

# FCC Test Report

## (Part 27)

Product Name : Notebook PC  
Model No : C300MA  
FCC ID : MSQC300MA

Applicant : ASUSTeK COMPUTER INC.

Address : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Date of Receipt : 2014/09/12  
Issued Date : 2014/10/03  
Report No. : 1490338R-HPUSP44V00  
Report Version : V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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# Test Report

Issued Date : 2014/10/03

Report No.: 1490338R-HPUSP44V00



Accredited by NIST (NVLAP)  
NVLAP Lab Code: 200533-0

Product Name : Notebook PC

Applicant : ASUSTeK COMPUTER INC.

Address : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Manufacturer : Tech-Front (Chongqing) Computer Co., Ltd

Trade Name : ASUS

Model No. : C300MA

EUT Rated Voltage : AC 120V~240V

EUT Test Voltage : AC 120V

Measurement Standard : FCC CFR Title 47 Part 27(L)

Measurement : TIA/EIA 603-C

Reference

Test Result : Complied

Documented By : Anny Chou  
(Adm. Specialist / Anny Chou)

Tested By : Vorana Chen  
(Senior Engineer / Vorana Chen)

Approved By : Vincent Lin  
(Director / Vincent Lin)

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## 1. GENERAL INFORMATION

### 1.1. EUT Description

Product Name	Notebook PC
Model No.	C300MA
Trade Name	ASUS
FCC ID	MSQC300MA
Modulation	LTE Band IV : QPSK/16-QAM
	LTE Band XIII : QPSK/16-QAM
Frequency Range	LTE Band IV : 1710MHz ~1755MHz (5M,10M,15M,20M)
	LTE Band XIII : 777MHz ~ 787MHz (5M,10M)
Software	CHROMEOS: R37-5978.59.0
Hardware	MB_R2.1
Antenna Type	PIFA
Antenna Kit	Refer Antenna list

### 1.2. Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	INPAQ	WA-P-LTE8LTE8-04-001(Main)	-4.49 for Band XIII 1.70 for Band IV

### 1.3. Operational Description

The information contained within this report is intended to show verification of compliance of the 700/1700MHz Notebook to the requirements of FCC 47 CFR Part 2, 27.

The EUT provide all functions described as above. The EUT is tested with maximum rated TX power via the Base Station simulator.

Quietek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

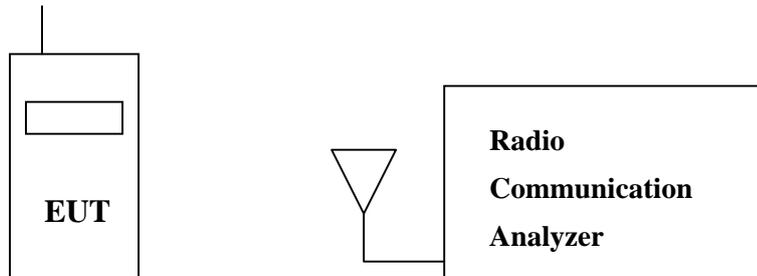
Test Mode:	LTE Band IV (5M)-QPSK/16QAM
	LTE Band IV (10M)-QPSK/16QAM
	LTE Band IV (15M)-QPSK/16QAM
	LTE Band IV (20M)-QPSK/16QAM
	LTE Band XIII (5M)-QPSK/16QAM
	LTE Band XIII (10M)-QPSK/16QAM

Note :

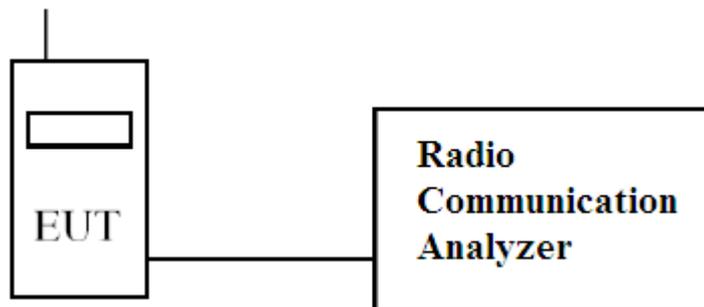
The maximum power levels are chosen in the LTE Band IV/XIII, only these modes were used for all tests.

## 1.4. Configuration of tested System

### (a) Configuration of Radiated measurement



### (b) Configuration of Conducted measurement



## 1.5. EUT Setup Procedures

- (1) Setup the EUT and simulators as shown on 1.3
- (2) Turn on the power of all equipments.
- (3) The EUT was set to communicate with MT8820C.
- (4) Repeat the above procedure (3).

## 1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	53
Barometric pressure (mbar)	860-1060	982

Site Description: File on  
Federal Communications Commission  
FCC Engineering Laboratory  
7435 Oakland Mills Road  
Columbia, MD 21046  
FCC Registration Number :92195

Site Name: Quietek Corporation

Linkou Testing Laboratory:  
No.5-22, Ruishukeng, Linkou Dist.,  
New Taipei City 24451,  
Taiwan, R.O.C.  
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789  
E-Mail : [service@quietek.com](mailto:service@quietek.com)

FCC Accreditation Number: TW1014

### 1.7. Type of Emission

Band	Bandwidth(MHz)	Modulation	Emission Designator
IV	5	QPSK	4M49G7D
IV	10	QPSK	8M93G7D
IV	15	QPSK	13M4G7D
IV	20	QPSK	17M9G7D
IV	5	16-QAM	4M49W7D
IV	10	16-QAM	8M93W7D
IV	15	16-QAM	13M4W7D
IV	20	16-QAM	17M9W7D
XIII	5	QPSK	4M50G7D
XIII	10	QPSK	8M94G7D
XIII	5	16-QAM	4M50W7D
XIII	10	16-QAM	8M94W7D

### 1.8. Voltages and DC currents

LTE Band IV/XIII	
EUT Transmitting (in maximum power):	AC voltage: 120V/60Hz, DC current: 0.17A
EUT Standby	: AC voltage:120V/60Hz, DC current: 0.12A

## 2. Peak Power Output

### 2.1. Test Equipment

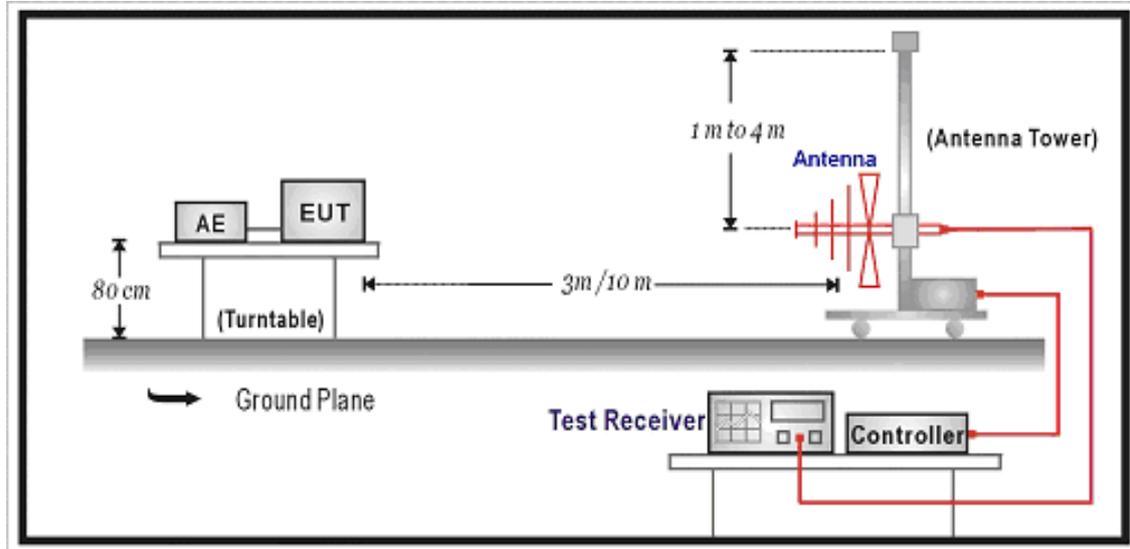
The following test equipments are used during the radiated emission test:

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
<input checked="" type="checkbox"/> CTR	Spectrum Analyzer	Agilent	N9020A / MY48010570	2014/06/24
	Dual Directional couple	Agilent	778D / 50550	2013/10/07
	Directional coupler	Agilent	87300C / MY44300352	2014/01/06
	Radio Communication Analyzer	Anritsu	MT8820C / 6201091166	2014/01/17
<input checked="" type="checkbox"/> Site#3	Test Receiver	R & S	ESCS 30/ 100367	2013/12/04
	Radio Communication Analyzer	Anritsu	MT8820C / 6201091166	2014/01/17
	Spectrum Analyzer	Agilent	N9010A/ MY48030495	2014/07/08
	Bilog Antenna	Schaffner Chase	CBL6112B/ 2707	2014/06/13
	Horn Antenna	Schwarzbeck	9120D / 556	2013/12/20
	Pre-Amplifier	QTK	QTK-LK-E-I-AMP4/ CHM-0201003	2014/06/18

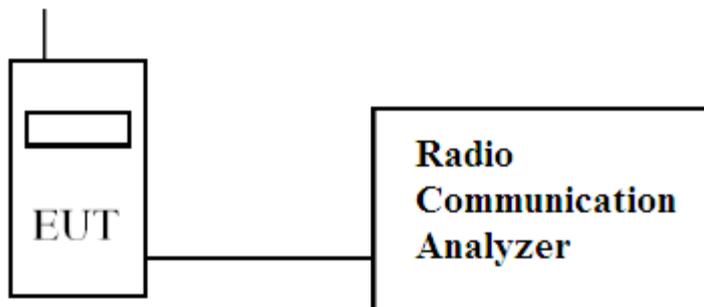
Note: All equipments that need to be calibrated are with calibration period of 1 year.

## 2.2. Test Setup

### Radiated Power Measurement



### Conducted Power Measurement



## 2.3. Limits

LTE Band IV	<1W (EIRP)
LTE Band XIII	<3W (ERP)

## 2.4. Test Procedure

### ➤RF Out Power (Radiated)

The Spectrum Analyzer was tuned to the test frequency. The EUT was tested in three The device was put into Transmit mode then rotated through 360 degrees until the highest power level was observed in both horizontal and vertical polarization. The device was then replaced with a substitution antenna, which input signal was adjusted until the received level matched that of the previously detected emission.

- (1) The EUT is tested with maximum rated TX power via the Base Station simulator.
- (2) The EUT is tested in three orthogonal planes , The worst case test configuration was found in the horizontal position.

### ➤RF Out Power (Conducted)

The EUT is tested with maximum rated TX power via the Base Station simulator, and the output power was measured at the antenna terminals of the EUT.

## 2.5. Test Specification

According to Part 2.1046, 27.50(d)(4).

## 2.6. Test Result of Peak Power Output

Product	Notebook PC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2014/09/26	Test Site	Site3
Test Condition	LTE Band IV (5M)		

### Maximum Power- LTE Band IV (5M)-QPSK

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result ERP (W)
1712.5	-20.02	16.33	9	0.8	24.53	0.28
1732.5	-20.15	16.21	9	0.8	24.41	0.28
1752.5	-18.84	17.44	9	0.8	25.64	0.37

### Maximum Power- LTE Band IV 5M-16QAM

Frequency (MHz)	Raw Result (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dB)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1712.5	-20.95	15.45	9	0.8	23.65	0.23
1732.5	-21.23	15.19	9	0.8	23.39	0.22
1752.5	-19.76	16.58	9	0.8	24.78	0.30

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	Notebook PC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2014/09/26	Test Site	Site3
Test Condition	LTE Band IV (10M)		

**Maximum Power- LTE Band IV (10M) -QPSK**

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1715	-19.60	16.73	9	0.8	24.93	0.31
1732.5	-20.03	16.32	9	0.8	24.52	0.28
1750	-19.77	16.57	9	0.8	24.77	0.30

**Maximum Power- LTE Band IV 10M-16QAM**

Frequency (MHz)	Raw Result (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dB)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1715	-20.76	15.63	9	0.8	23.83	0.24
1732.5	-21.28	15.14	9	0.8	23.34	0.22
1750	-20.81	15.58	9	0.8	23.78	0.24

## Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	Notebook PC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2014/09/26	Test Site	Site3
Test Condition	LTE Band IV (15M)		

**Maximum Power- LTE Band IV (15M) -QPSK**

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1717.5	-18.05	18.19	9	0.8	26.39	0.44
1732.5	-19.10	17.20	9	0.8	25.40	0.35
1747.5	-17.83	18.40	9	0.8	26.60	0.46

**Maximum Power- LTE Band IV 15M-16QAM**

Frequency (MHz)	Raw Result (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dB)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1717.5	-19.16	17.14	9	0.8	25.34	0.34
1732.5	-20.03	16.32	9	0.8	24.52	0.28
1747.5	-19.02	17.27	9	0.8	25.47	0.35

## Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	Notebook PC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2014/09/26	Test Site	Site3
Test Condition	LTE Band IV (20M)		

**Maximum Power- LTE Band IV (20M) -QPSK**

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1720	-17.95	18.28	9	0.8	26.48	0.44
1732.5	-17.44	18.76	9	0.8	26.96	0.50
1745	-17.51	18.70	9	0.8	26.90	0.49

**Maximum Power- LTE Band IV 20M-16QAM**

Frequency (MHz)	Raw Result (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dB)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1720	-19.24	17.07	9	0.8	25.27	0.34
1732.5	-18.35	17.91	9	0.8	26.11	0.41
1745	-18.72	17.56	9	0.8	25.76	0.38

## Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	Notebook PC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2014/09/26	Test Site	Site3
Test Condition	LTE Band XIII (5M)		

**Maximum Power- LTE Band XIII (5M) -QPSK**

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result ERP (dBm)	Result ERP (W)
779.5	-13.96	21.48	-0.05	0.6	20.83	0.12
782	-14.05	21.40	-0.05	0.6	20.75	0.12
784.5	-13.45	21.98	-0.05	0.6	21.33	0.14

**Maximum Power- LTE Band XIII 5M-16QAM**

Frequency (MHz)	Raw Result (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
779.5	-15.01	20.46	-0.05	0.6	19.81	0.10
782	-15.20	20.27	-0.05	0.6	19.62	0.09
784.5	-14.57	20.89	-0.05	0.6	20.24	0.11

**Note:**

1. The EUT meets the requirements of FCC CFR 47: Part 2.1046, 27.50(d)(4).for Effective Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result ERP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	Notebook PC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2014/09/26	Test Site	Site3
Test Condition	LTE Band XIII (10M)		

**Maximum Power- LTE Band XIII (10M) -QPSK**

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result ERP (dBm)	Result ERP (W)
--	--	--	--	--	--	--
782	-13.80	21.64	-0.05	0.6	20.99	0.13
--	--	--	--	--	--	--

**Maximum Power- LTE Band XIII 10M-16QAM**

Frequency (MHz)	Raw Result (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
--	--	--	--	--	--	--
782	-14.92	20.55	-0.05	0.6	19.90	0.10
--	--	--	--	--	--	--

**Note:**

1. The EUT meets the requirements of FCC CFR 47: Part 2.1046, 27.50(d)(4).for Effective Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result ERP = Substitution Level + Substitution Antenna Gain - Cable Loss

Band	Channel	Modulation	RB No.	RB Offset	MPR	Max Power (Conducted)	Limit (dBm)
Band IV (1700MHz)/5MHz	19975	QPSK	1	#0	0	21.99	23.5
			1	#Mid	0	22.49	23.5
			1	#Max	0	22.55	23.5
			50%	#0	1	22.5	23.5
			50%	#Mid	1	22.49	23.5
			50%	#Max	1	<b>22.64</b>	23.5
			100%	--	1	22.5	23.5
		16QAM	1	#0	1	21.63	23.5
			1	#Mid	1	22.27	23.5
			1	#Max	1	22.63	23.5
			50%	#0	2	22.5	23.5
			50%	#Mid	2	22.65	23.5
			50%	#Max	2	<b>22.91</b>	23.5
			100%	--	2	22.76	23.5
	20175	QPSK	1	#0	0	23.15	23.5
			1	#Mid	0	22.92	23.5
			1	#Max	0	22.76	23.5
			50%	#0	1	23.37	23.5
			50%	#Mid	1	<b>23.38</b>	23.5
			50%	#Max	1	23.14	23.5
			100%	--	1	23.16	23.5
		16QAM	1	#0	1	23.4	23.5
			1	#Mid	1	23.02	23.5
			1	#Max	1	23.04	23.5
			50%	#0	2	23.28	23.5
			50%	#Mid	2	23.35	23.5
			50%	#Max	2	23.35	23.5
			100%	--	2	<b>23.4</b>	23.5
	20375	QPSK	1	#0	0	22.43	23.5
			1	#Mid	0	22.79	23.5
			1	#Max	0	21.5	23.5
			50%	#0	1	22.76	23.5
			50%	#Mid	1	22.71	23.5
			50%	#Max	1	<b>23.01</b>	23.5
			100%	--	1	22.47	23.5
		16QAM	1	#0	1	23.06	23.5
			1	#Mid	1	22.92	23.5
			1	#Max	1	22.04	23.5
			50%	#0	2	22.78	23.5
			50%	#Mid	2	22.73	23.5
			50%	#Max	2	<b>23.28</b>	23.5
			100%	--	2	22.76	23.5

Band	Channel	Modulation	RB No.	RB Offset	MPR	Max Power (Conducted)	Limit (dBm)
Band IV (1700MHz)/10MHz	20000	QPSK	1	#0	0	21.75	23.5
			1	#Mid	0	22.36	23.5
			1	#Max	0	22.76	23.5
			50%	#0	1	22.34	23.5
			50%	#Mid	1	22.69	23.5
			50%	#Max	1	<b>22.89</b>	23.5
			100%	--	1	22.72	23.5
		16QAM	1	#0	1	22.39	23.5
			1	#Mid	1	23.11	23.5
			1	#Max	1	<b>23.50</b>	23.5
			50%	#0	2	22.69	23.5
			50%	#Mid	2	23.08	23.5
			50%	#Max	2	23.19	23.5
			100%	--	2	23.13	23.5
	20175	QPSK	1	#0	0	23.09	23.5
			1	#Mid	0	22.91	23.5
			1	#Max	0	22.78	23.5
			50%	#0	1	23.08	23.5
			50%	#Mid	1	23.36	23.5
			50%	#Max	1	23.06	23.5
			100%	--	1	<b>23.47</b>	23.5
		16QAM	1	#0	1	22.79	23.5
			1	#Mid	1	23.07	23.5
			1	#Max	1	22.79	23.5
			50%	#0	2	23.44	23.5
			50%	#Mid	2	23.36	23.5
			50%	#Max	2	23.08	23.5
			100%	--	2	<b>23.50</b>	23.5
	20350	QPSK	1	#0	0	22.36	23.5
			1	#Mid	0	21.82	23.5
			1	#Max	0	22.32	23.5
			50%	#0	1	22.21	23.5
			50%	#Mid	1	21.95	23.5
			50%	#Max	1	22.16	23.5
			100%	--	1	<b>22.8</b>	23.5
		16QAM	1	#0	1	22.46	23.5
			1	#Mid	1	22.08	23.5
			1	#Max	1	22.25	23.5
			50%	#0	2	22.54	23.5
			50%	#Mid	2	22.47	23.5
			50%	#Max	2	22.48	23.5
			100%	--	2	<b>22.99</b>	23.5

Band	Channel	Modulation	RB No.	RB Offset	MPR	Max Power (Conducted)	Limit (dBm)
Band IV (1700MHz)/15MHz	20025	QPSK	1	#0	0	21.99	23.5
			1	#Mid	0	22.66	23.5
			1	#Max	0	23.1	23.5
			50%	#0	1	22.62	23.5
			50%	#Mid	1	22.97	23.5
			50%	#Max	1	<b>23.35</b>	23.5
			100%	--	1	23.34	23.5
		16QAM	1	#0	1	22.56	23.5
			1	#Mid	1	22.74	23.5
			1	#Max	1	23.45	23.5
			50%	#0	2	23.03	23.5
			50%	#Mid	2	23.34	23.5
			50%	#Max	2	<b>23.50</b>	23.5
			100%	--	2	22.97	23.5
	20175	QPSK	1	#0	0	23.17	23.5
			1	#Mid	0	22.82	23.5
			1	#Max	0	22.22	23.5
			50%	#0	1	<b>23.4</b>	23.5
			50%	#Mid	1	23.12	23.5
			50%	#Max	1	22.93	23.5
			100%	--	1	23.36	23.5
		16QAM	1	#0	1	23.59	23.5
			1	#Mid	1	23.07	23.5
			1	#Max	1	22.24	23.5
			50%	#0	2	23.66	23.5
			50%	#Mid	2	23.39	23.5
			50%	#Max	2	23.27	23.5
			100%	--	2	<b>23.50</b>	23.5
	20325	QPSK	1	#0	0	22.16	23.5
			1	#Mid	0	21.96	23.5
			1	#Max	0	<b>22.94</b>	23.5
			50%	#0	1	22.26	23.5
			50%	#Mid	1	22.31	23.5
			50%	#Max	1	22.77	23.5
			100%	--	1	22.72	23.5
		16QAM	1	#0	1	22.21	23.5
			1	#Mid	1	22.1	23.5
			1	#Max	1	22.76	23.5
			50%	#0	2	22.51	23.5
			50%	#Mid	2	22.64	23.5
			50%	#Max	2	<b>22.96</b>	23.5
			100%	--	2	22.59	23.5

Band	Channel	Modulation	RB No.	RB Offset	MPR	Max Power (Conducted)	Limit (dBm)
Band IV (1700MHz)/20MHz	20050	QPSK	1	#0	0	22.06	23.5
			1	#Mid	0	23.29	23.5
			1	#Max	0	23.37	23.5
			50%	#0	1	22.9	23.5
			50%	#Mid	1	23.18	23.5
			50%	#Max	1	<b>23.44</b>	23.5
			100%	--	1	23.13	23.5
		16QAM	1	#0	1	22.3	23.5
			1	#Mid	1	<b>23.50</b>	23.5
			1	#Max	1	23.49	23.5
			50%	#0	2	23.23	23.5
			50%	#Mid	2	23.43	23.5
			50%	#Max	2	23.48	23.5
			100%	--	2	23.48	23.5
	20175	QPSK	1	#0	0	23.6	23.5
			1	#Mid	0	23.35	23.5
			1	#Max	0	22.35	23.5
			50%	#0	1	<b>23.50</b>	23.5
			50%	#Mid	1	23.47	23.5
			50%	#Max	1	23.25	23.5
			100%	--	1	23.44	23.5
		16QAM	1	#0	1	23.41	23.5
			1	#Mid	1	22.93	23.5
			1	#Max	1	22.32	23.5
			50%	#0	2	<b>23.50</b>	23.5
			50%	#Mid	2	23.47	23.5
			50%	#Max	2	23.42	23.5
			100%	--	2	23.44	23.5
	20300	QPSK	1	#0	0	23.03	23.5
			1	#Mid	0	22.15	23.5
			1	#Max	0	<b>23.19</b>	23.5
			50%	#0	1	22.86	23.5
			50%	#Mid	1	22.78	23.5
			50%	#Max	1	22.83	23.5
			100%	--	1	22.84	23.5
		16QAM	1	#0	1	22.46	23.5
1			#Mid	1	21.58	23.5	
1			#Max	1	22.7	23.5	
50%			#0	2	23.29	23.5	
50%			#Mid	2	<b>23.36</b>	23.5	
50%			#Max	2	23.31	23.5	
100%			--	2	23.17	23.5	

Band	Channel	Modulation	RB No.	RB Offset	MPR	Max Power (Conducted)	Limit (dBm)
Band XIII (700MHz)/5MHz	23205	QPSK	1	#0	0	22.59	23.5
			1	#Mid	0	23.33	23.5
			1	#Max	0	<b>23.48</b>	23.5
			50%	#0	1	23.06	23.5
			50%	#Mid	1	23.22	23.5
			50%	#Max	1	23.46	23.5
			100%	--	1	23.25	23.5
		16QAM	1	#0	1	22.62	23.5
			1	#Mid	1	22.72	23.5
			1	#Max	1	23	23.5
			50%	#0	2	23.22	23.5
			50%	#Mid	2	23.4	23.5
			50%	#Max	2	<b>23.50</b>	23.5
			100%	--	2	23.28	23.5
	23230	QPSK	1	#0	0	23.36	23.5
			1	#Mid	0	23.45	23.5
			1	#Max	0	23.27	23.5
			50%	#0	1	23.48	23.5
			50%	#Mid	1	<b>23.50</b>	23.5
			50%	#Max	1	23.46	23.5
			100%	--	1	23.48	23.5
		16QAM	1	#0	1	23.19	23.5
			1	#Mid	1	23.2	23.5
			1	#Max	1	23.06	23.5
			50%	#0	2	<b>23.50</b>	23.5
			50%	#Mid	2	23.46	23.5
			50%	#Max	2	23.39	23.5
			100%	--	2	23.42	23.5
	23255	QPSK	1	#0	0	23.47	23.5
			1	#Mid	0	23.02	23.5
			1	#Max	0	23.03	23.5
			50%	#0	1	23.4	23.5
			50%	#Mid	1	<b>23.50</b>	23.5
			50%	#Max	1	23.16	23.5
			100%	--	1	23.11	23.5
		16QAM	1	#0	1	23.08	23.5
			1	#Mid	1	22.47	23.5
			1	#Max	1	22.66	23.5
			50%	#0	2	23.47	23.5
			50%	#Mid	2	<b>23.50</b>	23.5
			50%	#Max	2	23.24	23.5
			100%	--	2	23.38	23.5

Band	Channel	Modulation	RB No.	RB Offset	MPR	Max Power (Conducted)	Limit (dBm)
Band XIII (700MHz)/10MHz	23230	QPSK	1	#0			
			1	#Mid			
			1	#Max			
			50%	#0			
			50%	#Mid			
			50%	#Max			
			100%	--			
		16QAM	1	#0			
			1	#Mid			
			1	#Max			
			50%	#0			
			50%	#Mid			
			50%	#Max			
			100%	--			
	23230	QPSK	1	#0	0	22.7	23.5
			1	#Mid	0	23.38	23.5
			1	#Max	0	22.85	23.5
			50%	#0	1	<b>23.50</b>	23.5
			50%	#Mid	1	23.5	23.5
			50%	#Max	1	23.26	23.5
			100%	--	1	23.64	23.5
		16QAM	1	#0	1	22.79	23.5
			1	#Mid	1	22.85	23.5
			1	#Max	1	23.01	23.5
			50%	#0	2	23.44	23.5
			50%	#Mid	2	23.42	23.5
			50%	#Max	2	23.48	23.5
			100%	--	2	<b>23.50</b>	23.5
	23230	QPSK	1	#0			
			1	#Mid			
1			#Max				
50%			#0				
50%			#Mid				
50%			#Max				
100%			--				
16QAM		1	#0				
		1	#Mid				
		1	#Max				
		50%	#0				
		50%	#Mid				
		50%	#Max				
		100%	--				

### 3. Occupied Bandwidth

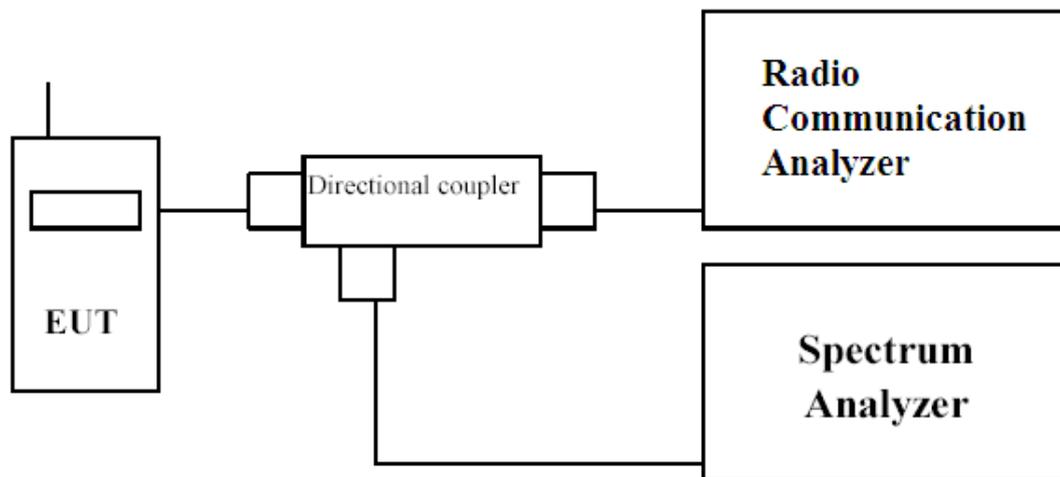
#### 3.1. Test Equipment

The following test equipments are used during the occupied bandwidth tests:

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Spectrum Analyzer	Agilent	N9010A/ MY48030495	2014/07/08
Radio Communication Analyzer	Anritsu	MT8820C / 6201091166	2014/01/17
Directional coupler	Agilent	87300C / MY44300352	2014/01/06
Dual Directional couple	Agilent	778D / 50550	2013/10/07

Note: All equipments upon which need to be calibrated are with calibration period of 1 year.

#### 3.2. Test Setup



#### 3.3. Test Procedure

The EUT is tested with maximum rated TX power via the Base Station simulator, and the occupied bandwidth was measured at the antenna terminals of the EUT.

The Resolution BW of the analyzer is set to 1 %~5% of the emission bandwidth. The EUT's occupied bandwidth is measured as the width of the signal between two points, one below the carrier center frequency and one above the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

The plots below show the resultant display from the Spectrum Analyser.

#### 3.4. Test Specification

According to Part 2.1049, 27.53(h).

### 3.5. Test Result of Occupied Bandwidth

Product	Notebook PC
Test Mode	Occupied Bandwidth
Test Site	CTR

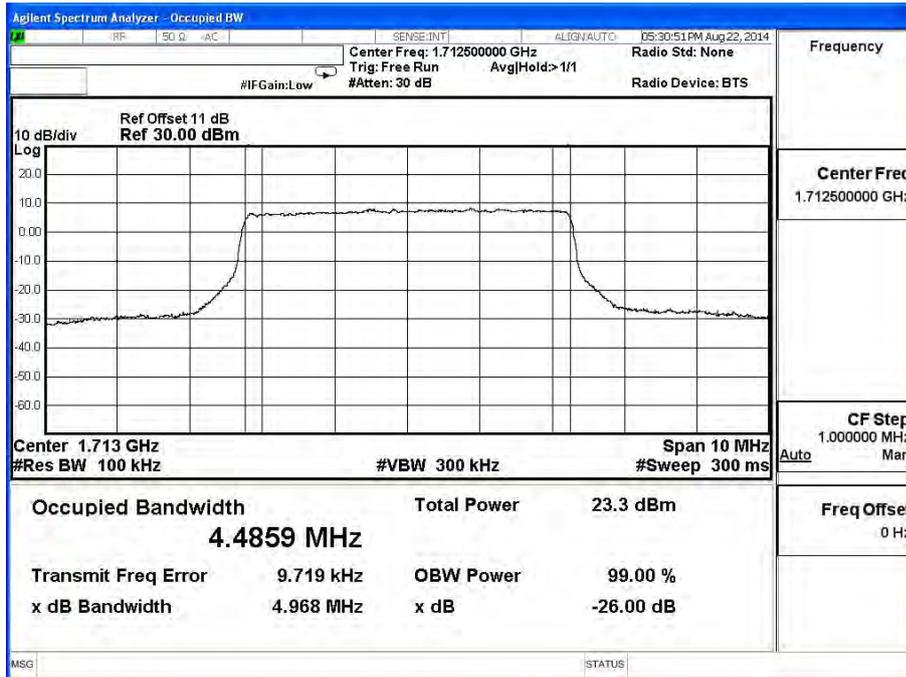
Test Mode	Channel	TX Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB bandwidth (MHz)	Result
Band IV (5M) QPSK	19975	1712.5	4.4859	4.968	Pass
	20175	1732.5	4.4818	4.927	Pass
	20375	1752.5	4.4844	4.978	Pass
Band IV (5M) 16QAM	19975	1712.5	4.4875	5.058	Pass
	20175	1732.5	4.4840	5.050	Pass
	20375	1752.5	4.4895	5.163	Pass
Band IV (10M) QPSK	20000	1715	8.9119	9.572	Pass
	20175	1732.5	8.9047	9.560	Pass
	20350	1750	8.9251	9.742	Pass
Band IV (10M) 16QAM	20000	1715	8.9096	9.665	Pass
	20175	1732.5	8.9151	9.641	Pass
	20350	1750	8.9316	9.848	Pass
Band IV (15M) QPSK	20025	1717.5	13.331	14.16	Pass
	20175	1732.5	13.349	14.14	Pass
	20325	1747.5	13.395	14.38	Pass
Band IV (15M) 16QAM	20025	1717.5	13.332	14.18	Pass
	20175	1732.5	13.365	14.47	Pass
	20325	1747.5	13.393	14.27	Pass
Band IV (20M) QPSK	20050	1720	17.750	18.65	Pass
	20175	1732.5	17.783	18.63	Pass
	20300	1745	17.889	19.02	Pass
Band IV (20M) 16QAM	20050	1720	17.756	18.89	Pass
	20175	1732.5	17.788	18.64	Pass
	20300	1745	17.872	18.88	Pass

Product	Notebook PC
Test Mode	Occupied Bandwidth
Test Site	CTR

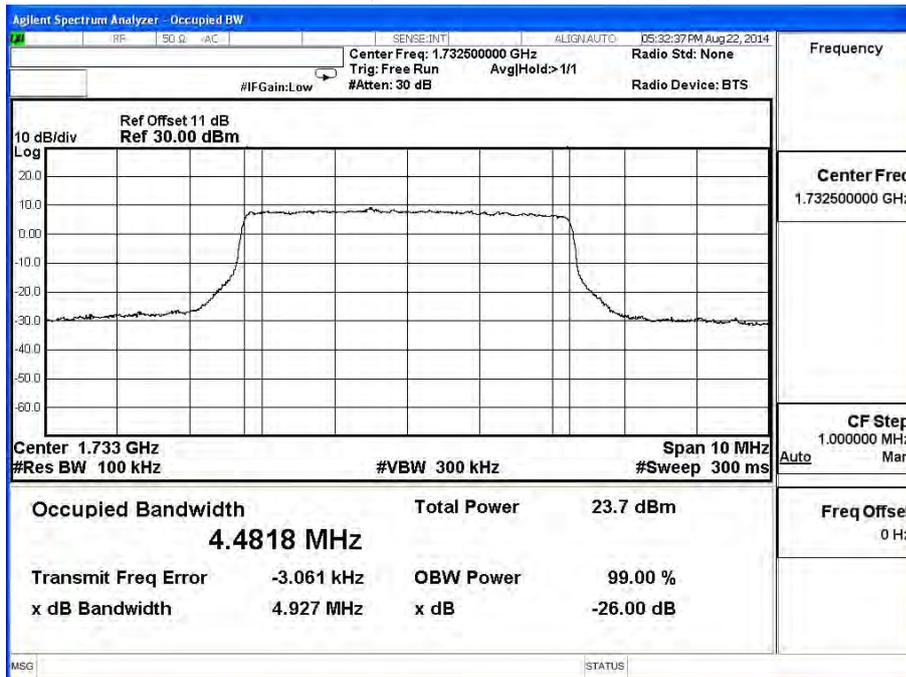
Test Mode	Channel	TX Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB bandwidth (MHz)	Result
Band XIII (5M) QPSK	23205	779.5	4.4858	4.957	Pass
	23230	782	4.4954	5.085	Pass
	23255	784.5	4.4790	4.950	Pass
Band XIII (5M) 16QAM	23205	779.5	4.4915	5.246	Pass
	23230	782	4.5000	5.254	Pass
	23255	784.5	4.4813	4.994	Pass
Band XIII (10M) QPSK	--	--	--	--	Pass
	23230	782	8.9437	9.769	Pass
	--	--	--	--	Pass
Band XIII (10M) 16QAM	--	--	--	--	Pass
	23230	782	8.9458	9.882	Pass
	--	--	--	--	Pass

Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 5M		

Band IV 5M QPSK - LTE Mode CH 19975

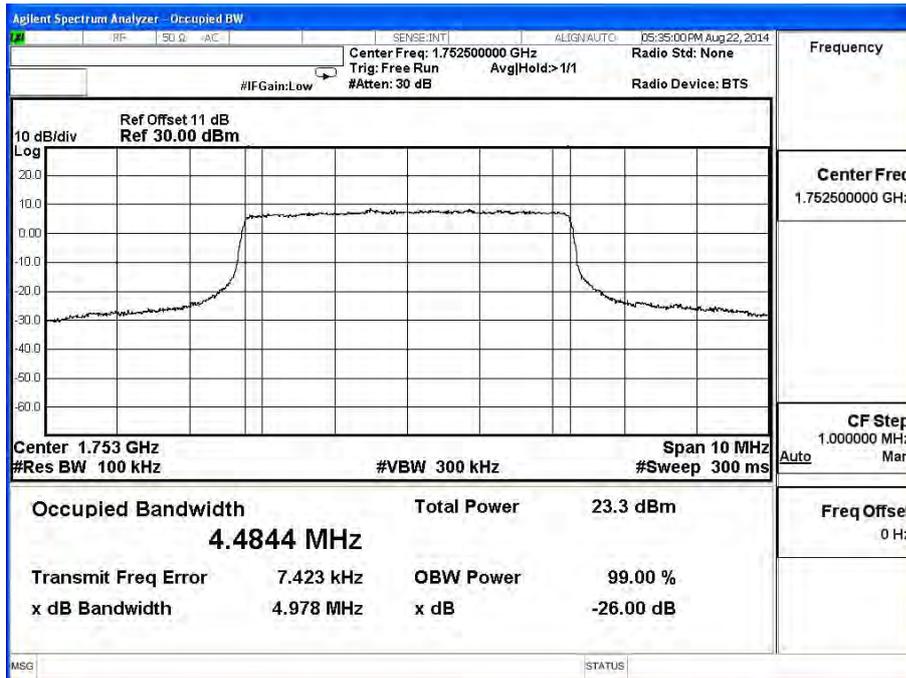


Band IV 5M QPSK - LTE Mode CH 20175

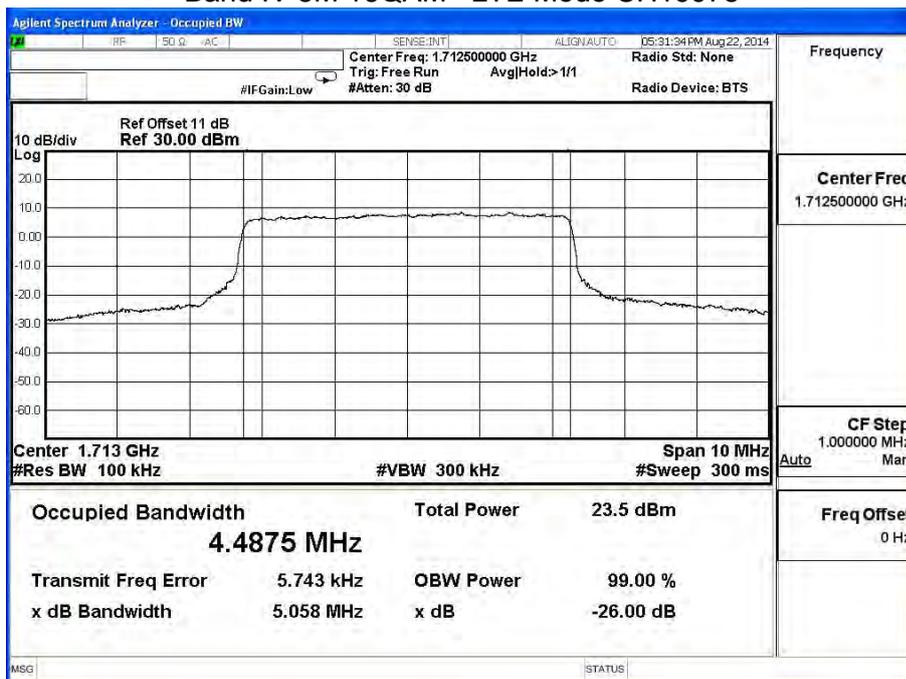


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 5M		

**Band IV 5M QPSK - LTE Mode CH 20375**

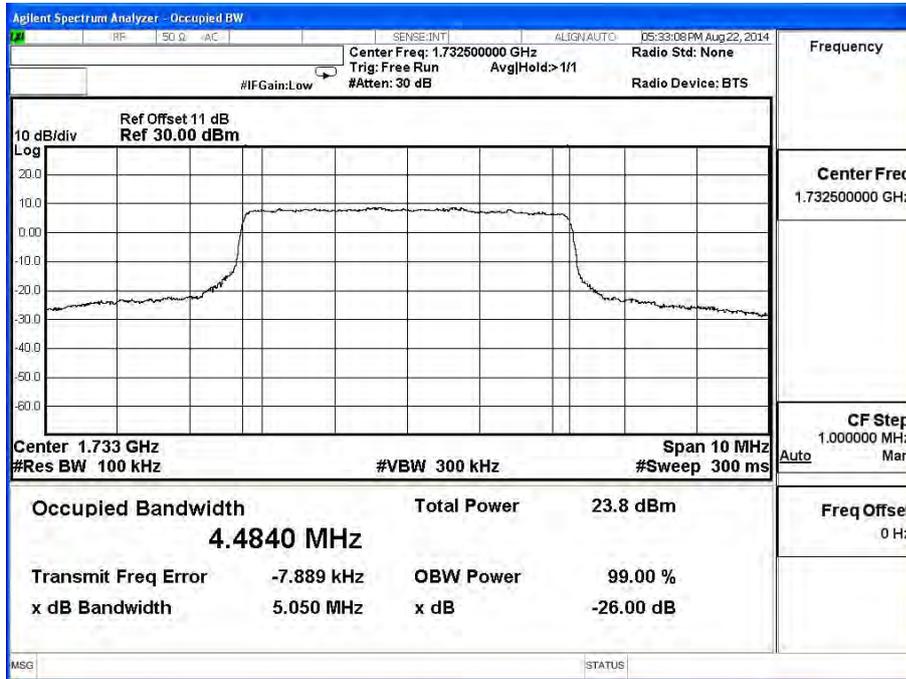


**Band IV 5M 16QAM - LTE Mode CH19975**

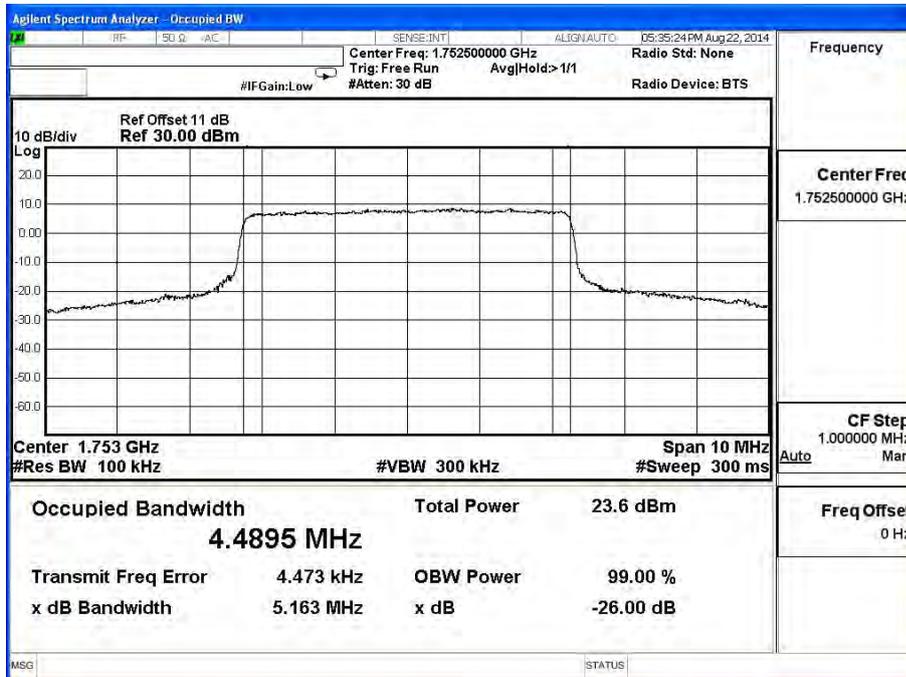


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 5M		

**Band IV 5M 16QAM - LTE Mode CH20175**

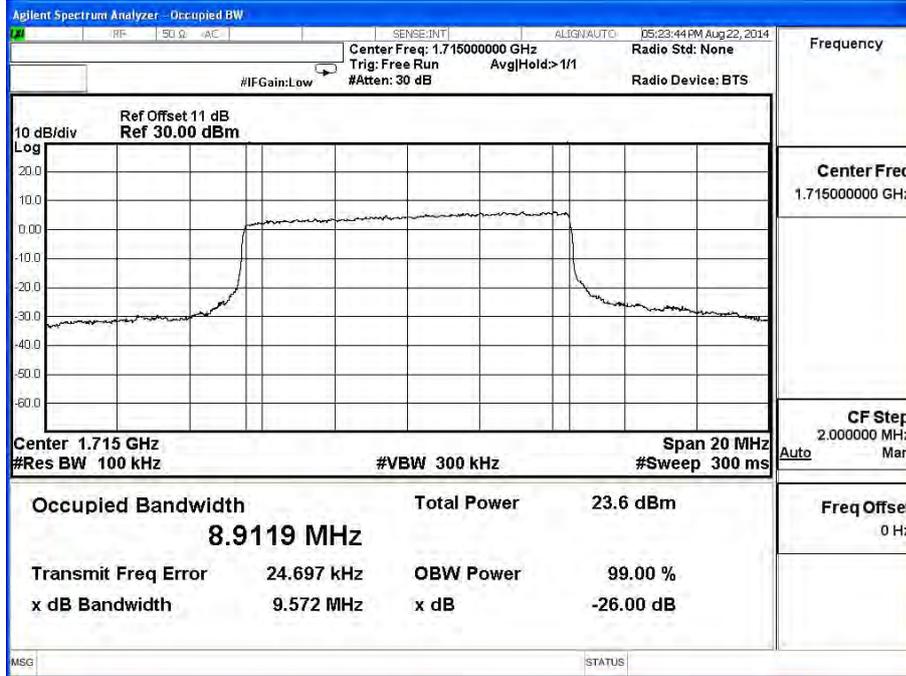


**Band IV 5M 16QAM - LTE Mode CH20375**

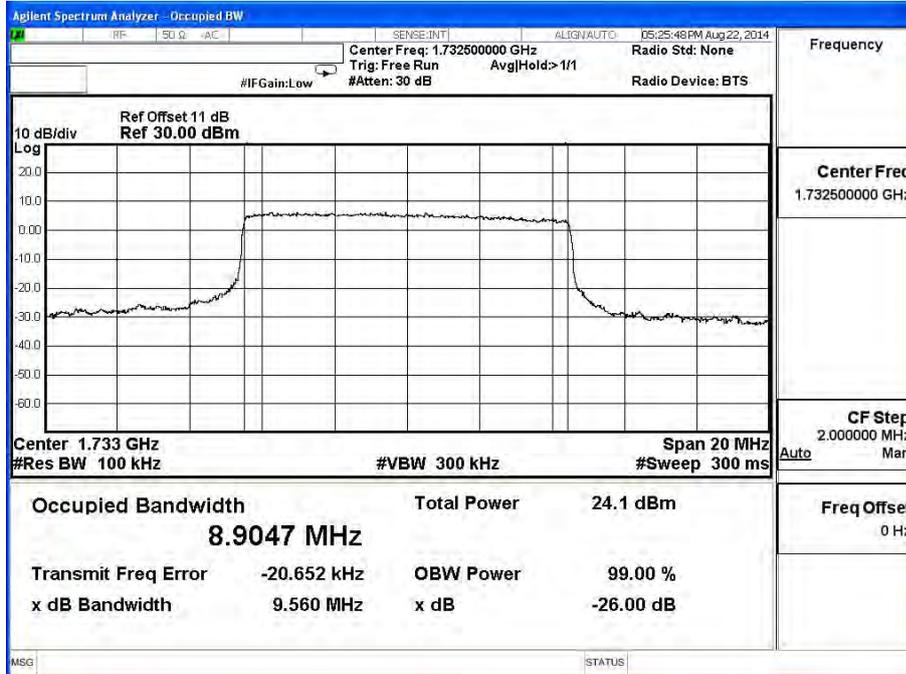


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 10M		

**Band IV 10M QPSK - LTE Mode CH 20000**

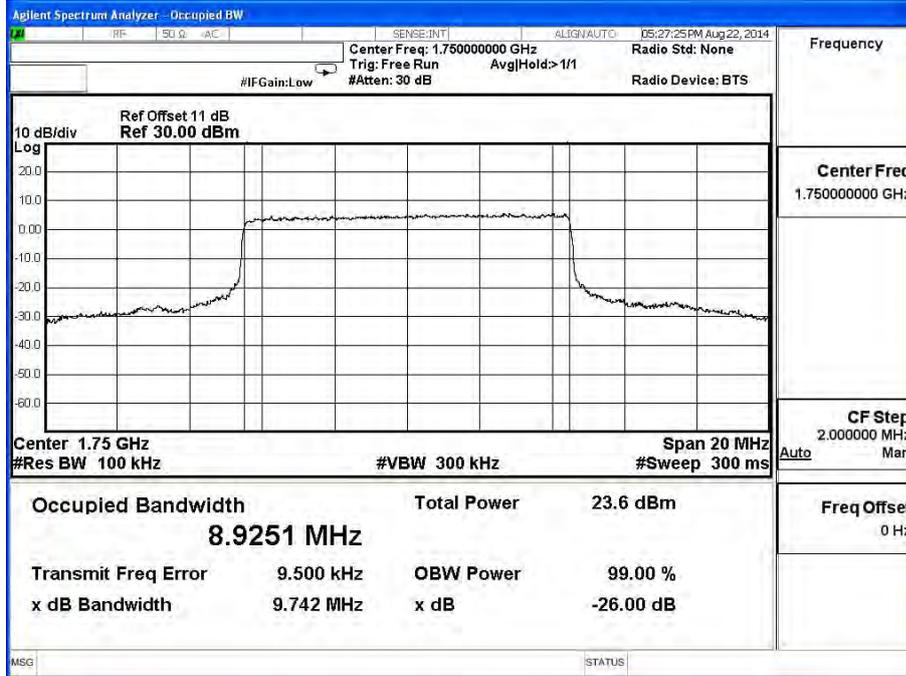


**Band IV 10M QPSK - LTE Mode CH 20175**

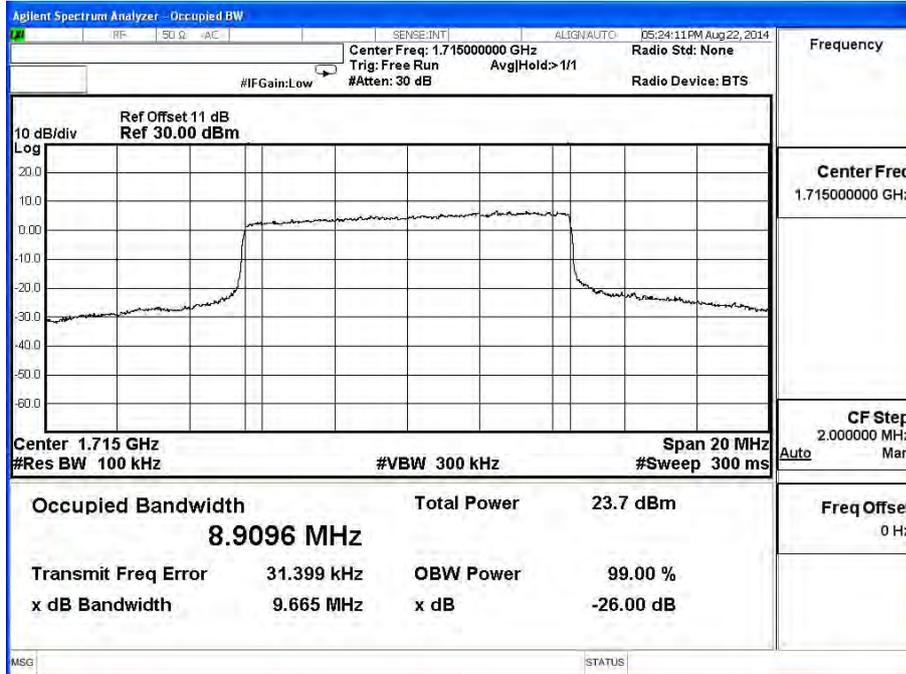


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 10M		

**Band IV 10M QPSK - LTE Mode CH 20350**

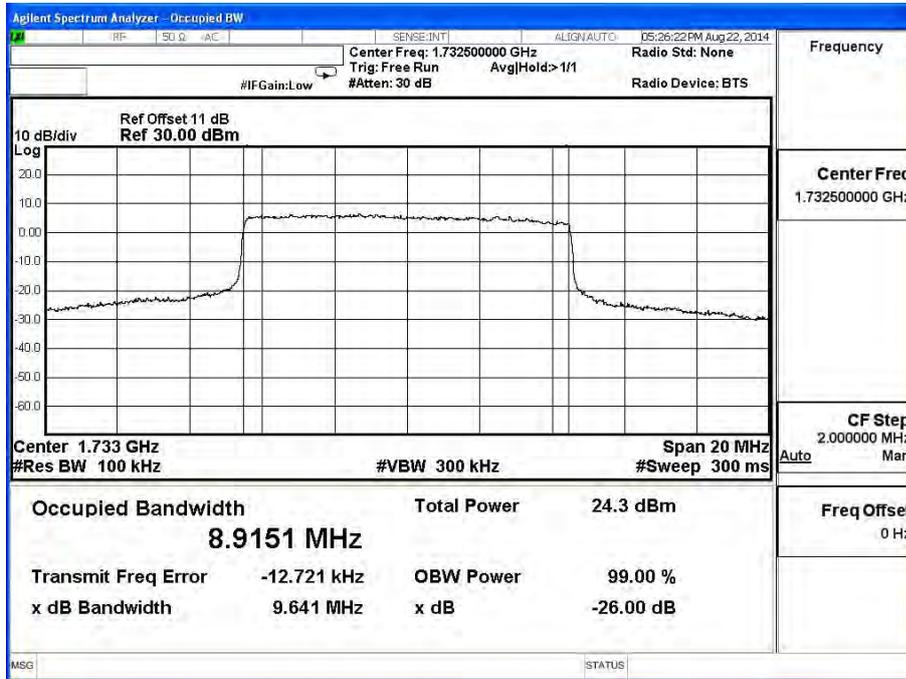


**Band IV 10M 16QAM - LTE Mode CH20000**

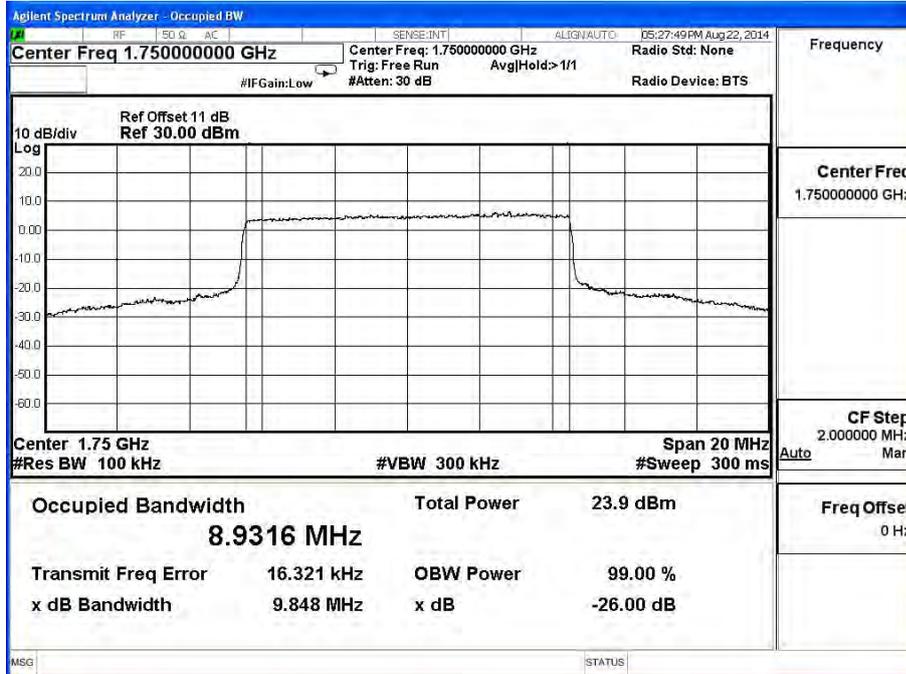


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 10M		

**Band IV 10M 16QAM - LTE Mode CH20175**

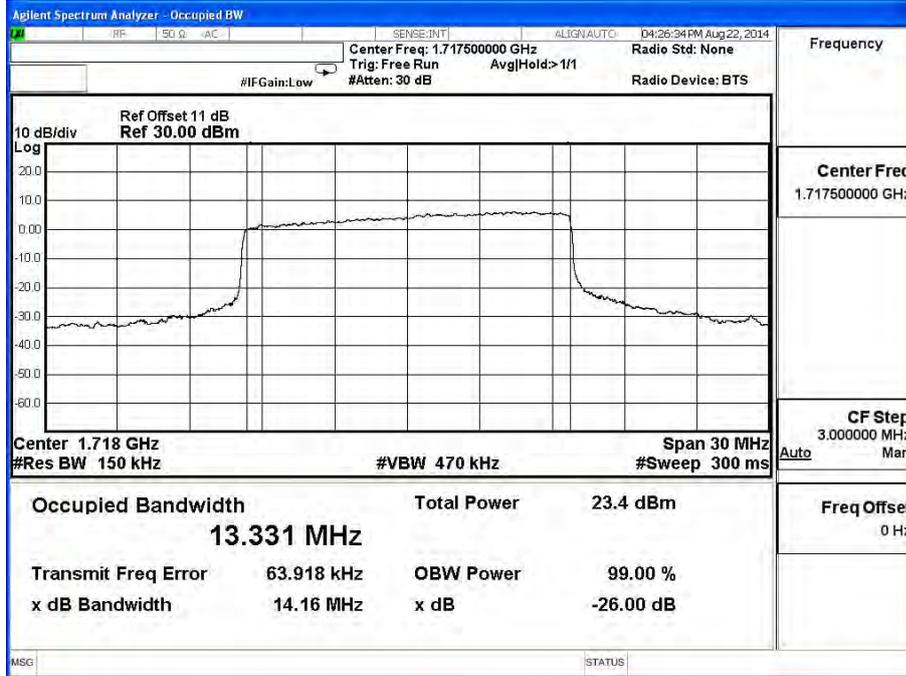


**Band IV 10M 16QAM - LTE Mode CH20350**

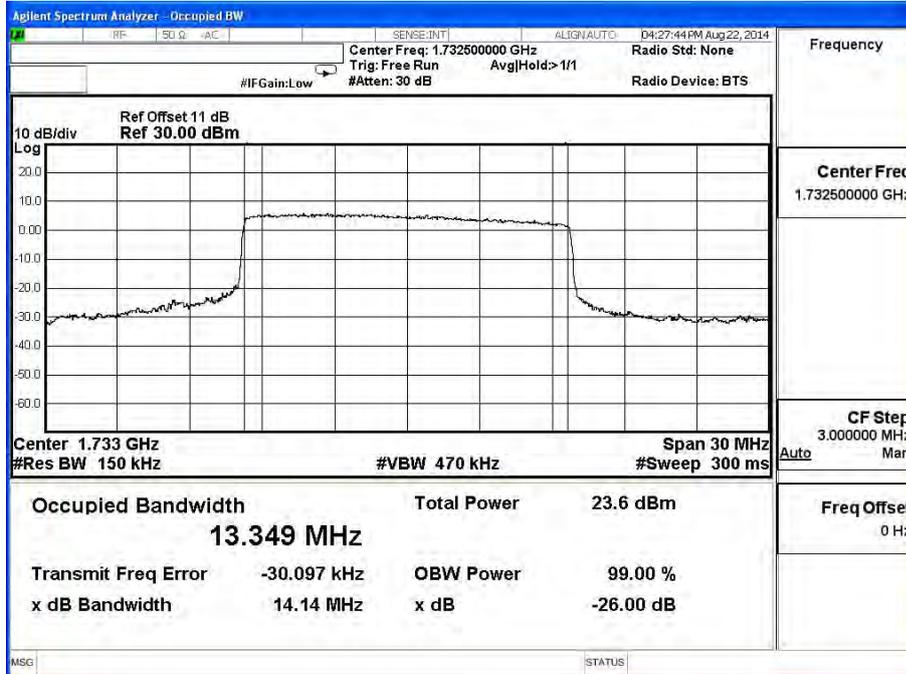


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 15M		

**Band IV 15M QPSK - LTE Mode CH 20025**

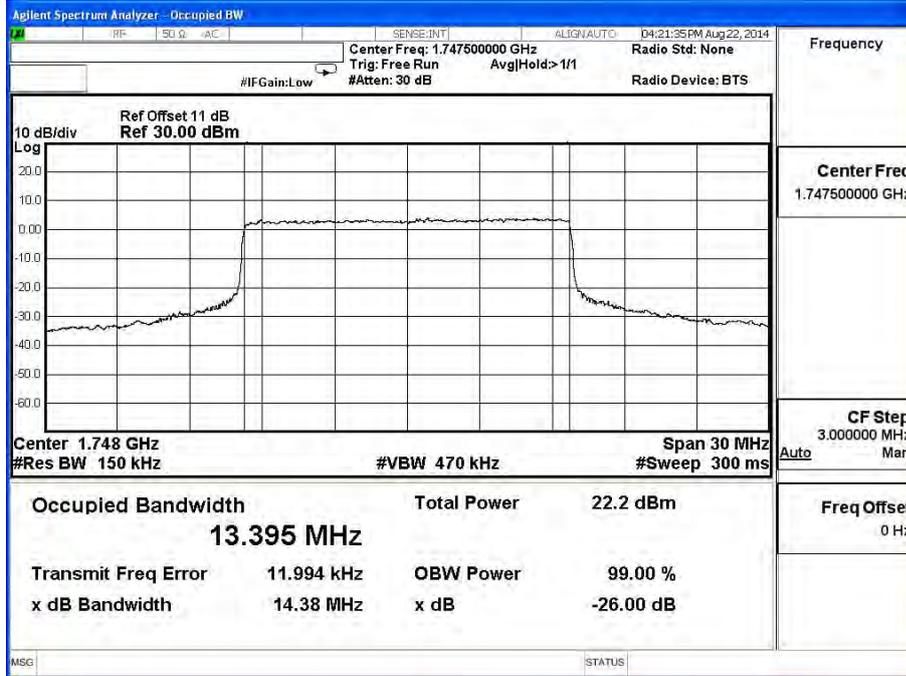


**Band IV 15M QPSK - LTE Mode CH 20175**

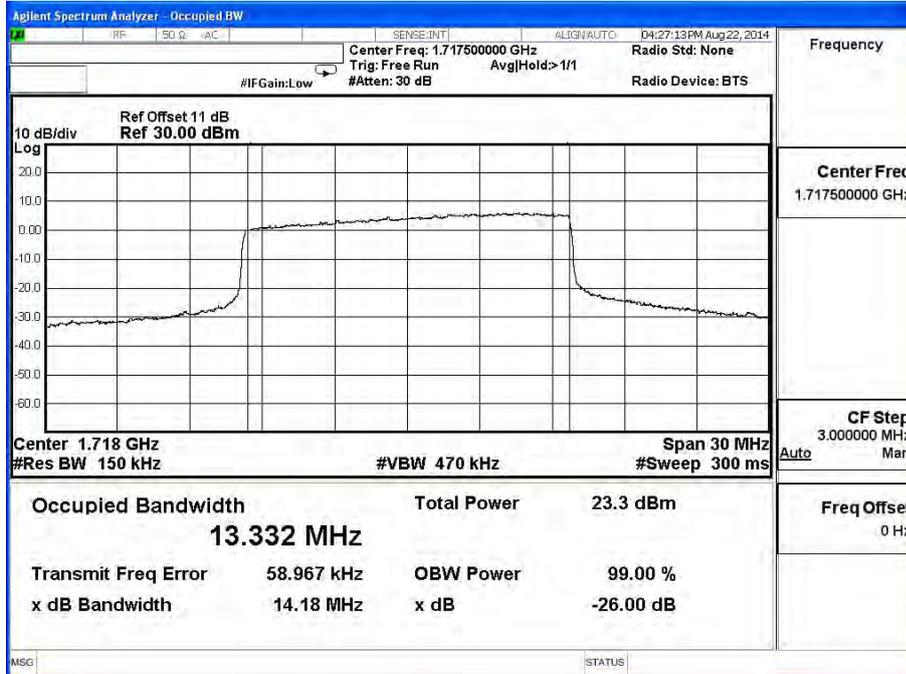


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 15M		

**Band IV 15M QPSK - LTE Mode CH 20325**

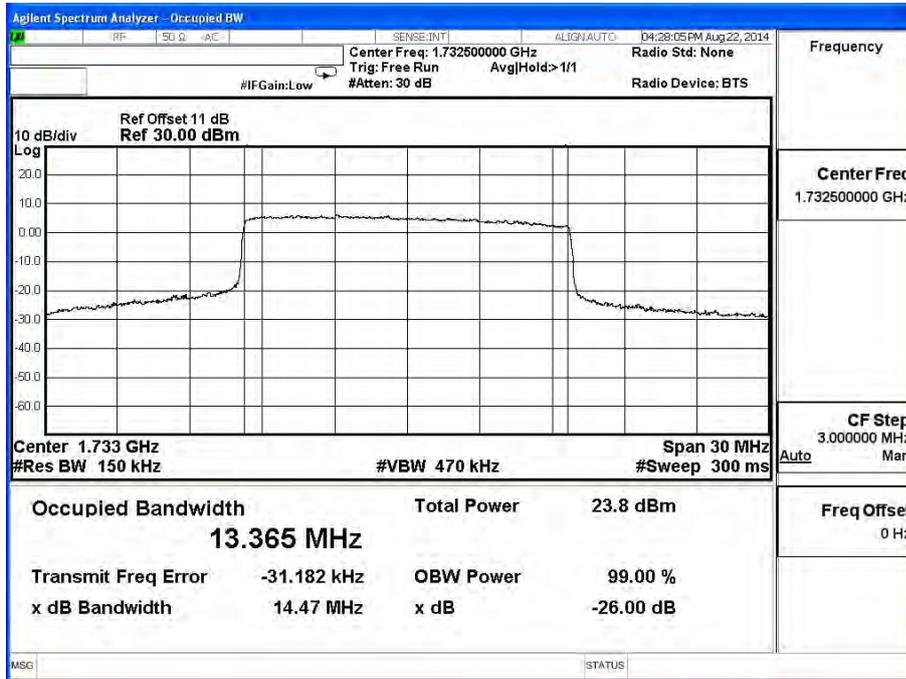


**Band IV 15M 16QAM - LTE Mode CH20025**

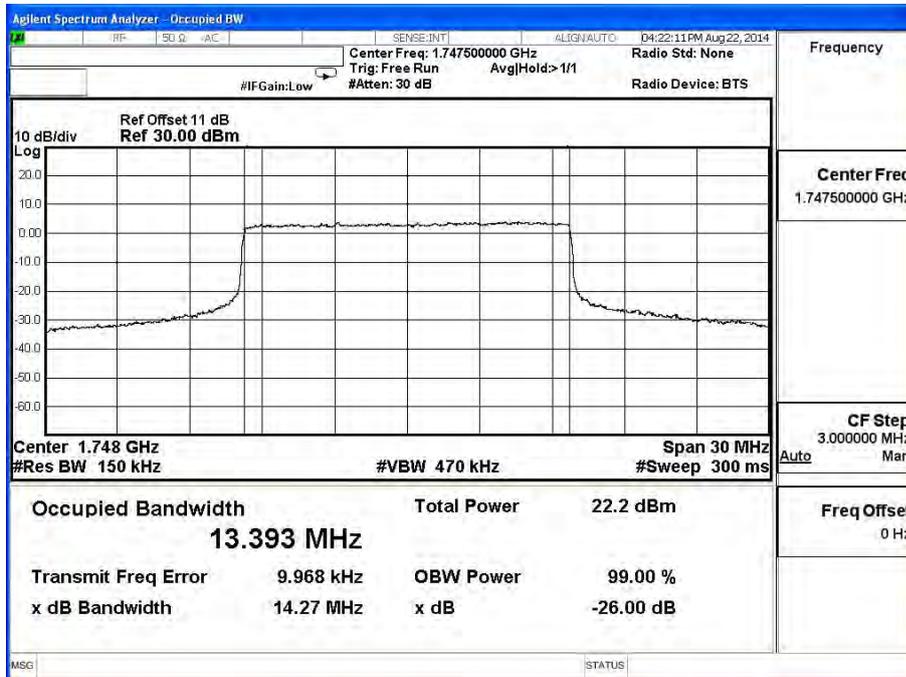


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 15M		

Band IV 15M 16QAM - LTE Mode CH20175

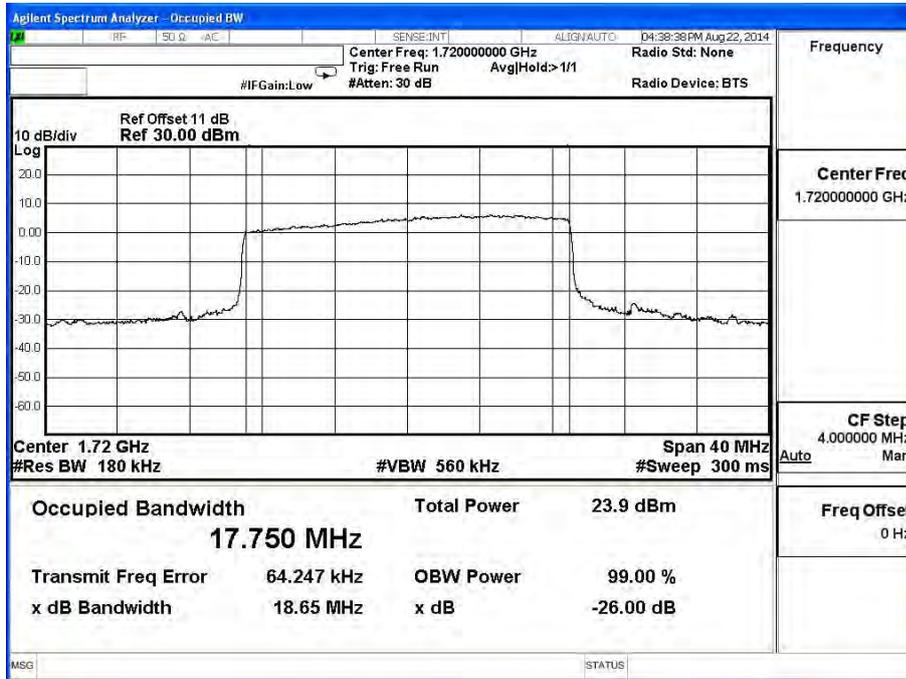


Band IV 15M 16QAM - LTE Mode CH20325

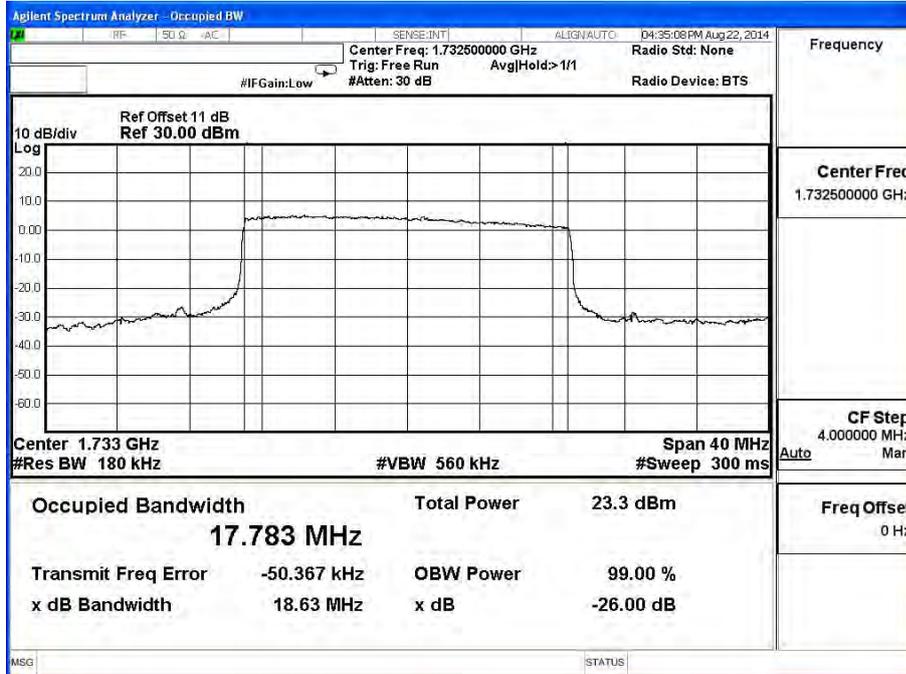


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 20M		

**Band IV 20M QPSK - LTE Mode CH 20050**

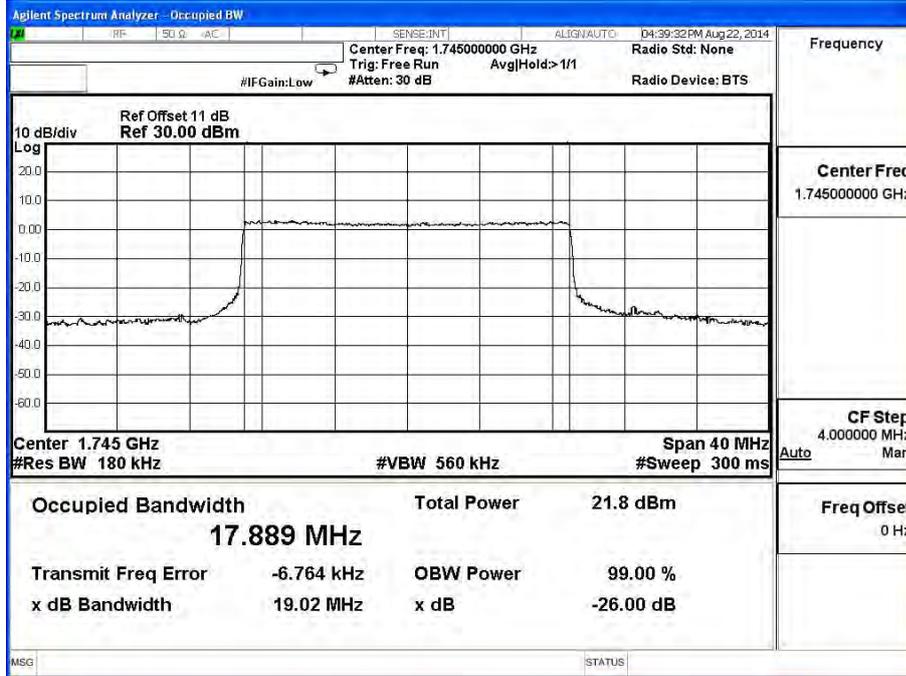


**Band IV 20M QPSK - LTE Mode CH 20175**

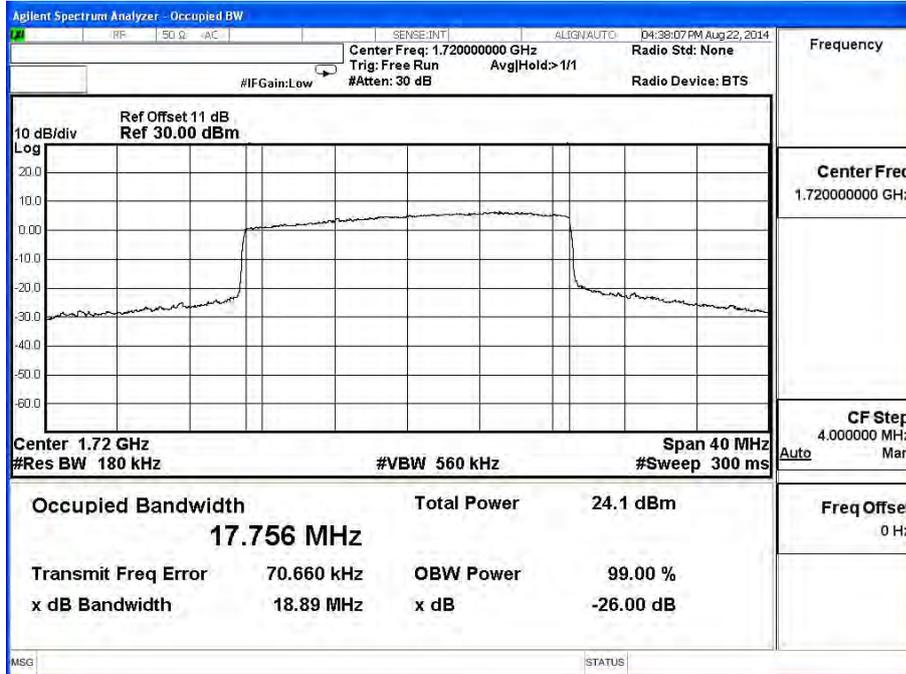


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 20M		

**Band IV 20M QPSK - LTE Mode CH 20300**

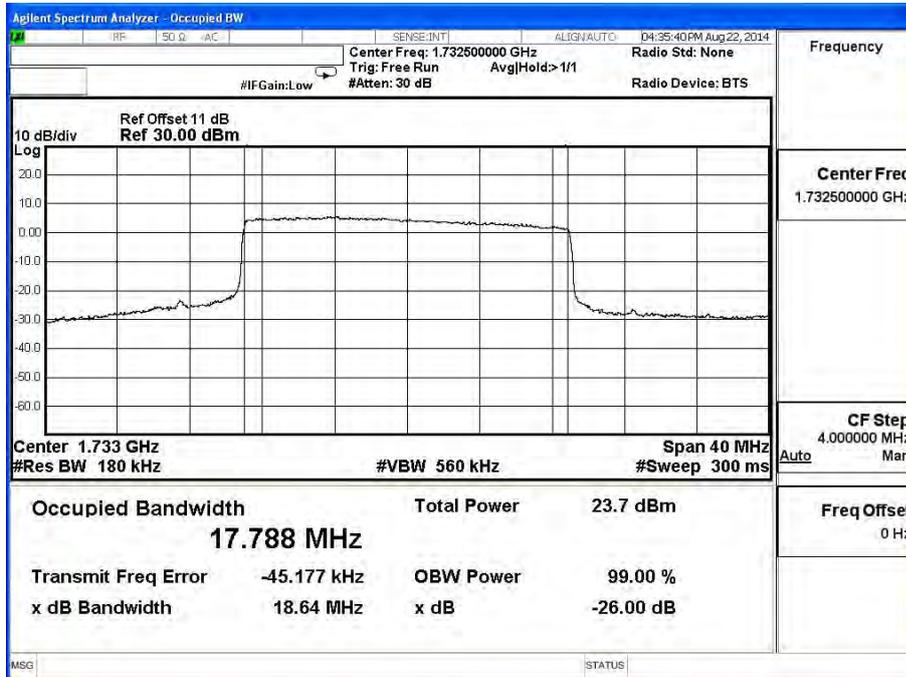


**Band IV 20M 16QAM - LTE Mode CH20050**

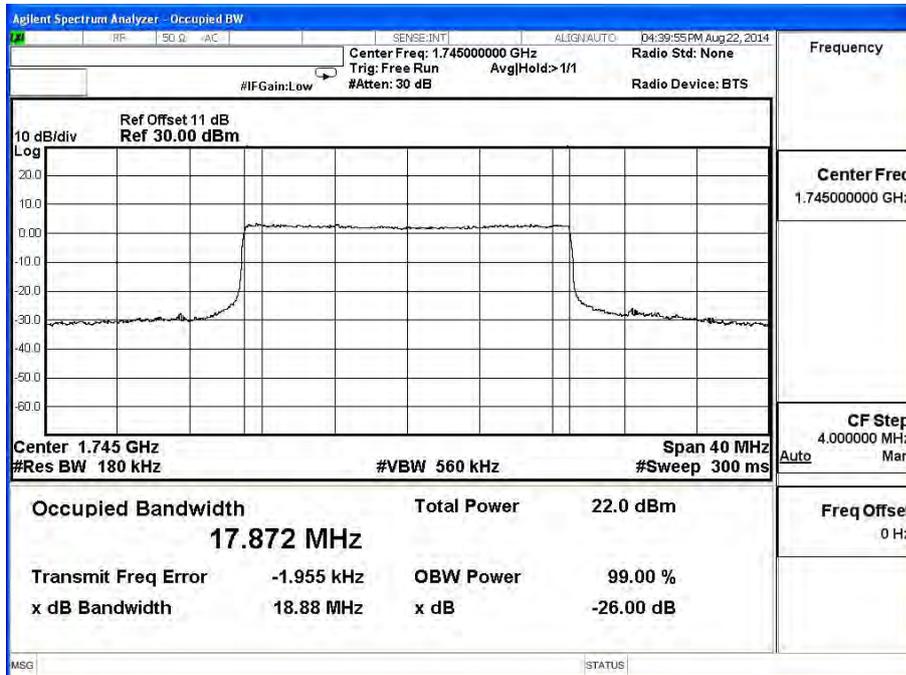


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band IV 20M		

Band IV 20M 16QAM - LTE Mode CH20175

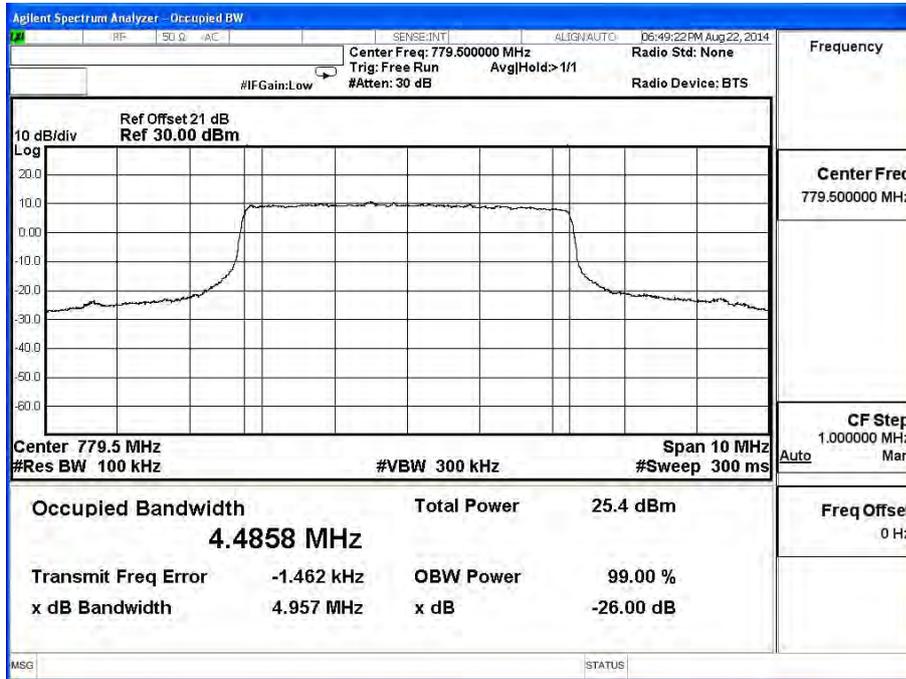


Band IV 20M 16QAM - LTE Mode CH20300

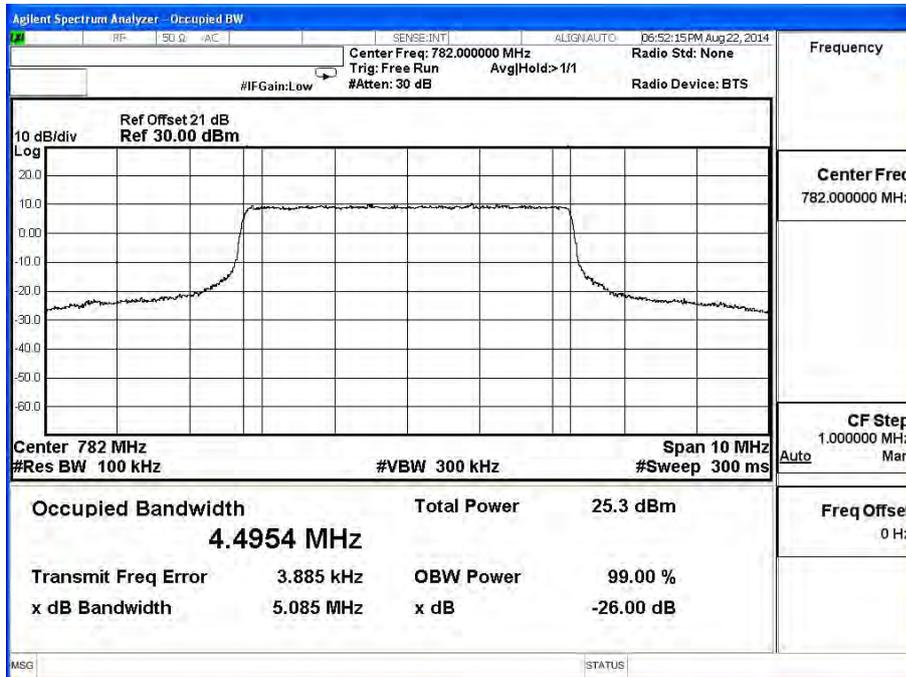


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band XIII 5M		

**Band XIII 5M QPSK - LTE Mode CH 23205**

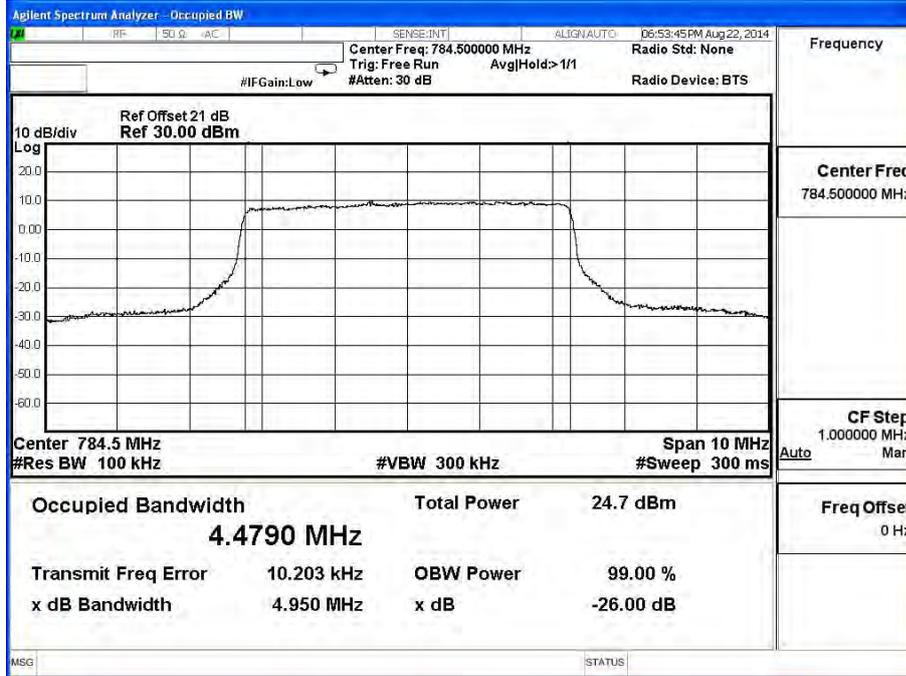


**Band XIII 5M QPSK - LTE Mode CH 23230**

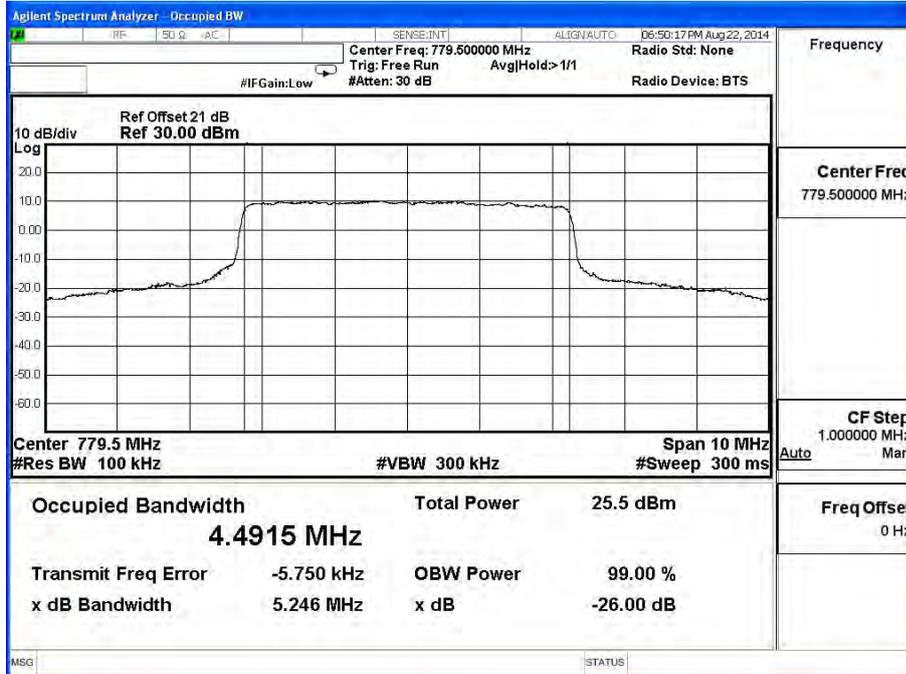


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band XIII 5M		

**Band XIII 5M QPSK - LTE Mode CH 23255**

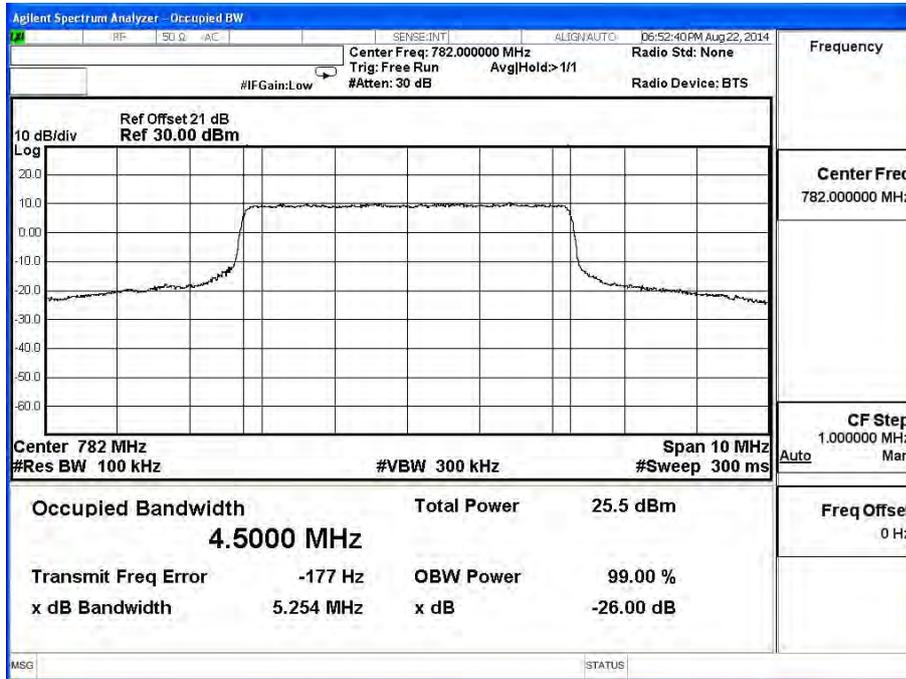


**Band XIII 5M 16QAM - LTE Mode CH23205**

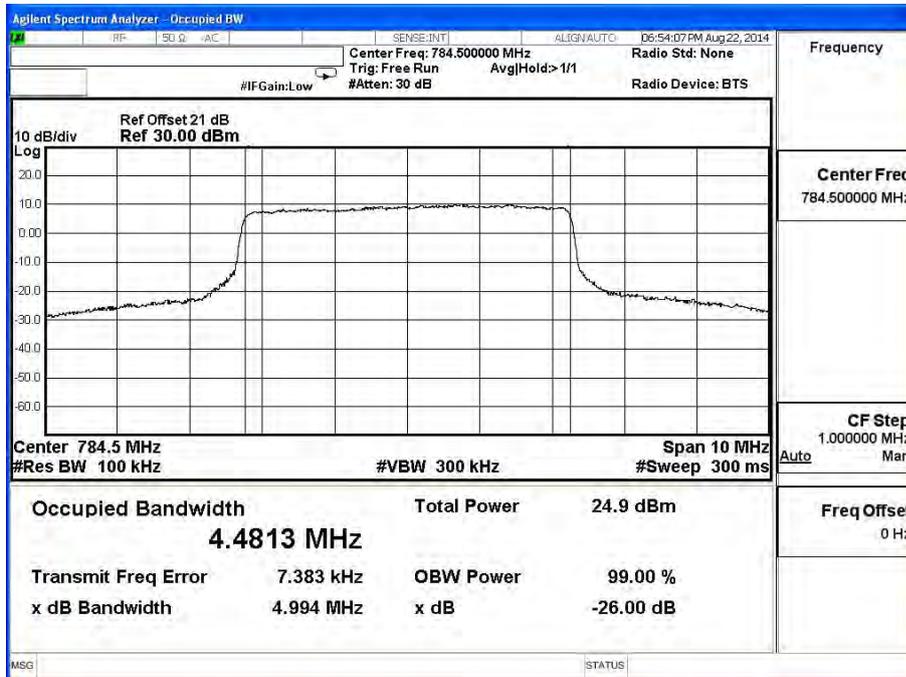


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band XIII 5M		

**Band XIII 5M 16QAM - LTE Mode CH23230**

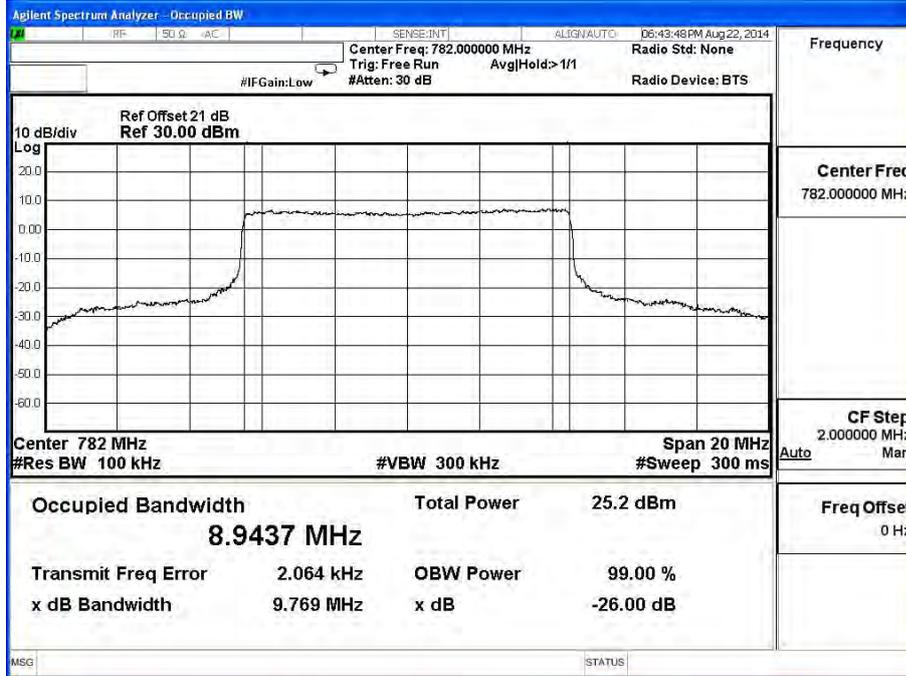


**Band XIII 5M 16QAM - LTE Mode CH23255**

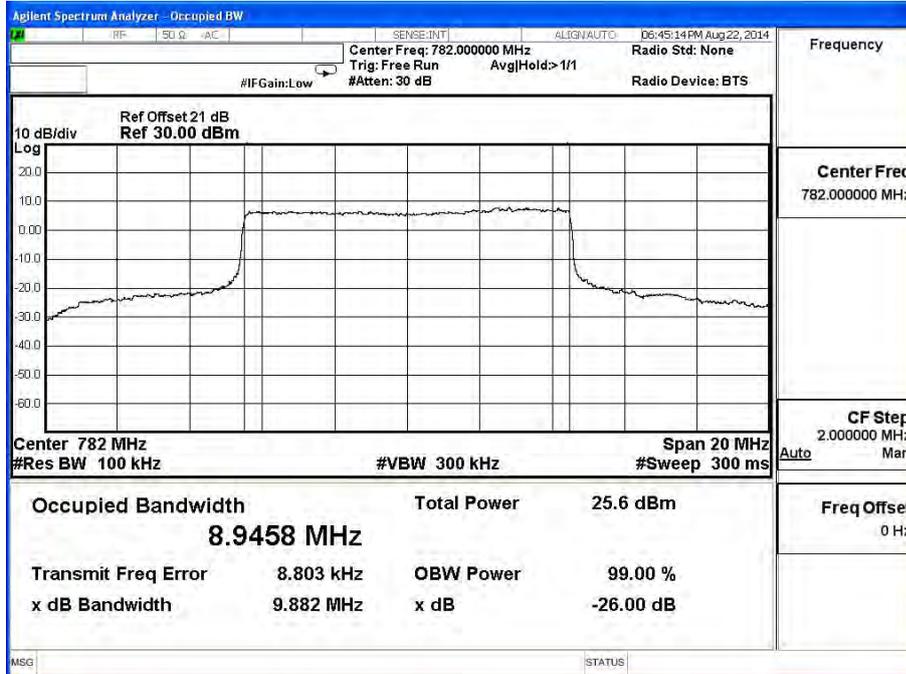


Product	Notebook PC		
Test Mode	Occupied Bandwidth		
Date of Test	2014/09/26	Test Site	CTR
Test Condition	Band XIII 10M		

Band XIII 10M QPSK - LTE Mode CH 23230



Band XIII 10M 16QAM - LTE Mode CH23230



#### 4. Spurious Emission At Antenna Terminals (+/-1MHz)

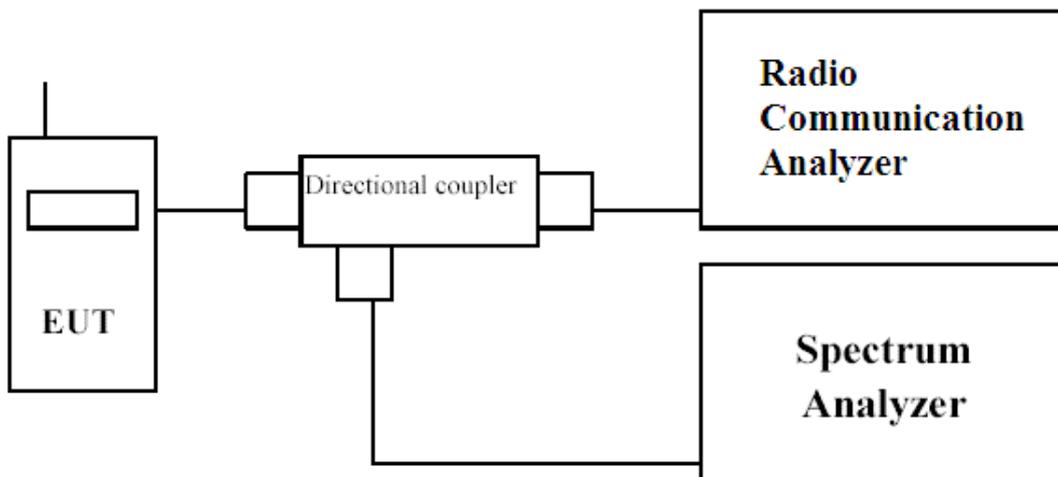
##### 4.1. Test Equipment

The following test equipments are used during the spurious emission test

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Spectrum Analyzer	Agilent	N9010A / MY48030495	2014/07/08
Radio Communication Analyzer	Anritsu	MT8820C / 6201091166	2014/01/17
Directional coupler	Agilent	87300C / MY44300352	2014/01/06
Dual Directional couple	Agilent	778D / 50550	2013/10/07

Note: All equipments upon which need to be calibrated are with calibration period of 1 year.

##### 4.2. Setup



### **4.3. Limits**

The spurious (unwanted) emission limits specified in the individual FCC rule parts applicable to licensed digital transmitters (typically referred to under the heading 'emission limits') normally apply to any and all emissions that are present outside of the authorized frequency band/block and apply to emissions in both the out-of-band and spurious domains. unwanted emissions are required by the licensed rule parts to be attenuated below the transmitter power by a factor of at least  $43 + 10\log(P)$  dB, where P represents the transmitter power expressed in watts

### **4.4. Test Procedure**

In accordance with Part 27.53, at least 1% of the emission bandwidth was used for the resolution and video bandwidths up to 1MHz away from the Block Edge. At greater than 1MHz, the resolution and video bandwidth were increased to 1MHz.

The reference power and path losses of all channels used for testing in each frequency block were measured.

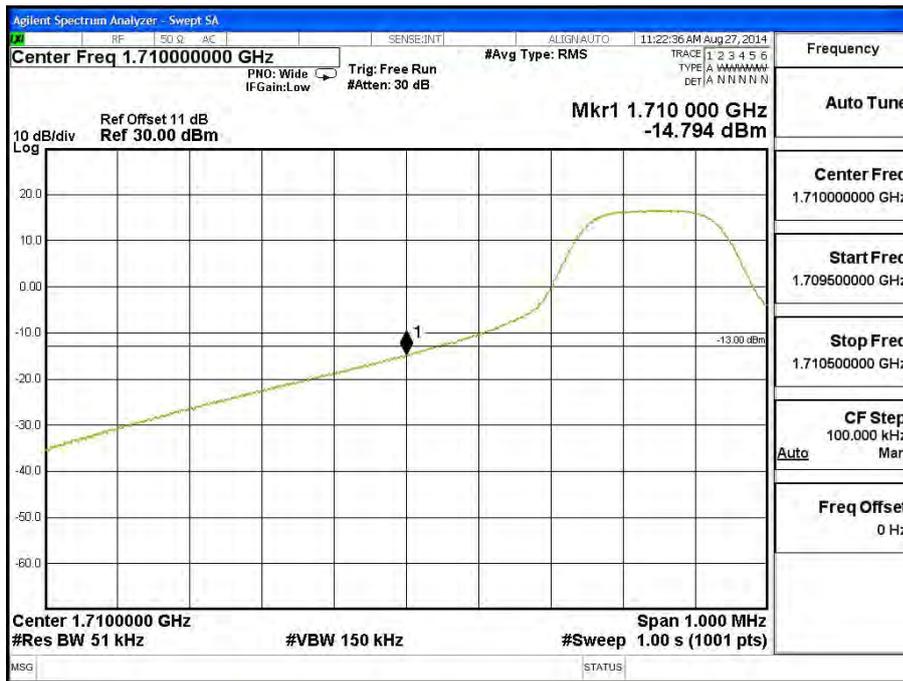
### **4.5. Test Specification**

According to Part 27.53(h)

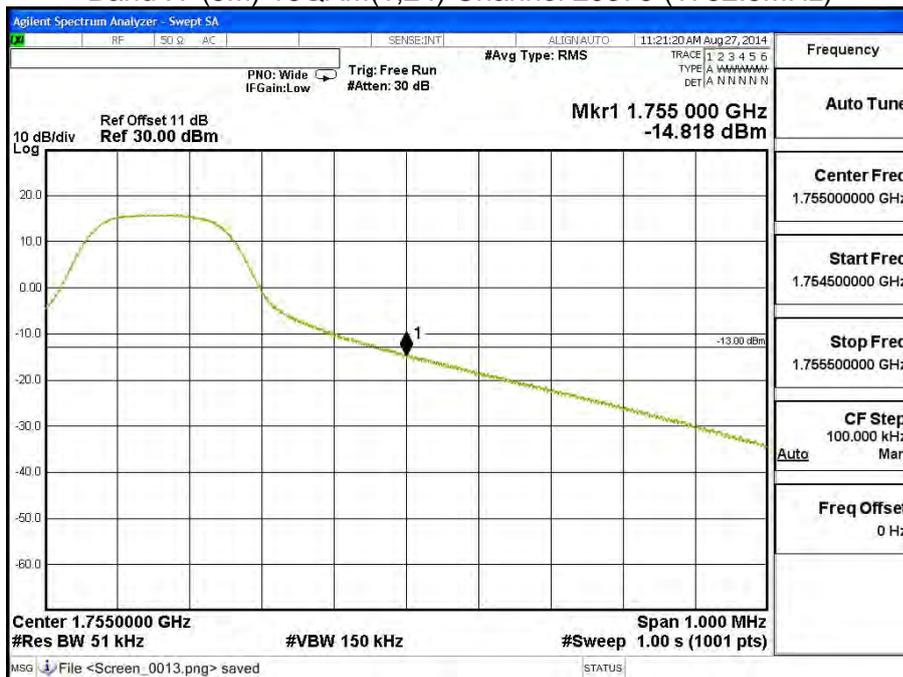
### 4.6. Test Result of Spurious Emission At Antenna Terminals (+/-1MHz)

Product	Notebook PC		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2014/09/12	Test Site	CTR
Test Condition	Block Edge Test (Band IV (5M))		

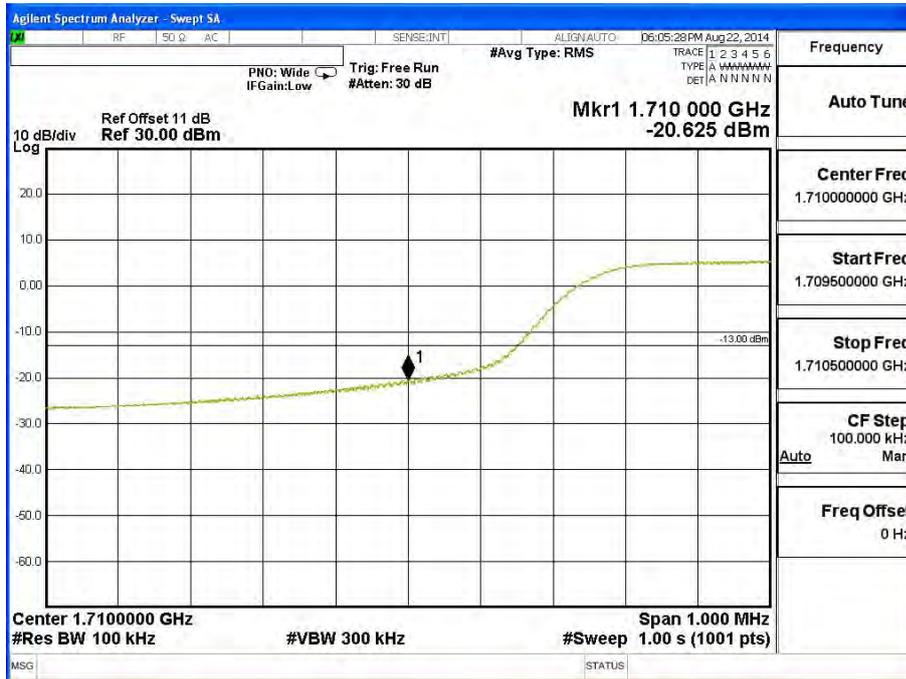
Band IV (5M) 16QAM(1,0) Channel 19975 (1712.5MHz)



Band IV (5M) 16QAM(1,24) Channel 20375 (1752.5MHz)



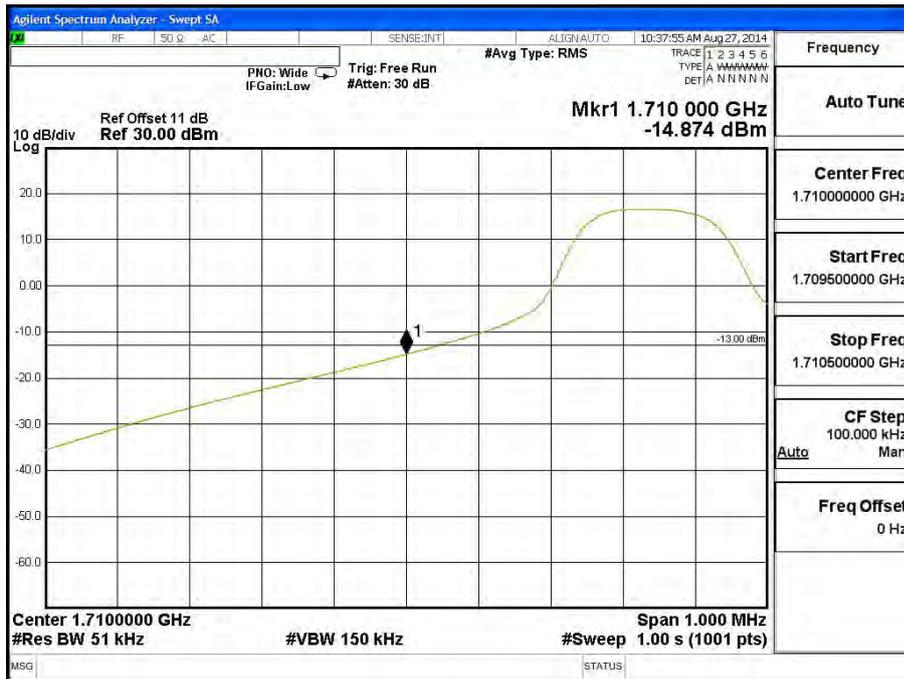
Band IV (5M) 16QAM(25,0) Channel 19975 (1712.5MHz)



Band IV (5M) 16QAM(25,0) Channel 20375 (1752.5MHz)



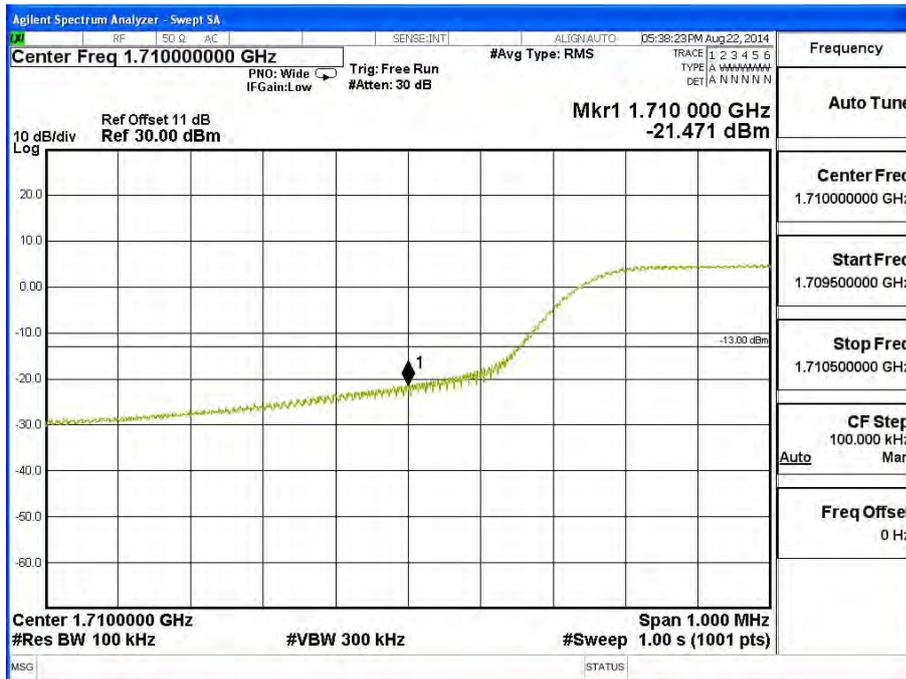
**Band IV (5M) QPSK(1,0) Channel 19975 (1712.5MHz)**



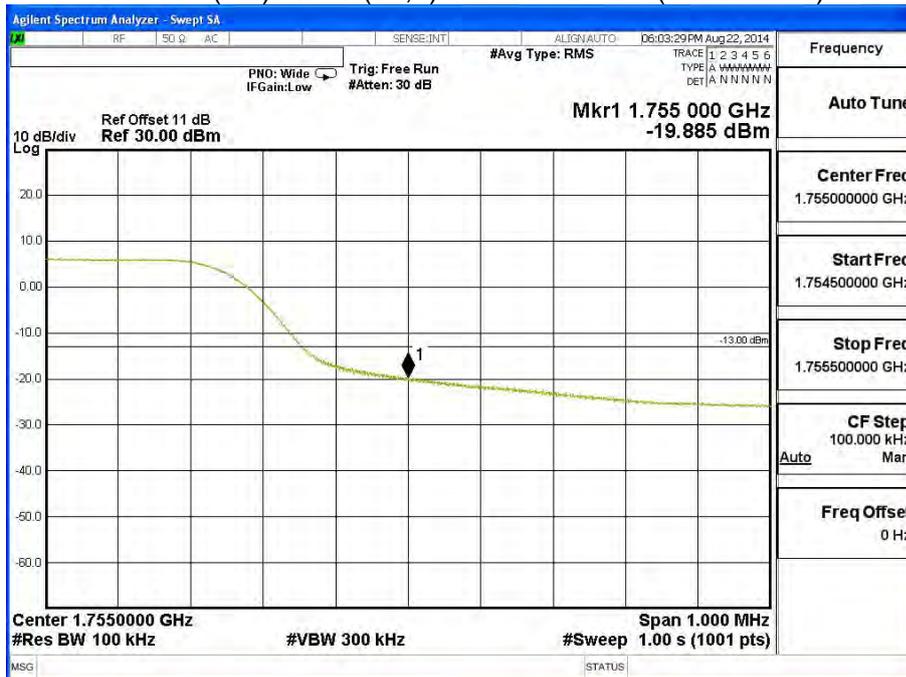
**Band IV (5M) QPSK(1,24) Channel 20375 (1752.5MHz)**



Band IV (5M) QPSK(25,0) Channel 19975 (1712.5MHz)

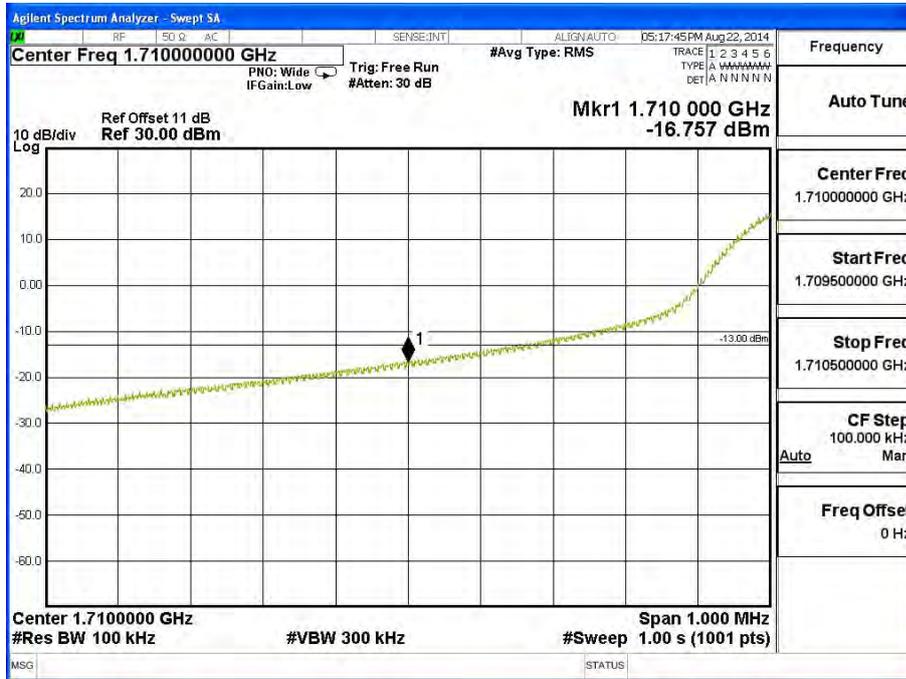


Band IV (5M) QPSK(25,0) Channel 20375 (1752.5MHz)

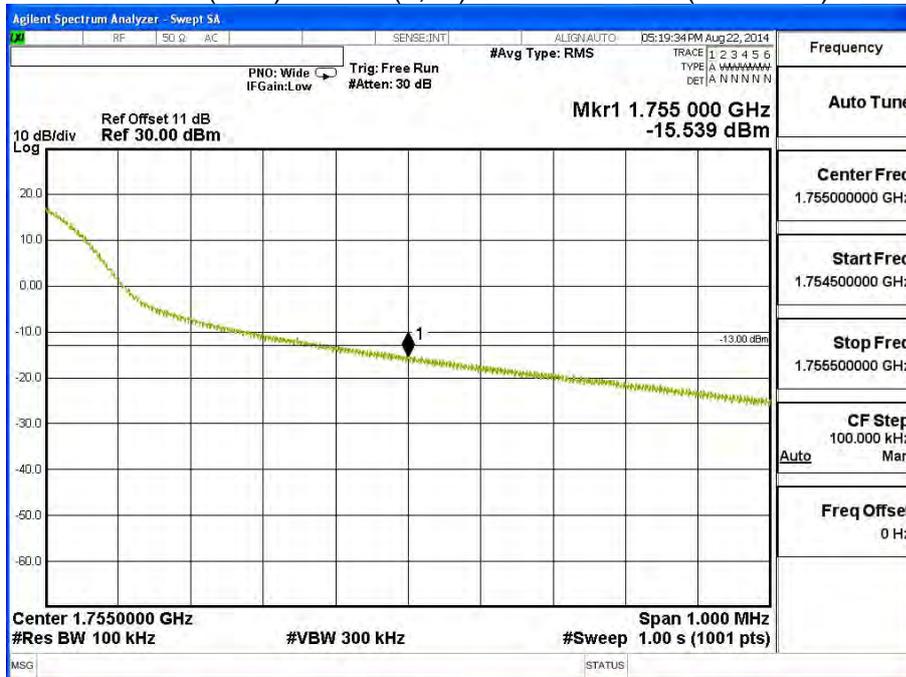


Product	Notebook PC		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2014/09/12	Test Site	CTR
Test Condition	Block Edge Test (Band IV (10M))		

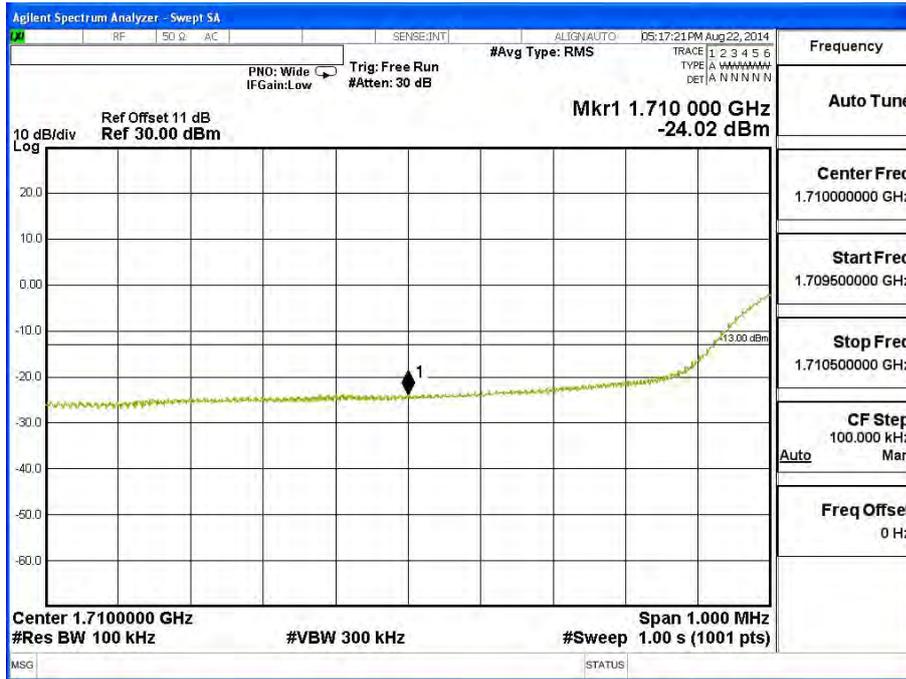
Band IV (10M) 16QAM(1,0) Channel 20000 (1715MHz)



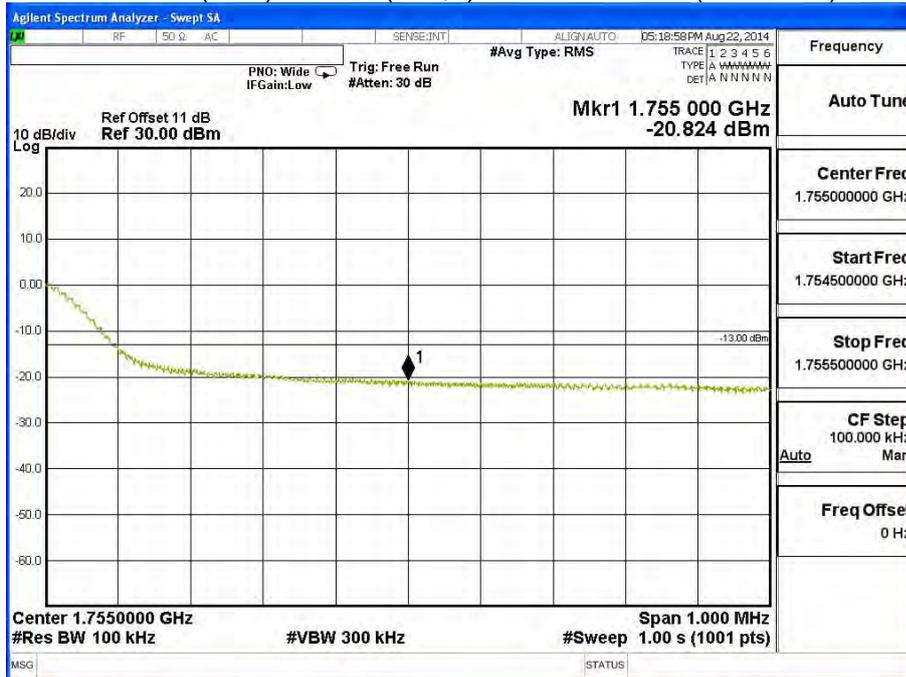
Band IV (10M) 16QAM(1,49) Channel 20350 (1750MHz)



Band IV (10M) 16QAM(100,0) Channel 20000 (1715MHz)



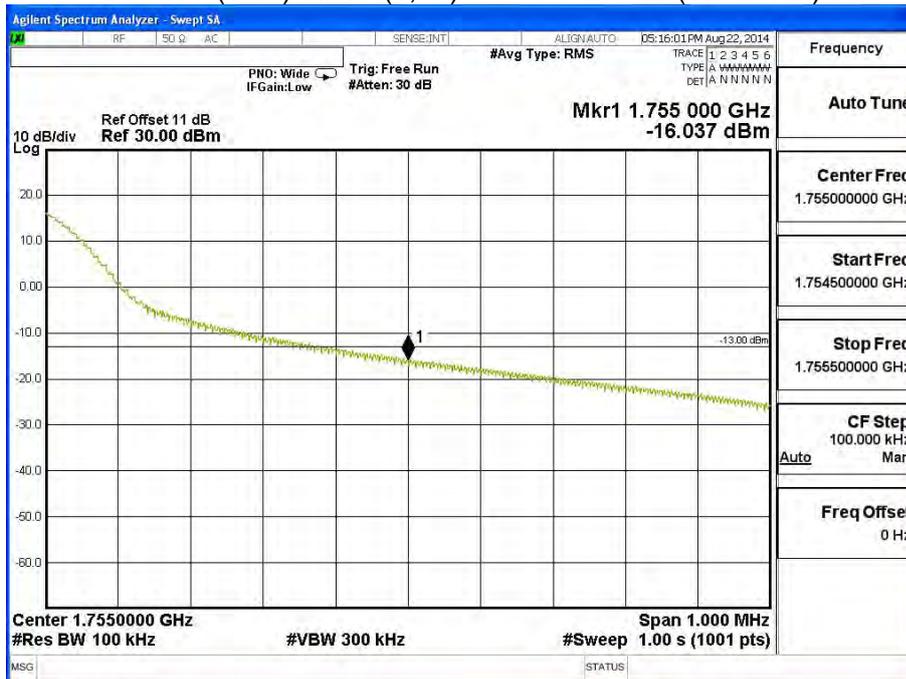
Band IV (10M) 16QAM(100,0) Channel 20350 (1750MHz)



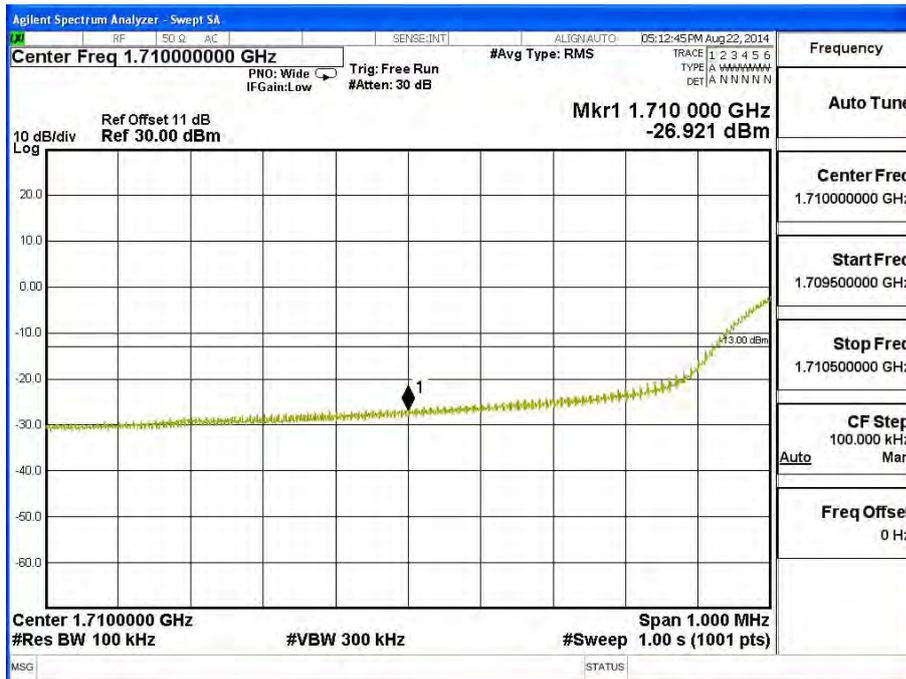
Band IV (10M) QPSK(1,0) Channel 2000 (1715MHz)



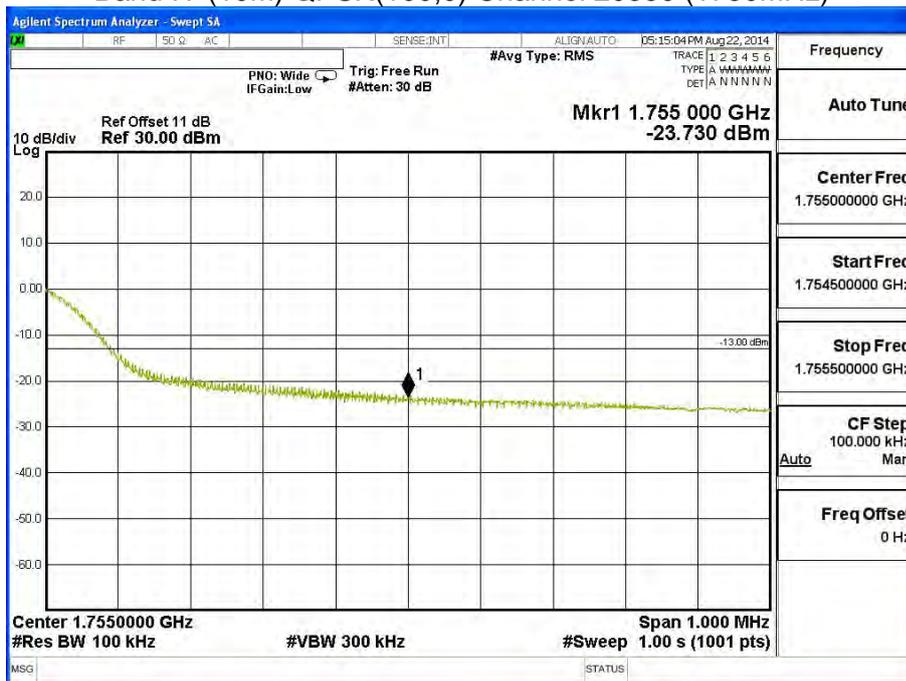
Band IV (10M) QPSK(1,49) Channel 20350 (1750MHz)



Band IV (10M) QPSK(100,0) Channel 20000 (1715MHz)

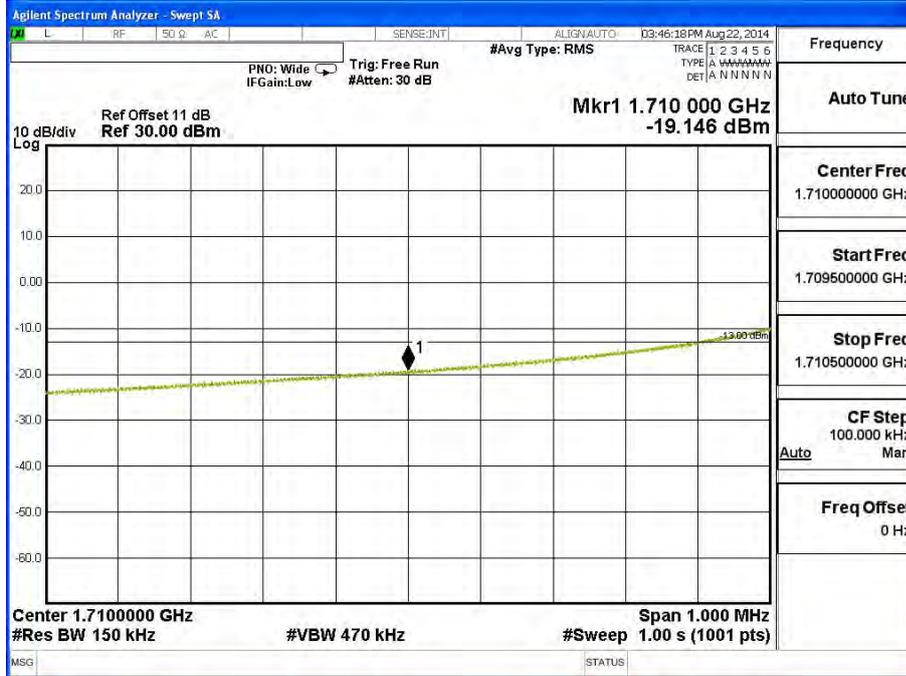


Band IV (10M) QPSK(100,0) Channel 20350 (1750MHz)

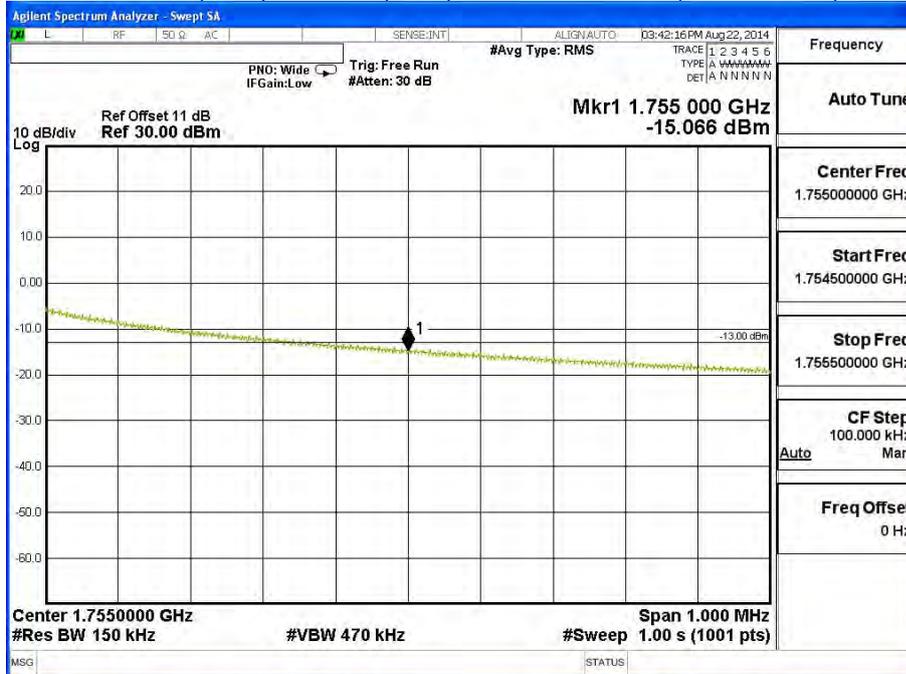


Product	Notebook PC		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2014/09/12	Test Site	CTR
Test Condition	Block Edge Test (Band IV (15M))		

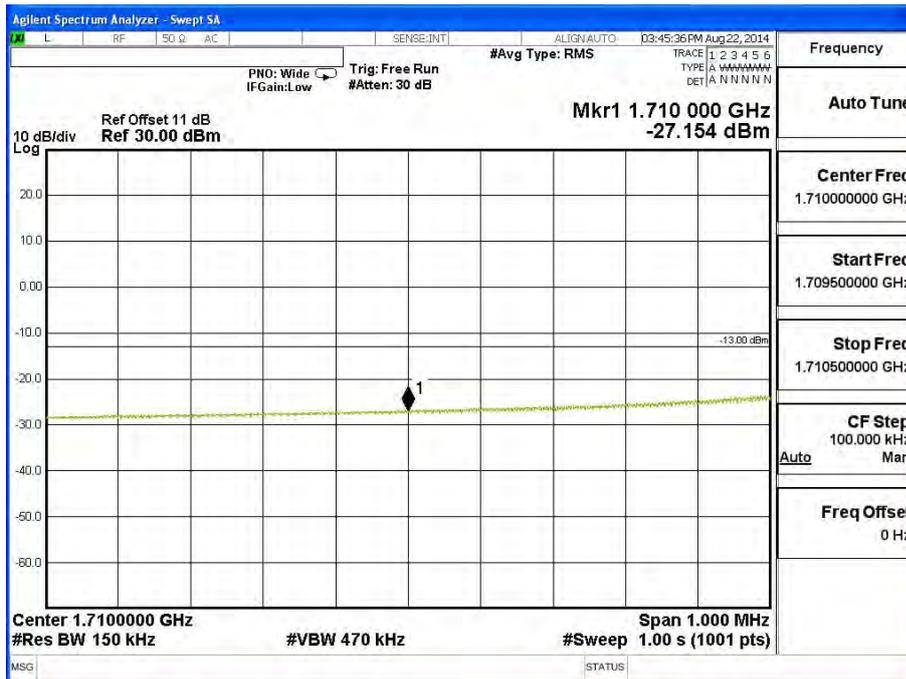
Band IV (15M) 16QAM(1,0) Channel 20025 (1717.5MHz)



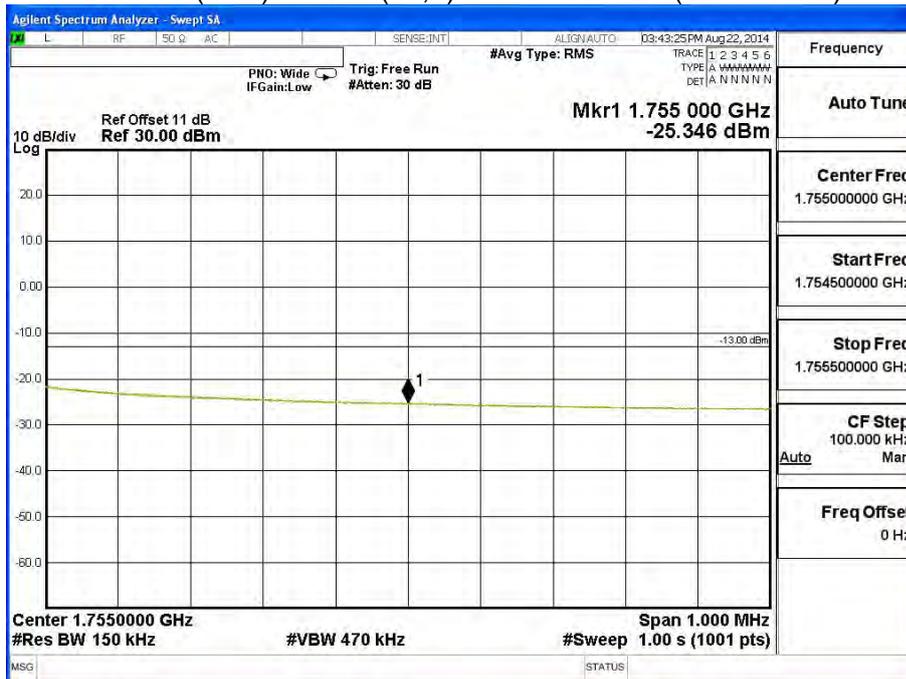
Band IV (15M) 16QAM(1,74) Channel 20325 (1747.5MHz)



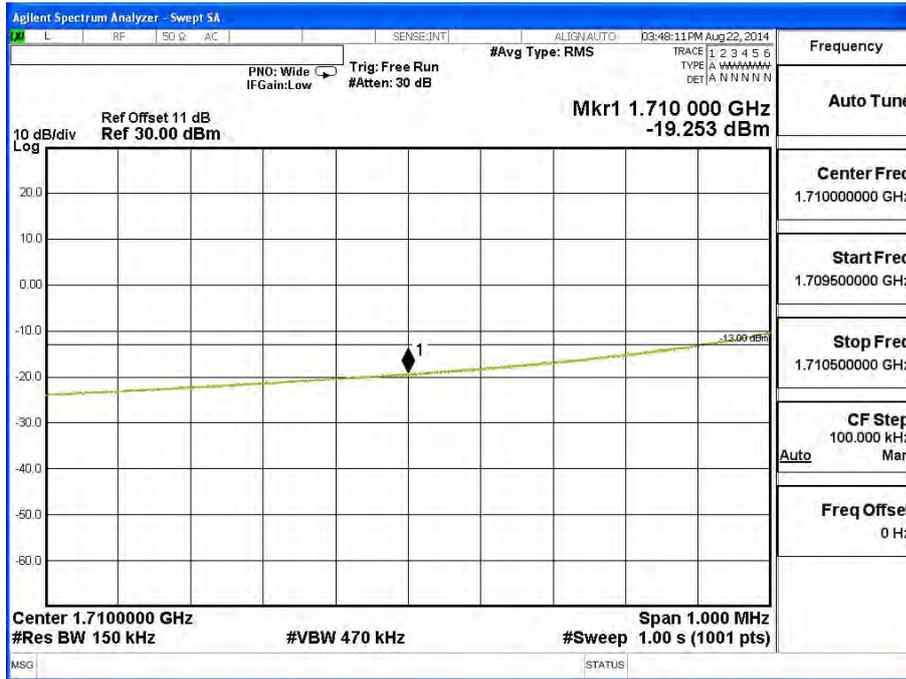
Band IV (15M) 16QAM(75,0) Channel 20025 (1717.5MHz)



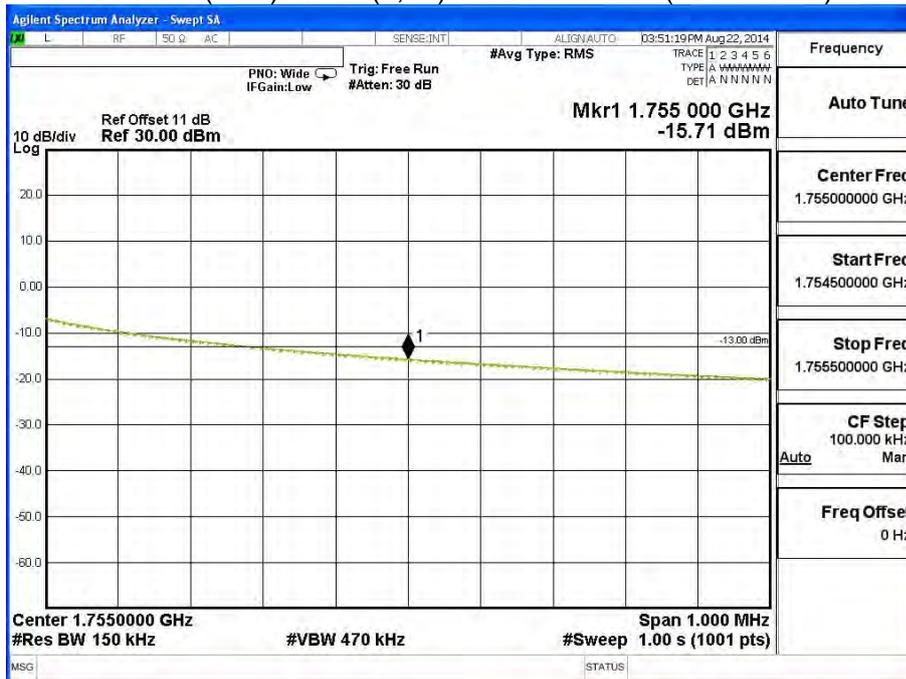
Band IV (15M) 16QAM(75,0) Channel 20325 (1747.5MHz)



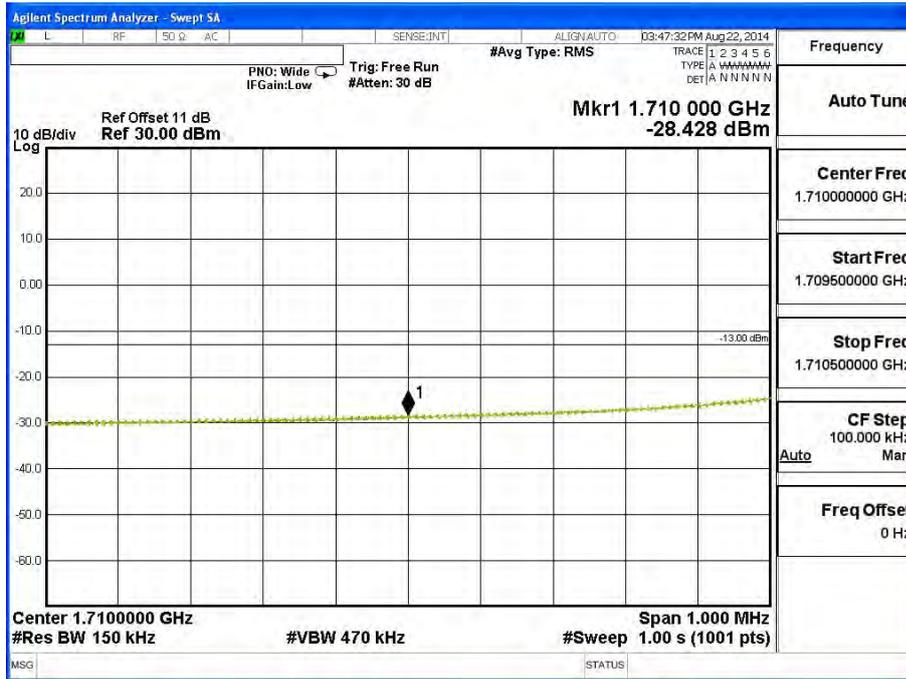
Band IV (15M)QPSK(1,0) Channel 20025 (1717.5MHz)



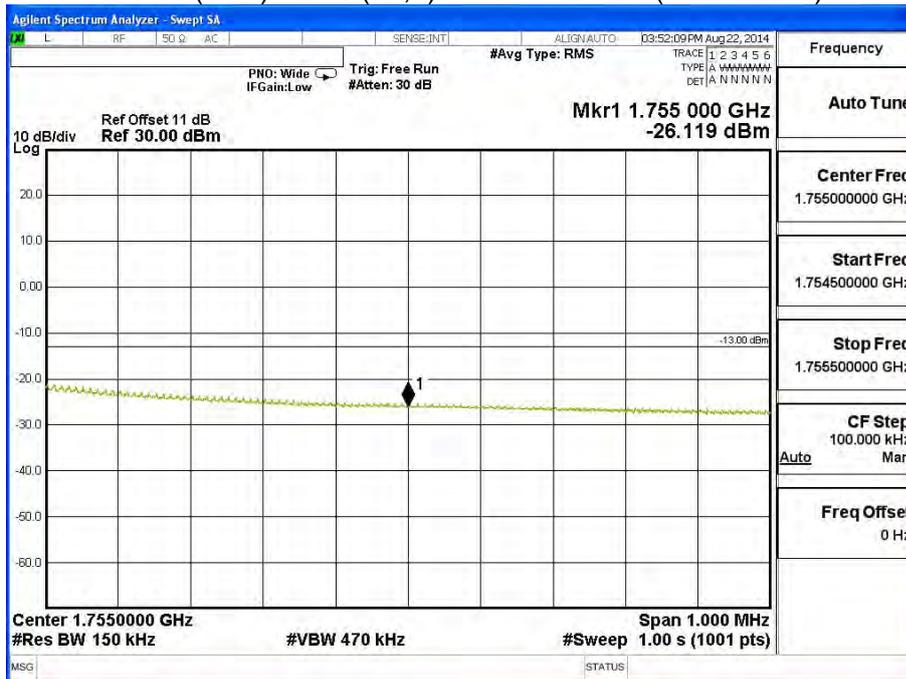
Band IV (15M) QPSK(1,74) Channel 20325 (1747.5MHz)



Band IV (15M) QPSK(75,0) Channel 20025 (1717.5MHz)

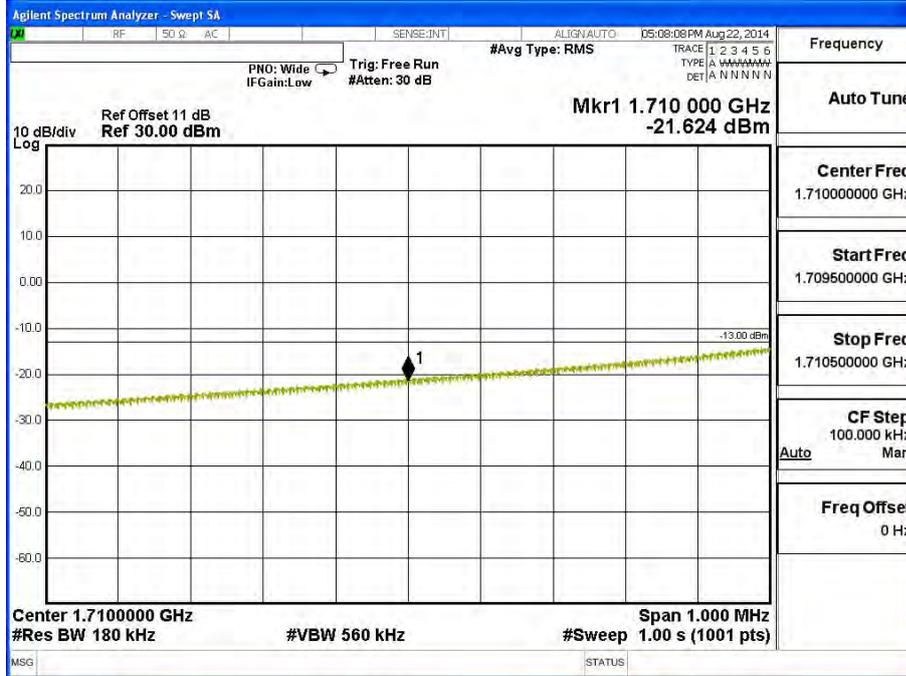


Band4 (15M) QPSK(75,0) Channel 20325 (1747.5MHz)



Product	Notebook PC		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2014/09/12	Test Site	CTR
Test Condition	Block Edge Test (Band IV (20M))		

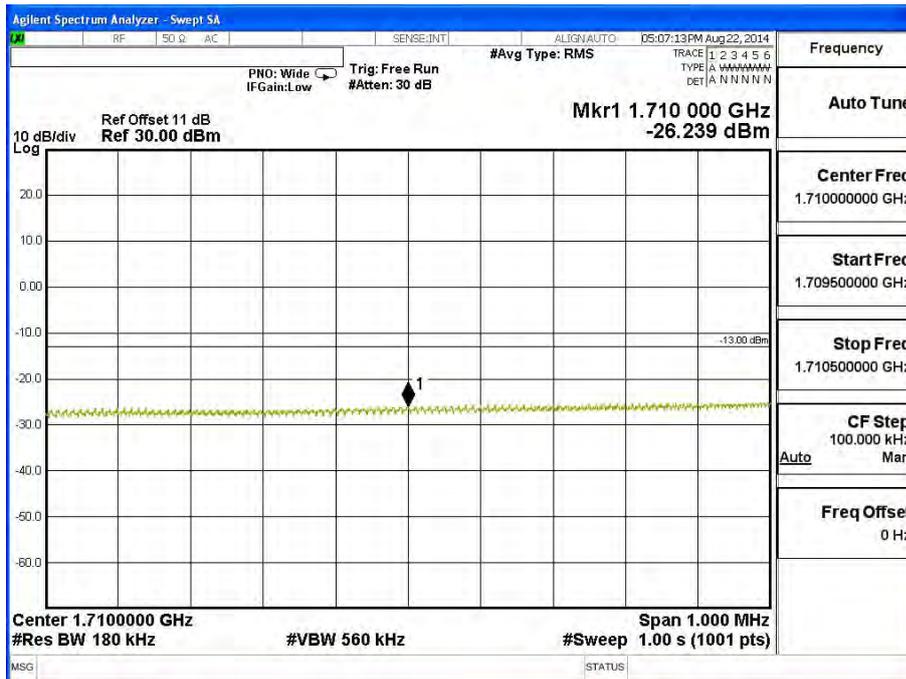
Band IV (20M) 16QAM(1,0) Channel 20050 (1720MHz)



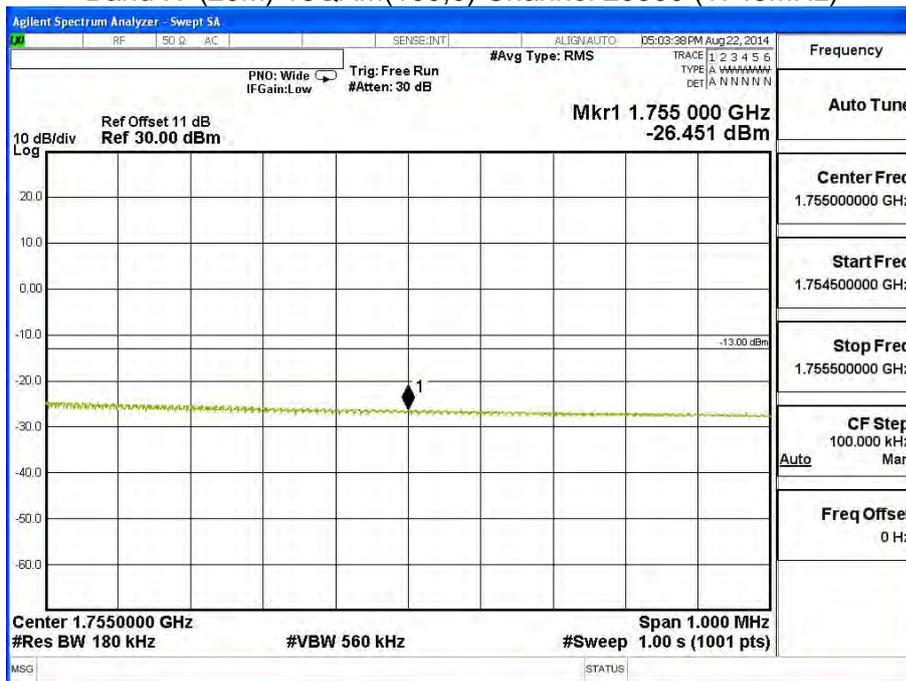
Band IV (20M) 16QAM(1,99) Channel 20300 (1745MHz)



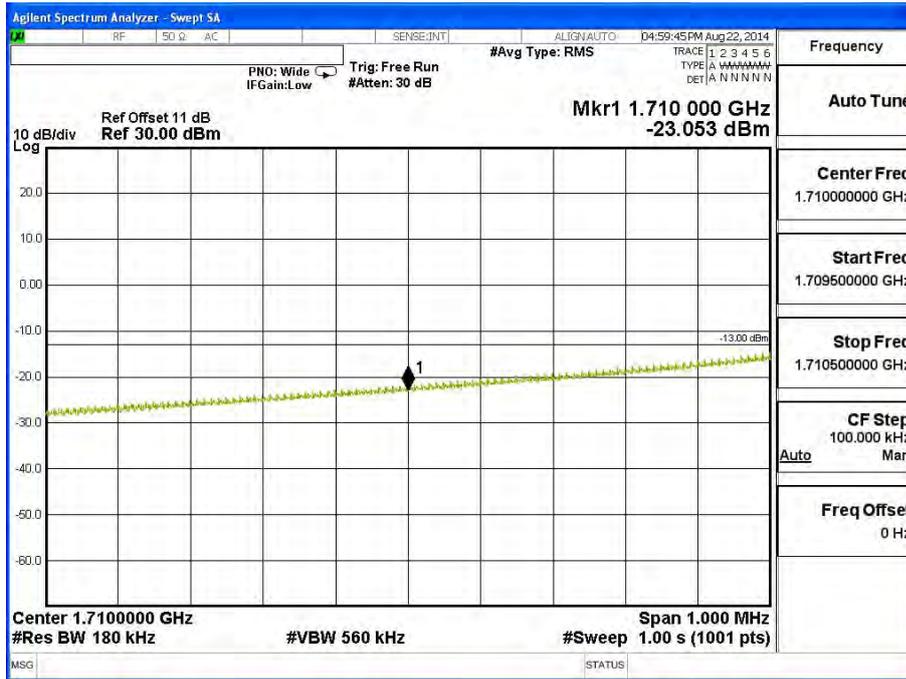
Band IV (20M) 16QAM(100,0) Channel 20050 (1720MHz)



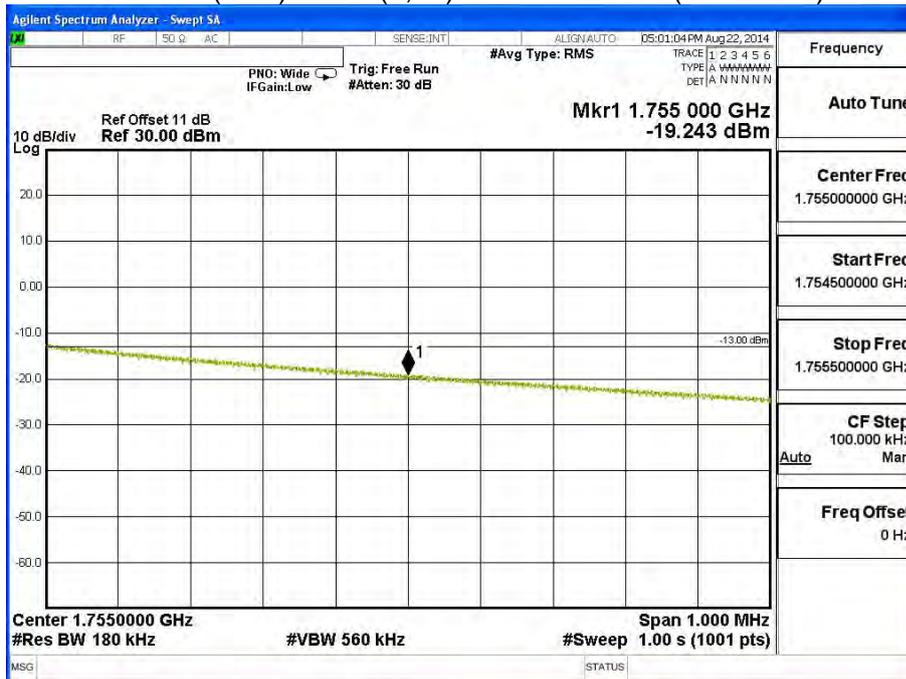
Band IV (20M) 16QAM(100,0) Channel 20300 (1745MHz)



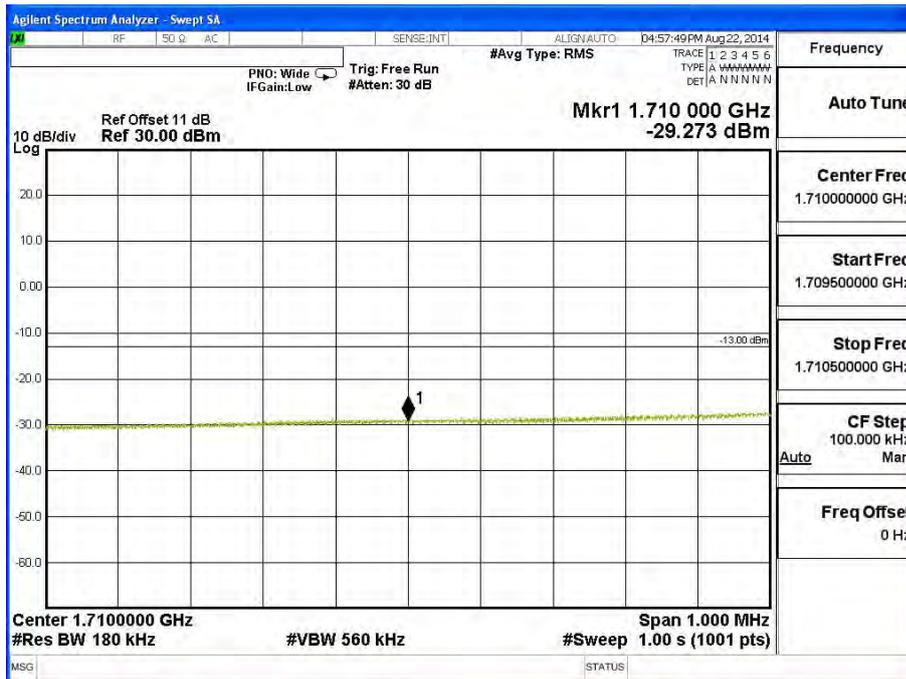
Band IV (20M) QPSK(1,0) Channel 20050 (1720MHz)



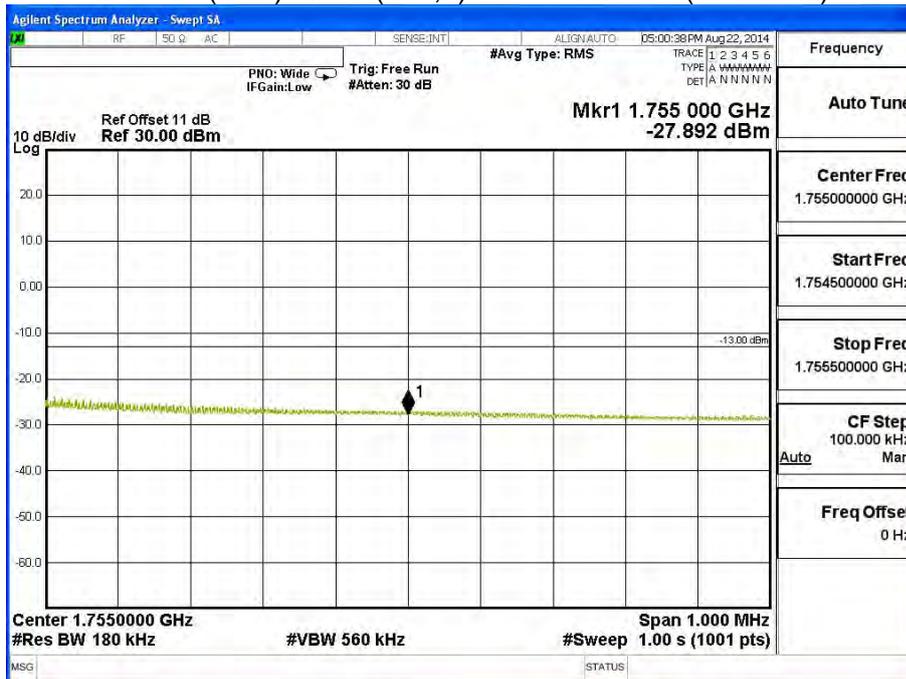
Band IV (20M) QPSK(1,99) Channel 20300 (1745 MHz)



Band IV (20M) QPSK(100,0) Channel 20050 (1720MHz)

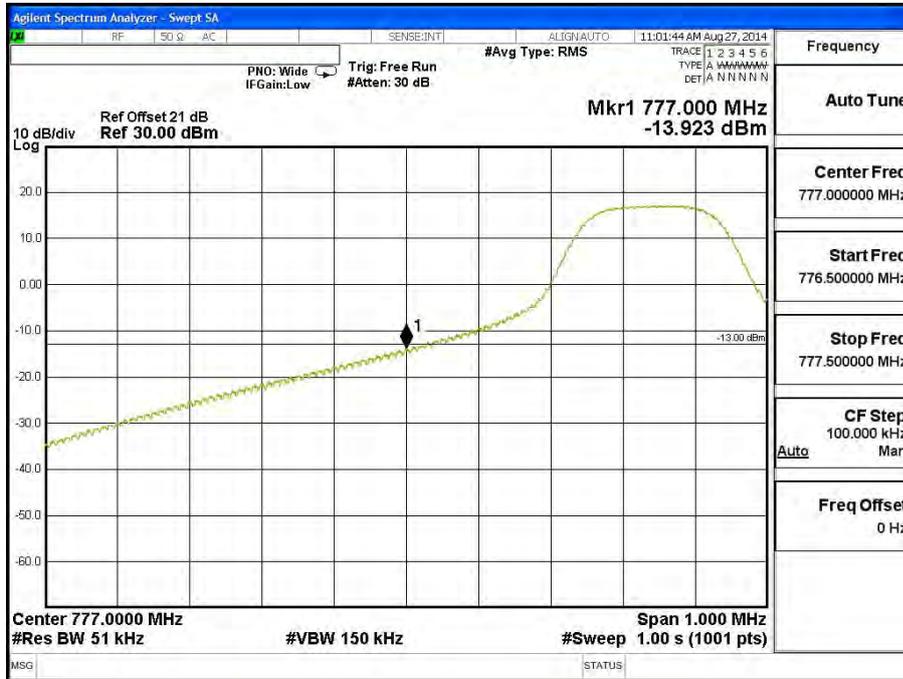


Band IV (20M) QPSK(100,0) Channel 20300 (1745MHz)

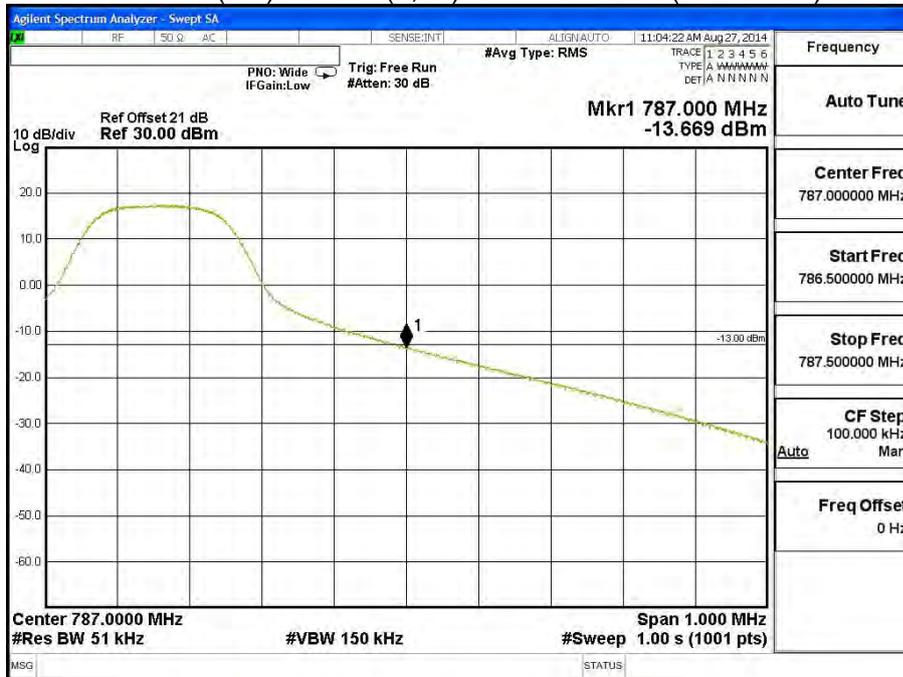


Product	Notebook PC		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2014/09/12	Test Site	CTR
Test Condition	Block Edge Test (Band 13 (5M))		

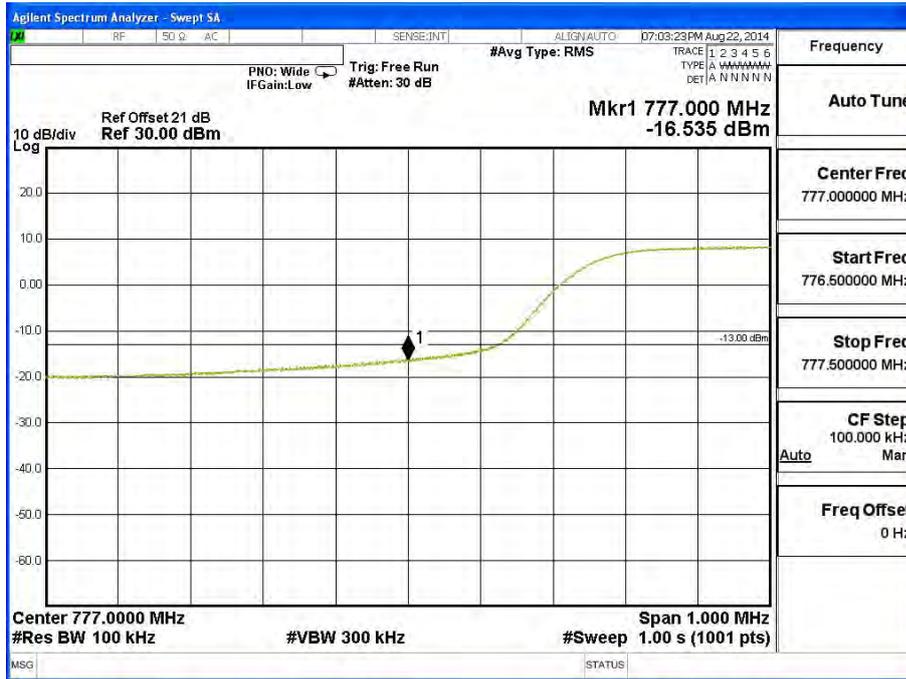
Band 13 (5M) 16QAM(1,0) Channel 23205 (779.5MHz)



Band 13 (5M) 16QAM(1,24) Channel 23255(784.5MHz)



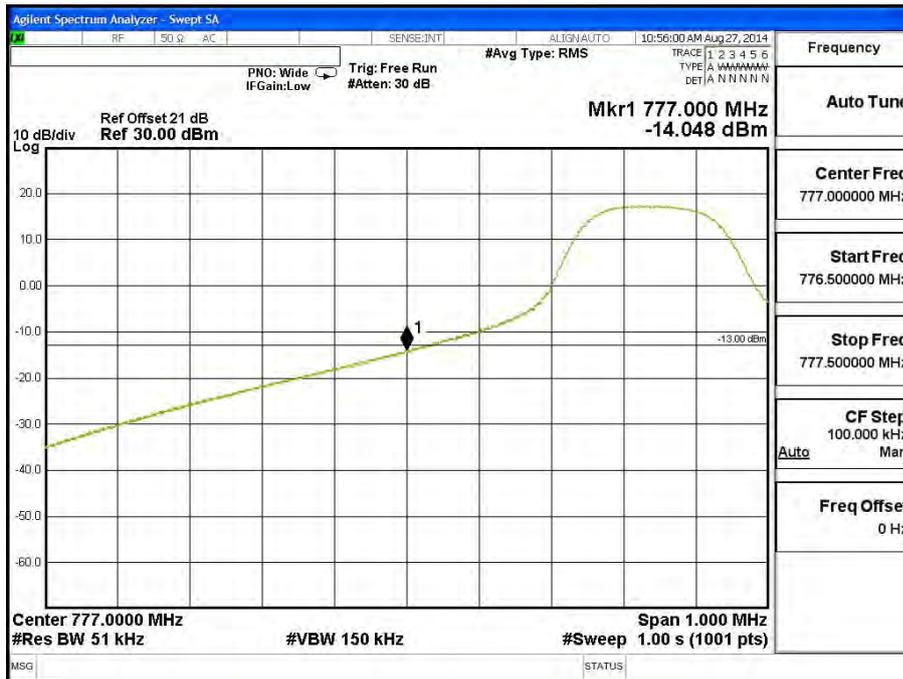
Band 13 (5M) 16QAM(25,0) Channel 23205 (779.5MHz)



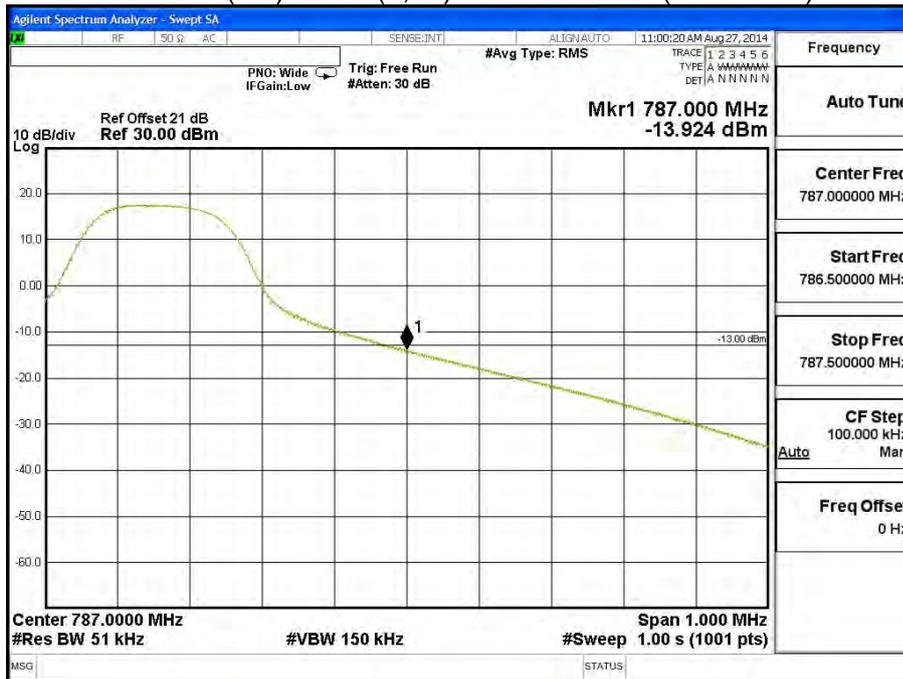
Band 13 (5M) 16QAM(25,0) Channel 23255(784.5MHz)



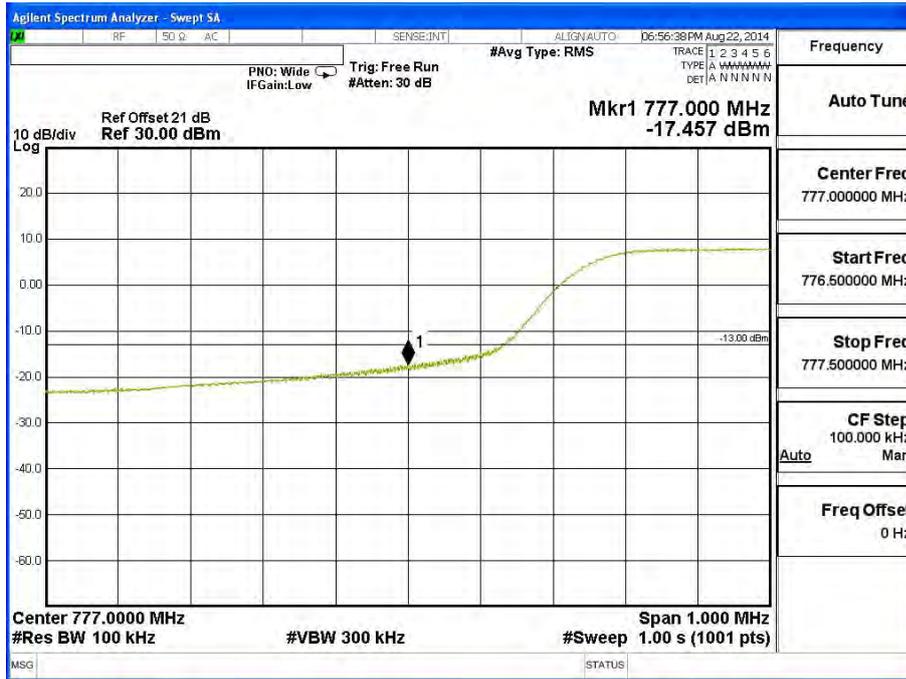
Band 13 (5M) QPSK(1,0) Channel 23205 (779.5MHz)



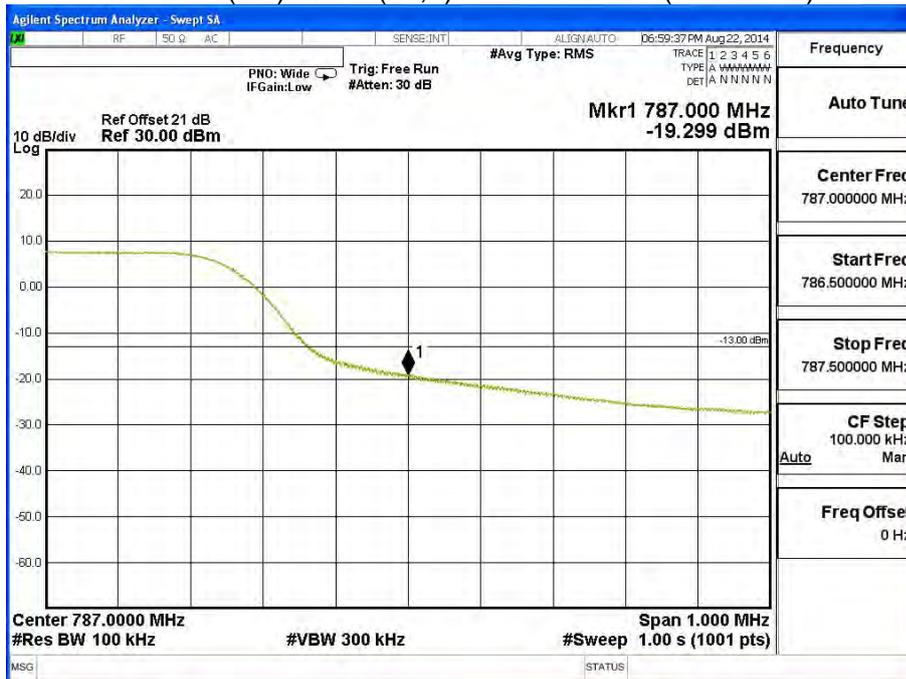
Band 13 (5M) QPSK(1,24) Channel 23255(784.5MHz)



Band 13 (5M) QPSK(25,0) Channel 23205 (779.5MHz)

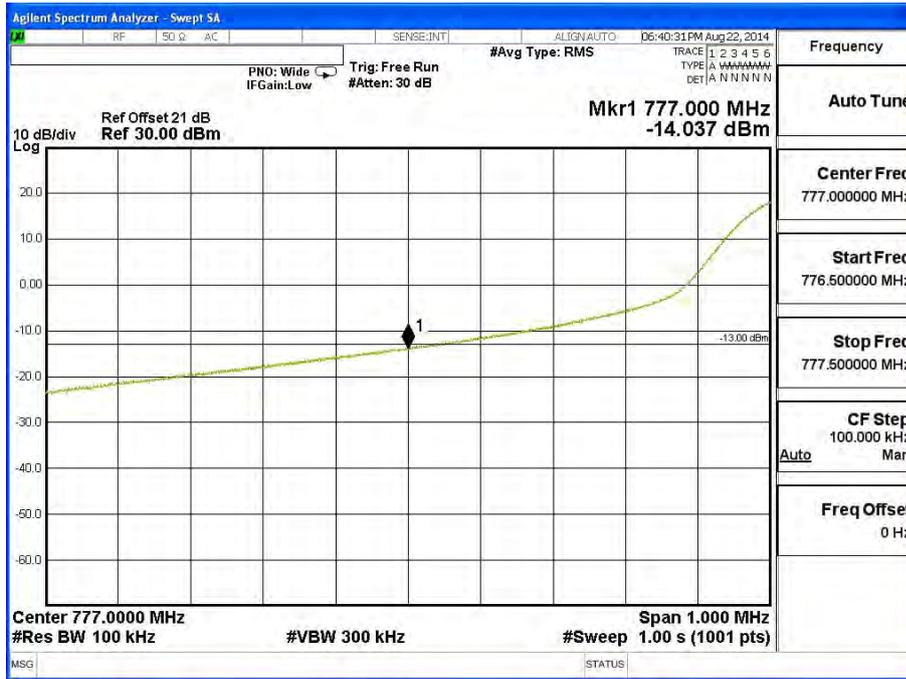


Band 13 (5M) QPSK(25,0) Channel 23255(784.5MHz)

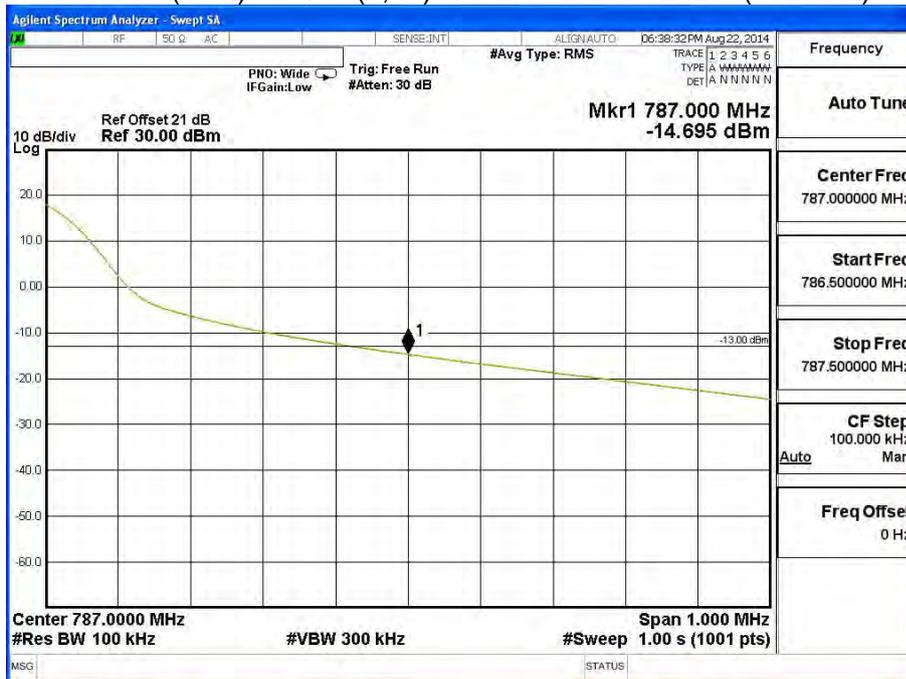


Product	Notebook PC		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2014/09/12	Test Site	CTR
Test Condition	Block Edge Test (Band13 (10M))		

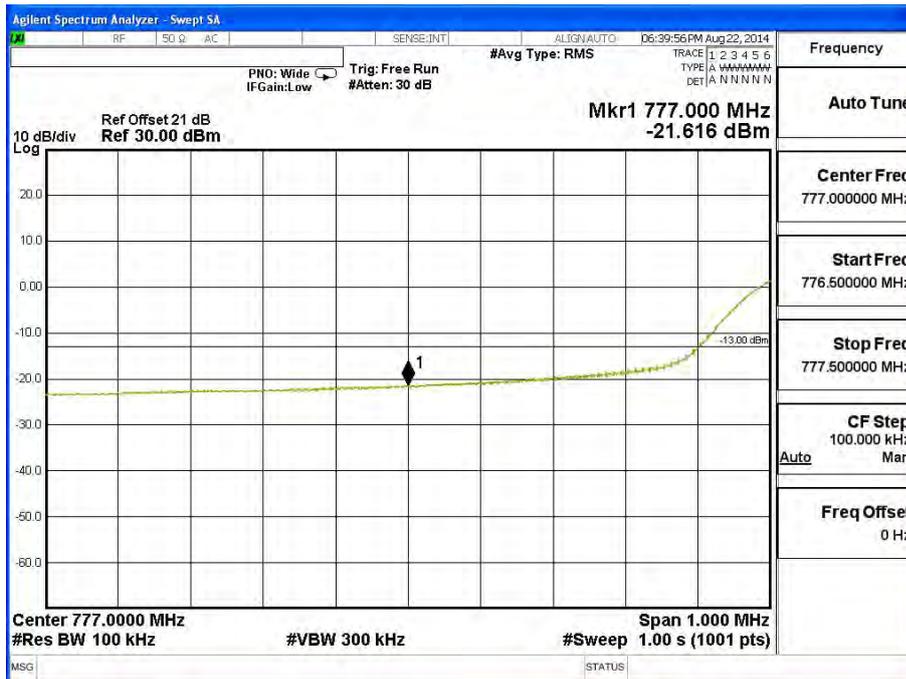
Band 13 (10M) 16QAM(1,0) LOWER Channel 23230 (782MHz)



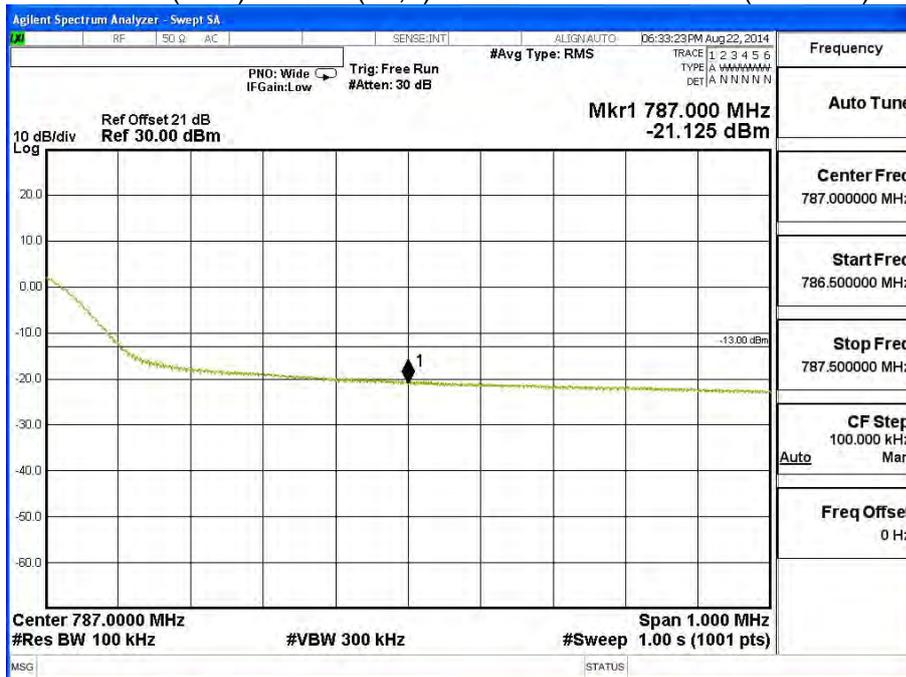
Band 13 (10M) 16QAM(1,49)UPPER Channel 23230(782MHz)



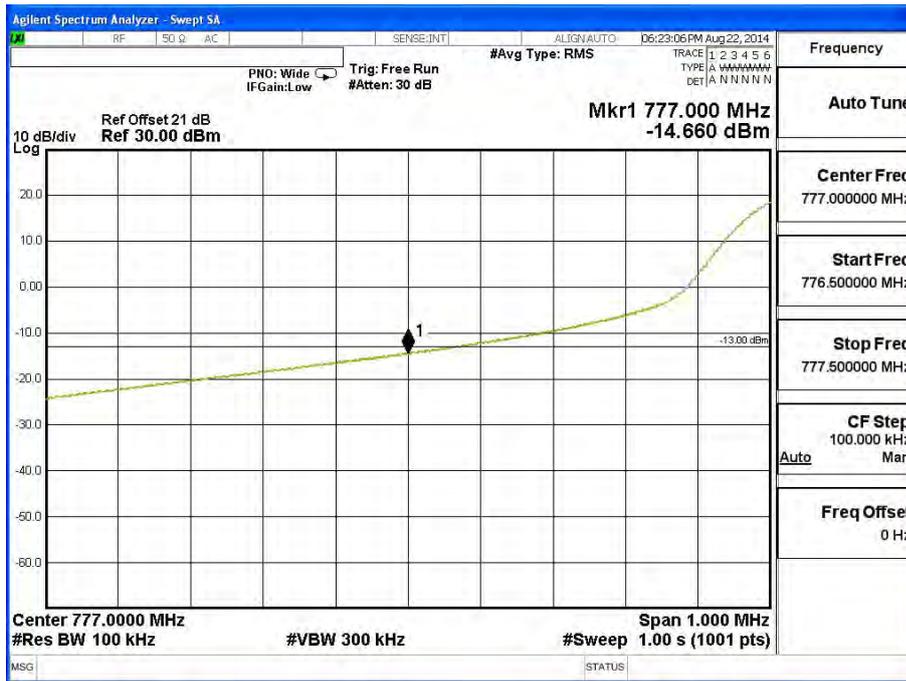
Band 13 (10M) 16QAM(50,0) LOWER Channel 23230 (782MHz)



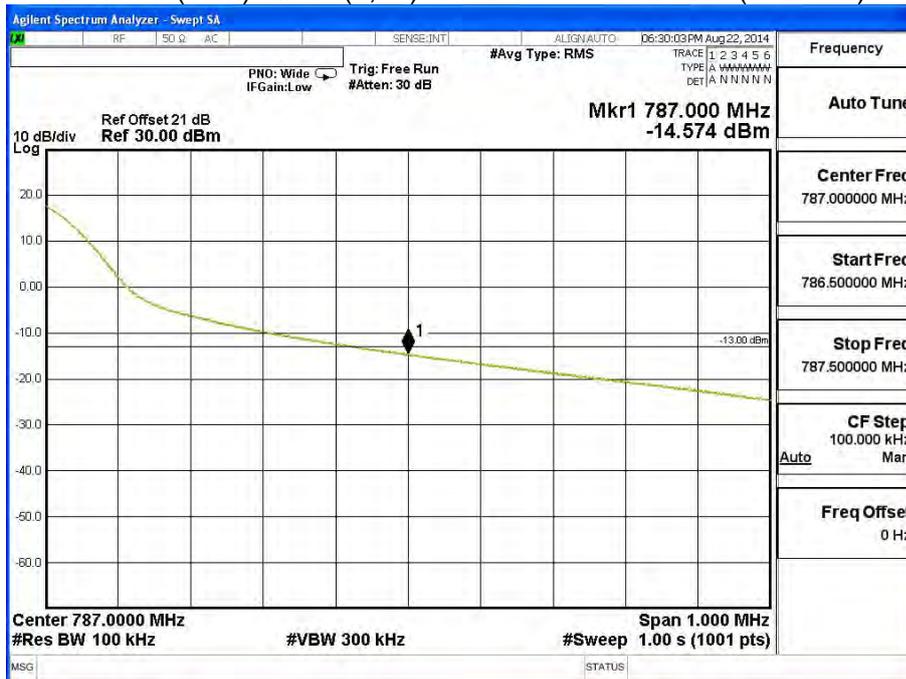
Band 13 (10M) 16QAM(50,0)UPPER Channel 23230(782MHz)



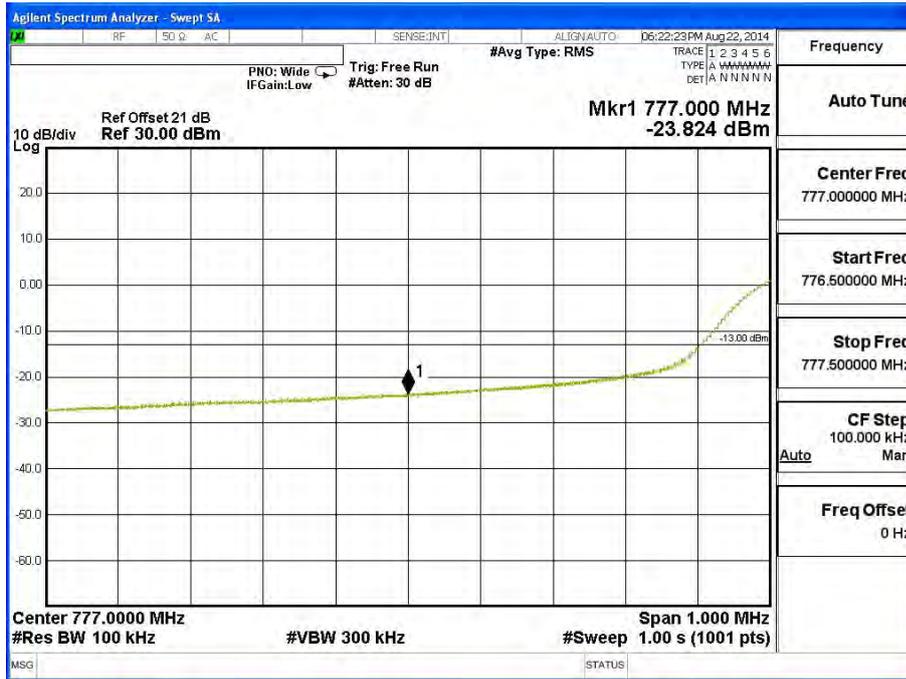
Band 13 (10M) QPSK(1,0)LOWER Channel 23230 (782MHz)



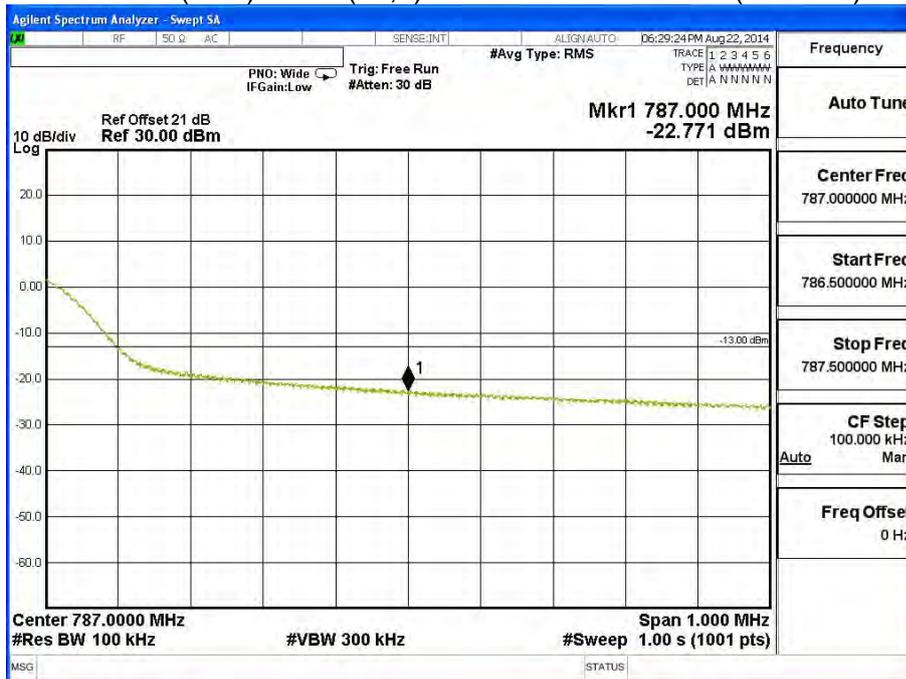
Band 13 (10M) QPSK(1,49)UPPER Channel 23230 (782MHz)



Band 13 (10M) QPSK(50,0) LOWER Channel 23230 (782MHz)



Band 13 (10M) QPSK(50,0) UPPER Channel 23230(782MHz)



## 5. Spurious Emission

### 5.1. Test Equipment

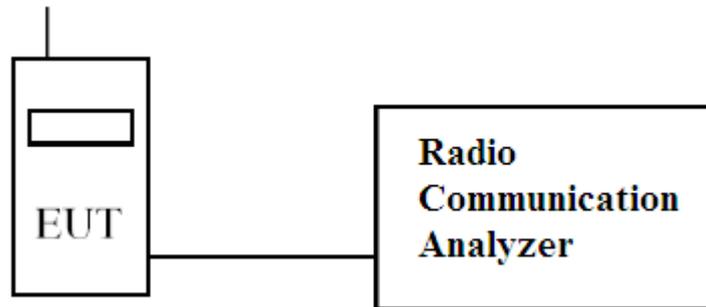
The following test equipments are used during the radiated emission test:

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒CTR	Spectrum Analyzer	Agilent	N9010A / MY48030495	2014/07/08
	Dual Directional couple	Agilent	778D / 50550	2013/10/07
	Directional coupler	Agilent	87300C / MY44300352	2014/01/06
☒Site#3	Test Receiver	R & S	ESCS 30/ 100367	2013/12/04
	Radio Communication Analyzer	Anritsu	MT8820C / 6201091166	2014/01/17
	Spectrum Analyzer	Agilent	N9010A/ MY48030495	2014/07/08
	Bilog Antenna	Schaffner Chase	CBL6112B/ 2707	2014/06/13
	Horn Antenna	Schwarzbeck	9120D / 556	2013/12/20
	Pre-Amplifier	QTK	QTK-LK-E-I-AMP4/ CHM-0201003	2014/06/18

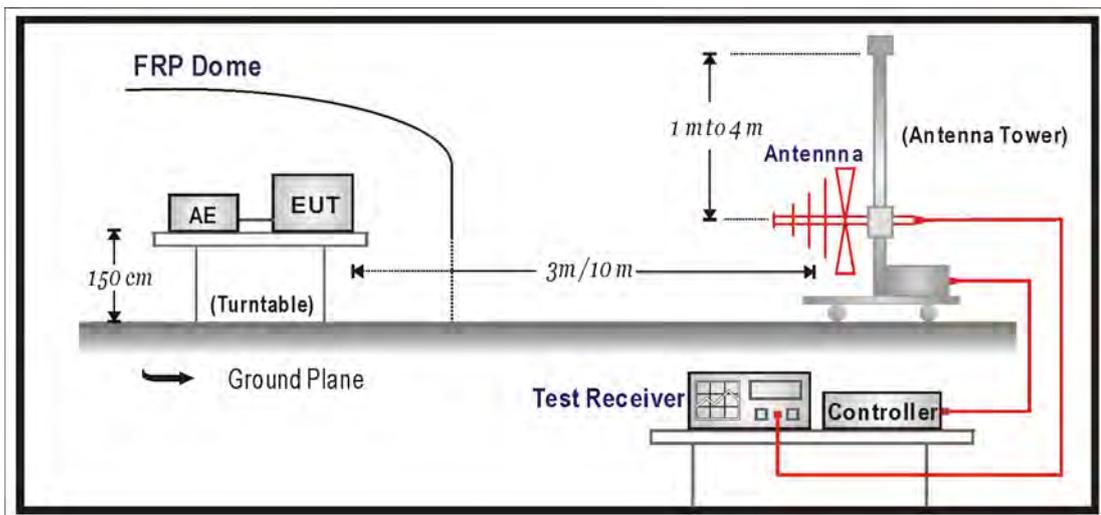
Note: All equipments that need to be calibrated are with calibration period of 1 year.

## 5.2. Test Setup

### 5.2.1.1 Spurious emissions at antenna terminals.



### 5.2.1.2 Field strength of spurious radiation.



## 5.3. Limits

Limit	$<-13\text{dBm}$
-------	------------------

$43 + 10\text{Log}(P)$  down on the carrier where P is the power in Watts.

## 5.4. Test Procedure

In accordance with Part 2.1051, the spurious emissions from the antenna terminal were measured. The transmitter output power was attenuated using a combination of filters and attenuators and the frequency spectrum investigated from 30MHz to 20GHz. The EUT was set to transmit on full power. The EUT was tested on Low, middle and High channels for both power levels. The resolution and video bandwidth was set to 1MHz/3MHz in accordance with Part 27.53(h). The spectrum analyzer detector was set to Max Hold. In addition, measurements were made up to the 10<sup>th</sup> harmonic of the fundamental. The device was then replaced with a substitution antenna, which input signal was adjusted until the received level matched that of the previously detected emission.

- (1) The EUT is tested with maximum rated TX power via the Base Station simulator.
- (2) The EUT is tested in three orthogonal planes, The worst case was showing in this report.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to TIA/EIA 603-C on radiated measurement.

## 5.5. Test Specification

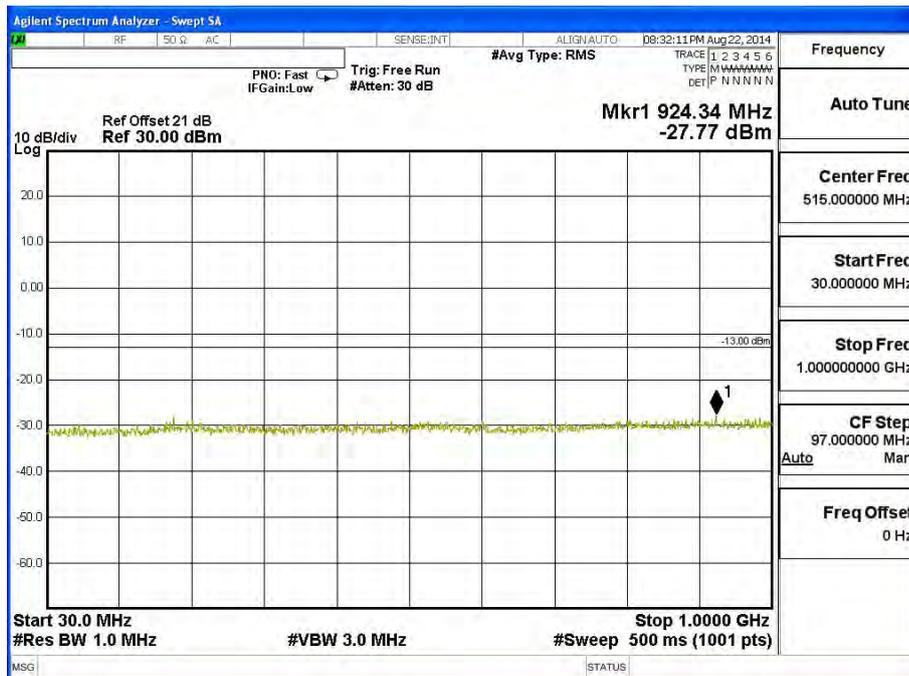
According to Part 2.1051, 2.1053, 27.53(h).

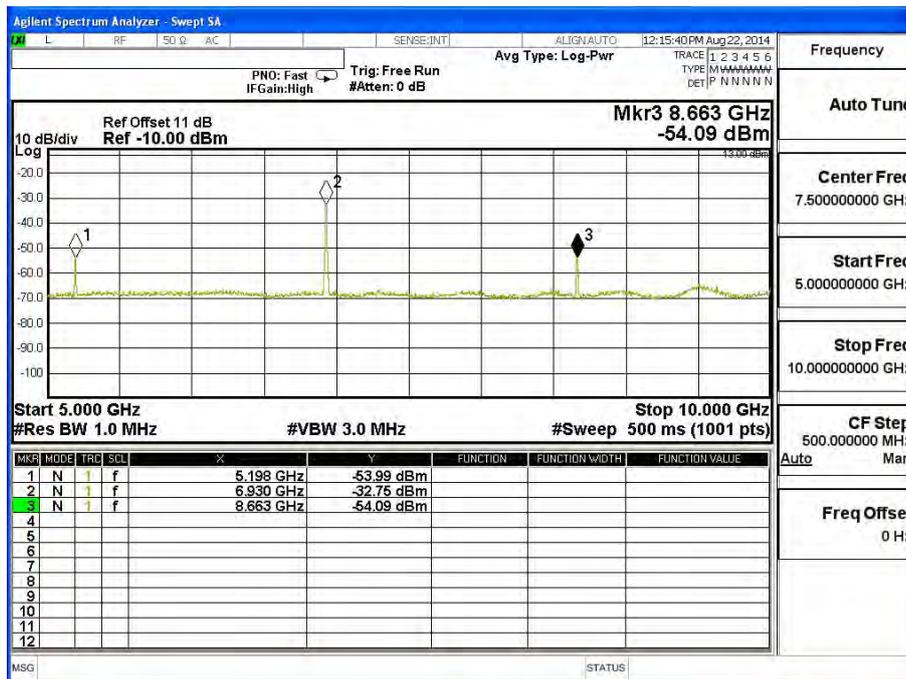
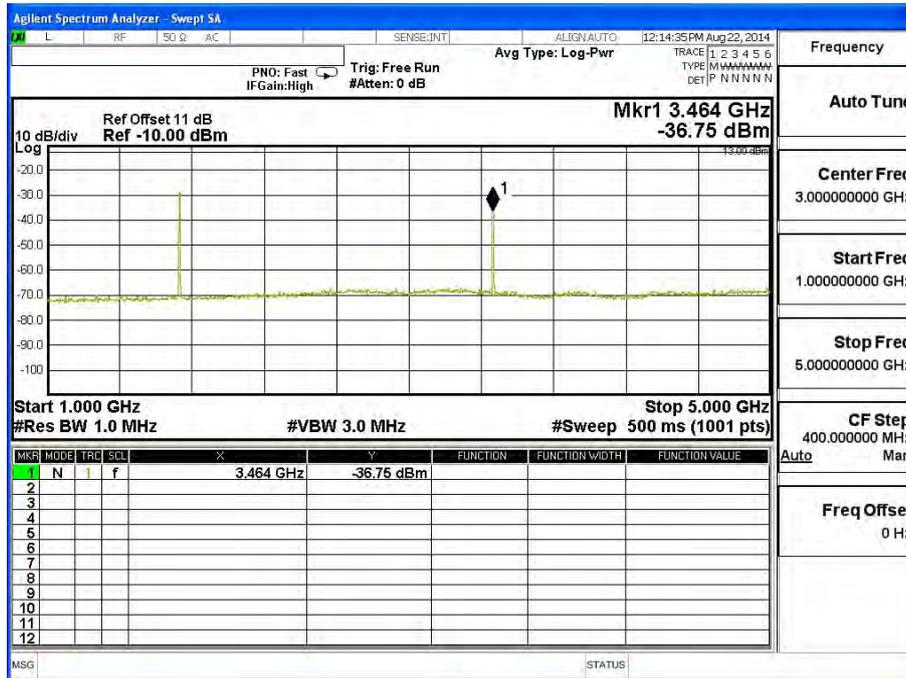
### 5.6. Test Result of Spurious Emission

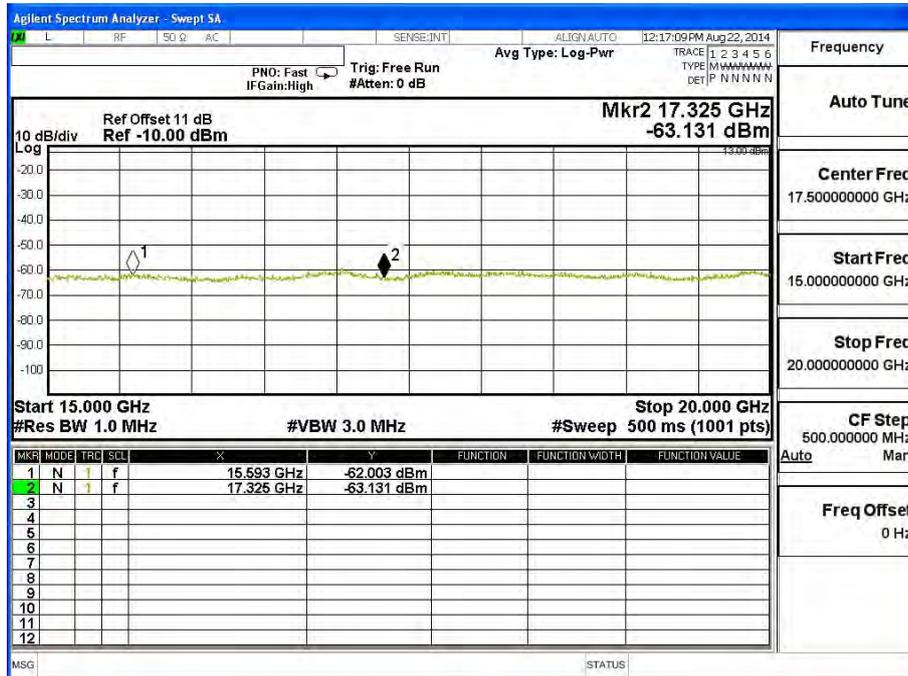
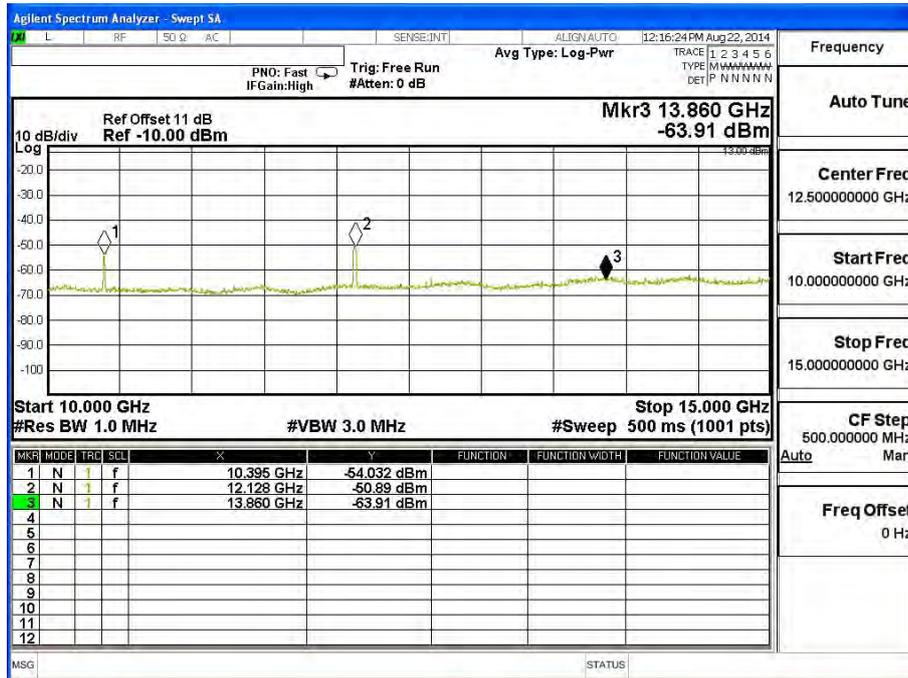
Product	Notebook PC		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2014/09/19	Test Site	CTR
Test Condition	LTE-Band IV (5M)	Test Range	30MHz~20GHz

#### LTE-Band IV (5M) QPSK(12,6) CH20175

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3464	-36.750	1.1	-35.650	-13
5198	-53.990	1.23	-52.760	-13
6930	-32.750	1.59	-31.160	-13
8663	-54.090	1.89	-52.200	-13
10395	-54.032	2.07	-51.962	-13
12128	-50.890	2.26	-48.630	-13
13860	-63.910	2.64	-61.270	-13
15593	-62.003	3.5	-58.503	-13
17325	-63.131	3.7	-59.431	-13







Product	Notebook PC		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2014/09/19	Test Site	CTR
Test Condition	LTE-Band IV (5M)	Test Range	30MHz~20GHz

**LTE- Band IV (5M) 16QAM(25,0) CH20175**

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3460	-35.870	1.1	-34.770	-13
5198	-54.810	1.23	-53.580	-13
6930	-31.620	1.59	-30.030	-13
8655	-52.670	1.89	-50.780	-13
10395	-56.040	2.07	-53.970	-13
12125	-50.110	2.26	-47.850	-13
13860	-63.420	2.64	-60.780	-13
15593	-61.769	3.5	-58.269	-13
17325	-62.925	3.7	-59.225	-13

