

FCC Radio Test Report

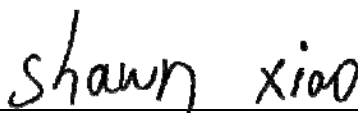
FCC ID: QISE5573FS-508

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

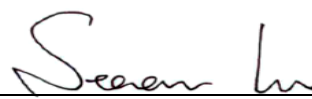
Project No. : 1804C039
Equipment : Mobile WiFi
Test Model : E5573Fs-508
Series Model : N/A
Applicant : Huawei Technologies Co.,Ltd.
Address : Administration Building, Huawei Base, Bantian,
Longgang District ,Shenzhen 518129, P.R.China

Date of Receipt : Apr. 09, 2018
Date of Test : Apr. 09, 2018 ~ Apr. 28, 2018
Issued Date : May 16, 2018
Tested by : BTL Inc.

Technical Engineer :


(Shawn Xiao)

Authorized Signatory :


(Steven Lu)

B T L I N C .

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-4-1804C039	Original Issue.	May 16, 2018

1. CERTIFICATION

Equipment : Mobile WiFi
Brand Name : HUAWEI
Test Model : E5573Fs-508
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 : Apr. 09, 2018 ~ Apr. 28, 2018
Test Sample : Engineering Sample No.: D180403104 for Conducted, D180403106 for Radiated.
Standard(s) : 47 CFR FCC Part 27
47 CFR FCC Part 2 & ANSI/TIA-603-D-2010
KDB 971168 D01 Power Meas License Digital Systems v03

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-4-1804C039) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP according to the ISO-17025 quality assessment standard and technical standard(s).

Test results included in this report is only for the WCDMA Band 4, LTE Band 4, 7parts.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part 27 & Part 2			
Standard(s) Section	Test Item	Judgment	Tested By
2.1046 27.50(d)(4)	Radiated power	PASS	Paul Li
2.1046 27.50(d)(4)	Conducted Output Power	PASS	Paul Li
2.1049 27.53(h)	Occupied Bandwidth	PASS	Paul Li
2.1051 27.53(h)	Conducted Spurious Emissions	PASS	Paul Li
2.1053 27.53(h)	Radiated Spurious Emissions	PASS	Paul Li
27.53(h)	Band Edge Measurements	PASS	Paul Li
27.50	Peak To Average Ratio	PASS	Paul Li
2.1055 27.54	Frequency Stability	PASS	Paul 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: 854385

BTL's designation number for FCC: CN5020

2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty figures shall be calculated according the methods described in the ETSI TR 100 028 and shall correspond to an expansion factor (coverage factor) $k=1.96$ or $k=2$ (which provide confidence levels of respectively 90% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)). Measurement Uncertainty for a Level of Confidence of 95 %, $U=2 \times U_c(y)$.

The BTL measurement uncertainty as below table:

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	Mobile WiFi	
Brand Name	HUAWEI	
Model Name	E5573Fs-508	
Model Difference	N/A	
Modulation Type	WCDMA	Uplink: BPSK Downlink: QPSK
	WCDMA(HSDPA/HSUPA)	16QAM
	LTE	QPSK, 16QAM
Operation Frequency	WCDMA Band 4	1712.4 ~1752.6MHz
	LTE 4 (Channel Bandwidth: 1.4MHz)	1710.7 ~ 1754.3 MHz
	LTE 4 (Channel Bandwidth: 3MHz)	1711.5 ~ 1753.5 MHz
	LTE 4 (Channel Bandwidth: 5MHz)	1712.5 ~ 1752.5 MHz
	LTE 4 (Channel Bandwidth: 10MHz)	1715.0 ~ 1750.0 MHz
	LTE 4 (Channel Bandwidth: 15MHz)	1717.5 ~ 1747.5 MHz
	LTE 4 (Channel Bandwidth: 20MHz)	1720.0 ~ 1745.0 MHz
	LTE 7 (Channel Bandwidth: 5MHz)	2502.5 ~ 2567.5 MHz
	LTE 7 (Channel Bandwidth: 10MHz)	2505.0 ~ 2565.0 MHz
	LTE 7 (Channel Bandwidth: 15MHz)	2507.5 ~ 2562.5 MHz
	LTE 7 (Channel Bandwidth: 20MHz)	2510.0 ~ 2560.0 MHz

Max. EIRP Power	WCDMA Band 4(WCDMA)	BPSK	27.24	dBm
	WCDMA Band 4(HSDPA)	16QAM	27.05	dBm
	WCDMA Band 4(HSUPA)	16QAM	27.19	dBm
	LTE 4 (Channel Bandwidth: 1.4MHz)	QPSK	26.65	dBm
		16QAM	25.95	dBm
	LTE 4 (Channel Bandwidth: 3MHz)	QPSK	26.50	dBm
		16QAM	25.91	dBm
	LTE 4 (Channel Bandwidth: 5MHz)	QPSK	27.43	dBm
		16QAM	26.81	dBm
	LTE 4 (Channel Bandwidth: 10MHz)	QPSK	27.39	dBm
		16QAM	26.90	dBm
	LTE 4 (Channel Bandwidth: 15MHz)	QPSK	27.12	dBm
		16QAM	26.33	dBm
	LTE 4 (Channel Bandwidth: 20MHz)	QPSK	26.95	dBm
		16QAM	26.54	dBm
	LTE 7 (Channel Bandwidth: 5MHz)	QPSK	25.94	dBm
		16QAM	25.16	dBm
	LTE 7 (Channel Bandwidth: 10MHz)	QPSK	25.89	dBm
		16QAM	25.11	dBm
	LTE 7 (Channel Bandwidth: 15MHz)	QPSK	25.83	dBm
		16QAM	24.66	dBm
	LTE 7 (Channel Bandwidth: 20MHz)	QPSK	25.48	dBm
		16QAM	24.91	dBm

Antenna Type	Fixed Internal Antenna		
Antenna Gain	WCDMA Band 4	4.6 dBi	
	LTE Band 4	4.6 dBi	
	LTE Band 7	3.2 dBi	
Hardware Version	CL1E5577ESM02		
Software Version	8.0.1.1(H331SP11C00)		
IMEI No.1	Radiated	004401720945720	
	Conducted	822107011002176	
Power Source	#1 DC Voltage supplied from AC/DC adapter. #2 Battery Supplied.		
Power Rating	#1:AC 100–240V 50/60Hz DC 5V 1.0A #2:DC 3.8V 1500mAh		

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	SCUD (FUJIAN) Electronics Co., Ltd	HB434666RBC
	Sunwoda Electronic Co.,LTD.	
USB Cable	HONGLIN TECHNOLOGY CO.,LTD	02451044
USB Cable	FOXCONN INTERCONNECT TECHNOLOGY LIMITED	CUBB01M-HC208-DH
	HONGLIN TECHNOLOGY CO.,LTD	130-26654
	Luxshare Precision Industry Co., Ltd.	L99U2013-CS-H
	MING JI ELECTRONICS CO., LTD.	203-0786-0
Adapter	HUIZHOU BYD ELECTRONIC CO., LTD.	HW-050100E01 HW-050100E01 HW-050100E01 HW-050100B01 HW-050100B01 HW-050100B01 HW-050100U01 HW-050100U01 HW-050100U01 HW-050100A01 HW-050100A01 HW-050100A01
	Shenzhen Huntkey Electric Co., Ltd.	
	Dongguan da hong electronics co. LTD.	

3.2 DESCRIPTION OF TEST MODES AND TEST CONDITION

Following channel(s) was (were) selected for the final test as listed below:

WCDMA BAND 4			
Test Item	Available Channel	Tested Channel	Mode
EIRP	1312 to 1513	1312, 1413, 1513	WCDMA,HSDPA, HSUPA
Frequency Stability	1312 to 1513	1413	WCDMA
Occupied Bandwidth	1312 to 1513	1312, 1413, 1513	WCDMA,HSDPA, HSUPA
Band Edge	1312 to 1513	1312, 1513	WCDMA,HSDPA, HSUPA
Peak to Average Ratio	1312 to 1513	1312, 1413, 1513	WCDMA,HSDPA, HSUPA
Conducuted Emission	1312 to 1513	1413	WCDMA,HSDPA, HSUPA
Radiated Emission	1312 to 1513	1312	WCDMA,HSDPA, HSUPA

Note: This device was tested under all bandwidths, WCMDA, HSDPA and HSIPA. The worst case was found in **WCDMA CH 1513**.

LTE BAND 4					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	1RB/3RB/6RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	1RB/8RB/15RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1RB/12RB/25RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1RB/25RB/50RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1RB/36RB/75RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1RB/50RB/100RB
Occupied Bandwidth	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	6RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	15RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	25RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	50RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	75 RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	100RB
Conducted Spurious Emission Radiated Spurious Emission	19957 to 20393	20175	1.4MHz	QPSK	1RB
	19965 to 20385	20175	3MHz	QPSK	1RB
	19975 to 20375	20175	5MHz	QPSK	1RB
	20000 to 20350	20175	10MHz	QPSK	1RB
	20025 to 20325	20175	15MHz	QPSK	1RB
	20050 to 20300	20175	20MHz	QPSK	1RB
Conducted Spurious Emission	19957 to 20393	20175	1.4MHz	QPSK	1RB
	20050 to 20300	20175	20MHz	QPSK	1RB

LTE BAND 4					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Band Edge	19957 to 20393	19957	1.4MHz	QPSK	1RB/6RB
		20393	1.4MHz	QPSK	
	19965 to 20385	19965	3MHz	QPSK	1RB/15RB
		20385	3MHz	QPSK	
	19975 to 20375	19975	5MHz	QPSK	1RB/25RB
		20375	5MHz	QPSK	
	20000 to 20350	20000	10MHz	QPSK	1RB/50RB
		20350	10MHz	QPSK	
	20025 to 20325	20025	15MHz	QPSK	1RB/75RB
		20325	15MHz	QPSK	
	20050 to 20300	20050	20MHz	QPSK	1RB/100RB
		20300	20MHz	QPSK	
Peak To Average Ratio	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	1RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	1RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1RB
Frequency Stability	19957 to 20393	20175	1.4MHz	QPSK	1RB
	19965 to 20385	20175	3MHz	QPSK	1RB
	19975 to 20375	20175	5MHz	QPSK	1RB
	20000 to 20350	20175	10MHz	QPSK	1RB
	20025 to 20325	20175	15MHz	QPSK	1RB
	20050 to 20300	20175	20MHz	QPSK	1RB

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

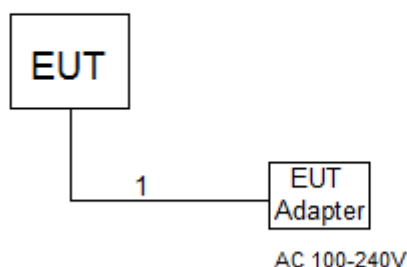
LTE BAND 7					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	1RB/12RB/25RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	1RB/25RB/50RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	1RB/36RB/75RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	1RB/50RB/100RB
Occupied Bandwidth	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	25RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	50RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	75RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	100RB
Conducted Spurious Emission	20775 to 21425	21100	5MHz	QPSK	1 RB
	20800 to 21400	21100	10MHz	QPSK	1 RB
	20825 to 21375	21100	15MHz	QPSK	1 RB
	20850 to 21350	21100	20MHz	QPSK	1 RB
Radiated Spurious Emission	20775 to 21425	21100	5MHz	QPSK	1 RB
	20850 to 21350	21100	20MHz	QPSK	1 RB
Band Edge	20775 to 21425	20775	5MHz	QPSK	1RB/25RB
		21425	5MHz	QPSK	
	20800 to 21400	20800	10MHz	QPSK	1RB/50RB
		21400	10MHz	QPSK	
	20825 to 21375	20825	15MHz	QPSK	1RB/75RB
		21375	15MHz	QPSK	
	20850 to 21350	20850	20MHz	QPSK	1RB/100RB
		21350	20MHz	QPSK	
Peak To Average Ratio	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	1RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	1RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	1RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	1RB
Frequency Stability	20775 to 21425	21100	5MHz	QPSK	1RB
	20800 to 21400	21100	10MHz	QPSK	1RB
	20825 to 21375	21100	15MHz	QPSK	1RB
	20850 to 21350	21100	20MHz	QPSK	1RB

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

EUT TEST CONDITIONS:

Test Item	Environmental Conditions	Test Voltage
EIRP	24°C, 63%RH	DC 3.8V
Conducted Output Power	25°C, 65%RH	DC 3.8V
Occupied Bandwidth	25°C, 65%RH	DC 3.8V
Conducted Emission	25°C, 65%RH	DC 3.8V
Radiated Emission	25°C, 60%RH	AC 120V/60Hz
Band Edge	25°C, 65%RH	DC 3.8V
Peak to Average Ratio	25°C, 65%RH	DC 3.8V
Frequency Stability	25°C, 65%RH	DC 3.6V , DC 3.8V, DC 4.2V

3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED FOR RADIATED



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	1.2m	DC Cable

4. TEST RESULT

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMIT

Mobile / Portable station are limited to 1 watts e.i.r.p. (WCDMA Band 4 & LTE 4)

Mobile / Portable station are limited to 2 watts e.i.r.p. (LTE 7)

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 WCDMA 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

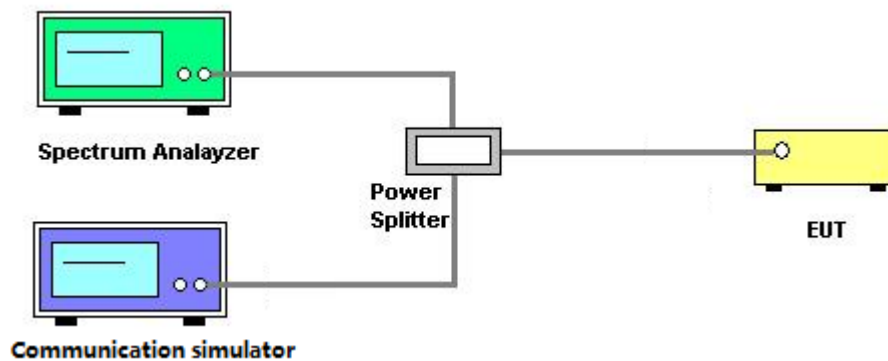
Please refer to the Appendix A.

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 Appendix B.

4.3 CONDUCTED EMISSIONS MEASUREMENT

4.3.1 LIMIT

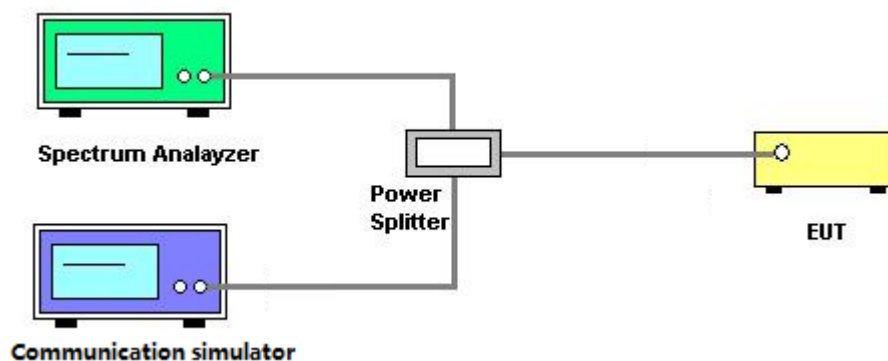
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm. (LTE 4,)

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 $55 + 10 \log(P)$ dB. The emission limit equal to -25dBm. (LTE 7)

4.3.2 TEST PROCEDURES

1. The testing follows FCC KDB 971168 v03 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 $RBW \geq 1\%$ 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 $43 + 10 \log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10 \log(P)](dB)$
 $= [30 + 10 \log(P)](dBm) - [43 + 10 \log(P)](dB)$
 $= -13dBm$

4.3.3 TESTSETUP LAYOUT



4.3.4 TESTDEVIATION

No deviation

4.3.5 TEST RESULTS

Please refer to the Appendix 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. (LTE 4)

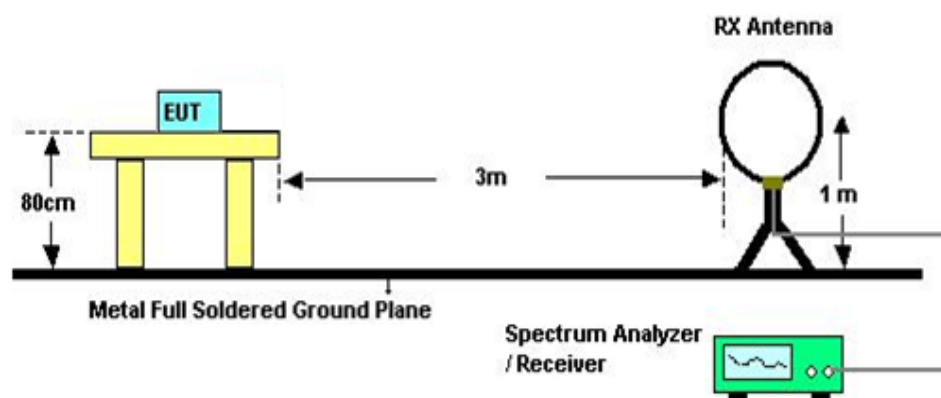
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log(P)$ dB. The emission limit equal to -25dBm. (LTE 7)

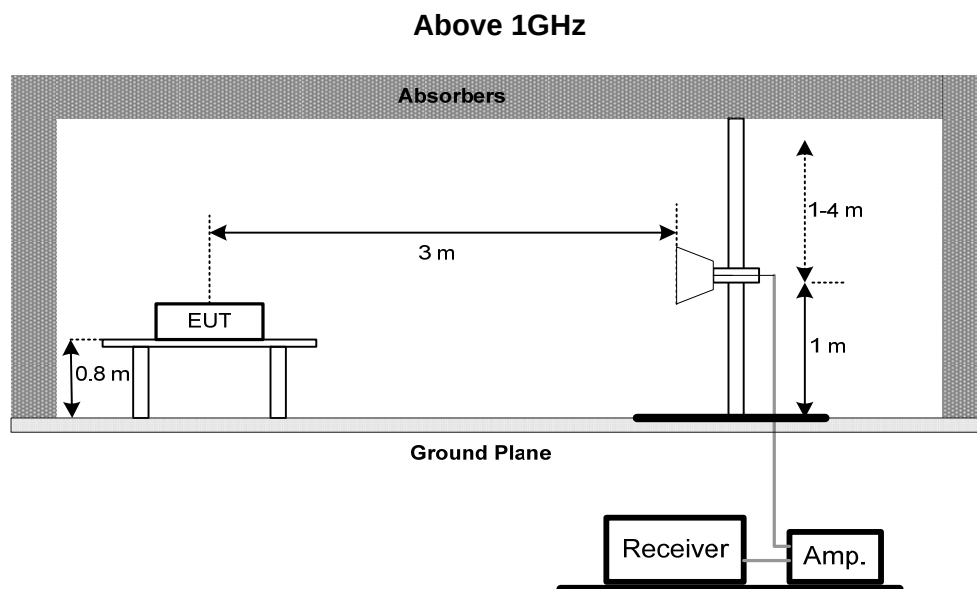
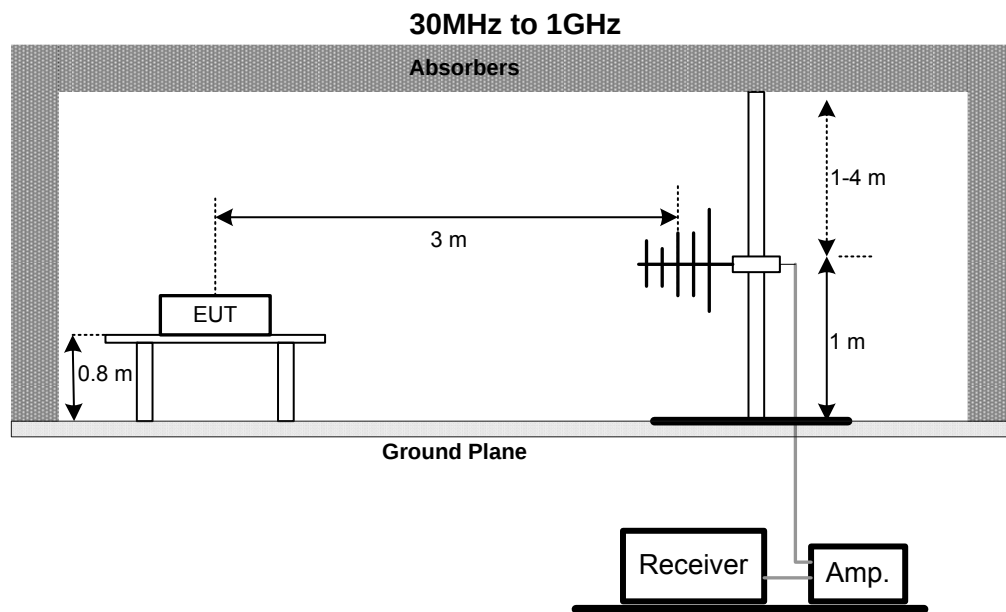
4.4.2 TEST PROCEDURES

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

Below 30MHz





4.4.4 TESTDEVIATION

No deviation

4.4.5 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Appendix D.

4.4.6 TEST RESULTS (30MHZ TO 1000MHZ)

Please refer to the Appendix E.

4.4.7 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the Appendix F.

4.5 BAND EDGE MEASUREMENT

4.5.1 LIMIT

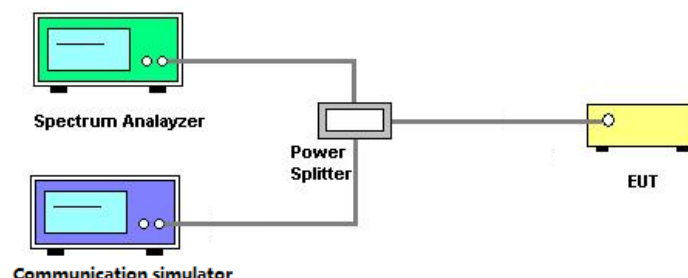
The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed. (LTE 4)

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. (LTE 7)

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 5MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA).
3. 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).
4. 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).
5. 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).
6. 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 Appendix G.

4.6 PEAK TO AVERAGE RATIO MEASUREMENT

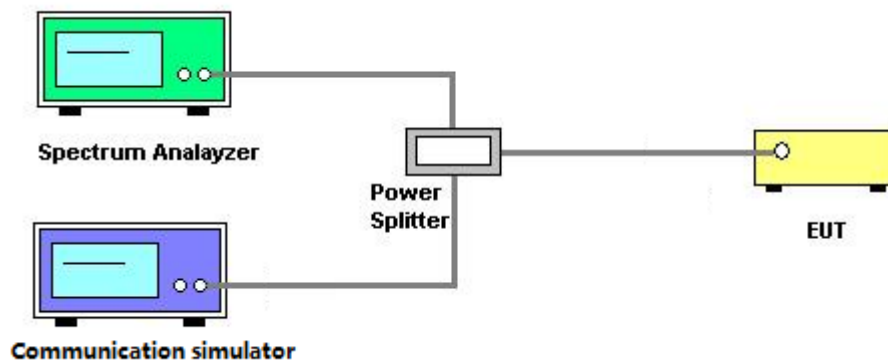
4.6.1 LIMIT

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 $\geq$ 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 Appendix H.

4.7 FREQUENCY STABILITY MEASUREMENT

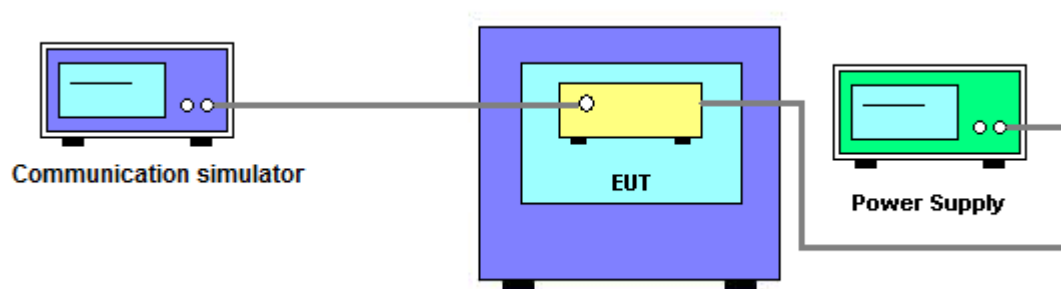
4.7.1 LIMIT

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 $\pm 0.5^{\circ}\text{C}$ 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 Appendix I.

5. List of measurement equipments

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 11, 2019
2	Amplifier	Agilent	8449B	3008A02274	Mar. 11, 2019
3	Amplifier	HP	8447D	2944A09673	Oct. 19, 2018
4	HighPass Filter	Wairwright Instruments Gmbh	WHK 1.5/15G-10ST	11	Mar. 11, 2019
5	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 1710/1785-1690/180 5-60/12SS	38	Mar. 11, 2019
6	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 824/849-810/863-60/ 9SS	7	Mar. 11, 2019
7	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 880/915-860/935-60/ 9SS	14	Mar. 11, 2019
8	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 1850/1910-1830/193 0-60/10SS	17	Mar. 11, 2019
9	HighPass Filter	Wairwright Instruments Gmbh	WHK3.1/18G-10SS	24	Mar. 11, 2019
10	Wireless Communication Test SET	Agilent	E5515C	MY48364183	Mar. 11, 2019
11	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 11, 2019
12	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
13	wideband radio communication tester	R&S	CMW500	152372	Mar. 11, 2019
14	Cable	emci	LMR-400(30MHz-1G Hz)(8m+5m)	N/A	Jun. 26, 2018
15	Cable	emci	EMC104-SM-SM-12000(12m)	N/A	Jun. 26, 2018
16	Controller	ETS-Lindgren	2090	N/A	N/A
17	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	EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Mar. 11, 2019
2	POWER SPLITTER	Mini-Circuits	ZFRSC-123-S+	331000910-1	Mar. 11, 2019
3	wideband radio communication tester	R&S	CMW500	152372	Mar. 11, 2019

Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Multi-output DC Power Supply	GW Instek	GPC-3030DN	EK880675	Sep. 26, 2020
2	POWER SPLITTER	Mini-Circuits	ZFRSC-123-S+	331000910-1	Mar. 11, 2019
3	wideband radio communication tester	R&S	CMW500	152372	Mar. 11, 2019
4	Const Temp.& Humidity Chamber	Bell	BTH-50C	20170306001	Mar. 11, 2019

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

APPENDIX A - OUTPUT POWER

Conducted Power:

Modulation	Band	WCDMA IV(dBm)		
	Tx Channel	1312 CH	1413 CH	1513 CH
	Rx Channel	1537 CH	1638 CH	1738 CH
	Frequency	1712.4	1732.6	1752.6
BPSK	RMC 12.2K	22.42	22.47	22.54
	RMC 64K	22.49	22.51	22.64
	RMC 144K	22.46	22.35	22.47
	RMC 384K	22.45	22.33	22.49
16QAM	HSDPA Subtest-1	22.26	22.21	22.45
	HSDPA Subtest-2	21.97	21.9	22.06
	HSDPA Subtest-3	21.5	21.33	21.54
	HSDPA Subtest-4	21.31	21.45	21.74
16QAM	HSUPA Subtest-1	21.54	21.61	21.54
	HSUPA Subtest-2	18.78	18.93	19.12
	HSUPA Subtest-3	21.02	20.74	20.85
	HSUPA Subtest-4	19.48	19.45	19.46
	HSUPA Subtest-5	22.46	22.38	22.59

Conducted Power:

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				19957 CH	20175 CH	20393 CH
				1710.7 MHz	1732.5 MHz	1754.3 MHz
				LTE Band 4 (dBm)		
4 / 1.4M	QPSK	1	0	21.56	21.67	21.83
		1	2	21.62	21.81	22.00
		1	5	21.63	21.83	21.56
		3	0	21.57	21.98	21.53
		3	1	21.58	22.04	21.59
		3	3	21.63	22.05	21.61
		6	0	20.94	21.11	21.01
	16QAM	1	0	20.68	21.15	20.91
		1	2	20.94	21.35	21.09
		1	5	20.94	21.26	20.97
		3	0	20.77	20.88	21.03
		3	1	21.00	20.93	21.08
		3	3	21.04	20.94	21.09
		6	0	20.49	20.41	20.61

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				19965 CH	20175 CH	20385 CH
				1711.5 MHz	1732.5 MHz	1753.5 MHz
				LTE Band 4 (dBm)		
4 / 3M	QPSK	1	0	21.56	21.60	21.54
		1	7	21.71	21.85	21.90
		1	14	21.59	21.84	21.61
		8	0	20.68	20.72	20.71
		8	3	20.95	20.98	21.17
		8	7	20.98	20.96	21.12
		15	0	20.82	20.87	21.06
	16QAM	1	0	20.50	20.72	20.84
		1	7	21.27	21.31	21.24
		1	14	21.11	21.07	20.90
		8	0	20.28	20.29	20.66
		8	3	20.57	20.55	20.69
		8	7	20.60	20.54	20.64
		15	0	20.39	20.44	20.50

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				19975 CH	20175 CH	20375 CH
				1712.5 MHz	1732.5 MHz	1752.5 MHz
				LTE Band 4 (dBm)		
4 / 5M	QPSK	1	0	21.73	21.92	22.25
		1	12	22.77	22.83	22.74
		1	24	21.96	22.28	22.05
		12	0	21.31	21.58	21.72
		12	6	21.61	21.86	21.85
		12	13	21.54	21.76	21.63
		25	0	21.35	21.64	21.50
	16QAM	1	0	20.94	21.31	21.54
		1	12	21.90	22.11	22.21
		1	24	21.11	21.53	21.38
		12	0	20.82	21.08	21.18
		12	6	21.14	21.37	21.30
		12	13	21.12	21.27	21.07
		25	0	21.00	21.19	20.91

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20000 CH	20175 CH	20350 CH
				1715 MHz	1732.5 MHz	1750 MHz
				LTE Band 4 (dBm)		
4 / 10M	QPSK	1	0	22.21	22.21	22.63
		1	24	22.60	22.74	22.79
		1	49	22.03	22.60	22.41
		25	0	21.25	21.49	21.33
		25	12	21.33	21.70	21.60
		25	25	20.94	21.56	21.43
		50	0	21.00	21.53	21.32
	16QAM	1	0	21.53	21.56	21.75
		1	24	21.75	22.30	22.04
		1	49	21.23	22.01	21.52
		25	0	20.71	21.09	20.92
		25	12	20.80	21.33	21.20
		25	25	20.43	21.20	21.04
		50	0	20.54	21.18	20.96

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20025 CH	20175 CH	20325 CH
				1717.5 MHz	1732.5 MHz	1747.5 MHz
				LTE Band 4 (dBm)		
4 / 15M	QPSK	1	0	21.97	21.95	22.43
		1	37	22.00	22.45	22.52
		1	74	21.65	22.13	21.94
		36	0	20.89	22.13	21.25
		36	19	20.93	21.35	21.37
		36	39	20.82	21.25	21.01
		75	0	20.76	21.13	21.24
	16QAM	1	0	21.30	21.40	21.71
		1	37	21.34	21.70	21.73
		1	74	21.08	21.41	21.18
		36	0	20.92	21.41	20.91
		36	19	20.62	21.03	21.02
		36	39	20.54	20.96	20.66
		75	0	20.45	20.85	20.90

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20050 CH	20175 CH	20300 CH
				1720 MHz	1732.5 MHz	1745 MHz
				LTE Band 4 (dBm)		
4 / 20M	QPSK	1	0	21.95	21.75	22.25
		1	50	21.65	21.64	22.03
		1	99	21.85	22.35	22.01
		50	0	21.08	21.15	21.04
		50	25	20.52	21.01	21.12
		50	50	20.61	21.00	20.73
		100	0	20.85	20.99	20.88
	16QAM	1	0	21.94	21.40	21.63
		1	50	21.21	20.52	21.34
		1	99	21.57	21.80	21.50
		50	0	20.76	20.70	20.61
		50	25	20.11	20.57	20.68
		50	50	20.32	20.56	20.65
		100	0	20.58	20.54	20.44

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20775 CH	21100 CH	21425 CH
				2502.5 MHz	2535 MHz	2567.5 MHz
				LTE Band 7 (dBm)		
7 / 5M	QPSK	1	0	21.66	22.13	22.22
		1	12	22.43	22.74	22.23
		1	24	21.79	22.01	22.43
		12	0	21.58	21.60	21.40
		12	6	21.84	21.83	21.84
		12	13	21.76	21.63	21.70
		25	0	21.62	21.52	21.50
	16QAM	1	0	20.65	20.91	21.25
		1	12	21.46	21.47	21.96
		1	24	20.85	20.81	21.23
		12	0	20.02	19.99	20.38
		12	6	20.27	20.23	20.62
		12	13	20.18	20.02	20.49
		25	0	19.99	19.95	20.73

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20800 CH	21100 CH	21400 CH
				2505 MHz	2535 MHz	2565 MHz
				LTE Band 7 (dBm)		
7 / 10M	QPSK	1	0	21.32	22.40	22.30
		1	24	22.50	22.69	22.66
		1	49	21.91	21.90	21.90
		25	0	21.35	21.72	21.63
		25	12	21.62	21.84	21.83
		25	25	21.41	21.58	21.43
		50	0	21.36	21.58	21.36
	16QAM	1	0	20.90	21.57	21.35
		1	24	21.42	21.83	21.91
		1	49	20.92	21.70	21.21
		25	0	19.86	20.74	20.32
		25	12	20.60	20.86	20.52
		25	25	20.40	20.62	20.14
		50	0	20.34	20.60	20.58

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20825 CH	21100 CH	21375 CH
				2507.5 MHz	2535 MHz	2562.5 MHz
				LTE Band 7 (dBm)		
7 / 15M	QPSK	1	0	21.08	22.13	21.67
		1	37	21.31	22.23	22.63
		1	74	21.70	21.41	22.05
		36	0	21.16	21.53	21.61
		36	19	21.30	21.58	21.86
		36	39	21.20	21.16	21.64
		75	0	21.16	21.23	21.56
	16QAM	1	0	20.95	21.33	20.80
		1	37	21.24	21.43	21.46
		1	74	20.92	20.72	20.87
		36	0	19.55	19.93	20.46
		36	19	19.71	20.00	20.69
		36	39	19.58	19.80	20.45
		75	0	19.56	19.81	20.35

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20850 CH	21100 CH	21350 CH
				2510 MHz	2535 MHz	2560 MHz
				LTE Band 7 (dBm)		
7 / 20M	QPSK	1	0	21.22	22.00	21.59
		1	50	21.14	21.76	22.28
		1	99	21.74	21.17	22.03
		50	0	20.82	21.04	21.22
		50	25	20.85	20.97	21.26
		50	50	21.07	20.79	21.34
		100	0	20.92	20.85	21.20
	16QAM	1	0	20.81	21.19	21.47
		1	50	20.86	20.93	21.70
		1	99	21.03	20.88	21.71
		50	0	19.13	20.05	20.06
		50	25	19.10	20.00	20.01
		50	50	19.33	19.86	20.10
		100	0	19.22	19.87	20.02

EIRP Power:

Modulation	Band	WCDMA IV(dBm)		
	Tx Channel	1312 CH	1413 CH	1513 CH
	Rx Channel	1537 CH	1638 CH	1738 CH
	Frequency	1712.4	1732.6	1752.6
BPSK	RMC 12.2K	27.02	27.07	27.14
	RMC 64K	27.09	27.11	27.24
	RMC 144K	27.06	26.95	27.07
	RMC 384K	27.05	26.93	27.09
16QAM	HSDPA Subtest-1	26.86	26.81	27.05
	HSDPA Subtest-2	26.57	26.50	26.66
	HSDPA Subtest-3	26.10	25.93	26.14
	HSDPA Subtest-4	25.91	26.05	26.34
16QAM	HSUPA Subtest-1	26.14	26.21	26.14
	HSUPA Subtest-2	23.38	23.53	23.72
	HSUPA Subtest-3	25.62	25.34	25.45
	HSUPA Subtest-4	24.08	24.05	24.06
	HSUPA Subtest-5	27.06	26.98	27.19

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				19957 CH	20175 CH	20393 CH
				1710.7 MHz	1732.5 MHz	1754.3 MHz
				LTE Band 4 (dBm)		
4 / 1.4M	QPSK	1	0	26.16	26.27	26.43
		1	2	26.22	26.41	26.60
		1	5	26.23	26.43	26.16
		3	0	26.17	26.58	26.13
		3	1	26.18	26.64	26.19
		3	3	26.23	26.65	26.21
		6	0	25.54	25.71	25.61
	16QAM	1	0	25.28	25.75	25.51
		1	2	25.54	25.95	25.69
		1	5	25.54	25.86	25.57
		3	0	25.37	25.48	25.63
		3	1	25.60	25.53	25.68
		3	3	25.64	25.54	25.69
		6	0	25.09	25.01	25.21

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				19965 CH	20175 CH	20385 CH
				1711.5 MHz	1732.5 MHz	1753.5 MHz
				LTE Band 4 (dBm)		
4 / 3M	QPSK	1	0	26.16	26.20	26.14
		1	7	26.31	26.45	26.50
		1	14	26.19	26.44	26.21
		8	0	25.28	25.32	25.31
		8	3	25.55	25.58	25.77
		8	7	25.58	25.56	25.72
		15	0	25.42	25.47	25.66
	16QAM	1	0	25.10	25.32	25.44
		1	7	25.87	25.91	25.84
		1	14	25.71	25.67	25.50
		8	0	24.88	24.89	25.26
		8	3	25.17	25.15	25.29
		8	7	25.20	25.14	25.24
		15	0	24.99	25.04	25.10

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				19975 CH	20175 CH	20375 CH
				1712.5 MHz	1732.5 MHz	1752.5 MHz
4 / 5M	QPSK	1	0	26.33	26.52	26.85
		1	12	27.37	27.43	27.34
		1	24	26.56	26.88	26.65
		12	0	25.91	26.18	26.32
		12	6	26.21	26.46	26.45
		12	13	26.14	26.36	26.23
		25	0	25.95	26.24	26.10
	16QAM	1	0	25.54	25.91	26.14
		1	12	26.50	26.71	26.81
		1	24	25.71	26.13	25.98
		12	0	25.42	25.68	25.78
		12	6	25.74	25.97	25.90
		12	13	25.72	25.87	25.67
		25	0	25.60	25.79	25.51

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20000 CH	20175 CH	20350 CH
				1715 MHz	1732.5 MHz	1750 MHz
				LTE Band 4 (dBm)		
4 / 10M	QPSK	1	0	26.81	26.81	27.23
		1	24	27.20	27.34	27.39
		1	49	26.63	27.20	27.01
		25	0	25.85	26.09	25.93
		25	12	25.93	26.30	26.20
		25	25	25.54	26.16	26.03
		50	0	25.60	26.13	25.92
	16QAM	1	0	26.13	26.16	26.35
		1	24	26.35	26.90	26.64
		1	49	25.83	26.61	26.12
		25	0	25.31	25.69	25.52
		25	12	25.40	25.93	25.80
		25	25	25.03	25.80	25.64
		50	0	25.14	25.78	25.56

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20025 CH	20175 CH	20325 CH
				1717.5 MHz	1732.5 MHz	1747.5 MHz
				LTE Band 4 (dBm)		
4 / 15M	QPSK	1	0	26.57	26.55	27.03
		1	37	26.60	27.05	27.12
		1	74	26.25	26.73	26.54
		36	0	25.49	26.73	25.85
		36	19	25.53	25.95	25.97
		36	39	25.42	25.85	25.61
		75	0	25.36	25.73	25.84
	16QAM	1	0	25.90	26.00	26.31
		1	37	25.94	26.30	26.33
		1	74	25.68	26.01	25.78
		36	0	25.52	26.01	25.51
		36	19	25.22	25.63	25.62
		36	39	25.14	25.56	25.26
		75	0	25.05	25.45	25.50

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20050 CH	20175 CH	20300 CH
				1720 MHz	1732.5 MHz	1745 MHz
				LTE Band 4 (dBm)		
4 / 20M	QPSK	1	0	26.55	26.35	26.85
		1	50	26.25	26.24	26.63
		1	99	26.45	26.95	26.61
		50	0	25.68	25.75	25.64
		50	25	25.12	25.61	25.72
		50	50	25.21	25.60	25.33
		100	0	25.45	25.59	25.48
	16QAM	1	0	26.54	26.00	26.23
		1	50	25.81	25.12	25.94
		1	99	26.17	26.40	26.10
		50	0	25.36	25.30	25.21
		50	25	24.71	25.17	25.28
		50	50	24.92	25.16	25.25
		100	0	25.18	25.14	25.04

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20775 CH	21100 CH	21425 CH
				2502.5 MHz	2535 MHz	2567.5 MHz
				LTE Band 7 (dBm)		
7 / 5M	QPSK	1	0	24.86	25.33	25.42
		1	12	25.63	25.94	25.43
		1	24	24.99	25.21	25.63
		12	0	24.78	24.80	24.60
		12	6	25.04	25.03	25.04
		12	13	24.96	24.83	24.90
		25	0	24.82	24.72	24.70
	16QAM	1	0	23.85	24.11	24.45
		1	12	24.66	24.67	25.16
		1	24	24.05	24.01	24.43
		12	0	23.22	23.19	23.58
		12	6	23.47	23.43	23.82
		12	13	23.38	23.22	23.69
		25	0	23.19	23.15	23.93

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20800 CH	21100 CH	21400 CH
				2505 MHz	2535 MHz	2565 MHz
				LTE Band 7 (dBm)		
7 / 10M	QPSK	1	0	24.52	25.60	25.50
		1	24	25.70	25.89	25.86
		1	49	25.11	25.10	25.10
		25	0	24.55	24.92	24.83
		25	12	24.82	25.04	25.03
		25	25	24.61	24.78	24.63
		50	0	24.56	24.78	24.56
	16QAM	1	0	24.10	24.77	24.55
		1	24	24.62	25.03	25.11
		1	49	24.12	24.90	24.41
		25	0	23.06	23.94	23.52
		25	12	23.80	24.06	23.72
		25	25	23.60	23.82	23.34
		50	0	23.54	23.80	23.78

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20825 CH	21100 CH	21375 CH
				2507.5 MHz	2535 MHz	2562.5 MHz
				LTE Band 7 (dBm)		
7 / 15M	QPSK	1	0	24.28	25.33	24.87
		1	37	24.51	25.43	25.83
		1	74	24.90	24.61	25.25
		36	0	24.36	24.73	24.81
		36	19	24.50	24.78	25.06
		36	39	24.40	24.36	24.84
		75	0	24.36	24.43	24.76
	16QAM	1	0	24.15	24.53	24.00
		1	37	24.44	24.63	24.66
		1	74	24.12	23.92	24.07
		36	0	22.75	23.13	23.66
		36	19	22.91	23.20	23.89
		36	39	22.78	23.00	23.65
		75	0	22.76	23.01	23.55

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				20850 CH	21100 CH	21350 CH
				2510 MHz	2535 MHz	2560 MHz
				LTE Band 7 (dBm)		
7 / 20M	QPSK	1	0	24.42	25.20	24.79
		1	50	24.34	24.96	25.48
		1	99	24.94	24.37	25.23
		50	0	24.02	24.24	24.42
		50	25	24.05	24.17	24.46
		50	50	24.27	23.99	24.54
		100	0	24.12	24.05	24.40
	16QAM	1	0	24.01	24.39	24.67
		1	50	24.06	24.13	24.90
		1	99	24.23	24.08	24.91
		50	0	22.33	23.25	23.26
		50	25	22.30	23.20	23.21
		50	50	22.53	23.06	23.30
		100	0	22.42	23.07	23.22

APPENDIX B - OCCUPIED BANDWIDTH

WCDMA Band 4 WCDMA					
BPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26Db Bandwidth (MHz)
1312	1712.4	4.1451	19957	1710.7	4.717
1413	1732.6	4.1805	20175	1732.5	4.719
1513	1752.6	4.1472	20393	1754.3	4.717



WCDMA Band 4 HSDPA					
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
1312	1712.4	4.1569	19957	1710.7	4.723
1413	1732.6	4.1653	20175	1732.5	4.742
1513	1752.6	4.1503	20393	1754.3	4.722

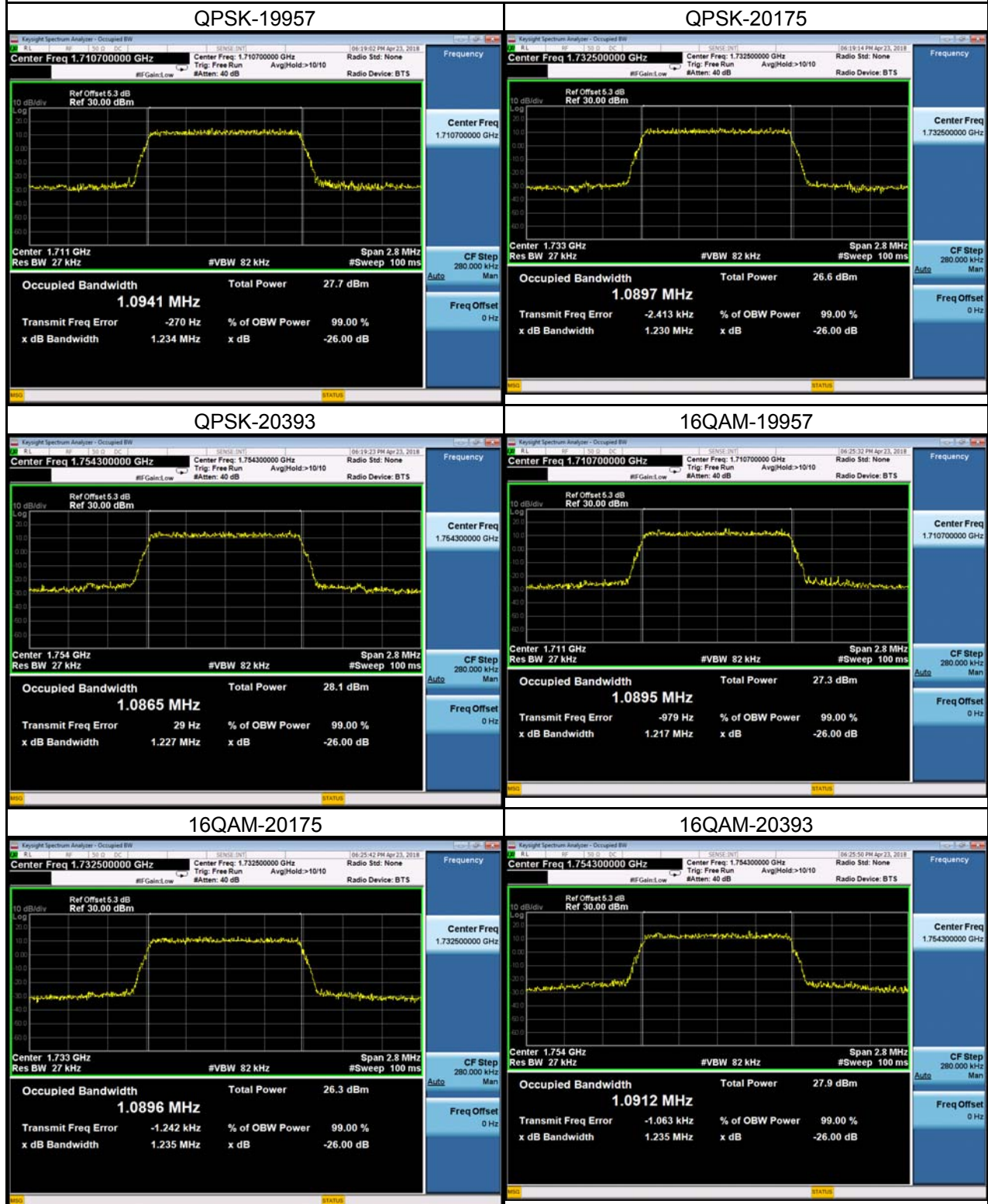


WCDMA Band 4 HSUPA					
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
1312	1712.4	4.1546	19957	1710.7	4.719
1413	1732.6	4.1737	20175	1732.5	4.738
1513	1752.6	4.1518	20393	1754.3	4.717



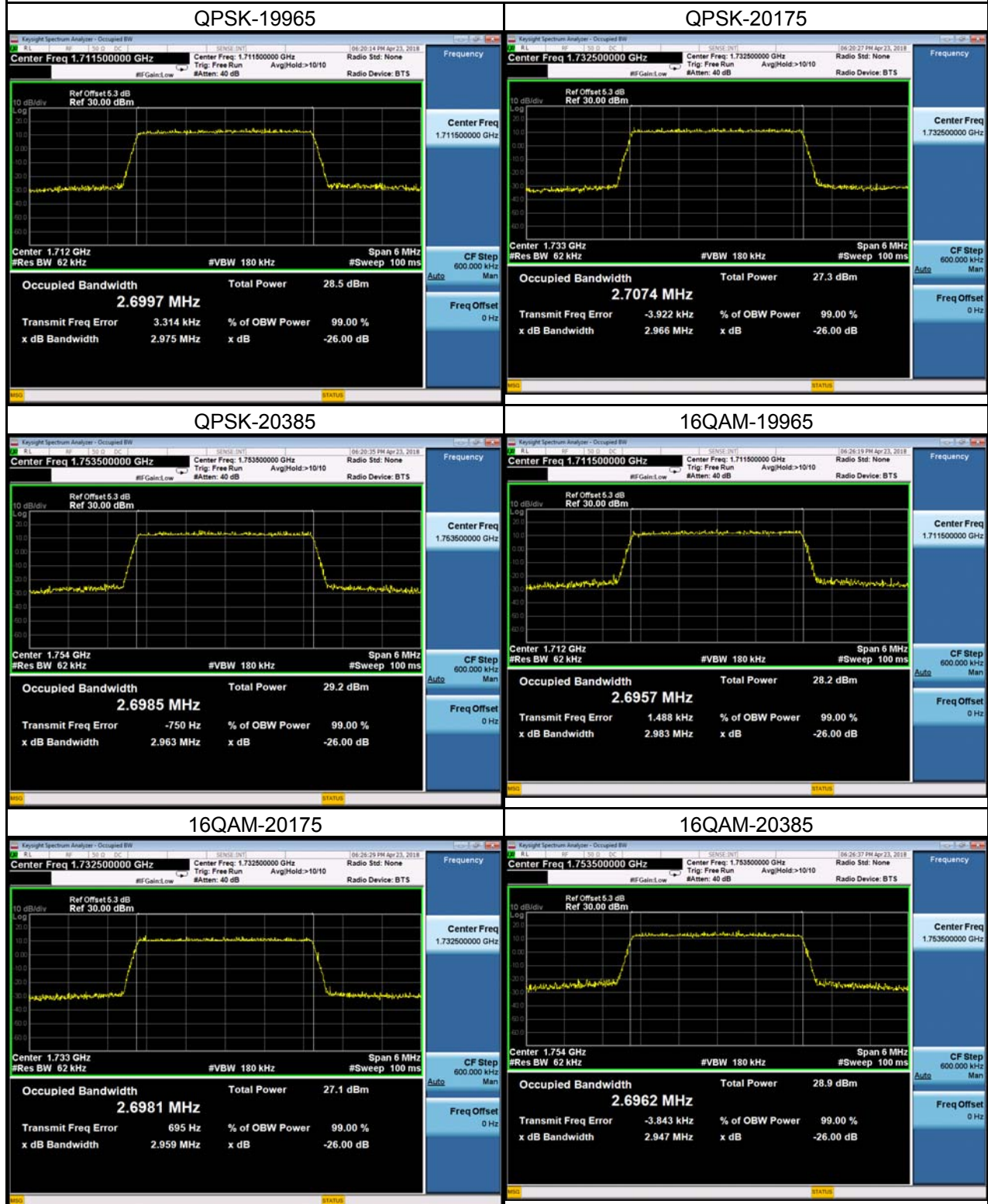
LTE Band 4_1.4M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
19957	1710.7	1.0941	19957	1710.7	1.0895
20175	1732.5	1.0897	20175	1732.5	1.0896
20393	1754.3	1.0865	20393	1754.3	1.0912
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19957	1710.7	1.234	19957	1710.7	1.217
20175	1732.5	1.230	20175	1732.5	1.235
20393	1754.3	1.227	20393	1754.3	1.235

Spectrum Plot



LTE Band 4_3M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
19965	1711.5	2.6997	19965	1711.5	2.6957
20175	1732.5	2.7074	20175	1732.5	2.6981
20385	1753.5	2.6985	20385	1753.5	2.6962
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19965	1711.5	2.975	19965	1711.5	2.983
20175	1732.5	2.966	20175	1732.5	2.959
20385	1753.5	2.963	20385	1753.5	2.947

Spectrum Plot



LTE Band 4_5M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
19975	1712.5	4.5044	19975	1712.5	4.4925
20175	1732.5	4.4997	20175	1732.5	4.4977
20375	1752.5	4.4940	20375	1752.5	4.4956
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19975	1712.5	4.957	19975	1712.5	4.915
20175	1732.5	4.941	20175	1732.5	4.963
20375	1752.5	4.911	20375	1752.5	4.946

Spectrum Plot

QPSK-19975



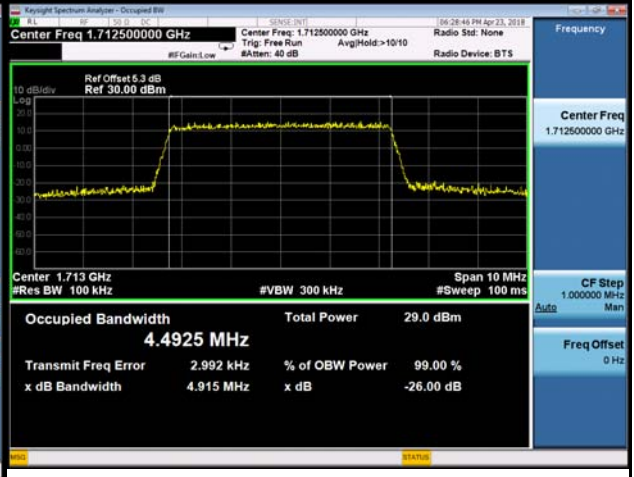
QPSK-20175



QPSK-20375



16QAM-19975



16QAM-20175

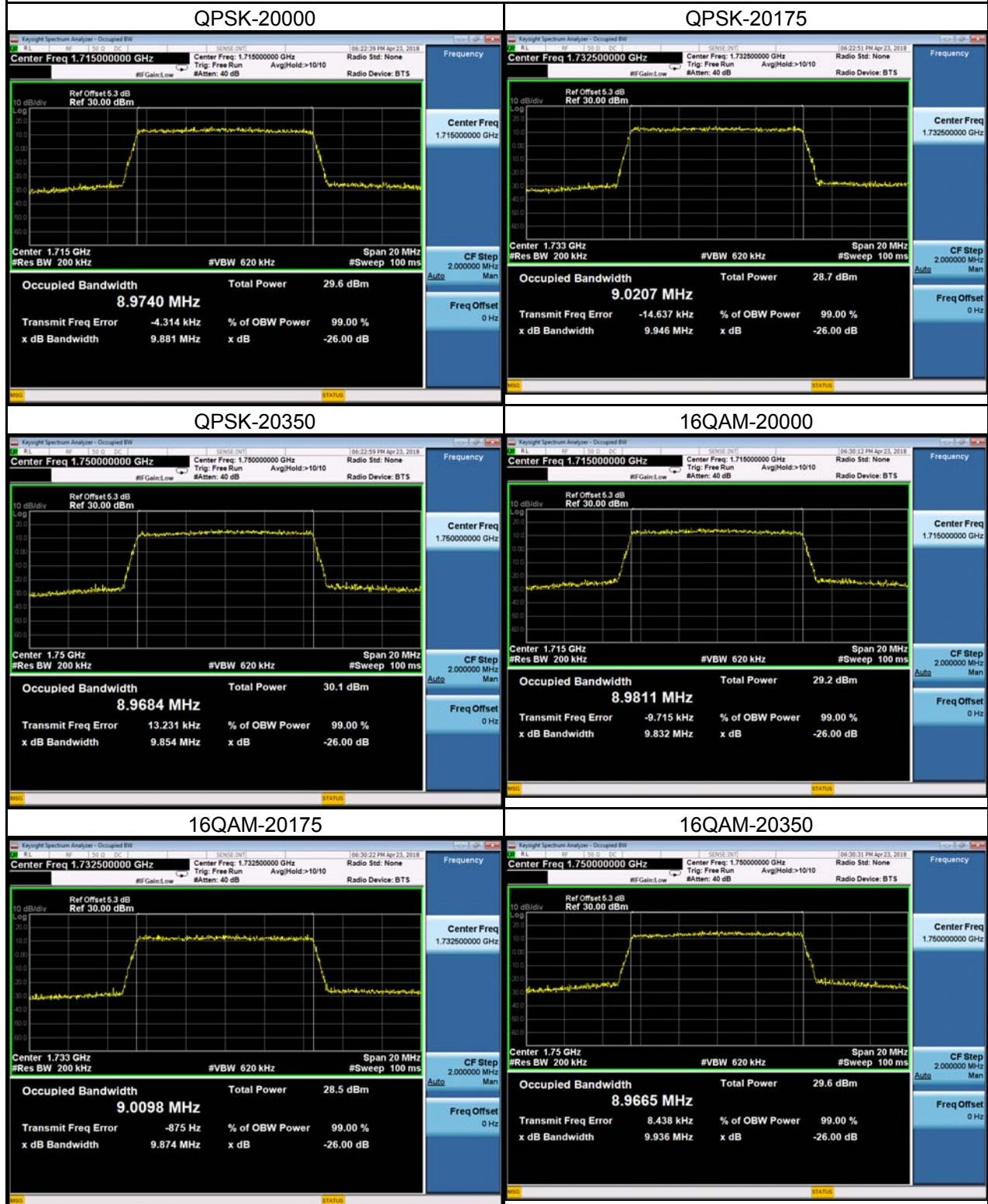


16QAM-20375



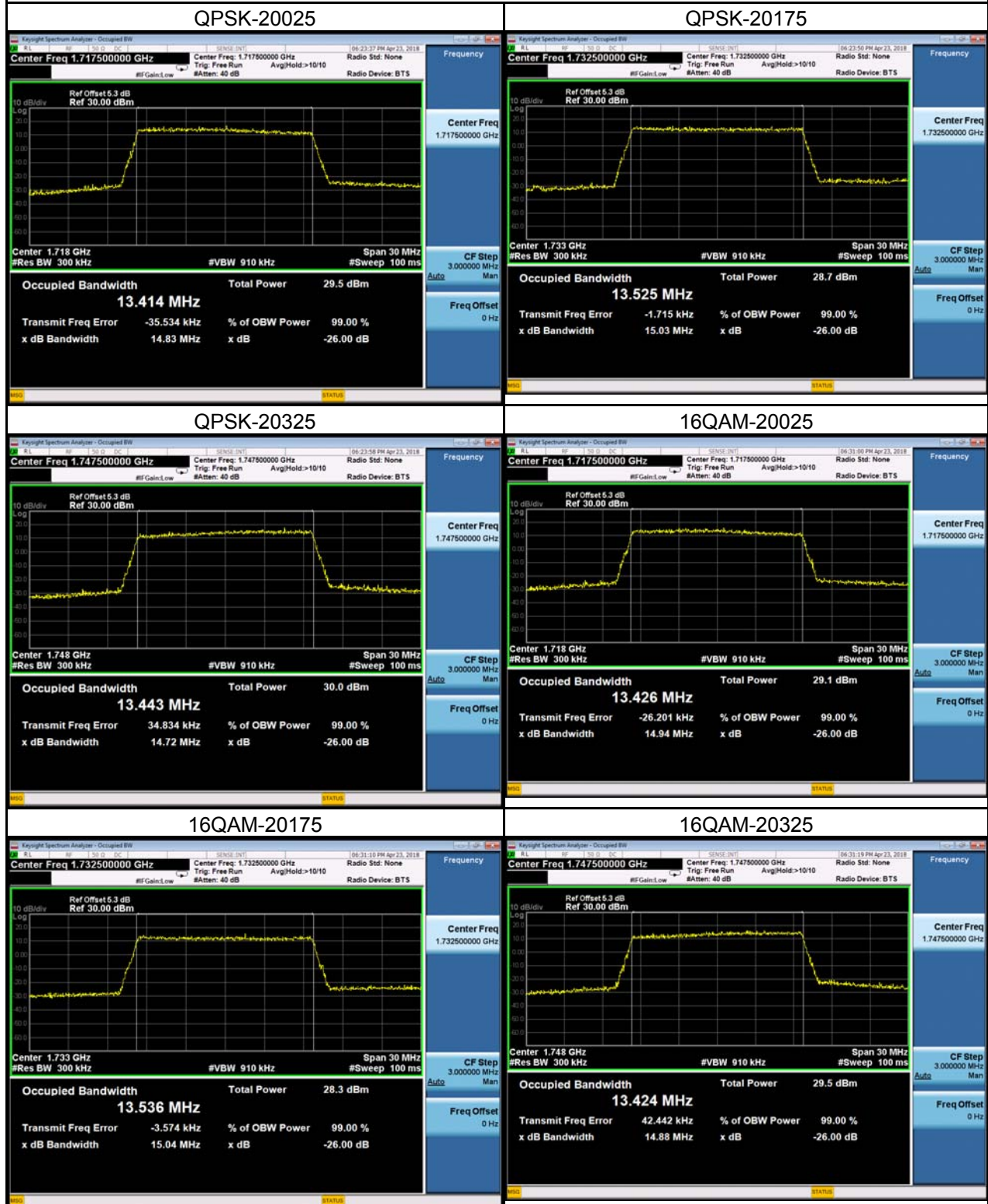
LTE Band 4_10M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20000	1715	8.9740	20000	1715	8.9811
20175	1732.5	9.0207	20175	1732.5	9.0098
20350	1750	8.9684	20350	1750	8.9665
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20000	1715	9.881	20000	1715	9.832
20175	1732.5	9.946	20175	1732.5	9.974
20350	1750	9.854	20350	1750	9.936

Spectrum Plot



LTE Band 4_15M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20025	1717.5	13.414	20025	1717.5	13.426
20175	1732.5	13.443	20175	1732.5	13.536
20325	1747.5	13.928	20325	1747.5	13.424
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	15.03	20025	1717.5	14.94
20175	1732.5	14.72	20175	1732.5	15.04
20325	1747.5	19.58	20325	1747.5	14.88

Spectrum Plot



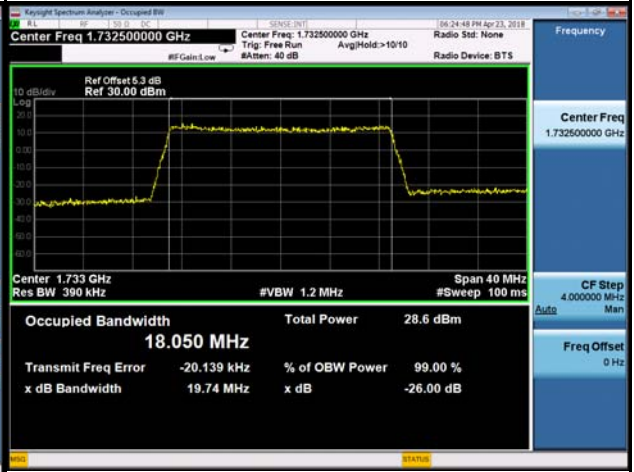
LTE Band 4_20M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20050	1720	17.928	20050	1720	17.925
20175	1732.5	18.050	20175	1732.5	18.055
20300	1745	17.945	20300	1745	17.921
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	19.58	20050	1720	19.70
20175	1732.5	19.74	20175	1732.5	19.63
20300	1745	19.69	20300	1745	19.61

Spectrum Plot

QPSK-20050



QPSK-20175



QPSK-20300



16QAM-20050



16QAM-20175



16QAM-20300



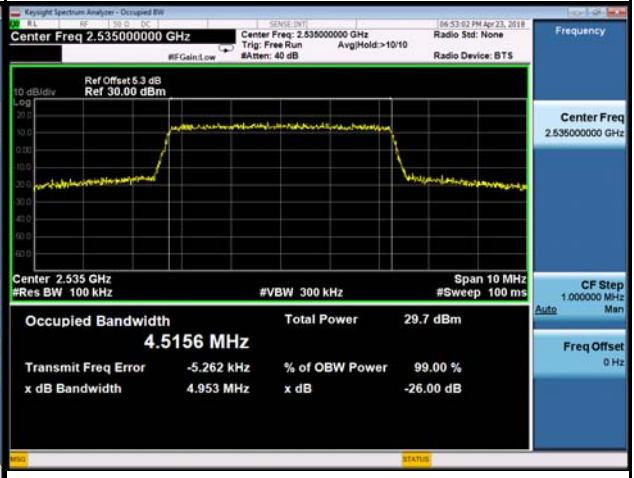
LTE Band 7_5M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20775	2502.5	4.5074	20775	2502.5	4.5116
21100	2535	4.5156	21100	2535	4.5061
21425	2567.5	4.4945	21425	2567.5	4.4958
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	2502.5	4.971	20775	2502.5	4.990
21100	2535	4.953	21100	2535	4.928
21425	2567.5	4.946	21425	2567.5	4.927

Spectrum Plot

QPSK-20775



QPSK-21100



QPSK-21425



16QAM-20775



16QAM-21100

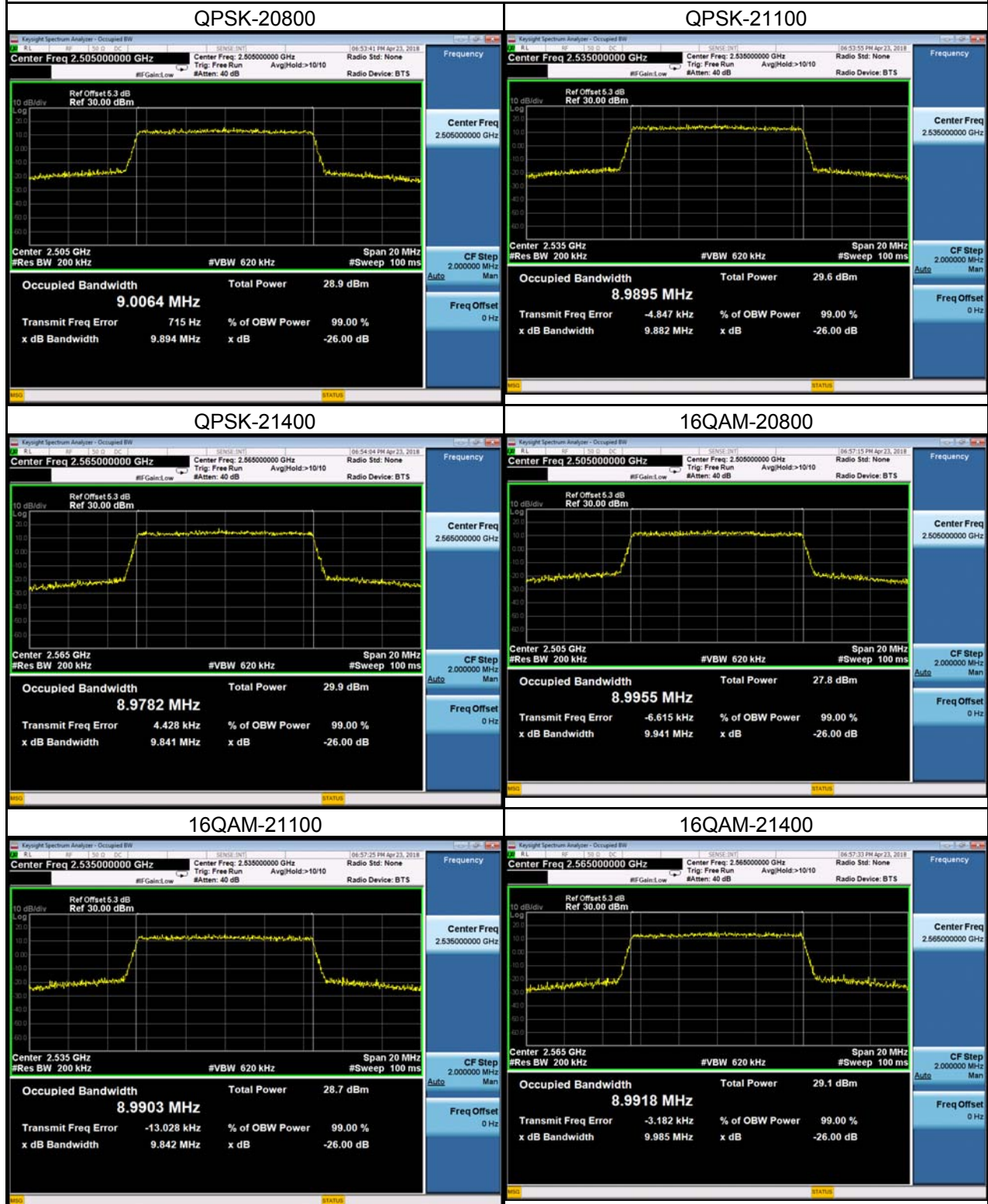


16QAM-21425



LTE Band 7_10M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20800	2505	9.0064	20800	2505	8.9955
21100	2535	8.9895	21100	2535	8.9903
21400	2565	8.9782	21400	2565	8.9918
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	9.894	20800	2505	9.941
21100	2535	9.882	21100	2535	9.842
21400	2565	9.841	21400	2565	9.985

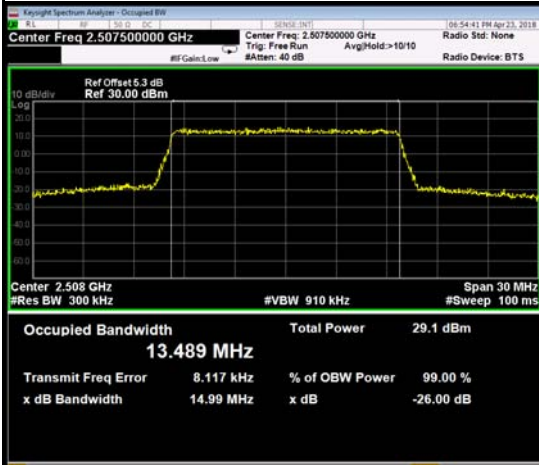
Spectrum Plot



LTE Band 7_15M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20825	2507.5	13.489	20825	2507.5	13.519
21100	2535	13.509	21100	2535	13.478
21375	2562.5	13.500	21375	2562.5	13.489
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	14.99	20825	2507.5	14.96
21100	2535	14.90	21100	2535	14.84
21375	2562.5	15.00	21375	2562.5	14.95

Spectrum Plot

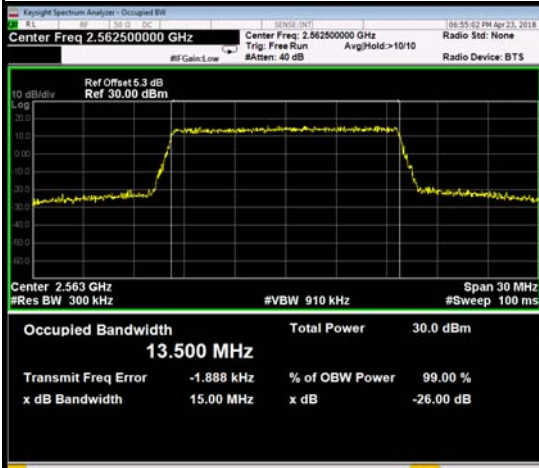
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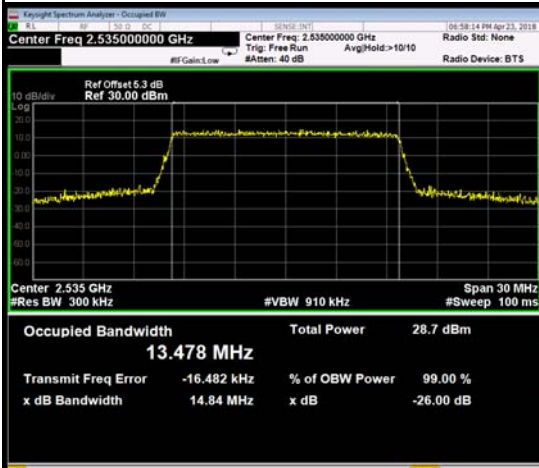
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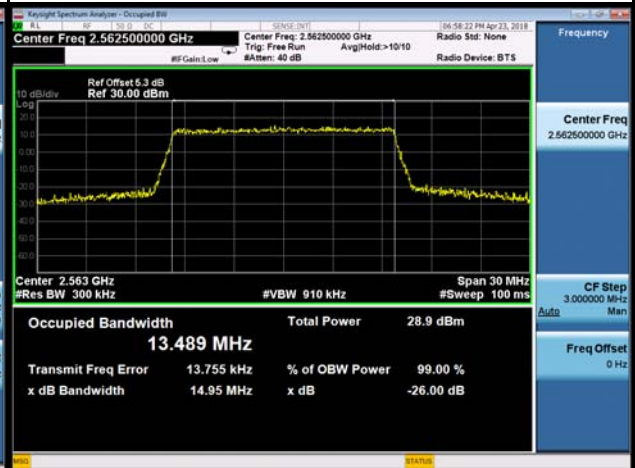
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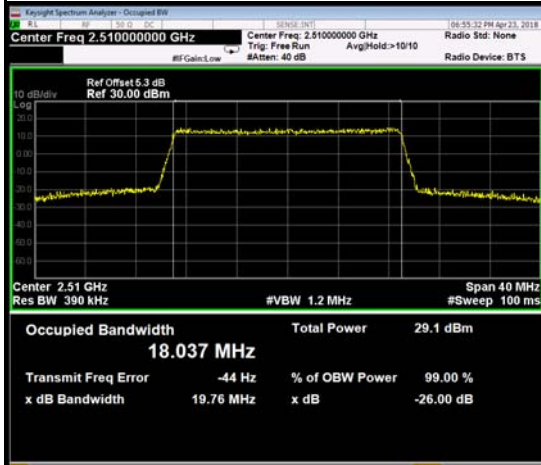
16QAM-21375



LTE Band 7_20M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20850	2510	18.037	20850	2510	18.032
21100	2535	17.944	21100	2535	17.920
21350	2560	17.999	21350	2560	18.023
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	19.76	20850	2510	19.69
21100	2535	19.78	21100	2535	19.66
21350	2560	19.80	21350	2560	19.69

Spectrum Plot

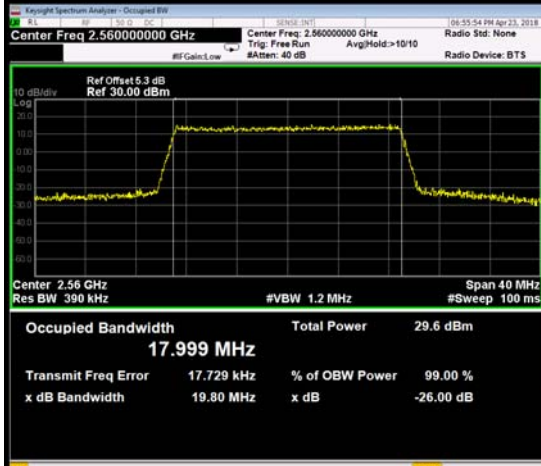
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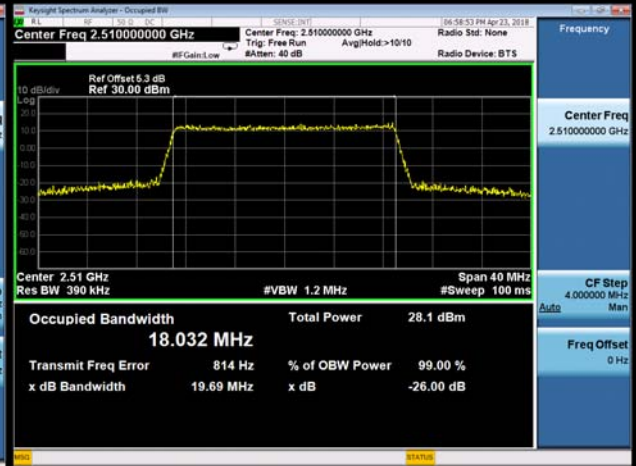
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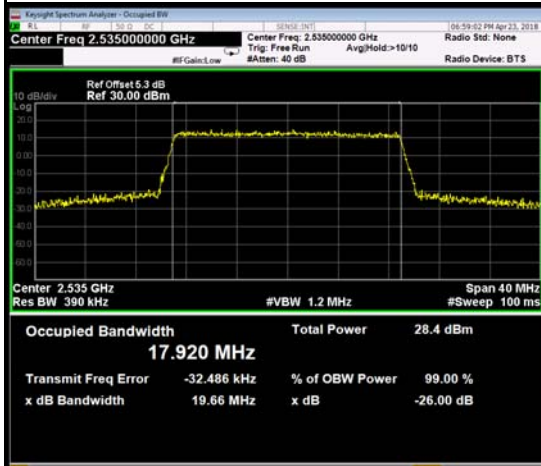
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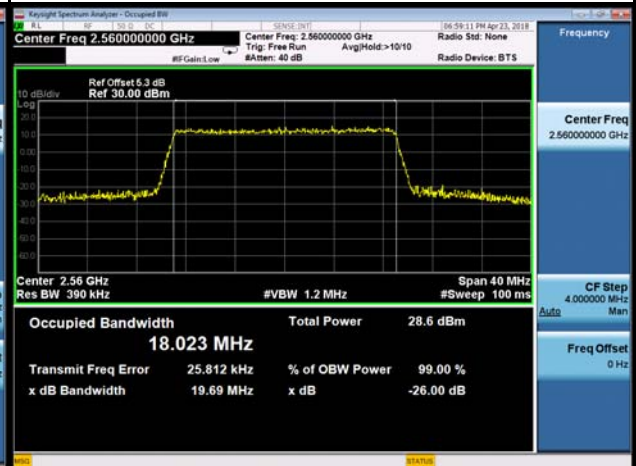
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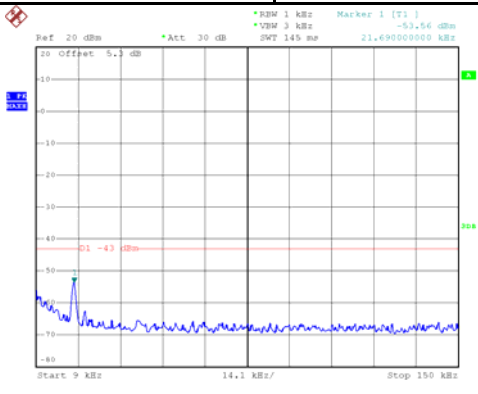
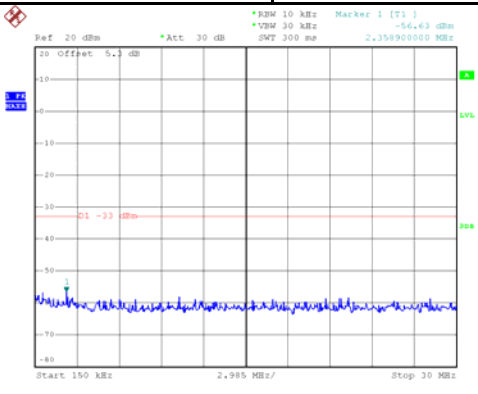
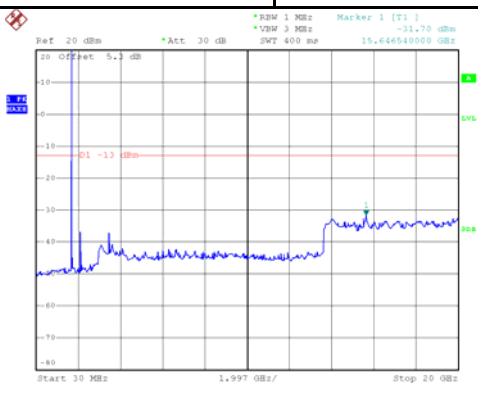
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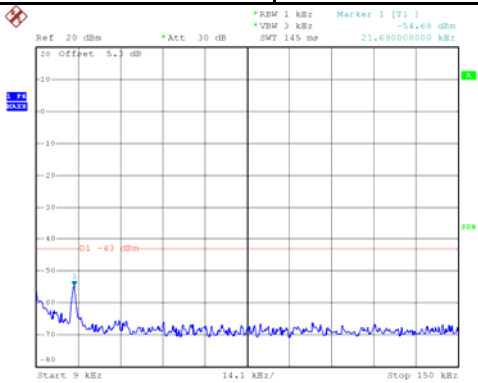
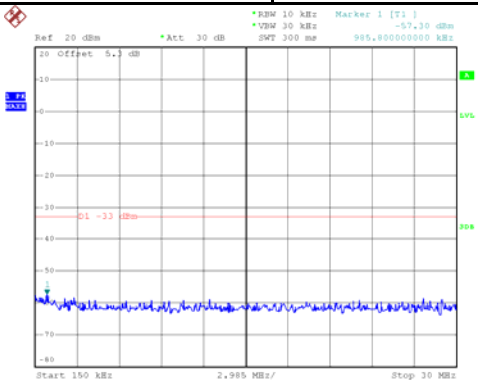
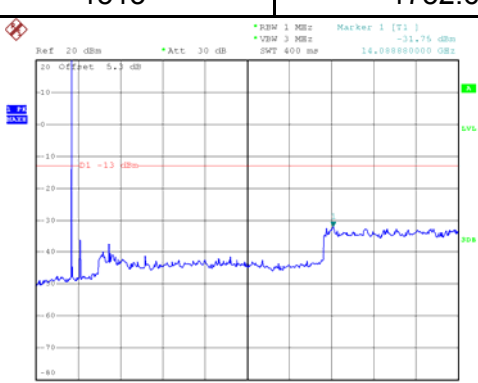


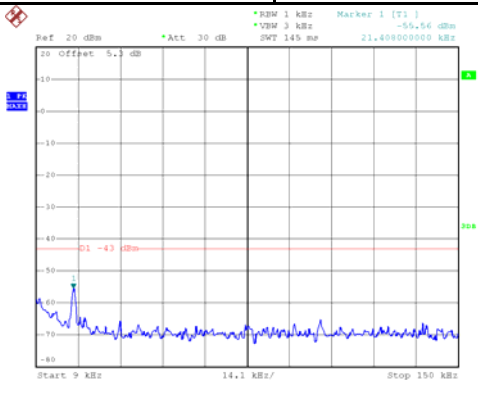
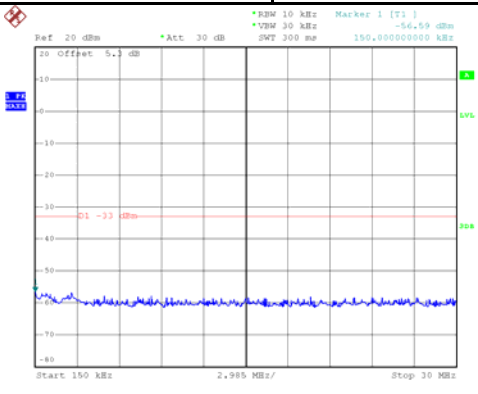
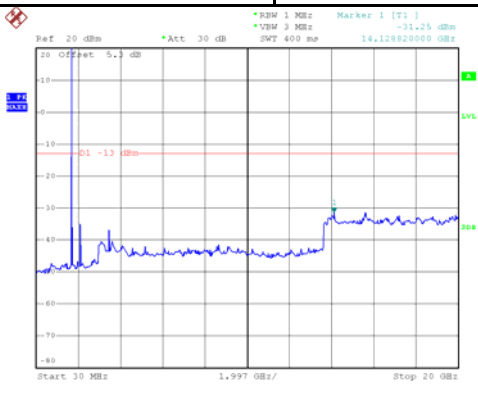
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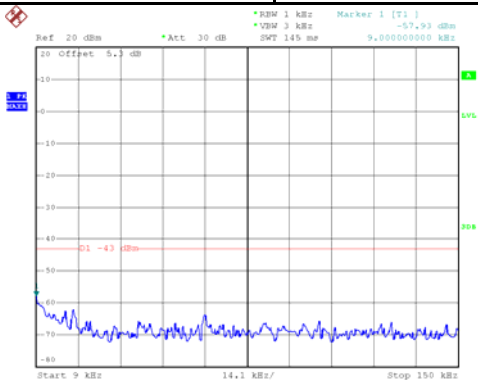
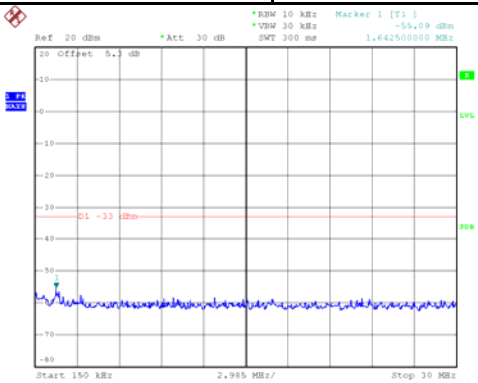
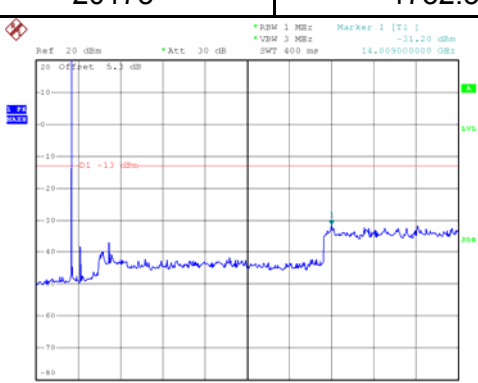
APPENDIX C - CONDUCTED EMISSIONS

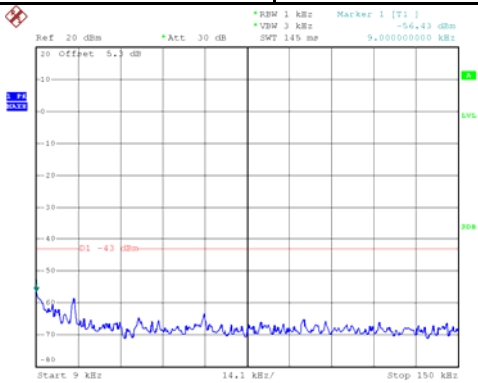
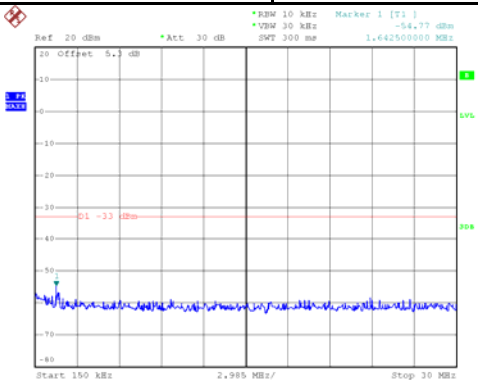
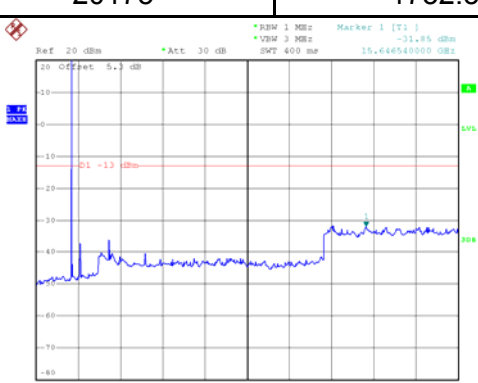
WCDMA Band 4_WCDMA			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
1513	1752.6	1513	1752.6
 Date: 19.APR.2018 10:21:15		 Date: 19.APR.2018 11:25:23	
Channel	Frequency(MHz)	-	-
1513	1752.6	-	-
 Date: 20.APR.2018 10:39:24		-	

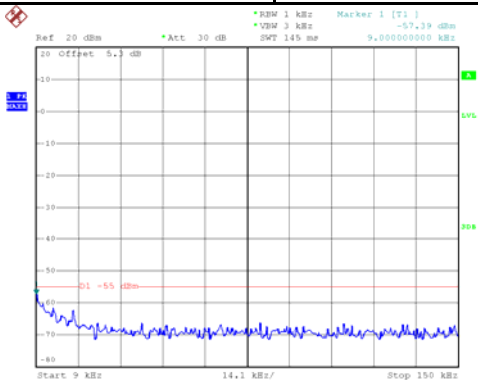
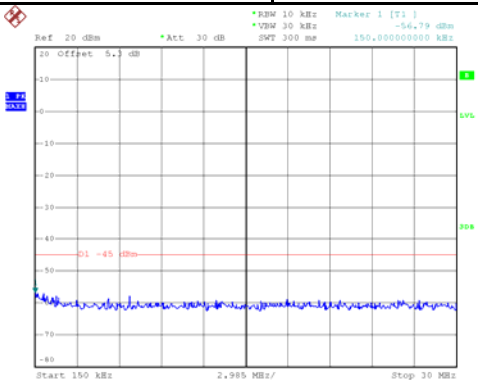
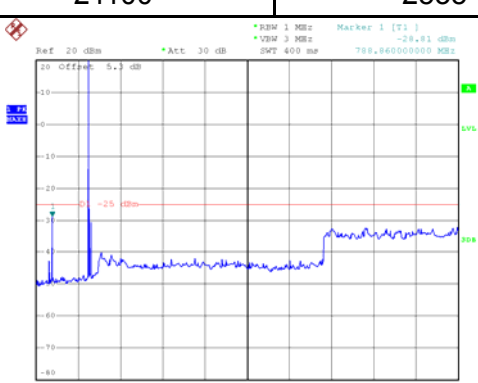
WCDMA Band 4_HSDPA			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
1513	1752.6	1513	1752.6
 Date: 19.APR.2018 10:56:26		 Date: 19.APR.2018 11:24:57	
Channel	Frequency(MHz)	-	-
1513	1752.6	-	-
 Date: 20.APR.2018 10:35:37		-	

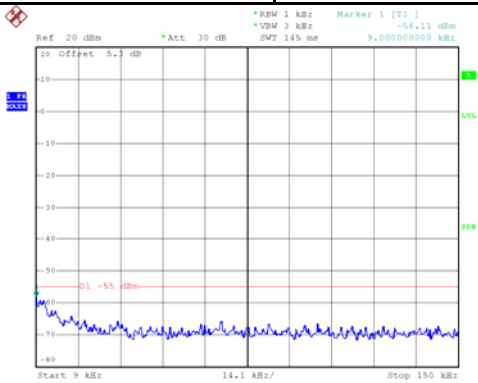
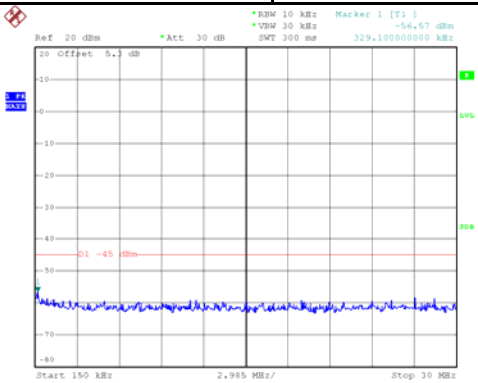
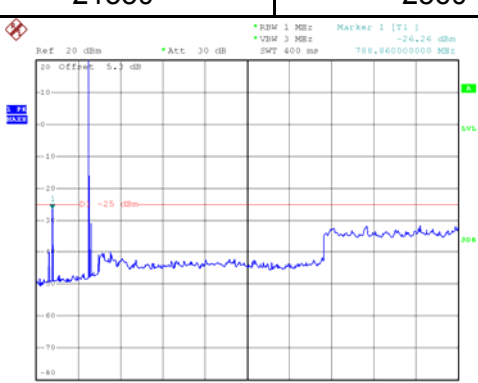
WCDMA Band 4_HSUPA			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
1513	1752.6	1513	1752.6
 Date: 19.APR.2018 11:02:52		 Date: 19.APR.2018 11:23:42	
Channel	Frequency(MHz)	-	-
1513	1752.6	-	-
 Date: 20.APR.2018 10:39:13		-	

LTE Band 4_1.4M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
20175	1732.5	20175	1732.5
Channel	Frequency(MHz)	-	-
20175	1732.5	-	-
		-	

LTE Band 4_5M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
20175	1732.5	20175	1732.5
			
Channel	Frequency(MHz)	-	-
20175	1732.5	-	-
			

LTE Band 4_20M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
20175	1732.5	20175	1732.5
 Date: 19.APR.2018 17:09:29		 Date: 19.APR.2018 17:08:19	
Channel	Frequency(MHz)	-	-
20175	1732.5	-	-
 Date: 20.APR.2018 10:20:42		-	

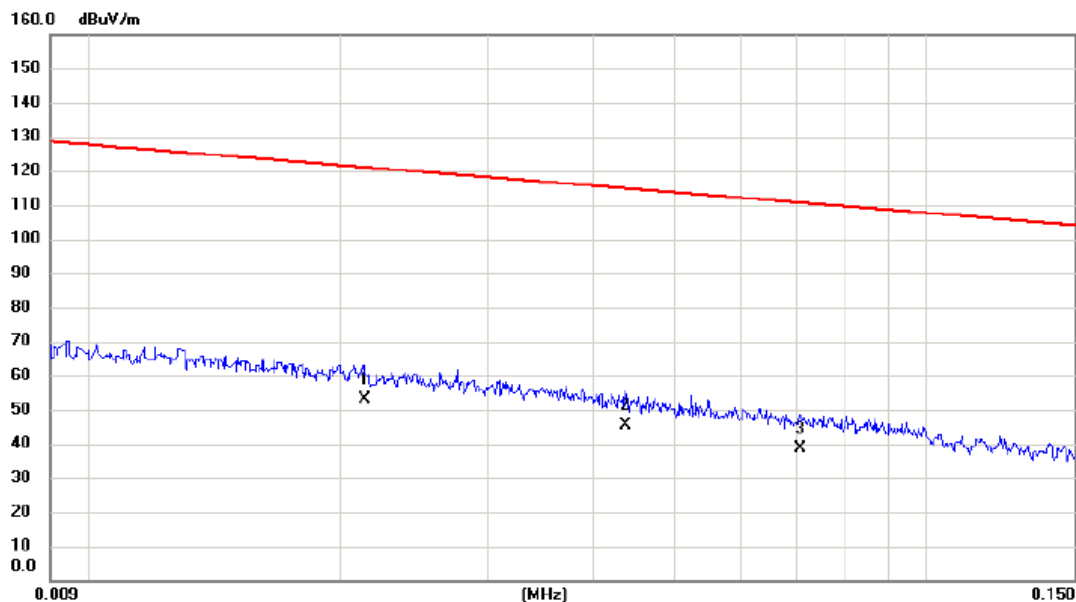
LTE Band 7_5M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
21100	2535	21100	2535
 Date: 20.APR.2018 13:50:11		 Date: 20.APR.2018 13:46:18	
Channel	Frequency(MHz)	-	-
21100	2535	-	-
 Date: 20.APR.2018 10:25:20		-	

LTE Band 7_20M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
21350	2560	21350	2560
			
Channel	Frequency(MHz)	-	-
21350	2560	-	-
			

APPENDIX C - RADIATED EMISSION (9KHZ TO 30MHZ)

Test Mode: TX MODE CHANNEL_Adapter:Huntkey

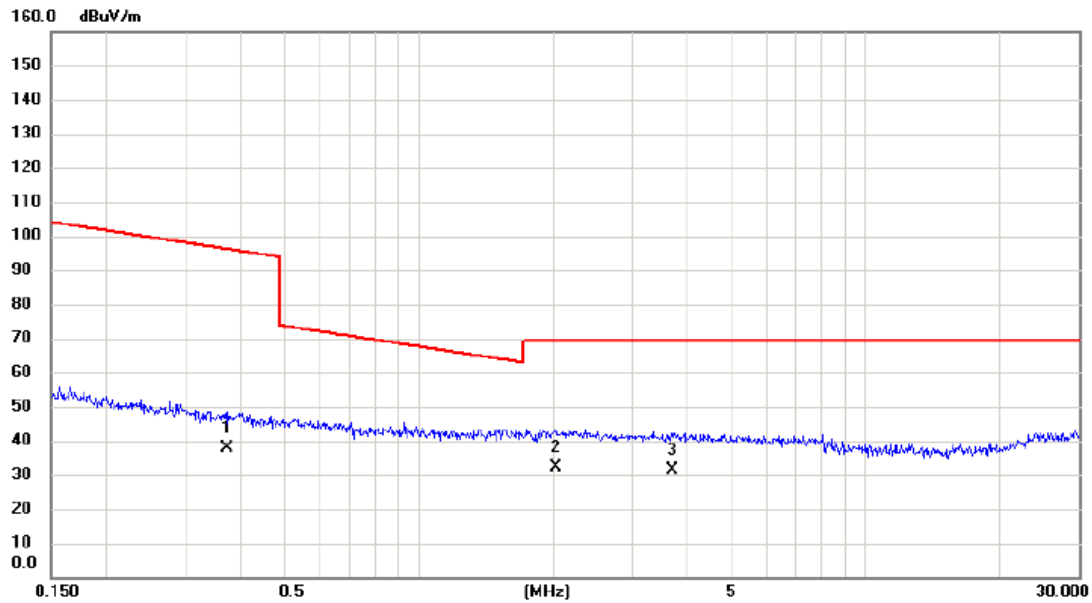
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0214	33.40	19.58	52.98	121.00	-68.02	AVG	
2		0.0437	26.30	18.91	45.21	114.80	-69.59	AVG	
3		0.0706	20.10	18.32	38.42	110.63	-72.21	AVG	

Test Mode: TX MODE CHANNEL_Adapter:Huntkey

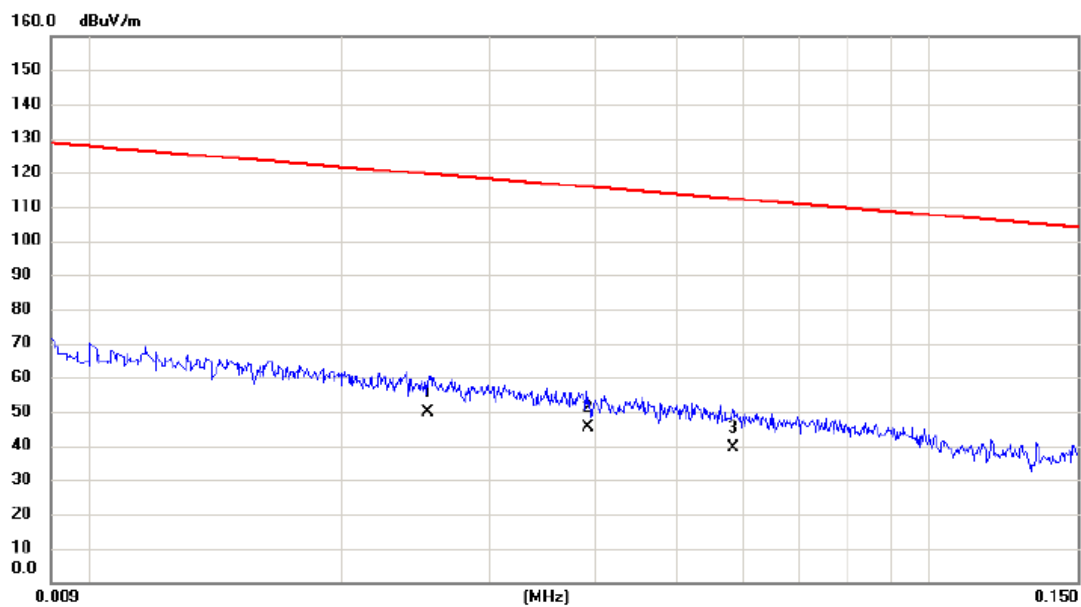
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.3731	21.10	16.56	37.66	96.17	-58.51	AVG	
2	*	2.0225	16.90	15.50	32.40	69.54	-37.14	QP	
3		3.7001	16.20	15.03	31.23	69.54	-38.31	QP	

Test Mode: TX MODE CHANNEL_Adapter:Huntkey

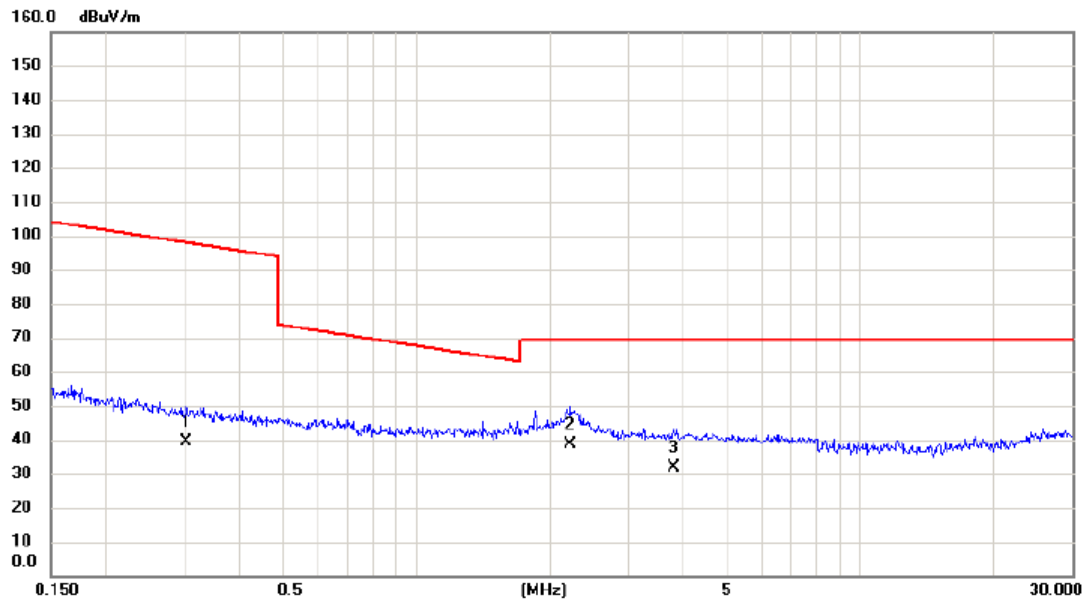
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0253	30.50	19.46	49.96	119.54	-69.58	AVG	
2		0.0392	26.30	19.04	45.34	115.74	-70.40	AVG	
3		0.0584	20.70	18.56	39.26	112.28	-73.02	AVG	

Test Mode: TX MODE CHANNEL_Adapter:Huntkey

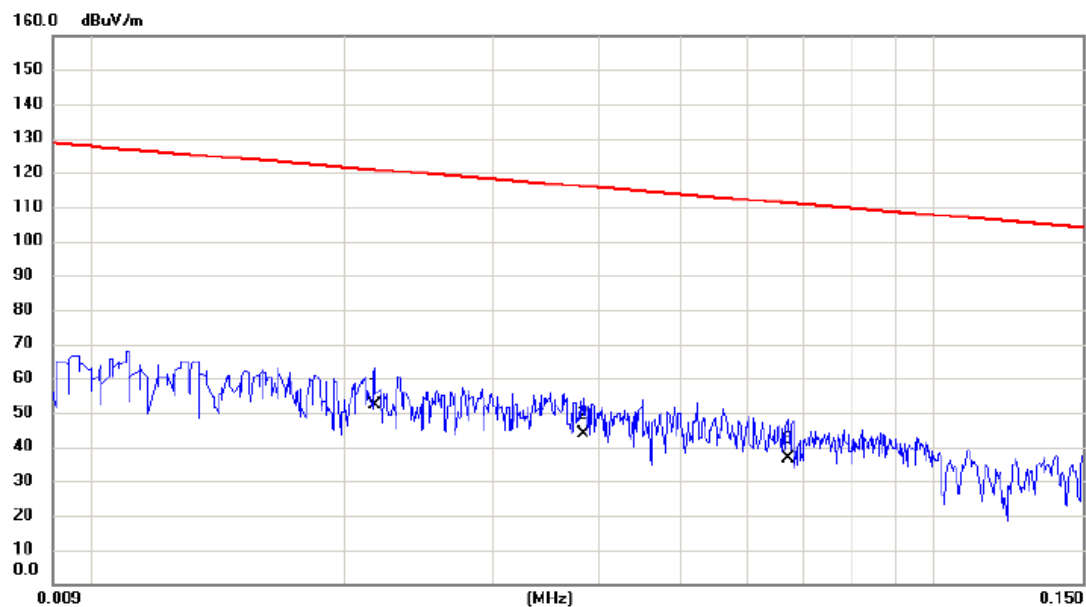
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.3035	22.80	16.62	39.42	97.96	-58.54	AVG	
2	*	2.2250	23.20	15.44	38.64	69.54	-30.90	QP	
3		3.7994	16.60	15.01	31.61	69.54	-37.93	QP	

Test Mode: TX MODE CHANNEL_Adapter:BYD

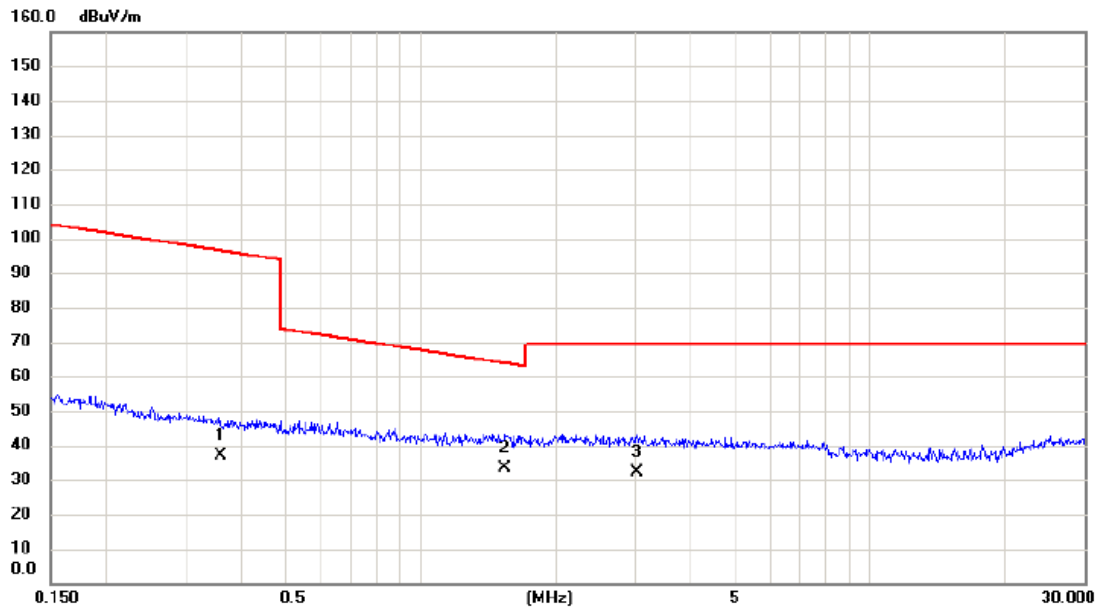
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0217	32.80	19.57	52.37	120.88	-68.51	AVG	
2		0.0384	24.60	19.07	43.67	115.92	-72.25	AVG	
3		0.0670	18.30	18.39	36.69	111.08	-74.39	AVG	

Test Mode: TX MODE CHANNEL_Adapter:BYD

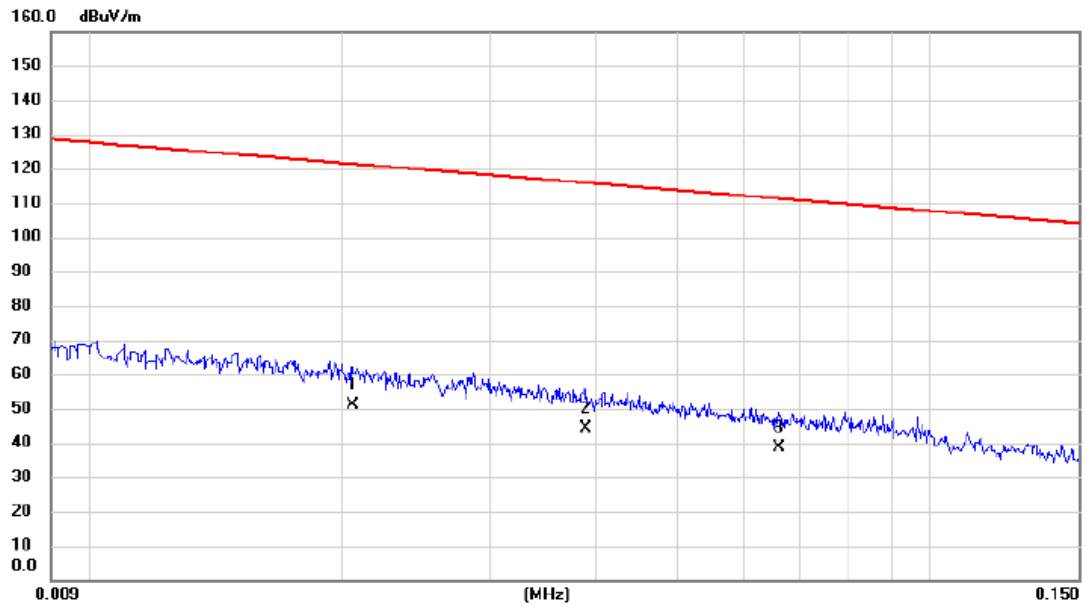
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.3577	20.30	16.57	36.87	96.53	-59.66	AVG	
2	*	1.5436	17.60	15.68	33.28	63.83	-30.55	QP	
3		3.0253	16.90	15.22	32.12	69.54	-37.42	QP	

Test Mode: TX MODE CHANNEL_Adapter:BYD

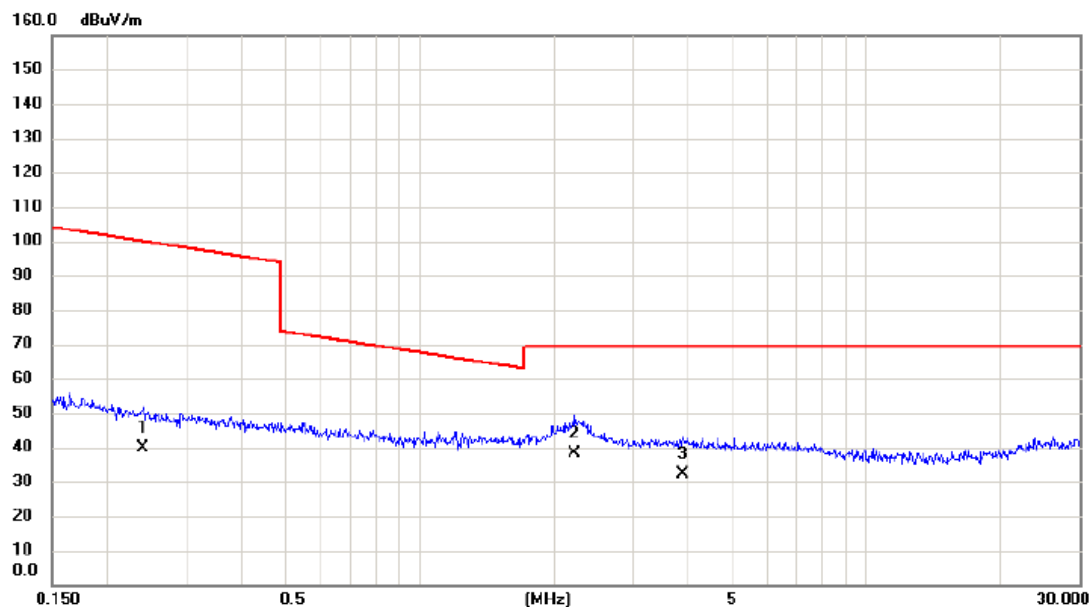
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0206	31.30	19.60	50.90	121.33	-70.43	AVG	
2		0.0390	25.20	19.05	44.25	115.78	-71.53	AVG	
3		0.0660	20.10	18.41	38.51	111.21	-72.70	AVG	

Test Mode: TX MODE CHANNEL_Adapter:BYD

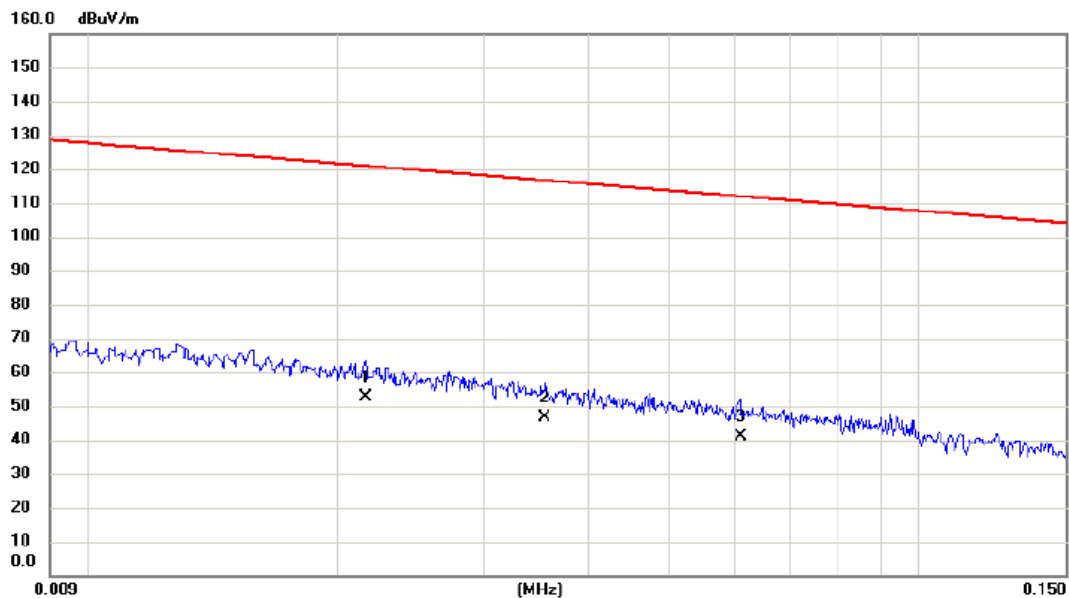
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2404	23.30	16.69	39.99	99.99	-60.00	AVG	
2	*	2.2250	22.70	15.44	38.14	69.54	-31.40	QP	
3		3.8808	17.20	14.99	32.19	69.54	-37.35	QP	

Test Mode: TX MODE CHANNEL _Adapter:Da Hong

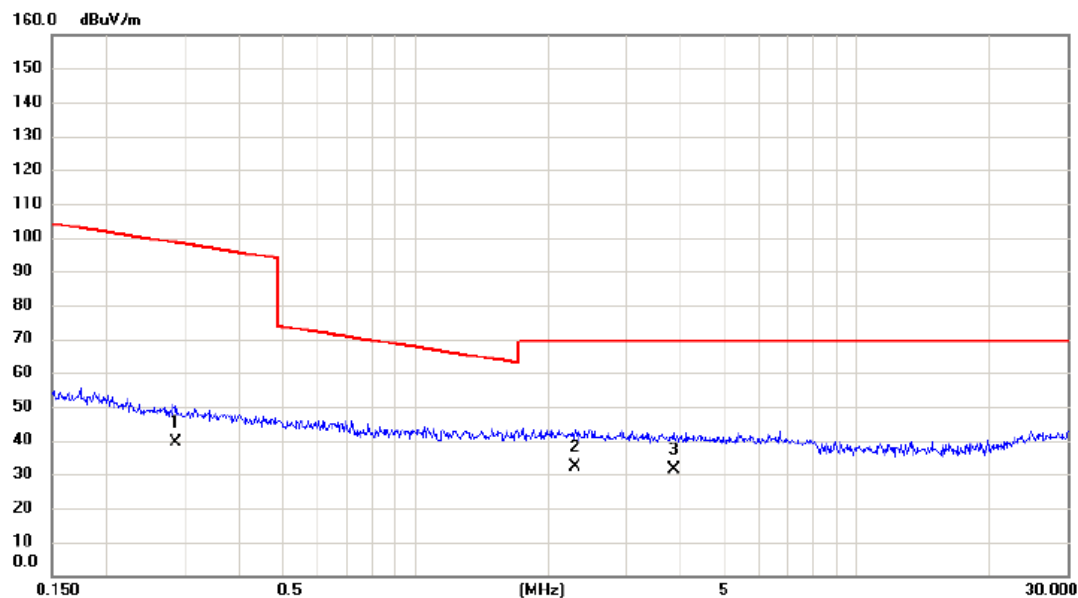
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0216	33.20	19.57	52.77	120.92	-68.15	AVG	
2		0.0355	27.30	19.16	46.46	116.60	-70.14	AVG	
3		0.0610	22.50	18.51	41.01	111.90	-70.89	AVG	

Test Mode: TX MODE CHANNEL_Adapter:Da Hong

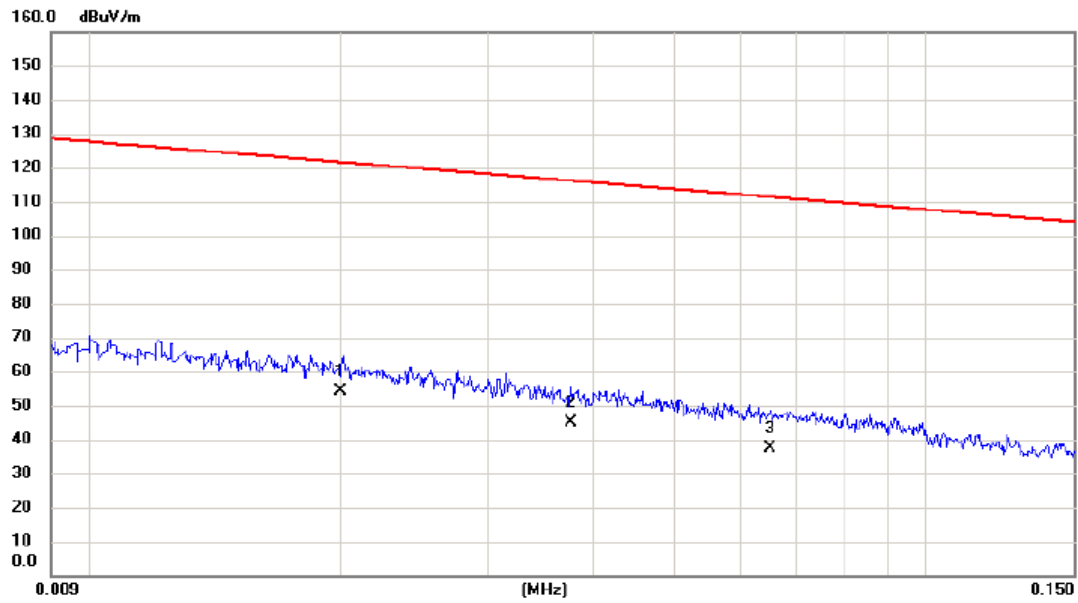
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2863	22.80	16.63	39.43	98.47	-59.04	AVG	
2	*	2.2968	16.80	15.43	32.23	69.54	-37.31	QP	
3		3.8400	16.30	15.00	31.30	69.54	-38.24	QP	

Test Mode: TX MODE CHANNEL_Adapter:Da Hong

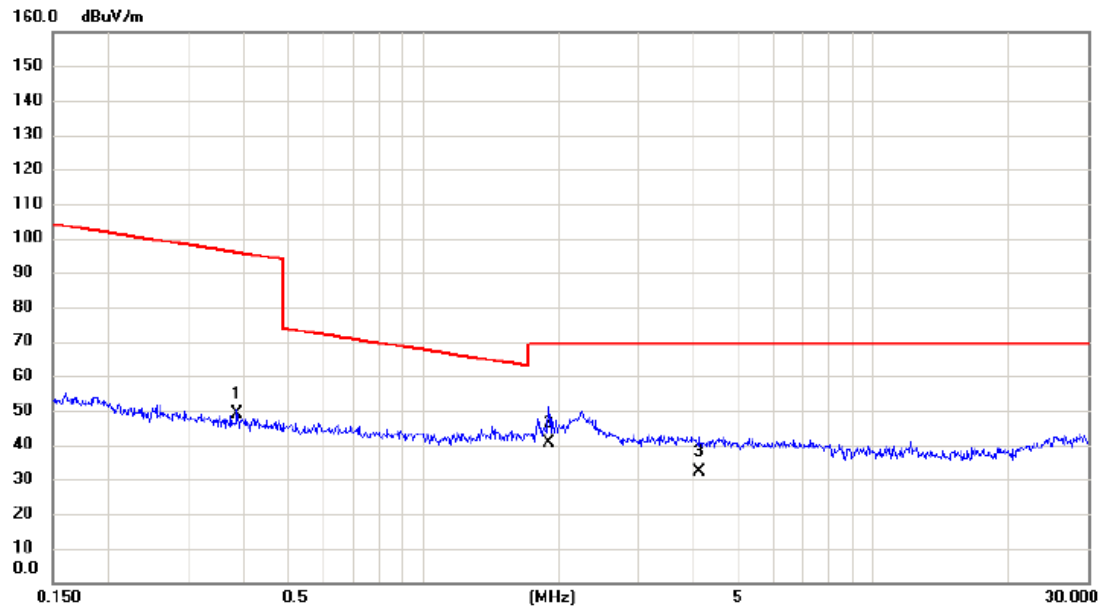
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0200	34.60	19.62	54.22	121.58	-67.36	AVG	
2		0.0377	26.10	19.09	45.19	116.08	-70.89	AVG	
3		0.0652	18.80	18.43	37.23	111.32	-74.09	AVG	

Test Mode: TX MODE CHANNEL_Adapter:Da Hong

Ant 90°

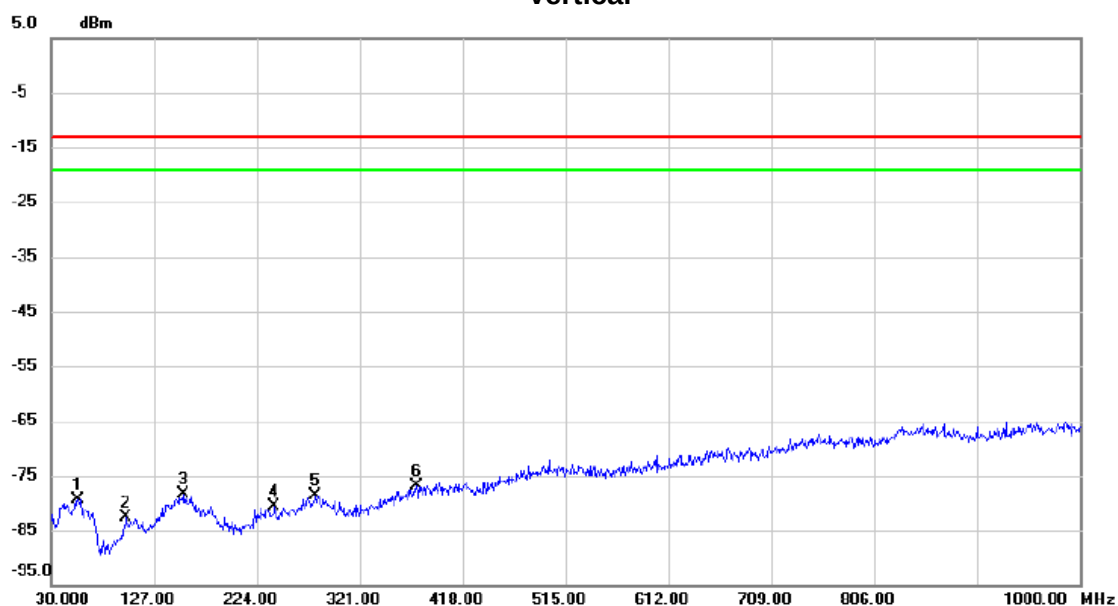


No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.3852	32.50	16.55	49.05	95.89	-46.84	AVG	
2	*	1.9080	25.20	15.55	40.75	69.54	-28.79	QP	
3		4.0920	17.30	14.89	32.19	69.54	-37.35	QP	

APPENDIX D - RADIATED EMISSION (30MHZ TO 1GHZ)

Test Mode: WCDMA Band 4_TX CH1513

Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	55.220	-81.99	2.61	-79.38	-13.00	-66.38	peak	
2	100.810	-81.36	-1.35	-82.71	-13.00	-69.71	peak	
3	155.130	-81.44	3.17	-78.27	-13.00	-65.27	peak	
4	240.490	-80.84	0.24	-80.60	-13.00	-67.60	peak	
5	279.290	-81.18	2.62	-78.56	-13.00	-65.56	peak	
6 *	374.350	-80.49	3.54	-76.95	-13.00	-63.95	peak	

Test Mode: WCDMA Band 4_TX CH1513

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		44.550	-81.99	2.97	-79.02	-13.00	-66.02	peak	
2		149.310	-81.95	4.16	-77.79	-13.00	-64.79	peak	
3		239.520	-80.81	2.44	-78.37	-13.00	-65.37	peak	
4		385.020	-80.34	6.04	-74.30	-13.00	-61.30	peak	
5		491.720	-79.52	7.46	-72.06	-13.00	-59.06	peak	
6 *		702.210	-80.67	13.93	-66.74	-13.00	-53.74	peak	

Test Mode: WCDMA Band 4_TX CH1513_ HSDPA

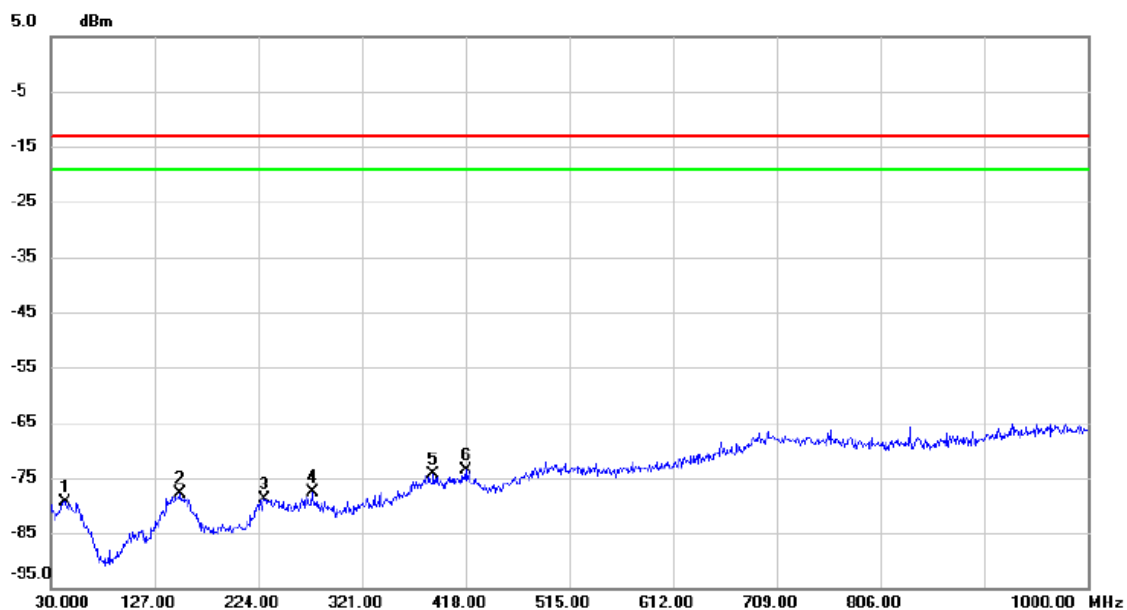
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		44.550	-81.71	1.96	-79.75	-13.00	-66.75	peak	
2		153.190	-81.51	3.16	-78.35	-13.00	-65.35	peak	
3		280.260	-81.92	2.64	-79.28	-13.00	-66.28	peak	
4		384.050	-80.59	3.89	-76.70	-13.00	-63.70	peak	
5		519.850	-80.92	7.51	-73.41	-13.00	-60.41	peak	
6	*	773.020	-79.91	12.20	-67.71	-13.00	-54.71	peak	

Test Mode: WCDMA Band 4_TX CH1513_ HSDPA

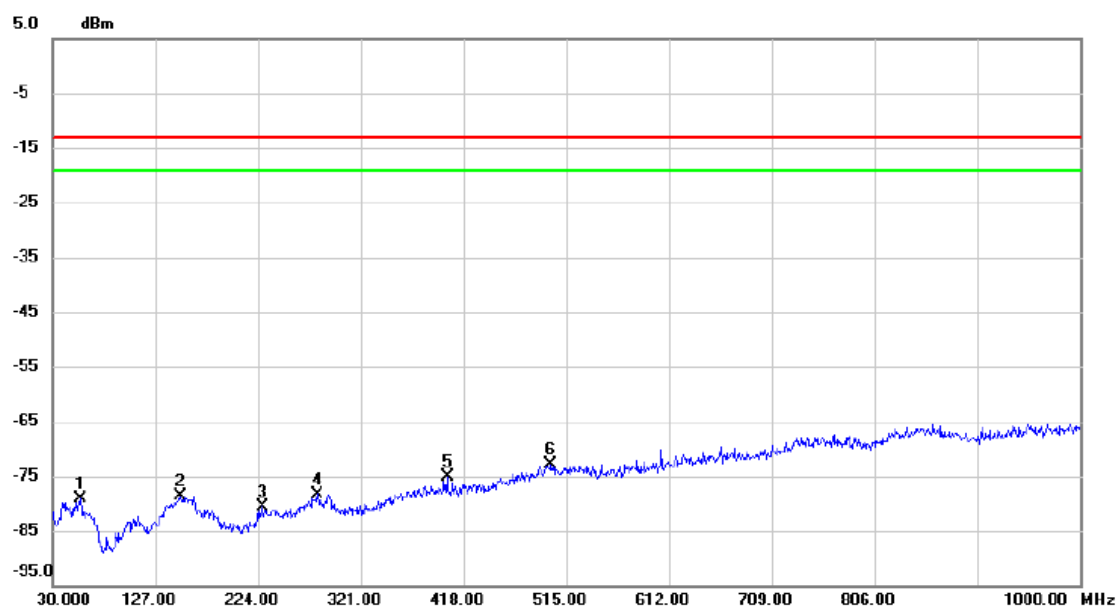
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		43.580	-82.12	2.78	-79.34	-13.00	-66.34	peak	
2		151.250	-82.03	4.05	-77.98	-13.00	-64.98	peak	
3		229.820	-82.00	3.20	-78.80	-13.00	-65.80	peak	
4		274.440	-80.38	2.79	-77.59	-13.00	-64.59	peak	
5		387.930	-80.26	6.01	-74.25	-13.00	-61.25	peak	
6	*	418.000	-80.50	6.78	-73.72	-13.00	-60.72	peak	

Test Mode: WCDMA Band 4_TX CH1513_ HSUPA

Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		56.190	-81.42	2.18	-79.24	-13.00	-66.24	peak	
2		151.250	-81.77	3.15	-78.62	-13.00	-65.62	peak	
3		227.880	-80.58	0.08	-80.50	-13.00	-67.50	peak	
4		280.260	-80.89	2.64	-78.25	-13.00	-65.25	peak	
5		402.480	-79.39	4.18	-75.21	-13.00	-62.21	peak	
6	*	500.450	-80.43	7.55	-72.88	-13.00	-59.88	peak	

Test Mode: WCDMA Band 4_TX CH1513_ HSUPA

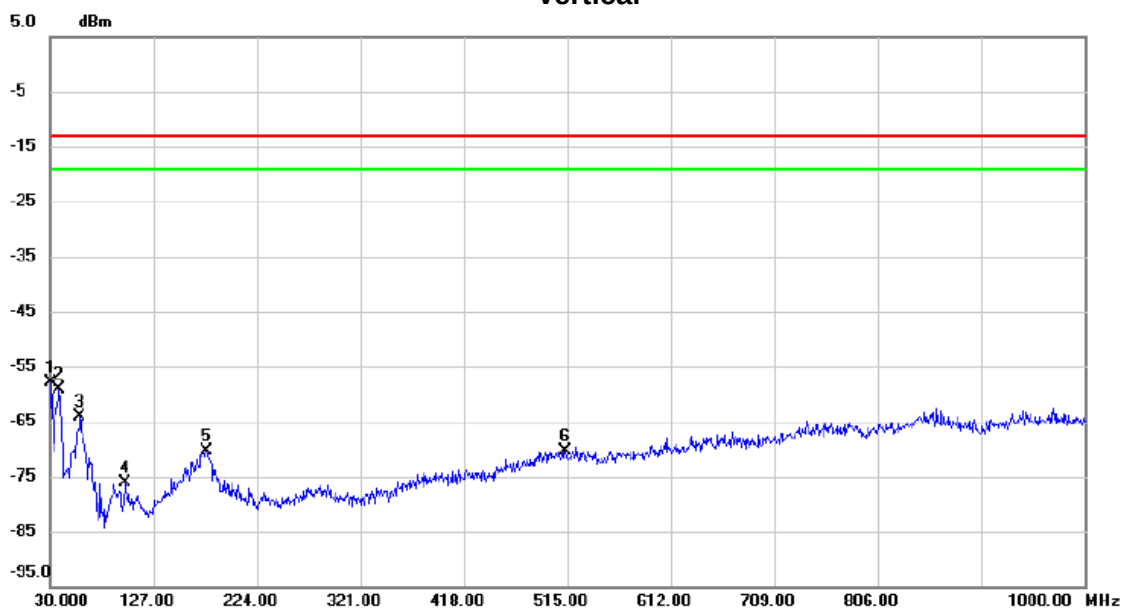
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		44.550	-80.92	2.97	-77.95	-13.00	-64.95	peak	
2		107.600	-81.87	-2.85	-84.72	-13.00	-71.72	peak	
3		149.310	-81.49	4.16	-77.33	-13.00	-64.33	peak	
4		229.820	-80.92	3.20	-77.72	-13.00	-64.72	peak	
5		411.210	-80.56	6.44	-74.12	-13.00	-61.12	peak	
6	*	518.880	-80.02	8.08	-71.94	-13.00	-58.94	peak	

Test Mode: LTE Band 4_TX CH20175_1.4M

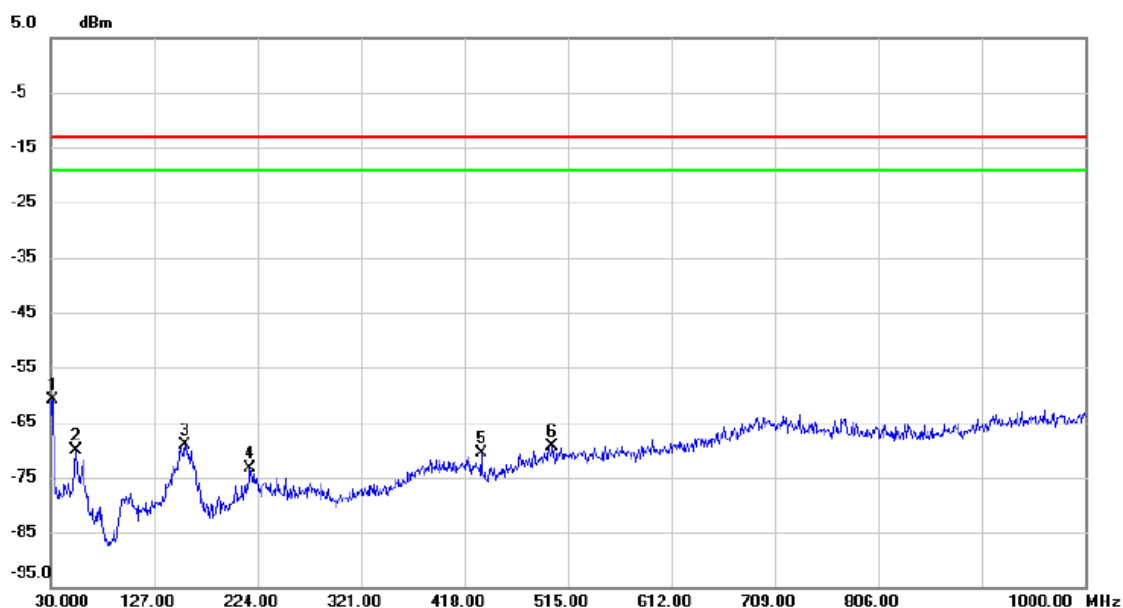
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	30.970	-57.37	-0.49	-57.86	-13.00	-44.86	peak	
2		38.730	-60.42	1.21	-59.21	-13.00	-46.21	peak	
3		58.130	-65.34	1.31	-64.03	-13.00	-51.03	peak	
4		100.810	-74.68	-1.35	-76.03	-13.00	-63.03	peak	
5		176.470	-70.85	0.46	-70.39	-13.00	-57.39	peak	
6		513.060	-77.89	7.52	-70.37	-13.00	-57.37	peak	

Test Mode: LTE Band 4_TX CH20175_1.4M

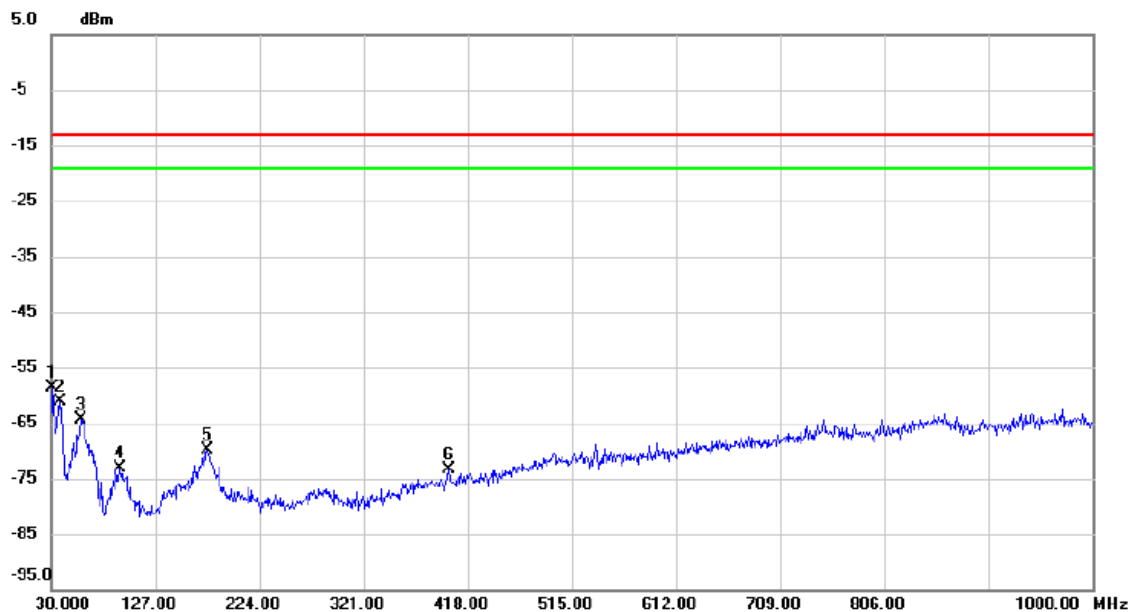
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	31.940	-62.24	1.27	-60.97	-13.00	-47.97	peak	
2		53.280	-72.29	2.19	-70.10	-13.00	-57.10	peak	
3		156.100	-72.42	3.33	-69.09	-13.00	-56.09	peak	
4		217.210	-73.31	-0.15	-73.46	-13.00	-60.46	peak	
5		433.520	-76.07	5.35	-70.72	-13.00	-57.72	peak	
6		500.450	-77.51	8.06	-69.45	-13.00	-56.45	peak	

Test Mode: LTE Band 4_TX CH20175_5M

Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	30.970	-58.18	-0.49	-58.67	-13.00	-45.67	peak	
2		38.730	-62.23	1.21	-61.02	-13.00	-48.02	peak	
3		57.160	-66.10	1.74	-64.36	-13.00	-51.36	peak	
4		94.020	-69.49	-3.69	-73.18	-13.00	-60.18	peak	
5		175.500	-70.25	0.37	-69.88	-13.00	-56.88	peak	
6		400.540	-77.59	4.12	-73.47	-13.00	-60.47	peak	

Test Mode: LTE Band 4_TX CH20175_5M

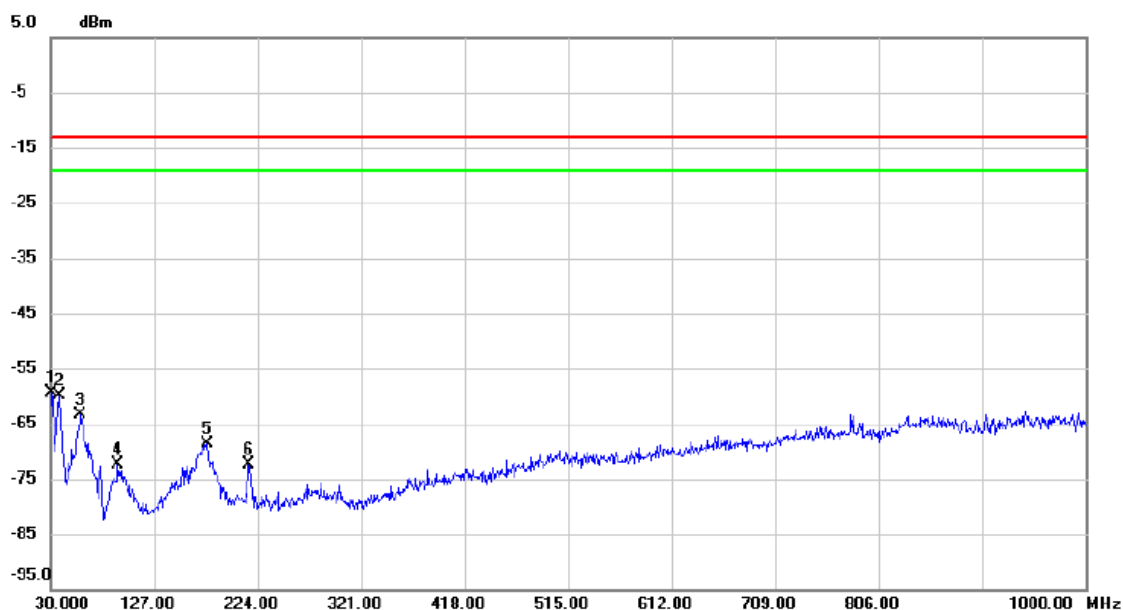
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	30.970	-63.11	1.57	-61.54	-13.00	-48.54	peak	
2		53.280	-70.38	2.19	-68.19	-13.00	-55.19	peak	
3		98.870	-70.04	-4.35	-74.39	-13.00	-61.39	peak	
4		154.160	-71.54	3.62	-67.92	-13.00	-54.92	peak	
5		394.720	-77.21	5.94	-71.27	-13.00	-58.27	peak	
6		504.330	-77.54	8.06	-69.48	-13.00	-56.48	peak	

Test Mode: LTE Band 4_TX CH20175_20M

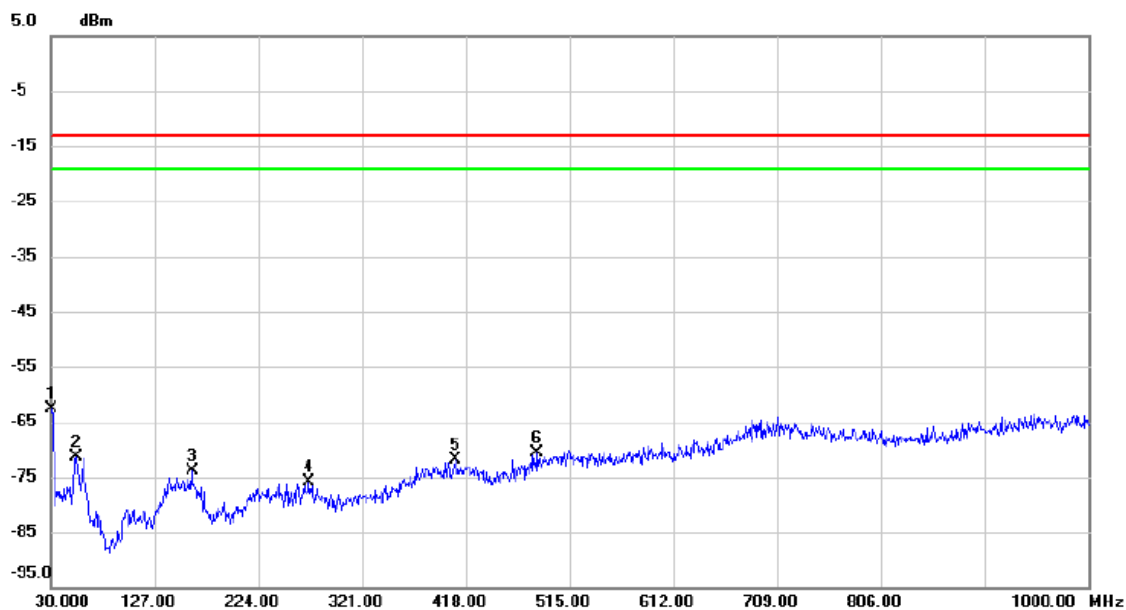
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	30.970	-58.94	-0.49	-59.43	-13.00	-46.43	peak	
2		38.730	-61.08	1.21	-59.87	-13.00	-46.87	peak	
3		58.130	-64.77	1.31	-63.46	-13.00	-50.46	peak	
4		93.050	-68.49	-3.81	-72.30	-13.00	-59.30	peak	
5		176.470	-69.07	0.46	-68.61	-13.00	-55.61	peak	
6		215.270	-70.35	-1.91	-72.26	-13.00	-59.26	peak	

Test Mode: LTE Band 4_TX CH20175_20M

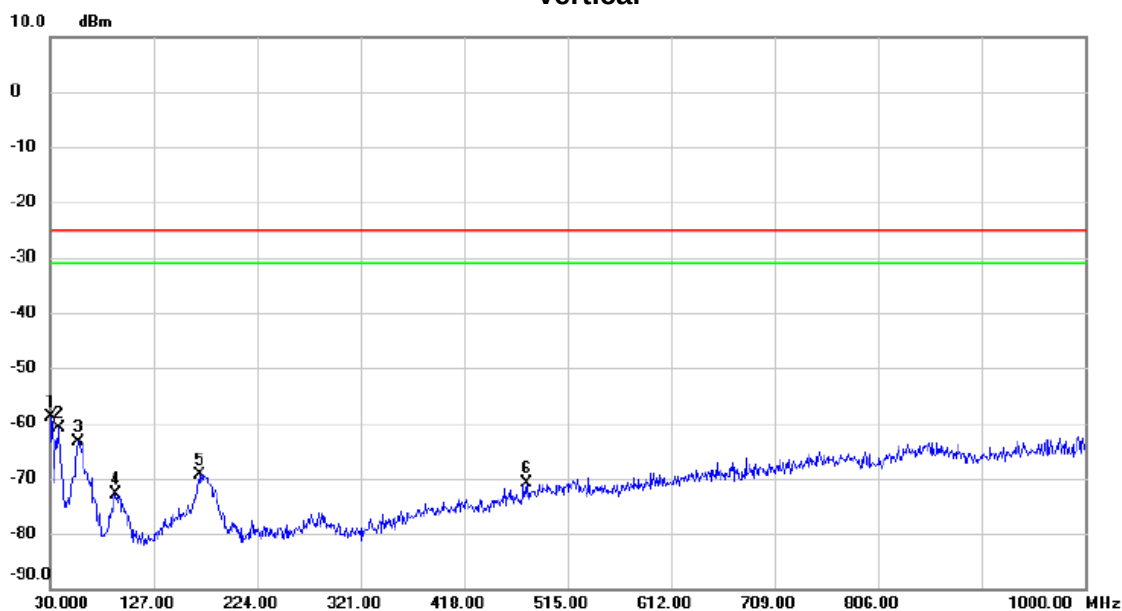
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	30.970	-64.18	1.57	-62.61	-13.00	-49.61	peak	
2		54.250	-73.87	2.47	-71.40	-13.00	-58.40	peak	
3		161.920	-75.85	1.95	-73.90	-13.00	-60.90	peak	
4		271.530	-78.91	2.94	-75.97	-13.00	-62.97	peak	
5		408.300	-78.11	6.30	-71.81	-13.00	-58.81	peak	
6		484.930	-77.63	6.97	-70.66	-13.00	-57.66	peak	

Test Mode: LTE Band 7_TX CH21100_5M

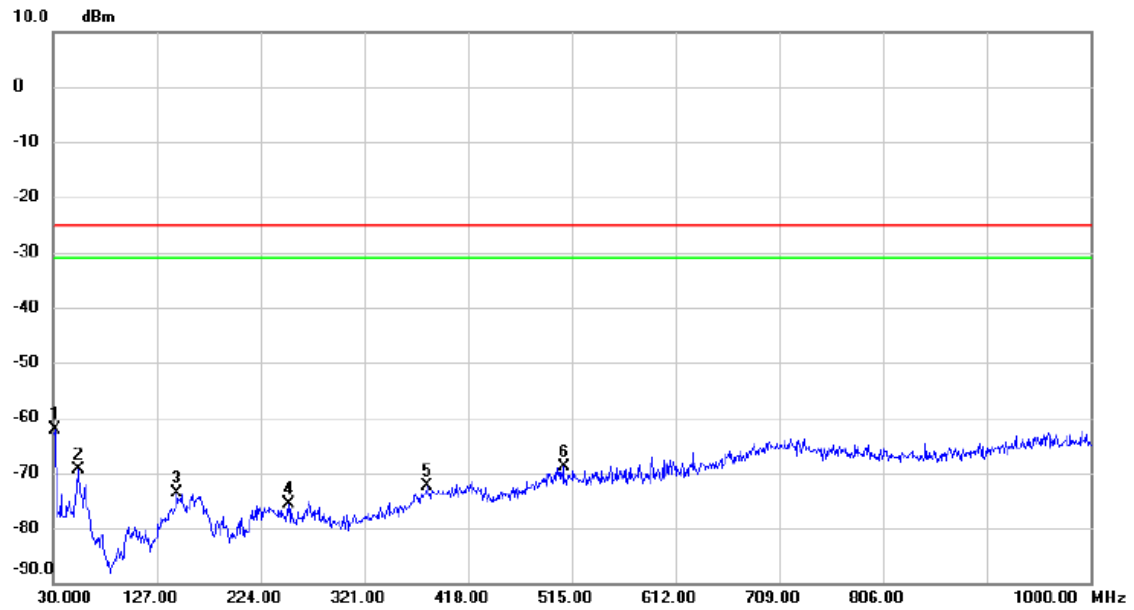
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	30.970	-58.41	-0.49	-58.90	-25.00	-33.90	peak	
2		37.760	-61.37	0.51	-60.86	-25.00	-35.86	peak	
3		56.190	-65.61	2.18	-63.43	-25.00	-38.43	peak	
4		91.110	-68.74	-4.06	-72.80	-25.00	-47.80	peak	
5		170.650	-69.26	-0.06	-69.32	-25.00	-44.32	peak	
6		476.200	-77.07	6.28	-70.79	-25.00	-45.79	peak	

Test Mode: LTE Band 7_TX CH21100_5M

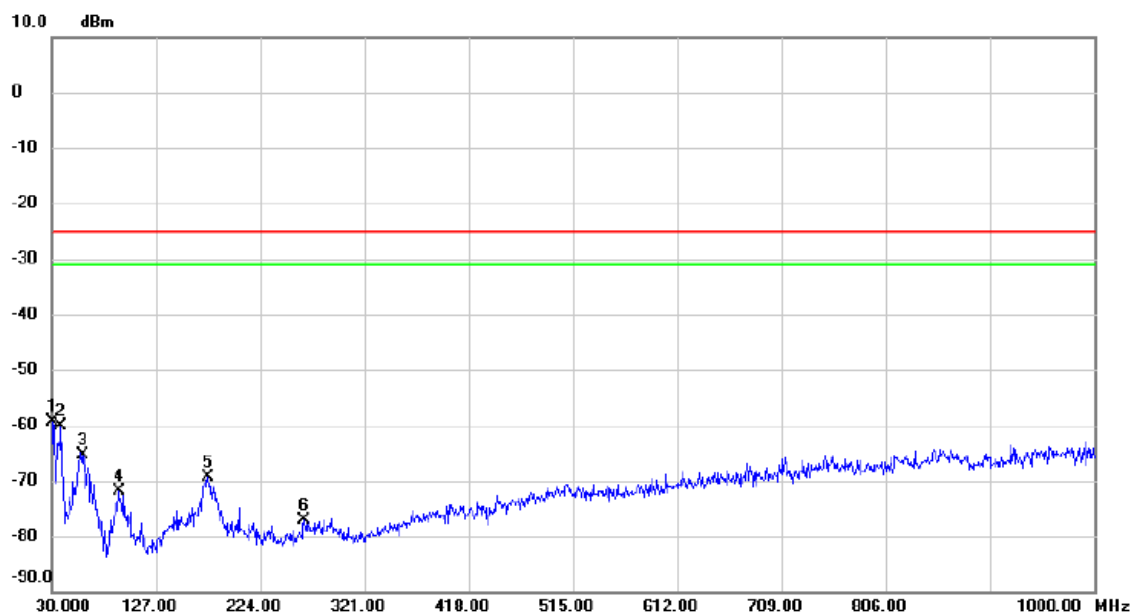
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	31.940	-63.39	1.27	-62.12	-25.00	-37.12	peak	
2		53.280	-71.56	2.19	-69.37	-25.00	-44.37	peak	
3		145.430	-77.38	3.73	-73.65	-25.00	-48.65	peak	
4		250.190	-77.59	1.87	-75.72	-25.00	-50.72	peak	
5		379.200	-78.30	6.00	-72.30	-25.00	-47.30	peak	
6		507.240	-76.82	8.07	-68.75	-25.00	-43.75	peak	

Test Mode: LTE Band 7_TX CH21350_20M

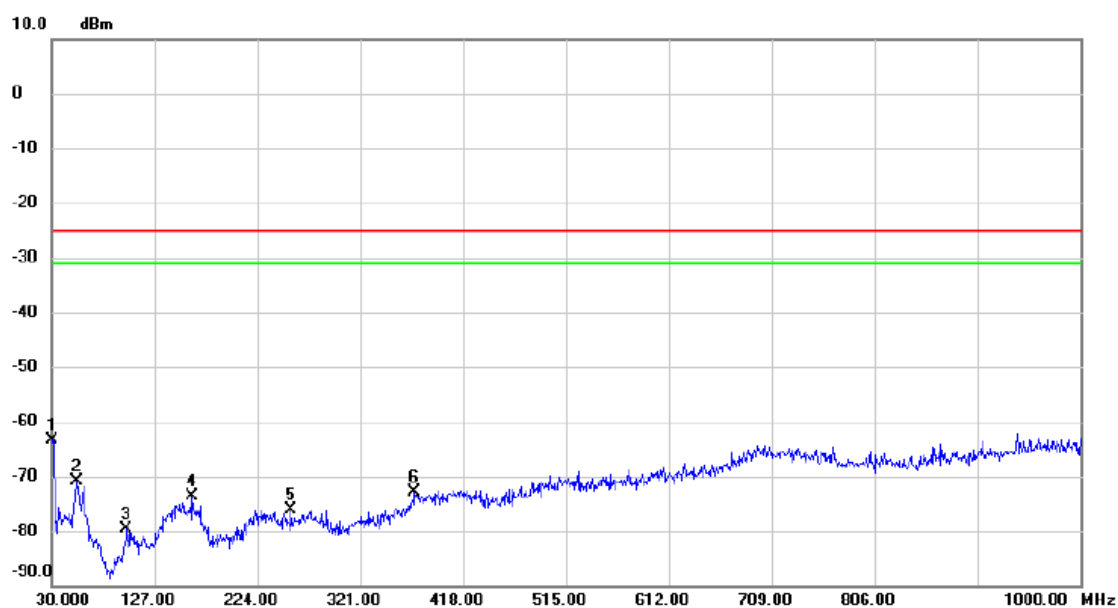
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	30.970	-58.81	-0.49	-59.30	-25.00	-34.30	peak	
2		38.730	-61.31	1.21	-60.10	-25.00	-35.10	peak	
3		59.100	-66.34	0.87	-65.47	-25.00	-40.47	peak	
4		92.080	-67.89	-3.93	-71.82	-25.00	-46.82	peak	
5		175.500	-69.81	0.37	-69.44	-25.00	-44.44	peak	
6		264.740	-78.59	1.43	-77.16	-25.00	-52.16	peak	

Test Mode: LTE Band 7_TX CH21350_20M

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	30.970	-64.97	1.57	-63.40	-25.00	-38.40	peak	
2		54.250	-73.43	2.47	-70.96	-25.00	-45.96	peak	
3		100.810	-75.92	-3.68	-79.60	-25.00	-54.60	peak	
4		162.890	-75.21	1.55	-73.66	-25.00	-48.66	peak	
5		256.010	-77.99	1.91	-76.08	-25.00	-51.08	peak	
6		372.410	-78.15	5.20	-72.95	-25.00	-47.95	peak	