

FCC PART 27
FCC PART 22H, PART 24E
MEASUREMENT AND TEST REPORT

For

Sky Phone LLC

1348 Washington Av. Suite 350, Miami Beach, Florida, United States

FCC ID: 2ABOSGCPLATINUM50

Report Type: Original Report	Product Type: WCDMA Mobile Phone
Test Engineer: Vincent Zheng	<i>Vincent Zheng</i>
Report Number: RSZ160119007-00D	
Report Date: 2016-02-02	
Reviewed By: RF Engineer	<i>Jimmy Xiao</i>
Prepared By:	Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

Note: This test report is prepared for the customer shown above and for the equipment described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

TABLE OF CONTENTS

GENERAL INFORMATION.....	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
OBJECTIVE	4
RELATED SUBMITTAL(S)/GRANT(S).....	4
TEST METHODOLOGY	4
TEST FACILITY	5
SYSTEM TEST CONFIGURATION.....	6
JUSTIFICATION	6
EQUIPMENT MODIFICATIONS	6
SUPPORT EQUIPMENT LIST AND DETAILS	6
BLOCK DIAGRAM OF TEST SETUP	6
SUMMARY OF TEST RESULTS	7
FCC §1.1307(B) & §2.1093 - RF EXPOSURE INFORMATION.....	8
APPLICABLE STANDARD	8
TEST RESULT	8
FCC §2.1047 - MODULATION CHARACTERISTIC	9
FCC § 2.1046, § 22.913 (A) & § 24.232 (C) & § 27.50 - RF OUTPUT POWER.....	10
APPLICABLE STANDARDS.....	10
TEST PROCEDURE	10
TEST EQUIPMENT LIST AND DETAILS.....	11
TEST DATA	11
FCC §2.1049, §22.917, §22.905 & §24.238 & §27.53 - OCCUPIED BANDWIDTH.....	18
APPLICABLE STANDARDS.....	18
TEST PROCEDURE	18
TEST EQUIPMENT LIST AND DETAILS.....	18
TEST DATA	19
FCC §2.1051, §22.917(A) & §24.238(A) & §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS ..	26
APPLICABLE STANDARDS.....	26
TEST PROCEDURE	26
TEST EQUIPMENT LIST AND DETAILS.....	26
TEST DATA	26
FCC §2.1053, §22.917 & §24.238 & §27.53 - SPURIOUS RADIATED EMISSIONS	33
APPLICABLE STANDARDS.....	33
TEST PROCEDURE	33
TEST EQUIPMENT LIST AND DETAILS.....	34
TEST DATA	34
FCC §22.917(A) & §24.238(A) & §27.53 - BAND EDGES.....	37
APPLICABLE STANDARDS.....	37
TEST PROCEDURE	37
TEST EQUIPMENT LIST AND DETAILS.....	37
TEST DATA	38
FCC §2.1055, §22.355 & §24.235 & §27.54 - FREQUENCY STABILITY.....	50

APPLICABLE STANDARDS.....50

TEST PROCEDURE50

TEST EQUIPMENT LIST AND DETAILS.....51

TEST DATA51

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The Sky Phone LLC's product, model number: *PLATINUM 5.0+* (FCC ID: 2ABOSGCPLATINUM50) or the "EUT" in this report was a *WCDMA Mobile Phone*, which was measured approximately: 143 mm (L) × 70 mm (W) × 8 mm (H), rated with input voltage: DC 3.8V rechargeable Li-ion battery or DC 5.0V from adapter.

Adapter Information:

Input AC: 100-240V, 50/60Hz, 0.15A

Output DC: 5.0V, 1A

**All measurement and test data in this report was gathered from production sample serial number: 1601176 (Assigned by Shenzhen BACL). The EUT supplied by the applicant was received on 2016-01-19.*

Objective

This type approval report is prepared on behalf of Sky Phone LLC in accordance with Part 2, Part 22-Subpart H, Part 24-Subpart E and Part 27 of the Federal Communication Commissions rules.

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

Related Submittal(s)/Grant(s)

FCC Part 15B JBP, Part 15.247 DSS & DTS submissions with FCC ID: 2ABOSGCPLATINUM50.

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

Part 27 – Miscellaneous wireless communications services

Applicable Standards: TIA/EIA 603-D.

All radiated and conducted emissions measurements were performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement uncertainty with radiated emission is 5.81 dB for 30MHz-1GHz and 4.88 dB for above 1GHz, 1.95dB for conducted measurement.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp.(Shenzhen) to collect test data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication 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 October 31, 2103. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. 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.
The final qualification test was performed with the EUT operating at normal mode.

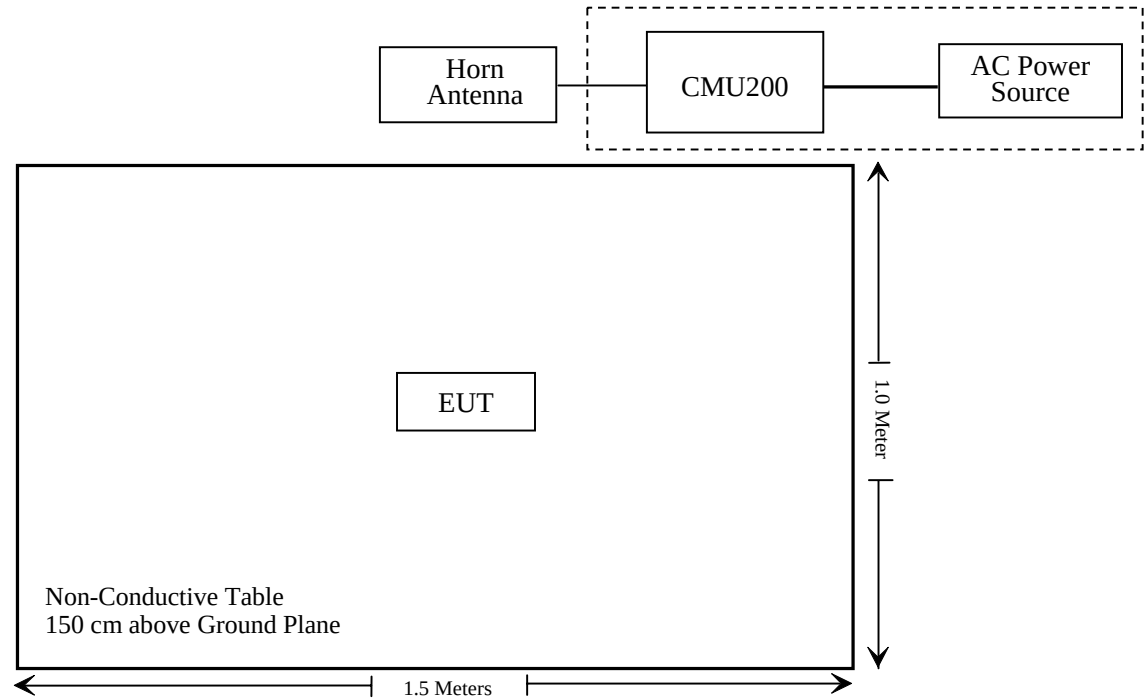
Equipment Modifications

No modifications were made to the EUT.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	106891

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b)(1), §2.1093	RF Exposure Information	Compliance
§2.1046; § 22.913 (a); § 24.232 (c); §27.50 (d) (i)	RF Output Power	Compliance
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905; § 22.917; § 24.238; §27.53 (c)	Occupied Bandwidth	Compliance
§ 2.1051; § 22.917 (a); § 24.238 (a); §27.53(c) (g)	Spurious Emissions at Antenna Terminal	Compliance
§ 2.1053; § 22.917 (a); § 24.238 (a); §27.53 (c) (g)	Spurious Radiated Emissions	Compliance
§ 22.917 (a); § 24.238 (a); §27.53 (c) (g);	Band Edge	Compliance
§ 2.1055; § 22.355; § 24.235; §27.54;	Frequency stability	Compliance

FCC §1.1307(b) & §2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

FCC§1.1307, §2.1093.

Test Result

Compliance, please refer to the SAR report: RSZ160119007-20.

FCC §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d) , Part 22H & 24E, Part 27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046, § 22.913 (a) & § 24.232 (c) & § 27.50 - RF OUTPUT POWER**Applicable Standards**

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

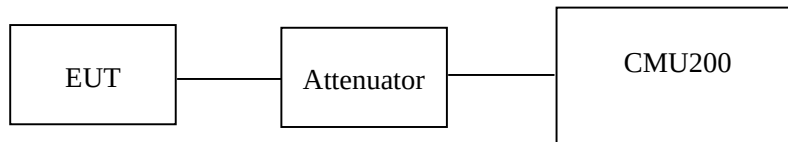
According to FCC §2.1046 and §24.232 (C), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications..

According to §27.50(d), the maximum EIRP must not exceed 1Watts (30dBm) for 1710-1755MHz.

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB.

Test Procedure*Conducted method:*

The RF output of the transmitter was connected to the CMU200 through sufficient attenuation.

*Radiated method:*

TIA603-D section 2.2.17

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2015-11-03	2016-11-03
Sunol Sciences	Bi-log Antenna	JB1	A040904-2	2014-12-07	2017-12-06
HP	Synthesized Sweeper	8341B	2624A00116	2015-06-03	2016-06-03
COM POWER	Dipole Antenna	AD-100	041000	2015-08-18	2016-08-18
A.H. System	Horn Antenna	SAS-200/571	135	2013-02-11	2016-02-10
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2015-12-11	2016-12-11
Sunol Sciences	Horn Antenna	DRH-118	A052304	2015-12-01	2016-11-30
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	106891	2015-11-23	2016-11-23
Ducommun technologies	RF Cable	UFA210A-1-4724-30050U	MFR64369 223410-001	2015-06-15	2016-06-15
Ducommun technologies	RF Cable	104PEA	218124002	2015-06-15	2016-06-15
Ducommun technologies	RF Cable	RG-214	1	2015-06-15	2016-06-15
Ducommun technologies	RF Cable	RG-214	2	2015-06-15	2016-06-15
Ducommun technologies	RF Cable	RG-214	3	2015-06-15	2016-06-15
WEINSCHL	10dB Attenuator	5324	AU0709	2015-06-18	2016-06-18

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

Test Data**Environmental Conditions**

Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	101.0 kPa

The testing was performed by Vincent Zheng on 2016-01-30.

Conducted Power**Cellular Band (Part 22H)**

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	Limit (dBm)
GSM	128	824.2	32.93	38.45
	190	836.6	32.78	38.45
	251	848.8	32.78	38.45

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	
GPRS	128	824.2	32.02	31.24	29.27	28.08	38.45
	190	836.6	32.13	31.29	29.43	28.26	38.45
	251	848.8	32.08	31.28	29.45	28.37	38.45

Mode	Test Condition	Test Mode	3GPP Sub Test	Average Output Power (dBm)		
				Low Frequency	Middle Frequency	High Frequency
WCDMA (Band V)	Normal	RMC12.2k		22.22	22.20	21.17
		Rel 6 HSDPA	1	21.42	21.36	20.29
			2	21.35	21.32	20.33
			3	21.39	21.35	20.31
			4	21.35	21.32	20.31
		Rel 6 HSUPA	1	21.37	21.32	20.35
			2	21.40	21.35	20.36
			3	21.36	21.37	20.34
			4	21.35	21.32	20.33
			5	21.34	21.36	20.32

PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	Limit (dBm)
GSM	512	1850.2	28.76	33
	661	1880.0	28.32	33
	810	1909.8	29.00	33

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	
GPRS	512	1850.2	28.82	27.42	25.67	24.59	33
	661	1880.0	28.18	27.99	25.23	25.08	33
	810	1909.8	29.49	28.69	26.90	25.84	33

Mode	Test Condition	Test Mode	3GPP Sub Test	Average Output Power (dBm)		
				Low Frequency	Middle Frequency	High Frequency
WCDMA (Band II)	Normal	RMC12.2k		22.28	21.80	21.62
		Rel 6 HSDPA	1	21.45	20.95	20.80
			2	21.47	20.98	20.78
			3	21.47	20.93	20.81
			4	21.46	20.94	20.79
		Rel 6 HSUPA	1	21.43	20.99	20.76
			2	21.41	20.93	20.79
			3	21.40	20.96	20.76
			4	21.39	20.96	20.74
			5	21.40	20.94	20.78

AWS Band (Part 27)

Mode	Test Condition	Test Mode	3GPP Sub Test	Average Output Power (dBm)		
				Low Frequency	Middle Frequency	High Frequency
WCDMA (Band IV)	Normal	RMC12.2k		21.57	22.02	22.20
		Rel 6 HSDPA	1	20.77	21.13	21.33
			2	20.74	21.15	21.32
			3	20.74	21.17	21.37
			4	20.71	21.14	21.35
		Rel 6 HSUPA	1	20.69	21.20	21.32
			2	20.73	21.16	21.33
			3	20.70	21.18	21.32
			4	20.76	21.19	21.36
			5	20.76	21.20	21.37

Peak-to-average ratio (PAR)**Cellular Band**

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	0.27	13
	Middle	0.23	13
	High	0.28	13

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (BPSK)	Low	3.45	13
	Middle	3.62	13
	High	3.71	13
HSDPA (16QAM)	Low	3.45	13
	Middle	3.18	13
	High	3.15	13
HSUPA (BPSK)	Low	3.21	13
	Middle	3.17	13
	High	3.16	13

PCS Band

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	0.23	13
	Middle	0.24	13
	High	0.21	13

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (BPSK)	Low	2.98	13
	Middle	3.02	13
	High	2.95	13
HSDPA (16QAM)	Low	2.96	13
	Middle	2.94	13
	High	2.99	13
HSUPA (BPSK)	Low	2.86	13
	Middle	2.84	13
	High	2.81	13

AWS Band

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (BPSK)	Low	2.78	13
	Middle	2.87	13
	High	2.75	13
HSDPA (16QAM)	Low	2.79	13
	Middle	2.57	13
	High	2.67	13
HSUPA (BPSK)	Low	2.31	13
	Middle	2.69	13
	High	2.71	13

Radiated Power**GSM Mode:**

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 22H/24E	
			Height (m)	Polar (H/V)	S.G. Level (dBm)	Cable loss (dB)	Antenna Gain (dB)		Limit (dBm)	Margin (dB)
ERP for Cellular Band (Part 22H)										
836.6	97.89	301	2.1	H	30.7	0.67	0	30.03	38.45	8.42
836.6	98.12	47	2.1	V	30.9	0.67	0	30.23	38.45	8.22
EIRP for PCS Band (Part 24E)										
1880	88.47	257	1.5	H	19.7	1.40	7.30	25.60	33	7.40
1880	90.76	145	1.6	V	21.5	1.40	7.30	27.40	33	5.60

WCDMA Mode:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 22H/24E/27	
			Height (m)	Polar (H/V)	S.G. Level (dBm)	Cable loss (dB)	Antenna Gain (dB)		Limit (dBm)	Margin (dB)
ERP for WCDMA Band V (Part 22H)										
836.6	87.12	236	1.7	H	19.9	0.67	0	19.23	38.45	19.22
836.6	88.34	223	1.6	V	21.1	0.67	0	20.43	38.45	18.02
EIRP for WCDMA Band II (Part 24E)										
1880	81.37	156	1.5	H	12.7	1.40	7.30	18.60	33	14.40
1880	82.67	223	1.7	V	14.2	1.40	7.30	20.10	33	12.90
EIRP for WCDMA Band IV (Part 27)										
1732.4	80.79	257	1.6	H	11.2	1.60	6.90	18.60	30	11.40
1732.4	81.83	17	1.0	V	13.8	1.60	6.90	20.10	30	9.90

Note:

All above data were tested with no amplifier.

Absolute Level = SG Level - Cable loss + Antenna Gain

Margin = Limit- Absolute Level

FCC §2.1049, §22.917, §22.905 & §24.238 & §27.53 - OCCUPIED BANDWIDTH

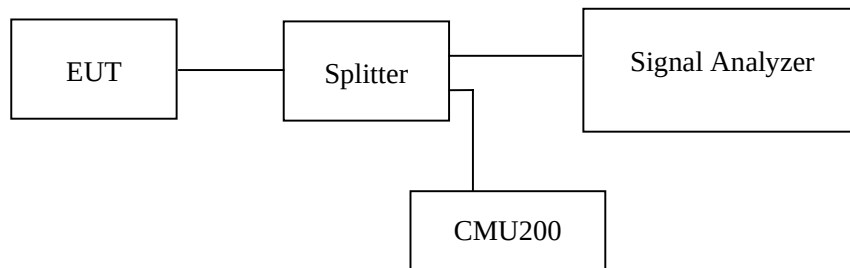
Applicable Standards

FCC 47 §2.1049, §22.917, §22.905, §24.238 and §27.53.

Test Procedure

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

The resolution bandwidth of the spectrum analyzer was set at 5 kHz (Cellular /PCS) & 100 kHz (WCDMA) and the 26 dB & 99% bandwidth was recorded.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2015-12-11	2016-12-11
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03-101746-zn	2015-06-13	2016-06-13
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	106891	2015-11-23	2016-11-23
Ducommun technologies	RF Cable	RG-214	3	2015-06-15	2016-06-15
WEINSCHEL	10dB Attenuator	5324	AU0709	2015-06-18	2016-06-18

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

Test Data**Environmental Conditions**

Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	101.0 kPa

The testing was performed by Vincent Zheng on 2016-01-30.

EUT operation mode: Transmitting

Test Result: Compliance. Please refer to the following tables and plots.

Cellular Band (Part 22H)

Mode	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM(GMSK)	836.6	244.5	316.6

Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (BPSK)	836.6	4.15	4.69
HSUPA (BPSK)	836.6	4.17	4.69
HSDPA (16QAM)	836.6	4.13	4.71

PCS Band (Part 24E)

Mode	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM(GMSK)	1880.0	244.5	320.6

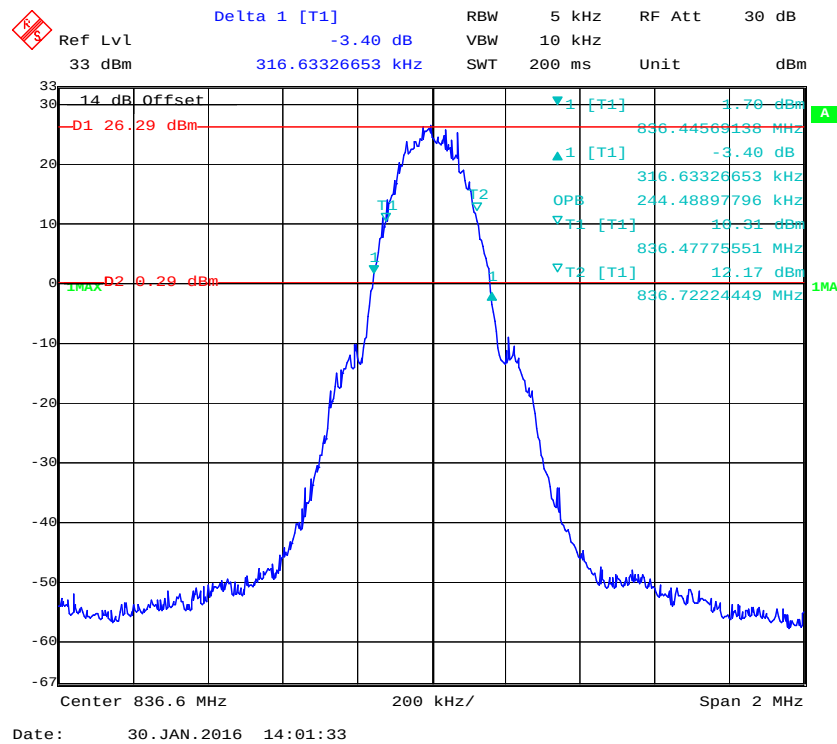
Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (BPSK)	1880.0	4.17	4.71
HSUPA (BPSK)	1880.0	4.15	4.73
HSDPA (16QAM)	1880.0	4.15	4.71

AWS Band

Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA (BPSK)	1732.4	4.15	4.71
HSUPA (BPSK)	1732.4	4.17	4.73
HSDPA (16QAM)	1732.4	4.17	4.73

Cellular Band (Part 22H)

99% Occupied & 26 dB Emissions Bandwidth for GSM (GMSK) Mode



Ref Lvl 30 dBm

Delta 1 [T1] -0.69 dB

RBW 100 kHz

VBW 300 kHz

RF Att 30 dB

Unit dBm

30 dBm

4.68937876 MHz

SWT 5 ms

14 dB Offset

D1 17.92 dBm

D2 -8.08 dBm

1MAX

1 [T1] -7.61 dBm

1 [T1] -0.69 dB

0 [T1] 4.68937876 MHz

0 [T1] 4.14829659 MHz

1 [T1] 8.82 dBm

1 [T1] 834.24529058 MHz

1 [T1] 834.50581162 MHz

1 [T1] 9.25 dBm

1 [T1] 838.65410822 MHz

1MAX

Center 836.6 MHz

1 MHz/

Span 10 MHz

Date: 30. JAN. 2016 13:46:26

Delta 1 [T1]

Ref Lvl 0.01 dB RBW 100 kHz RF Att 30 dB

30 dBm 4.68937876 MHz SWT 5 ms Unit dBm

14 dB Offset

D1 16.82 dBm

D2 -9.18 dBm

1MAX

1 [T1] -5.36 dBm 834.24529058 MHz

1 [T1] 0.01 dB 4.68937876 MHz

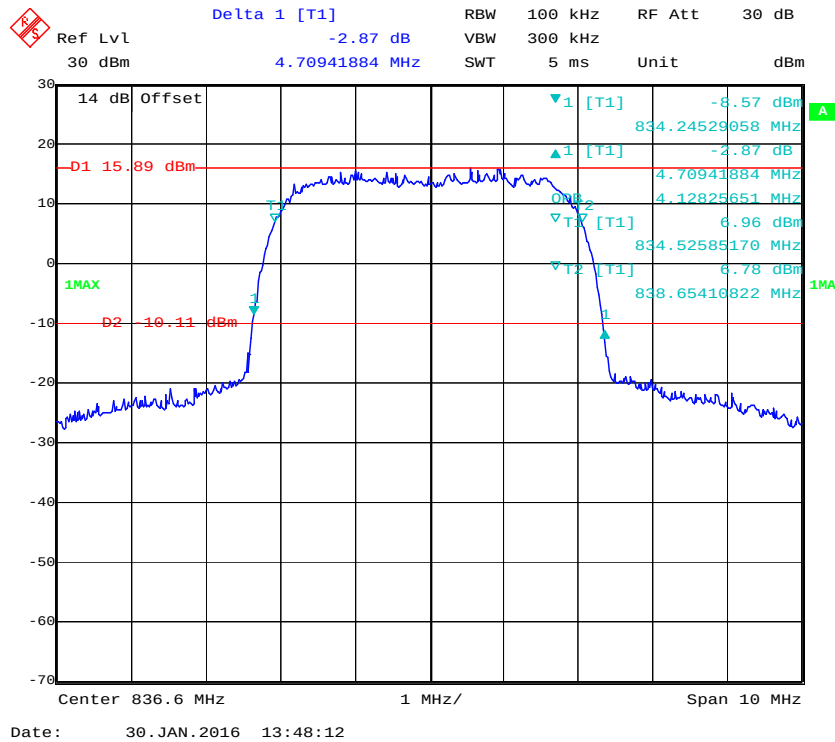
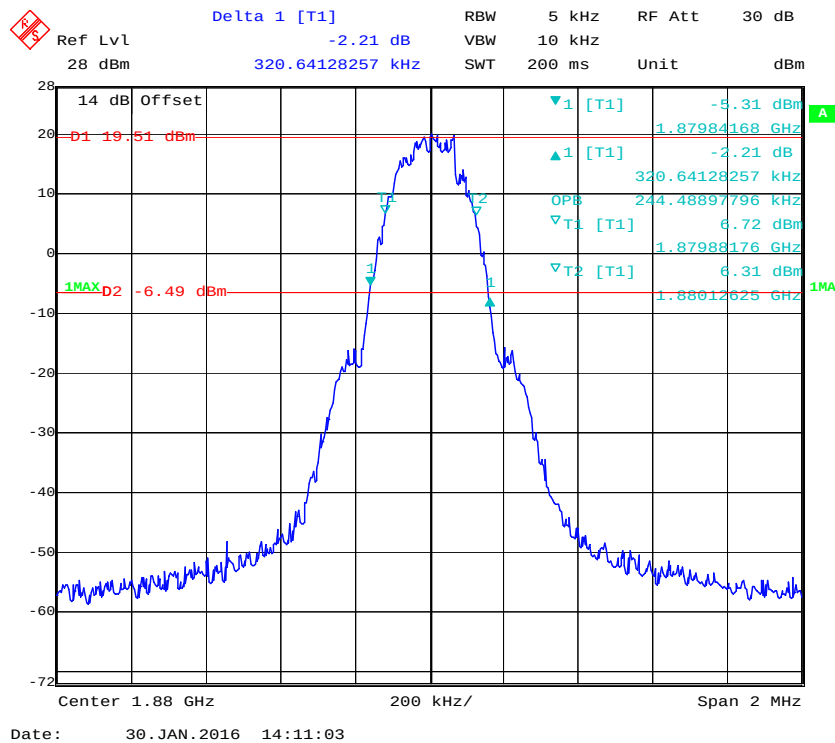
1 [T1] 4.16833667 MHz

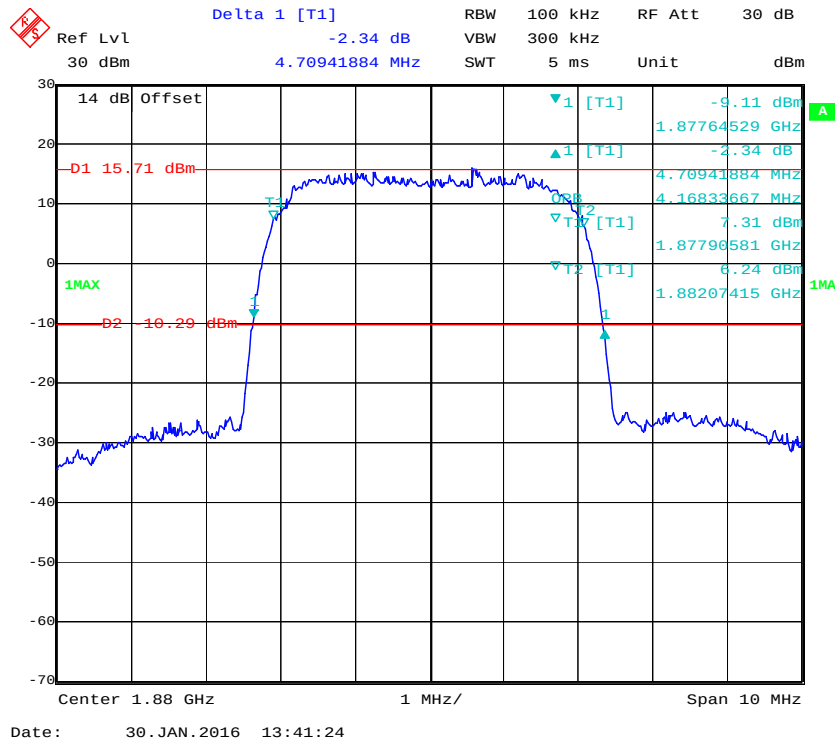
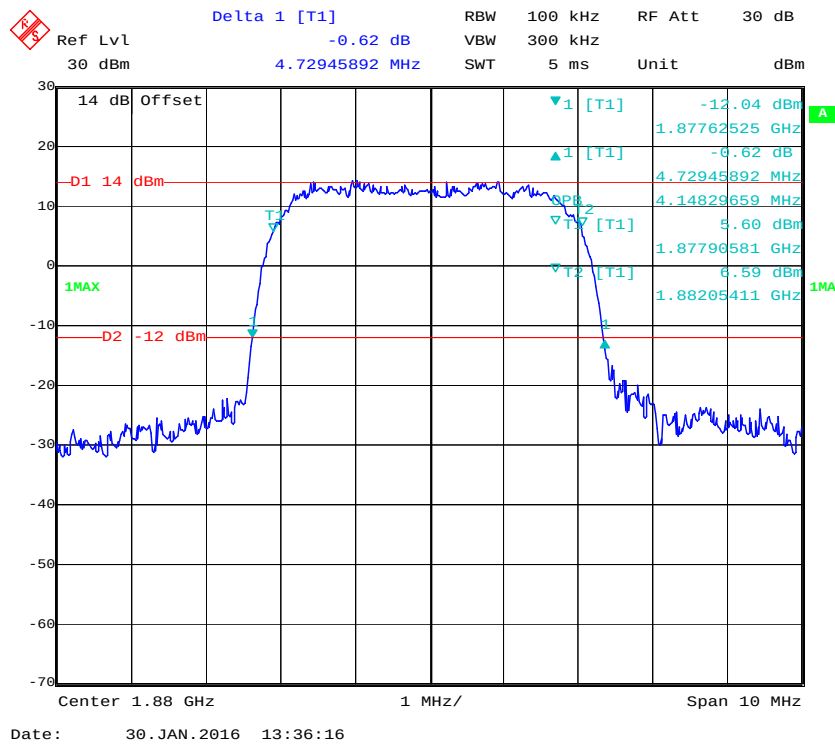
1 [T1] 7.44 dBm 834.50581162 MHz

1 [T1] 8.18 dBm 838.67414830 MHz

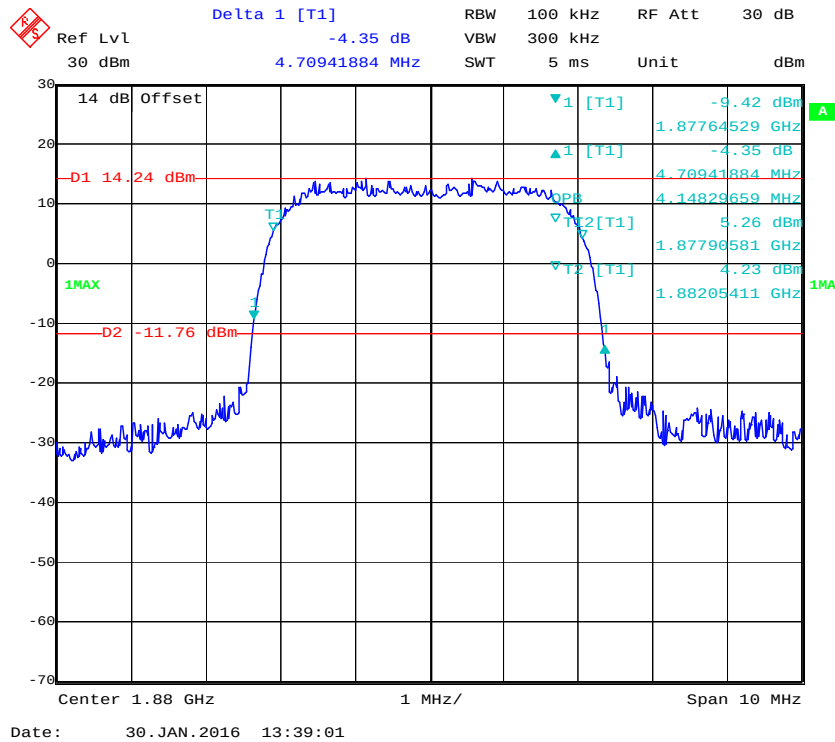
Center 836.6 MHz 1 MHz/ Span 10 MHz

Date: 30. JAN. 2016 13:50:02

99% Occupied & 26 dB Emissions Bandwidth for HSDPA (16QAM) Mode**PCS Band (Part 24E)****99% Occupied & 26 dB Emissions Bandwidth for GSM (GMSK) Mode**

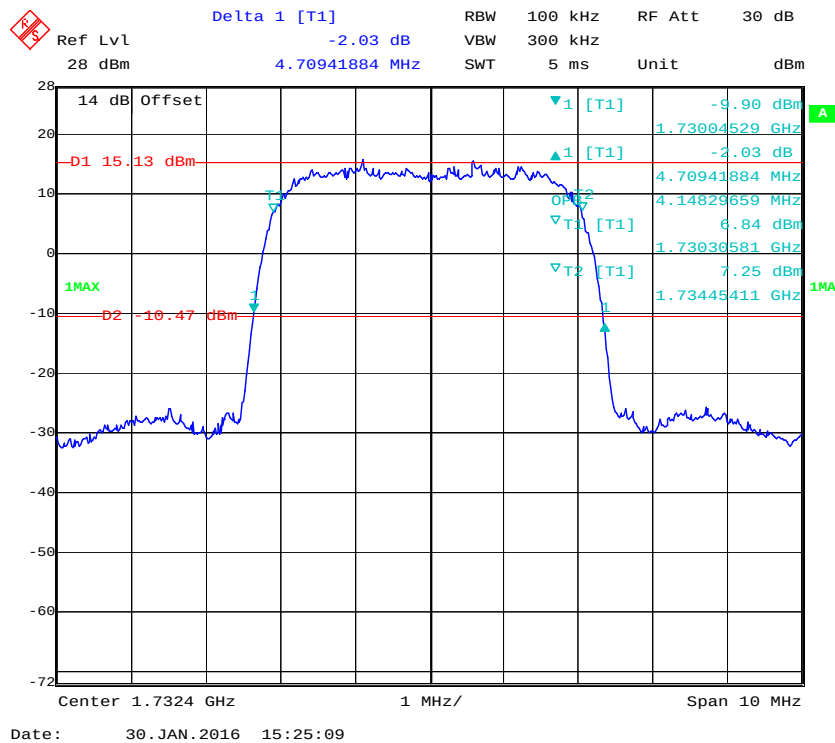
99% Occupied & 26 dB Emissions Bandwidth for WCDMA (BPSK) Mode**99% Occupied & 26 dB Emissions Bandwidth for HSUPA (BPSK) Mode**

99% Occupied & 26 dB Emissions Bandwidth for HSDPA (16QAM) Mode



AWS Band:

99% Occupied & 26 dB Emissions Bandwidth for WCDMA (BPSK) Mode



Ref Lvl 35 dBm Delta 1 [T1] -0.13 dB RBW 100 kHz VBW 300 kHz RF Att 40 dB Unit dBm

14 dB Offset

D1 13.48 dBm

D2 -12.52 dBm

1MAX

1 [T1] -12.43 dBm

1 [T1] -0.13 dB

OP8

1.73002525 GHz

4.72945892 MHz

4.16833667 MHz

5.60 dBm

1.73036581 GHz

5.69 dBm

1.73447415 GHz

Center 1.7324 GHz 1 MHz/ Span 10 MHz

Date: 30.JAN.2016 15:40:06

Delta 1 [T1] -0.66 dB
 Ref Lvl 35 dBm
 3.72945892 MHz
 RBW 100 kHz
 VBW 300 kHz
 SWT 5 ms
 RF Att 40 dB
 Unit dBm

14 dB Offset
 D1 12.99 dBm
 D2 -13.01 dBm
 1MAX
 T1
 T2
 T3
 T4
 T5
 T6
 T7
 T8
 T9
 T10
 T11
 T12
 T13
 T14
 T15
 T16
 T17
 T18
 T19
 T20
 T21
 T22
 T23
 T24
 T25
 T26
 T27
 T28
 T29
 T30
 T31
 T32
 T33
 T34
 T35
 T36
 T37
 T38
 T39
 T40
 T41
 T42
 T43
 T44
 T45
 T46
 T47
 T48
 T49
 T50
 T51
 T52
 T53
 T54
 T55
 T56
 T57
 T58
 T59
 T60
 T61
 T62
 T63
 T64
 T65
 T66
 T67
 T68
 T69
 T70
 T71
 T72
 T73
 T74
 T75
 T76
 T77
 T78
 T79
 T80
 T81
 T82
 T83
 T84
 T85
 T86
 T87
 T88
 T89
 T90
 T91
 T92
 T93
 T94
 T95
 T96
 T97
 T98
 T99
 T100
 T101
 T102
 T103
 T104
 T105
 T106
 T107
 T108
 T109
 T110
 T111
 T112
 T113
 T114
 T115
 T116
 T117
 T118
 T119
 T120
 T121
 T122
 T123
 T124
 T125
 T126
 T127
 T128
 T129
 T130
 T131
 T132
 T133
 T134
 T135
 T136
 T137
 T138
 T139
 T140
 T141
 T142
 T143
 T144
 T145
 T146
 T147
 T148
 T149
 T150
 T151
 T152
 T153
 T154
 T155
 T156
 T157
 T158
 T159
 T160
 T161
 T162
 T163
 T164
 T165
 T166
 T167
 T168
 T169
 T170
 T171
 T172
 T173
 T174
 T175
 T176
 T177
 T178
 T179
 T180
 T181
 T182
 T183
 T184
 T185
 T186
 T187
 T188
 T189
 T190
 T191
 T192
 T193
 T194
 T195
 T196
 T197
 T198
 T199
 T200
 T201
 T202
 T203
 T204
 T205
 T206
 T207
 T208
 T209
 T210
 T211
 T212
 T213
 T214
 T215
 T216
 T217
 T218
 T219
 T220
 T221
 T222
 T223
 T224
 T225
 T226
 T227
 T228
 T229
 T230
 T231
 T232
 T233
 T234
 T235
 T236
 T237
 T238
 T239
 T240
 T241
 T242
 T243
 T244
 T245
 T246
 T247
 T248
 T249
 T250
 T251
 T252
 T253
 T254
 T255
 T256
 T257
 T258
 T259
 T260
 T261
 T262
 T263
 T264
 T265
 T266
 T267
 T268
 T269
 T270
 T271
 T272
 T273
 T274
 T275
 T276
 T277
 T278
 T279
 T280
 T281
 T282
 T283
 T284
 T285
 T286
 T287
 T288
 T289
 T290
 T291
 T292
 T293
 T294
 T295
 T296
 T297
 T298
 T299
 T300
 T301
 T302
 T303
 T304
 T305
 T306
 T307
 T308
 T309
 T310
 T311
 T312
 T313
 T314
 T315
 T316
 T317
 T318
 T319
 T320
 T321
 T322
 T323
 T324
 T325
 T326
 T327
 T328
 T329
 T330
 T331
 T332
 T333
 T334
 T335
 T336
 T337
 T338
 T339
 T340
 T341
 T342
 T343
 T344
 T345
 T346
 T347
 T348
 T349
 T350
 T351
 T352
 T353
 T354
 T355
 T356
 T357
 T358
 T359
 T360
 T361
 T362
 T363
 T364
 T365
 T366
 T367
 T368
 T369
 T370
 T371
 T372
 T373
 T374
 T375
 T376
 T377
 T378
 T379
 T380
 T381
 T382
 T383
 T384
 T385
 T386
 T387
 T388
 T389
 T390
 T391
 T392
 T393
 T394
 T395
 T396
 T397
 T398
 T399
 T400
 T401
 T402
 T403
 T404
 T405
 T406
 T407
 T408
 T409
 T410
 T411
 T412
 T413
 T414
 T415
 T416
 T417
 T418
 T419
 T420
 T421
 T422
 T423
 T424
 T425
 T426
 T427
 T428
 T429
 T430
 T431
 T432
 T433
 T434
 T435
 T436
 T437
 T438
 T439
 T440
 T441
 T442
 T443
 T444
 T445
 T446
 T447
 T448
 T449
 T450
 T451
 T452
 T453
 T454
 T455
 T456
 T457
 T458
 T459
 T460
 T461
 T462
 T463
 T464
 T465
 T466
 T467
 T468

FCC §2.1051, §22.917(a) & §24.238(a) & §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

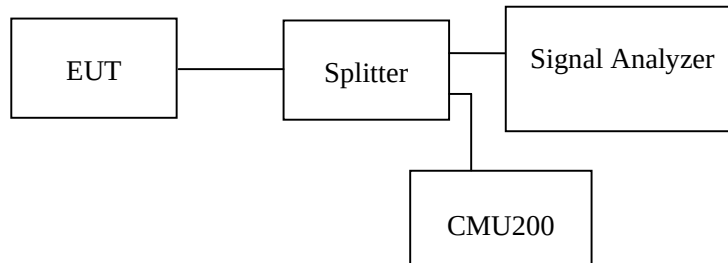
Applicable Standards

FCC §2.1051, §22.917(a) and §24.238(a) and §27.53.

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. The resolution bandwidth of the spectrum analyzer was set at 1MHz. 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
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2015-12-11	2016-12-11
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	106891	2015-11-23	2016-11-23
Ducommun technologies	RF Cable	RG-214	3	2015-06-15	2016-06-15
WEINSCHEL	10dB Attenuator	5324	AU0709	2015-06-18	2016-06-18

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

Test Data

Environmental Conditions

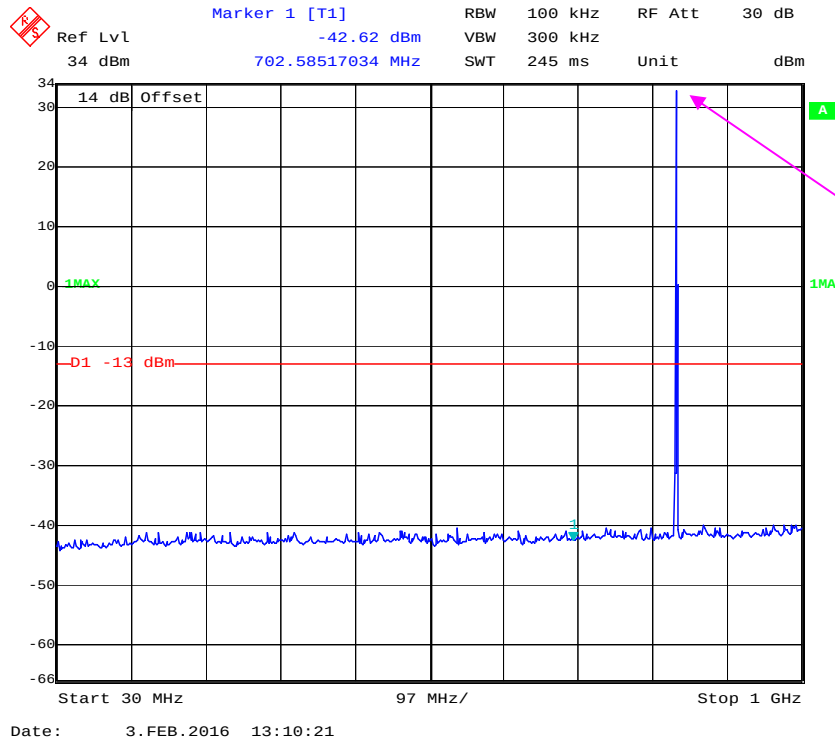
Temperature:	20~25 °C
Relative Humidity:	48~54 %
ATM Pressure:	100.0~101.0 kPa

The testing was performed by Vincent Zheng on 2016-01-30 and 2016-02-03.

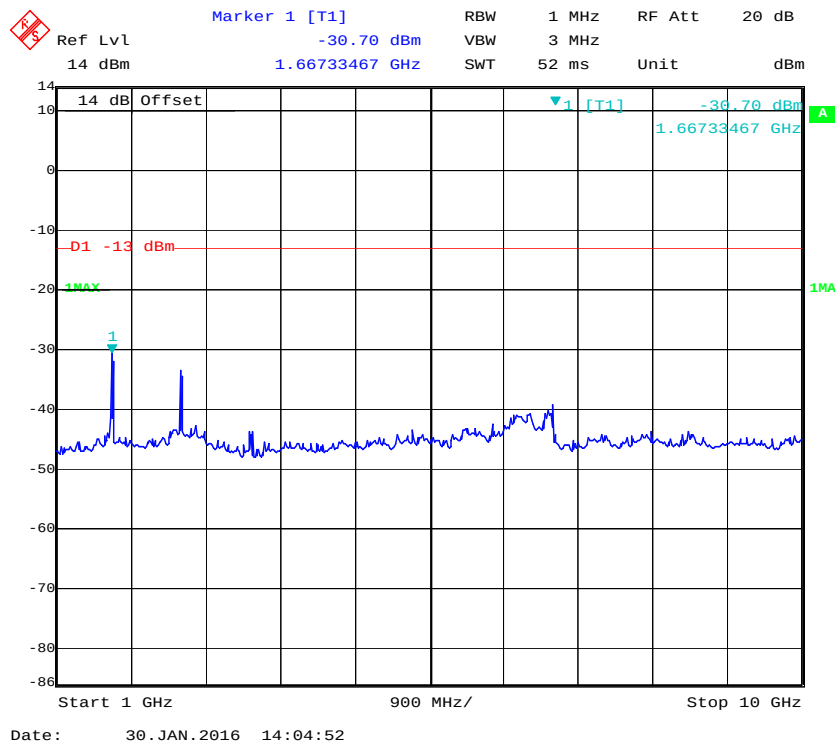
Please refer to the following plots.

Cellular Band (Part 22H)

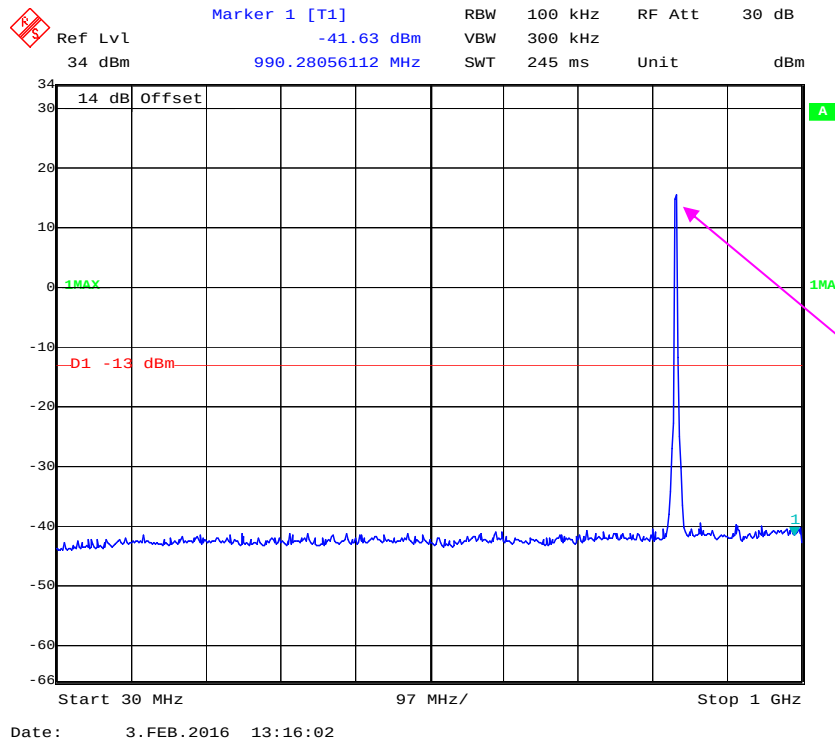
30 MHz – 1 GHz (GSM Mode)



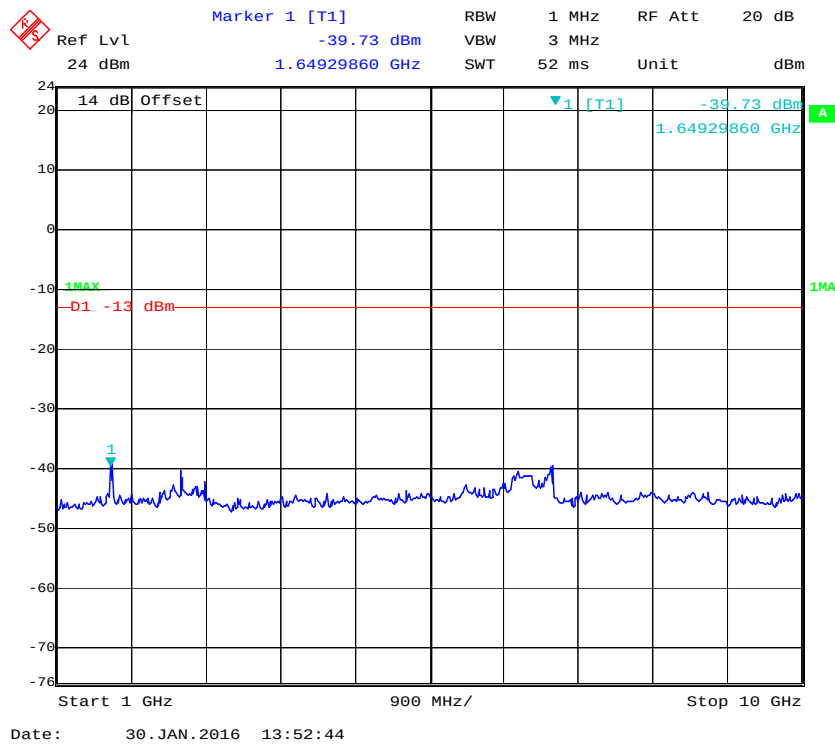
1 GHz – 10 GHz (GSM Mode)



30 MHz – 1 GHz (WCDMA Mode)

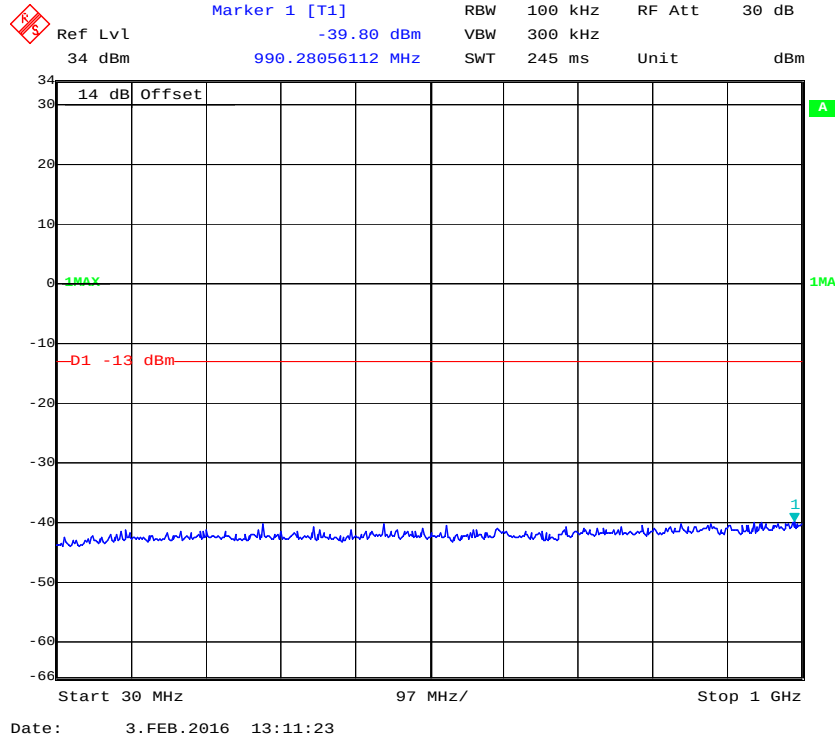


1 GHz – 10 GHz (WCDMA Mode)

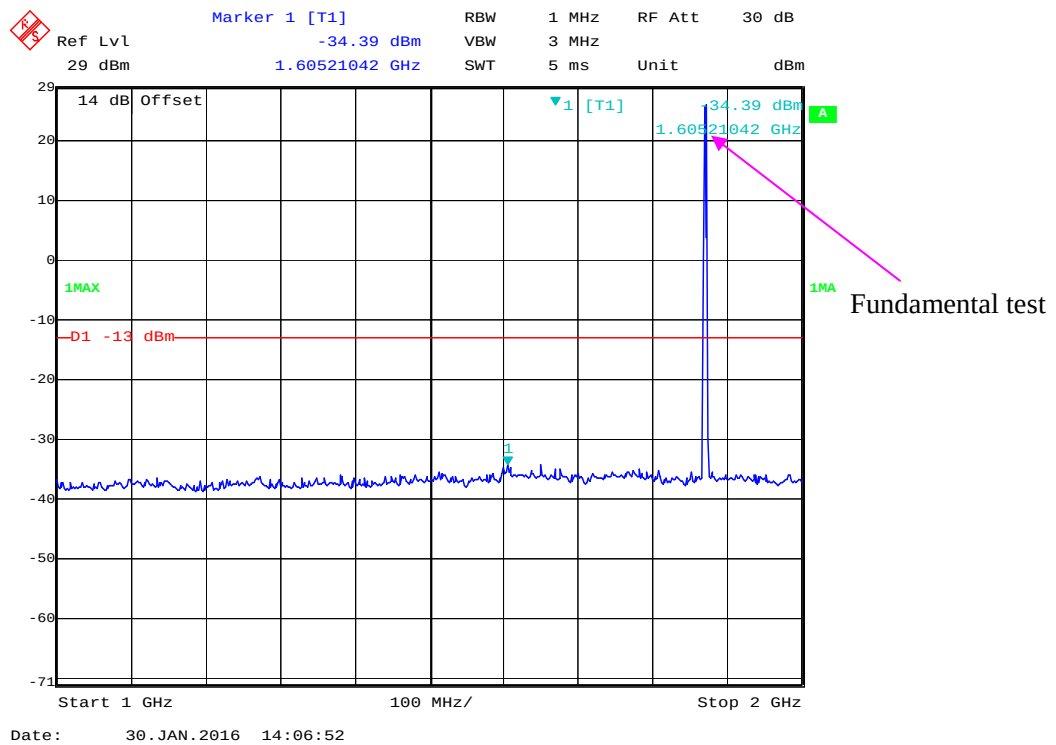


PCS Band (Part 24E)

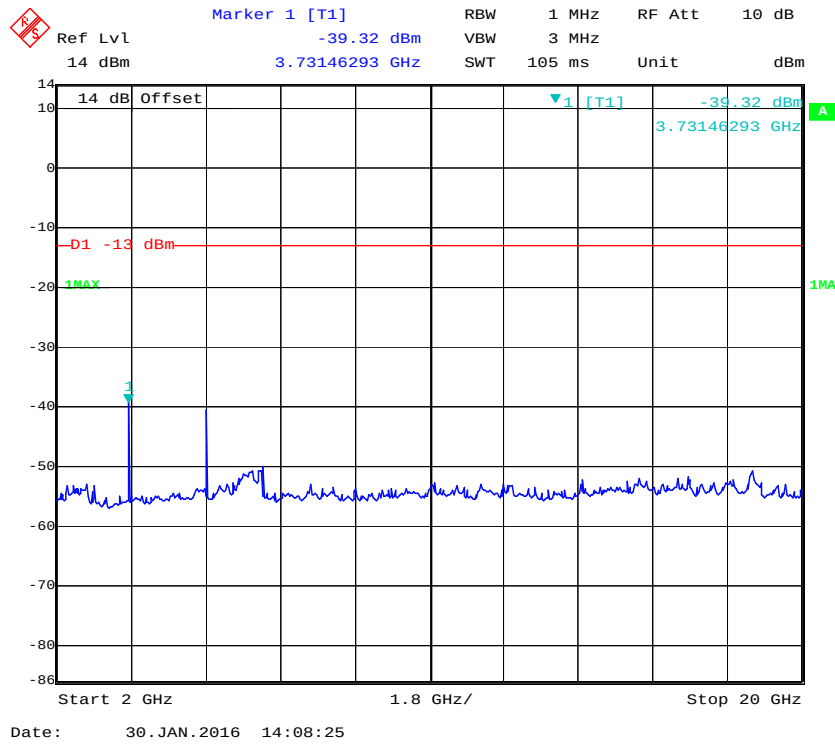
30 MHz – 1 GHz (GSM Mode)



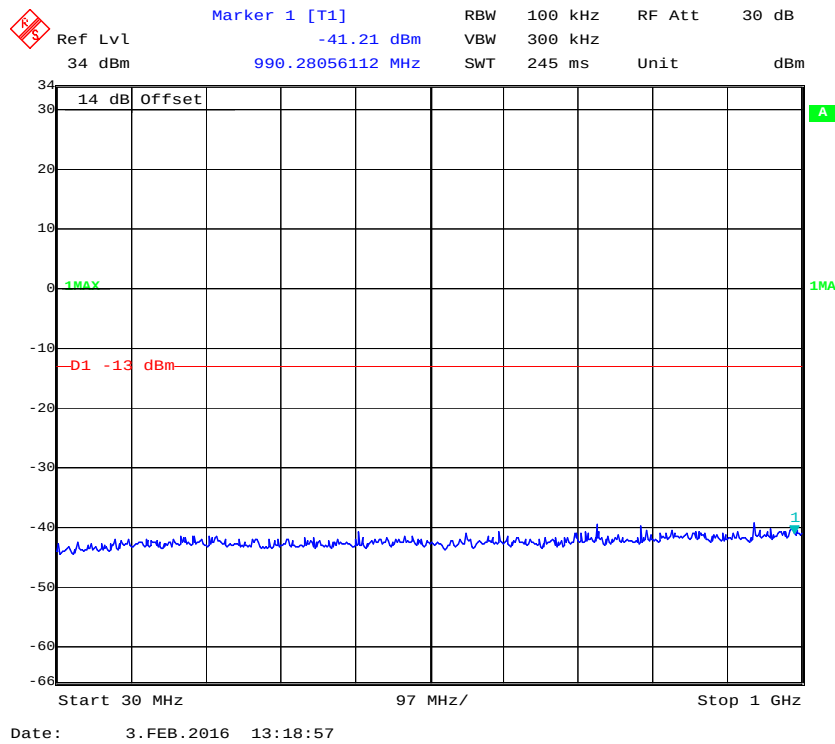
1 GHz – 2 GHz (GSM Mode)



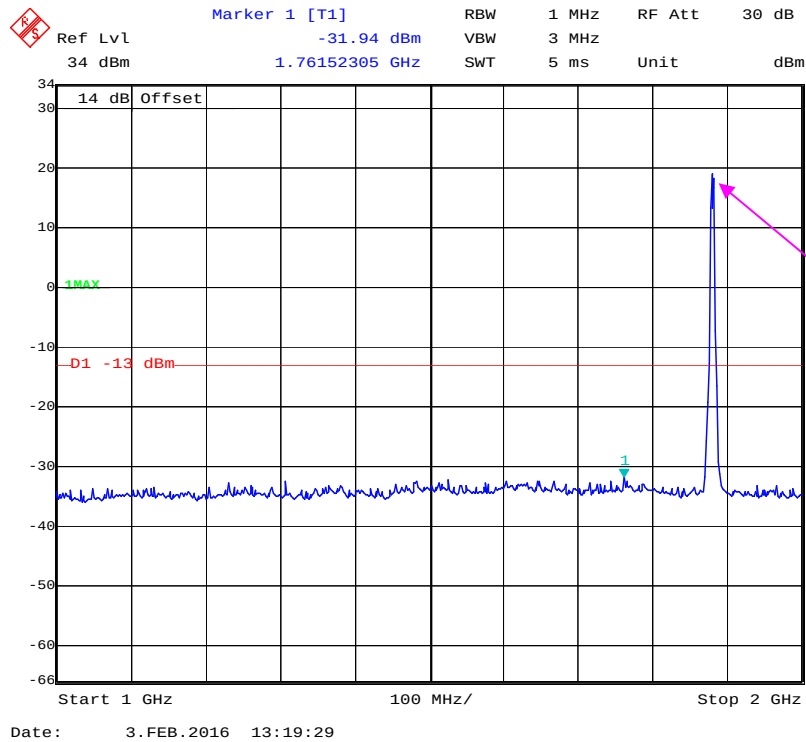
2 GHz – 20 GHz (GSM Mode)



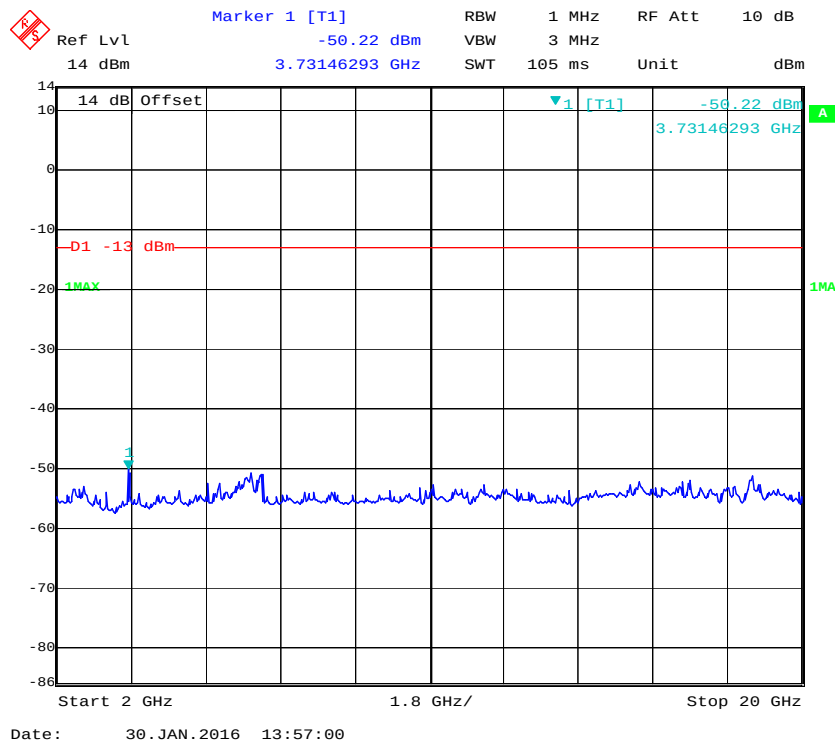
30 MHz – 1 GHz (WCDMA Mode)



1 GHz – 2 GHz (WCDMA Mode)

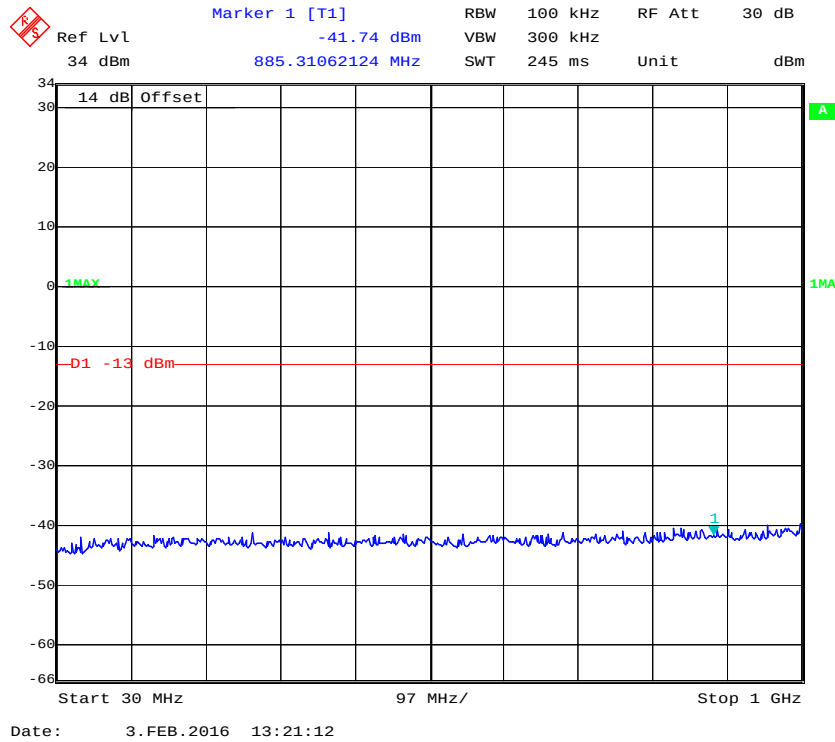


2 GHz – 20 GHz (WCDMA Mode)

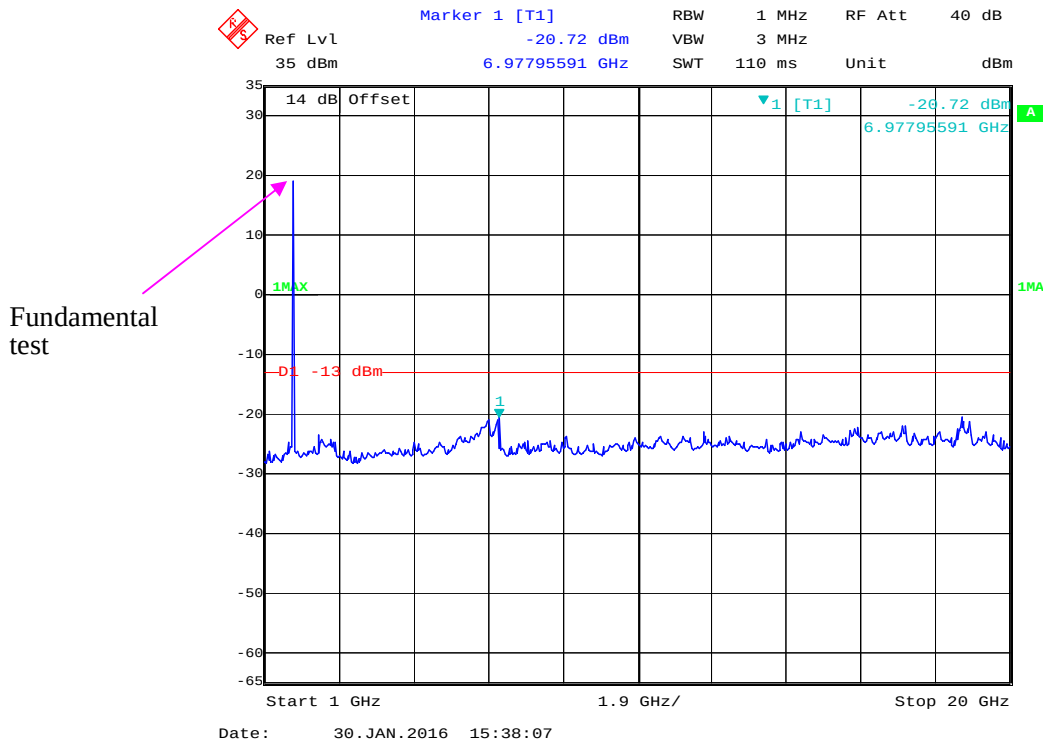


AWS Band:

30 MHz – 1 GHz (WCDMA Mode)



1 GHz – 20 GHz (WCDMA Mode)



FCC §2.1053, §22.917 & §24.238 & §27.53 - SPURIOUS RADIATED EMISSIONS

Applicable Standards

FCC § 2.1053, §22.917 and § 24.238 and § 27.53.

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

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 = $10 \lg (\text{TX pwr in Watts}/0.001)$ – the absolute level

Spurious attenuation limit in dB = $43 + 10 \log_{10} (\text{power out in Watts})$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Horn Antenna	DRH-118	A052304	2015-12-01	2016-11-30
Sunol Sciences	Bi-log Antenna	JB1	A040904-2	2014-12-07	2017-12-06
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2015-12-11	2016-12-11
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2015-04-23	2016-04-23
HP	Amplifier	HP8447E	1937A01046	2015-05-06	2016-05-06
HP	Signal Generator	8341B	2624A00116	2015-06-03	2016-06-03
COM POWER	Dipole Antenna	AD-100	041000	2015-08-18	2016-08-18
A.H. System	Horn Antenna	SAS-200/571	135	2013-02-11	2016-02-10
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2015-11-03	2016-11-03
Electro-Mechanics	Horn Antenna	3116	9510-2270	2013-10-14	2016-10-13
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	106891	2015-11-23	2016-11-23
Ducommun technologies	RF Cable	UFA210A-1-4724-30050U	MFR64369223410-001	2015-06-15	2016-06-15
Ducommun technologies	RF Cable	104PEA	218124002	2015-06-15	2016-06-15
Ducommun technologies	RF Cable	RG-214	1	2015-06-15	2016-06-15
Ducommun technologies	RF Cable	RG-214	2	2015-06-15	2016-06-15

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

Test Data**Environmental Conditions**

Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	101.0 kPa

The testing was performed by Vincent Zheng on 2016-01-30.

Test mode: Transmitting

30 MHz ~ 10 GHz:

Cellular Band (Part 22H)

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 22H	
			Height (m)	Polar (H/V)	SG Level (dBm)	Cable Loss (dB)	Antenna Gain (dB)		Limit (dBm)	Margin (dB)
GSM Mode										
162.37	35.64	42	2.0	H	-61.4	0.27	0	-61.67	-13	48.67
162.37	34.45	40	2.4	V	-62.5	0.27	0	-62.77	-13	49.77
1673.20	64.41	85	2.0	H	-43.0	1.60	6.90	-37.70	-13	24.70
1673.20	62.22	54	2.4	V	-45.6	1.60	6.90	-40.30	-13	27.30
2509.80	65.05	150	1.1	H	-39.5	1.70	8.60	-32.60	-13	19.60
2509.80	61.27	355	1.6	V	-43.6	1.70	8.60	-36.70	-13	23.70
3346.40	52.11	174	1.3	H	-49.3	1.90	9.80	-41.40	-13	28.40
3346.40	51.09	158	1.4	V	-50.9	1.90	9.80	-43.00	-13	30.00
4183.00	45.45	152	2.3	H	-55.9	2.00	9.80	-48.10	-13	35.10
4183.00	44.78	121	2.1	V	-57.0	2.00	9.80	-49.20	-13	36.20
WCDMA Mode										
251.33	34.76	78	1.2	H	-62.2	0.32	0	-62.52	-13	49.52
251.33	34.16	243	1.1	V	-62.8	0.32	0	-63.12	-13	50.12
1673.20	68.01	300	1.9	H	-39.4	1.60	6.90	-34.10	-13	21.10
1673.20	62.38	19	2.4	V	-45.5	1.60	6.90	-40.20	-13	27.20
2509.80	46.56	191	1.7	H	-58.0	1.70	8.60	-51.10	-13	38.10
2509.80	48.03	51	1.6	V	-56.9	1.70	8.60	-50.00	-13	37.00
3346.40	45.11	62	1.7	H	-56.3	1.90	9.80	-48.40	-13	35.40
3346.40	44.64	318	2.3	V	-57.4	1.90	9.80	-49.50	-13	36.50

30 MHz ~ 20 GHz:**PCS Band (Part 24E)**

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 24E	
			Height (m)	Polar (H/V)	SG Level (dBm)	Cable Loss (dB)	Antenna Gain (dB)		Limit (dBm)	Margin (dB)
GSM Mode										
162.37	34.99	170	1.6	H	-62.0	0.27	0	-62.27	-13	49.27
162.37	35.34	136	2.1	V	-61.7	0.27	0	-61.97	-13	48.97
3760.00	47.59	72	1.4	H	-51.9	1.90	9.90	-43.90	-13	30.90
3760.00	48.67	230	2.3	V	-50.4	1.90	9.90	-42.40	-13	29.40
5640.00	46.79	188	1.5	H	-49.7	2.10	10.30	-41.50	-13	28.50
5640.00	47.32	165	2.1	V	-48.5	2.10	10.30	-40.30	-13	27.30
7520.00	42.61	126	1.7	H	-46.4	2.60	10.70	-38.30	-13	25.30
7520.00	42.38	43	1.2	V	-47.7	2.60	10.70	-39.60	-13	26.60
WCDMA Mode										
251.33	35.60	23	2.3	H	-61.4	0.32	0	-61.72	-13	48.72
251.33	34.35	214	2.1	V	-62.6	0.32	0	-62.92	-13	49.92
3760.00	44.45	276	1.7	H	-55.0	1.90	9.90	-47.00	-13	34.00
3760.00	43.97	262	1.3	V	-55.1	1.90	9.90	-47.10	-13	34.10
5640.00	42.73	205	1.3	H	-53.7	2.10	10.30	-45.50	-13	32.50
5640.00	42.55	213	1.4	V	-53.3	2.10	10.30	-45.10	-13	32.10

AWS Band (Part 27)

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 27	
			Height (m)	Polar (H/V)	SG Level (dBm)	Cable Loss (dB)	Antenna Gain (dB)		Limit (dBm)	Margin (dB)
WCDMA Mode										
251.33	34.35	23	2.3	H	-62.6	0.32	0	-61.92	-13	48.92
251.33	34.16	214	2.1	V	-62.8	0.32	0	-63.12	-13	50.12
3465.00	55.39	134	1.1	H	-40.1	1.90	10.00	-32.00	-13	19.00
3465.00	48.34	292	1.7	V	-47.4	1.90	10.00	-39.30	-13	26.30
5197.50	46.31	81	2.0	H	-47.6	1.80	10.10	-39.30	-13	26.30
5197.50	45.13	150	2.3	V	-48.0	1.80	10.10	-39.70	-13	26.70

Note:

1) Absolute Level = SG Level - Cable loss + Antenna Gain

2) Margin = Limit- Absolute Level

FCC §22.917(a) & §24.238(a) & §27.53 - BAND EDGES

Applicable Standards

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.

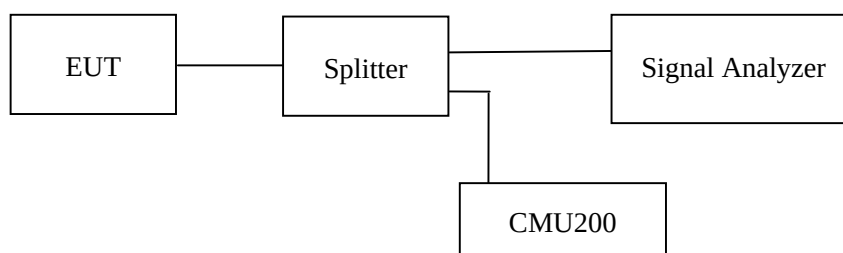
According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to FCC §27.53, the power of any emission 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
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2015-12-11	2016-12-11
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	106891	2015-11-23	2016-11-23
Ducommun technologies	RF Cable	RG-214	3	2015-06-15	2016-06-15
WEINSCHTEL	10dB Attenuator	5324	AU0709	2015-06-18	2016-06-18

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

Test Data**Environmental Conditions**

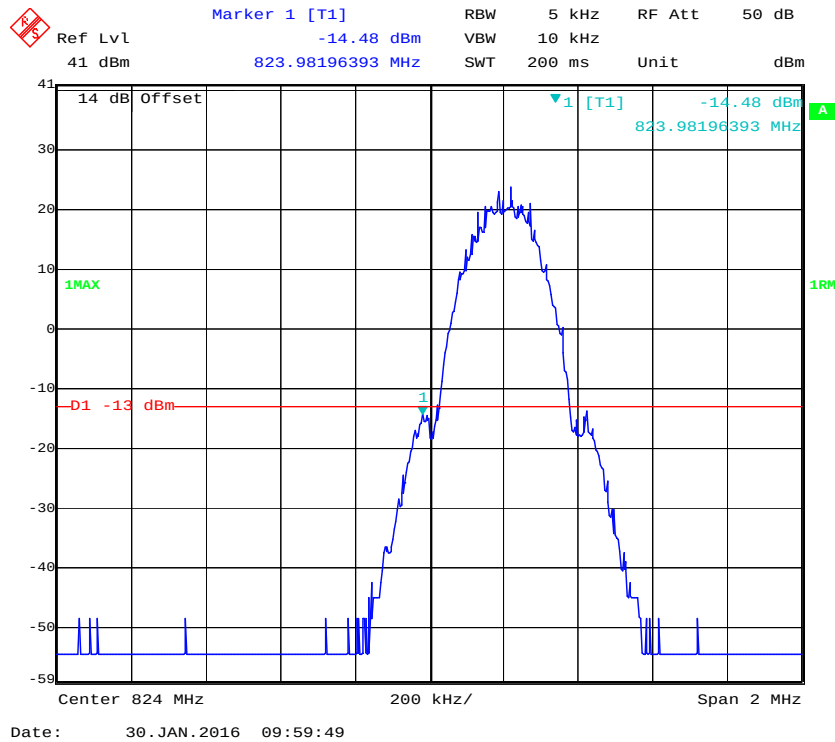
Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	101.0 kPa

The testing was performed by Vincent Zheng on 2016-01-30.

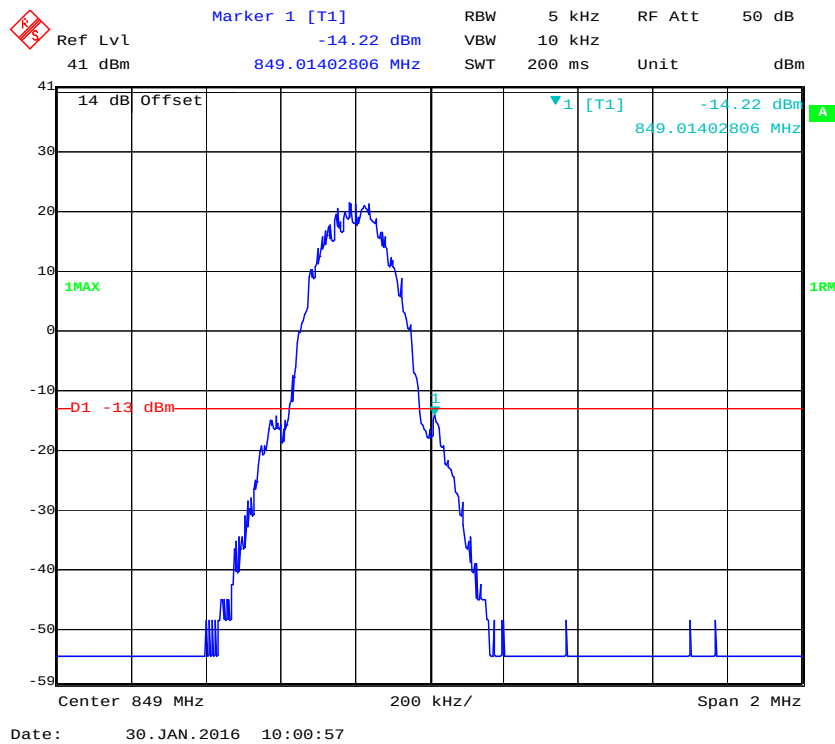
EUT operation mode: Transmitting

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

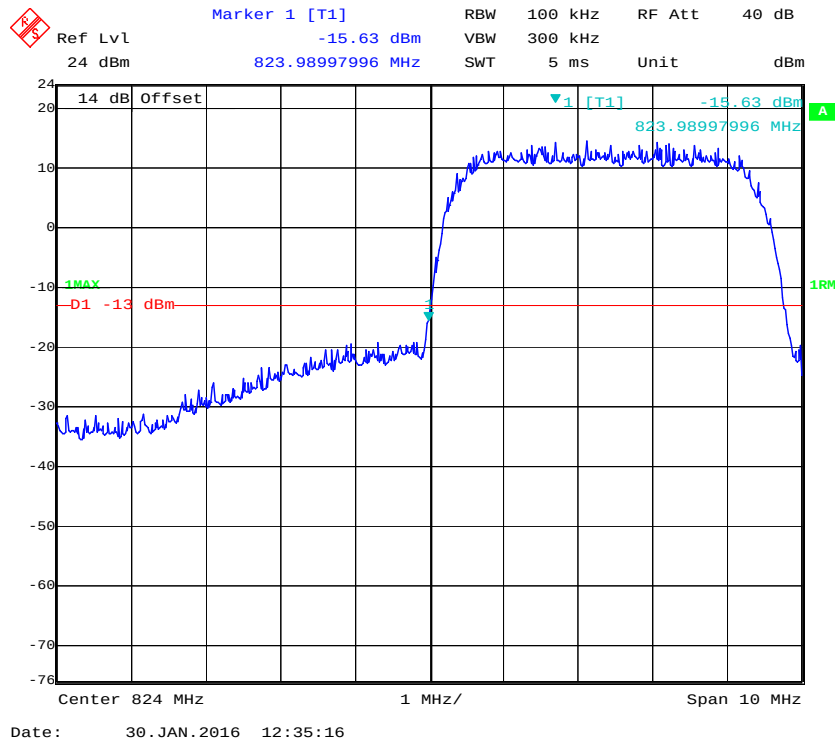
Cellular Band, Left Band Edge for GSM (GMSK) Mode



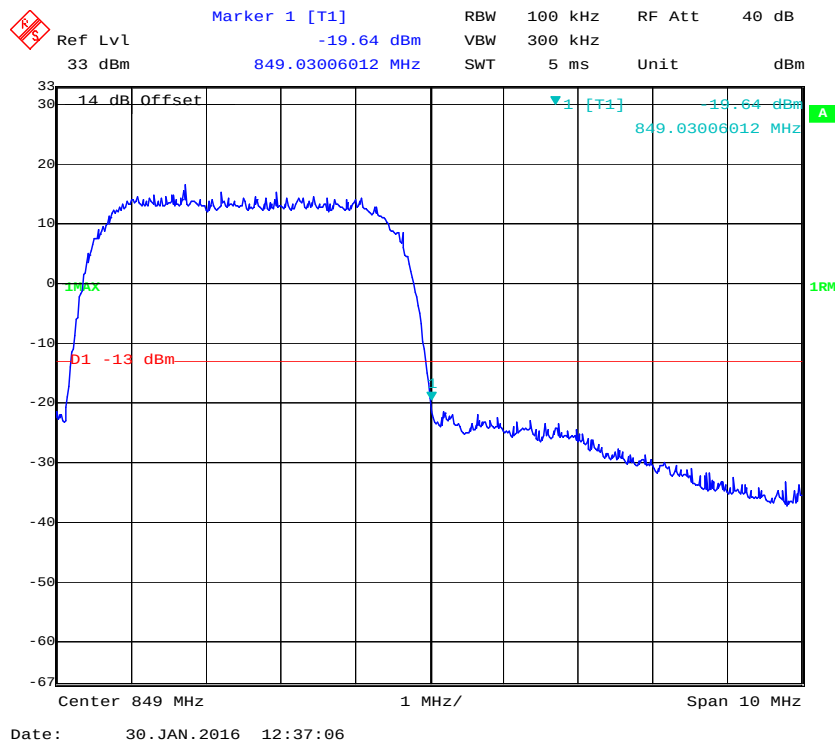
Cellular Band, Right Band Edge for GSM (GMSK) Mode



Left Band Edge for WCDMA (BPSK) Mode



Right Band Edge for WCDMA (BPSK) Mode



Ref Lvl 33 dBm RBW 100 kHz RF Att 30 dB
 Marker 1 [T1] -16.20 dBm VBW 300 kHz Unit dBm
 824.01002004 MHz SWT 5 ms

14 dB Offset
 1 [T1] -16.20 dBm
 824.01002004 MHz
 1 MAX
 D1 -13 dBm
 1 RM
 Center 824 MHz 1 MHz/ Span 10 MHz

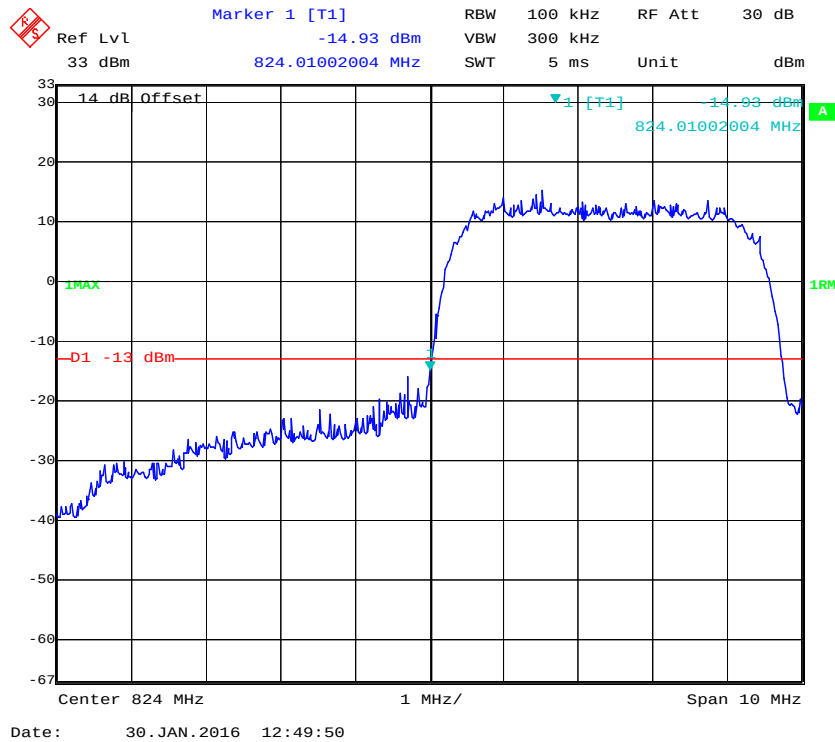
Date: 30. JAN. 2016 12:42:53

Marker 1 [T1]
 Ref Lvl 33 dBm
 RBW 100 kHz
 VBW 300 kHz
 SWT 5 ms
 RF Att 30 dB
 Unit dBm

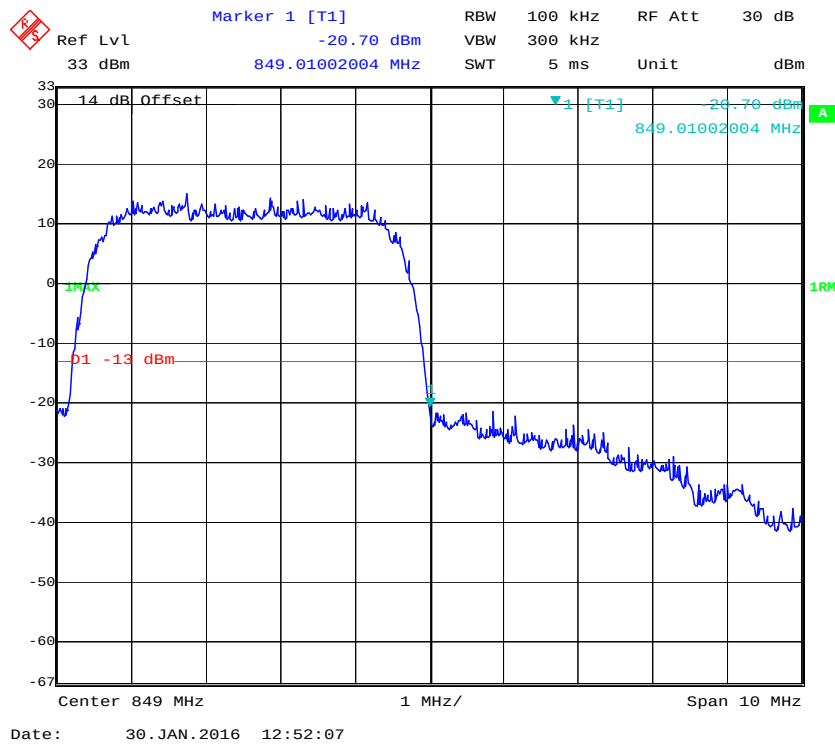
14 dB Offset
 -16.85 dBm
 849.31062124 MHz
 -13 dBm
 1 MHz/
 Span 10 MHz

Date: 30.JAN.2016 13:01:51

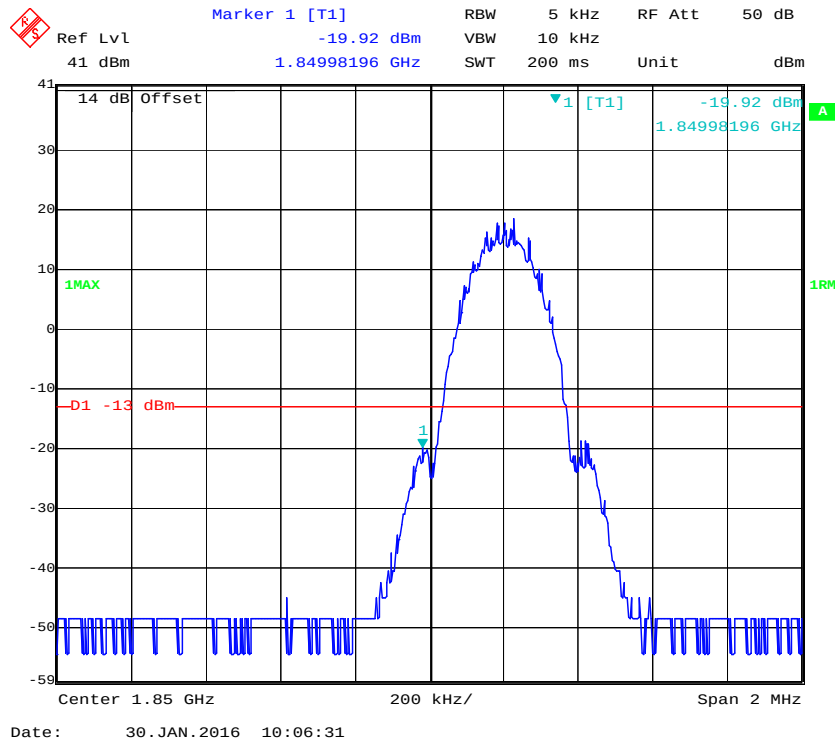
Left Band Edge for HSUPA (BPSK) Mode



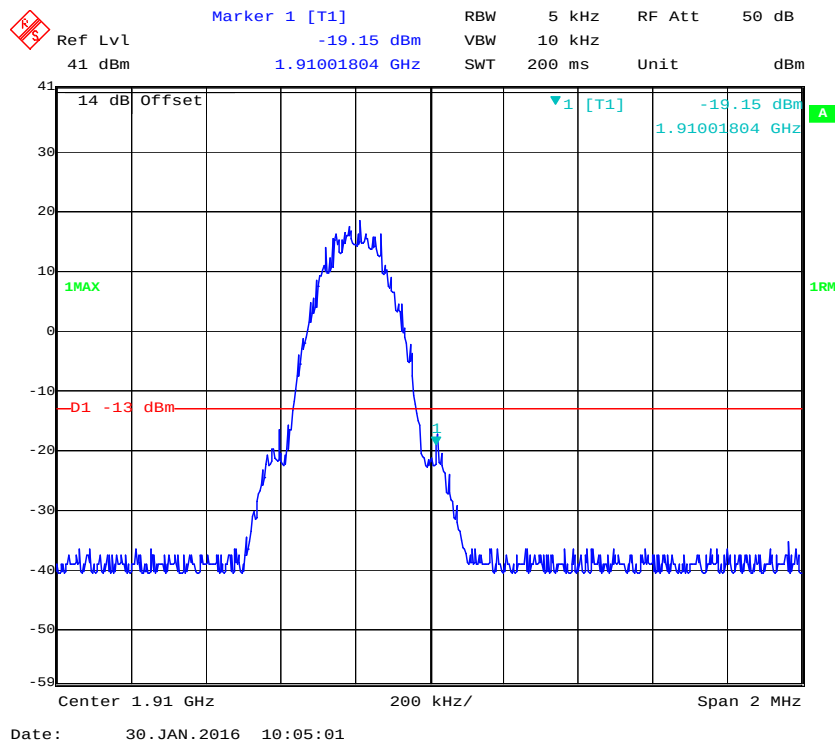
Right Band Edge for HSUPA (BPSK) Mode



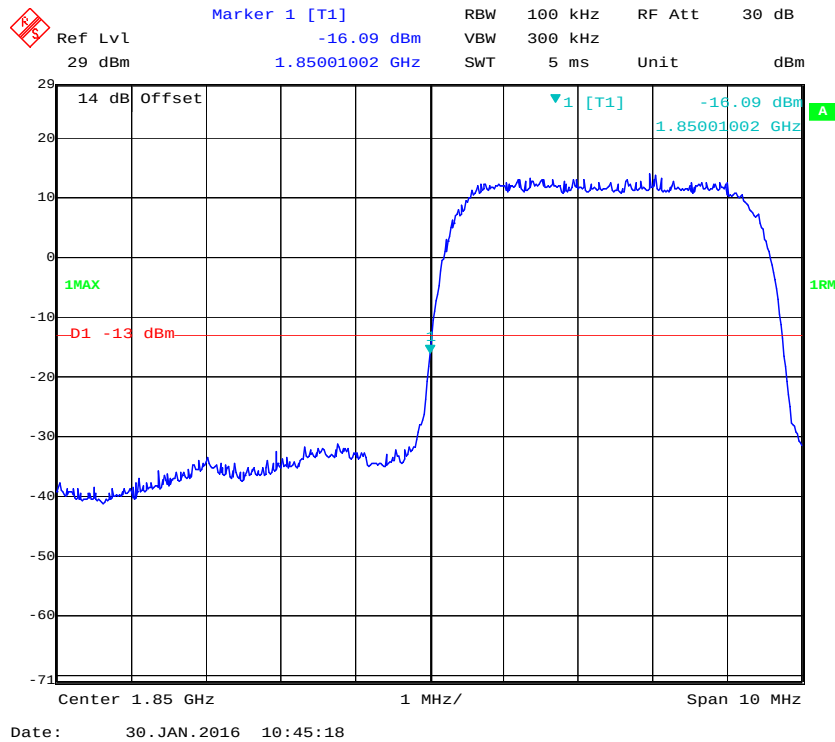
PCS Band, Left Band Edge for GSM (GMSK) Mode



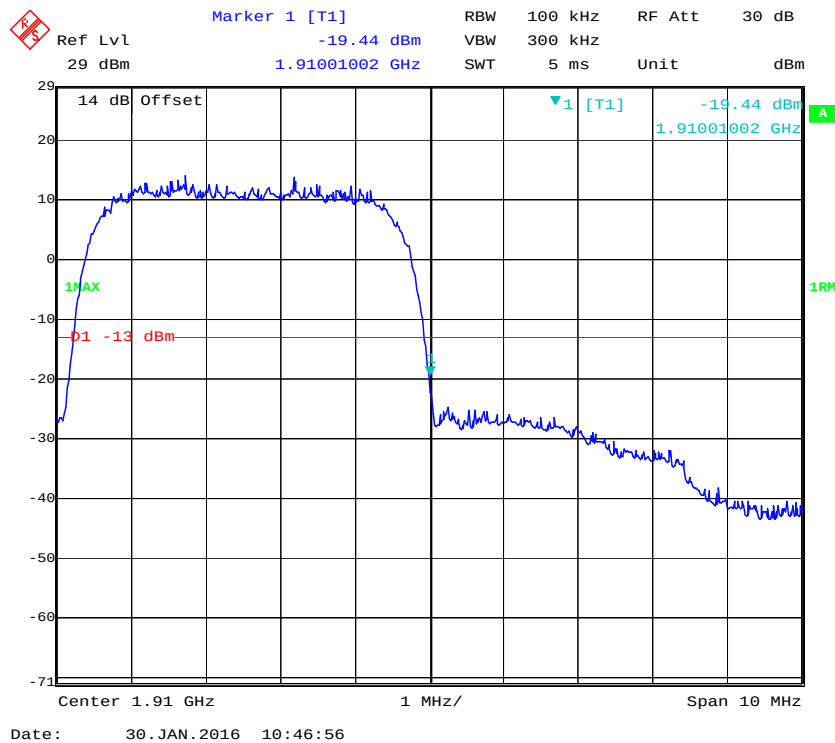
PCS Band, Right Band Edge for GSM (GMSK) Mode



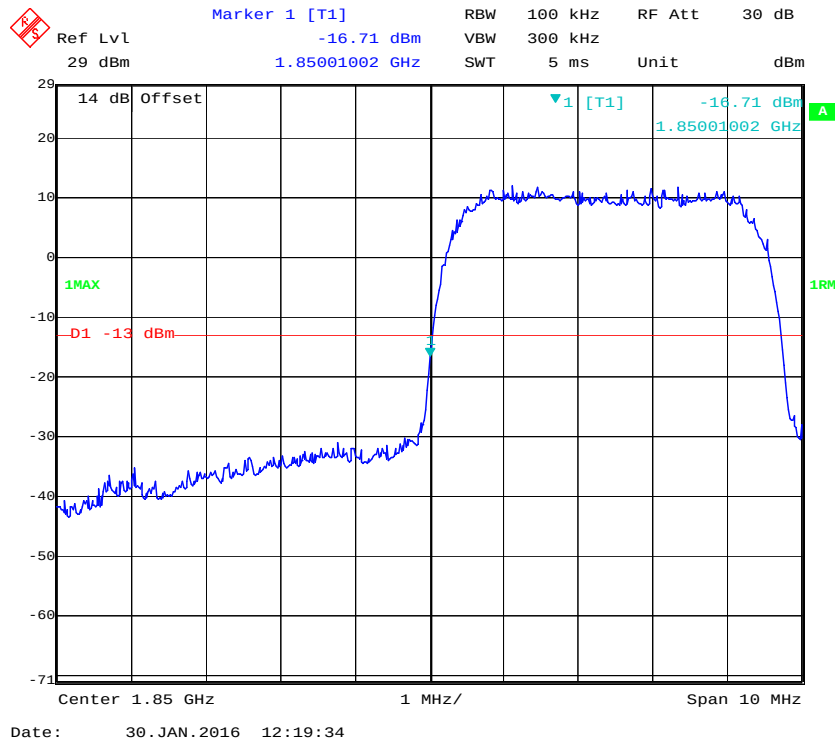
PCS Band, Left Band Edge for WCDMA (BPSK) Mode



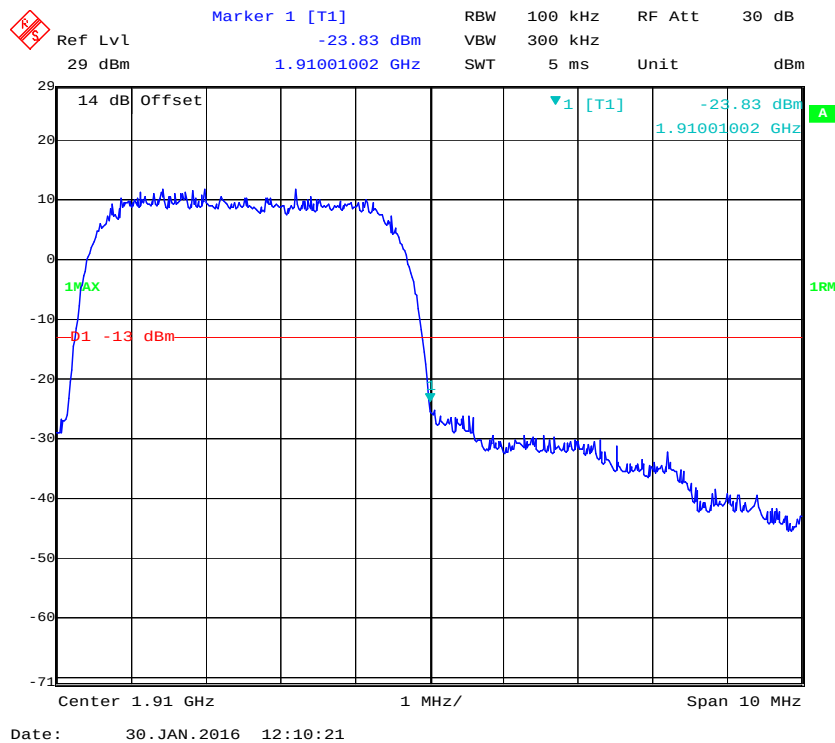
PCS Band, Right Band Edge for WCDMA (BPSK) Mode



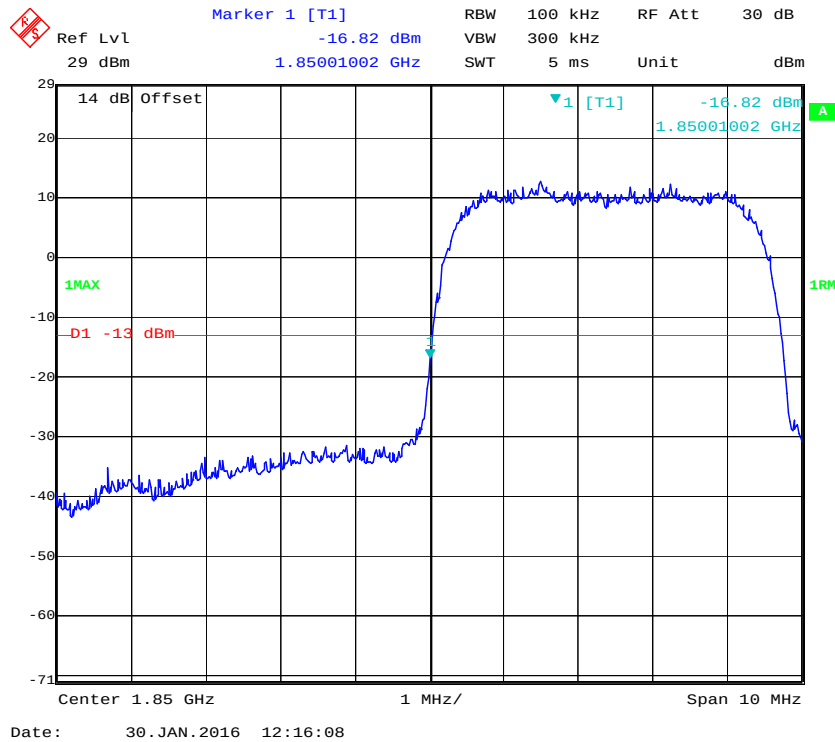
PCS Band, Left Band Edge for HSDPA (16QAM) Mode



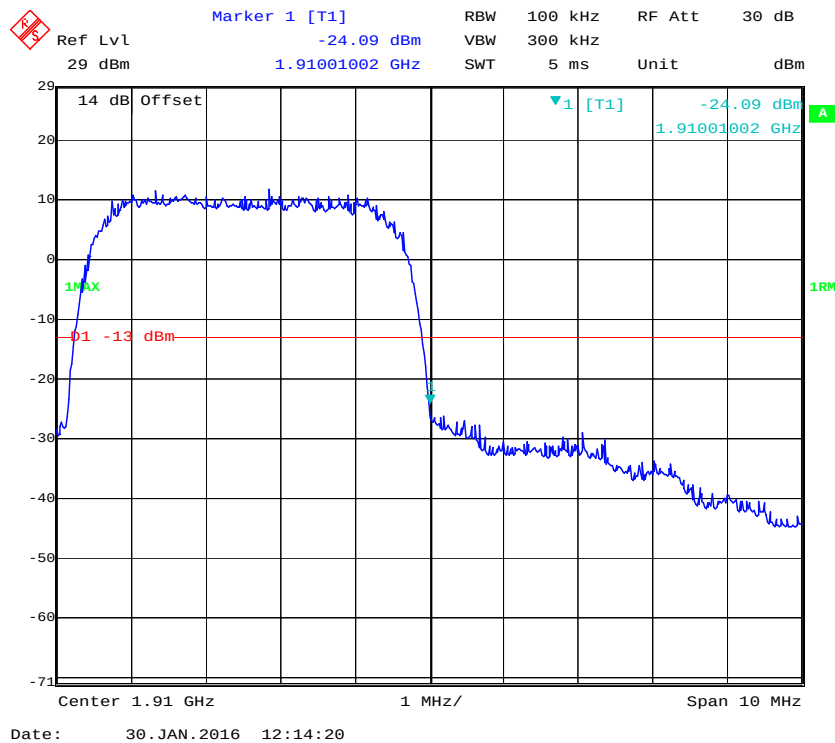
PCS Band, Right Band Edge for HSDPA (16QAM) Mode

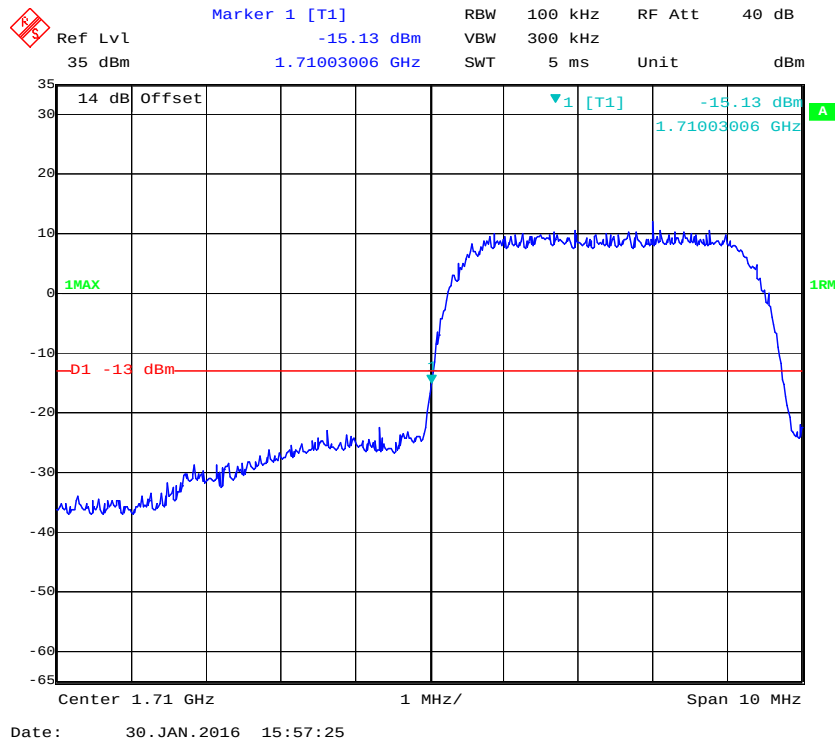
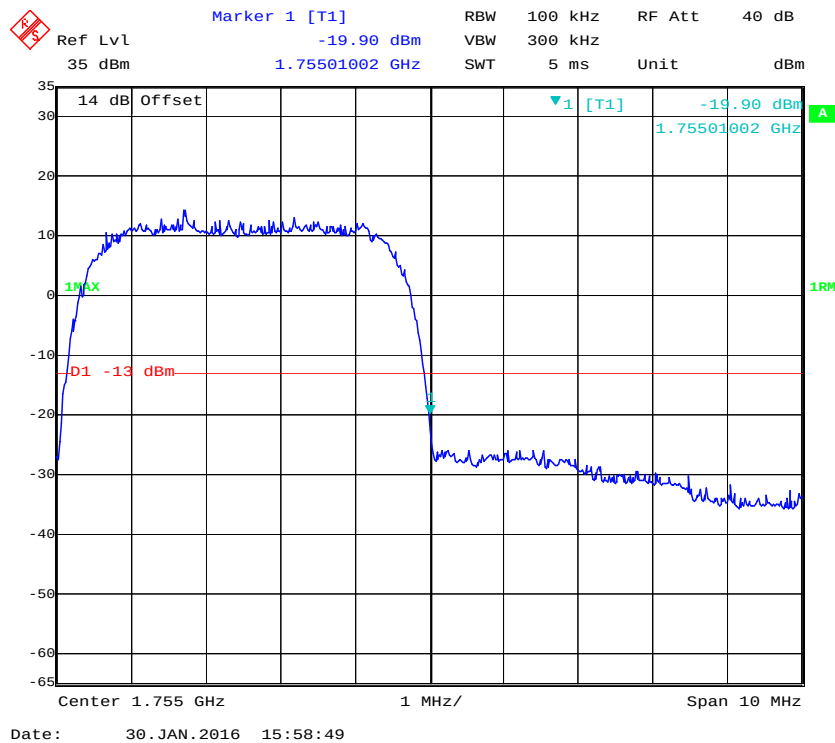


PCS Band, Left Band Edge for HSUPA (BPSK) Mode



PCS Band, Right Band Edge for HSUPA (BPSK) Mode



Band IV, Left Band Edge for WCDMA (BPSK) Mode**Band IV, Right Band Edge for WCDMA (BPSK) Mode**

Ref Lvl 35 dBm

Marker 1 [T1] -18.56 dBm

RBW 100 kHz

VBW 300 kHz

SWT 5 ms

RF Att 40 dB

Unit dBm

14 dB Offset

1.71001002 GHz

1MAX

D1 -13 dBm

1 [T1]

-18.56 dBm

1.71001002 GHz

Center 1.71 GHz

1 MHz/

Span 10 MHz

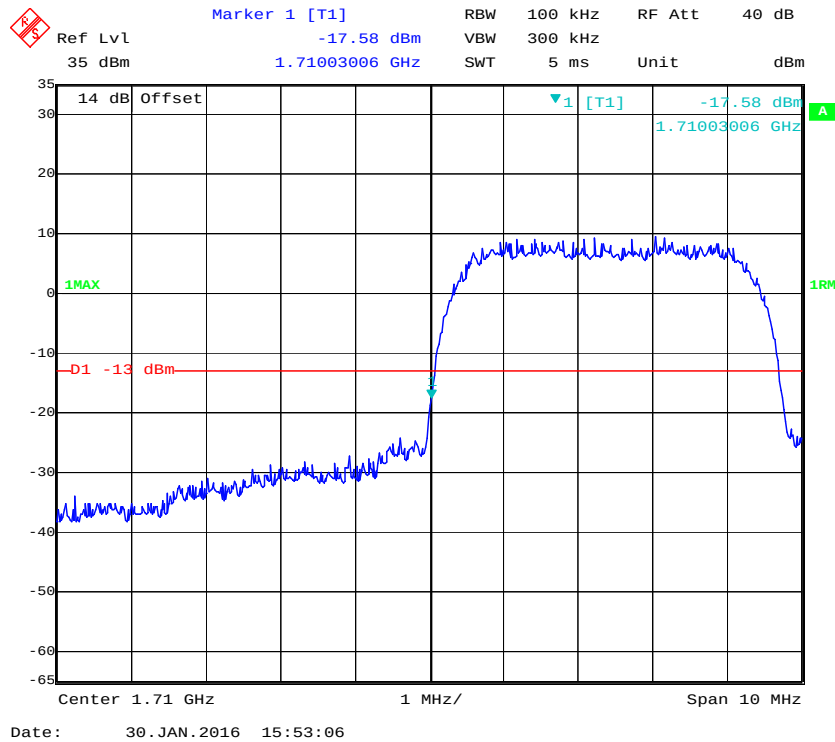
Date: 30. JAN. 2016 15:46:46

Ref Lvl 35 dBm Offset 1.75515030 GHz RBW 100 kHz VBW 300 kHz SWT 5 ms RF Att 40 dB Unit dBm

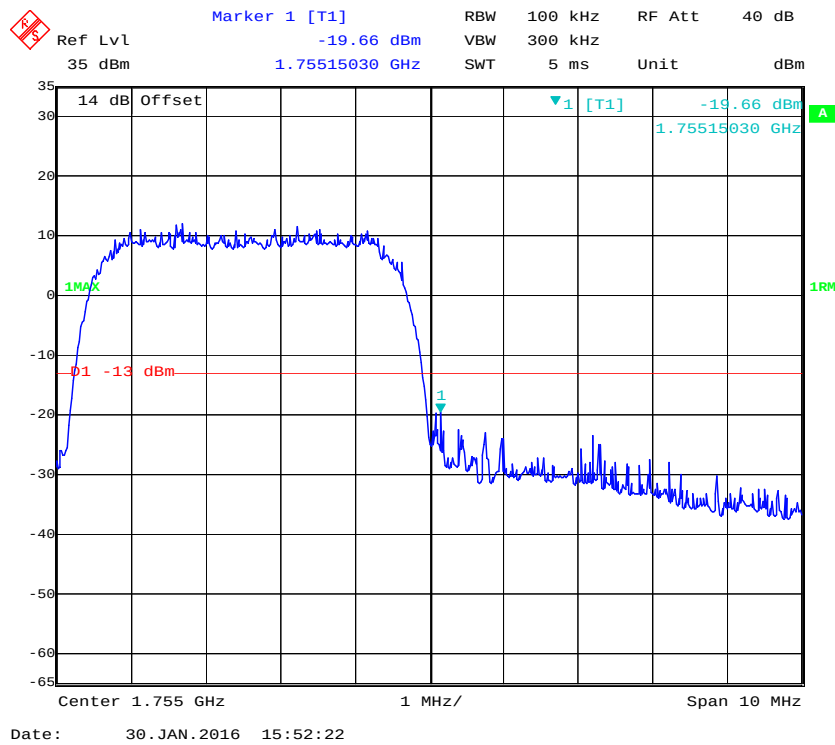
Marker	Frequency	Power
1 [T1]	1.75515030 GHz	-21.58 dBm

Center 1.755 GHz Span 10 MHz

Band IV, Left Band Edge for HSUPA (BPSK) Mode



Band IV, Right Band Edge for HSUPA (BPSK) Mode



FCC §2.1055, §22.355 & §24.235 & §27.54 - FREQUENCY STABILITY**Applicable Standards**

FCC § 2.1055, §22.355, §24.235 and § 27.54.

According to FCC §2.1055, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

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

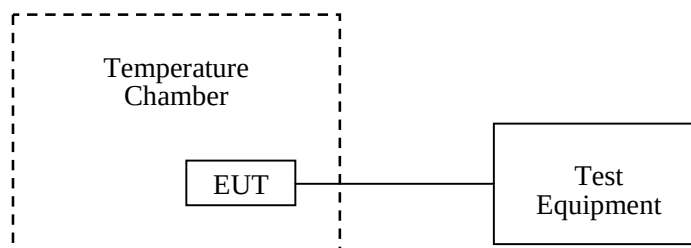
According to §24.235, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

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: For hand carried, battery powered equipment; reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ESPEC	Temperature & Humidity Chamber	EL-10KA	09107726	2015-11-01	2016-11-01
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	106891	2015-11-23	2016-11-23
Ducommun technologies	RF Cable	RG-214	3	2015-06-15	2016-06-15
WEINSCHTEL	10dB Attenuator	5324	AU0709	2015-06-18	2016-06-18

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

Test Data**Environmental Conditions**

Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	101.0 kPa

The testing was performed by Vincent Zheng on 2016-01-30.

EUT operation mode: Transmitting

Test Result: Compliance. Please refer to the following tables.

Cellular Band (Part 22H)**GSM Mode**

Middle Channel, $f_0=836.6$ MHz				
Temperature (°C)	Power Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	3.8	24	0.02870	2.5
-20		25	0.02882	2.5
-10		25	0.02882	2.5
0		19	0.02271	2.5
10		12	0.01434	2.5
20		12	0.01434	2.5
30		13	0.01554	2.5
40		13	0.01554	2.5
50		15	0.01793	2.5
25	V min.= 3.5	24	0.02870	2.5
25	V max.= 4.2	24	0.02870	2.5

WCDMA Mode

Middle Channel, $f_0=836.6$ MHz				
Temperature (°C)	Power Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	3.8	19	0.02271	2.5
-20		13	0.01554	2.5
-10		12	0.01434	2.5
0		8	0.00956	2.5
10		8	0.00956	2.5
20		5	0.00598	2.5
30		12	0.01434	2.5
40		12	0.01434	2.5
50		15	0.01793	2.5
25	V min.= 3.5	19	0.02271	2.5
25	V max.= 4.2	19	0.02271	2.5

PCS Band (Part 24E)**GSM Mode**

Middle Channel, $f_0=1880.0$ MHz				
Temperature (°C)	Power Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	3.8	24	0.01277	Pass
-20		16	0.00851	Pass
-10		21	0.01117	Pass
0		18	0.00957	Pass
10		11	0.00585	Pass
20		14	0.00745	Pass
30		13	0.00691	Pass
40		21	0.01117	Pass
50		22	0.01170	Pass
25	V min.= 3.5	24	0.01277	Pass
25	V max.= 4.2	24	0.01277	Pass

WCDMA Mode

Middle Channel, $f_0=1880.0$ MHz				
Temperature (°C)	Power Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	3.8	22	0.01170	Pass
-20		18	0.00957	Pass
-10		17	0.00904	Pass
0		11	0.00585	Pass
10		9	0.00479	Pass
20		9	0.00479	Pass
30		9	0.00479	Pass
40		11	0.00585	Pass
50		14	0.00798	Pass
25	V min.= 3.5	21	0.01176	Pass
25	V max.= 4.2	17	0.00904	Pass

AWS Band

Middle Channel, $f_0=1732.4$ MHz				
Temperature (°C)	Power Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	3.8	19	0.010966	Pass
-20		18	0.010389	Pass
-10		16	0.009235	Pass
0		12	0.006926	Pass
10		11	0.006349	Pass
20		13	0.007503	Pass
30		14	0.008080	Pass
40		12	0.006926	Pass
50		11	0.006349	Pass
25	V min.= 3.5	19	0.010966	Pass
25	V max.= 4.2	19	0.010966	Pass

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