FCC Radio Test Report

FCC ID: QISBGO-L03

This report concerns (check one): ☒**Original Grant** ☐**Class II Change**

Project No.	: 1608C212
Equipment	: HUAWEI MediaPad T2 7.0 (MediaPad T2 7.0 for short)
Test Model	: BGO-L03
Series Model	: N/A
Applicant	: Huawei Technologies Co., Ltd.
Address	: Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

Date of Receipt	: Aug. 26, 2016
Date of Test	: Aug. 26, 2016 ~ Sep. 12, 2016
Issued Date	: Sep. 13, 2016
Tested by	: BTL Inc.

Technical Engineer : Shawn Xiao

(Shawn Xiao)

Authorized Signatory : Steven Lu

(Steven Lu)

BTL INC.

No.3,Jinshagang 1st Road, Shixia,Dalang Town, Dongguan, Guangdong, China.

TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-5-1608C212	Original Issue.	Sep. 13, 2016

1. CERTIFICATION

Equipment	:	HUAWEI MediaPad T2 7.0 (MediaPad T2 7.0 for short)
Brand Name	:	HUAWEI
Test Model	:	BGO-L03
Series Model	:	N/A
Applicant	:	Huawei Technologies Co., Ltd.
Manufacturer	:	Huawei Technologies Co.,Ltd.
Address	:	Administration Building, Huawei Base, Bantian, Longgang District ,Shenzhen 518129, P.R.China
Factory	:	Huawei Technologies Co.,Ltd.
Address	:	Administration Building, Huawei Base, Bantian, Longgang District ,Shenzhen 518129, P.R.China
Date of Test	:	Aug. 26, 2016 ~ Sep. 12, 2016
Test Sample	:	Engineering Sample
Standard(s)	:	47 CFR FCC Part 24 Subpart E 47 CFR FCC Part 2 ANSI/TIA-603-D-2010 KDB 971168 D01 Power Meas License Digital Systems v02r02

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-5-1608C212) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Test results included in this report is only for the DCS1900, WCDMA Band II and LTE Band 2 part.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part 22 Subpart H& Part 2			
Standard(s) Section	Test Item	Judgment	Tested By
2.1046 24.232(c)	Radiated power	PASS	Robort Luo
2.1046 24.232(c)	Conducted Output Power	PASS	Allen Li
2.1049 24.238(a)	Occupied Bandwidth	PASS	Allen Li
2.1051 24.238(a)	Conducted Spurious Emissions	PASS	Allen Li
2.1053 24.238(a)	Radiated Spurious Emissions	PASS	Robort Luo
24.238(a)	Band Edge Measurements	PASS	Allen Li
24.232(d)	Peak To Average Ratio	PASS	Allen Li
2.1055 24.235	Frequency Stability	PASS	Allen Li

NOTE:

(1)" N/A" denotes test is not applicable to this device.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.
BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{cispr} requirement.

The reported uncertainty of measurement **y** ± **U**, where expanded uncertainty **U** is based on astandard uncertainty multiplied by a coverage factor of **k=2**, providing a level of confidence of approximately **95**%.

A. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DG-CB03 (3m)	CISPR	9KHz ~ 30MHz	V	3.79
		9KHz ~ 30MHz	H	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	H	3.78
		200MHz ~ 1,000MHz	V	4.10
		200MHz ~ 1,000MHz	H	4.06

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DG-CB03 (3m)	CISPR	1GHz ~ 18GHz	V	3.12
		1GHz ~ 18GHz	H	3.68

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DG-CB03 (1m)	CISPR	18GHz ~ 40GHz	V	4.15
		18GHz ~ 40GHz	H	4.14

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	HUAWEI MediaPad T2 7.0 (MediaPad T2 7.0 for short)		
Brand Name	HUAWEI		
Test Model	BGO-L03		
Series Model	N/A		
Model Difference	N/A		
Modulation Type	GSM/GPRS	GMSK	
	EDGE	GMSK, 8PSK	
	WCDMA	Uplink: BPSK Downlink: QPSK	
	WCDMA(HSDPA/HSUPA)	16QAM	
	LTE	QPSK, 16QAM	
Operation Frequency	GSM /EDGE/GPRS	1850.2 ~ 1909.8 MHz	
	WCDMA Band 2	1852.4 ~ 1907.6 MHz	
	LTE 2 (Channel Bandwidth: 1.4MHz)	1850.7 ~ 1909.3 MHz	
	LTE 2 (Channel Bandwidth: 3MHz)	1851.5 ~ 1908.5 MHz	
	LTE 2 (Channel Bandwidth: 5MHz)	1852.5 ~ 1907.5 MHz	
	LTE 2 (Channel Bandwidth: 10MHz)	1855.0 ~ 1905.0 MHz	
	LTE 2 (Channel Bandwidth: 15MHz)	1857.5 ~ 1902.5 MHz	
	LTE 2 (Channel Bandwidth: 20MHz)	1860.0 ~ 1900.0 MHz	
Max. EIRP Power	GSM/GPRS	GMSK	30.63 dBm
	EDGE	8PSK	27.37 dBm
	WCDMA	BPSK	24.16 dBm
	WCDMA_HSDPA	16QAM	24.02 dBm
	WCDMA_HSUPA	16QAM	22.43 dBm
	LTE 2 (Channel Bandwidth: 1.4MHz)	QPSK	24.27 dBm
		16QAM	23.70 dBm
	LTE 2 (Channel Bandwidth: 3MHz)	QPSK	24.49 dBm
		16QAM	23.45 dBm
	LTE 2 (Channel Bandwidth: 5MHz)	QPSK	24.47 dBm
		16QAM	23.46 dBm
	LTE 2 (Channel Bandwidth: 10MHz)	QPSK	24.42 dBm
		16QAM	23.77 dBm
	LTE 2 (Channel Bandwidth: 15MHz)	QPSK	24.46 dBm
		16QAM	23.80 dBm
	LTE 2 (Channel Bandwidth: 20MHz)	QPSK	24.71 dBm
		16QAM	24.12 dBm

Antenna Type	Fixed Internal Antenna
Antenna Gain	1.48 dBi
Hardware Version	SH1BAGO721LM
Softwarre Version	BGO-L03C331B002
IMEI No.	004401727645588
Power Source	#1 DC voltage supplied from AC/DC adapter. Manufacturer: (1) HUIZHOU BYD ELECTRONIC CO., LTD. (2) Shenzhen Huntkey Electric Co., Ltd. (3) Dongguan Phitek Electronics Co., Ltd Model: HW-050100U01 (US), HW-050100A01 (AU) HW-050100E01 (EU), HW-050100B01 (UK) #2 Supplied from battery.
Power Rating	#1 I/P: 100-240V~50/60Hz, 0.2A #2 DC 3.7V 4000mAh

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT contains following accessory devices.

Item	Mfr/Brand	Model.
Battery	Harbin Coslight Power Co., Ltd.	HB3G1
	Sunwoda Electronic Co., LTD	
USB Cable	HONGLIN TECHNOLOGY CO., LTD	130-26988
	FOXCONN INTERCONNECT CO., LTD	CUBB01M-HC304-DH
	Shenzhen Luxshare Precision Industry Co., Ltd	L99U2017-CS-H
Earphone	GoerTek Inc	HA1-3, HG-04A
	Jiangxi Lianchuang Hongsheng Electronic Co., LTD	MEMD1632B580C00
	BOLUO COUNTY QUANCHENG ELECTRONIC CO.,LTD	1311-3291-3.5mm-229

3.2 DESCRIPTION OF TEST MODES AND TEST CONDITION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports
The worst case was found when positioned on X-plane for EIRP and X-axis for radiated emission.
Following channel(s) was (were) selected for the final test as listed below:

GSM MODE			
Test Item	Available Channel	Tested Channel	Mode
EIRP	512 to 810	512, 661, 810	GSM, EDGE
Conducted Output Power	512 to 810	512, 661, 810	GSM, EDGE
Occupied Bandwidth	512 to 810	512, 661, 810	GSM, EDGE
Condcudeted Emission	512 to 810	661	GSM, EDGE
Radiated Emission	512 to 810	661	GSM, EDGE
Band Edge	512 to 810	512, 810	GSM, EDGE
Peak to Average Ratio	512 to 810	512, 661, 810	GSM, EDGE
Frequency Stability	512 to 810	661	GSM, EDGE

WCDMA MODE			
Test Item	Available Channel	Tested Channel	Mode
EIRP	9262 to 9538	9262, 9400, 9538	WCDMA, HSDPA,HSUPA
Conducted Output Power	9262 to 9538	9262, 9400, 9538	WCDMA, HSDPA,HSUPA
Condcudeted Emission	9262 to 9538	9400	WCDMA
Radiated Emission	9262 to 9538	9400	WCDMA, HSDPA,HSUPA
Band Edge	9262 to 9538	9262, 9538	WCDMA
Peak to Average Ratio	9262 to 9538	9262, 9400, 9538	WCDMA
Frequency Stability	9262 to 9538	9262	WCDMA

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in **QPSK** modulation.

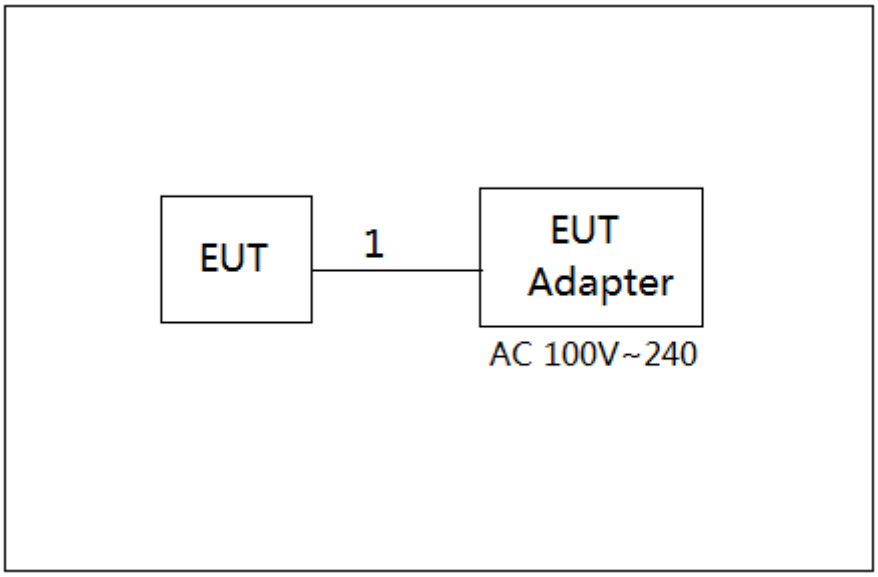
LTE BAND 2 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
Occupied Bandwidth	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	6 RB / 0 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	15 RB / 0 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	75 RB / 0 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	100 RB / 0 RB Offset
Conducted Emission	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
	18615 to 19185	18900	3MHz	QPSK	1 RB / 0 RB Offset
	18625 to 19175	18900	5MHz	QPSK	1 RB / 0 RB Offset
	18650 to 19150	18900	10MHz	QPSK	1 RB / 0 RB Offset
	18675 to 19125	18900	15MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset
Radiated Emission	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset

LTE BAND 2 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Band Edge	18607 to 19193	18607	1.4MHz	QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
		19193	1.4MHz	QPSK	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
	18615 to 19185	18615	3MHz	QPSK	1 RB / 0 RB Offset
					15 RB / 0 RB Offset
		19185	3MHz	QPSK	1 RB / 14 RB Offset
					15 RB / 0 RB Offset
	18625 to 19175	18625	5MHz	QPSK	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
		19175	5MHz	QPSK	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	18650 to 19150	18650	10MHz	QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
		19150	10MHz	QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
	18675 to 19125	18675	15MHz	QPSK	1 RB / 0 RB Offset
					75 RB / 0 RB Offset
		19125	15MHz	QPSK	1 RB / 74 RB Offset
					75 RB / 0 RB Offset
	18700 to 19100	18700	20MHz	QPSK	1 RB / 0 RB Offset
					100 RB / 0 RB Offset
		19100	20MHz	QPSK	1 RB / 99 RB Offset
					100 RB / 0 RB Offset
Peak To Average Ratio	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
Frequency Stability	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
	18615 to 19185	18900	3MHz	QPSK	1 RB / 0 RB Offset
	18625 to 19175	18900	5MHz	QPSK	1 RB / 0 RB Offset
	18650 to 19150	18900	10MHz	QPSK	1 RB / 0 RB Offset
	18675 to 19125	18900	15MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset

EUT TEST CONDITIONS:

Test Item	Environmental Conditions	Test Voltage
EIRP	25°C, 60%RH	AC 120V/60Hz
Conducted Output Power	25°C, 65%RH	AC 120V/60Hz
Occupied Bandwidth	25°C, 65%RH	AC 120V/60Hz
Conducted Emission	25°C, 65%RH	AC 120V/60Hz
Radiated Emission	25°C, 60%RH	AC 120V/60Hz
Band Edge	25°C, 65%RH	AC 120V/60Hz
Peak to Average Ratio	25°C, 65%RH	AC 120V/60Hz
Frequency Stability	25°C, 65%RH	AC 120V/60Hz

3.3 BLOCKDIGRAMSHOWINGTHECONFIGURATIONOFSYSTEMTESTED



3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1m	USB cable

4. TEST RESULT

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMIT

Mobile / Portable station are limited to 2 watts e.i.r.p.

4.1.2 TEST PROCEDURE

EIRP/ERP:

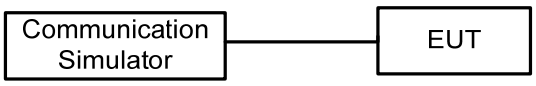
EIRP= Conducted Power +Antenan gain
ERP power=EIPR power-2.15dBi.

Conducted Power:

The EUT was set up for the maximum power with GSM, GPRS, EDGE, WCDMA, CDMA, and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

4.1.3 TESTSETUP LAYOUT

Conducted Power Measurement



4.1.4 TEST DEVIATION

No deviation

4.1.5 TEST RESULTS

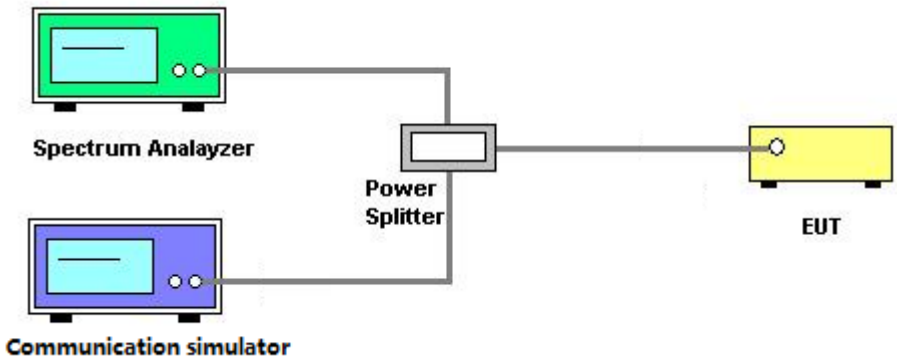
Please refer to the Attachment A.

4.2 OCCUPIED BANDWIDTH MEASUREMENT

4.2.1 TEST PROCEDURE

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth and 26dB bandwidth.

4.2.2 TEST SETUP LAYOUT



4.2.3 TEST DEVIATION

No deviation

4.2.4 TEST RESULTS

Please refer to the Attachment B.

4.3 CONDUCTED EMISSIONS MEASUREMENT

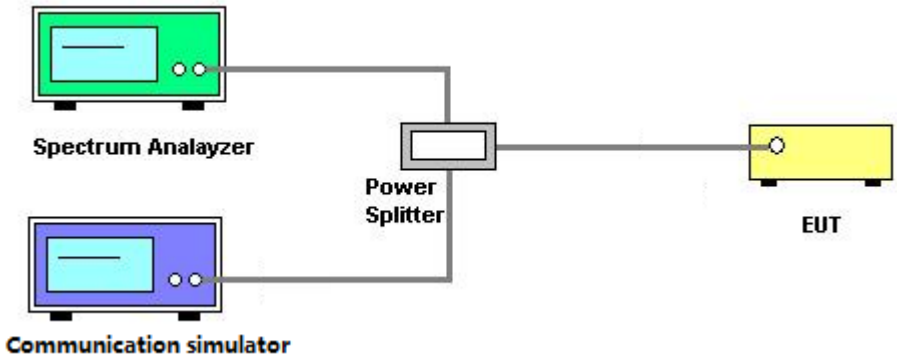
4.3.1 LIMIT

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. The emission limit equal to -13dBm.

4.3.2 TEST PROCEDURES

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured. Set RBW>=1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Set spectrum analyzer with RMS detector.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from 43+10log(P)dB below the transmitter power P(Watts)
   =P(W)-[43+10log(P)](dB)
   =[30+10log(P)](dBm)-[43+10log(P)](dB)
   =-13dBm

4.3.3 TESTSETUP LAYOUT



4.3.4 TESTDEVIATION

No deviation

4.3.5 TEST RESULTS

Please refer to the Attachment C.

4.4 RADIATED EMISSIONS MEASUREMENT

4.4.1 LIMIT

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. The emission limit equal to -13dBm.

4.4.2 TEST PROCEDURES

1. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
2. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step a. Record the power level of S.G
3. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
4. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.
5. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

4.4.3 TESTSETUP LAYOUT

This test setup layout is the same as that shown in **section 4.1.3.**

4.4.4 TESTDEVIATION

No deviation

4.4.5 TEST RESULTS

Please refer to the Attachment D.

4.5 BAND EDGE MEASUREMENT

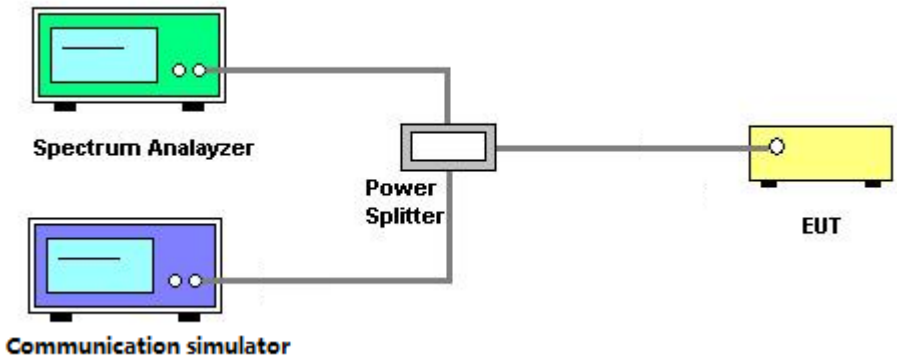
4.5.1 LIMIT

A 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. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

4.5.2 TEST PROCEDURES

1. All measurements were done at low and high operational frequency range.
2. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 3kHz and VB of the spectrum is 10kHz (GSM/GPRS/EDGE).
3. The center frequency of spectrum is the band edge frequency and span is 5MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA).
4. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 13kHz and VB of the spectrum is 51kHz (LTE Bandwidth 1.4MHz).
5. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 30kHz and VB of the spectrum is 100kHz (LTE Bandwidth 3MHz).
6. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (LTE Bandwidth 5MHz/10MHz).
7. Record the max trace plot into the test report.

4.5.3 TESTSETUP LAYOUT



4.5.4 TESTDEVIATION

No deviation

4.5.5 TEST RESULTS

Please refer to the Attachment E.

4.6 PEAK TO AVERAGE RATIO MEASUREMENT

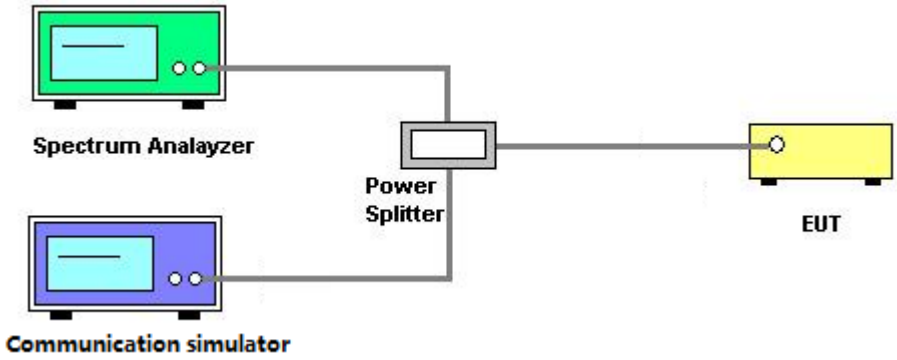
4.6.1 LIMIT

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.

4.6.2 TEST PROCEDURES

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

4.6.3 TESTSETUP LAYOUT



4.6.4 TESTDEVIATION

No deviation

4.6.5 TEST RESULTS

Please refer to the Attachment F.

4.7 FREQUENCY STABILITY MEASUREMENT

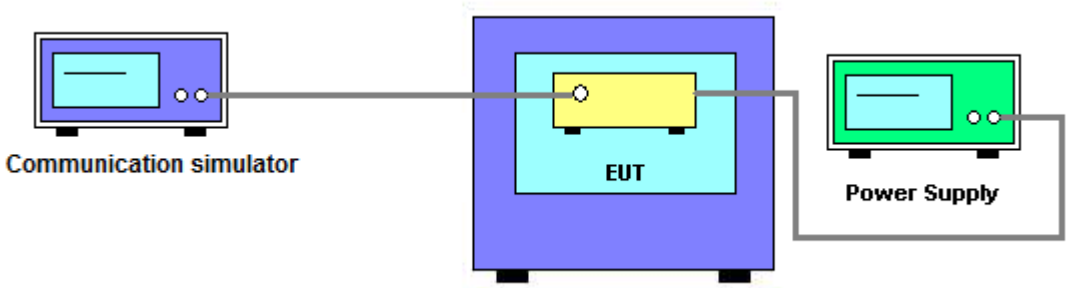
4.7.1 LIMIT

1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

4.7.2 TEST PROCEDURES

1. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
2. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
3. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5°C during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.
4. The frequency error was recorded frequency error from the communication simulator.

4.7.3 TESTSETUP LAYOUT



4.7.4 TESTDEVIATION

No deviation

4.7.5 TEST RESULTS

Please refer to the Attachment G.

5. LIST OF MEASUREMENT EQUIPMENTS

Radiated Emission & ERP or EIRP Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 27, 2017
2	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 27, 2017
3	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Apr. 23, 2017
4	Amplifier	Agilent	8449B	3008A02274	Mar. 10, 2017
5	Amplifier	HP	8447D	2944A09673	Nov. 09, 2016
6	HighPass Filter	Wairrwright Instruments Gmbh	WHK 1.5/15G-10ST	11	Mar. 10, 2017
7	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 1710/1785-1690/1805-60/12SS	38	Feb. 23, 2017
8	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 824/849-810/863-60/9SS	7	Feb. 23, 2017
9	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 880/915-860/935-60/9SS	14	Feb. 23, 2017
10	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 1850/1910-1830/1930-60/10SS	17	Feb. 23, 2017
11	HighPass Filter	Wairrwright Instruments Gmbh	WHK3.1/18G-10SS	24	Mar. 10, 2017
12	Wireless Communication Test SET	Agilent	E5515C	MY48364183	Mar. 27, 2017
13	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 27, 2017
14	Receiver	Agilent	N9038A	MY52130039	Sep. 04, 2017
15	wideband radio communication tester	R&S	CMW500	152372	Mar. 27, 2017
16	High pass filter	ZHPF-M1000-4000-1	ZHPF-M3-12.75G-3869	B2015073763	Aug. 04, 2017
17	High pass filter	ZHPF-M3-12.75G-3869	ZHPF-M1000-4000-1	B2015073762	Aug. 04, 2017
18	High pass filter	ZHPF-M6-18G-1727	ZHPF-M6-186-1727	B2015073764	Aug. 04, 2017
19	Cable	emci	LMR-400(30MHz-1GHz)(8m+5m)	N/A	Jun. 27, 2017
20	Cable	emci	EMC104-SM-SM-12000(12m)	N/A	Jul. 06, 2017
21	Controller	ETS-Lindgren	2090	N/A	N/A
22	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Conducted Emission & Band Edge & Occupied Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Wireless Communication Test SET	Agilent	E5515C	MY48364183	Mar. 27, 2017
2	EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Mar. 27, 2017
3	POWER SPLITTER	Mini-Circuits	ZFRSC-123-S+	331000910-1	Feb. 26, 2017
4	wideband radio communication tester	R&S	CMW500	152372	Mar. 27, 2017
5	Cable	N/A	RG316(0.3m)	N/A	Jul. 06, 2017
6	Cable	N/A	RG316(0.3m)	N/A	Jul. 06, 2017

Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Wireless Communication Test SET	Agilent	E5515C	MY48364183	Mar. 27, 2017
2	DC power supply	GW Instek	GPC-3030DN	EK880675	Oct. 13, 2017
3	POWER SPLITTER	Mini-Circuits	ZFRSC-123-S+	331000910-1	Feb. 26, 2017
4	wideband radio communication tester	R&S	CMW500	152372	Mar. 27, 2017
5	Const Temp,& Humidity Chamber	Giant?Force	ITH-225-20-S	IAB0309-001	Dec. 04, 2016
6	Cable	N/A	RG316(0.3m)	N/A	Jul. 06, 2017

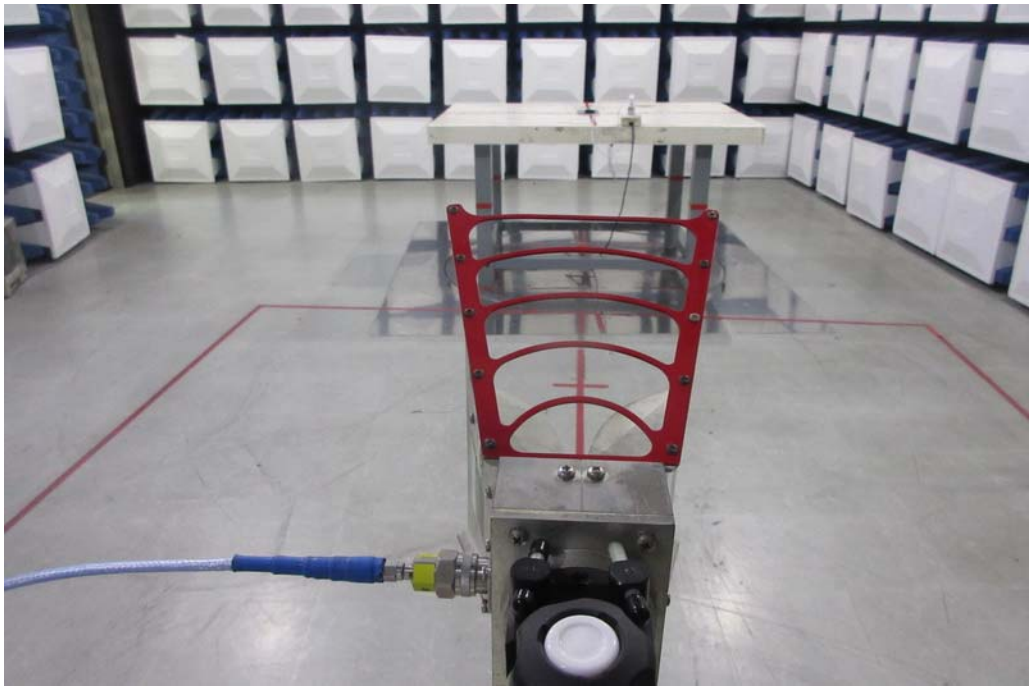
Remark: ”N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

6. EUT TEST PHOTO

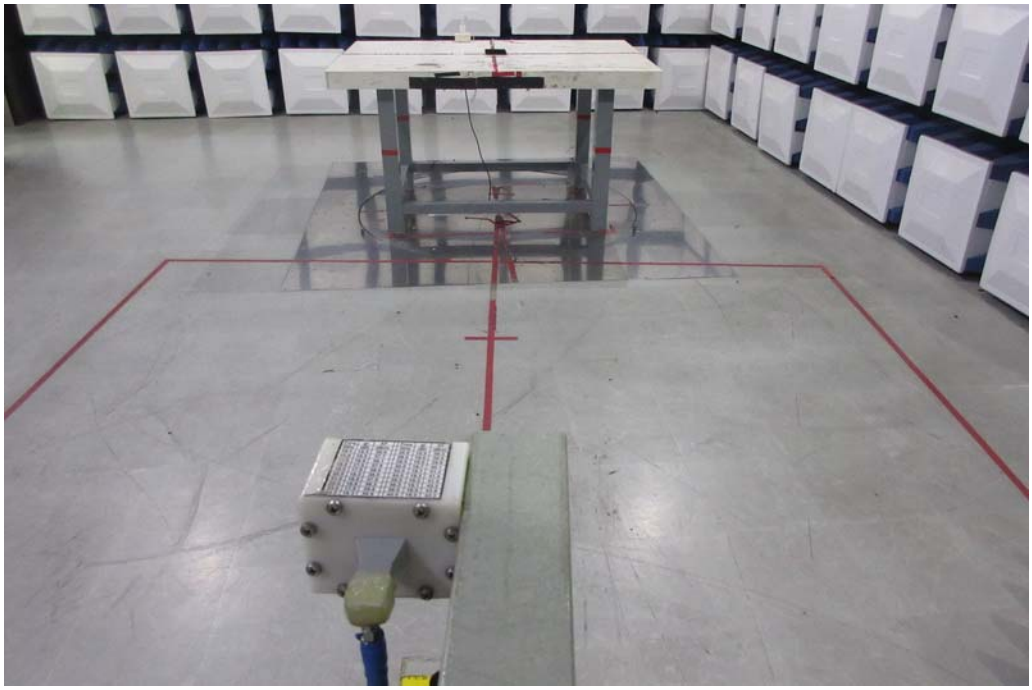
Radiated Measurement Photos
9KHz to 30MHz

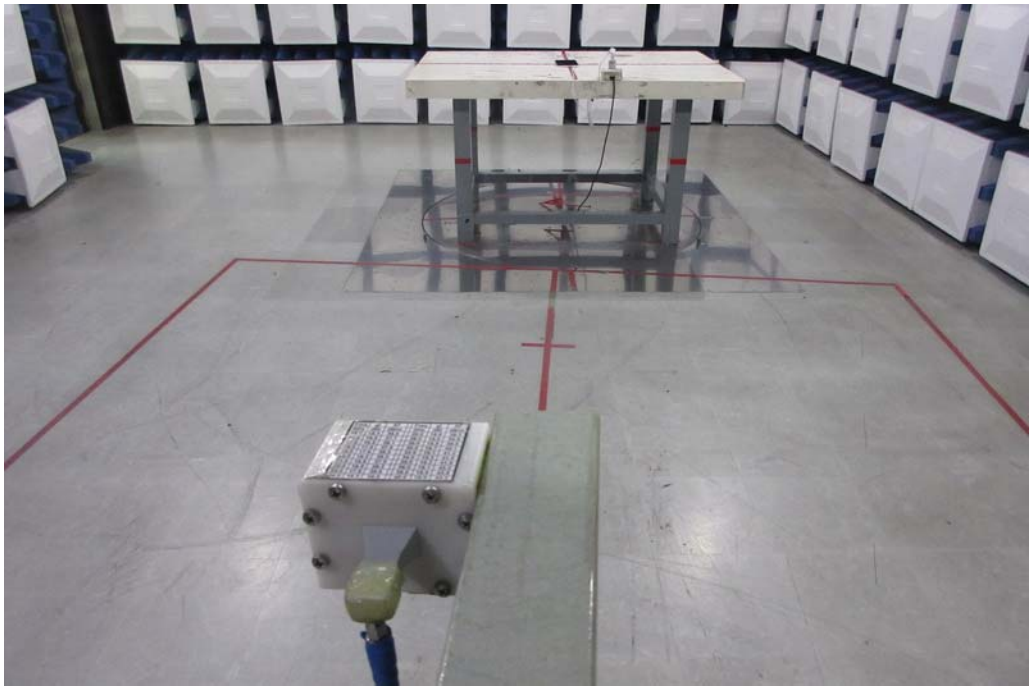
Radiated Measurement Photos
Below 1GHz

Radiated Measurement Photos
1GHz to 18GHz



Radiated Measurement Photos
18GHz to 40GHz





ATTACHMENT A - OUTPUT POWER

Conducted Power:

DCS1900 (Capsensor Off)	Burst Conducted Power (dBm)		
	512CH	661CH	810CH
	1850.2MHz	1880MHz	1909.8MHz
GSM (CS)	29.07	29.15	29.09
GPRS/EDGE (GMSK)	29.07	29.15	29.09
	26.73	26.84	26.87
	25.18	25.33	25.37
	23.59	23.73	23.78
EDGE (8PSK)	25.56	25.86	25.89
	25.53	25.81	25.70
	23.78	23.86	23.94
	21.75	21.66	21.67

Modulation	Band	WCDMA Band II(Capsensor Off)		
	Tx Channel	9262CH	9400CH	9538CH
	Rx Channel	9662CH	9800CH	9938CH
	Frequency	1852.4MHz	1880MHz	1907.6MHz
BPSK	RMC 12.2K	22.67	22.54	22.66
	RMC 64K	22.66	22.52	22.64
	RMC 144K	22.68	22.53	22.65
	RMC 384K	22.61	22.59	22.63
16QAM	HSDPA Subtest-1	22.54	22.31	22.47
	HSDPA Subtest-2	22.36	22.14	22.13
	HSDPA Subtest-3	21.98	21.72	21.81
	HSDPA Subtest-4	22.00	21.70	21.87
16QAM	HSUPA Subtest-1	20.95	20.53	20.71
	HSUPA Subtest-2	19.80	19.74	19.73
	HSUPA Subtest-3	19.86	19.78	19.71
	HSUPA Subtest-4	19.31	19.31	19.33
	HSUPA Subtest-5	20.56	20.24	20.48

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18607 CH	18900 CH	19193 CH
				1850.7 MHz	1880 MHz	1909.3 MHz
2 / 1.4M	QPSK	1	0	22.79	22.75	22.50
		1	2	22.78	22.74	22.50
		1	5	22.79	22.76	22.47
		3	0	22.71	22.65	22.20
		3	1	22.63	22.63	22.22
		3	3	22.62	22.63	22.21
		6	0	21.79	21.87	21.59
	16QAM	1	0	21.95	21.80	21.52
		1	2	21.96	21.82	21.50
		1	5	21.94	21.71	21.58
		3	0	22.17	22.13	21.88
		3	1	22.14	22.22	21.89
		3	3	22.13	22.15	21.88
		6	0	20.90	20.03	20.40

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18615 CH	18900 CH	19185 CH
				1851.5 MHz	1880 MHz	1908.5 MHz
2 / 3M	QPSK	1	0	22.71	23.01	22.41
		1	7	22.73	22.91	22.51
		1	14	22.87	22.87	22.48
		8	0	21.96	22.03	21.74
		8	3	21.99	21.94	21.66
		8	7	22.03	21.87	21.69
		15	0	21.98	21.94	21.66
	16QAM	1	0	21.35	21.97	21.21
		1	7	21.42	21.88	21.17
		1	14	21.40	21.79	21.17
		8	0	20.98	20.24	20.49
		8	3	21.02	20.30	20.53
		8	7	21.07	20.38	20.56
		15	0	20.96	20.22	20.44

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18625 CH	18900 CH	19175 CH
				1852.5 MHz	1880 MHz	1907.5 MHz
2 / 5M	QPSK	1	0	22.90	22.70	22.63
		1	12	22.89	22.65	22.67
		1	24	22.99	22.63	22.65
		12	0	21.96	21.99	21.68
		12	6	21.96	21.96	21.60
		12	13	21.96	21.79	21.56
		25	0	21.88	21.95	21.71
	16QAM	1	0	21.70	21.62	21.87
		1	12	21.71	21.59	21.93
		1	24	21.82	21.50	21.98
		12	0	20.80	20.03	20.27
		12	6	20.98	20.28	20.43
		12	13	21.05	20.29	20.39
		25	0	20.78	20.08	20.22

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18650 CH	18900 CH	19150 CH
				1855 MHz	1880 MHz	1905 MHz
2 / 10M	QPSK	1	0	22.80	22.93	22.29
		1	24	22.91	22.92	22.26
		1	49	22.94	22.80	22.27
		25	0	22.13	22.01	21.79
		25	12	22.13	22.11	21.63
		25	25	22.30	21.99	21.76
		50	0	22.21	22.10	21.68
	16QAM	1	0	21.54	22.29	21.36
		1	24	21.66	22.22	21.30
		1	49	21.73	22.20	21.42
		25	0	21.19	20.05	20.79
		25	12	21.18	20.31	20.61
		25	25	21.12	20.53	20.62
		50	0	21.13	20.29	20.63

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18675 CH	18900 CH	19125 CH
				1857.5 MHz	1880 MHz	1902.5 MHz
2 / 15M	QPSK	1	0	22.83	22.98	22.37
		1	37	22.94	22.95	22.37
		1	74	22.76	22.79	22.48
		36	0	22.18	22.74	21.62
		36	19	22.30	22.08	21.76
		36	39	22.19	21.92	21.79
		75	0	22.31	22.03	21.76
	16QAM	1	0	21.62	22.32	22.02
		1	37	21.84	22.15	22.10
		1	74	21.61	22.10	21.98
		36	0	20.91	21.10	20.63
		36	19	21.06	20.34	20.37
		36	39	20.69	20.29	20.22
		75	0	20.83	20.09	20.34

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18700 CH	18900 CH	19100 CH
				1860 MHz	1880 MHz	1900 MHz
2 / 20M	QPSK	1	0	23.13	23.23	22.83
		1	50	23.13	22.53	22.62
		1	99	23.07	23.20	22.82
		50	0	22.32	22.40	21.97
		50	25	22.31	22.30	21.85
		50	50	22.21	22.20	21.96
		100	0	22.40	22.32	21.86
	16QAM	1	0	22.10	22.64	21.97
		1	50	22.15	21.83	21.78
		1	99	22.03	22.45	21.95
		50	0	21.07	20.28	20.60
		50	25	21.09	20.49	20.80
		50	50	20.83	20.60	20.45
		100	0	20.97	20.35	20.92

EIRP Power

DCS1900 (Capsensor Off)	EIRP Power (dBm)		
	512CH	661CH	810CH
	1850.2MHz	1880MHz	1909.8MHz
GSM (CS)	30.55	**30.63**	30.57
GPRS/EDGE (GMSK)	30.55	**30.63**	30.57
	28.21	28.32	28.35
	26.66	26.81	26.85
	25.07	25.21	25.26
EDGE (8PSK)	27.04	27.34	**27.37**
	27.01	27.29	27.18
	25.26	25.34	25.42
	23.23	23.14	23.15

Modulation	Band	WCDMA Band II(Capsensor Off)		
	Tx Channel	9262CH	9400CH	9538CH
	Rx Channel	9662CH	9800CH	9938CH
	Frequency	1852.4MHz	1880MHz	1907.6MHz
BPSK	RMC 12.2K	24.15	24.02	24.14
	RMC 64K	24.14	24.00	24.12
	RMC 144K	**24.16**	24.01	24.13
	RMC 384K	24.09	24.07	24.11
16QAM	HSDPA Subtest-1	**24.02**	23.79	23.95
	HSDPA Subtest-2	23.84	23.62	23.61
	HSDPA Subtest-3	23.46	23.20	23.29
	HSDPA Subtest-4	23.48	23.18	23.35
16QAM	HSUPA Subtest-1	**22.43**	22.01	22.19
	HSUPA Subtest-2	21.28	21.22	21.21
	HSUPA Subtest-3	21.34	21.26	21.19
	HSUPA Subtest-4	20.79	20.79	20.81
	HSUPA Subtest-5	22.04	21.72	21.96

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18607 CH	18900 CH	19193 CH
				1850.7 MHz	1880 MHz	1909.3 MHz
2 / 1.4M	QPSK	1	0	**24.27**	24.23	23.98
		1	2	24.26	24.22	23.98
		1	5	24.27	24.24	23.95
		3	0	24.19	24.13	23.68
		3	1	24.11	24.11	23.7
		3	3	24.10	24.11	23.69
		6	0	23.27	23.35	23.07
	16QAM	1	0	23.43	23.28	23.00
		1	2	23.44	23.30	22.98
		1	5	23.42	23.19	23.06
		3	0	23.65	23.61	23.36
		3	1	23.62	**23.70**	23.37
		3	3	23.61	23.63	23.36
		6	0	22.38	21.51	21.88

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18615 CH	18900 CH	19185 CH
				1851.5 MHz	1880 MHz	1908.5 MHz
2 / 3M	QPSK	1	0	24.19	**24.49**	23.89
		1	7	24.21	24.39	23.99
		1	14	24.35	24.35	23.96
		8	0	23.44	23.51	23.22
		8	3	23.47	23.42	23.14
		8	7	23.51	23.35	23.17
		15	0	23.46	23.42	23.14
	16QAM	1	0	22.83	**23.45**	22.69
		1	7	22.90	23.36	22.65
		1	14	22.88	23.27	22.65
		8	0	22.46	21.72	21.97
		8	3	22.50	21.78	22.01
		8	7	22.55	21.86	22.04
		15	0	22.44	21.70	21.92

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18625 CH	18900 CH	19175 CH
				1852.5 MHz	1880 MHz	1907.5 MHz
2 / 5M	QPSK	1	0	24.38	24.18	24.11
		1	12	24.37	24.13	24.15
		1	24	**24.47**	24.11	24.13
		12	0	23.44	23.47	23.16
		12	6	23.44	23.44	23.08
		12	13	23.44	23.27	23.04
		25	0	23.36	23.43	23.19
	16QAM	1	0	23.18	23.10	23.35
		1	12	23.19	23.07	23.41
		1	24	23.30	22.98	**23.46**
		12	0	22.28	21.51	21.75
		12	6	22.46	21.76	21.91
		12	13	22.53	21.77	21.87
		25	0	22.26	21.56	21.70

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18650 CH	18900 CH	19150 CH
				1855 MHz	1880 MHz	1905 MHz
2 / 10M	QPSK	1	0	24.28	24.41	23.77
		1	24	24.39	24.40	23.74
		1	49	**24.42**	24.28	23.75
		25	0	23.61	23.49	23.27
		25	12	23.61	23.59	23.11
		25	25	23.78	23.47	23.24
		50	0	23.69	23.58	23.16
	16QAM	1	0	23.02	**23.77**	22.84
		1	24	23.14	23.70	22.78
		1	49	23.21	23.68	22.90
		25	0	22.67	21.53	22.27
		25	12	22.66	21.79	22.09
		25	25	22.60	22.01	22.10
		50	0	22.61	21.77	22.11

LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18675 CH	18900 CH	19125 CH
				1857.5 MHz	1880 MHz	1902.5 MHz
2 / 15M	QPSK	1	0	24.31	**24.46**	23.85
		1	37	24.42	24.43	23.85
		1	74	24.24	24.27	23.96
		36	0	23.66	24.22	23.10
		36	19	23.78	23.56	23.24
		36	39	23.67	23.40	23.27
		75	0	23.79	23.51	23.24
	16QAM	1	0	23.10	**23.80**	23.50
		1	37	23.32	23.63	23.58
		1	74	23.09	23.58	23.46
		36	0	22.39	22.58	22.11
		36	19	22.54	21.82	21.85
		36	39	22.17	21.77	21.70
		75	0	22.31	21.57	21.82

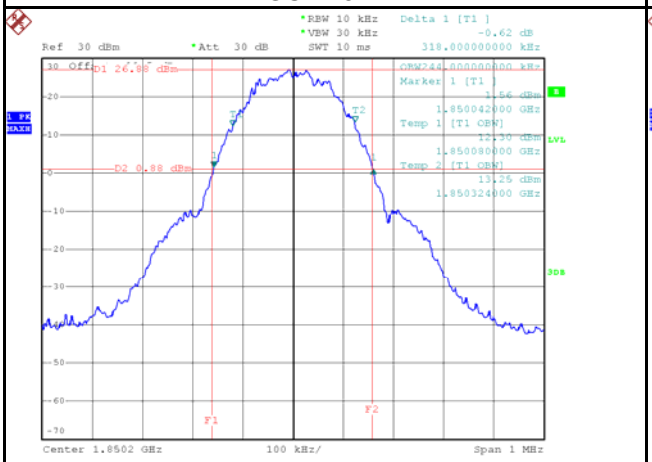
LTE Band / BW	Modulation	RB Sizet	RB Offset	Low CH	Mid CH	High CH
				18700 CH	18900 CH	19100 CH
				1860 MHz	1880 MHz	1900 MHz
2 / 20M	QPSK	1	0	24.61	**24.71**	24.31
		1	50	24.61	24.01	24.10
		1	99	24.55	24.68	24.30
		50	0	23.80	23.88	23.45
		50	25	23.79	23.78	23.33
		50	50	23.69	23.68	23.44
		100	0	23.88	23.80	23.34
	16QAM	1	0	23.58	**24.12**	23.45
		1	50	23.63	23.31	23.26
		1	99	23.51	23.93	23.43
		50	0	22.55	21.76	22.08
		50	25	22.57	21.97	22.28
		50	50	22.31	22.08	21.93
		100	0	22.45	21.83	22.40

ATTACHMENT B - OCCUPIED BANDWIDTH

DCS1900					
GSM			EDGE		
CS			8PSK		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
512	1850.2	0.244	512	1850.2	0.240
661	1880	0.244	661	1880	0.242
810	1909.8	0.246	810	1909.8	0.242
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
512	1850.2	0.318	512	1850.2	0.304
661	1880	0.318	661	1880	0.308
810	1909.8	0.318	810	1909.8	0.308

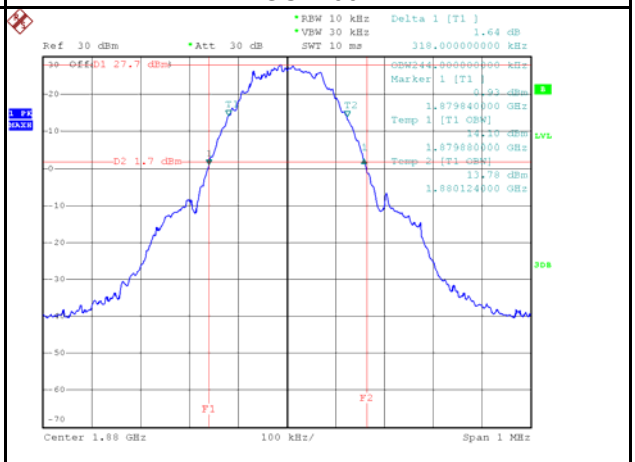
Spectrum Plot

GSM -512



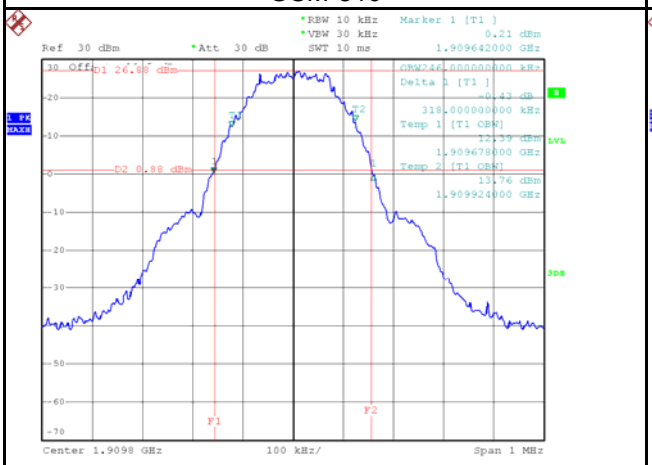
Date: 31.AUG.2016 19:18:27

GSM-661



Date: 31.AUG.2016 18:27:12

GSM-810



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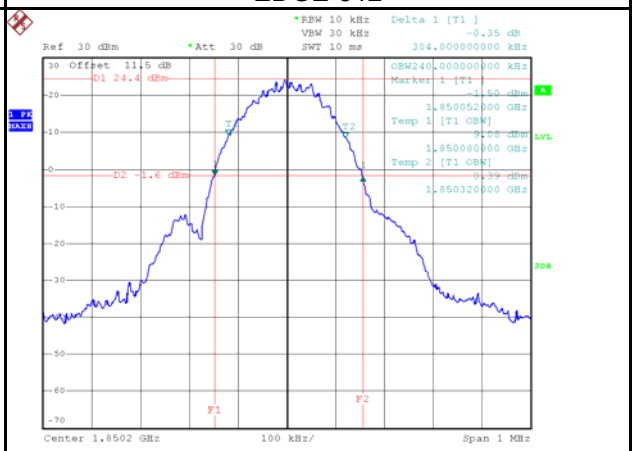
EDGE-512



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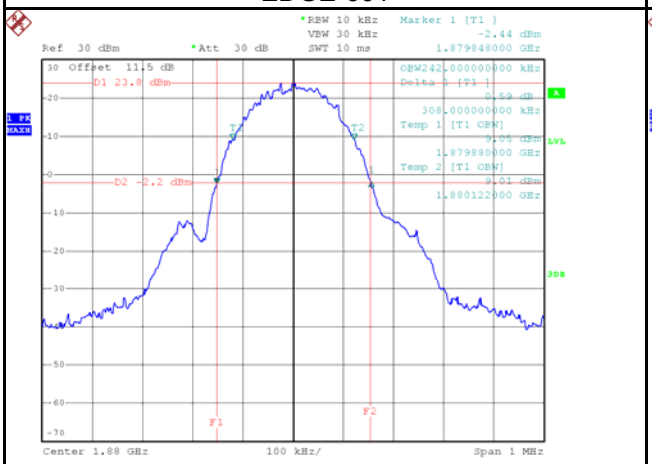

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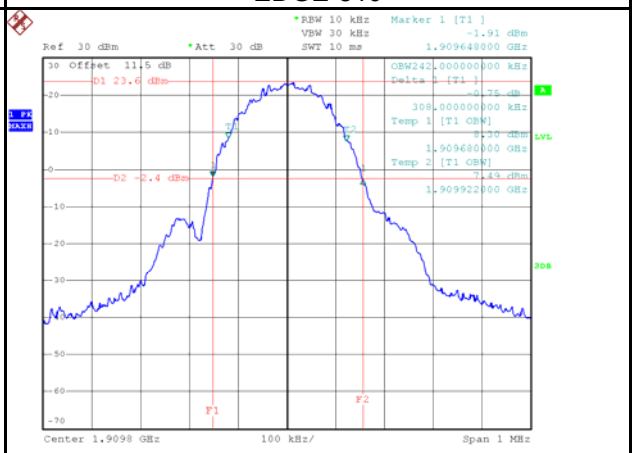
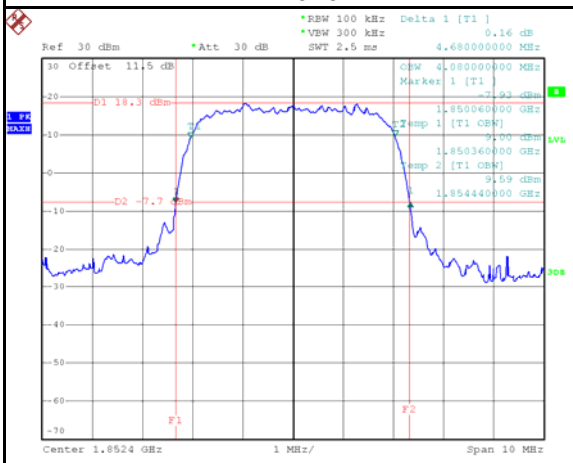
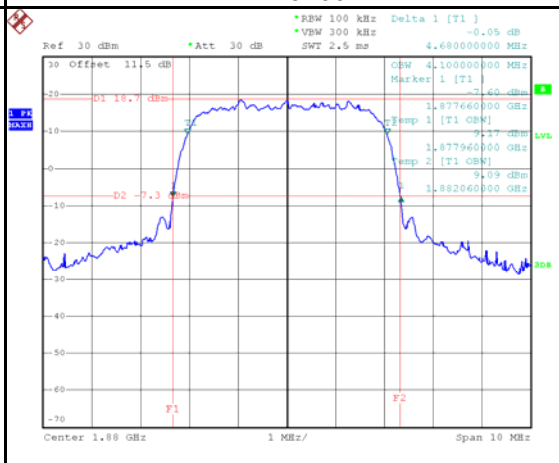
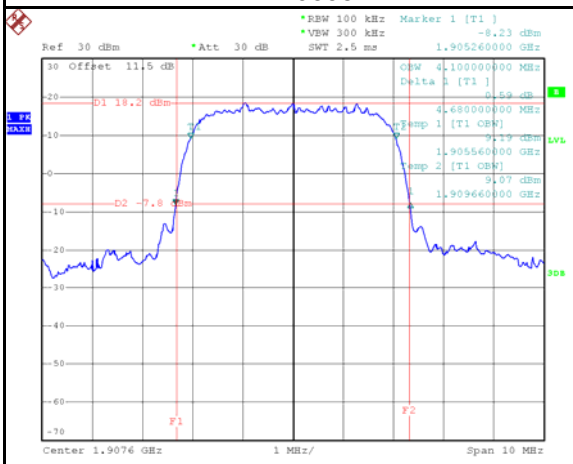
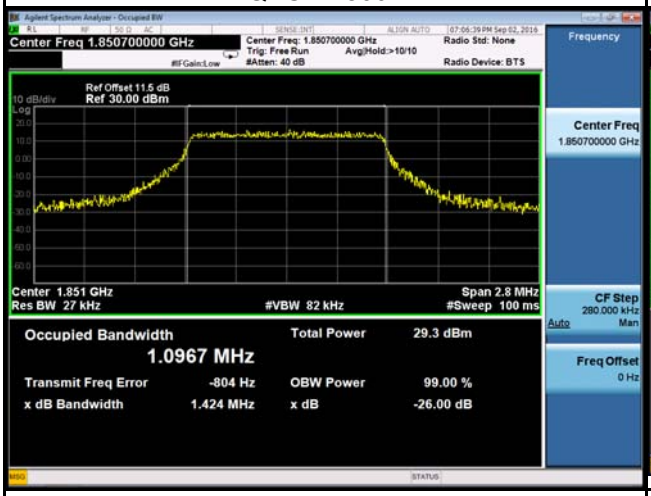
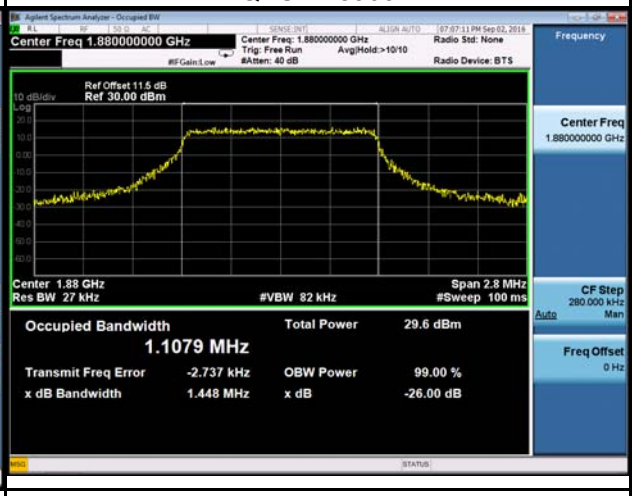
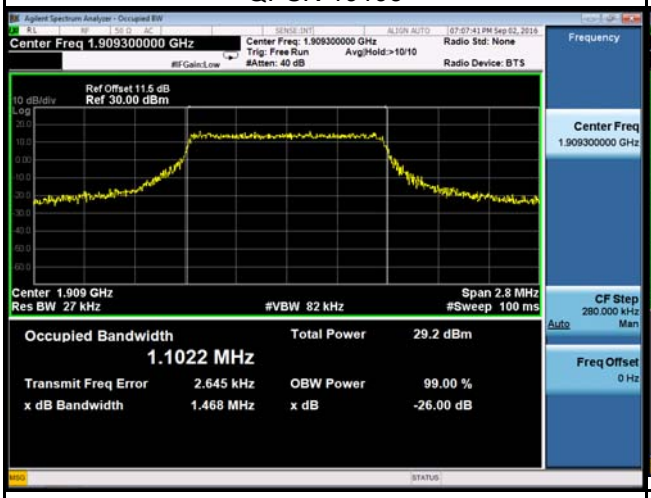
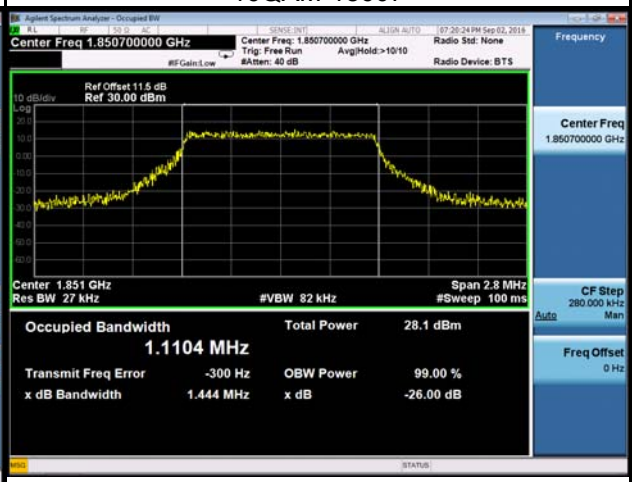
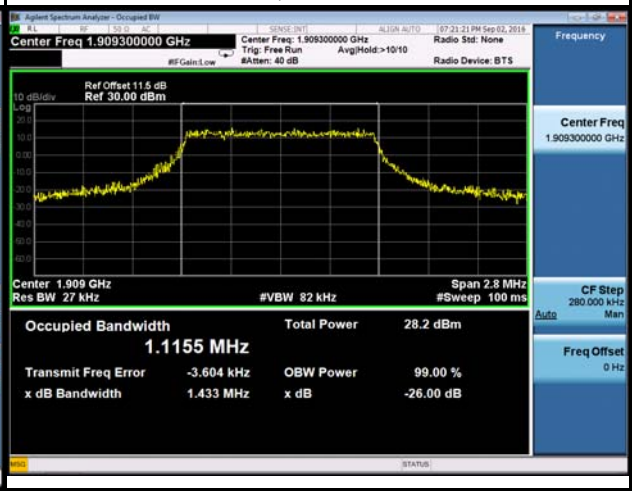


Date: 31.AUG.2016 22:15:12

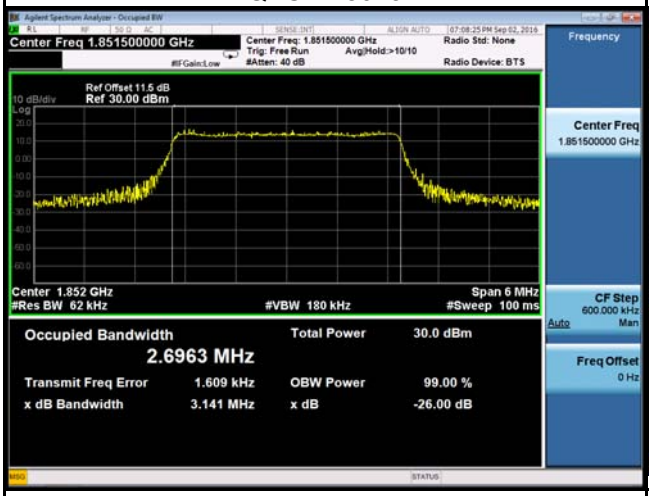
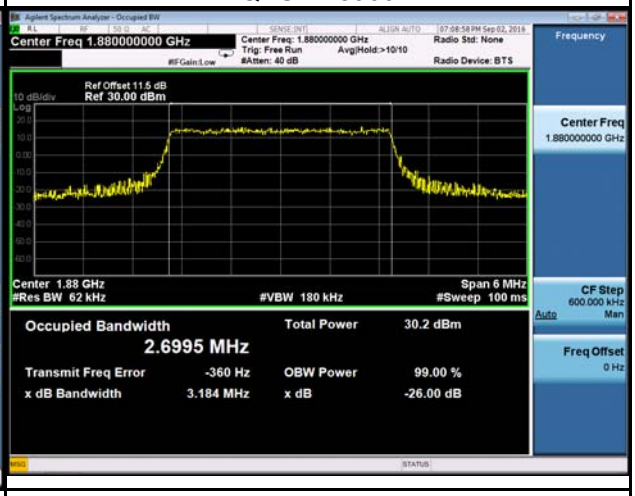
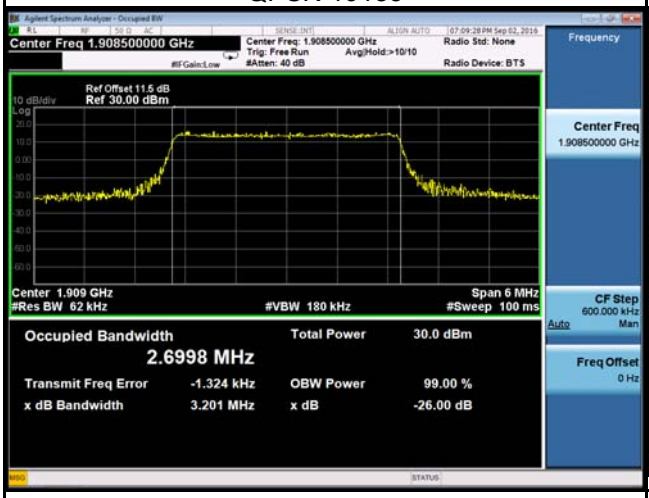
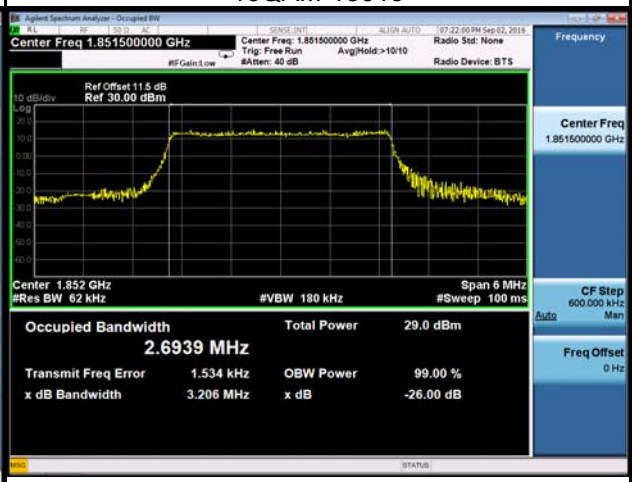
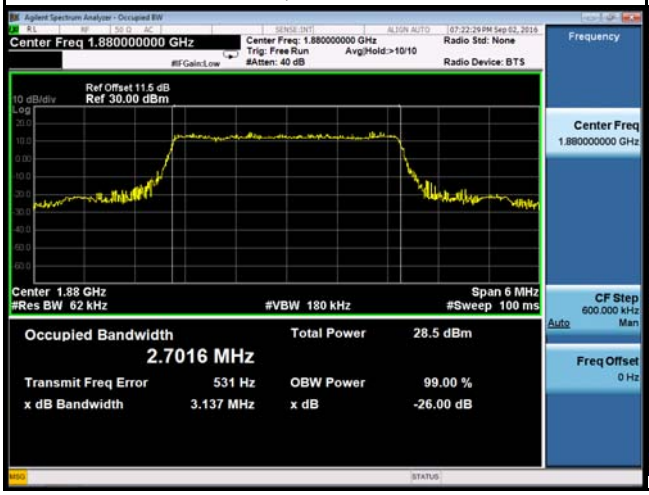
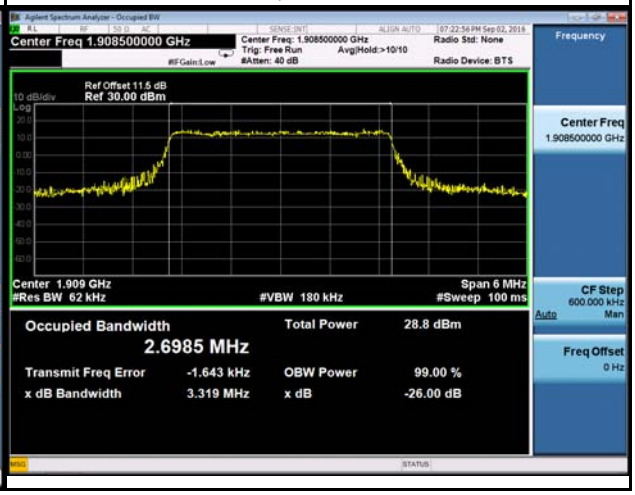
WCDMA Band II					
BPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
9262	1852.4	4.08	9262	1852.4	4.68
9400	1880	4.10	9400	1880	4.68
9538	1907.6	4.10	9538	1907.6	4.68

Spectrum Plot	
9262	9400
	
9538	-
	-

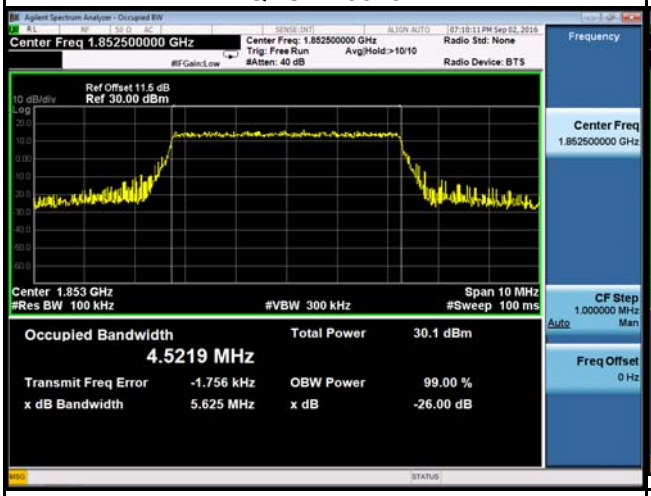
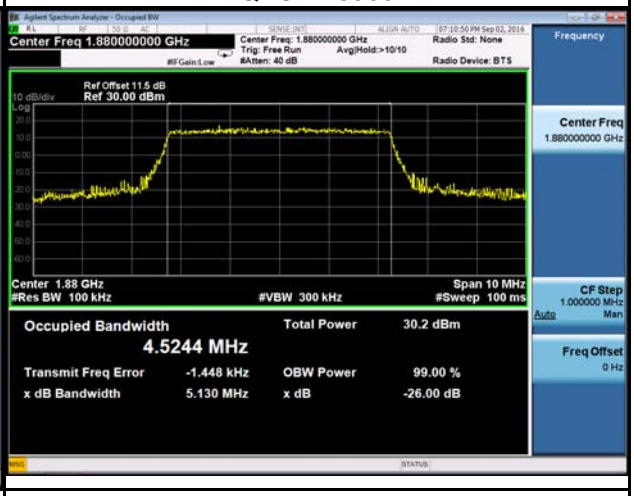
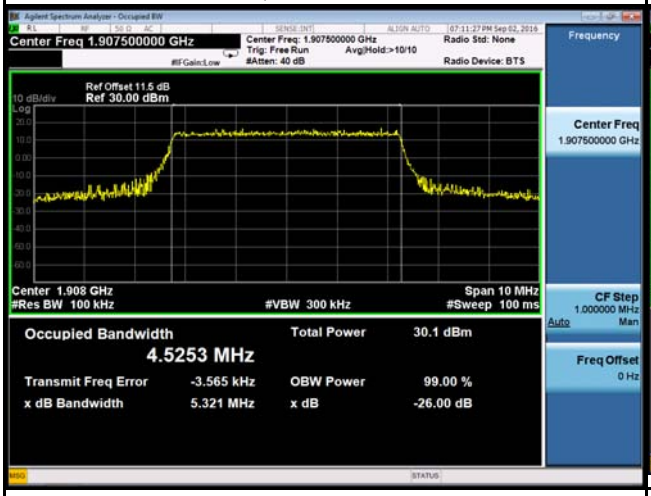
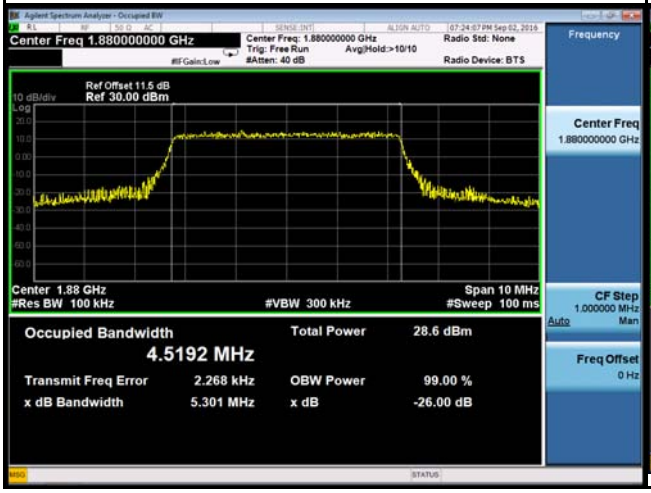
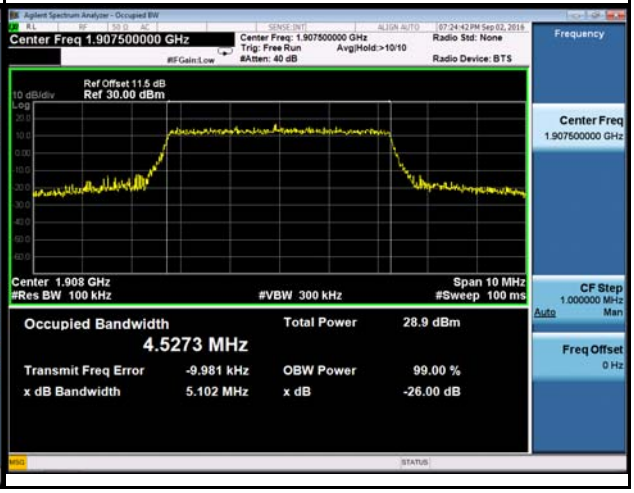
LTE Band 2_1.4M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18607	1850.7	1.0967	18607	1850.7	1.1104
18900	1880	1.1079	18900	1880	1.1082
19193	1909.3	1.1022	19193	1909.3	1.1155
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18607	1850.7	1.424	18607	1850.7	1.444
18900	1880	1.448	18900	1880	1.452
19193	1909.3	1.468	19193	1909.3	1.433

Spectrum Plot	
QPSK-18607	QPSK-18900
	
QPSK-19193	16QAM-18607
	
16QAM-18900	16QAM-19193
	

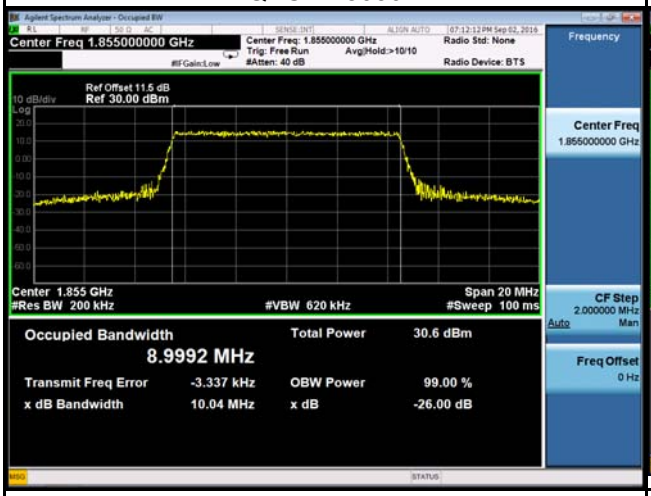
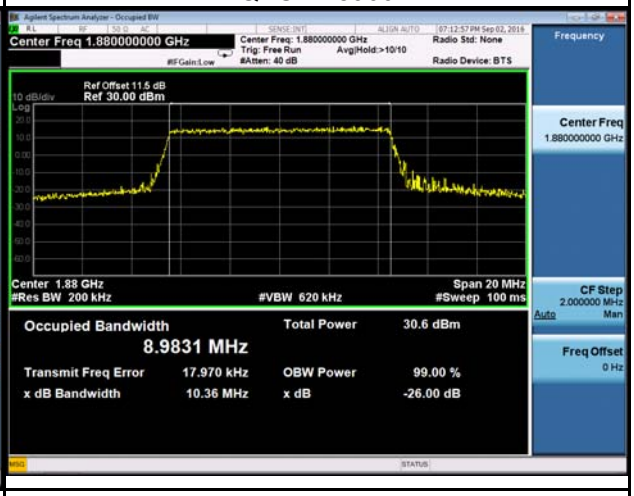
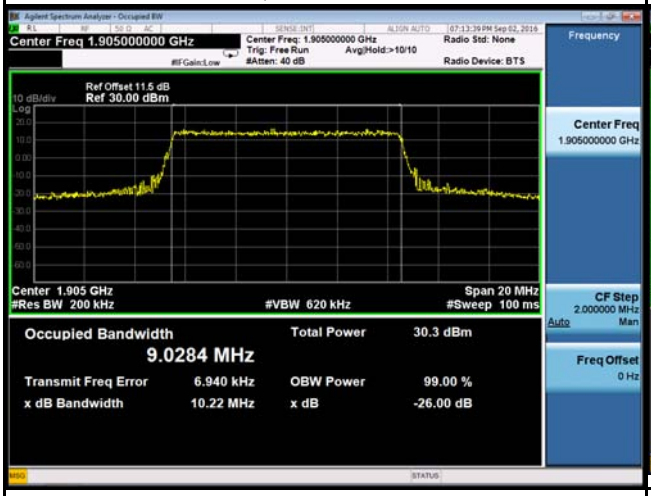
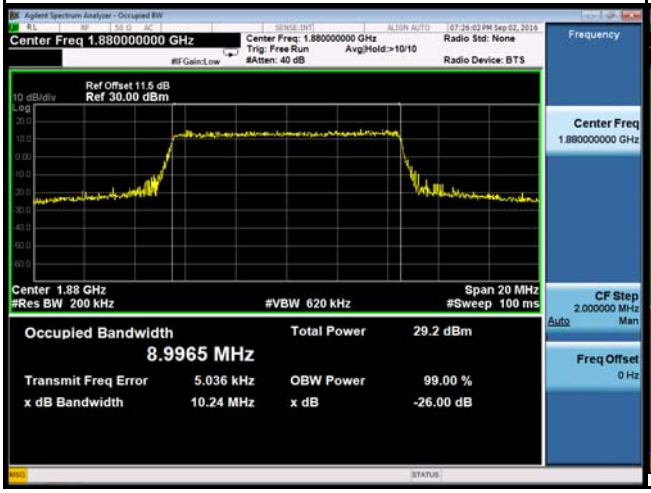
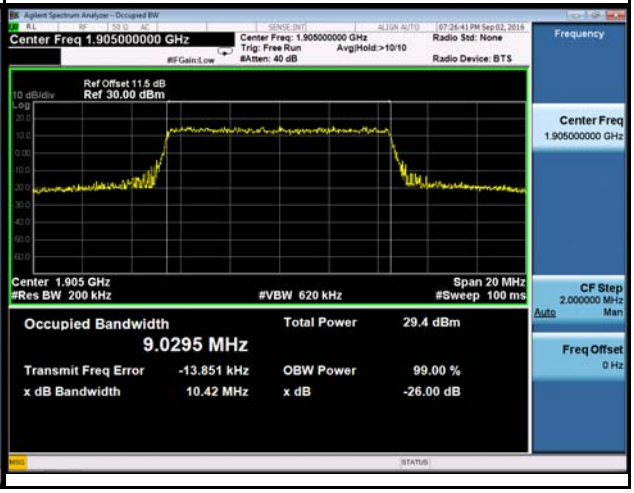
LTE Band 2_3M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18615	1851.5	2.6963	18615	1851.5	2.6939
18900	1880	2.6995	18900	1880	2.7016
19185	1908.5	2.6998	19185	1908.5	2.6985
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18615	1851.5	3.141	18615	1851.5	3.206
18900	1880	3.184	18900	1880	3.137
19185	1908.5	3.201	19185	1908.5	3.319

Spectrum Plot	
QPSK-18615	QPSK-18900
	
QPSK-19185	16QAM-18615
	
16QAM-18900	16QAM-19185
	

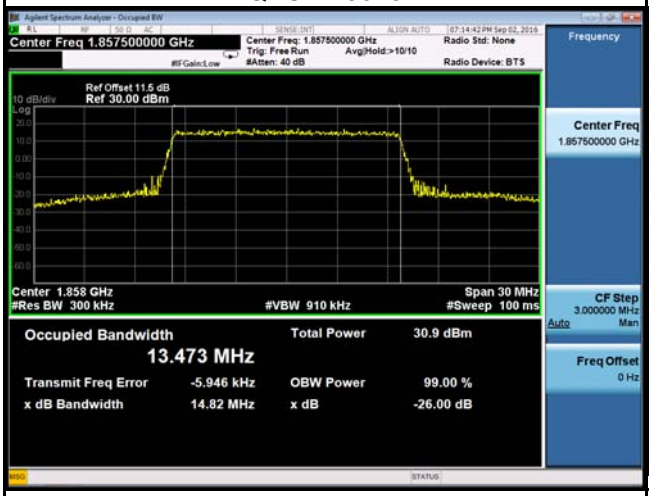
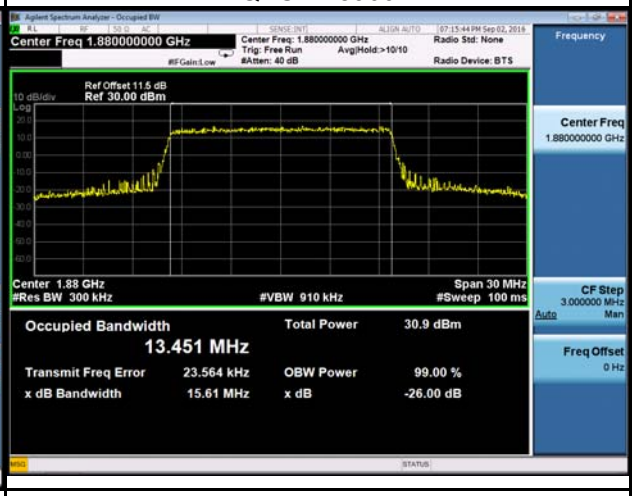
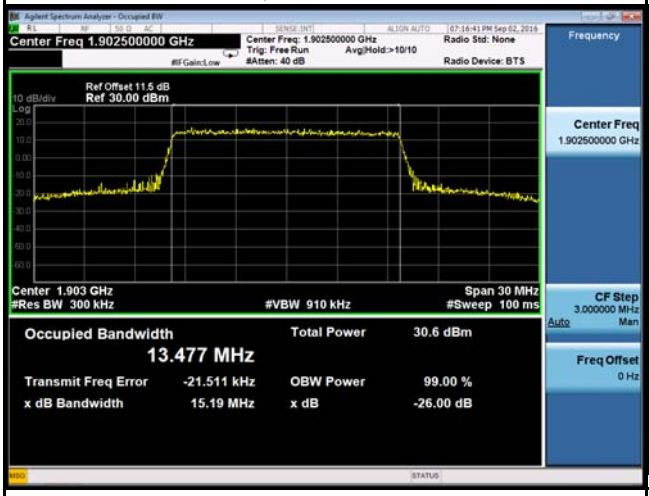
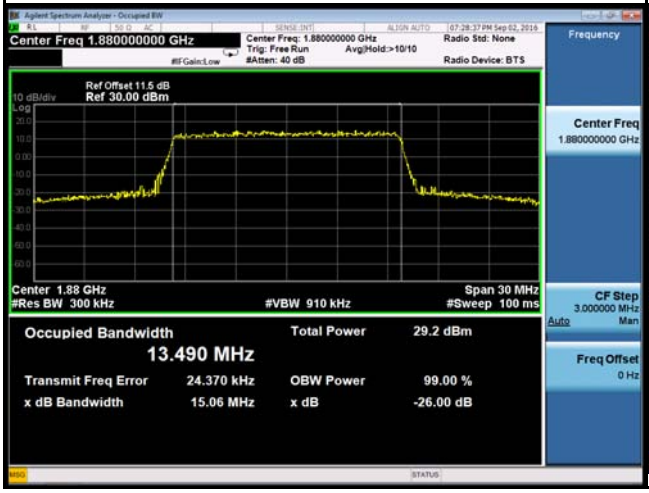
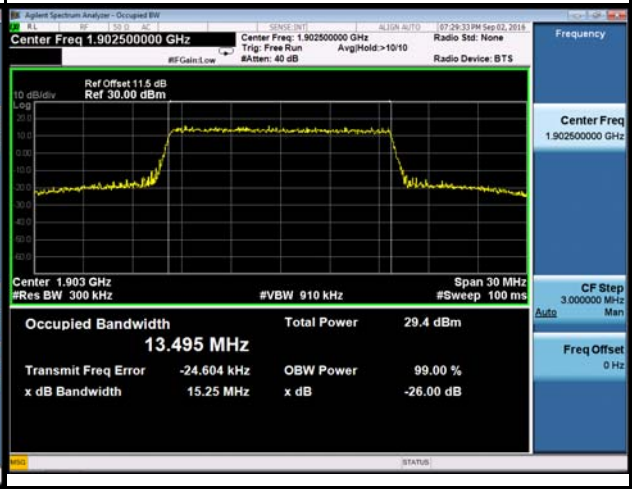
LTE Band 2_5M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18625	1852.5	4.5219	18625	1852.5	4.5107
18900	1880	4.5244	18900	1880	4.5192
19175	1907.5	4.5253	19175	1907.5	4.5273
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18625	1852.5	5.625	18625	1852.5	5.125
18900	1880	5.130	18900	1880	5.301
19175	1907.5	5.321	19175	1907.5	5.102

Spectrum Plot	
QPSK-18625	QPSK-18900
	
QPSK-19175	16QAM-18625
	
16QAM-18900	16QAM-19175
	

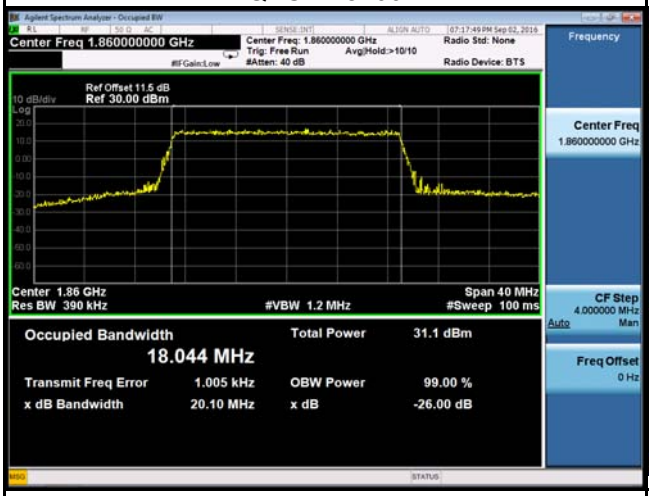
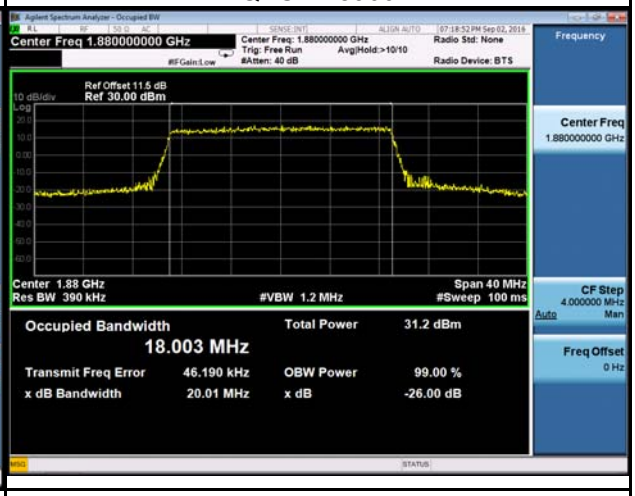
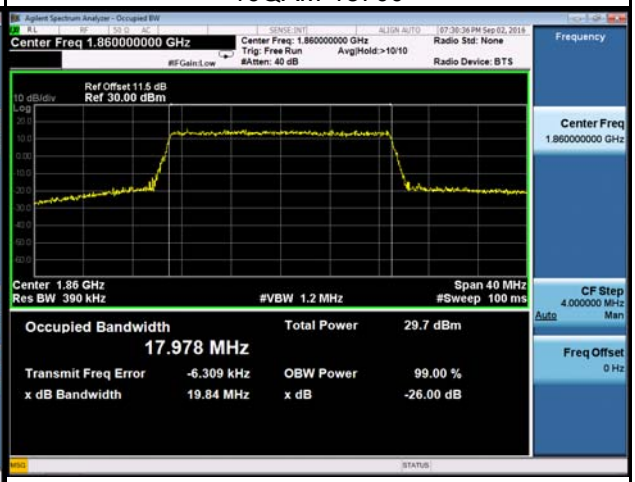
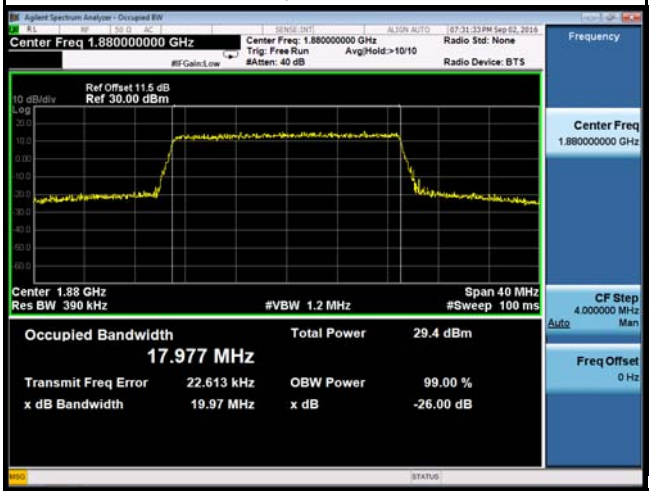
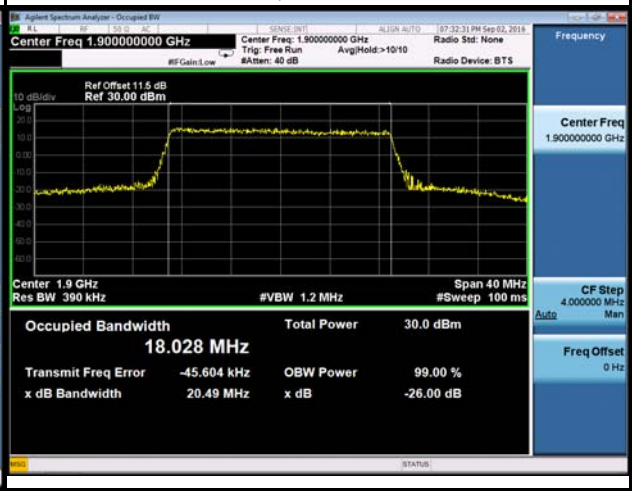
LTE Band 2_10M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18650	1855	8.9992	18650	1855	9.0064
18900	1880	8.9831	18900	1880	8.9965
19150	1905	9.0284	19150	1905	9.0295
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18650	1855	10.04	18650	1855	10.29
18900	1880	10.36	18900	1880	10.24
19150	1905	10.22	19150	1905	10.42

Spectrum Plot	
QPSK-18650	QPSK-18900
	
QPSK-19150	16QAM-18650
	
16QAM-18900	16QAM-19150
	

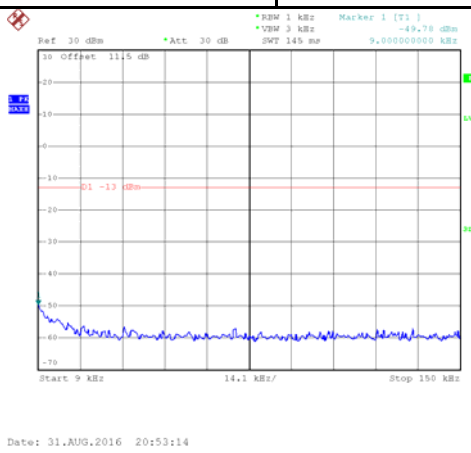
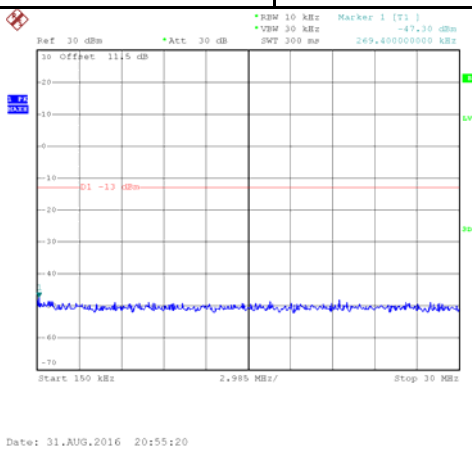
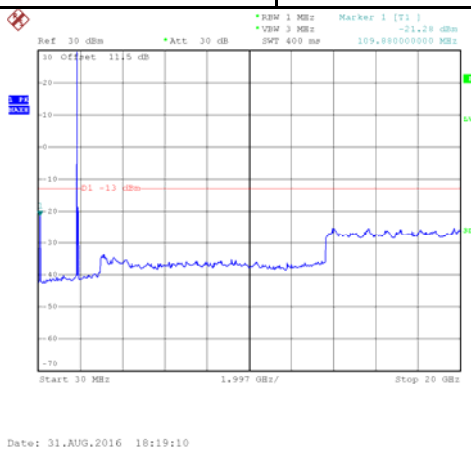
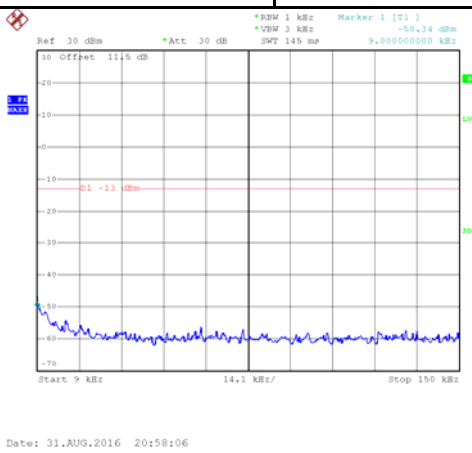
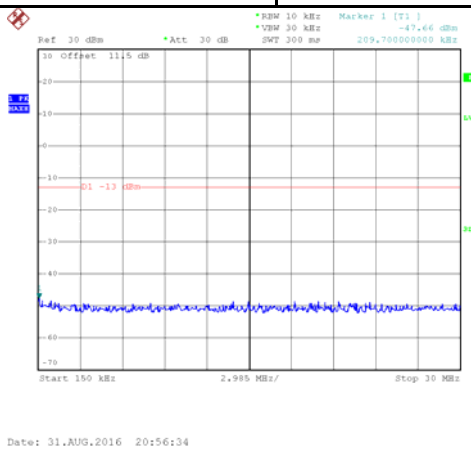
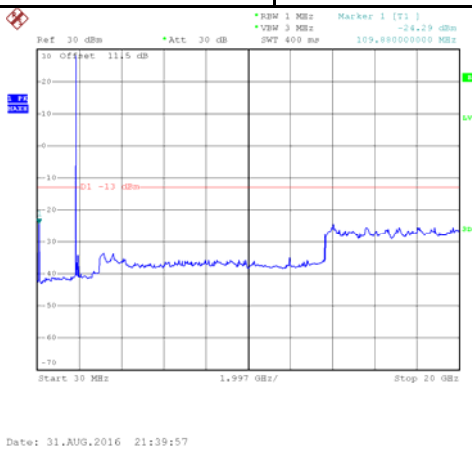
LTE Band 2_15M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18675	1857.5	13.473	18675	1857.5	13.458
18900	1880	13.451	18900	1880	13.490
19125	1902.5	13.477	19125	1902.5	13.495
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18675	1857.5	14.82	18675	1857.5	15.09
18900	1880	15.61	18900	1880	15.06
19125	1902.5	15.19	19125	1902.5	15.25

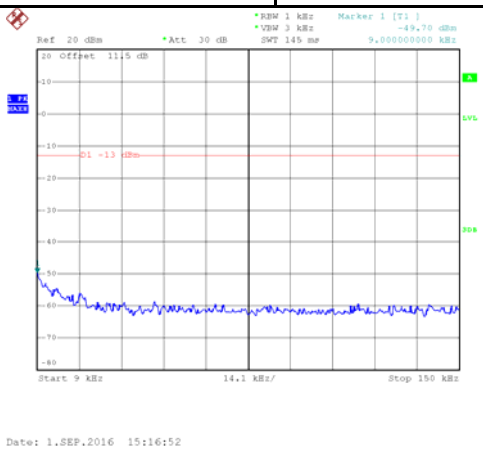
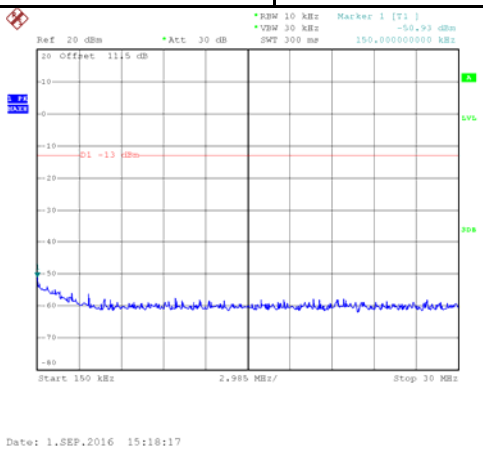
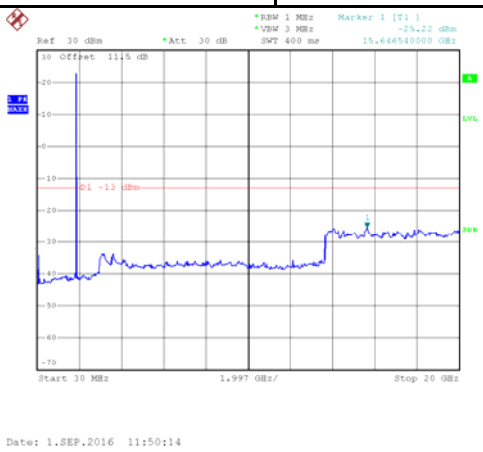
Spectrum Plot	
QPSK-18675	QPSK-18900
	
QPSK-19125	16QAM-18675
	
16QAM-18900	16QAM-19125
	

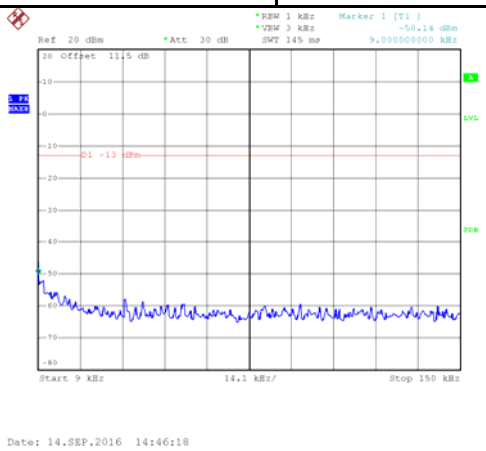
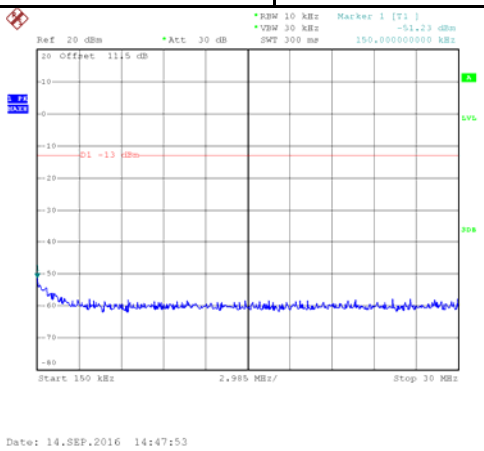
LTE Band 2_20M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18700	1860	18.044	18700	1860	17.978
18900	1880	18.003	18900	1880	17.977
19100	1900	18.010	19100	1900	18.028
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18700	1860	20.10	18700	1860	19.84
18900	1880	20.01	18900	1880	19.97
19100	1900	19.81	19100	1900	20.49

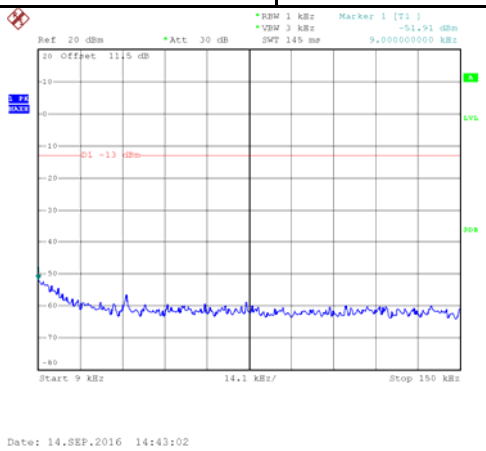
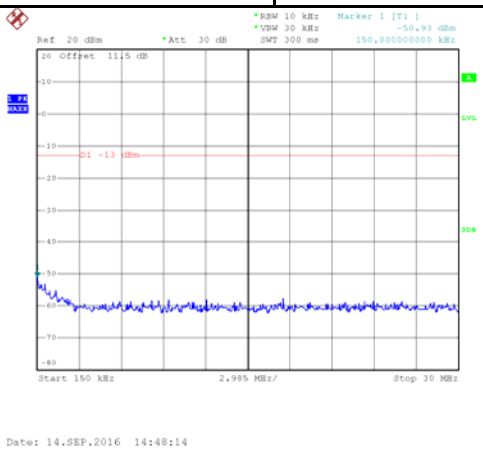
Spectrum Plot	
QPSK-18700	QPSK-18900
	
QPSK-19100	16QAM-18700
	
16QAM-18900	16QAM-19100
	

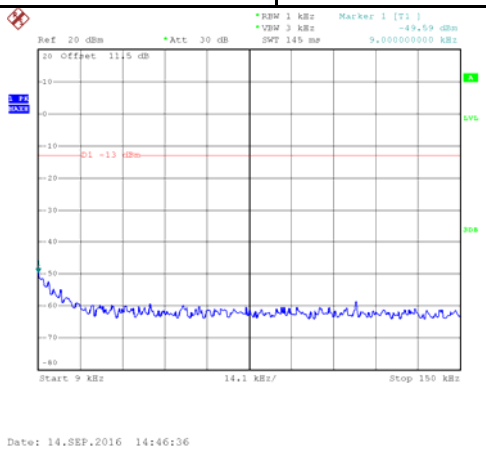
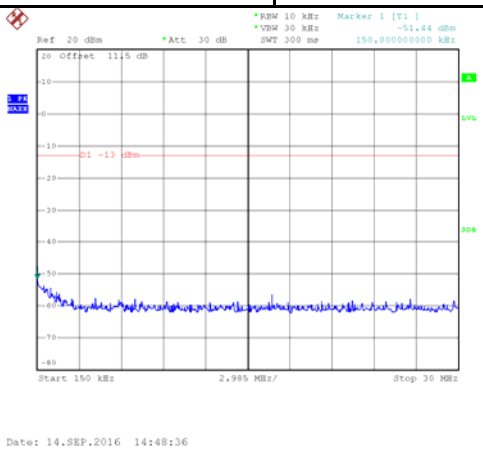
ATTACHMENT C - CONDUCTED EMISSIONS

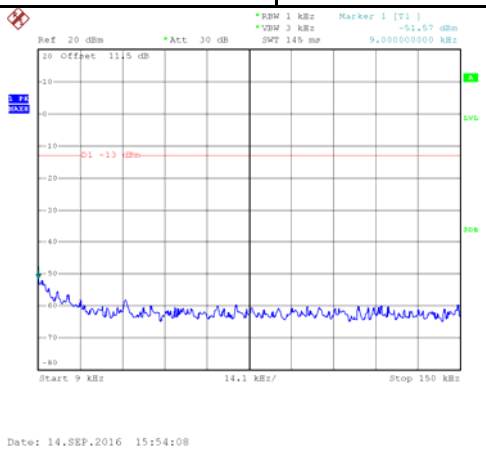
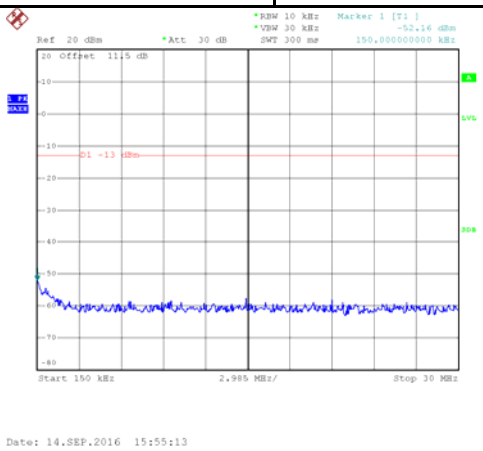
DCS1900			
GSM		GSM	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
661	1880	661	1880
			
GSM		EDGE	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
661	1880	661	1880
			
EDGE		EDGE	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
661	1880	661	1880
			

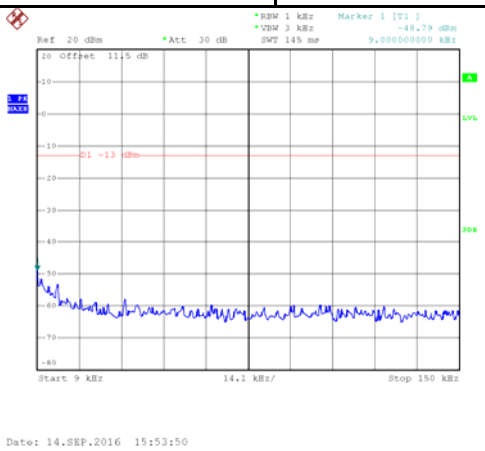
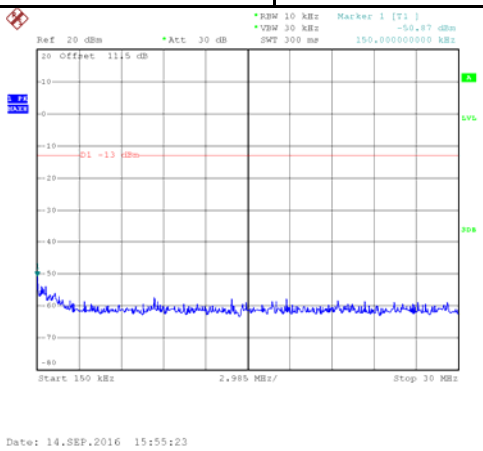
WCDMA Band II			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
9400	1880	9400	1880
			
Channel	Frequency(MHz)	-	-
9400	1880	-	-
		-	

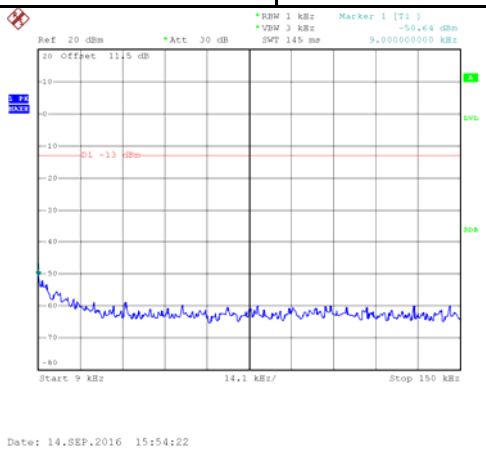
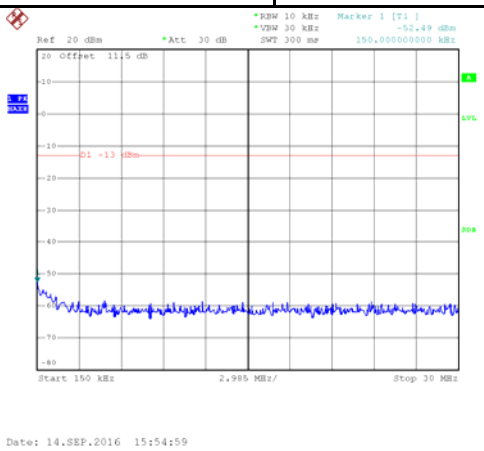
LTE Band 2_1.4M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
18900	1880	18900	1880
			
Channel	Frequency(MHz)	-	-
18900	1880	-	-
		-	

LTE Band 2_3M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
18900	1880	18900	1880
			
Channel	Frequency(MHz)	-	-
18900	1880	-	-
		-	

LTE Band 2_5M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
18900	1880	18900	1880
			
Channel	Frequency(MHz)	-	-
18900	1880	-	-
		-	

LTE Band 2_10M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
18900	1880	18900	1880
			
Channel	Frequency(MHz)	-	-
18900	1880	-	-
		-	

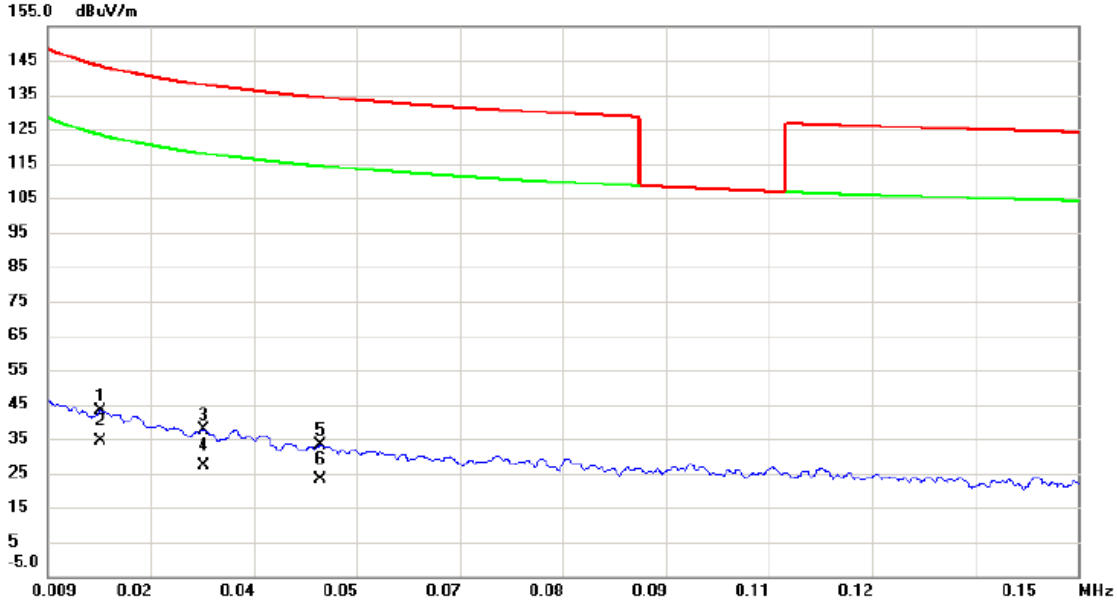
LTE Band 2_15M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
18900	1880	18900	1880
			
Channel	Frequency(MHz)	-	-
18900	1880	-	-
		-	

LTE Band 2_20M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
18900	1880	18900	1880
			
Channel	Frequency(MHz)	-	-
18900	1880	-	-
		-	

ATTACHMENT D - RADIATED EMISSION

Test Mode:	TX Mode(Adapter: Phitek)

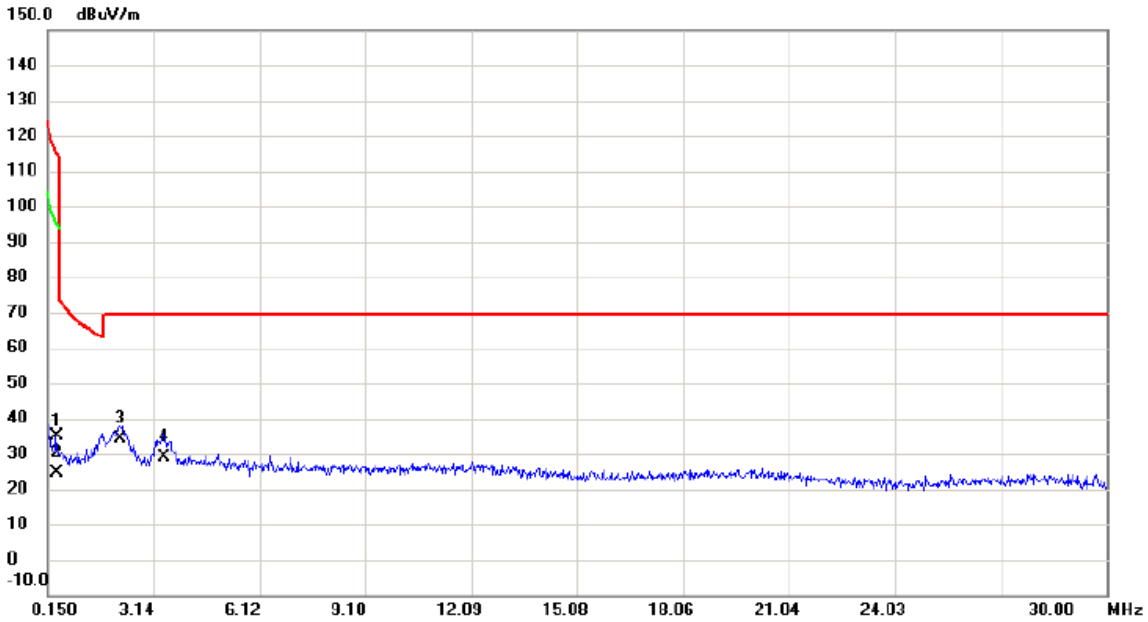
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0163	19.45	23.74	43.19	143.36	-100.17	peak	
2	*	0.0163	10.58	23.74	34.32	123.36	-89.04	AVG	
3		0.0304	15.36	22.24	37.60	137.95	-100.35	peak	
4		0.0304	4.88	22.24	27.12	117.95	-90.83	AVG	
5		0.0464	12.80	20.26	33.06	134.27	-101.21	peak	
6		0.0464	2.76	20.26	23.02	114.27	-91.25	AVG	

Test Mode:	TX Mode(Adapter: Phitek)

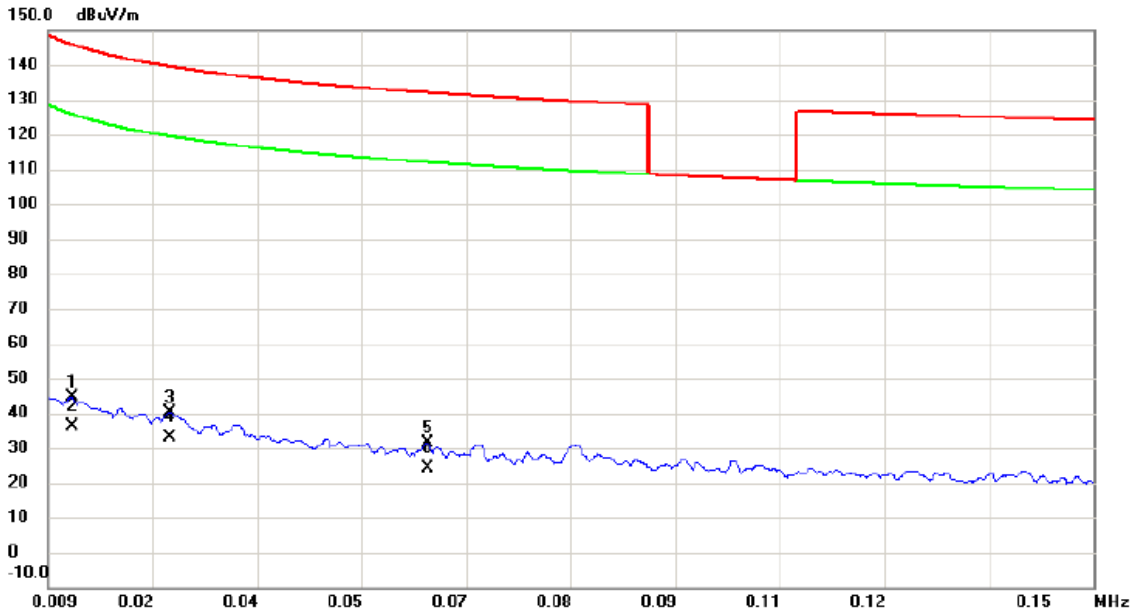
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.4186	16.41	18.46	34.87	115.17	-80.30	peak	
2		0.4186	6.30	18.46	24.76	95.17	-70.41	AVG	
3	*	2.1947	16.55	17.66	34.21	69.54	-35.33	QP	
4		3.4483	11.56	17.58	29.14	69.54	-40.40	QP	

Test Mode:	TX Mode(Adapter: Phitek)

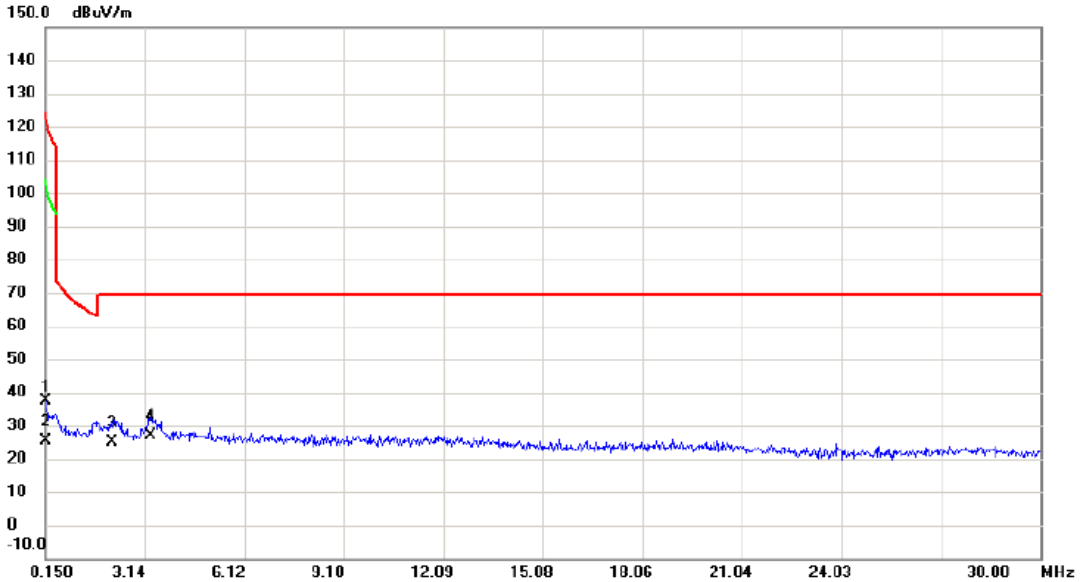
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0122	20.45	23.99	44.44	145.88	-101.44	peak	
2		0.0122	12.13	23.99	36.12	125.88	-89.76	AVG	
3		0.0255	17.28	22.84	40.12	139.47	-99.35	peak	
4	*	0.0255	10.18	22.84	33.02	119.47	-86.45	AVG	
5		0.0602	11.88	19.71	31.59	132.01	-100.42	peak	
6		0.0602	4.63	19.71	24.34	112.01	-87.67	AVG	

Test Mode:	TX Mode(Adapter: Phitek)

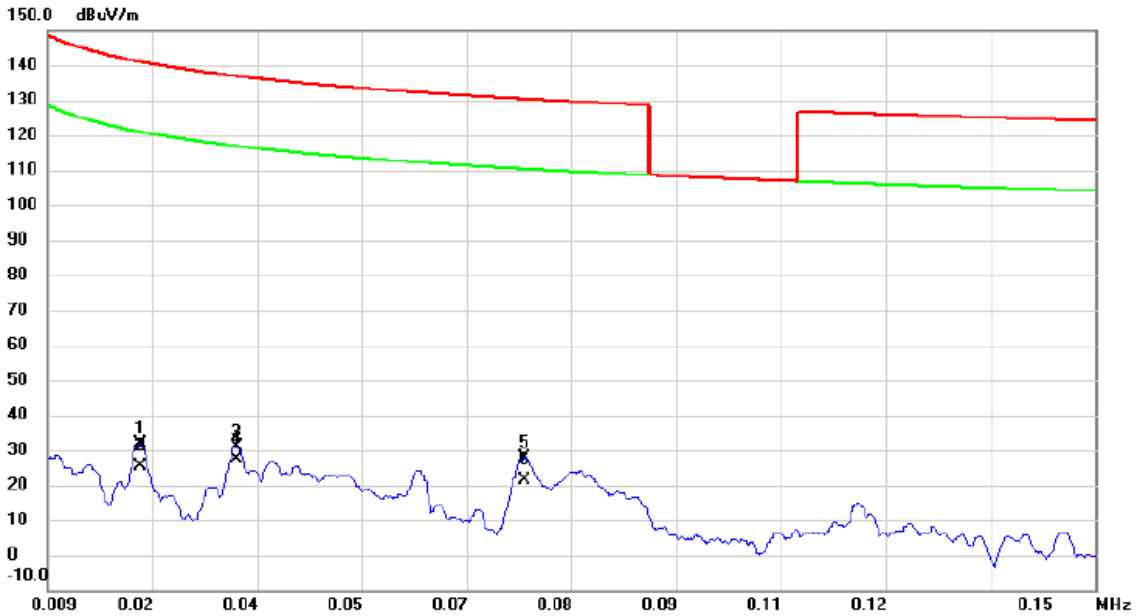
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1500	18.69	18.74	37.43	124.09	-86.66	peak	
2		0.1500	6.80	18.74	25.54	104.09	-78.55	AVG	
3		2.1650	7.11	17.70	24.81	69.54	-44.73	QP	
4	*	3.3290	9.81	17.33	27.14	69.54	-42.40	QP	

Test Mode:	TX Mode (Adapter: Huntkey)

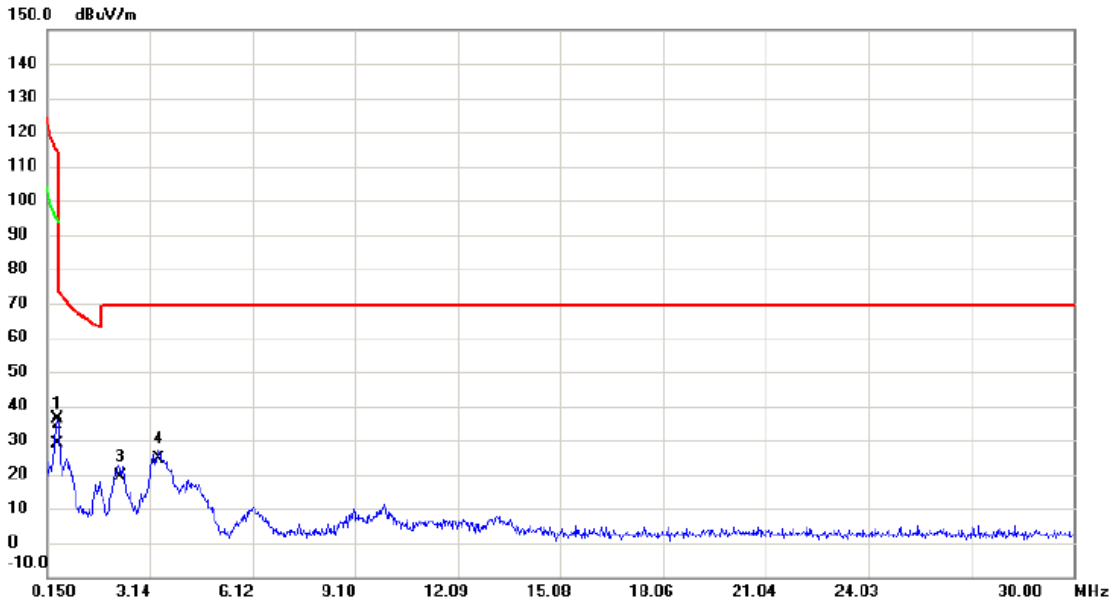
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0215	8.30	23.34	31.64	140.96	-109.32	peak	
2		0.0215	2.09	23.34	25.43	120.96	-95.53	AVG	
3		0.0345	9.42	21.73	31.15	136.85	-105.70	peak	
4		0.0345	5.60	21.73	27.33	116.85	-89.52	AVG	
5		0.0732	8.45	19.55	28.00	130.31	-102.31	peak	
6	*	0.0732	1.95	19.55	21.50	110.31	-88.81	AVG	

Test Mode:	TX Mode (Adapter: Huntkey)

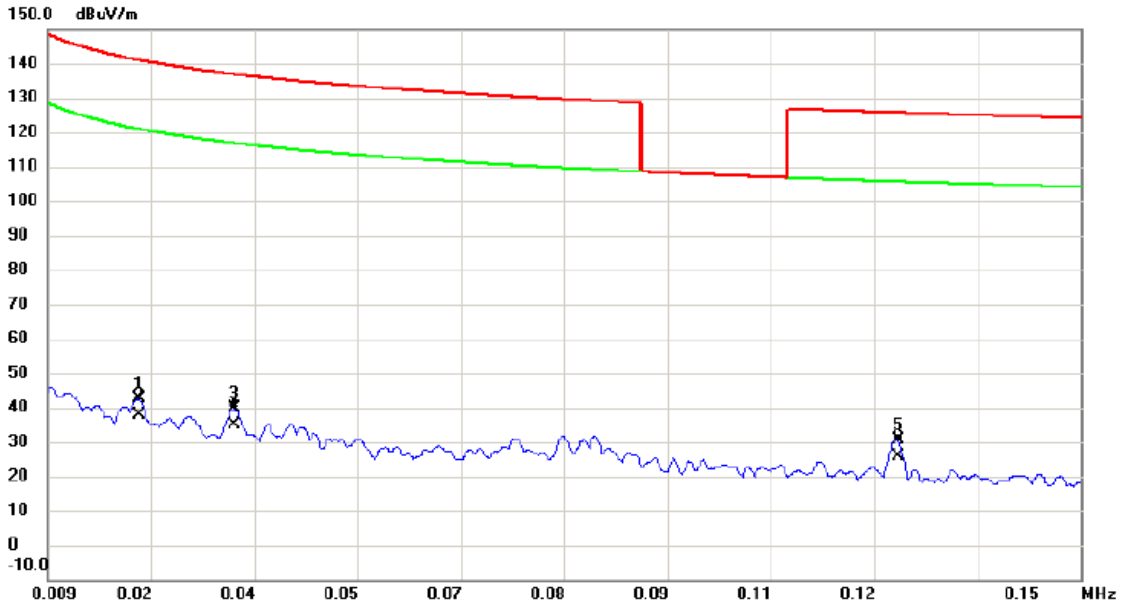
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.4485	17.93	18.43	36.36	114.57	-78.21	peak	
2		0.4485	10.75	18.43	29.18	94.57	-65.39	AVG	
3		2.2694	1.93	17.56	19.49	69.54	-50.05	QP	
4	*	3.3887	7.04	17.46	24.50	69.54	-45.04	QP	

Test Mode:	TX Mode (Adapter: Huntkey)

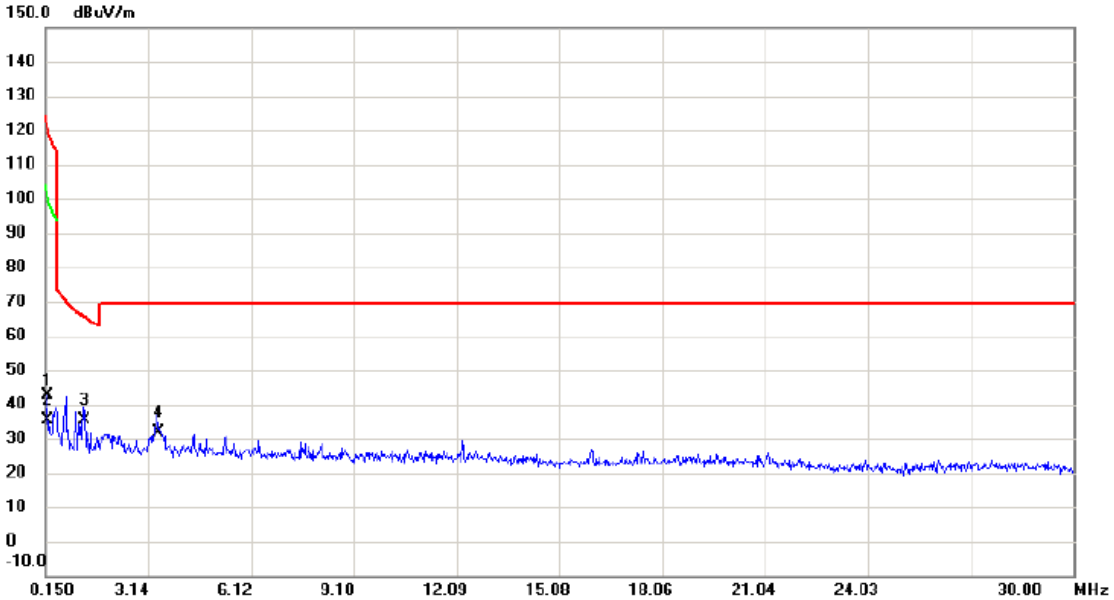
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0215	19.10	23.34	42.44	140.96	-98.52	peak	
2		0.0215	14.36	23.34	37.70	120.96	-83.26	AVG	
3		0.0345	17.88	21.73	39.61	136.85	-97.24	peak	
4		0.0345	13.13	21.73	34.86	116.85	-81.99	AVG	
5		0.1250	12.19	18.59	30.78	125.67	-94.89	peak	
6	*	0.1250	7.26	18.59	25.85	105.67	-79.82	AVG	

Test Mode:	TX Mode (Adapter: Huntkey)

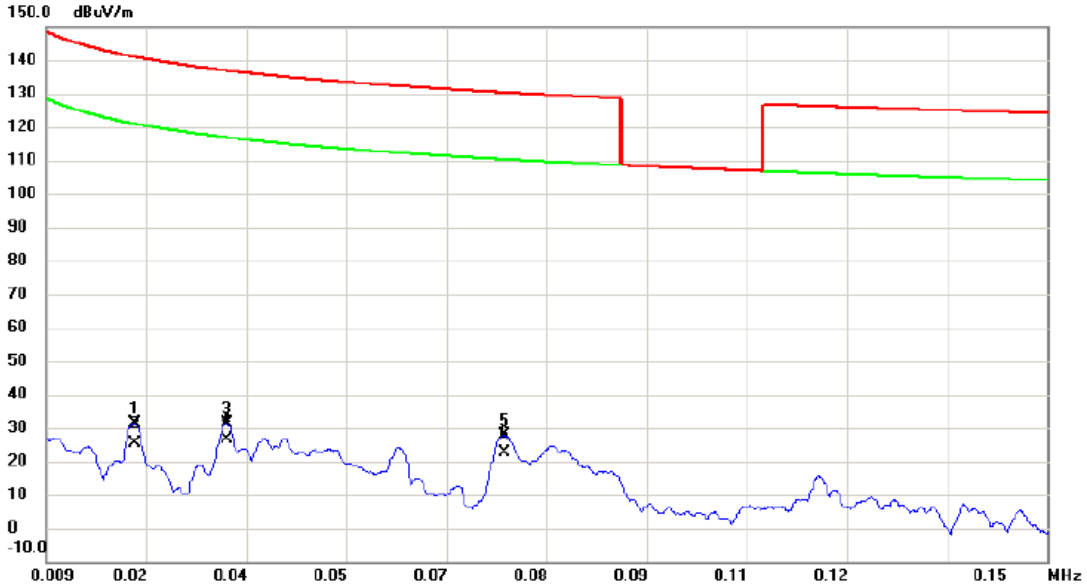
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1948	23.92	18.70	42.62	121.81	-79.19	peak	
2		0.1948	16.61	18.70	35.31	101.81	-66.50	AVG	
3	*	1.2694	17.72	17.74	35.46	65.53	-30.07	QP	
4		3.4186	14.41	17.52	31.93	69.54	-37.61	QP	

Test Mode:	TX Mode (Adapter: BYD)

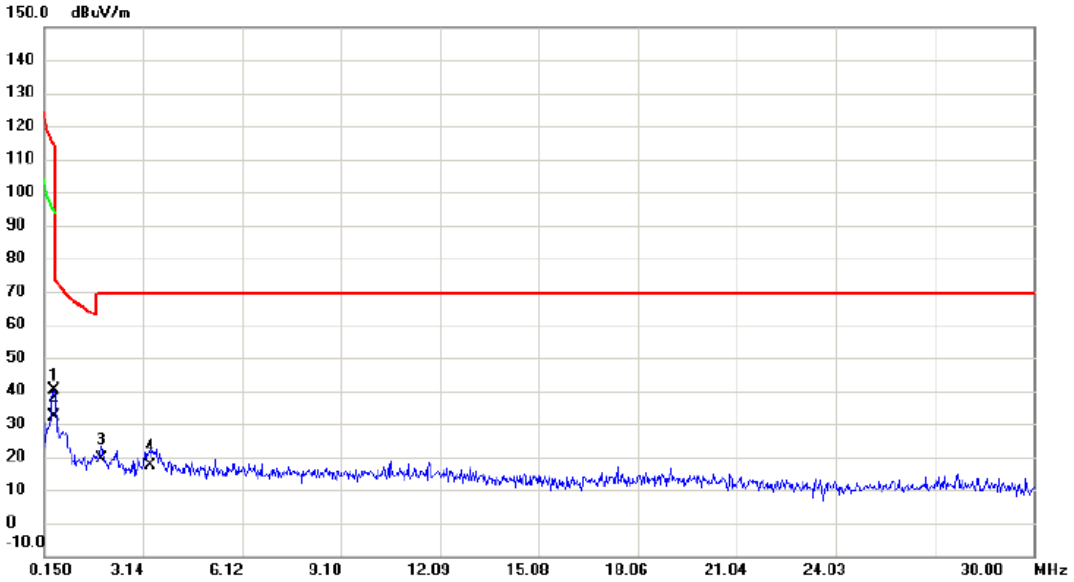
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0215	8.18	23.34	31.52	140.96	-109.44	peak	
2		0.0215	2.18	23.34	25.52	120.96	-95.44	AVG	
3		0.0345	9.61	21.73	31.34	136.85	-105.51	peak	
4		0.0345	5.03	21.73	26.76	116.85	-90.09	AVG	
5		0.0735	8.37	19.55	27.92	130.28	-102.36	peak	
6	*	0.0735	3.22	19.55	22.77	110.28	-87.51	AVG	

Test Mode:	TX Mode (Adapter: BYD)

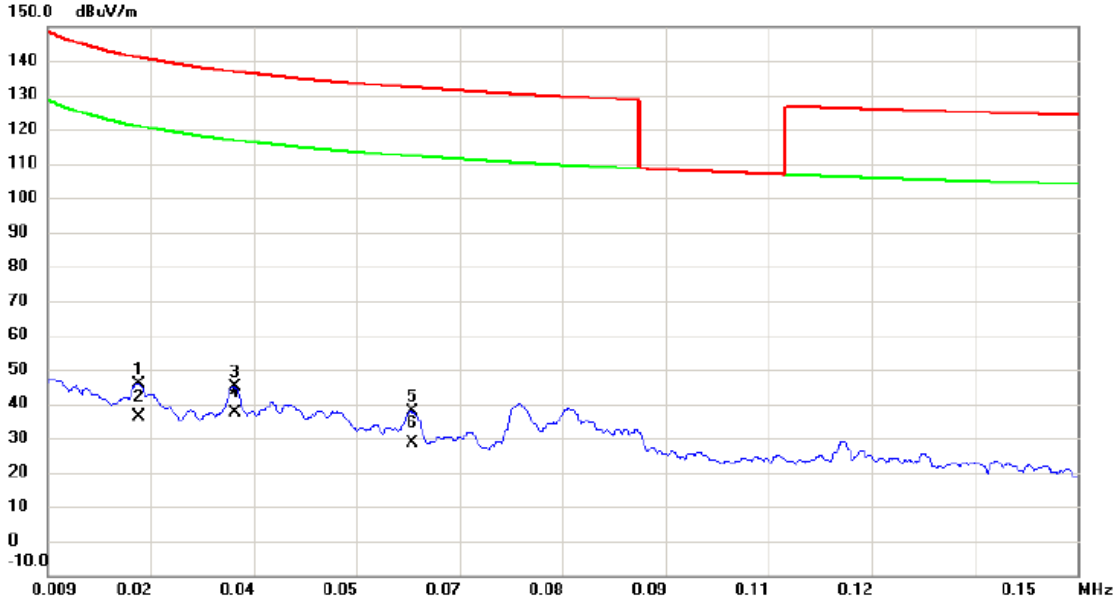
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.4634	21.74	18.41	40.15	114.28	-74.13	peak	
2		0.4634	13.84	18.41	32.25	94.28	-62.03	AVG	
3	*	1.8962	1.42	17.88	19.30	69.54	-50.24	QP	
4		3.3440	-0.14	17.36	17.22	69.54	-52.32	QP	

Test Mode:	TX Mode (Adapter: BYD)

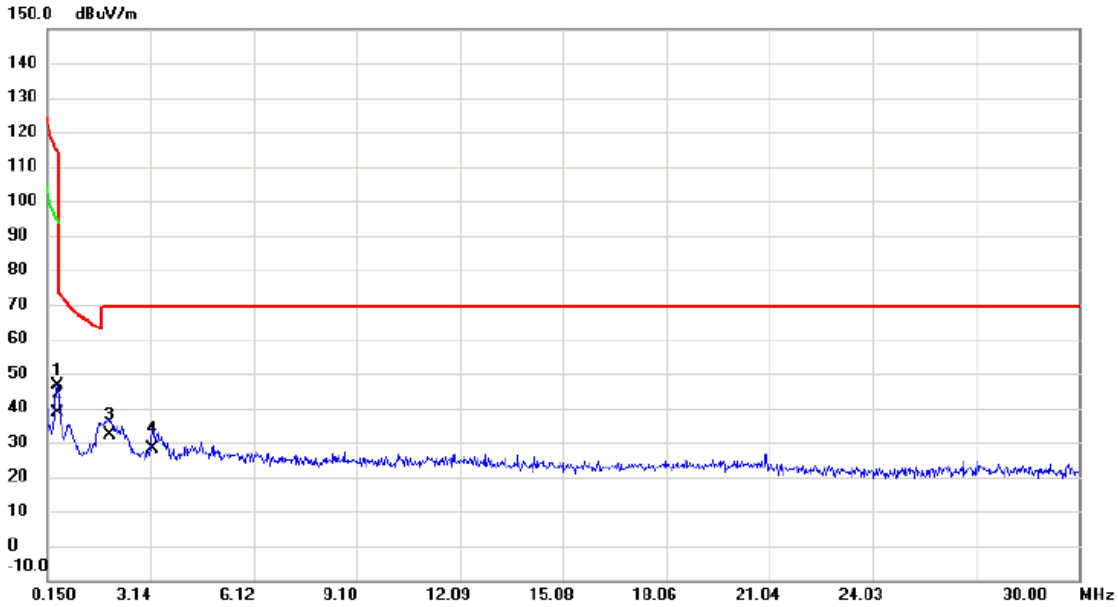
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0215	22.62	23.34	45.96	140.96	-95.00	peak	
2		0.0215	13.05	23.34	36.39	120.96	-84.57	AVG	
3		0.0346	23.40	21.72	45.12	136.82	-91.70	peak	
4	*	0.0346	15.72	21.72	37.44	116.82	-79.38	AVG	
5		0.0590	17.95	19.72	37.67	132.19	-94.52	peak	
6		0.0590	8.98	19.72	28.70	112.19	-83.49	AVG	

Test Mode:	TX Mode (Adapter: BYD)

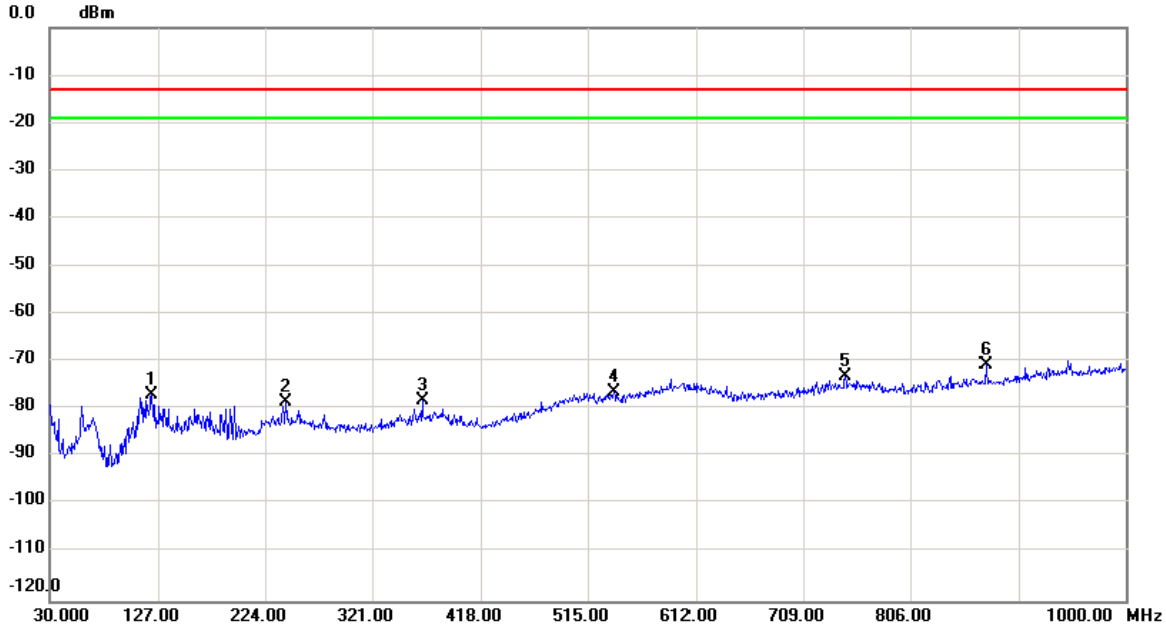
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.4485	28.29	18.43	46.72	114.57	-67.85	peak	
2		0.4485	20.22	18.43	38.65	94.57	-55.92	AVG	
3	*	1.9410	14.25	17.89	32.14	69.54	-37.40	QP	
4		3.2096	11.27	17.08	28.35	69.54	-41.19	QP	

Test Mode:	DCS1900_TX CH661_GSM

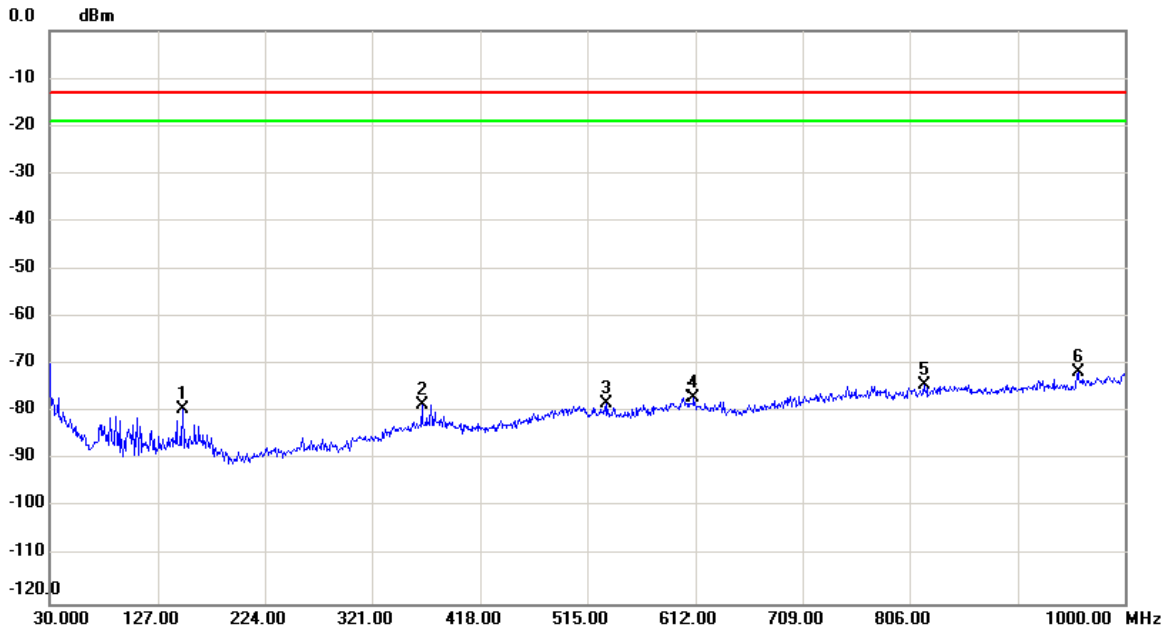
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		121.6650	-74.26	-2.71	-76.97	-13.00	-63.97	peak	
2		242.4300	-77.98	-0.52	-78.50	-13.00	-65.50	peak	
3		365.1350	-78.03	-0.23	-78.26	-13.00	-65.26	peak	
4		538.7650	-79.48	3.02	-76.46	-13.00	-63.46	peak	
5		747.3150	-78.66	5.72	-72.94	-13.00	-59.94	peak	
6	*	873.4150	-77.50	6.85	-70.65	-13.00	-57.65	peak	

Test Mode:	DCS1900_TX CH661_GSM

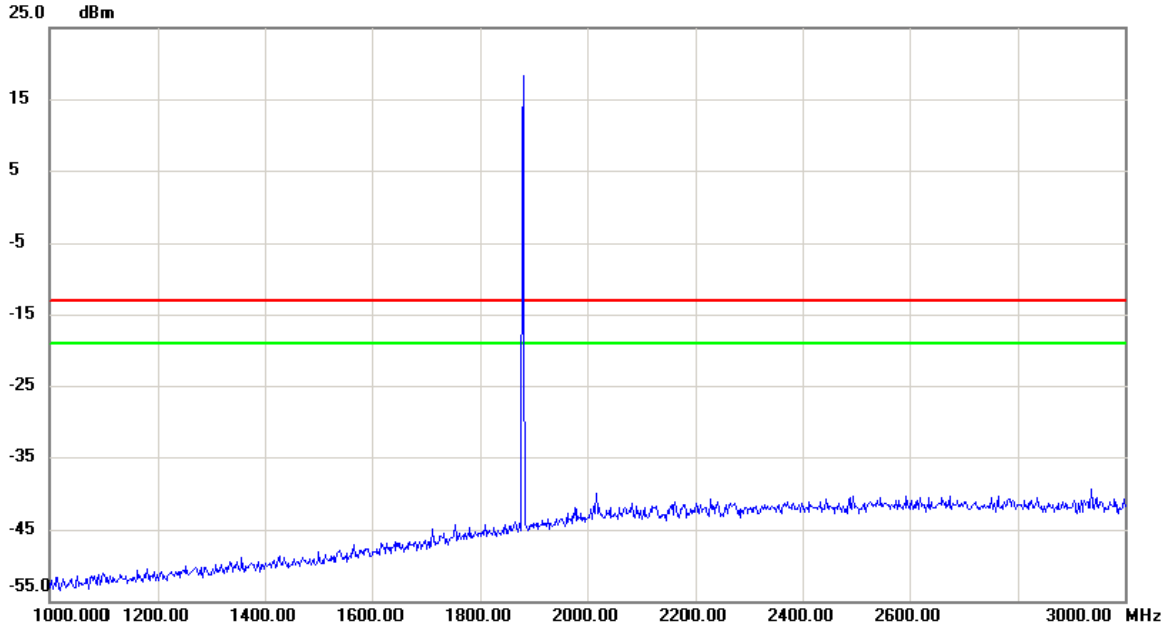
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		149.3100	-73.75	-5.67	-79.42	-13.00	-66.42	peak	
2		365.1350	-77.76	-0.73	-78.49	-13.00	-65.49	peak	
3		532.9450	-78.72	0.45	-78.27	-13.00	-65.27	peak	
4		610.5450	-79.11	2.12	-76.99	-13.00	-63.99	peak	
5		819.0950	-79.36	5.08	-74.28	-13.00	-61.28	peak	
6	*	957.8050	-78.65	7.23	-71.42	-13.00	-58.42	peak	

Test Mode:	DCS1900_TX CH661_GSM

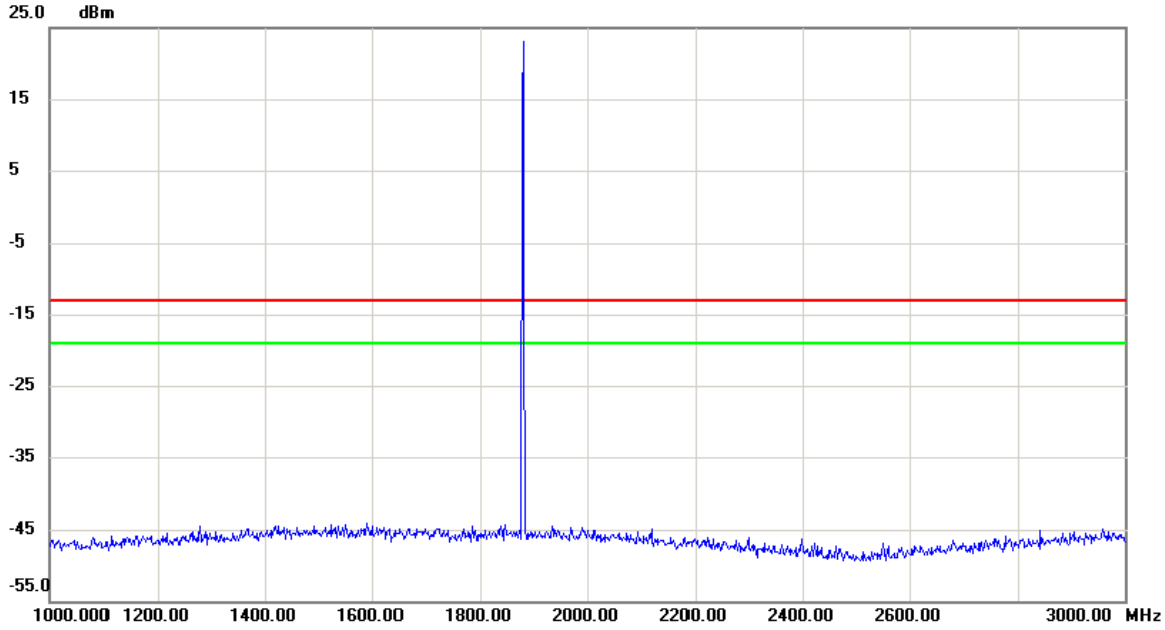
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_GSM

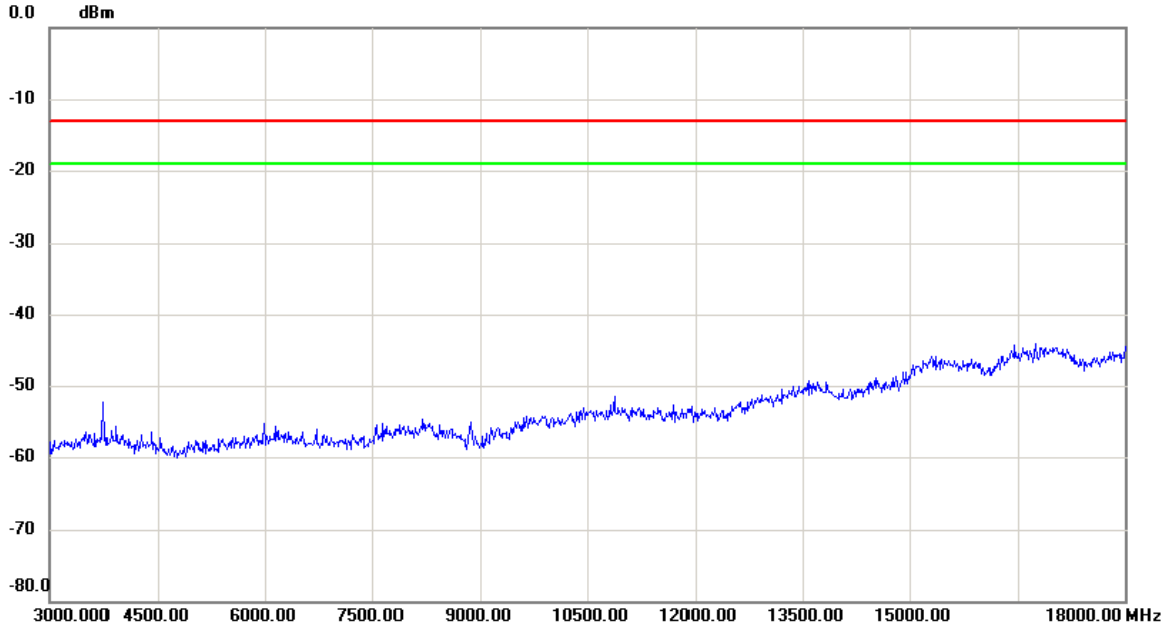
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_GSM

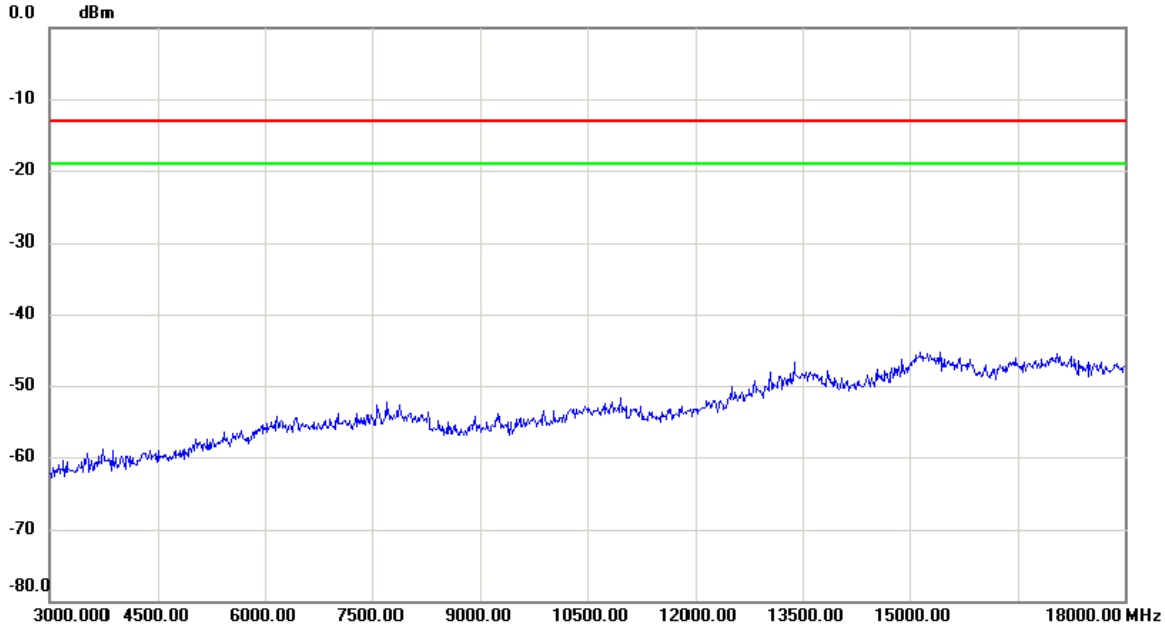
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_GSM

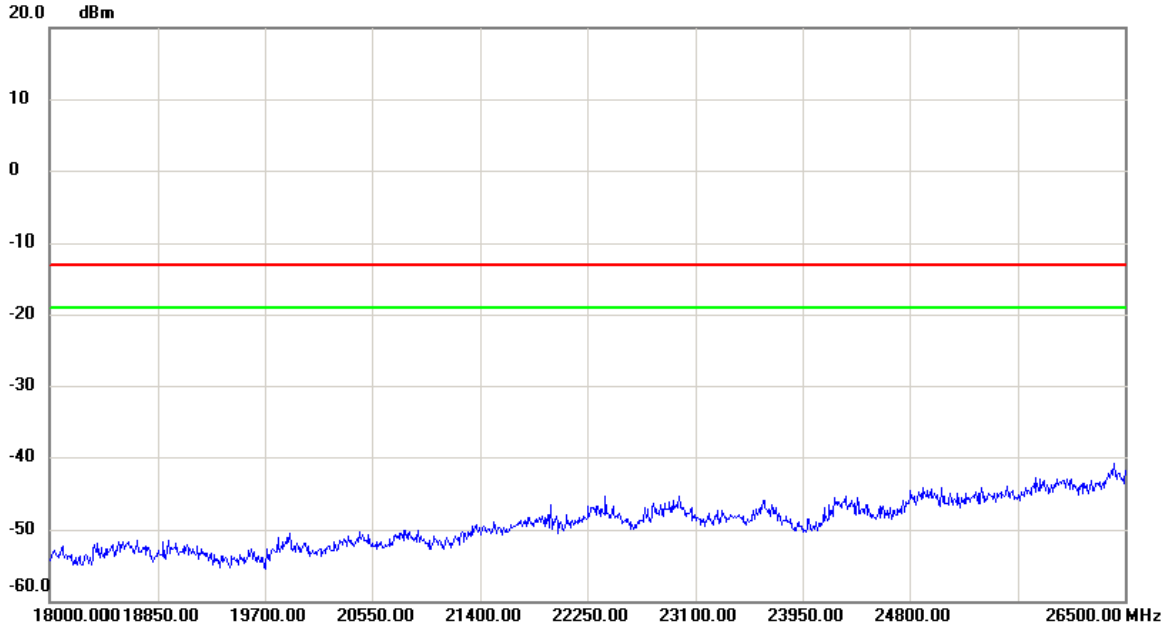
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_GSM

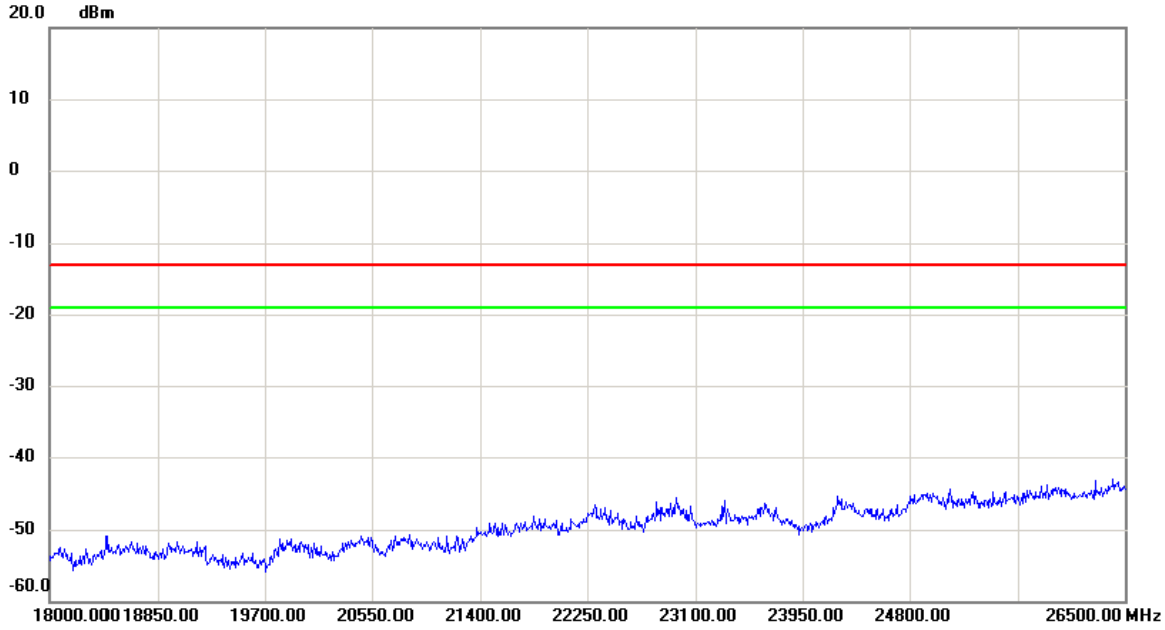
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_GSM

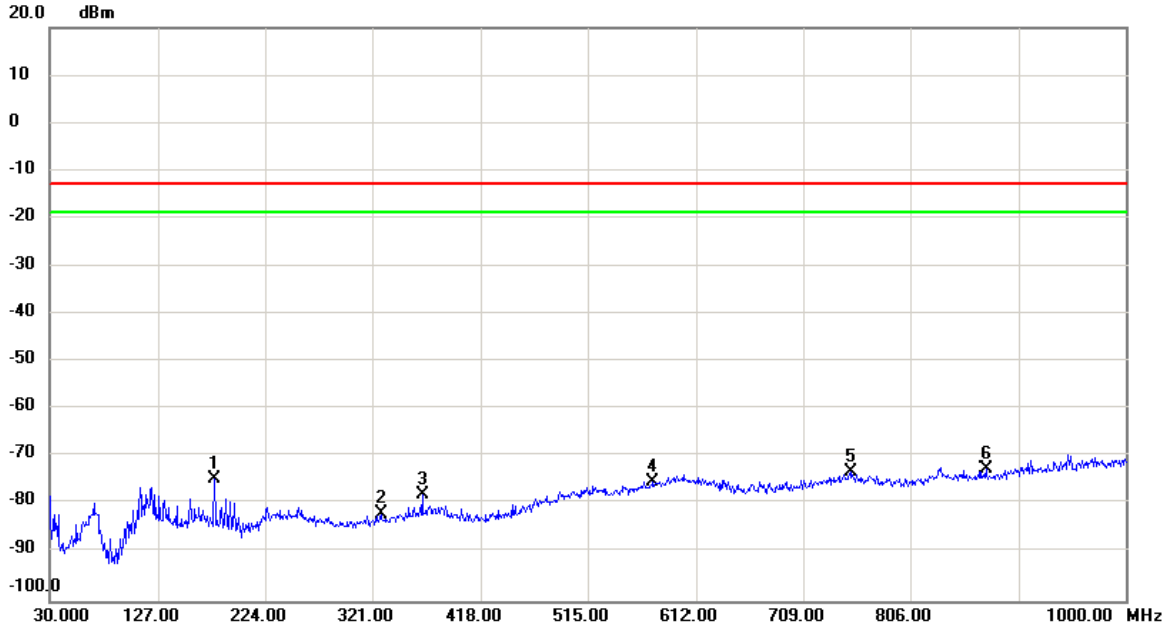
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_EDGE

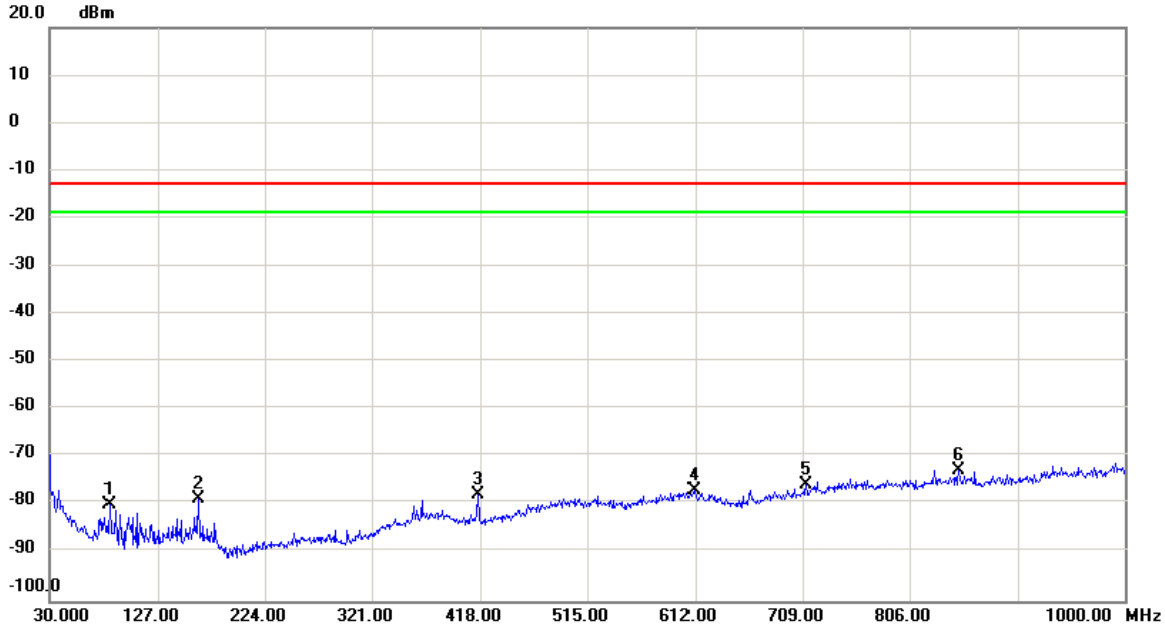
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		177.9250	-71.67	-2.93	-74.60	-13.00	-61.60	peak	
2		328.7600	-80.24	-1.56	-81.80	-13.00	-68.80	peak	
3		365.1350	-77.87	-0.23	-78.10	-13.00	-65.10	peak	
4		574.1700	-79.53	4.34	-75.19	-13.00	-62.19	peak	
5		752.1650	-79.06	5.77	-73.29	-13.00	-60.29	peak	
6	*	873.4150	-79.33	6.85	-72.48	-13.00	-59.48	peak	

Test Mode:	DCS1900_TX CH661_EDGE

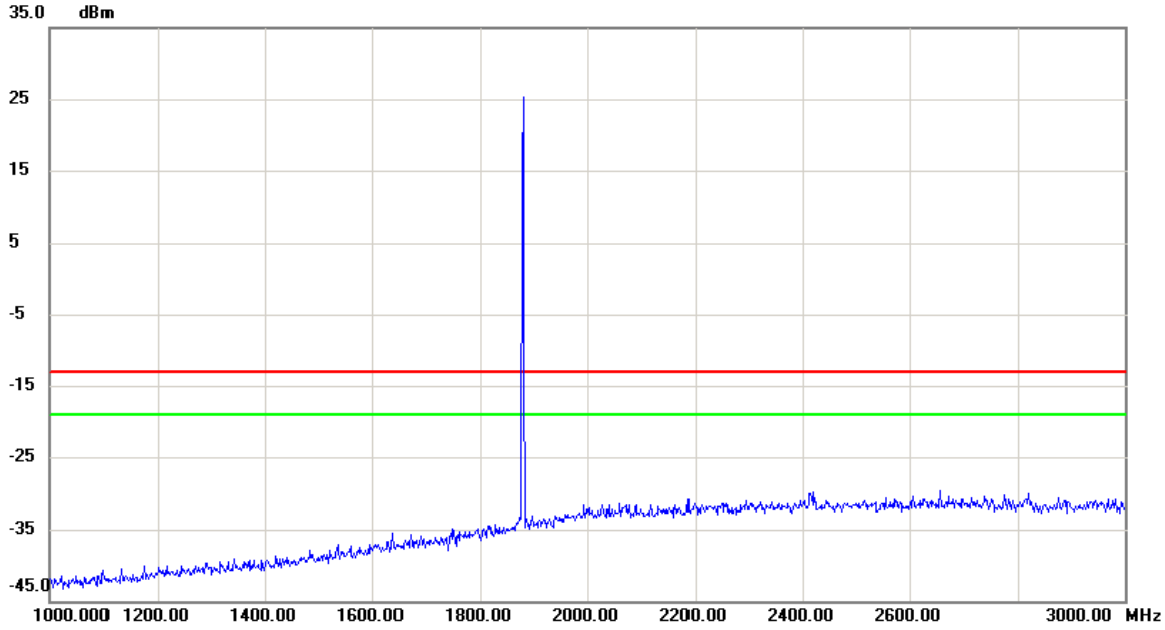
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		83.8350	-71.57	-8.61	-80.18	-13.00	-67.18	peak	
2		163.8600	-74.23	-4.66	-78.89	-13.00	-65.89	peak	
3		416.5450	-75.84	-2.20	-78.04	-13.00	-65.04	peak	
4		611.5150	-79.13	2.08	-77.05	-13.00	-64.05	peak	
5		712.3950	-78.83	3.05	-75.78	-13.00	-62.78	peak	
6	*	851.1050	-78.65	5.88	-72.77	-13.00	-59.77	peak	

Test Mode:	DCS1900_TX CH661_EDGE

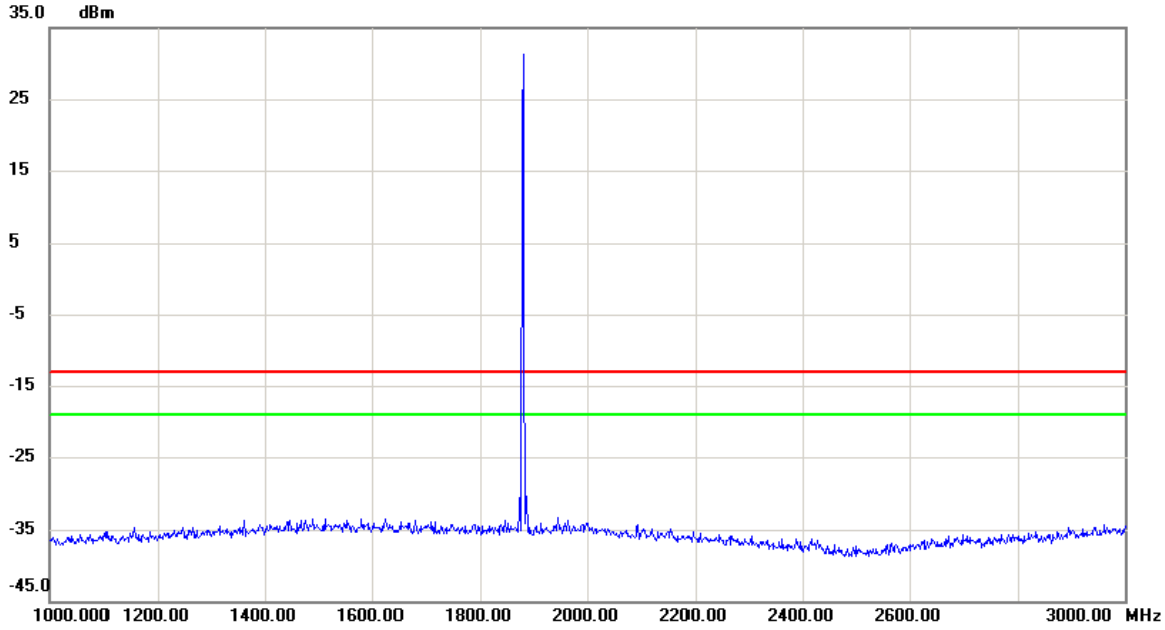
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_EDGE

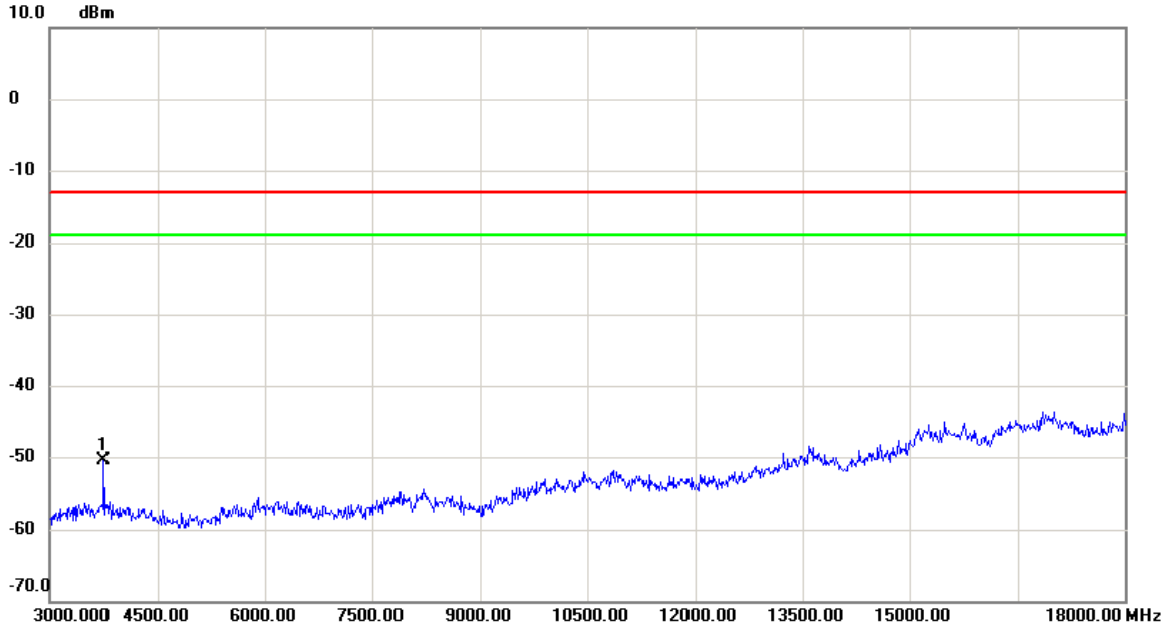
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_EDGE

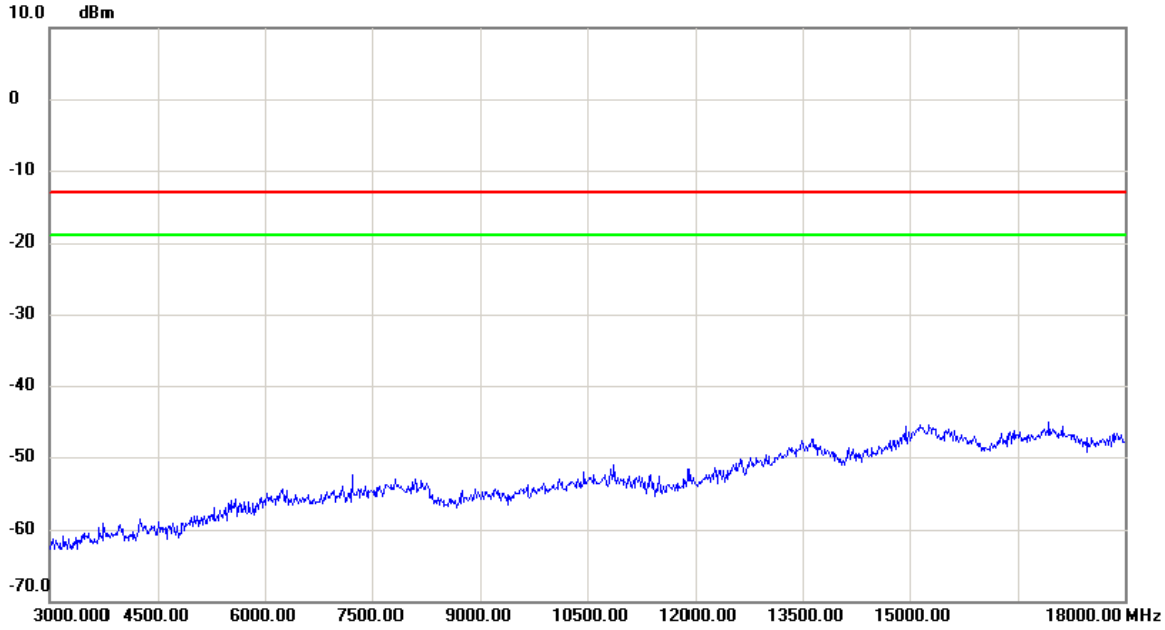
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3757.500	-64.96	14.51	-50.45	-13.00	-37.45	peak	

Test Mode:	DCS1900_TX CH661_EDGE

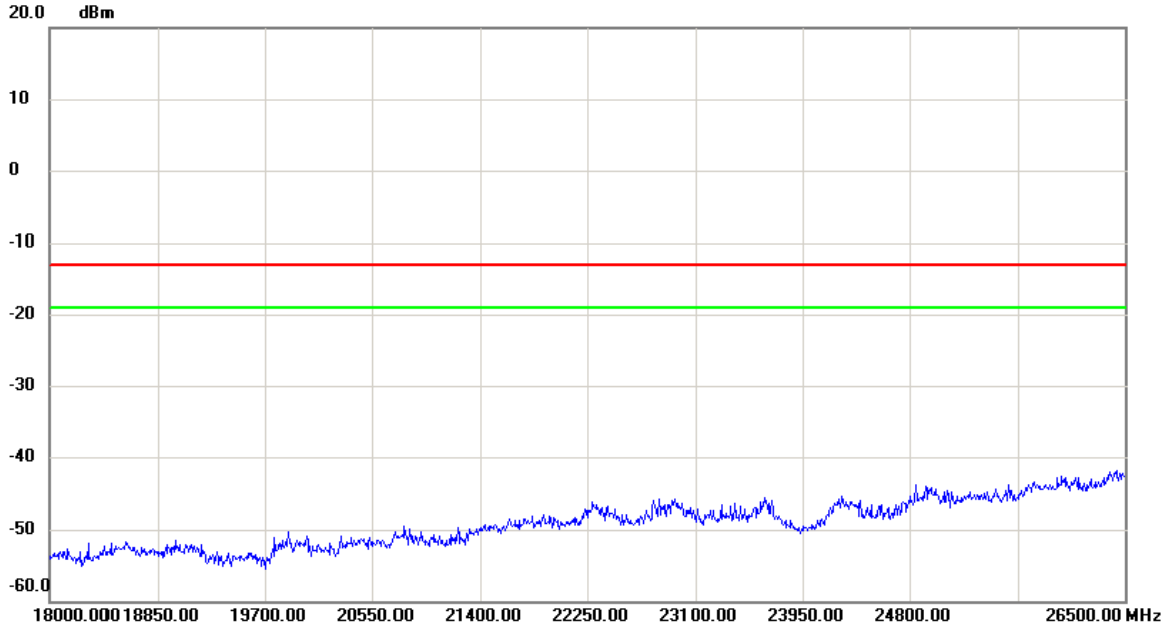
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_EDGE

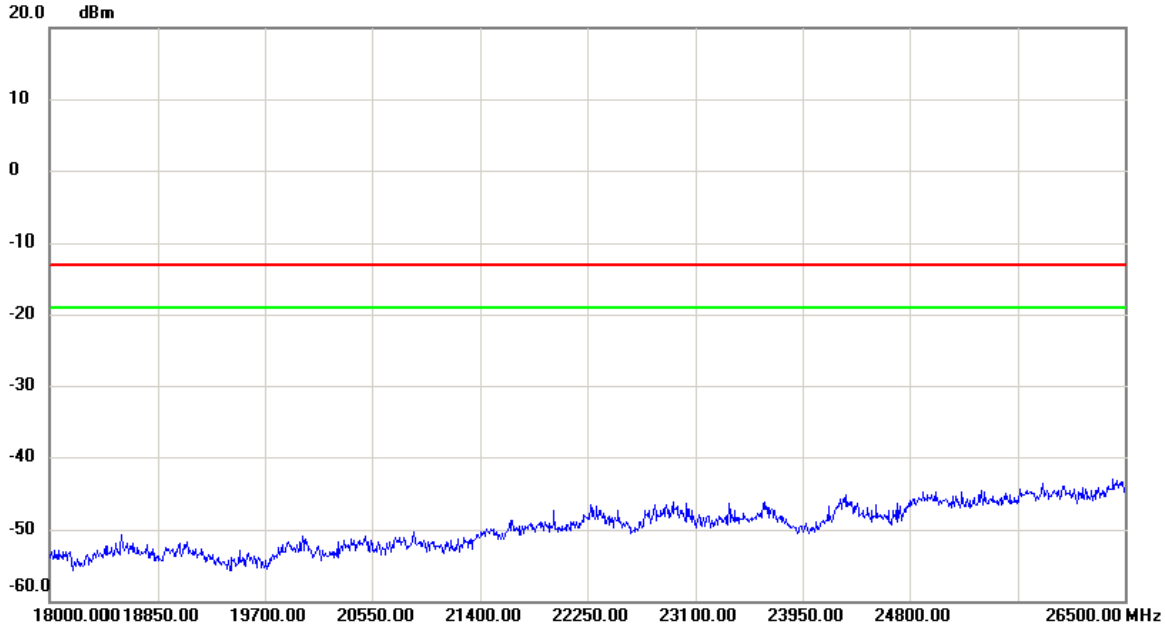
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	DCS1900_TX CH661_EDGE

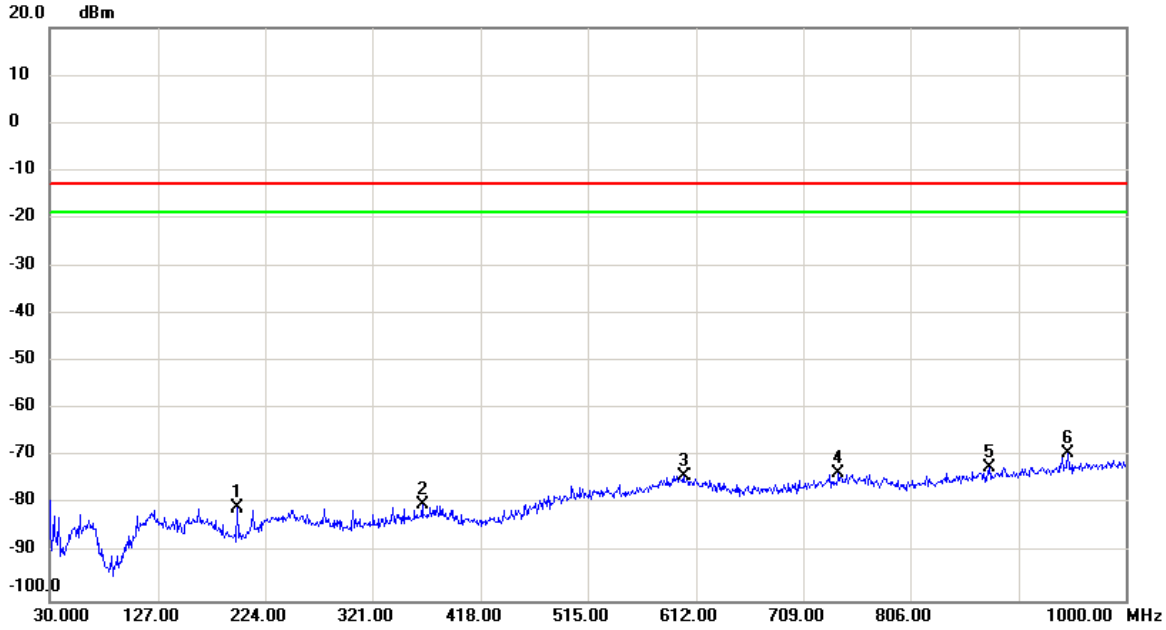
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_TX CH9400

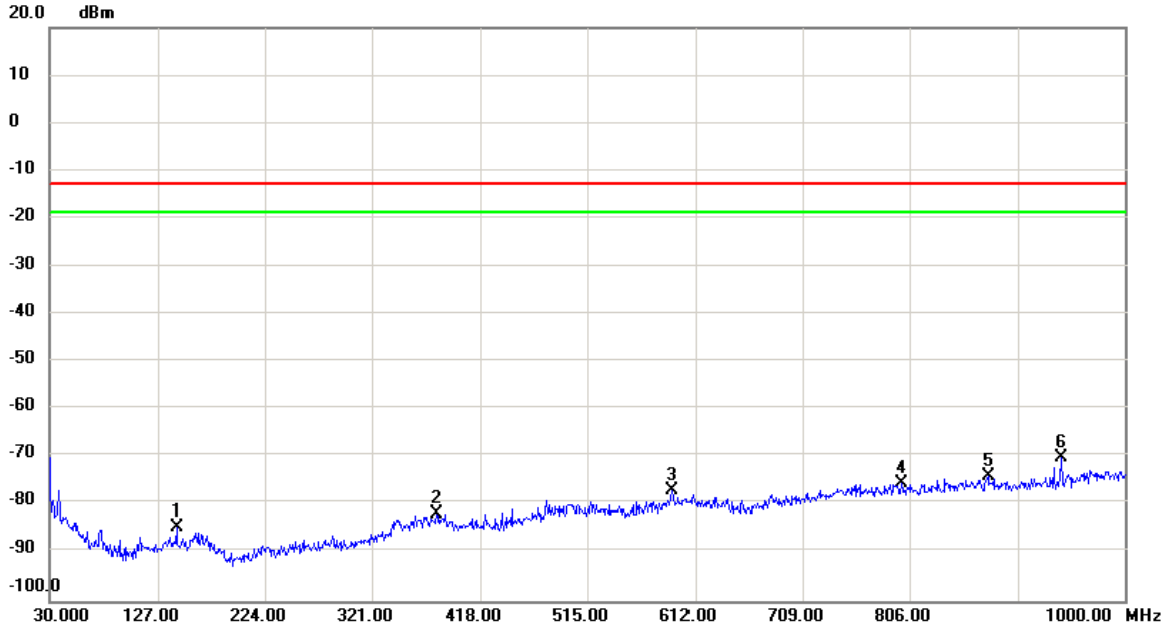
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		199.2650	-75.46	-5.12	-80.58	-13.00	-67.58	peak	
2		365.1350	-79.92	-0.23	-80.15	-13.00	-67.15	peak	
3		601.8150	-79.58	5.53	-74.05	-13.00	-61.05	peak	
4		741.0100	-79.07	5.49	-73.58	-13.00	-60.58	peak	
5		875.8400	-79.05	6.92	-72.13	-13.00	-59.13	peak	
6	*	947.6200	-78.07	8.75	-69.32	-13.00	-56.32	peak	

Test Mode:	WCDMA Band II_TX CH9400

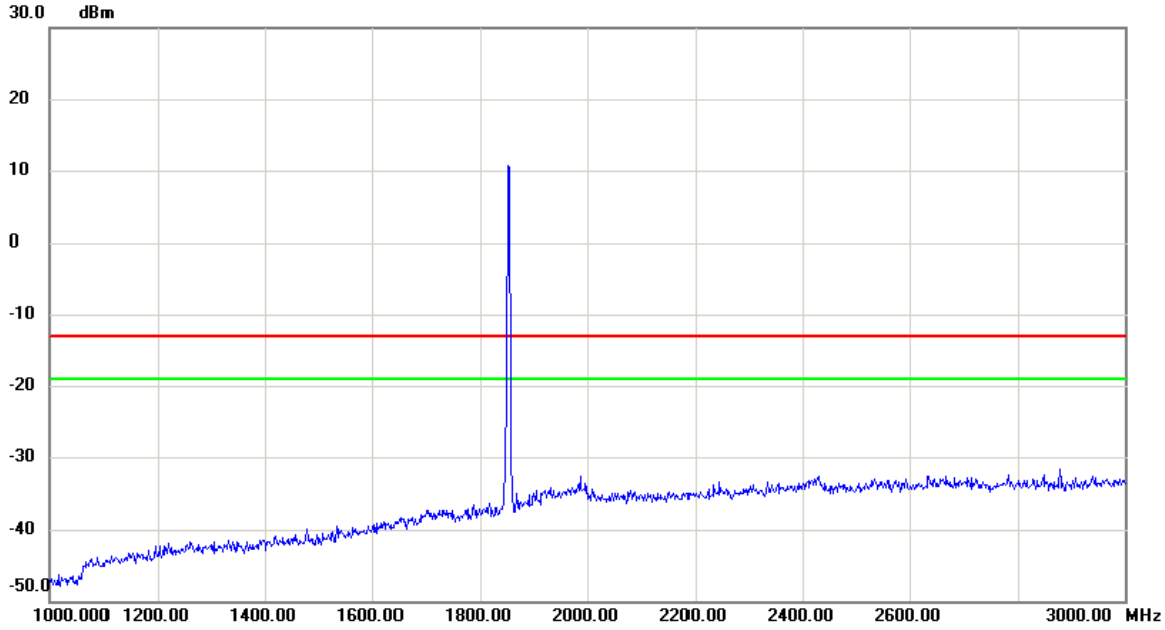
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		143.9750	-79.18	-5.29	-84.47	-13.00	-71.47	peak	
2		378.2300	-81.27	-0.55	-81.82	-13.00	-68.82	peak	
3		591.6300	-79.26	2.14	-77.12	-13.00	-64.12	peak	
4		798.2400	-80.13	4.57	-75.56	-13.00	-62.56	peak	
5		875.8400	-79.81	5.90	-73.91	-13.00	-60.91	peak	
6	*	941.8000	-76.89	6.81	-70.08	-13.00	-57.08	peak	

Test Mode:	WCDMA Band II_TX CH9400

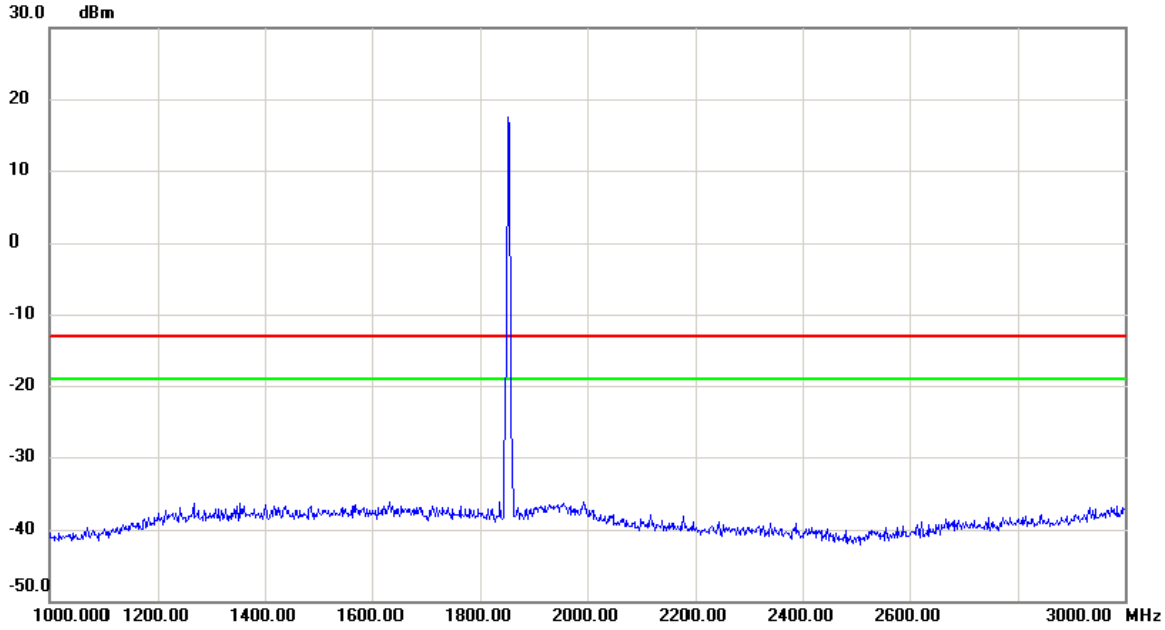
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_TX CH9400

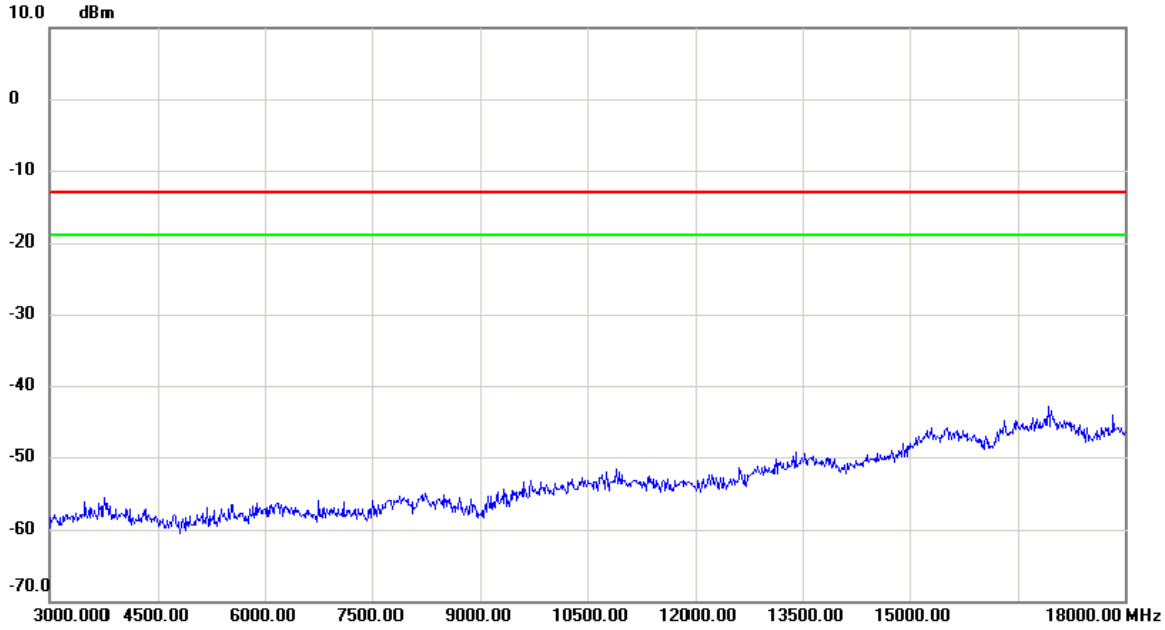
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_TX CH9400

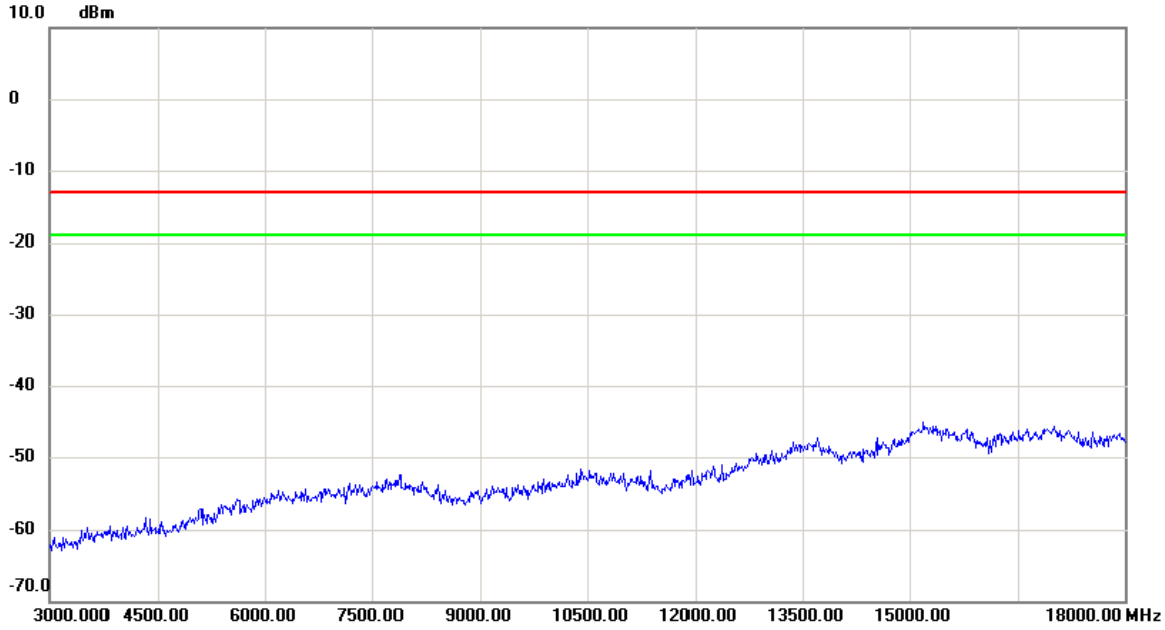
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_TX CH9400

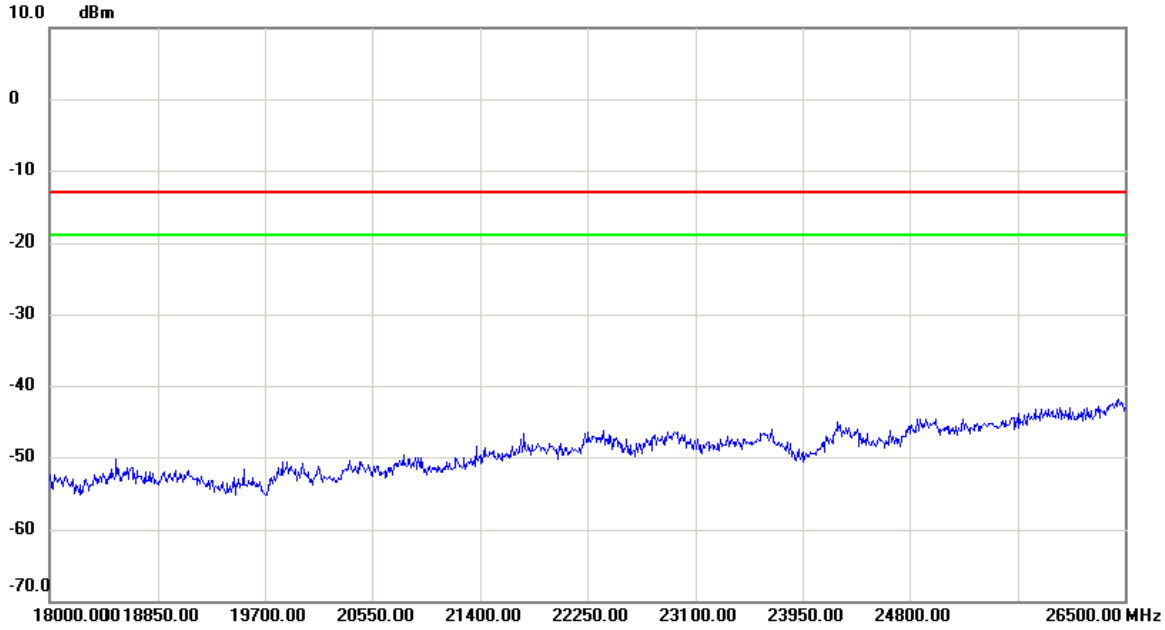
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_TX CH9400

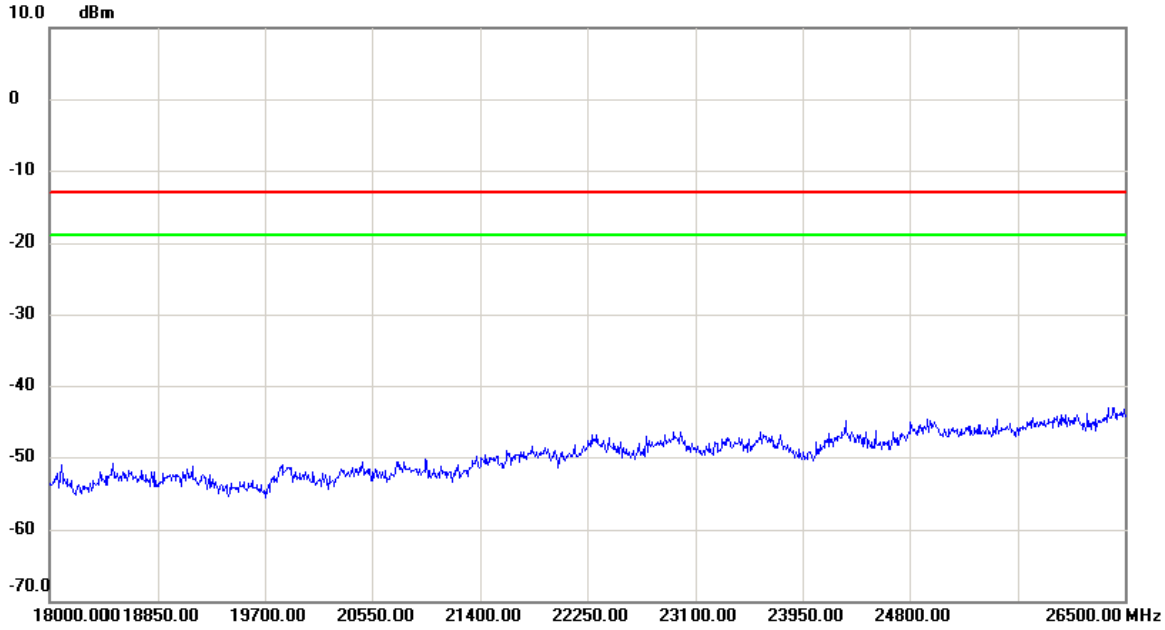
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_TX CH9400

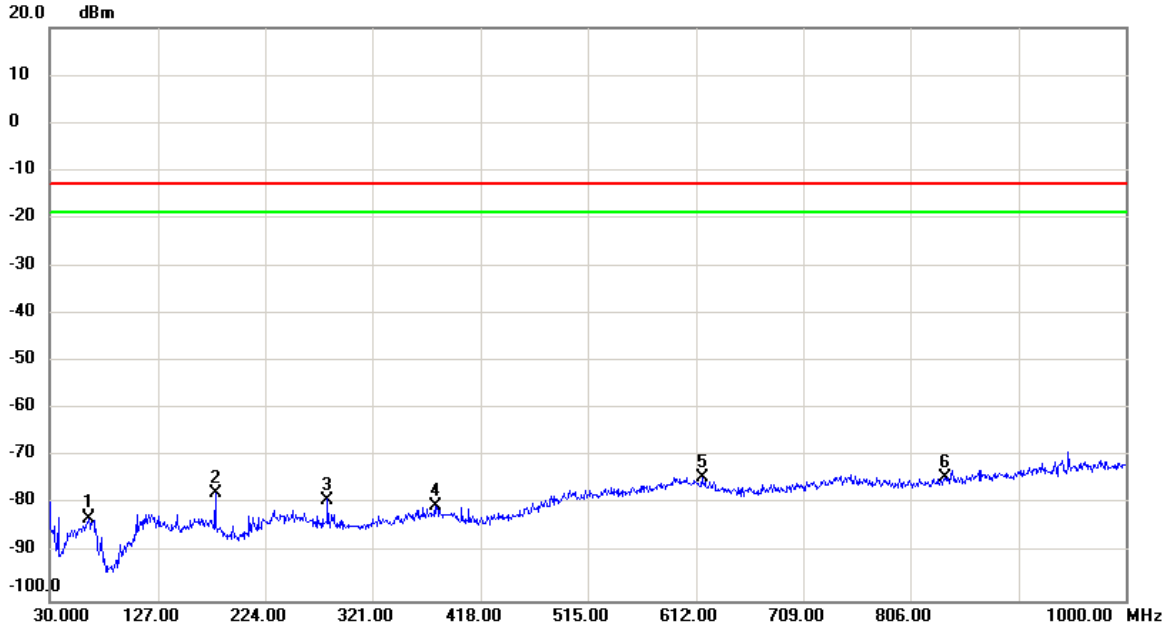
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSDPA_TX CH9400

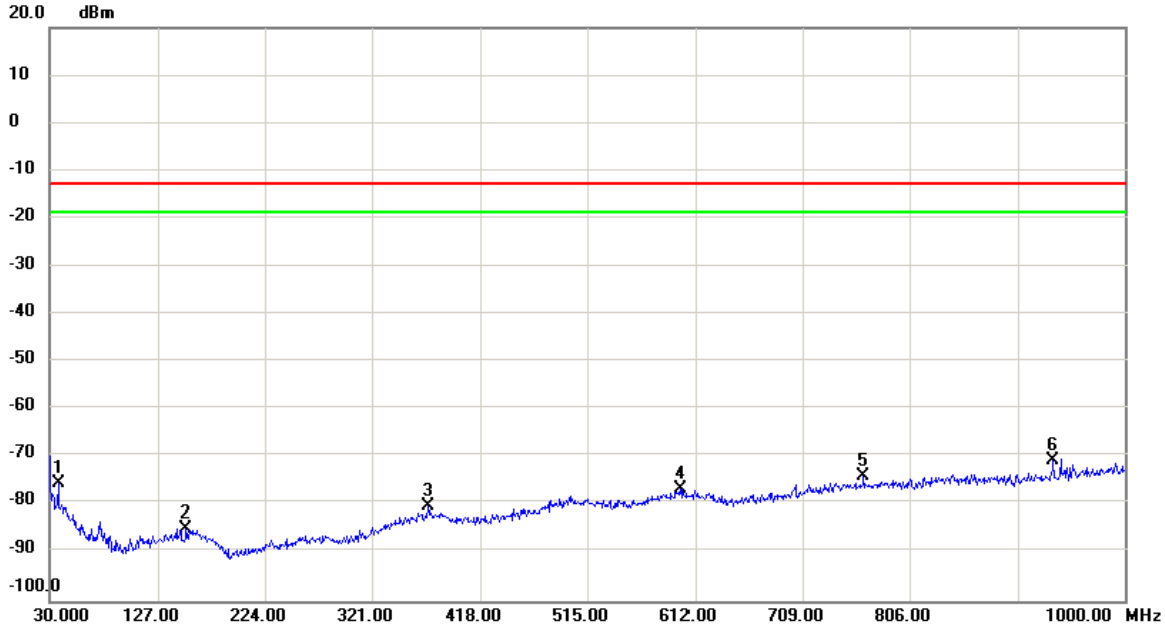
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		64.9200	-80.05	-2.81	-82.86	-13.00	-69.86	peak	
2		178.8950	-74.68	-3.07	-77.75	-13.00	-64.75	peak	
3		280.7450	-77.42	-1.58	-79.00	-13.00	-66.00	peak	
4		376.7750	-80.15	-0.07	-80.22	-13.00	-67.22	peak	
5		617.3350	-79.10	4.78	-74.32	-13.00	-61.32	peak	
6	*	837.0400	-80.07	5.83	-74.24	-13.00	-61.24	peak	

Test Mode:	WCDMA Band II_HSDPA _TX CH9400

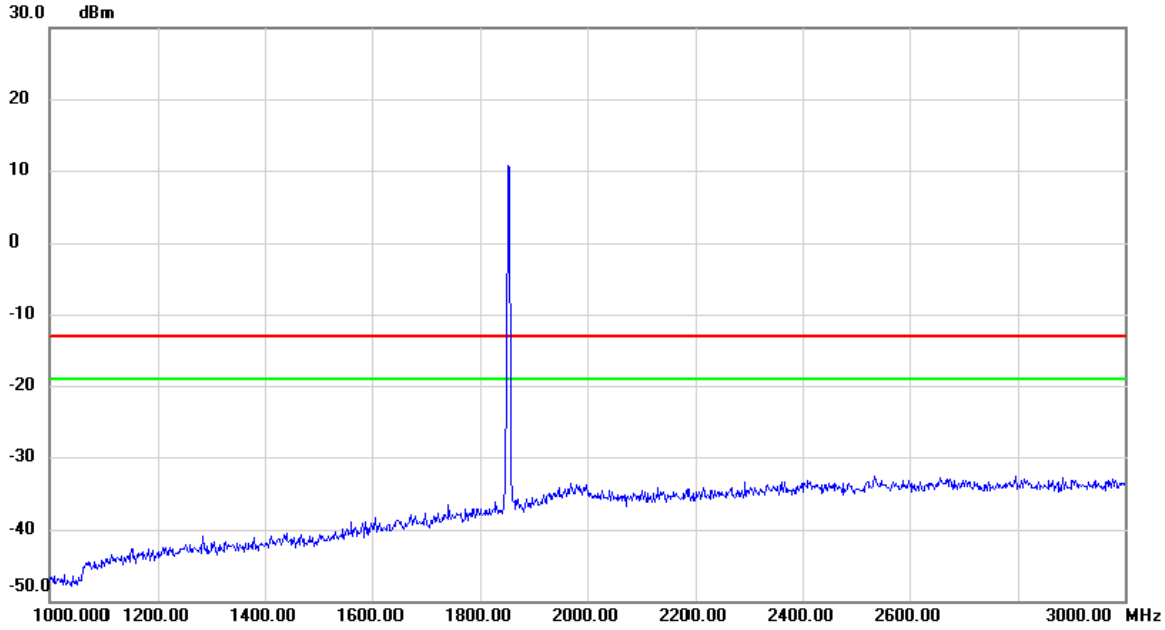
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		38.2450	-75.92	0.51	-75.41	-13.00	-62.41	peak	
2		152.2200	-79.61	-5.38	-84.99	-13.00	-71.99	peak	
3		370.4700	-79.75	-0.66	-80.41	-13.00	-67.41	peak	
4		599.8750	-79.18	2.53	-76.65	-13.00	-63.65	peak	
5		764.2900	-78.63	4.47	-74.16	-13.00	-61.16	peak	
6	*	935.0100	-77.29	6.67	-70.62	-13.00	-57.62	peak	

Test Mode:	WCDMA Band II_HSDPA _TX CH9400

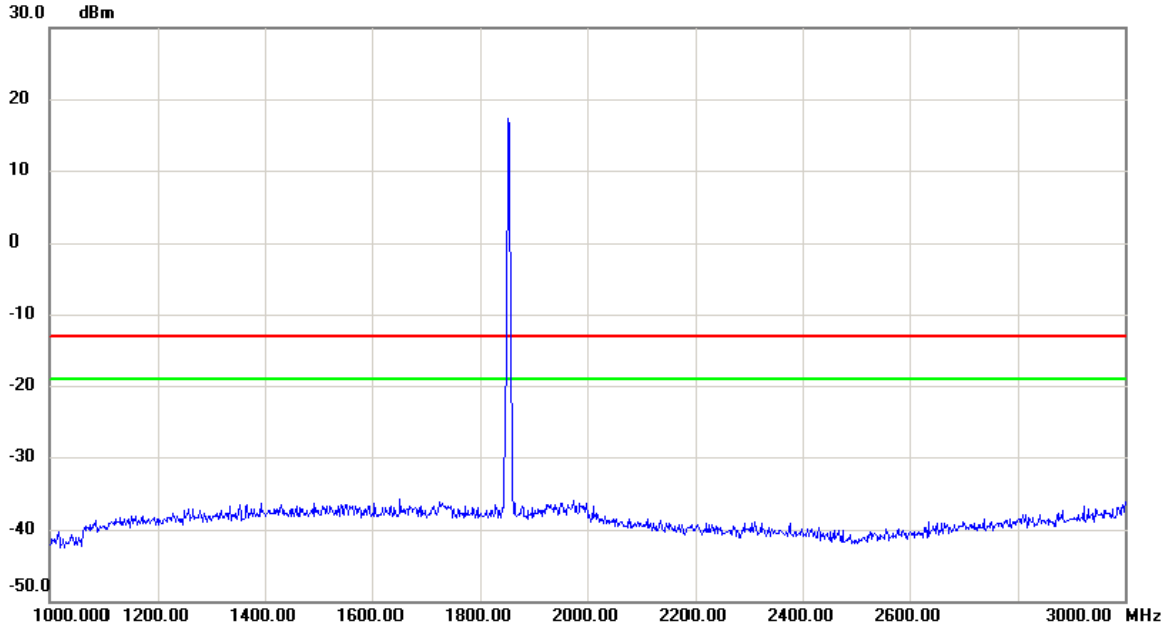
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSDPA _TX CH9400

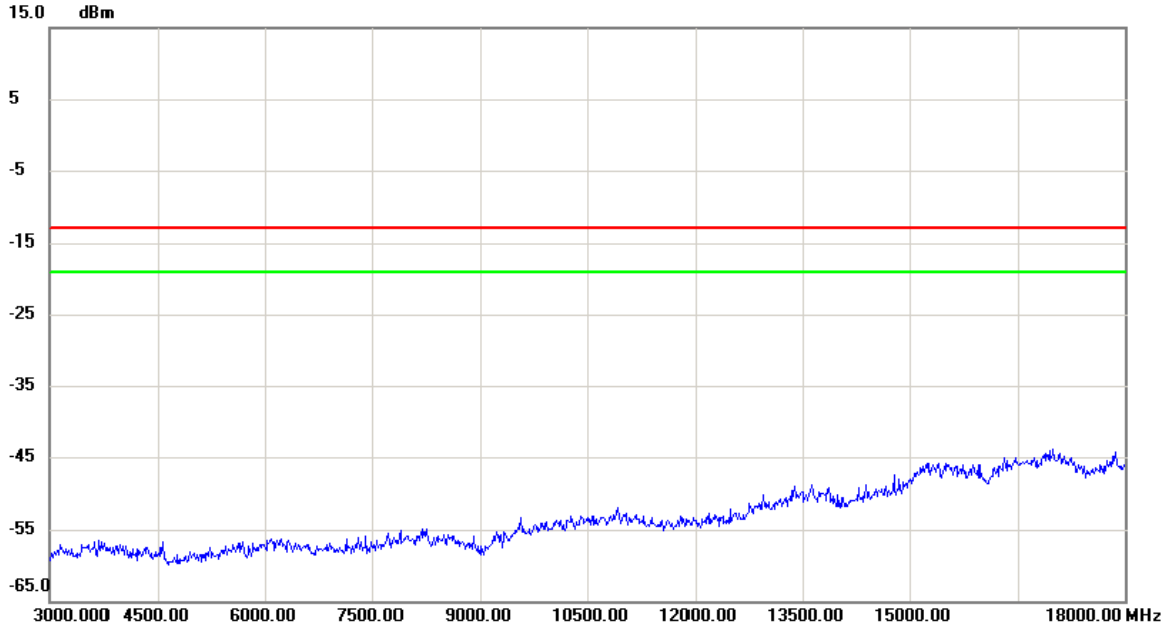
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSDPA _TX CH9400

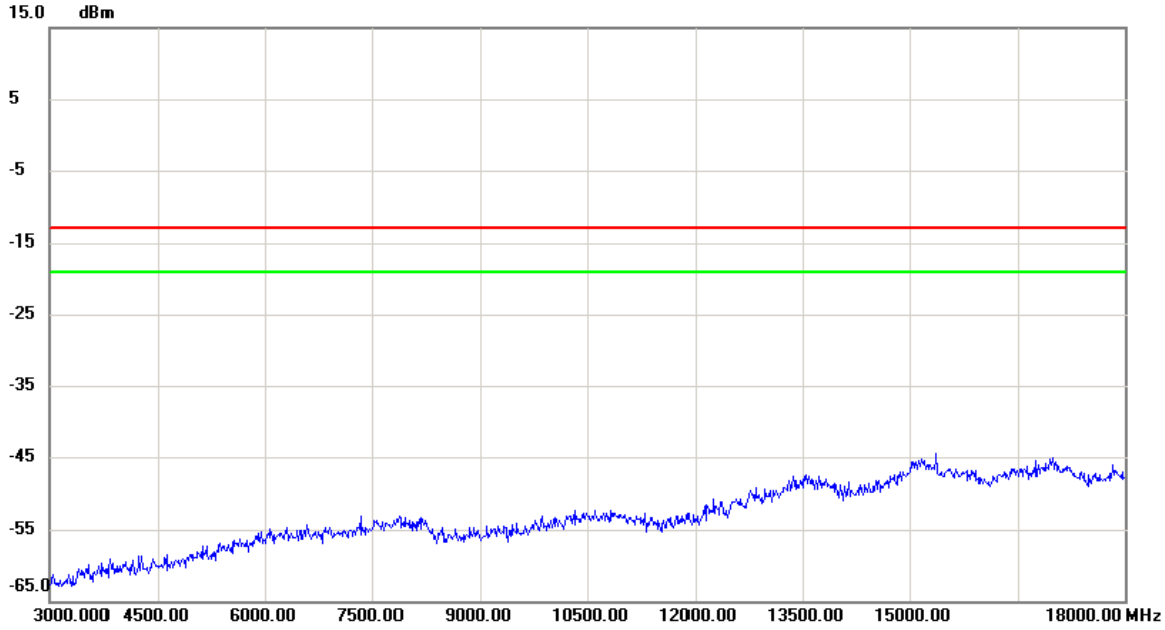
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSDPA _TX CH9400

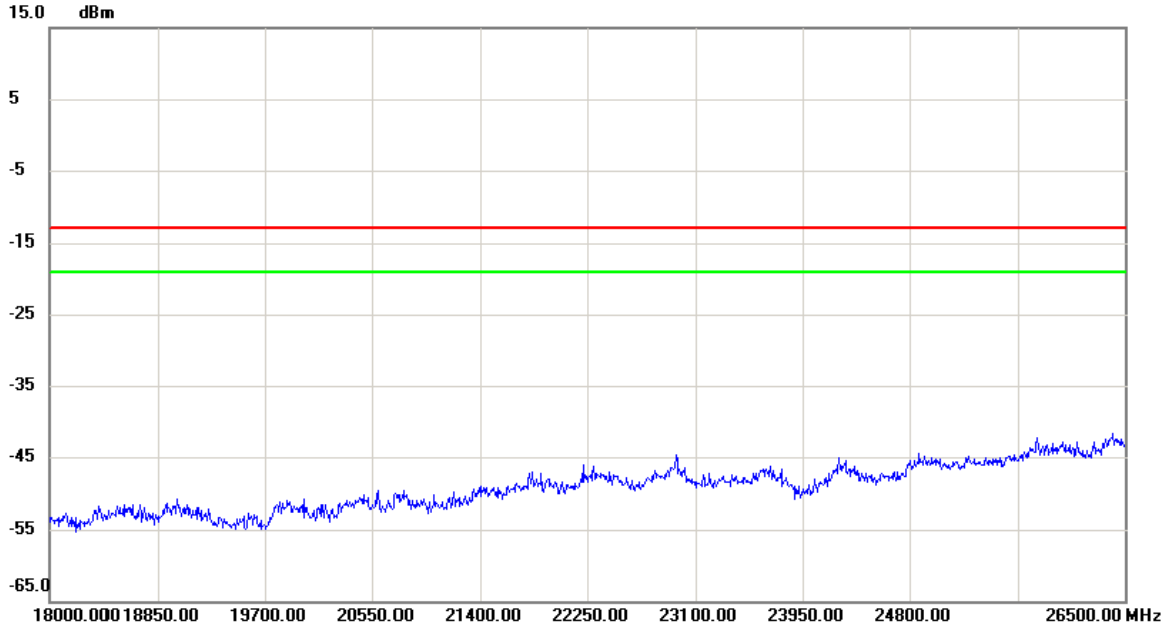
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSDPA _TX CH9400

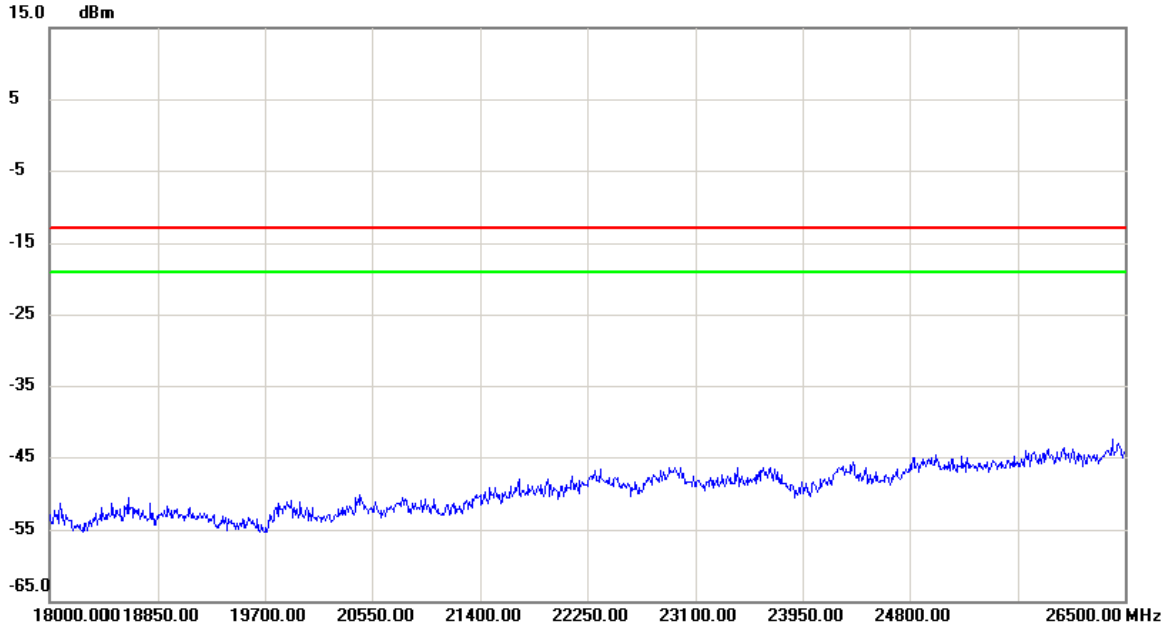
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSDPA_TX CH9400

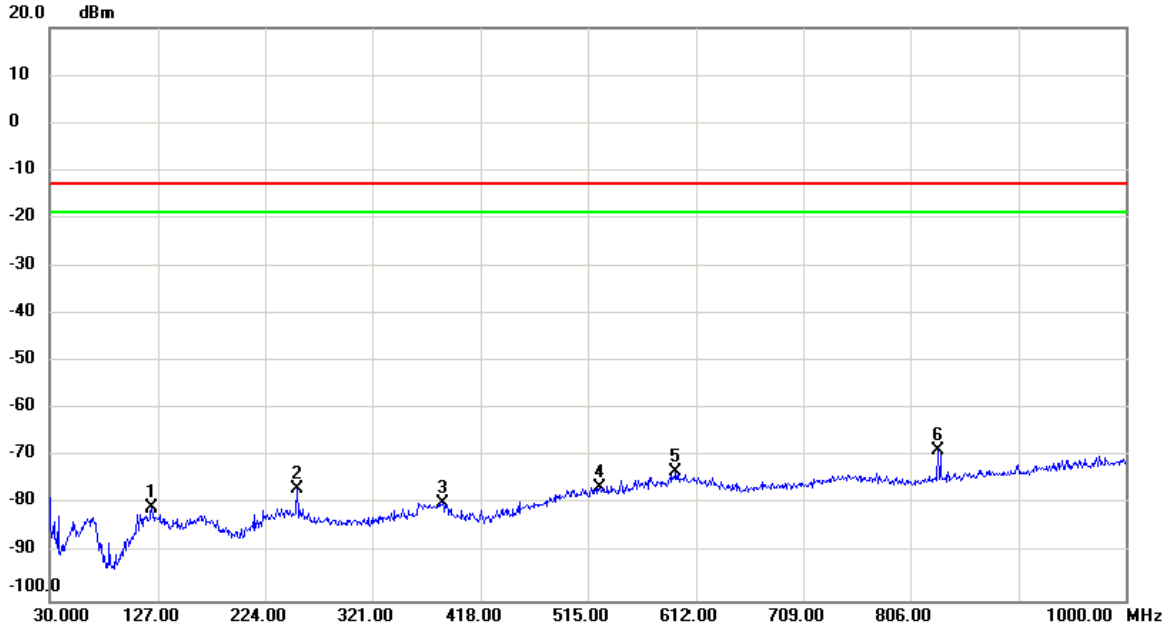
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSUPA_TX CH9400

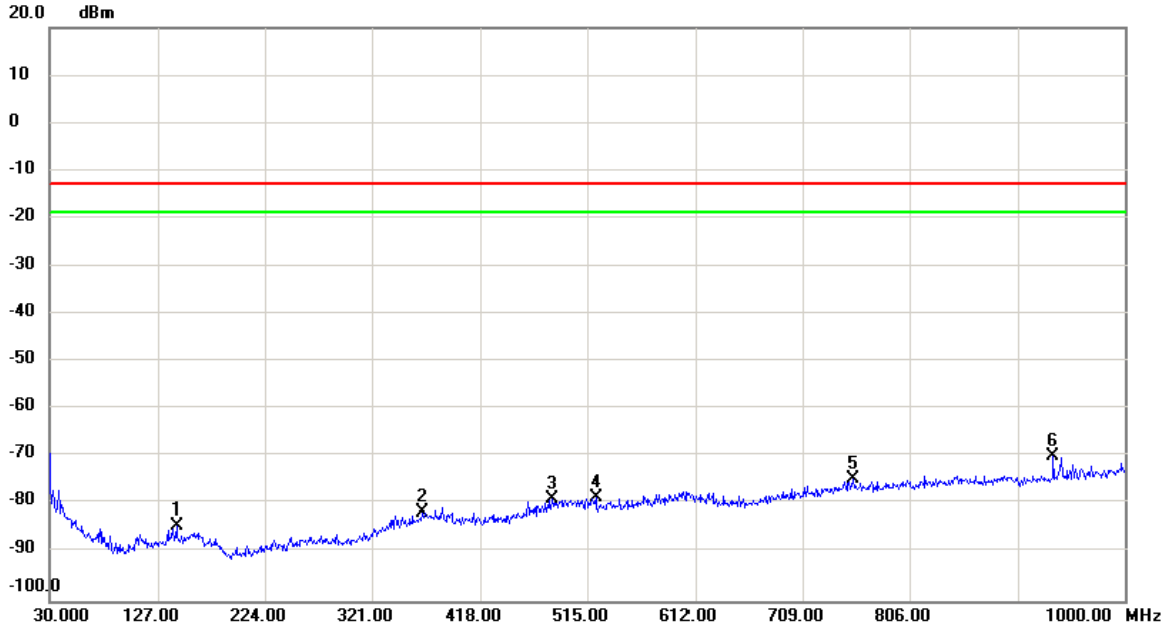
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		121.6650	-77.96	-2.71	-80.67	-13.00	-67.67	peak	
2		253.5850	-76.10	-0.53	-76.63	-13.00	-63.63	peak	
3		383.0800	-79.47	-0.26	-79.73	-13.00	-66.73	peak	
4		526.1550	-79.21	2.88	-76.33	-13.00	-63.33	peak	
5		595.0250	-78.48	5.37	-73.11	-13.00	-60.11	peak	
6	*	830.7350	-74.24	5.66	-68.58	-13.00	-55.58	peak	

Test Mode:	WCDMA Band II_HSUPA_TX CH9400

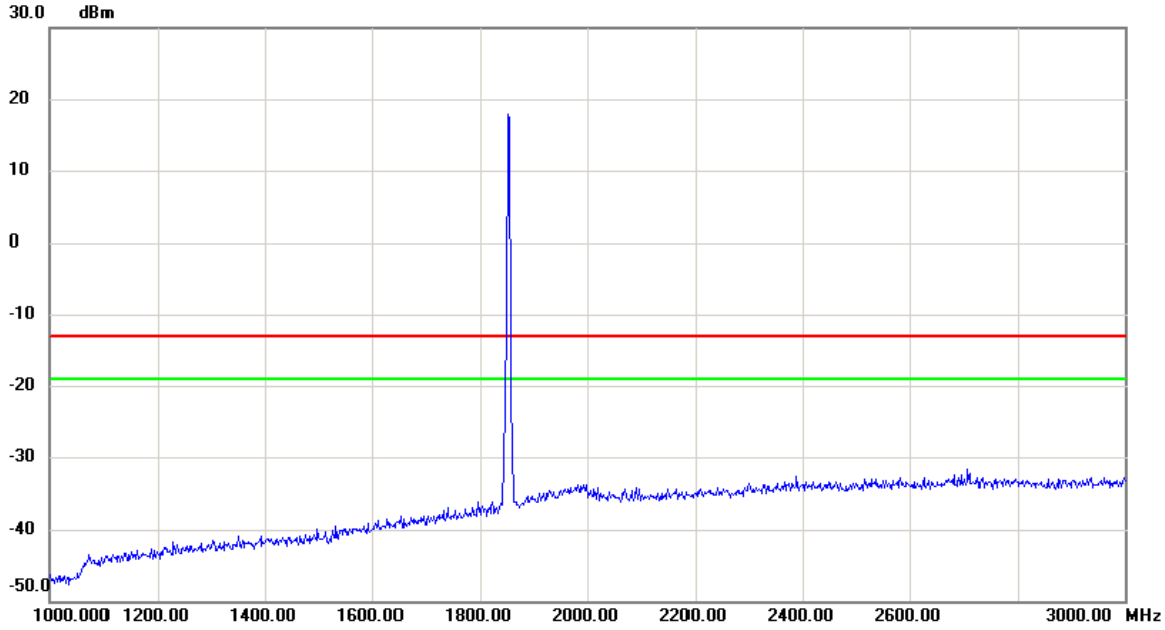
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		143.9750	-79.00	-5.29	-84.29	-13.00	-71.29	peak	
2		365.1350	-80.83	-0.73	-81.56	-13.00	-68.56	peak	
3		482.9900	-79.36	0.38	-78.98	-13.00	-65.98	peak	
4		523.2450	-79.10	0.60	-78.50	-13.00	-65.50	peak	
5		755.0750	-79.18	4.44	-74.74	-13.00	-61.74	peak	
6	*	935.0100	-76.57	6.67	-69.90	-13.00	-56.90	peak	

Test Mode:	WCDMA Band II_HSUPA_TX CH9400

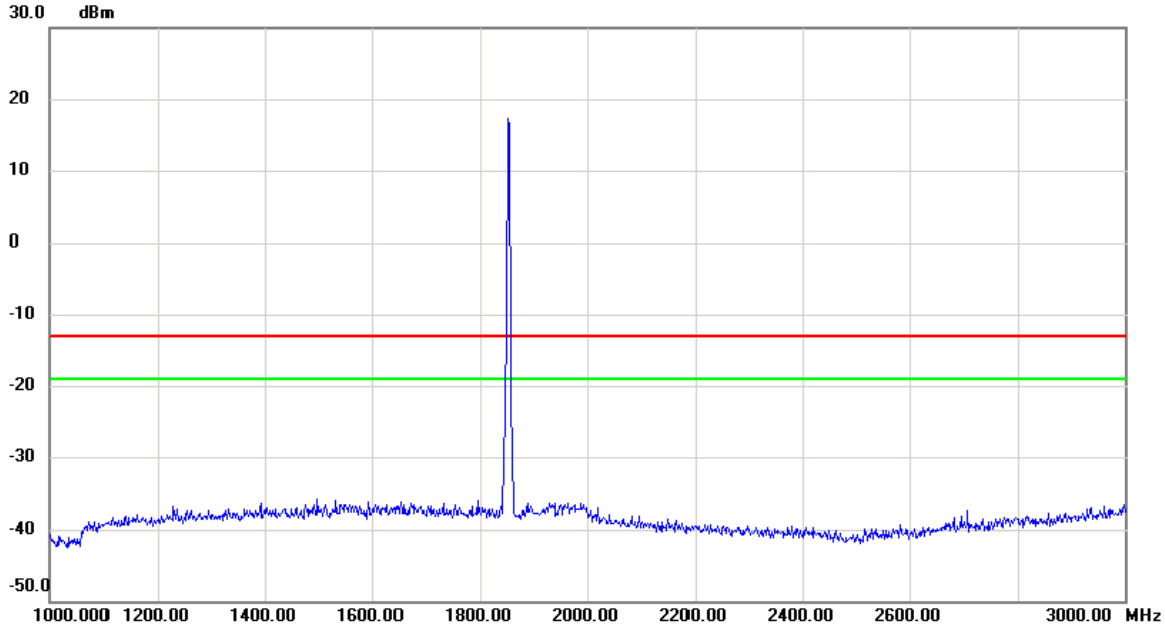
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSUPA_TX CH9400

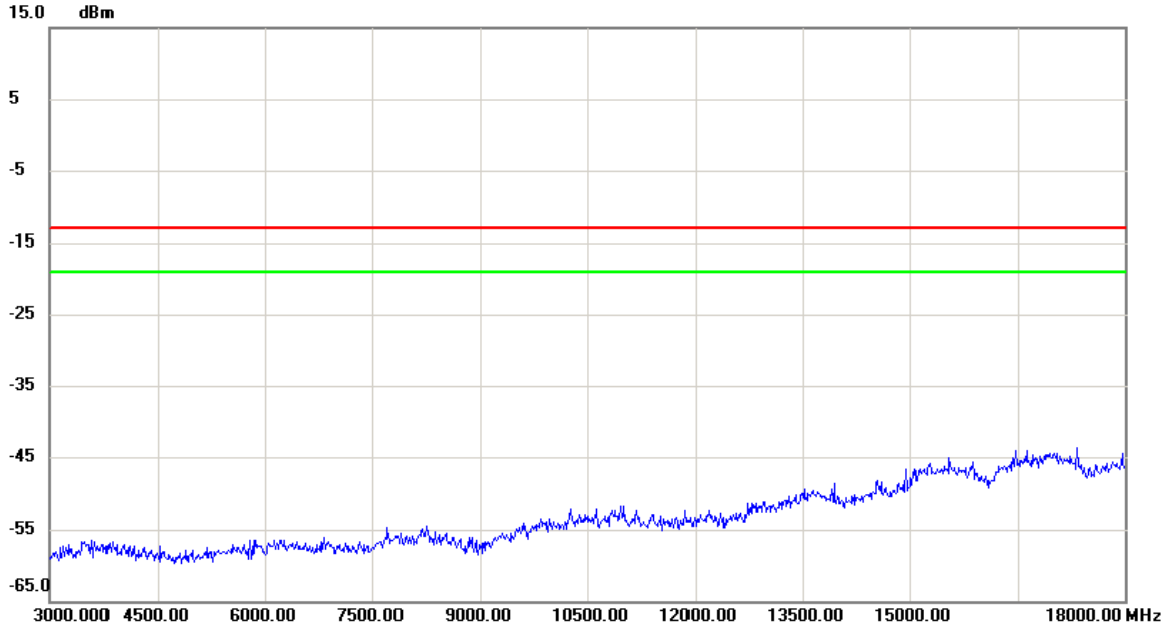
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSUPA_TX CH9400

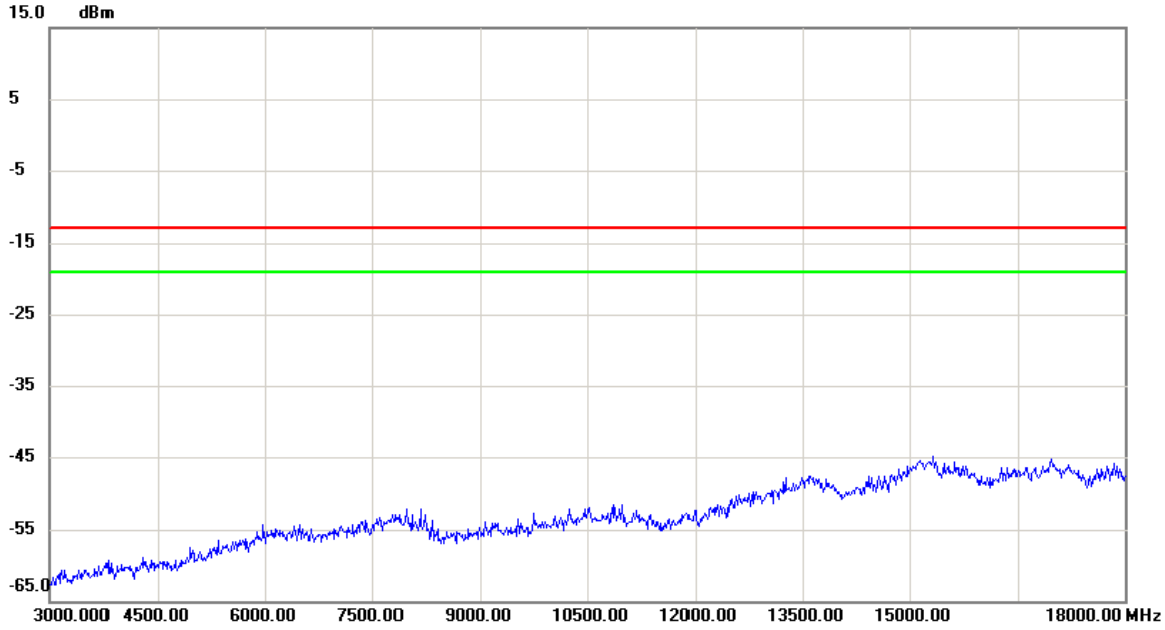
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSUPA_TX CH9400

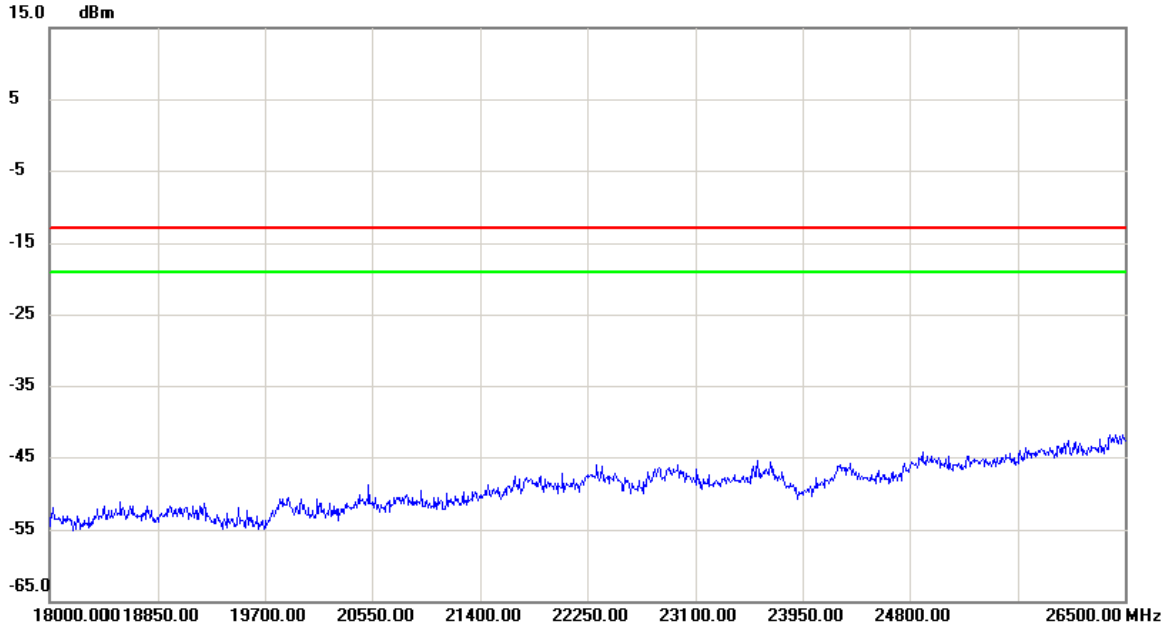
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSUPA_TX CH9400

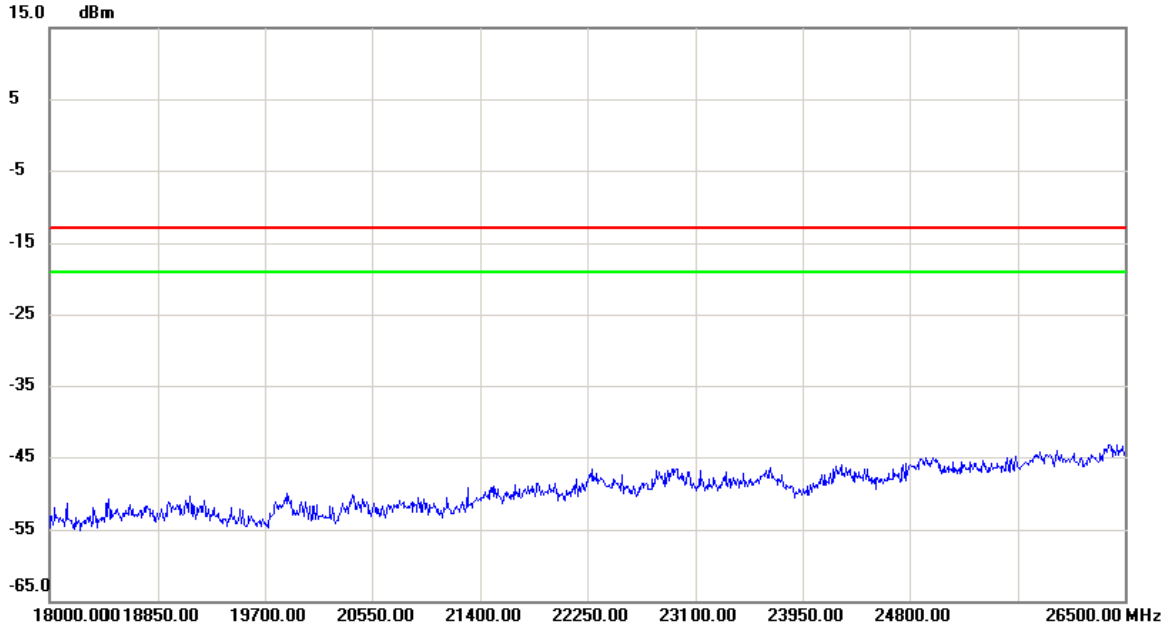
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	WCDMA Band II_HSUPA_TX CH9400

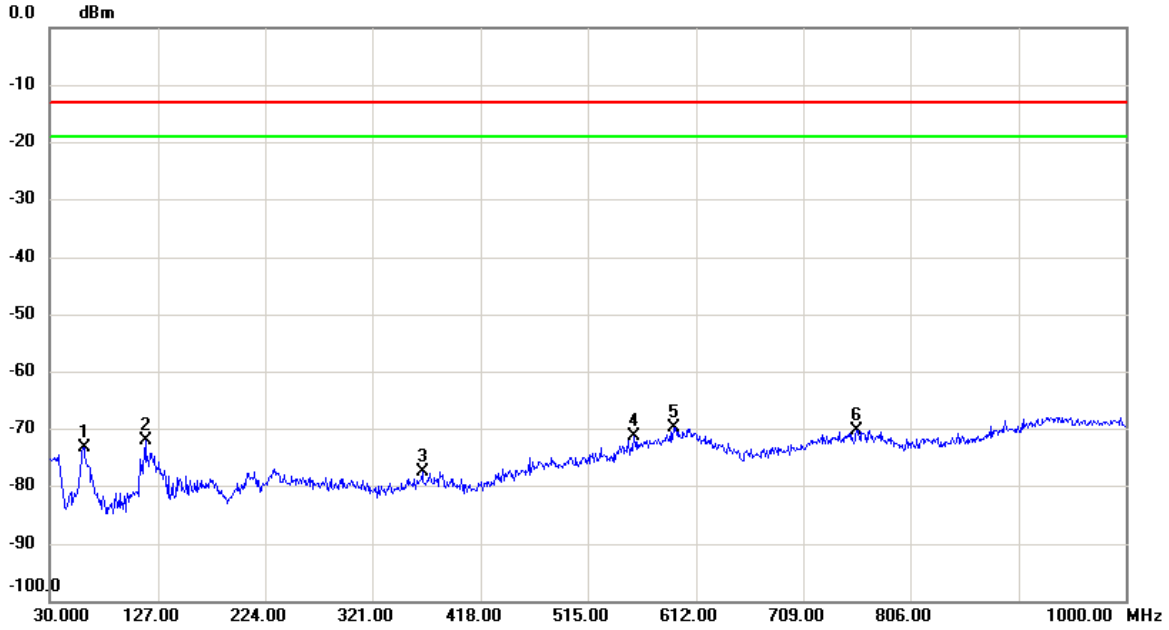
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_1.4M

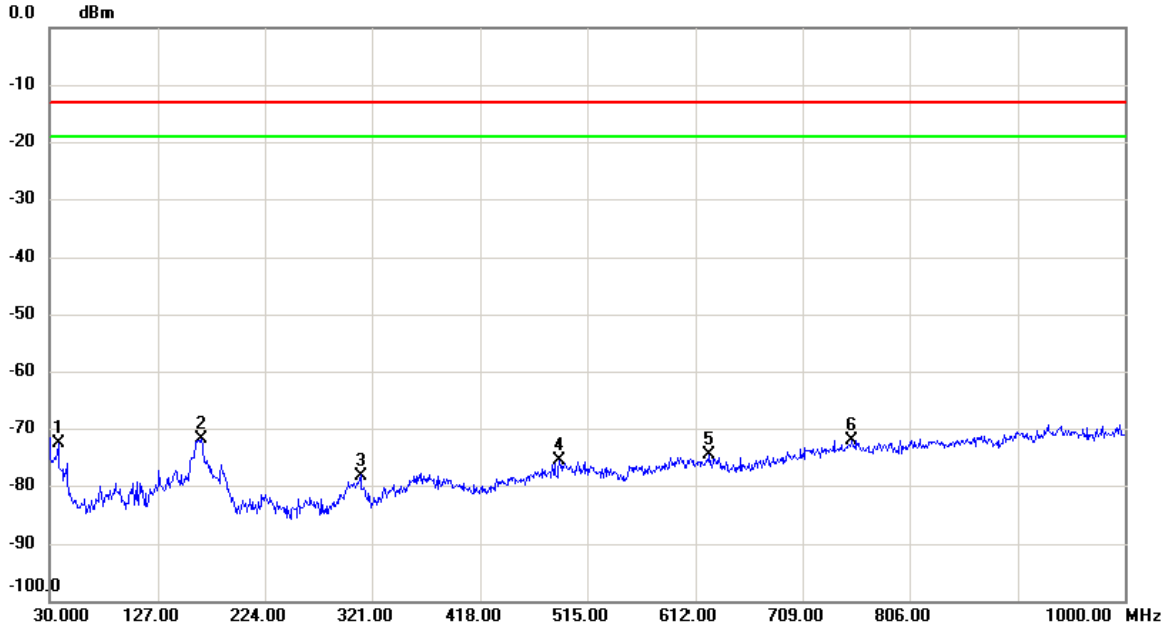
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		61.0400	-69.51	-3.81	-73.32	-13.00	-60.32	peak	
2		115.8450	-68.89	-3.14	-72.03	-13.00	-59.03	peak	
3		365.1350	-77.35	-0.23	-77.58	-13.00	-64.58	peak	
4		556.7100	-74.90	3.48	-71.42	-13.00	-58.42	peak	
5	*	593.0850	-75.18	5.28	-69.90	-13.00	-56.90	peak	
6		757.5000	-76.13	5.67	-70.46	-13.00	-57.46	peak	

Test Mode:	LTE Band 2_TX CH18900_1.4M

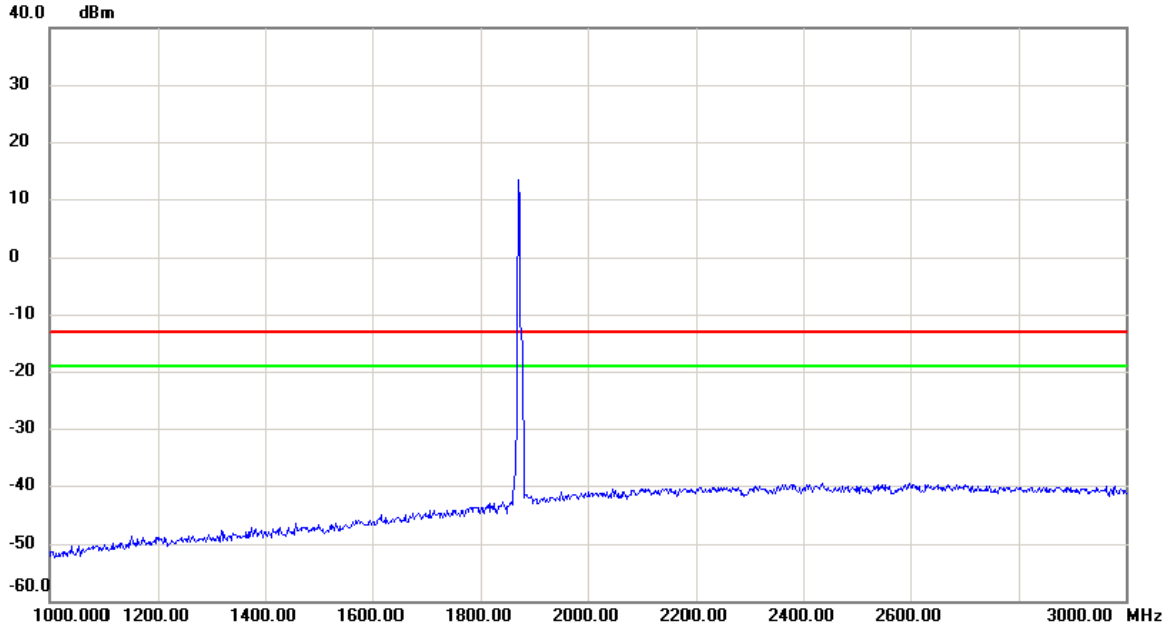
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		37.7600	-73.14	0.53	-72.61	-13.00	-59.61	peak	
2	*	165.8000	-66.91	-4.89	-71.80	-13.00	-58.80	peak	
3		310.8150	-73.47	-4.78	-78.25	-13.00	-65.25	peak	
4		490.2650	-76.18	0.63	-75.55	-13.00	-62.55	peak	
5		624.6100	-76.17	1.57	-74.60	-13.00	-61.60	peak	
6		753.6200	-76.58	4.43	-72.15	-13.00	-59.15	peak	

Test Mode:	LTE Band 2_TX CH18900_1.4M

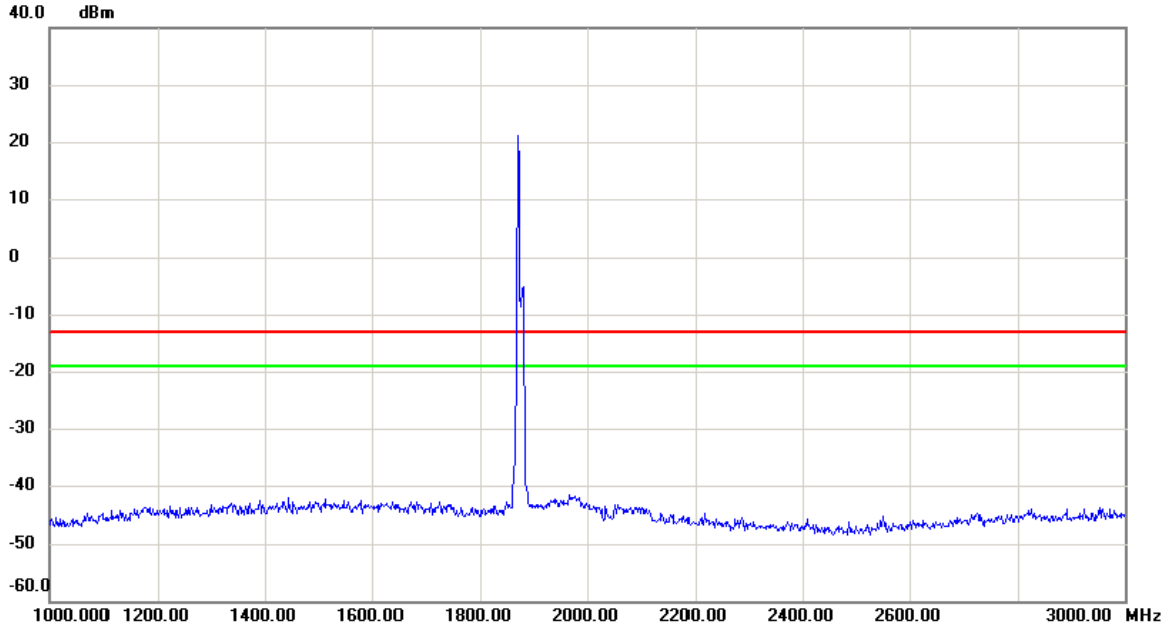
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_1.4M

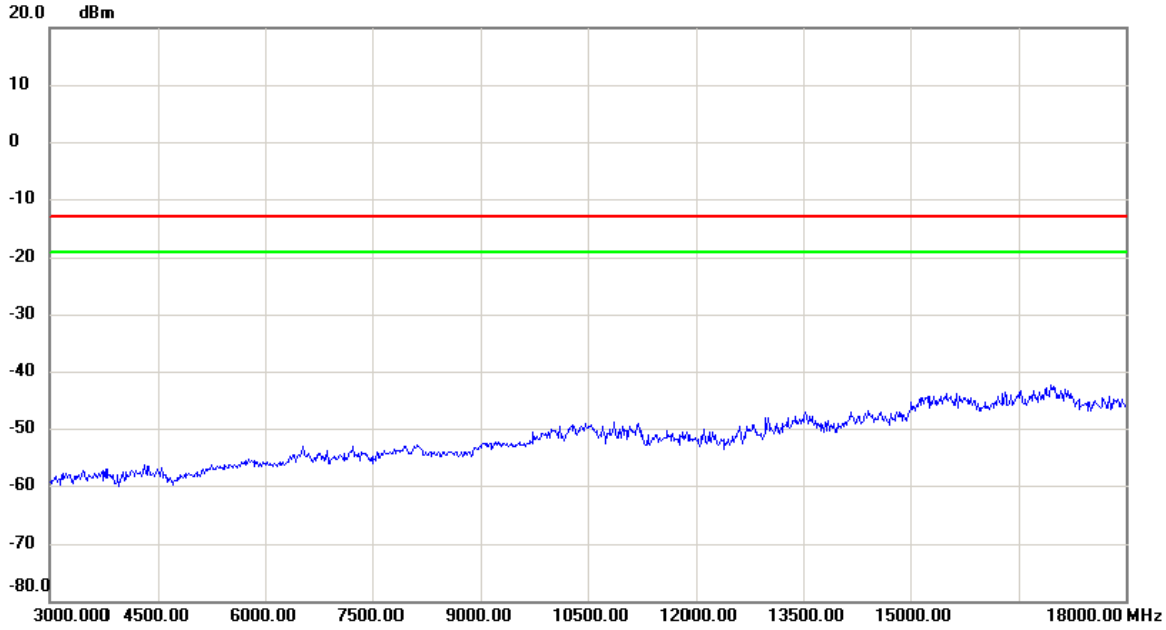
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_1.4M

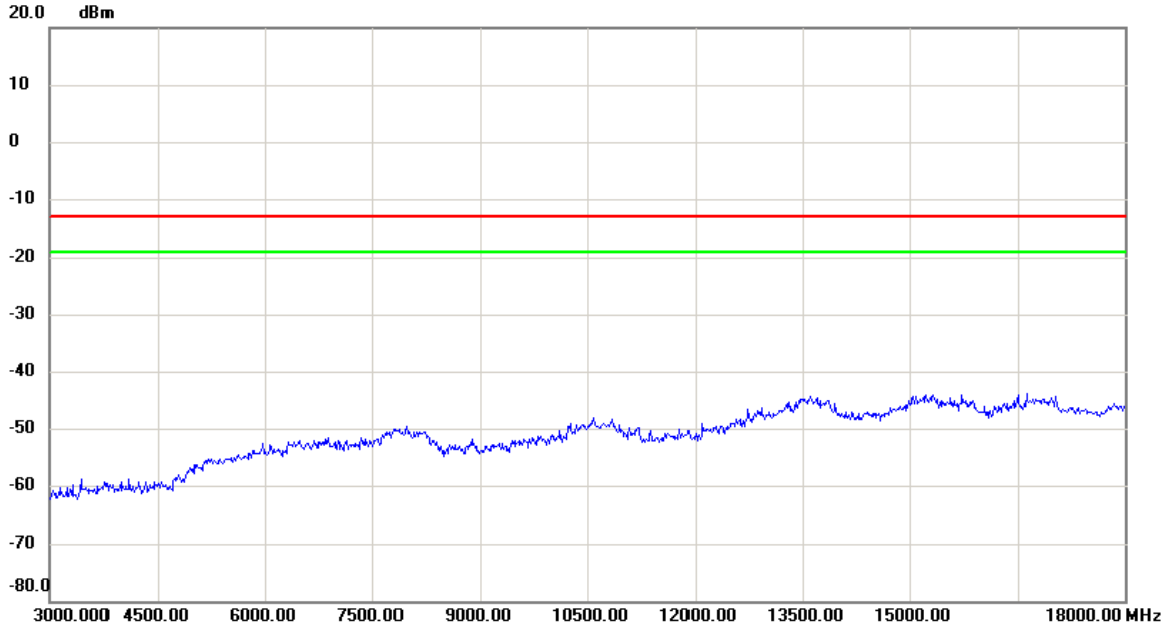
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_1.4M

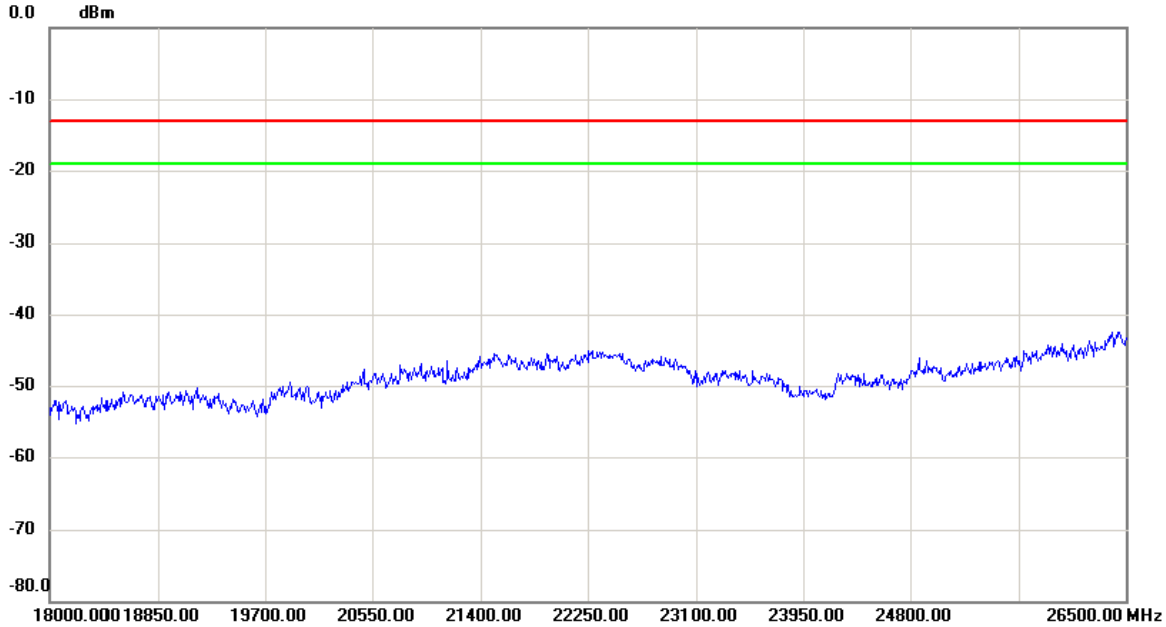
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_1.4M

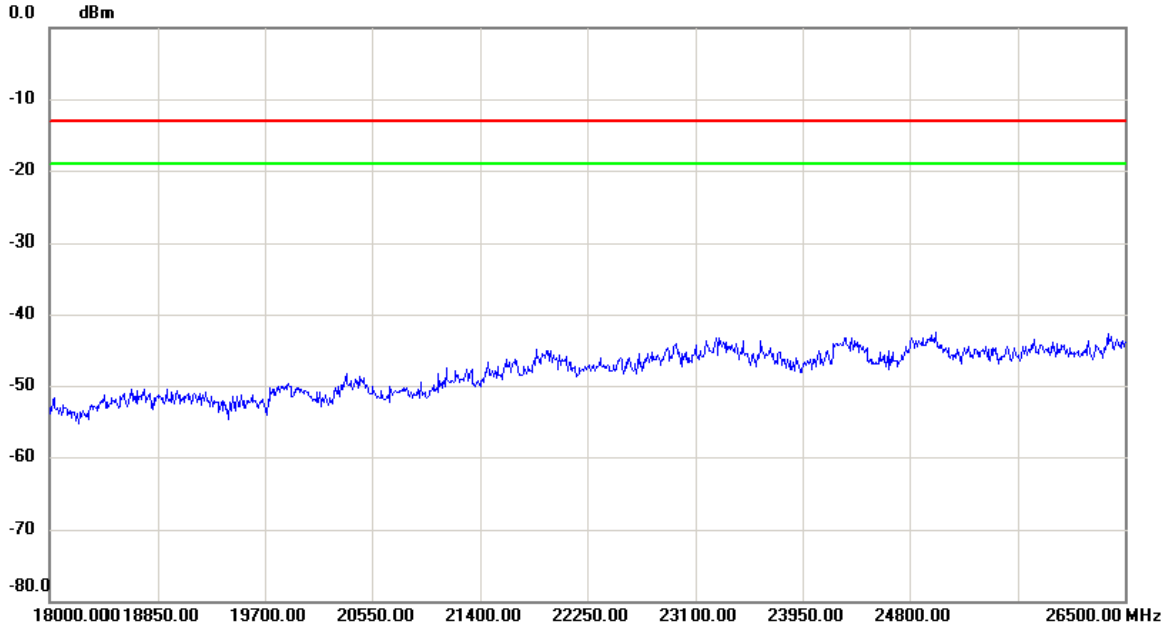
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_1.4M

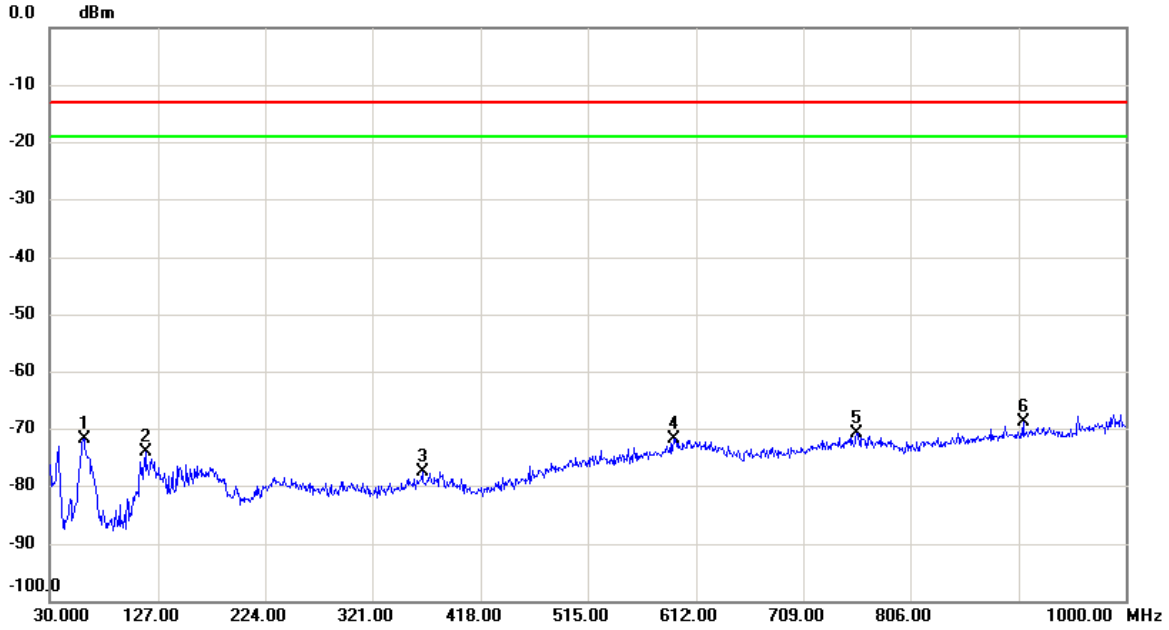
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_20M

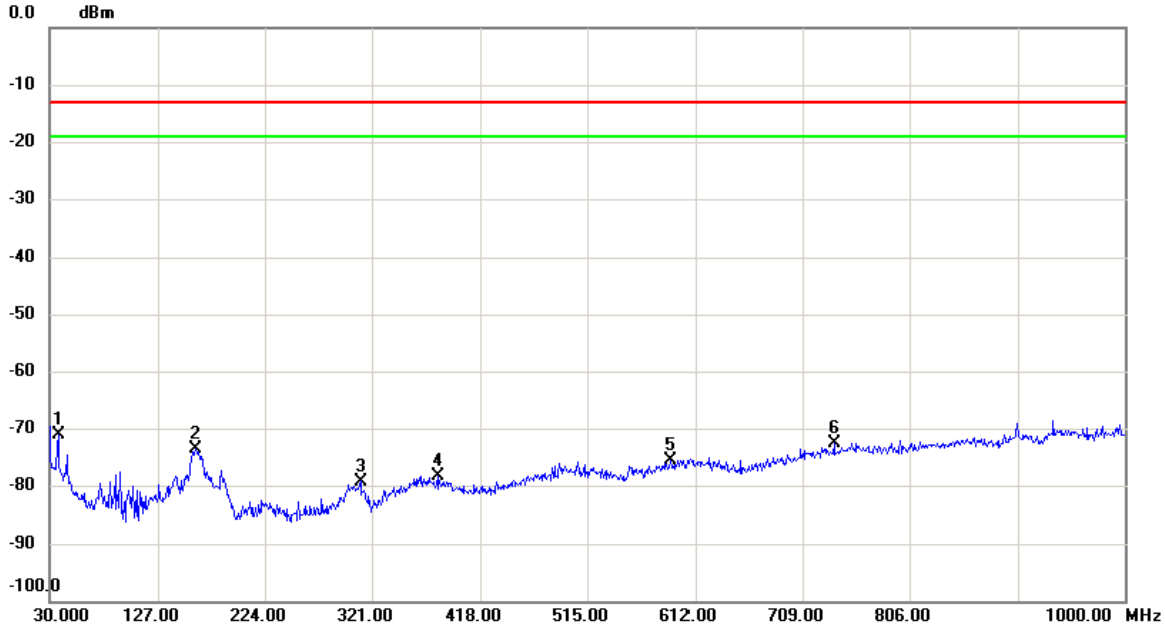
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		61.0400	-68.01	-3.81	-71.82	-13.00	-58.82	peak	
2		115.8450	-70.89	-3.14	-74.03	-13.00	-61.03	peak	
3		365.1350	-77.35	-0.23	-77.58	-13.00	-64.58	peak	
4		593.0850	-77.18	5.28	-71.90	-13.00	-58.90	peak	
5		757.5000	-76.63	5.67	-70.96	-13.00	-57.96	peak	
6	*	906.8800	-76.59	7.78	-68.81	-13.00	-55.81	peak	

Test Mode:	LTE Band 2_TX CH18900_20M

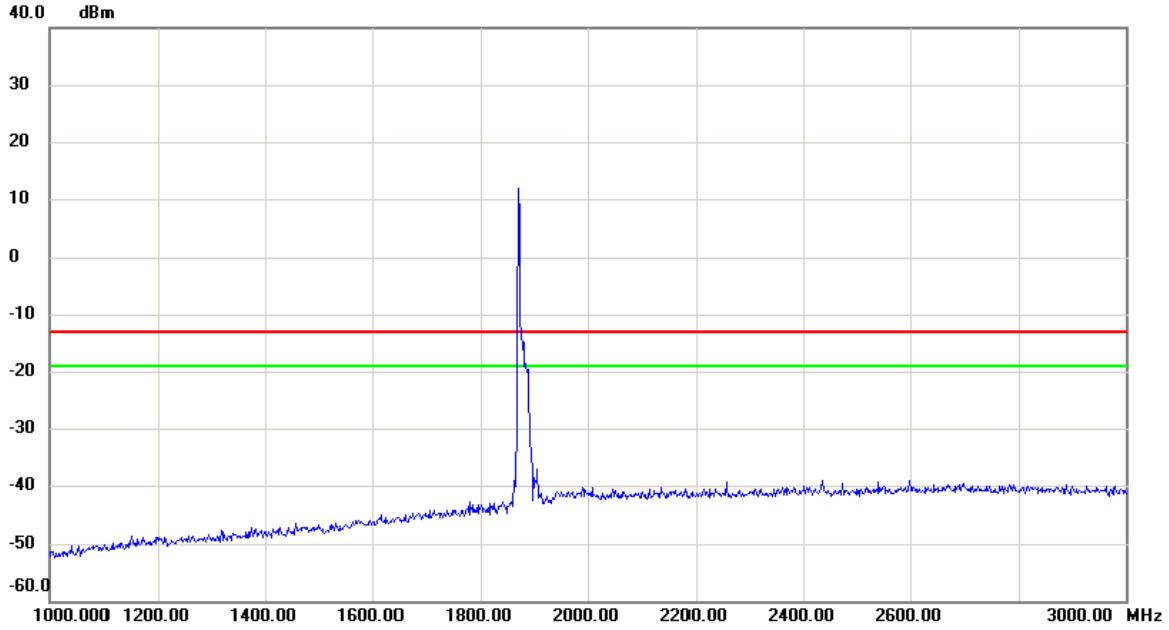
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	37.7600	-71.64	0.53	-71.11	-13.00	-58.11	peak	
2		161.4350	-69.29	-4.38	-73.67	-13.00	-60.67	peak	
3		310.8150	-74.47	-4.78	-79.25	-13.00	-66.25	peak	
4		379.2000	-77.73	-0.54	-78.27	-13.00	-65.27	peak	
5		591.1450	-77.62	2.12	-75.50	-13.00	-62.50	peak	
6		737.6150	-76.67	3.97	-72.70	-13.00	-59.70	peak	

Test Mode:	LTE Band 2_TX CH18900_20M

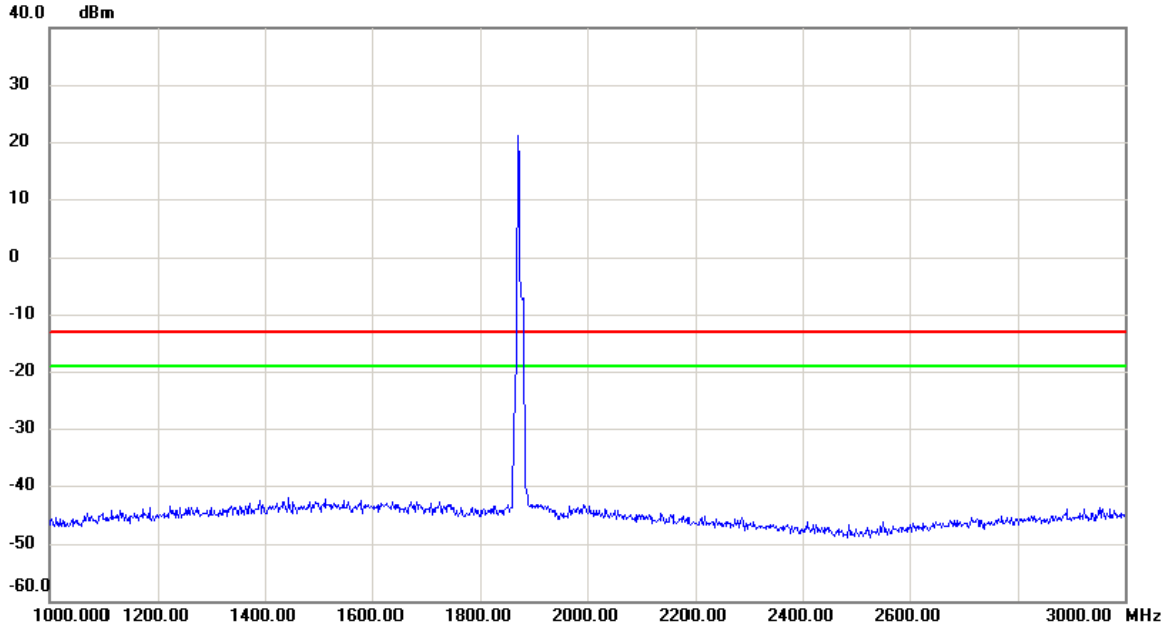
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_20M

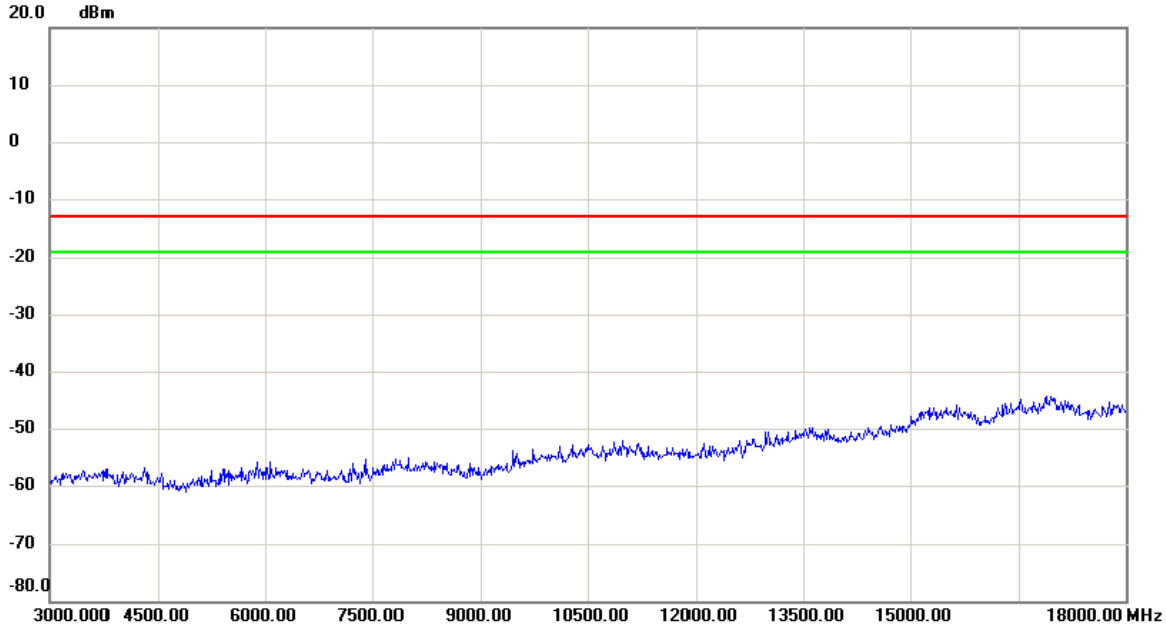
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_20M

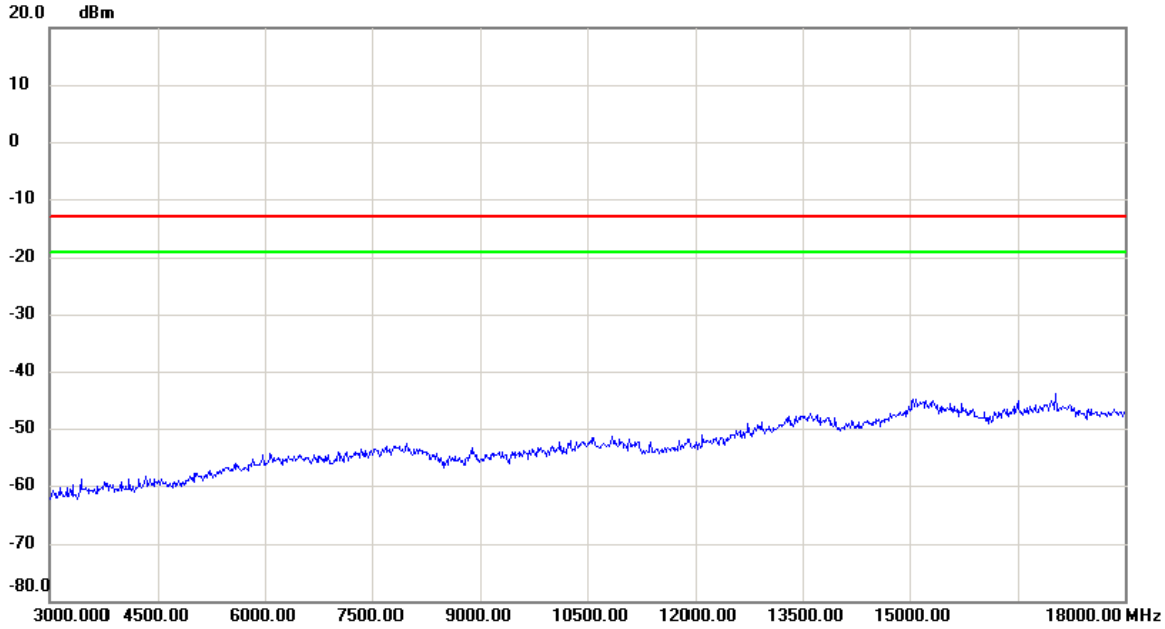
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_20M

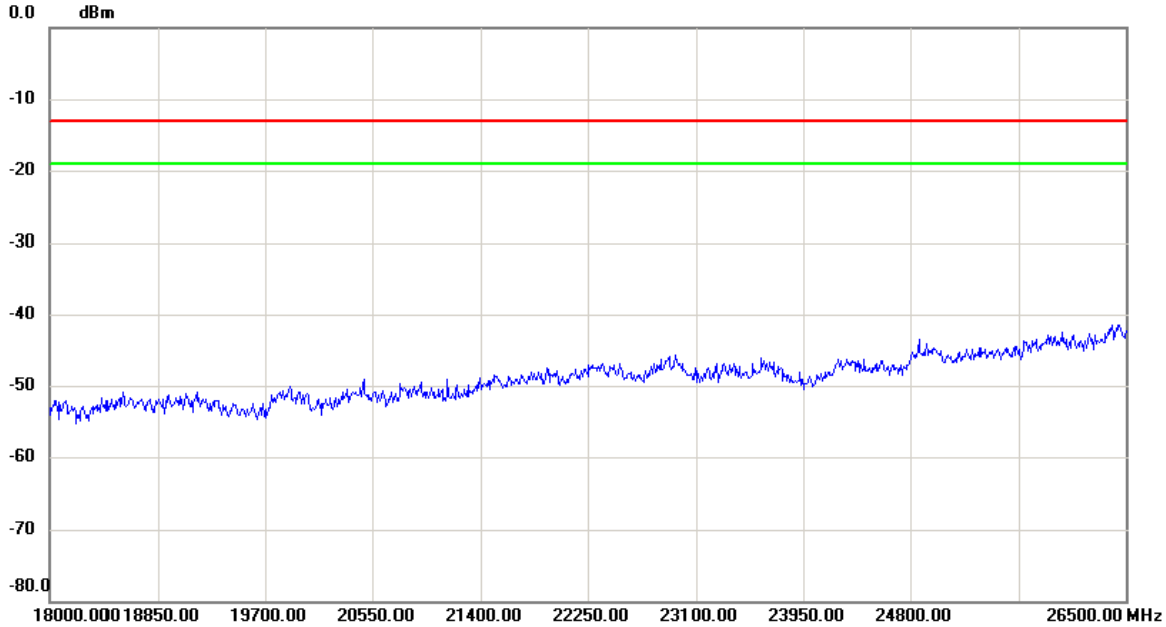
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

Test Mode:	LTE Band 2_TX CH18900_20M

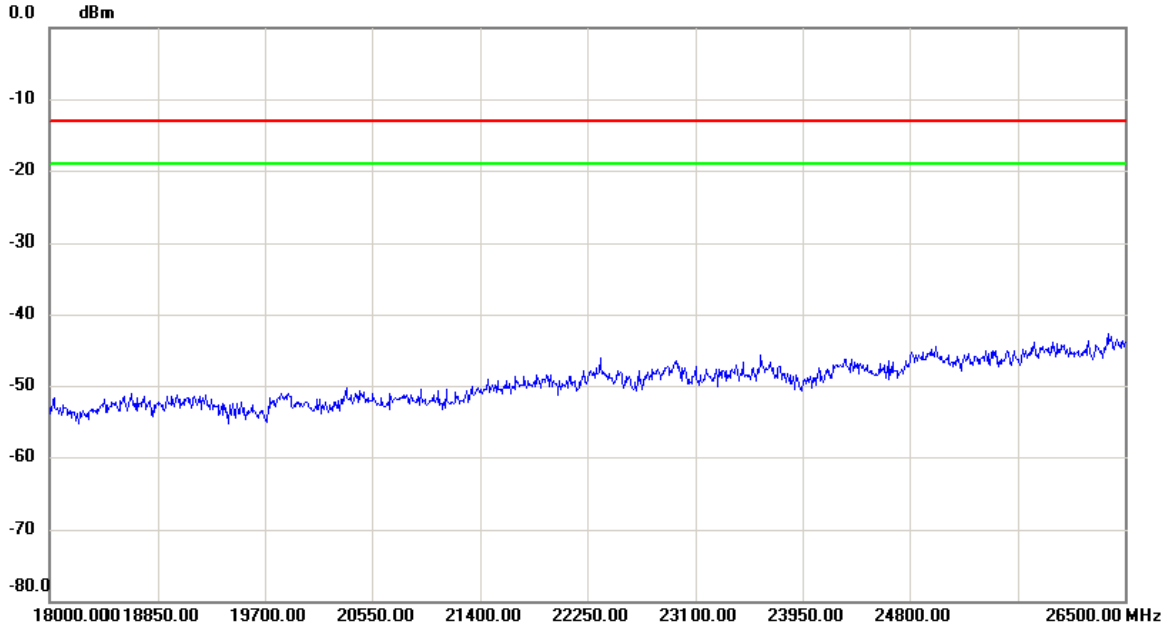
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

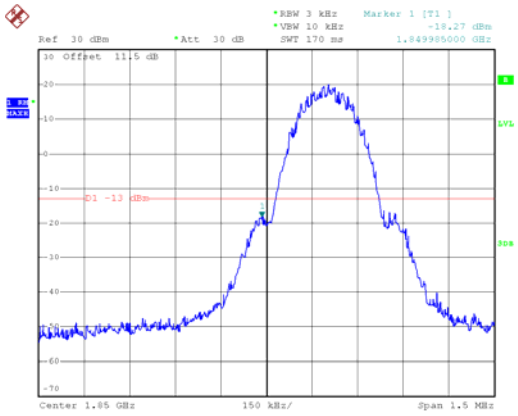
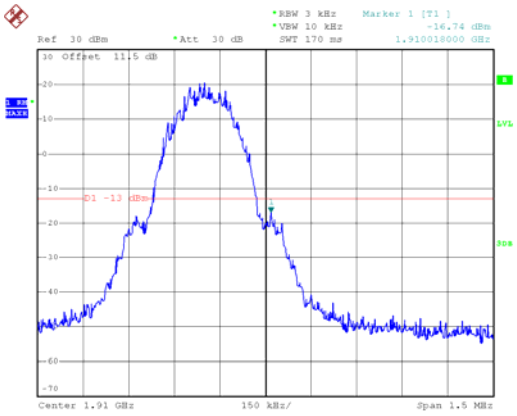
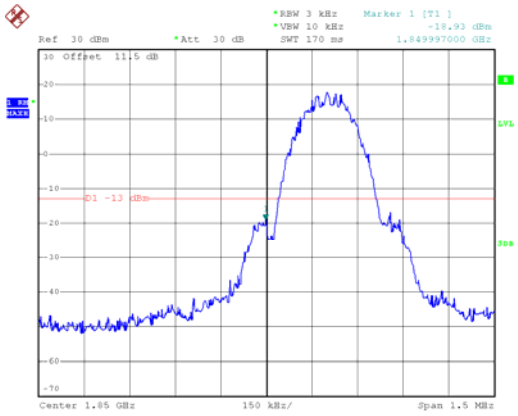
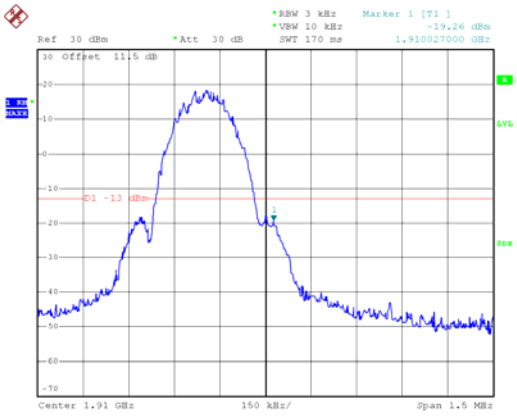
Test Mode:	LTE Band 2_TX CH18900_20M

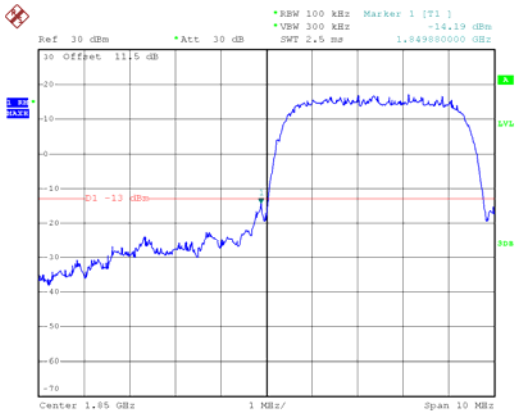
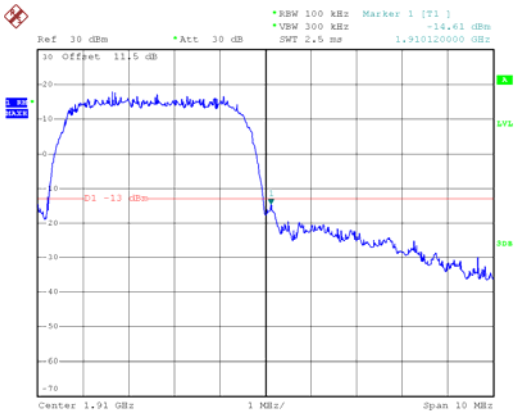
Horizontal

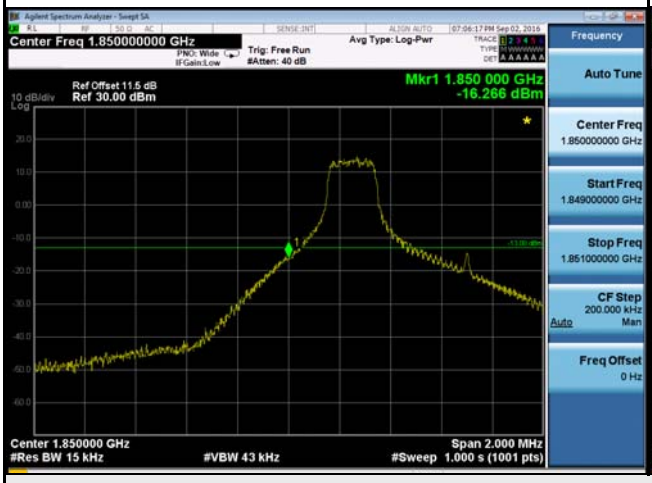
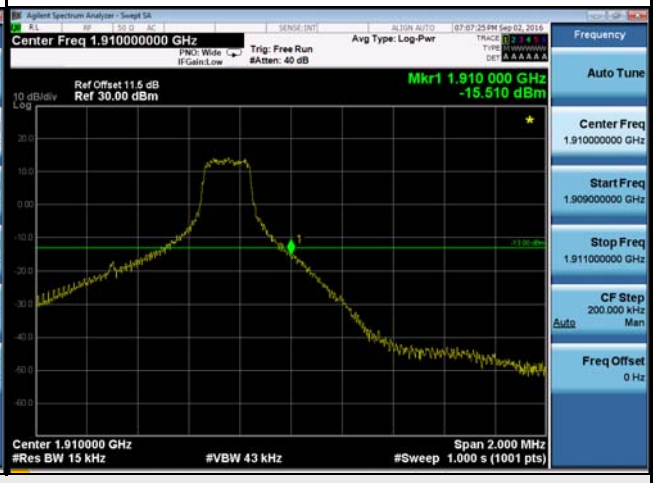


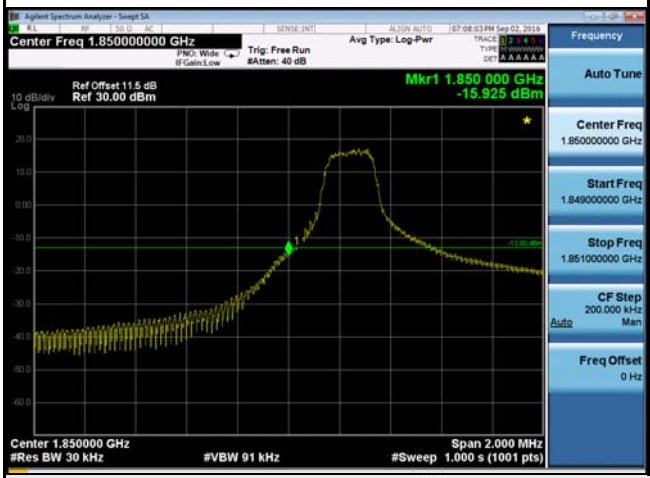
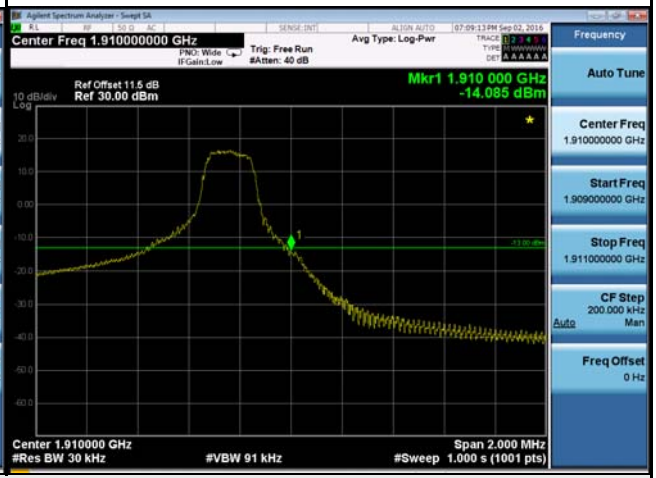
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment

ATTACHMENT E - BAND EDGE

DCS1900			
GSM			
Channel	512	Channel	810
			
EDGE			
Channel	512	Channel	810
			

WCDMA Band II			
Channel	9262	Channel	9538
			

LTE Band 2_1.4M			
1RB0		1RB5	
Channel	18607	Channel	19193
			
6RB0			
Channel	18607	Channel	19193

LTE Band 2_3M			
1RB0		1RB14	
Channel	18615	Channel	19185
			
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LTE Band 2_5M			
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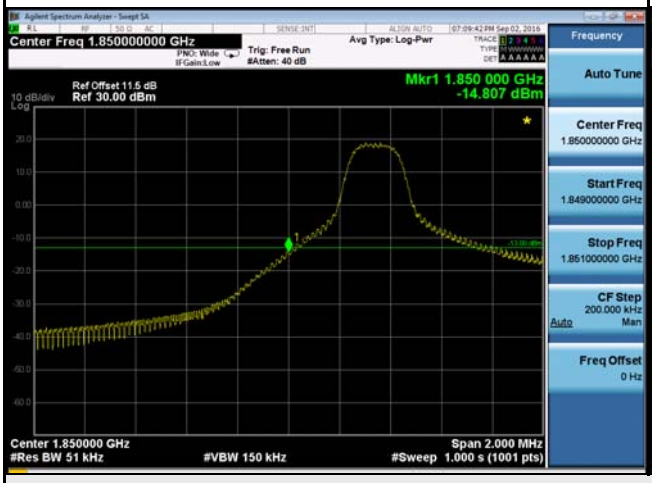		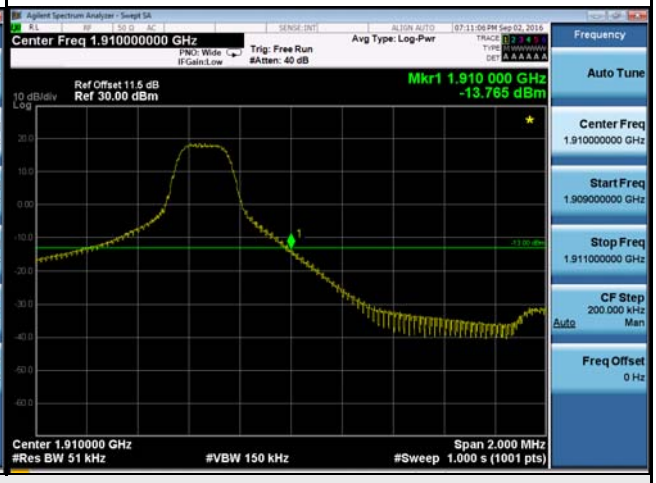	
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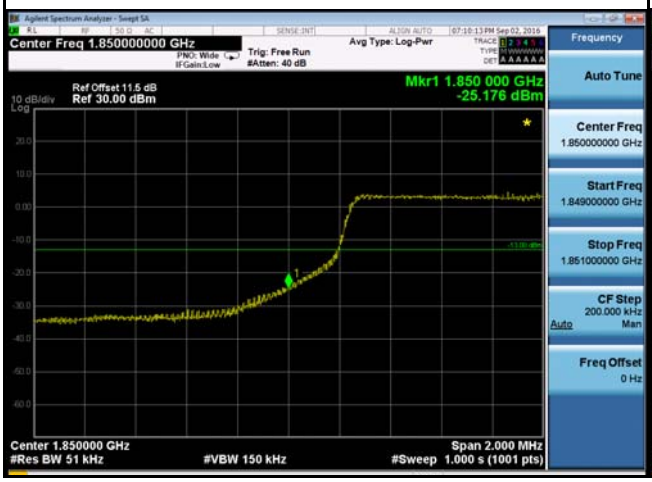			

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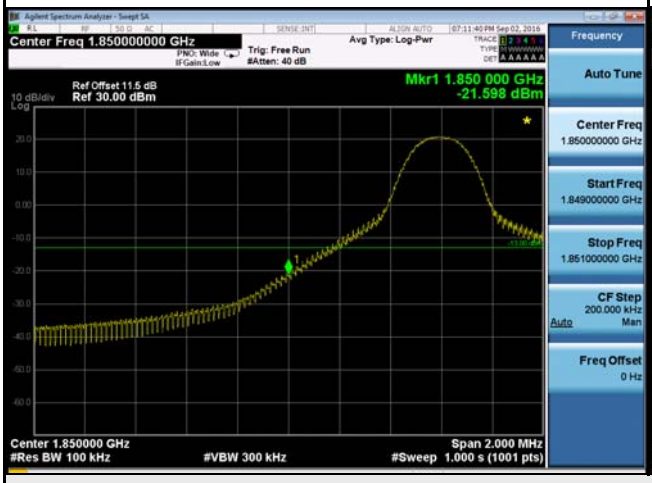		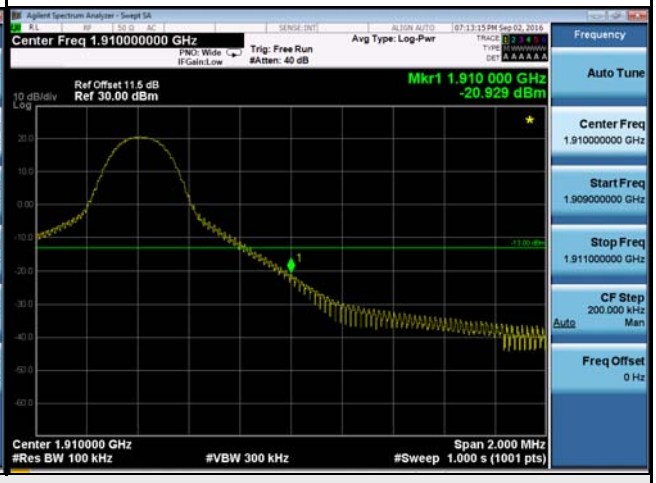	
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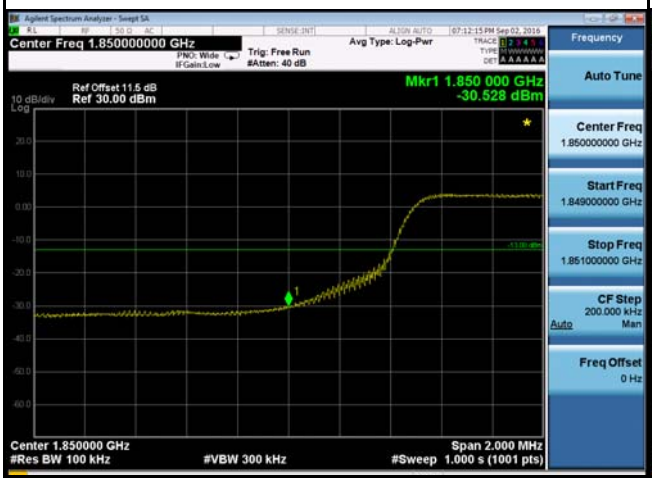		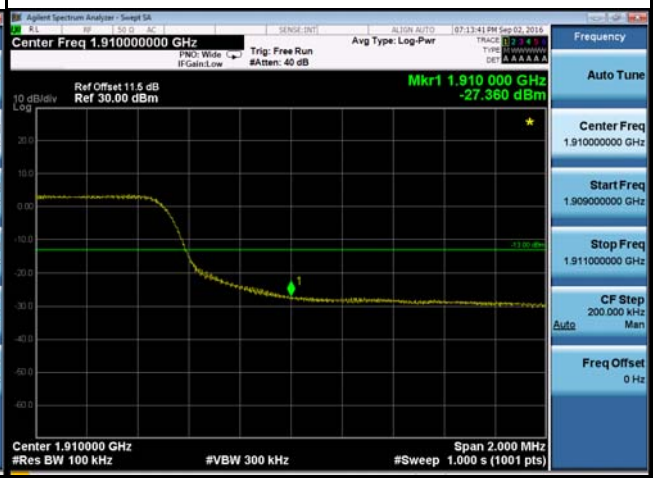	

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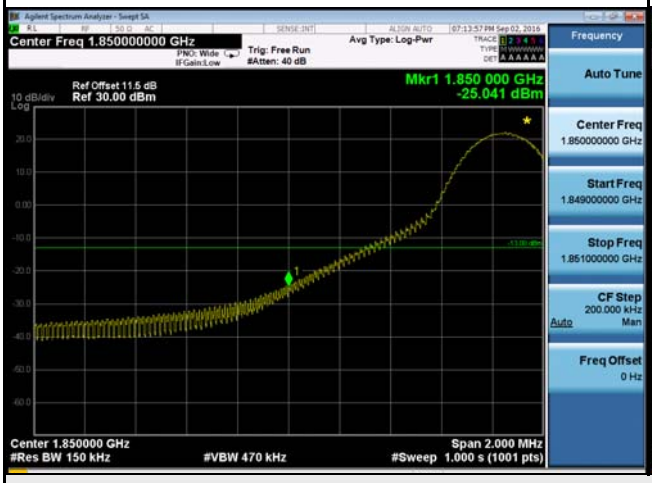		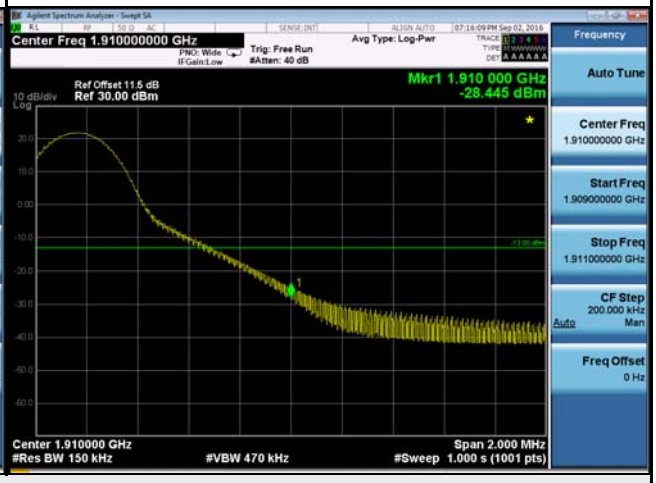	
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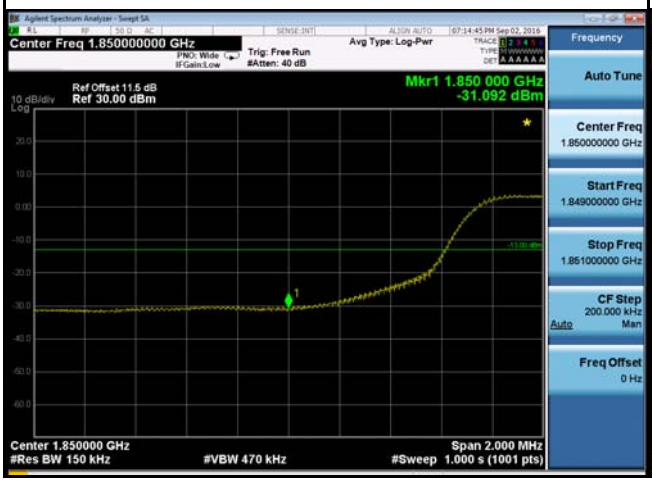			

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		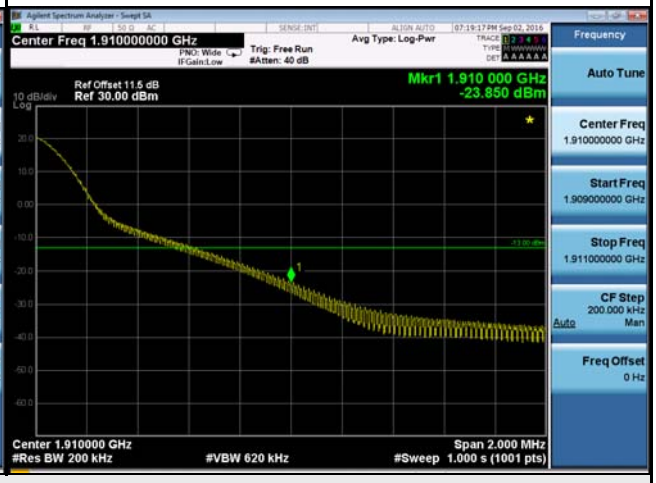	
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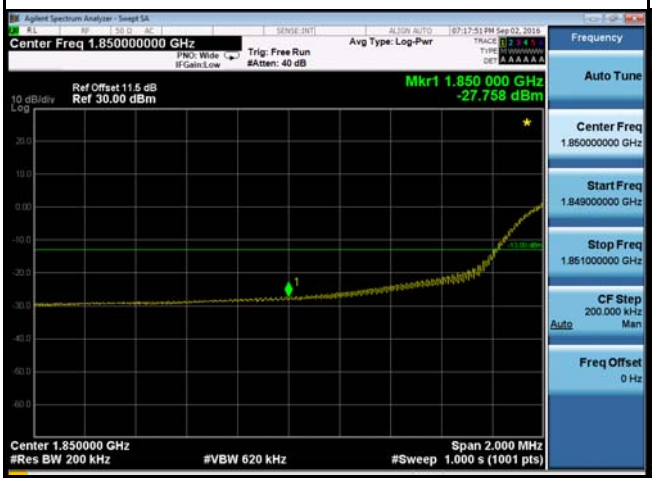
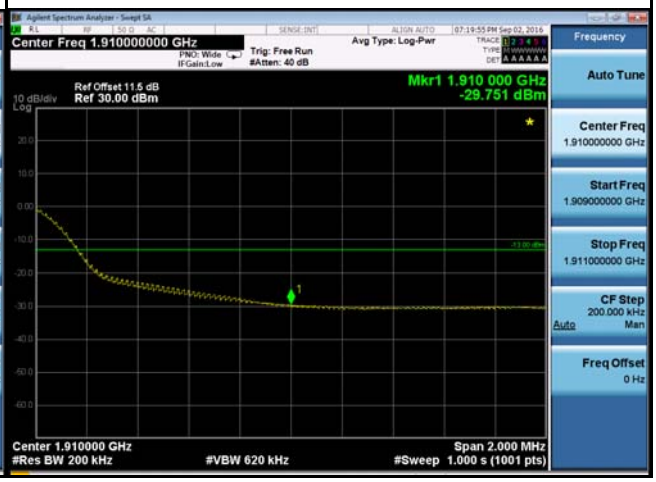
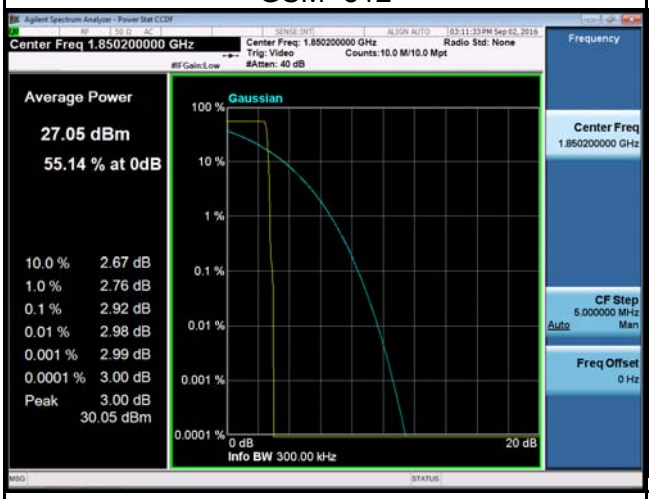
			

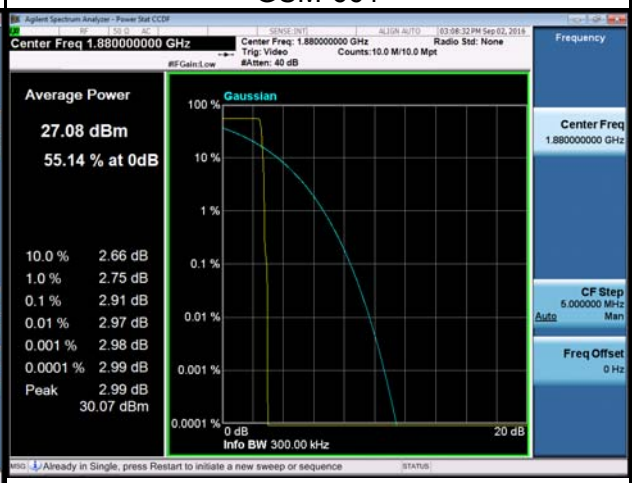
ATTACHMENT F - PEAK TO AVERAGE RATIO

DCS1900 Spectrum Plot

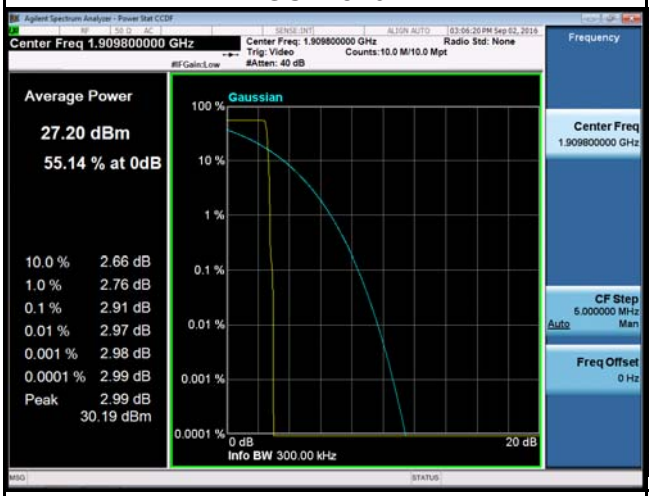
GSM -512



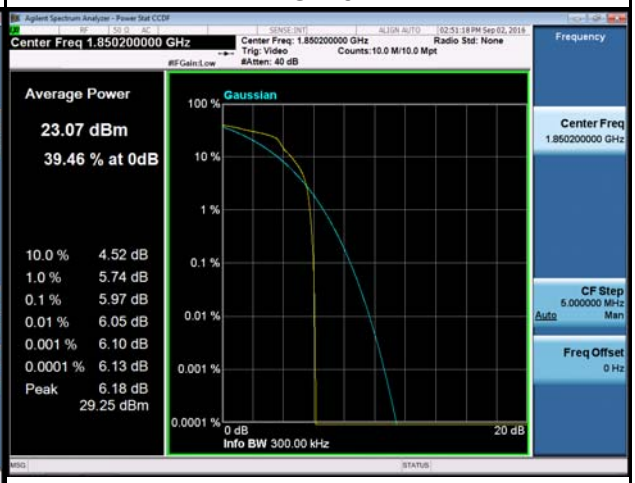
GSM-661



GSM-810



EDGE-512



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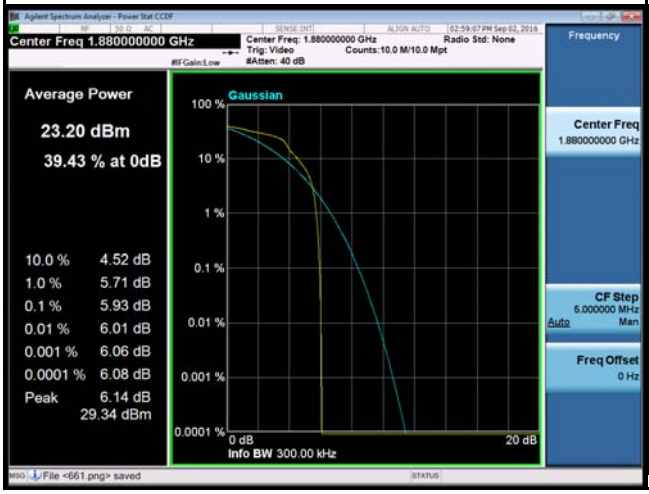

EDGE-810

WCDMA Band II Spectrum Plot	
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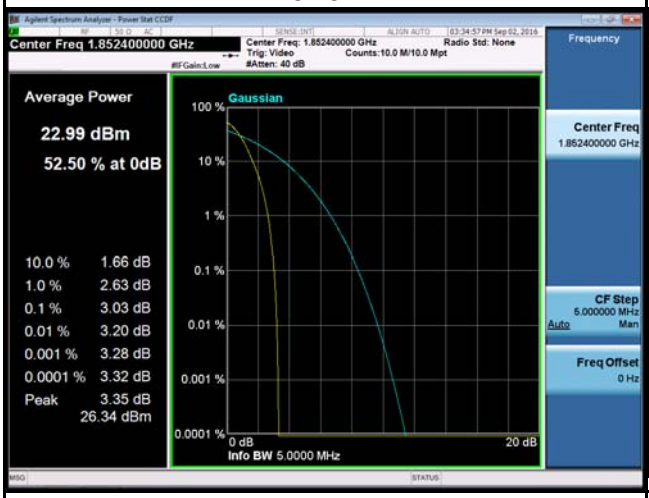	
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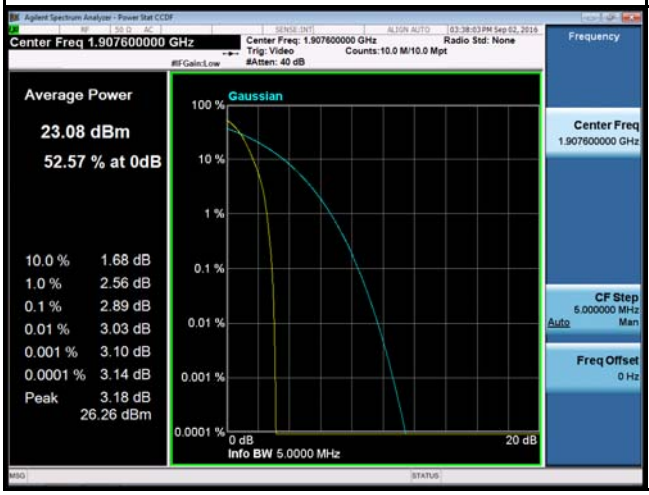	-