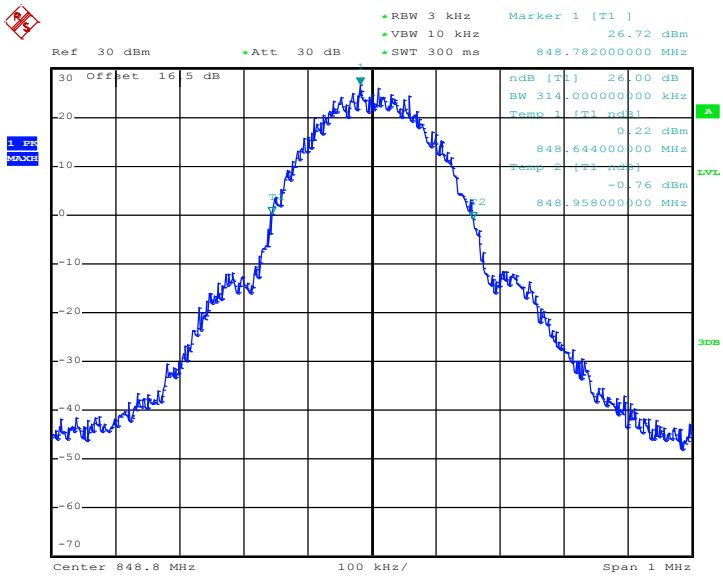
Date: 18.SEP.2012 09:43:22

99% Occupied Bandwidth Plot on Channel 251 (848.8 MHz)



Date: 18.SEP.2012 09:54:26

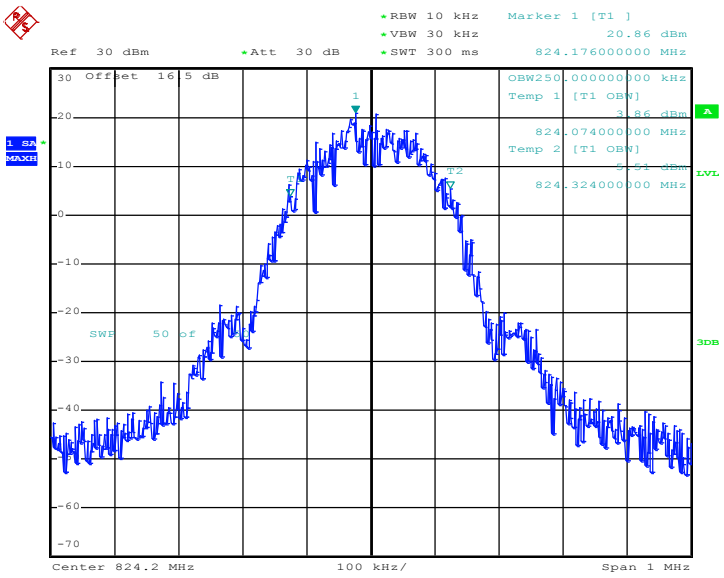
26dB Bandwidth Plot on Channel 251 (848.8 MHz)



Date: 18.SEP.2012 09:43:48

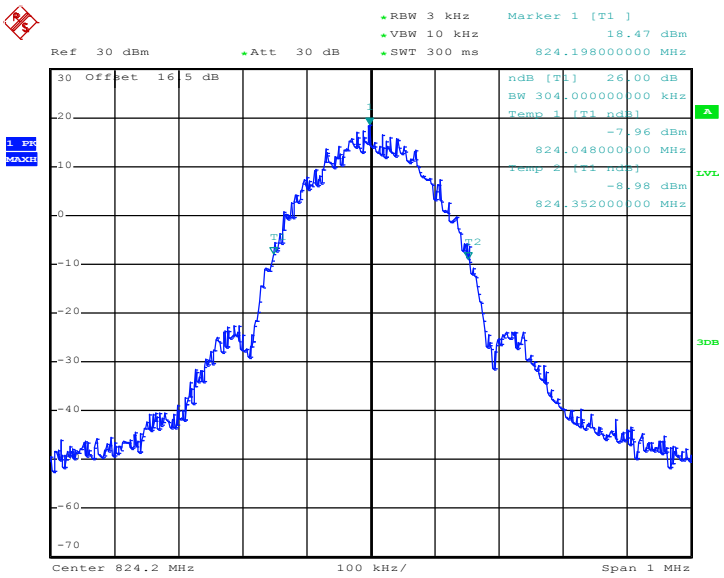
Band :	GSM 850	Test Mode :	EDGE 8 Link

99% Occupied Bandwidth Plot on Channel 128 (824.2 MHz)



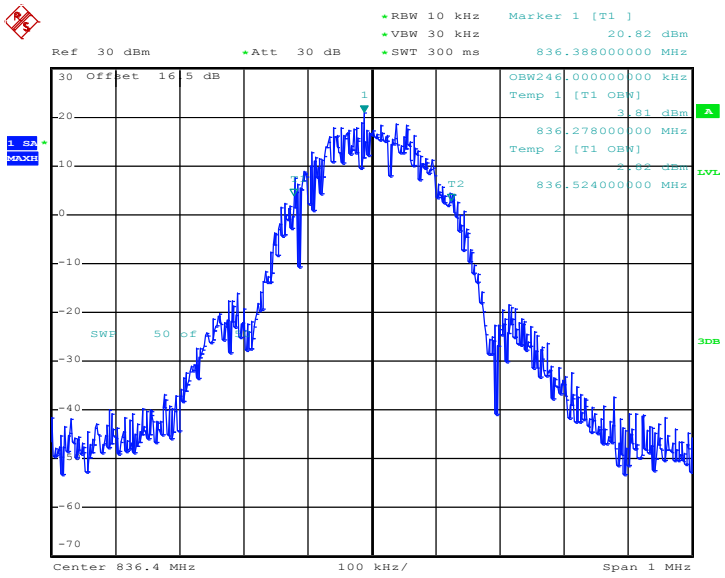
Date: 18.SEP.2012 10:44:00

26dB Bandwidth Plot on Channel 128 (824.2 MHz)



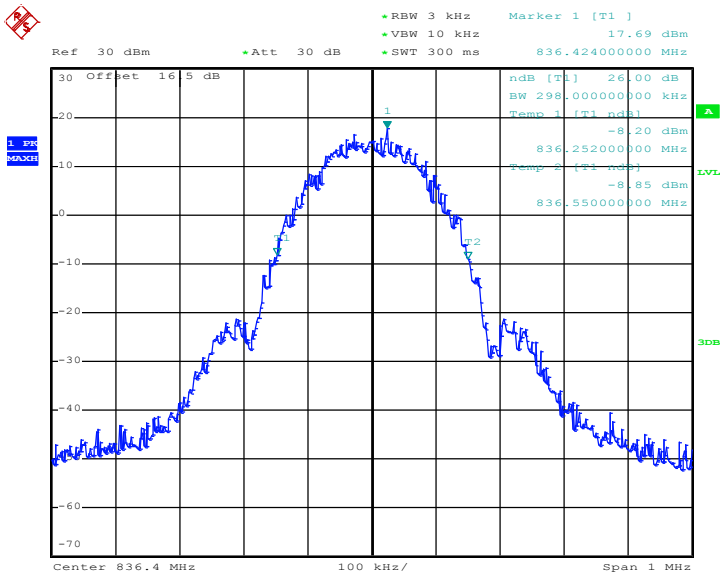
Date: 18.SEP.2012 10:37:22

99% Occupied Bandwidth Plot on Channel 189 (836.4 MHz)



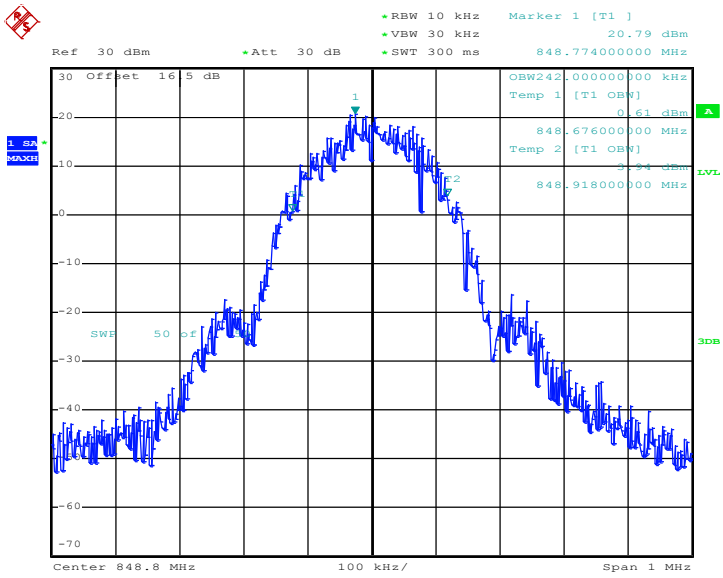
Date: 18.SEP.2012 10:44:19

26dB Bandwidth Plot on Channel 189 (836.4 MHz)



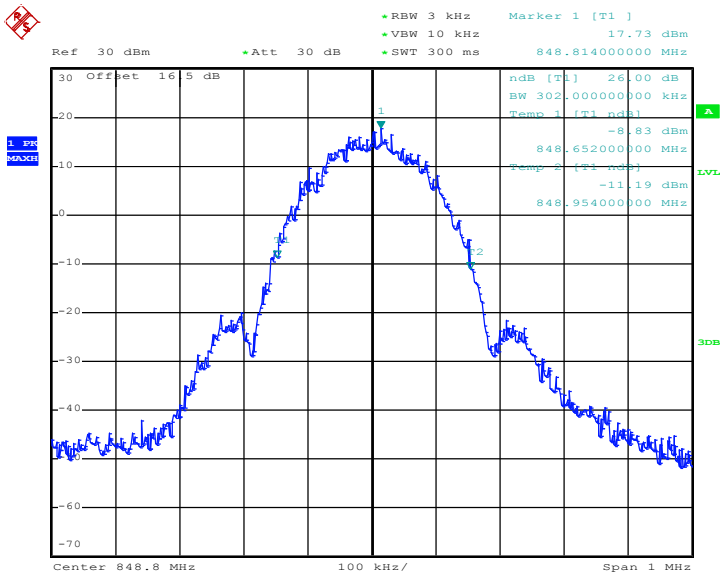
Date: 18.SEP.2012 10:37:48

99% Occupied Bandwidth Plot on Channel 251 (848.8 MHz)



Date: 18.SEP.2012 10:44:39

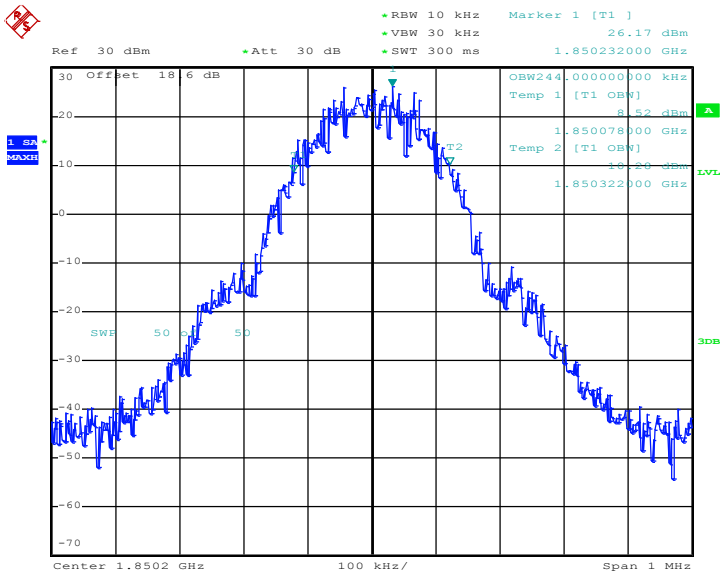
26dB Bandwidth Plot on Channel 251 (848.8 MHz)



Date: 18.SEP.2012 10:38:14

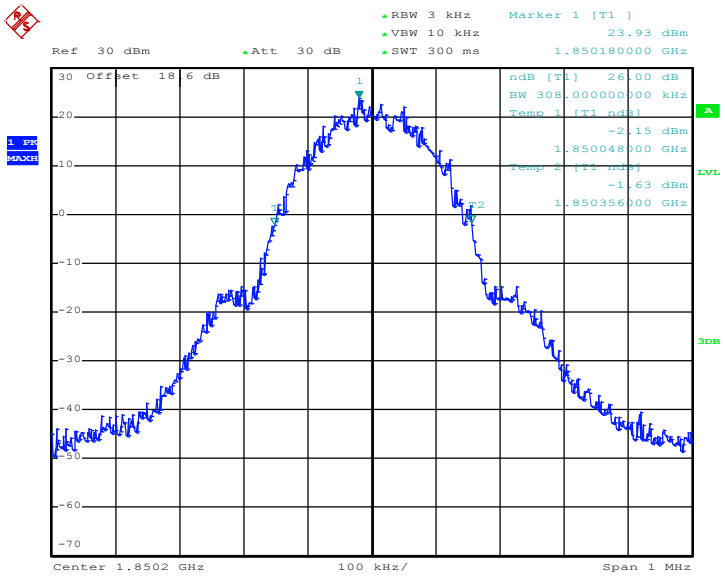
Band :	GSM 1900	Test Mode :	GPRS 8 Link

99% Occupied Bandwidth Plot on Channel 512 (1850.2 MHz)



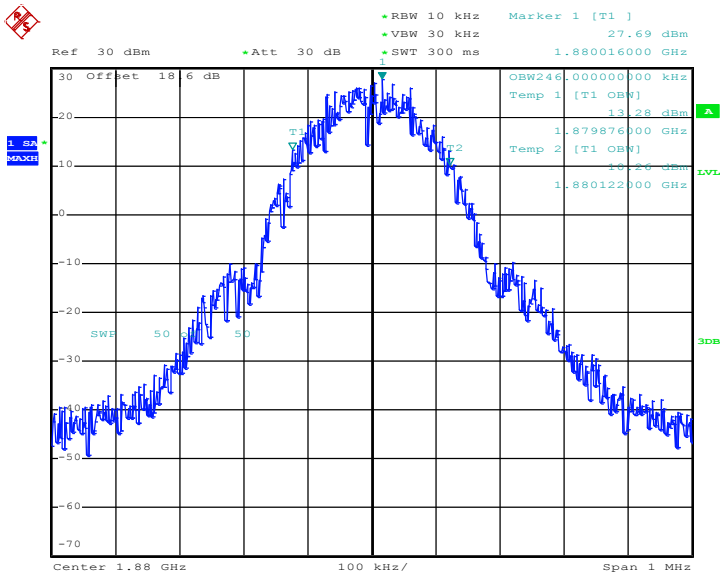
Date: 18.SEP.2012 13:44:49

26dB Bandwidth Plot on Channel 512 (1850.2 MHz)



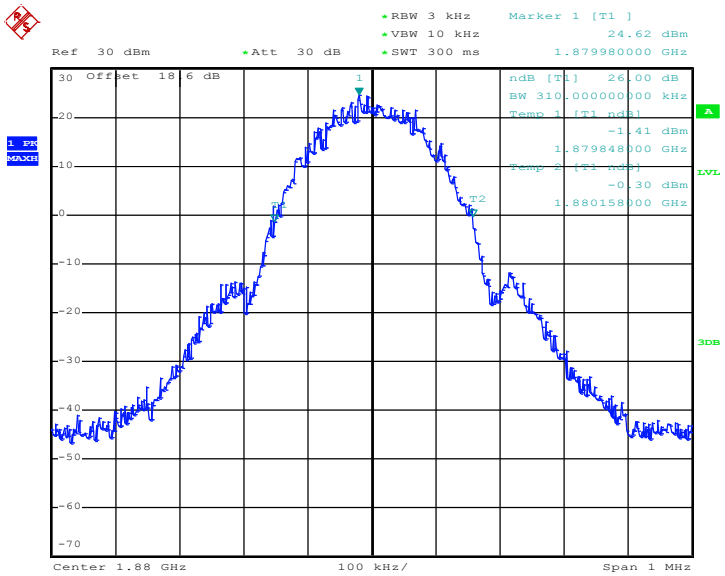
Date: 18.SEP.2012 13:35:34

99% Occupied Bandwidth Plot on Channel 661 (1880.0 MHz)



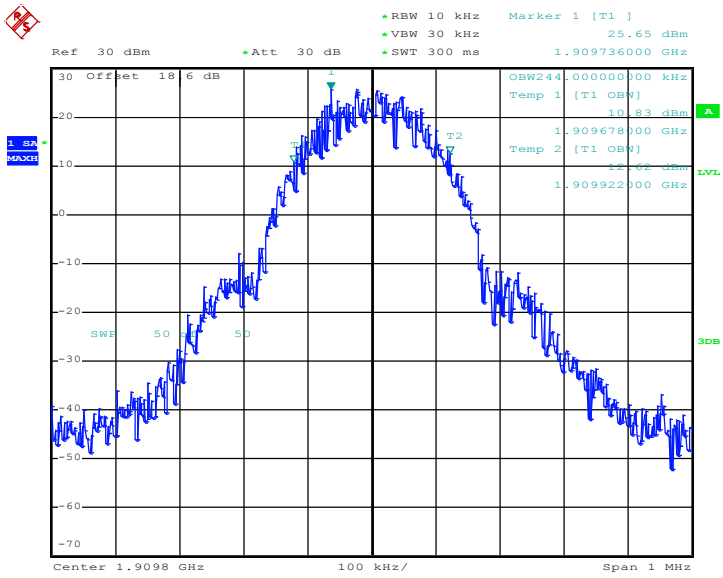
Date: 18.SEP.2012 13:45:08

26dB Bandwidth Plot on Channel 661 (1880.0 MHz)



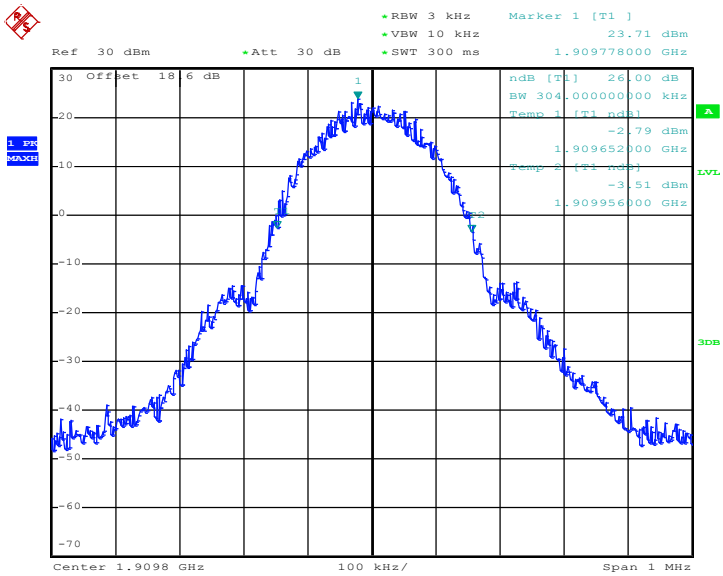
Date: 18.SEP.2012 13:36:00

99% Occupied Bandwidth Plot on Channel 810 (1909.8 MHz)



Date: 18.SEP.2012 13:45:28

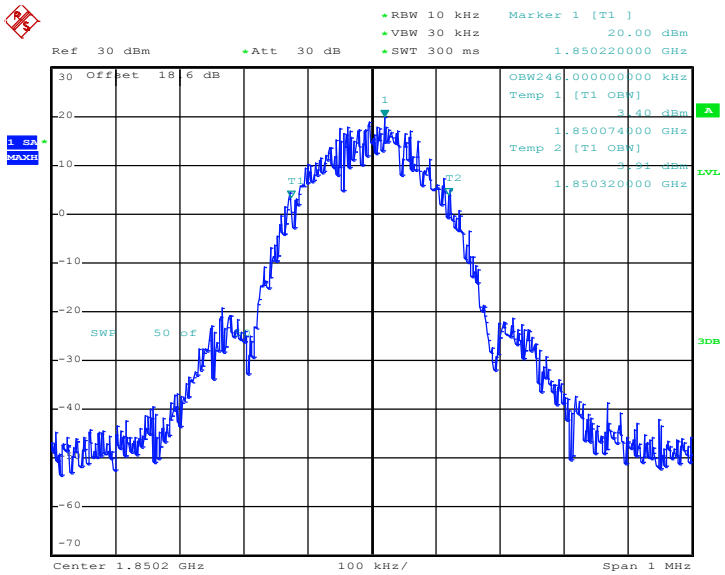
26dB Bandwidth Plot on Channel 810 (1909.8 MHz)



Date: 18.SEP.2012 13:36:26

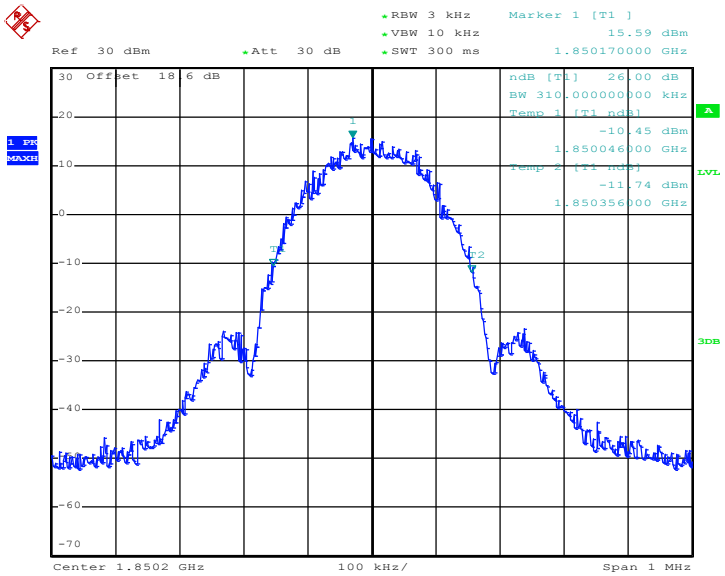
Band :	GSM 1900	Test Mode :	EDGE 8 Link

99% Occupied Bandwidth Plot on Channel 512 (1850.2 MHz)



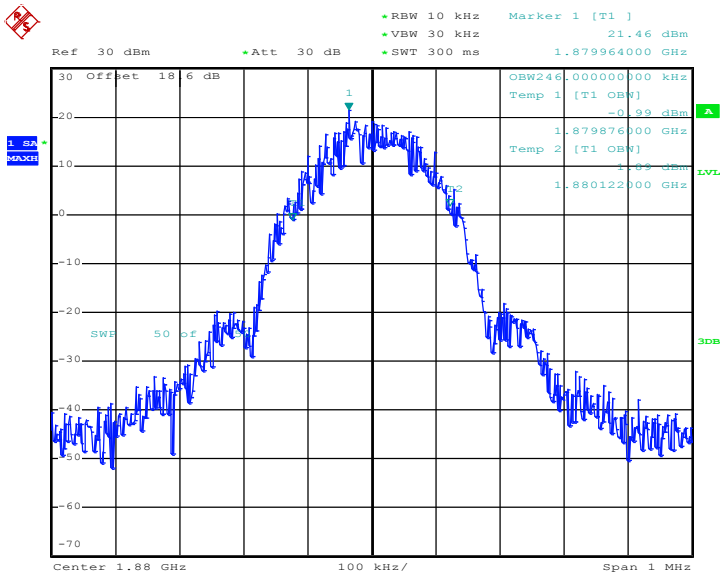
Date: 18.SEP.2012 15:05:17

26dB Bandwidth Plot on Channel 512 (1850.2 MHz)



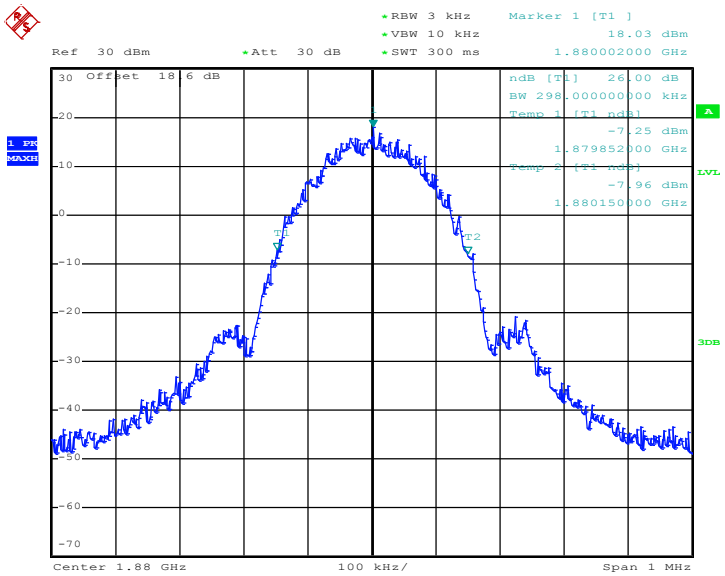
Date: 18.SEP.2012 14:56:24

99% Occupied Bandwidth Plot on Channel 661 (1880.0 MHz)



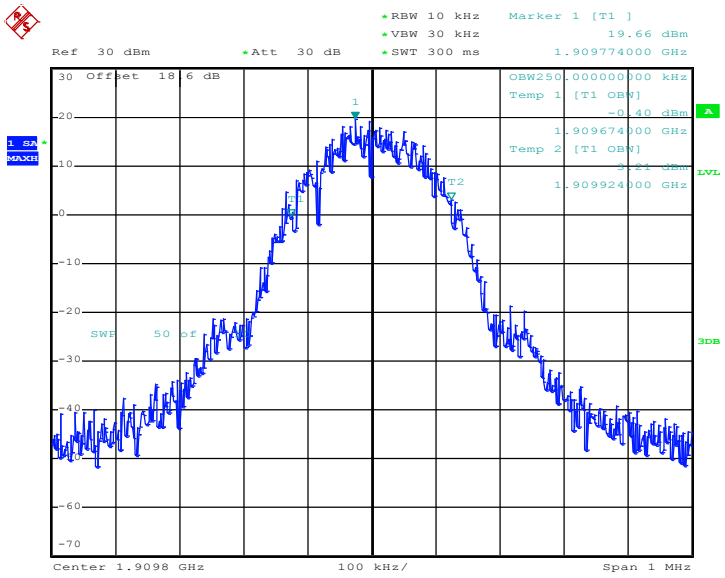
Date: 18.SEP.2012 15:05:36

26dB Bandwidth Plot on Channel 661 (1880.0 MHz)



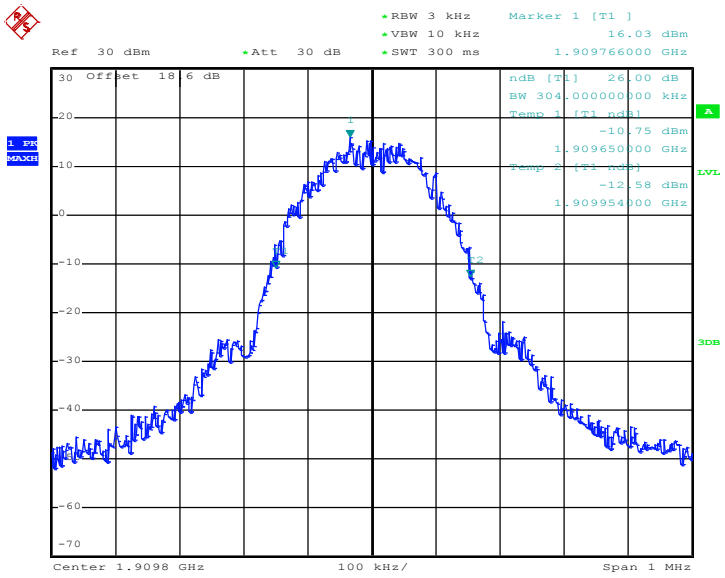
Date: 18.SEP.2012 14:56:50

99% Occupied Bandwidth Plot on Channel 810 (1909.8 MHz)



Date: 18.SEP.2012 15:05:55

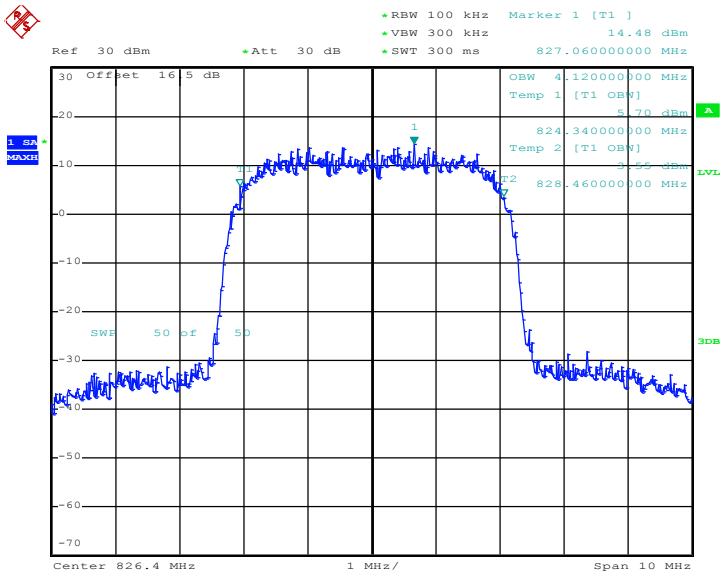
26dB Bandwidth Plot on Channel 810 (1909.8 MHz)



Date: 18.SEP.2012 14:57:16

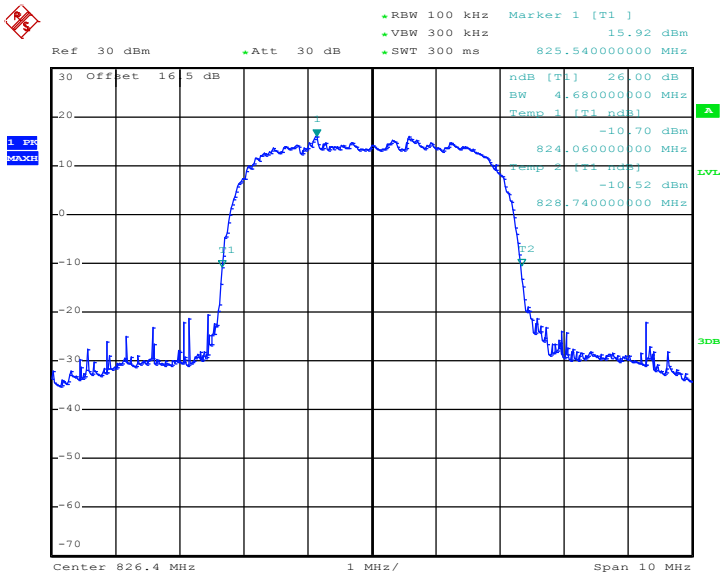
Band :	WCDMA Band V	Test Mode :	RMC 12.2Kbps Link

99% Occupied Bandwidth Plot on Channel 4132 (826.4 MHz)



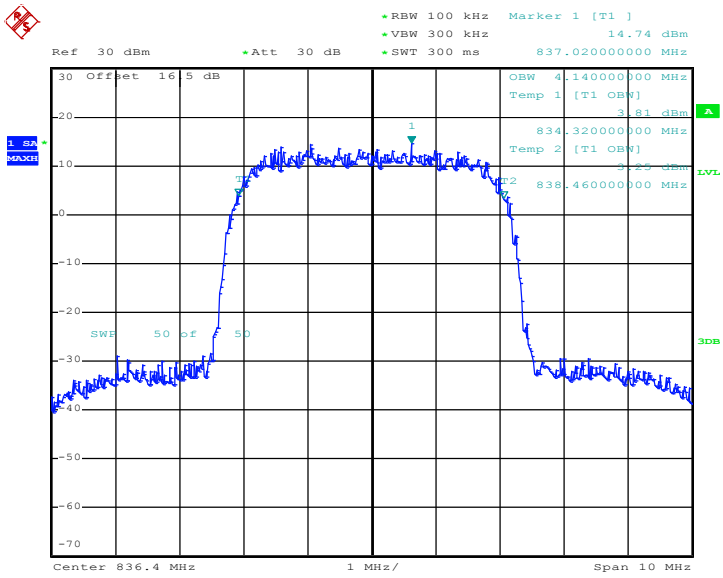
Date: 18.SEP.2012 11:11:03

26dB Bandwidth Plot on Channel 4132 (826.4 MHz)



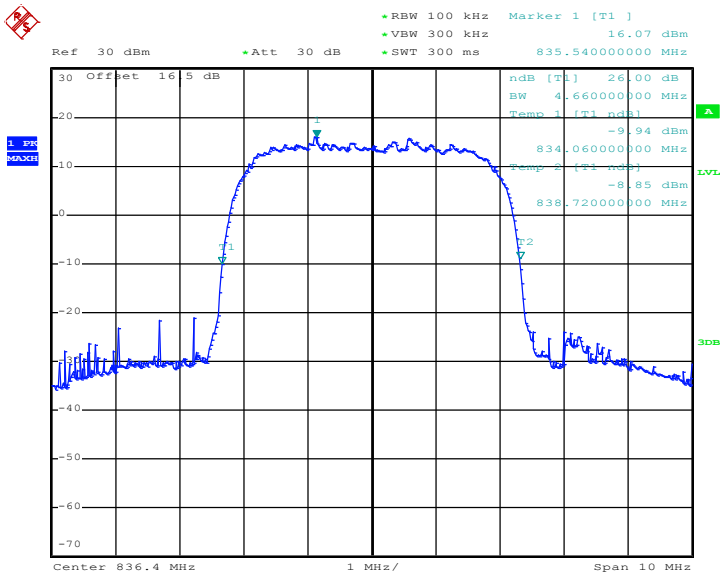
Date: 18.SEP.2012 11:08:32

99% Occupied Bandwidth Plot on Channel 4182 (836.4 MHz)



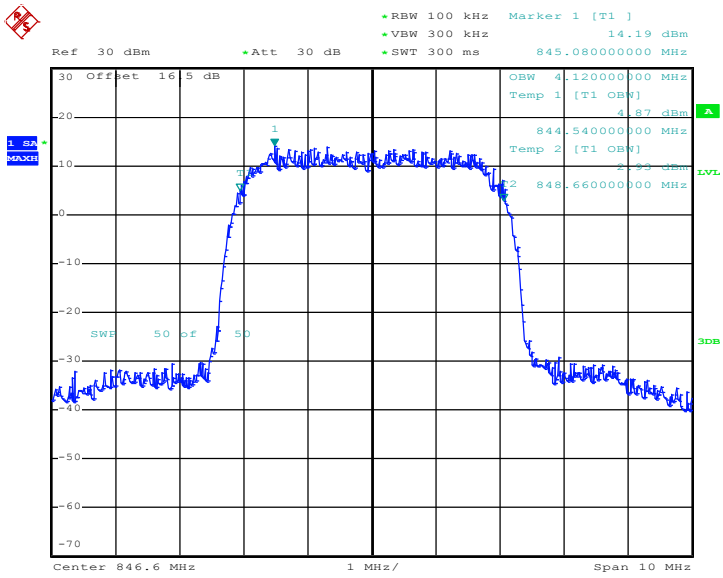
Date: 18.SEP.2012 11:11:23

26dB Bandwidth Plot on Channel 4182 (836.4 MHz)



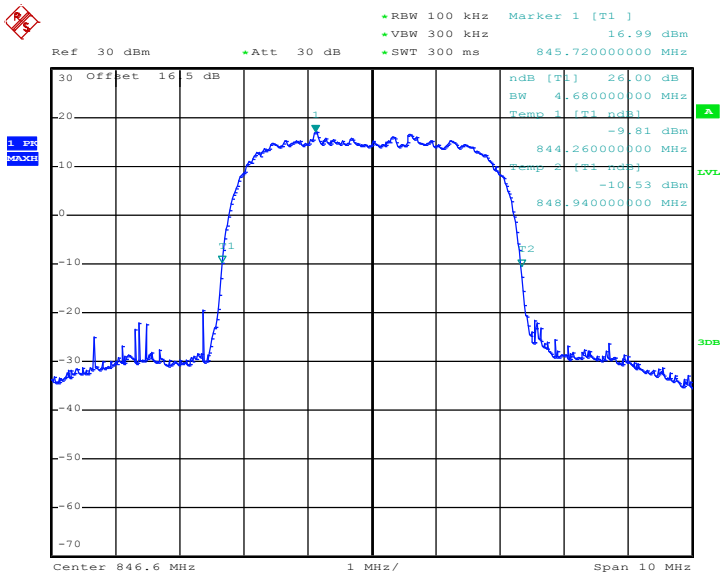
Date: 18.SEP.2012 11:08:58

99% Occupied Bandwidth Plot on Channel 4233 (846.6 MHz)



Date: 18.SEP.2012 11:11:43

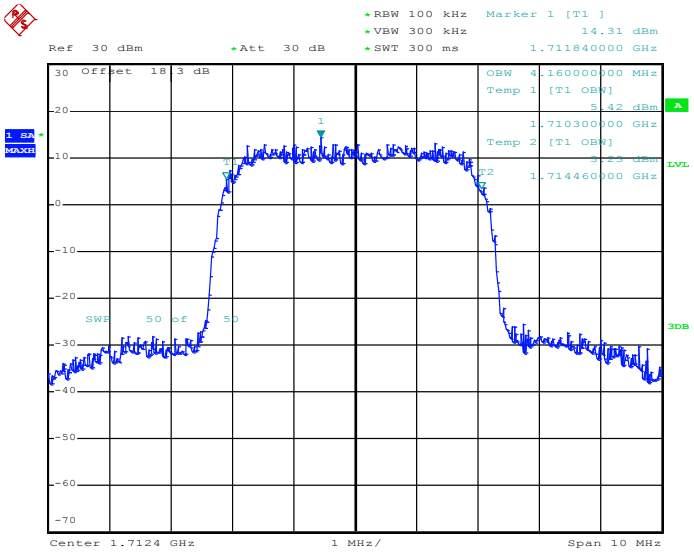
26dB Bandwidth Plot on Channel 4233 (846.6 MHz)



Date: 18.SEP.2012 11:09:24

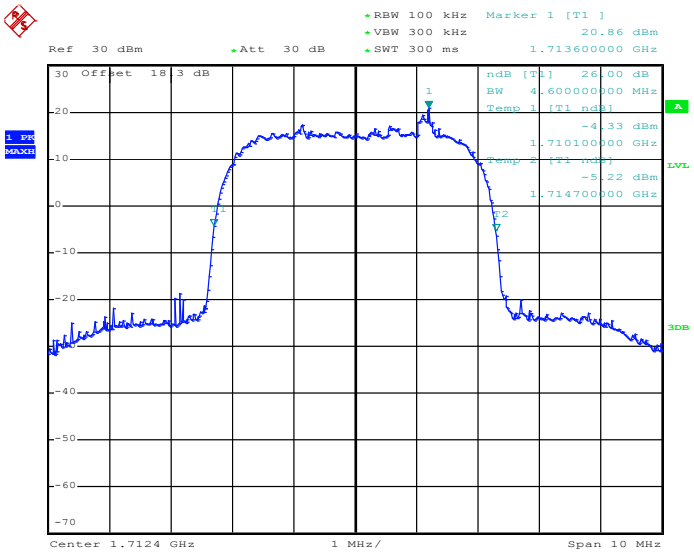
Band :	WCDMA Band IV	Test Mode :	RMC 12.2Kbps Link

99% Occupied Bandwidth Plot on Channel 1312 (1712.4 MHz)



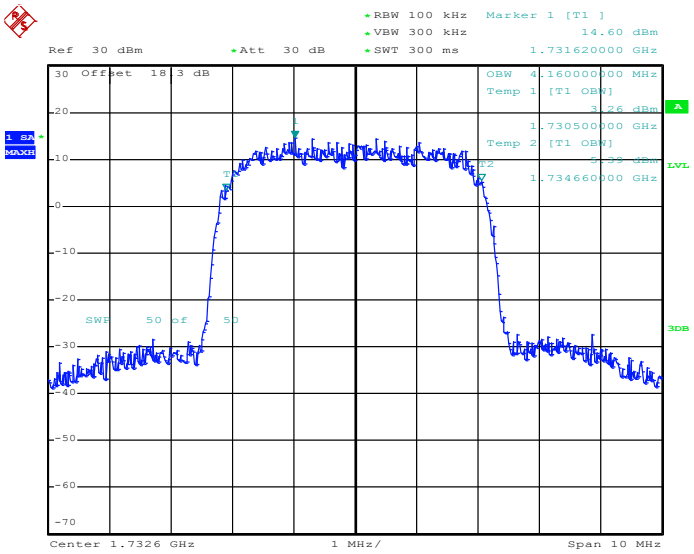
Date: 18.SEP.2012 11:33:58

26dB Bandwidth Plot on Channel 1312 (1712.4 MHz)



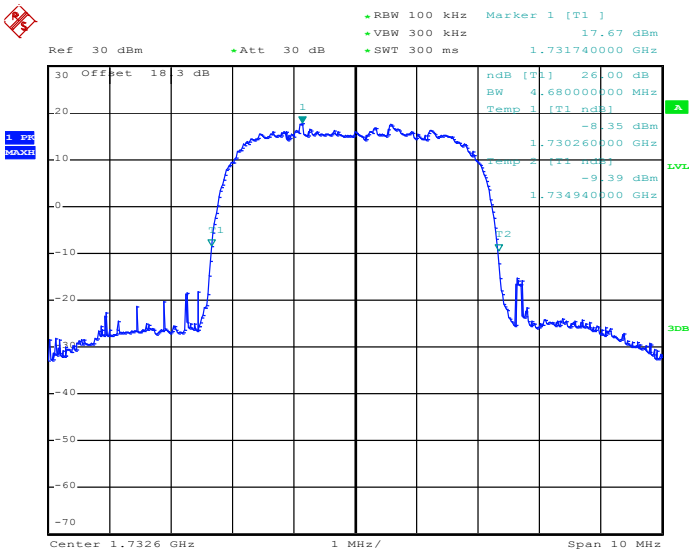
Date: 18.SEP.2012 11:31:26

99% Occupied Bandwidth Plot on Channel 1413 (1732.6 MHz)



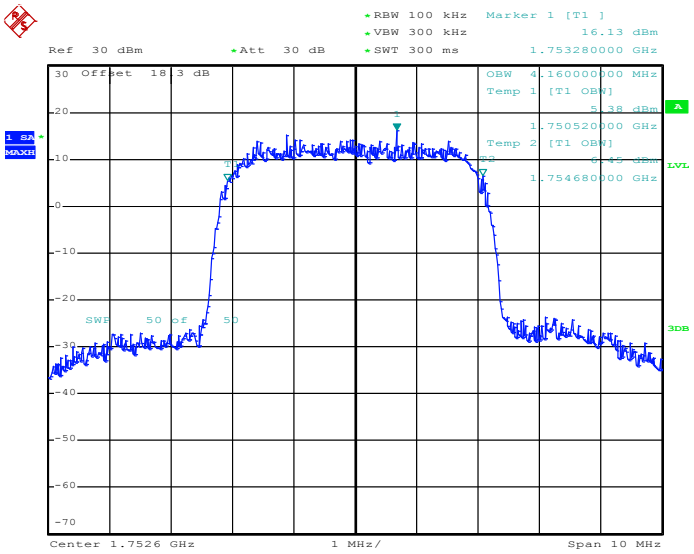
Date: 18.SEP.2012 11:34:18

26dB Bandwidth Plot on Channel 1413 (1732.6 MHz)



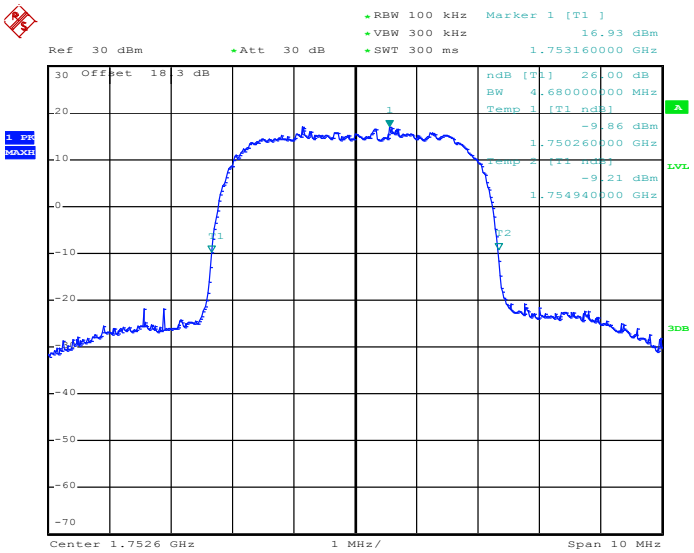
Date: 18.SEP.2012 11:31:52

99% Occupied Bandwidth Plot on Channel 1513 (1752.6 MHz)



Date: 18.SEP.2012 11:34:38

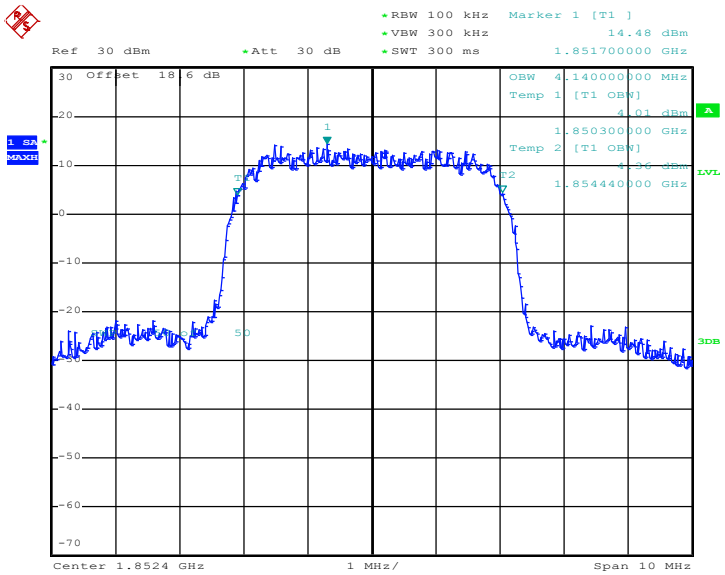
26dB Bandwidth Plot on Channel 1513 (1752.6 MHz)



Date: 18.SEP.2012 11:32:19

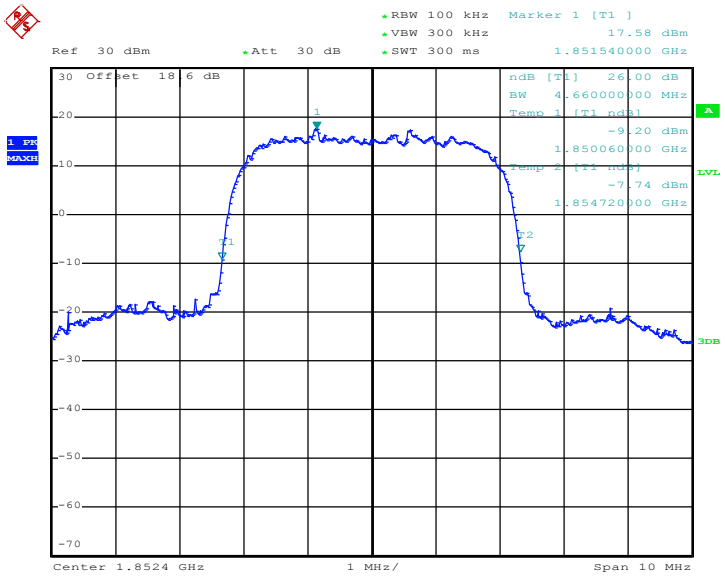
Band :	WCDMA Band II	Test Mode :	RMC 12.2Kbps Link

99% Occupied Bandwidth Plot on Channel 9262 (1852.4 MHz)



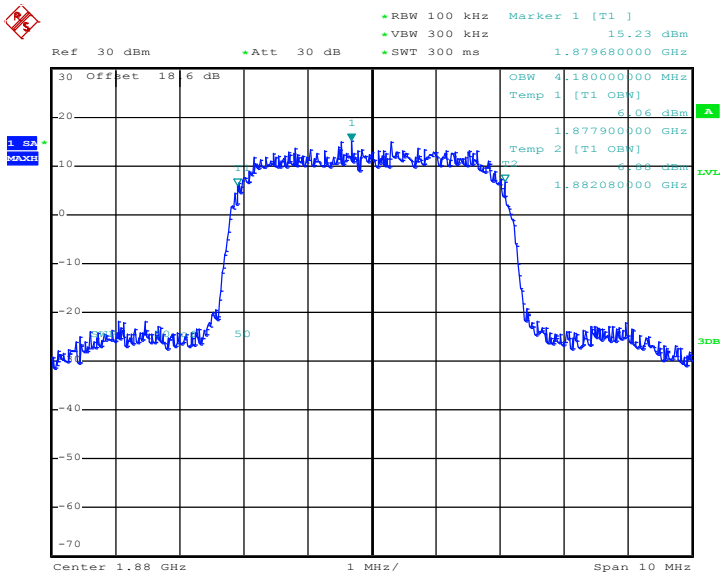
Date: 18.SEP.2012 11:56:02

26dB Bandwidth Plot on Channel 9262 (1852.4 MHz)



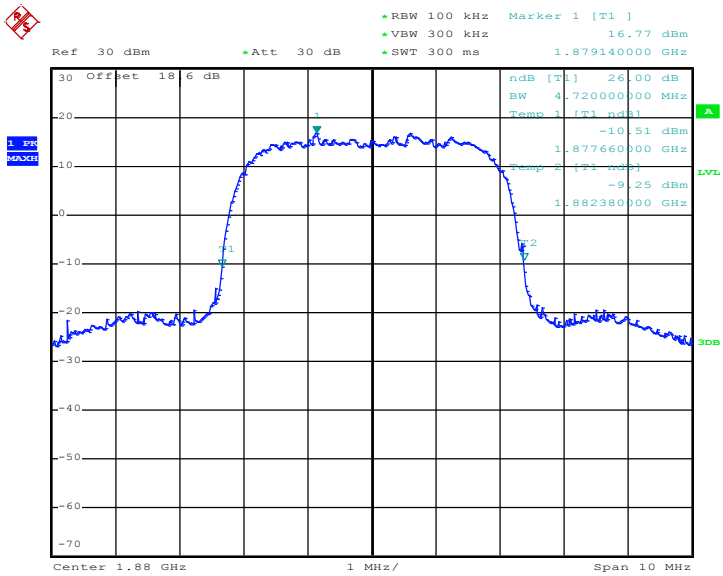
Date: 18.SEP.2012 11:53:31

99% Occupied Bandwidth Plot on Channel 9400 (1880.0 MHz)



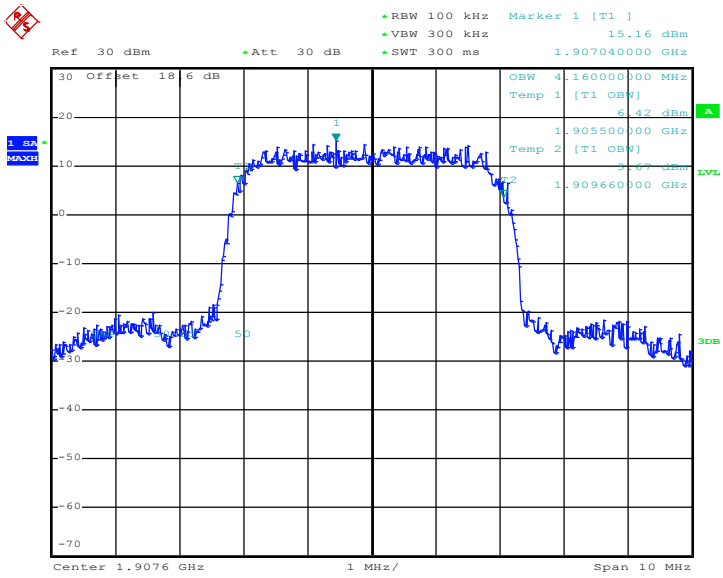
Date: 18.SEP.2012 11:56:23

26dB Bandwidth Plot on Channel 9400 (1880.0 MHz)



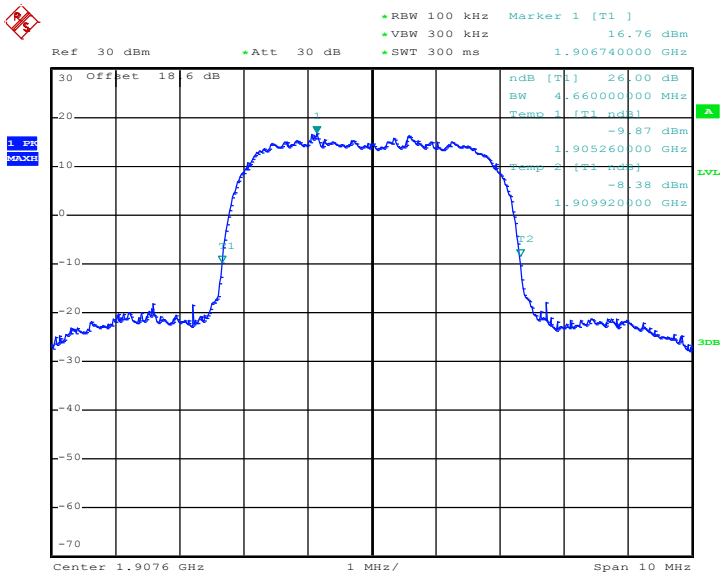
Date: 18.SEP.2012 11:53:57

99% Occupied Bandwidth Plot on Channel 9538 (1907.6 MHz)



Date: 18.SEP.2012 11:56:43

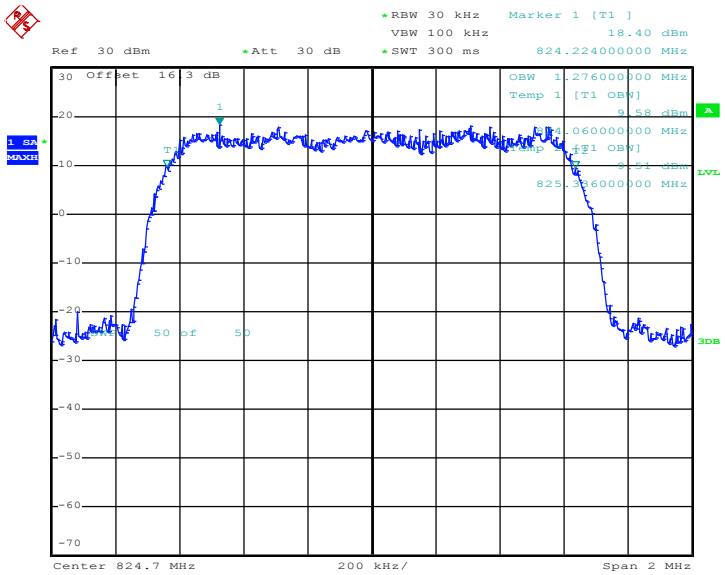
26dB Bandwidth Plot on Channel 9538 (1907.6 MHz)



Date: 18.SEP.2012 11:54:23

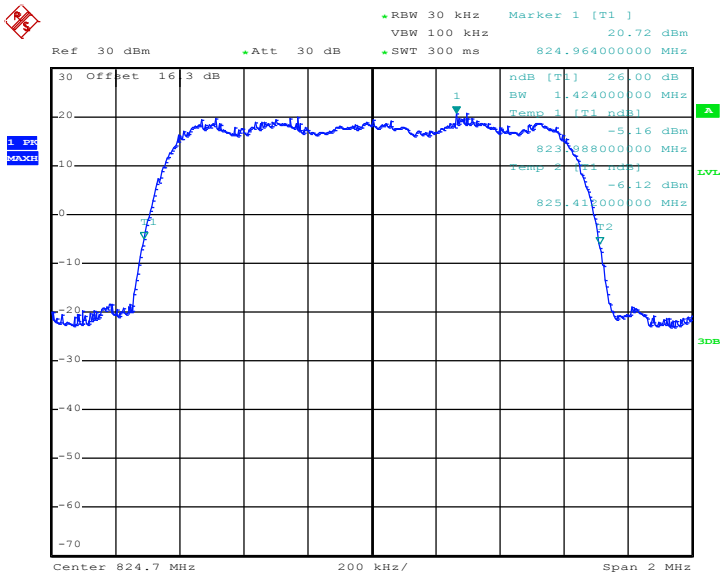
Band :	CDMA2000 BC0	Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K

99% Occupied Bandwidth Plot on Channel 1013 (824.7 MHz)



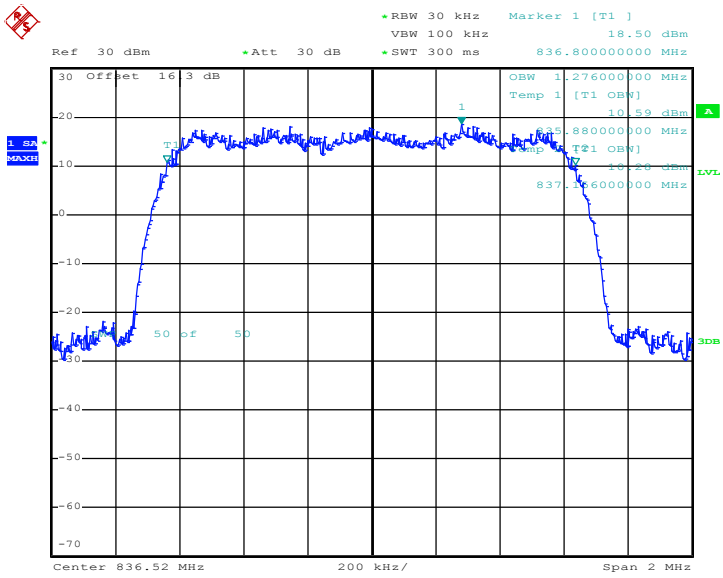
Date: 2.NOV.2012 10:36:39

26dB Bandwidth Plot on Channel 1013 (824.7 MHz)



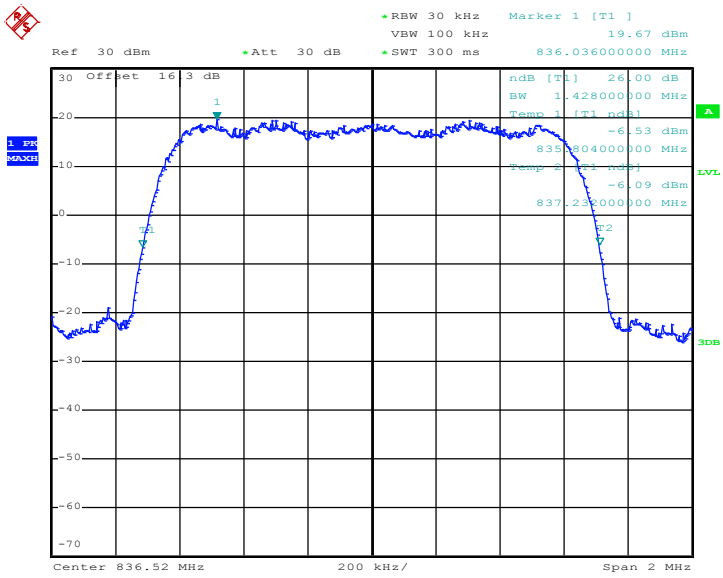
Date: 2.NOV.2012 10:27:40

99% Occupied Bandwidth Plot on Channel 384 (836.52 MHz)



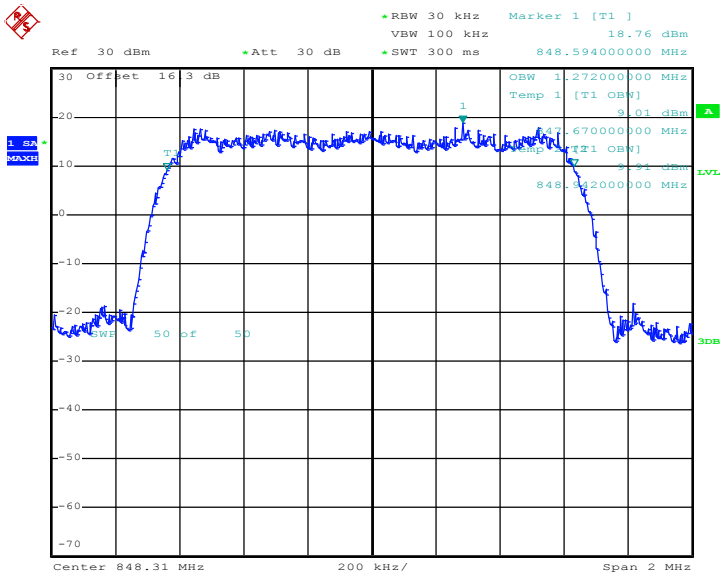
Date: 2.NOV.2012 10:34:11

26dB Bandwidth Plot on Channel 384 (836.52 MHz)



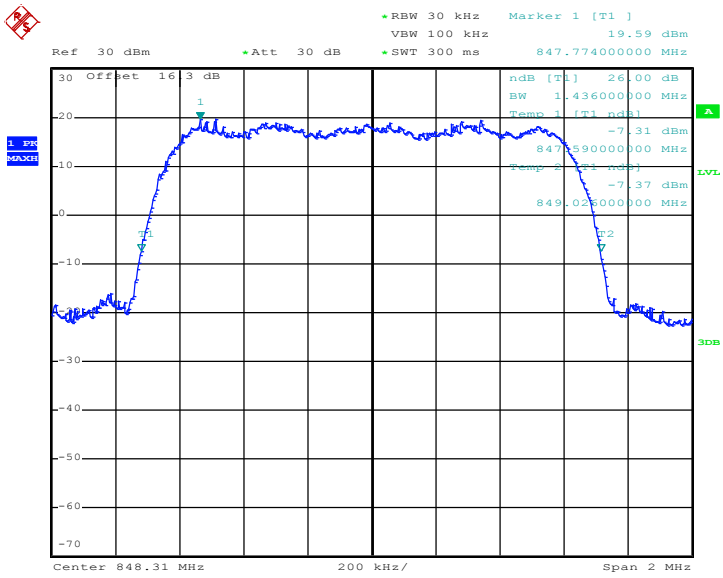
Date: 2.NOV.2012 10:28:51

99% Occupied Bandwidth Plot on Channel 777 (848.31 MHz)



Date: 2.NOV.2012 10:32:55

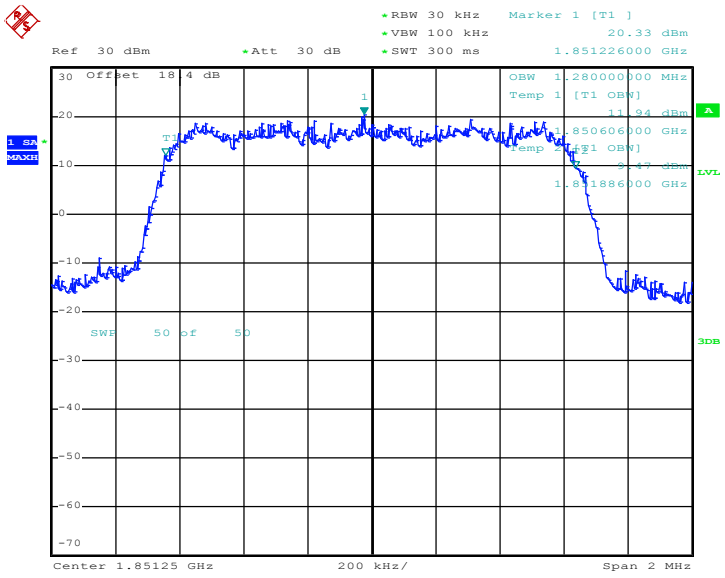
26dB Bandwidth Plot on Channel 777 (848.31 MHz)



Date: 2.NOV.2012 10:29:41

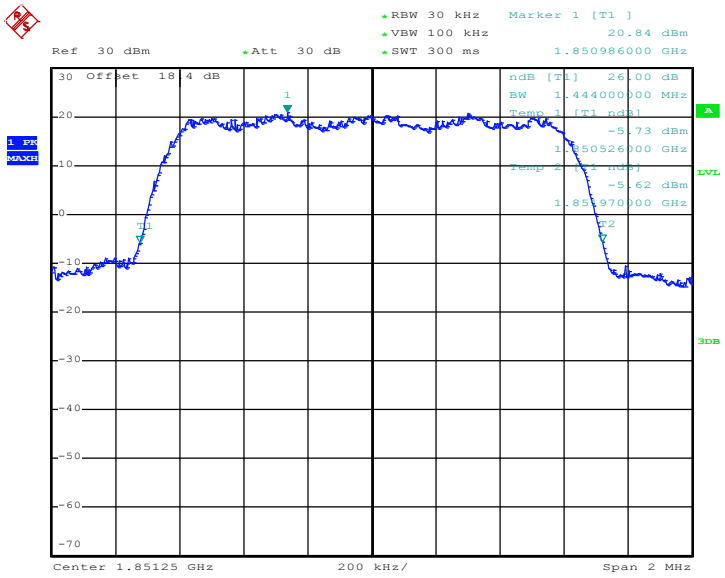
Band :	CDMA2000 BC1	Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K

99% Occupied Bandwidth Plot on Channel 25 (1851.24 MHz)



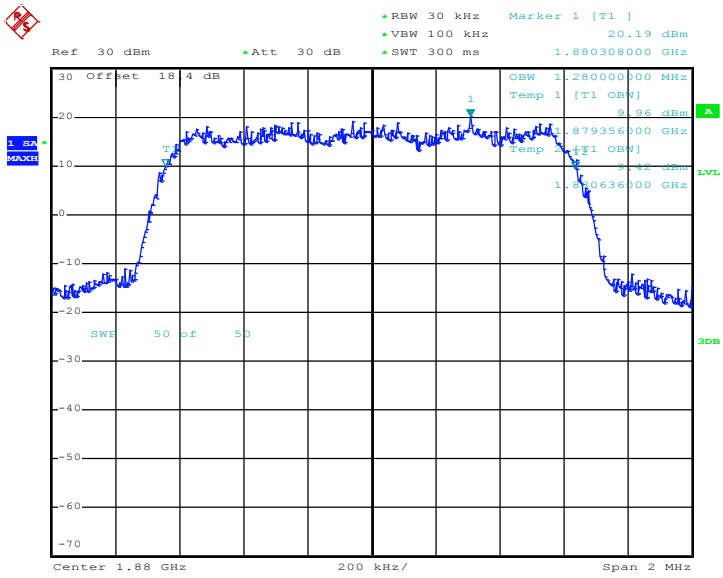
Date: 2.NOV.2012 13:24:32

26dB Bandwidth Plot on Channel 25 (1851.24 MHz)



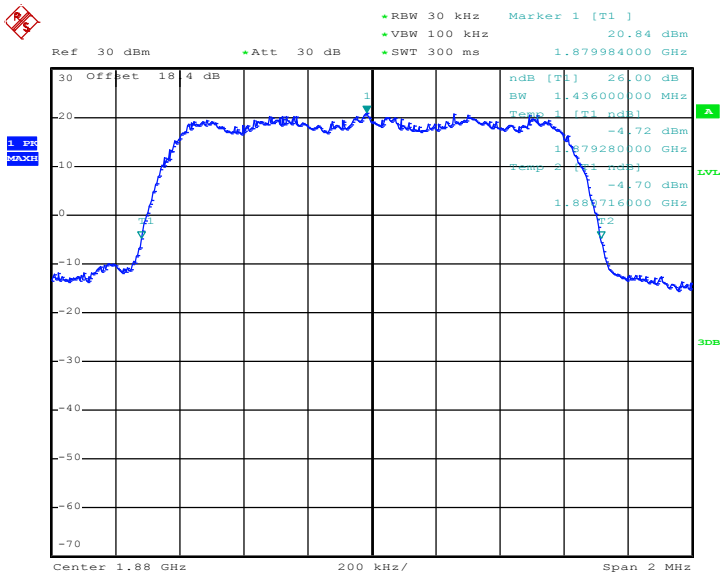
Date: 2.NOV.2012 13:19:40

99% Occupied Bandwidth Plot on Channel 600 (1880.0 MHz)



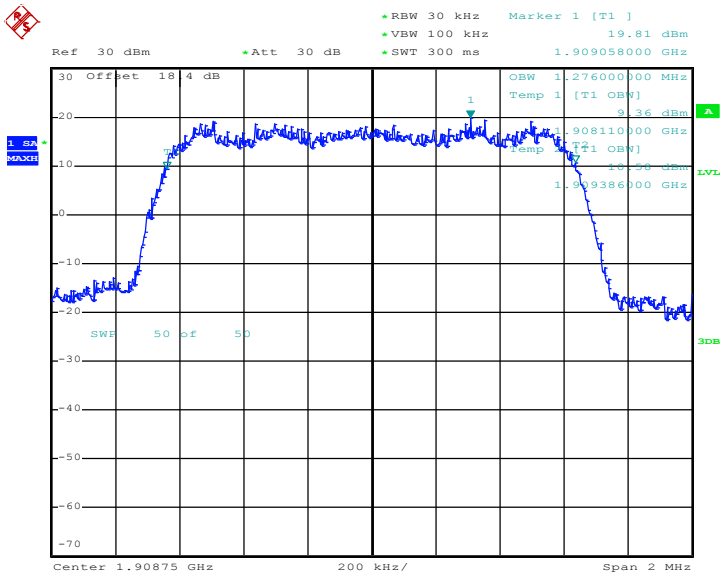
Date: 2.NOV.2012 13:25:36

26dB Bandwidth Plot on Channel 600 (1880.0 MHz)



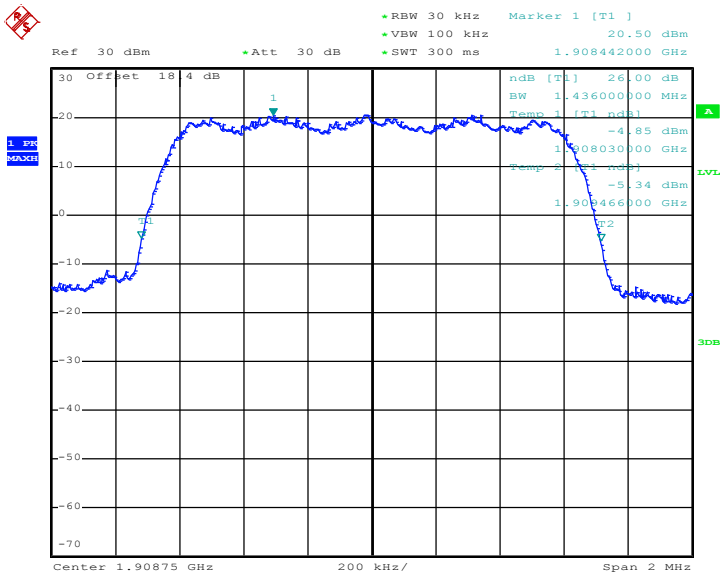
Date: 2.NOV.2012 13:18:52

99% Occupied Bandwidth Plot on Channel 1175 (1908.75 MHz)



Date: 2.NOV.2012 13:28:42

26dB Bandwidth Plot on Channel 1175 (1908.75 MHz)



Date: 2.NOV.2012 13:17:57

3.4 Band Edge Measurement

3.4.1 Description of Band Edge Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

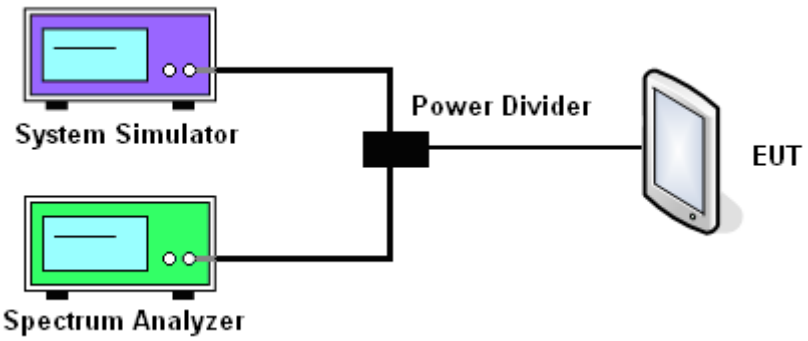
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The band edges of low and high channels for the highest RF powers were measured. Setting RBW as roughly BW/100.
3. The RBW was replaced by 10 kHz, slightly smaller than the value in (2), due to the spectrum analyzer limitation to set the exact value. A worst case correction factor of 10*log (1% emission-BW/measurement RBW) was compensated.

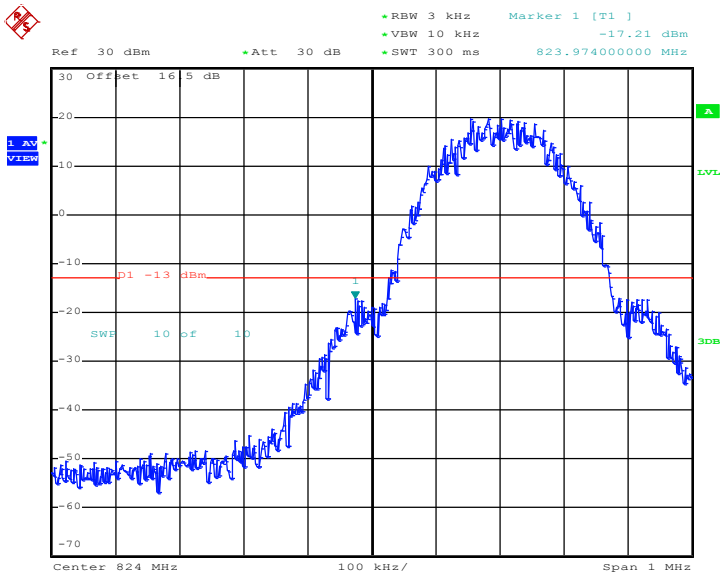
3.4.4 Test Setup



3.4.5 Test Result (Plots) of Conducted Band Edge

Band :	GSM850	Test Mode :	GPRS 8 Link
Correction Factor :	0.23dB	Maximum 26dB Bandwidth :	0.316MHz
Band Edge :	-16.98dBm	Measurement Value :	-17.21dBm

Lower Band Edge Plot on Channel 128 (824.2 MHz)



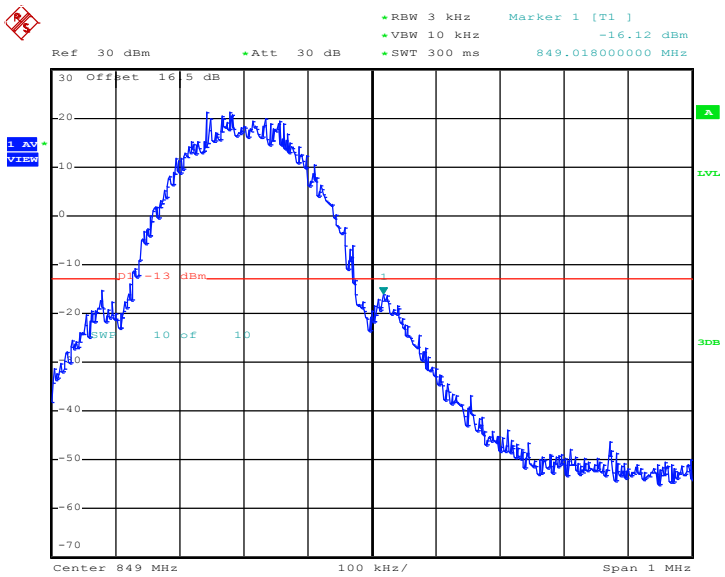
Date: 18.SEP.2012 09:47:29

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	GSM850	Test Mode :	GPRS 8 Link
Correction Factor :	0.23dB	Maximum 26dB Bandwidth :	0.316MHz
Band Edge :	-15.89dBm	Measurement Value :	-16.12dBm

Higher Band Edge Plot on Channel 251 (848.8 MHz)



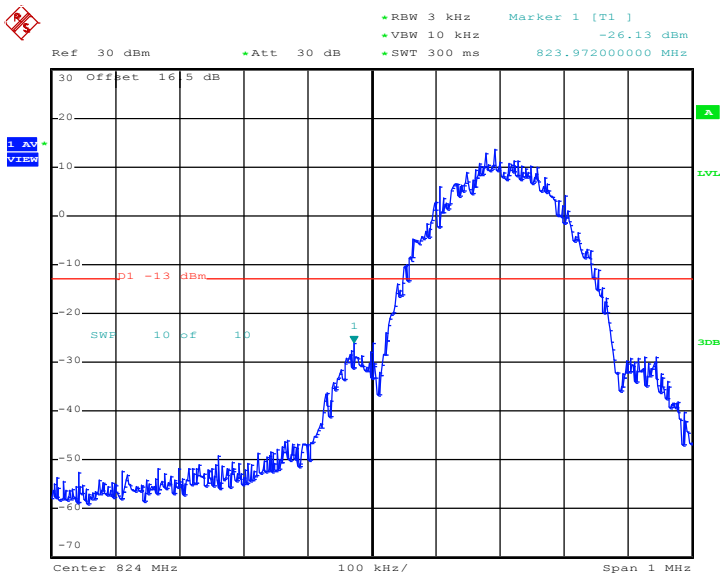
Date: 18.SEP.2012 09:47:58

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	GSM850	Test Mode :	EDGE 8 Link
Correction Factor :	0.06dB	Maximum 26dB Bandwidth :	0.304MHz
Band Edge :	-26.07dBm	Measurement Value :	-26.13dBm

Lower Band Edge Plot on Channel 128 (824.2 MHz)



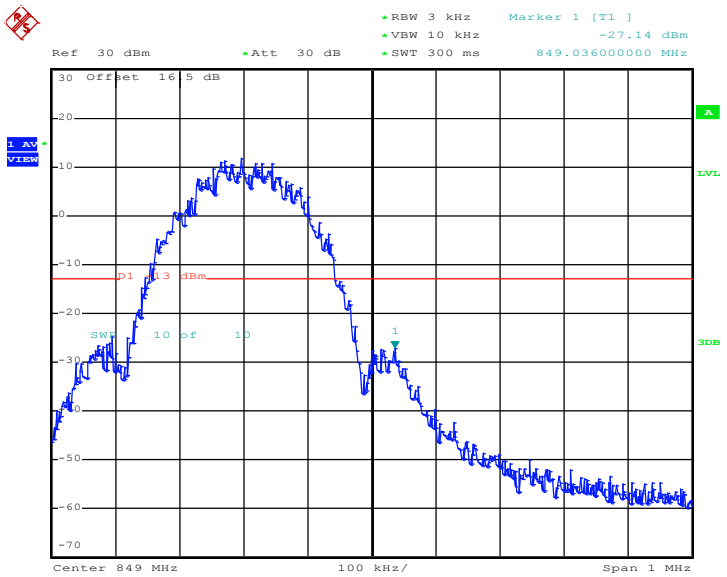
Date: 18.SEP.2012 10:41:54

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	GSM850	Test Mode :	EDGE 8 Link
Correction Factor :	0.06dB	Maximum 26dB Bandwidth :	0.304MHz
Band Edge :	-27.08dBm	Measurement Value :	-27.14dBm

Higher Band Edge Plot on Channel 251 (848.8 MHz)



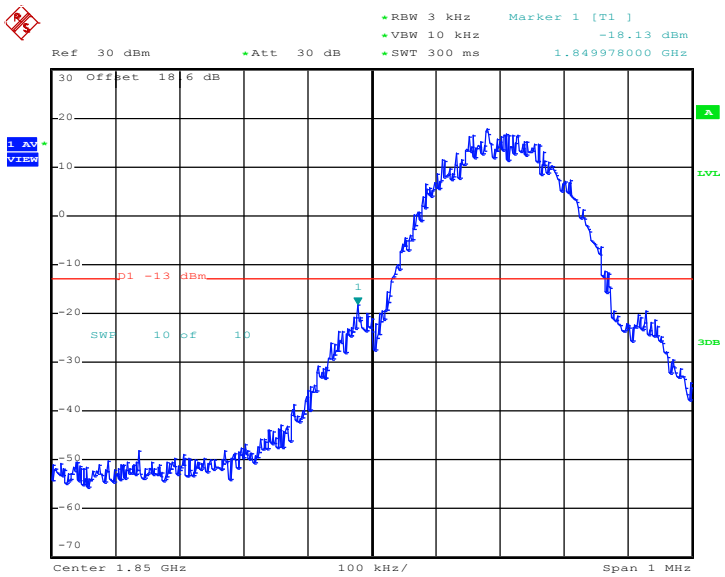
Date: 18.SEP.2012 10:42:23

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	GSM1900	Test Mode :	GPRS 8 Link
Correction Factor :	0.14dB	Maximum 26dB Bandwidth :	0.310MHz
Band Edge :	-17.99dBm	Measurement Value :	-18.13dBm

Lower Band Edge Plot on Channel 512 (1850.2 MHz)



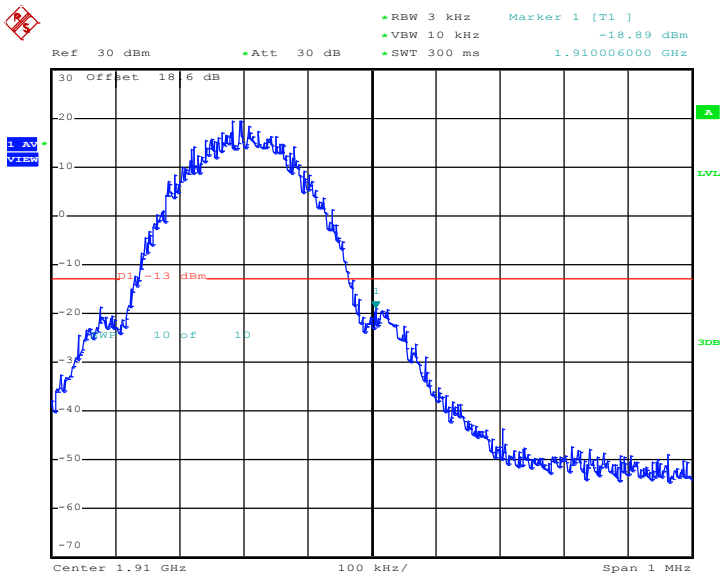
Date: 18.SEP.2012 13:40:06

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	GSM1900	Test Mode :	GPRS 8 Link
Correction Factor :	0.14dB	Maximum 26dB Bandwidth :	0.310MHz
Band Edge :	-18.75dBm	Measurement Value :	-18.89dBm

Higher Band Edge Plot on Channel 810 (1909.8 MHz)



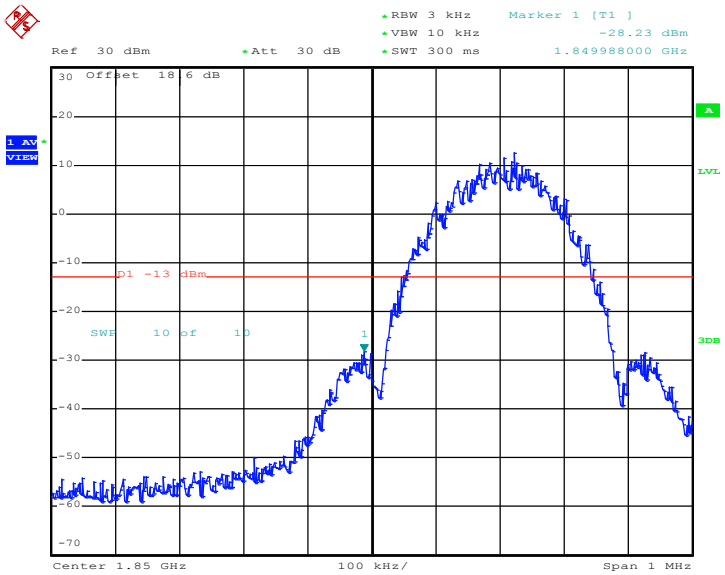
Date: 18.SEP.2012 13:40:35

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	GSM1900	Test Mode :	EDGE 8 Link
Correction Factor :	0.14dB	Maximum 26dB Bandwidth :	0.310MHz
Band Edge :	-28.09dBm	Measurement Value :	-28.23dBm

Lower Band Edge Plot on Channel 512 (1850.2 MHz)



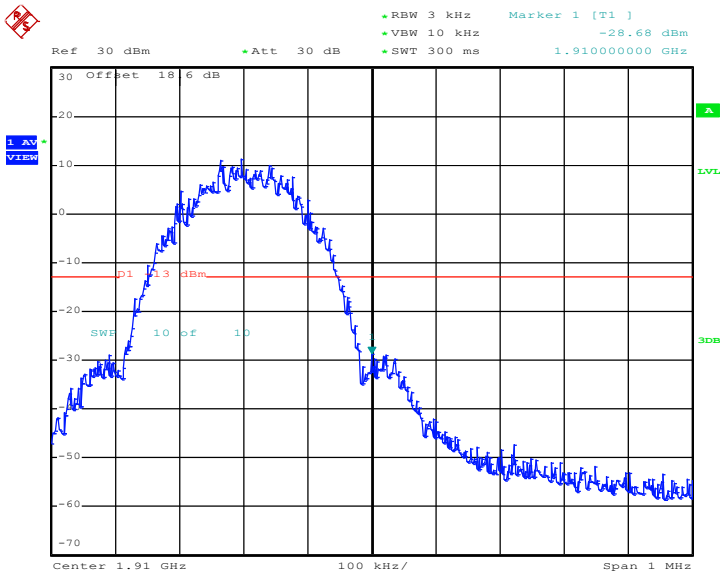
Date: 18.SEP.2012 15:00:56

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	GSM1900	Test Mode :	EDGE 8 Link
Correction Factor :	0.14dB	Maximum 26dB Bandwidth :	0.310MHz
Band Edge :	-28.54dBm	Measurement Value :	-28.68dBm

Higher Band Edge Plot on Channel 810 (1909.8 MHz)



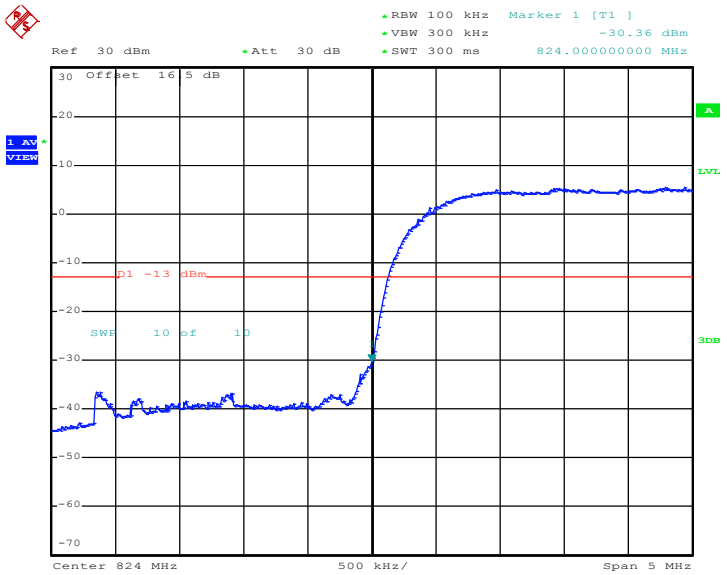
Date: 18.SEP.2012 15:01:22

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	WCDMA Band V	Test Mode :	RMC 12.2Kbps Link
Correction Factor :	-3.30dB	Maximum 26dB Bandwidth :	4.68MHz
Band Edge :	-33.66dBm	Measurement Value :	-30.36dBm

Lower Band Edge Plot on Channel 4132 (826.4 MHz)



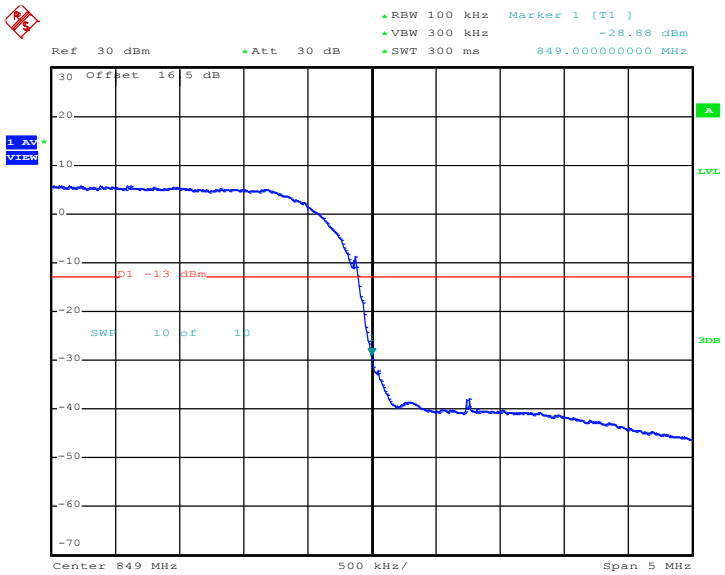
Date: 18.SEP.2012 11:15:09

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	WCDMA Band V	Test Mode :	RMC 12.2Kbps Link
Correction Factor :	-3.30dB	Maximum 26dB Bandwidth :	4.68MHz
Band Edge :	-32.18dBm	Measurement Value :	-28.88dBm

Higher Band Edge Plot on Channel 4233 (846.6 MHz)



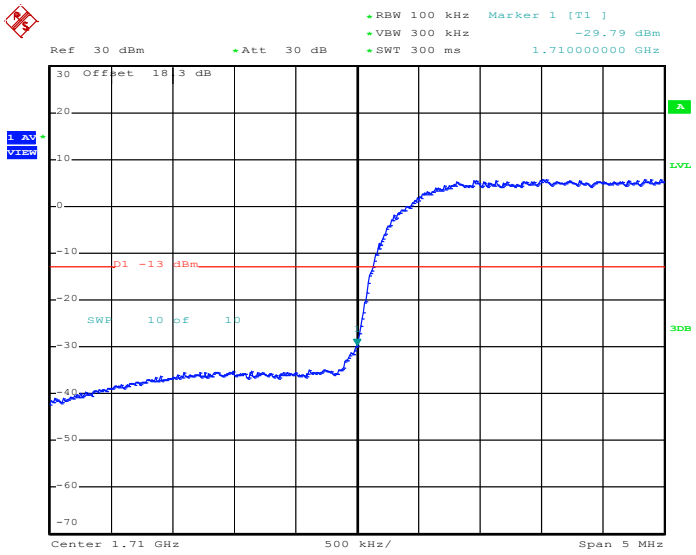
Date: 18.SEP.2012 11:15:38

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	WCDMA Band IV	Test Mode :	RMC 12.2Kbps Link
Correction Factor :	-3.30dB	Maximum 26dB Bandwidth :	4.68MHz
Band Edge :	-33.09dBm	Measurement Value :	-29.79dBm

Lower Band Edge Plot on Channel 1312 (1712.4 MHz)



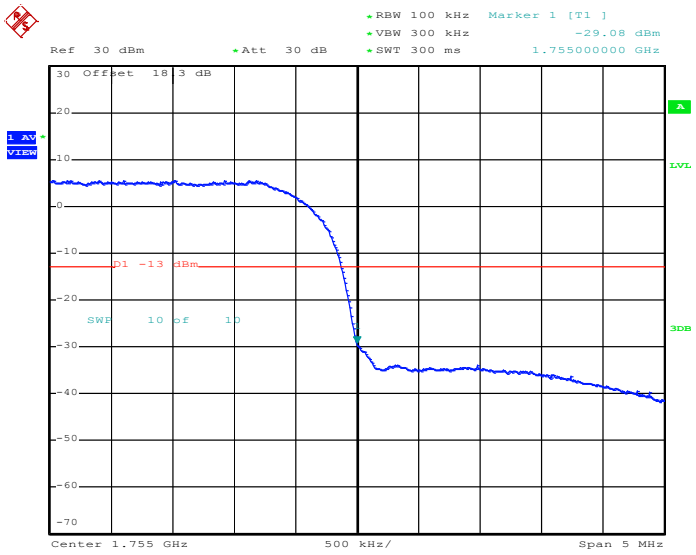
Date: 18.SEP.2012 11:48:17

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	WCDMA Band IV	Test Mode :	RMC 12.2Kbps Link
Correction Factor :	-3.30dB	Maximum 26dB Bandwidth :	4.68MHz
Band Edge :	-32.38dBm	Measurement Value :	-29.08dBm

Higher Band Edge Plot on Channel 1513 (1752.6 MHz)



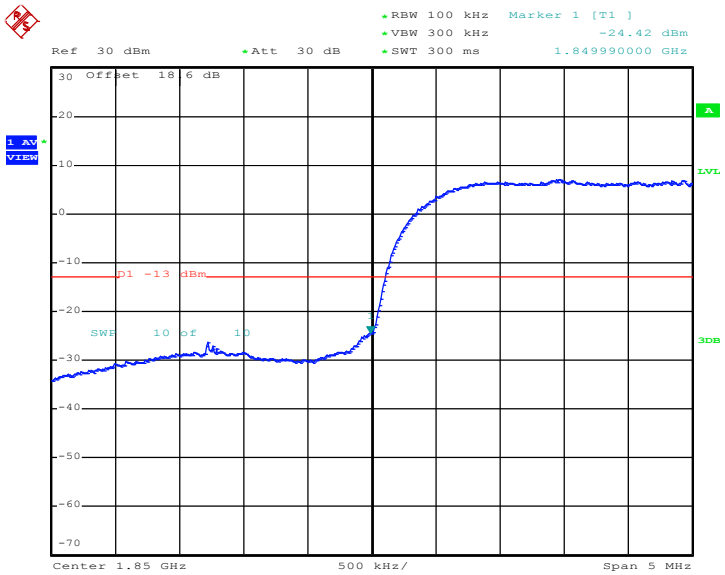
Date: 18.SEP.2012 11:48:46

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	WCDMA Band II	Test Mode :	RMC 12.2Kbps Link
Correction Factor :	-3.26dB	Maximum 26dB Bandwidth :	4.72MHz
Band Edge :	-27.68dBm	Measurement Value :	-24.42dBm

Lower Band Edge Plot on Channel 9262 (1852.4 MHz)



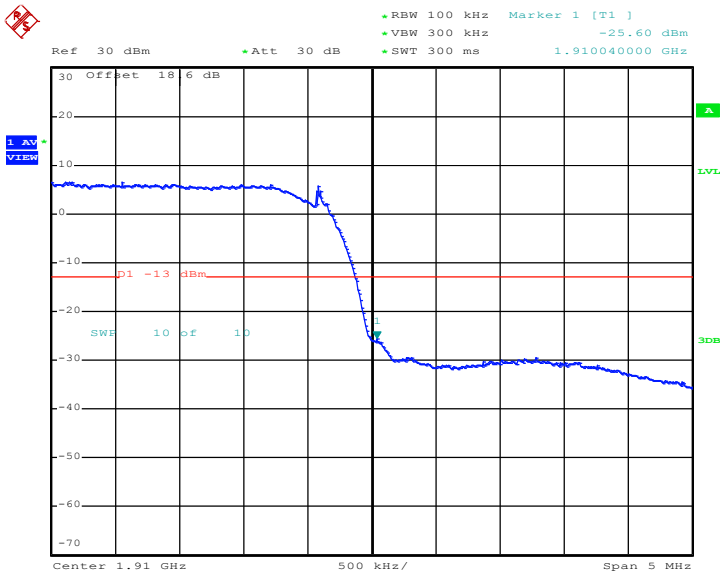
Date: 18.SEP.2012 11:58:06

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	WCDMA Band II	Test Mode :	RMC 12.2Kbps Link
Correction Factor :	-3.26dB	Maximum 26dB Bandwidth :	4.72MHz
Band Edge :	-28.86dBm	Measurement Value :	-25.60dBm

Higher Band Edge Plot on Channel 9538 (1907.6 MHz)



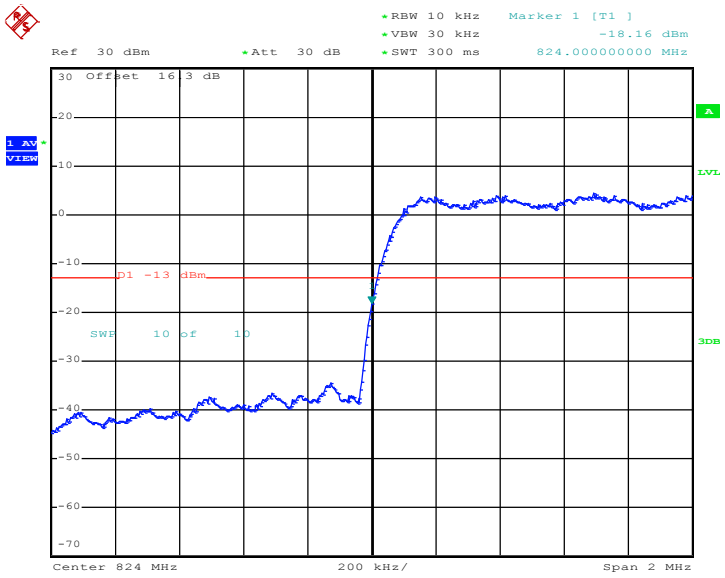
Date: 18.SEP.2012 11:58:35

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	CDMA2000 BC0	Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K
Correction Factor :	1.57dB	Maximum 26dB Bandwidth :	1.436MHz
Band Edge :	-16.59dBm	Measurement Value :	-18.16dBm

Lower Band Edge Plot on Channel 1013 (824.7 MHz)



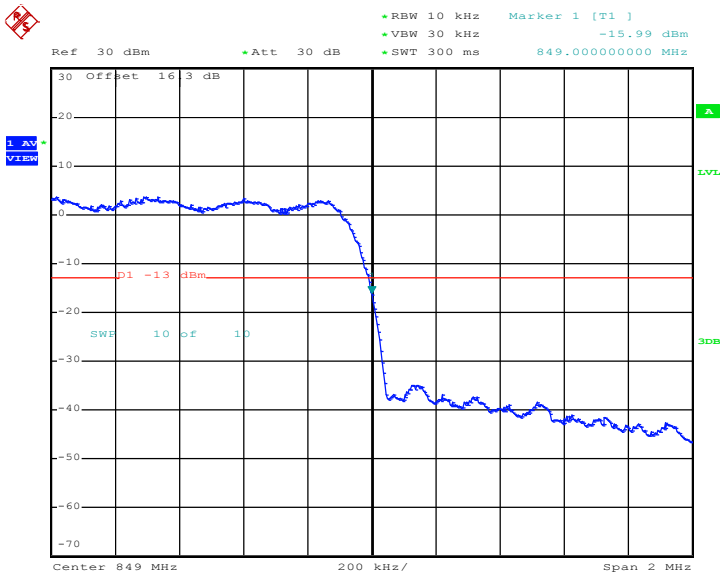
Date: 2.NOV.2012 10:44:30

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	CDMA2000 BC0	Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K
Correction Factor :	1.57dB	Maximum 26dB Bandwidth :	1.436MHz
Band Edge :	-14.42dBm	Measurement Value :	-15.99dBm

Higher Band Edge Plot on Channel 777 (848.31 MHz)

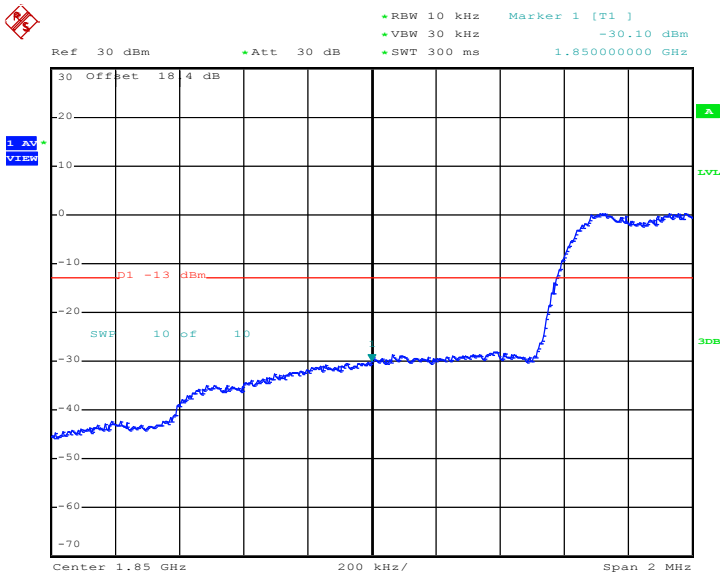


1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	CDMA2000 BC1	Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K
Correction Factor :	1.60dB	Maximum 26dB Bandwidth :	1.444MHz
Band Edge :	-28.50dBm	Measurement Value :	-30.10dBm

Lower Band Edge Plot on Channel 25 (1851.25 MHz)



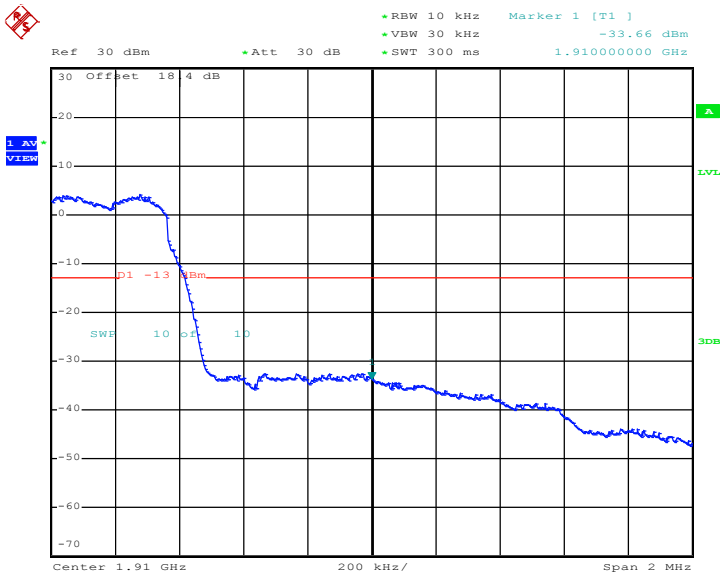
Date: 2.NOV.2012 12:03:25

1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

Band :	CDMA2000 BC1	**Test Mode :**	1xEV-DO Rev. 0_RTAP 153.6K
Correction Factor :	1.60dB	**Maximum 26dB Bandwidth :**	1.444MHz
Band Edge :	-32.06Bm	**Measurement Value :**	-33.66dBm

Higher Band Edge Plot on Channel 1175 (1908.75 MHz)



1. Correction Factor(dB)= 10log(1% Emission BW/RBW)

2. Band Edge= Measurement Value + Correction Factor(dB)

3.5 Conducted Spurious Emission Measurement

3.5.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

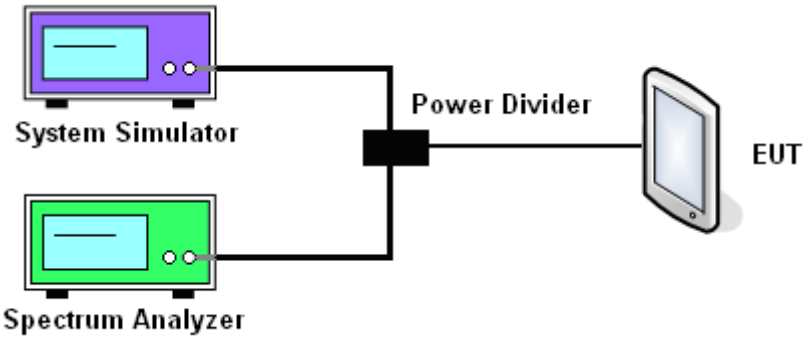
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.

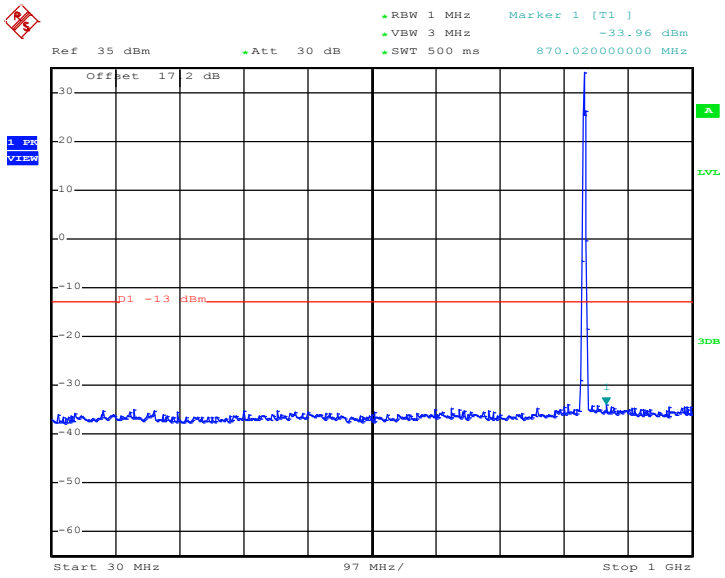
3.5.4 Test Setup



3.5.5 Test Result (Plots) of Conducted Emission

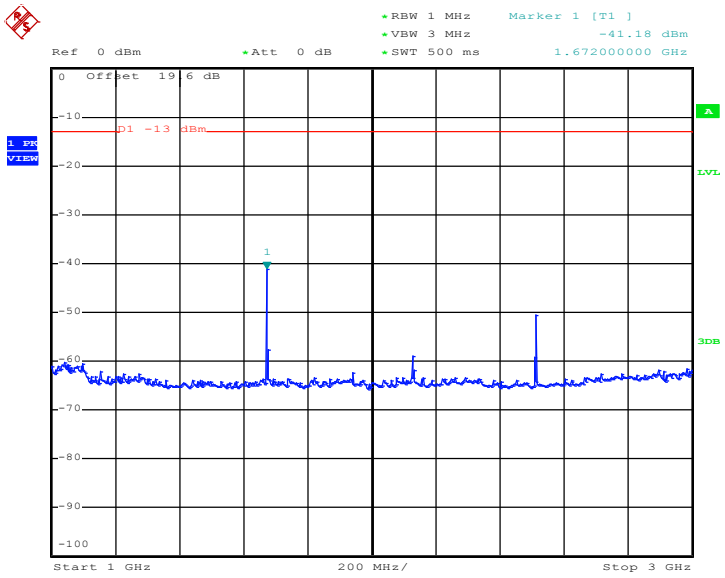
Band :	GSM850	Channel :	CH189
Test Mode :	GPRS 8 Link	Frequency :	836.4 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



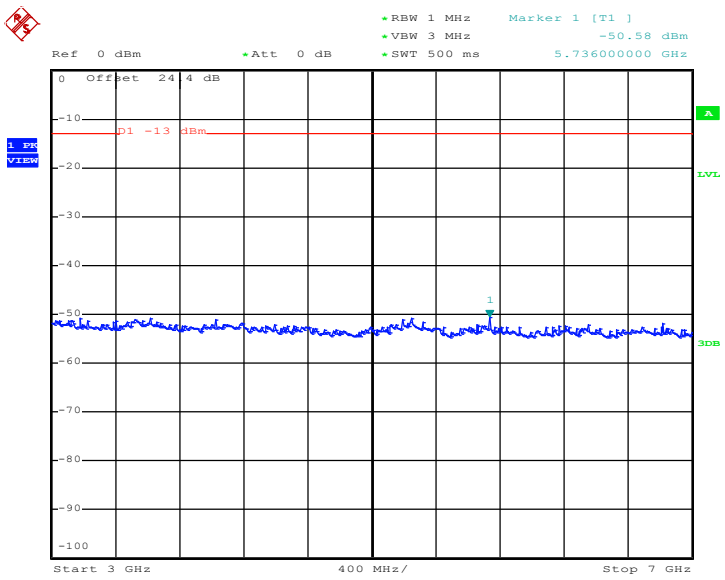
Date: 18.SEP.2012 09:39:55

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



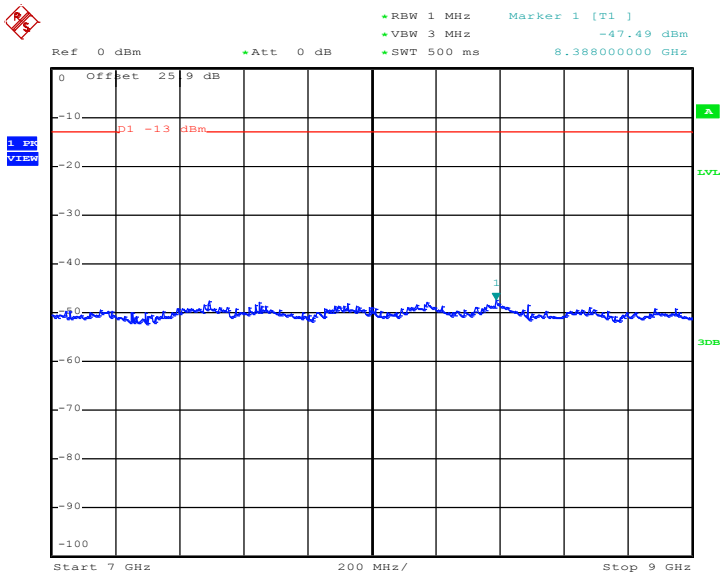
Date: 18.SEP.2012 09:40:10

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



Date: 18.SEP.2012 09:40:23

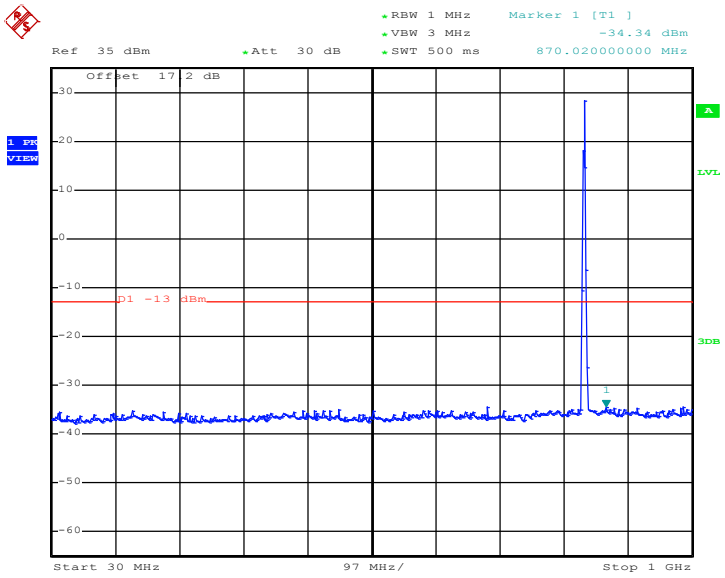
Conducted Spurious Emission Plot between 7GHz ~ 9GHz



Date: 18.SEP.2012 09:40:35

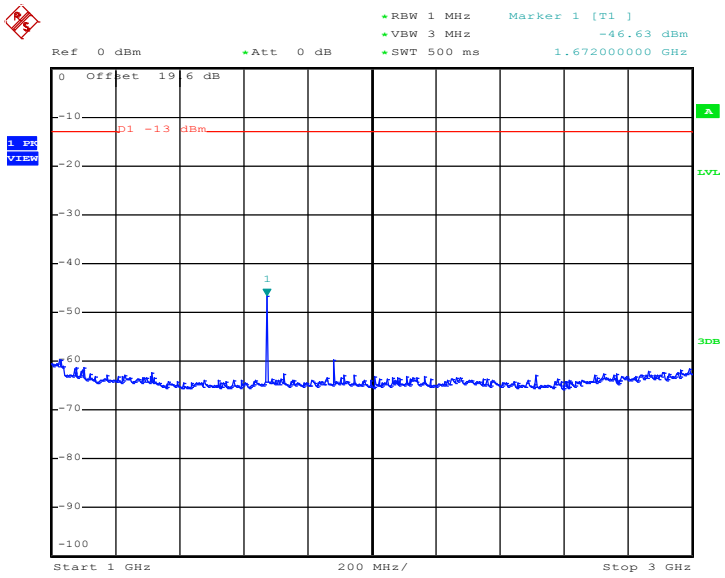
Band :	GSM850	Channel :	CH189
Test Mode :	EDGE 8 Link	Frequency :	836.4 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



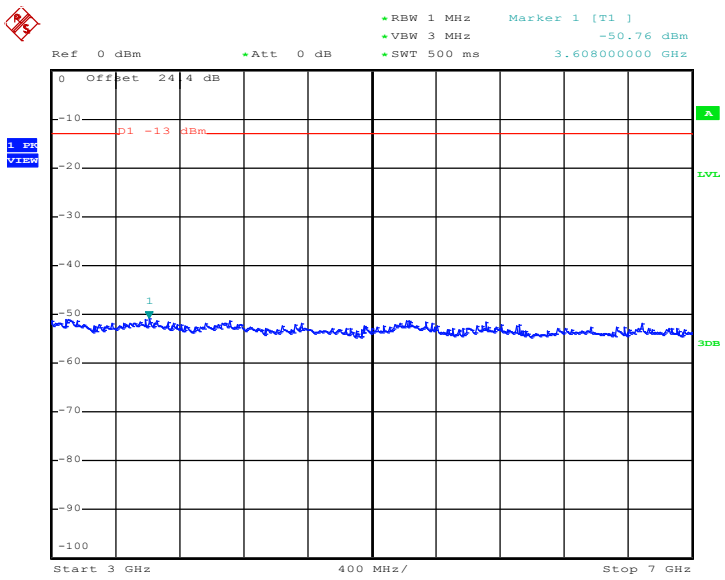
Date: 18.SEP.2012 10:35:09

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



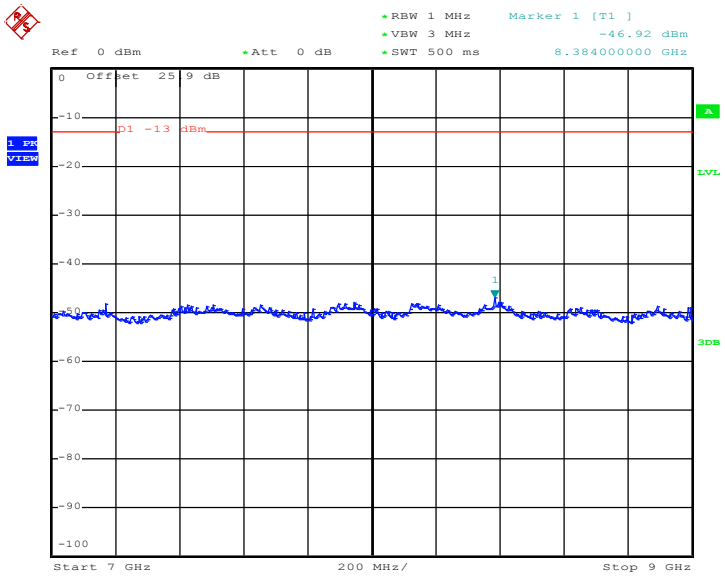
Date: 18.SEP.2012 10:35:31

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



Date: 18.SEP.2012 10:35:44

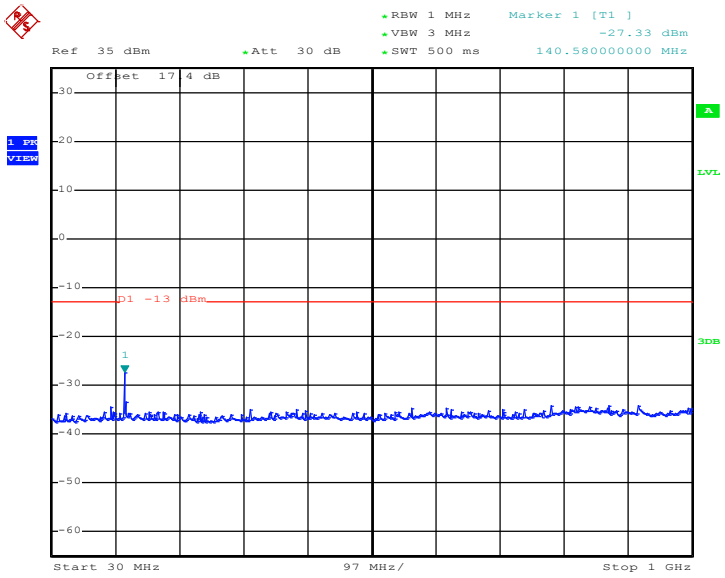
Conducted Spurious Emission Plot between 7GHz ~ 9GHz



Date: 18.SEP.2012 10:35:56

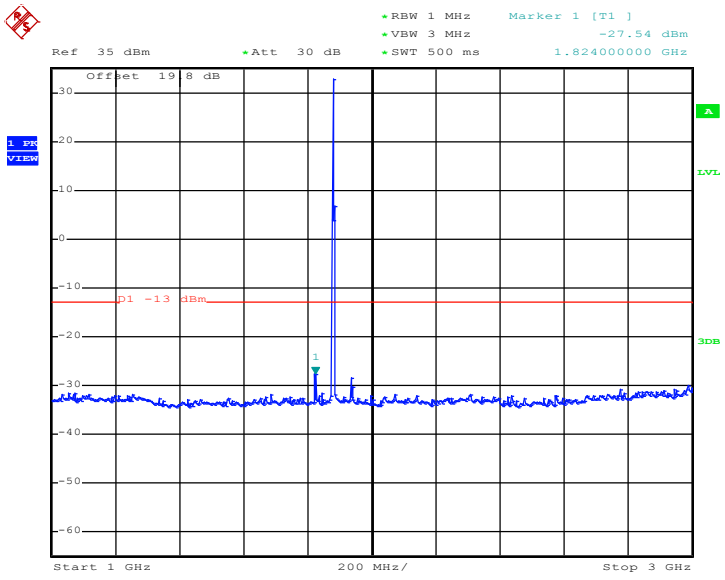
Band :	GSM1900	Channel :	CH661
Test Mode :	GPRS 8 Link	Frequency :	1880.0 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



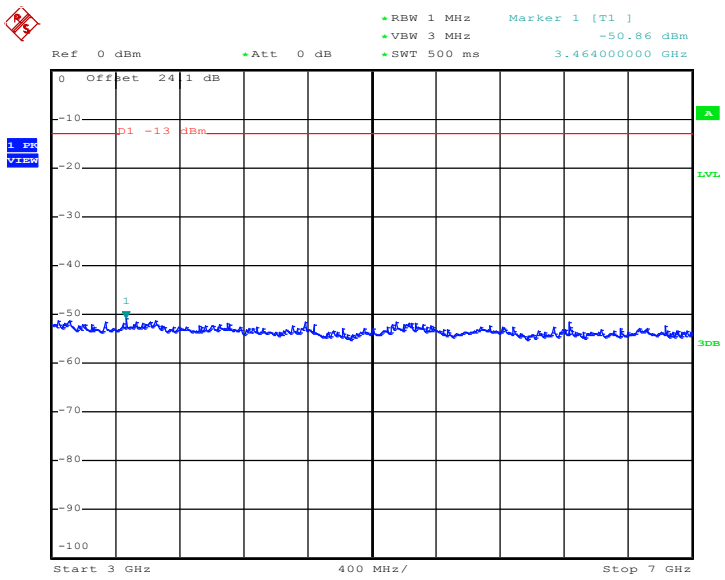
Date: 18.SEP.2012 13:33:26

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



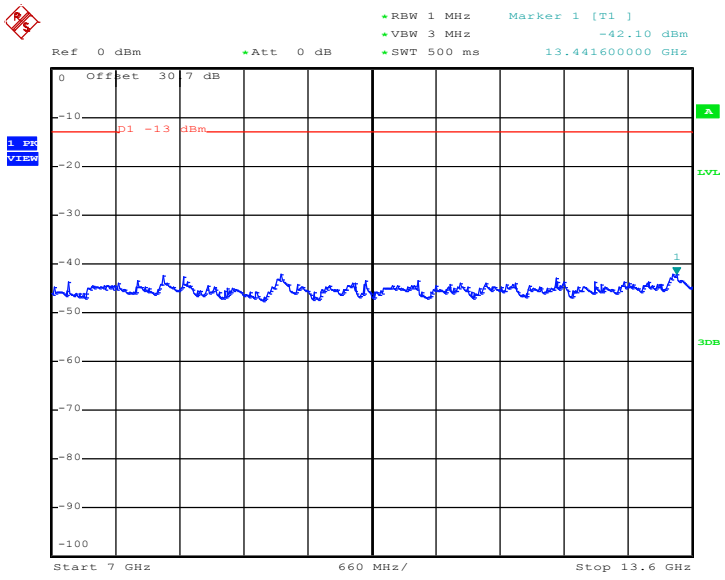
Date: 18.SEP.2012 13:33:39

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



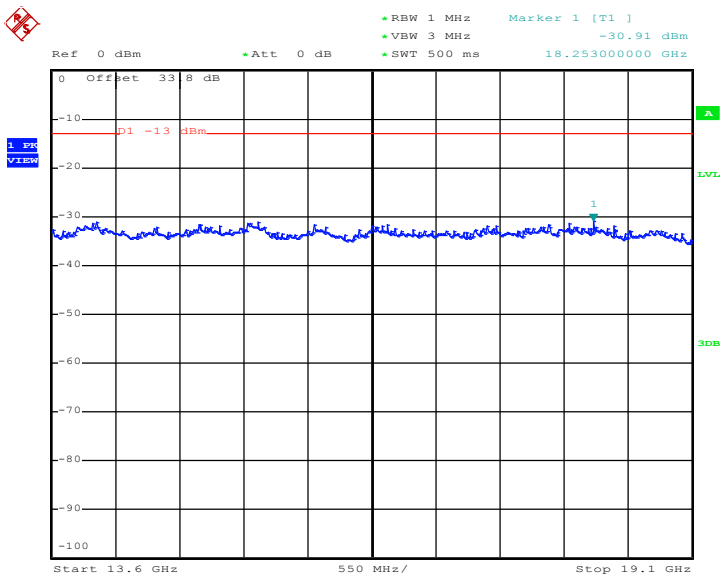
Date: 18.SEP.2012 13:34:02

Conducted Spurious Emission Plot between 7GHz ~ 13.6G



Date: 18.SEP.2012 13:34:14

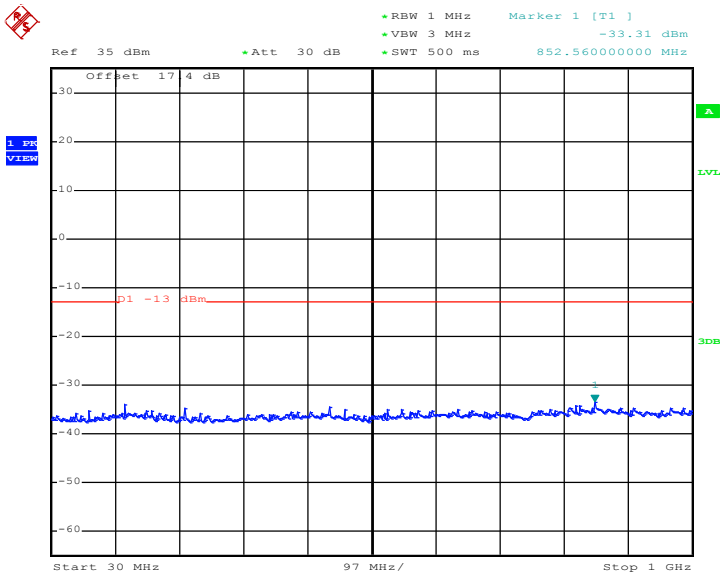
Conducted Spurious Emission Plot between 13.6GHz ~ 19.1GHz



Date: 18.SEP.2012 13:34:27

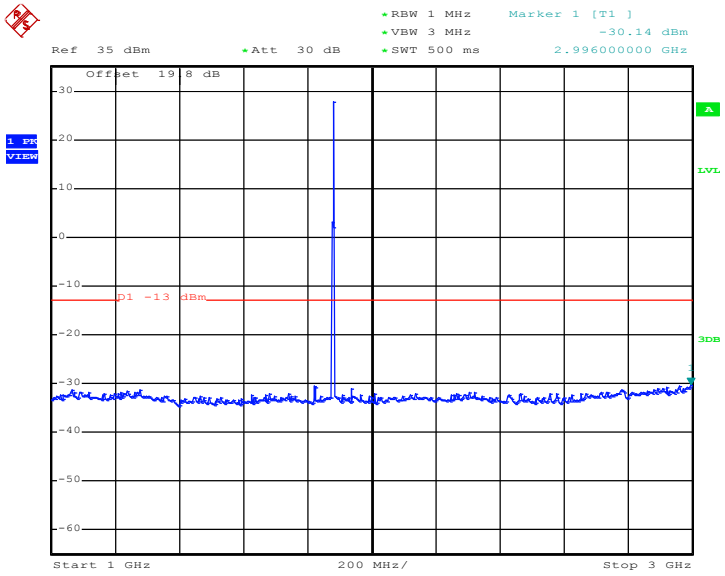
Band :	GSM1900	Channel :	CH661
Test Mode :	EDGE 8 Link	Frequency :	1880.0 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



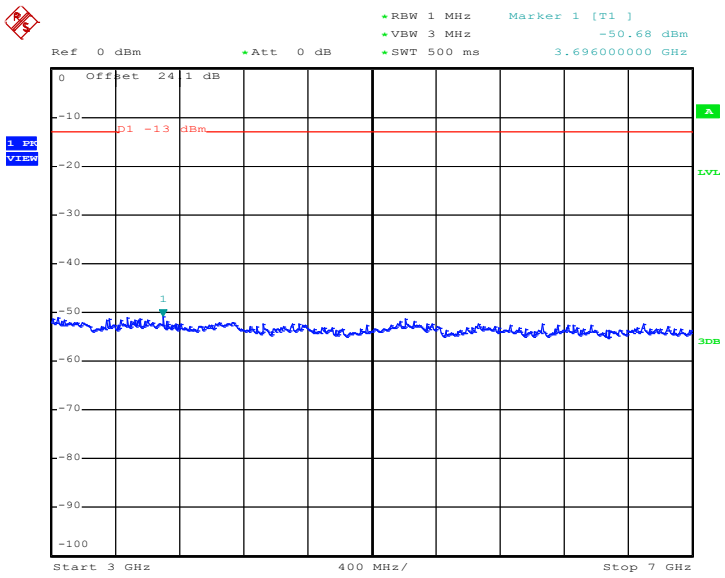
Date: 18.SEP.2012 14:54:46

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



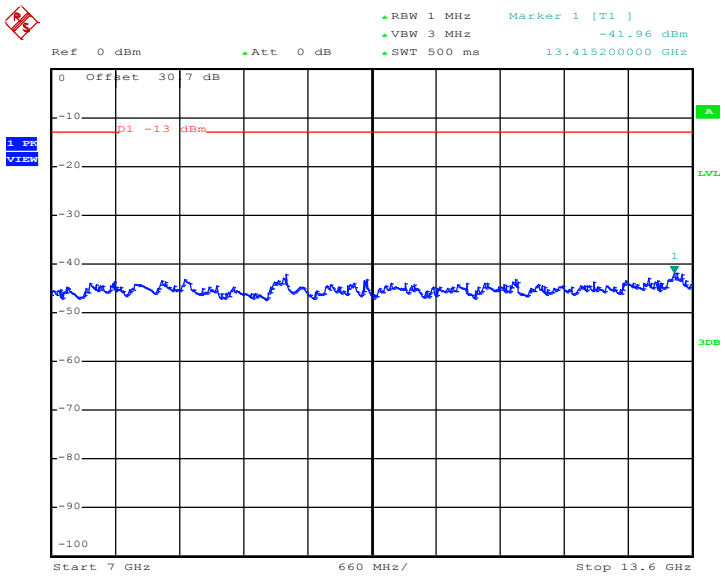
Date: 18.SEP.2012 14:54:58

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



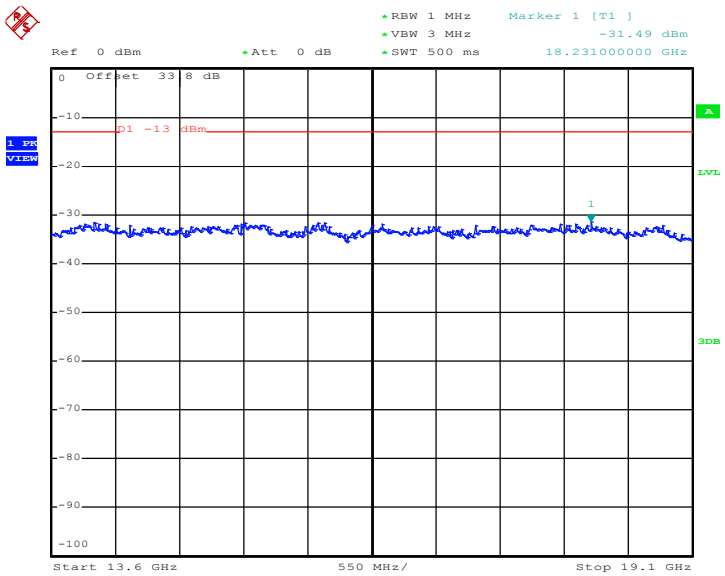
Date: 18.SEP.2012 14:55:16

Conducted Spurious Emission Plot between 7GHz ~ 13.6GHz



Date: 18.SEP.2012 14:55:29

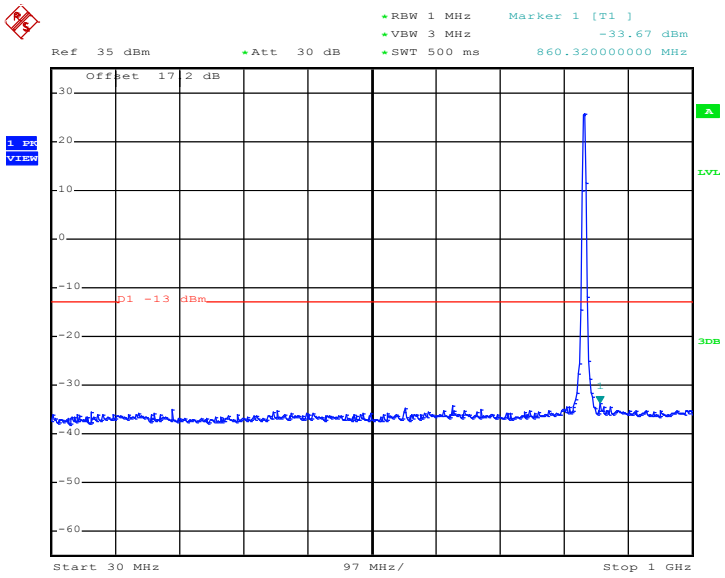
Conducted Spurious Emission Plot between 13.6GHz ~ 19.1GHz



Date: 18.SEP.2012 14:55:41

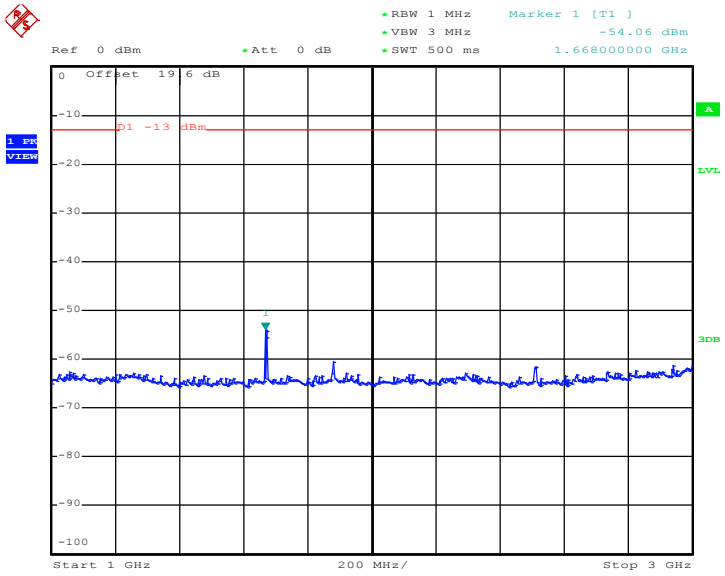
Band :	WCDMA Band V	Channel :	CH4182
Test Mode :	RMC 12.2Kbps Link	Frequency :	836.4 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



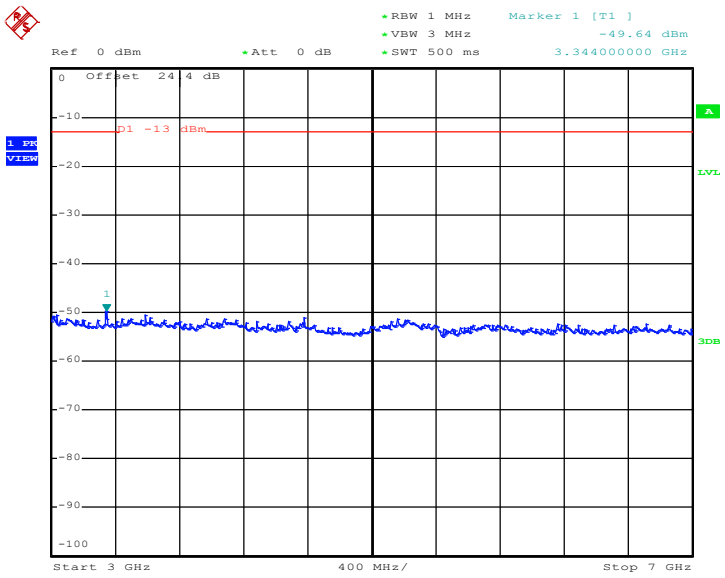
Date: 18.SEP.2012 11:20:23

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



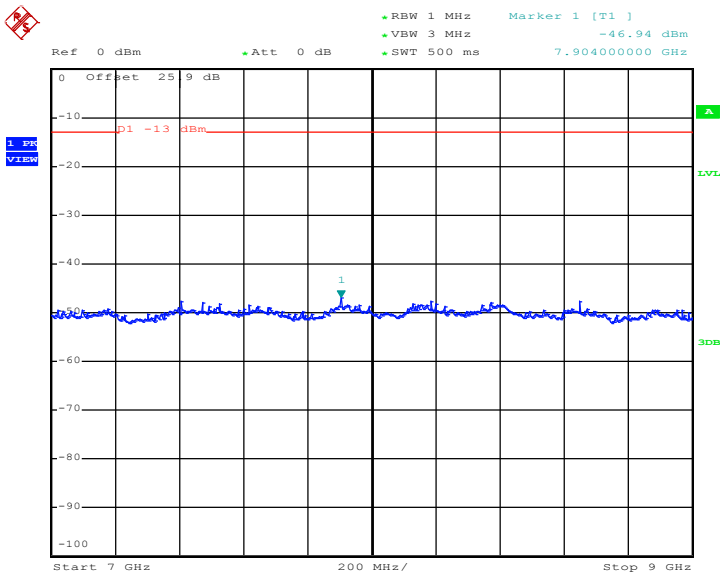
Date: 18.SEP.2012 11:20:42

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



Date: 18.SEP.2012 11:20:54

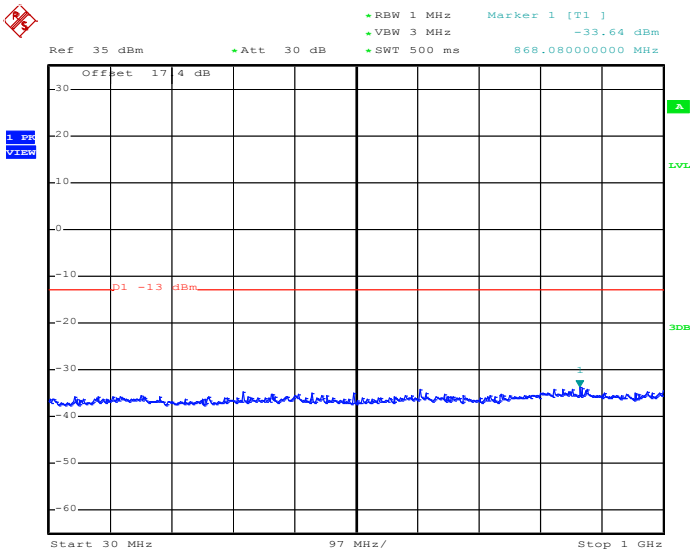
Conducted Spurious Emission Plot between 7GHz ~ 9GHz



Date: 18.SEP.2012 11:21:06

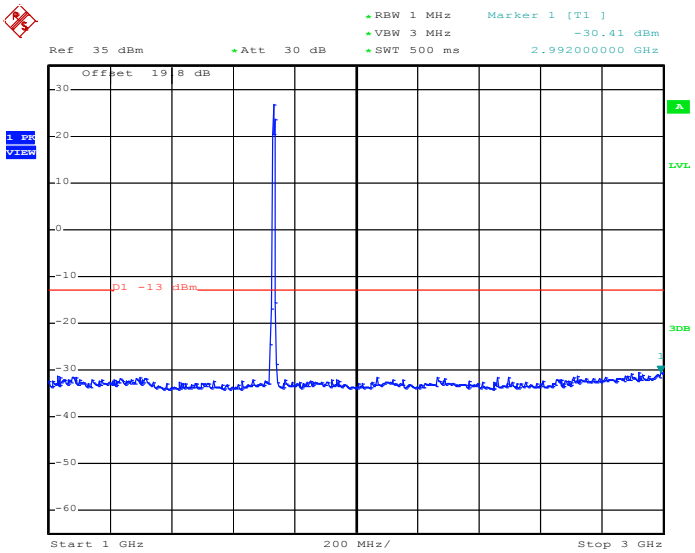
Band :	WCDMA Band IV	Channel :	CH1413
Test Mode :	RMC 12.2Kbps Link	Frequency :	1732.6 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



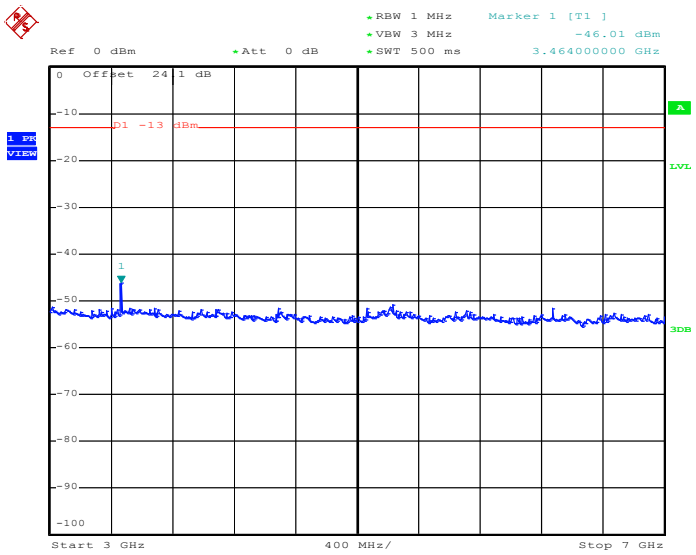
Date: 18.SEP.2012 11:26:41

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



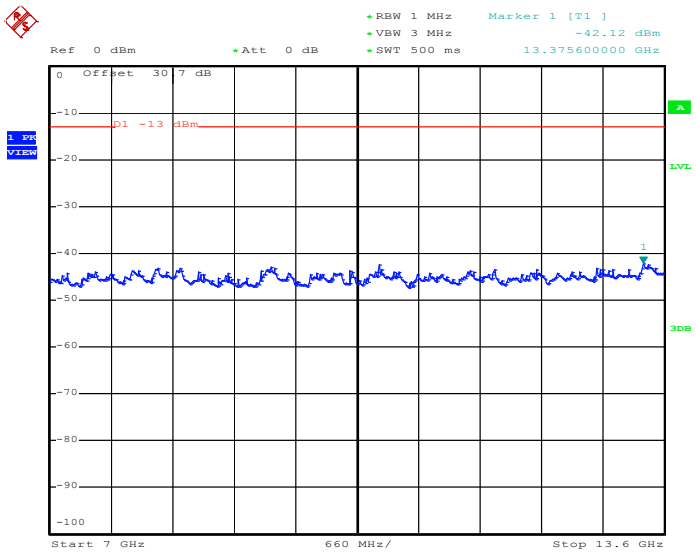
Date: 18.SEP.2012 11:26:54

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



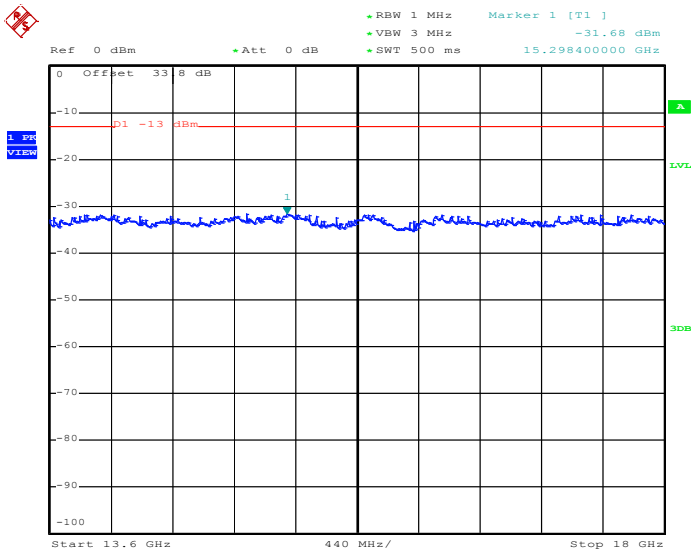
Date: 18.SEP.2012 11:27:11

Conducted Spurious Emission Plot between 7GHz ~ 13.6GHz



Date: 18.SEP.2012 11:27:23

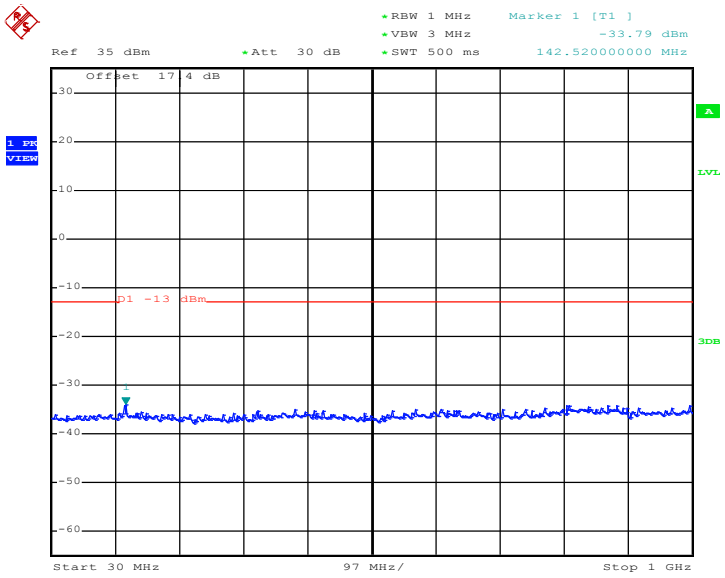
Conducted Spurious Emission Plot between 13.6GHz ~ 18GHz



Date: 18.SEP.2012 11:27:36

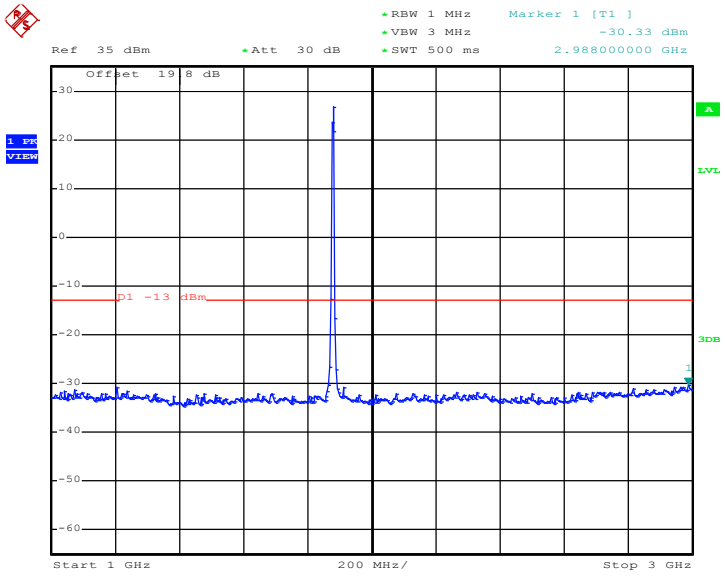
Band :	WCDMA Band II	Channel :	CH9400
Test Mode :	RMC 12.2Kbps Link	Frequency :	1880.0 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



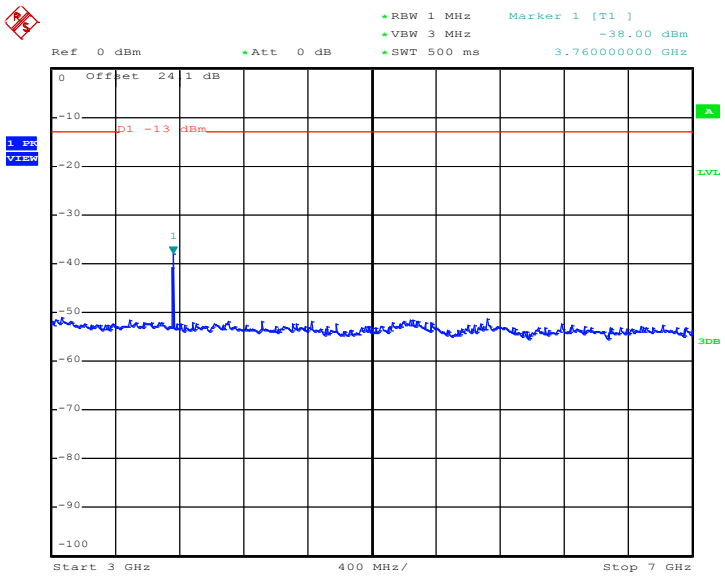
Date: 18.SEP.2012 11:51:52

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



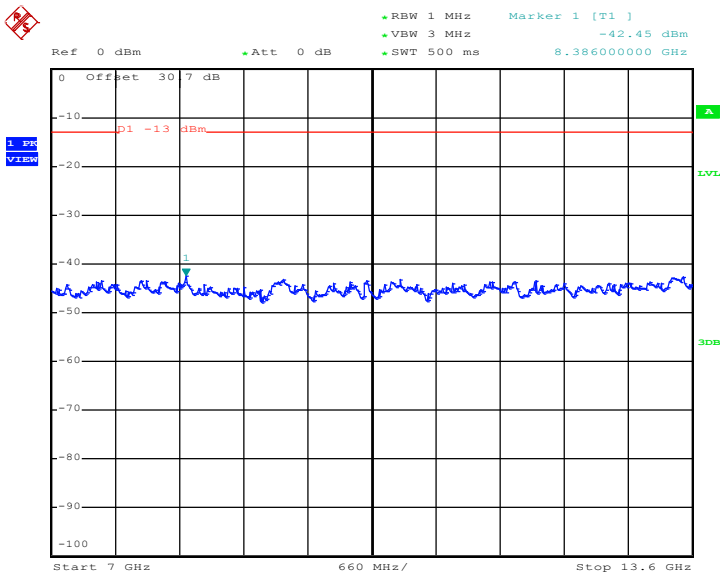
Date: 18.SEP.2012 11:52:04

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



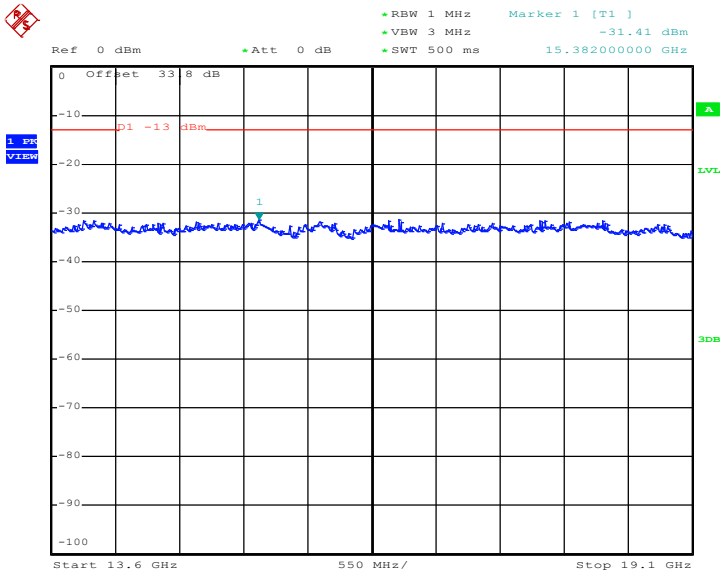
Date: 18.SEP.2012 11:52:22

Conducted Spurious Emission Plot between 7GHz ~ 13.6GHz



Date: 18.SEP.2012 11:52:35

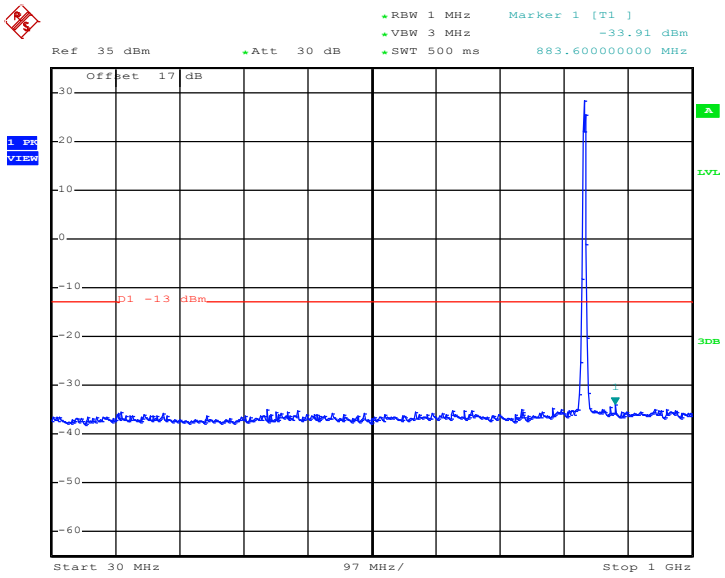
Conducted Spurious Emission Plot between 13.6GHz ~ 19.1GHz



Date: 18.SEP.2012 11:52:47

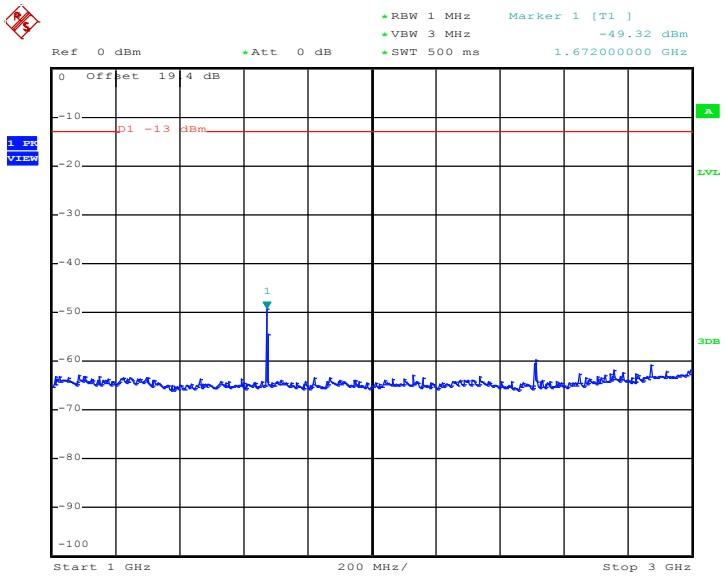
Band :	CDMA2000 BC0	Channel :	CH384
Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K	Frequency :	836.52 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



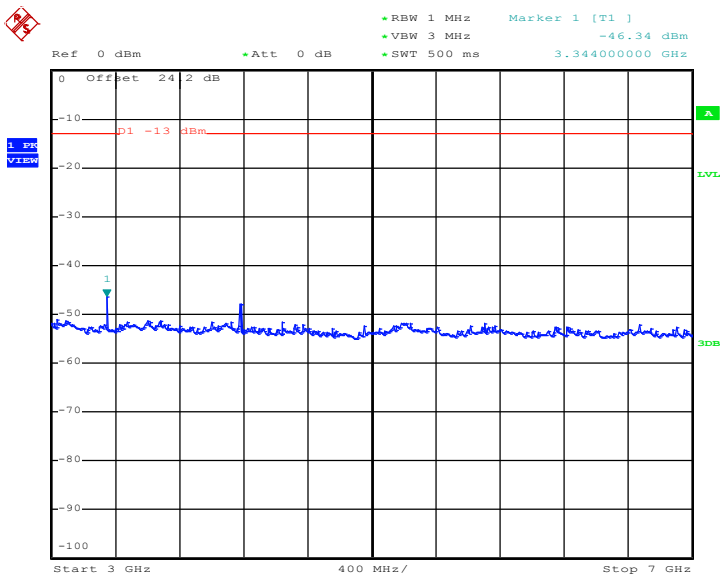
Date: 2.NOV.2012 10:09:01

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



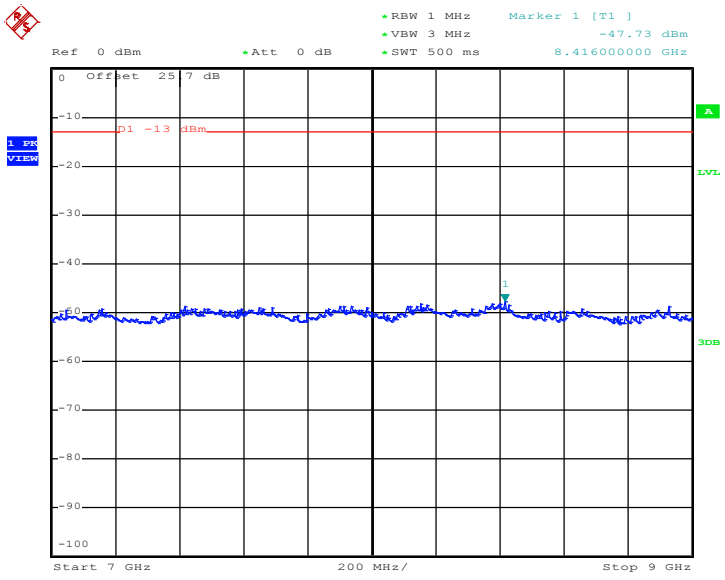
Date: 2.NOV.2012 10:09:22

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



Date: 2.NOV.2012 10:09:34

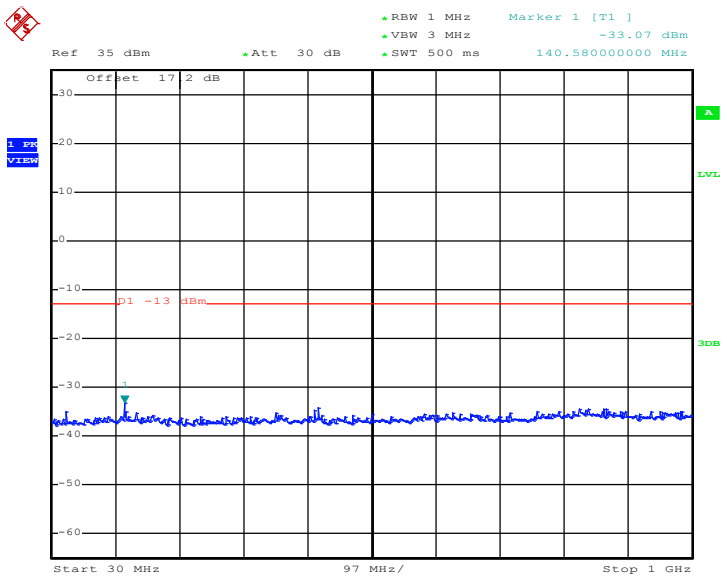
Conducted Spurious Emission Plot between 7GHz ~ 9GHz



Date: 2.NOV.2012 10:09:46

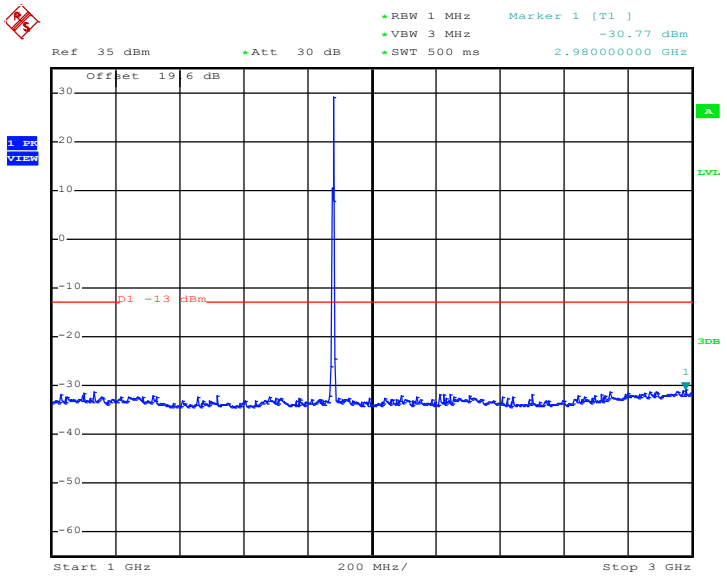
Band :	CDMA2000 BC1	Channel :	CH600
Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K	Frequency :	1880.0 MHz

Conducted Spurious Emission Plot between 30MHz ~ 1GHz



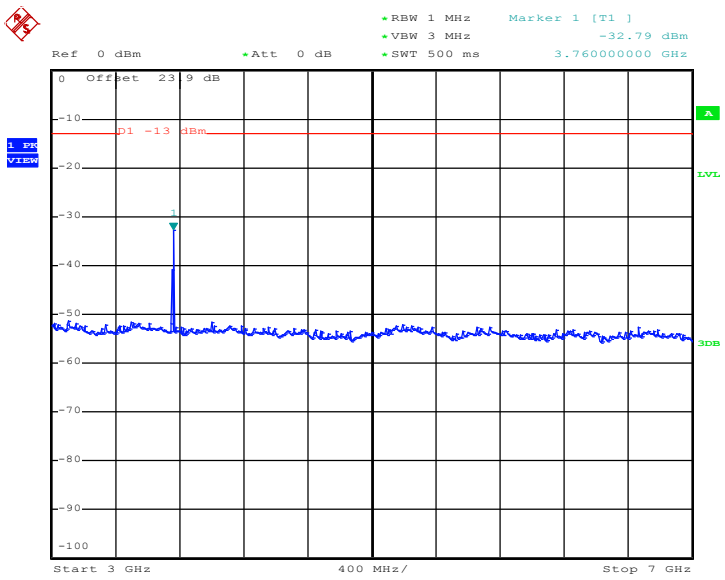
Date: 2.NOV.2012 13:08:36

Conducted Spurious Emission Plot between 1GHz ~ 3GHz



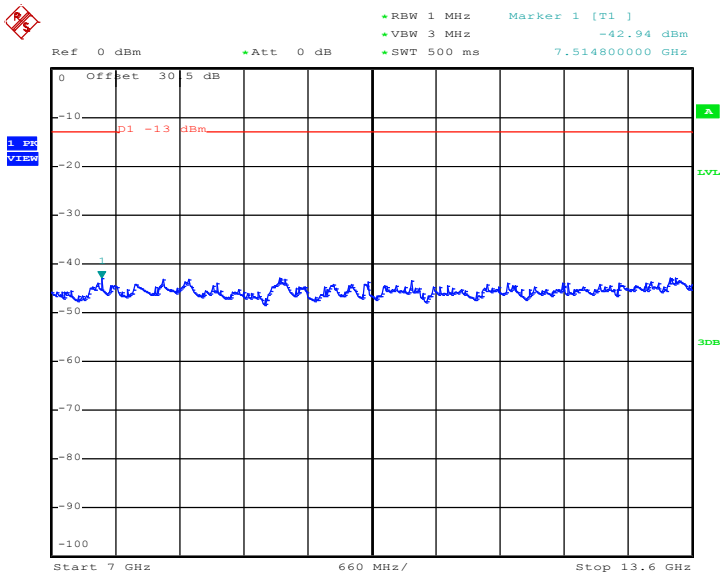
Date: 2.NOV.2012 13:08:48

Conducted Spurious Emission Plot between 3GHz ~ 7GHz



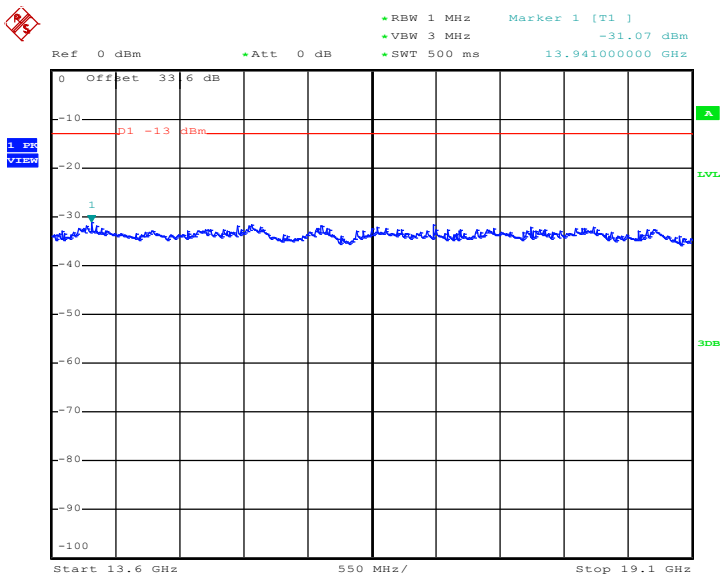
Date: 2.NOV.2012 13:09:08

Conducted Spurious Emission Plot between 7GHz ~ 13.6GHz



Date: 2.NOV.2012 13:09:21

Conducted Spurious Emission Plot between 13.6GHz ~ 19.1GHz



Date: 2.NOV.2012 13:09:33

3.6 Field Strength of Spurious Radiation Measurement

3.6.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.6.2 Measuring Instruments

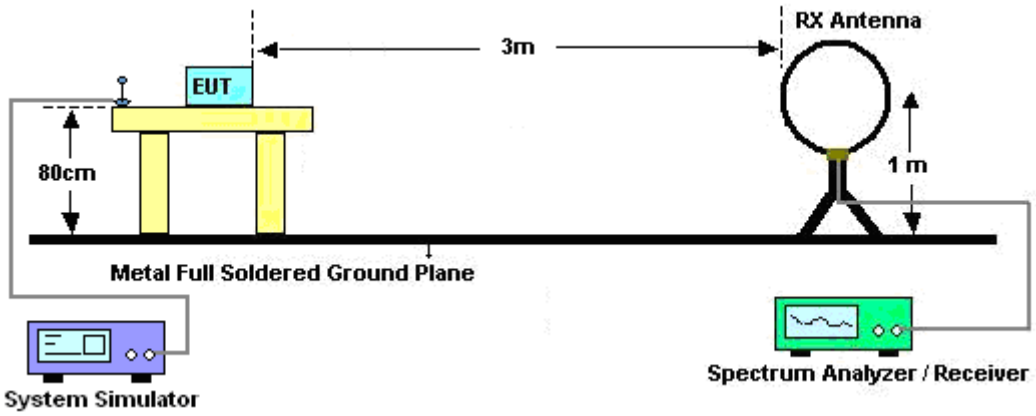
See list of measuring instruments of this test report.

3.6.3 Test Procedures

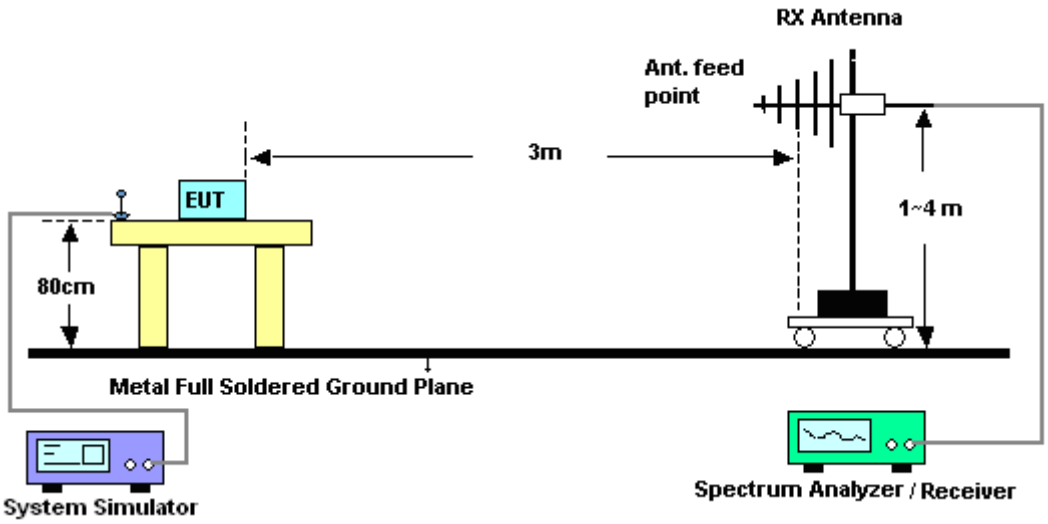
1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15

3.6.4 Test Setup

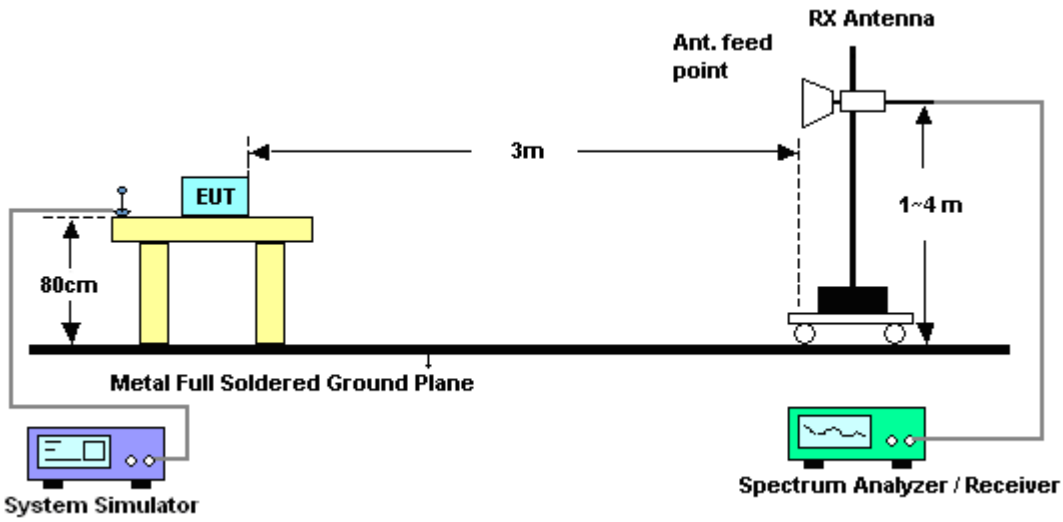
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz

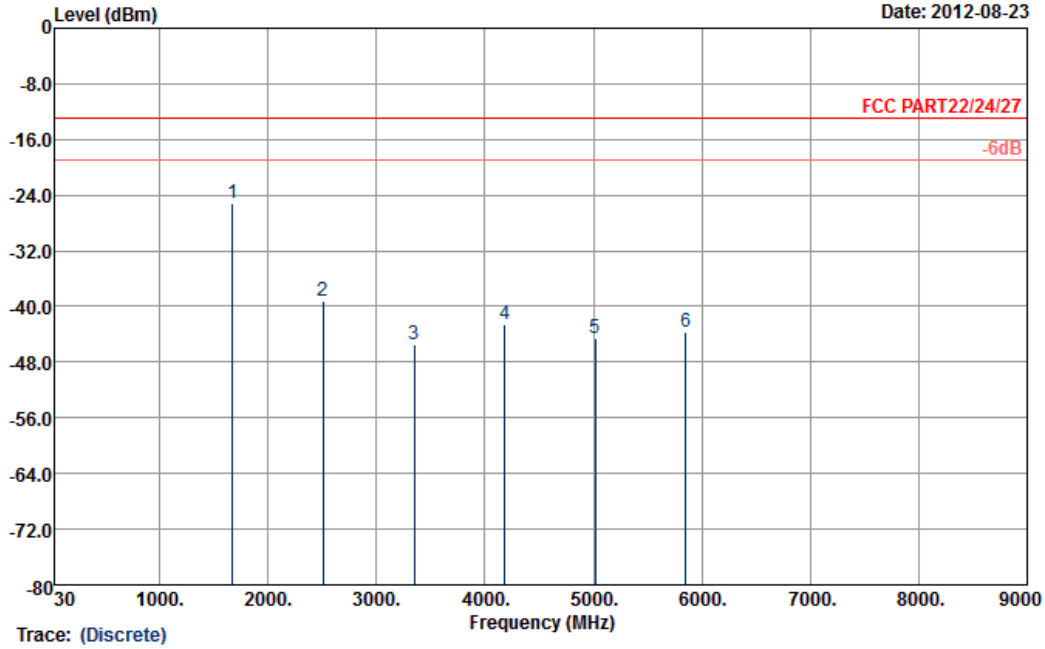


3.6.5 Test Results of Radiated Emissions (9 KHz ~ 30 MHz)

The low frequency, which started from 9 KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

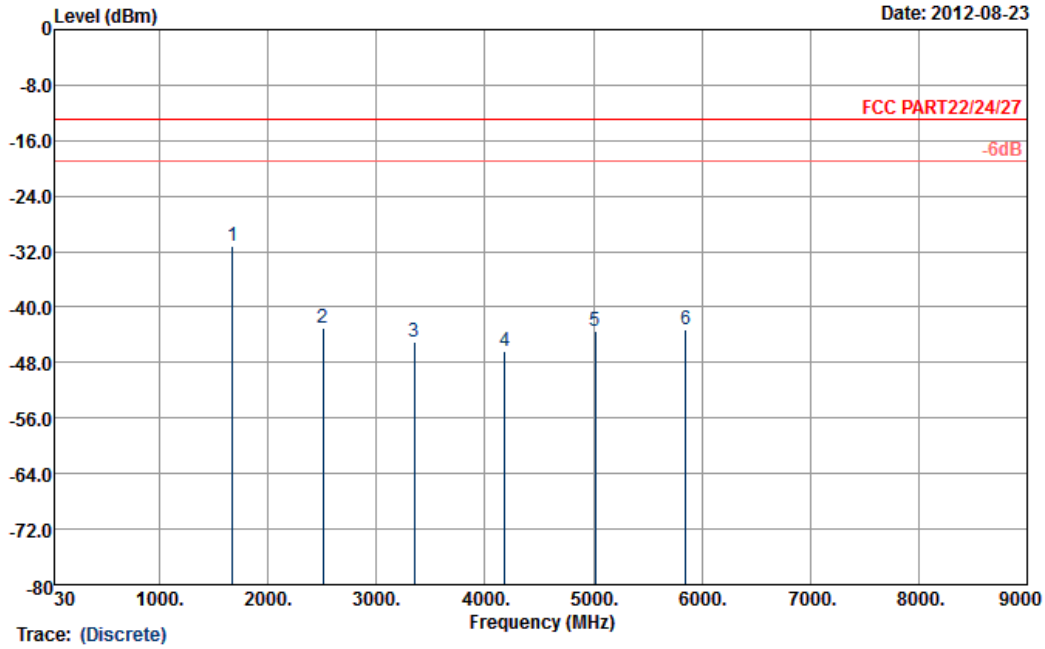
3.6.6 Test Result of Field Strength of Spurious Radiated

Band :	GSM850	**Temperature :**	23~25°C
Test Mode :	GPRS 8 Link + Battery 1	**Relative Humidity :**	50~52%
Test Engineer :	Kyle Jhuang	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-25.28	-13	-12.28	-34.46	-27	1.62	5.49	H	Pass
2509	-39.13	-13	-26.13	-52.57	-41.1	2.1	6.22	H	Pass
3346	-45.41	-13	-32.41	-60.07	-48.3	3.03	8.07	H	Pass
4180	-42.46	-13	-29.46	-58.86	-47	2.52	9.21	H	Pass
5015	-44.55	-13	-31.55	-61.97	-50	3.1	10.70	H	Pass
5855	-43.76	-13	-30.76	-64.81	-49	2.92	10.31	H	Pass

Band :	GSM850	Temperature :	23~25°C
Test Mode :	GPRS 8 Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

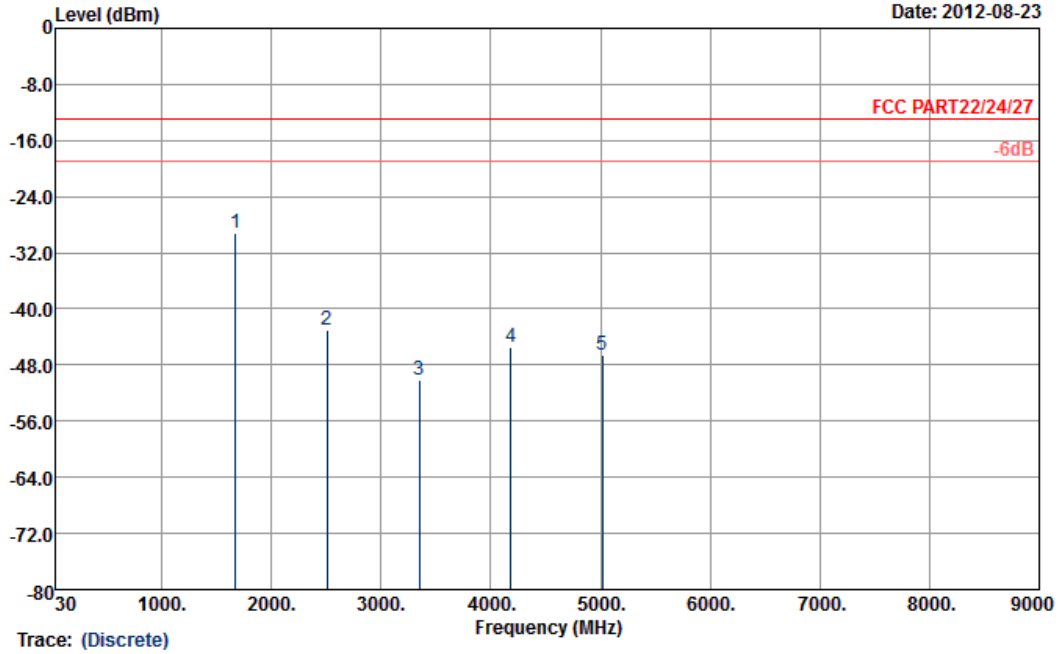


Trace: (Discrete)
Site : 03CH07-HY
Condition : FCC PART22/24/27 HF-EIRP(080306) VERTICAL
Project : FG 280604

Plane : E2

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-31.28	-13	-18.28	-42.86	-33	1.62	5.49	V	Pass
2509	-43.03	-13	-30.03	-57.26	-45	2.1	6.22	V	Pass
3346	-45.11	-13	-32.11	-61.33	-48	3.03	8.07	V	Pass
4180	-46.46	-13	-33.46	-63.82	-51	2.52	9.21	V	Pass
5015	-43.55	-13	-30.55	-61.75	-49	3.1	10.70	V	Pass
5855	-43.26	-13	-30.26	-64.68	-48.5	2.92	10.31	V	Pass

Band :	GSM850	Temperature :	23~25°C
Test Mode :	EDGE 8 Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

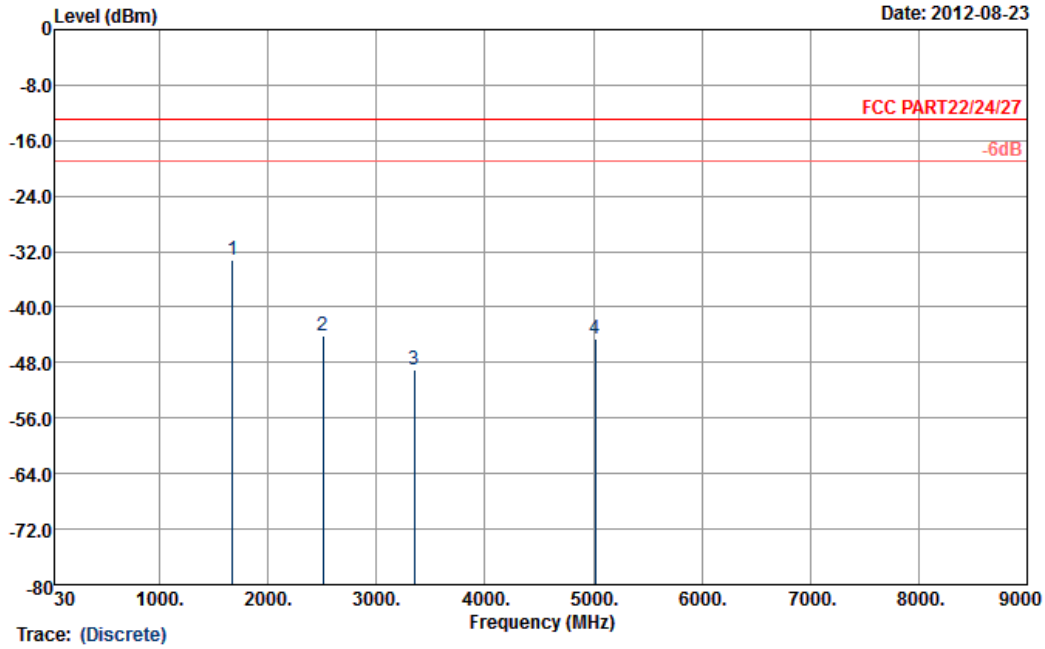


Trace: (Discrete)
Site : 03CH07-HY
Condition : FCC PART22/24/27 HF-EIRP(080306) HORIZONTAL
Project : FG 280604

Plane : E2

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-29.28	-13	-16.28	-38.14	-31	1.62	5.49	H	Pass
2509	-43.03	-13	-30.03	-56.58	-45	2.1	6.22	H	Pass
3346	-50.11	-13	-37.11	-65.09	-53	3.03	8.07	H	Pass
4180	-45.46	-13	-32.46	-61.53	-50	2.52	9.21	H	Pass
5020	-46.55	-13	-33.55	-64.02	-52	3.1	10.70	H	Pass

Band :	GSM850	Temperature :	23~25°C
Test Mode :	EDGE 8 Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

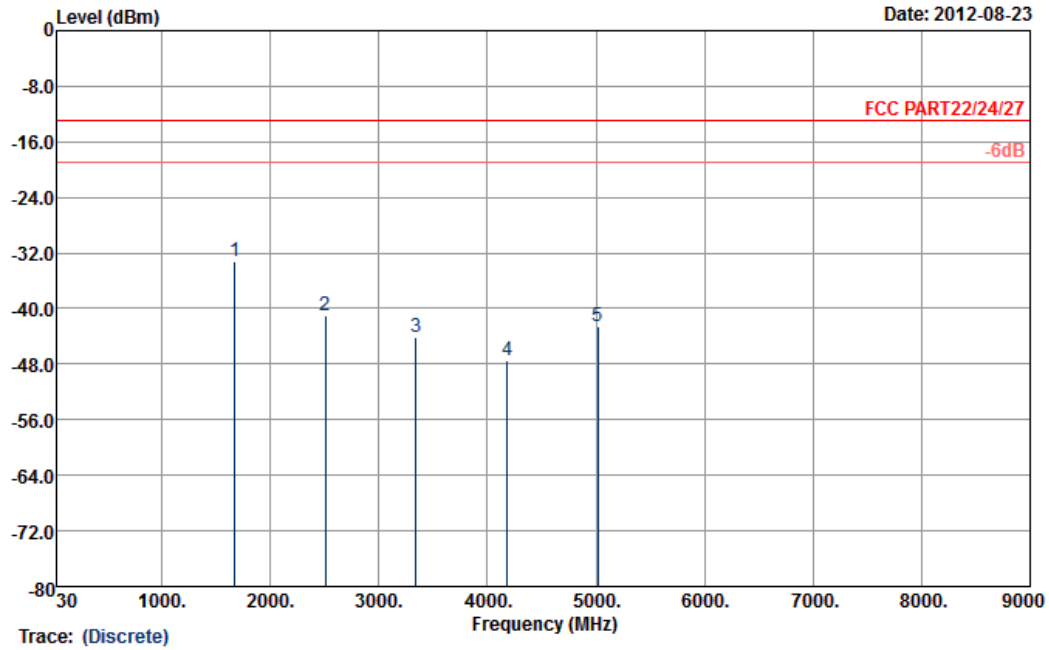


Trace: (Discrete)
Site : 03CH07-HY
Condition : FCC PART22/24/27 HF-EIRP(080306) VERTICAL
Project : FG 280604

Plane : E2

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-33.28	-13	-20.28	-44.34	-35	1.62	5.49	V	Pass
2509	-44.03	-13	-31.03	-58.37	-46	2.1	6.22	V	Pass
3346	-49.11	-13	-36.11	-65.34	-52	3.03	8.07	V	Pass
5015	-44.55	-13	-31.55	-62.79	-50	3.1	10.70	V	Pass

Band :	GSM850	Temperature :	23~25°C
Test Mode :	GPRS 8 Link + Battery 2	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

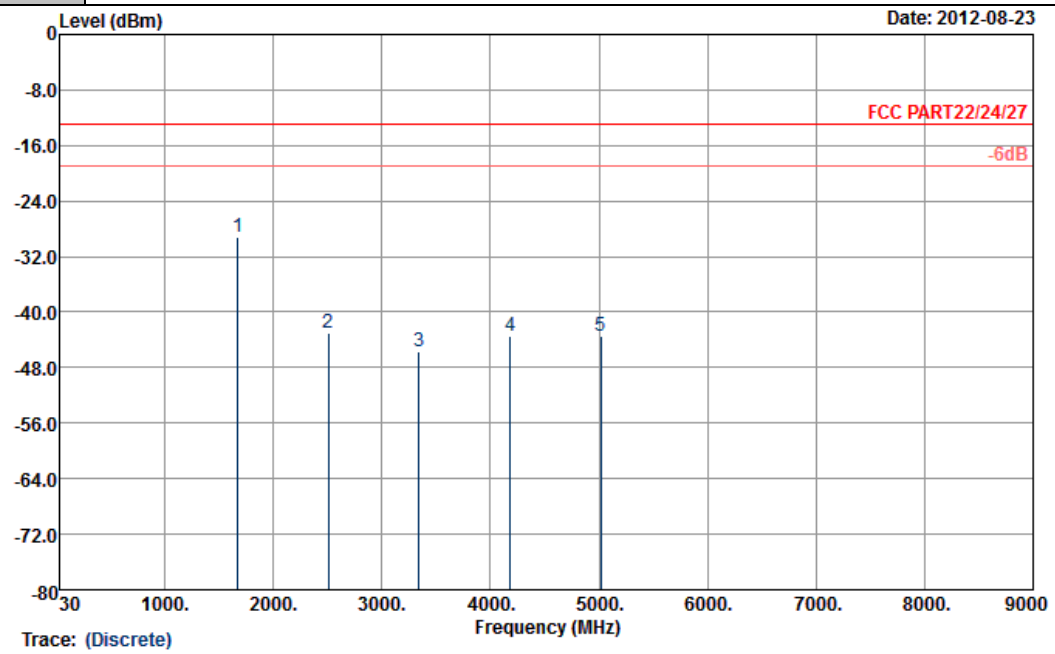


Trace: (Discrete)
Site : 03CH07-HY
Condition : FCC PART22/24/27 HF-EIRP(080306) HORIZONTAL
Project : FG 280604

Plane : E1

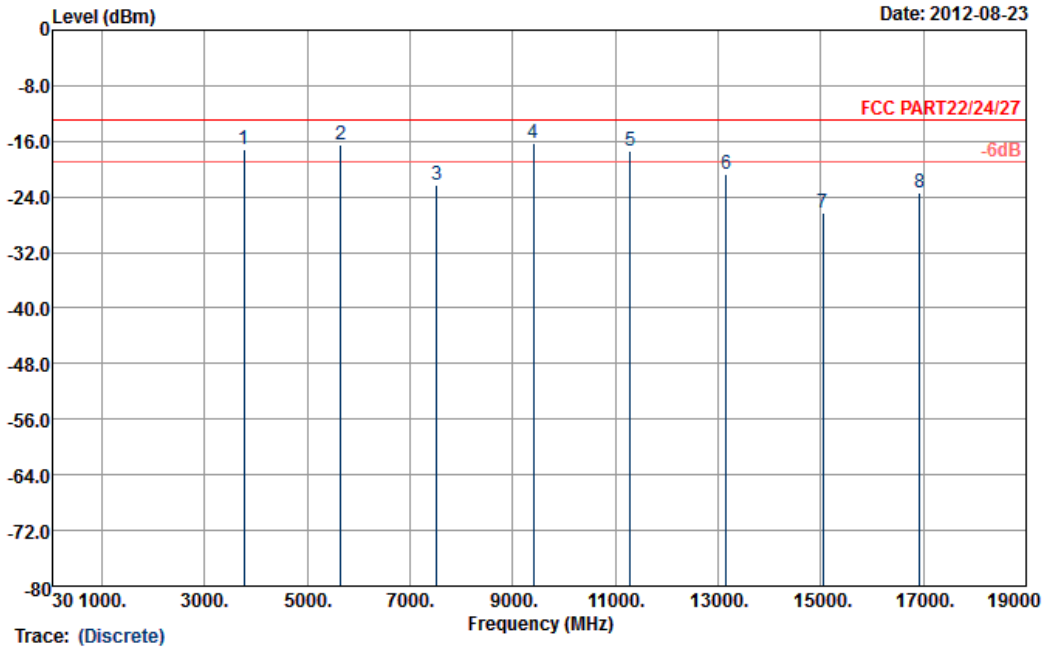
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-33.28	-13	-20.28	-42.86	-35	1.62	5.49	H	Pass
2509	-41.03	-13	-28.03	-54.68	-43	2.1	6.22	H	Pass
3345	-44.11	-13	-31.11	-58.92	-47	3.03	8.07	H	Pass
4182	-47.46	-13	-34.46	-63.49	-52	2.52	9.21	H	Pass
5018	-42.55	-13	-29.55	-60.63	-48	3.1	10.70	H	Pass

Band :	GSM850	Temperature :	23~25°C
Test Mode :	GPRS 8 Link + Battery 2	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



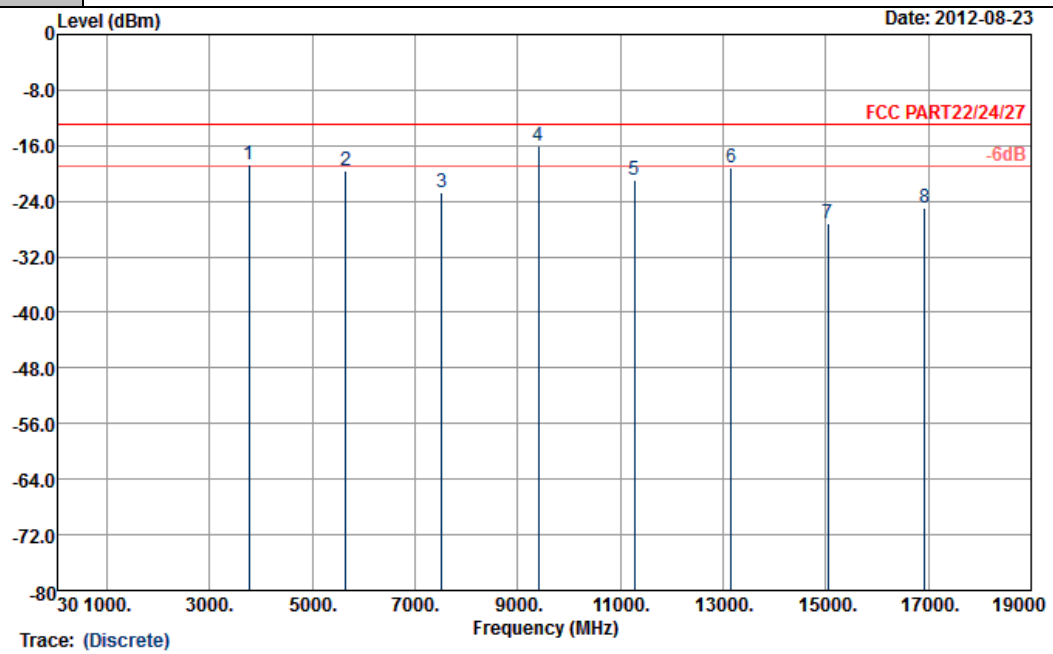
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-29.28	-13	-16.28	-40.76	-31	1.62	5.49	V	Pass
2509	-43.03	-13	-30.03	-57.28	-45	2.1	6.22	V	Pass
3345	-45.61	-13	-32.61	-60.7	-48.5	3.03	8.07	V	Pass
4182	-43.46	-13	-30.46	-60.32	-48	2.52	9.21	V	Pass
5018	-43.55	-13	-30.55	-61.91	-49	3.1	10.70	V	Pass

Band :	GSM1900	Temperature :	23~25°C
Test Mode :	GPRS 8 Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



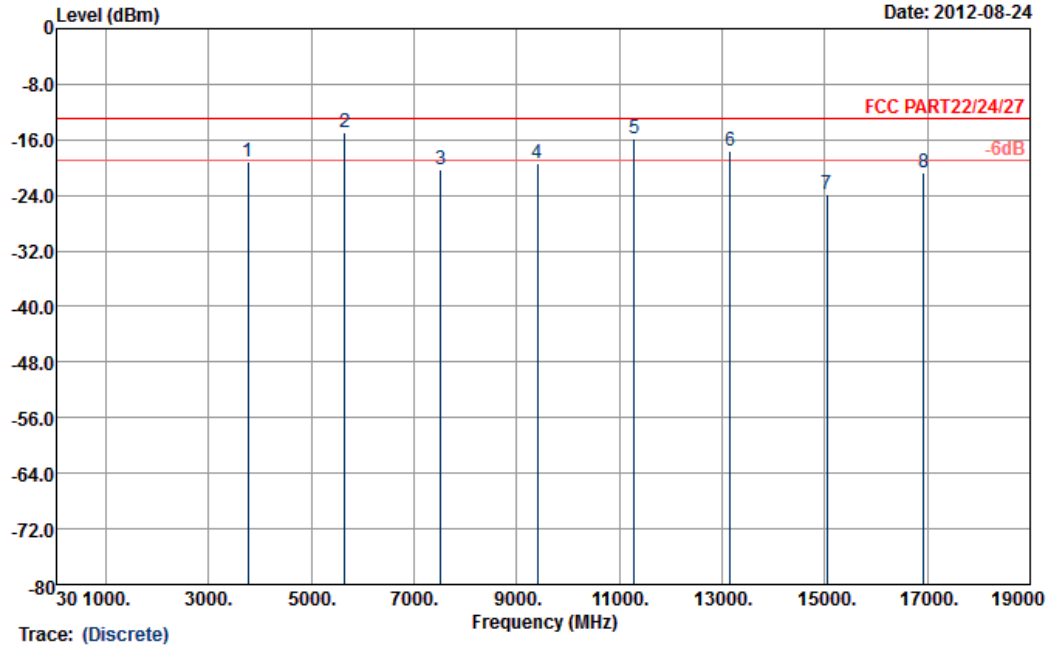
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-17.20	-13	-4.20	-32.71	-23.5	2.51	8.81	H	Pass
5640	-16.47	-13	-3.47	-37.3	-24.18	2.99	10.70	H	Pass
7520	-22.35	-13	-9.35	-49.64	-30.88	3.59	12.12	H	Pass
9400	-16.37	-13	-3.37	-42.97	-25.47	4.1	13.20	H	Pass
11280	-17.43	-13	-4.43	-46.92	-26.47	4.27	13.31	H	Pass
13160	-20.73	-13	-7.73	-54.3	-30.25	4.27	13.79	H	Pass
15039	-26.31	-13	-13.31	-60.15	-35.28	4.75	13.72	H	Pass
16920	-23.35	-13	-10.35	-60.15	-32.02	4.88	13.55	H	Pass

Band :	GSM1900	Temperature :	23~25°C
Test Mode :	GPRS 8 Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-18.76	-13	-5.76	-34.96	-25.06	2.51	8.81	V	Pass
5640	-19.51	-13	-6.51	-40.03	-27.22	2.99	10.70	V	Pass
7520	-22.71	-13	-9.71	-49.75	-31.24	3.59	12.12	V	Pass
9400	-16.05	-13	-3.05	-41.6	-25.15	4.1	13.20	V	Pass
11276	-20.95	-13	-7.95	-49.61	-29.99	4.27	13.31	V	Pass
13160	-19.14	-13	-6.14	-50.69	-28.66	4.27	13.79	V	Pass
15039	-27.10	-13	-14.10	-59.75	-36.07	4.75	13.72	V	Pass
16920	-24.90	-13	-11.90	-61.47	-33.57	4.88	13.55	V	Pass

Band :	GSM1900	Temperature :	23~25°C
Test Mode :	EDGE 8 Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

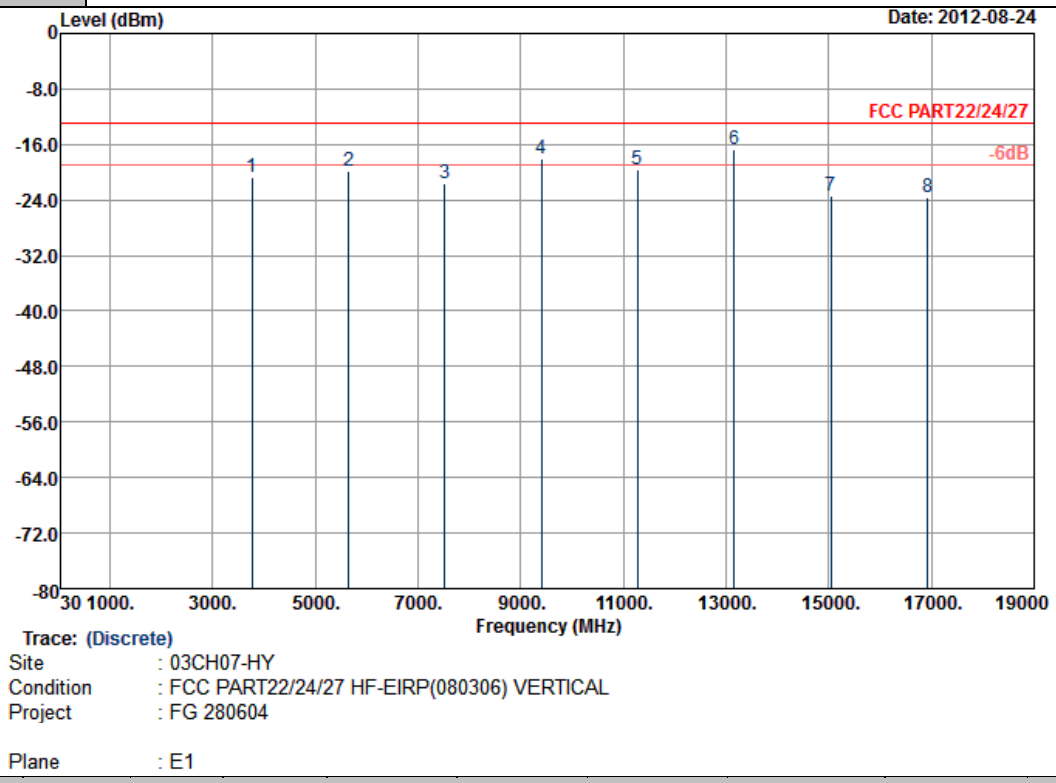


Trace: (Discrete)
Site : 03CH07-HY
Condition : FCC PART22/24/27 HF-EIRP(080306) HORIZONTAL
Project : FG 280604

Plane : E1

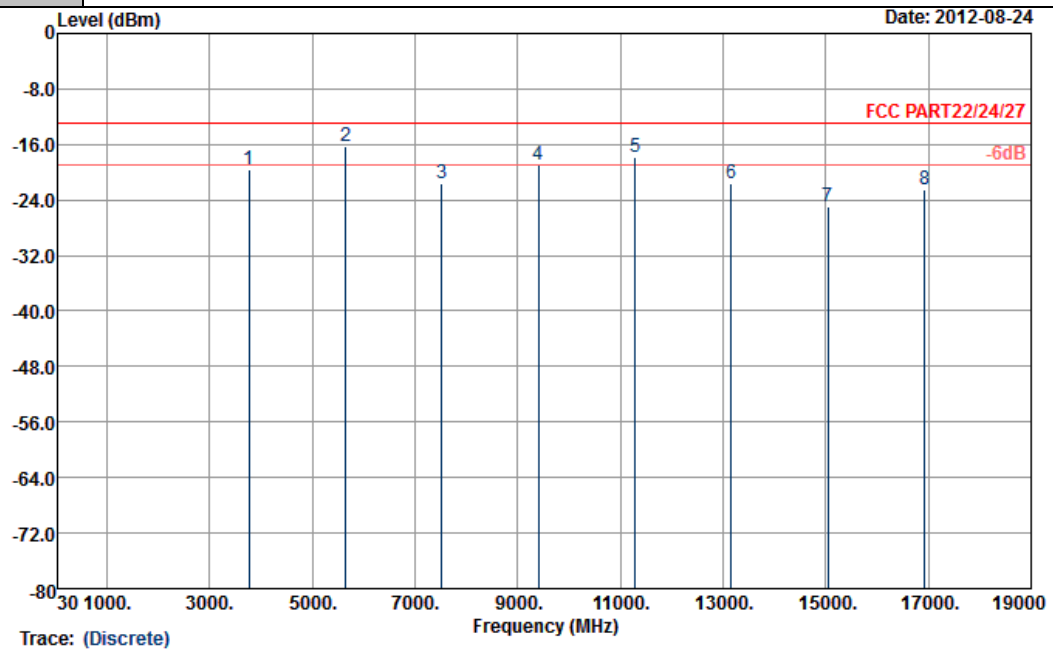
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-19.22	-13	-6.22	-34.62	-25.52	2.51	8.81	H	Pass
5640	-15.01	-13	-2.01	-34.82	-22.72	2.99	10.70	H	Pass
7520	-20.35	-13	-7.35	-47.51	-28.88	3.59	12.12	H	Pass
9400	-19.31	-13	-6.31	-45.81	-28.41	4.1	13.20	H	Pass
11280	-15.85	-13	-2.85	-45.11	-24.89	4.27	13.31	H	Pass
13160	-17.59	-13	-4.59	-50.88	-27.11	4.27	13.79	H	Pass
15039	-23.78	-13	-10.78	-57.37	-32.75	4.75	13.72	H	Pass
16920	-20.74	-13	-7.74	-57.55	-29.41	4.88	13.55	H	Pass

Band :	GSM1900	Temperature :	23~25°C
Test Mode :	EDGE 8 Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



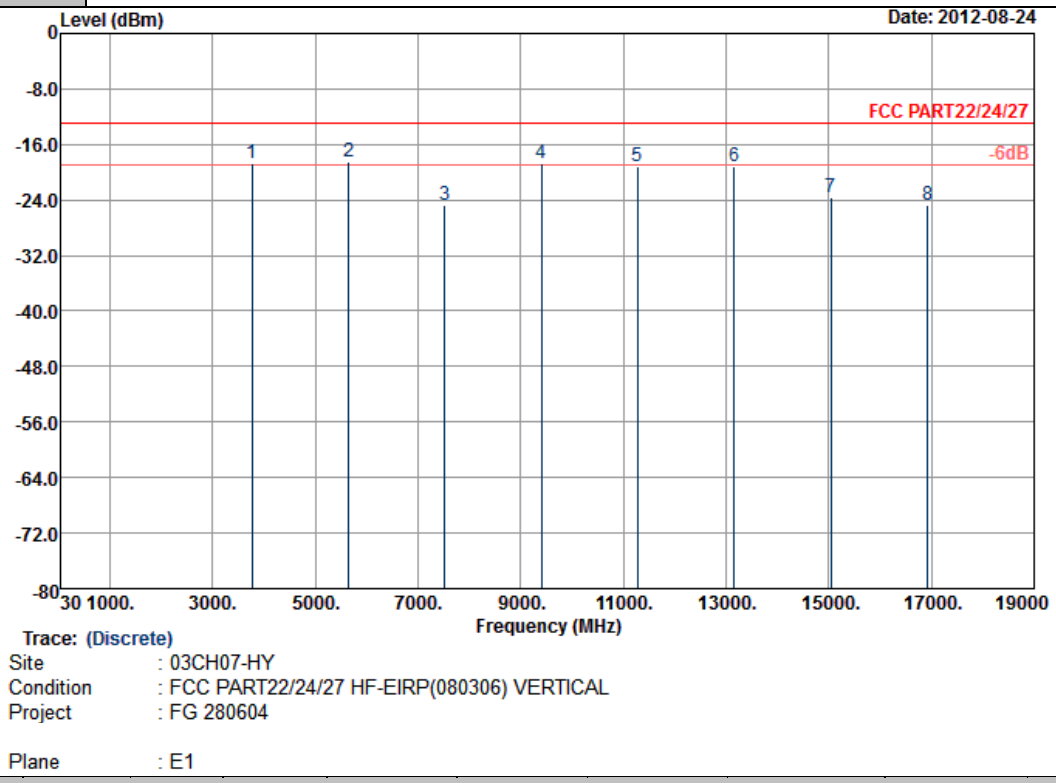
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-20.71	-13	-7.71	-36.67	-27.01	2.51	8.81	V	Pass
5640	-19.81	-13	-6.81	-39.85	-27.52	2.99	10.70	V	Pass
7516	-21.69	-13	-8.69	-48.57	-30.22	3.59	12.12	V	Pass
9400	-18.02	-13	-5.02	-44.14	-27.12	4.1	13.20	V	Pass
11276	-19.52	-13	-6.52	-47.73	-28.56	4.27	13.31	V	Pass
13160	-16.81	-13	-3.81	-47.92	-26.33	4.27	13.79	V	Pass
15039	-23.44	-13	-10.44	-55.54	-32.41	4.75	13.72	V	Pass
16920	-23.59	-13	-10.59	-59.77	-32.26	4.88	13.55	V	Pass

Band :	GSM1900	Temperature :	23~25°C
Test Mode :	EDGE 8 Link + Battery 2	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



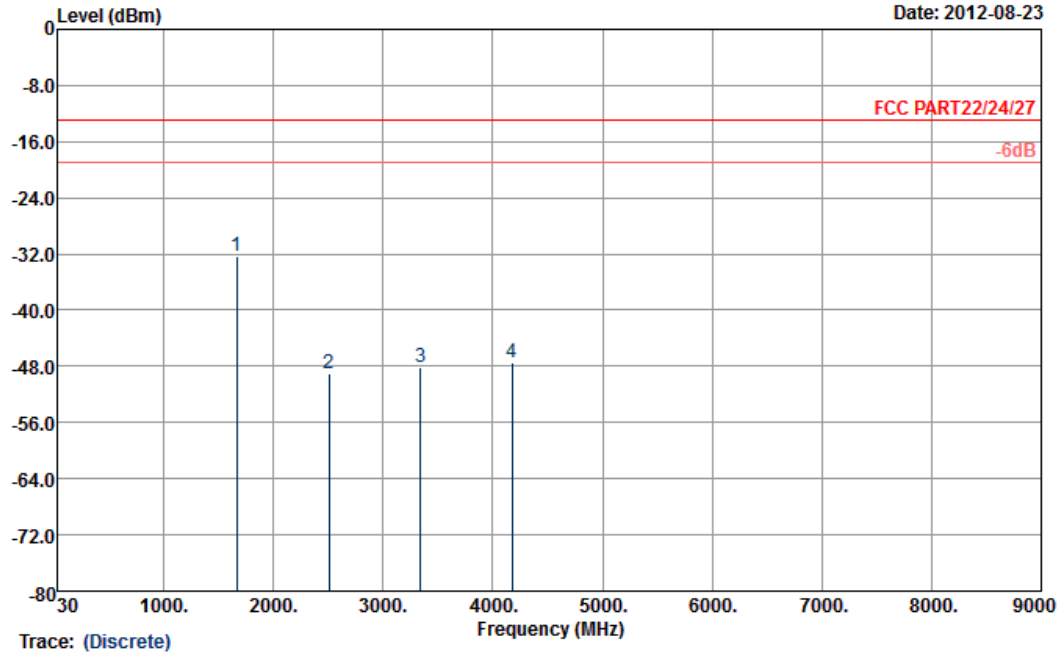
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-19.55	-13	-6.55	-34.4	-25.85	2.51	8.81	H	Pass
5640	-16.22	-13	-3.22	-36.59	-23.93	2.99	10.70	H	Pass
7520	-21.62	-13	-8.62	-48.57	-30.15	3.59	12.12	H	Pass
9400	-18.95	-13	-5.95	-45.03	-28.05	4.1	13.20	H	Pass
11280	-17.72	-13	-4.72	-46.47	-26.76	4.27	13.31	H	Pass
13160	-21.65	-13	-8.65	-54.61	-31.17	4.27	13.79	H	Pass
15039	-24.94	-13	-11.94	-58.22	-33.91	4.75	13.72	H	Pass
16920	-22.48	-13	-9.48	-59.07	-31.15	4.88	13.55	H	Pass

Band :	GSM1900	Temperature :	23~25°C
Test Mode :	EDGE 8 Link + Battery 2	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



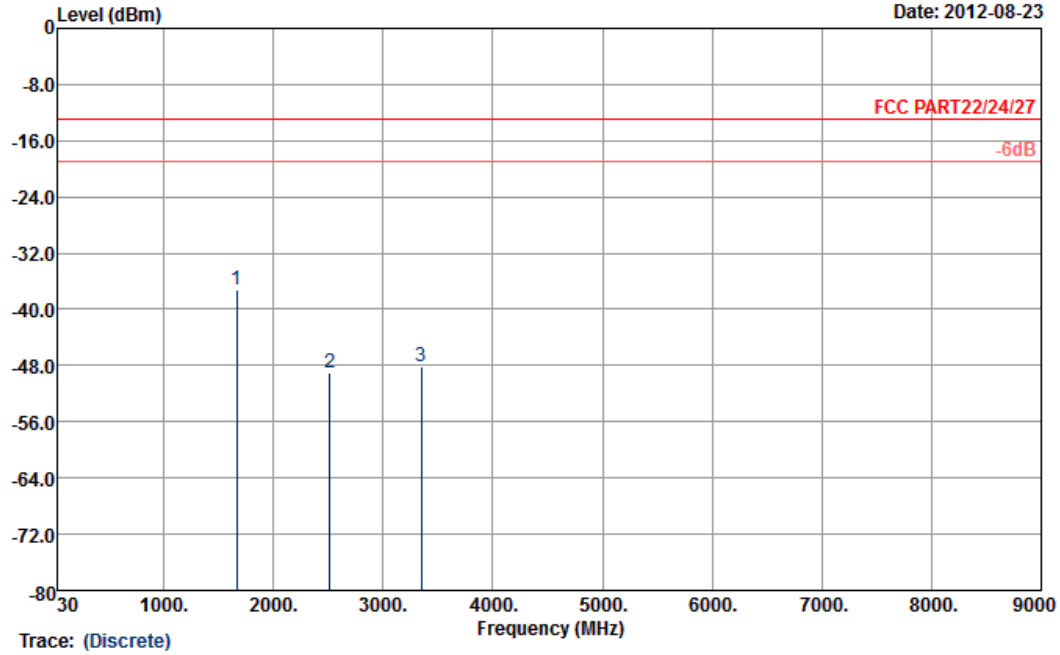
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-18.80	-13	-5.80	-34.97	-25.1	2.51	8.81	V	Pass
5640	-18.41	-13	-5.41	-38.67	-26.12	2.99	10.70	V	Pass
7520	-24.64	-13	-11.64	-51.17	-33.17	3.59	12.12	V	Pass
9400	-18.73	-13	-5.73	-44.56	-27.83	4.1	13.20	V	Pass
11276	-19.11	-13	-6.11	-47.7	-28.15	4.27	13.31	V	Pass
13160	-19.21	-13	-6.21	-50.27	-28.73	4.27	13.79	V	Pass
15039	-23.61	-13	-10.61	-55.72	-32.58	4.75	13.72	V	Pass
16923	-24.74	-13	-11.74	-60.88	-33.41	4.88	13.55	V	Pass

Band :	WCDMA Band V	Temperature :	23~25°C
Test Mode :	RMC 12.2Kbps Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



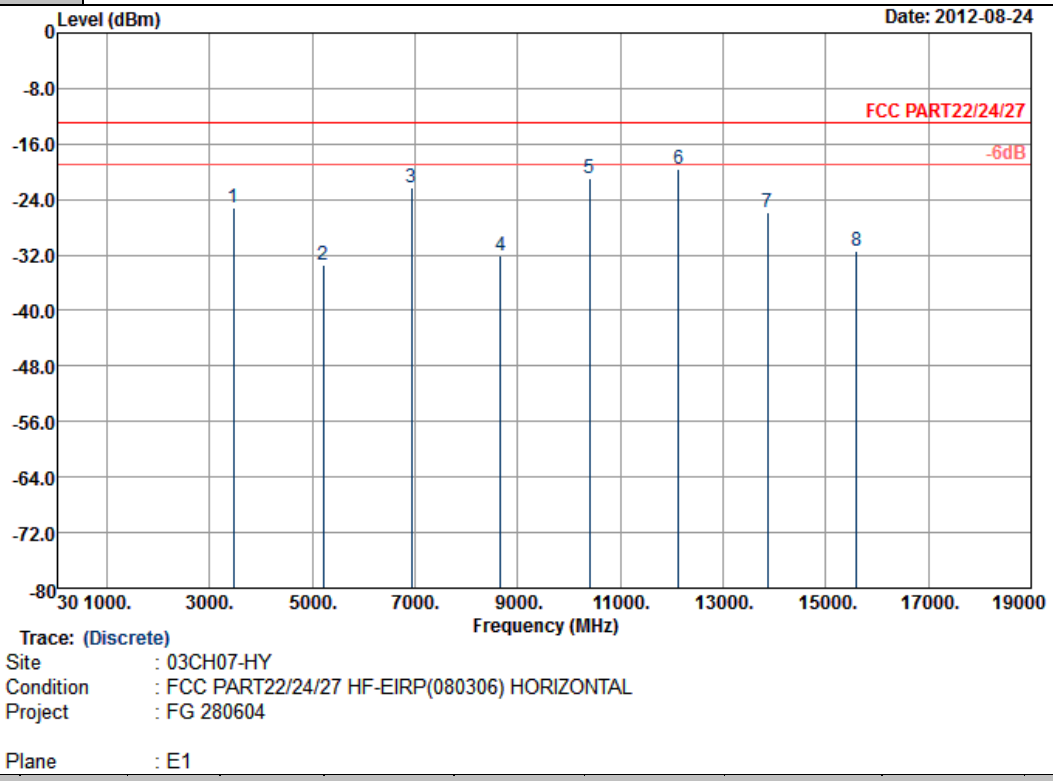
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1669	-32.28	-13	-19.28	-41.76	-34	1.62	5.49	H	Pass
2506	-49.03	-13	-36.03	-63.27	-51	2.1	6.22	H	Pass
3343	-48.11	-13	-35.11	-62.44	-51	3.03	8.07	H	Pass
4175	-47.46	-13	-34.46	-63.88	-52	2.52	9.21	H	Pass

Band :	WCDMA Band V	Temperature :	23~25°C
Test Mode :	RMC 12.2Kbps Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



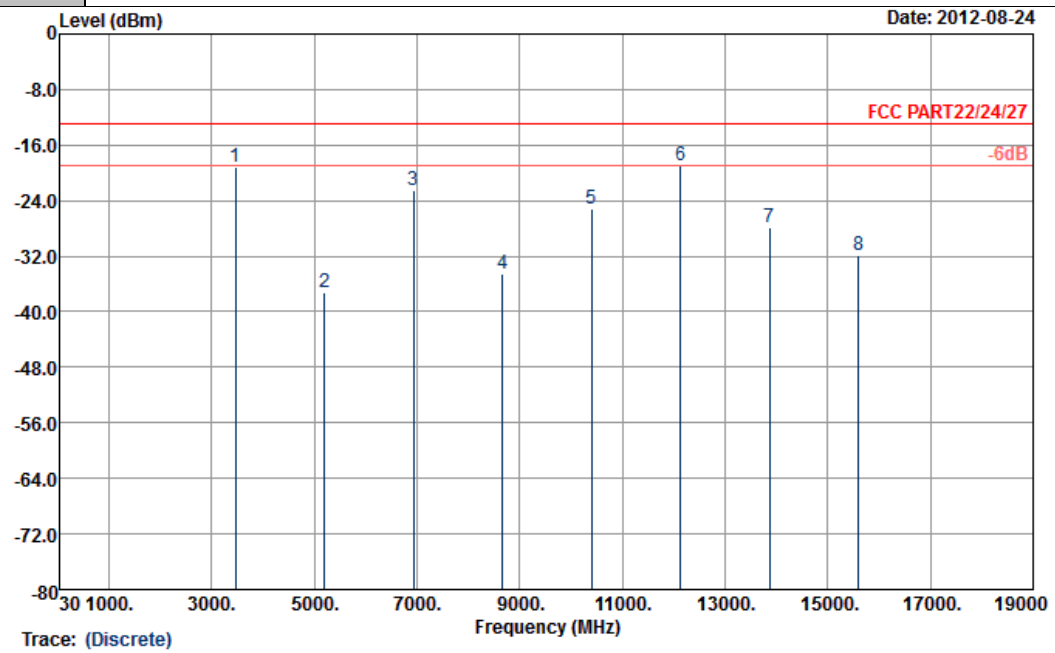
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1669	-37.28	-13	-24.28	-48.16	-39	1.62	5.49	V	Pass
2512	-49.03	-13	-36.03	-62.77	-51	2.1	6.22	V	Pass
3349	-48.11	-13	-35.11	-64.36	-51	3.03	8.07	V	Pass

Band :	WCDMA Band IV	Temperature :	23~25°C
Test Mode :	RMC 12.2Kbps Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



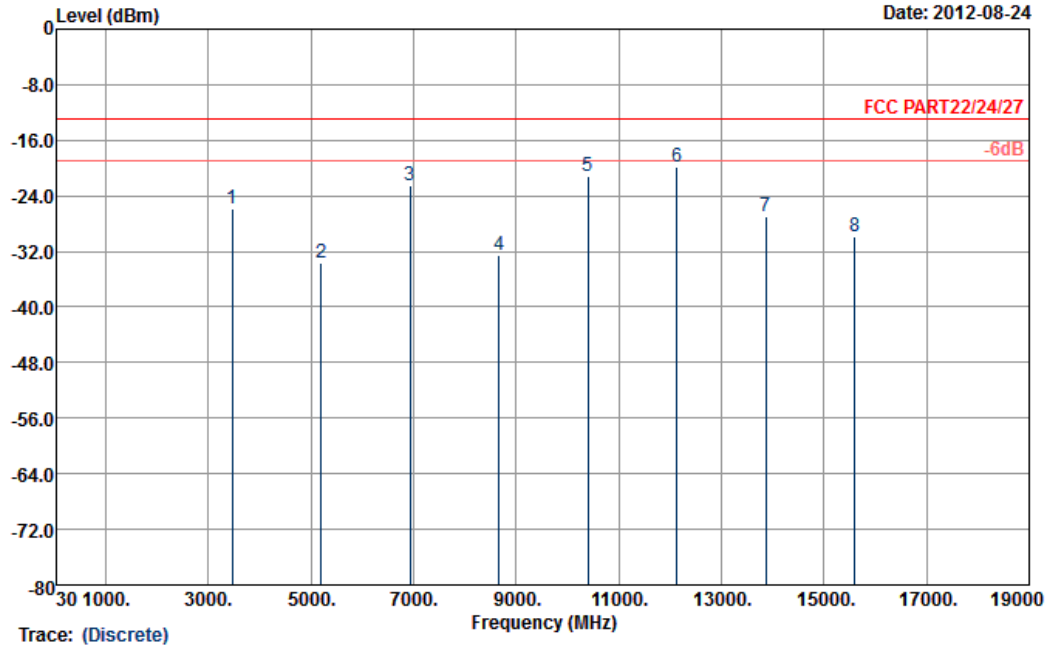
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3468	-25.28	-13	-12.28	-39.23	-29.11	4.48	8.31	H	Pass
5204	-33.45	-13	-20.45	-51.9	-38.09	5.332	9.98	H	Pass
6936	-22.33	-13	-9.33	-47.98	-27.57	6.1	11.34	H	Pass
8668	-32.05	-13	-19.05	-57.45	-36.97	8.25	13.17	H	Pass
10404	-21.04	-13	-8.04	-50.05	-25.33	8.65	12.94	H	Pass
12132	-19.57	-13	-6.57	-50.82	-23.88	8.59	12.90	H	Pass
13872	-25.88	-13	-12.88	-59.18	-31.93	8.14	14.19	H	Pass
15600	-31.33	-13	-18.33	-64.83	-35.82	9.45	13.94	H	Pass

Band :	WCDMA Band IV	Temperature :	23~25°C
Test Mode :	RMC 12.2Kbps Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



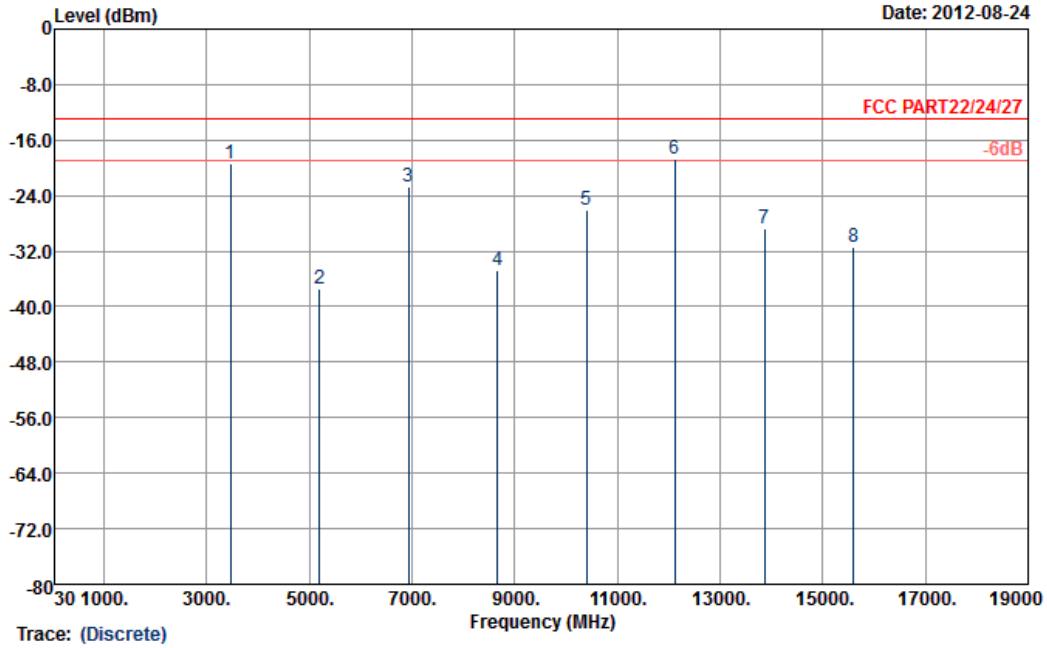
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3468	-19.25	-13	-6.25	-34.28	-23.08	4.48	8.31	V	Pass
5200	-37.22	-13	-24.22	-55.66	-41.86	5.332	9.98	V	Pass
6936	-22.45	-13	-9.45	-47.35	-27.69	6.1	11.34	V	Pass
8668	-34.53	-13	-21.53	-59.51	-39.45	8.25	13.17	V	Pass
10400	-25.14	-13	-12.14	-53.1	-29.43	8.65	12.94	V	Pass
12132	-18.84	-13	-5.84	-48.44	-23.15	8.59	12.90	V	Pass
13872	-27.79	-13	-14.79	-59.54	-33.84	8.14	14.19	V	Pass
15600	-31.89	-13	-18.89	-65.11	-36.38	9.45	13.94	V	Pass

Band :	WCDMA Band IV	Temperature :	23~25°C
Test Mode :	RMC 12.2Kbps Link + Battery 2	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



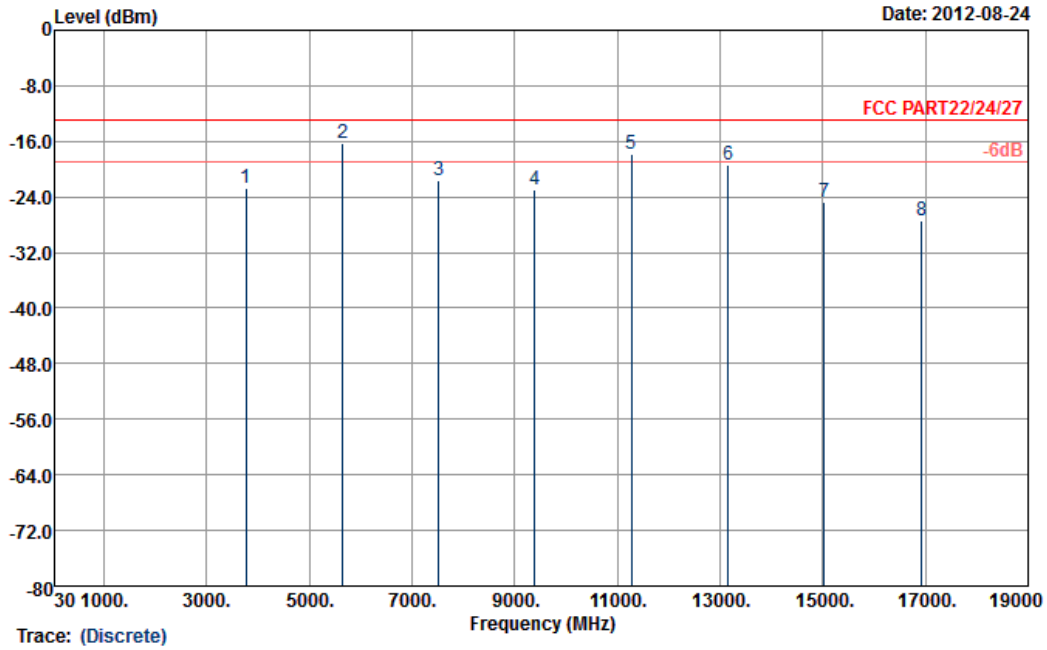
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3460	-25.75	-13	-12.75	-39.91	-29.58	4.48	8.31	H	Pass
5200	-33.61	-13	-20.61	-52.04	-38.25	5.332	9.98	H	Pass
6936	-22.47	-13	-9.47	-48.23	-27.71	6.1	11.34	H	Pass
8668	-32.47	-13	-19.47	-57.93	-37.39	8.25	13.17	H	Pass
10404	-21.24	-13	-8.24	-50.19	-25.53	8.65	12.94	H	Pass
12132	-19.86	-13	-6.86	-51.08	-24.17	8.59	12.90	H	Pass
13860	-27.09	-13	-14.09	-60.29	-33.14	8.14	14.19	H	Pass
15600	-29.84	-13	-16.84	-63.69	-34.33	9.45	13.94	H	Pass

Band :	WCDMA Band IV	Temperature :	23~25°C
Test Mode :	RMC 12.2Kbps Link + Battery 2	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



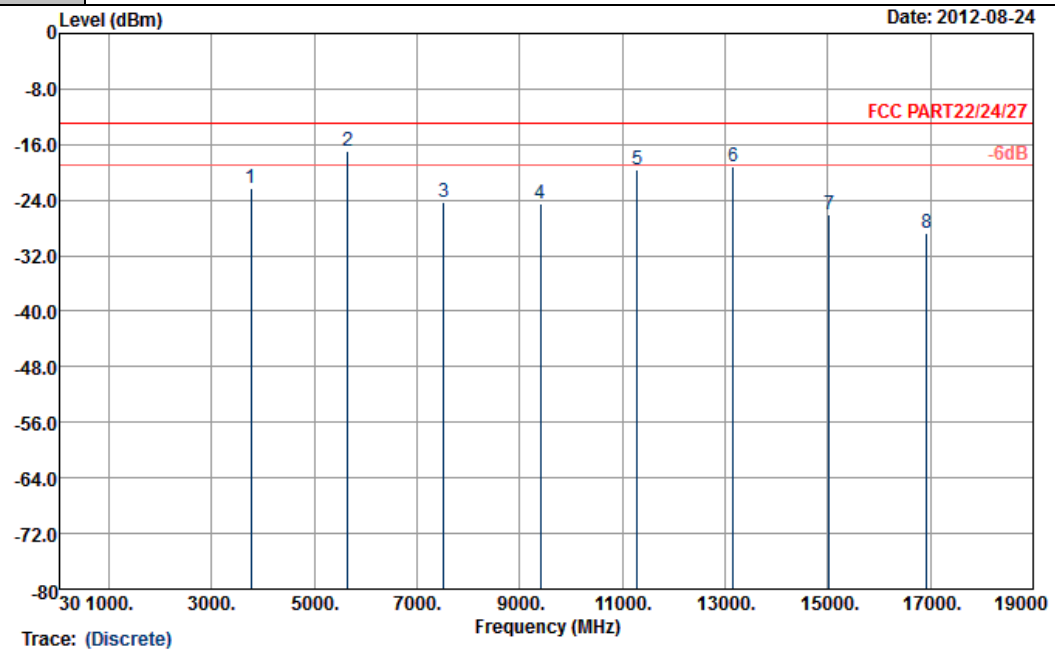
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3468	-19.35	-13	-6.35	-34.6	-23.18	4.48	8.31	V	Pass
5200	-37.47	-13	-24.47	-55.86	-42.11	5.332	9.98	V	Pass
6936	-22.75	-13	-9.75	-47.61	-27.99	6.1	11.34	V	Pass
8664	-34.80	-13	-21.80	-59.71	-39.72	8.25	13.17	V	Pass
10400	-25.97	-13	-12.97	-53.78	-30.26	8.65	12.94	V	Pass
12120	-18.83	-13	-5.83	-48.58	-23.14	8.59	12.90	V	Pass
13872	-28.80	-13	-15.80	-60.33	-34.85	8.14	14.19	V	Pass
15600	-31.53	-13	-18.53	-64.6	-36.02	9.45	13.94	V	Pass

Band :	WCDMA Band II	Temperature :	23~25°C
Test Mode :	RMC 12.2Kbps Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



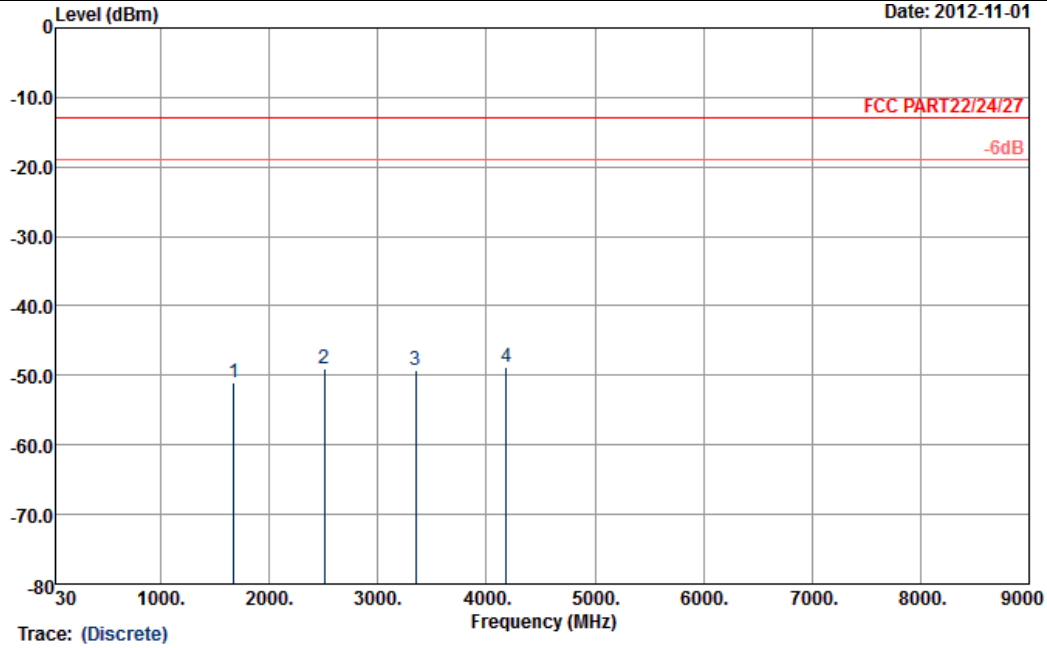
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3756	-22.65	-13	-9.65	-37.51	-28.95	2.51	8.81	H	Pass
5644	-16.30	-13	-3.30	-36.69	-24.01	2.99	10.70	H	Pass
7524	-21.55	-13	-8.55	-48.44	-30.08	3.59	12.12	H	Pass
9392	-22.93	-13	-9.93	-49.08	-32.03	4.1	13.20	H	Pass
11272	-17.79	-13	-4.79	-46.58	-26.83	4.27	13.31	H	Pass
13152	-19.49	-13	-6.49	-52.43	-29.01	4.27	13.79	H	Pass
15027	-24.74	-13	-11.74	-57.8	-33.71	4.75	13.72	H	Pass
16920	-27.38	-13	-14.38	-63.81	-36.05	4.88	13.55	H	Pass

Band :	WCDMA Band II	Temperature :	23~25°C
Test Mode :	RMC 12.2Kbps Link + Battery 1	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



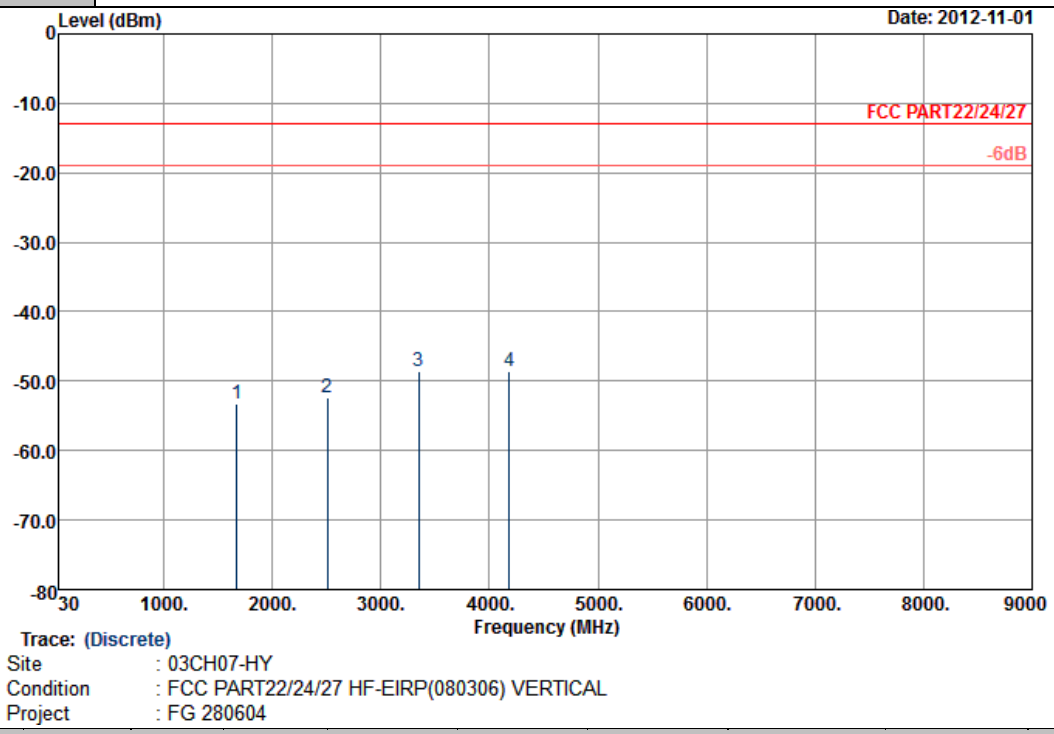
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3756	-22.33	-13	-9.33	-38.19	-28.63	2.51	8.81	V	Pass
5644	-16.88	-13	-3.88	-37	-24.59	2.99	10.70	V	Pass
7524	-24.19	-13	-11.19	-50.93	-32.72	3.59	12.12	V	Pass
9396	-24.46	-13	-11.46	-50.49	-33.56	4.1	13.20	V	Pass
11288	-19.64	-13	-6.64	-48.21	-28.68	4.27	13.31	V	Pass
13156	-19.15	-13	-6.15	-50.47	-28.67	4.27	13.79	V	Pass
15033	-26.09	-13	-13.09	-58.32	-35.06	4.75	13.72	V	Pass
16920	-28.85	-13	-15.85	-64.97	-37.52	4.88	13.55	V	Pass

Band :	CDMA2000 BC0	Temperature :	24~25°C
Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K + Battery 1	Relative Humidity :	40~41%
Test Engineer :	Gavin Wu	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



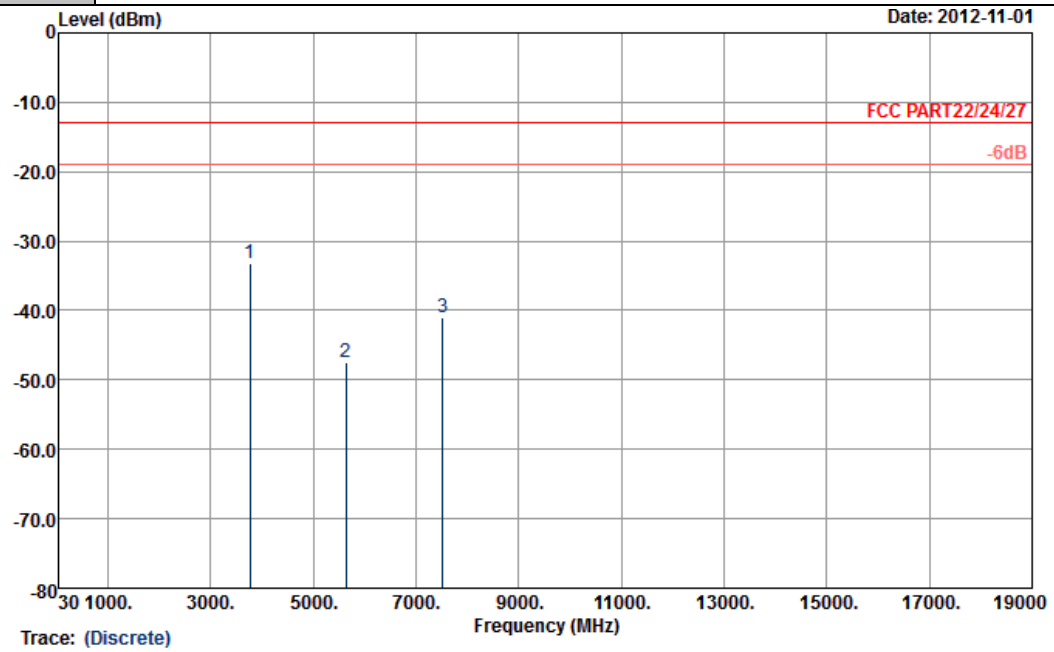
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-51.01	-13	-38.01	-60.13	-52.73	1.62	5.49	H	Pass
2509	-48.98	-13	-35.98	-62.56	-50.95	2.1	6.22	H	Pass
3346	-49.34	-13	-36.34	-61.78	-52.23	3.03	8.07	H	Pass
4180	-48.78	-13	-35.78	-65.3	-53.32	2.52	9.21	H	Pass

Band :	CDMA2000 BC0	Temperature :	24~25°C
Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K + Battery 1	Relative Humidity :	40~41%
Test Engineer :	Gavin Wu	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



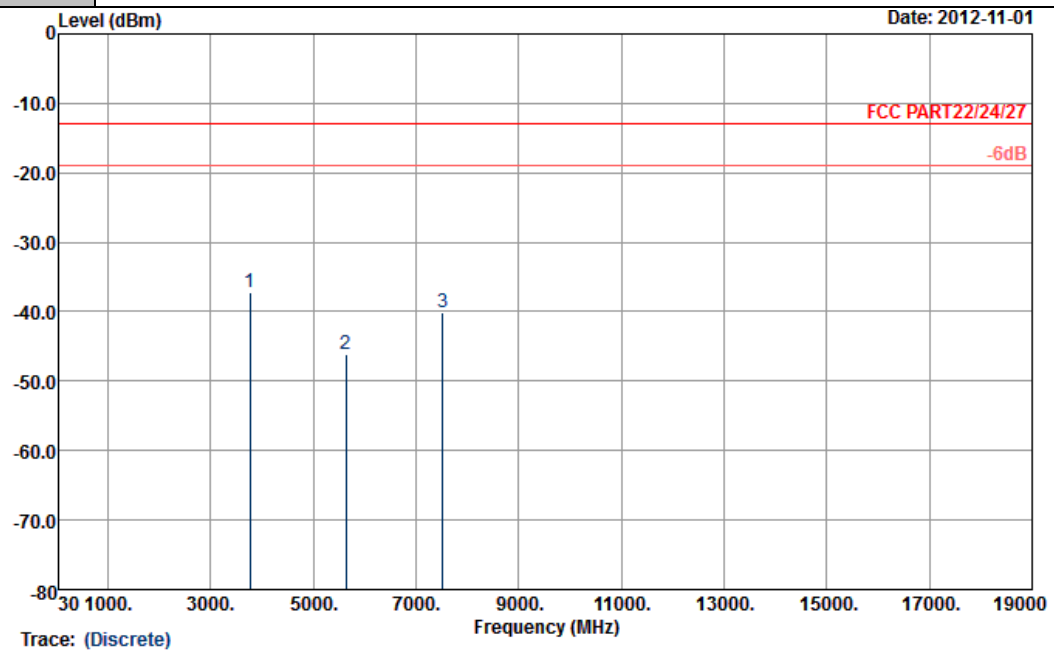
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-53.15	-13	-40.15	-64.45	-54.87	1.62	5.49	V	Pass
2509	-52.26	-13	-39.26	-66.24	-54.23	2.1	6.22	V	Pass
3346	-48.56	-13	-35.56	-64.29	-51.45	3.03	8.07	V	Pass
4180	-48.58	-13	-35.58	-65.87	-53.12	2.52	9.21	V	Pass

Band :	CDMA2000 BC1	Temperature :	24~25°C
Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K + Battery 1	Relative Humidity :	40~41%
Test Engineer :	Gavin Wu	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-33.14	-13	-20.14	-49.79	-39.44	2.51	8.81	H	Pass
5636	-47.53	-13	-34.53	-69.27	-55.24	2.99	10.70	H	Pass
7520	-40.94	-13	-27.94	-67.89	-49.47	3.59	12.12	H	Pass

Band :	CDMA2000 BC1	Temperature :	24~25°C
Test Mode :	1xEV-DO Rev. 0_RTAP 153.6K + Battery 1	Relative Humidity :	40~41%
Test Engineer :	Gavin Wu	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-37.17	-13	-24.17	-55.15	-43.47	2.51	8.81	V	Pass
5636	-46.06	-13	-33.06	-68.53	-53.77	2.99	10.70	V	Pass
7520	-40.04	-13	-27.04	-68.06	-48.57	3.59	12.12	V	Pass

3.7 Frequency Stability Measurement

3.7.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

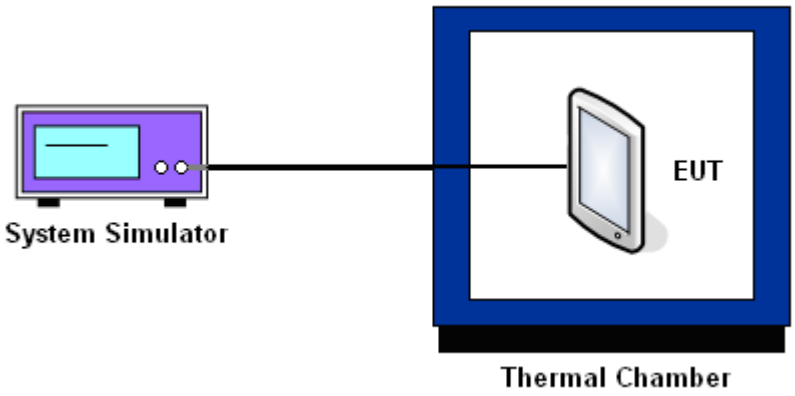
3.7.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. If the EUT cannot be turned on at -30°C, the testing lowest temperature will be raised in 10°C step until the EUT can be turned on.

3.7.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at 25±5° C and connected with the base station.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

3.7.5 Test Setup



3.7.6 Test Result of Temperature Variation

Band :	GSM 850	Channel :	189
Limit (ppm) :	2.5	Frequency :	836.4 MHz

Temperature (°C)	GPRS 8		EDGE 8		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	44	0.05	53	0.06	PASS
-20	38	0.04	46	0.05	
-10	26	0.03	35	0.04	
0	-34	-0.04	-45	-0.05	
10	-30	-0.04	-47	-0.06	
20	-26	-0.03	-39	-0.05	
30	-22	-0.03	42	0.05	
40	-37	-0.04	-51	-0.06	
50	-23	-0.03	47	0.06	

Band :	GSM 1900	Channel :	661
Limit (ppm) :	2.5	Frequency :	1880.0 MHz

Temperature (°C)	GPRS 8		EDGE 8		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	79	0.04	101	0.05	PASS
-20	71	0.04	97	0.05	
-10	54	0.03	76	0.04	
0	53	0.03	80	0.04	
10	50	0.03	73	0.04	
20	47	0.02	95	0.05	
30	30	0.02	81	0.04	
40	-33	-0.02	-85	-0.04	
50	31	0.02	71	0.04	

Band :	WCDMA Band V	Channel :	4182
Limit (ppm) :	2.5	Frequency :	836.4 MHz

Temperature (°C)	RMC 12.2Kbps		Result
	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-16	-0.02	PASS
-20	-19	-0.02	
-10	-15	-0.02	
0	-17	-0.02	
10	-17	-0.02	
20	-15	-0.02	
30	-19	-0.02	
40	19	0.02	
50	-17	-0.02	

Band :	WCDMA Band IV	Channel :	1413
Limit (ppm) :	2.5	Frequency :	1732.6 MHz

Temperature (°C)	RMC 12.2Kbps		Result
	Freq. Dev. (Hz)	Deviation (ppm)	
-30	43	0.03	PASS
-20	40	0.02	
-10	-36	-0.02	
0	34	0.02	
10	29	0.02	
20	26	0.02	
30	-36	-0.02	
40	-29	-0.02	
50	-30	-0.02	

Band :	WCDMA Band II	Channel :	9400
Limit (ppm) :	2.5	Frequency :	836.4 MHz

Temperature (°C)	RMC 12.2Kbps		Result
	Freq. Dev. (Hz)	Deviation (ppm)	
-30	37	0.02	PASS
-20	-35	-0.02	
-10	31	0.02	
0	-33	-0.02	
10	36	0.02	
20	37	0.02	
30	37	0.02	
40	-30	-0.02	
50	-35	-0.02	

Band :	CDMA2000 BC0 1xEV-DO Rev. 0_RTAP 153.6K	Channel :	384
Limit (ppm) :	2.5	Frequency :	836.52 MHz

Temperature (°C)	Freq. Dev. (Hz)	Deviation (ppm)	Result
-30	-6	-0.01	PASS
-20	-4	0.00	
-10	-3	0.00	
0	-2	0.00	
10	3	0.00	
20	4	0.00	
30	-6	-0.01	
40	-5	-0.01	
50	-7	-0.01	

Band :	CDMA2000 BC1 1xEV-DO Rev. 0_RTAP 153.6K	Channel :	600
Limit (ppm) :	2.5	Frequency :	1880.0 MHz

Temperature (°C)	Freq. Dev. (Hz)	Deviation (ppm)	Result
-30	9	0.00	PASS
-20	8	0.00	
-10	7	0.00	
0	-6	0.00	
10	-6	0.00	
20	-7	0.00	
30	-9	0.00	
40	13	0.01	
50	-15	-0.01	

3.7.7 Test Result of Voltage Variation

Band & Channel	Mode	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
GSM 850 CH189	GPRS 8	12	-18	-0.02	2.5	PASS
		BEP	-21	-0.02		
		12.6	25	0.03		
	EDGE 8	12	-28	-0.03		
		BEP	-22	-0.03		
		12.6	-31	-0.04		
GSM 1900 CH661	GPRS 8	12	52	0.03		
		BEP	49	0.03		
		12.6	46	0.02		
	EDGE 8	12	-54	-0.03		
		BEP	-50	-0.03		
		12.6	-56	-0.03		
WCDMA Band V CH4182	RMC 12.2Kbps	12	-18	-0.02		
		BEP	-16	-0.02		
		12.6	-19	-0.02		
WCDMA Band IV CH1413	RMC 12.2Kbps	12	-39	-0.02		
		BEP	-44	-0.03		
		12.6	-48	-0.03		
WCDMA Band II CH9400	RMC 12.2Kbps	12	-26	-0.01		
		BEP	-28	-0.01		
		12.6	-33	-0.02		
CDMA2000 BC0 CH384	1xEV-DO Rev. 0 RTAP 153.6K	12	4	0.00		
		BEP	3	0.00		
		12.6	3	0.00		
CDMA2000 BC1 CH600	1xEV-DO Rev. 0 RTAP 153.6K	12	-7	0.00		
		BEP	-8	0.00		
		12.6	-18	-0.01		

Note:

1. Normal Voltage = 12V.
2. Battery End Point (BEP) = 11.4 V.

4 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
System Simulator	R&S	CMU200	117995	N/A	Jul. 30, 2012	Sep. 18, 2012 ~ Nov. 02, 2012	Jul. 29, 2013	Conducted (TH02-HY)
Spectrum Analyzer	R&S	FSP40	100055	9kHz~40GHz	Jun. 06, 2012	Sep. 18, 2012 ~ Nov. 02, 2012	Jun. 05, 2013	Conducted (TH02-HY)
Thermal Chamber	Ten Billion	TTH-D3SP	TBN-930701	N/A	Jul. 23, 2012	Sep. 18, 2012 ~ Nov. 02, 2012	Jul. 22, 2013	Conducted (TH02-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2726	30MHz ~ 1GHz	Oct. 22, 2011	Aug. 23, 2012~ Oct. 06, 2012	Oct. 21, 2012	Radiation (03CH07-HY)
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Oct. 06, 2012	Oct. 06, 2012~ Nov. 01, 2012	Oct. 05, 2013	Radiation (03CH07-HY)
Spectrum Analyzer	R&S	FSP30	101067	9KHz ~ 30GHz	Dec. 06, 2011	Aug. 23, 2012~ Nov. 01, 2012	Dec. 05, 2012	Radiation (03CH07-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Aug. 01, 2012	Aug. 23, 2012~ Nov. 01, 2012	Jul. 31, 2013	Radiation (03CH07-HY)
Pre Amplifier	Agilent	8449B	3008A02362	1GHz ~ 26.5GHz	Dec. 05, 2011	Aug. 23, 2012~ Nov. 01, 2012	Dec. 04, 2012	Radiation (03CH07-HY)
Pre Amplifier	COM-POWER	PA-103A	161241	10-1000MHz.32dB. GAIN	Feb. 27, 2012	Aug. 23, 2012~ Nov. 01, 2012	Feb. 26, 2013	Radiation (03CH07-HY)
Signal Analyzer	Rohde & Schwarz	FSQ	200578/026	20Hz~26.5GHz	Feb. 06, 2012	Aug. 23, 2012~ Nov. 01, 2012	Feb. 05, 2013	Radiation (03CH07-HY)
Pre Amplifier	MITEQ	AMF-7D-00 101800-30-1	159088	1GHz ~ 18GHz	Mar. 10, 2012	Aug. 23, 2012~ Nov. 01, 2012	Mar. 09, 2013	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz ~ 40GHz	Oct. 21, 2011	Aug. 23, 2012~ Sep. 28, 2012	Oct. 20, 2012	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz ~ 40GHz	Sep. 28, 2012	Sep. 28, 2012~ Nov. 01, 2012	Sep. 27, 2013	Radiation (03CH07-HY)
System Simulator	R&S	CMU200	117997	N/A	Aug. 22, 2011	Aug. 23, 2012~ Nov. 01, 2012	Aug. 21, 2013	Radiation (03CH07-HY)
System Simulator	Agilent	E5515C (8960)	MY48360820	N/A	Jan. 05, 2012	Aug. 23, 2012~ Nov. 01, 2012	Jan. 04, 2014	Radiation (03CH07-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.54**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.72**

Appendix A. Photographs of EUT

Please refer to Sporton report number EP280604 as below.