FCC PART 22H, PART 24E

MEASUREMENT AND TEST REPORT

For

Posh Mobile Limited

1011A, 10/F., Harbour Centre Tower 1, No. 1 Hok Cheung St., Hung Hom, Kowloon, Hong Kong

FCC ID: 2ABN6S900

Report Type:	**Product Type:**
Original Report	Equal Max

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Report Number:	RDG151008002-00C
Report Date:	2015-10-26
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Posh Mobile Limited.* 's product, model number: *S900A (FCC ID: 2ABN6S900)* (the "EUT") in this report was a *Equal Max,* which was measured approximately: 23.9 cm (L) x13.6 cm (W) x 1.1 cm (H), rated input voltage: DC3.7V rechargeable Li-ion battery or DC5V charging from adapter.

Adapter information:
Part No.: C01-S900
MODEL:KZ0502000
INPUT: AC100-240V, 50/60Hz 0.5A
OUTPUT: DC5V, 2A

Note: The series product, model S900A,S900B are electrically identical, the difference between them is model name, we selected S900A for testing, the details was explained in the attached declaration letter.

All measurement and test data in this report was gathered from production sample serial number: 151008002 (Assigned by BACL, Dongguan). The EUT was received on 2015-10-10

Objective

This report is prepared on behalf of *Posh Mobile Limited.* in accordance with: Part 2-Subpart J, Part 22-Subpart H, and Part 24-Subpart E of the Federal Communications Commission's rules.

The objective is to determine compliance with FCC rules for output power, modulation characteristic, occupied bandwidth, spurious emissions at antenna terminal, spurious radiated emission, frequency stability and band edge.

Related Submittal(s)/Grant(s)

FCC Part 15B JBP submissions with FCC ID: 2ABN6S900
FCC Part 15C DSS submissions with FCC ID: 2ABN6S900
FCC Part 15C DTS submissions with FCC ID: 2ABN6S900

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-part J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
Part 24 Subpart E - Personal Communication Services

Applicable Standards: TIA/EIA-603-D-2010.

All radiated and conducted emissions measurements were performed at Bay Area Compliance Laboratories Corp.(Dongguan).

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China

Test site at Bay Area Compliance Laboratories Corp. (Dongguan) has been fully described in reports submitted to the Federal Communications Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 06, 2015.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 273710. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

SYSTEM TEST CONFIGURATION

Justification

The EUT was configured for testing according to TIA/EIA-603-D-2010.

The test items were performed with the EUT operating at testing mode.

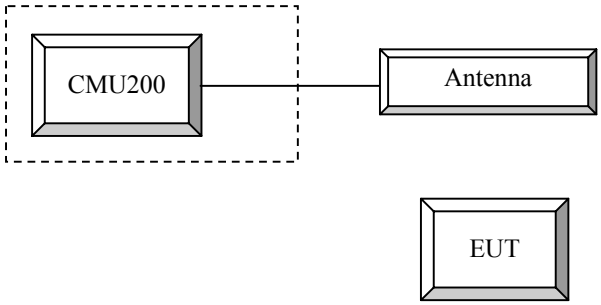
Equipment Modifications

No modification was made to the EUT.

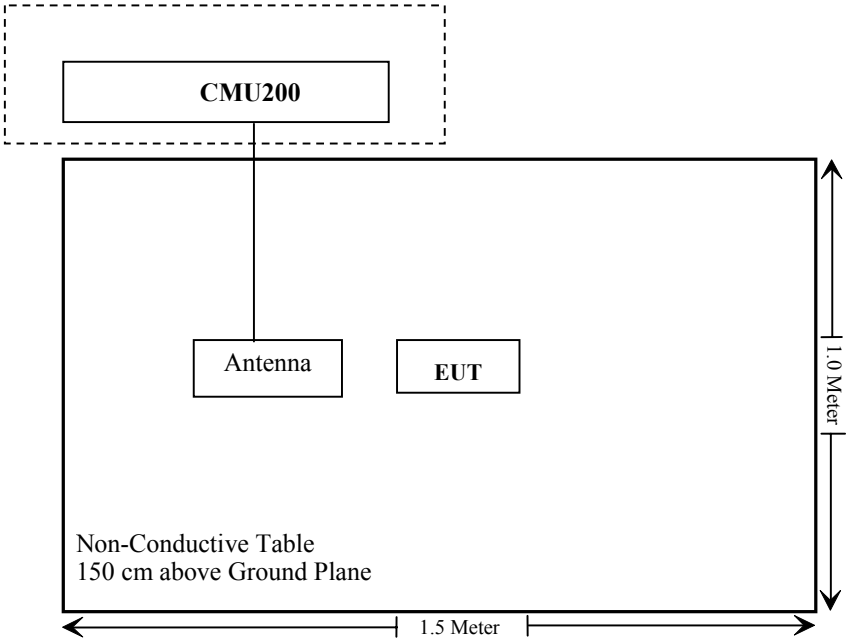
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
R&S	Universal Radio Communication Tester	CMU200	109038
N/A	ANTENNA	N/A	N/A

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1310, §2.1093	RF Exposure	Compliance
§2.1046; § 22.913 (a); § 24.232 (c)	RF Output Power	Compliance
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905 § 22.917; § 24.238	Occupied Bandwidth	Compliance
§ 2.1051, § 22.917 (a); § 24.238 (a)	Spurious Emissions at Antenna Terminal	Compliance
§ 2.1053 § 22.917 (a); § 24.238 (a)	Field Strength of Spurious Radiation	Compliance
§ 22.917 (a); § 24.238 (a)	Out of band emission, Band Edge	Compliance
§ 2.1055 § 22.355; § 24.235	Frequency stability vs. temperature Frequency stability vs. voltage	Compliance

FCC §1.1310 & §2.1093- RF EXPOSURE

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: RDG151008002-20.

FCC §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H & 24E, there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046, § 22.913 (a) & § 24.232 (c) - RF OUTPUT POWER

Applicable Standard

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC §2.1046 and §24.232 (C), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications..

According to §24.232 (d) Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. 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.

Test Procedure

GSM/GPRS

Function: Menu select > GSM Mobile Station > GSM 850/1900
Press Connection control to choose the different menus
Press RESET > choose all the reset all settings
Connection Press Signal Off to turn off the signal and change settings
Network Support > GSM + GPRS or GSM + EGSM
Main Service > Packet Data
Service selection > Test Mode A – Auto Slot Config. off
MS Signal Press Slot Config Bottom on the right twice to select and change the number of time slots and power setting
> Slot configuration > Uplink/Gamma
> 33 dBm for GPRS 850
> 30 dBm for GPRS 1900
BS Signal Enter the same channel number for TCH channel (test channel) and BCCH channel
Frequency Offset > + 0 Hz
Mode > BCCH and TCH
BCCH Level > -85 dBm (May need to adjust if link is not stable)
BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]

Channel Type > Off

P0 > 4 dB
Slot Config > Unchanged (if already set under MS signal)
TCH > choose desired test channel
Hopping > Off
Main Timeslot > 3
Network Coding Scheme > CS4 (GPRS)

Bit Stream > 2E9-1 PSR Bit Stream
AF/RF Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection Press Signal on to turn on the signal and change settings

WCDMA-Release 99

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification. The EUT has a nominal maximum output power of 24dBm (+1.7/-3.7).

WCDMA General Settings	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	βc / βd	8/15

WCDMA HSDPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subset	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm2			
	βc	2/15	12/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	βd (SF)	64			
	βc/ βd	2/15	12/15	15/8	15/4
	βhs	4/15	24/15	30/15	30/15
	MPR(dB)	0	0	0.5	0.5
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	Ahs=βhs/ βc	30/15			

WCDMA HSUPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSUPA	HSUPA	HSUPA	HSUPA	HSUPA
	Subset	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	βc	11/15	6/15	15/15	2/15	15/15
	βd	15/15	15/15	9/15	15/15	0
	βec	209/225	12/15	30/15	2/15	5/15
	βc/ βd	11/15	6/15	15/9	2/15	-
	βhs	22/15	12/15	30/15	4/15	5/15
	CM(dB)	1.0	3.0	2.0	3.0	1.0
	MPR(dB)	0	2	1	2	0
HSDPA Specific Settings	DACK	8				
	DNAK	8				
	DCQI	8				
	Ack-Nack repetition factor	3				
	CQI Feedback	4ms				
	CQI Repetition Factor	2				
	Ahs=βhs/ βc	30/15				
HSUPA Specific Settings	DE-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	ETFCI	75	67	92	71	81
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_FCIs	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27		E-TFCI 11 E-TFCI PO4 E-TFCI 92 E-TFCI PO 18	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	

HSPA+

The following tests were conducted according to the test requirements in Table C.11.1.4 of 3GPP TS 34.121-1

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed}1: 30/15 β_{ed}2: 30/15	β_{ed}3: 24/15 β_{ed}4: 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c.
Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
Note 3: DPDCH is not configured, therefore the β_c is set to 1 and β_d = 0 by default.
Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

DC-HSDPA

The following tests were conducted according to the test requirements in Table C.8.1.12 of 3GPP TS 34.121-1

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK

Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.

Radiated method:

ANSI/TIA-603-D section 2.2.17

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2015-08-03	2016-08-02
Sunol Sciences	Antenna	JB3	A060611-3	2014-11-06	2017-11-05
HP	Amplifier	8447E	2434A02181	2015-09-01	2016-09-01
R&S	Spectrum Analyzer	FSEM	DE31388	2015-07-28	2016-07-27
ETS LINDGREN	Horn Antenna	3115	000 527 35	2013-09-06	2016-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2015-02-19	2016-02-19
Giga	Signal Generator	1026	320408	2015-05-09	2016-05-09
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
TDK RF	Horn Antenna	HRN-0118	130 084	2013-09-06	2016-09-06

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.8 °C
Relative Humidity:	57%
ATM Pressure:	101.4 kPa

The testing was performed by Allen Qiao on 2015-10-13

Conducted Output Power

Cellular Band (Part 22H) & PCS Band (Part 24E)

Band	Channel No.	Peak Output Power (dBm)				
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot
Cellular	128	32.67	31.37	30.36	29.34	28.65
	190	32.64	31.21	30.87	29.28	28.50
	251	32.68	31.54	30.85	29.64	28.62
PCS	512	29.75	29.63	28.64	27.62	26.55
	661	29.90	29.57	28.35	27.83	26.38
	810	30.01	29.34	28.68	27.68	26.57

WCDMA Band Ⅱ(PART 24E)

Mode	3GPP Sub Test	Average Output Power (dBm)					
		Low Channel (Ave. Power)	Low Channel (PAR)	Middle Channel (Ave. Power)	Middle Channel (PAR)	High Channel (Ave. Power)	High Channel (PAR)
Rel 99	1	22.12	3.48	22.14	3.68	22.40	3.48
HSDPA	1	21.88	3.42	21.95	3.65	22.24	3.56
	2	22.74	3.41	21.65	3.52	22.18	3.52
	3	22.54	3.46	21.54	3.65	22.04	3.61
	4	22.48	3.37	21.37	3.51	21.86	3.49
HSUPA	1	21.87	3.41	21.97	3.68	22.17	3.47
	2	21.71	3.42	21.74	3.54	22.04	3.49
	3	21.65	3.34	21.63	3.49	21.93	3.52
	4	21.52	3.31	21.59	3.49	21.85	3.62
	5	21.47	3.51	21.56	3.62	21.73	3.54
DC-HSDPA	1	21.73	3.36	21.54	3.67	21.65	3.49
	2	21.52	3.49	21.44	3.54	21.53	3.38
	3	21.62	3.36	21.32	3.62	21.42	3.42
	4	21.48	3.45	21.25	3.49	21.37	3.62
HSPA+	1	20.98	3.50	21.05	3.54	21.13	3.47

WCDMA Band V(PART 22H)

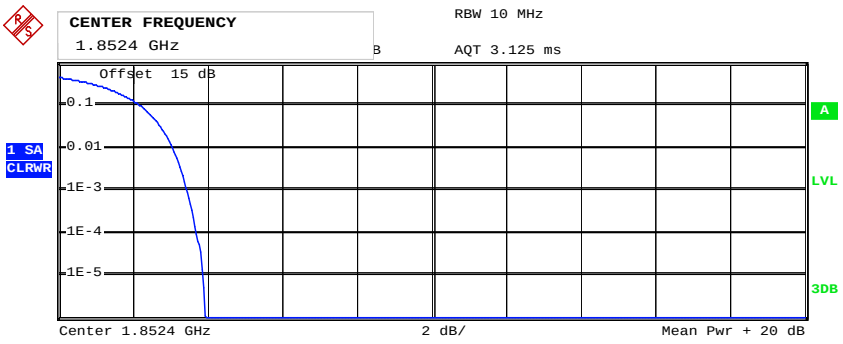
Mode	3GPP Sub Test	Average Output Power (dBm)					
		Low Channel (Ave. Power)	Low Channel (PAR)	Middle Channel (Ave. Power)	Middle Channel (PAR)	High Channel (Ave. Power)	High Channel (PAR)
Rel 99	1	22.61	3.84	22.53	4.20	22.32	3.84
HSDPA	1	21.44	3.80	21.48	4.27	21.24	3.67
	2	21.42	3.59	21.46	4.16	21.20	3.59
	3	21.33	3.73	21.43	4.34	21.16	3.79
	4	21.31	3.68	21.35	4.26	21.07	3.86
DC-HSDPA	1	21.38	3.85	21.41	4.17	21.29	3.91
	2	21.34	3.91	21.37	4.37	21.24	3.86
	3	21.30	3.85	21.25	4.16	21.19	3.67
	4	21.27	3.83	21.24	3.95	21.14	3.54
	5	21.23	3.70	21.16	3.86	21.13	3.28
HSUPA	1	21.16	3.59	21.12	4.15	21.10	3.65
	2	21.14	3.67	21.10	4.21	21.07	3.57
	3	21.12	3.54	21.08	3.96	21.09	3.68
	4	21.07	3.85	21.05	3.85	21.04	3.62
HSPA+	1	21.02	3.71	21.01	3.76	21.05	3.88

Note: peak-to-average ratio (PAR) <13 dB.

Peak-to-average ratio (PAR)

WCDMA Band Ⅱ(PART 24E)

Low Channel

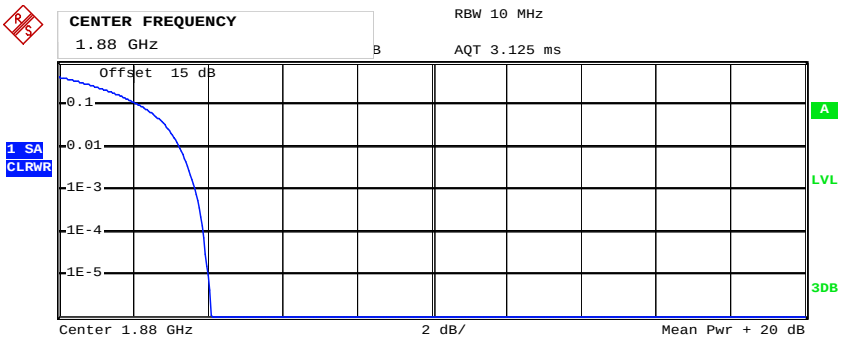


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	20.97 dBm
Peak	24.92 dBm
Crest	3.95 dB
10% @	2.24 dB
1% @	3.08 dB
.1% @	3.48 dB

Date: 13.OCT.2015 16:15:53

Middle Channel

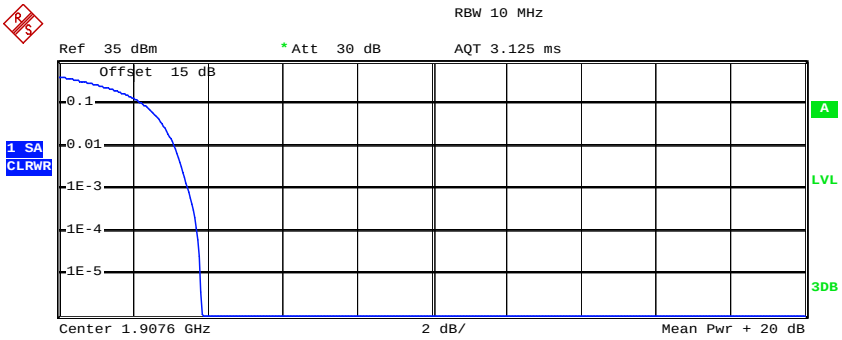


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	19.76 dBm
Peak	23.86 dBm
Crest	4.10 dB
10% @	2.20 dB
1% @	3.28 dB
.1% @	3.68 dB

Date: 13.OCT.2015 16:10:41

High Channel



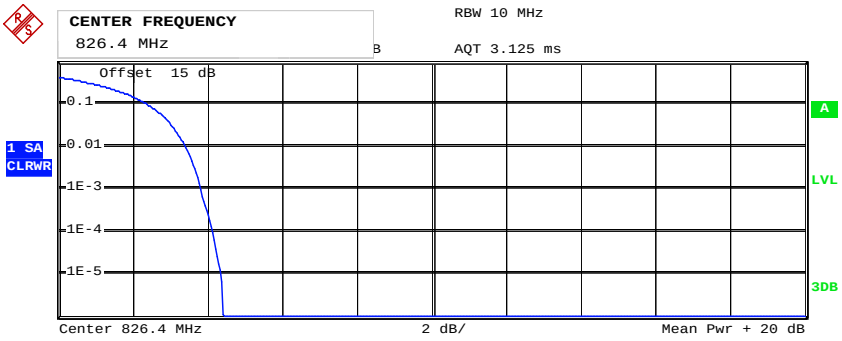
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	20.38 dBm
Peak	24.22 dBm
Crest	3.84 dB
10% @	2.32 dB
1% @	3.12 dB
.1% @	3.48 dB

Date: 13.OCT.2015 16:09:51

WCDMA Band V (PART 22H)

Low Channel

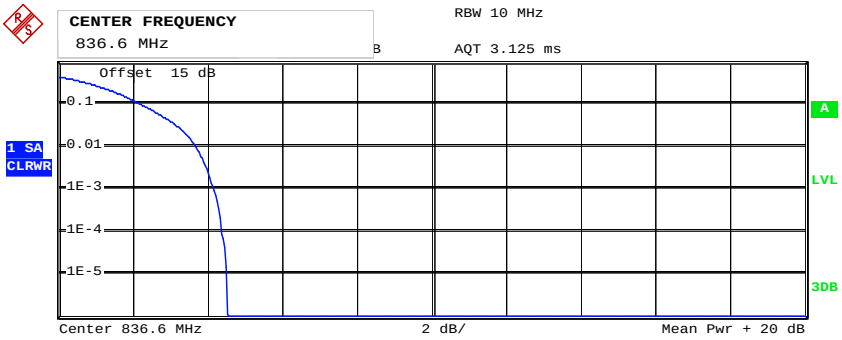


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	21.47 dBm
Peak	25.91 dBm
Crest	4.44 dB
10% @	2.44 dB
1% @	3.44 dB
.1% @	3.84 dB

Date: 13.OCT.2015 16:25:25

Middle Channel

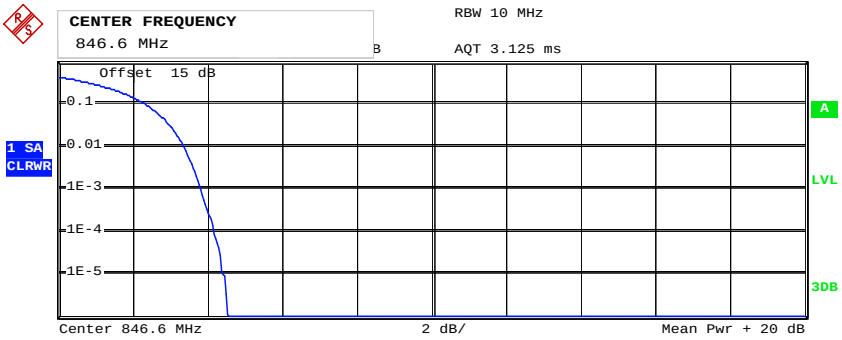


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	20.11 dBm
Peak	24.64 dBm
Crest	4.53 dB
10% @	2.28 dB
1% @	3.72 dB
.1% @	4.20 dB

Date: 13.OCT.2015 16:24:55

High Channel



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	21.87 dBm
Peak	26.40 dBm
Crest	4.54 dB
10% @	2.36 dB
1% @	3.40 dB
.1% @	3.84 dB

Date: 13.OCT.2015 16:25:47

ERP & EIRP

Part 22H

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 850_Middle Channel								
836.6	H	105.98	31.1	0.0	1.0	30.1	38.5	8.4
836.6	V	101.43	29.6	0.0	1.0	28.6	38.5	9.9
WCDMA Band V_Middle Channel								
836.6	H	95.44	20.5	0.0	1.0	19.5	38.5	19.0
836.6	V	95.19	23.4	0.0	1.0	22.4	38.5	16.1

Part 24E

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
PCS 1900_Middle Channel								
1880	H	92.25	20.7	8.4	1.4	27.7	33.0	5.3
1880	V	93.31	21.9	8.4	1.4	28.9	33.0	4.1
WCDMA Band II_Middle Channel								
1880	H	85.36	13.8	8.4	1.4	20.8	33.0	12.2
1880	V	86.31	14.9	8.4	1.4	21.9	33.0	11.1

Note:
1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
2) Absolute Level = SG Level - Cable loss + Antenna Gain
3) Margin = Limit-Absolute Level

FCC §2.1049, §22.917, §22.905 & §24.238 - OCCUPIED BANDWIDTH

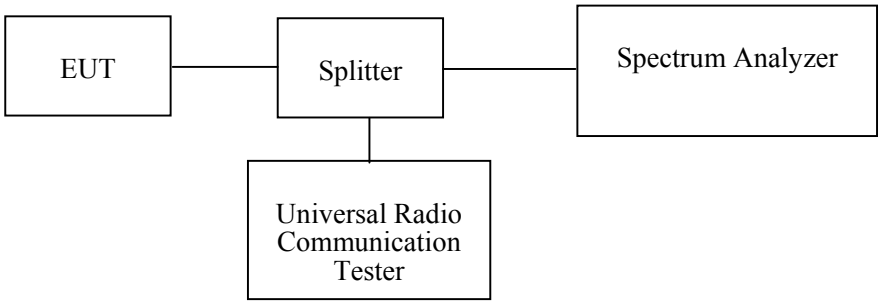
Applicable Standard

FCC §2.1049, §22.917 and §22.905, §24.238.

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The 26 dB & 99% bandwidth was recorded.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09
R&S	Universal Radio Communication Tester	CMU200	109 038	2015-07-28	2016-07-27

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.8 °C
Relative Humidity:	57 %
ATM Pressure:	101.4 kPa

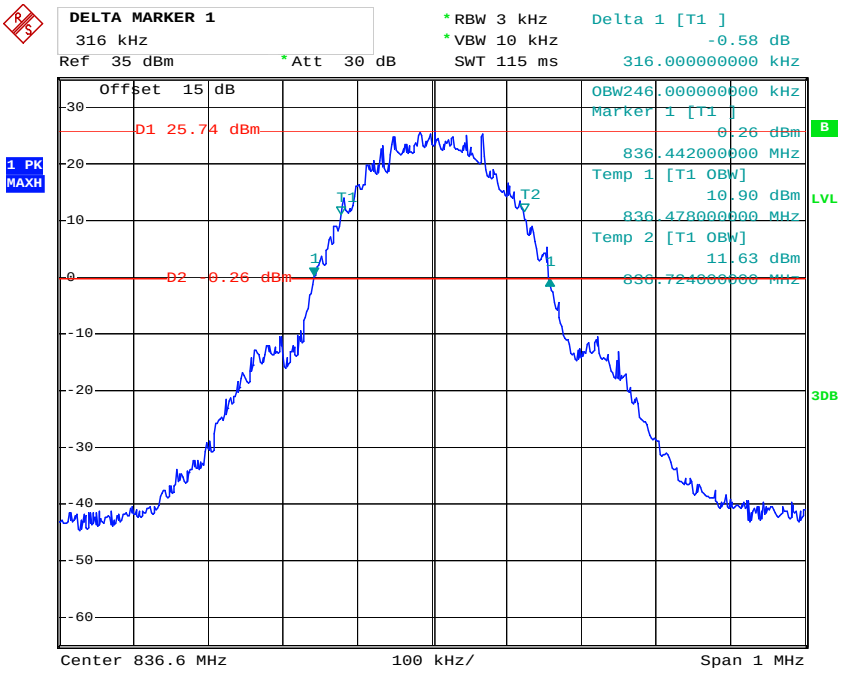
The testing was performed by Allen Qiao on 2015-10-13

Test Mode: Transmitting

Test Result: Compliant. Please refer to the following table and plots.

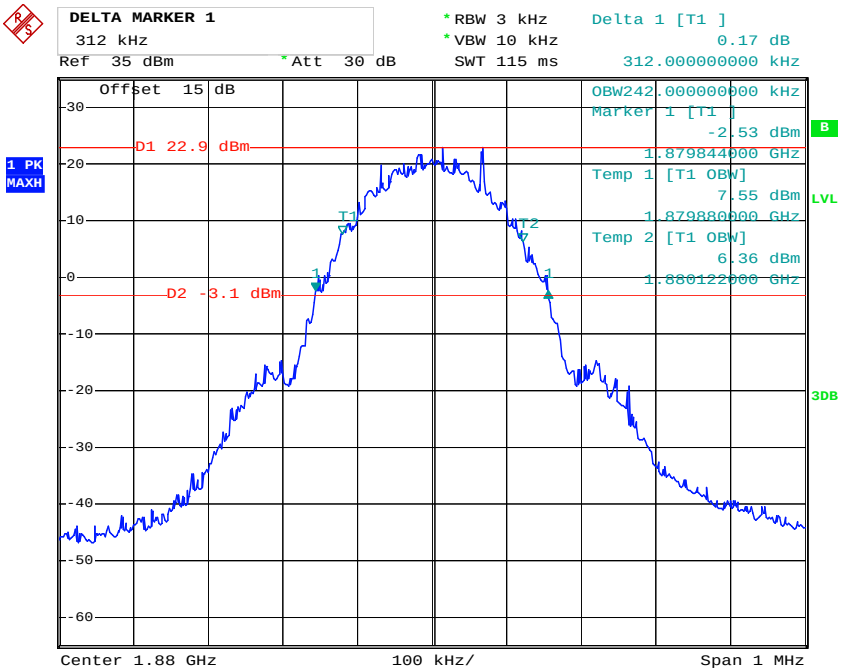
Band	Channel No.	Mode	99% Occupied Bandwidth	26 dB Occupied Bandwidth
			kHz	kHz
Cellular	190	GSM	246	316
PCS	661	PCS	242	312
WCDMA Band Ⅱ	9400	Rel 99	4180	4680
	9400	HSDPA	4180	4700
	9400	HSUPA	4180	4720
WCDMA Band V	4183	Rel 99	4160	4680
	4183	HSDPA	4160	4700
	4183	HSUPA	4180	4680

GMSK 850 Cellular Band



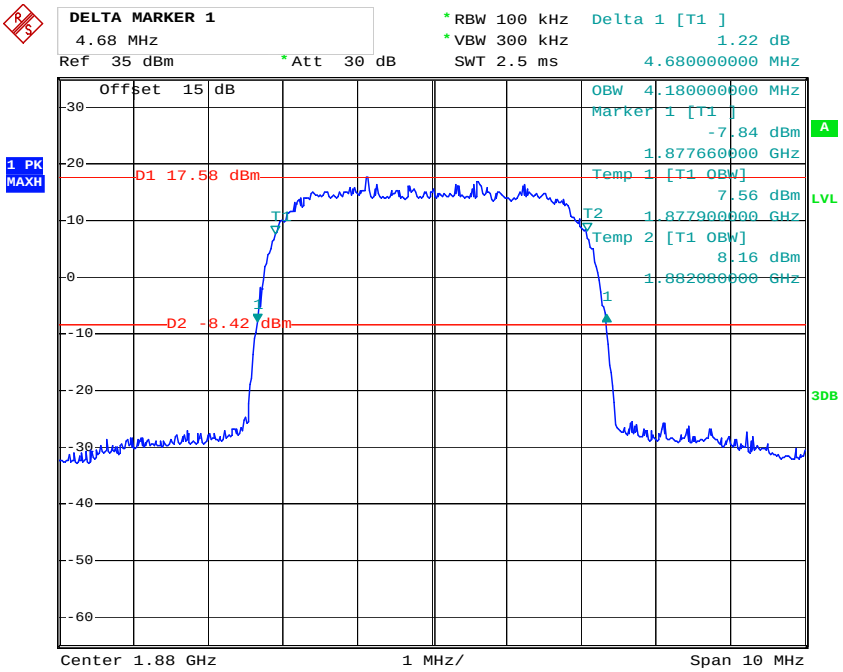
Date: 12.OCT.2015 15:10:37

GMSK PCS Band



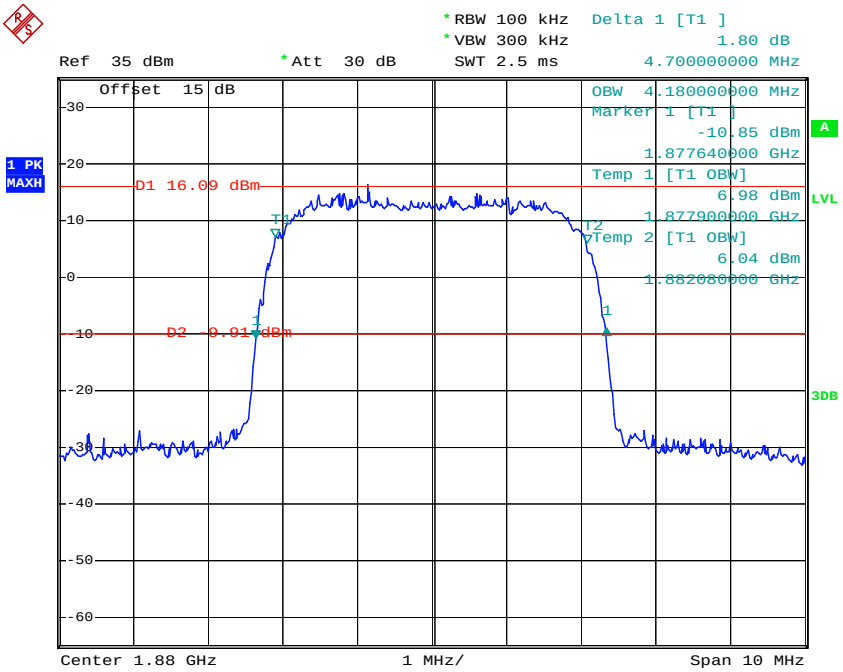
Date: 13.OCT.2015 15:44:29

REL99 Band II



Date: 13.OCT.2015 16:47:26

HSDPA Band II



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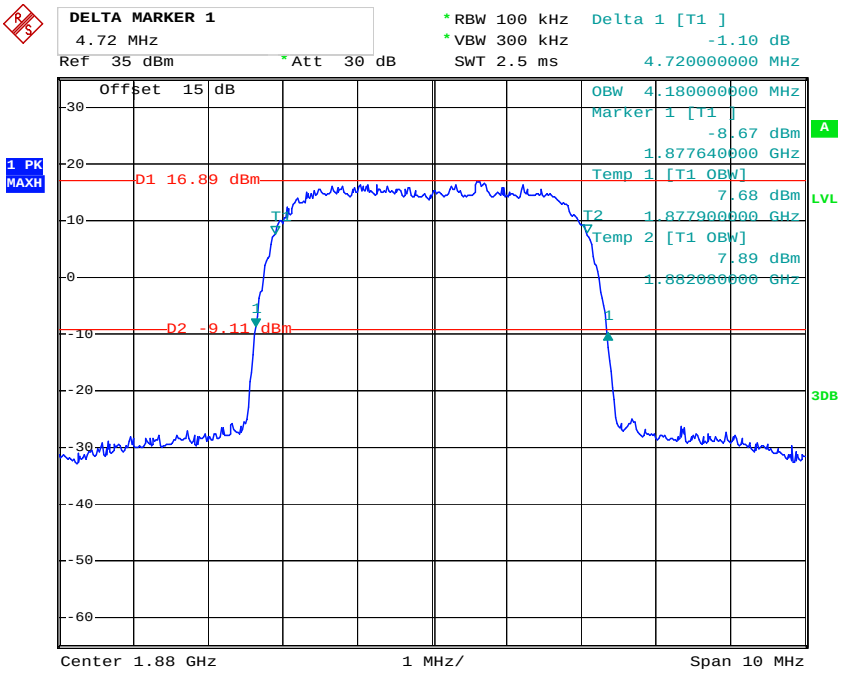
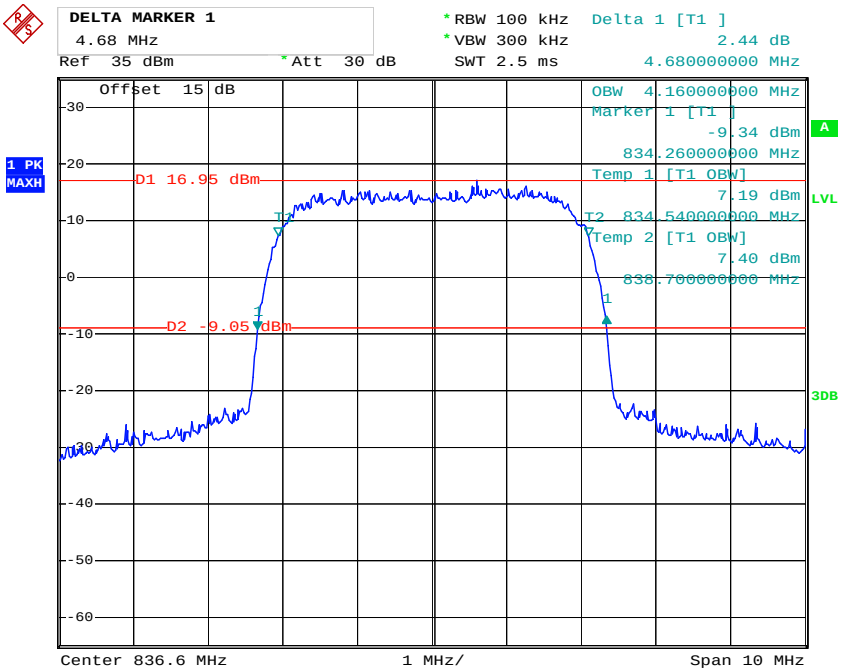
HSUPA Band II



Date: 13.OCT.2015 16:46:42

REL99 Band V



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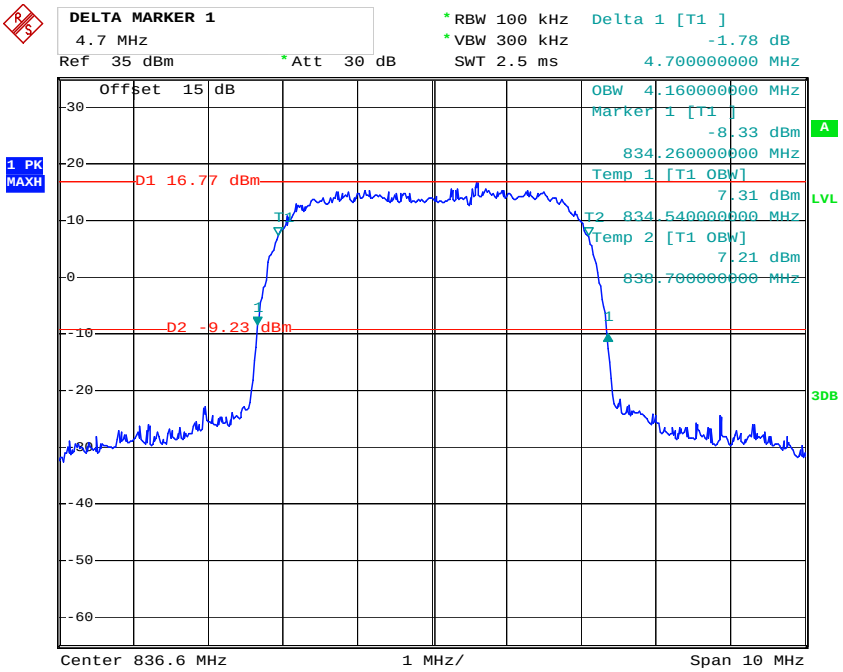
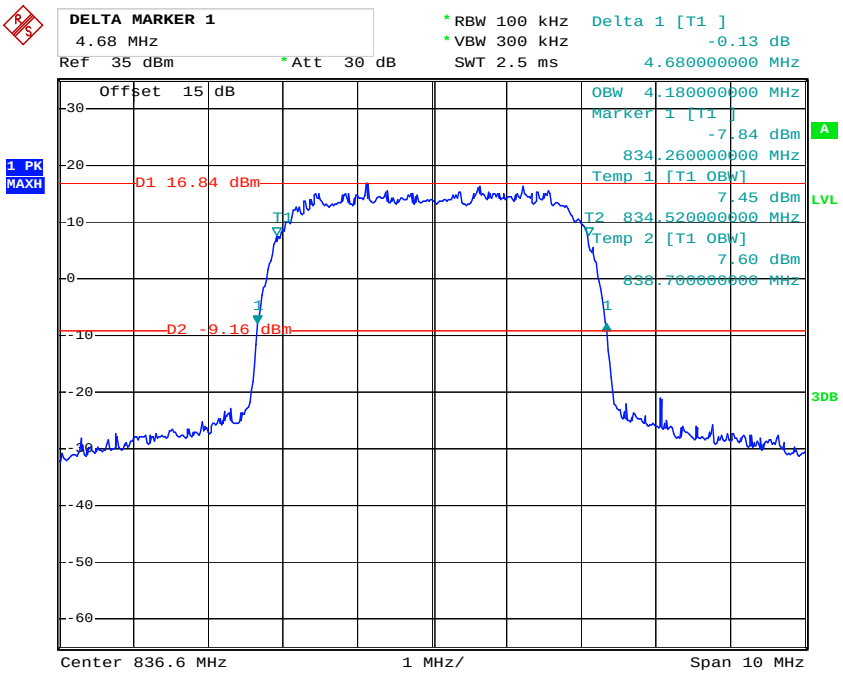
HSDPA Band V



Date: 13.OCT.2015 16:28:26

HSUPA Band V



Date: 13.OCT.2015 16:32:49

FCC §2.1051, §22.917(a) & §24.238(a) - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

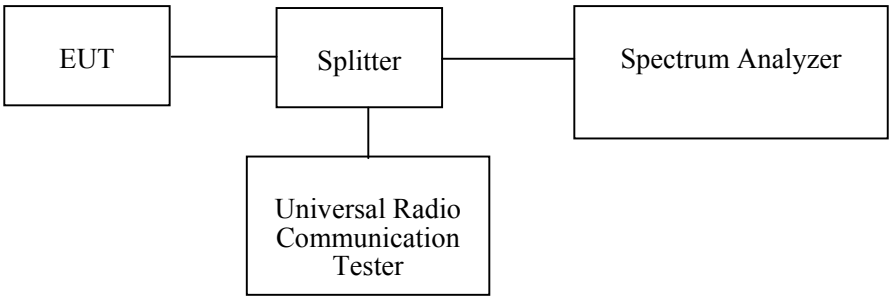
Applicable Standard

FCC §2.1051, §22.917(a) and §24.238(a).

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09
R&S	Universal Radio Communication Tester	CMU200	109 038	2015-07-28	2016-07-27

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

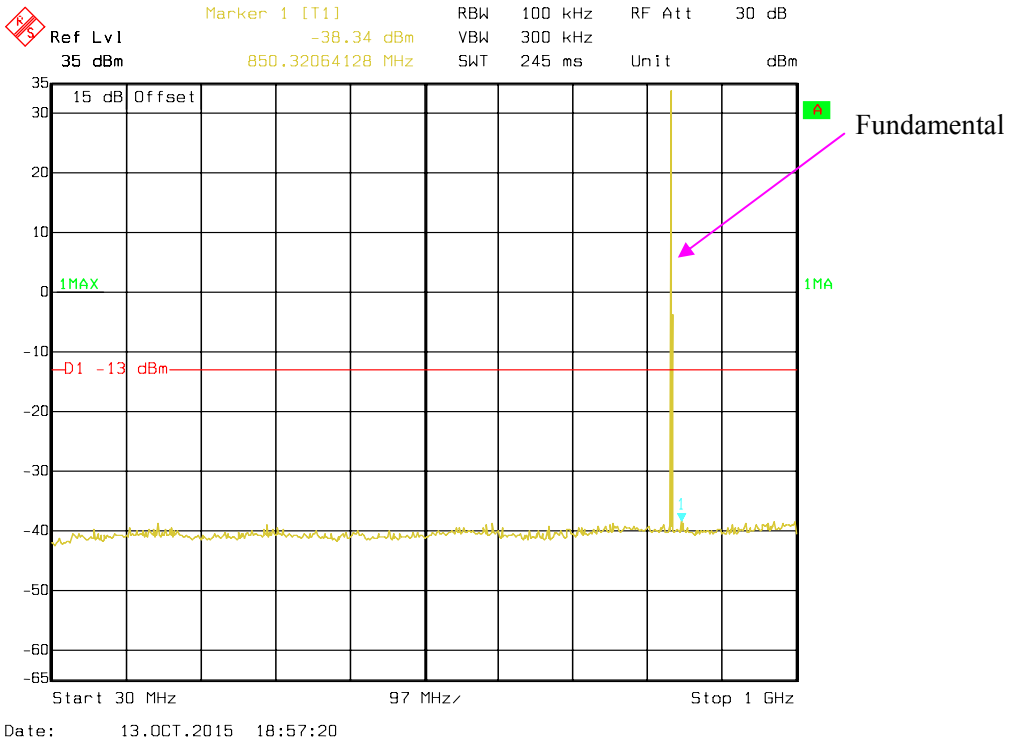
Environmental Conditions

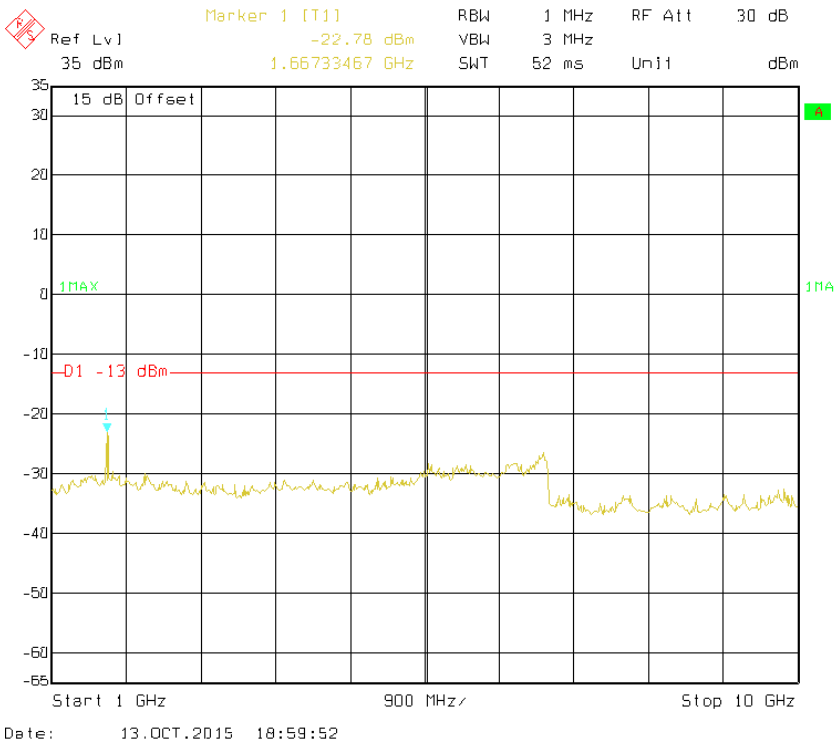
Temperature:	26.8 °C
Relative Humidity:	57 %
ATM Pressure:	101.4 kPa

The testing was performed by Allen Qiao on 2015-10-13

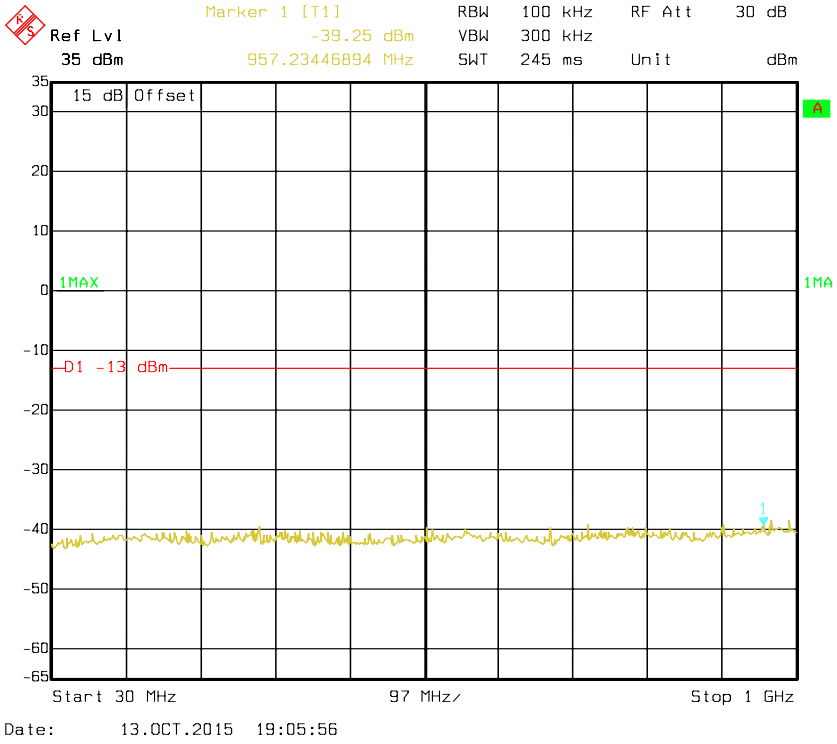
Please refer to the following plots.

GSM850_Middle Channel

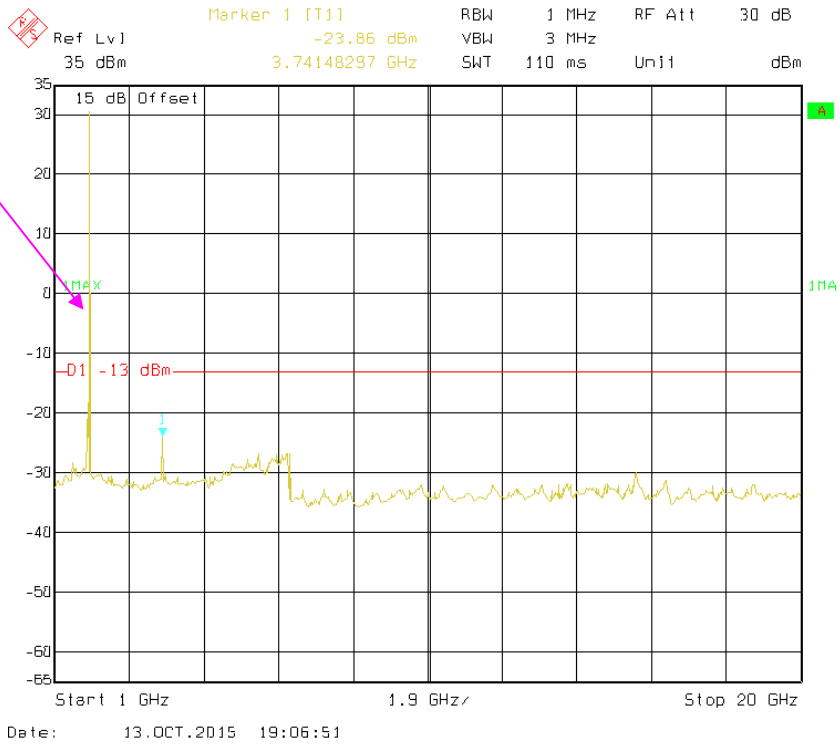




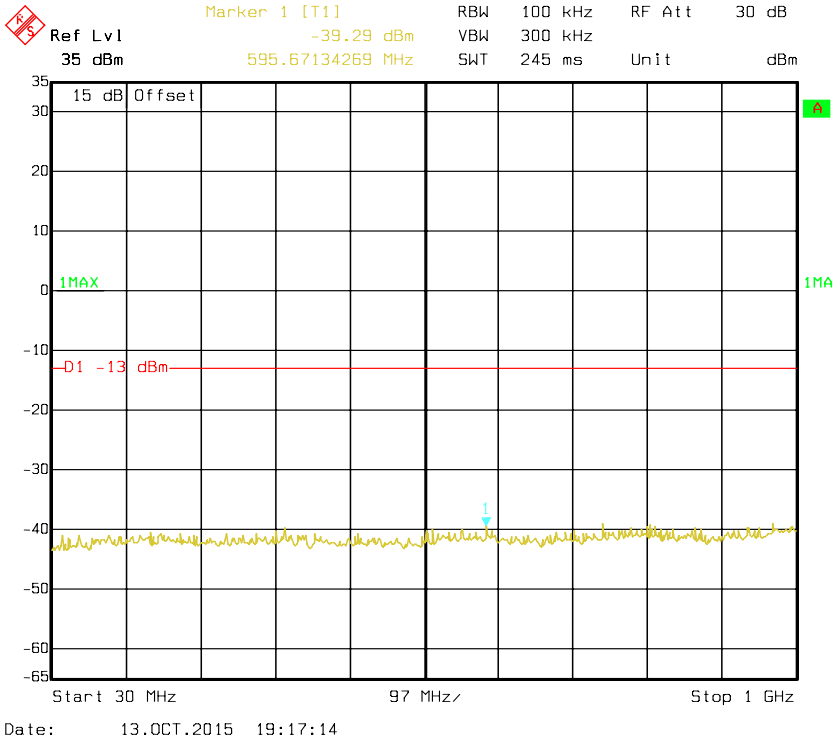
PCS 1900_ Middle Channel

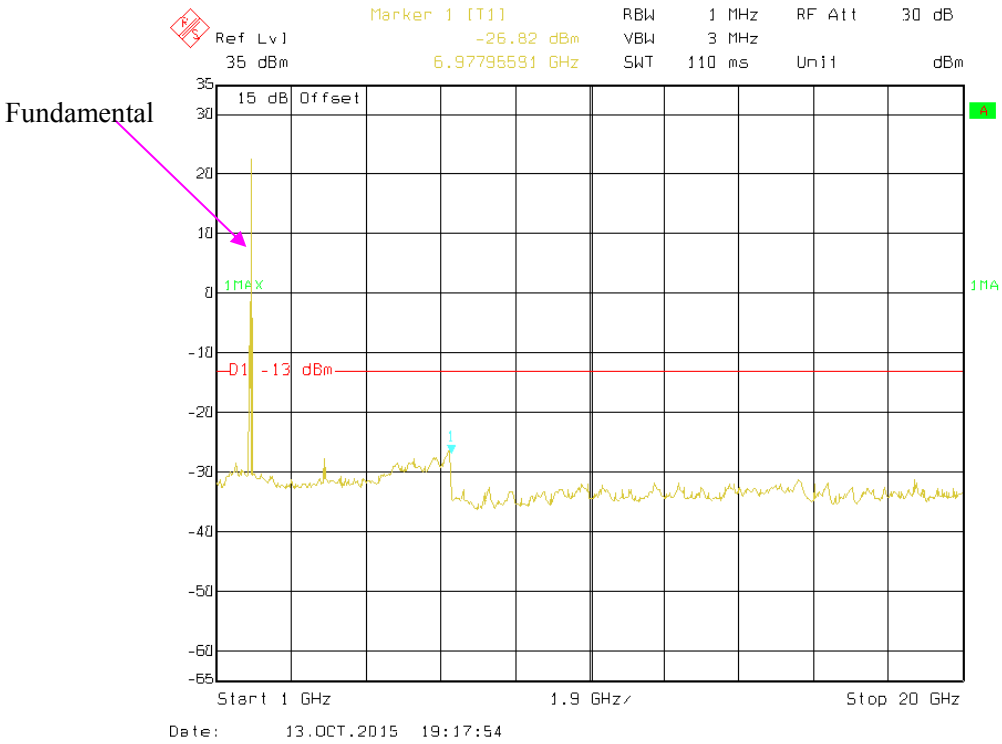


Fundamental

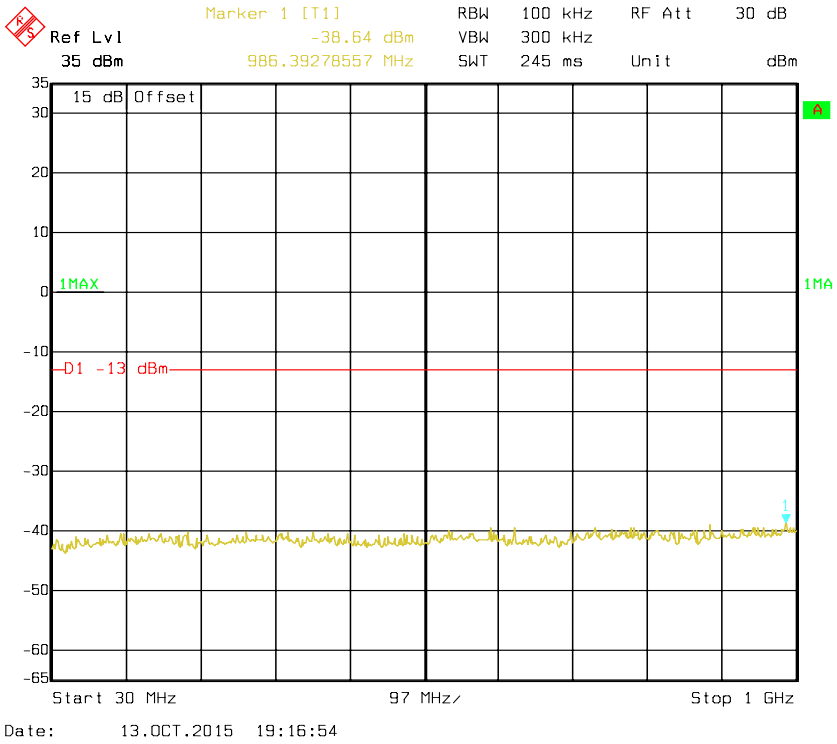


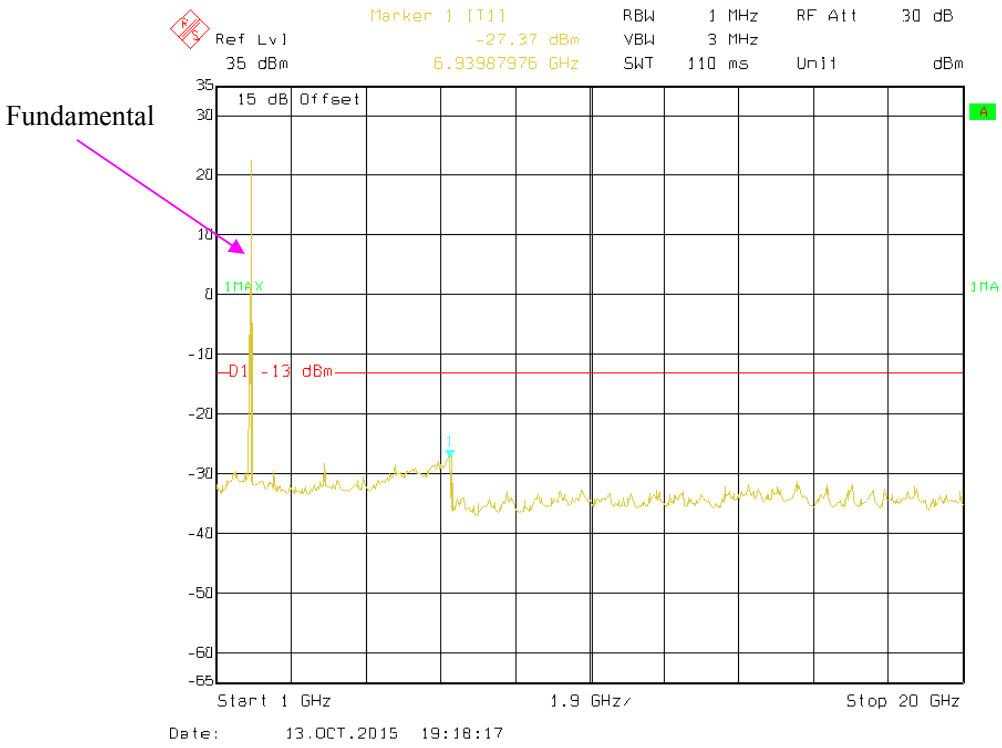
REL99 Band II_ Middle Channel



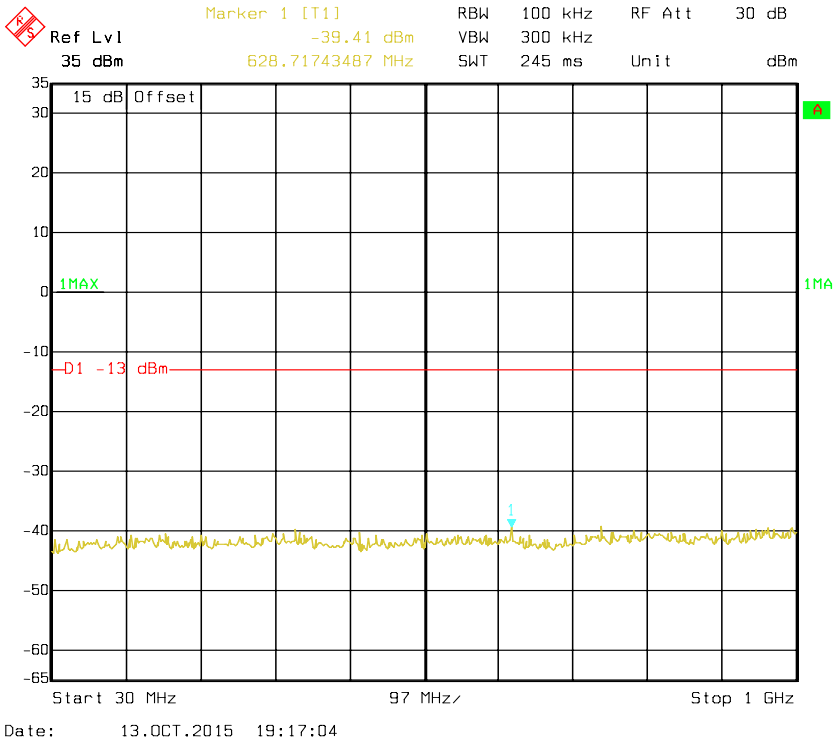


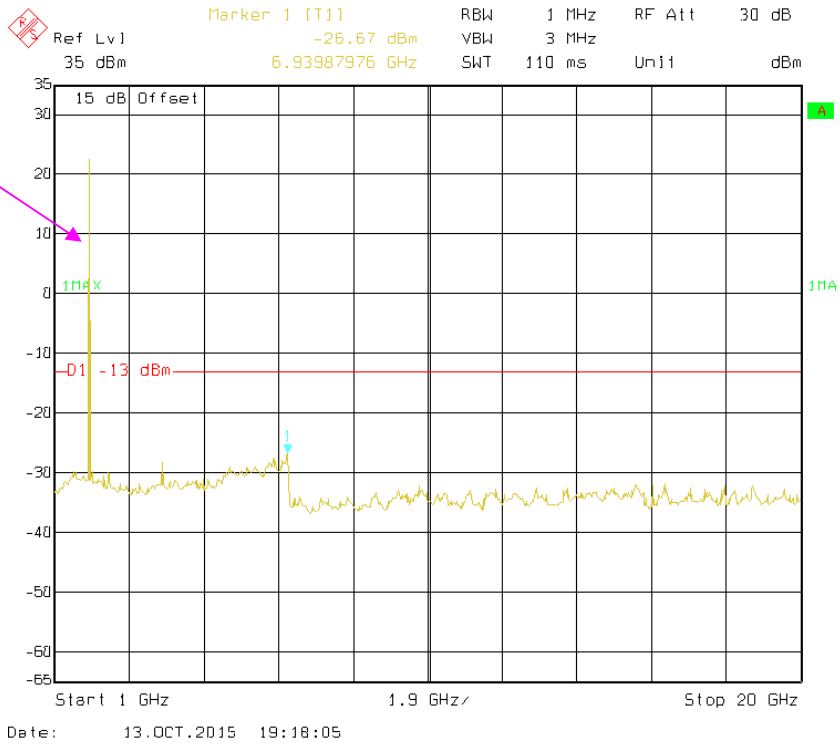
HSDPA Band II _Middle Channel





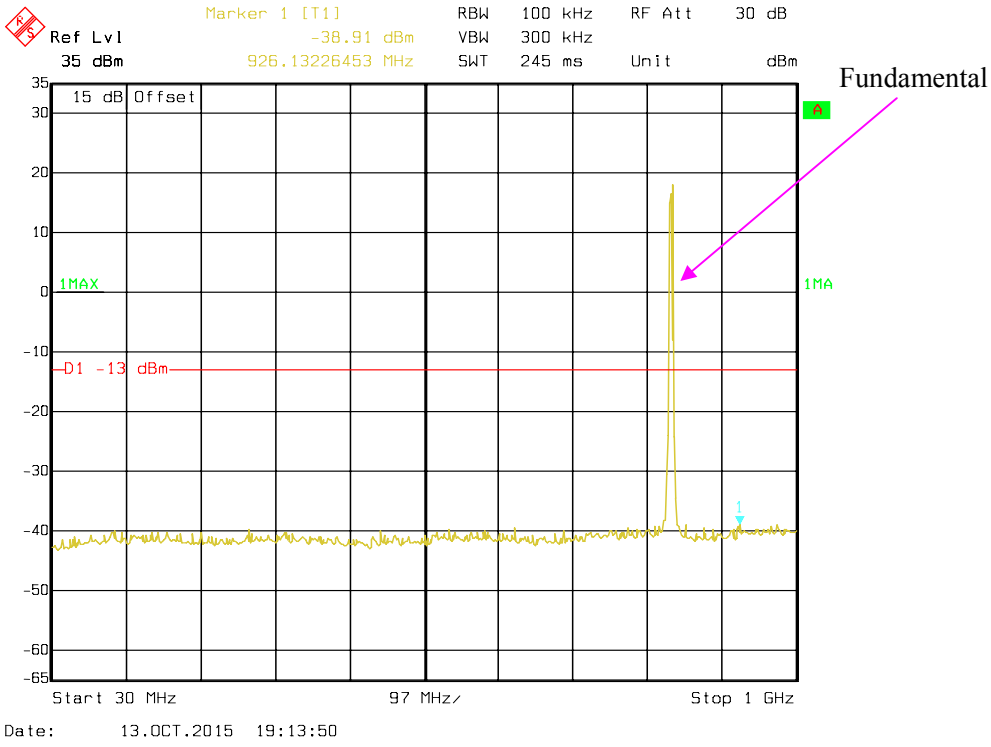
HSUPA Band II _ Middle Channel

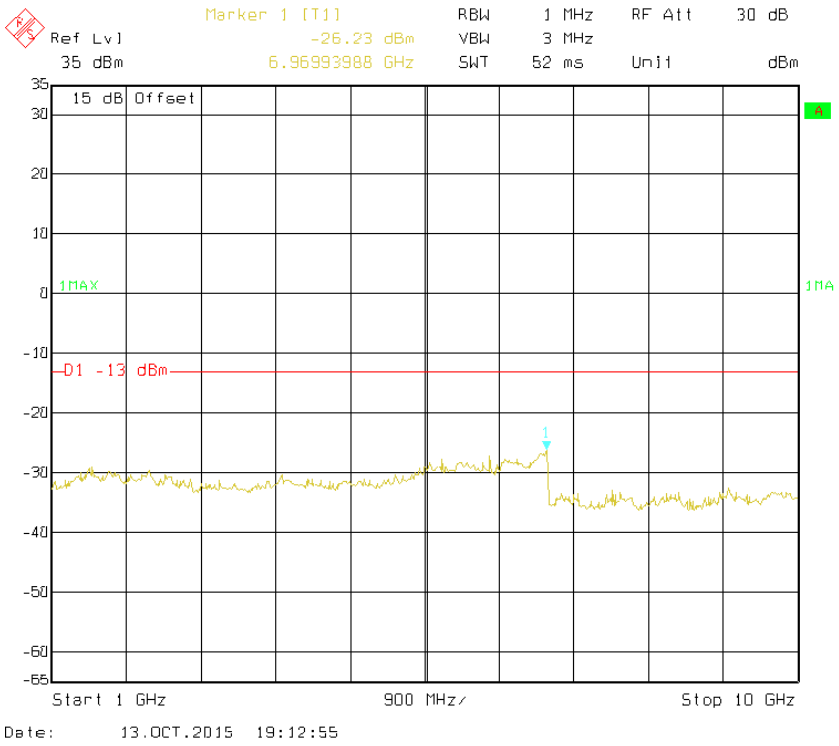




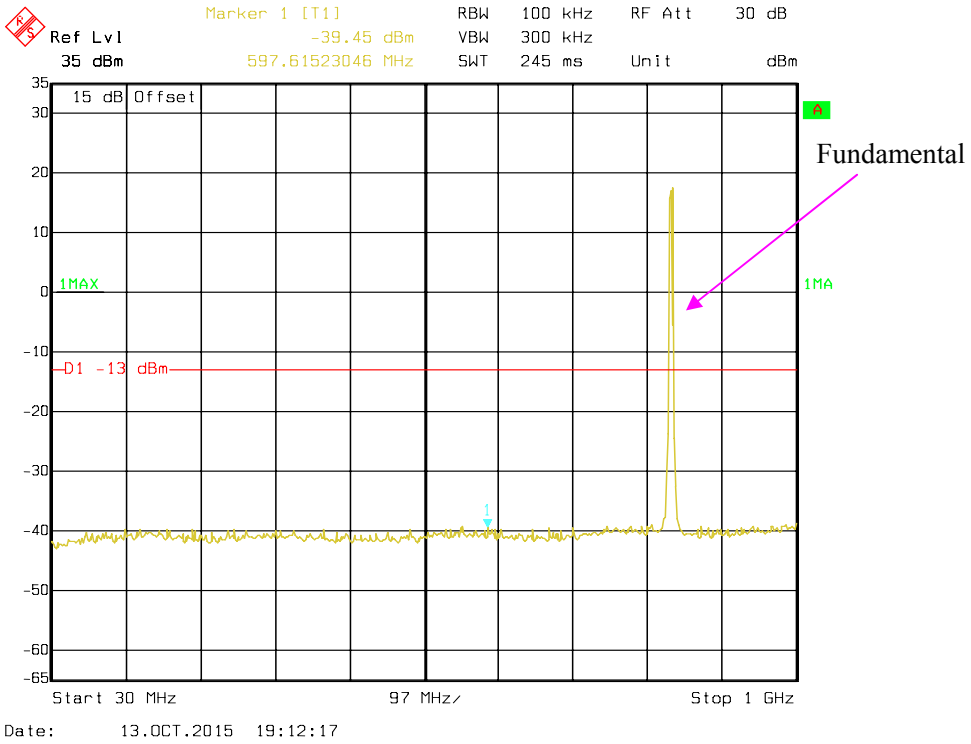
Fundamental

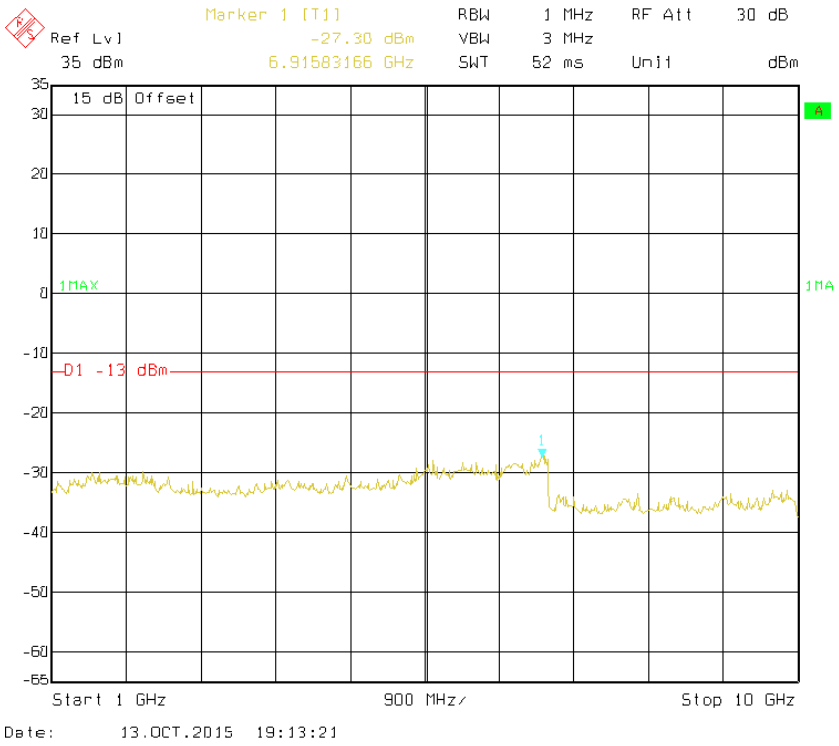
REL99 Band V_ Middle Channel



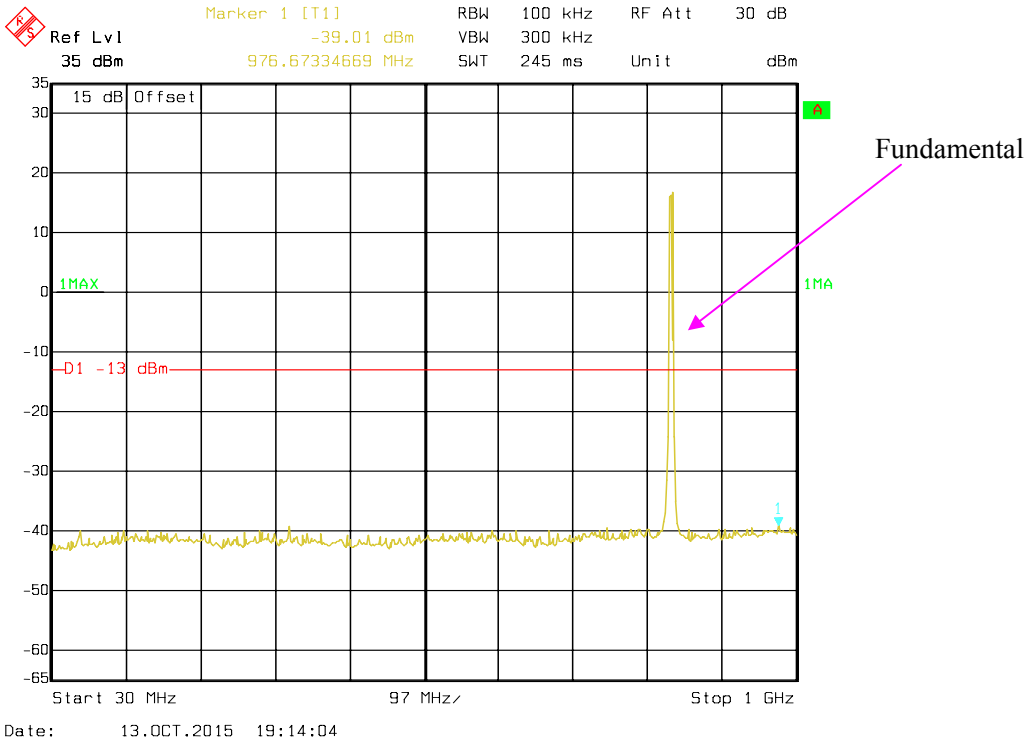


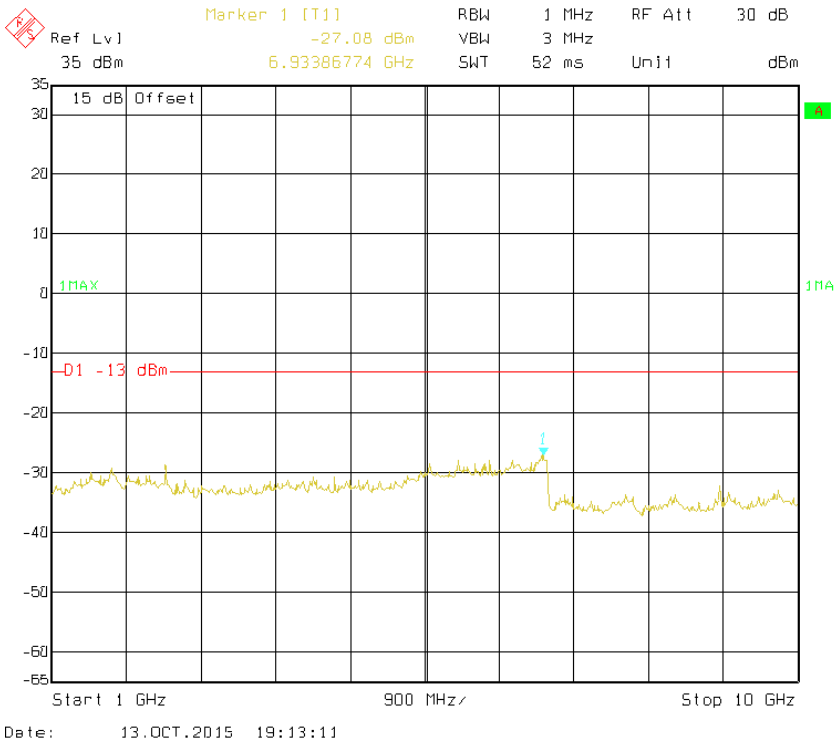
HSDPA Band V_ Middle Channel





HSUPA Band V_ Middle Channel





FCC §2.1053, §22.917 & §24.238 - SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, §22.917 and § 24.238.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB = 10 lg (TXpwr in Watts/0.001) – the absolute level

Spurious attenuation limit in dB = 43 + 10 Log_{10} (power out in Watts)

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2015-08-03	2016-08-02
Sunol Sciences	Antenna	JB3	A060611-3	2014-11-06	2017-11-05
HP	Amplifier	8447E	2434A02181	2015-09-01	2016-09-01
R&S	Spectrum Analyzer	FSEM	831259/019	2015-07-28	2016-07-27
ETS LINDGREN	Horn Antenna	3115	000 527 35	2015-09-06	2018-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2015-02-19	2016-02-19
Giga	Signal Generator	1026	320408	2015-05-09	2016-05-09
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
TDK RF	Horn Antenna	HRN-0118	130 084	2015-09-06	2018-09-06

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.5 °C
Relative Humidity:	52 %
ATM Pressure:	100.8 kPa

The testing was performed by Allen Qiao on 2015-10-15

EUT Operation Mode: Transmitting

Cellular Band (PART 22H)

30 MHz-10 GHz:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency: 836.6 MHz								
1673.20	H	43.88	-57.2	8.0	1.5	-50.7	-13.0	37.7
1673.20	V	41.94	-59.4	8.0	1.5	-52.9	-13.0	39.9
2509.800	H	50.75	-47.3	9.5	2.8	-40.6	-13.0	27.6
2509.80	V	49.53	-47.6	9.5	2.8	-40.9	-13.0	27.9
240.49	H	38.72	-69.4	0.0	0.5	-69.9	-13.0	56.9
242.43	V	44.25	-61.5	0.0	0.5	-62.0	-13.0	49.0

WCDMA Band V (PART 22H)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency: 836.6 MHz								
1673.20	H	47.80	-53.3	8.0	1.5	-46.8	-13.0	33.8
1673.20	V	45.49	-55.9	8.0	1.5	-49.4	-13.0	36.4
240.49	H	37.94	-70.1	0.0	0.5	-70.6	-13.0	57.6
242.43	V	43.69	-62.0	0.0	0.5	-62.5	-13.0	49.5

PCS Band (PART 24E)

30 MHz-20 GHz:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency: 1880 MHz								
3760	H	40.72	-53.6	9.3	2.9	-47.2	-13.0	34.2
3760	V	38.39	-54.7	9.3	2.9	-48.3	-13.0	35.3
240.49	H	38.62	-69.5	0.0	0.5	-70.0	-13.0	57.0
242.43	V	43.85	-61.9	0.0	0.5	-62.4	-13.0	49.4

WCDMA Band II (PART 24E)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency: 1880 MHz								
3760	H	49.24	-45.1	9.3	2.9	-38.7	-13.0	25.7
3760	V	46.49	-46.6	9.3	2.9	-40.2	-13.0	27.2
240.49	H	38.07	-70	0.0	0.5	-70.5	-13.0	57.5
242.43	V	44.28	-61.4	0.0	0.5	-61.9	-13.0	48.9

Note:
1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
2) Absolute Level = SG Level - Cable loss + Antenna Gain
3) Margin = Limit-Absolute Level

FCC §22.917(a) & §24.238(a) - BAND EDGES

Applicable Standard

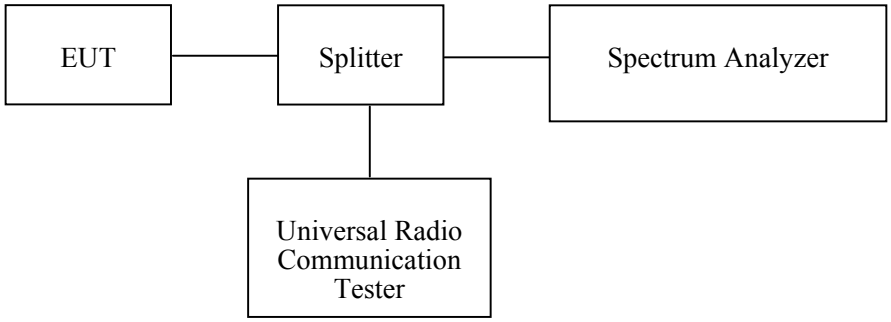
According to § 22.917(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09
R&S	Universal Radio Communication Tester	CMU200	109 038	2015-07-28	2016-07-27

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

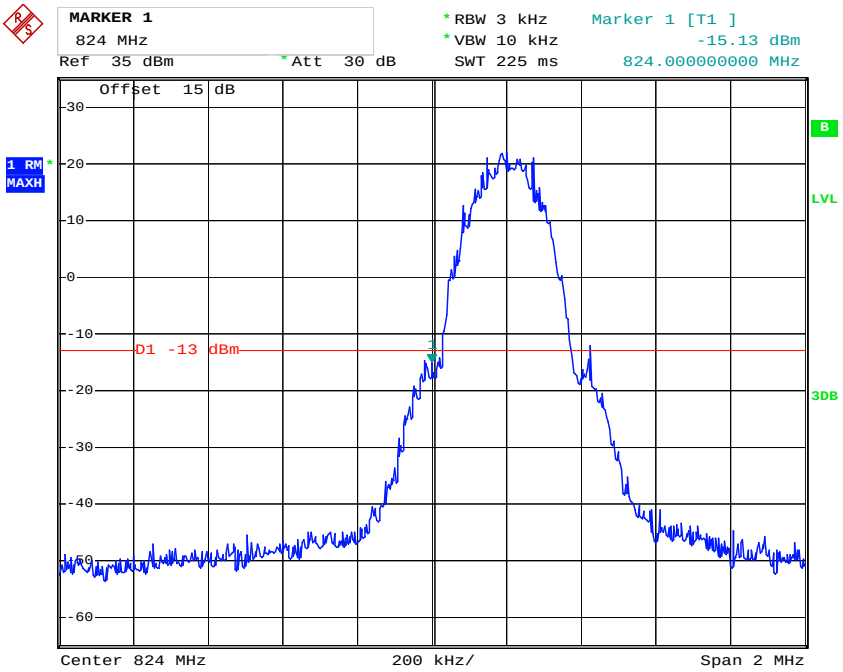
Temperature:	26.8 °C
Relative Humidity:	57 %
ATM Pressure:	101.4 kPa

The testing was performed by Allen Qiao on 2015-10-13

Test Mode: Transmitting

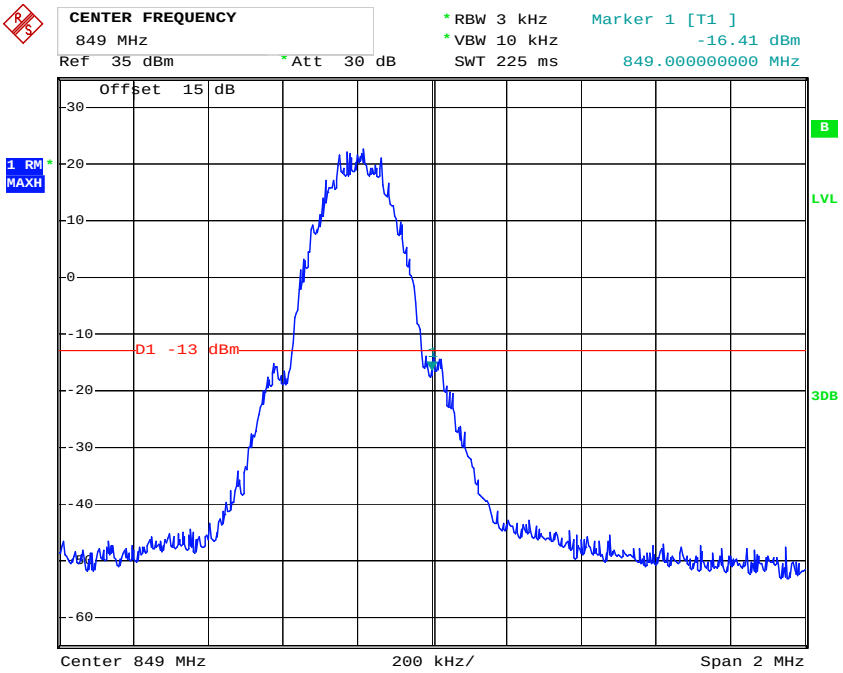
Test Result: Compliant. Please refer to the following plots.

GSM 850, Left Band Edge



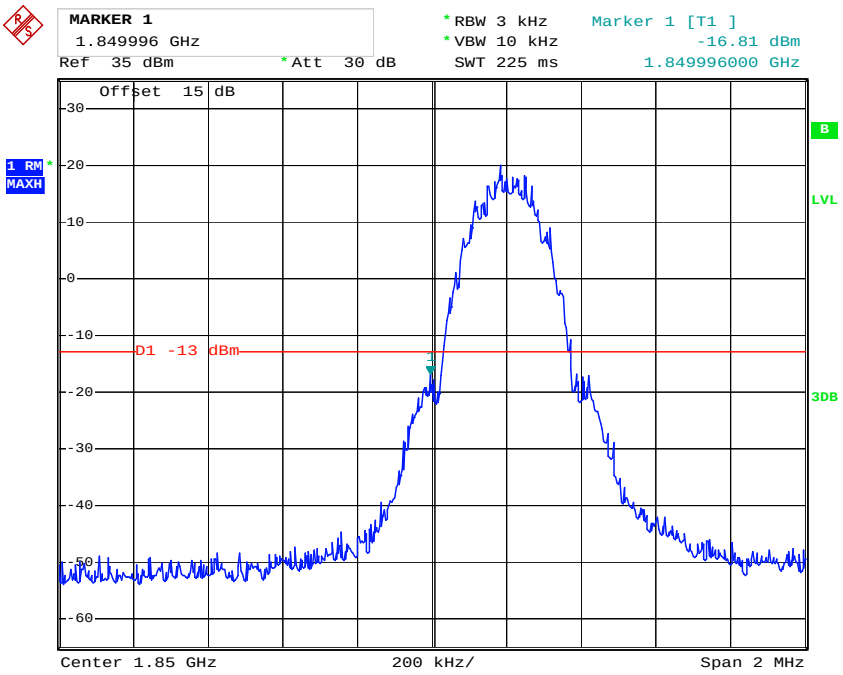
Date: 12.OCT.2015 15:12:45

GSM 850, Right Band Edge



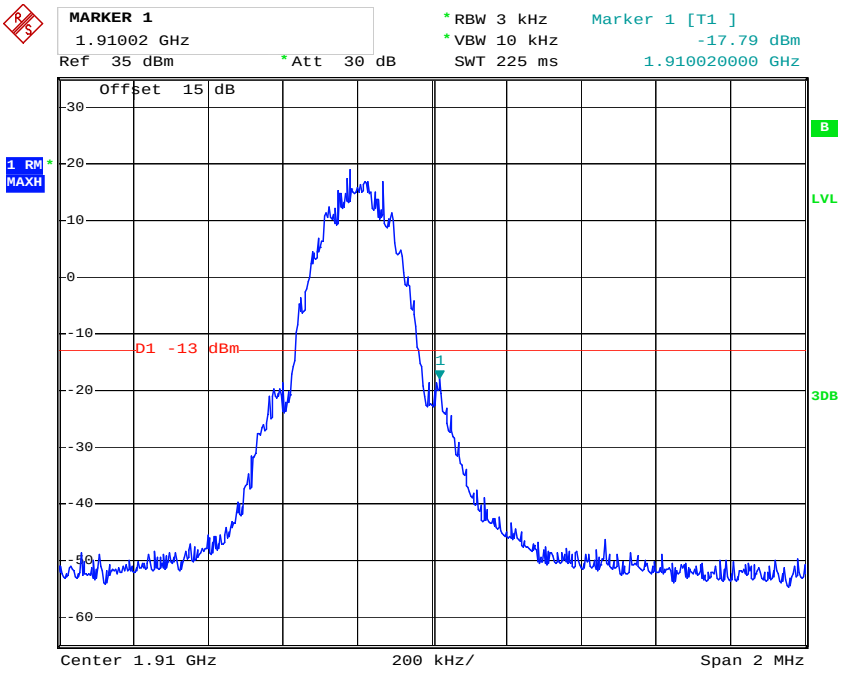
Date: 13.OCT.2015 15:14:03

PCS 1900, Left Band Edge



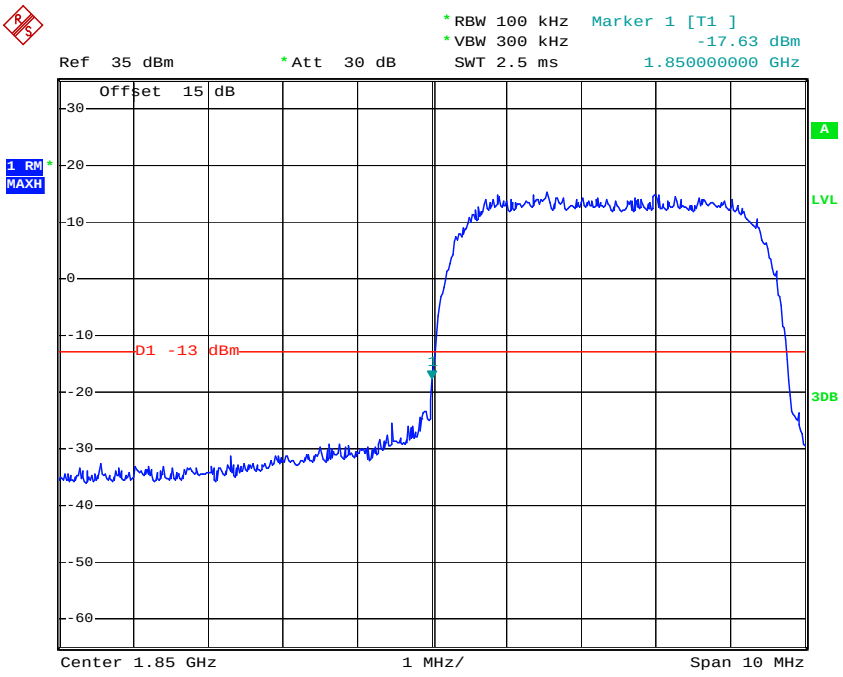
Date: 13.OCT.2015 15:47:57

PCS 1900, Right Band Edge



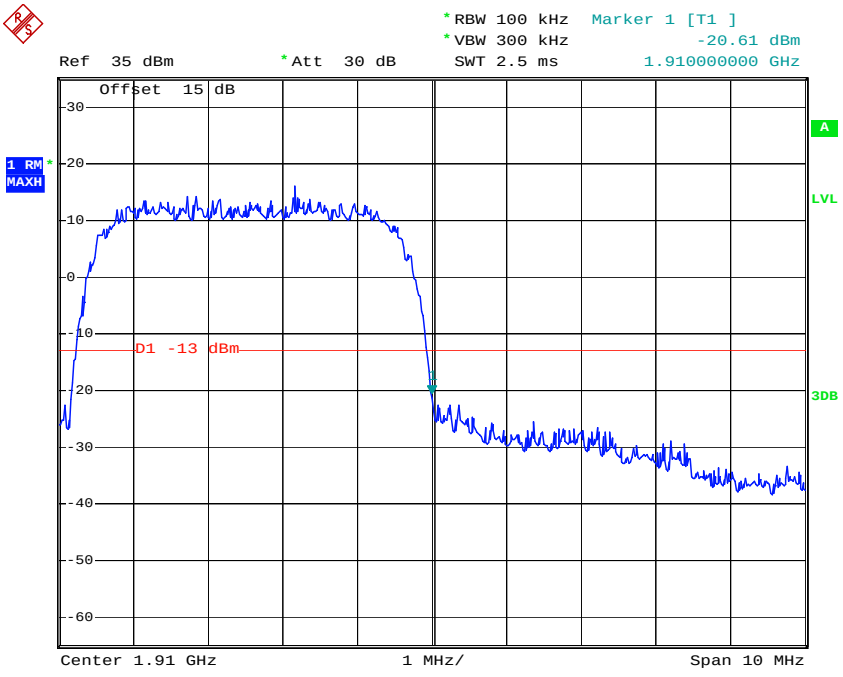
Date: 13.OCT.2015 15:47:07

REL99 Band II, Left Band Edge



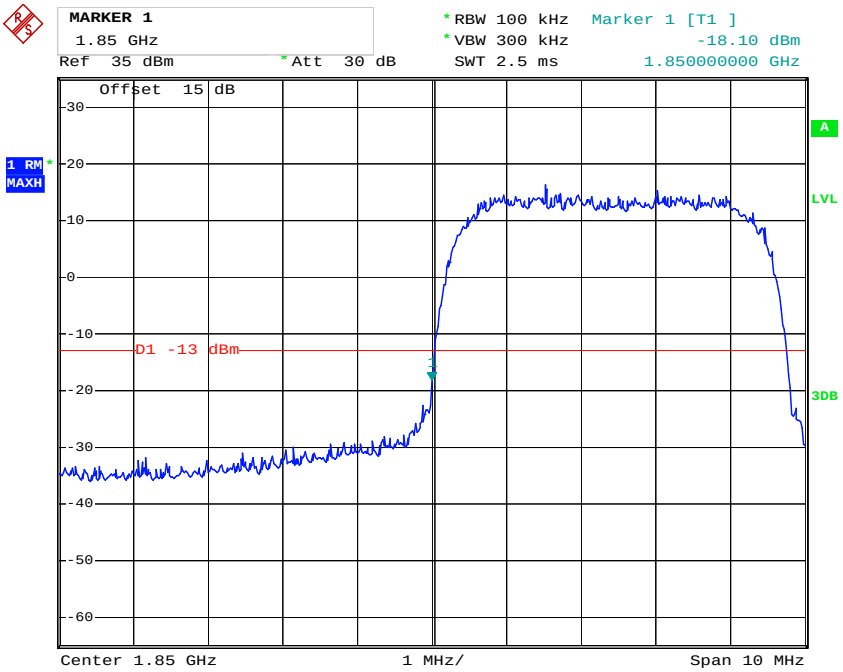
Date: 13.OCT.2015 16:06:27

REL99 Band II, Right Band Edge



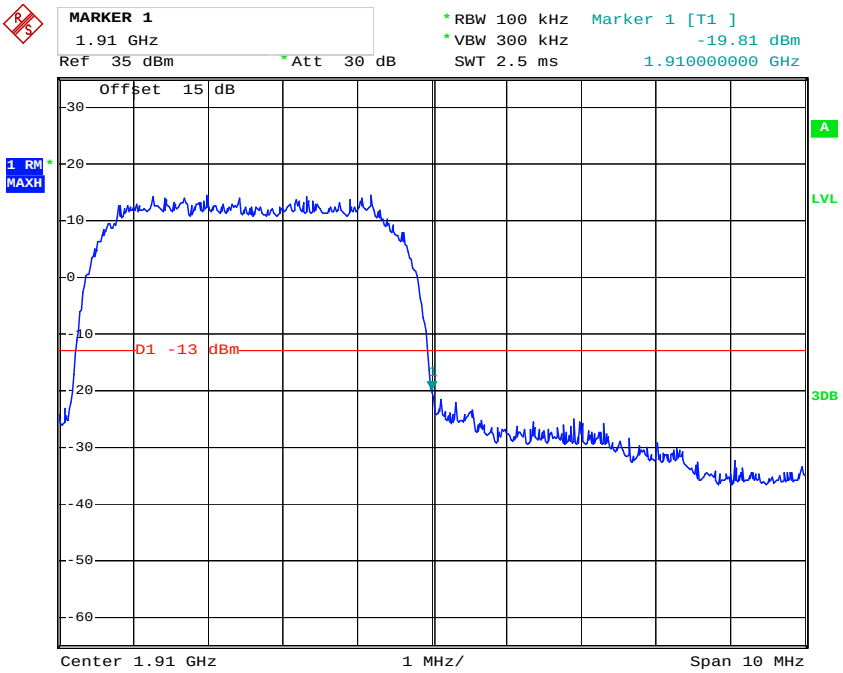
Date: 13.OCT.2015 16:07:13

HSDPA Band II, Left Band Edge



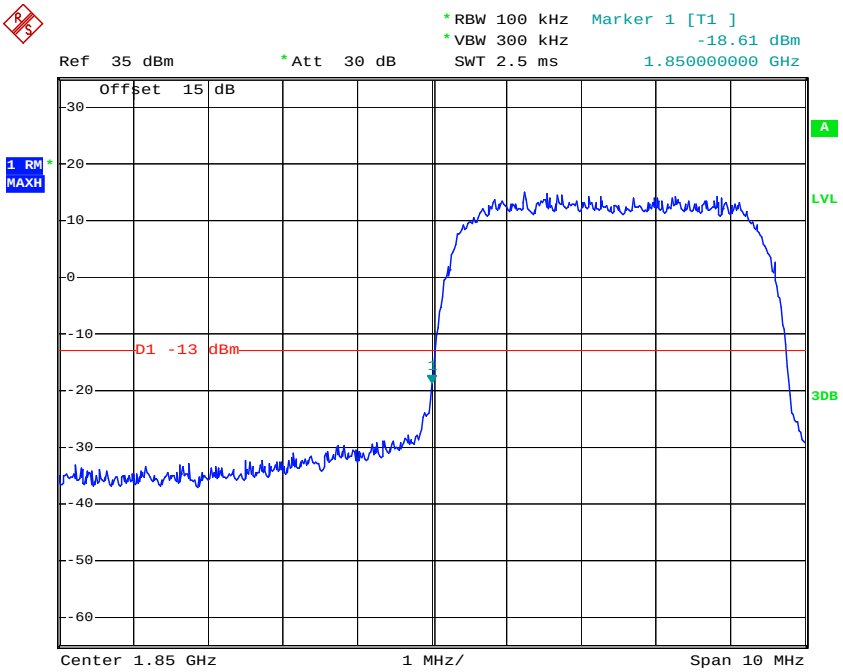
Date: 13.OCT.2015 16:05:49

HSDPA Band II, Right Band Edge



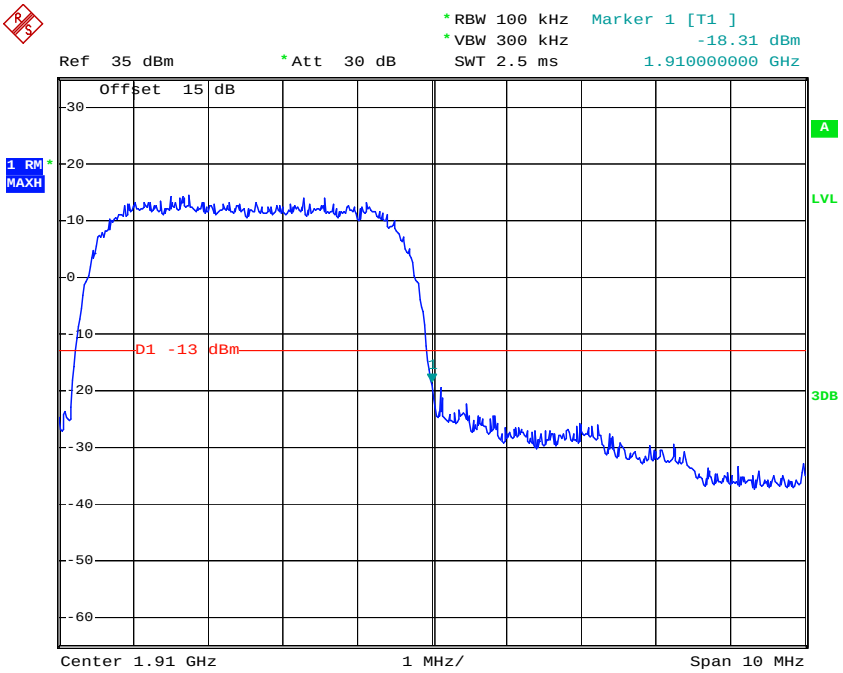
Date: 13.OCT.2015 16:06:50

HSUPA Band II, Left Band Edge



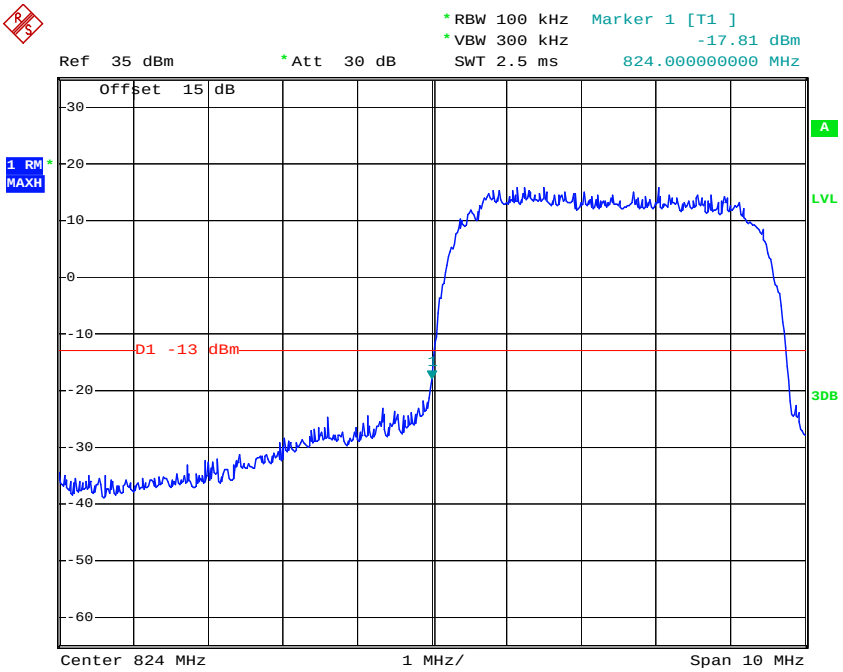
Date: 13.OCT.2015 16:06:02

HSUPA Band II, Right Band Edge



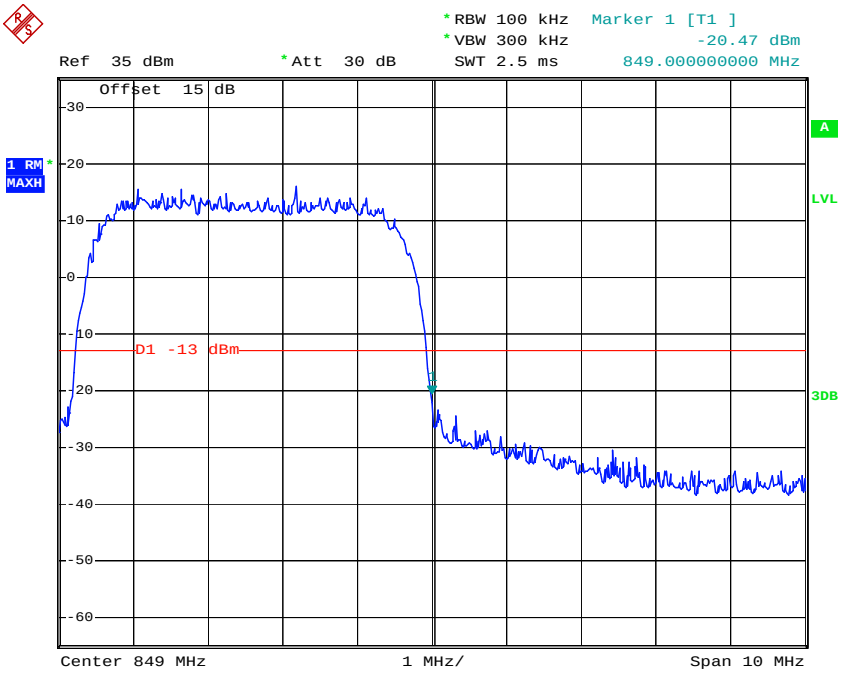
Date: 13.OCT.2015 16:07:03

REL99 Band V, Left Band Edge



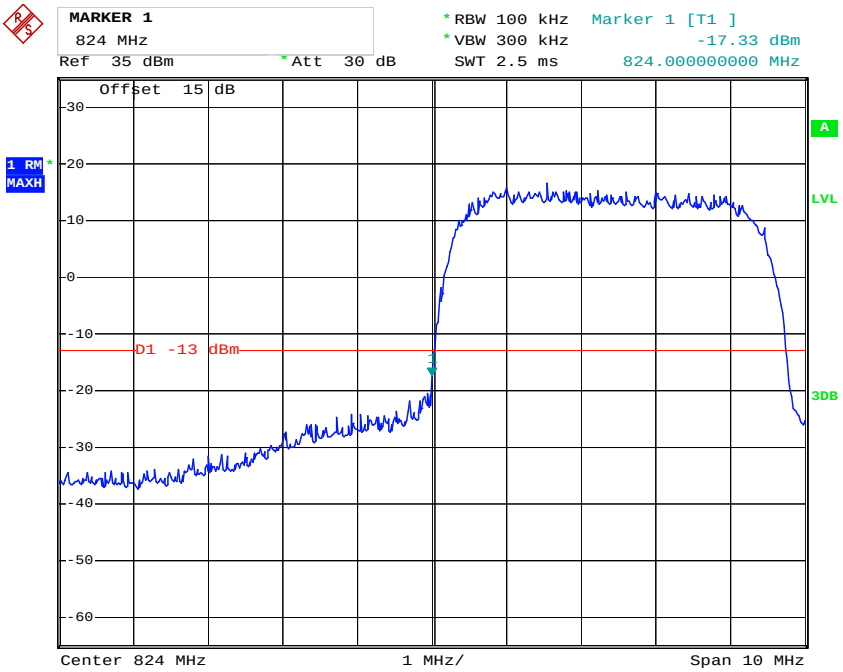
Date: 13.OCT.2015 16:37:20

REL99 Band V Right Band Edge



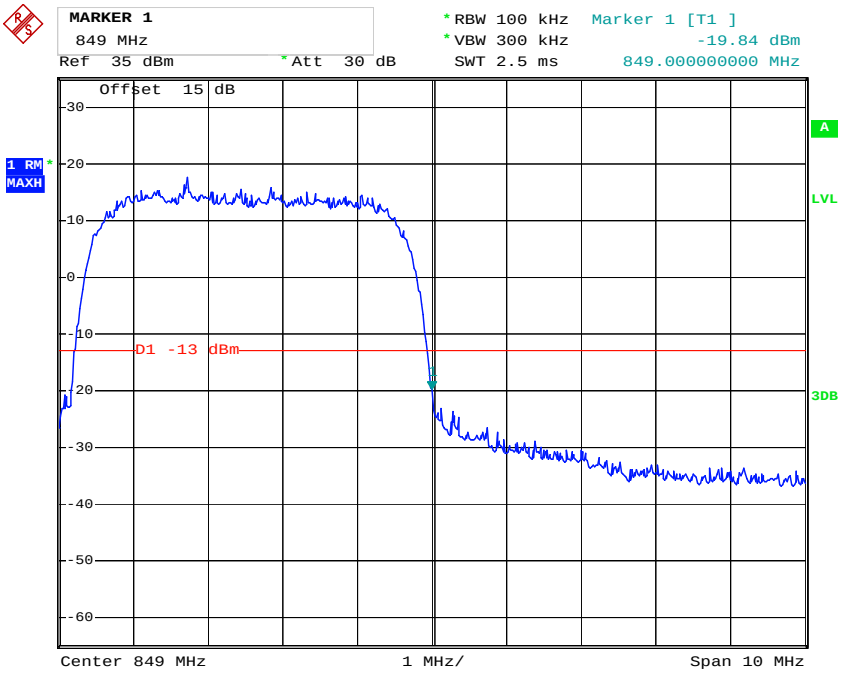
Date: 13.OCT.2015 16:38:17

HSDPA Band V, Left Band Edge



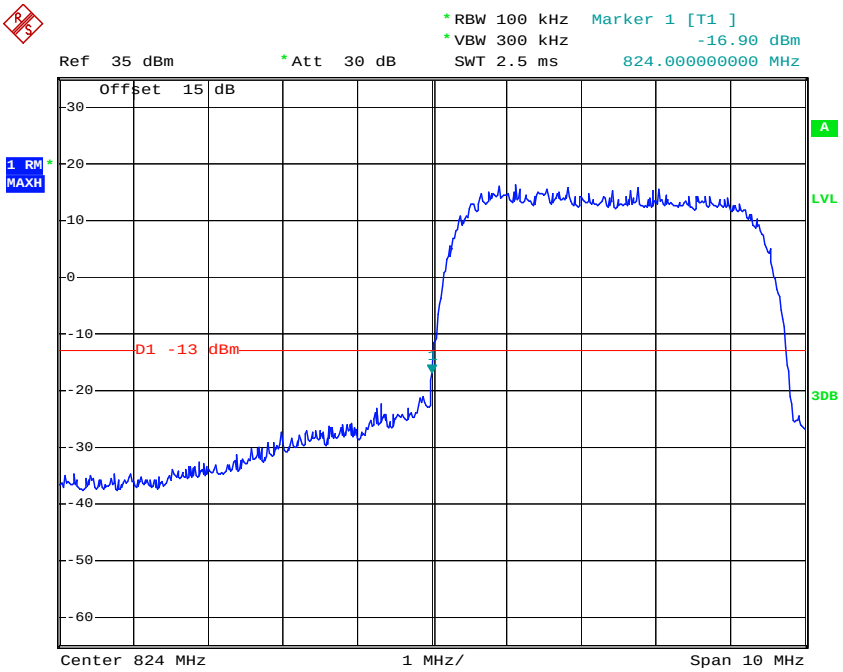
Date: 13.OCT.2015 16:36:51

HSDPA Band V, Right Band Edge



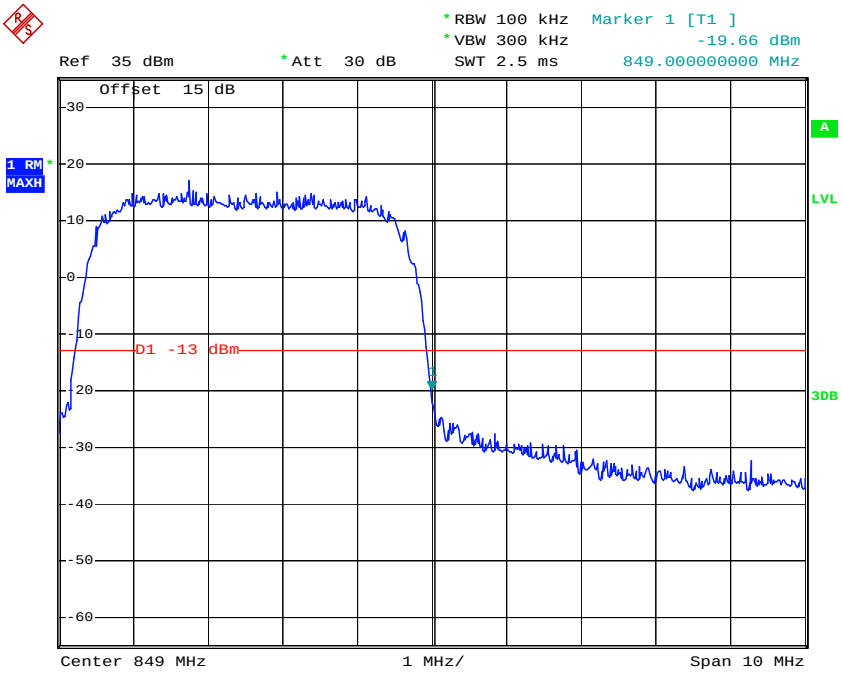
Date: 13.OCT.2015 16:37:59

HSUPA Band V, Left Band Edge



Date: 13.OCT.2015 16:37:08

HSUPA Band V, Right Band Edge



Date: 13.OCT.2015 16:38:11

FCC §2.1055, §22.355 & §24.235 - FREQUENCY STABILITY

Applicable Standard

FCC § 2.1055 (a), § 2.1055 (d), §22.355, §24.235

According to §22.355, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table below:

Frequency Tolerance for Transmitters in the Public Mobile Services

Frequency Range (MHz)	Base, fixed (ppm)	Mobile > 3 watts (ppm)	Mobile ≤ 3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929.	5.0	N/A	N/A
929 to 960.	1.5	N/A	N/A
2110 to 2220	10.0	N/A	N/A

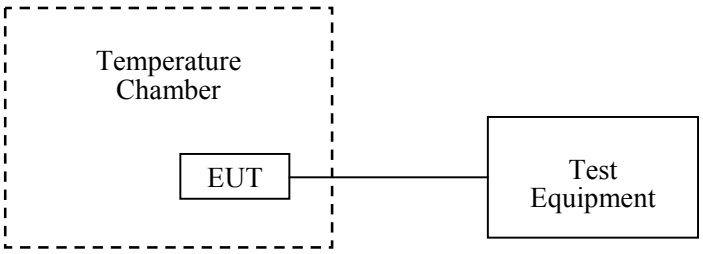
According to §24.235, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: An external variable DC power supply was connected to the battery terminals of the equipment under test. The voltage was set from 85% to 115% of the nominal value and was then decreased until the transmitter light no longer illuminated; i.e., the battery end point. The output frequency was recorded for each battery voltage.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Dongzhixu	High Temperature Test Chamber	DP1000	201105083-3	2015-09-10	2016-09-09
R&S	Universal Radio Communication Tester	CMU200	109 038	2015-07-28	2016-07-27

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.5 °C
Relative Humidity:	52%
ATM Pressure:	100.8 kPa

The testing was performed by Allen Qiao on 2015-10-15

Cellular Band (Part 22H)

GMSK, Middle Channel, f_c = 836.6 MHz				
Temperature	**Voltage**	**Frequency Error**	**Frequency Error**	**Limit**
℃	**V_{DC}**	**Hz**	**ppm**	**ppm**
-30	3.7	23	0.027	2.5
-20		25	0.030	
-10		27	0.032	
0		26	0.031	
10		29	0.035	
20		27	0.032	
30		23	0.027	
40		22	0.026	
50		24	0.029	
25	3.5	22	0.026	
	4.2	27	0.032	

WCDMA Band V: Re199

Middle Channel, f_c = 836.6 MHz				
Temperature	**Voltage**	**Frequency Error**	**Frequency Error**	**Limit**
℃	**V_{DC}**	**Hz**	**ppm**	**ppm**
-30	3.7	18	0.022	2.5
-20		27	0.032	
-10		25	0.030	
0		20	0.024	
10		19	0.023	
20		18	0.022	
30		17	0.020	
40		23	0.027	
50		18	0.022	
25	3.5	21	0.025	
25	4.2	17	0.020	

WCDMA Band V: HSDPA

Middle Channel, f_c = 836.6 MHz				
Temperature	**Voltage**	**Frequency Error**	**Frequency Error**	**Limit**
℃	**V_{DC}**	**Hz**	**ppm**	**ppm**
-30	3.7	31	0.037	2.5
-20		30	0.036	
-10		32	0.038	
0		30	0.036	
10		28	0.033	
20		31	0.037	
30		28	0.033	
40		32	0.038	
50		36	0.043	
25	3.5	34	0.041	
25	4.2	30	0.036	

WCDMA Band V: HSUPA

Middle Channel, f_c = 836.6 MHz				
Temperature	**Voltage**	**Frequency Error**	**Frequency Error**	**Limit**
℃	**V_{DC}**	**Hz**	**ppm**	**ppm**
-30	3.7	23	0.027	2.5
-20		28	0.033	
-10		26	0.031	
0		20	0.024	
10		23	0.027	
20		24	0.029	
30		19	0.023	
40		23	0.027	
50		20	0.024	
25	3.5	17	0.020	
25	4.2	25	0.030	

PCS Band (Part 24E)

GMSK, Middle Channel, f_c = 1880.0 MHz				
Temperature	**Voltage**	**Frequency Error**	**Frequency Error**	**Result**
℃	**V_{DC}**	**Hz**	**ppm**	
-30	3.7	19	0.010	Compliance
-20		14	0.007	
-10		13	0.007	
0		21	0.011	
10		26	0.014	
20		18	0.010	
30		16	0.009	
40		18	0.010	
50		21	0.011	
25	3.5	23	0.012	
	4.2	19	0.010	

WCDMA Band II: Re199

Middle Channel, f_c = 1880.0 MHz				
Temperature	**Voltage**	**Frequency Error**	**Frequency Error**	**Result**
℃	**V_{DC}**	**Hz**	**ppm**	
-30	3.7	13	0.007	Compliance
-20		21	0.011	
-10		16	0.009	
0		17	0.009	
10		15	0.008	
20		18	0.010	
30		19	0.010	
40		16	0.009	
50		12	0.006	
25	3.5	14	0.007	
25	4.2	18	0.010	

WCDMA Band II: HSDPA

Middle Channel, f_c = 1880.0 MHz				
Temperature	**Voltage**	**Frequency Error**	**Frequency Error**	**Result**
℃	**V_{DC}**	**Hz**	**ppm**	
-30	3.7	33	0.018	Compliance
-20		26	0.014	
-10		30	0.016	
0		34	0.018	
10		31	0.016	
20		22	0.012	
30		24	0.013	
40		28	0.015	
50		23	0.012	
25	3.5	27	0.014	
25	4.2	25	0.013	

WCDMA Band II: HSUPA

Middle Channel, f_c = 1880.0 MHz				
Temperature	**Voltage**	**Frequency Error**	**Frequency Error**	**Result**
℃	**V_{DC}**	**Hz**	**ppm**	
-30	3.7	27	0.014	Compliance
-20		25	0.013	
-10		26	0.014	
0		28	0.015	
10		27	0.014	
20		24	0.013	
30		20	0.011	
40		22	0.012	
50		26	0.014	
25	3.5	29	0.015	
25	4.2	23	0.012	

DECLARATION LETTER

Declaration of Alteration

To Whom It May Concern,

We, Posh Mobile Limited, hereby declare that there are some differences between our Multiple Models and testing products. Details as below:

(This is for your reference only.)

Products Description	Name	Equal Max
	Brand	POSH
	Manufacturer	Shenzhen Posh Mobile Limited
	Project No.	RDG151008002, RDG151008002-20

Differences Description			
Testing Products	Multiple Models	Differences Items	Details
S900A	S900B	Model name.	They are same motherboard, and just have the different model name.

Notes: Testing products-the products tested by BACL
Multiple Model- have the same or similar appearance, structure, PCB, Material and function to the testing products, and only are different for little parameters.

Besides the differences in the table above, we declare the products are identical
We guarantee all the information provided above is true, and notice that we'll bear all the consequences caused by any false information or concealing

Best Regards,

Signature:
Print Name: K.N. Chong
Title: Manager

Posh Mobile Limited

ADD: 1011A, 10/F., Harbour Centre Tower 1, No.1 Hok Cheung St., Hung Hom, Kowloon, Hong Kong Tel: (852) 31889834 Fax: (852) 39044979 Email:poshmobileltd@yahoo.com

OPDG004R32 Version1.0 (20140717)

***** END OF REPORT *****