

FCC Radio Test Report

FCC ID: 2A0UD-TP00098A

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

Project No. : 1711C206A
Equipment : Tablet PC
Test Model : TP00098A
Series Model : N/A
Applicant : Shenzhen Bitland Information Technology Co.,Ltd
Address : 6F, #7 Building, XiLi Tongfuyu Industrial Town,
Nanshan District, Shenzhen Guangdong 518055
China

Date of Receipt : Nov. 24, 2017
Date of Test : Nov. 24, 2017 ~ Feb. 09, 2018
Issued Date : Feb. 14, 2018
Tested by : BTL Inc.

Technical Engineer

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Authorized Signatory

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Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-2-1711C206A	Original Issue.	Feb. 14, 2018

1. CERTIFICATION

Equipment : Tablet PC
Brand Name : Lenovo
Test Model : TP00098A
Series Model : N/A
Applicant : Shenzhen Bitland Information Technology Co.,Ltd
Manufacturer : Lenovo PC HK Limited
Address : 23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong
Factory : Hefei Bitland Information Technology Co.Ltd.
Address : No.4088 JINXIU AVENUE, ECONOMIC&TECHNOLOGY DEVELOPMENT
AREA, HEFEI, CHINA
Date of Test : Nov. 24, 2017 ~ Feb. 09, 2018
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 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-2-1711C206A) 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 for the WCDMA Band 2, LTE Band 2 and Band 25 part.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part 24 Subpart H& Part 2			
Standard(s) Section	Test Item	Judgment	Tested By
2.1046 24.232(c)	Radiated power	PASS	Paul Li
2.1046 24.232(c)	Conducted Output Power	PASS	Paul Li
2.1049 24.238(a)	Occupied Bandwidth	PASS	Paul Li
2.1051 24.238(a)	Conducted Spurious Emissions	PASS	Paul Li
2.1053 24.238(a)	Radiated Spurious Emissions	PASS	Paul Li
24.238(a)	Band Edge Measurements	PASS	Paul Li
24.232(d)	Peak To Average Ratio	PASS	Paul Li
2.1055 24.235	Frequency Stability	PASS	Paul Li

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	Tablet PC		
Brand Name	Lenovo		
Test Model	TP00098A		
Series Model	N/A		
Model Difference	N/A		
Modulation Type	WCDMA	UL: BPSK DL: QPSK	
	WCDMA (HSDPA/HSUPA)	16QAM	
	LTE	UL: QPSK,16QAM DL: QPSK,16QAM	
Operation Frequency	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	
	LTE 25 (Channel Bandwidth: 1.4MHz)	1850.7 ~ 1914.3 MHz	
	LTE 25 (Channel Bandwidth: 3MHz)	1851.5 ~ 1913.5 MHz	
	LTE 25 (Channel Bandwidth: 5MHz)	1852.5 ~ 1912.5 MHz	
	LTE 25 (Channel Bandwidth: 10MHz)	1855.0 ~ 1910.0 MHz	
	LTE 25 (Channel Bandwidth: 15MHz)	1857.5 ~ 1907.5 MHz	
	LTE 25 (Channel Bandwidth: 20MHz)	1860.0 ~ 1905.0 MHz	
Max. EIRP Power	WCDMA	BPSK	26.56 dBm
	WCDMA_HSDPA	16QAM	25.40 dBm
	WCDMA_HSUPA	16QAM	25.58 dBm
	LTE 2 (Channel Bandwidth: 1.4MHz)	QPSK	25.81 dBm
		16QAM	25.18 dBm
	LTE 2 (Channel Bandwidth: 3MHz)	QPSK	25.88 dBm
		16QAM	25.29 dBm
	LTE 2 (Channel Bandwidth: 5MHz)	QPSK	26.70 dBm
		16QAM	25.69 dBm
	LTE 2 (Channel Bandwidth: 10MHz)	QPSK	26.68 dBm
		16QAM	25.69 dBm
	LTE 2 (Channel Bandwidth: 15MHz)	QPSK	26.48 dBm
		16QAM	25.62 dBm
	LTE 2 (Channel Bandwidth: 20MHz)	QPSK	26.61 dBm
		16QAM	25.86 dBm

Max. EIRP Power	LTE 25 (Channel Bandwidth: 1.4MHz)	QPSK	26.46	dBm
		16QAM	25.73	dBm
	LTE 25 (Channel Bandwidth: 3MHz)	QPSK	26.66	dBm
		16QAM	25.89	dBm
	LTE 25 (Channel Bandwidth: 5MHz)	QPSK	26.70	dBm
		16QAM	25.69	dBm
	LTE 25 (Channel Bandwidth: 10MHz)	QPSK	26.38	dBm
		16QAM	25.69	dBm
	LTE 25 (Channel Bandwidth: 15MHz)	QPSK	26.48	dBm
		16QAM	25.62	dBm
	LTE 25 (Channel Bandwidth: 20MHz)	QPSK	26.61	dBm
		16QAM	25.86	dBm
IMEI No.	014583000483973			
HW Version	TBD			
SW Version	TBD			
Power Source	#1 DC voltage supplied from AC/DC adapter. 1) Manufacturer / Model: Liteon / ADLX45YLC2A (2pin) 2) Manufacturer / Model: Liteon / ADLX45YLC3A (3pin) 3) Manufacturer / Model: Liteon / ADLX65YLC3A (3pin) 4) Manufacturer / Model: Chicony / ADLX45YCC2A (2pin) 5) Manufacturer / Model: Chicony / ADLX45YCC3A (3pin) 6) Manufacturer / Model: Chicony / ADLX65YCC3A (3pin) #2 Rechargeable Li-ion Battery supplied. 1) Manufacturer / Model: Simplo / L17M2P51 2) Manufacturer / Model: Simplo / L17M2P52 3) Manufacturer / Model: Celxpert / L17C2P51			
Power Rating	#1 For adapter: 1) / 2) / 4) / 5): I/P: 100-240V~1.3A 50-60Hz O/P: 20V --- 2.25A/15V --- 3A/9V --- 2A/5V --- 2A Max 45W 3) / 6): I/P: 100-240V~1.8A 50-60Hz O/P: 20V --- 3.25A/15V --- 3A/9V --- 2A/5V --- 2A Max 65W #2 For battery: DC 7.68V, 5080mAh			

Note:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- Table for Filed Antenna:

Ant. Part Number (main & aux parts)	Type	Antenna Mfr.	Antenna Gain(dBi)		
			WCDMA Band 2	LTE Band 2	LTE Band 25
N19-0351-R0A	Monopole	South	2.90	2.90	2.90
N19-0352-R0A		Star	2.07	2.07	2.07

3.2 DESCRIPTION OF TEST MODES AND TEST CONDITION

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

WCDMA BAND 2			
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
Conducted Spurious Emission	9262 to 9538	9400	WCDMA, HSDPA, HSUPA
Radiated Spurious Emission	9262 to 9538	9400	WCDMA, HSDPA, HSUPA
Band Edge	9262 to 9538	9262, 9538	WCDMA, HSDPA, HSUPA
Peak to Average Ratio	9262 to 9538	9262, 9400, 9538	WCDMA, HSDPA, HSUPA
Frequency Stability	9262 to 9538	9262	WCDMA

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	1 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 Spurious Emission	18607 to 19193	18900	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	18615 to 19185	18900	3MHz	QPSK, 16QAM	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 Spurious Emission	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	19100	20MHz	QPSK	1 RB / 0 RB Offset

Band Edge	18607 to 19193	18607	1.4MHz	QPSK	1 RB / 0 RB Offset
		19193	1.4MHz	QPSK	6 RB / 0 RB Offset
	18615 to 19185	18615	3MHz	QPSK	1 RB / 5 RB Offset
		19185	3MHz	QPSK	6 RB / 0 RB Offset
	18625 to 19175	18625	5MHz	QPSK	1 RB / 0 RB Offset
		19175	5MHz	QPSK	15 RB / 0 RB Offset
	18650 to 19150	18650	10MHz	QPSK	1 RB / 14 RB Offset
		19150	10MHz	QPSK	15 RB / 0 RB Offset
	18675 to 19125	18625	5MHz	QPSK	1 RB / 0 RB Offset
		19175	5MHz	QPSK	25 RB / 0 RB Offset
	18700 to 19100	18650	10MHz	QPSK	1 RB / 24 RB Offset
		19150	10MHz	QPSK	25 RB / 0 RB Offset
	18675 to 19125	18650	10MHz	QPSK	1 RB / 0 RB Offset
		19150	10MHz	QPSK	50 RB / 0 RB Offset
	18700 to 19100	18675	15MHz	QPSK	1 RB / 49 RB Offset
		19125	15MHz	QPSK	50 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

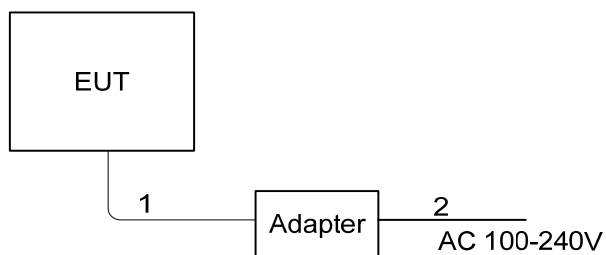
LTE BAND 25 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
Occupied Bandwidth	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK, 16QAM	15 RB / 0 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK, 16QAM	75 RB / 0 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK, 16QAM	100 RB / 0 RB Offset
Conducted Spurious Emission	26047 to 26683	26365	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26055 to 26675	26365	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26065 to 26665	26365	5MHz	QPSK	1 RB / 0 RB Offset
	26090 to 26640	26365	10MHz	QPSK	1 RB / 0 RB Offset
	26115 to 26615	26365	15MHz	QPSK	1 RB / 0 RB Offset
	26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset
Radiated Spurious Emission	26047 to 26683	26683	1.4MHz	QPSK	1 RB / 0 RB Offset
	26140 to 26590	26590	20MHz	QPSK	1 RB / 0 RB Offset

Band Edge	26047 to 26683	26047	1.4MHz	QPSK	1 RB / 0 RB Offset
		26683	1.4MHz	QPSK	6 RB / 0 RB Offset
	26055 to 26675	26055	3MHz	QPSK	1 RB / 5 RB Offset
		26675	3MHz	QPSK	6 RB / 0 RB Offset
	26065 to 26665	26065	5MHz	QPSK	1 RB / 0 RB Offset
		26665	5MHz	QPSK	15 RB / 0 RB Offset
	26090 to 26640	26090	10MHz	QPSK	1 RB / 14 RB Offset
		26640	10MHz	QPSK	15 RB / 0 RB Offset
	26115 to 26615	26065	5MHz	QPSK	1 RB / 0 RB Offset
		26665	5MHz	QPSK	25 RB / 0 RB Offset
	26140 to 26590	26090	10MHz	QPSK	1 RB / 24 RB Offset
		26640	10MHz	QPSK	25 RB / 0 RB Offset
	26115 to 26615	26090	10MHz	QPSK	1 RB / 0 RB Offset
		26640	10MHz	QPSK	50 RB / 0 RB Offset
	26140 to 26590	26090	10MHz	QPSK	1 RB / 49 RB Offset
		26640	10MHz	QPSK	50 RB / 0 RB Offset
Peak To Average Ratio	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
Frequency Stability	26047 to 26683	26365	1.4MHz	QPSK	1 RB / 0 RB Offset
	26055 to 26675	26365	3MHz	QPSK	1 RB / 0 RB Offset
	26065 to 26665	26365	5MHz	QPSK	1 RB / 0 RB Offset
	26090 to 26640	26365	10MHz	QPSK	1 RB / 0 RB Offset
	26115 to 26615	26365	15MHz	QPSK	1 RB / 0 RB Offset
	26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset

EUT TEST CONDITIONS:

Test Item	Environmental Conditions	Test Voltage
EIRP	25°C, 60%RH	DC 7.68V
Conducted Output Power	25°C, 65%RH	DC 7.68V
Occupied Bandwidth	25°C, 65%RH	DC 7.68V
Conducted Spurious Emission	25°C, 65%RH	DC 7.68V
Radiated Spurious Emission	25°C, 60%RH	AC 120V/60Hz
Band Edge	25°C, 65%RH	DC 7.68V
Peak to Average Ratio	25°C, 65%RH	DC 7.68V
Frequency Stability	Normal and Extreme	Normal and Extreme

3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



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	1.6m	DC Cable
2	NO	NO	1.0m	AC 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

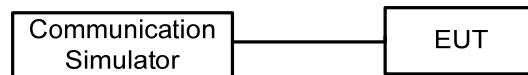
ERP power=EIPR power-2.15dBi.

Conducted Power:

The EUT was set up for the maximum power with GSM, GPRS, EDGE, WCDMA and CDMA 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

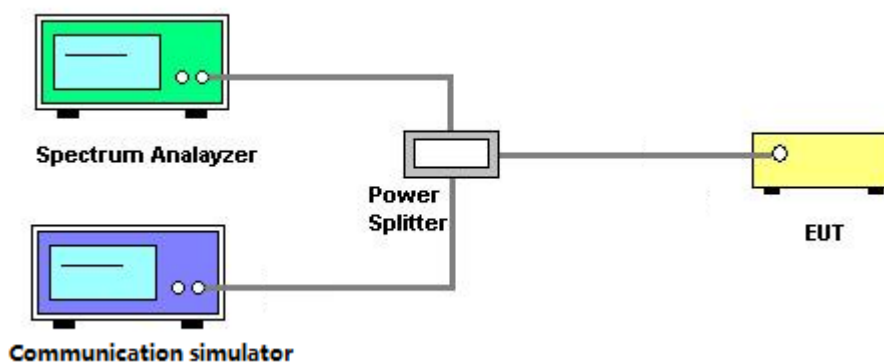
Please refer to the Appendix A.

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

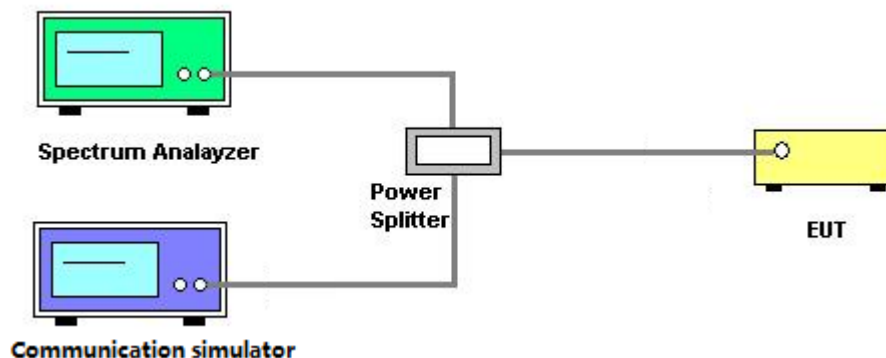
4.3.1 LIMIT

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.

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

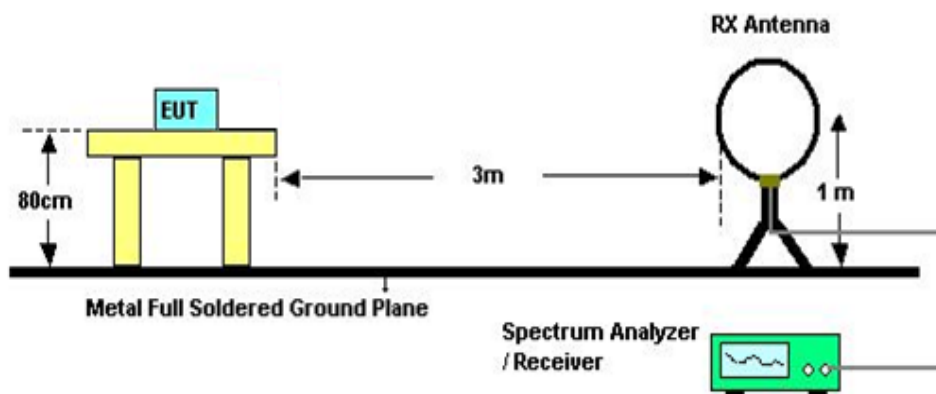
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

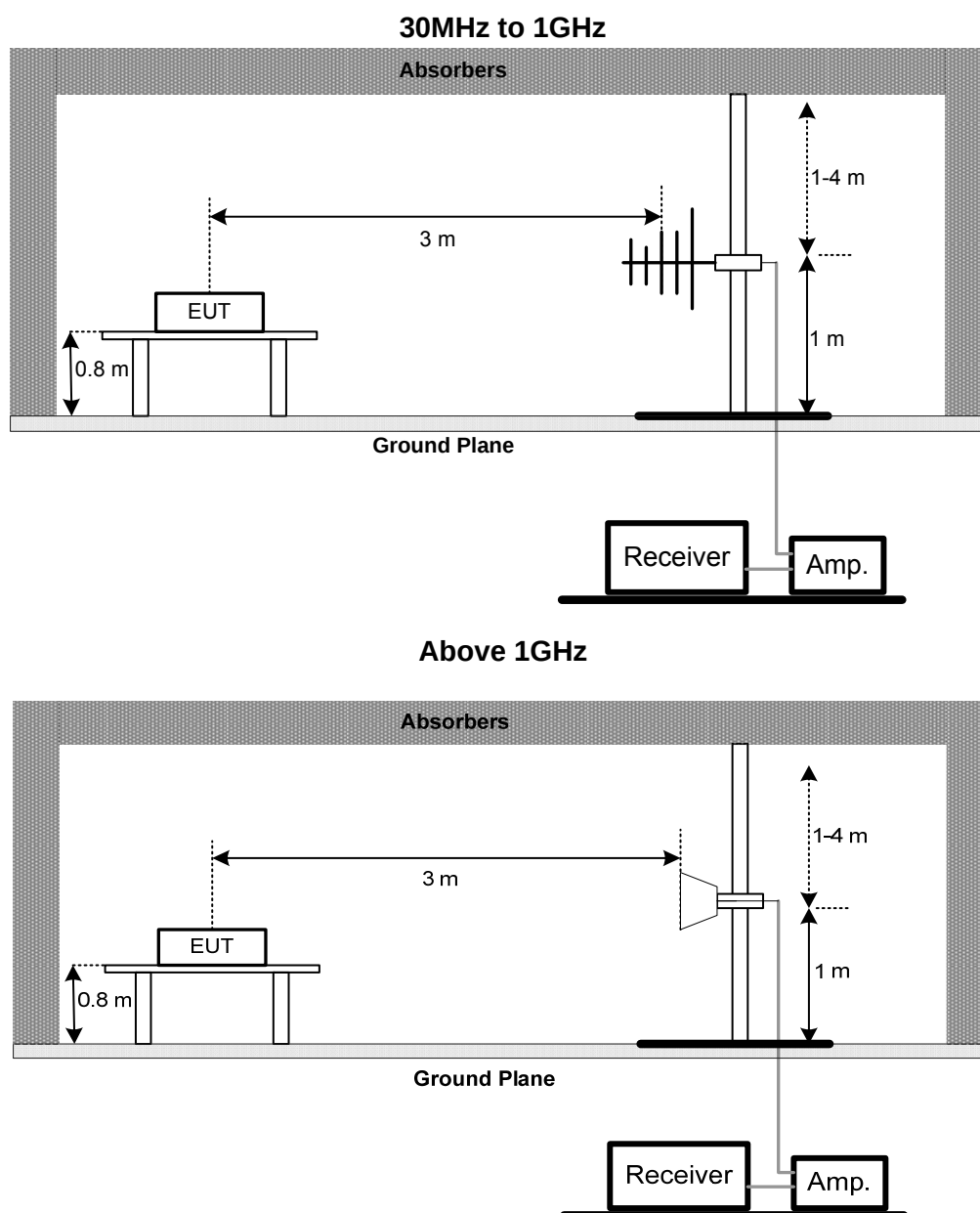
4.4.2 TEST PROCEDURES

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 TEST DEVIATION

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

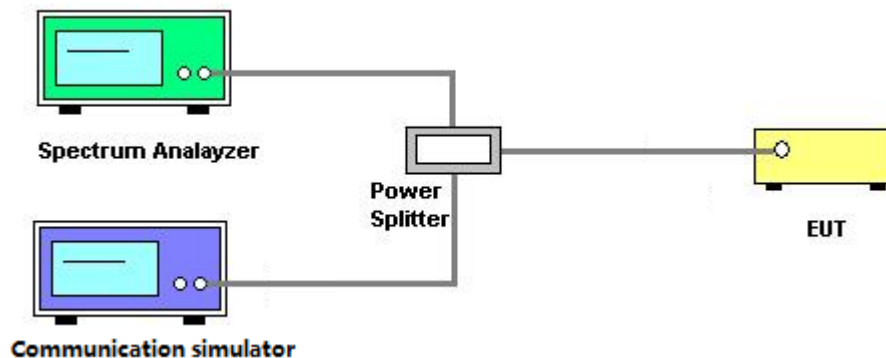
4.5.1 LIMIT

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. 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

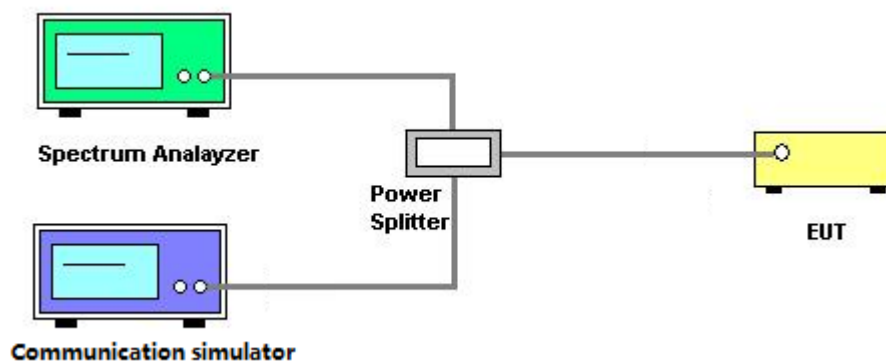
4.6.1 LIMIT

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

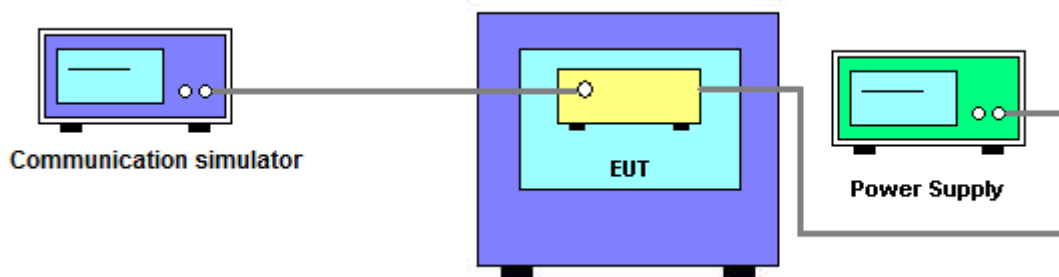
4.7.1 LIMIT

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. 26, 2018
2	Amplifier	Agilent	8449B	3008A02274	May. 16, 2018
3	Amplifier	HP	8447D	2944A09673	Oct. 19, 2018
4	HighPass Filter	Wairwright Instruments Gmbh	WHK 1.5/15G-10ST	11	Feb. 20, 2018
5	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 1710/1785-1690/180 5-60/12SS	38	Feb. 15, 2018
6	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 824/849-810/863-60/ 9SS	7	Feb. 15, 2018
7	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 880/915-860/935-60/ 9SS	14	Feb. 15, 2018
8	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 1850/1910-1830/193 0-60/10SS	17	Feb. 15, 2018
9	HighPass Filter	Wairwright Instruments Gmbh	WHK3.1/18G-10SS	24	Feb. 20, 2018
10	Wireless Communication Test SET	Agilent	E5515C	MY48364183	Mar. 26, 2018
11	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 26, 2018
12	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
13	wideband radio communication tester	R&S	CMW500	152372	Mar. 26, 2018
14	High pass filter	KANGMAIWEI	ZHPF-M3-12.75G-38 69	B2015073763	Aug. 04, 2018
15	High pass filter	KANGMAIWEI	ZHPF-M1000-4000-1	B2015073762	Aug. 04, 2018
16	High pass filter	KANGMAIWEI	ZHPF-M6-186-1727	B2015073764	Aug. 04, 2018
17	Cable	emci	LMR-400(30MHz-1G Hz)(8m+5m)	N/A	Jun. 26, 2018
18	Cable	emci	EMC104-SM-SM-120 00(12m)	N/A	Jun. 26, 2018
19	Controller	ETS-Lindgren	2090	N/A	N/A
20	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
21	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 26, 2018
22	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Apr. 22, 2018
23	Antenna	EM	EM-6876-1	230	Mar. 06, 2018

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. 26, 2018
2	POWER SPLITTER	Mini-Circuits	ZFRSC-123-S+	331000910-1	May. 16, 2018
3	wideband radio communication tester	R&S	CMW500	152372	Mar. 26, 2018

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	May. 16, 2018
3	wideband radio communication tester	R&S	CMW500	152372	Mar. 26, 2018
4	Const Temp,& Humidity Chamber	Bell	BTH-50C	20170306001	Mar. 26, 2018

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 Band 2		
	Tx Channel	9262CH	9400CH	9538CH
	Frequency	1852.4MHz	1880MHz	1907.6MHz
BPSK	RMC 12.2K	23.66	23.51	23.45
	RMC 64K	23.65	23.50	23.43
	RMC 144K	23.63	23.49	23.51
	RMC 384K	23.64	23.48	23.40
16QAM	HSDPA Subtest-1	22.32	22.40	22.47
	HSDPA Subtest-2	22.35	22.41	22.50
	HSDPA Subtest-3	21.83	21.96	21.95
	HSDPA Subtest-4	21.86	21.91	21.96
16QAM	HSUPA Subtest-1	22.61	22.56	22.47
	HSUPA Subtest-2	22.01	22.02	21.93
	HSUPA Subtest-3	22.68	22.53	22.54
	HSUPA Subtest-4	22.62	22.48	22.50
	HSUPA Subtest-5	22.63	22.50	22.48

LTE Band / BW	Modulation	RB Size	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	22.72	22.74	22.83
		1	2	22.75	22.66	22.74
		1	5	22.64	22.91	22.77
		3	0	22.59	22.61	22.68
		3	1	22.64	22.73	22.77
		3	3	22.67	22.77	22.78
	16QAM	6	0	21.69	21.73	21.74
		1	0	21.94	22.20	21.96
		1	2	22.07	22.27	22.13
		1	5	22.15	22.28	22.04
		3	0	21.81	21.95	22.01
		3	1	21.87	22.01	22.06
		3	3	21.90	22.04	22.05
		6	0	20.89	20.72	21.05

LTE Band / BW	Modulation	RB Size	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	22.89	22.92	22.96
		1	7	22.89	22.93	22.85
		1	14	22.90	22.98	22.97
		8	0	21.74	21.80	21.84
		8	3	21.78	21.83	21.90
		8	7	21.77	21.85	21.86
		15	0	21.75	21.78	21.86
	16QAM	1	0	21.77	22.38	21.94
		1	7	21.77	22.29	22.09
		1	14	21.77	22.39	21.98
		8	0	20.89	20.92	20.84
		8	3	20.91	20.95	20.90
		8	7	20.91	20.92	20.93
		15	0	20.84	20.87	20.84

LTE Band / BW	Modulation	RB Size	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	22.93	22.81	22.95
		1	12	22.90	22.95	22.96
		1	24	22.89	22.77	22.93
		12	0	21.74	21.71	21.81
		12	6	21.84	21.82	21.86
		12	13	21.79	21.84	21.91
		25	0	21.82	21.80	21.81
	16QAM	1	0	21.94	22.33	22.03
		1	12	22.06	22.42	22.21
		1	24	21.94	22.30	22.06
		12	0	20.86	20.93	20.90
		12	6	20.92	20.95	20.97
		12	13	20.89	20.99	20.92
		25	0	20.86	20.86	20.77

LTE Band / BW	Modulation	RB Size	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	22.90	22.96	22.94
		1	24	22.91	22.90	22.86
		1	49	22.84	22.94	22.90
		25	0	21.74	21.74	21.84
		25	12	21.79	21.86	21.86
		25	25	21.75	21.71	21.86
		50	0	21.72	21.74	21.79
	16QAM	1	0	21.94	22.12	22.70
		1	24	21.81	22.17	21.97
		1	49	21.80	22.14	22.14
		25	0	20.76	20.77	20.91
		25	12	20.87	20.92	20.92
		25	25	20.81	20.73	20.87
		50	0	20.72	20.75	20.81

LTE Band / BW	Modulation	RB Size	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	22.80	22.88	22.98
		1	37	22.70	22.88	22.96
		1	74	22.49	22.86	22.80
		36	0	21.71	22.86	21.81
		36	19	21.77	21.79	21.94
		36	39	21.61	21.85	21.87
		75	0	21.62	21.77	21.79
	16QAM	1	0	21.63	22.11	22.36
		1	37	21.56	22.16	22.55
		1	74	21.49	22.10	22.11
		36	0	20.72	20.01	20.75
		36	19	20.80	20.81	20.87
		36	39	20.68	20.86	20.81
		75	0	20.66	20.73	20.78

LTE Band / BW	Modulation	RB Size	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	22.87	22.90	22.96
		1	50	22.91	22.67	22.99
		1	99	22.68	22.74	22.82
		50	0	21.84	21.82	21.98
		50	25	21.81	21.98	21.99
		50	50	21.67	21.89	21.96
		100	0	21.76	21.92	22.01
	16QAM	1	0	22.29	22.31	22.25
		1	50	22.44	22.73	22.33
		1	99	22.13	22.09	22.11
		50	0	20.89	20.80	20.90
		50	25	20.85	20.96	20.94
		50	50	20.73	20.89	20.94
		100	0	20.79	20.94	21.00

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26047 CH	26365 CH	26683 CH
				1850.7 MHz	1882.5 MHz	1914.3 MHz
25 / 1.4M	QPSK	1	0	23.39	23.48	23.56
		1	2	23.35	23.55	23.42
		1	5	23.46	23.46	23.50
		3	0	23.21	23.33	23.34
		3	1	23.32	23.33	23.33
		3	3	23.21	23.36	23.37
		6	0	22.37	22.31	22.31
	16QAM	1	0	22.49	22.71	22.48
		1	2	22.69	22.83	22.62
		1	5	22.65	22.64	22.47
		3	0	22.50	22.65	22.47
		3	1	22.59	22.68	22.44
		3	3	22.61	22.72	22.51
		6	0	21.50	21.27	21.51

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26055 CH	26365 CH	26675 CH
				1851.5 MHz	1882.5 MHz	1913.5 MHz
25 / 3M	QPSK	1	0	23.31	23.76	23.36
		1	7	23.36	23.67	23.22
		1	14	23.27	23.68	23.31
		8	0	22.34	22.34	22.29
		8	3	22.41	22.39	22.39
		8	7	22.22	22.38	22.29
		15	0	22.38	22.37	22.39
	16QAM	1	0	22.54	22.88	22.46
		1	7	22.49	22.82	22.55
		1	14	22.31	22.99	22.41
		8	0	21.49	21.50	21.29
		8	3	21.56	21.49	21.38
		8	7	21.42	21.51	21.36
		15	0	21.44	21.45	21.42

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26065 CH	26365 CH	26665 CH
				1852.5 MHz	1882.5 MHz	1912.5 MHz
25 / 5M	QPSK	1	0	23.44	23.48	23.55
		1	12	23.61	23.80	23.65
		1	24	23.42	23.61	23.50
		12	0	22.29	22.35	22.42
		12	6	22.36	22.38	22.44
		12	13	22.27	22.36	22.52
		25	0	22.36	22.34	22.48
	16QAM	1	0	22.54	22.75	22.58
		1	12	22.79	22.75	22.71
		1	24	22.61	22.78	22.53
		12	0	21.46	21.56	21.42
		12	6	21.44	21.59	21.46
		12	13	21.42	21.53	21.48
		25	0	21.36	21.43	21.40

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26090 CH	26365 CH	26640 CH
				1855 MHz	1882.5 MHz	1910 MHz
25 / 10M	QPSK	1	0	23.51	23.78	23.55
		1	24	23.25	23.64	23.49
		1	49	23.27	23.55	23.39
		25	0	22.27	22.34	22.33
		25	12	22.30	22.41	22.54
		25	25	22.25	22.39	22.48
		50	0	22.29	22.35	22.44
	16QAM	1	0	22.51	22.79	22.56
		1	24	22.33	22.77	22.08
		1	49	22.38	22.76	22.72
		25	0	21.32	21.39	21.44
		25	12	21.34	21.47	21.46
		25	25	21.29	21.41	21.48
		50	0	21.28	21.42	21.47

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26115 CH	26365 CH	26615 CH
				1857.5 MHz	1882.5 MHz	1907.5 MHz
25 / 15M	QPSK	1	0	23.15	23.40	23.49
		1	37	23.10	23.36	23.58
		1	74	22.98	23.32	23.25
		36	0	22.17	22.72	22.39
		36	19	22.27	22.28	22.52
		36	39	22.22	22.22	22.35
		75	0	22.21	22.21	22.32
	16QAM	1	0	22.34	22.62	22.72
		1	37	22.07	22.64	22.53
		1	74	21.96	22.49	22.66
		36	0	21.19	21.79	21.27
		36	19	21.31	21.30	21.40
		36	39	21.24	21.25	21.36
		75	0	21.20	21.22	21.38

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26140 CH	26365 CH	26590 CH
				1860 MHz	1882.5 MHz	1905 MHz
25 / 20M	QPSK	1	0	23.43	23.29	23.55
		1	50	23.41	22.77	23.71
		1	99	23.20	23.20	23.27
		50	0	22.29	22.35	22.38
		50	25	22.40	22.38	22.40
		50	50	22.27	22.40	22.37
		100	0	22.37	22.33	22.48
	16QAM	1	0	22.96	22.56	22.88
		1	50	22.54	21.68	22.84
		1	99	22.65	22.76	22.56
		50	0	21.39	21.36	21.43
		50	25	21.46	21.38	21.49
		50	50	21.32	21.40	21.44
		100	0	21.36	21.31	21.68

EIRP Power

Modulation	Band	WCDMA Band 2		
	Tx Channel	9262CH	9400CH	9538CH
	Frequency	1852.4MHz	1880MHz	1907.6MHz
BPSK	RMC 12.2K	26.56	26.41	26.35
	RMC 64K	26.55	26.40	26.33
	RMC 144K	26.53	26.39	26.41
	RMC 384K	26.54	26.38	26.30
16QAM	HSDPA Subtest-1	25.22	25.30	25.37
	HSDPA Subtest-2	25.25	25.31	25.40
	HSDPA Subtest-3	24.73	24.86	24.85
	HSDPA Subtest-4	24.76	24.81	24.86
16QAM	HSUPA Subtest-1	25.51	25.46	25.37
	HSUPA Subtest-2	24.91	24.92	24.83
	HSUPA Subtest-3	25.58	25.43	25.44
	HSUPA Subtest-4	25.52	25.38	25.40
	HSUPA Subtest-5	25.53	25.40	25.38

LTE Band / BW	Modulation	RB Size	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	25.62	25.64	25.73
		1	2	25.65	25.56	25.64
		1	5	25.54	25.81	25.67
		3	0	25.49	25.51	25.58
		3	1	25.54	25.63	25.67
		3	3	25.57	25.67	25.68
		6	0	24.59	24.63	24.64
	16QAM	1	0	24.84	25.10	24.86
		1	2	24.97	25.17	25.03
		1	5	25.05	25.18	24.94
		3	0	24.71	24.85	24.91
		3	1	24.77	24.91	24.96
		3	3	24.80	24.94	24.95
		6	0	23.79	23.62	23.95

LTE Band / BW	Modulation	RB Size	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	25.79	25.82	25.86
		1	7	25.79	25.83	25.75
		1	14	25.80	25.88	25.87
		8	0	24.64	24.70	24.74
		8	3	24.68	24.73	24.80
		8	7	24.67	24.75	24.76
		15	0	24.65	24.68	24.76
	16QAM	1	0	24.67	25.28	24.84
		1	7	24.67	25.19	24.99
		1	14	24.67	25.29	24.88
		8	0	23.79	23.82	23.74
		8	3	23.81	23.85	23.80
		8	7	23.81	23.82	23.83
		15	0	23.74	23.77	23.74

LTE Band / BW	Modulation	RB Size	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	25.83	25.71	25.85
		1	12	25.80	25.85	25.86
		1	24	25.79	25.67	25.83
		12	0	24.64	24.61	24.71
		12	6	24.74	24.72	24.76
		12	13	24.69	24.74	24.81
		25	0	24.72	24.70	24.71
	16QAM	1	0	24.84	25.23	24.93
		1	12	24.96	25.32	25.11
		1	24	24.84	25.20	24.96
		12	0	23.76	23.83	23.80
		12	6	23.82	23.85	23.87
		12	13	23.79	23.89	23.82
		25	0	23.76	23.76	23.67

LTE Band / BW	Modulation	RB Size	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	25.80	25.86	25.84
		1	24	25.81	25.80	25.76
		1	49	25.74	25.84	25.80
		25	0	24.64	24.64	24.74
		25	12	24.69	24.76	24.76
		25	25	24.65	24.61	24.76
		50	0	24.62	24.64	24.69
	16QAM	1	0	24.84	25.02	25.60
		1	24	24.71	25.07	24.87
		1	49	24.70	25.04	25.04
		25	0	23.66	23.67	23.81
		25	12	23.77	23.82	23.82
		25	25	23.71	23.63	23.77
		50	0	23.62	23.65	23.71

LTE Band / BW	Modulation	RB Size	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	25.70	25.78	25.88
		1	37	25.60	25.78	25.86
		1	74	25.39	25.76	25.70
		36	0	24.61	25.76	24.71
		36	19	24.67	24.69	24.84
		36	39	24.51	24.75	24.77
		75	0	24.52	24.67	24.69
	16QAM	1	0	24.53	25.01	25.26
		1	37	24.46	25.06	25.45
		1	74	24.39	25.00	25.01
		36	0	23.62	22.91	23.65
		36	19	23.70	23.71	23.77
		36	39	23.58	23.76	23.71
		75	0	23.56	23.63	23.68

LTE Band / BW	Modulation	RB Size	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	25.77	25.80	25.86
		1	50	25.81	25.57	25.89
		1	99	25.58	25.64	25.72
		50	0	24.74	24.72	24.88
		50	25	24.71	24.88	24.89
		50	50	24.57	24.79	24.86
		100	0	24.66	24.82	24.91
	16QAM	1	0	25.19	25.21	25.15
		1	50	25.34	25.63	25.23
		1	99	25.03	24.99	25.01
		50	0	23.79	23.70	23.80
		50	25	23.75	23.86	23.84
		50	50	23.63	23.79	23.84
		100	0	23.69	23.84	23.90

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26047 CH	26365 CH	26683 CH
				1850.7 MHz	1882.5 MHz	1914.3 MHz
25 / 1.4M	QPSK	1	0	26.29	26.38	26.46
		1	2	26.25	26.45	26.32
		1	5	26.36	26.36	26.40
		3	0	26.11	26.23	26.24
		3	1	26.22	26.23	26.23
		3	3	26.11	26.26	26.27
		6	0	25.27	25.21	25.21
	16QAM	1	0	25.39	25.61	25.38
		1	2	25.59	25.73	25.52
		1	5	25.55	25.54	25.37
		3	0	25.40	25.55	25.37
		3	1	25.49	25.58	25.34
		3	3	25.51	25.62	25.41
		6	0	24.40	24.17	24.41

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26055 CH	26365 CH	26675 CH
				1851.5 MHz	1882.5 MHz	1913.5 MHz
25 / 3M	QPSK	1	0	26.21	26.66	26.26
		1	7	26.26	26.57	26.12
		1	14	26.17	26.58	26.21
		8	0	25.24	25.24	25.19
		8	3	25.31	25.29	25.29
		8	7	25.12	25.28	25.19
		15	0	25.28	25.27	25.29
	16QAM	1	0	25.44	25.78	25.36
		1	7	25.39	25.72	25.45
		1	14	25.21	25.89	25.31
		8	0	24.39	24.40	24.19
		8	3	24.46	24.39	24.28
		8	7	24.32	24.41	24.26
		15	0	24.34	24.35	24.32

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26065 CH	26365 CH	26665 CH
				1852.5 MHz	1882.5 MHz	1912.5 MHz
25 / 5M	QPSK	1	0	26.34	26.38	26.45
		1	12	26.51	26.70	26.55
		1	24	26.32	26.51	26.40
		12	0	25.19	25.25	25.32
		12	6	25.26	25.28	25.34
		12	13	25.17	25.26	25.42
		25	0	25.26	25.24	25.38
	16QAM	1	0	25.44	25.65	25.48
		1	12	25.69	25.65	25.61
		1	24	25.51	25.68	25.43
		12	0	24.36	24.46	24.32
		12	6	24.34	24.49	24.36
		12	13	24.32	24.43	24.38
		25	0	24.26	24.33	24.30

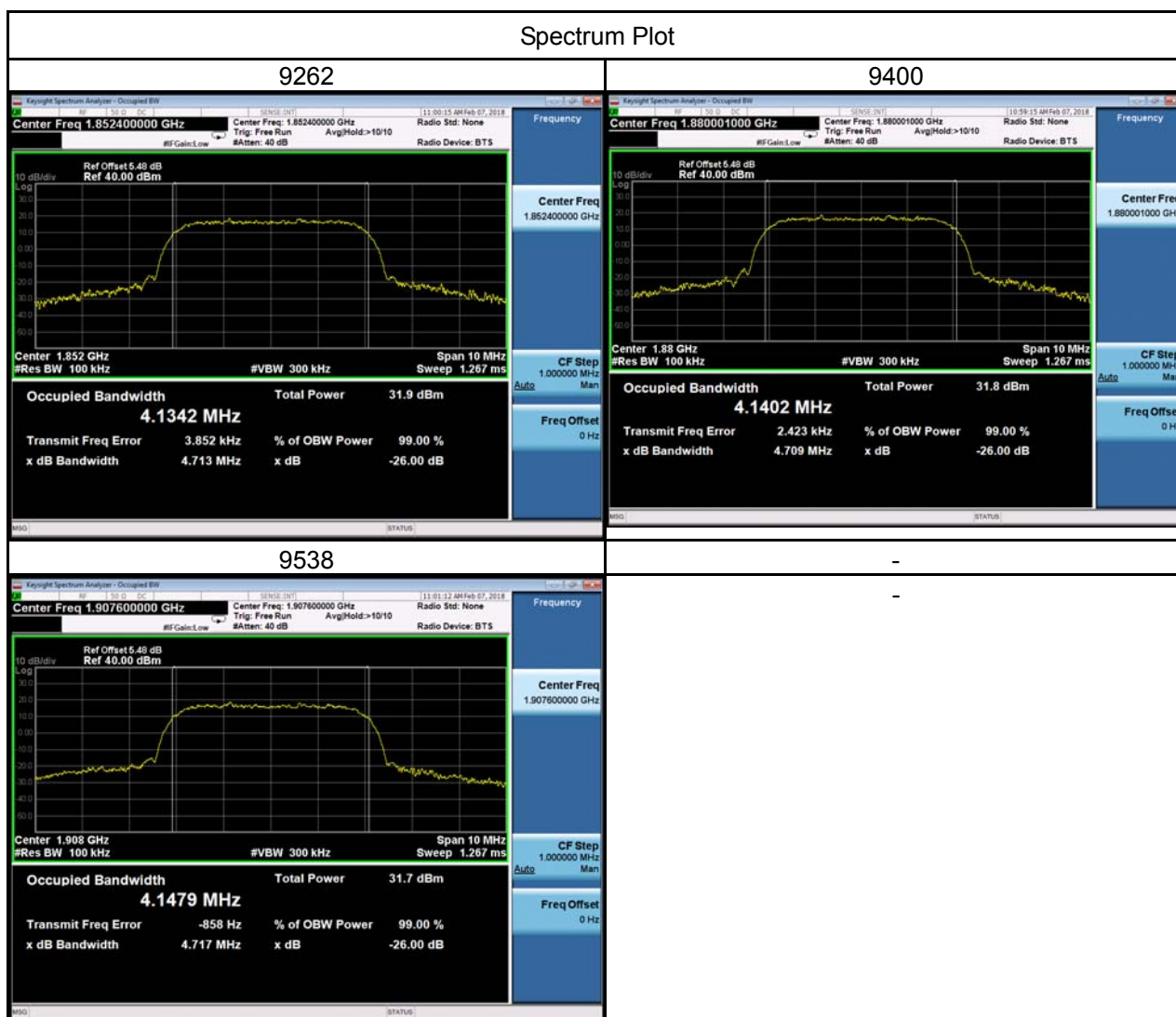
LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26090 CH	26365 CH	26640 CH
				1855 MHz	1882.5 MHz	1910 MHz
25 / 10M	QPSK	1	0	26.41	26.68	26.45
		1	24	26.15	26.54	26.39
		1	49	26.17	26.45	26.29
		25	0	25.17	25.24	25.23
		25	12	25.20	25.31	25.44
		25	25	25.15	25.29	25.38
		50	0	25.19	25.25	25.34
	16QAM	1	0	25.41	25.69	25.46
		1	24	25.23	25.67	24.98
		1	49	25.28	25.66	25.62
		25	0	24.22	24.29	24.34
		25	12	24.24	24.37	24.36
		25	25	24.19	24.31	24.38
		50	0	24.18	24.32	24.37

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26115 CH	26365 CH	26615 CH
				1857.5 MHz	1882.5 MHz	1907.5 MHz
25 / 15M	QPSK	1	0	26.05	26.30	26.39
		1	37	26.00	26.26	26.48
		1	74	25.88	26.22	26.15
		36	0	25.07	25.62	25.29
		36	19	25.17	25.18	25.42
		36	39	25.12	25.12	25.25
		75	0	25.11	25.11	25.22
	16QAM	1	0	25.24	25.52	25.62
		1	37	24.97	25.54	25.43
		1	74	24.86	25.39	25.56
		36	0	24.09	24.69	24.17
		36	19	24.21	24.20	24.30
		36	39	24.14	24.15	24.26
		75	0	24.10	24.12	24.28

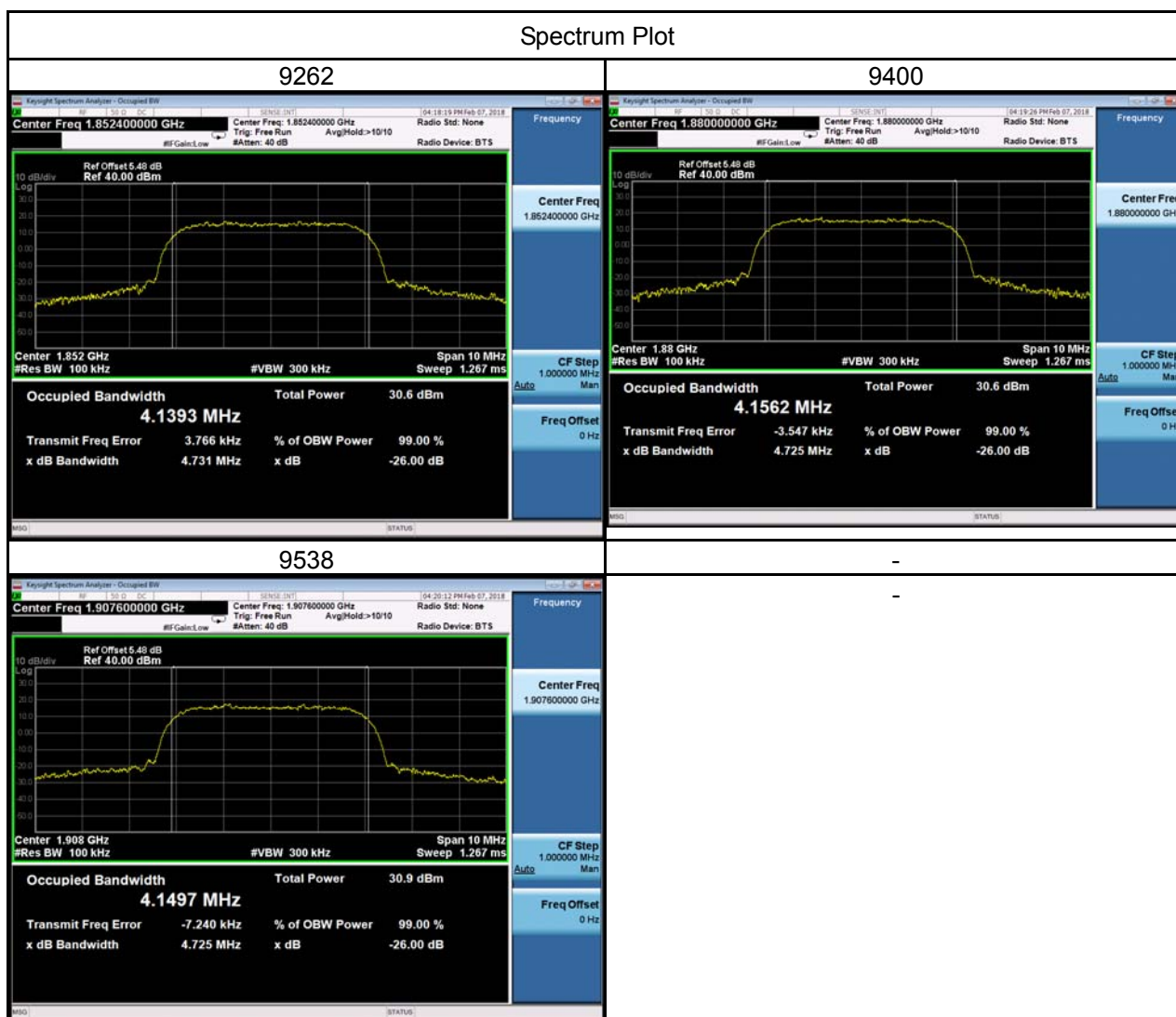
LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				26140 CH	26365 CH	26590 CH
				1860 MHz	1882.5 MHz	1905 MHz
25 / 20M	QPSK	1	0	26.33	26.19	26.45
		1	50	26.31	25.67	26.61
		1	99	26.10	26.10	26.17
		50	0	25.19	25.25	25.28
		50	25	25.30	25.28	25.30
		50	50	25.17	25.30	25.27
		100	0	25.27	25.23	25.38
	16QAM	1	0	25.86	25.46	25.78
		1	50	25.44	24.58	25.74
		1	99	25.55	25.66	25.46
		50	0	24.29	24.26	24.33
		50	25	24.36	24.28	24.39
		50	50	24.22	24.30	24.34
		100	0	24.26	24.21	24.58

APPENDIX B - OCCUPIED BANDWIDTH

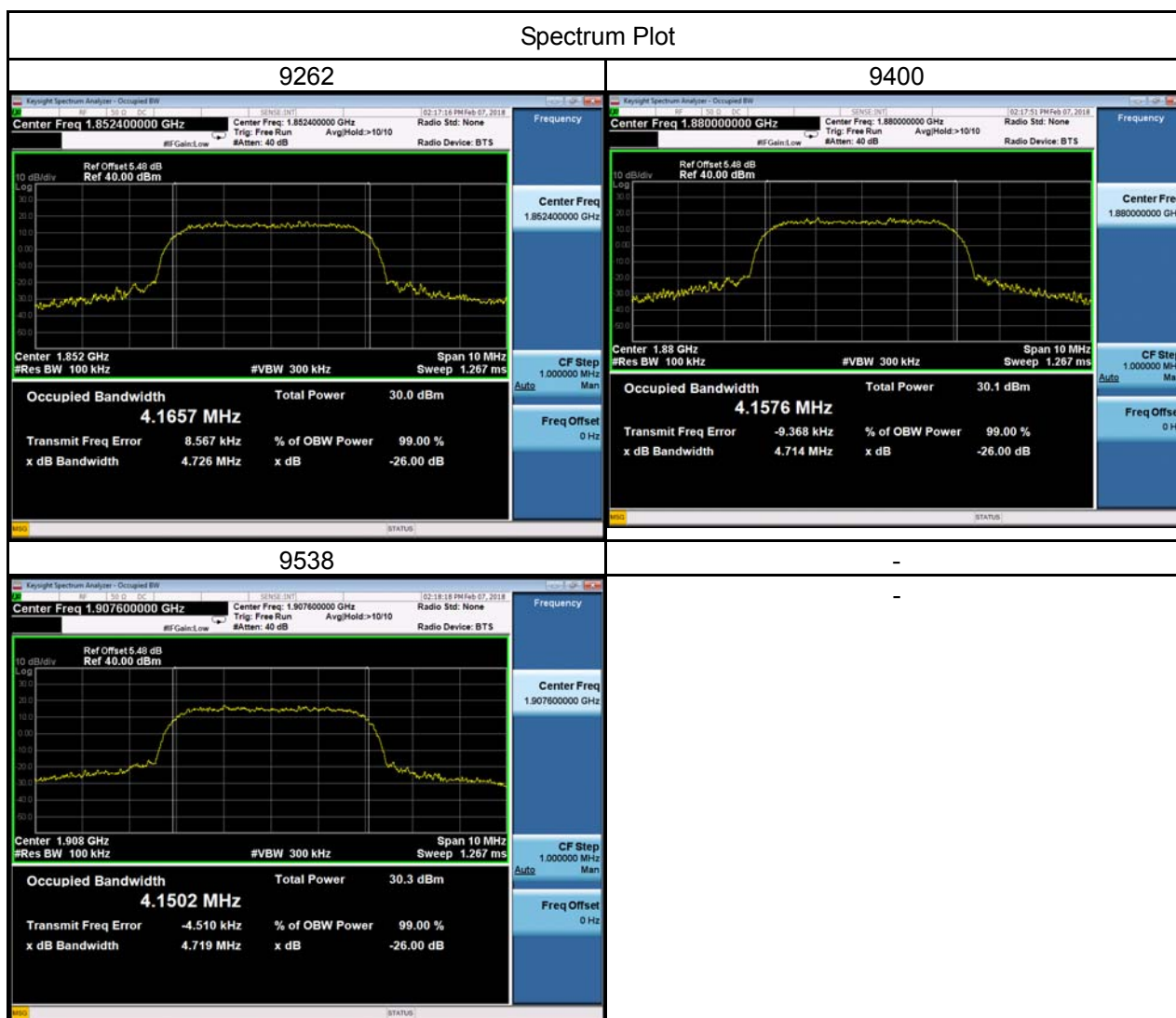
WCDMA Band 2					
BPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
9262	1852.4	4.1342	9262	1852.4	4.713
9400	1880	4.1402	9400	1880	4.709
9538	1907.6	4.1479	9538	1907.6	4.717



WCDMA_HSDPA Band 2					
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
9262	1852.4	4.1393	9262	1852.4	4.731
9400	1880	4.1562	9400	1880	4.725
9538	1907.6	4.1497	9538	1907.6	4.725



WCDMA_HSUPA Band 2					
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
9262	1852.4	4.1657	9262	1852.4	4.726
9400	1880	4.1576	9400	1880	4.714
9538	1907.6	4.1502	9538	1907.6	4.719



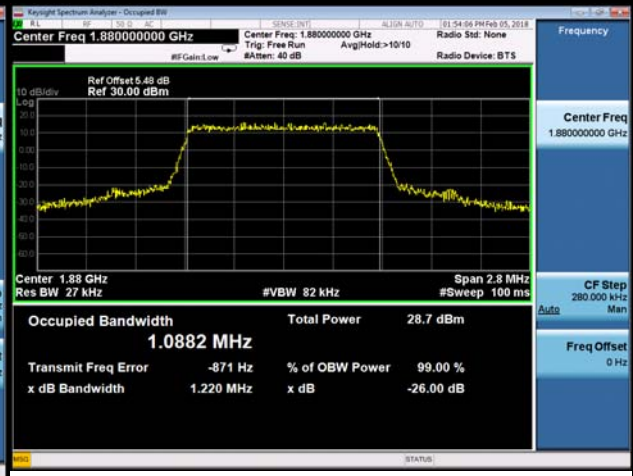
LTE Band 2_1.4M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18607	1850.7	1.0823	18607	1850.7	1.0899
18900	1880	1.0882	18900	1880	1.0922
19193	1909.3	1.0954	19193	1909.3	1.0812
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18607	1850.7	1.230	18607	1850.7	1.233
18900	1880	1.220	18900	1880	1.229
19193	1909.3	1.233	19193	1909.3	1.233

Spectrum Plot

QPSK-18607



QPSK-18900



QPSK-19193



16QAM-18607



16QAM-18900



16QAM-19193



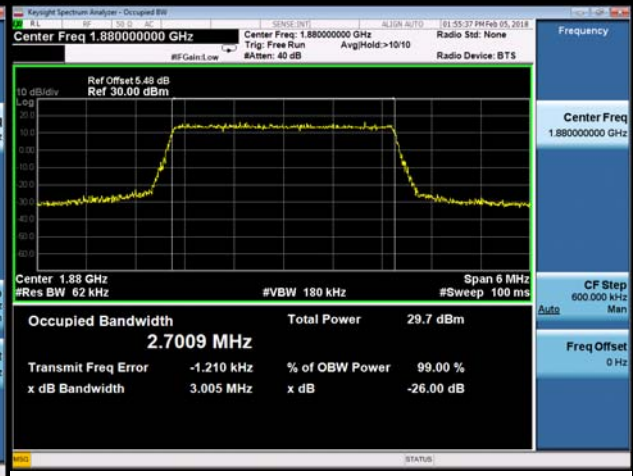
LTE Band 2_3M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18615	1851.5	2.6939	18615	1851.5	2.6959
18900	1880	2.7009	18900	1880	2.6964
19185	1908.5	2.6940	19185	1908.5	2.6959
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18615	1851.5	2.977	18615	1851.5	2.984
18900	1880	3.005	18900	1880	3.005
19185	1908.5	2.960	19185	1908.5	3.013

Spectrum Plot

QPSK-18615



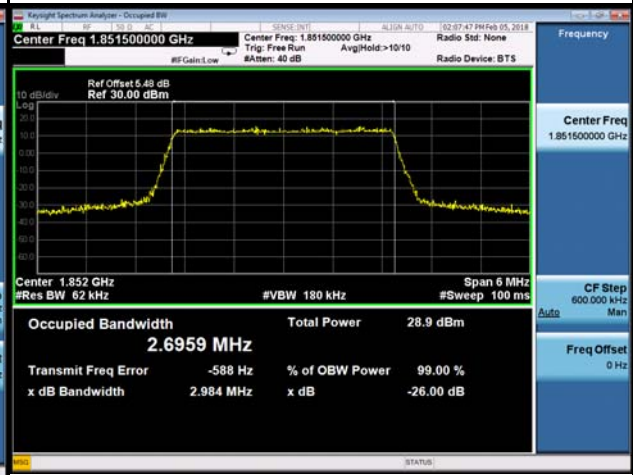
QPSK-18900



QPSK-19185



16QAM-18615



16QAM-18900



16QAM-19185



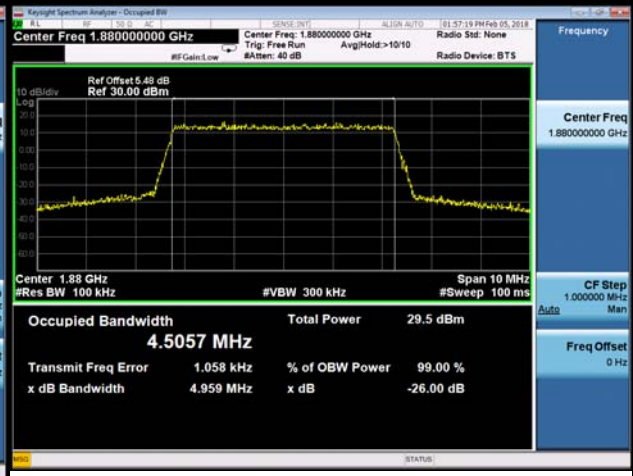
LTE Band 2_5M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18625	1852.5	4.5025	18625	1852.5	4.4897
18900	1880	4.5057	18900	1880	4.4976
19175	1907.5	4.5084	19175	1907.5	4.4982
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18625	1852.5	4.970	18625	1852.5	4.967
18900	1880	4.959	18900	1880	4.939
19175	1907.5	4.966	19175	1907.5	4.901

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	8.9589	18650	1855	8.9777
18900	1880	8.9872	18900	1880	8.9556
19150	1905	8.9558	19150	1905	8.9648
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18650	1855	9.784	18650	1855	9.848
18900	1880	9.833	18900	1880	9.819
19150	1905	9.765	19150	1905	9.692

Spectrum Plot

QPSK-18650



QPSK-18900



QPSK-19150



16QAM-18650



16QAM-18900



16QAM-19150



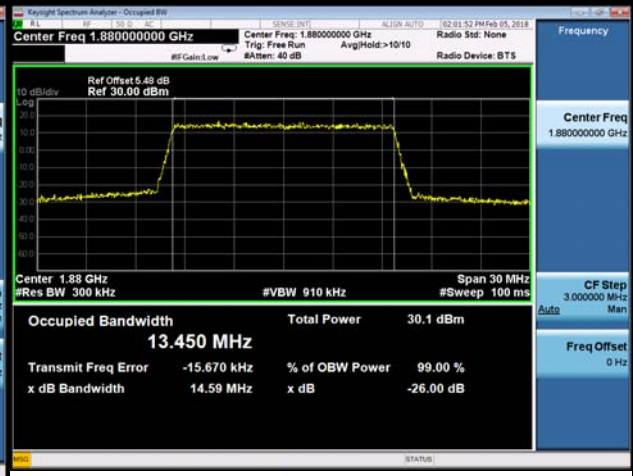
LTE Band 2_15M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18675	1857.5	13.459	18675	1857.5	13.445
18900	1880	13.450	18900	1880	13.454
19125	1902.5	13.441	19125	1902.5	13.427
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18675	1857.5	14.63	18675	1857.5	14.60
18900	1880	14.59	18900	1880	14.69
19125	1902.5	14.66	19125	1902.5	14.65

Spectrum Plot

QPSK-18675



QPSK-18900



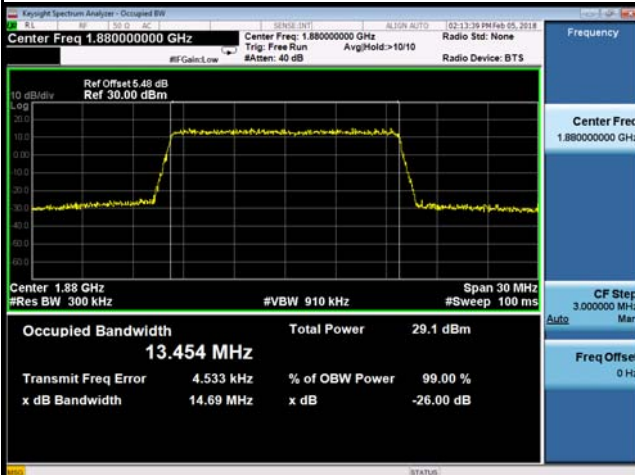
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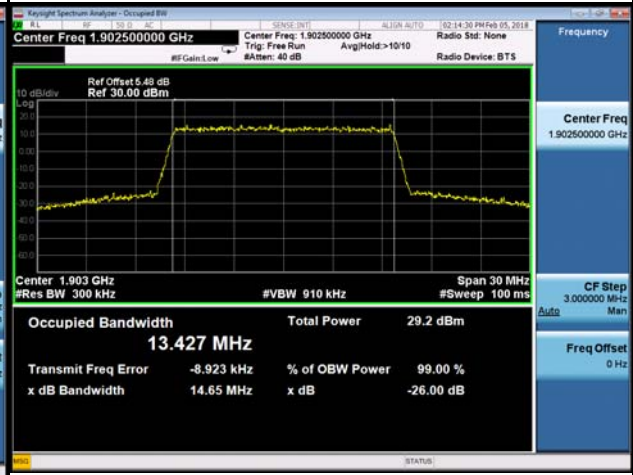
16QAM-18675



16QAM-18900



16QAM-19125



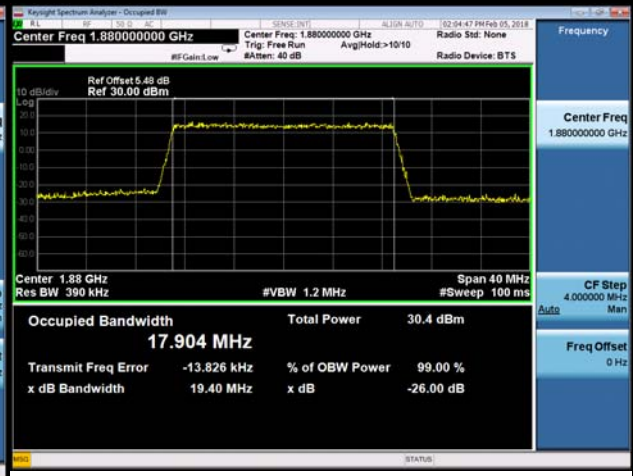
LTE Band 2_20M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
18700	1860	17.884	18700	1860	17.922
18900	1880	17.904	18900	1880	17.946
19100	1900	17.890	19100	1900	17.911
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
18700	1860	19.56	18700	1860	19.37
18900	1880	19.40	18900	1880	19.40
19100	1900	19.43	19100	1900	19.46

Spectrum Plot

QPSK-18700



QPSK-18900



QPSK-19100



16QAM-18700



16QAM-18900



16QAM-19100



LTE Band 25_1.4M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
26047	1850.7	1.0831	26047	1850.7	1.0948
26365	1882.5	1.0954	26365	1882.5	1.0841
26683	1914.3	1.0852	26683	1914.3	1.0908
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
26047	1850.7	1.239	26047	1850.7	1.236
26365	1882.5	1.232	26365	1882.5	1.224
26683	1914.3	1.228	26683	1914.3	1.232

Spectrum Plot

QPSK-26047



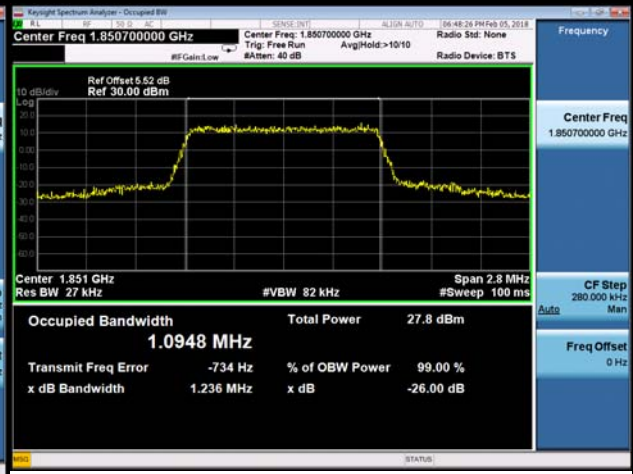
QPSK-26365



QPSK-26683



16QAM-26047



16QAM-26365



16QAM-26683



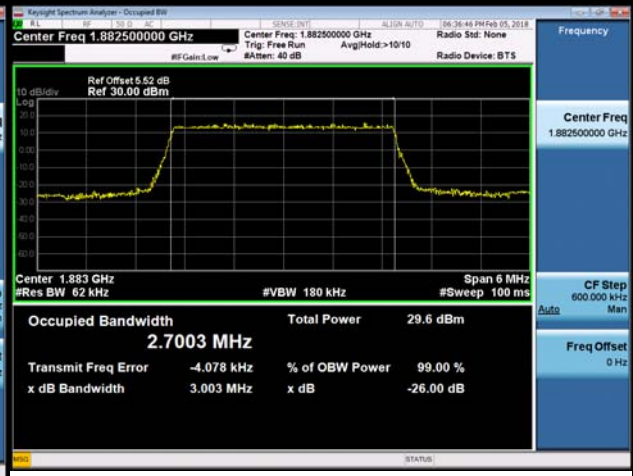
LTE Band 25_3M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
26055	1851.5	2.6926	26055	1851.5	2.7012
26365	1882.5	2.7003	26365	1882.5	2.6901
26675	1913.5	2.6981	26675	1913.5	2.6942
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
26055	1851.5	3.014	26055	1851.5	2.984
26365	1882.5	3.003	26365	1882.5	3.015
26675	1913.5	2.990	26675	1913.5	3.004

Spectrum Plot

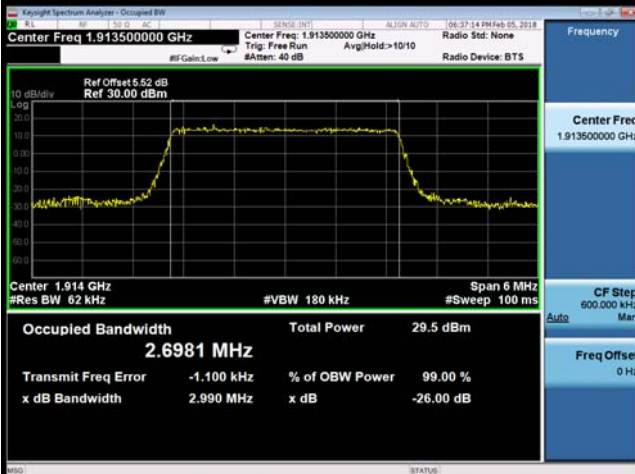
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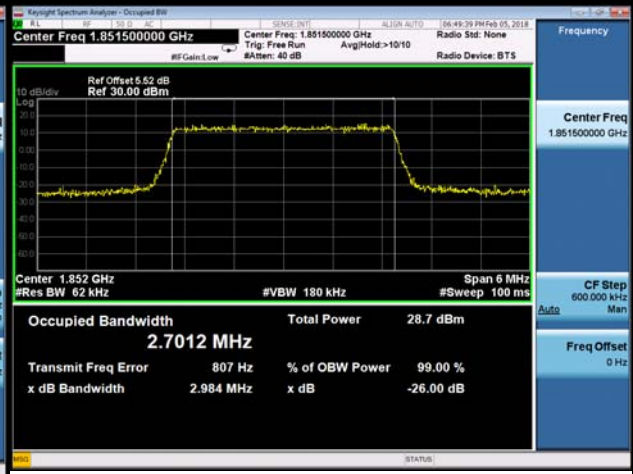
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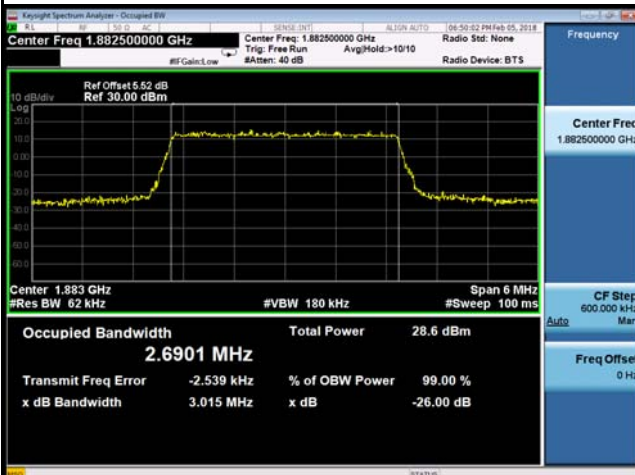
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16QAM-26055



16QAM-26365



16QAM-26675



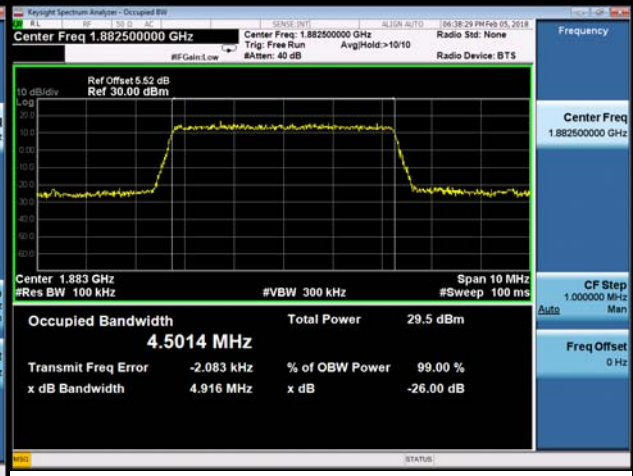
LTE Band 25_5M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
26065	1852.5	4.5039	26065	1852.5	4.4934
26365	1882.5	4.5014	26365	1882.5	4.4963
26665	1912.5	4.5044	26665	1912.5	4.4947
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
26065	1852.5	4.970	26065	1852.5	4.932
26365	1882.5	4.916	26365	1882.5	4.922
26665	1912.5	4.966	26665	1912.5	4.913

Spectrum Plot

QPSK-26065



QPSK-26365



QPSK-26665



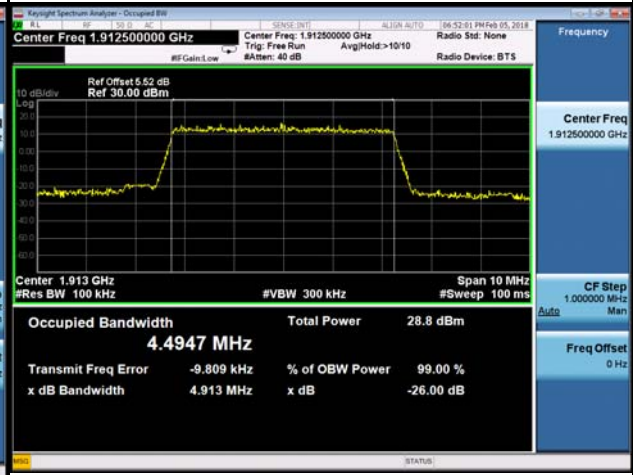
16QAM-26065



16QAM-26365



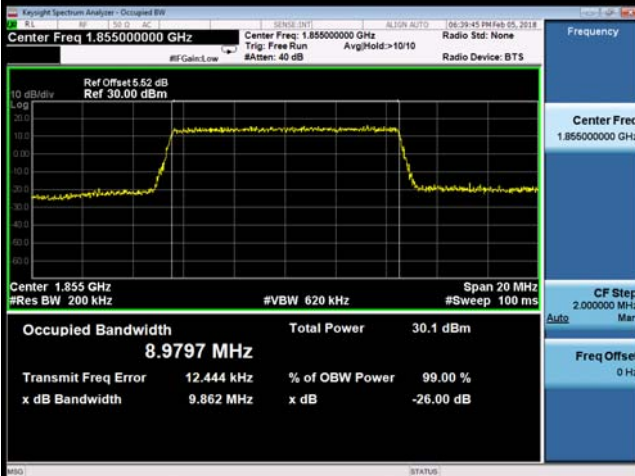
16QAM-26665



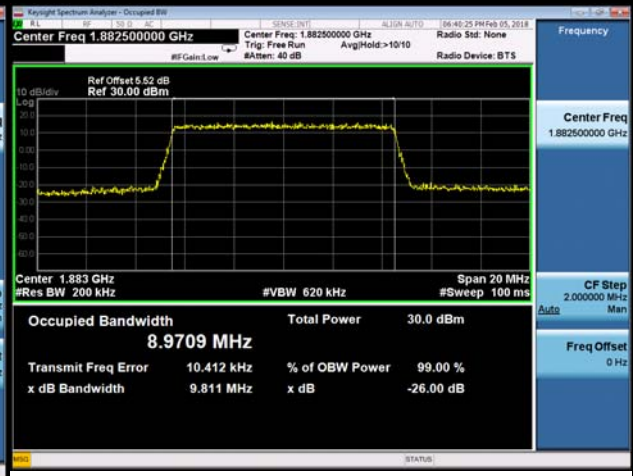
LTE Band 25_10M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
26090	1855	8.9797	26090	1855	8.9631
26365	1882.5	8.9709	26365	1882.5	8.9694
26640	1910	8.9705	26640	1910	8.9861
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
26090	1855	9.862	26090	1855	9.839
26365	1882.5	9.811	26365	1882.5	9.877
26640	1910	9.792	26640	1910	9.849

Spectrum Plot

QPSK-26090



QPSK-26365



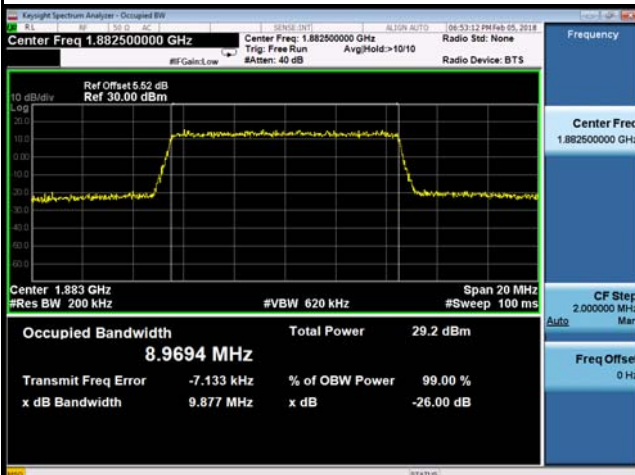
QPSK-26640



16QAM-26090



16QAM-26365



16QAM-26640



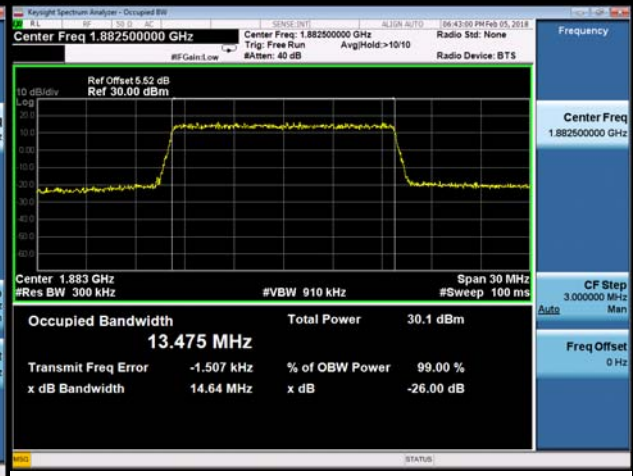
LTE Band 25_15M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
26115	1857.5	13.450	26115	1857.5	13.461
26365	1882.5	13.475	26365	1882.5	13.451
26615	1907.5	13.452	26615	1907.5	13.425
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
26115	1857.5	14.75	26115	1857.5	14.68
26365	1882.5	14.64	26365	1882.5	14.67
26615	1907.5	14.67	26615	1907.5	14.60

Spectrum Plot

QPSK-26115



QPSK-26365



QPSK-26615



16QAM-26115



16QAM-26365



16QAM-26615



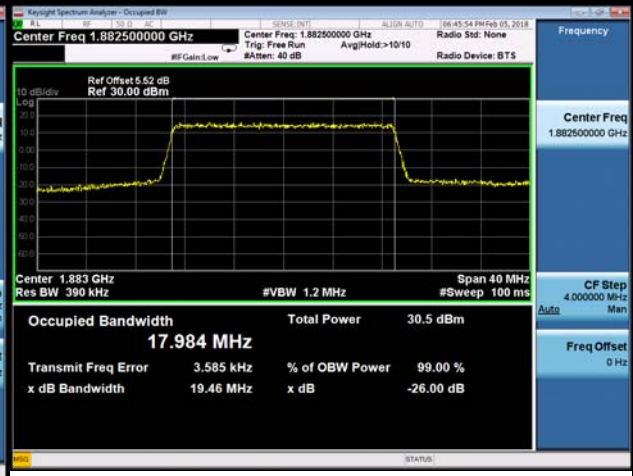
LTE Band 25_20M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
26140	1860	17.924	26140	1860	17.952
26365	1882.5	17.984	26365	1882.5	17.949
26590	1905	17.876	26590	1905	17.907
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
26140	1860	19.62	26140	1860	19.50
26365	1882.5	19.46	26365	1882.5	19.48
26590	1905	19.40	26590	1905	19.47

Spectrum Plot

QPSK-26140



QPSK-26365



QPSK-26590



16QAM-26140



16QAM-26365

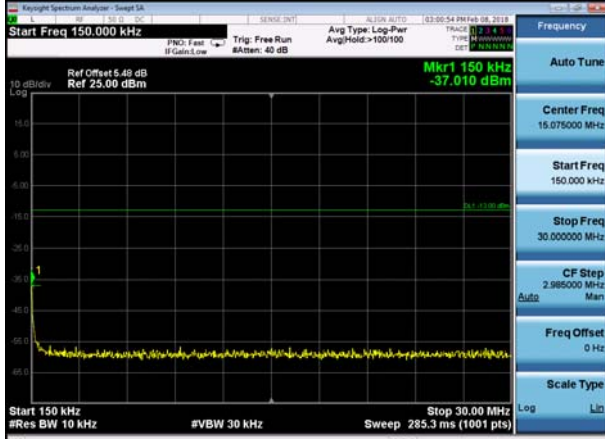


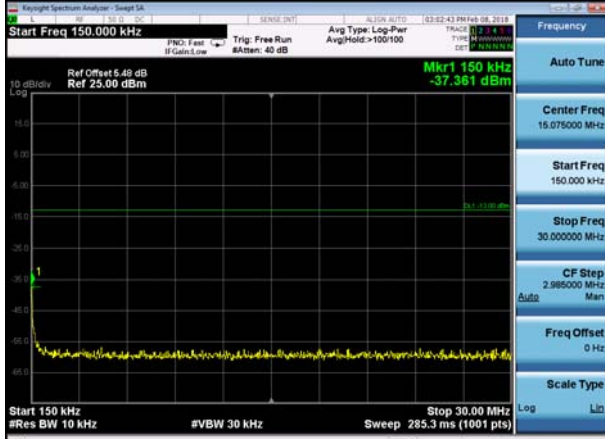
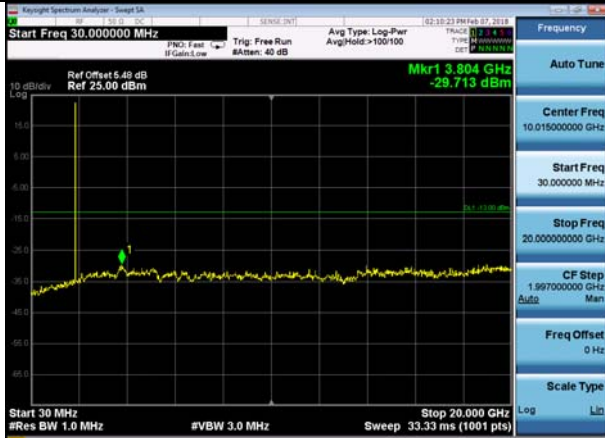
16QAM-26590



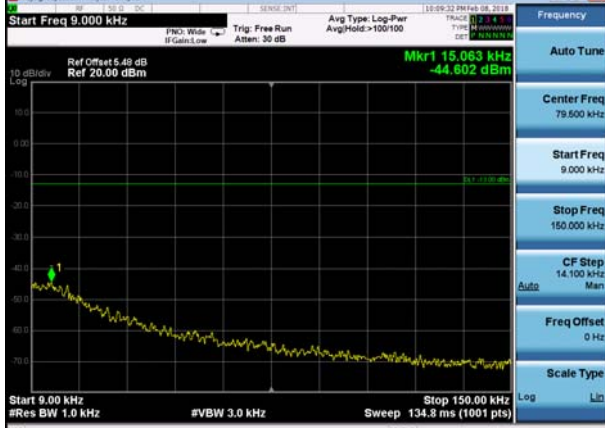
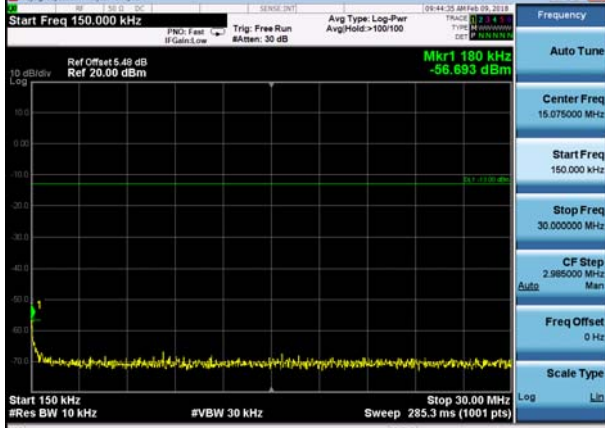
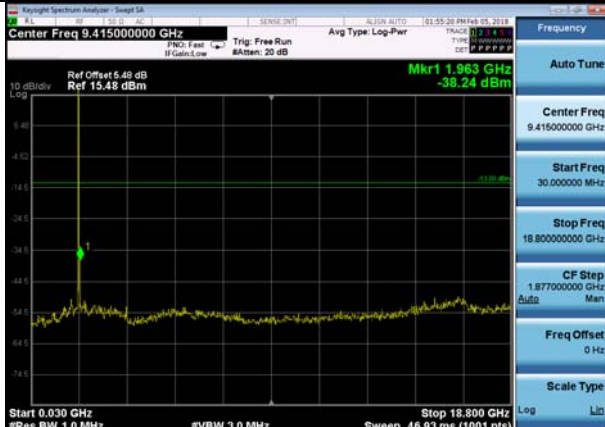
APPENDIX C - CONDUCTED EMISSIONS

WCDMA Band 2			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
9400	1880	9400	1880
Channel	Frequency(MHz)	-	-
9400	1880	-	-

WCDMA_HSDPA Band 2			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
9400	1880	9400	1880
			
Channel	Frequency(MHz)	-	-
9400	1880	-	-
			

WCDMA_HSUPA Band 2			
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	-	-
			

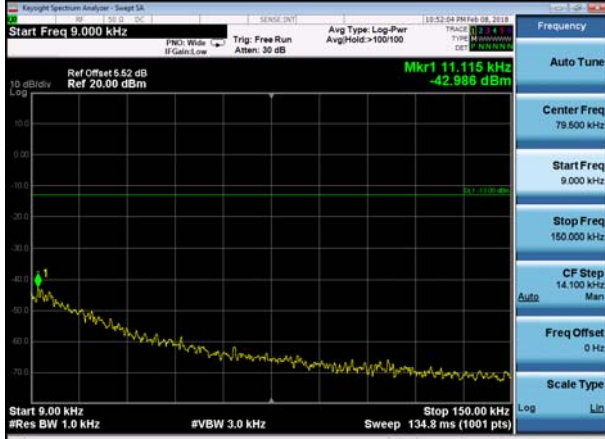
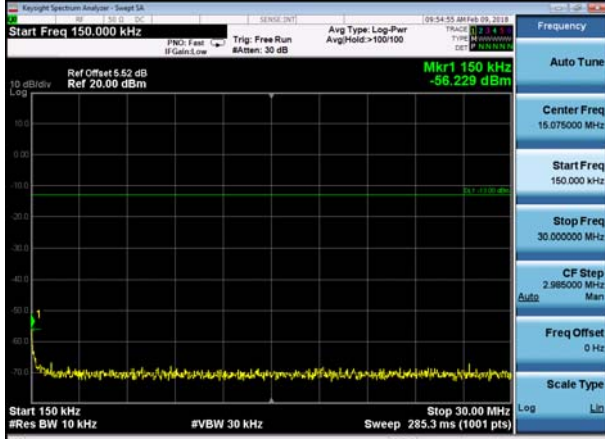
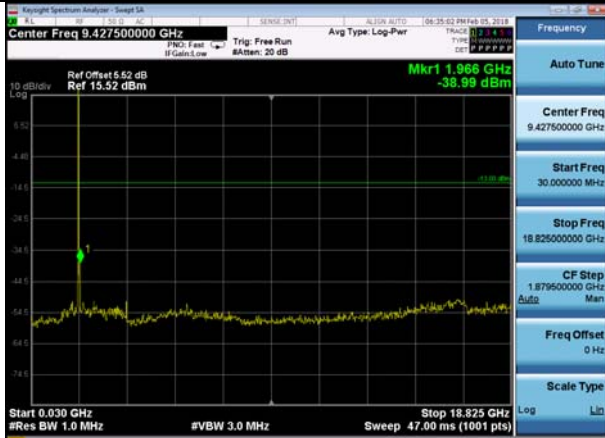
LTE Band 2_5M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
18900	1880	18900	1880
Channel	Frequency(MHz)	-	-
18900	1880	-	-

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	-	-

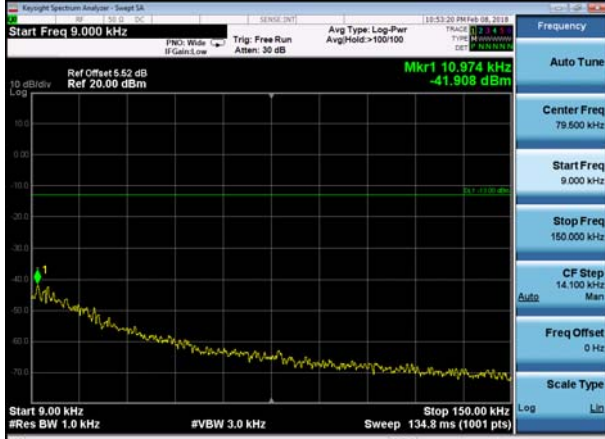
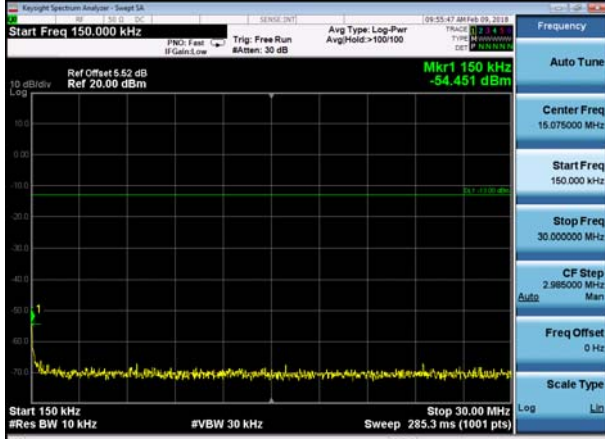
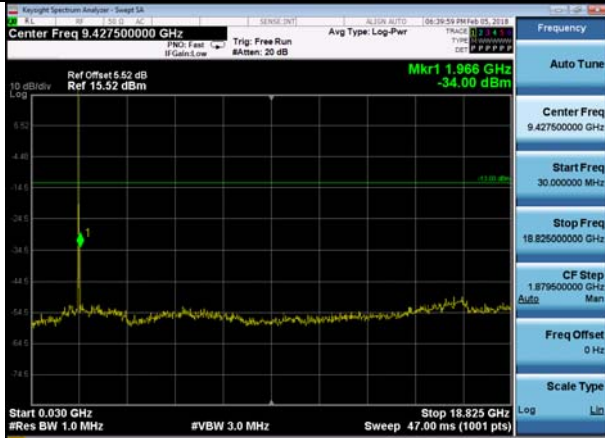
LTE Band 2_20M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
18900	1880	18900	1880
Channel	Frequency(MHz)	-	-
18900	1880	-	-

LTE Band 25_1.4M

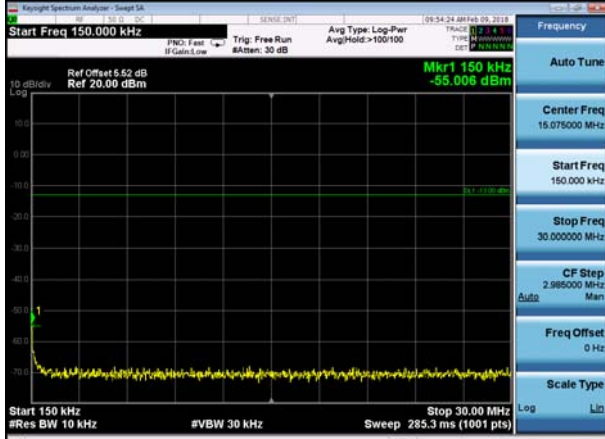
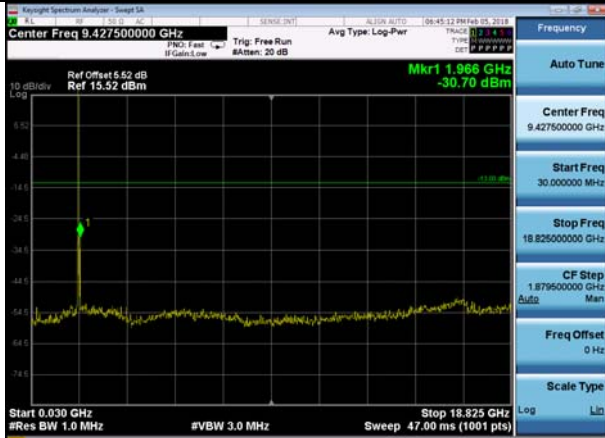
Channel	Frequency(MHz)	Channel	Frequency(MHz)
26365	1882.5	26365	1882.5
			
Channel	Frequency(MHz)	-	-
26365	1882.5	-	-
			

LTE Band 25_3M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
26365	1882.5	26365	1882.5
Channel	Frequency(MHz)	-	-
26365	1882.5	-	-
		-	

LTE Band 25_5M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
26365	1882.5	26365	1882.5
Channel	Frequency(MHz)	-	-
26365	1882.5	-	-

LTE Band 25_10M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
26365	1882.5	26365	1882.5
			
Channel	Frequency(MHz)	-	-
26365	1882.5	-	-
			

LTE Band 25_15M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
26365	1882.5	26365	1882.5
Channel	Frequency(MHz)	-	-
26365	1882.5	-	-

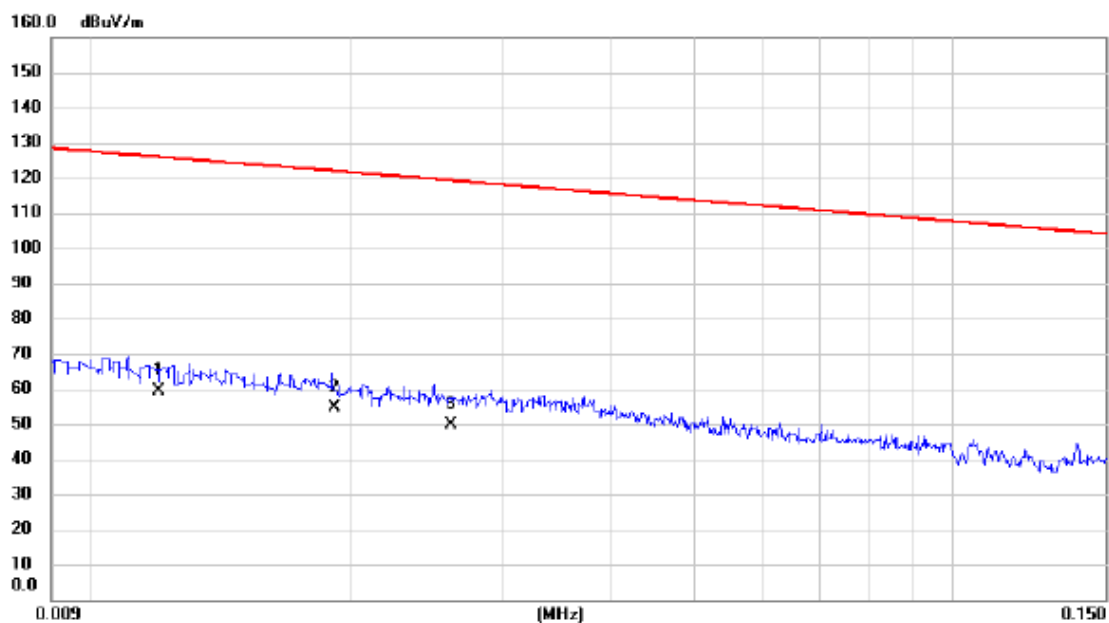
LTE Band 25_20M			
Channel	Frequency(MHz)	Channel	Frequency(MHz)
26365	1882.5	26365	1882.5
			
Channel	Frequency(MHz)	-	-
26365	1882.5	-	-
			

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

Test Mode:

TX Mode (Adapter: Liteon / ADLX45YLC2A)

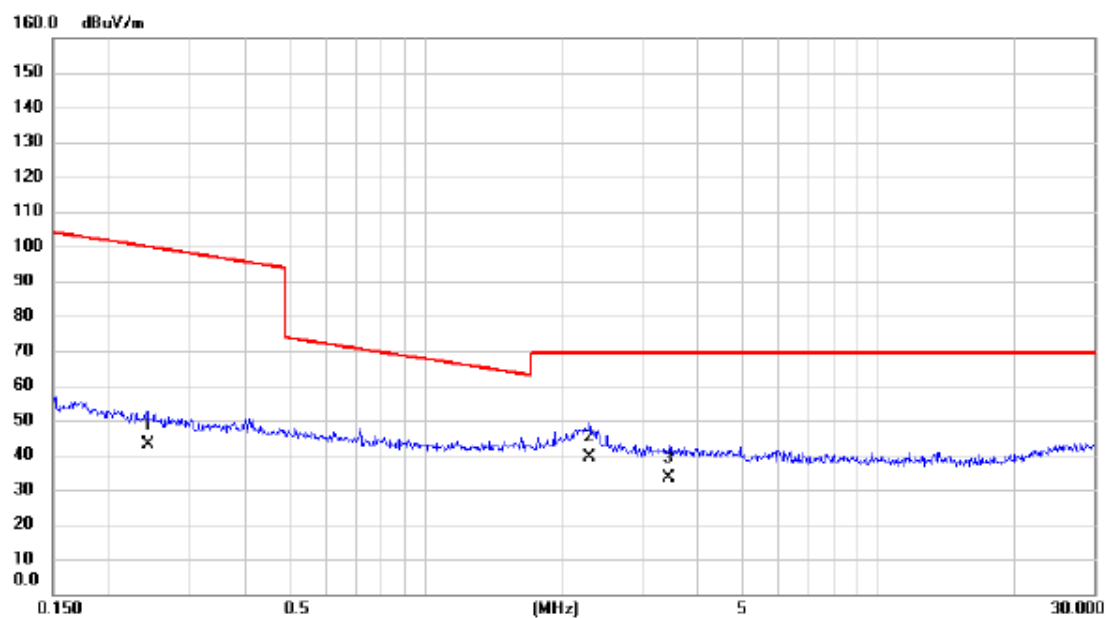
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.012	38.55	20.66	59.21	126.02	-66.81	AVG	
2		0.019	34.83	19.72	54.55	121.94	-67.39	AVG	
3		0.026	30.27	19.43	49.70	119.24	-69.54	AVG	

Test Mode: TX Mode (Adapter: Liteon / ADLX45YLC2A)

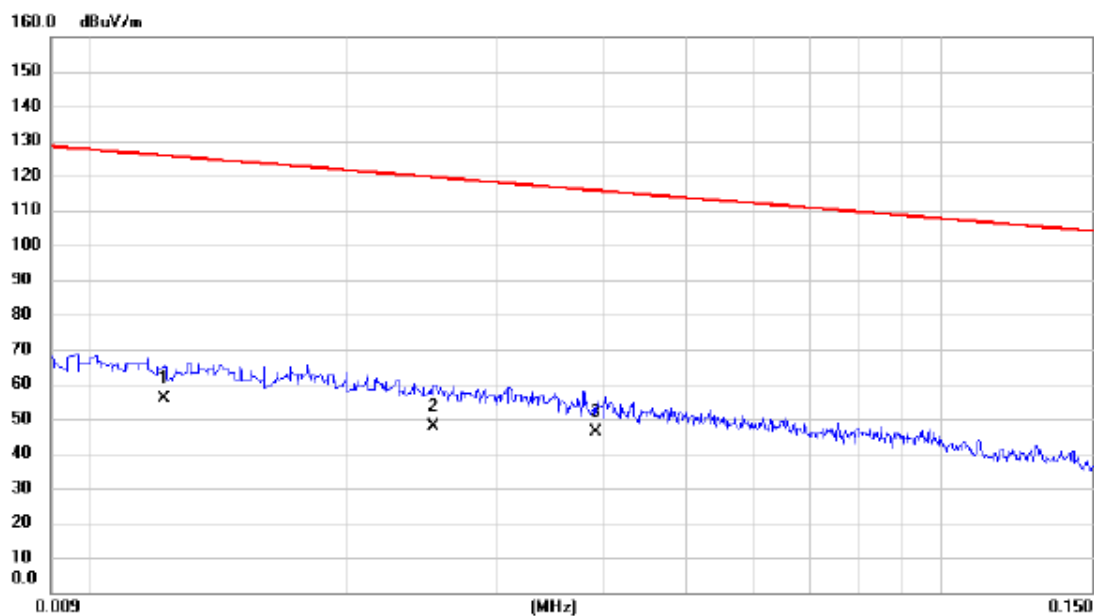
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.244	26.19	16.68	42.87	99.85	-56.98	AVG	
2	*	2.297	24.07	15.43	39.50	69.54	-30.04	QP	
3		3.435	18.16	15.11	33.27	69.54	-36.27	QP	

Test Mode: TX Mode (Adapter: Liteon / ADLX45YLC2A)

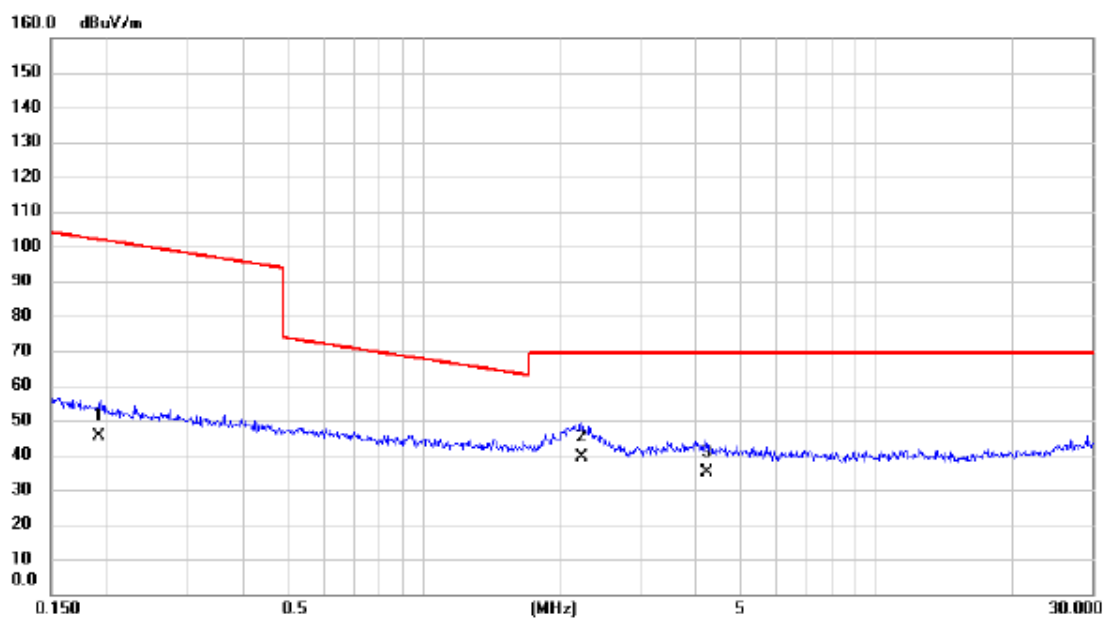
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.012	35.19	20.63	55.82	125.88	-70.06	AVG	
2		0.025	28.43	19.46	47.89	119.54	-71.65	AVG	
3	*	0.039	27.16	19.04	46.20	115.74	-69.54	AVG	

Test Mode: TX Mode (Adapter: Liteon / ADLX45YLC2A)

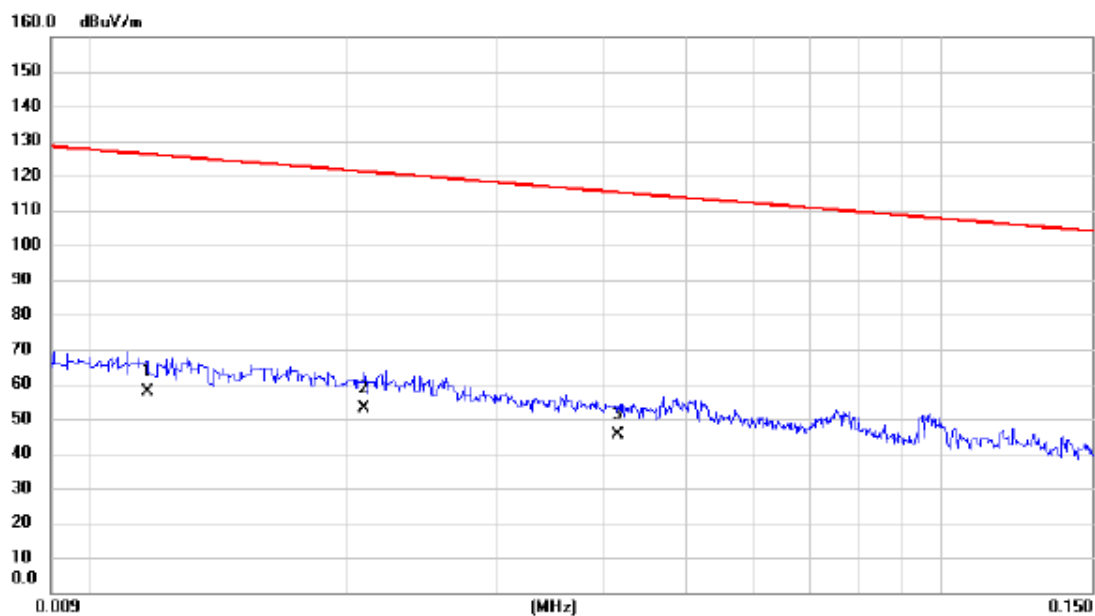
Ant 90°



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.191	28.47	16.83	45.30	101.97	-56.67	AVG	
2	*	2.240	24.16	15.44	39.60	69.54	-29.94	QP	
3		4.213	20.18	14.82	35.00	69.54	-34.54	QP	

Test Mode: TX Mode (Adapter: Chicony / ADLX45YCC2A)

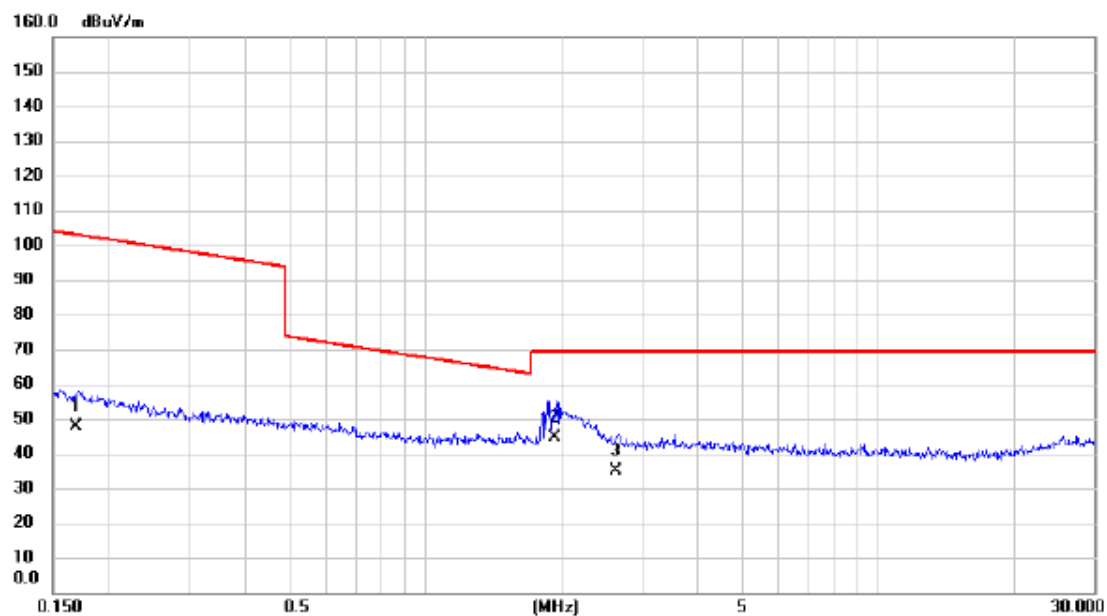
Ant 0°



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.012	37.17	20.70	57.87	126.24	-68.37	AVG	
2	*	0.021	33.56	19.59	53.15	121.16	-68.01	AVG	
3		0.042	26.29	18.97	45.26	115.22	-69.96	AVG	

Test Mode: TX Mode (Adapter: Chicony / ADLX45YCC2A)

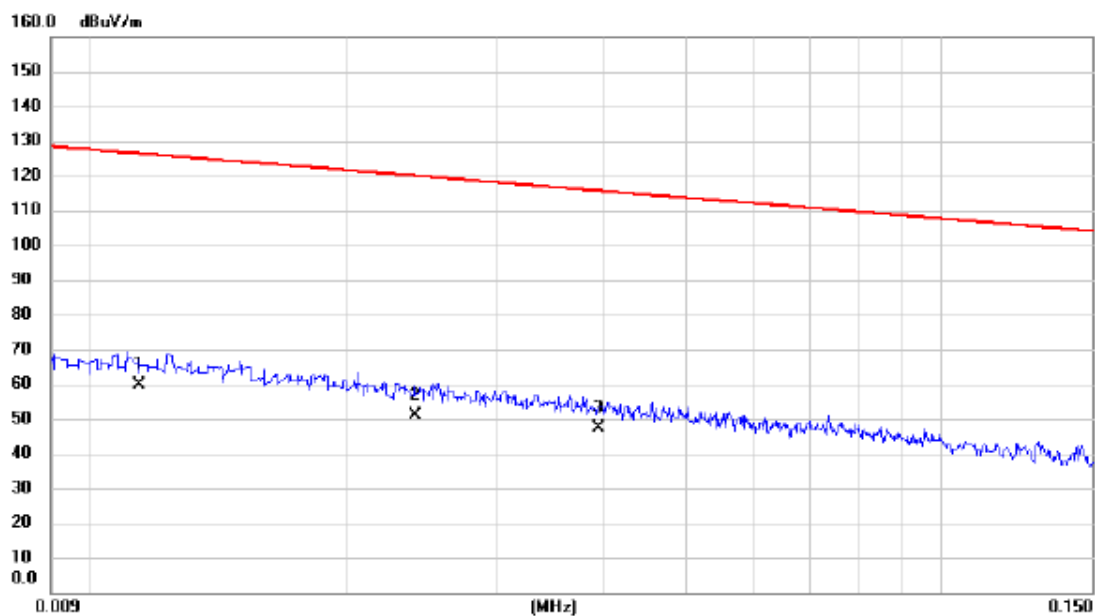
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.169	30.89	16.89	47.78	103.04	-55.26	AVG	
2	*	1.925	28.87	15.54	44.41	69.54	-25.13	QP	
3		2.629	19.87	15.33	35.20	69.54	-34.34	QP	

Test Mode: TX Mode (Adapter: Chicony / ADLX45YCC2A)

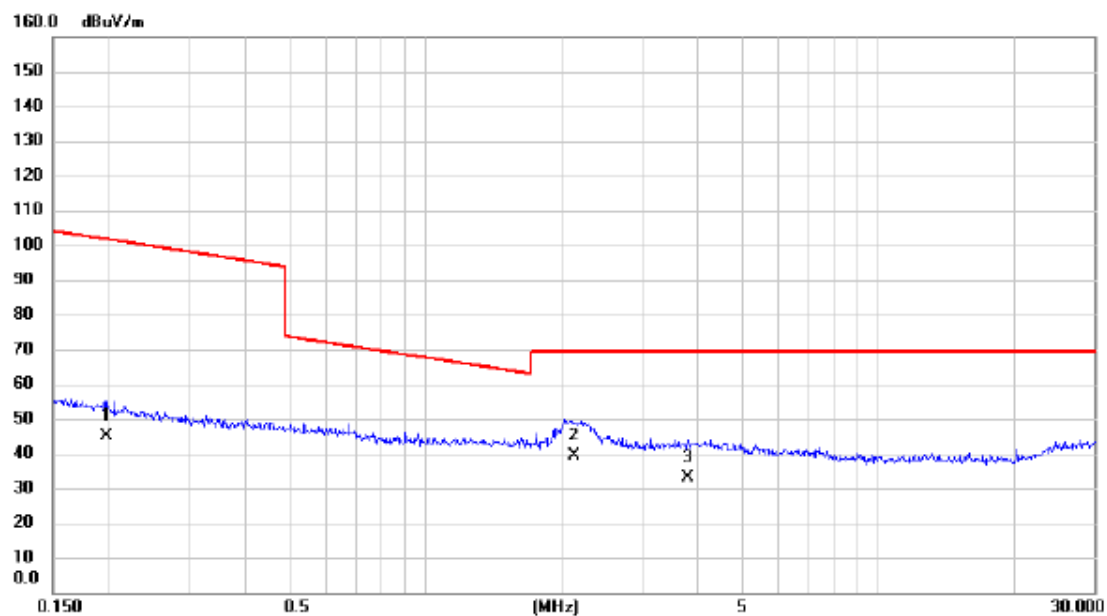
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.011	38.88	20.74	59.62	126.47	-66.85	AVG	
2		0.024	31.41	19.50	50.91	119.96	-69.05	AVG	
3		0.040	28.26	19.03	47.29	115.65	-68.36	AVG	

Test Mode: TX Mode (Adapter: Chicony / ADLX45YCC2A)

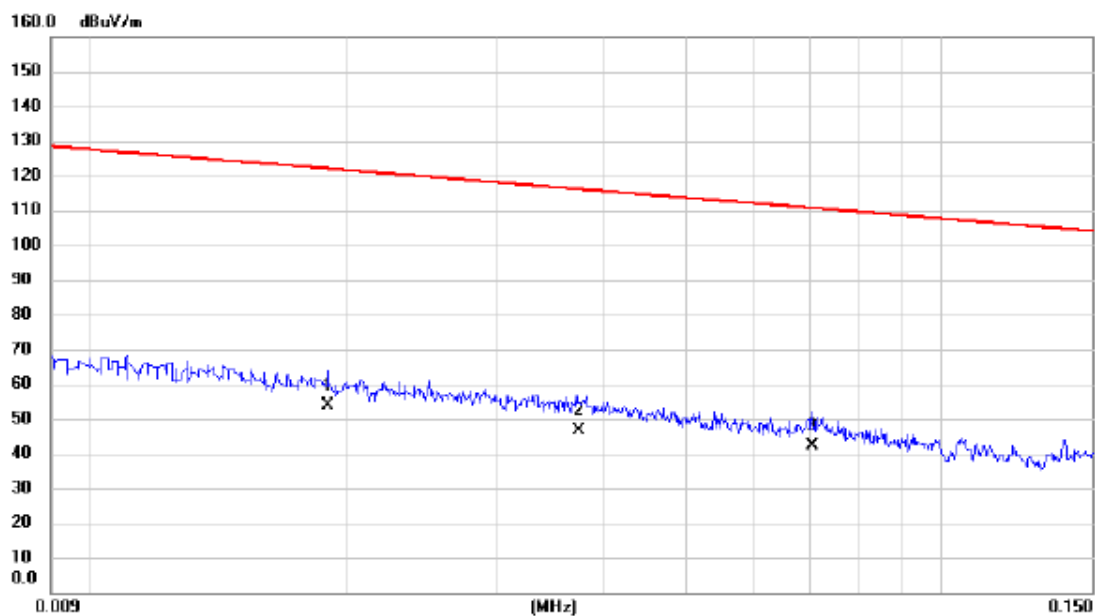
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.197	28.31	16.81	45.12	101.71	-56.59	AVG	
2	*	2.128	23.79	15.47	39.26	69.54	-30.28	QP	
3		3.796	17.98	15.01	32.99	69.54	-36.55	QP	

Test Mode: TX Mode (Adapter: Liteon / ADLX45YLC3A)

Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.019	33.90	19.75	53.65	122.03	-68.38	AVG	
2		0.037	27.53	19.09	46.62	116.12	-69.50	AVG	
3		0.070	23.95	18.32	42.27	110.65	-68.38	AVG	

Test Mode: TX Mode (Adapter: Liteon / ADLX45YLC3A)

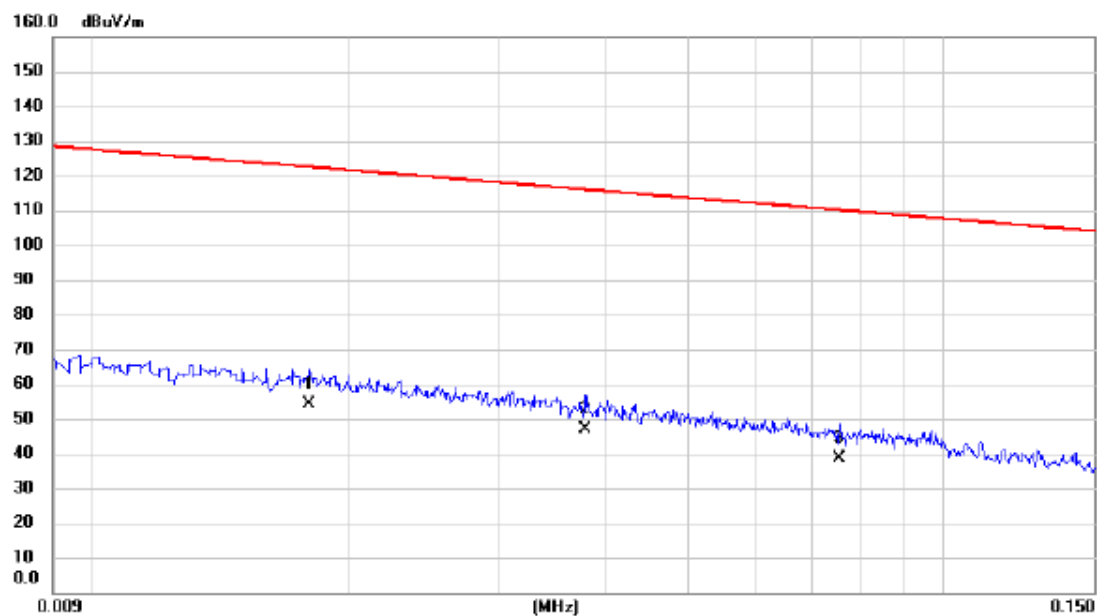
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.408	23.40	16.53	39.93	95.38	-55.45	AVG	
2	*	2.297	23.87	15.43	39.30	69.54	-30.24	QP	
3		4.978	20.22	14.38	34.60	69.54	-34.94	QP	

Test Mode: TX Mode (Adapter: Liteon / ADLX45YLC3A)

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.018	34.37	19.88	54.25	122.50	-68.25	AVG	
2		0.038	27.92	19.08	47.00	116.01	-69.01	AVG	
3		0.075	20.33	18.22	38.55	110.05	-71.50	AVG	

Test Mode: TX Mode (Adapter: Liteon / ADLX45YLC3A)

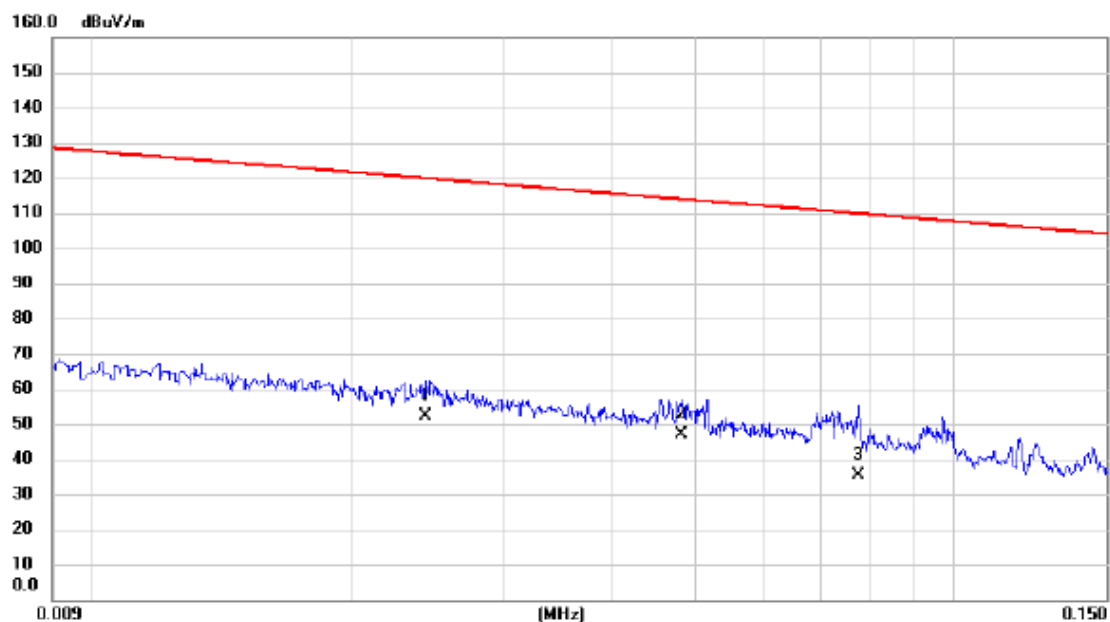
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.274	25.36	16.64	42.00	98.84	-56.84	AVG	
2	*	1.928	23.69	15.54	39.23	69.54	-30.31	QP	
3		4.202	21.33	14.83	36.16	69.54	-33.38	QP	

Test Mode: TX Mode (Adapter: Chicony / ADLX45YCC3A)

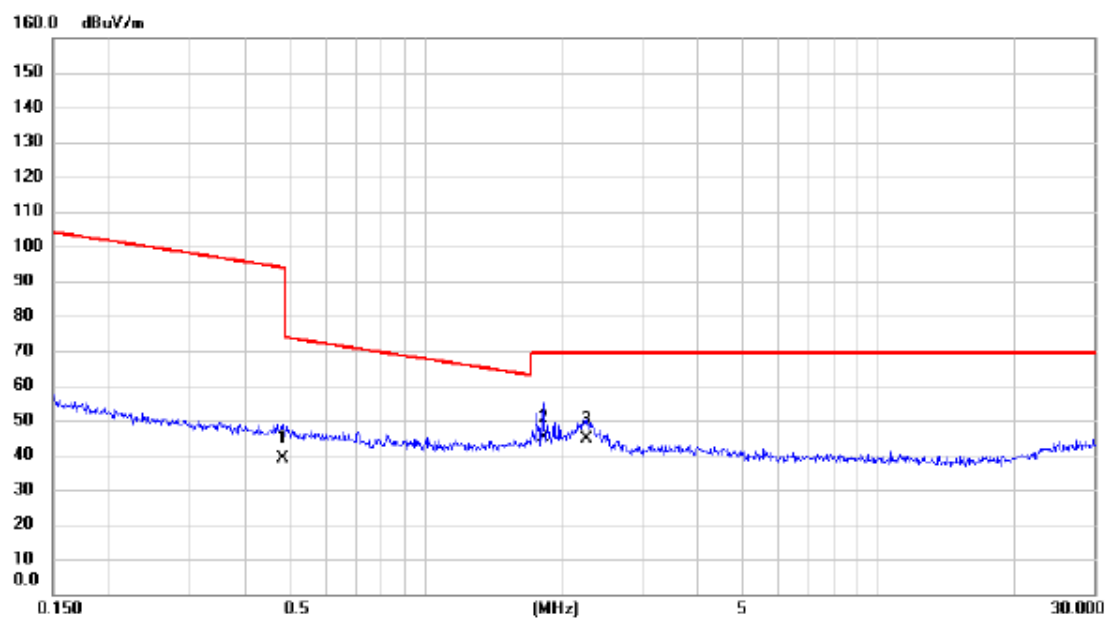
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1		0.024	32.72	19.49	52.21	119.86	-67.65		AVG	
2	*	0.048	28.26	18.77	47.03	113.93	-66.90		AVG	
3		0.077	17.08	18.17	35.25	109.83	-74.58		AVG	

Test Mode: TX Mode (Adapter: Chicony / ADLX45YCC3A)

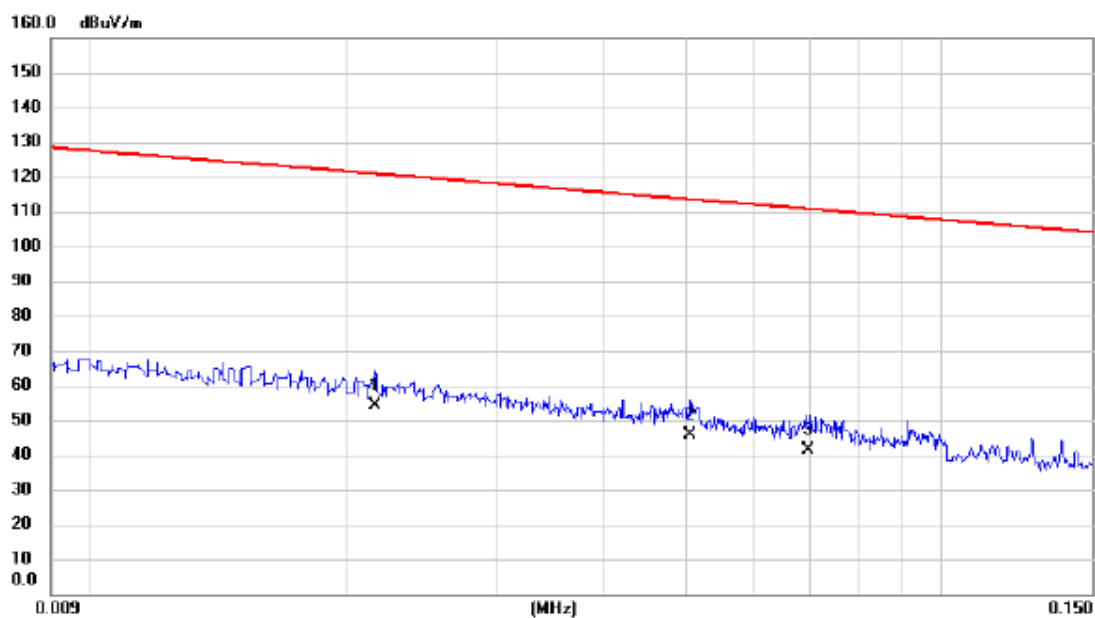
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.481	22.35	16.49	38.84	93.96	-55.12	AVG	
2	*	1.819	29.34	15.58	44.92	69.54	-24.62	QP	
3		2.272	29.33	15.44	44.77	69.54	-24.77	QP	

Test Mode: TX Mode (Adapter: Chicony / ADLX45YCC3A)

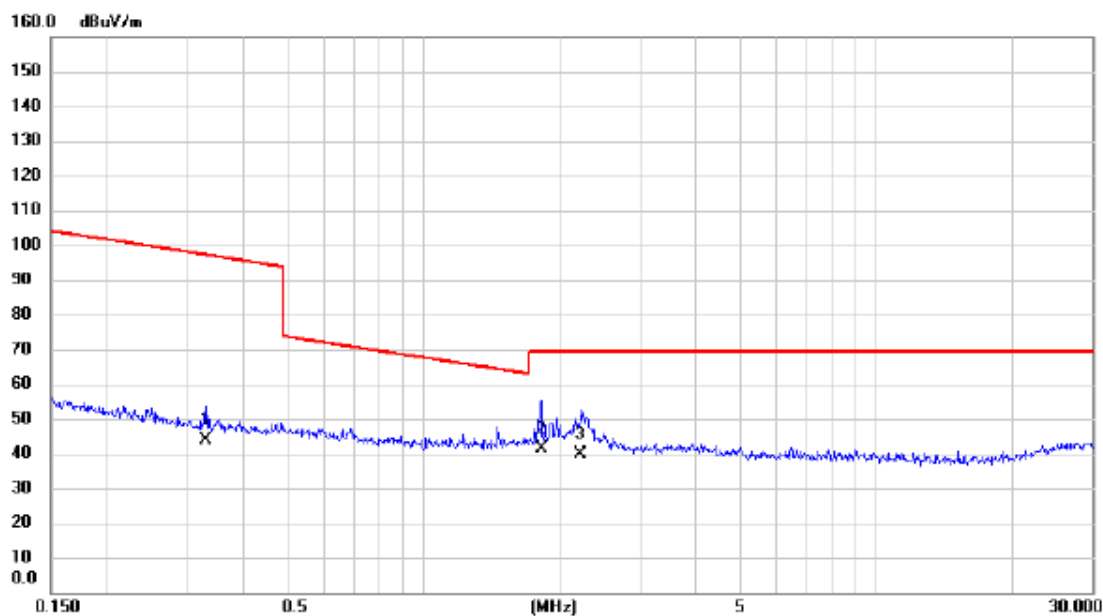
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.022	34.45	19.57	54.02	120.92	-66.90	AVG	
2		0.051	27.04	18.71	45.75	113.50	-67.75	AVG	
3		0.070	23.20	18.34	41.54	110.75	-69.21	AVG	

Test Mode: TX Mode (Adapter: Chicony / ADLX45YCC3A)

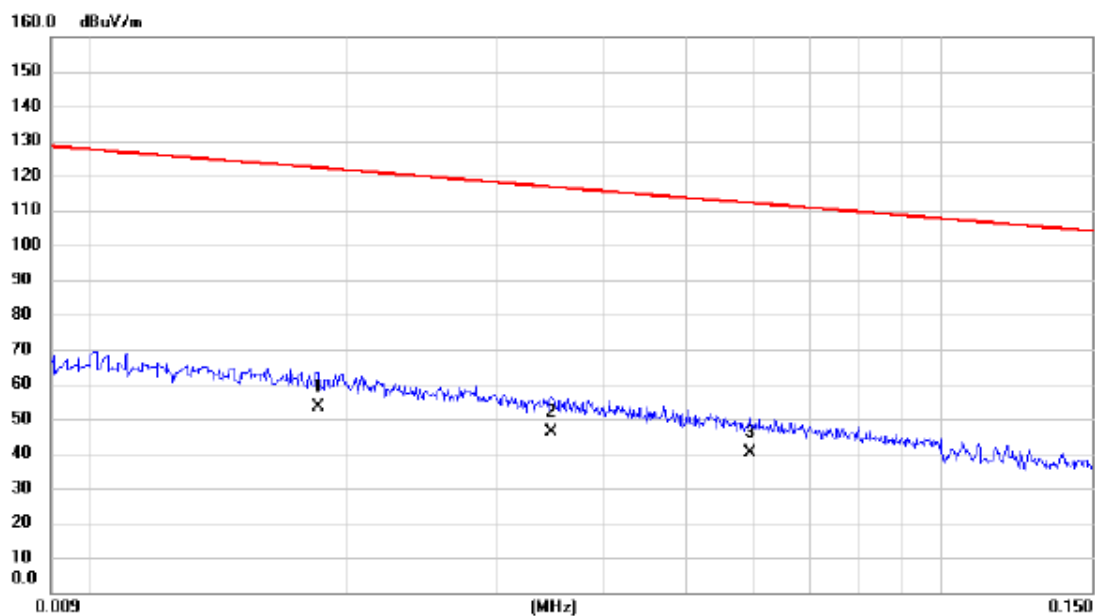
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.329	27.30	16.60	43.90	97.27	-53.37	AVG	
2	*	1.819	25.97	15.58	41.55	69.54	-27.99	QP	
3		2.225	24.30	15.44	39.74	69.54	-29.80	QP	

Test Mode: TX Mode (Adapter: Liteon / ADLX65YLC3A)

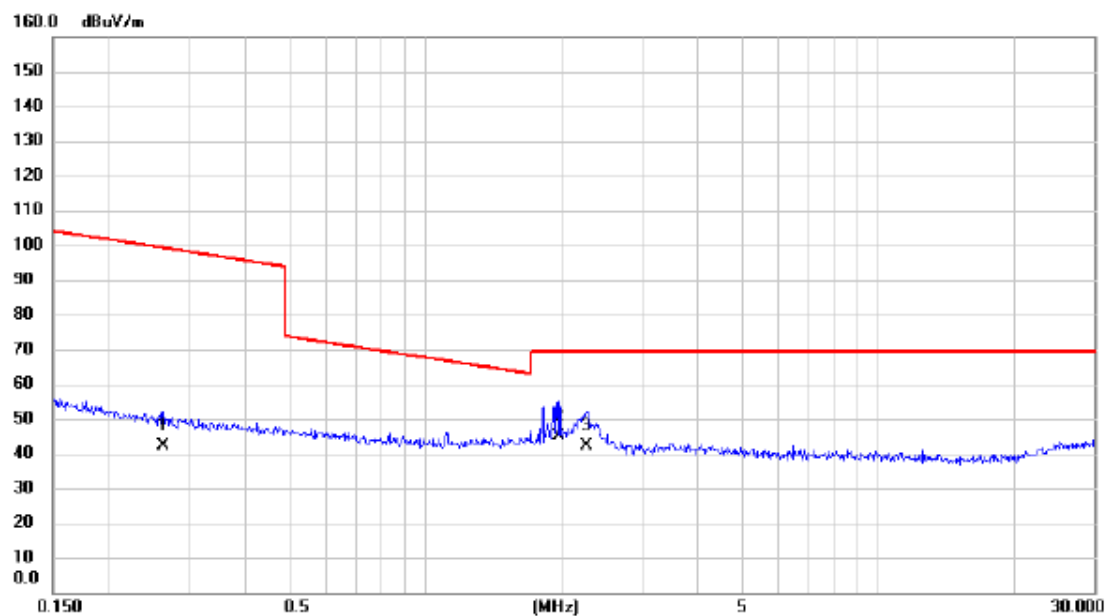
Ant 0°



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment				
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.018	33.64	19.82	53.46	122.26	-68.80	AVG	
2		0.035	27.10	19.18	46.28	116.77	-70.49	AVG	
3		0.059	21.85	18.54	40.39	112.13	-71.74	AVG	

Test Mode: TX Mode (Adapter: Liteon / ADLX65YLC3A)

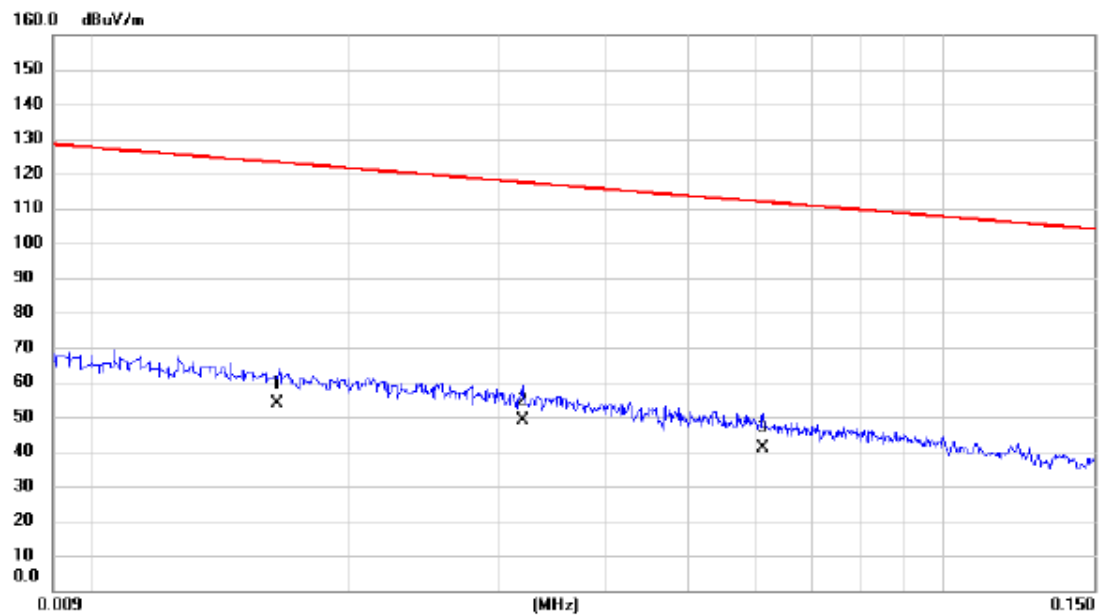
Ant 0°



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment				
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.263	25.44	16.65	42.09	99.21	-57.12	AVG	
2	*	1.970	29.65	15.52	45.17	69.54	-24.37	QP	
3		2.272	26.69	15.44	42.13	69.54	-27.41	QP	

Test Mode: TX Mode (Adapter: Liteon / ADLX65YLC3A)

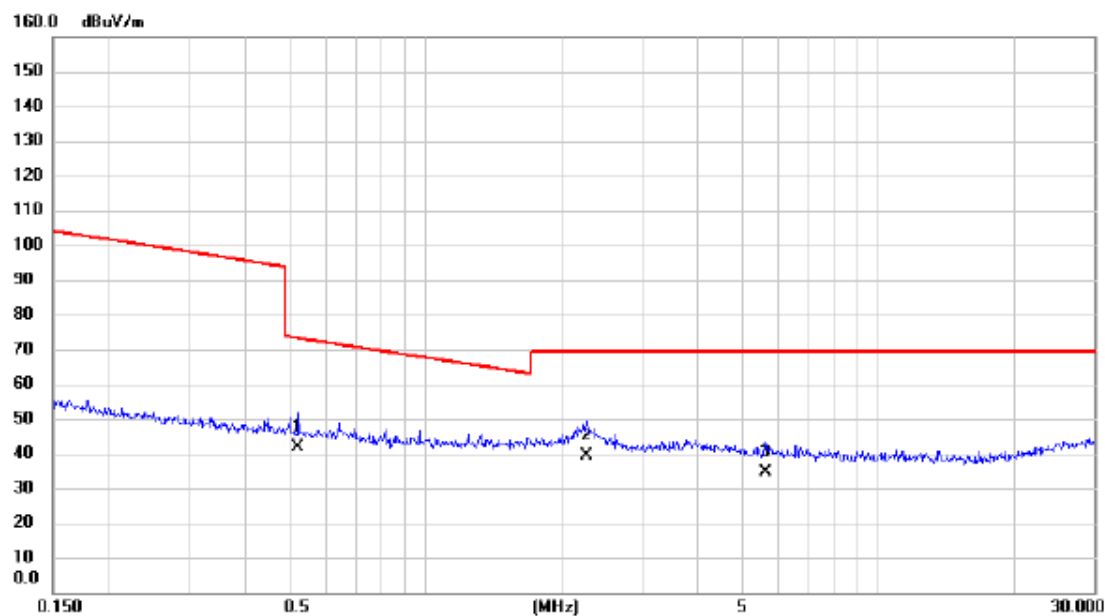
Ant 90°



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.017	33.61	20.07	53.68	123.26	-69.58	AVG	
2	*	0.032	29.70	19.26	48.96	117.50	-68.54	AVG	
3		0.061	22.49	18.50	40.99	111.86	-70.87	AVG	

Test Mode: TX Mode (Adapter: Liteon / ADLX65YLC3A)

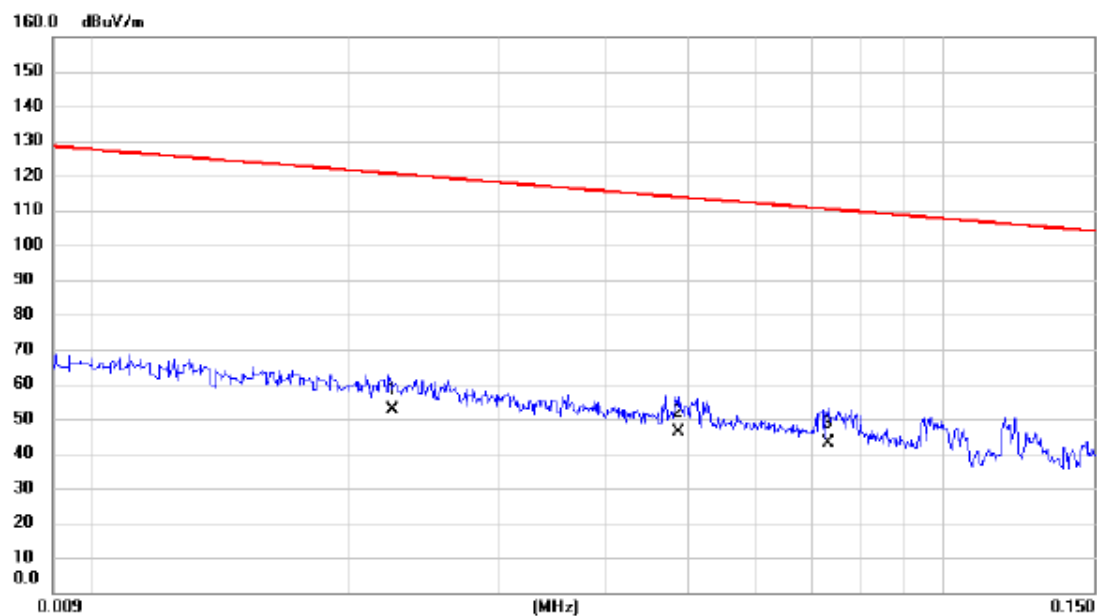
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.524	25.48	16.44	41.92	73.22	-31.30	AVG	
2	*	2.273	24.02	15.44	39.46	69.54	-30.08	QP	
3		5.653	20.18	14.29	34.47	69.54	-35.07	QP	

Test Mode: TX Mode (Adapter: Chicony / ADLX65YCC3A)

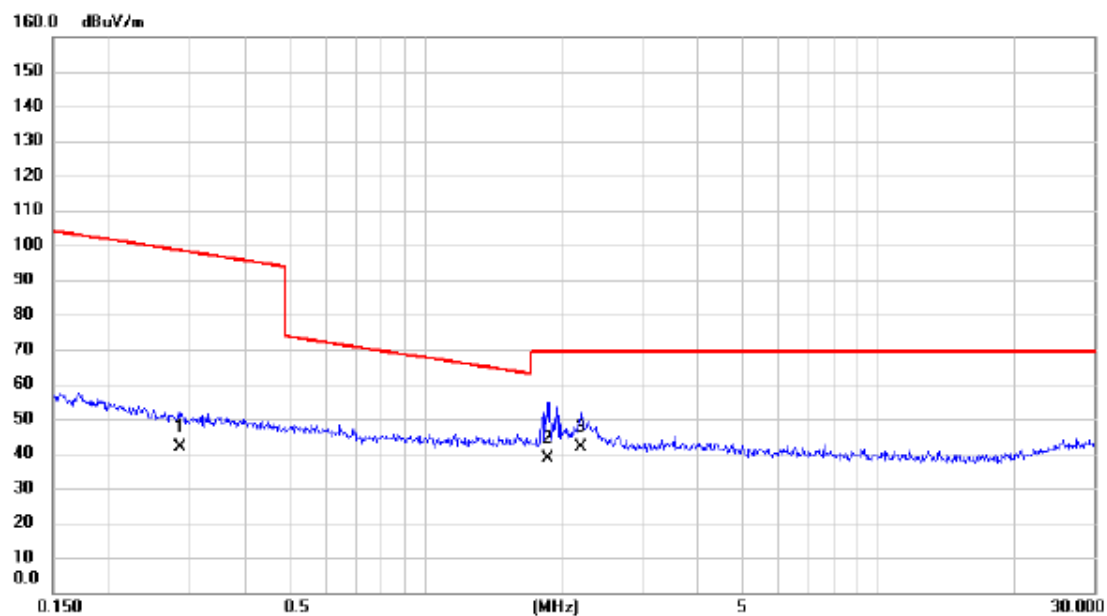
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.022	33.11	19.55	52.66	120.56	-67.90	AVG	
2		0.049	27.36	18.76	46.12	113.85	-67.73	AVG	
3	*	0.073	24.85	18.27	43.12	110.31	-67.19	AVG	

Test Mode: TX Mode (Adapter: Chicony / ADLX65YCC3A)

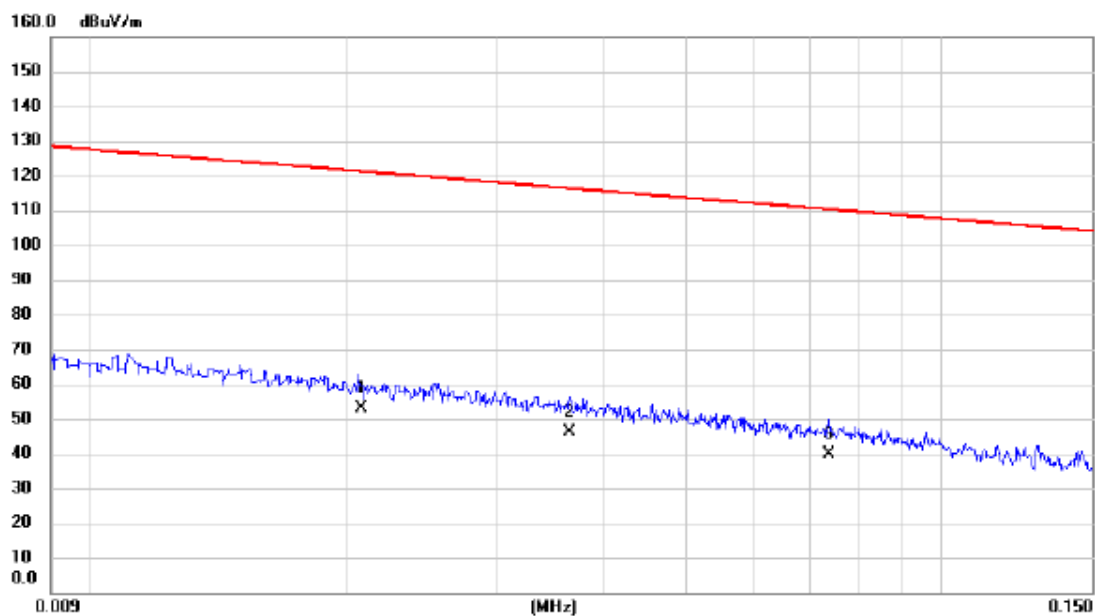
Ant 0°



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment				
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.286	25.30	16.63	41.93	98.47	-56.54	AVG	
2		1.868	23.10	15.56	38.66	69.54	-30.88	QP	
3	*	2.213	26.39	15.45	41.84	69.54	-27.70	QP	

Test Mode: TX Mode (Adapter: Chicony / ADLX65YCC3A)

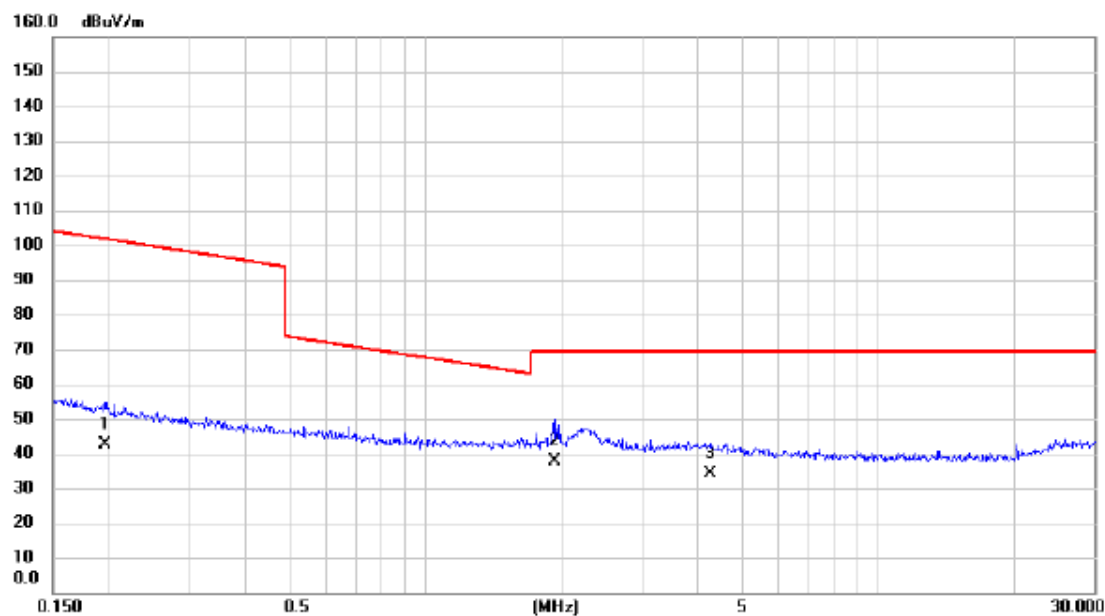
Ant 90°



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment				
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.021	33.34	19.60	52.94	121.24	-68.30	AVG	
2		0.037	27.02	19.12	46.14	116.34	-70.20	AVG	
3		0.074	21.64	18.25	39.89	110.24	-70.35	AVG	

Test Mode: TX Mode (Adapter: Chicony / ADLX65YCC3A)

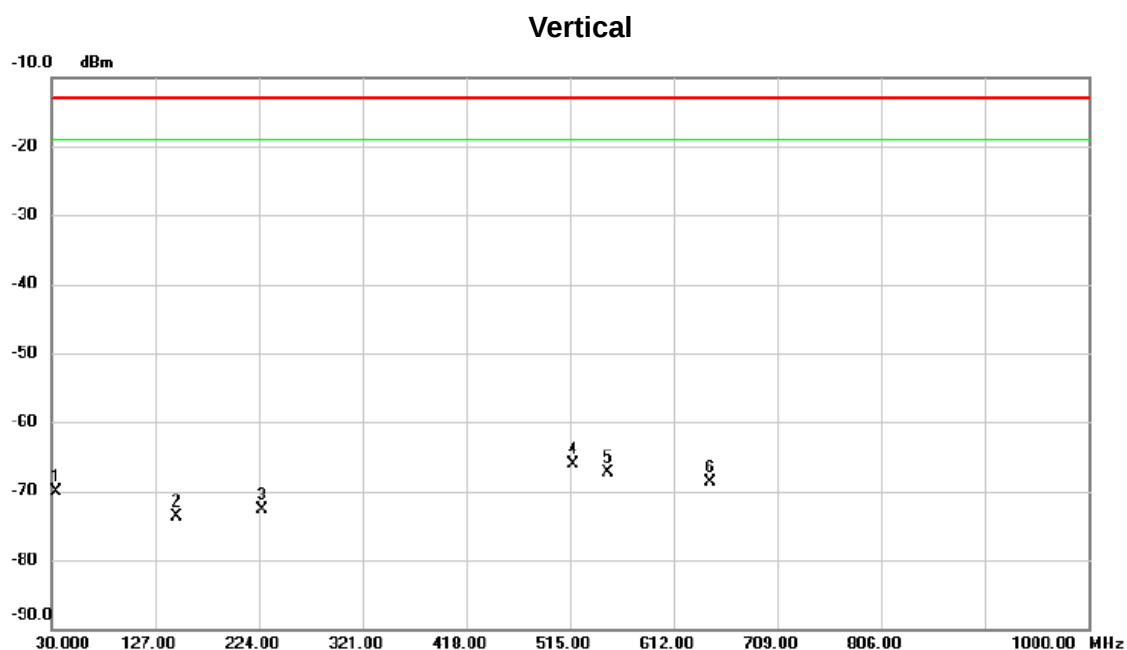
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.196	25.73	16.81	42.54	101.78	-59.24	AVG	
2	*	1.928	22.21	15.54	37.75	69.54	-31.79	QP	
3		4.269	19.33	14.80	34.13	69.54	-35.41	QP	

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

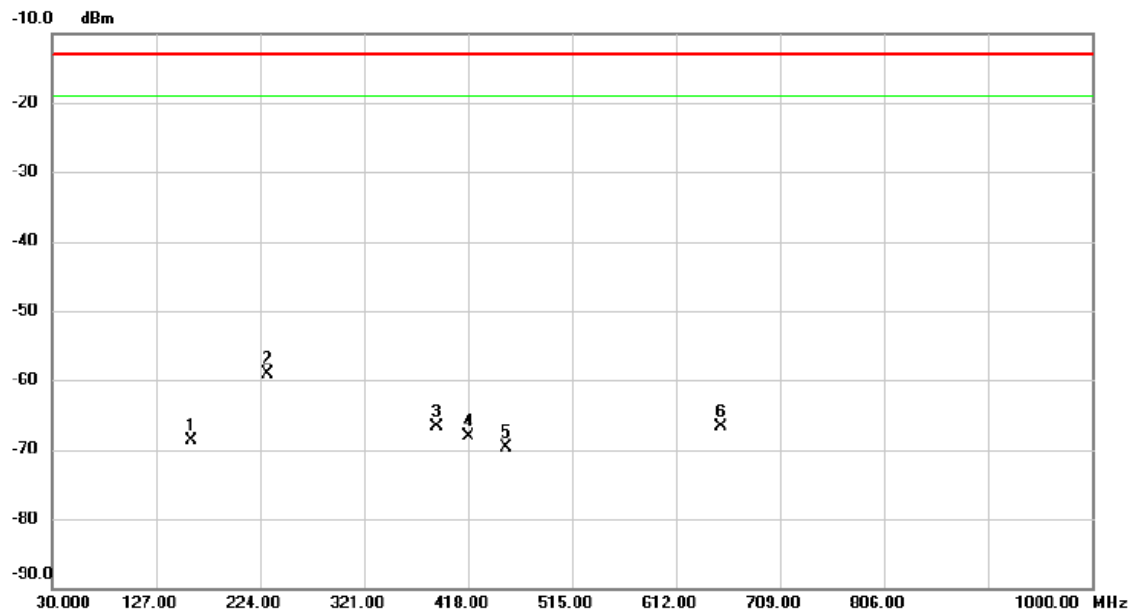
Test Mode:	WCDMA Band 2 (Adapter: Liteon / ADLX45YLC2A)
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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		33.880	-68.81	-1.20	-70.01	-13.00	-57.01	peak	
2		146.400	-79.68	5.98	-73.70	-13.00	-60.70	peak	
3		226.910	-68.71	-4.04	-72.75	-13.00	-59.75	peak	
4	*	517.910	-74.23	8.14	-66.09	-13.00	-53.09	peak	
5		550.890	-75.26	8.01	-67.25	-13.00	-54.25	peak	
6		646.920	-75.94	7.15	-68.79	-13.00	-55.79	peak	

Test Mode: WCDMA Band 2 (Adapter: Liteon / ADLX45YLC2A)

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		159.980	-71.96	3.23	-68.73	-13.00	-55.73	peak	
2	*	230.790	-66.60	7.46	-59.14	-13.00	-46.14	peak	
3		388.900	-71.91	5.29	-66.62	-13.00	-53.62	peak	
4		418.000	-74.38	6.36	-68.02	-13.00	-55.02	peak	
5		452.920	-73.39	3.65	-69.74	-13.00	-56.74	peak	
6		653.710	-79.87	13.23	-66.64	-13.00	-53.64	peak	

Test Mode: WCDMA Band 2 (Adapter: Chicony / ADLX45YCC2A)

Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		32.910	-70.40	-0.96	-71.36	-13.00	-58.36	peak	
2		137.670	-72.84	3.27	-69.57	-13.00	-56.57	peak	
3		284.140	-78.64	3.97	-74.67	-13.00	-61.67	peak	
4	*	517.910	-75.24	8.14	-67.10	-13.00	-54.10	peak	
5		550.890	-76.07	8.01	-68.06	-13.00	-55.06	peak	
6		647.890	-75.71	7.36	-68.35	-13.00	-55.35	peak	