

FCC Radio Test Report

FCC ID: 2ANJN-VT1611-EG91

Original Grant

Report No. : TB-FCC174180
Applicant : Anytrek Corporation
Equipment Under Test (EUT)
EUT Name : TrackLight
Model No. : VT1611
S/N : VT-2006904-01000001
Brand Name : ANYTREK
Sample ID : 20200527-07_1-01
Receipt Date : 2020-06-11
Test Date : 2020-06-12 to 2020-07-12
Issue Date : 2020-07-13
Standards : 47 CFR Part 2, 22(H), 24(E), 27
Test Method : ANSI C63.26 2015
Conclusions : PASS

In the configuration tested, the EUT complied with the standards specified above,

Test/Witness Engineer :

Jack

Jack Deng

Engineer Supervisor :

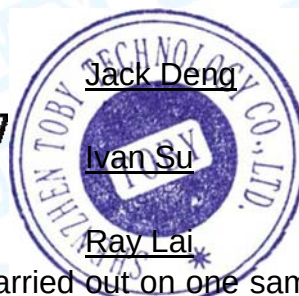
IVAN SU

Ivan Su

Engineer Manager :

Ray Lai

Ray Lai



This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

Contents

CONTENTS.....	2
1. GENERAL INFORMATION ABOUT EUT	5
1.1 Client Information.....	5
1.2 General Description of EUT (Equipment Under Test)	5
1.3 Block Diagram Showing the Configuration of System Tested.....	11
1.4 Description of Support Units	11
1.5 Description of Test Mode.....	12
1.6 Measurement Uncertainty	14
1.7 Test Facility.....	14
2. TEST SUMMARY	15
3. TEST SOFTWARE.....	15
4. TEST EQUIPMENT.....	16
5. CONDUCTED RF OUTPUT POWER.....	17
5.1 Test Standard and Limit.....	17
5.2 Test Setup.....	17
5.3 Test Procedure.....	17
5.4 Deviation From Test Standard.....	17
5.5 EUT Operating Condition	17
5.6 Test Data.....	17
6. PEAK-AVERAGE RATIO	18
6.1 Test Standard and Limit.....	18
6.2 Test Setup.....	18
6.3 Test Procedure.....	18
6.4 Deviation From Test Standard.....	18
6.5 EUT Operating Condition	18
6.6 Test Data.....	18
7. OCCUPIED BANDWIDTH	19
7.1 Test Standard and Limit.....	19
7.2 Test Setup.....	19
7.3 Test Procedure.....	19
7.4 Deviation From Test Standard.....	20
7.5 EUT Operating Condition	20
7.6 Test Data.....	20
8. OUT OF BAND EMISSION AT ANTENNA TERMINALS.....	21
8.1 Test Standard and Limit.....	21
8.2 Test Setup.....	21
8.3 Test Procedure.....	22
8.4 Deviation From Test Standard.....	22
8.5 EUT Operating Condition	22

8.6 Test Data.....	22
9. BAND EDGE TEST	23
9.1 Test Standard and Limit.....	23
9.2 Test Setup.....	23
9.3 Test Procedure.....	23
9.4 Deviation From Test Standard.....	24
9.5 EUT Operating Condition	24
9.6 Test Data.....	24
10. RADIATED OUTPUT POWER	25
10.1 Test Standard and Limit	25
10.2 Test Setup.....	25
10.3 Test Procedure.....	26
10.4 Deviation From Test Standard.....	26
10.5 EUT Operating Condition	26
10.6 Test Data.....	26
11. RADIATED OUT BAND OF EMISSIONS.....	27
11.1 Test Standard and Limit	27
11.2 Test Setup.....	27
11.3 Test Procedure.....	27
11.4 Deviation From Test Standard.....	28
11.5 EUT Operating Condition	28
11.6 Test Data.....	28
12. FREQUENCY STABILITY	29
12.1 Test Standard and Limit	29
12.2 Test Setup.....	29
12.3 Test Procedure.....	30
12.4 Deviation From Test Standard.....	30
12.5 EUT Operating Condition	30
12.6 Test Data.....	30
ATTACHMENT A--CONDUCTED RF OUTPUT POWER	31
ATTACHMENT B--PEAK-AVERAGE RATIO	48
ATTACHMENT C--OCCUPY BANDWIDTH	56
ATTACHMENT D--OUT OF BAND EMISSION AT ANTENNA TERMINALS	96
ATTACHMENT E--BAND EDGE TEST	129
ATTACHMENT F--RADIATED OUTPUT POWER	162
ATTACHMENT G--RADIATED OUT BAND OF EMISSIONS	179
ATTACHMENT H--FREQUENCY STABILITY	196

Revision History

Report No.	Version	Description	Issued Date
TB-FCC174180	Rev.01	Initial issue of report	2020-07-13

1. General Information about EUT

1.1 Client Information

Applicant	:	Anytrek Corporation
Address	:	4405 E Airport Dr, Suite 106, Ontario, CA 91761
Manufacturer	:	Shenzhen Anxingzhiyuan Technology Co., Ltd.
Address	:	No.302, Building No.6, COFCO(Fuan)Robot Intelligent Building Industrial Park, No.90 Dayang Road, Fuhai Street, Baoan District, Shenzhen, Guangdong, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	TrackLight
Models No.	:	VT1611
Model Difference	:	N/A
Product Description	:	LTE Band 2:TX: 1850MHz-1910MHz, RX: 1930MHz-1990MHz LTE Band 4:TX: 1710MHz-1755MHz, RX: 2110MHz-2155MHz LTE Band 5:TX: 824MHz-849MHz, RX: 869MHz-894MHz LTE Band 12: TX: 699MHz -716MHz, RX: 729MHz-746MHz LTE Band 13: TX: 777MHz -787MHz, RX: 746MHz-756MHz LTE Band 25:TX: 1850MHz-1915MHz, RX: 1930MHz-1995MHz LTE Band 26:TX: 824MHz-849MHz, RX: 869MHz-894MHz
	Antenna Type:	PCB Antenna
	Antenna Gain:	B2: 1.31dBi; B4: 1.35dBi; B5: 0.41dBi; B12: 0.20dBi; B13: 0.30dBi; B25: 1.32dBi; B26: 0.42dBi;
	Modulation Type:	QPSK, 16QAM
	Bandwidth:	LTE Band 2 :1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 4 :1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 5 :1.4MHz/3MHz/5MHz/10MHz LTE Band 12 :1.4MHz/3MHz/5MHz/10MHz LTE Band 13 : 5MHz/10MHz LTE Band 25 :1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 26 :1.4MHz/3MHz/5MHz/10MHz/15MHz
Power Rating	:	Input: DC 12*1A or DC 3.7V by 3000mAh Li-Po.
Software Version	:	V1.0.52
Hardware Version	:	V7.01
For LTE Category 1, 16QAM only supports 25%RB.		

Note:

- (1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (2) Channel List

LTE Band 2(1.4MHz)		LTE Band 2(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18607	1850.70	18615	1851.50
18608	1850.80	18616	1851.60
.....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
.....			
19192	1909.20	19184	1908.40
19193	1909.30	19185	1908.50
LTE Band 2(5MHz)		LTE Band 2(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18615	1851.50	18625	1855.00
18616	1851.60	18626	1854.90
.....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
.....			
19154	1908.40	19174	1907.90
19185	1908.50	19175	1905.00
LTE Band 2(15MHz)		LTE Band 2(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18675	1857.50	18700	1860.00
18676	1857.60	18701	1860.10
.....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
.....			
19124	1902.40	19099	1899.90
19125	1902.50	19100	1900.00

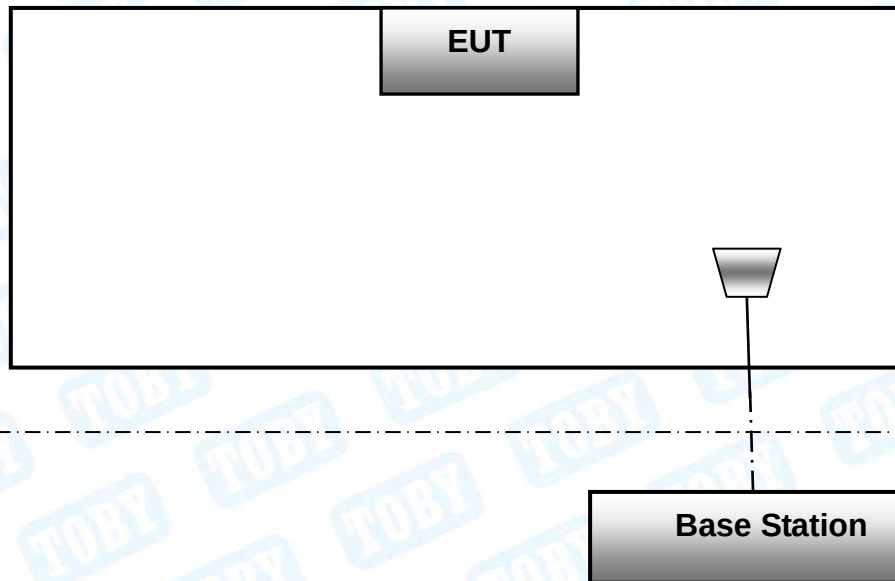
LTE Band 4(1.4MHz)		LTE Band 4(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19957	1710.70	19965	1711.50
19958	1710.80	19966	1711.60
.....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
.....			
20392	1754.20	20384	1753.40
20393	1754.30	20385	1753.50
LTE Band 4(5MHz)		LTE Band 4(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19975	1712.50	20000	1715.00
19976	1712.60	20001	1715.10
.....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
.....			
20374	1752.40	20349	1749.90
20375	1752.50	20350	1750.00
LTE Band 4(15MHz)		LTE Band 4(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20025	1717.50	20050	1720.00
20026	1717.60	20051	1720.10
.....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
.....			
20324	1747.40	20299	1744.90
20325	1747.50	20300	1745.00

LTE Band 5(1.4MHz)		LTE Band 5(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20407	824.70	20415	825.50
20408	824.80	20416	825.60
.....			
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
.....			
20643	848.20	20634	847.40
20643	848.30	20635	847.50
LTE Band 5(5MHz)		LTE Band 5(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20425	826.50	20450	829.00
20426	826.60	20451	829.10
.....			
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
.....			
20624	846.40	20599	843.90
20625	846.50	20600	844.00
LTE Band 12(1.4MHz)		LTE Band 12(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23017	699.70	23025	700.50
23018	699.80	23026	700.60
.....			
23094	707.40	23094	707.40
23095	707.50	23095	707.50
23096	707.60	23096	707.60
.....			
23172	715.20	23164	714.30
23173	715.30	23165	714.40
LTE Band 12(5MHz)		LTE Band 12(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23035	701.50	23060	704.00
23036	701.40	23061	703.90
.....			
23094	707.40	23094	707.40
23095	707.50	23095	707.50
23096	707.60	23096	707.60
.....			

23156	713.40	23129	710.90
23155	713.50	23130	711.00
LTE Band 13(5MHz)		LTE Band 13(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23205	779.50	.....	.....
23205	779.60	.....	.....
.....			
23229	781.90	.....	.....
23230	782.00	23230	782.00
23231	782.10	.....	.....
.....			
23254	784.40	.....	.....
23255	784.50	.....	.....
LTE Band 25(1.4MHz)		LTE Band 25(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26047	1850.70	26055	1851.50
26048	1850.80	26056	1851.60
.....			
26354	1882.40	26354	1882.40
26355	1882.50	26355	1882.50
26356	1882.60	26356	1882.60
.....			
26682	1914.20	26674	1913.40
26683	1914.30	26675	1913.50
LTE Band 25(5MHz)		LTE Band 25(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26065	1852.50	26090	1855.00
26066	1852.40	26091	1855.10
.....			
26354	1882.40	26354	1882.40
26355	1882.50	26355	1882.50
26356	1882.60	26356	1882.60
.....			
26664	1912.40	26639	1909.90
26665	1912.50	26640	1910.00
LTE Band 25(15MHz)		LTE Band 25(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26115	1857.50	26047	1860.00
26116	1857.60	26048	1850.80
.....			
26354	1882.40	26354	1882.40
26355	1882.50	26355	1882.50

26356	1882.60	26356	1882.60
.....			
26614	1907.40	26682	1904.90
26615	1907.50	26590	1905.00
LTE Band 26(1.4MHz)		LTE Band 26(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26797	824.70	26805	825.50
26798	824.60	26806	825.60
.....			
26914	836.40	26914	836.40
26915	836.50	26915	836.50
26916	836.60	26916	836.60
.....			
27032	848.20	27024	847.40
27033	848.30	27025	847.50
LTE Band 26(5MHz)		LTE Band 26(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26815	826.50	26840	829.00
26816	826.70	26841	829.10
.....			
26914	836.40	26914	836.40
26915	836.50	26915	836.50
26916	836.60	26916	836.60
.....			
27014	846.40	26989	843.90
27015	846.50	26990	844.00
LTE Band 26(15MHz)			
Channel	Frequency (MHz)		
26865	831.50		
26866	831.60		
.....			
26914	836.40		
26915	836.50		
26916	836.60		
.....			
26964	841.40		
26965	841.50		

1.3 Block Diagram Showing the Configuration of System Tested



The above block diagram of setup is the normal mode. And more detail please refer to the test setup of each test item of bellow.

1.4 Description of Support Units

The EUT has been tested as an independent unit.

1.5 Description of Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 v03r01 and ANSI C63.26 2015 Power Meas. License Digital Systems with maximum output power. Radiated measurements are performed by rotating the EUT in three different or tho-gonal test planes to find the maximum emission.

Remark:

1. The mark “v ” means that this configuration is chosen for testing
2. The mark “--” means that this bandwidth is not supported.
3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated

ITEMS	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
RF Output Power	2	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	4	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	5	V	V	V	V	--	--	V	V	V	V	V	V	V	V
	12	V	V	V	V	--	--	V	V	V	V	V	V	V	V
	13	--	--	V	V	--	--	V	V	V	V	V	V	V	V
	25	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	26	V	V	V	V	V	--	V	V	V	V	V	V	V	V
Peak-to-Average Ratio	2	--	--	--	--	--	V	V	V	V			V	V	V
	4	--	--	--	--	--	V	V	V	V			V	V	V
	5	--	--	--	V	--	--	V	V	V			V	V	V
	12	--	--	--	V	--	--	V	V	V			V	V	V
	13	--	--	--	V	--	--	V	V	V			V	V	V
	25	--	--	--	--	--	V	V	V	V			V	V	V
	26	--	--	--	--	V	--	V	V	V			V	V	V
99% & -26 dB Occupied Bandwidth	2	V	V	V	V	V	V	V	V	V			V	V	V
	4	V	V	V	V	V	V	V	V	V			V	V	V
	5	V	V	V	V	--	--	V	V	V			V	V	V
	12	V	V	V	V	--	--	V	V	V			V	V	V
	13	--	--	V	V	--	--	V	V	V			V	V	V
	25	V	V	V	V	V	V	V	V	V			V	V	V
	26	V	V	V	V	V	--	V	V	V			V	V	V
Spurious Emissions at Antenna Terminal	2	V	V	V	V	V	V	V	--	V		V	V	V	V
	4	V	V	V	V	V	V	V	--	V		V	V	V	V
	5	V	V	V	V	--	--	V	--	V		V	V	V	V
	12	V	V	V	V	--	--	V	--	V		V	V	V	V
	13	--	--	V	V	--	--	V	--	V		V	V	V	V
	25	V	V	V	V	V	V	V	--	V		V	V	V	V
	26	V	V	V	V	V	--	V	--	V		V	V	V	V

Field Strength of Spurious Radiation	2	V	V	V	V	V	V	V	V	V			V	
	4	V	V	V	V	V	V	V	V	V			V	
	5	V	V	V	V	--	--	V	V	V			V	
	12	V	V	V	V	--	--	V	V	V			V	
	13	--	--	V	V	--	--	V	V	V			V	
	25	V	V	V	V	V	V	V	V	V			V	
	26	V	V	V	V	V	--	V	V	V			V	
Out of band emission, Band Edge	2	V	V	V	V	V	V	V	V	--		V	V	V
	4	V	V	V	V	V	V	V	V	--		V	V	V
	5	V	V	V	V	--	--	V	V	--		V	V	V
	12	V	V	V	V	--	--	V	V	--		V	V	V
	13	--	--	V	V	--	--	V	V	--		V	V	V
	25	V	V	V	V	V	V	V	V	--		V	V	V
	26	V	V	V	V	V	--	V	V	--		V	V	V
Frequency stability	2	V	V	V	V	V	V	V	V	V			V	
	4	V	V	V	V	V	V	V	V	V			V	
	5	V	V	V	V	--	--	V	V	V			V	
	12	V	V	V	V	--	--	V	V	V			V	
	13	--	--	V	V	--	--	V	V	V			V	
	25	V	V	V	V	V	V	V	V	V			V	
	26	V	V	V	V	V	--	V	V	V			V	

The EUT is LTE Category 1, 16QAM only supports 25%RB. So the 16QAM only test 25%RB.

Note: (1) During the testing procedure, the EUT is in link mode with base station emulator at maximum power level in each test mode.

(2) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on Z-plane as the normal use. Therefore only the test data of this Z-plane was used for radiated emission measurement test.

1.6 Measurement Uncertainty

Test Item	Parameters	Expanded Uncertainty (U_{Lab})
RF Power, conducted	/	± 0.82 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	± 4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	± 4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	± 4.20 dB

1.7 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A.

2. Test Summary

Test Item	Section in CFR 47	Result
RF Output Power	Part 2.1046 Part 22.913(a)(2) Part 24.232(c) Part 27.50 (b)(10) Part 27.50 (d)(4) Part 27.50 (h)(2)	PASS
Peak-to-Average Ratio	Part 24.232(d) Part 27.50(d)(5)	PASS
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 22.917(a) Part 24.238(b) Part 27.53(h) Part 27.53(m)	PASS
Spurious Emissions at Antenna Terminal	Part 2.1051 Part 24.238(a) Part 27.53 (h) Part 27.53(m)	PASS
Field Strength of Spurious Radiation	Part 2.1053 Part 22.917(a) Part 24.238(a) Part 27.53 (h) Part 27.53(m)	PASS
Out of band emission, Band Edge	Part 24.238(a) Part 22.917(a) Part 27.53 (h) Part 27.53(m)	PASS
Frequency stability vs. temperature	Part 27.54 Part 24.235 Part 22.355 Part 2.1055(a)(1)(b)	PASS
Frequency stability vs. voltage	Part 27.54 Part 24.235 Part 22.355 Part 2.1055(d)(2)	PASS

Pass: The EUT complies with the essential requirements in the standard.

3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Radiation Emission	EZ-EMC	EZ	FA-03A2RE

4. Test Equipment

Radiation Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 13, 2019	Jul. 12, 2020
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 13, 2019	Jul. 12, 2020
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 13, 2019	Jul. 12, 2020
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.01, 2020	Feb. 28, 2021
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.01, 2020	Feb. 28, 2021
Horn Antenna	ETS-LINDGREN	BBHA 9170	BBHA9170582	Aug.07, 2019	Aug. 06, 2020
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 13, 2019	Jul. 12, 2020
Pre-amplifier	Sonoma	310N	185903	Mar.01, 2020	Feb. 28, 2021
Pre-amplifier	HP	8449B	3008A00849	Mar.01, 2020	Feb. 28, 2021
Pre-amplifier	SKET	LNPA_1840G-50	SK201904032	Jul. 27, 2019	Jul. 26, 2020
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.01, 2020	Feb. 28, 2021
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducted Emission					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 13, 2019	Jul. 12, 2020
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul. 13, 2019	Jul. 12, 2020
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 16, 2019	Sep. 15, 2020
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 16, 2019	Sep. 15, 2020
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 16, 2019	Sep. 15, 2020
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 16, 2019	Sep. 15, 2020
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 16, 2019	Sep. 15, 2020
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 16, 2019	Sep. 15, 2020
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 16, 2019	Sep. 15, 2020
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	144382	Sep. 16, 2019	Sep. 15, 2020
Universal Radio Communication Tester	Rohde&Schwarz	CMU200	103903	Jul. 13, 2019	Jul. 12, 2020

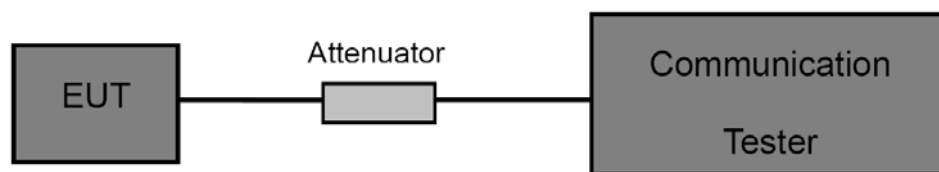
5. Conducted RF Output Power

5.1 Test Standard and Limit

5.1.1 Test Standard

FCC part 2.1046, FCC part 22.913(a)(2),
FCC part 24.232(c), FCC Part 27.50(b)&(d),
FCC Part 27.50 (h)

5.2 Test Setup



5.3 Test Procedure

- (1) The EUT is coupled to the Base Station with the suitable Attenuator, the path loss is calibrated to correct the reading.
- (2) A call is set up by the Base Station to the generic call set up procedure.
- (3) Set EUT at maximum power level through base station by power level command.
- (4) Then read record the power value from the Base Station in dBm.

5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

5.6 Test Data

Please refer to the Attachment A.

6. Peak-Average Ratio

6.1 Test Standard and Limit

6.1.1 Test Standard

FCC part 24.232(d)

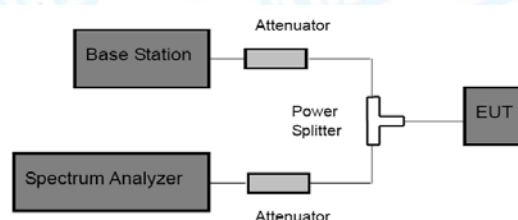
FCC Part 27.50(d), FCC Part 27.50 (h)

6.1.2 Test Limit

Peak-to-Average Ratio

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

6.2 Test Setup



6.3 Test Procedure

According with KDB 971168

- (1) The signal analyzer's CCDF measurement profile is enabled.
- (2) Frequency = carrier center frequency.
- (3) Measurement BW > Emission bandwidth of signal.
- (4) The signal analyzer was set to collect one million samples to generate the CCDF curve.
- (5) Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level.
- (6) The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which of the transmitter is operating at maximum power.

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

6.6 Test Data

Please refer to the Attachment B.

7. Occupied Bandwidth

7.1 Test Standard and Limit

7.1.1 Test Standard

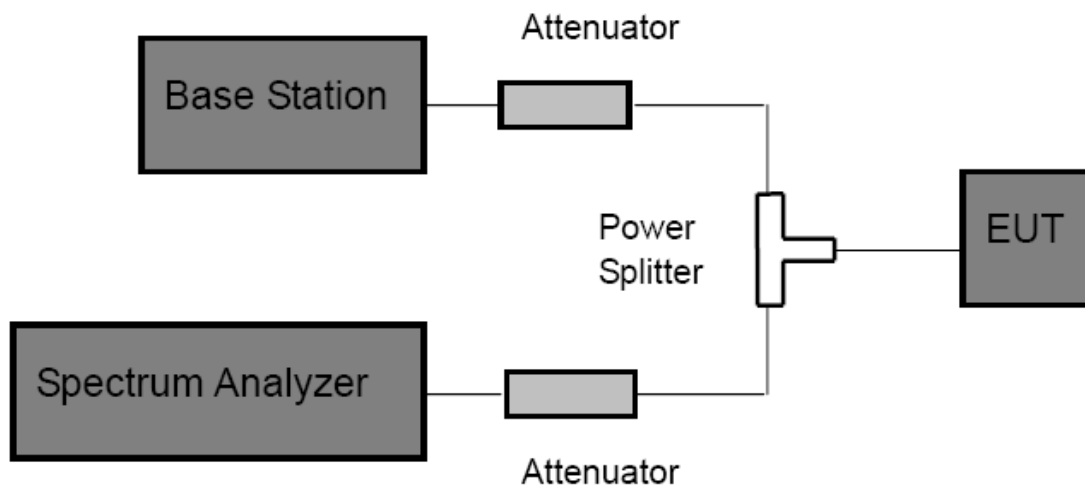
FCC Part 2: 2.1049, FCC Part 22.917(a),
FCC part 24.238(b)
FCC Part 27.53(h)
FCC Part 27.53(m)

7.1.2 Test Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Occupied bandwidth is also known as 99% power and -26dBC occupied bandwidths.

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and Base station via power splitter as show in the block diagram above.
- (2) The resolution bandwidth of the Spectrum Analyzer is set to at least 1% of the occupied bandwidth. VBW= 3 times RBW.
- (3) The low, middle and the high channels are selected to perform tests respectively.
- (4) Set the frequency range of the Spectrum Analyzer suitably to capture the waveform; search peak; make a line whose value is 26dB lower than the peak; mark two points which the line intersected the waveform at; finally record the delta of the two points as the occupied bandwidth and the plot.
- (5) Set the Spectrum Analyzer Occupied bandwidth function to measure the 99% occupied bandwidth.

7.4 Deviation From Test Standard

No deviation

7.5 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

7.6 Test Data

Please refer to the Attachment C.

8. Out of Band Emission at Antenna Terminals

8.1 Test Standard and Limit

8.1.1 Test Standard

FCC Part 2: 2.1051, 2.1057

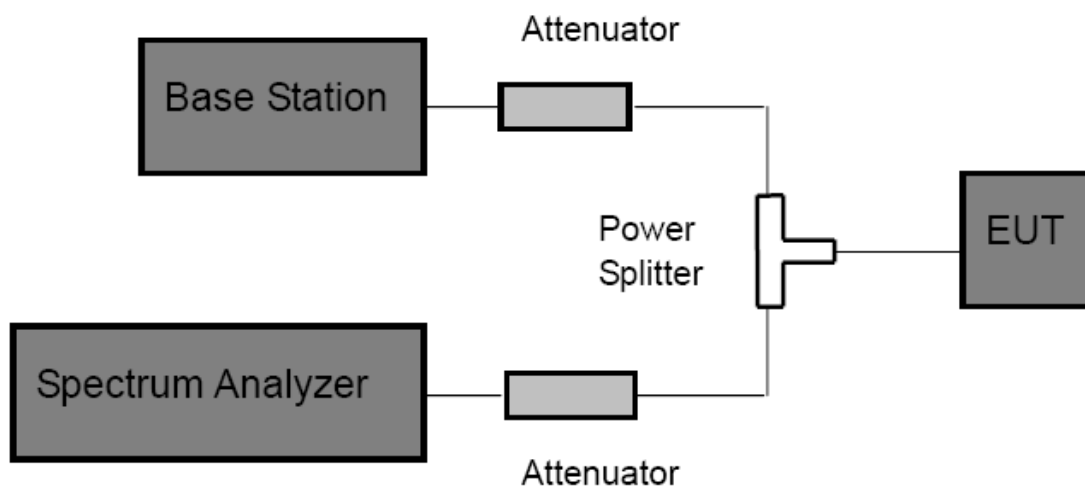
FCC Part 22.917(a), FCC part 24.238(a)

FCC Part 27.53 (h), FCC Part 27.53(m)

8.1.2 Test Limit

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. 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. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.

8.2 Test Setup



8.3 Test Procedure

- 1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
- 2 The resolution bandwidth of the spectrum analyzer was set at 100 kHz when below 1GHz, 1MHz when above 1 GHz; sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.
- 3 For the out of band: Set the RBW=100 kHz, VBW=300 kHz when below 1 GHz, RBW =1 MHz, VBW=3 MHz when above 1 GHz, Start=30MHz, Stop= 10th harmonic.
- 4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter.

8.4 Deviation From Test Standard

No deviation

8.5 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

8.6 Test Data

Please refer to the Attachment D.

9. Band Edge Test

9.1 Test Standard and Limit

9.1.1 Test Standard

FCC Part 2: 2.1051, 2.1057

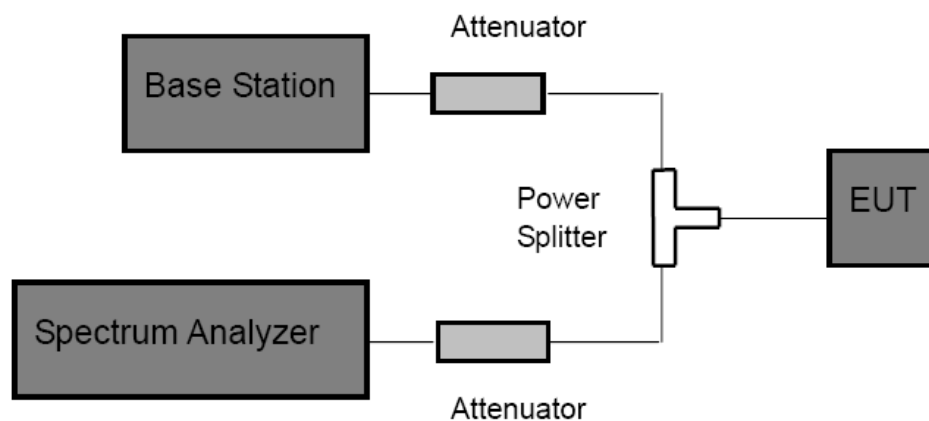
FCC Part 22.917(a), FCC part 24.238(a)

FCC Part 27.53 (h), FCC Part 27.53(m)

9.1.2 Test Limit

Band 7: For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. 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. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.

9.2 Test Setup



9.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and Base station via power splitter as show in the block diagram above.
- (2) Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter.

9.4 Deviation From Test Standard

No deviation

9.5 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

9.6 Test Data

Please refer to the Attachment E.

10. Radiated Output Power

10.1 Test Standard and Limit

10.1.1 Test Standard

FCC Part 2.1046, FCC Part 22.913(a)(2),

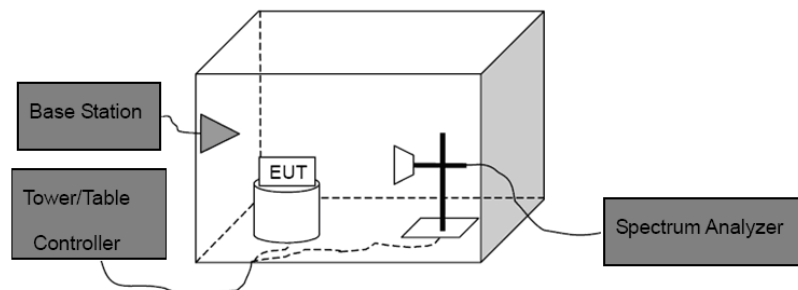
FCC part 24.232(c)

FCC part 27.50(c), FCC part 27.50(d)

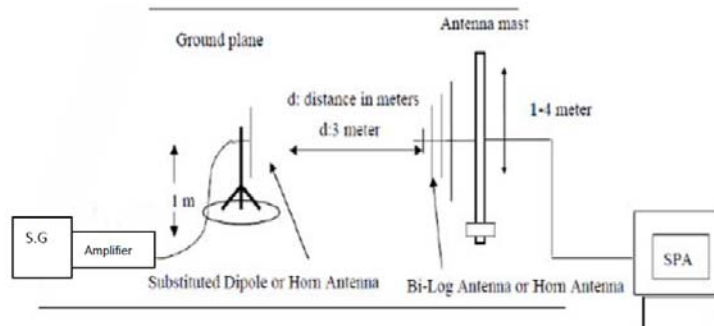
10.1.2 Test Limit

E.I.R.P	E.I.R.P	E.R.P	
LTE Band 2	LTE Band 4	LTE Band 5	
2W(33 dBm)	1W(30 dBm)	7W(38.45dBm)	
E.R.P	E.R.P	E.I.R.P	E.R.P
LTE Band 12	LTE Band 13	LTE Band 25	LTE Band 26
3W(34.77dBm)	3W(34.77dBm)	2W(33 dBm)	7W(38.45dBm)

10.2 Test Setup



Above 1G



Substituted Method

10.3 Test Procedure

- (1) The EUT was placed on an non-conductive rotating platform with 0.8 meter height in an anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RBW=3 MHz, VBW=3 MHz and peak detector settings.
- (2) During the measurement, the EUT was enforced in maximum power and linked with the Base Station. The highest was recorded from analyzer power level (LVT) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
- (3) Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to C63.26. The EUT was replaced by dipole antenna (for frequency below 1 GHz) or Horn antenna (for frequency above 1 GHz) at same location with same polarize of receiver antenna and then a known power of each measure frequency from S.G. was applied into the dipole antenna or Horn antenna through a TX cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna.

Note: In test, the S.G Connect the Pre-amplifier(Sonoma 310N Pre-amplifier for frequency below 1 GHz, HP 8449B Pre-amplifier for frequency above 1 GHz)

Then the EUT's EIRP and ERP was calculated with the correction factor:

$ERP = S.G.Level + Antenna\ Gain\ Cord.(dBd) - Cable\ Loss(dB)$

$EIRP = S.G.Level + Antenna\ Gain\ Cord.(dBi) - Cable\ Loss(dB)$

10.4 Deviation From Test Standard

No deviation

10.5 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

10.6 Test Data

Please refer to the Attachment F.
Measurement Data (worst case)

11. Radiated Out Band of Emissions

11.1 Test Standard and Limit

11.1.1 Test Standard

FCC Part 2: 2.1053, FCC Part 22.917(a)

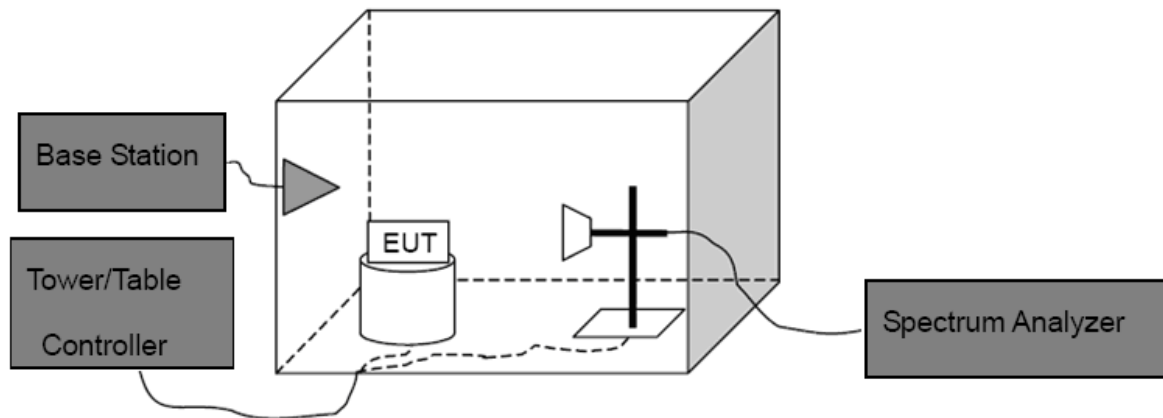
FCC part 24.238(a)

FCC Part 27.53 (h), FCC Part 27.53(m)

11.1.2 Test 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. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.

11.2 Test Setup



11.3 Test Procedure

- (1) The test system setup as show in the block diagram above.
- (2) The EUT was placed on an non-conductive rotating platform in an anechoic chamber. The radiated spurious emissions from 30MHz to 10th harmonious of fundamental frequency were measured at 3 m with a test antenna and a spectrum analyzer with RBW=1 MHz, VBW=1 MHz, peak detector settings.
- (3) During the measurement, the EUT was enforced in maximum power and linked with a base station. All the spurious emissions at 3m were measured by rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
- (4) When found the maximum level of emissions from the EUT. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB=10 log(TX power in Watts/0.001)-the absolute level

Spurious attenuation limit in dB=43+10 log(power out in Watts)

11.4 Deviation From Test Standard

No deviation

11.5 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

11.6 Test Data

Please refer to the Attachment G.
Measurement Data (worst case)

12. Frequency Stability

12.1 Test Standard and Limit

12.1.1 Test Standard

FCC Part 2.1055(a)(1)(b) FCC Part 22.355

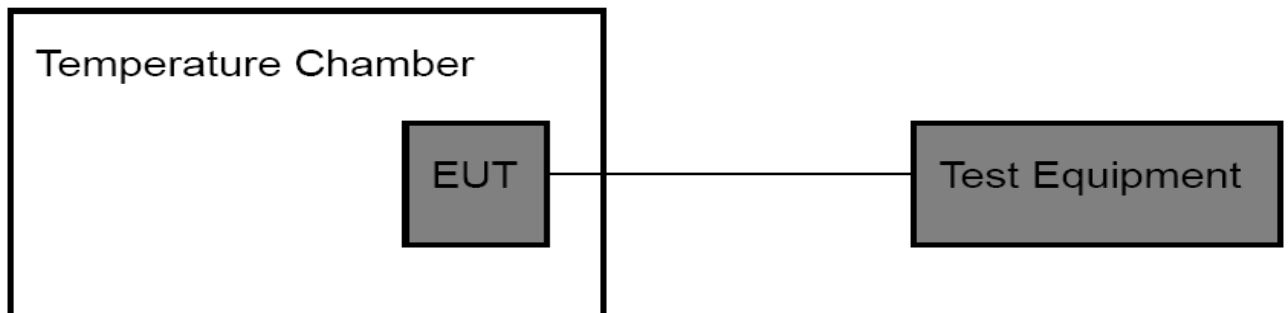
FCC Part 24.235, Part 27.54

12.1.2 Limit

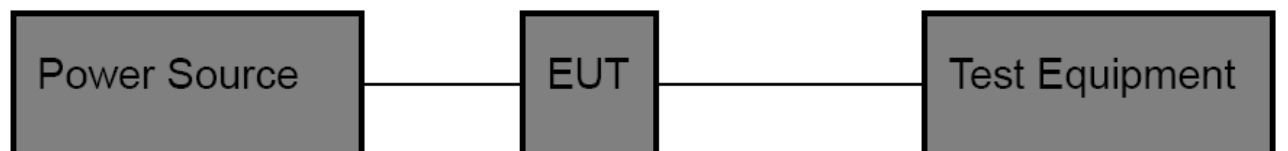
Limit
$\pm 2.5\text{ppm}$

12.2 Test Setup

For Temperature Test:



For Voltage Test:



12.3 Test Procedure

Test Procedures for Temperature Variation:

- (1) The EUT was set up in the thermal chamber and connected with the base station.
- (2) With power off, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
- (3) With power off, the temperature was raised in 10°C set up to 50°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
- (4) If the EUT cannot be turned on at -30°C , the testing lowest temperature will be raised in 10°C step until the EUT can be turned on.

Test Procedures for Voltage Variation:

- (1) The EUT was placed in a temperature chamber at $25 \pm 5^{\circ}\text{C}$ and connected with the base station.
- (2) Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.
- (3) The variation in frequency was measured for the worst case.

12.4 Deviation From Test Standard

No deviation

12.5 EUT Operating Condition

The Equipment Under Test was set to Communication with the Base Station.

12.6 Test Data

Please refer to the Attachment H.

ATTACHMENT A--CONDUCTED RF OUTPUT POWER

FDD-LTE Band 2						
Channel Bandwidth: 1.4 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.62	22.40	22.53	PASS
	1	3	22.50	22.46	22.74	PASS
	1	5	22.44	22.29	22.65	PASS
	3	0	22.52	22.42	22.67	PASS
	3	1	22.54	22.55	22.76	PASS
	3	3	22.49	22.52	22.82	PASS
	6	0	21.54	21.50	21.65	PASS
16QAM	1	0	20.99	21.28	21.83	PASS
	1	3	20.90	21.37	21.99	PASS
	1	5	21.10	21.34	21.93	PASS
	3	0	21.39	21.13	21.66	PASS
	3	1	21.39	21.09	21.75	PASS
	3	3	21.36	21.01	21.70	PASS
	6	0	20.38	20.28	20.58	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.50	22.52	22.63	PASS
	1	8	22.63	22.47	22.66	PASS
	1	14	22.58	22.39	22.67	PASS
	8	0	21.63	21.64	21.72	PASS
	8	4	21.58	21.69	21.87	PASS
	8	7	21.64	21.68	21.75	PASS
	15	0	21.21	21.64	21.71	PASS
16QAM	1	0	21.24	21.20	21.85	PASS
	1	8	21.16	21.23	21.86	PASS
	1	14	20.64	21.13	21.95	PASS
	8	0	20.59	20.63	20.55	PASS
	8	4	20.63	20.60	20.78	PASS
	8	7	20.42	20.61	20.91	PASS
	15	0	21.58	20.43	20.46	PASS

FDD-LTE Band 2						
Channel Bandwidth: 5 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.39	22.43	22.53	PASS
	1	12	22.96	22.78	22.78	PASS
	1	24	22.44	22.49	22.74	PASS
	12	0	21.64	21.59	21.60	PASS
	12	7	21.57	21.57	21.71	PASS
	12	13	21.55	21.46	21.77	PASS
	25	0	21.56	21.53	21.58	PASS
16QAM	1	0	21.04	21.00	21.03	PASS
	1	12	21.22	21.00	21.31	PASS
	1	24	20.89	20.87	21.26	PASS
	12	0	20.50	20.29	20.15	PASS
	12	7	20.51	22.43	20.24	PASS
	12	13	20.45	20.35	20.41	PASS
	25	0	21.57	20.24	22.53	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.79	22.47	22.47	PASS
	1	25	22.61	22.90	22.60	PASS
	1	49	22.41	22.36	22.62	PASS
	25	0	21.43	21.62	21.63	PASS
	25	12	21.60	21.61	21.59	PASS
	25	25	21.55	21.49	21.59	PASS
	50	0	21.42	21.54	21.77	PASS
16QAM	1	0	21.45	21.36	21.65	PASS
	1	25	21.75	21.64	21.48	PASS
	1	49	20.87	20.67	20.78	PASS
	25	0	20.54	20.87	20.43	PASS
	25	12	20.61	20.39	20.78	PASS
	25	25	21.52	21.49	21.36	PASS

FDD-LTE Band 2						
Channel Bandwidth: 15 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.76	22.78	22.41	PASS
	1	37	22.78	22.81	22.64	PASS
	1	74	22.72	22.56	22.54	PASS
	36	0	21.41	21.56	21.68	PASS
	36	20	21.58	21.59	21.66	PASS
	36	39	21.55	21.52	21.62	PASS
	75	0	21.65	21.35	21.48	PASS
16QAM	1	0	21.30	21.24	21.95	PASS
	1	37	21.16	21.18	21.94	PASS
	1	74	21.21	21.10	21.86	PASS
Channel Bandwidth: 20 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.16	22.48	22.45	PASS
	1	49	22.69	22.59	22.56	PASS
	1	99	22.24	22.43	22.35	PASS
	50	0	21.45	21.66	21.77	PASS
	50	24	21.53	21.49	21.58	PASS
	50	50	21.63	21.48	21.58	PASS
	100	0	21.34	22.52	21.28	PASS
16QAM	1	0	21.03	21.59	21.60	PASS
	1	49	21.29	21.58	21.55	PASS
	1	99	21.87	21.15	21.31	PASS

FDD-LTE Band 4						
Channel Bandwidth: 1.4 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.54	22.64	22.61	PASS
	1	3	22.83	22.72	22.61	PASS
	1	5	22.68	22.60	22.47	PASS
	3	0	22.63	22.73	22.49	PASS
	3	1	22.69	22.78	22.49	PASS
	3	3	22.67	22.78	22.45	PASS
	6	0	21.58	21.71	21.65	PASS
16QAM	1	0	21.76	21.47	21.29	PASS
	1	3	21.81	21.50	21.24	PASS
	1	5	21.69	21.30	20.98	PASS
	3	0	21.89	21.47	21.32	PASS
	3	1	21.95	21.54	21.34	PASS
	3	3	21.81	21.54	21.41	PASS
	6	0	20.79	20.54	20.40	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.64	22.73	22.29	PASS
	1	8	22.52	22.65	22.45	PASS
	1	14	22.70	22.90	22.69	PASS
	8	0	21.75	21.78	21.58	PASS
	8	4	21.81	21.78	21.54	PASS
	8	7	21.69	21.82	21.55	PASS
	15	0	21.76	21.74	21.62	PASS
16QAM	1	0	21.23	21.17	21.49	PASS
	1	8	21.09	21.07	21.24	PASS
	1	14	21.26	21.12	21.49	PASS
	8	0	20.74	20.56	20.46	PASS
	8	4	20.68	20.76	20.44	PASS
	8	7	20.60	20.79	20.37	PASS
	15	0	20.62	20.59	20.54	PASS

FDD-LTE Band 4						
Channel Bandwidth: 5 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.56	22.52	22.64	PASS
	1	12	22.77	22.73	22.78	PASS
	1	24	22.70	22.52	22.97	PASS
	12	0	21.72	21.75	21.72	PASS
	12	7	21.65	21.72	21.55	PASS
	12	13	21.77	21.71	21.72	PASS
	25	0	21.74	21.69	21.58	PASS
16QAM	1	0	21.19	21.62	21.31	PASS
	1	12	21.34	21.21	21.01	PASS
	1	24	22.56	21.09	21.08	PASS
	12	0	21.91	20.51	20.45	PASS
	12	7	20.80	20.47	20.25	PASS
	12	13	20.74	20.47	20.46	PASS
	25	0	20.95	20.65	20.43	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.64	22.87	22.59	PASS
	1	25	22.69	22.71	22.79	PASS
	1	49	22.59	22.67	22.78	PASS
	25	0	21.80	21.57	21.58	PASS
	25	12	21.72	21.68	21.52	PASS
	25	25	21.69	21.70	21.64	PASS
	50	0	21.74	21.59	21.55	PASS
16QAM	1	0	21.62	21.38	21.71	PASS
	1	25	21.64	21.38	21.59	PASS
	1	49	21.65	21.30	21.72	PASS
	25	0	20.38	20.18	20.19	PASS
	25	12	20.44	20.23	20.33	PASS
	25	25	20.36	20.06	20.27	PASS

FDD-LTE Band 4						
Channel Bandwidth: 15 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.64	22.61	22.55	PASS
	1	37	22.78	22.79	22.74	PASS
	1	74	22.61	22.63	22.56	PASS
	36	0	21.62	21.67	21.65	PASS
	36	20	21.60	21.75	21.59	PASS
	36	39	21.64	21.83	21.54	PASS
	75	0	21.45	21.67	21.29	PASS
16QAM	1	0	21.80	21.39	21.13	PASS
	1	37	21.38	21.37	21.20	PASS
	1	74	21.58	21.27	21.15	PASS
Channel Bandwidth: 20 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.48	22.67	22.73	PASS
	1	49	22.55	22.81	22.75	PASS
	1	99	22.59	22.61	22.66	PASS
	50	0	21.79	21.71	21.69	PASS
	50	24	21.61	21.80	21.62	PASS
	50	50	21.71	21.74	21.54	PASS
	100	0	21.67	21.59	21.68	PASS
16QAM	1	0	21.31	21.95	21.75	PASS
	1	49	21.34	21.64	21.73	PASS
	1	99	21.44	21.39	21.69	PASS

FDD-LTE Band 5						
Channel Bandwidth: 1.4 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	24.06	23.74	23.73	PASS
	1	3	24.12	23.83	23.85	PASS
	1	5	24.22	23.61	23.77	PASS
	3	0	24.10	23.82	23.81	PASS
	3	1	24.16	23.82	23.83	PASS
	3	3	24.16	23.82	23.79	PASS
	6	0	22.98	22.88	22.91	PASS
16QAM	1	0	22.42	22.88	22.96	PASS
	1	3	22.35	22.92	22.74	PASS
	1	5	22.60	22.79	22.71	PASS
	3	0	22.84	22.71	22.52	PASS
	3	1	22.91	22.70	22.53	PASS
	3	3	22.81	22.57	22.62	PASS
	6	0	21.97	21.90	21.85	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.91	24.24	24.12	PASS
	1	8	23.87	23.80	23.86	PASS
	1	14	23.95	24.02	24.06	PASS
	8	0	23.03	23.02	22.94	PASS
	8	4	23.08	22.89	23.00	PASS
	8	7	23.07	22.86	22.89	PASS
	15	0	23.11	22.99	23.04	PASS
16QAM	1	0	23.12	22.49	23.09	PASS
	1	8	23.02	22.29	22.94	PASS
	1	14	23.03	22.56	23.10	PASS
	8	0	22.00	22.23	21.78	PASS
	8	4	22.03	22.10	21.76	PASS
	8	7	22.00	22.06	21.65	PASS
	15	0	22.05	22.09	21.91	PASS

FDD-LTE Band 5						
Channel Bandwidth: 5 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.93	23.94	24.02	PASS
	1	12	24.13	23.85	24.19	PASS
	1	24	24.01	23.89	24.00	PASS
	12	0	23.00	23.10	23.02	PASS
	12	7	23.08	22.92	22.92	PASS
	12	13	23.06	23.05	22.93	PASS
	25	0	23.04	23.04	22.93	PASS
16QAM	1	0	22.51	22.48	22.57	PASS
	1	12	22.82	22.54	22.63	PASS
	1	24	23.14	22.48	22.48	PASS
	12	0	22.13	21.99	21.80	PASS
	12	7	22.02	21.91	21.80	PASS
	12	13	22.06	21.88	21.85	PASS
	25	0	21.81	21.57	21.98	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.84	24.13	23.86	PASS
	1	25	24.09	23.87	23.98	PASS
	1	49	24.12	23.98	23.90	PASS
	25	0	23.06	23.06	22.86	PASS
	25	12	23.15	23.04	22.78	PASS
	25	25	23.04	22.97	22.87	PASS
	50	0	23.09	22.89	23.02	PASS
16QAM	1	0	22.28	22.13	22.59	PASS
	1	25	22.23	22.23	22.30	PASS
	1	49	22.13	22.19	22.45	PASS
	25	0	22.93	22.10	22.28	PASS
	25	12	21.01	22.20	22.22	PASS
	25	25	22.85	22.07	22.20	PASS

FDD-LTE Band 12						
Channel Bandwidth: 1.4 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.80	23.67	23.70	PASS
	1	3	23.80	23.72	23.90	PASS
	1	5	23.78	23.74	23.79	PASS
	3	0	23.88	23.75	23.80	PASS
	3	1	23.94	23.73	23.94	PASS
	3	3	23.84	23.76	23.77	PASS
	6	0	22.88	22.75	22.74	PASS
16QAM	1	0	22.44	22.61	22.94	PASS
	1	3	22.50	22.49	22.98	PASS
	1	5	22.36	22.51	22.95	PASS
	3	0	22.68	22.61	22.73	PASS
	3	1	22.76	22.60	22.83	PASS
	3	3	22.67	22.36	22.79	PASS
	6	0	21.73	21.75	21.80	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.67	23.82	23.70	PASS
	1	8	23.69	23.94	23.61	PASS
	1	14	23.64	23.99	23.59	PASS
	8	0	23.07	22.83	22.82	PASS
	8	4	22.97	22.92	22.83	PASS
	8	7	22.86	22.96	22.80	PASS
	15	0	22.97	22.85	22.92	PASS
16QAM	1	0	22.46	22.60	22.94	PASS
	1	8	22.38	22.48	22.85	PASS
	1	14	22.33	22.40	22.86	PASS
	8	0	22.22	21.94	21.98	PASS
	8	4	22.08	22.02	21.98	PASS
	8	7	21.91	22.06	21.97	PASS
	15	0	21.88	21.83	21.83	PASS

FDD-LTE Band 12						
Channel Bandwidth: 5 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.59	23.74	23.74	PASS
	1	12	23.92	24.12	23.97	PASS
	1	24	23.56	23.79	23.89	PASS
	12	0	22.97	22.84	22.89	PASS
	12	7	22.88	22.91	22.94	PASS
	12	13	22.79	22.96	22.79	PASS
	25	0	22.92	22.91	22.83	PASS
16QAM	1	0	22.43	22.47	22.31	PASS
	1	12	22.21	22.54	22.39	PASS
	1	24	21.96	22.09	22.12	PASS
	12	0	21.91	21.69	21.63	PASS
	12	7	21.82	21.75	21.54	PASS
	12	13	21.82	21.68	21.58	PASS
	25	0	21.45	21.39	21.57	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.60	23.64	23.58	PASS
	1	25	23.61	24.42	24.08	PASS
	1	49	23.47	23.69	23.35	PASS
	25	0	22.78	22.80	22.80	PASS
	25	12	22.84	22.87	22.93	PASS
	25	25	22.78	22.73	22.77	PASS
	50	0	22.78	22.90	22.89	PASS
16QAM	1	0	23.37	23.09	23.33	PASS
	1	25	23.23	23.12	23.26	PASS
	1	49	23.10	22.97	23.19	PASS
	25	0	21.91	21.95	21.19	PASS
	25	12	21.96	21.94	21.97	PASS
	25	25	21.88	21.82	21.85	PASS

FDD-LTE Band 13						
Channel Bandwidth: 5 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.61	23.72	23.70	PASS
	1	12	24.05	23.74	24.30	PASS
	1	24	23.78	23.80	23.93	PASS
	12	0	22.84	22.86	23.01	PASS
	12	7	22.94	22.95	22.83	PASS
	12	13	22.82	22.88	22.83	PASS
	25	0	22.78	22.77	23.00	PASS
16QAM	1	0	22.09	22.55	22.53	PASS
	1	12	22.40	22.33	22.42	PASS
	1	24	22.38	21.93	22.26	PASS
	12	0	21.72	21.52	21.77	PASS
	12	7	21.74	21.79	21.37	PASS
	12	13	21.69	21.67	21.27	PASS
	25	0	22.78	22.55	23.70	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	--	23.80	--	PASS
	1	25	--	23.84	--	PASS
	1	49	--	23.78	--	PASS
	25	0	--	22.94	--	PASS
	25	12	--	22.87	--	PASS
	25	25	--	22.94	--	PASS
	50	0	--	22.78	--	PASS
16QAM	1	0	--	21.67	--	PASS
	1	25	--	21.43	--	PASS
	1	49	--	21.76	--	PASS
	25	0	--	21.86	--	PASS
	25	12	--	22.45	--	PASS
	25	25	--	22.90	--	PASS

FDD-LTE Band 25						
Channel Bandwidth: 1.4 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.64	22.37	22.91	PASS
	1	3	22.63	22.44	22.88	PASS
	1	5	22.57	22.29	22.67	PASS
	3	0	22.63	22.41	22.90	PASS
	3	1	22.65	22.46	22.83	PASS
	3	3	22.60	22.44	22.74	PASS
	6	0	21.46	21.50	21.72	PASS
16QAM	1	0	21.12	21.26	21.79	PASS
	1	3	21.17	21.49	21.81	PASS
	1	5	21.11	21.34	21.74	PASS
	3	0	21.26	21.14	21.90	PASS
	3	1	21.31	21.07	21.84	PASS
	3	3	21.28	21.02	21.77	PASS
	6	0	20.54	20.30	20.55	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.48	22.48	23.02	PASS
	1	8	22.34	22.50	23.09	PASS
	1	14	22.49	22.40	22.70	PASS
	8	0	21.52	21.55	21.77	PASS
	8	4	21.50	21.60	21.69	PASS
	8	7	21.51	21.61	21.87	PASS
	15	0	21.53	21.56	21.84	PASS
16QAM	1	0	21.24	21.21	21.80	PASS
	1	8	20.95	21.08	21.98	PASS
	1	14	21.07	21.05	21.88	PASS
	8	0	20.35	20.56	20.83	PASS
	8	4	20.31	20.52	20.84	PASS
	8	7	20.34	20.52	20.89	PASS
	15	0	20.35	20.25	20.77	PASS

FDD-LTE Band 25						
Channel Bandwidth: 5 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.37	22.39	22.55	PASS
	1	12	22.68	22.39	22.98	PASS
	1	24	22.57	22.44	22.82	PASS
	12	0	21.56	21.54	21.76	PASS
	12	7	21.60	21.50	21.84	PASS
	12	13	21.57	21.55	21.79	PASS
	25	0	21.59	21.49	21.70	PASS
16QAM	1	0	20.64	21.00	21.34	PASS
	1	12	20.65	21.02	21.78	PASS
	1	24	20.53	20.94	21.44	PASS
	12	0	20.24	20.42	20.42	PASS
	12	7	20.54	20.51	20.54	PASS
	12	13	20.48	20.45	20.48	PASS
	25	0	20.56	20.75	20.64	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.83	22.73	22.63	PASS
	1	25	22.78	23.14	23.02	PASS
	1	49	22.60	22.64	22.84	PASS
	25	0	21.67	21.54	21.70	PASS
	25	12	21.73	21.68	21.76	PASS
	25	25	21.70	21.64	21.94	PASS
	50	0	21.64	21.60	21.70	PASS
16QAM	1	0	22.31	22.21	22.06	PASS
	1	25	22.04	22.33	22.13	PASS
	1	49	22.19	22.07	22.33	PASS
	25	0	21.06	21.09	20.94	PASS
	25	12	21.04	21.14	21.00	PASS
	25	25	21.07	21.05	20.92	PASS

FDD-LTE Band 25						
Channel Bandwidth: 15 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.70	22.30	22.47	PASS
	1	37	22.93	22.48	22.50	PASS
	1	74	22.92	22.24	22.88	PASS
	36	0	21.62	21.39	21.58	PASS
	36	20	21.78	21.46	21.63	PASS
	36	39	21.82	21.47	21.73	PASS
	75	0	21.56	21.35	21.78	PASS
16QAM	1	0	22.23	22.17	21.65	PASS
	1	37	22.31	22.15	21.86	PASS
	1	74	22.07	21.94	21.84	PASS
Channel Bandwidth: 20 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.40	22.34	22.38	PASS
	1	49	22.80	22.28	22.34	PASS
	1	99	22.36	22.52	22.60	PASS
	50	0	21.51	21.44	21.61	PASS
	50	24	21.67	21.45	21.64	PASS
	50	49	21.69	21.50	21.59	PASS
	100	0	21.38	21.49	21.44	PASS
16QAM	1	0	22.19	22.89	22.41	PASS
	1	49	22.11	22.59	20.95	PASS
	1	99	21.91	22.31	21.05	PASS

FDD-LTE Band 26						
Channel Bandwidth: 1.4 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.88	23.99	23.60	PASS
	1	3	24.18	24.12	23.87	PASS
	1	5	23.97	23.99	23.71	PASS
	3	0	23.87	23.87	23.88	PASS
	3	1	23.85	24.04	23.82	PASS
	3	3	23.81	24.05	23.79	PASS
	6	0	22.90	22.95	22.98	PASS
16QAM	1	0	22.63	22.71	23.01	PASS
	1	3	22.78	22.89	22.99	PASS
	1	5	22.68	22.89	22.98	PASS
	3	0	22.62	22.62	22.80	PASS
	3	1	22.70	22.59	22.74	PASS
	3	3	22.72	22.58	22.72	PASS
	6	0	21.76	21.76	21.95	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.89	23.96	23.89	PASS
	1	8	23.79	24.13	23.81	PASS
	1	14	23.70	24.23	23.70	PASS
	8	0	22.94	23.03	22.97	PASS
	8	4	22.91	23.03	22.82	PASS
	8	7	22.85	23.03	22.82	PASS
	15	0	22.83	23.03	23.11	PASS
16QAM	1	0	22.59	22.70	22.94	PASS
	1	8	22.44	22.80	22.79	PASS
	1	14	22.45	22.79	22.68	PASS
	8	0	21.77	22.02	22.23	PASS
	8	4	21.74	22.18	22.15	PASS
	8	7	21.69	22.22	21.82	PASS
	15	0	21.64	22.11	21.93	PASS

FDD-LTE Band 26						
Channel Bandwidth: 5 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.76	23.72	23.77	PASS
	1	12	24.24	24.20	24.21	PASS
	1	24	23.80	23.98	23.95	PASS
	12	0	22.87	23.00	23.00	PASS
	12	7	22.74	23.11	22.97	PASS
	12	13	22.90	23.06	22.82	PASS
	25	0	22.90	23.00	22.97	PASS
16QAM	1	0	22.25	22.03	22.48	PASS
	1	12	22.32	22.55	22.71	PASS
	1	24	22.14	22.46	22.15	PASS
	12	0	21.84	21.77	21.48	PASS
	12	7	21.77	21.87	21.48	PASS
	12	13	21.82	21.76	21.33	PASS
	25	0	21.59	21.49	21.29	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.85	24.29	23.79	PASS
	1	25	24.04	24.46	24.24	PASS
	1	49	23.79	24.01	23.68	PASS
	25	0	22.95	23.09	22.97	PASS
	25	12	22.92	23.13	23.06	PASS
	25	25	22.89	23.05	23.02	PASS
	50	0	22.90	23.00	22.91	PASS
16QAM	1	0	22.50	22.25	22.68	PASS
	1	25	22.54	22.43	22.54	PASS
	1	49	22.60	22.21	22.75	PASS
	25	0	21.32	21.20	21.37	PASS
	25	12	21.25	21.18	21.45	PASS
	25	25	21.03	21.14	21.35	PASS

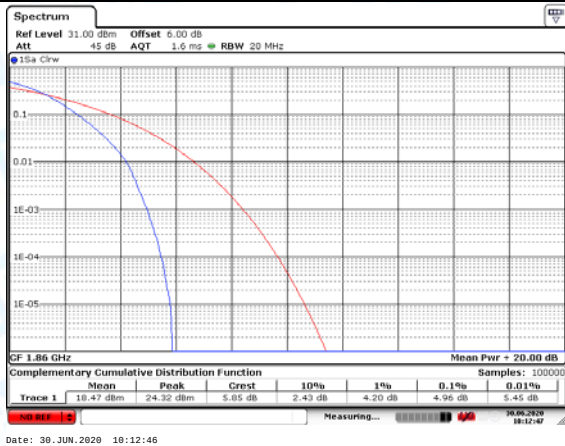
FDD-LTE Band 26						
Channel Bandwidth: 15 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.79	23.96	23.80	PASS
	1	37	24.24	24.24	23.80	PASS
	1	74	23.68	23.78	23.75	PASS
	36	0	22.97	22.90	22.97	PASS
	36	20	23.06	23.01	22.90	PASS
	36	39	23.79	22.87	22.91	PASS
	75	0	22.78	22.45	22.68	PASS
16QAM	1	0	22.79	22.41	22.27	PASS
	1	37	22.52	22.39	22.35	PASS
	1	74	22.48	22.39	22.23	PASS

ATTACHMENT B--PEAK-AVERAGE RATIO

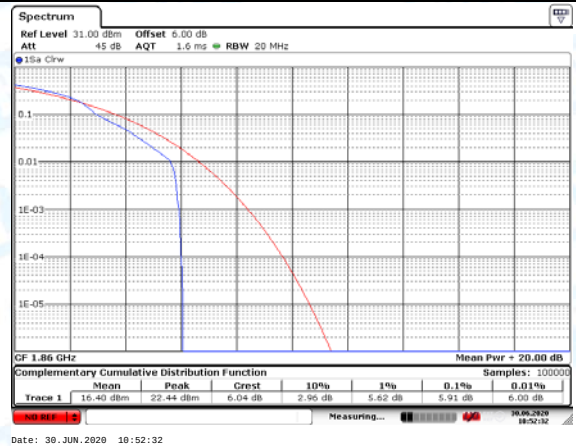
Test Mode	Modulation	RB Size	RB Offset	PAPR with 0.1% probability (dB)	Limit (dB)	Result
LTE BAND 2 20MHz (Low Channel)	QPSK	1	0	4.96	≤13	PASS
	16QAM	1	0	5.91	≤13	PASS
LTE BAND 2 20MHz (Middle Channel)	QPSK	1	0	5.54	≤13	PASS
	16QAM	1	0	5.94	≤13	PASS
LTE BAND 2 20MHz (High Channel)	QPSK	1	0	5.19	≤13	PASS
	16QAM	1	0	5.13	≤13	PASS
LTE BAND 4 20MHz (Low Channel)	QPSK	1	0	4.20	≤13	PASS
	16QAM	1	0	4.99	≤13	PASS
LTE BAND 4 20MHz (Middle Channel)	QPSK	1	0	4.84	≤13	PASS
	16QAM	1	0	5.97	≤13	PASS
LTE BAND 4 20MHz (High Channel)	QPSK	1	0	4.58	≤13	PASS
	16QAM	1	0	5.25	≤13	PASS
LTE BAND 5 10MHz (Low Channel)	QPSK	1	0	4.93	≤13	PASS
	16QAM	1	0	5.83	≤13	PASS
LTE BAND 5 10MHz (Middle Channel)	QPSK	1	0	4.52	≤13	PASS
	16QAM	1	0	5.16	≤13	PASS
LTE BAND 5 10MHz (High Channel)	QPSK	1	0	4.55	≤13	PASS
	16QAM	1	0	5.65	≤13	PASS
LTE BAND 12 10MHz (Low Channel)	QPSK	1	0	4.41	≤13	PASS
	16QAM	1	0	5.36	≤13	PASS
LTE BAND 12 10MHz (Middle Channel)	QPSK	1	0	4.61	≤13	PASS
	16QAM	1	0	5.45	≤13	PASS
LTE BAND 12 10MHz (High Channel)	QPSK	1	0	4.26	≤13	PASS
	16QAM	1	0	5.25	≤13	PASS
LTE BAND 13 10MHz	QPSK	1	0	4.46	≤13	PASS
	16QAM	1	0	5.42	≤13	PASS
LTE BAND 25 20MHz (Low Channel)	QPSK	1	0	5.16	≤13	PASS
	16QAM	1	0	6.00	≤13	PASS
LTE BAND 25 20MHz (Middle Channel)	QPSK	1	0	5.01	≤13	PASS
	16QAM	1	0	6.09	≤13	PASS
LTE BAND 25 20MHz (High Channel)	QPSK	1	0	4.55	≤13	PASS
	16QAM	1	0	5.39	≤13	PASS
LTE BAND 26 15MHz (Low Channel)	QPSK	1	0	4.55	≤13	PASS
	16QAM	1	0	5.28	≤13	PASS
LTE BAND 26 15MHz (Middle Channel)	QPSK	1	0	4.38	≤13	PASS
	16QAM	1	0	5.33	≤13	PASS
LTE BAND 26 15MHz (High Channel)	QPSK	1	0	5.07	≤13	PASS
	16QAM	1	0	5.51	≤13	PASS

Note: Only show the worst case data.

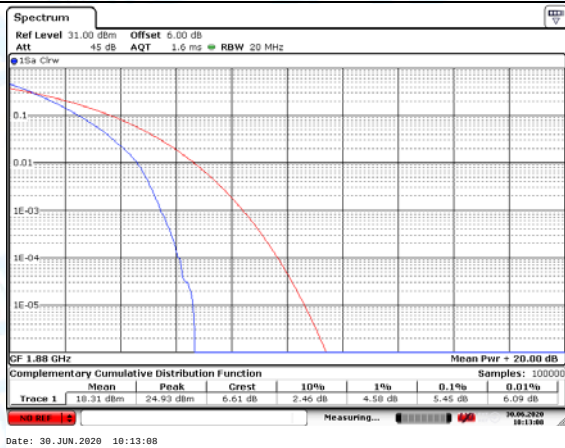
LTE Band 2 20MHz (Low Channel)-QPSK



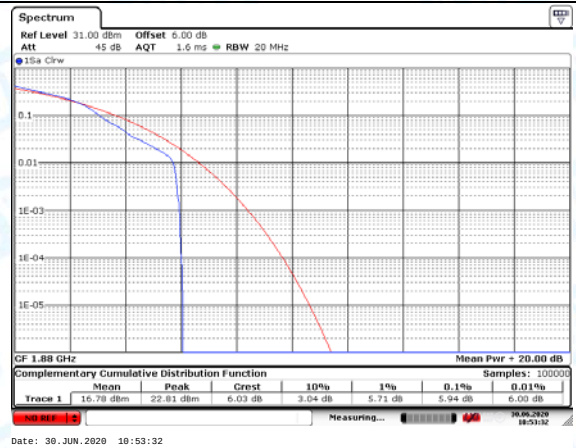
LTE Band 2 20MHz (Low Channel)-16QAM



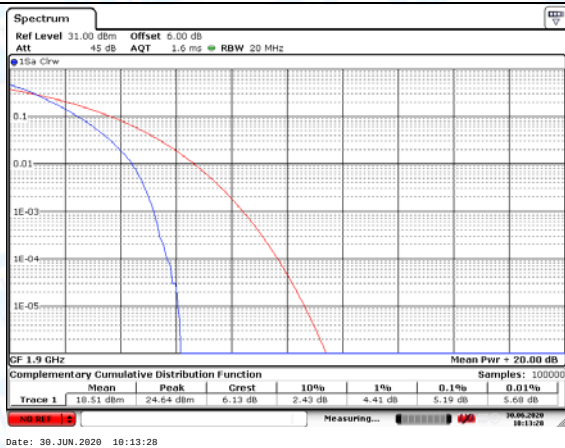
LTE Band 2 20MHz (Middle Channel)-QPSK



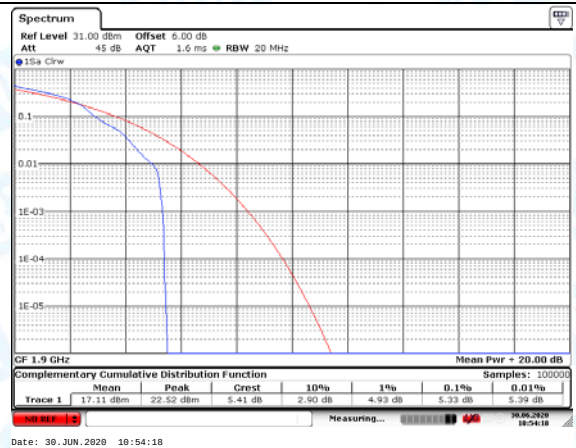
LTE Band 2 20MHz (Middle Channel)-16QAM



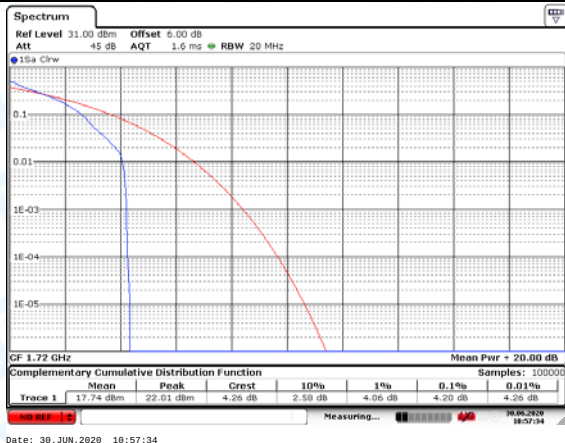
LTE Band 2 20MHz (High Channel)-QPSK



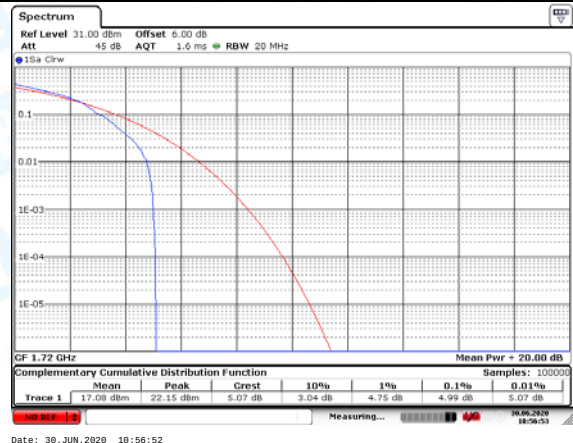
LTE Band 2 20MHz (High Channel)-16QAM



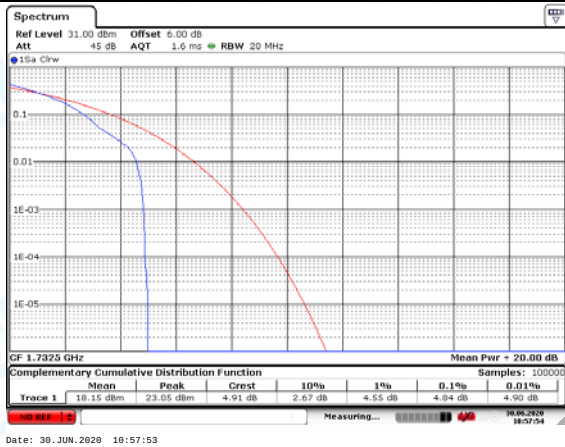
LTE Band 4 20MHz (Low Channel)-QPSK



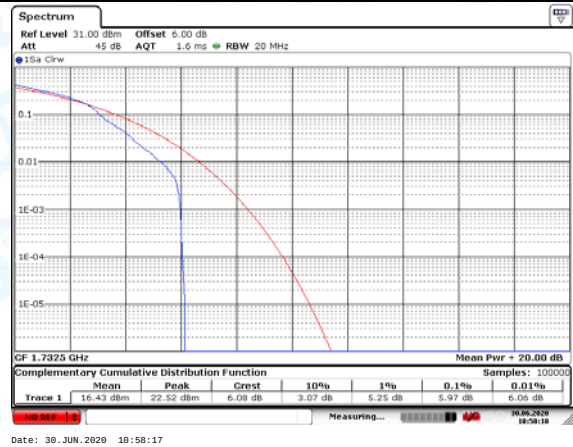
LTE Band 4 20MHz (Low Channel)-16QAM



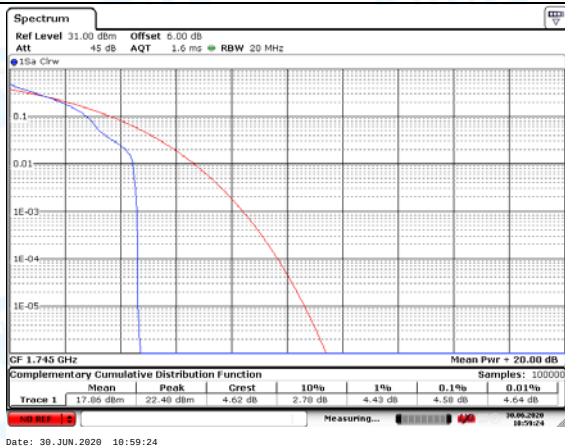
LTE Band 4 20MHz (Middle Channel)-QPSK



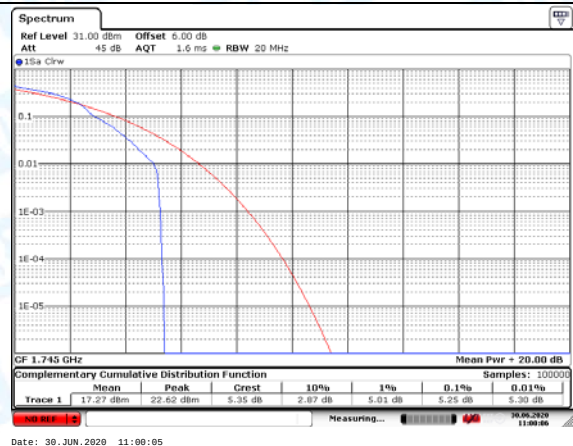
LTE Band 4 20MHz (Middle Channel)-16QAM



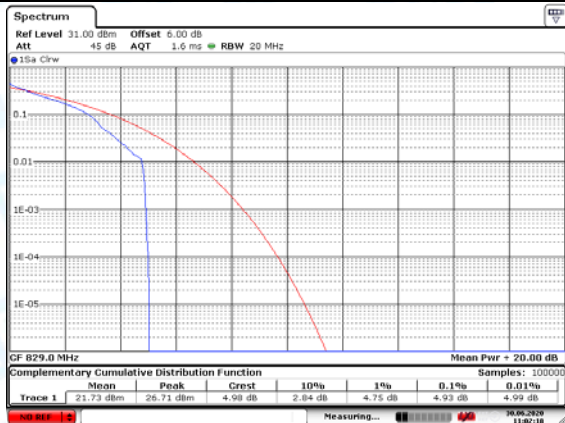
LTE Band 4 20MHz (High Channel)-QPSK



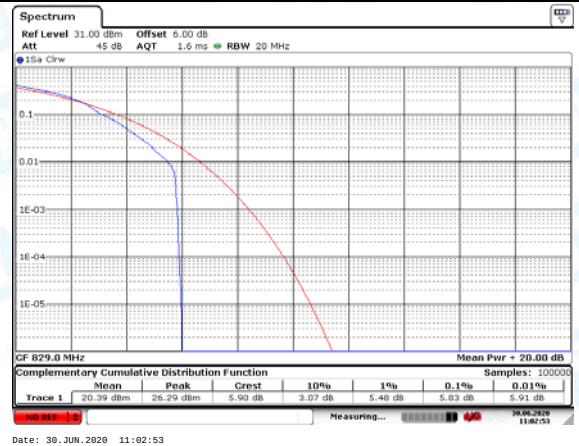
LTE Band 4 20MHz (High Channel)-16QAM



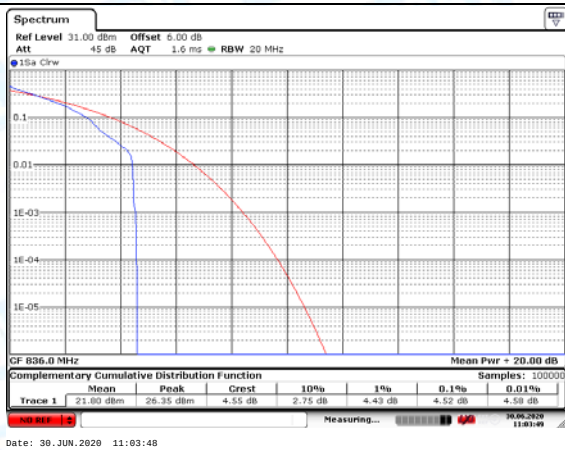
LTE Band 5 10MHz (Low Channel)-QPSK



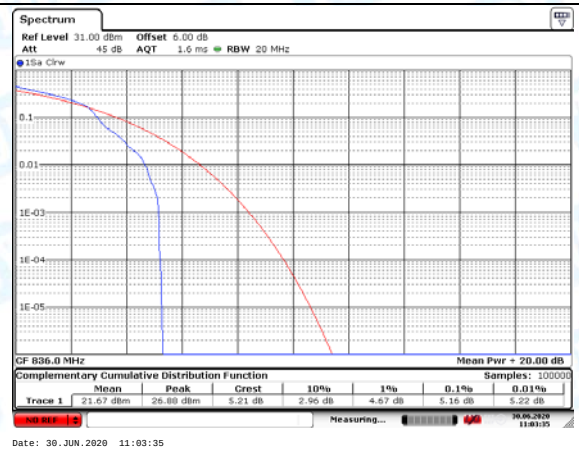
LTE Band 5 10MHz (Low Channel)-16QAM



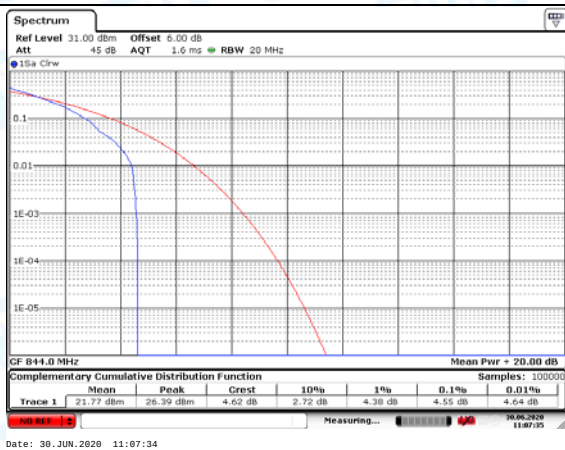
LTE Band 5 10MHz (Middle Channel)-QPSK



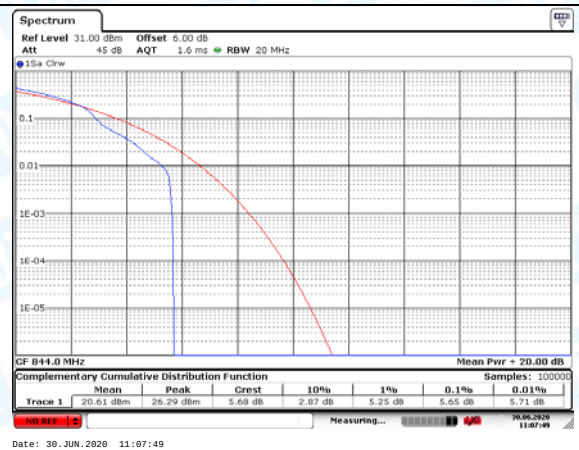
LTE Band 5 10MHz (Middle Channel)-16QAM



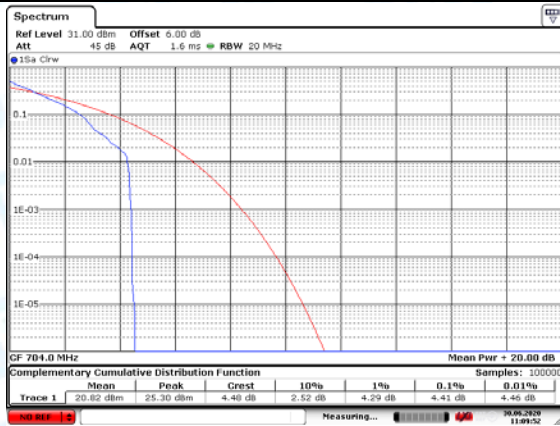
LTE Band 5 10MHz (High Channel)-QPSK



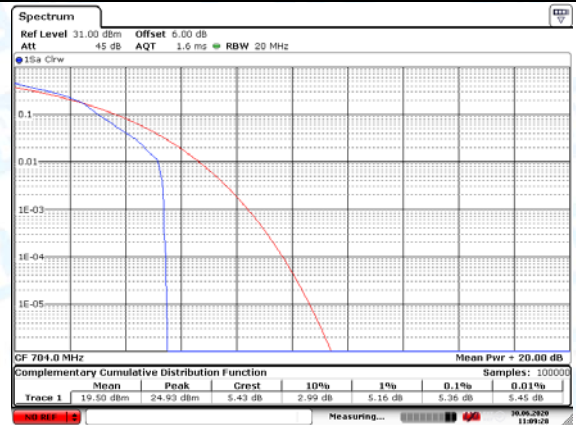
LTE Band 5 10MHz (High Channel)-16QAM



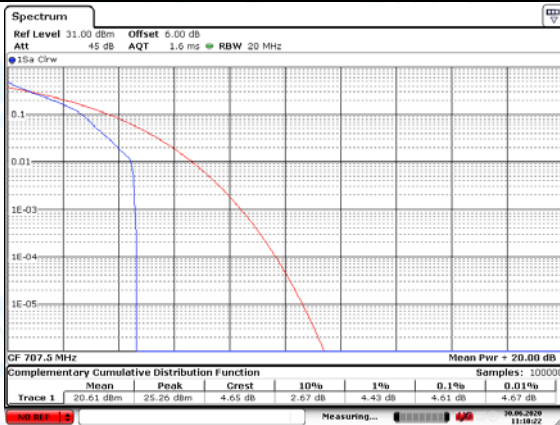
LTE Band 12 10MHz (Low Channel)-QPSK



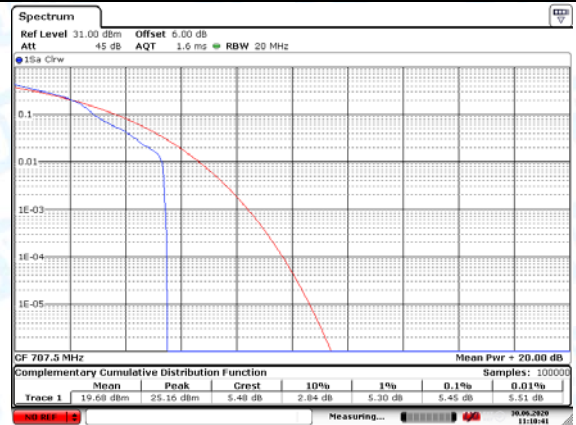
LTE Band 12 10MHz (Low Channel)-16QAM



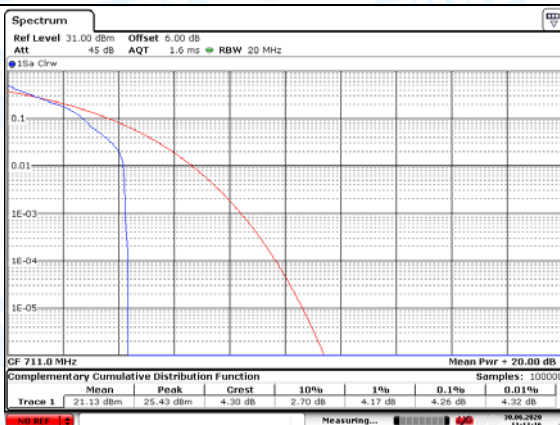
LTE Band 12 10MHz (Middle Channel)-QPSK



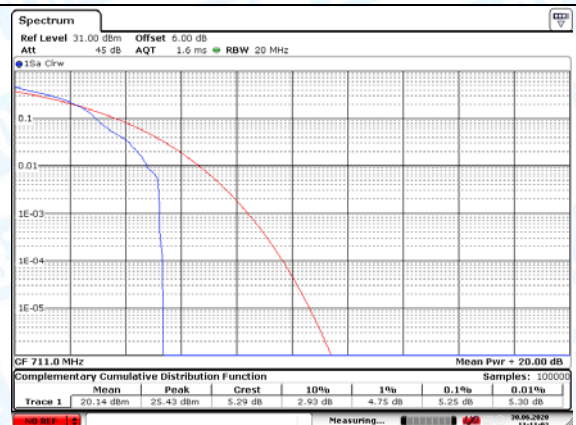
LTE Band 12 10MHz (Middle Channel)-16QAM



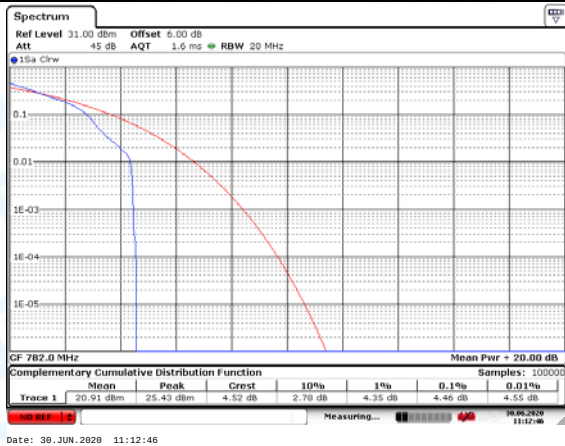
LTE Band 12 10MHz (High Channel)-QPSK



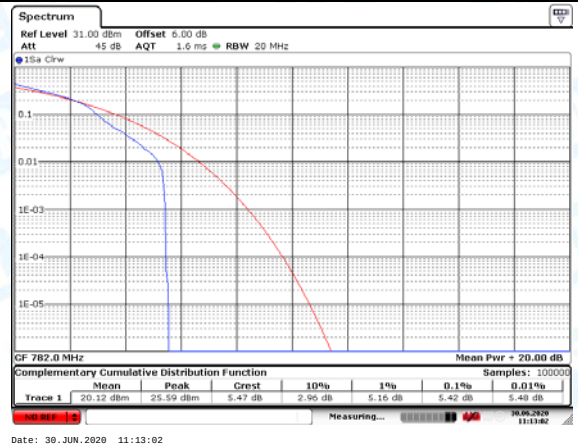
LTE Band 12 10MHz (High Channel)-16QAM



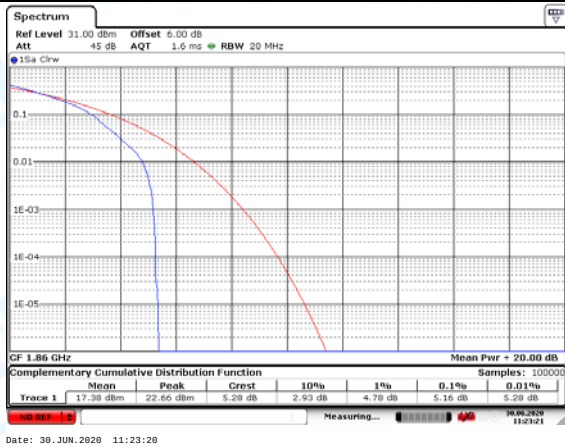
LTE Band 13 10MHz (Middle Channel)-QPSK



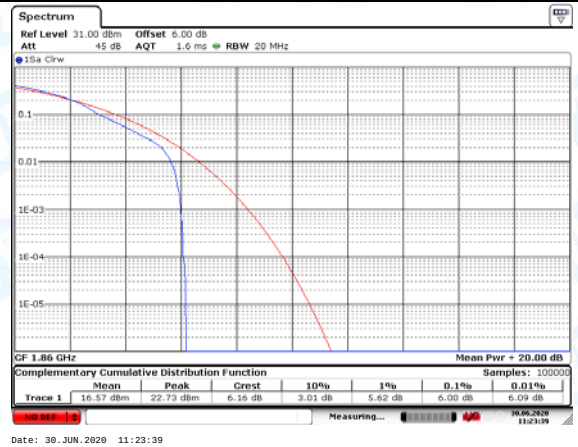
LTE Band 13 10MHz (Middle Channel)-16QAM



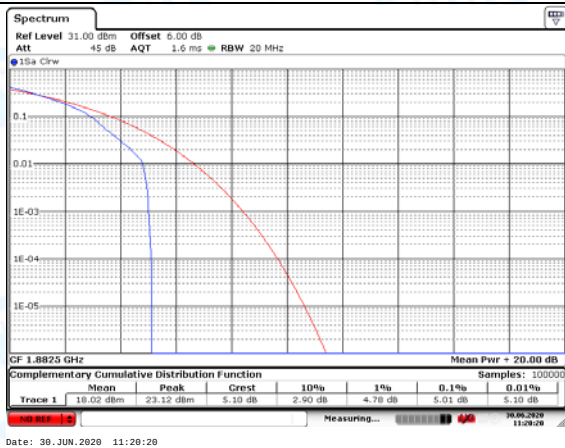
LTE Band 25 20MHz (Low Channel)-QPSK



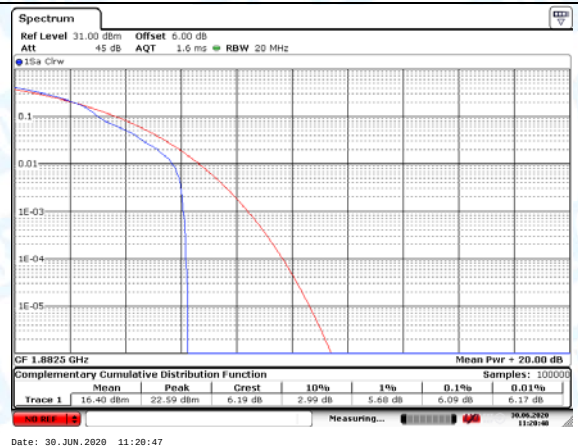
LTE Band 25 20MHz (Low Channel)-16QAM



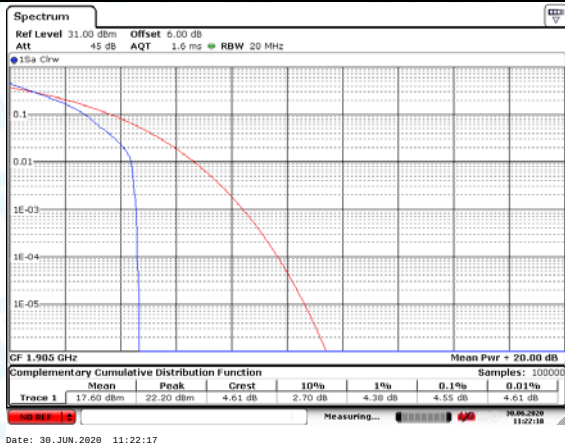
LTE Band 25 20MHz (Middle Channel)-QPSK



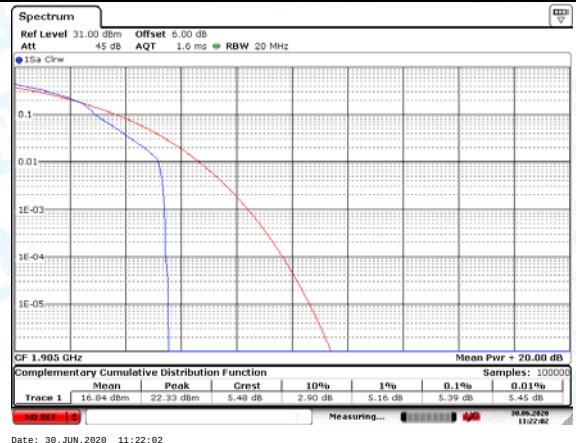
LTE Band 25 20MHz (Middle Channel)-16QAM



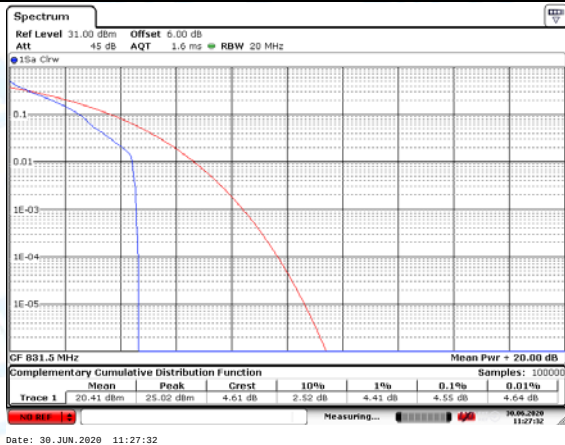
LTE Band 25 20MHz (High Channel)-QPSK



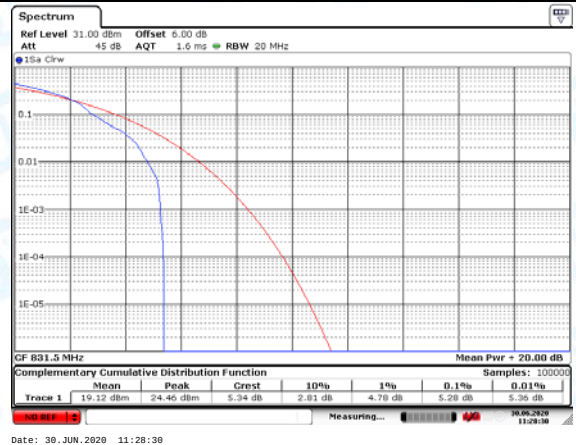
LTE Band 25 20MHz (High Channel)-16QAM



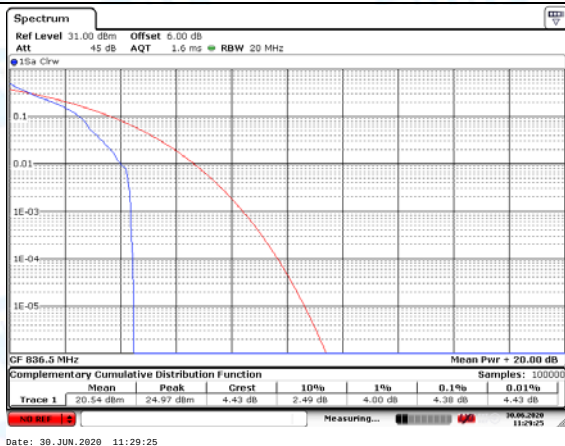
LTE Band 26 15MHz (Low Channel)-QPSK



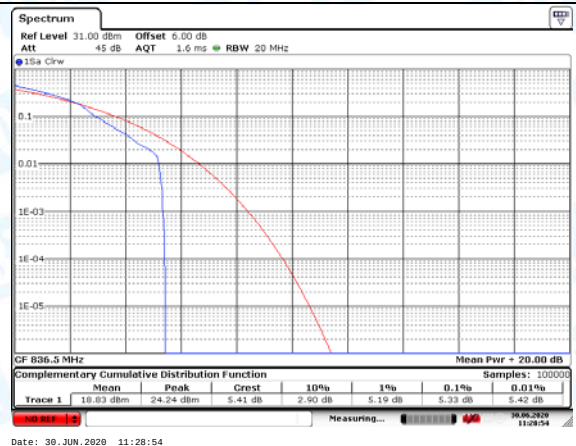
LTE Band 26 15MHz (Low Channel)-16QAM

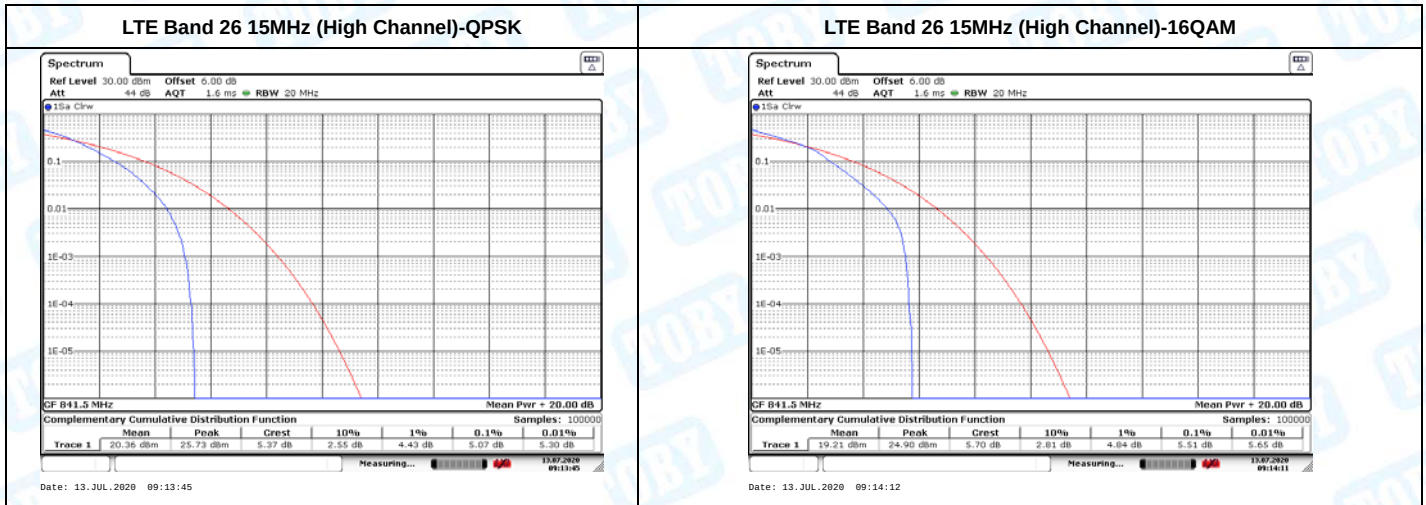


LTE Band 26 15MHz (Middle Channel)-QPSK



LTE Band 26 15MHz (Middle Channel)-16QAM





ATTACHMENT C--OCCUPY BANDWIDTH

LTE Band 2					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	18607	1850.70	QPSK	1.9042	1.296
			16QAM	1.0928	1.273
	18900	1880.00	QPSK	1.0920	1.299
			16QAM	1.0947	1.295
	19193	1909.30	QPSK	1.1100	1.326
			16QAM	1.0975	1.283
3MHz	18615	1851.50	QPSK	2.6896	2.909
			16QAM	2.6752	2.902
	18900	1880.00	QPSK	2.6634	2.905
			16QAM	2.6799	2.900
	19185	1908.50	QPSK	2.6842	2.915
			16QAM	2.6679	2.928
5MHz	18625	1852.50	QPSK	4.5280	5.302
			16QAM	4.5075	4.958
	18900	1880.00	QPSK	4.5115	4.967
			16QAM	4.4919	4.916
	19175	1907.50	QPSK	4.5135	5.017
			16QAM	4.5168	4.959
10MHz	18650	1855.00	QPSK	8.9351	9.727
			16QAM	4.5632	5.270
	18900	1880.00	QPSK	8.9039	9.649
			16QAM	4.5478	5.113
	19150	1905.00	QPSK	8.8958	9.670
			16QAM	4.5297	5.251
15MHz	18675	1857.50	QPSK	13.4333	14.531
			16QAM	4.7624	5.664
	18900	1880.00	QPSK	13.4056	14.627
			16QAM	4.7493	5.642
	19125	1902.50	QPSK	13.4411	14.387
			16QAM	4.7101	5.770
20MHz	18700	1860.00	QPSK	18.4807	21.222
			16QAM	6.1366	9.237
	18900	1880.00	QPSK	18.4972	21.233
			16QAM	6.0986	8.495
	19100	1900.00	QPSK	18.3403	20.995
			16QAM	6.1306	8.979

Note: For 10MHz,15MHz, 20MHz of 16QAM only test 25%RB.

LTE Band 4					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	19957	1710.70	QPSK	1.0970	1.269
			16QAM	1.0929	1.283
	20175	1732.50	QPSK	1.0956	1.252
			16QAM	1.0860	1.294
	20393	1754.30	QPSK	1.0928	1.274
			16QAM	1.0938	1.304
3MHz	19965	1711.50	QPSK	2.6809	2.920
			16QAM	2.6751	2.918
	20175	1732.50	QPSK	2.6745	2.901
			16QAM	2.6786	2.921
	20385	1753.50	QPSK	2.6897	2.896
			16QAM	2.6703	2.921
5MHz	19975	1712.50	QPSK	4.5101	4.946
			16QAM	4.5015	4.976
	20175	1732.50	QPSK	4.5070	4.941
			16QAM	4.4811	4.941
	20375	1752.50	QPSK	4.5085	5.035
			16QAM	4.5149	4.989
10MHz	20000	1715.00	QPSK	8.8540	9.603
			16QAM	4.5424	5.195
	20175	1732.50	QPSK	8.9353	9.685
			16QAM	4.5400	5.143
	20350	1750.00	QPSK	8.9057	9.614
			16QAM	4.5077	5.108
15MHz	20025	1717.50	QPSK	13.4500	14.609
			16QAM	4.7333	5.796
	20175	1732.50	QPSK	13.3869	14.524
			16QAM	4.7795	5.819
	20325	1747.50	QPSK	13.4341	14.723
			16QAM	4.7987	5.749
20MHz	20050	1720.00	QPSK	18.5732	21.371
			16QAM	6.0945	8.544
	20175	1732.50	QPSK	18.3593	20.919
			16QAM	6.1266	8.586
	20300	1745.00	QPSK	18.5131	21.325
			16QAM	6.0562	9.048

Note: For 10MHz,15MHz, 20MHz of 16QAM only test 25%RB.

LTE Band 5					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	20407	824.70	QPSK	1.0914	1.297
			16QAM	1.0889	1.250
	20525	836.50	QPSK	1.0883	1.280
			16QAM	1.0978	1.275
	20643	848.30	QPSK	1.0962	1.300
			16QAM	1.0956	1.278
3MHz	20415	825.50	QPSK	2.7324	3.065
			16QAM	2.7422	3.043
	20525	836.50	QPSK	2.7420	3.108
			16QAM	2.7420	3.108
	20635	847.50	QPSK	2.7398	3.109
			16QAM	2.7668	3.054
5MHz	20425	826.50	QPSK	4.5141	4.984
			16QAM	4.5002	4.873
	20525	836.50	QPSK	4.4849	4.911
			16QAM	4.4775	4.992
	20625	846.50	QPSK	4.4759	4.996
			16QAM	4.4863	4.906
10MHz	20450	829.00	QPSK	8.9007	9.413
			16QAM	4.5418	5.456
	20525	836.50	QPSK	8.8958	9.514
			16QAM	4.5196	5.100
	20600	844.00	QPSK	8.8920	9.677
			16QAM	4.5426	5.362
Note: For 10MHz,15MHz, 20MHz of 16QAM only test 25%RB.					

LTE Band 12					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	23017	699.70	QPSK	1.0944	1.275
			16QAM	1.0983	1.260
	23095	707.50	QPSK	1.0897	1.300
			16QAM	1.0938	1.270
	23173	715.30	QPSK	1.0928	1.296
			16QAM	1.0951	1.281
3MHz	23025	700.50	QPSK	2.6792	2.960
			16QAM	2.6699	2.870
	23095	707.50	QPSK	2.6679	2.873
			16QAM	2.6712	2.917
	23165	714.50	QPSK	2.6575	2.908
			16QAM	2.6761	2.860
5MHz	23035	701.50	QPSK	4.5000	4.955
			16QAM	4.5034	4.982
	23095	707.50	QPSK	4.5125	4.979
			16QAM	4.5172	4.969
	23155	713.50	QPSK	4.5186	5.074
			16QAM	4.4988	4.943
10MHz	23060	704.00	QPSK	8.9038	9.578
			16QAM	4.5527	5.199
	23095	707.50	QPSK	8.9370	9.522
			16QAM	4.5738	5.321
	23130	711.00	QPSK	8.8924	9.492
			16QAM	4.5261	5.094
Note: For 10MHz,15MHz, 20MHz of 16QAM only test 25%RB.					

LTE Band 13					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
5MHz	23205	779.5	QPSK	4.5089	4.954
			16QAM	4.4945	4.890
	23230	782.0	QPSK	4.5095	5.020
			16QAM	4.4970	5.025
	23255	784.5	QPSK	4.4814	5.013
			16QAM	4.5132	4.949
10MHz	---	----	----	----	----
			----	----	----
	23230	782.0	QPSK	8.9454	9.518
			16QAM	4.5398	5.303
	---	----	----	----	----
			----	----	----
Note: For 10MHz,15MHz, 20MHz of 16QAM only test 25%RB.					

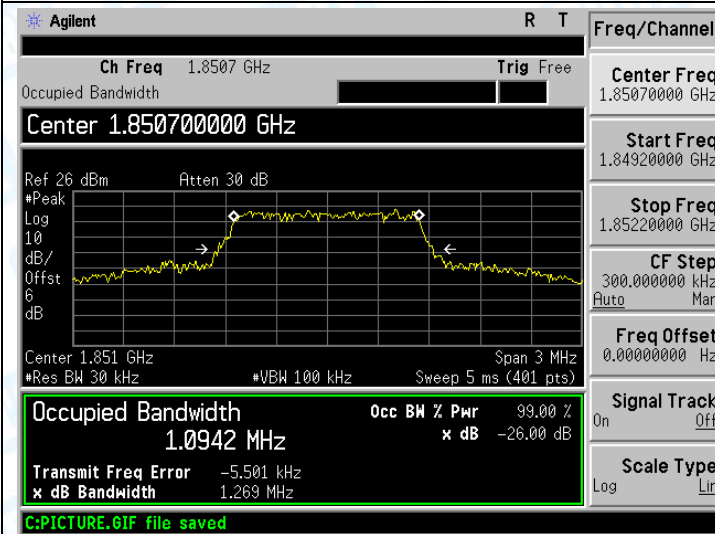
LTE Band 25					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	26047	1850.70	QPSK	1.0878	1.265
			16QAM	1.0917	1.282
	26365	1882.50	QPSK	1.0898	1.258
			16QAM	1.0931	1.305
	26683	1914.30	QPSK	1.0968	1.274
			16QAM	1.0945	1.284
3MHz	26055	1851.50	QPSK	2.6764	2.912
			16QAM	2.6861	2.924
	26365	1882.50	QPSK	2.6781	2.883
			16QAM	2.6800	2.867
	26675	1913.50	QPSK	2.6827	2.908
			16QAM	2.6836	2.914
5MHz	26065	1852.50	QPSK	4.5063	4.944
			16QAM	4.5142	4.891
	26365	1882.50	QPSK	4.5085	4.961
			16QAM	4.5146	5.032
	26665	1912.50	QPSK	4.4746	4.948
			16QAM	4.5068	4.977
10MHz	26090	1855.00	QPSK	9.0293	9.951
			16QAM	4.5285	5.174
	26365	1882.50	QPSK	9.0797	10.041
			16QAM	4.5534	5.124
	26640	1910.00	QPSK	9.0059	10.054
			16QAM	4.5366	5.180
15MHz	26115	1857.50	QPSK	13.3754	14.785
			16QAM	4.7355	5.613
	26365	1882.50	QPSK	13.4160	14.515
			16QAM	4.7832	5.583
	26615	1917.50	QPSK	13.3471	14.547
			16QAM	4.7600	5.839
20MHz	26140	1860.00	QPSK	18.3800	21.152
			16QAM	6.2157	8.227
	26365	1882.50	QPSK	18.4823	21.499
			16QAM	6.1329	8.158
	26590	1915.00	QPSK	18.4145	21.300
			16QAM	6.1446	8.917

Note: For 10MHz,15MHz, 20MHz of 16QAM only test 25%RB.

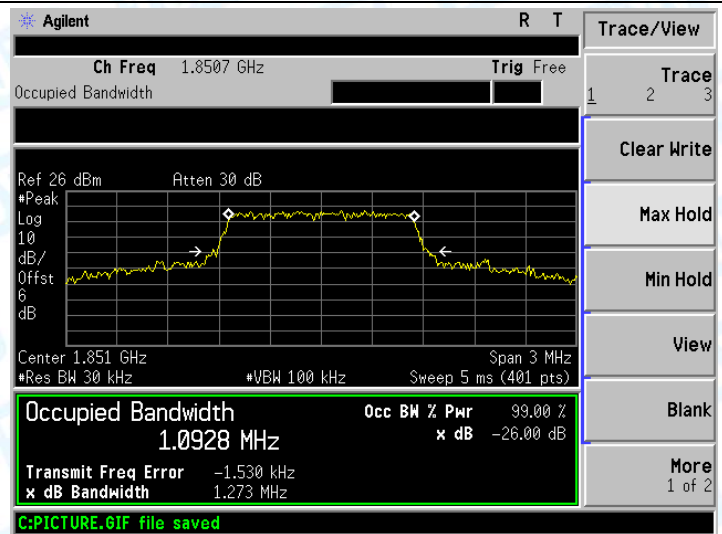
LTE Band 26					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	26997	814.70	QPSK	1.1012	1.303
			16QAM	1.0844	1.257
	26865	831.50	QPSK	1.0920	1.298
			16QAM	1.0865	1.258
	27033	848.30	QPSK	1.0984	1.256
			16QAM	1.0976	1.257
3MHz	26705	814.70	QPSK	2.6754	2.961
			16QAM	2.6854	2.915
	26865	831.50	QPSK	2.6822	2.951
			16QAM	2.6883	2.915
	27025	847.50	QPSK	2.6748	2.886
			16QAM	2.6731	2.905
5MHz	26715	814.70	QPSK	4.5133	5.021
			16QAM	4.5155	4.993
	26865	831.50	QPSK	4.4859	4.963
			16QAM	4.4995	5.000
	27015	846.50	QPSK	4.4884	4.908
			16QAM	4.4775	4.939
10MHz	26750	814.70	QPSK	8.9394	9.520
			16QAM	4.5298	5.213
	26865	831.50	QPSK	8.8974	9.579
			16QAM	4.5194	5.144
	26990	844.00	QPSK	8.9241	9.461
			16QAM	4.5076	5.221
15MHz	26775	814.70	QPSK	14.1170	16.525
			16QAM	6.1135	8.742
	26865	831.50	QPSK	14.2259	16.808
			16QAM	6.1470	9.250
	26965	841.50	QPSK	13.3974	14.525
			16QAM	4.8003	5.806
Note: For 10MHz,15MHz, 20MHz of 16QAM only test 25%RB.					

Occupancy Bandwidth Test Plot

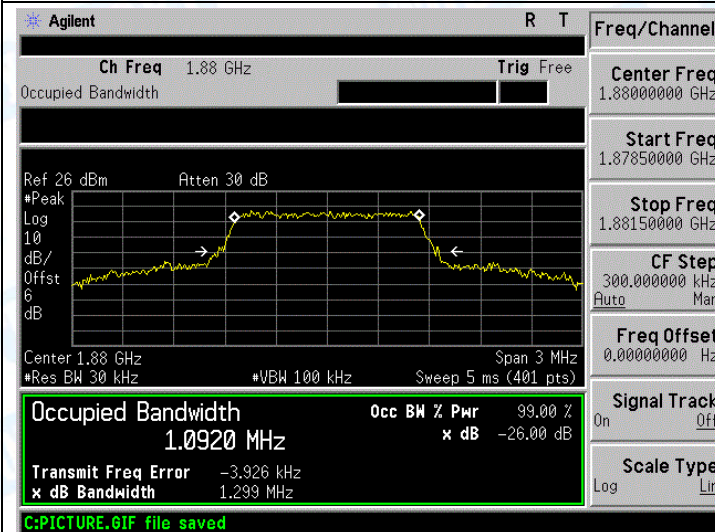
LTE BAND 2 (1.4MHz QPSK-Low CH)



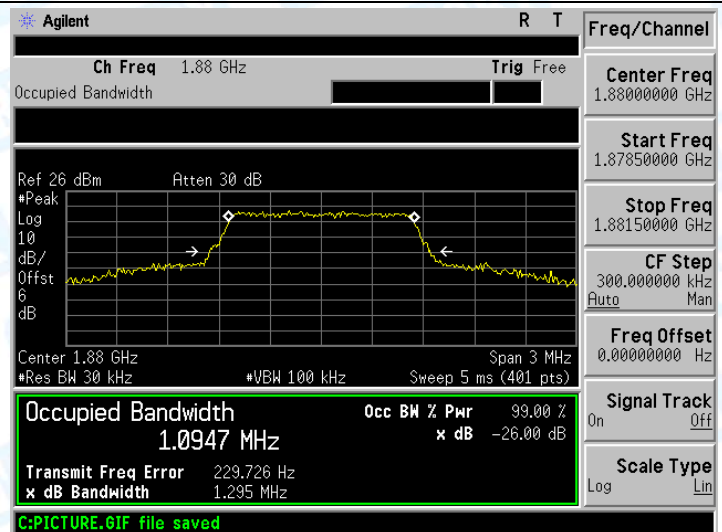
LTE BAND 2 (1.4MHz 16QAM-Low CH)



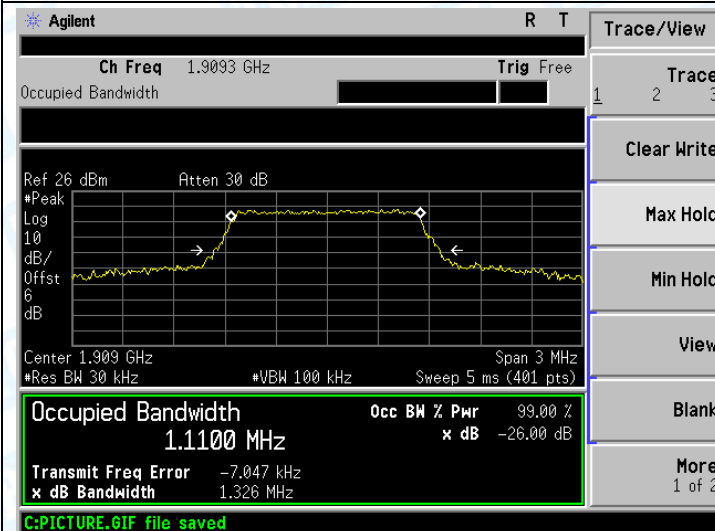
LTE BAND 2 (1.4MHz QPSK-Middle CH)



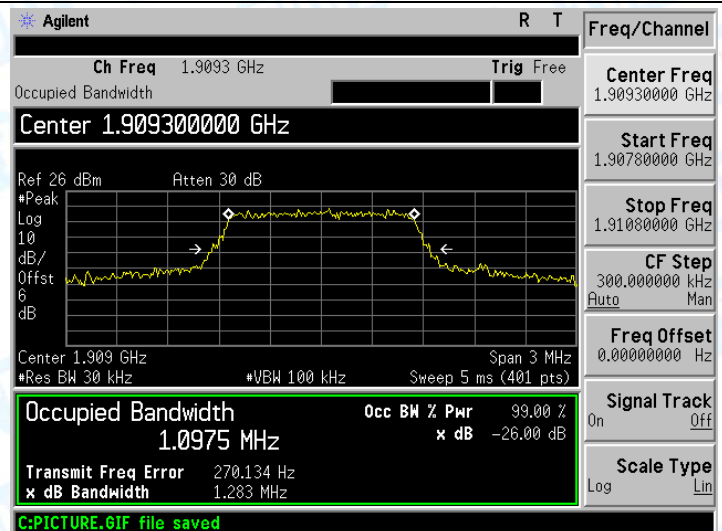
LTE BAND 2 (1.4MHz 16QAM- Middle CH)

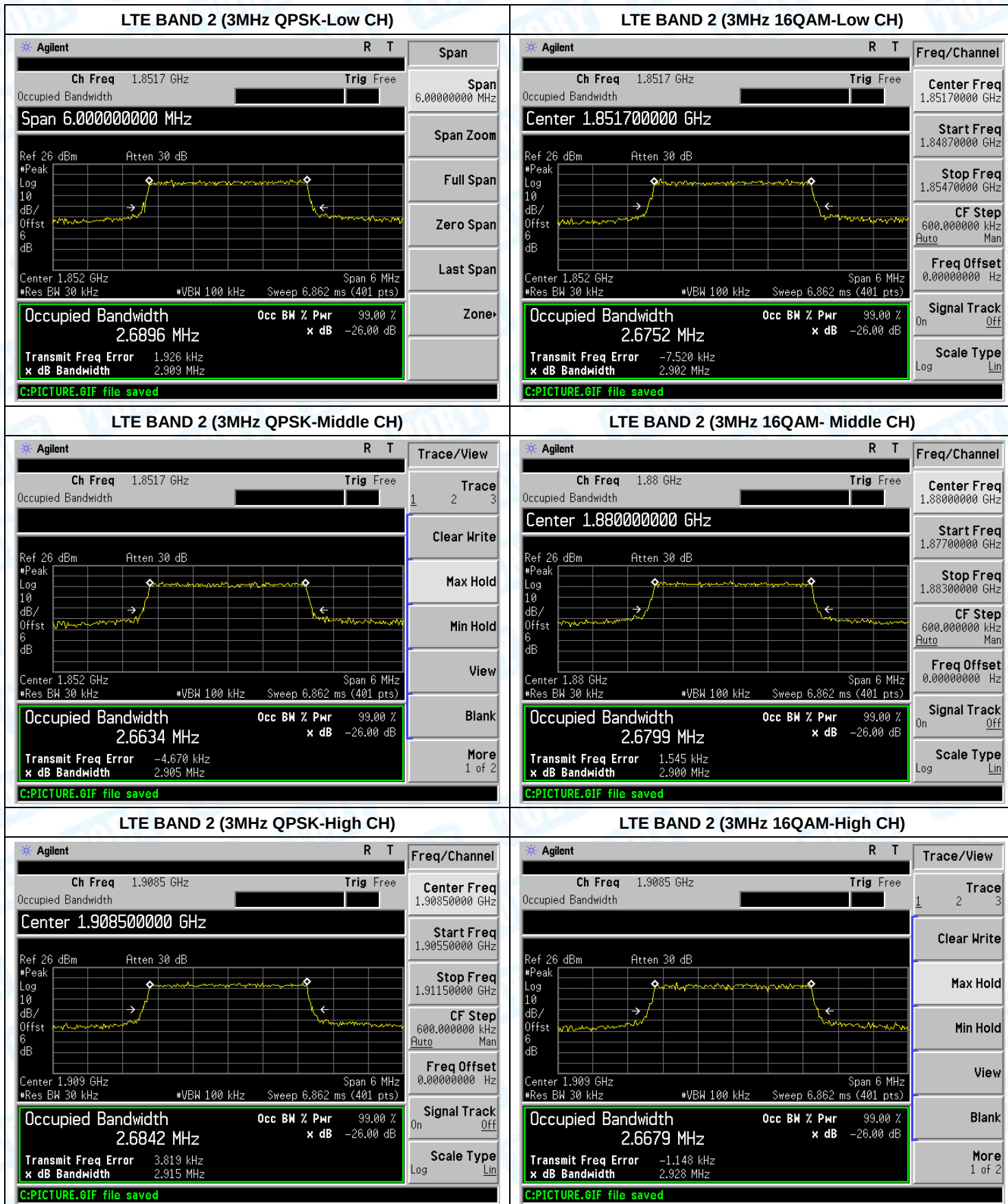


LTE BAND 2 (1.4MHz QPSK-High CH)

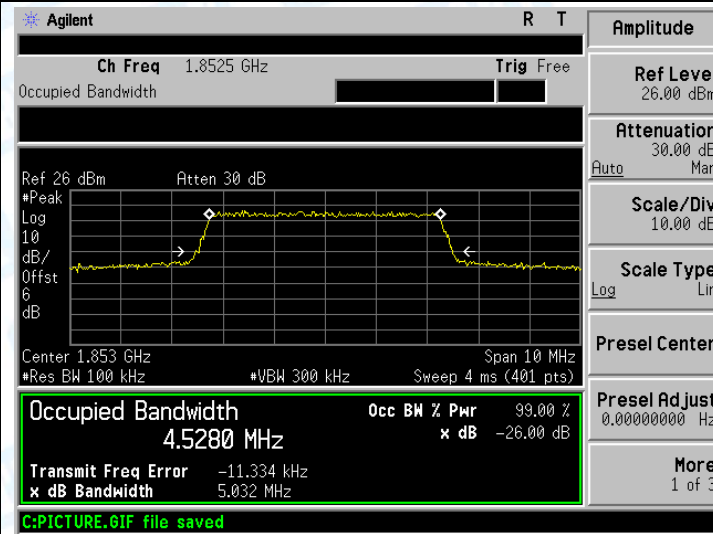


LTE BAND 2 (1.4MHz 16QAM-High CH)

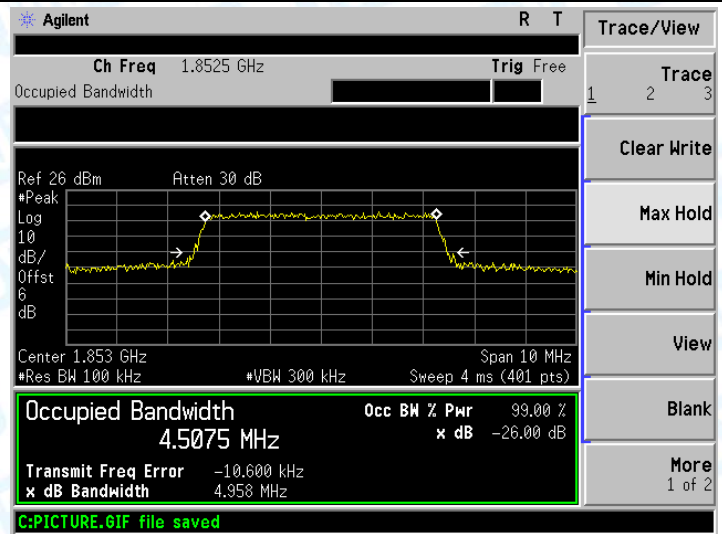




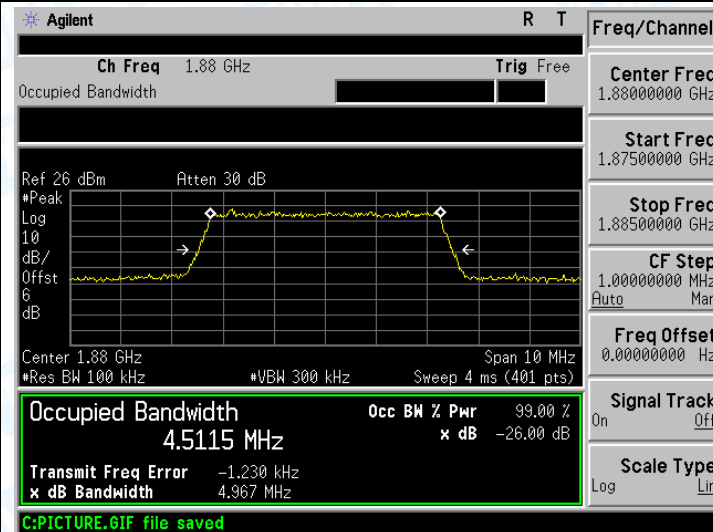
LTE BAND 2 (5MHz QPSK-Low CH)



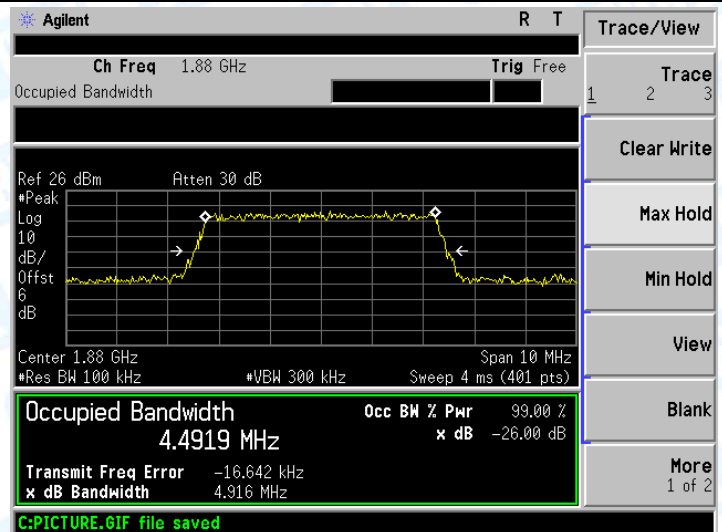
LTE BAND 2 (5MHz 16QAM-Low CH)



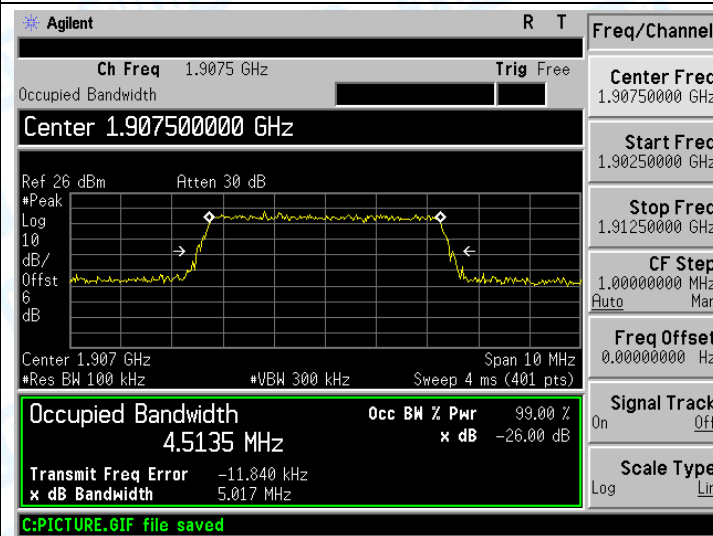
LTE BAND 2 (5MHz QPSK-Middle CH)



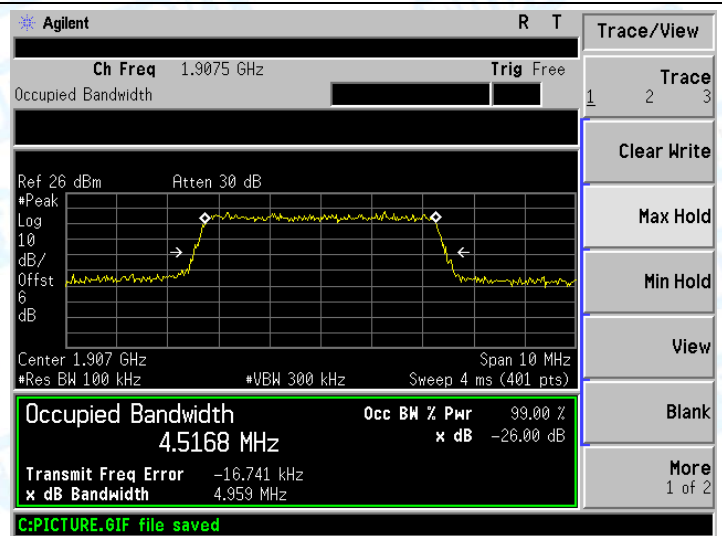
LTE BAND 2 (5MHz 16QAM- Middle CH)



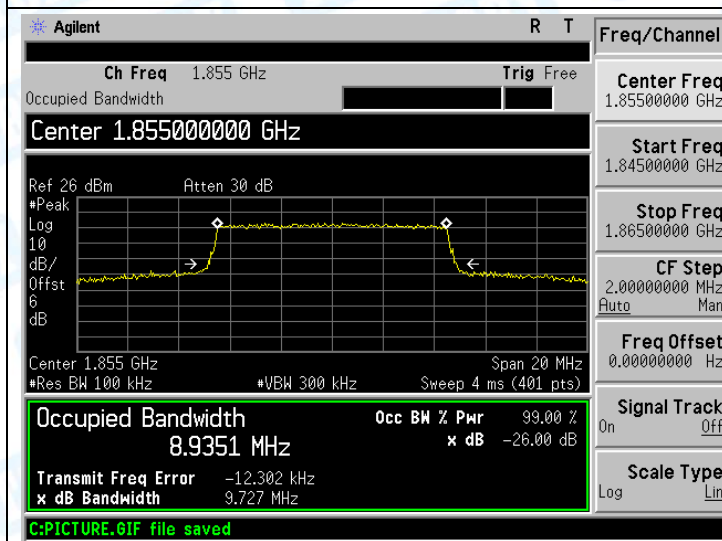
LTE BAND 2 (5MHz QPSK-High CH)



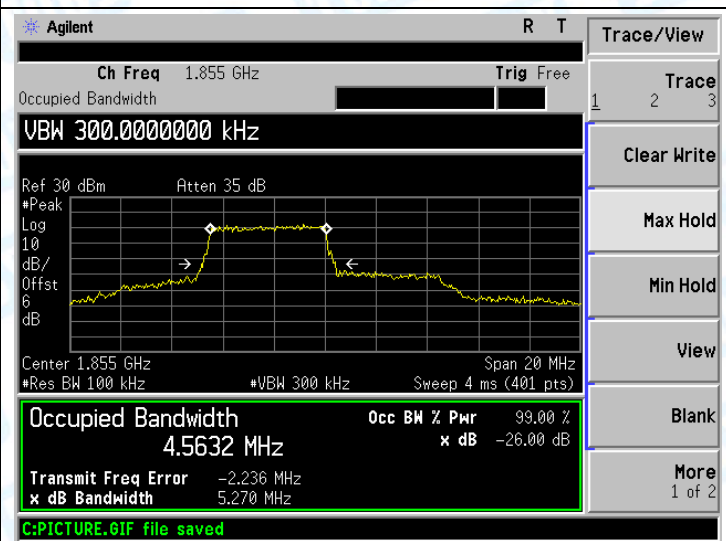
LTE BAND 2 (5MHz 16QAM-High CH)



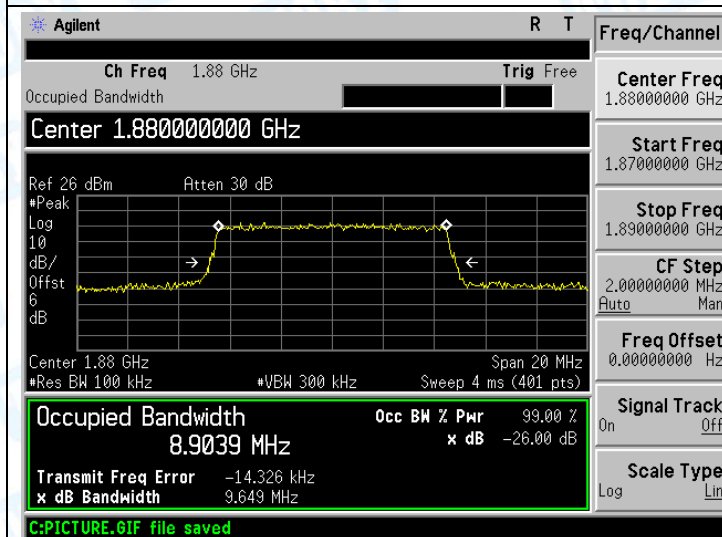
LTE BAND 2 (10MHz QPSK-Low CH)



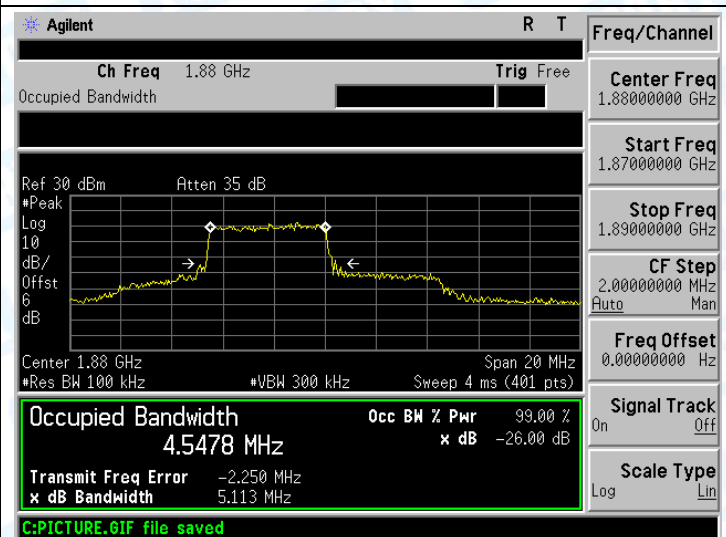
LTE BAND 2 (10MHz 16QAM-Low CH)



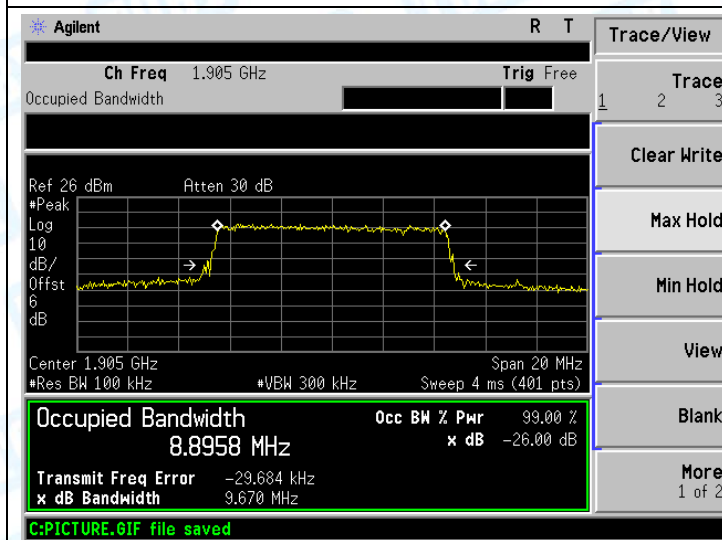
LTE BAND 2 (10MHz QPSK-Middle CH)



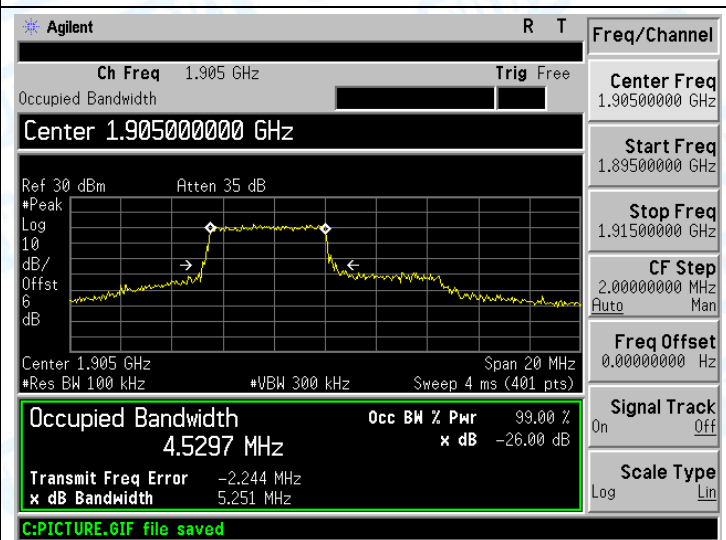
LTE BAND 2 (10MHz 16QAM-Middle CH)



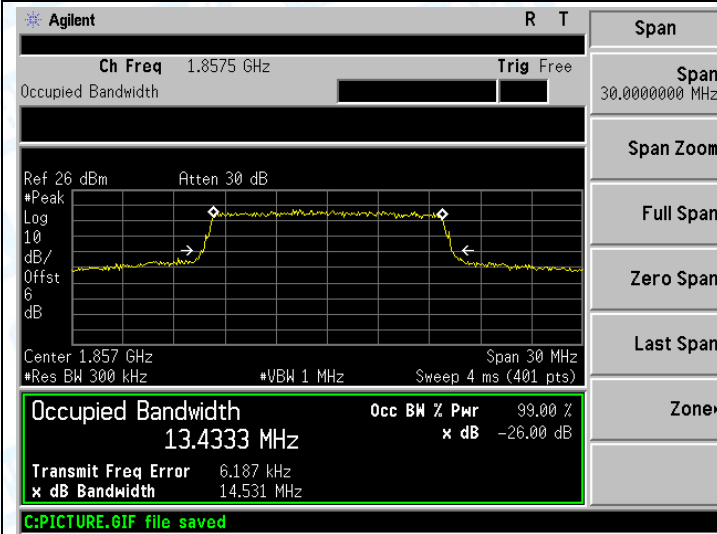
LTE BAND 2 (10MHz QPSK-High CH)



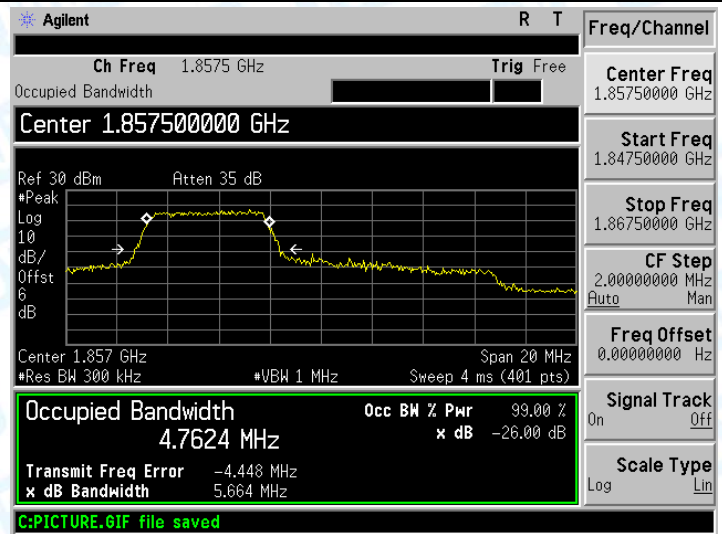
LTE BAND 2 (10MHz 16QAM-High CH)



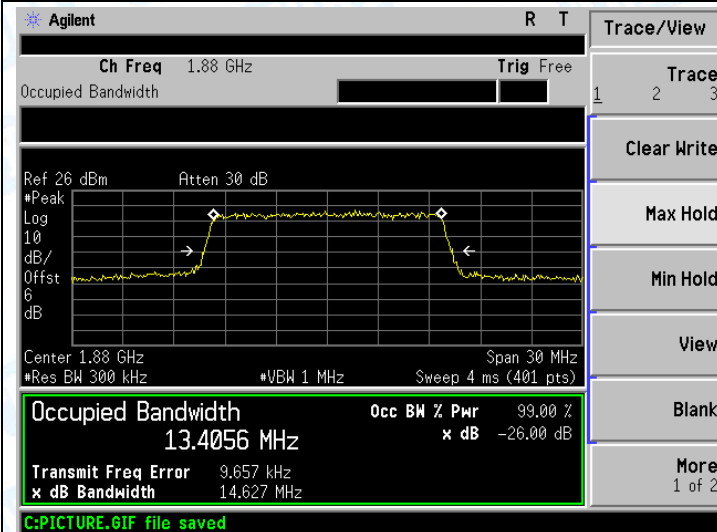
LTE BAND 2 (15MHz QPSK-Low CH)



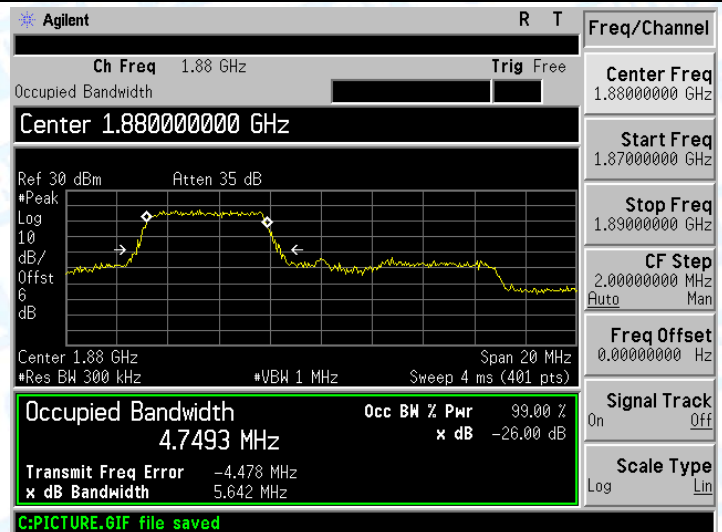
LTE BAND 2 (15MHz 16QAM-Low CH)



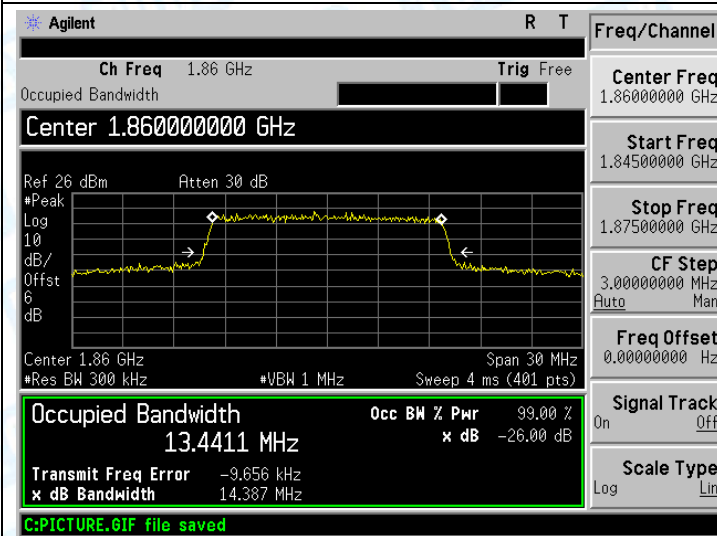
LTE BAND 2 (15MHz QPSK-Middle CH)



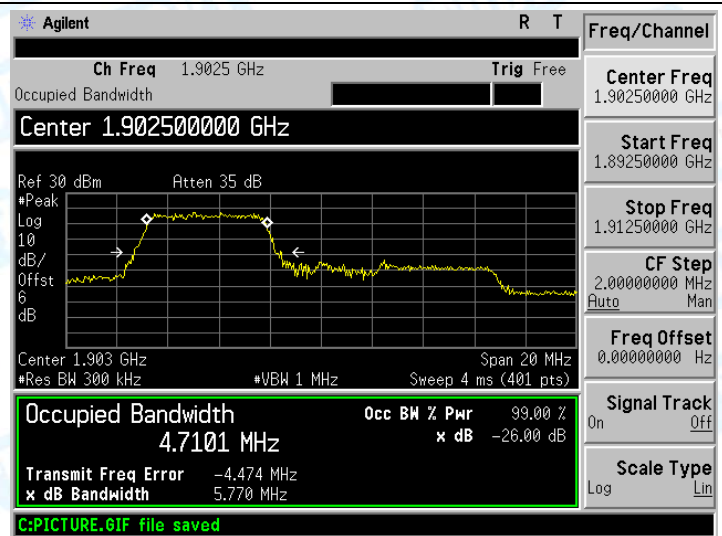
LTE BAND 2 (15MHz 16QAM-Middle CH)



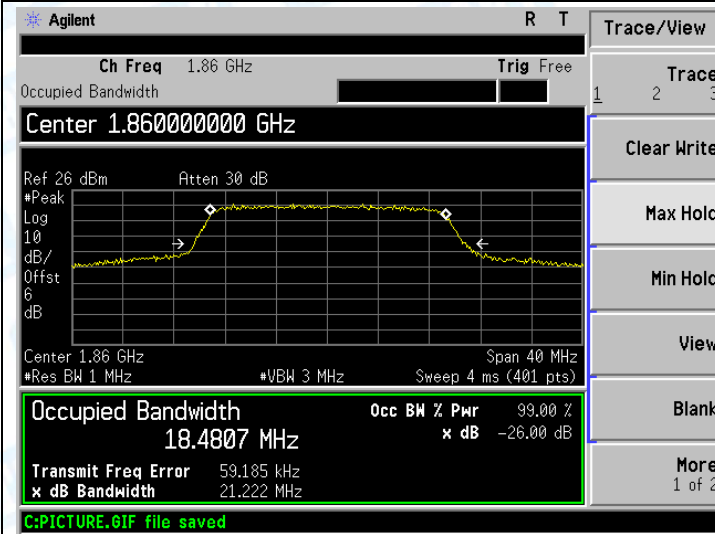
LTE BAND 2 (15MHz QPSK-High CH)



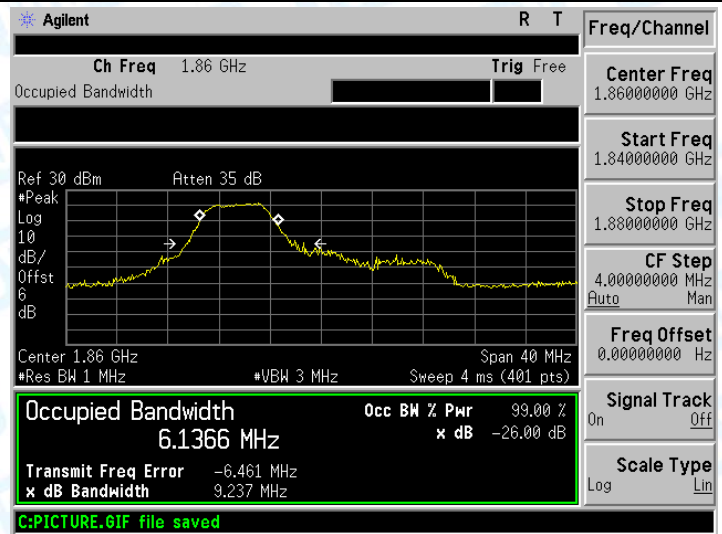
LTE BAND 2 (15MHz 16QAM-High CH)



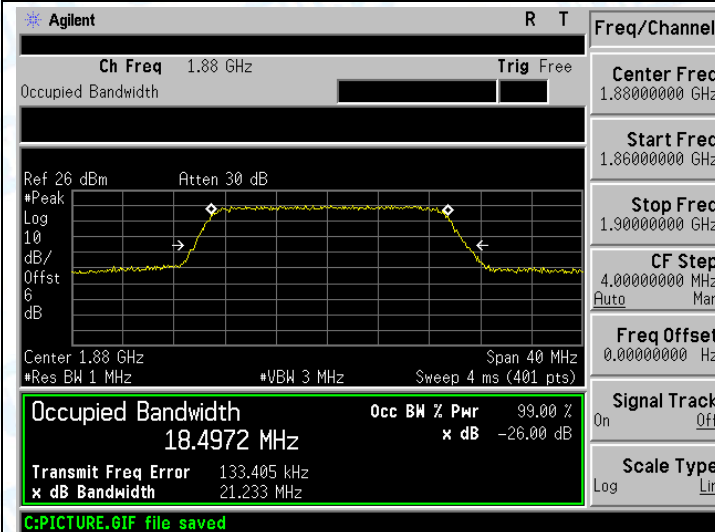
LTE BAND 2 (20MHz QPSK-Low CH)



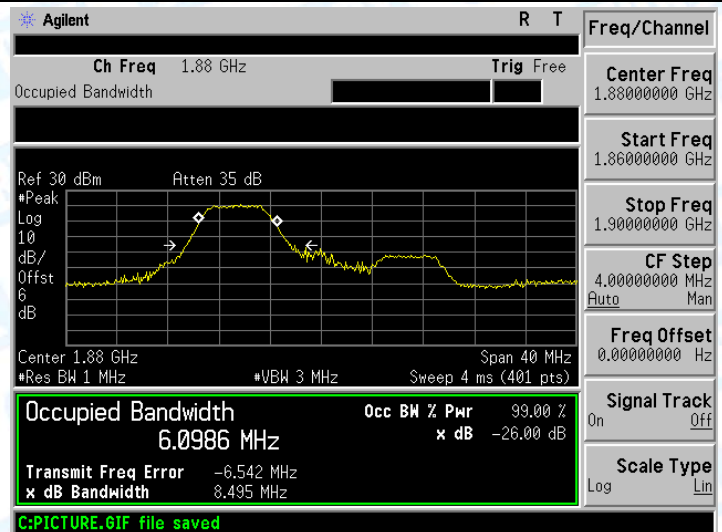
LTE BAND 2 (20MHz 16QAM-Low CH)



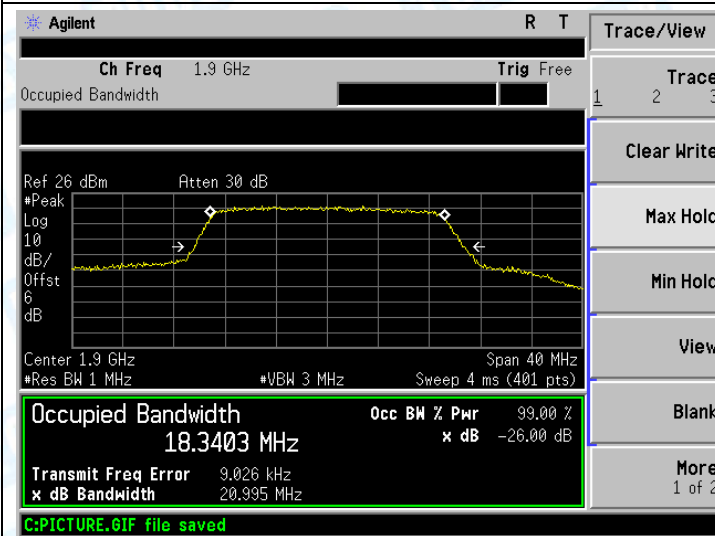
LTE BAND 2 (20MHz QPSK-Middle CH)



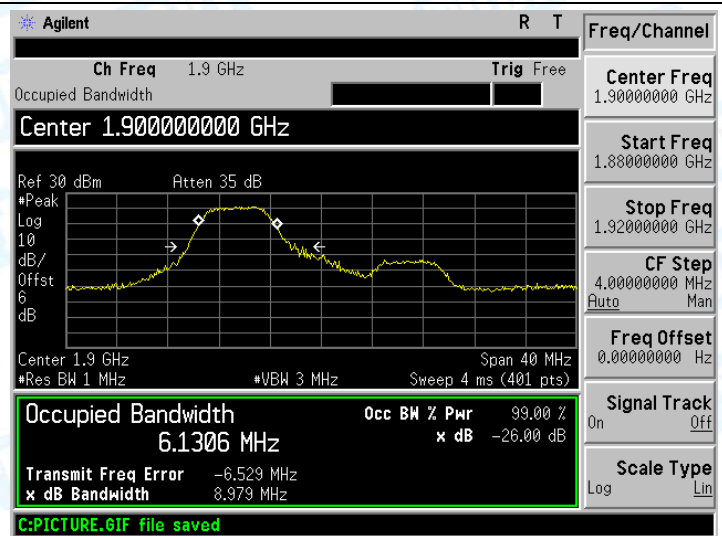
LTE BAND 2 (20MHz 16QAM-Middle CH)



LTE BAND 2 (20MHz QPSK-High CH)

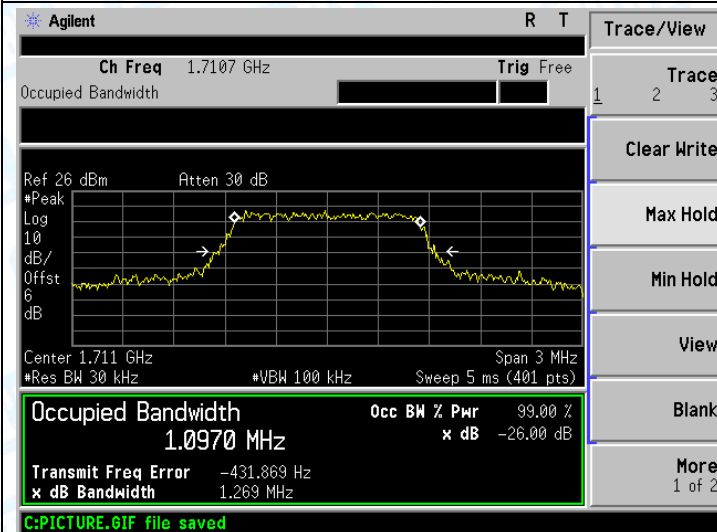


LTE BAND 2 (20MHz 16QAM-High CH)

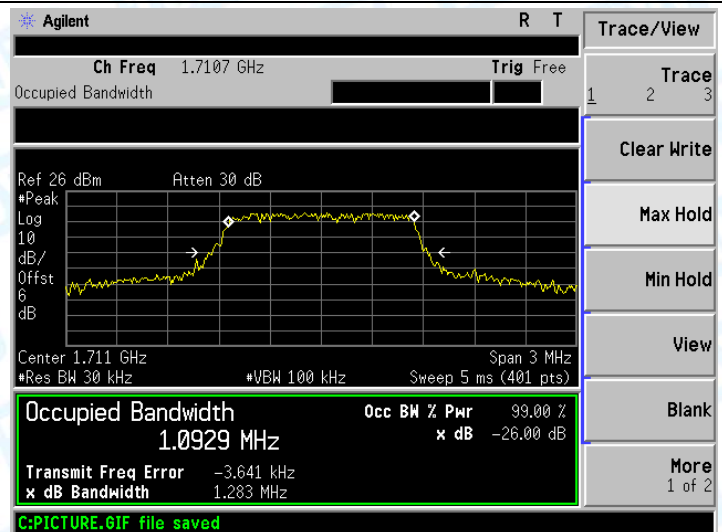


Occupancy Bandwidth Test Plot

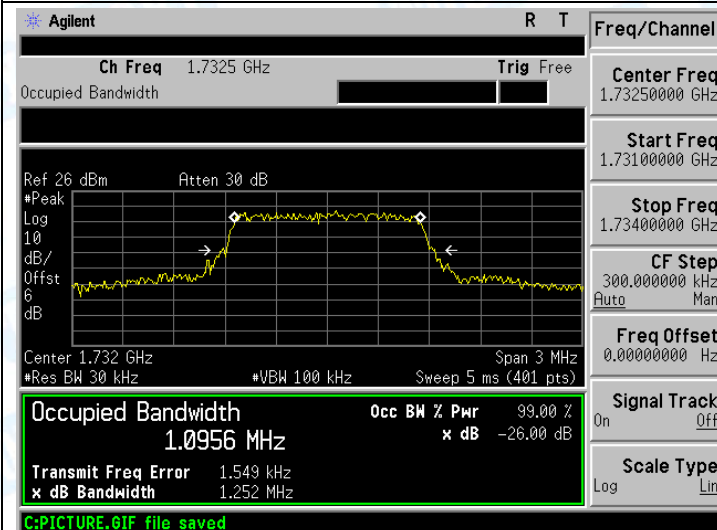
LTE BAND 4 (1.4MHz QPSK-Low CH)



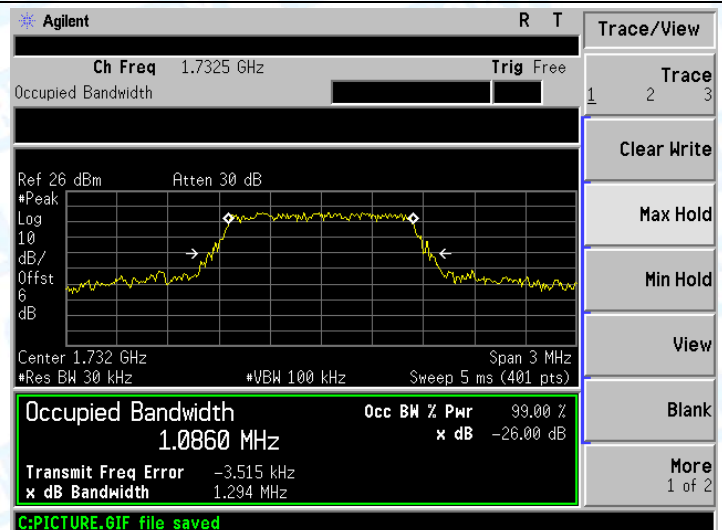
LTE BAND 4 (1.4MHz 16QAM-Low CH)



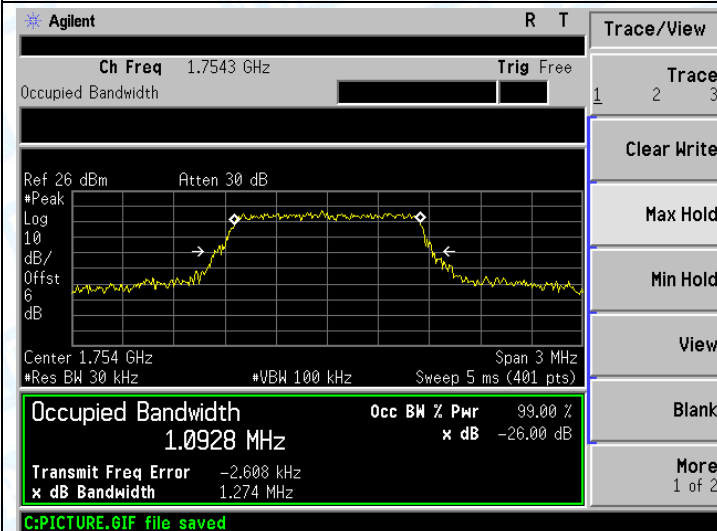
LTE BAND 4 (1.4MHz QPSK-Middle CH)



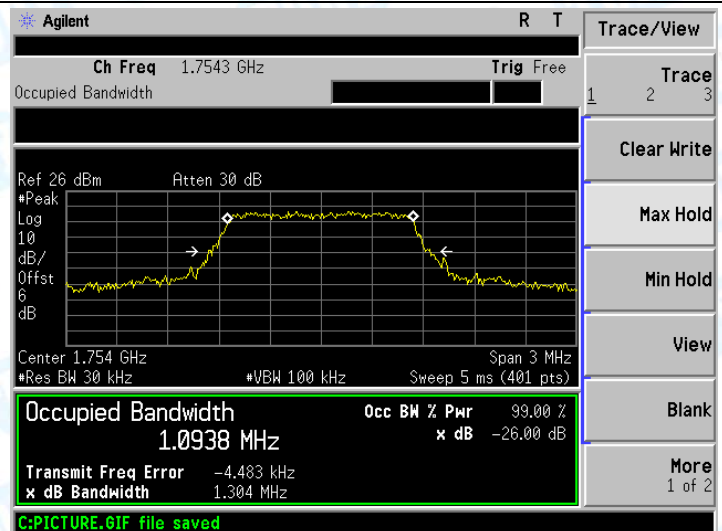
LTE BAND 4 (1.4MHz 16QAM- Middle CH)



LTE BAND 4 (1.4MHz QPSK-High CH)

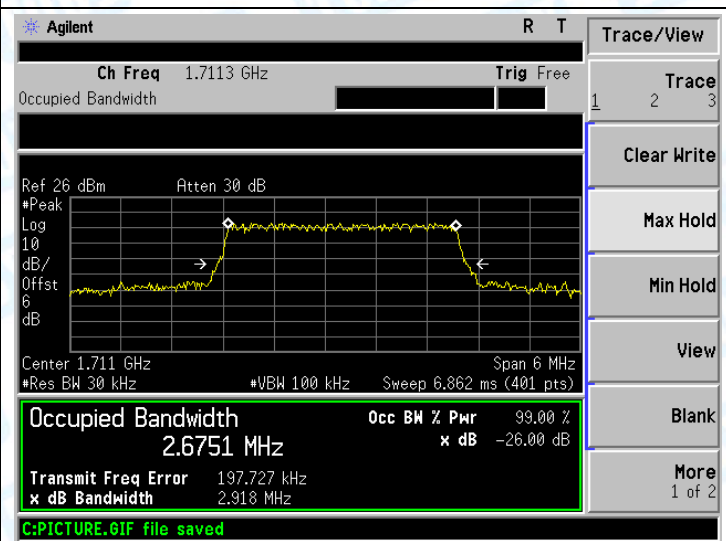
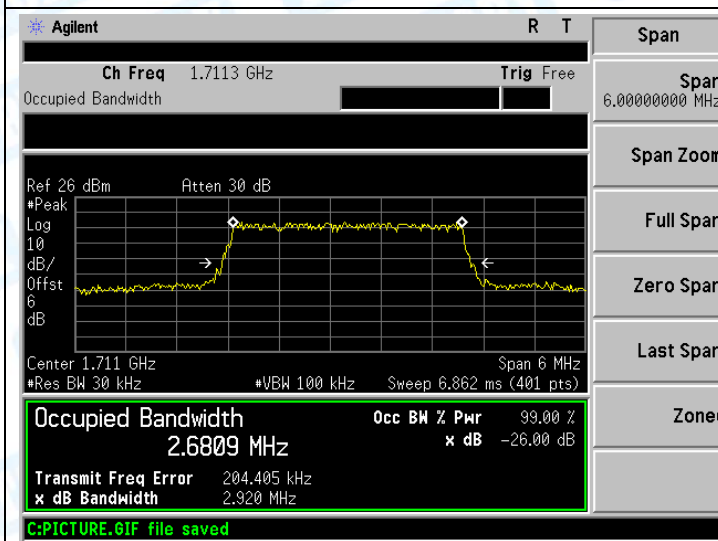


LTE BAND 4 (1.4MHz 16QAM-High CH)



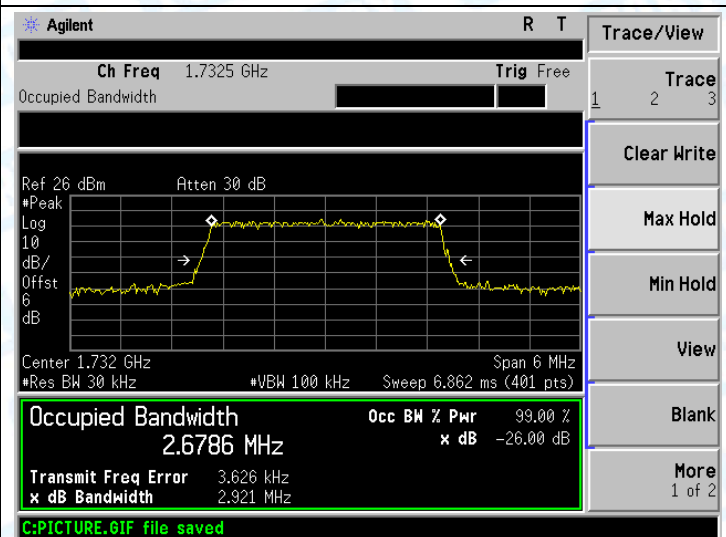
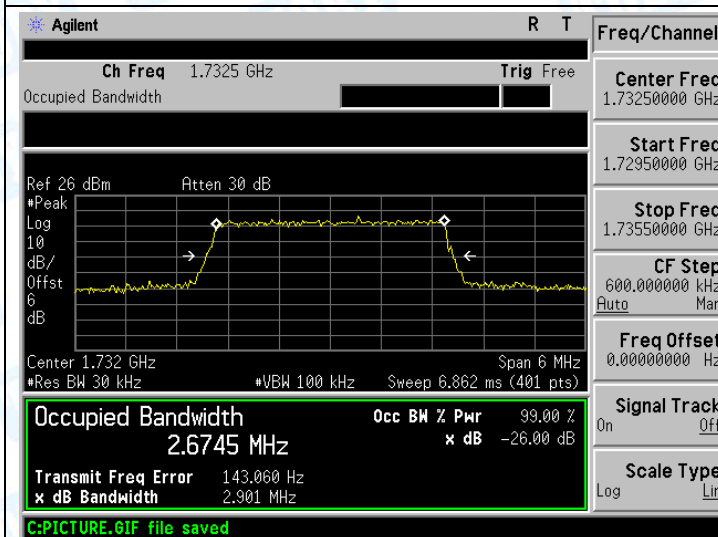
LTE BAND 4 (3MHz QPSK-Low CH)

LTE BAND 4 (3MHz 16QAM-Low CH)



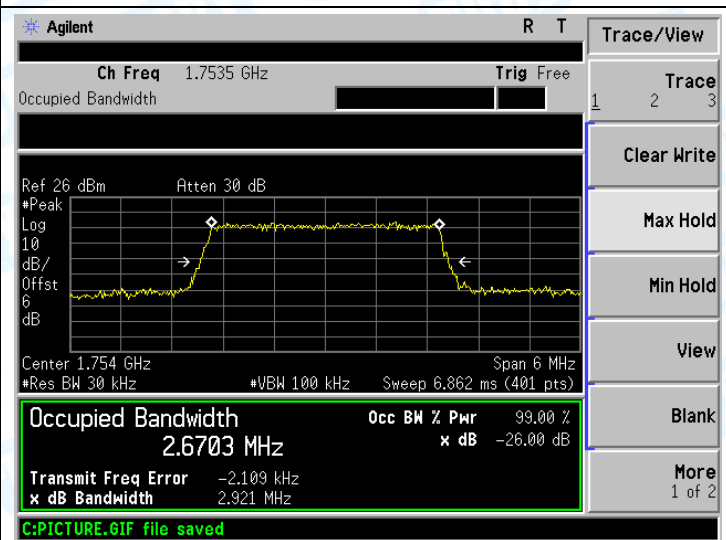
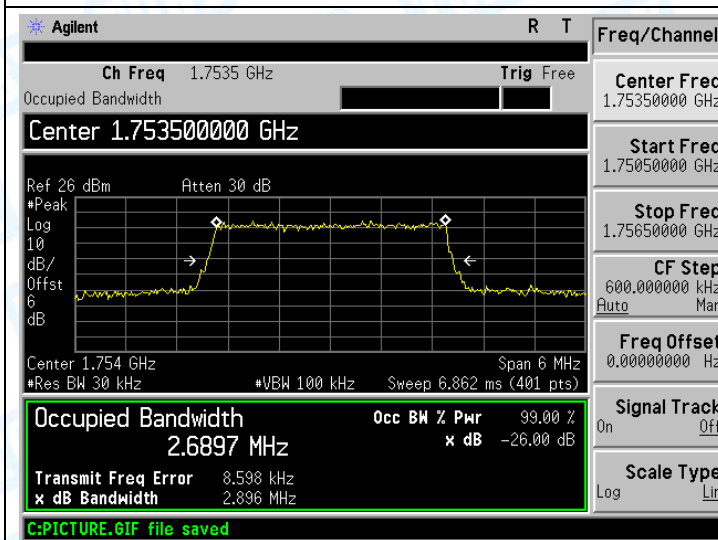
LTE BAND 4 (3MHz QPSK-Middle CH)

LTE BAND 4 (3MHz 16QAM-Middle CH)

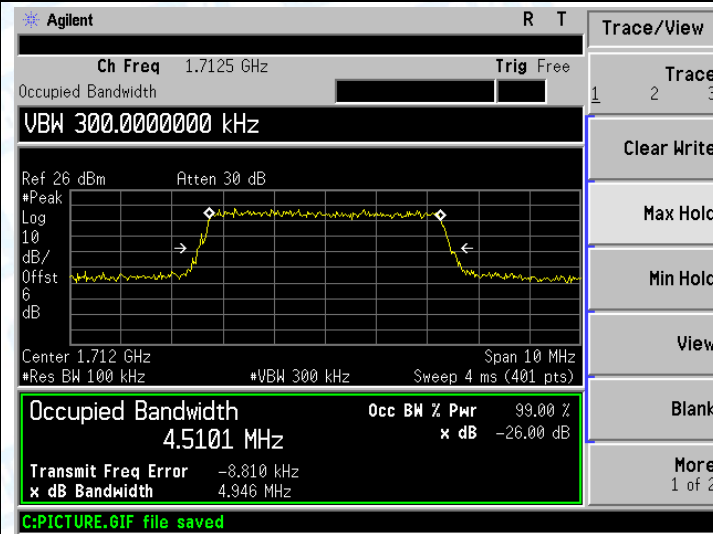


LTE BAND 4 (3MHz QPSK-High CH)

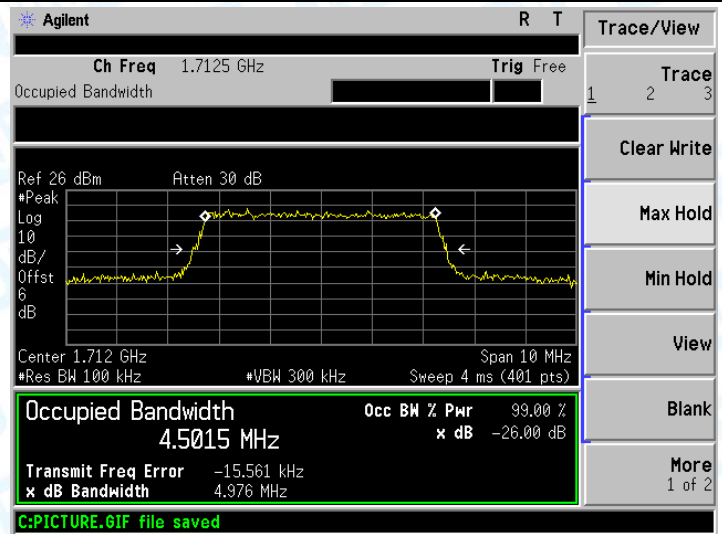
LTE BAND 4 (3MHz 16QAM-High CH)



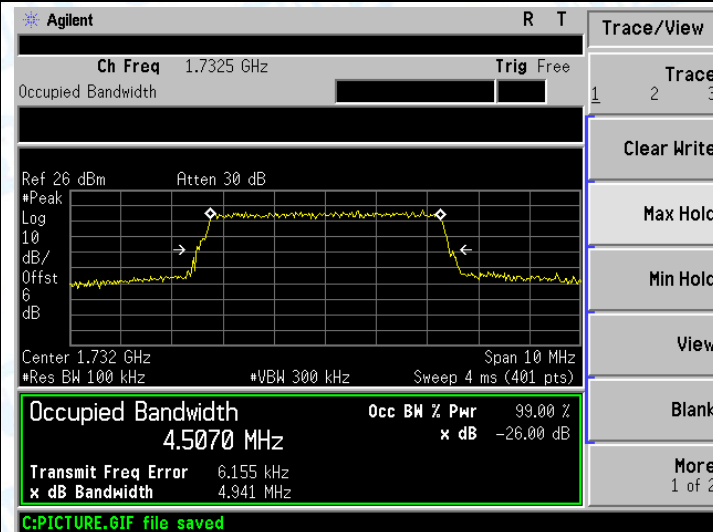
LTE BAND 4 (5MHz QPSK-Low CH)



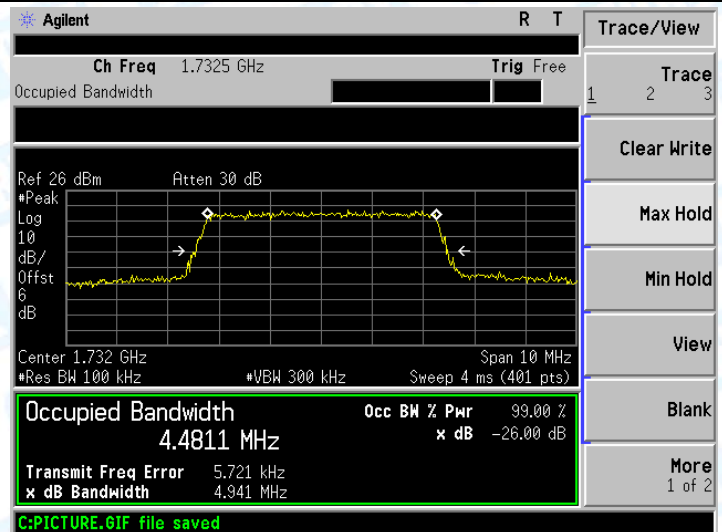
LTE BAND 4 (5MHz 16QAM-Low CH)



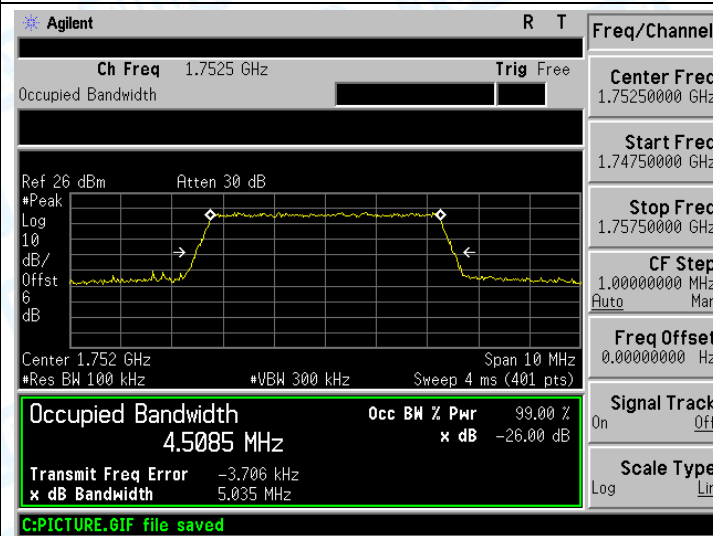
LTE BAND 4 (5MHz QPSK-Middle CH)



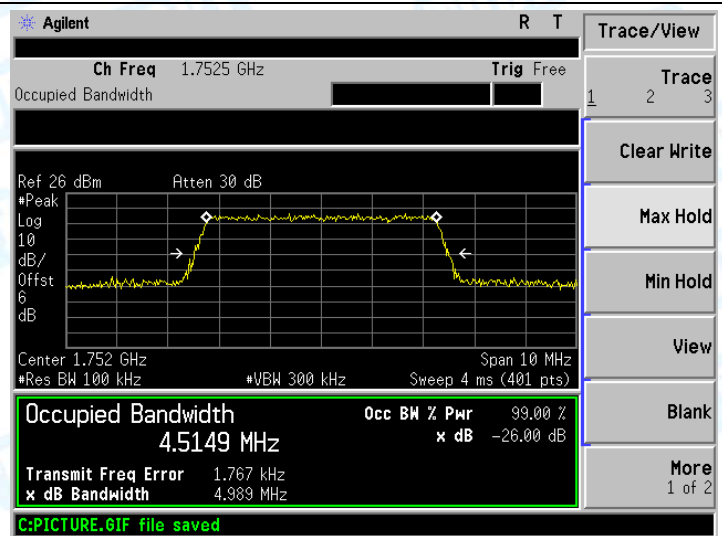
LTE BAND 4 (5MHz 16QAM- Middle CH)



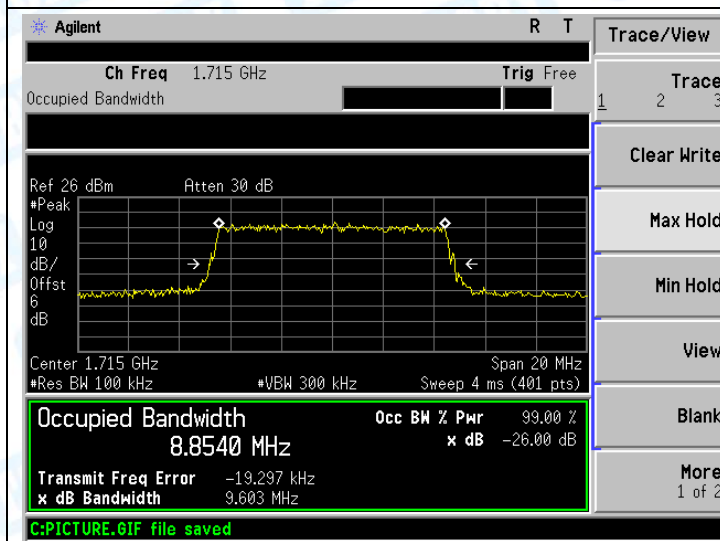
LTE BAND 4 (5MHz QPSK-High CH)



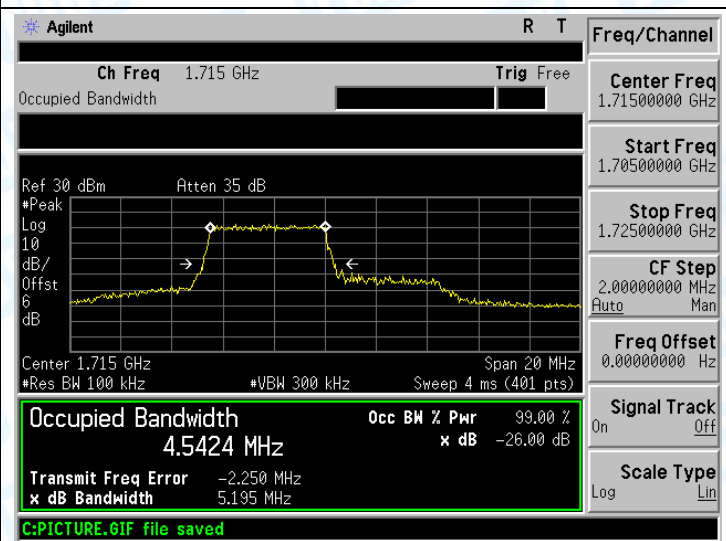
LTE BAND 4 (5MHz 16QAM-High CH)



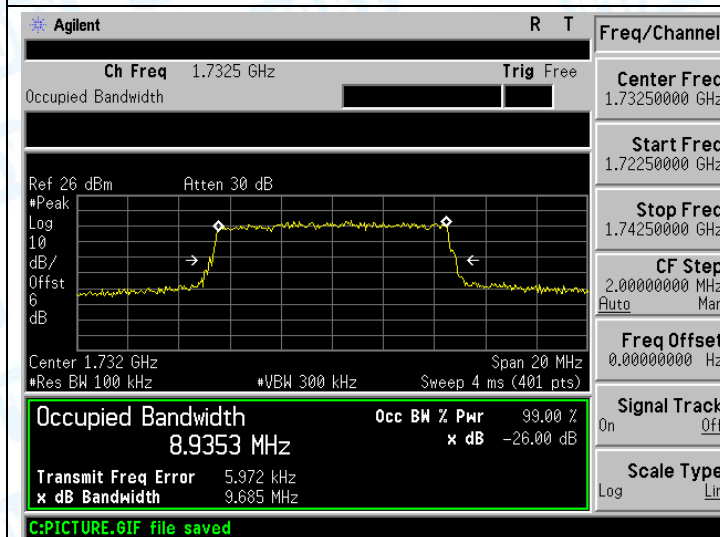
LTE BAND 4 (10MHz QPSK-Low CH)



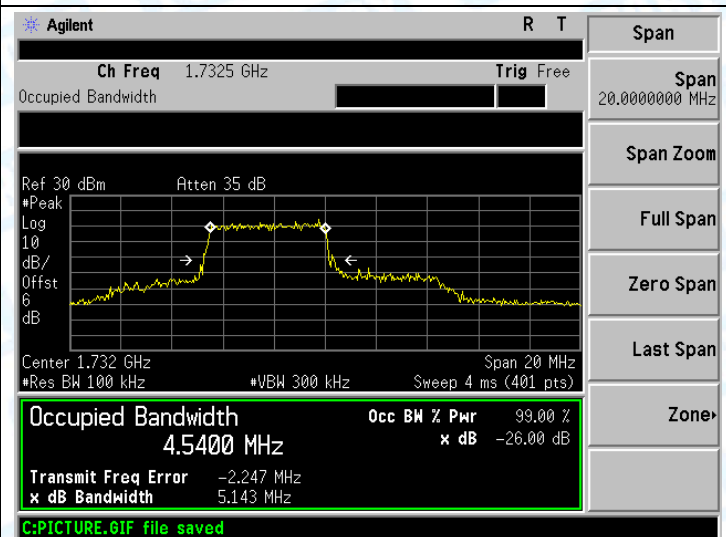
LTE BAND 4 (10MHz 16QAM-Low CH)



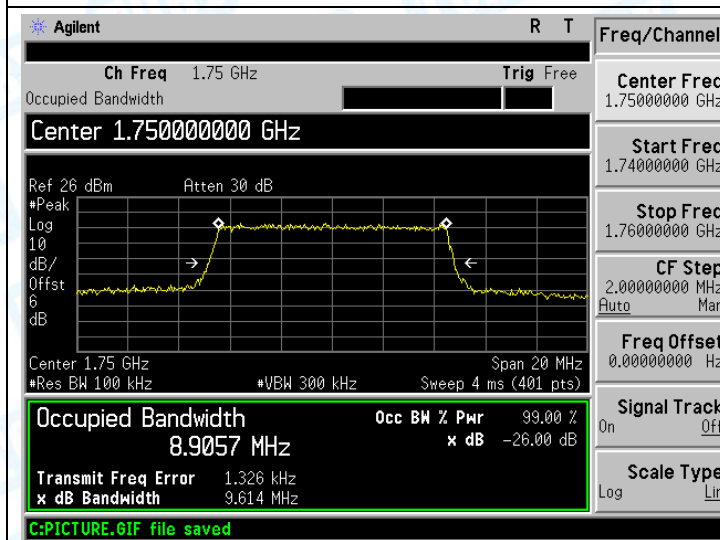
LTE BAND 4 (10MHz QPSK-Middle CH)



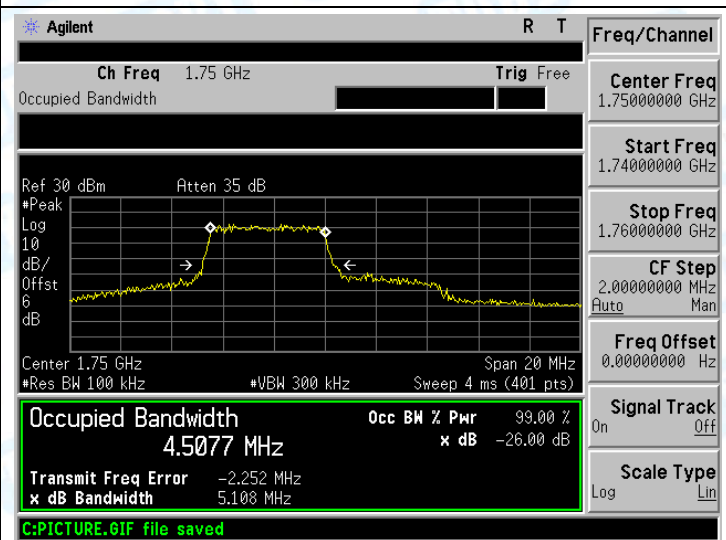
LTE BAND 4 (10MHz 16QAM- Middle CH)



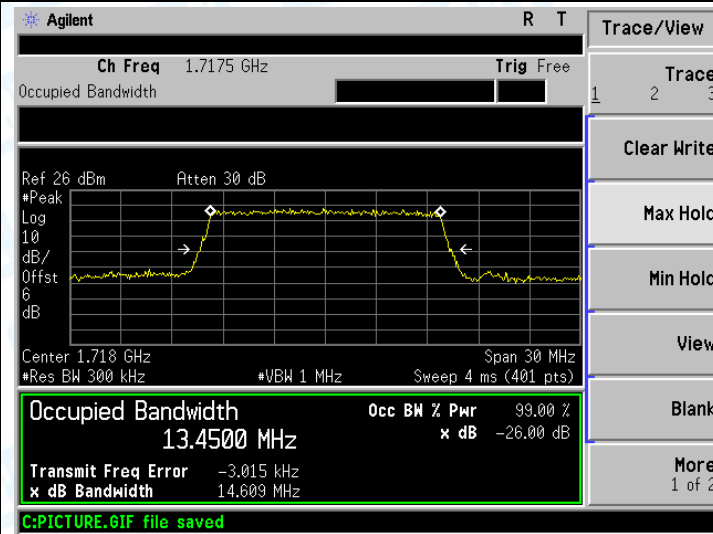
LTE BAND 4 (10MHz QPSK-High CH)



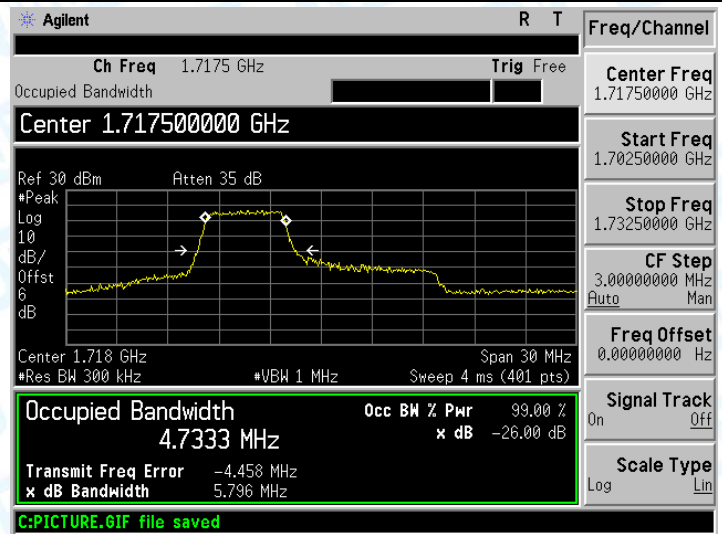
LTE BAND 4 (10MHz 16QAM-High CH)



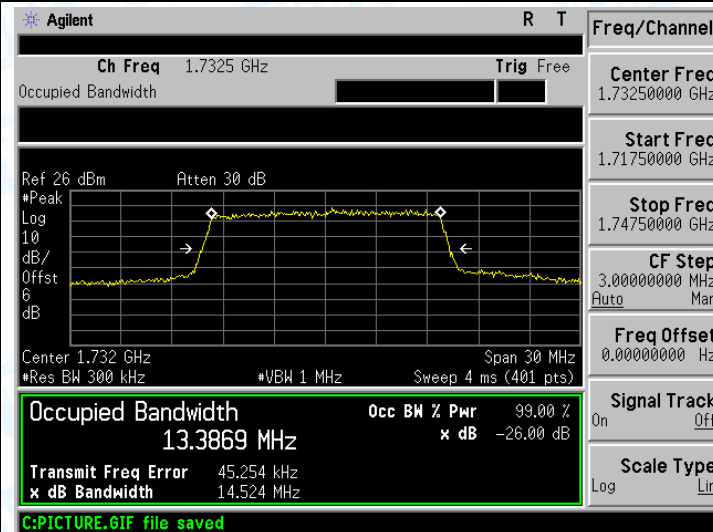
LTE BAND 4 (15MHz QPSK-Low CH)



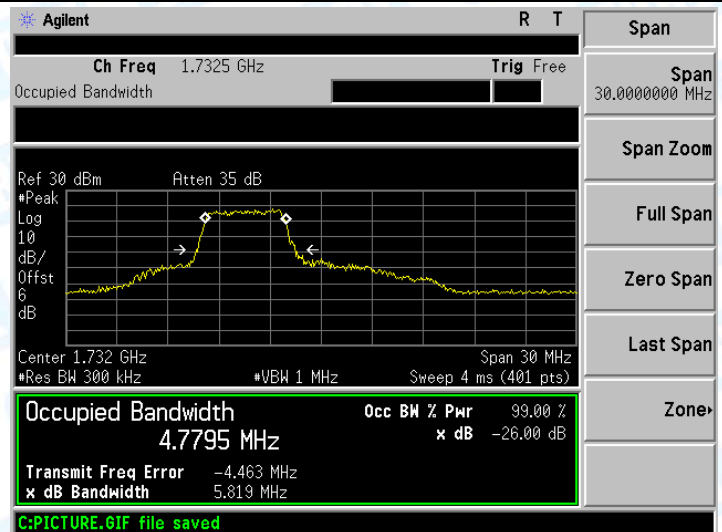
LTE BAND 4 (15MHz 16QAM-Low CH)



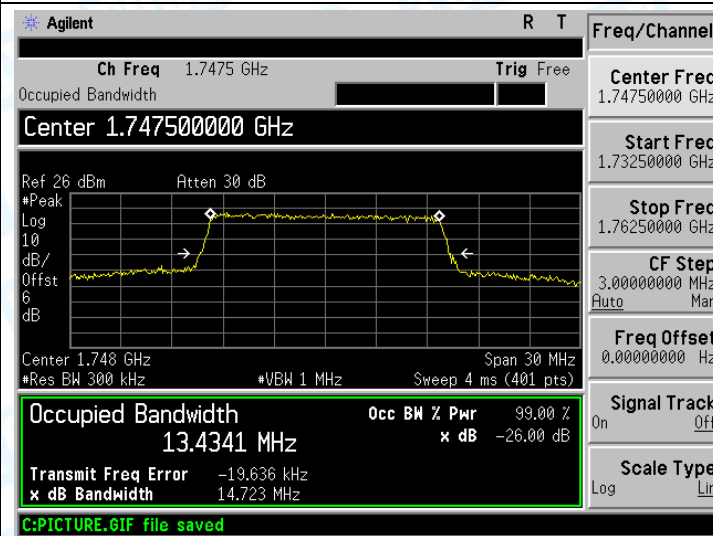
LTE BAND 4 (15MHz QPSK-Middle CH)



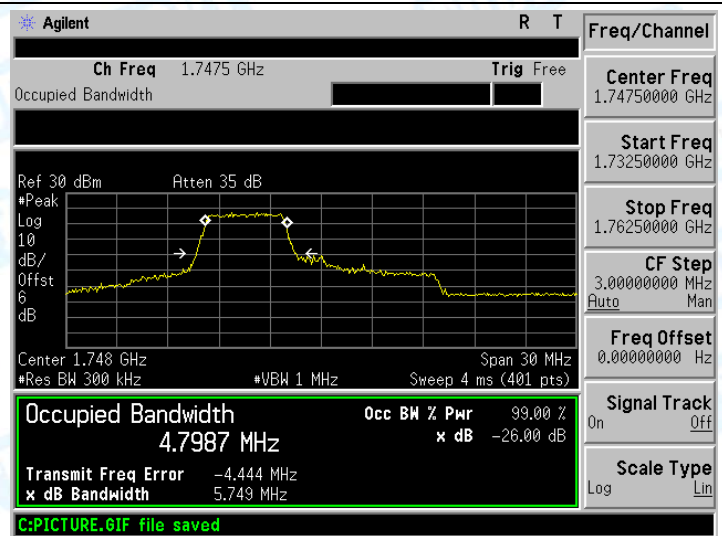
LTE BAND 4 (15MHz 16QAM-Middle CH)



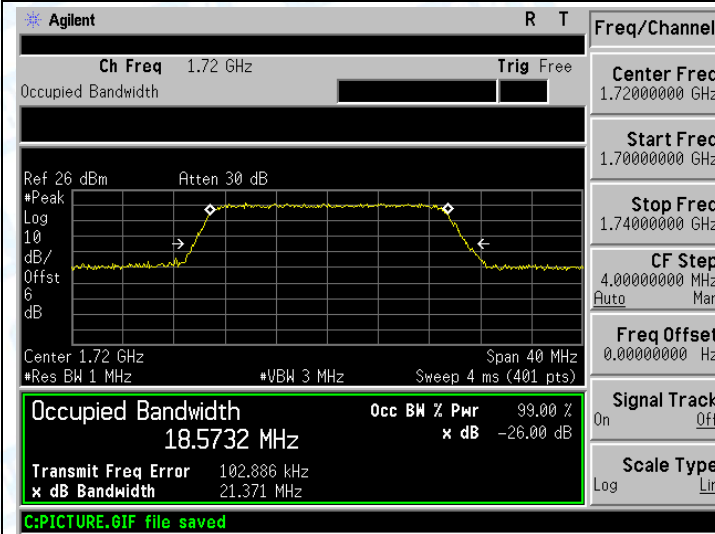
LTE BAND 4 (15MHz QPSK-High CH)



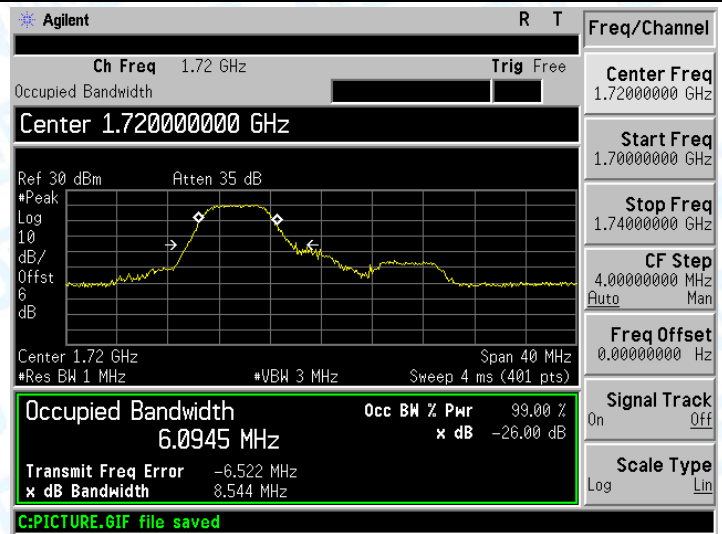
LTE BAND 4 (15MHz 16QAM-High CH)



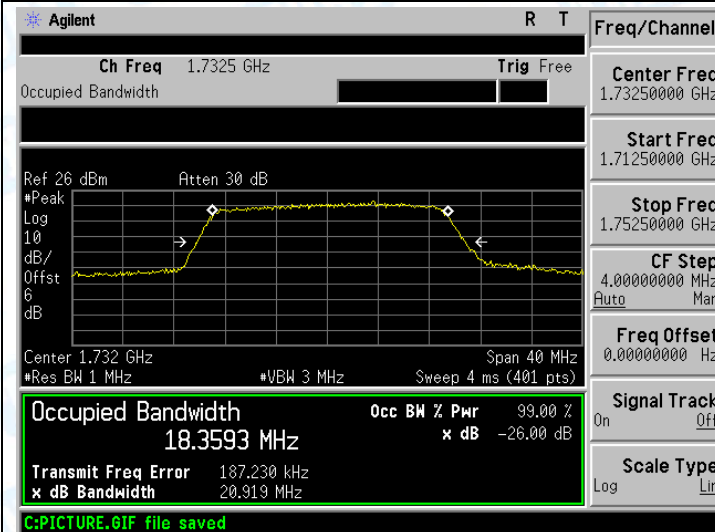
LTE BAND 4 (20MHz QPSK-Low CH)



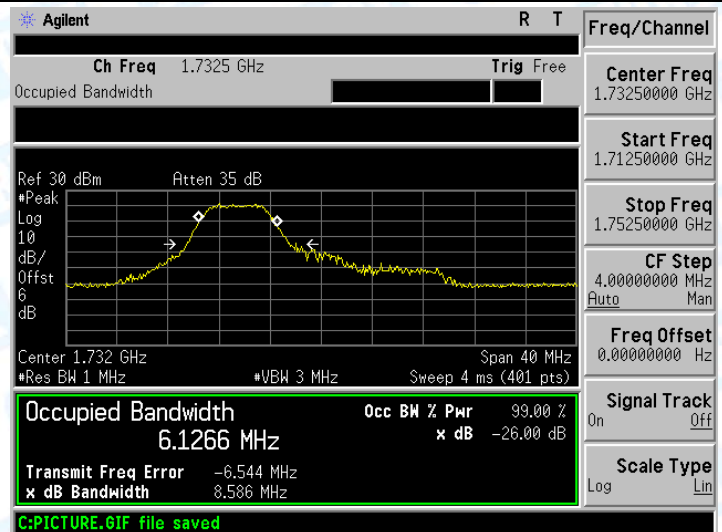
LTE BAND 4 (20MHz 16QAM-Low CH)



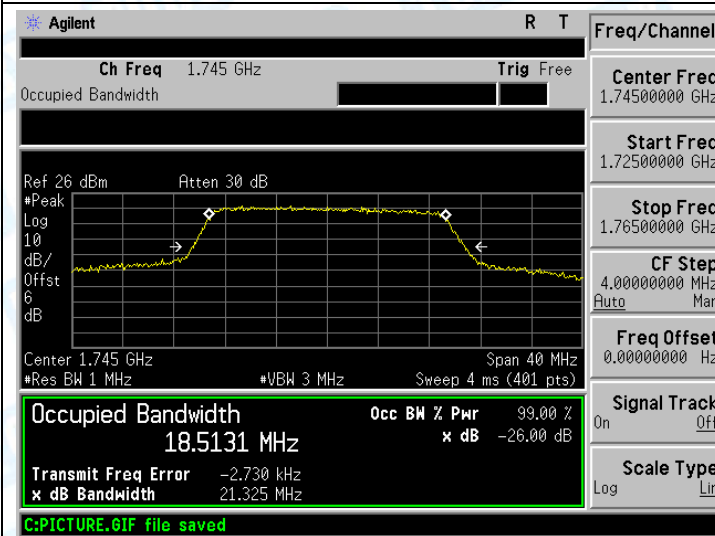
LTE BAND 4 (20MHz QPSK-Middle CH)



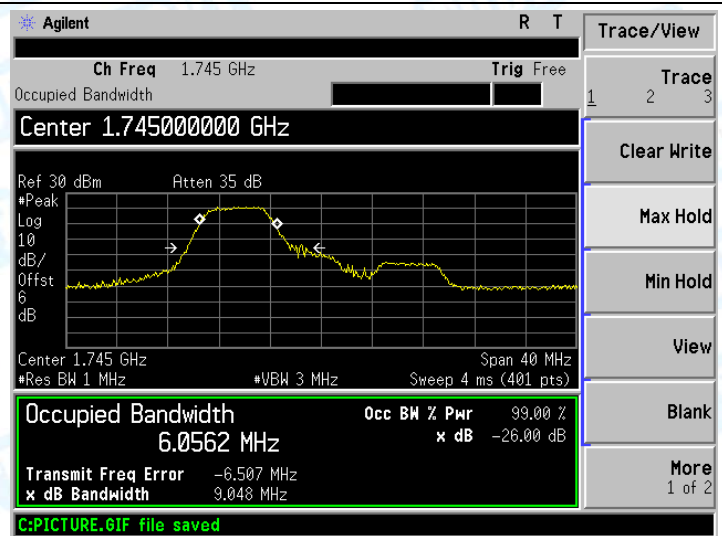
LTE BAND 4 (20MHz 16QAM-Middle CH)



LTE BAND 4 (20MHz QPSK-High CH)

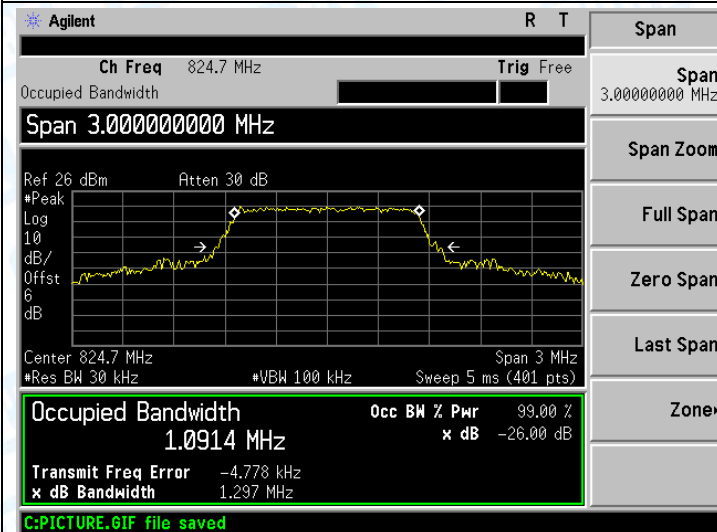


LTE BAND 4 (20MHz 16QAM-High CH)

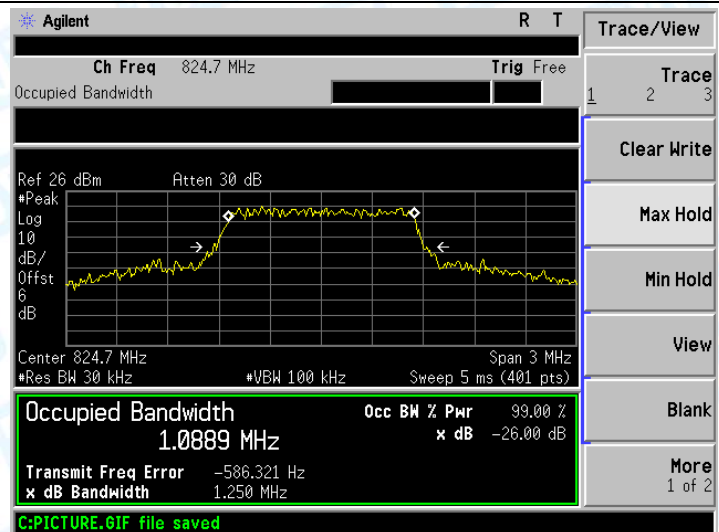


Occupancy Bandwidth Test Plot

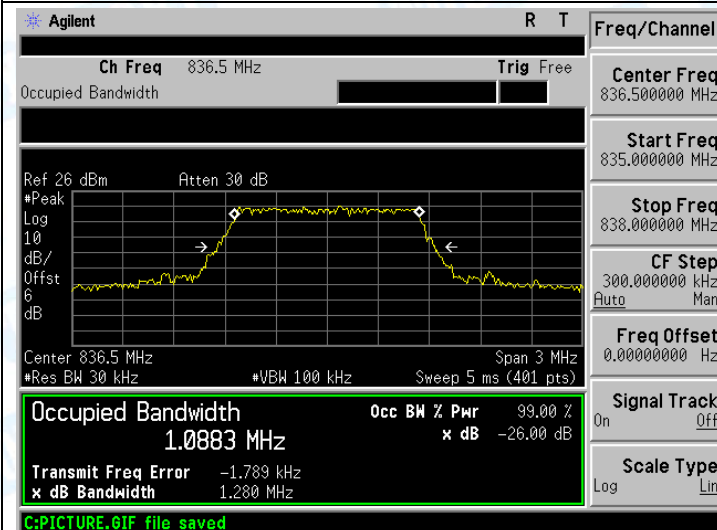
LTE BAND 5 (1.4MHz QPSK-Low CH)



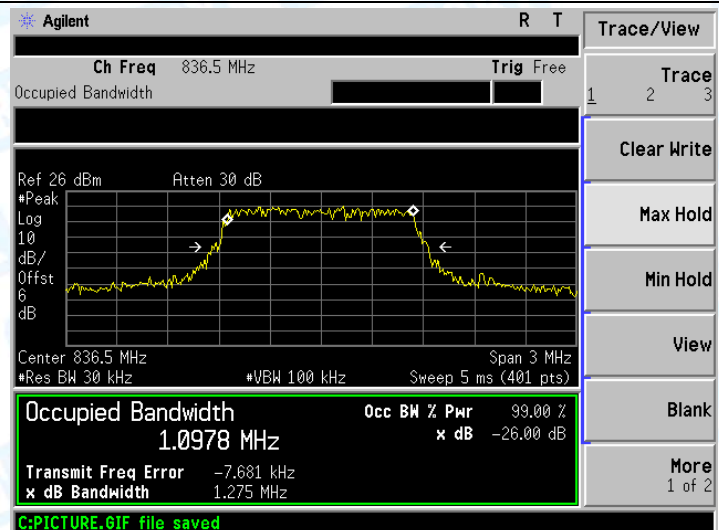
LTE BAND 5 (1.4MHz 16QAM-Low CH)



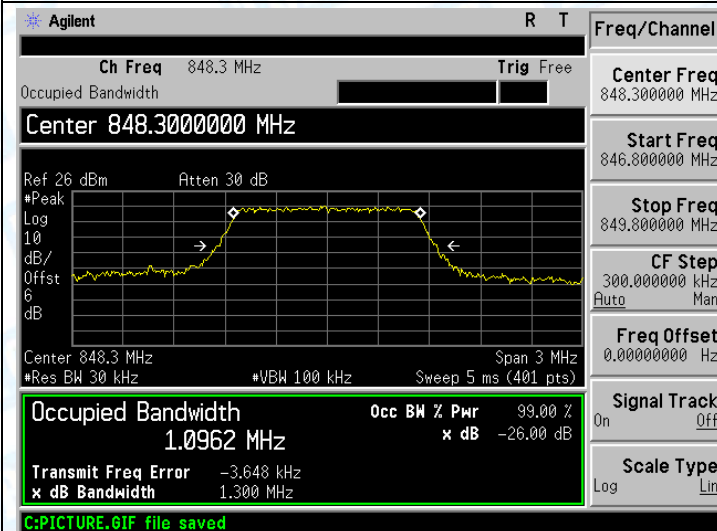
LTE BAND 5 (1.4MHz QPSK-Middle CH)



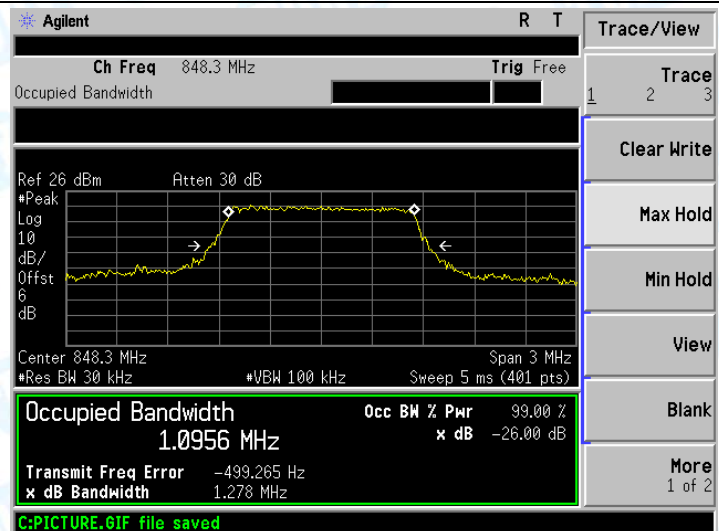
LTE BAND 5 (1.4MHz 16QAM- Middle CH)



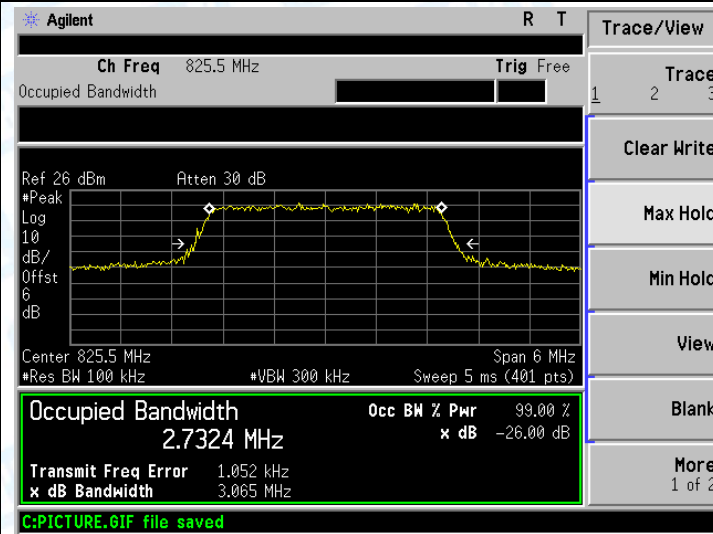
LTE BAND 5 (1.4MHz QPSK-High CH)



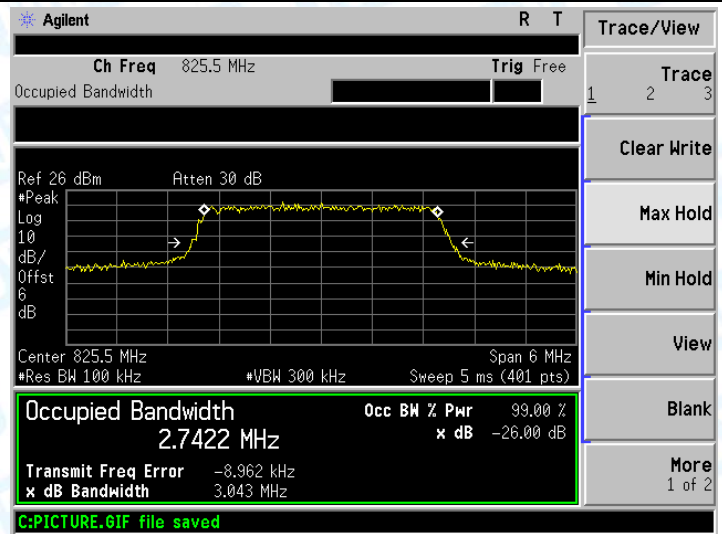
LTE BAND 5 (1.4MHz 16QAM-High CH)



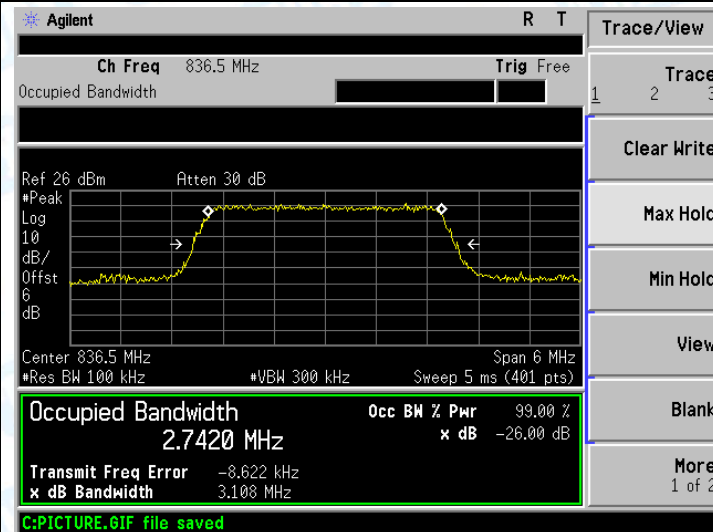
LTE BAND 5 (3MHz QPSK-Low CH)



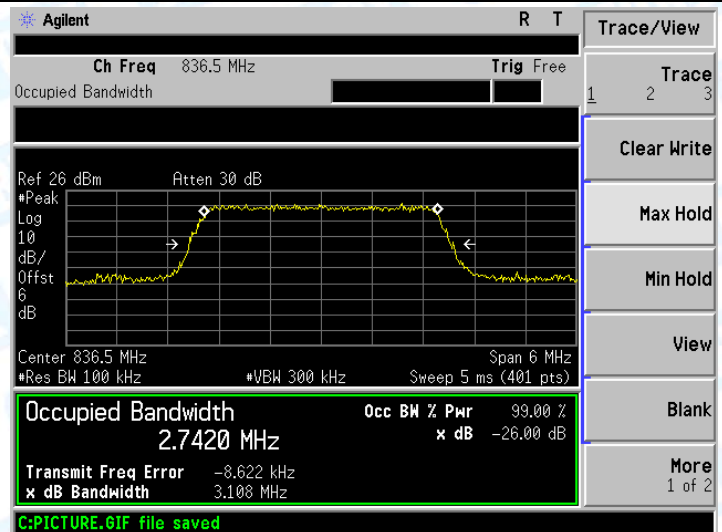
LTE BAND 5 (3MHz 16QAM-Low CH)



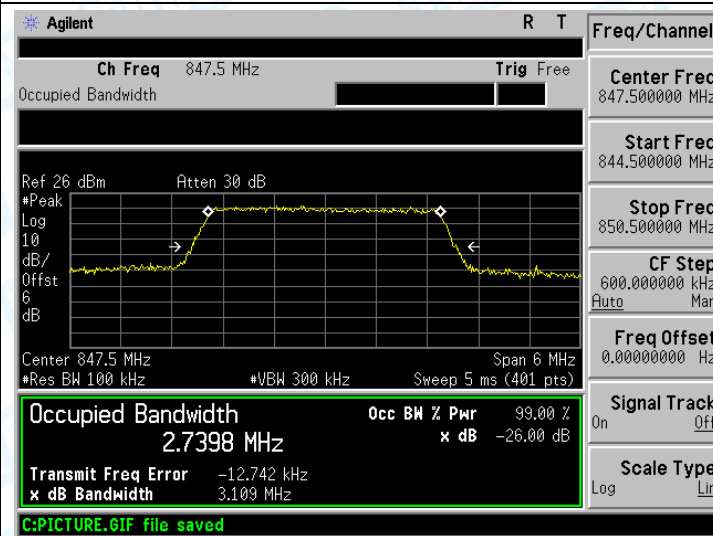
LTE BAND 5 (3MHz QPSK-Middle CH)



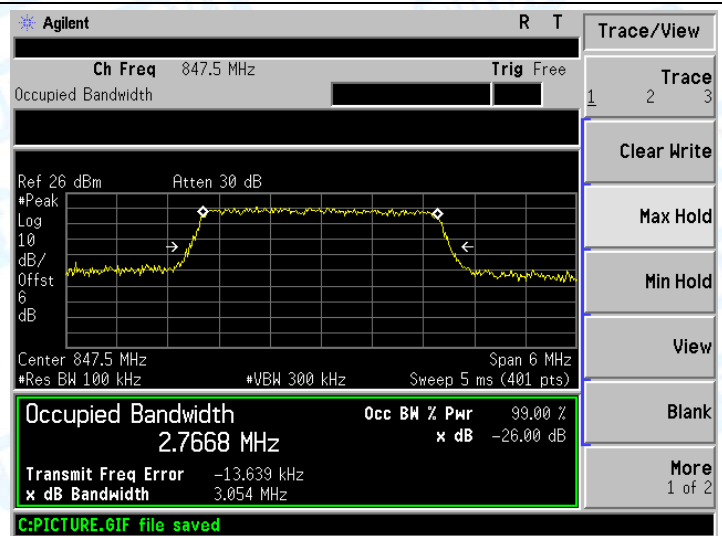
LTE BAND 5 (3MHz 16QAM- Middle CH)



LTE BAND 5 (3MHz QPSK-High CH)

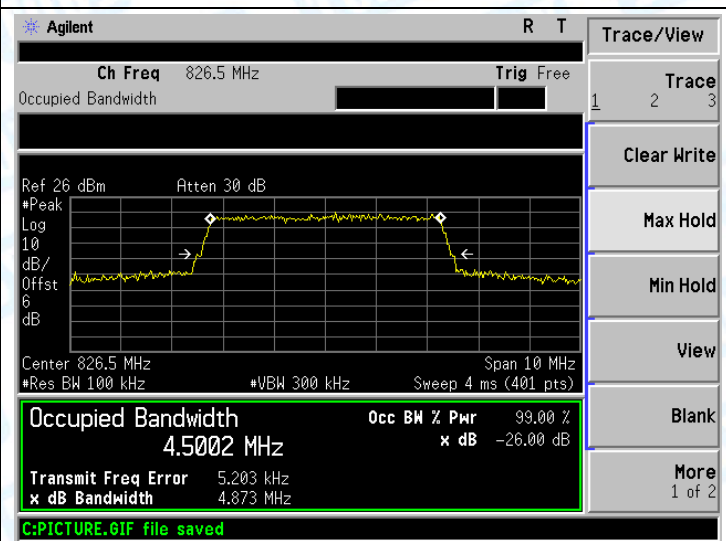
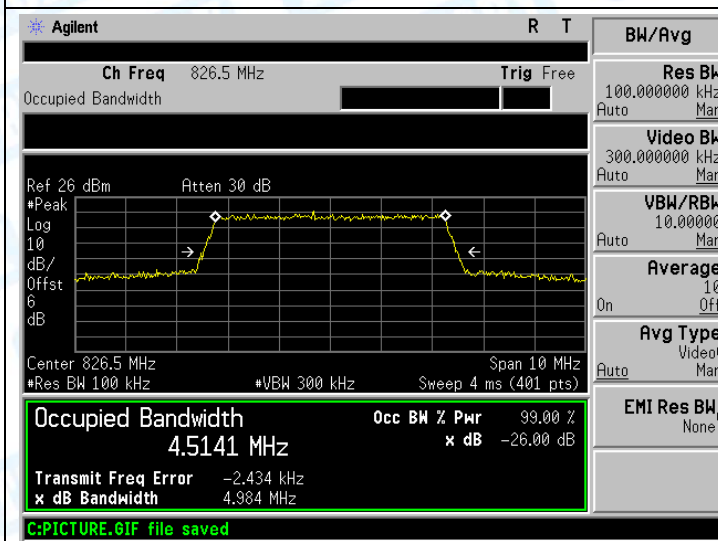


LTE BAND 5 (3MHz 16QAM-High CH)



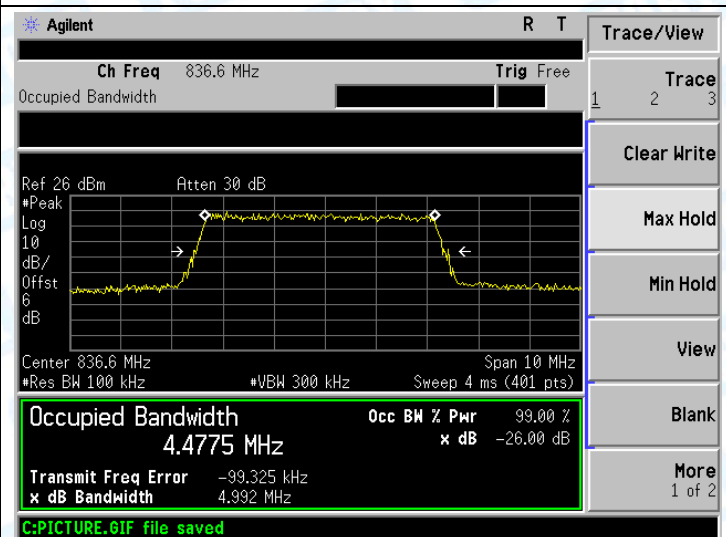
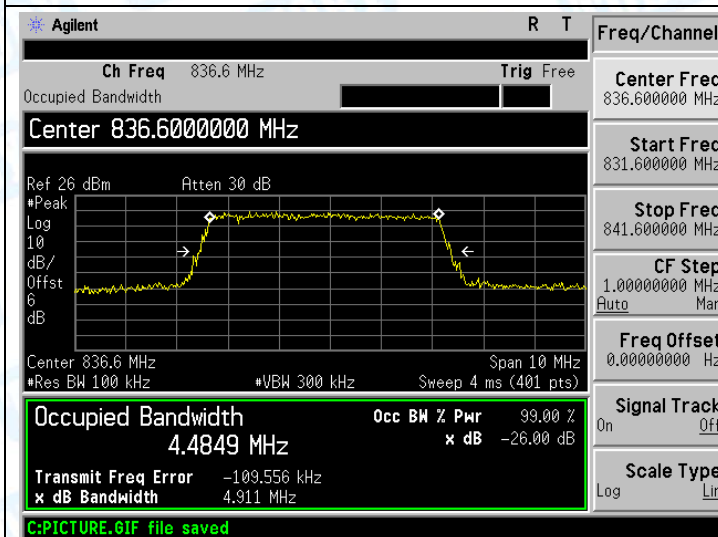
LTE BAND 5 (5MHz QPSK-Low CH)

LTE BAND 5 (5MHz 16QAM-Low CH)



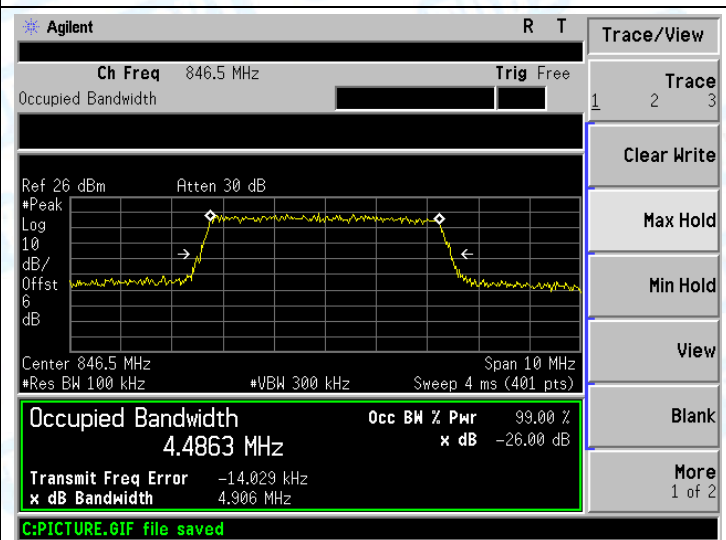
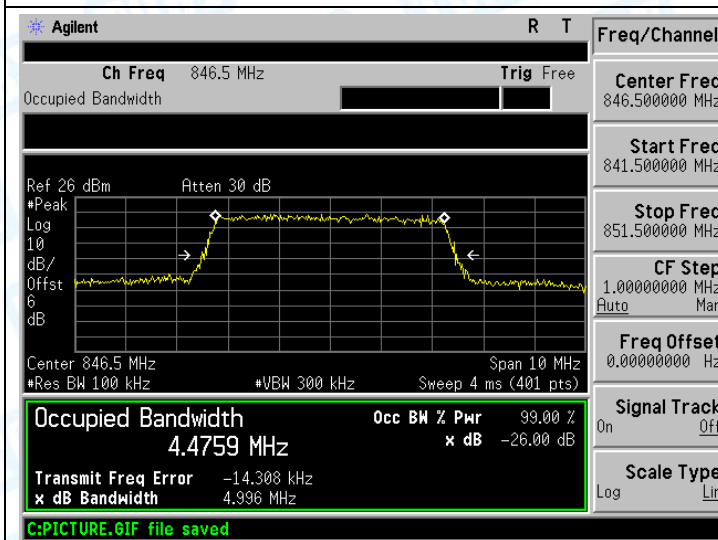
LTE BAND 5 (5MHz QPSK-Middle CH)

LTE BAND 5 (5MHz 16QAM- Middle CH)

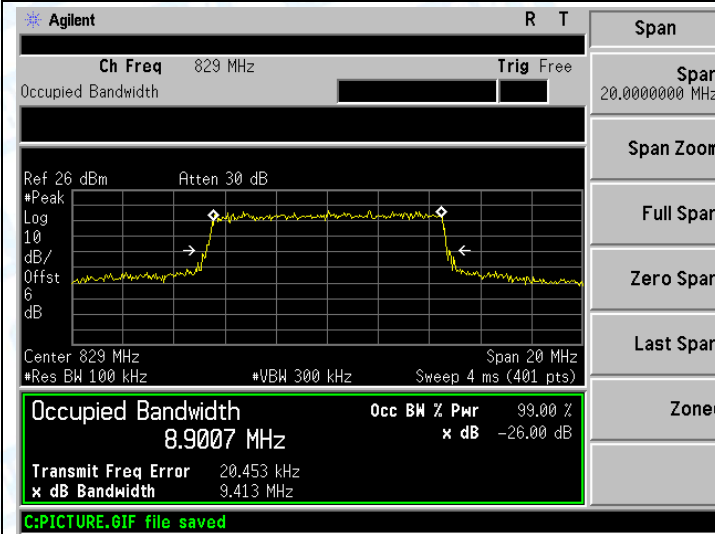


LTE BAND 5 (5MHz QPSK-High CH)

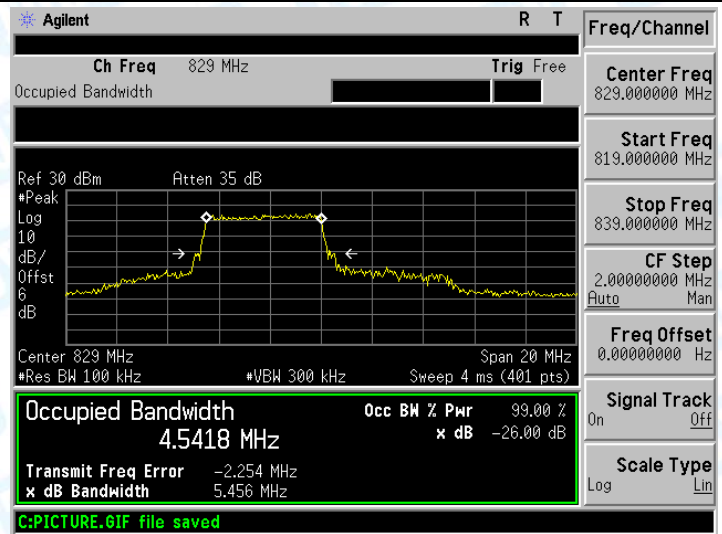
LTE BAND 5 (5MHz 16QAM-High CH)



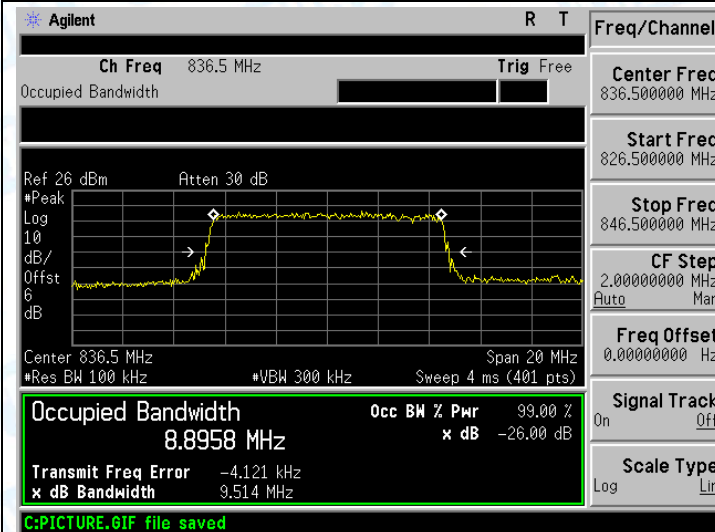
LTE BAND 5 (10MHz QPSK-Low CH)



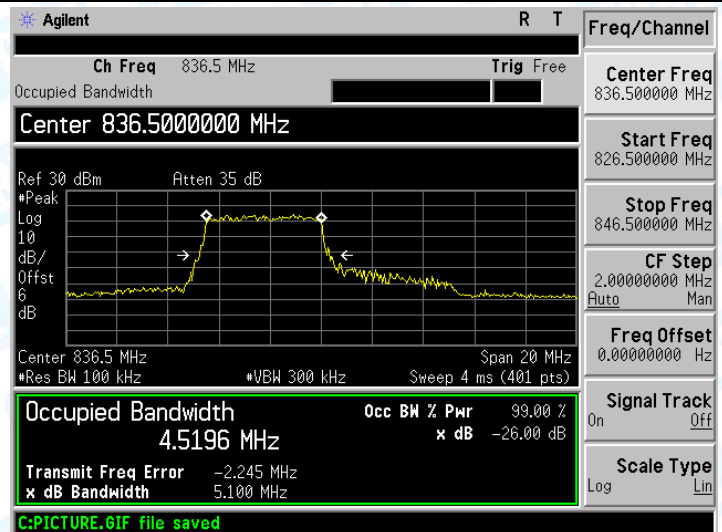
LTE BAND 5 (10MHz 16QAM-Low CH)



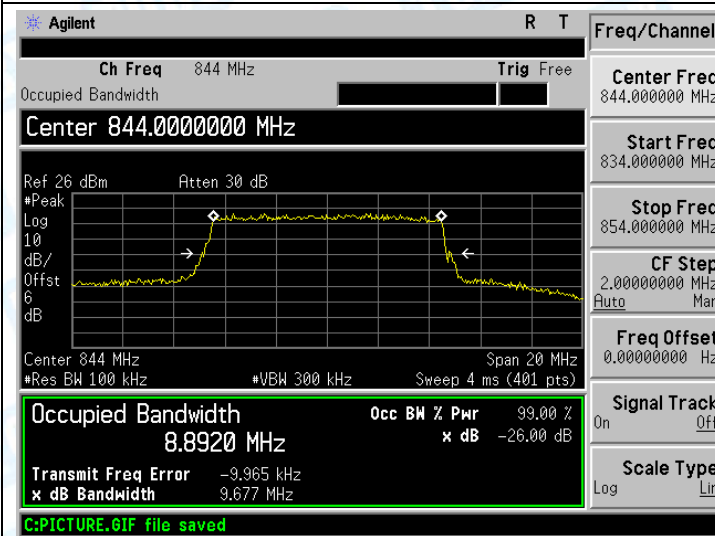
LTE BAND 5 (10MHz QPSK-Middle CH)



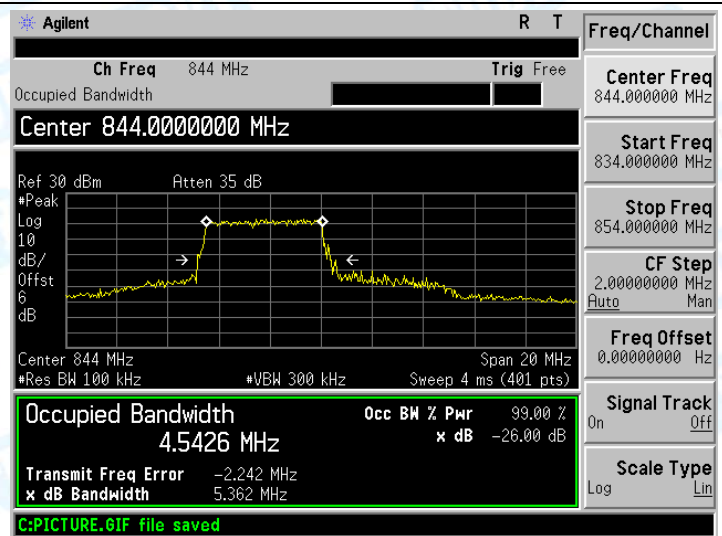
LTE BAND 5 (10MHz 16QAM-Middle CH)



LTE BAND 5 (10MHz QPSK-High CH)



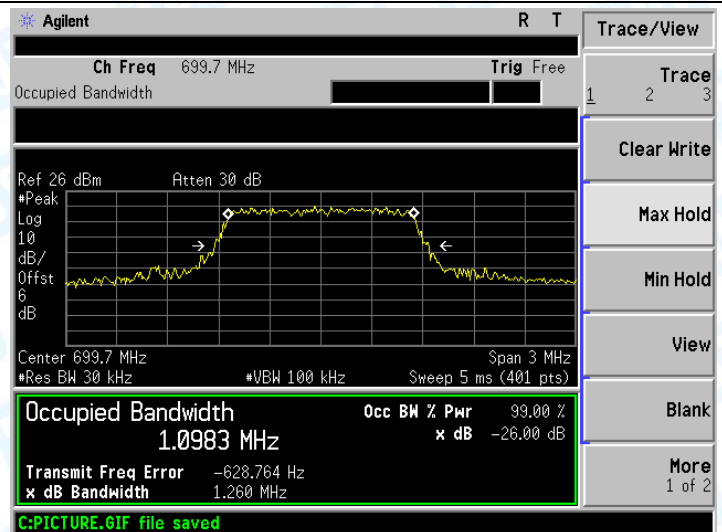
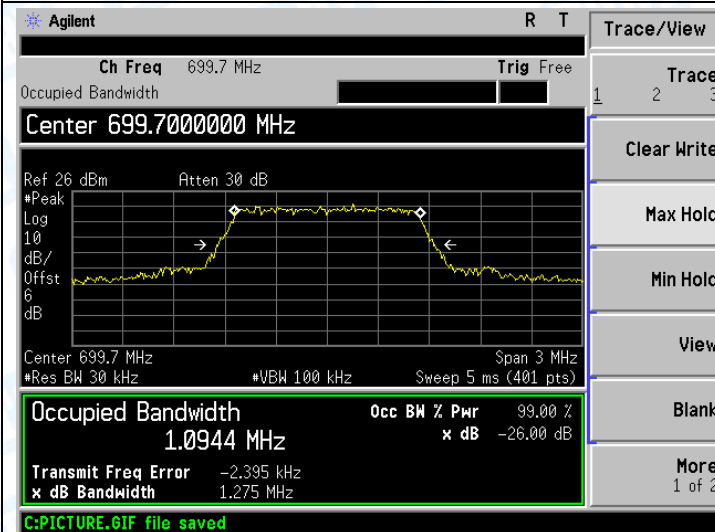
LTE BAND 5 (10MHz 16QAM-High CH)



Occupancy Bandwidth Test Plot

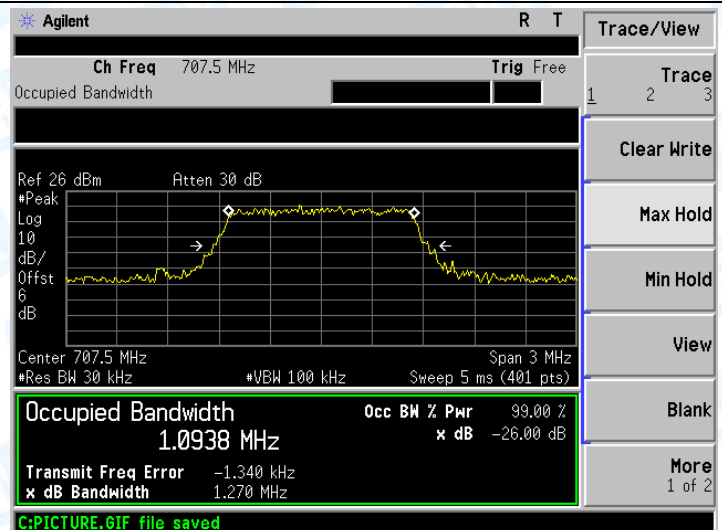
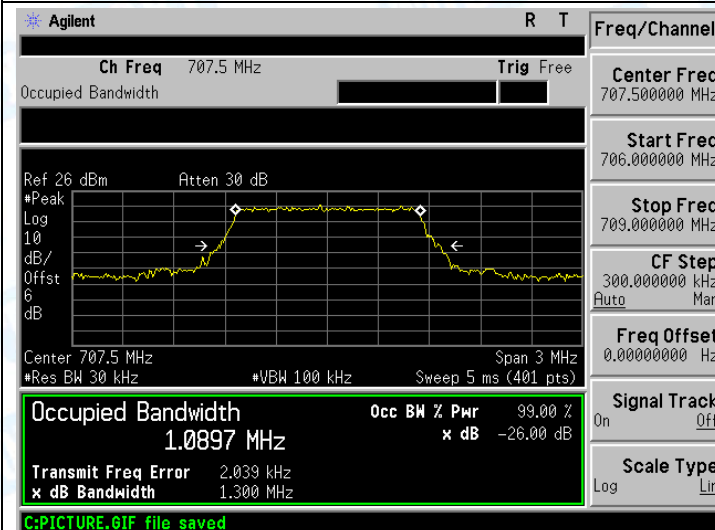
LTE BAND 12 (1.4MHz QPSK-Low CH)

LTE BAND 12 (1.4MHz 16QAM-Low CH)



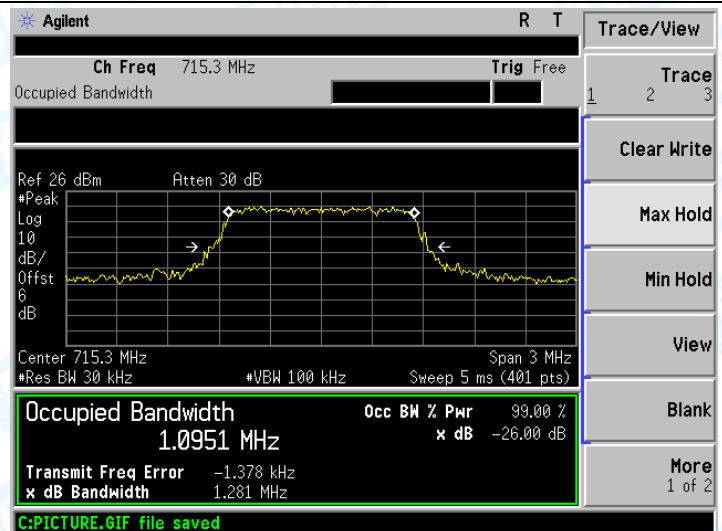
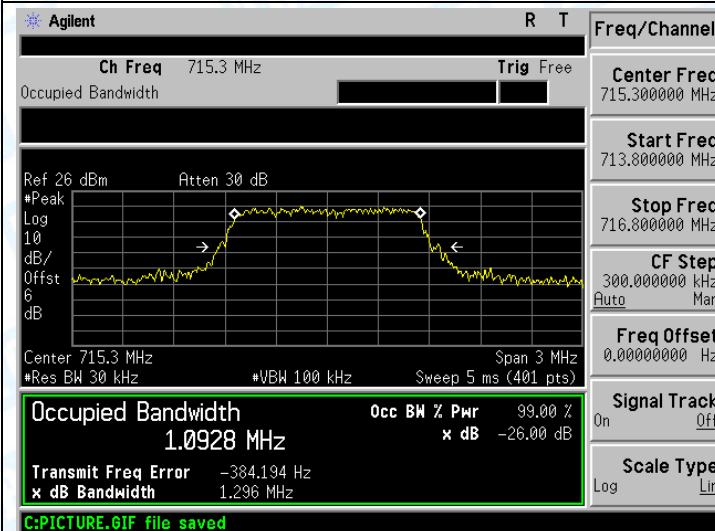
LTE BAND 12 (1.4MHz QPSK-Middle CH)

LTE BAND 12 (1.4MHz 16QAM- Middle CH)

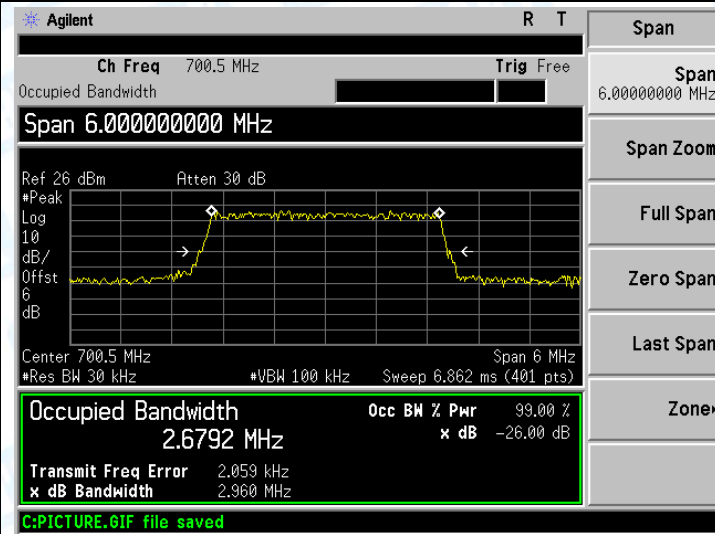


LTE BAND 12 (1.4MHz QPSK-High CH)

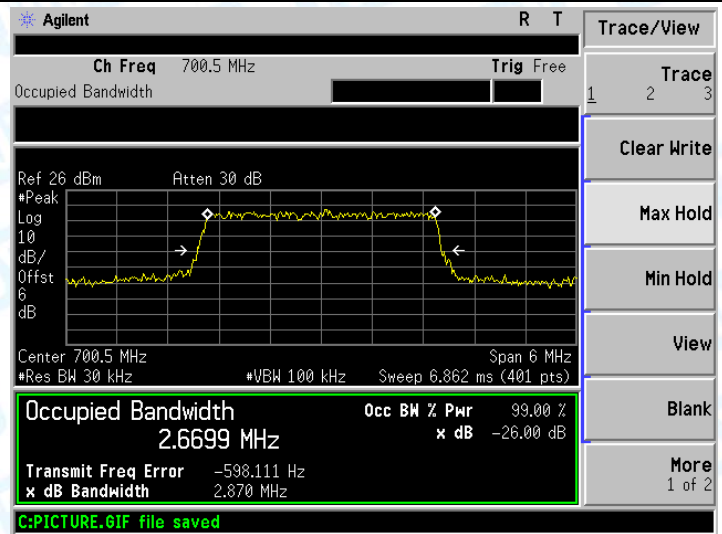
LTE BAND 12 (1.4MHz 16QAM-High CH)



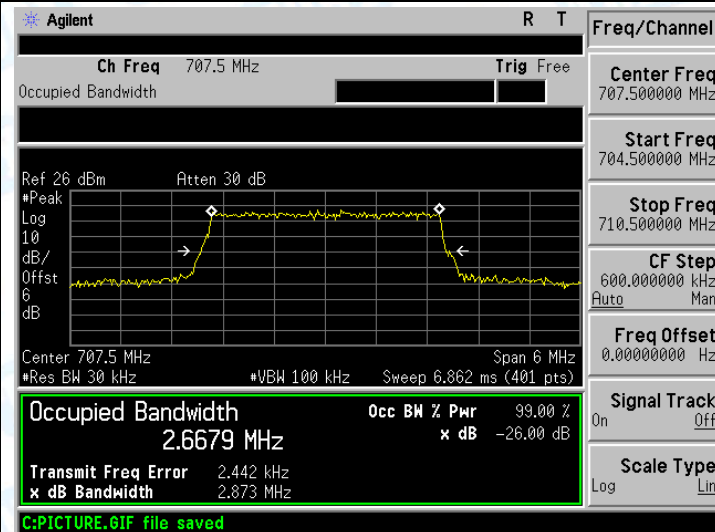
LTE BAND 12 (3MHz QPSK-Low CH)



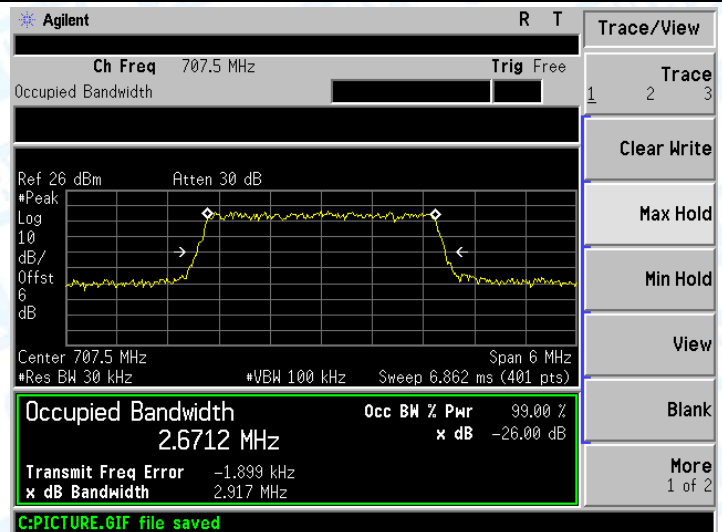
LTE BAND 12 (3MHz 16QAM-Low CH)



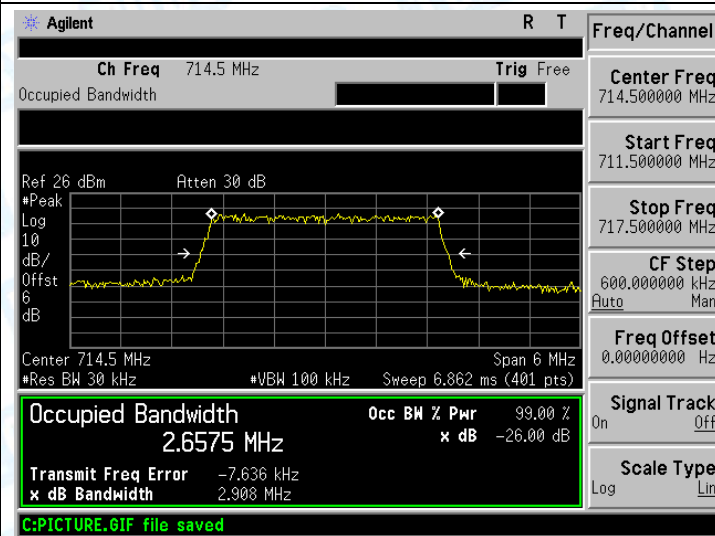
LTE BAND 12 (3MHz QPSK-Middle CH)



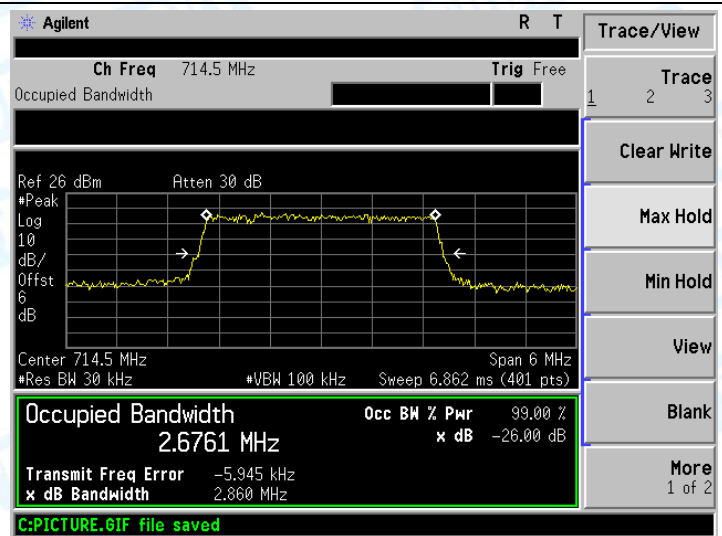
LTE BAND 12 (3MHz 16QAM-Middle CH)



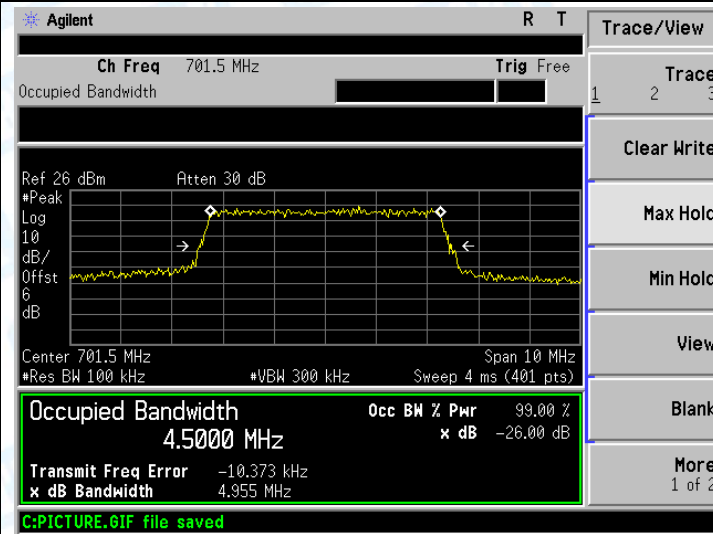
LTE BAND 12 (3MHz QPSK-High CH)



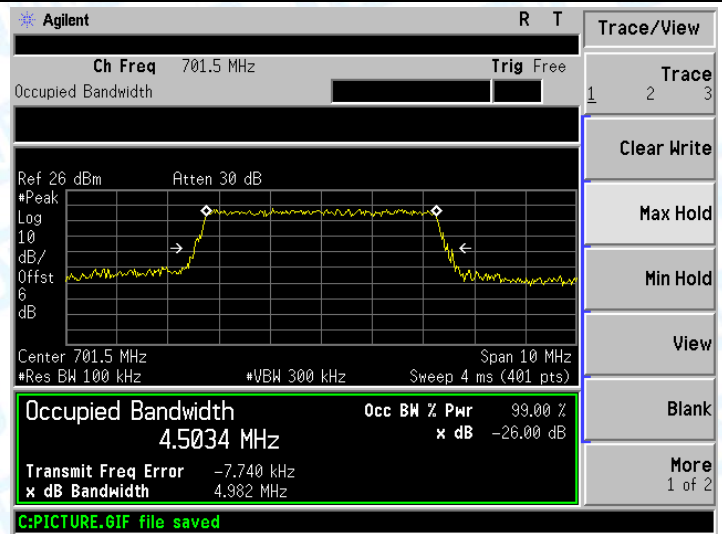
LTE BAND 12 (3MHz 16QAM-High CH)



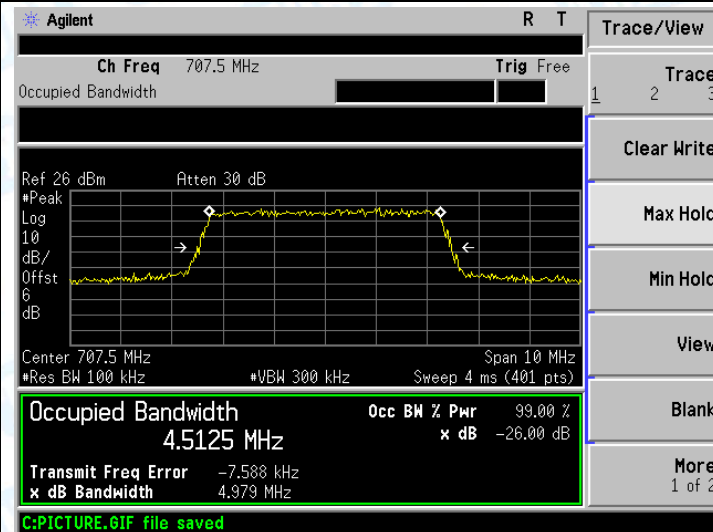
LTE BAND 12 (5MHz QPSK-Low CH)



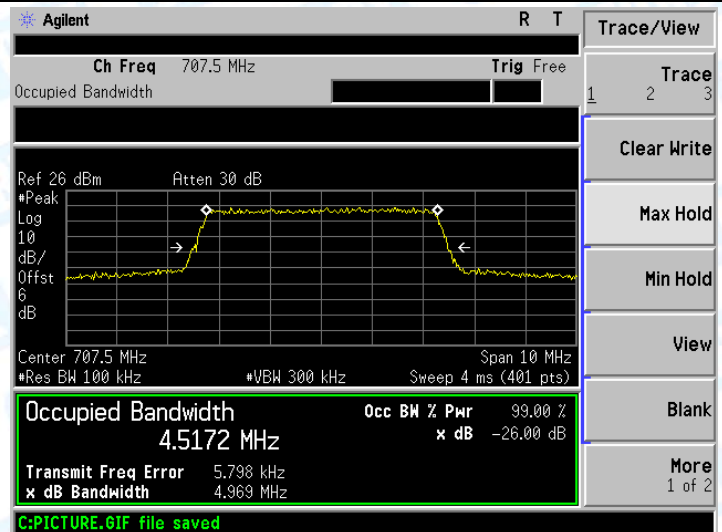
LTE BAND 12 (5MHz 16QAM-Low CH)



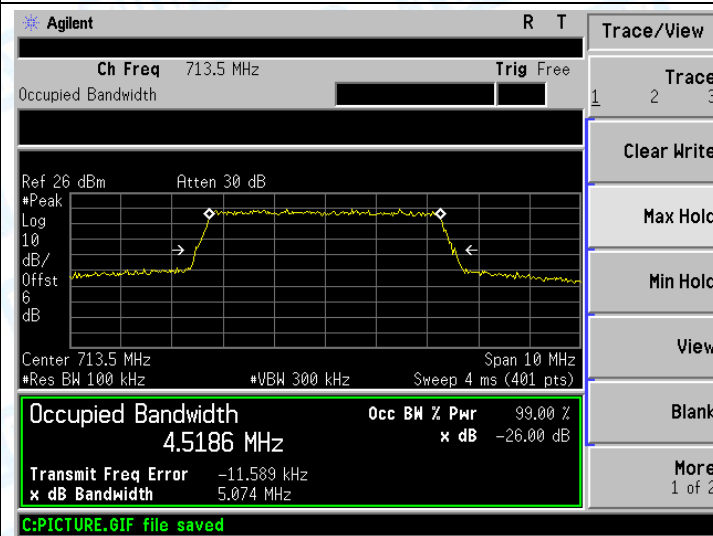
LTE BAND 12 (5MHz QPSK-Middle CH)



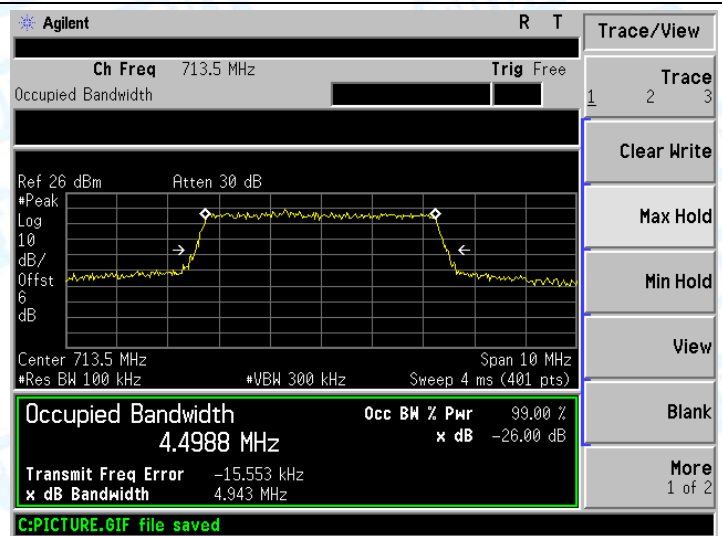
LTE BAND 12 (5MHz 16QAM- Middle CH)



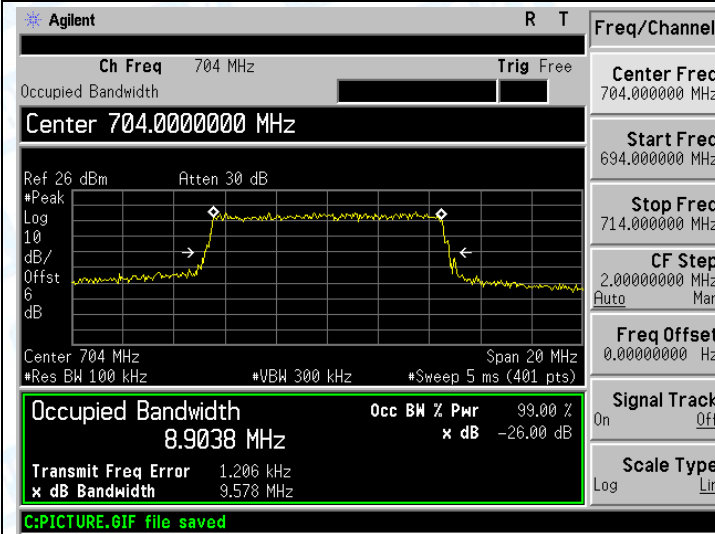
LTE BAND 12 (5MHz QPSK-High CH)



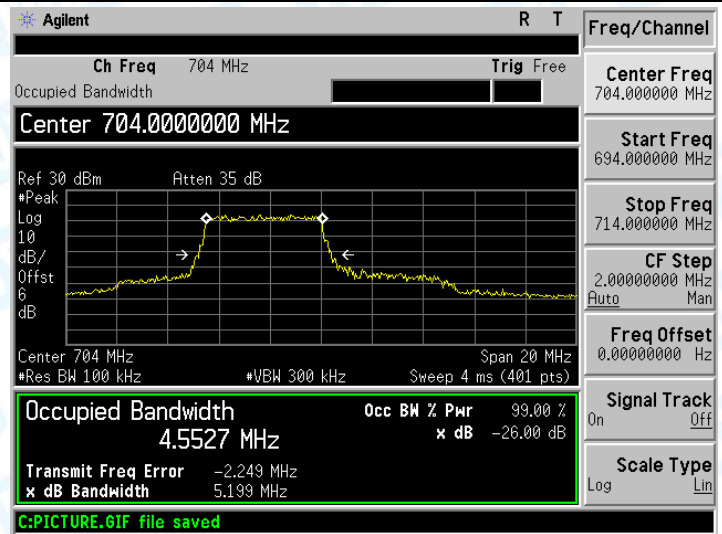
LTE BAND 12 (5MHz 16QAM-High CH)



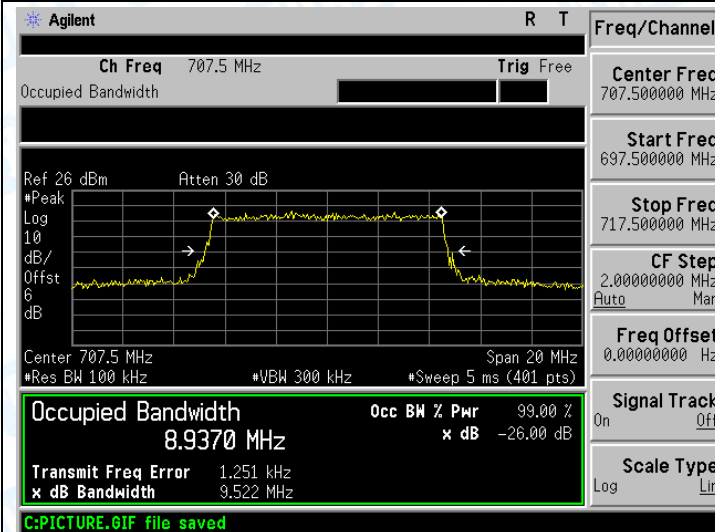
LTE BAND 12 (10MHz QPSK-Low CH)



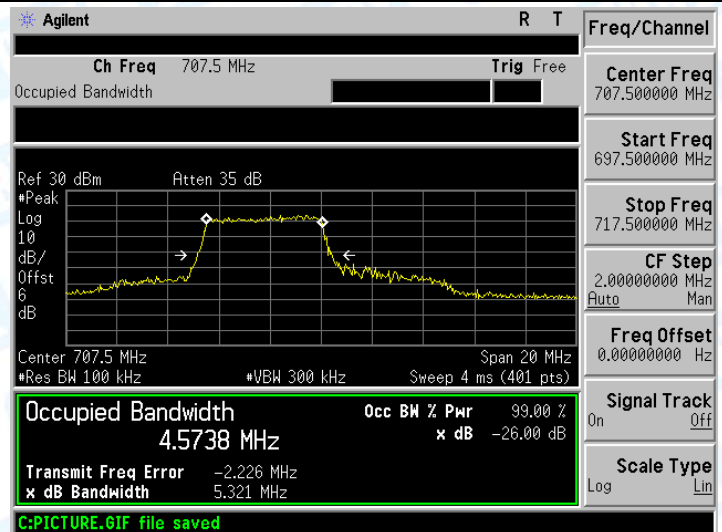
LTE BAND 12 (10MHz 16QAM-Low CH)



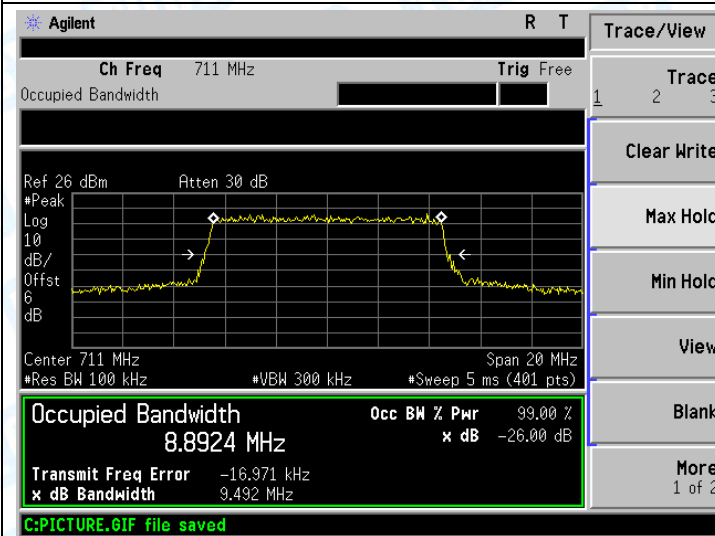
LTE BAND 12 (10MHz QPSK-Middle CH)



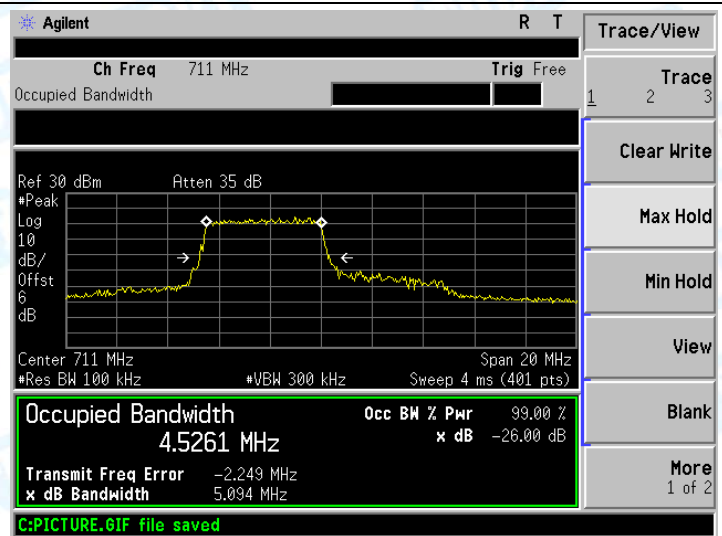
LTE BAND 12 (10MHz 16QAM- Middle CH)



LTE BAND 12 (10MHz QPSK-High CH)

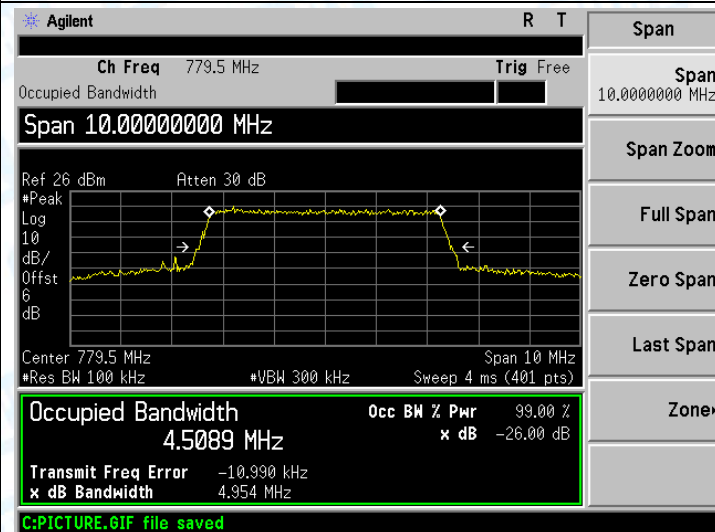


LTE BAND 12 (10MHz 16QAM-High CH)

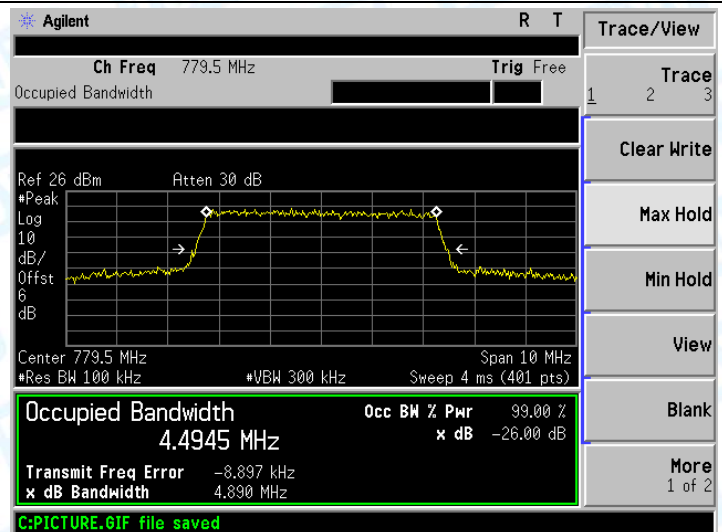


Occupancy Bandwidth Test Plot

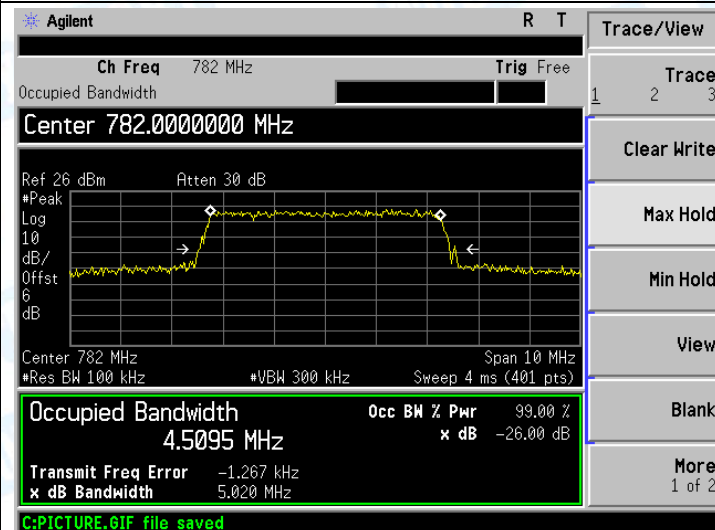
LTE BAND 13 (5MHz QPSK-Low CH)



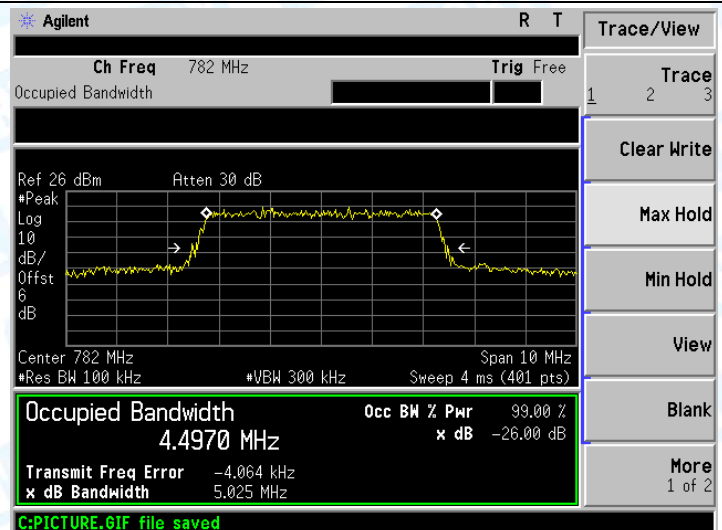
LTE BAND 13 (5MHz 16QAM-Low CH)



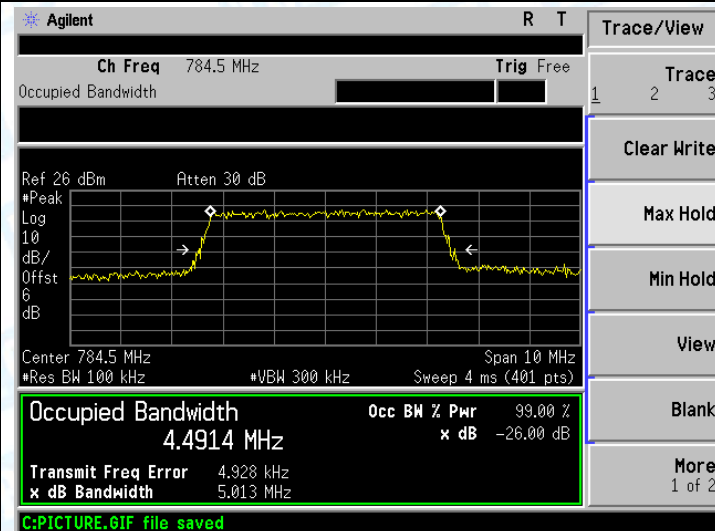
LTE BAND 13 (5MHz QPSK-Middle CH)



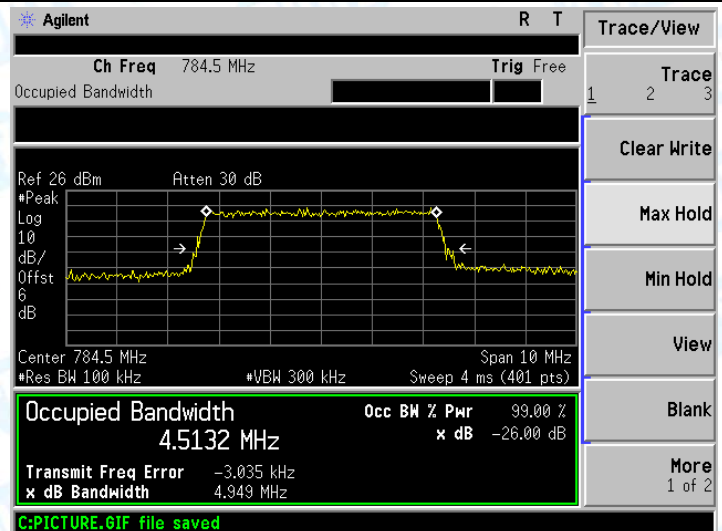
LTE BAND 13 (5MHz 16QAM- Middle CH)

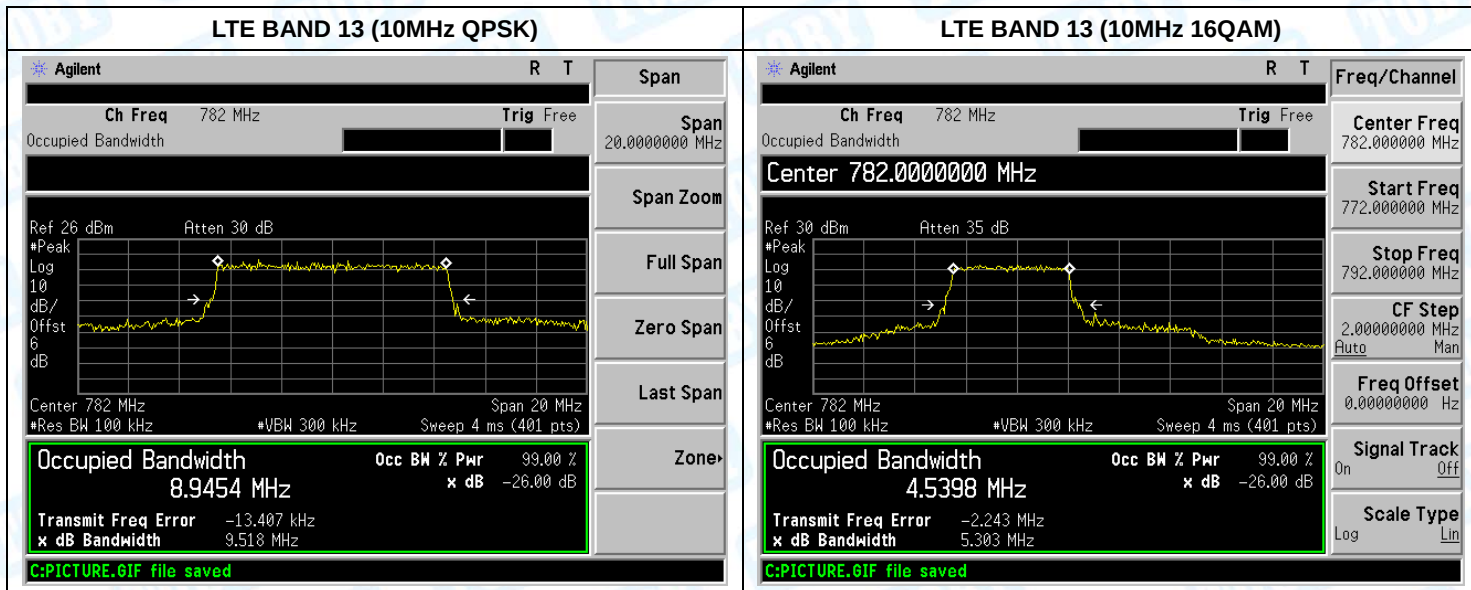


LTE BAND 13 (5MHz QPSK-High CH)



LTE BAND 13 (5MHz 16QAM-High CH)

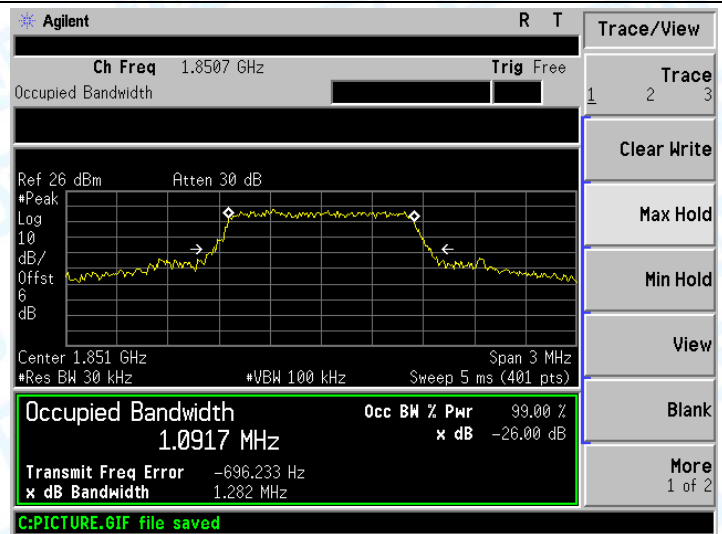
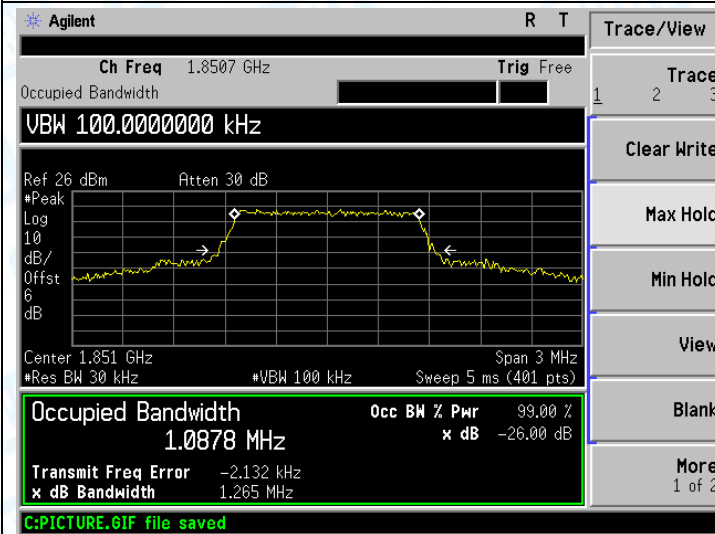




Occupancy Bandwidth Test Plot

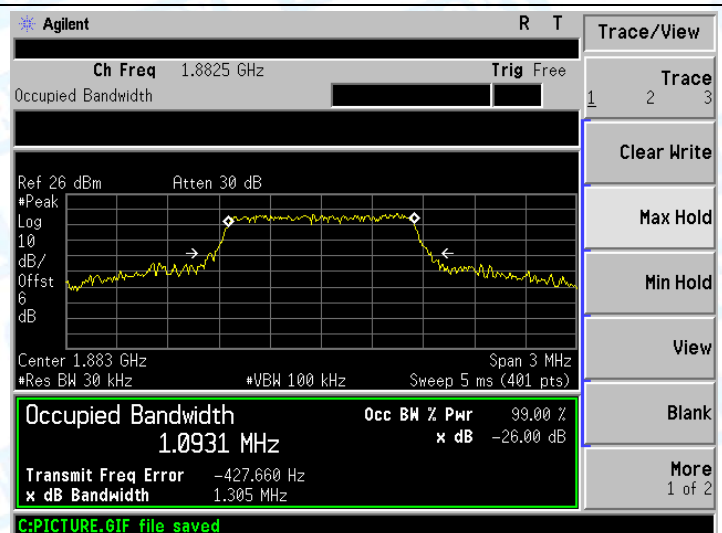
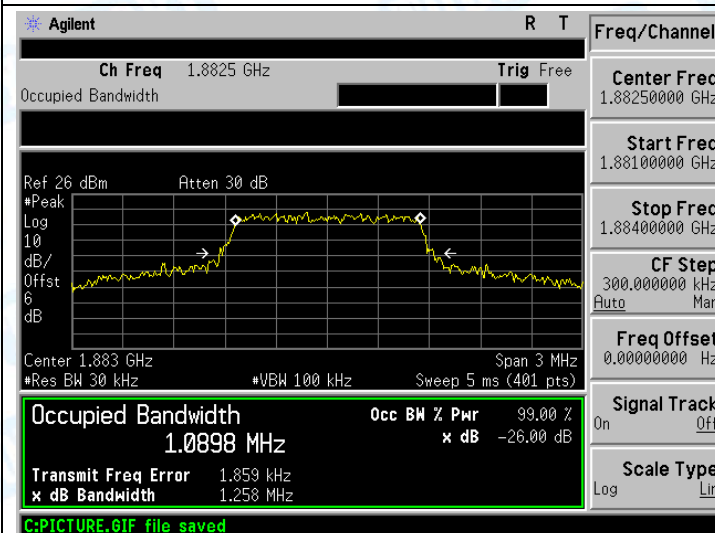
LTE BAND 25 (1.4MHz QPSK-Low CH)

LTE BAND 25 (1.4MHz 16QAM-Low CH)



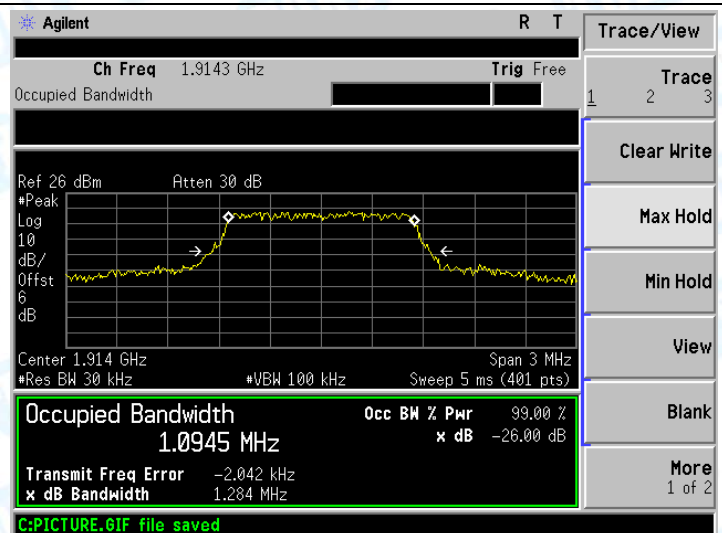
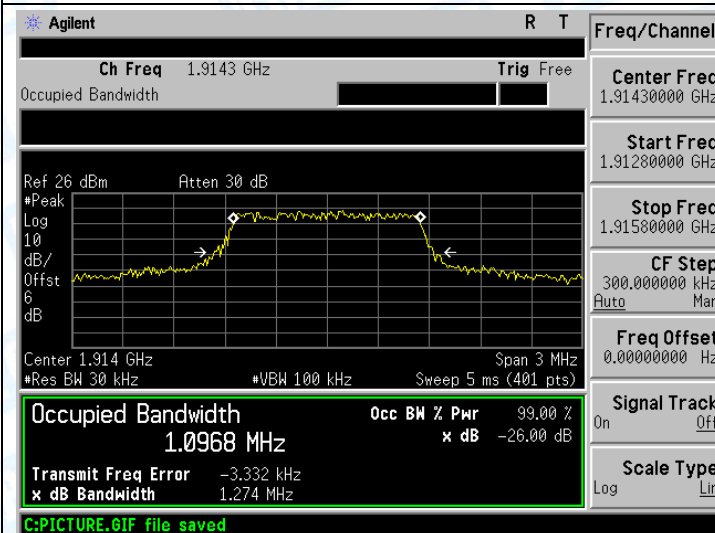
LTE BAND 25 (1.4MHz QPSK-Middle CH)

LTE BAND 25 (1.4MHz 16QAM- Middle CH)

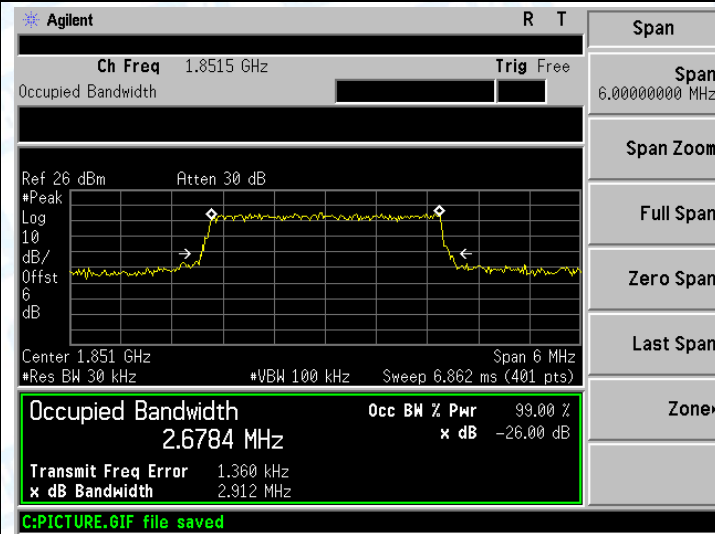


LTE BAND 25 (1.4MHz QPSK-High CH)

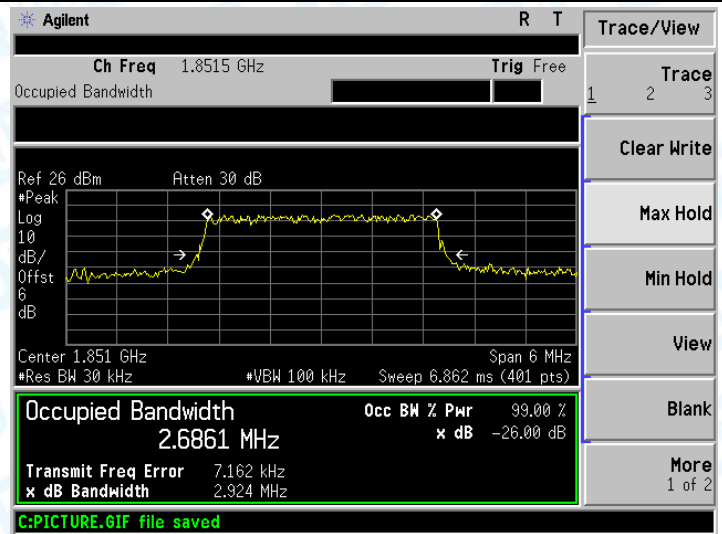
LTE BAND 25 (1.4MHz 16QAM-High CH)



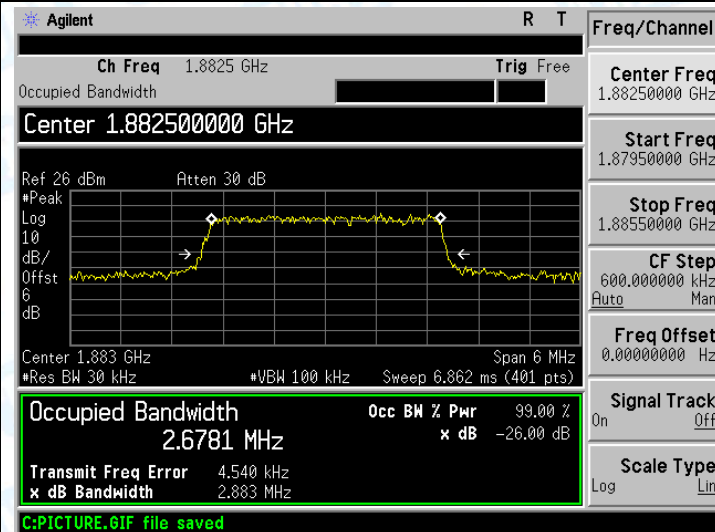
LTE BAND 25 (3MHz QPSK-Low CH)



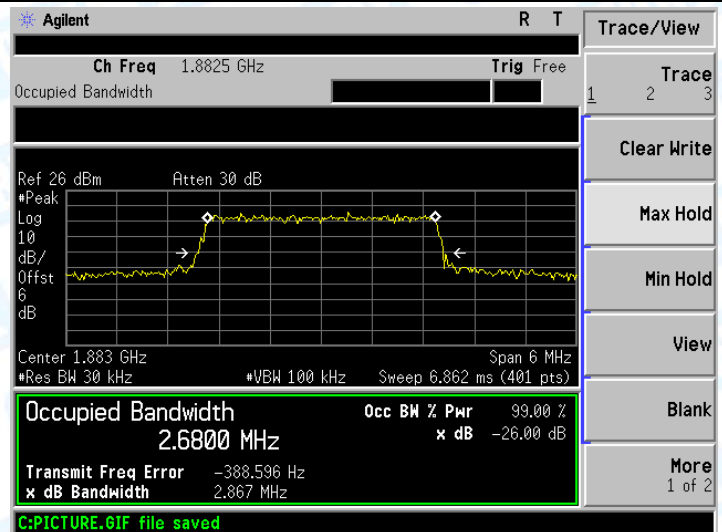
LTE BAND 25 (3MHz 16QAM-Low CH)



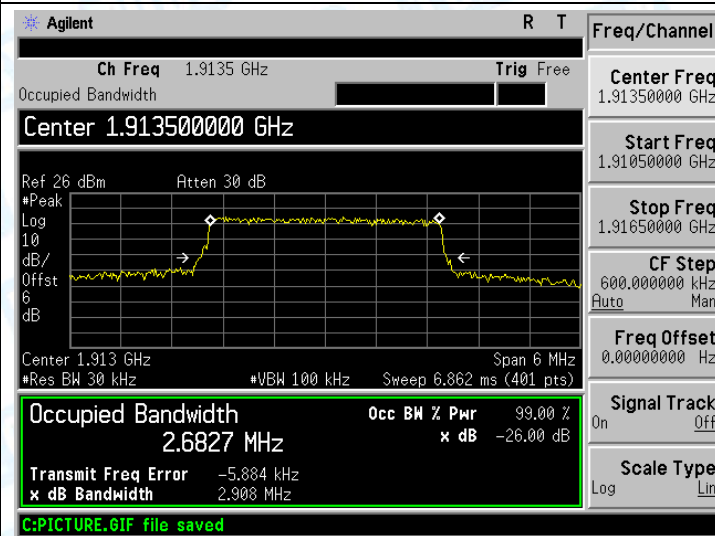
LTE BAND 25 (3MHz QPSK-Middle CH)



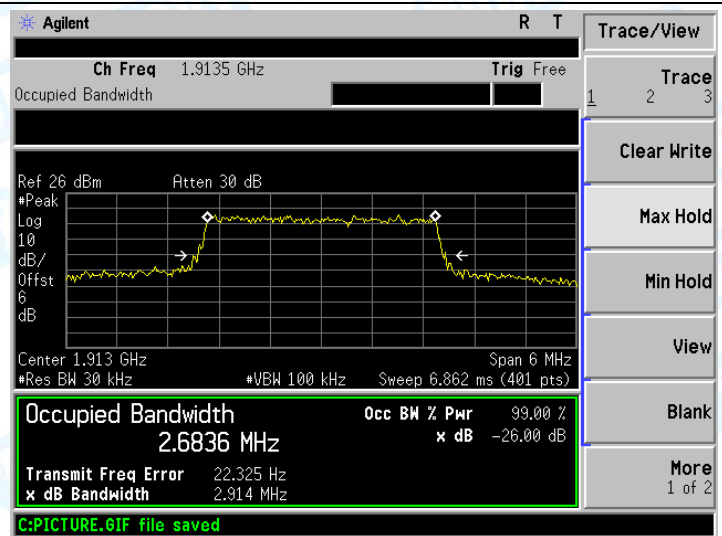
LTE BAND 25 (3MHz 16QAM- Middle CH)



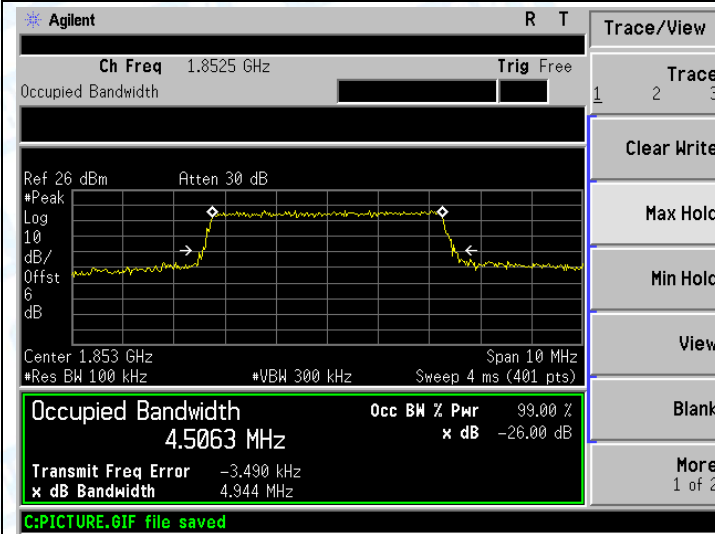
LTE BAND 25 (3MHz QPSK-High CH)



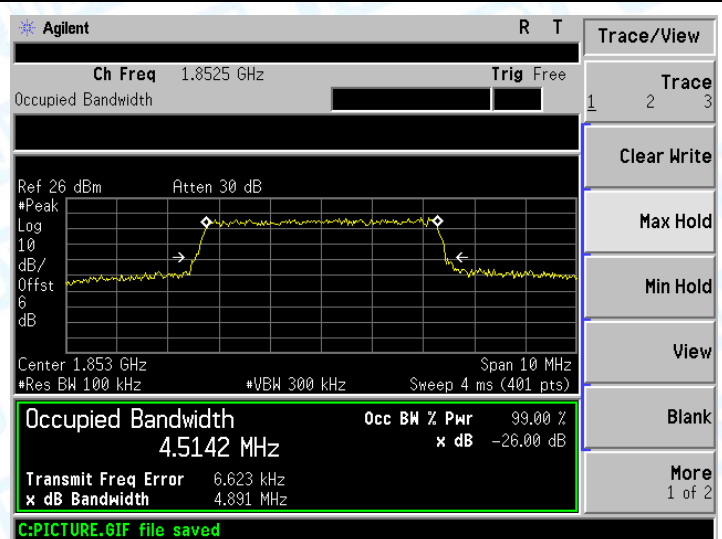
LTE BAND 25 (3MHz 16QAM-High CH)



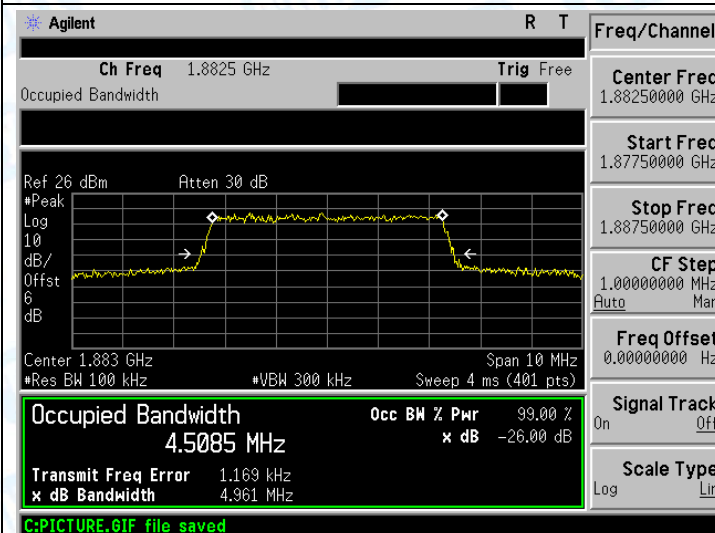
LTE BAND 25 (5MHz QPSK-Low CH)



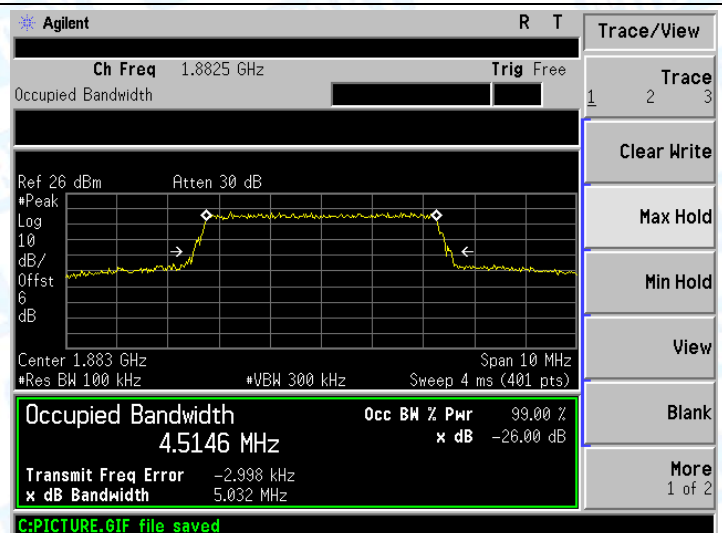
LTE BAND 25 (5MHz 16QAM-Low CH)



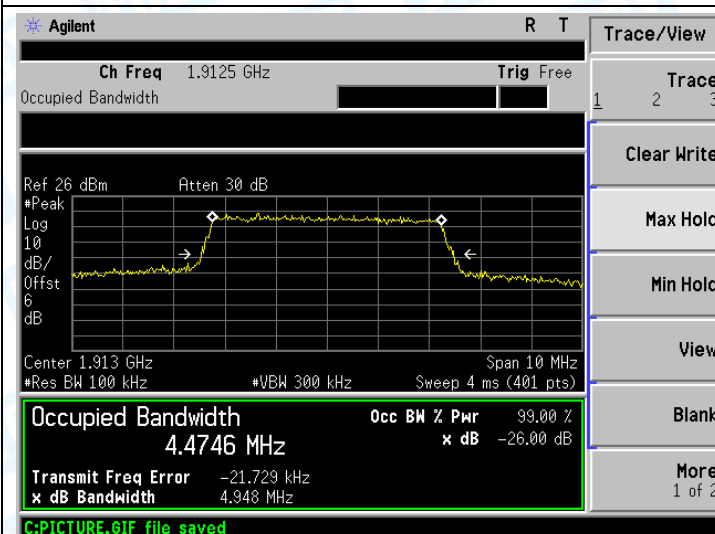
LTE BAND 25 (5MHz QPSK-Middle CH)



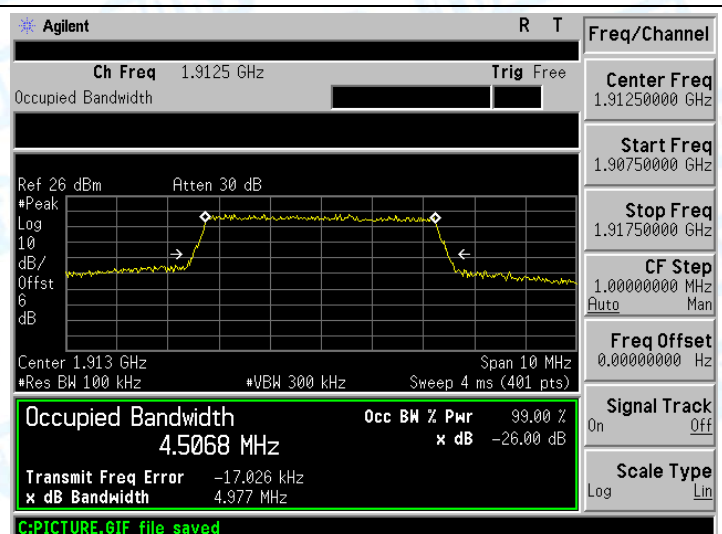
LTE BAND 25 (5MHz 16QAM-Middle CH)



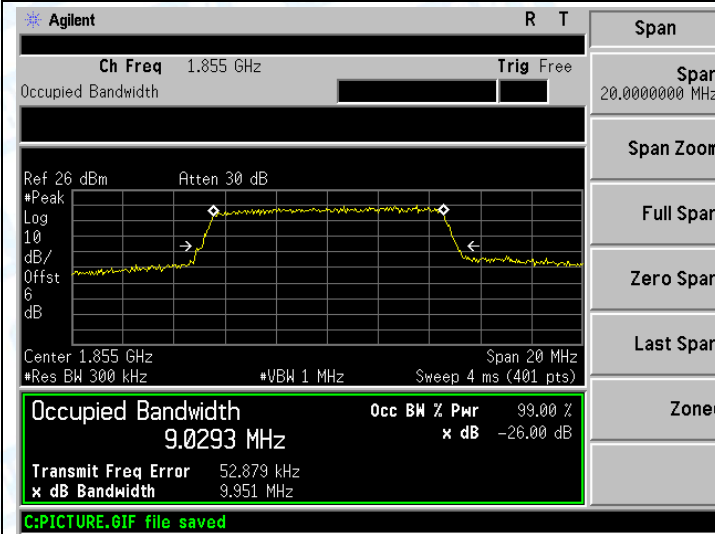
LTE BAND 25 (5MHz QPSK-High CH)



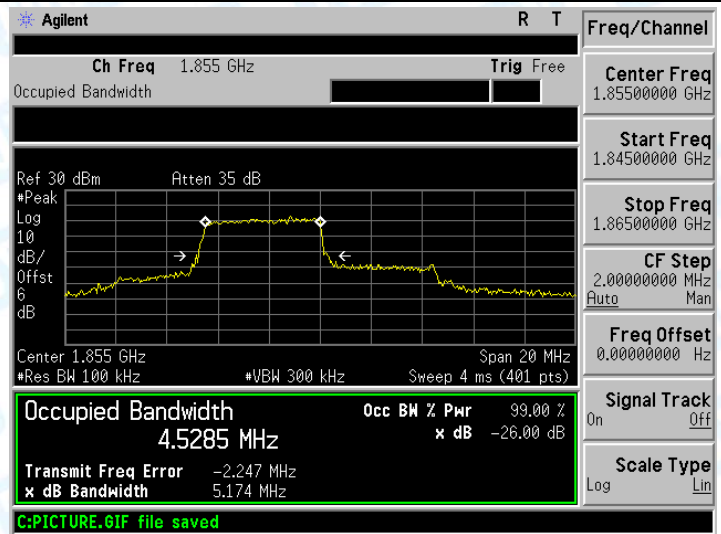
LTE BAND 25 (5MHz 16QAM-High CH)



LTE BAND 25 (10MHz QPSK-Low CH)



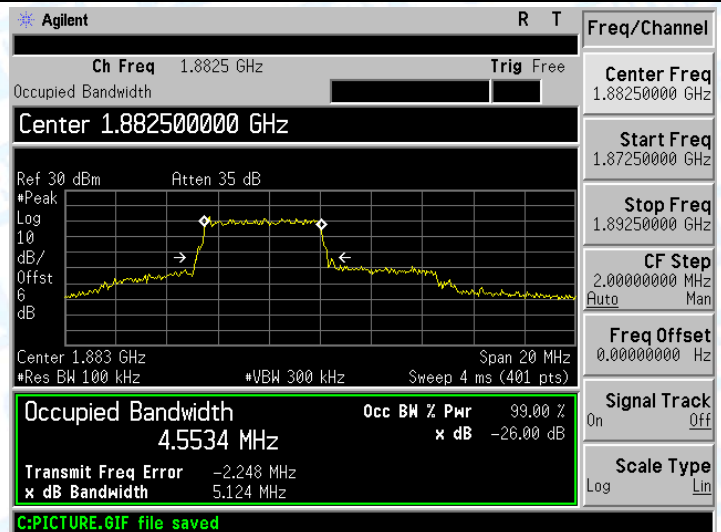
LTE BAND 25 (10MHz 16QAM-Low CH)



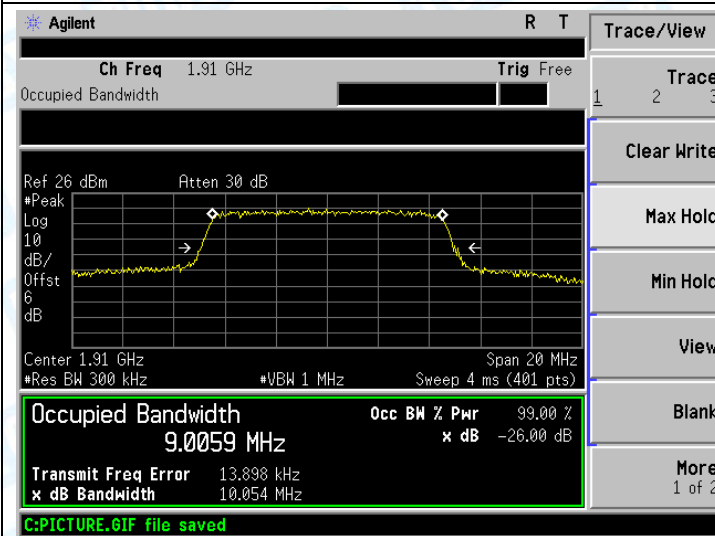
LTE BAND 25 (10MHz QPSK-Middle CH)



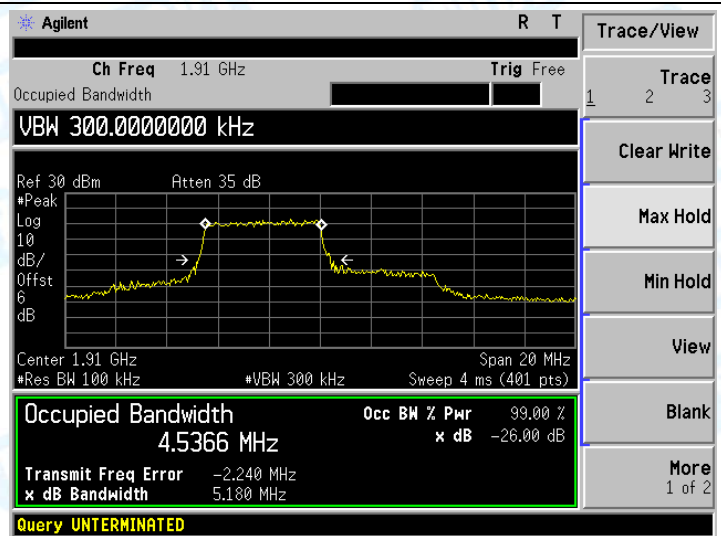
LTE BAND 25 (10MHz 16QAM- Middle CH)



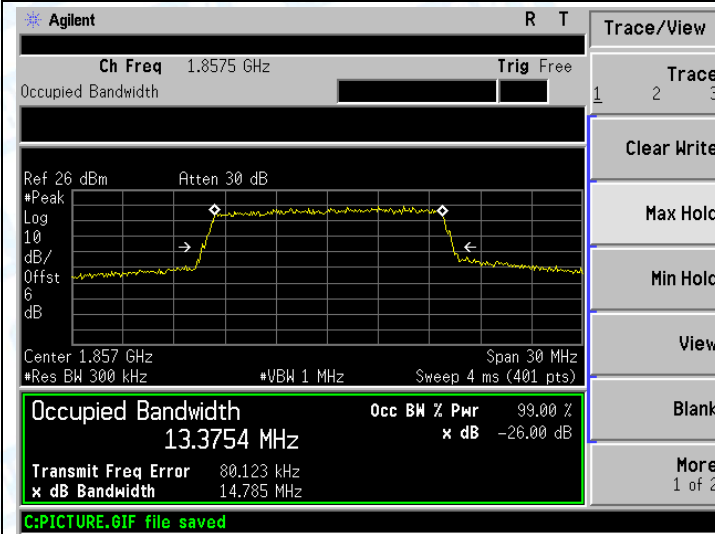
LTE BAND 25 (10MHz QPSK-High CH)



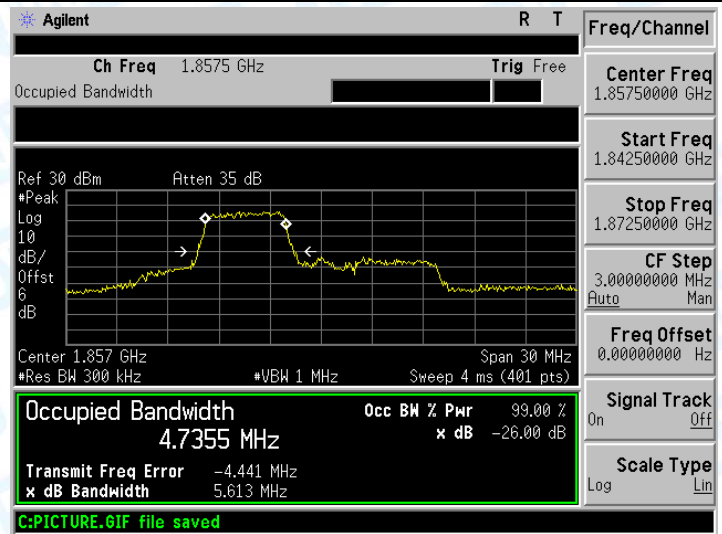
LTE BAND 25 (10MHz 16QAM-High CH)



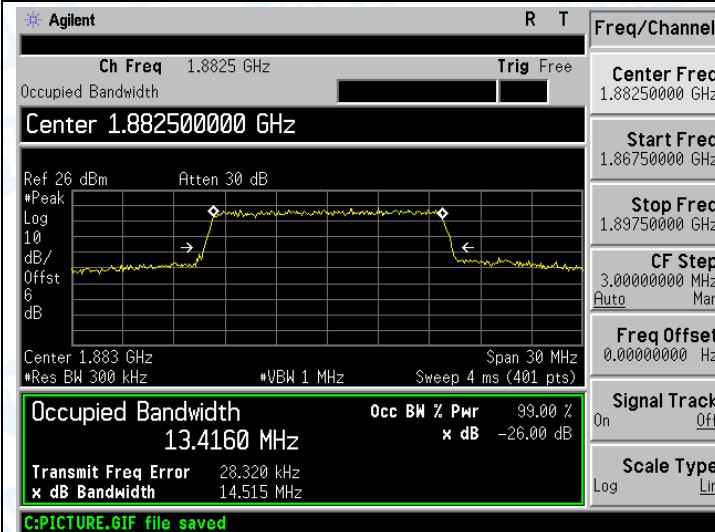
LTE BAND 25 (15MHz QPSK-Low CH)



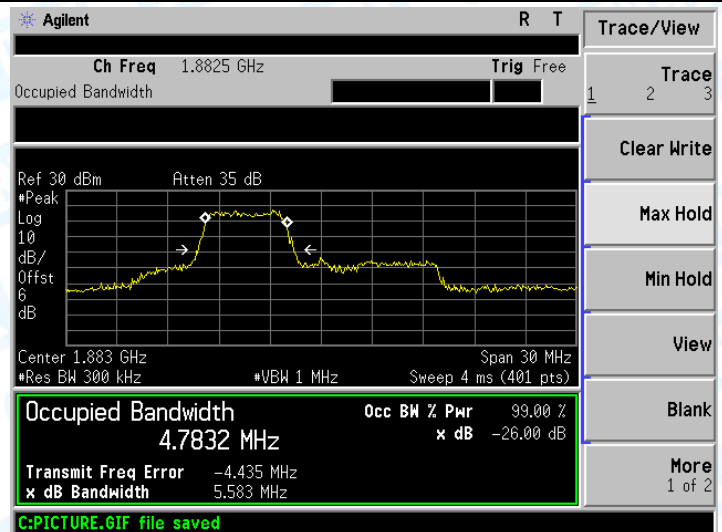
LTE BAND 25 (15MHz 16QAM-Low CH)



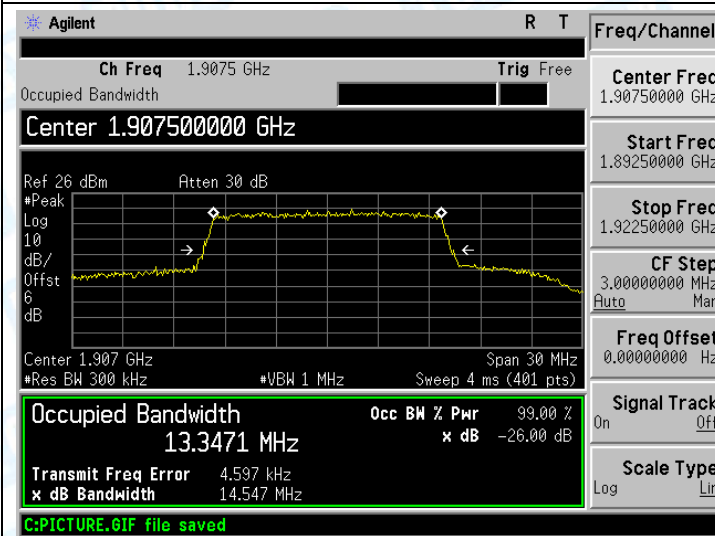
LTE BAND 25 (15MHz QPSK-Middle CH)



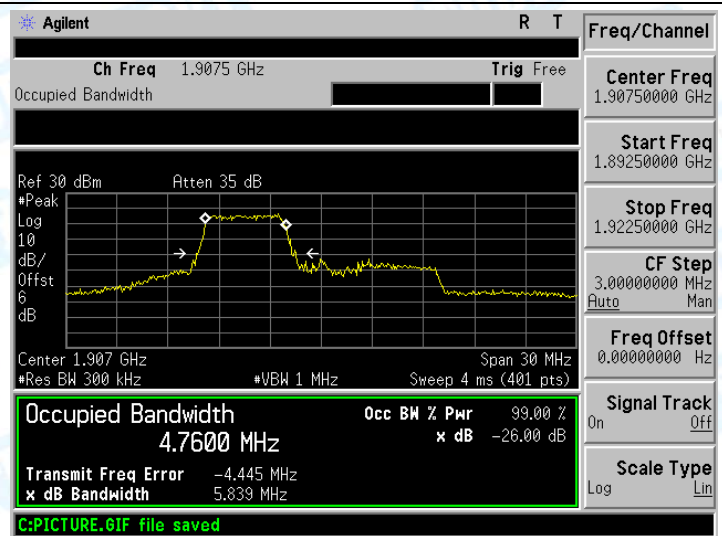
LTE BAND 25 (15MHz 16QAM- Middle CH)



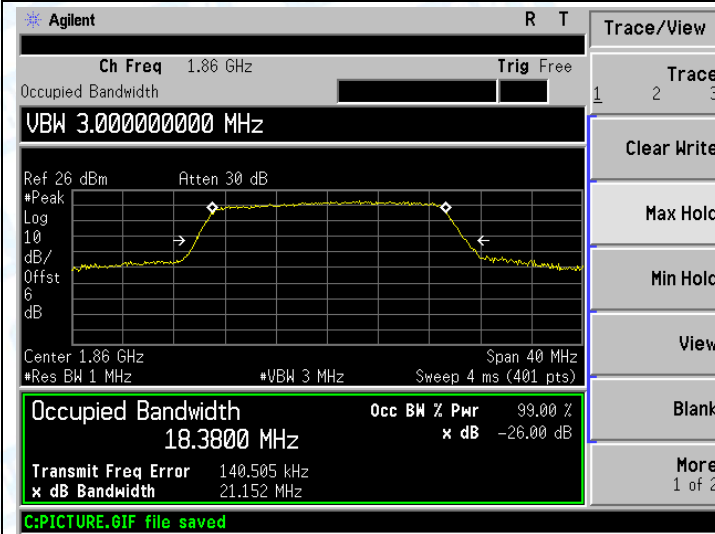
LTE BAND 25 (15MHz QPSK-High CH)



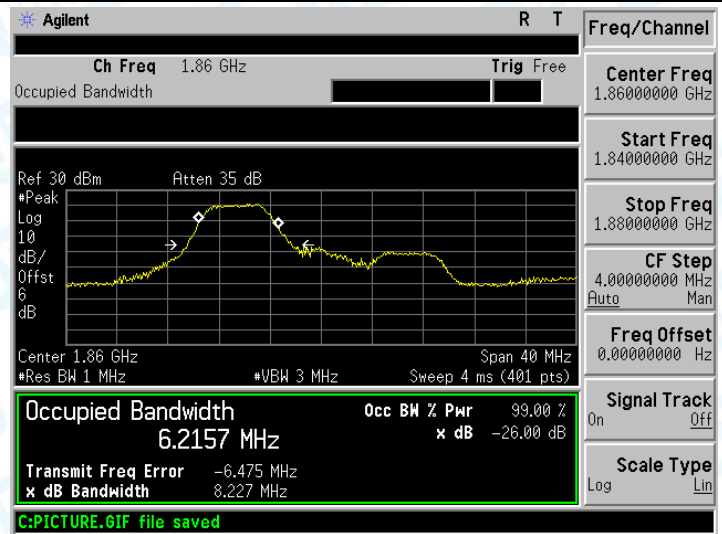
LTE BAND 25 (15MHz 16QAM-High CH)



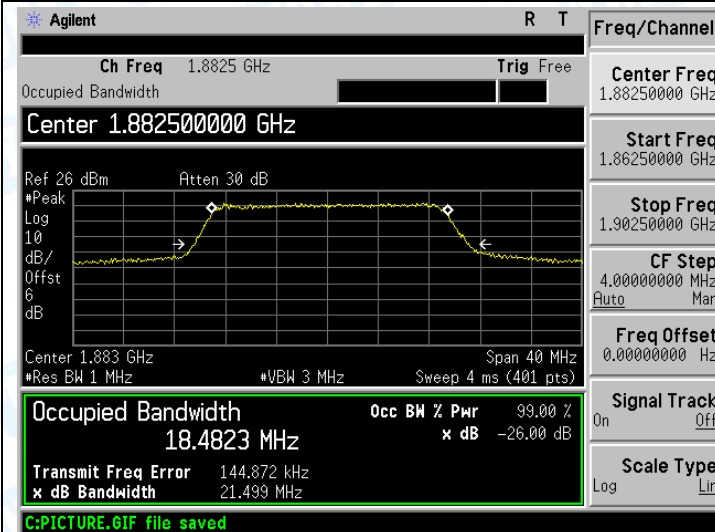
LTE BAND 25 (20MHz QPSK-Low CH)



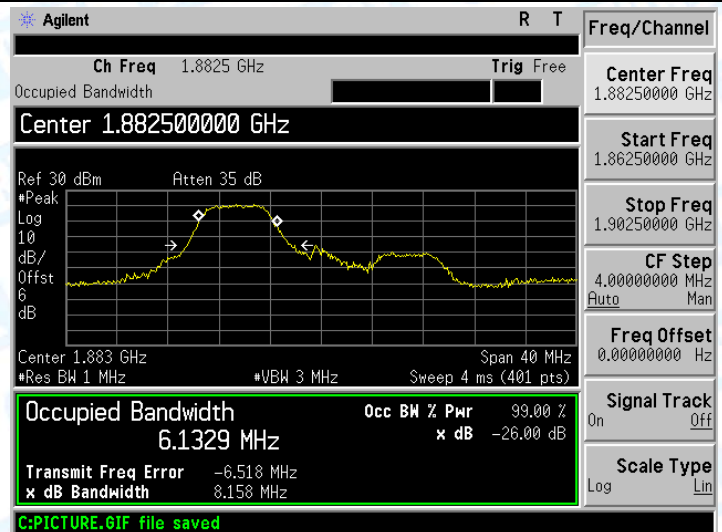
LTE BAND 25 (20MHz 16QAM-Low CH)



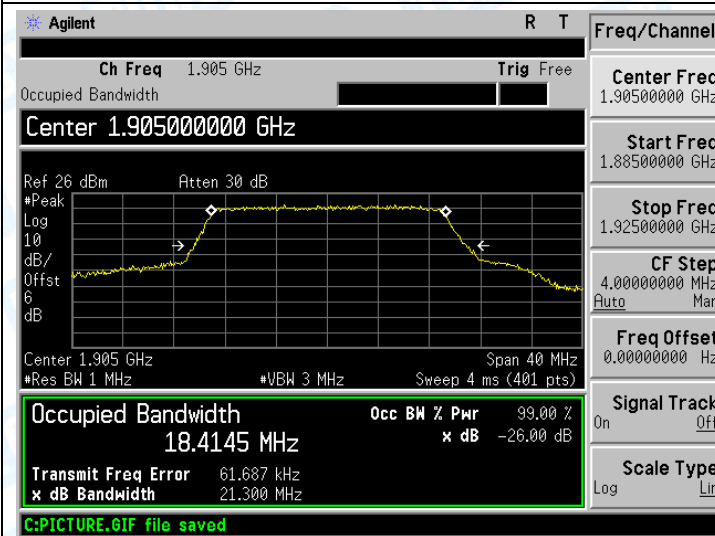
LTE BAND 25 (20MHz QPSK-Middle CH)



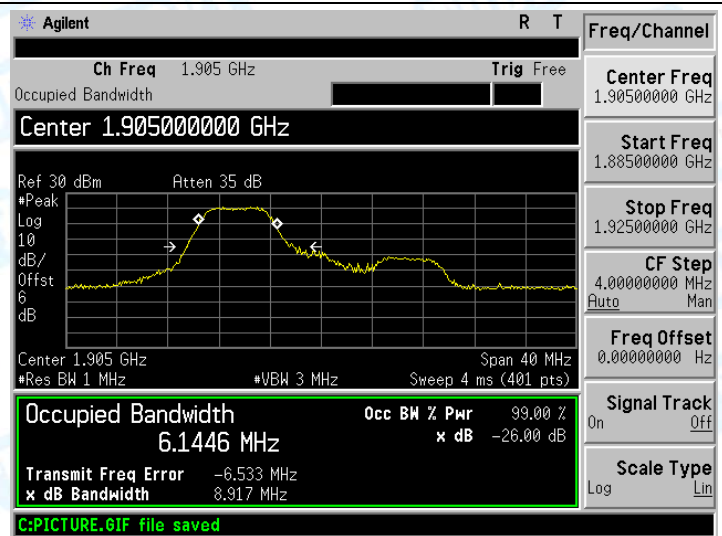
LTE BAND 25 (20MHz 16QAM- Middle CH)



LTE BAND 25 (20MHz QPSK-High CH)



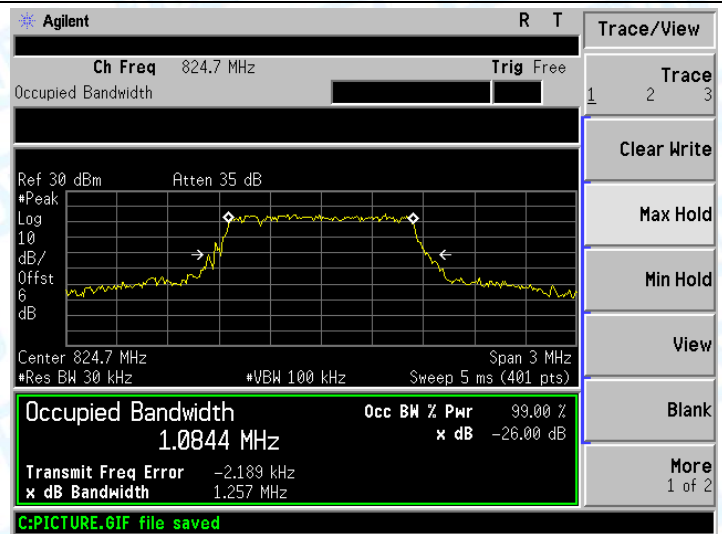
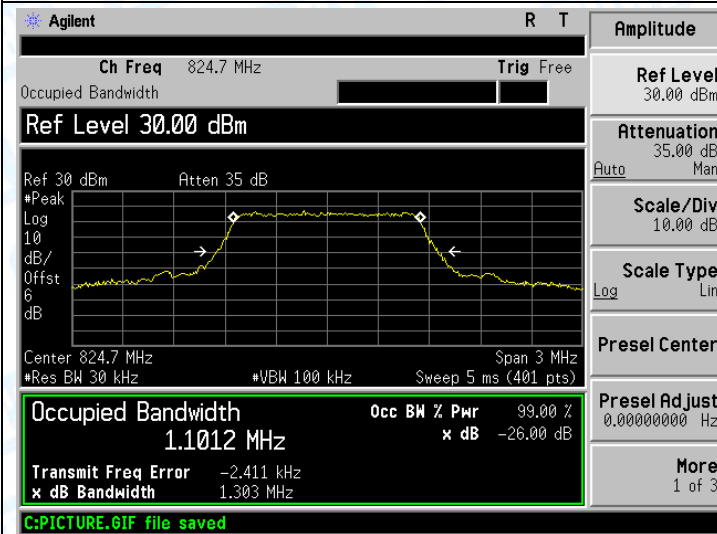
LTE BAND 25 (20MHz 16QAM-High CH)



Occupancy Bandwidth Test Plot

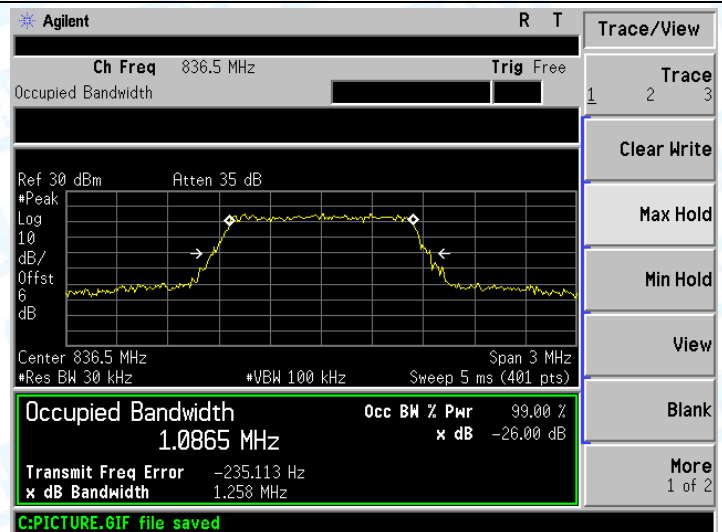
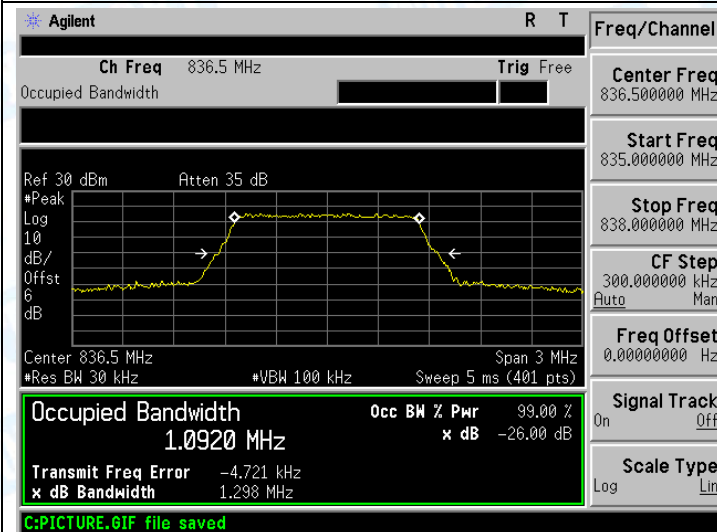
LTE BAND 26 (1.4MHz QPSK-Low CH)

LTE BAND 26 (1.4MHz 16QAM-Low CH)



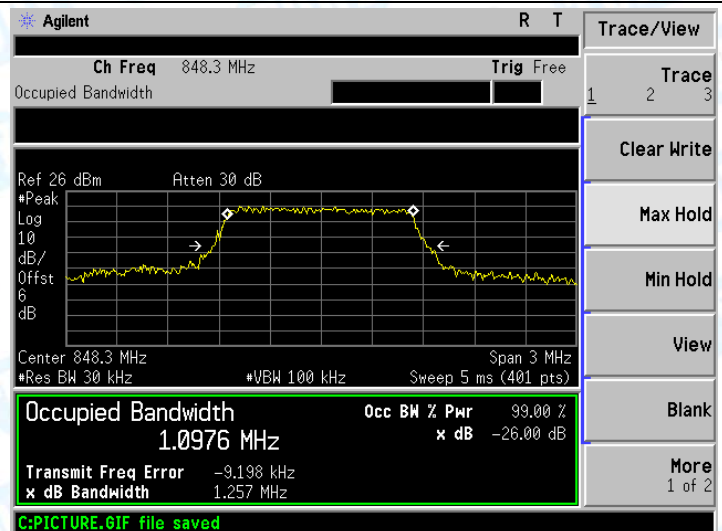
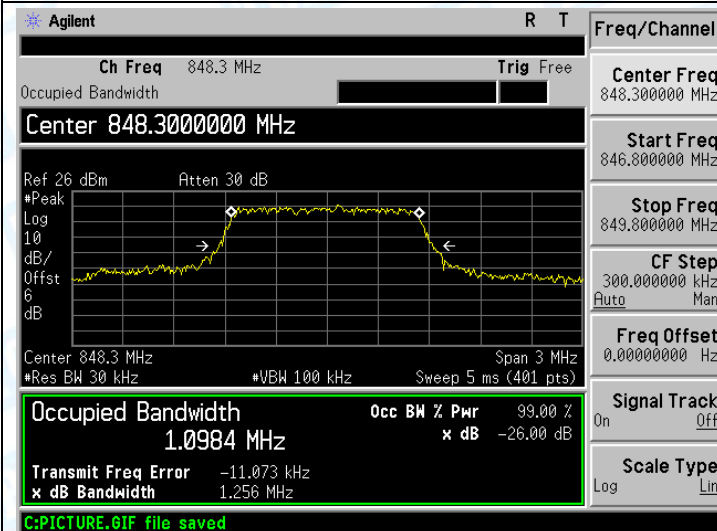
LTE BAND 26 (1.4MHz QPSK-Middle CH)

LTE BAND 26 (1.4MHz 16QAM- Middle CH)

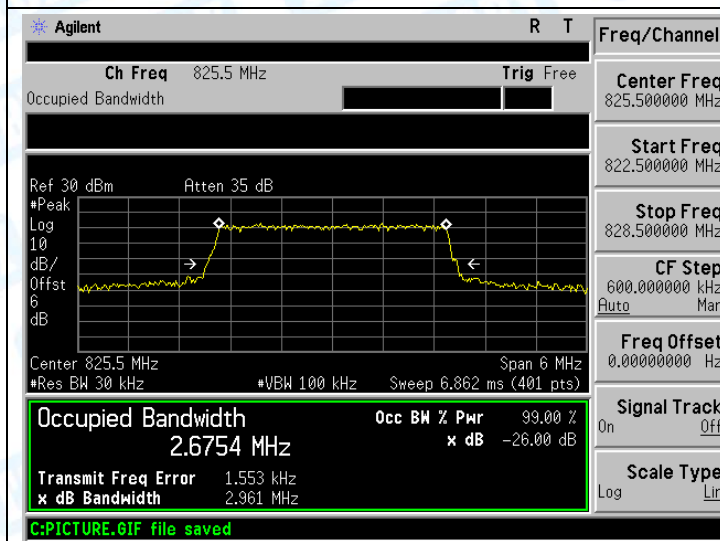


LTE BAND 26 (1.4MHz QPSK-High CH)

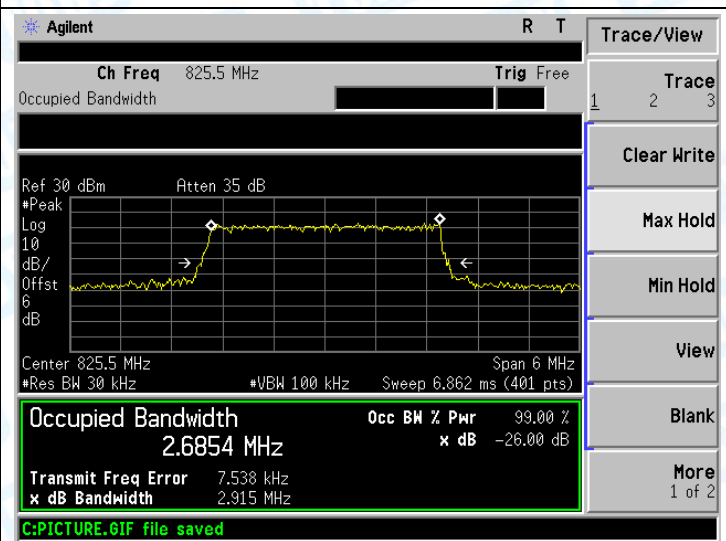
LTE BAND 26 (1.4MHz 16QAM-High CH)



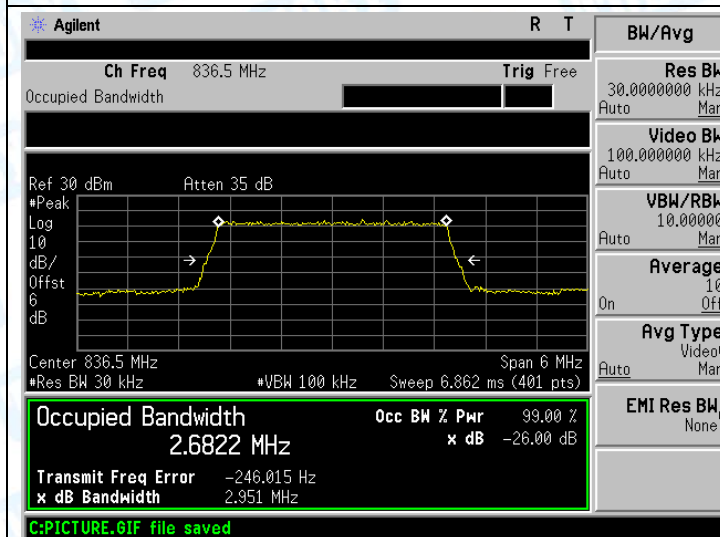
LTE BAND 26 (3MHz QPSK-Low CH)



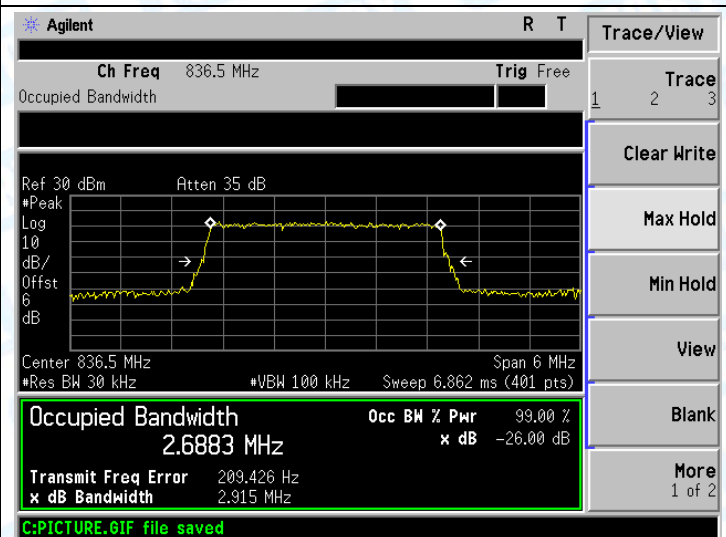
LTE BAND 26 (3MHz 16QAM-Low CH)



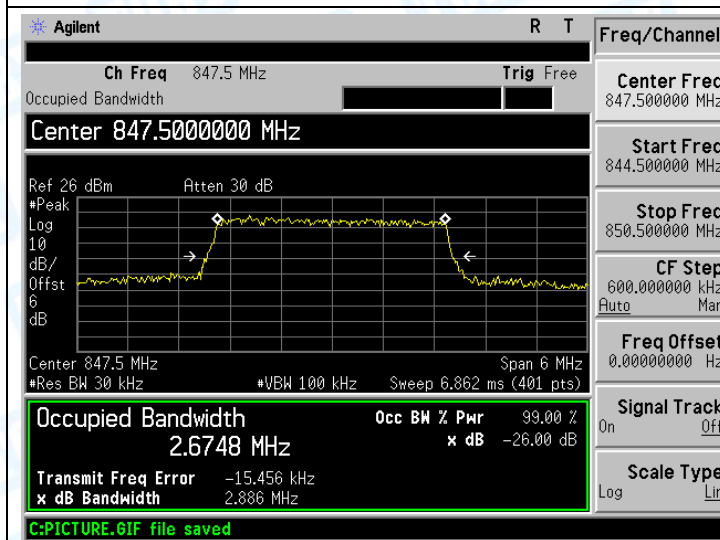
LTE BAND 26 (3MHz QPSK-Middle CH)



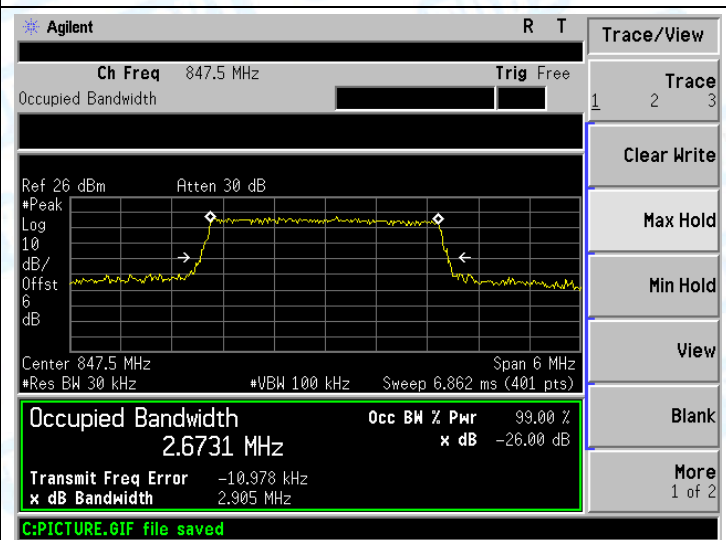
LTE BAND 26 (3MHz 16QAM- Middle CH)



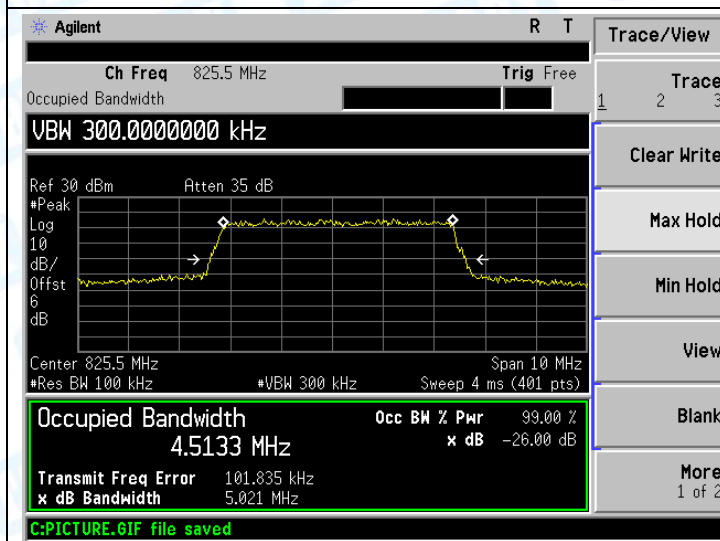
LTE BAND 26 (3MHz QPSK-High CH)



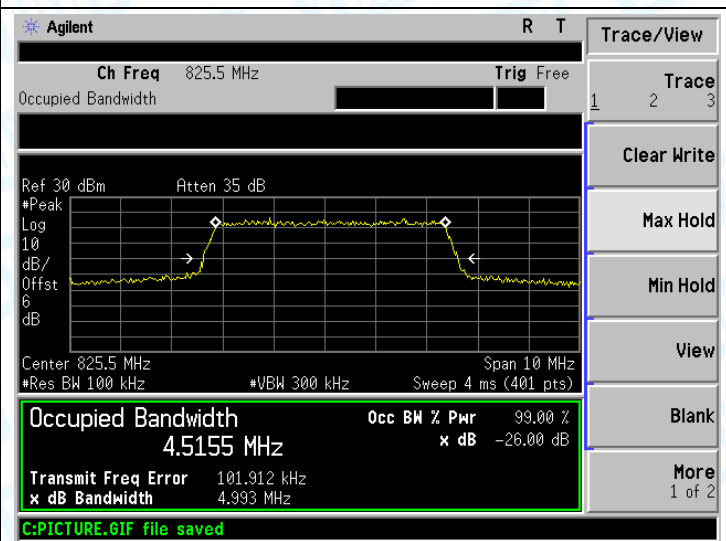
LTE BAND 26 (3MHz 16QAM-High CH)



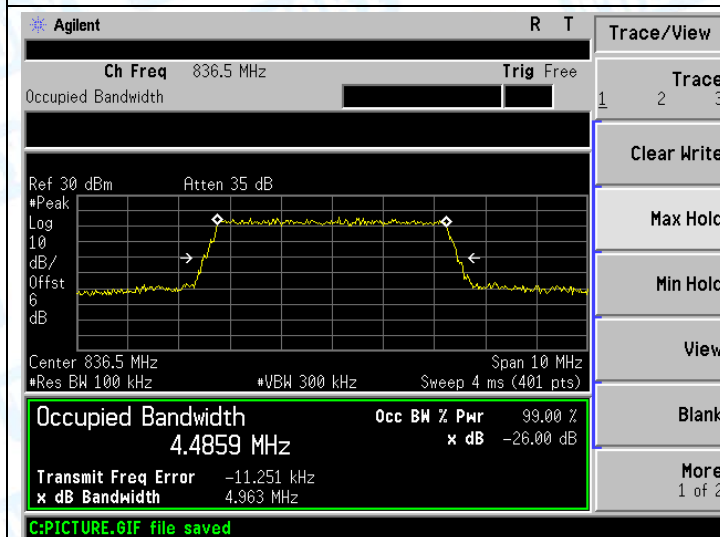
LTE BAND 26 (5MHz QPSK-Low CH)



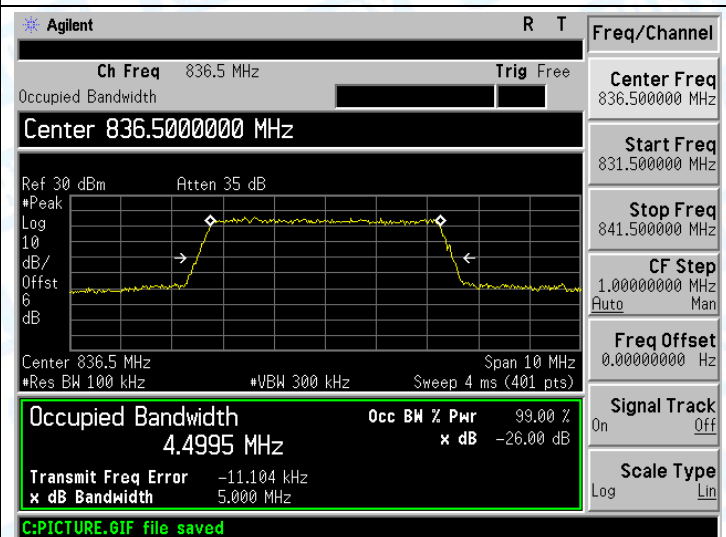
LTE BAND 26 (5MHz 16QAM-Low CH)



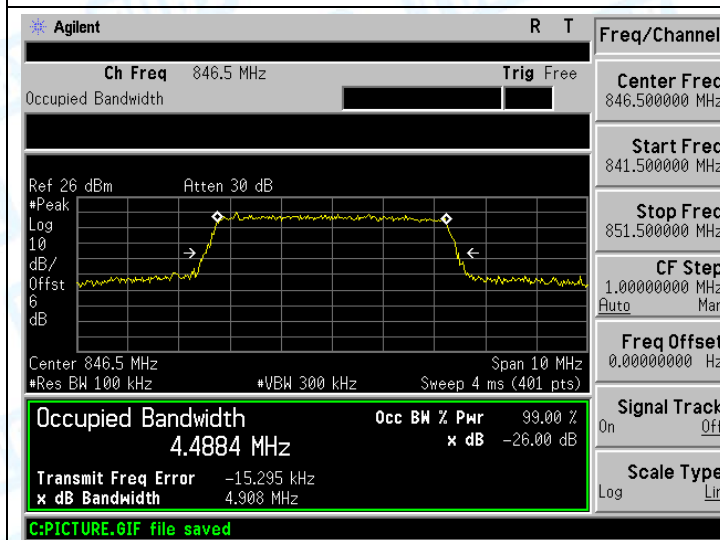
LTE BAND 26(5MHz QPSK-Middle CH)



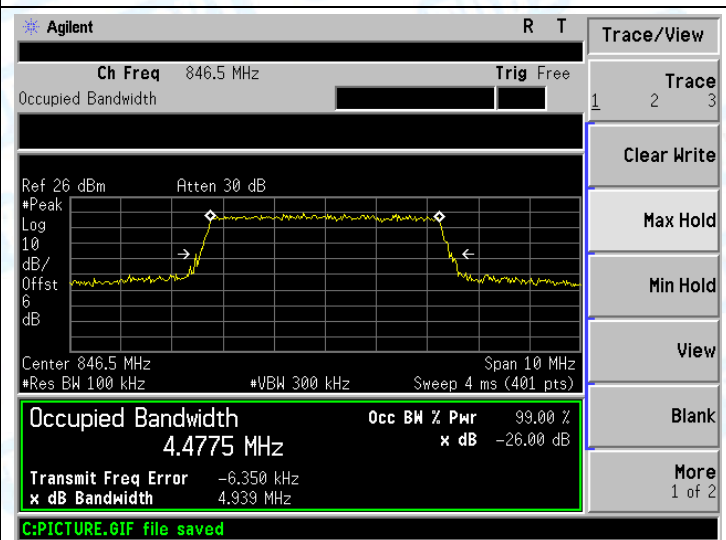
LTE BAND 26 (5MHz 16QAM- Middle CH)



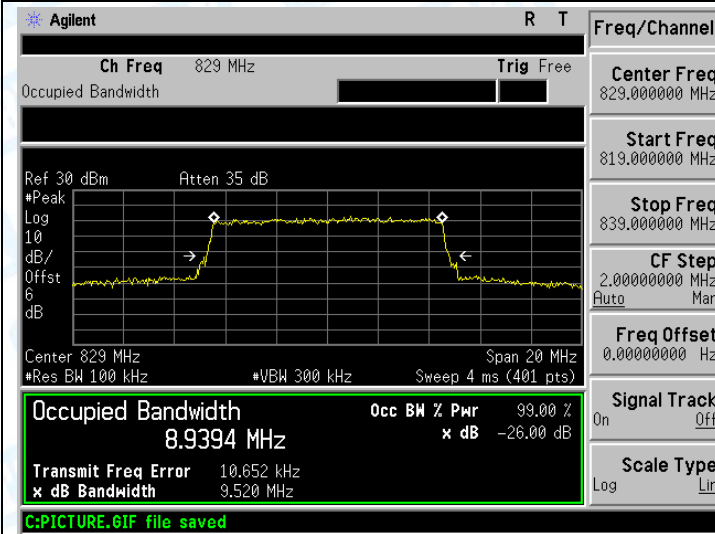
LTE BAND 26 (5MHz QPSK-High CH)



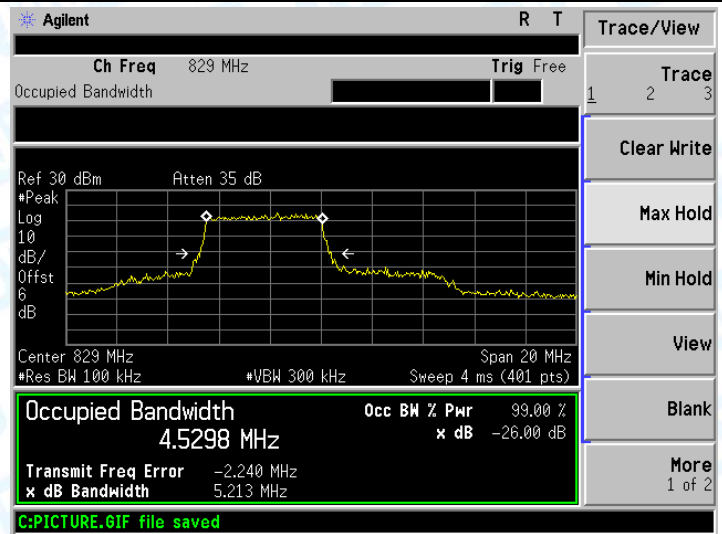
LTE BAND 26 (5MHz 16QAM-High CH)



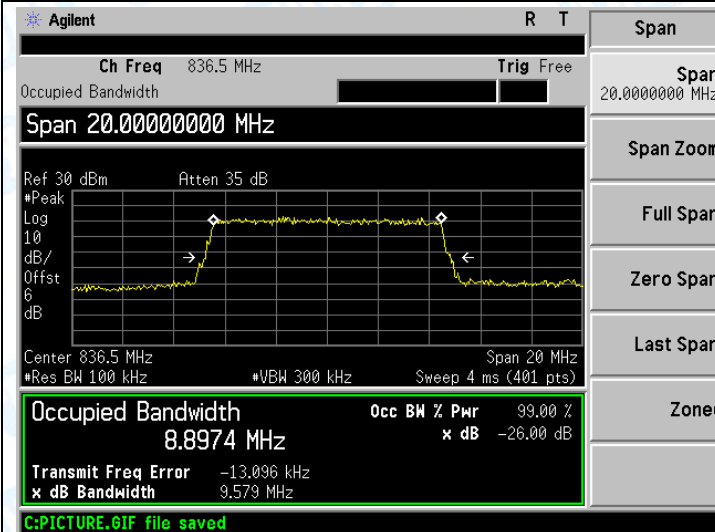
LTE BAND 26 (10MHz QPSK-Low CH)



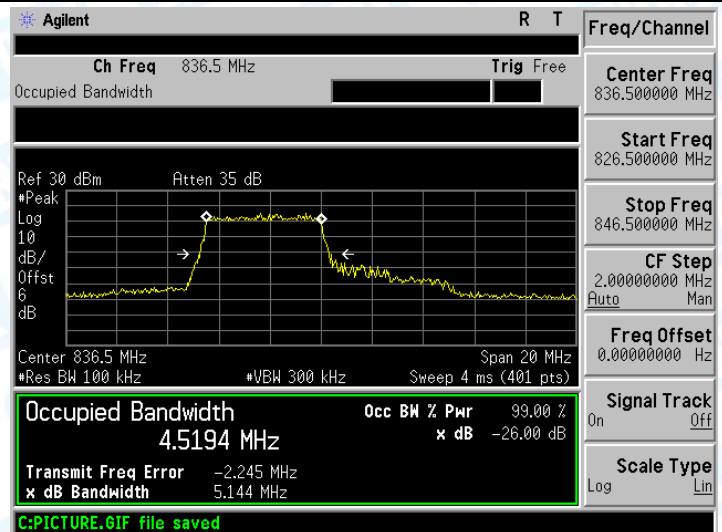
LTE BAND 26 (10MHz 16QAM-Low CH)



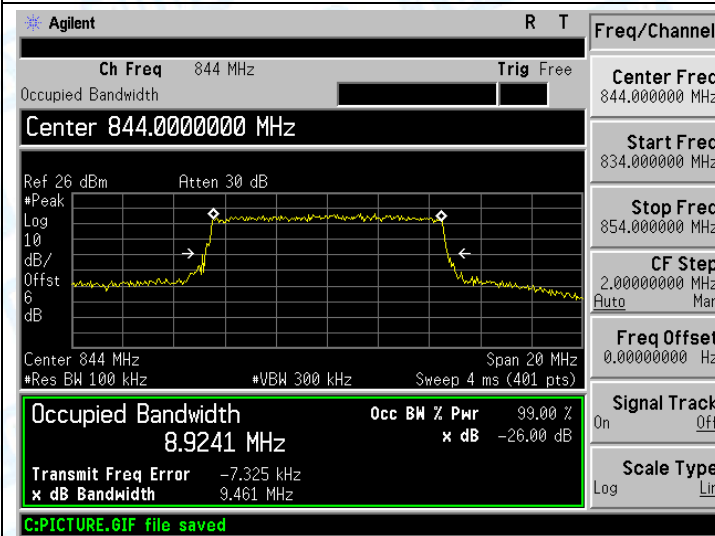
LTE BAND 26 (10MHz QPSK-Middle CH)



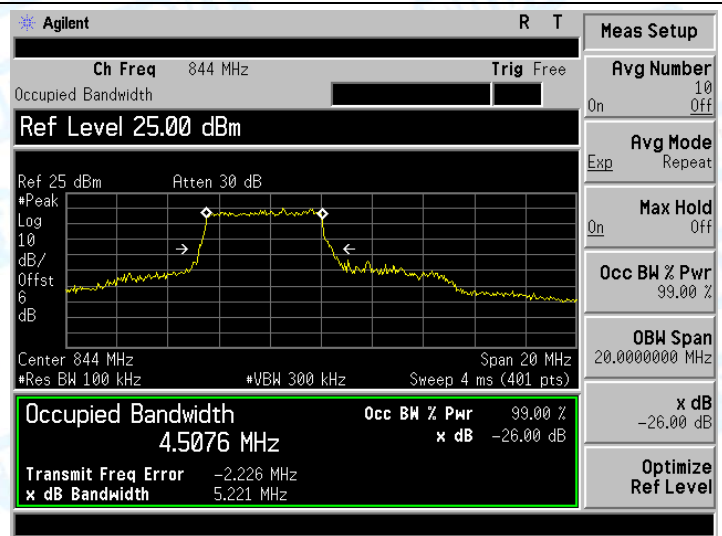
LTE BAND 26 (10MHz 16QAM- Middle CH)



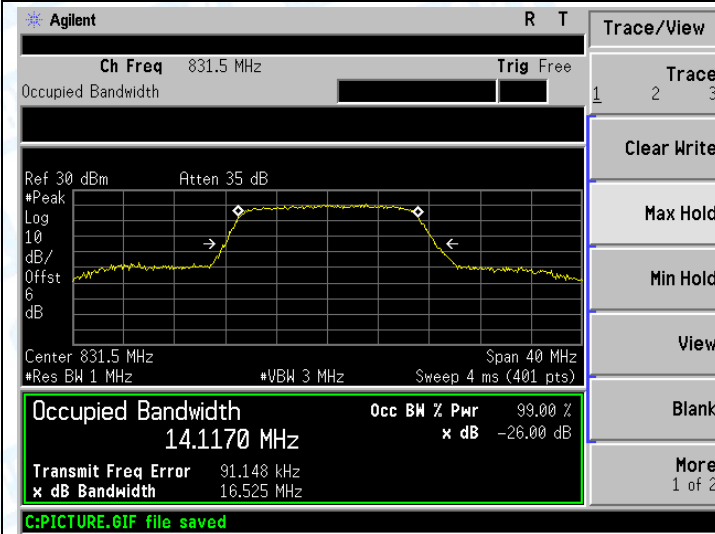
LTE BAND 26 (10MHz QPSK-High CH)



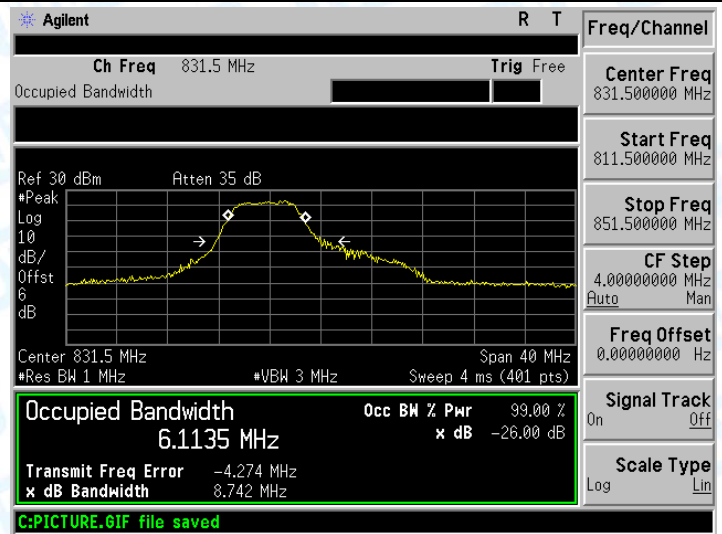
LTE BAND 26 (10MHz 16QAM-High CH)



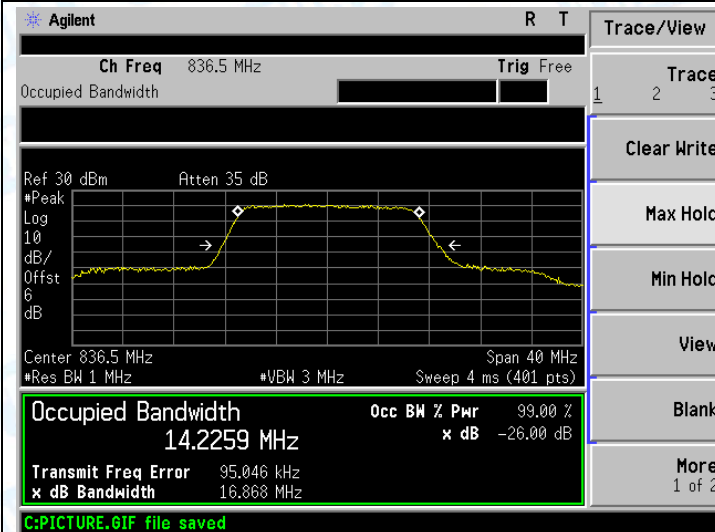
LTE BAND 26 (15MHz QPSK-Low CH)



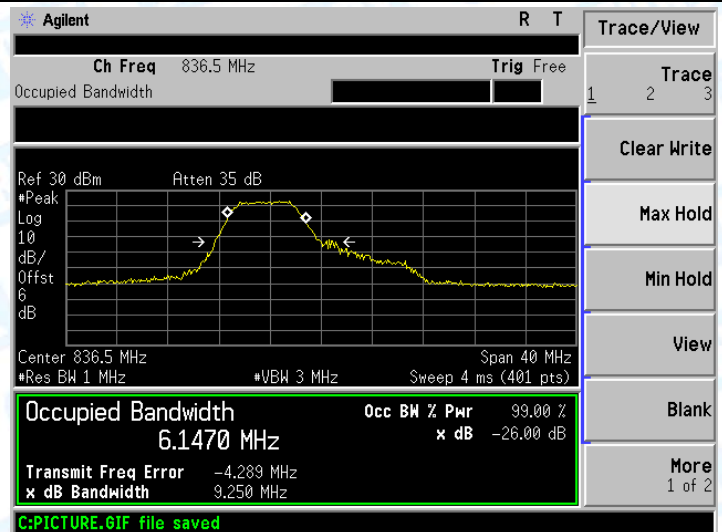
LTE BAND 26 (15MHz 16QAM-Low CH)



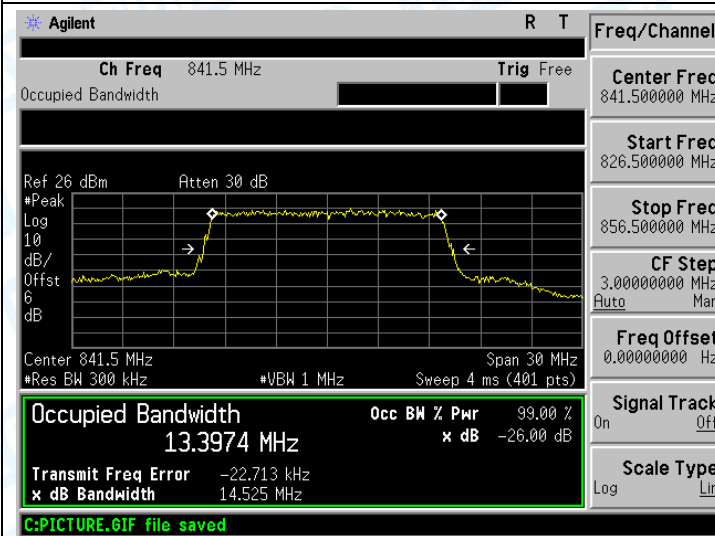
LTE BAND 26 (15MHz QPSK-Middle CH)



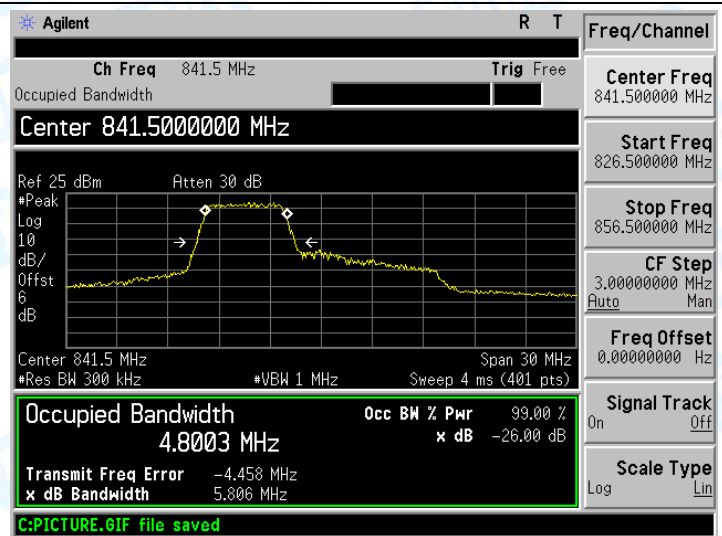
LTE BAND 26 (15MHz 16QAM- Middle CH)



LTE BAND 26 (15MHz QPSK-High CH)

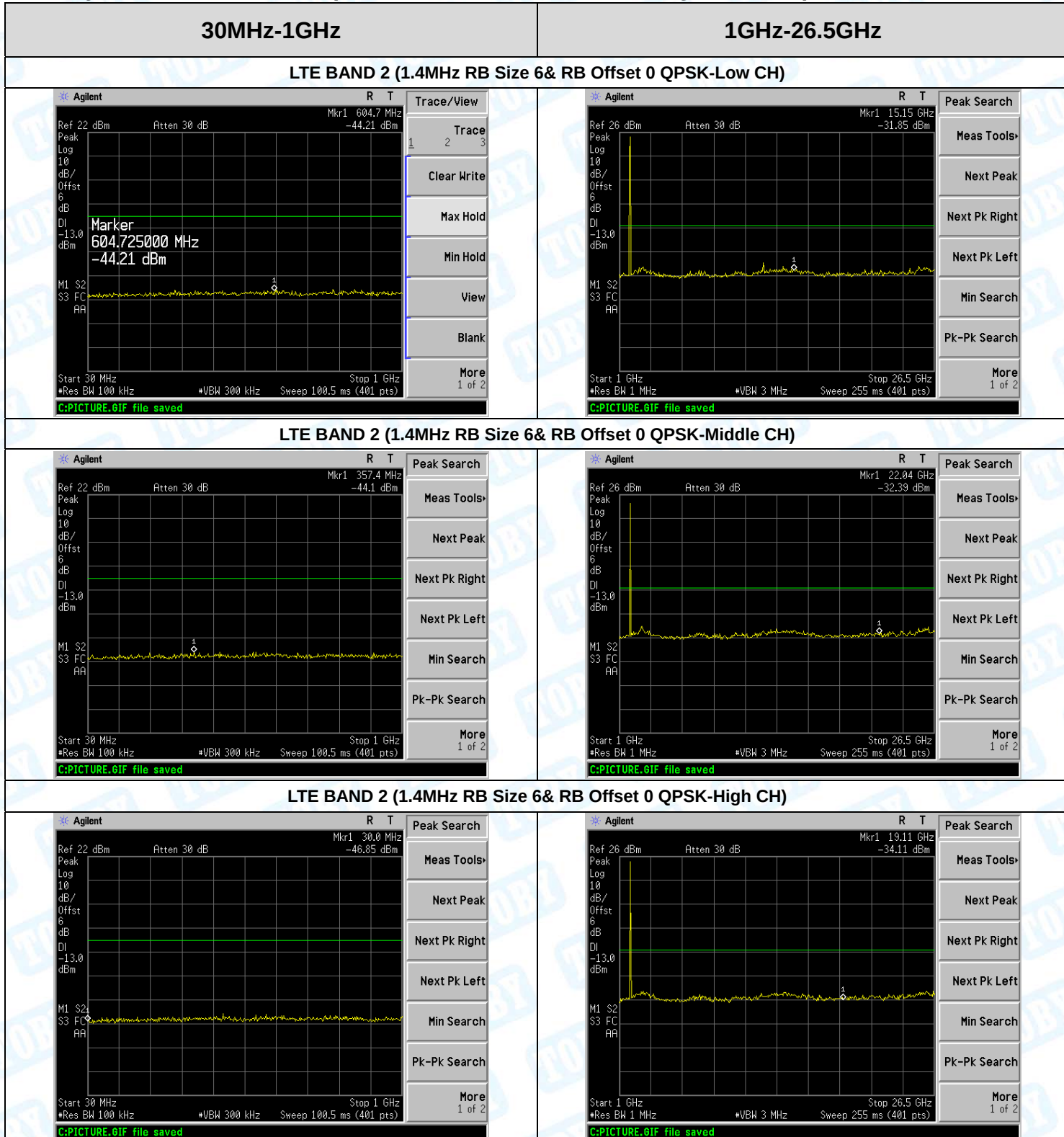


LTE BAND 26 (15MHz 16QAM-High CH)



ATTACHMENT D--OUT OF BAND EMISSION AT ANTENNA TERMINALS

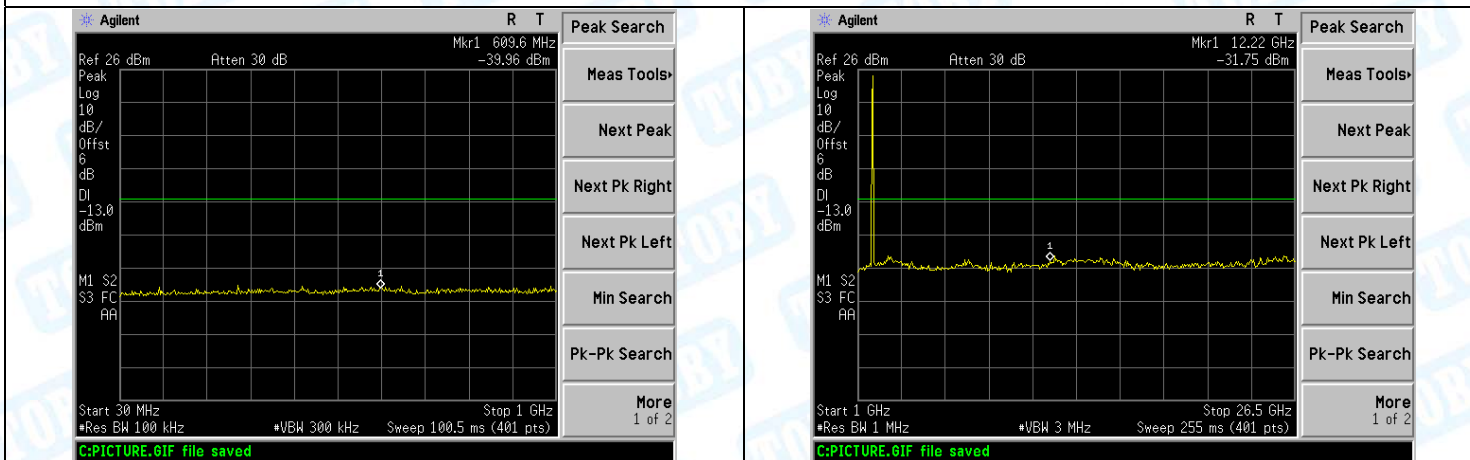
Only show the worst case(LTE BAND 2/4/5/7/12/13/25/26 QPSK Mode)



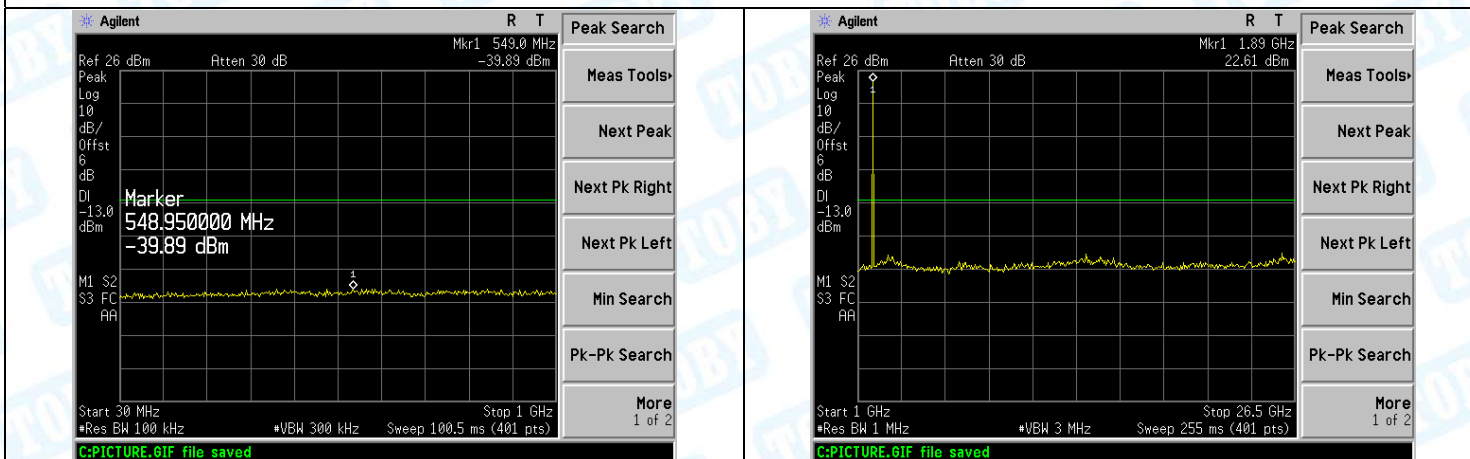
30MHz-1GHz

1GHz-26.5GHz

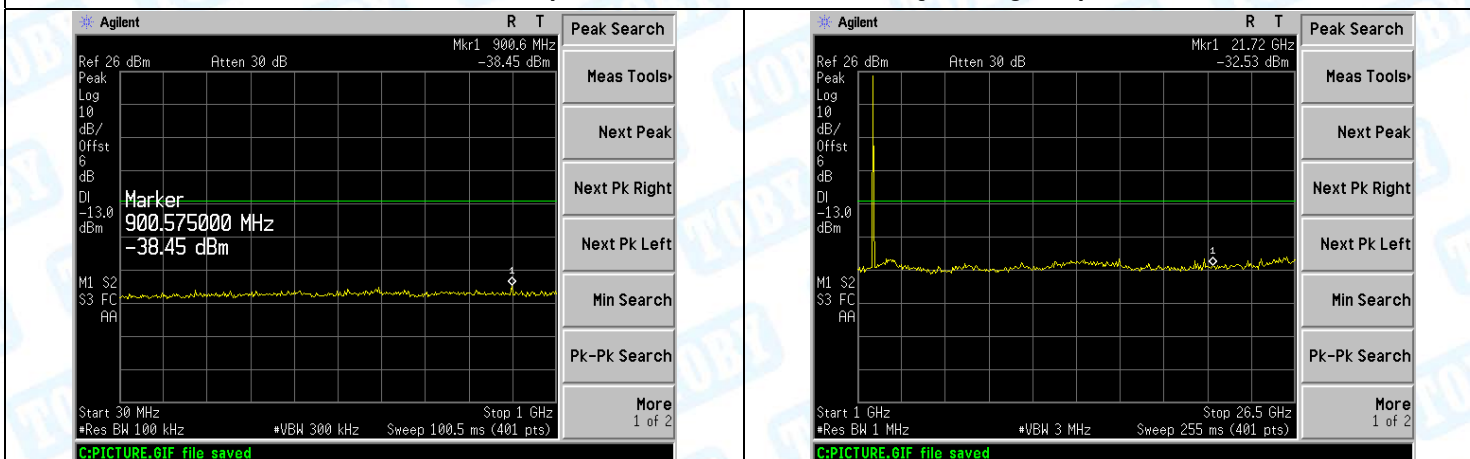
LTE BAND 2 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



LTE BAND 2 (3MHz RB Size 15& RB Offset 0 QPSK-Middle CH)



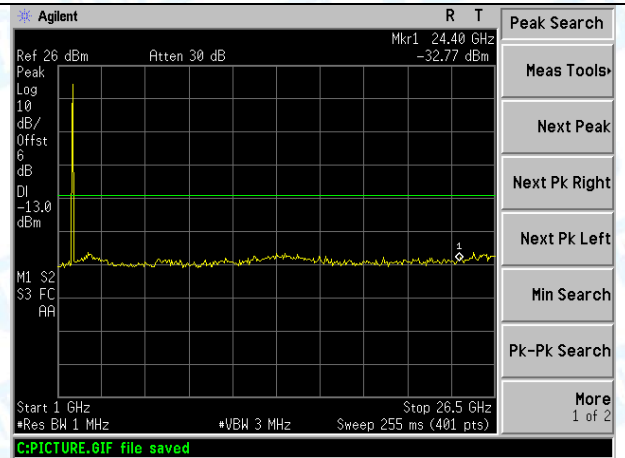
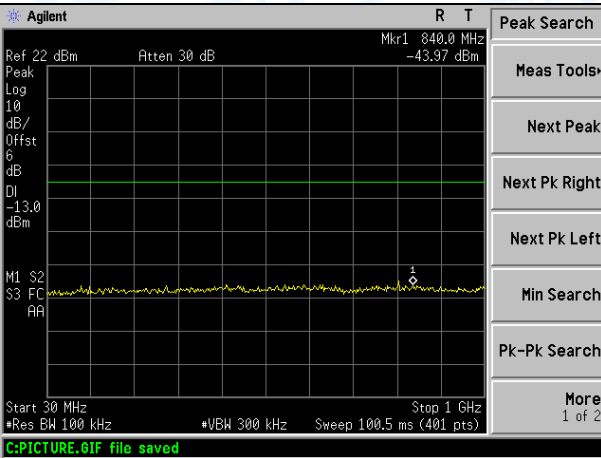
LTE BAND 2 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)



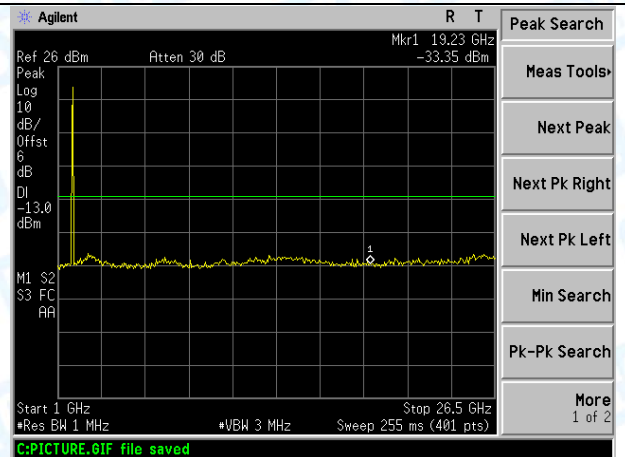
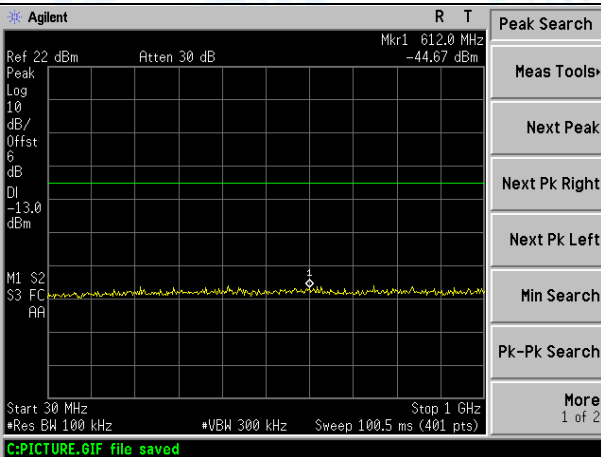
30MHz-1GHz

1GHz-26.5GHz

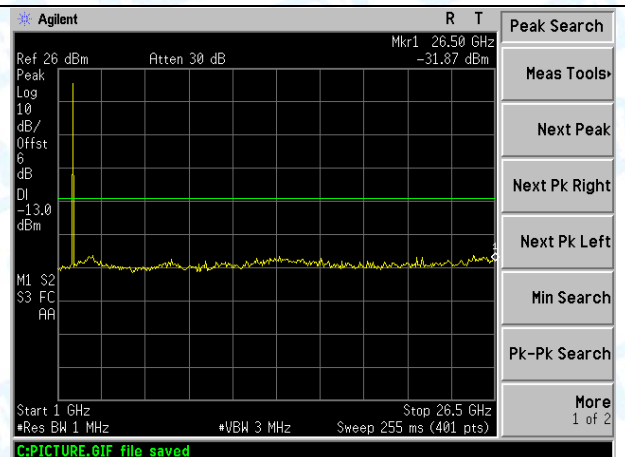
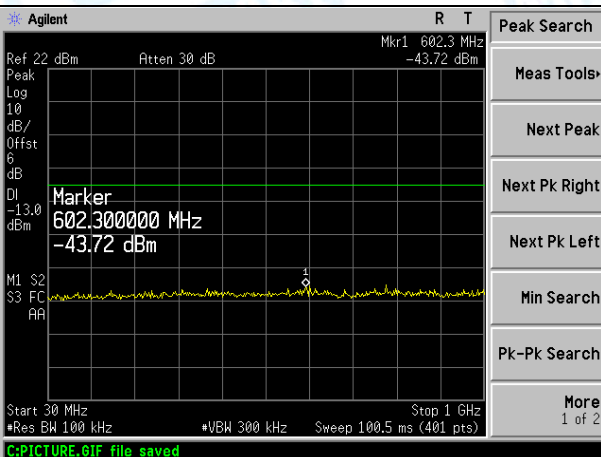
LTE BAND 2 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



LTE BAND 2 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)



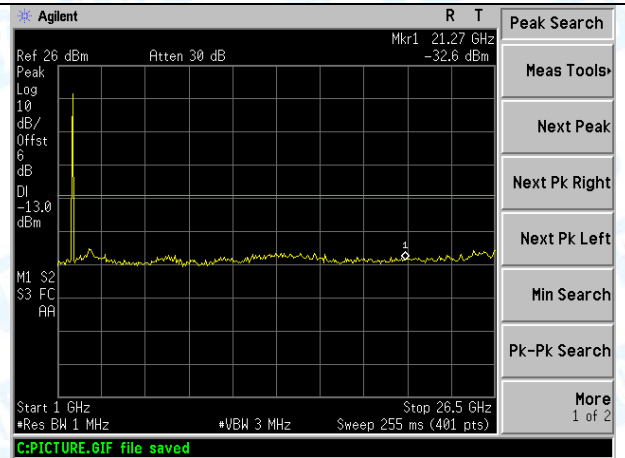
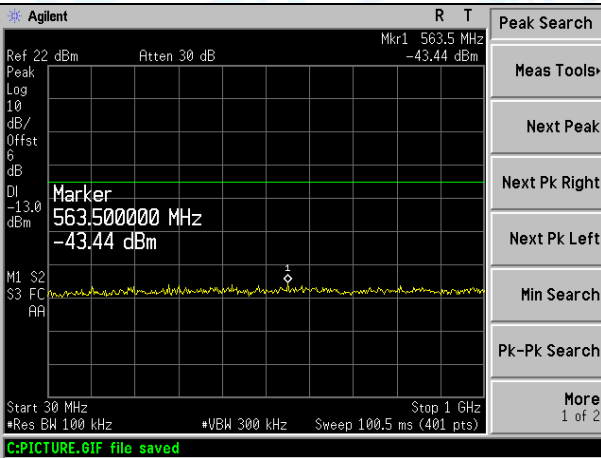
LTE BAND 2 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)



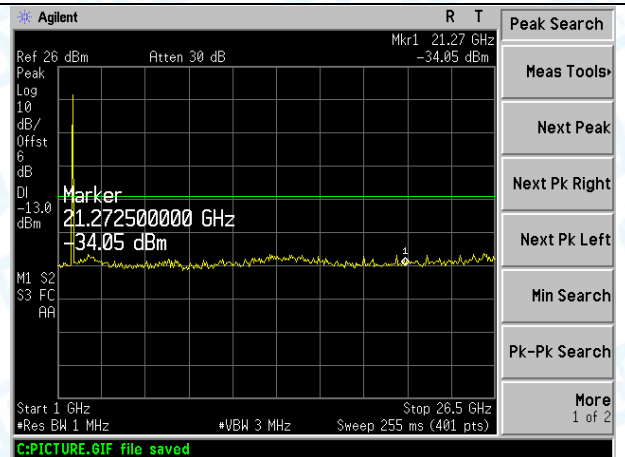
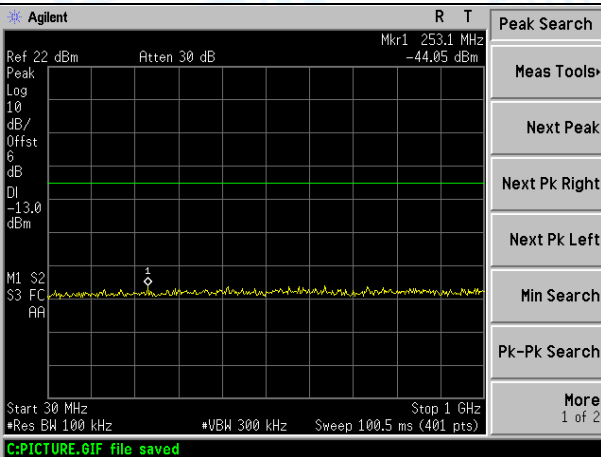
30MHz-1GHz

1GHz-26.5GHz

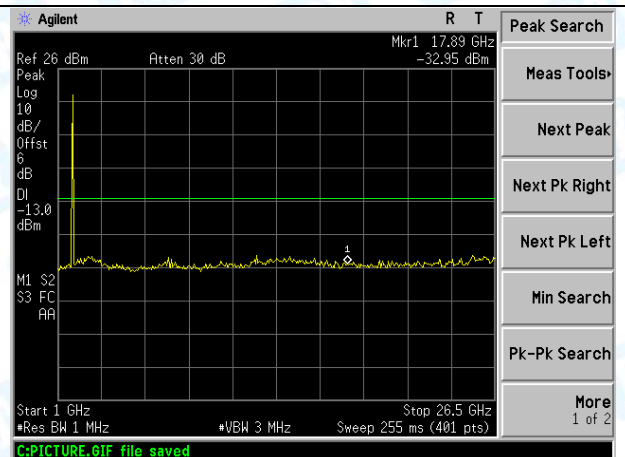
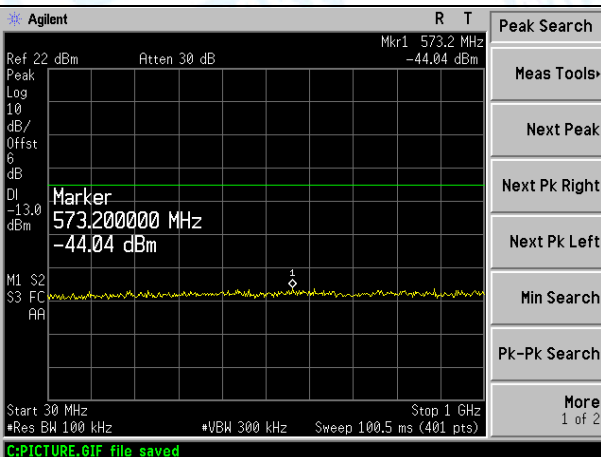
LTE BAND 2 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



LTE BAND 2 (10MHz RB Size 50& RB Offset 0 QPSK-Middle CH)



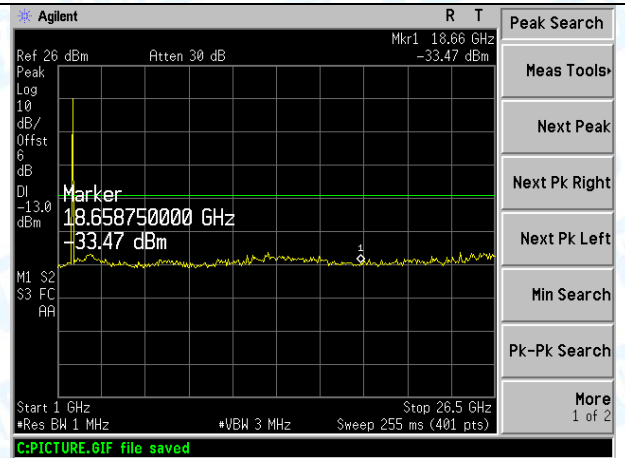
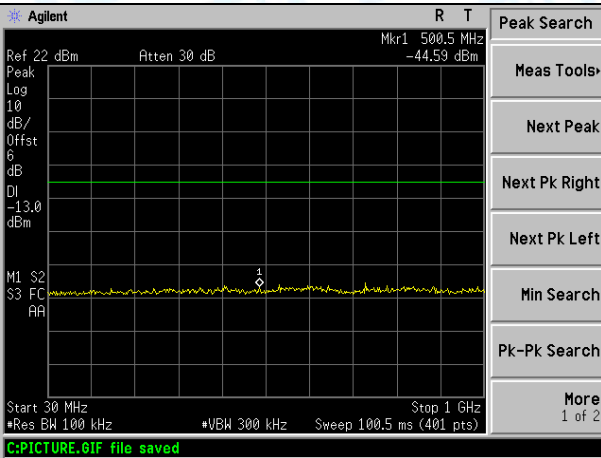
LTE BAND 2 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)



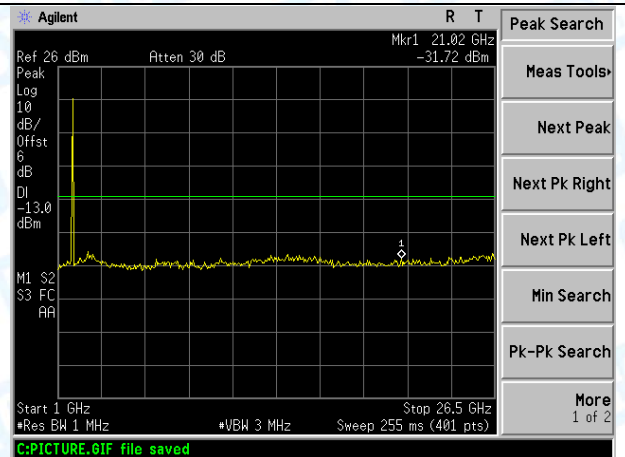
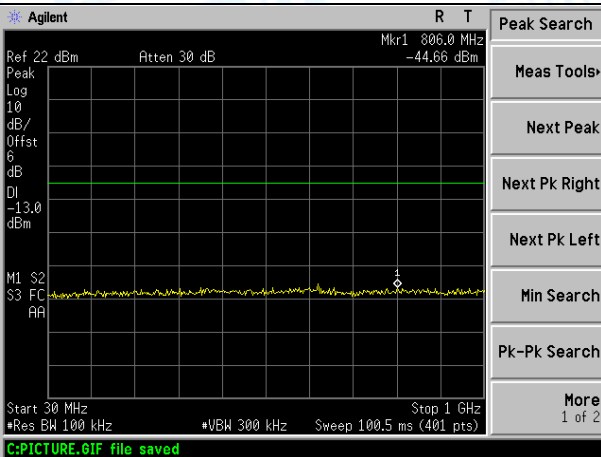
30MHz-1GHz

1GHz-26.5GHz

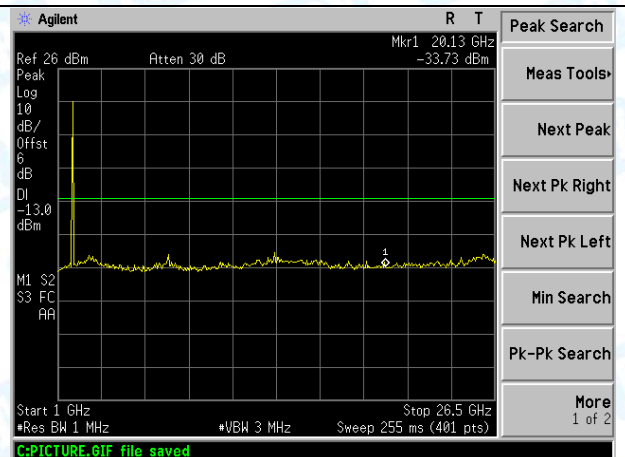
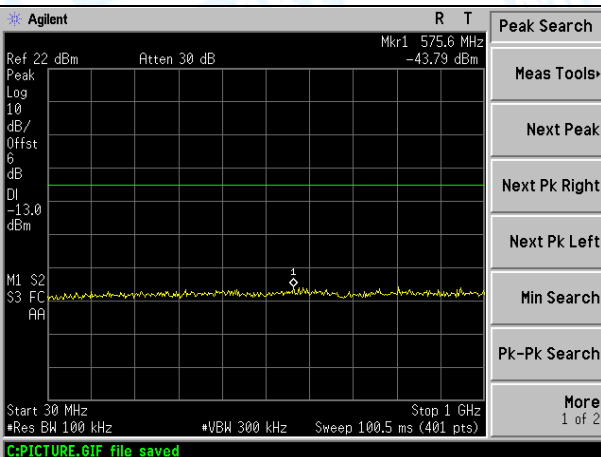
LTE BAND 2 (15MHz RB Size 75& RB Offset 0 QPSK-Low CH)



LTE BAND 2 (15MHz RB Size 75& RB Offset 0 QPSK-Middle CH)



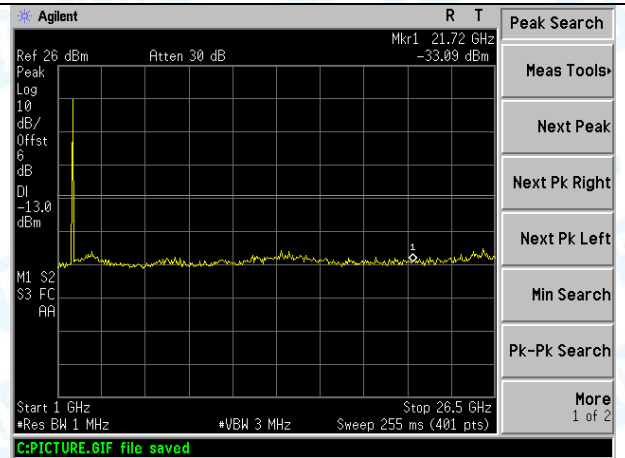
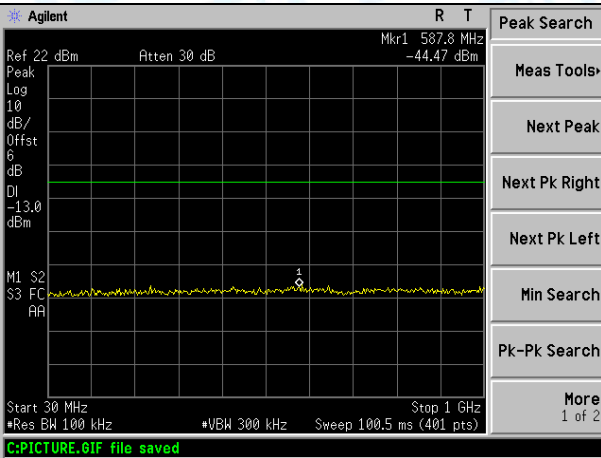
LTE BAND 2 (15MHz RB Size 75& RB Offset 0 QPSK-High CH)



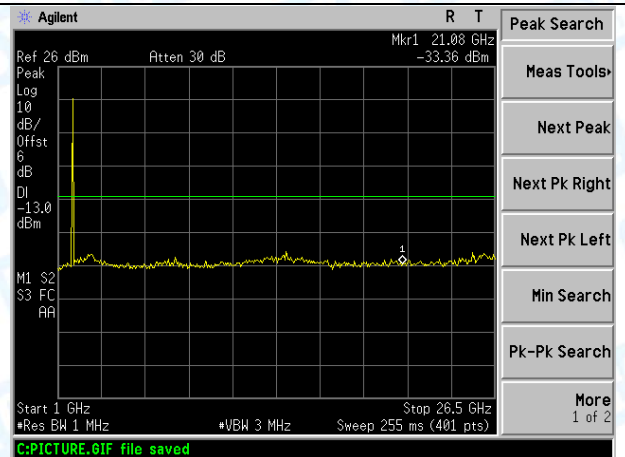
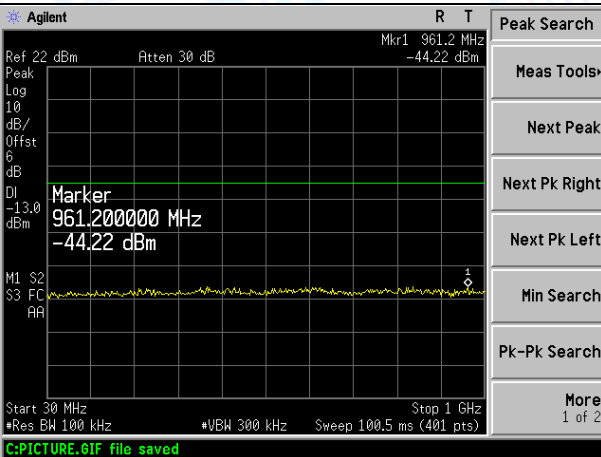
30MHz-1GHz

1GHz-26.5GHz

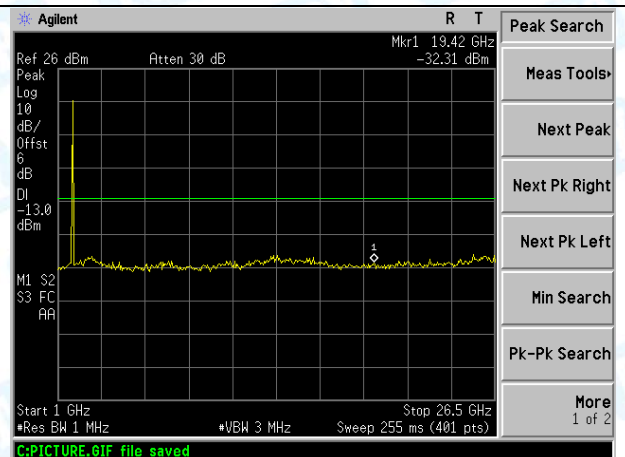
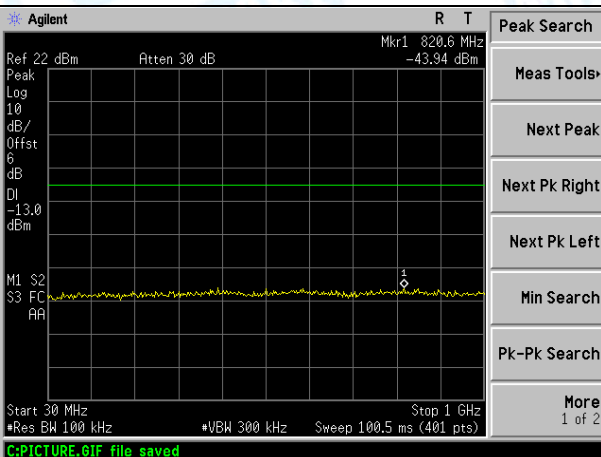
LTE BAND 2 (20MHz RB Size 100& RB Offset 0 QPSK-Low CH)



LTE BAND 2 (20MHz RB Size 100& RB Offset 0 QPSK-Middle CH)



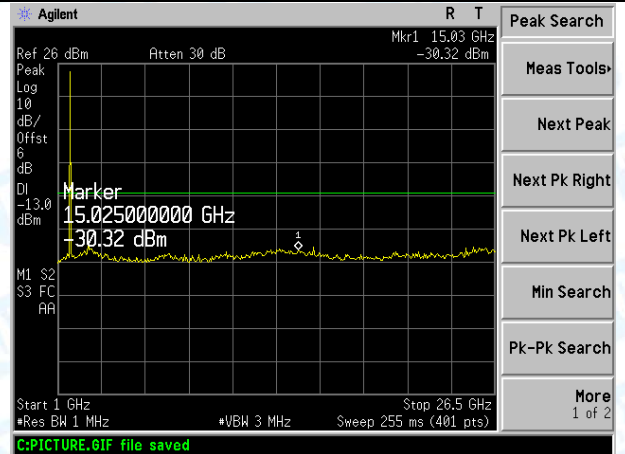
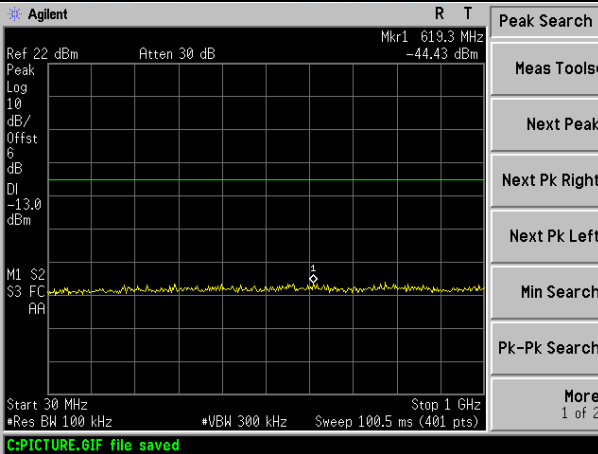
LTE BAND 2 (20MHz RB Size 100& RB Offset 0 QPSK-High CH)



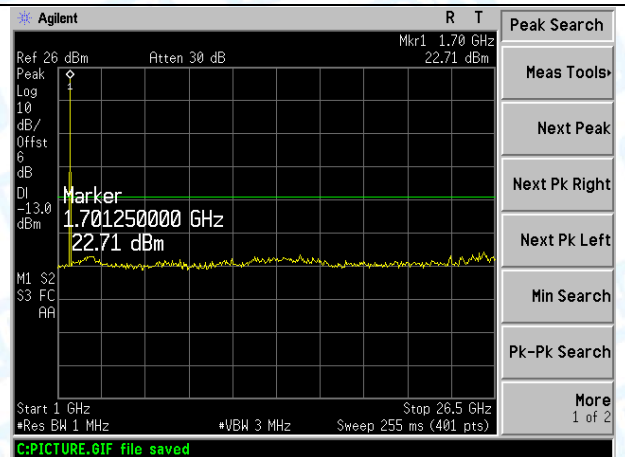
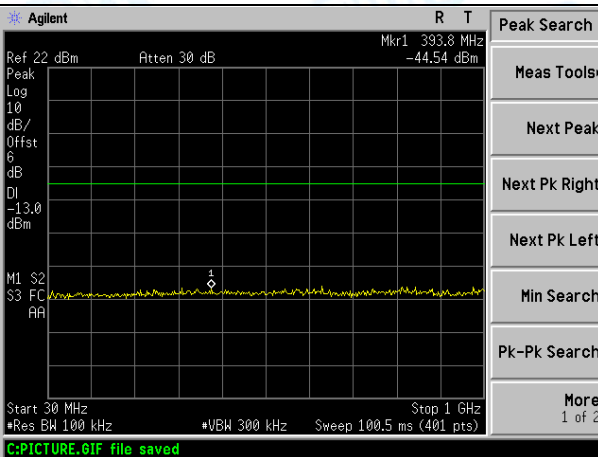
30MHz-1GHz

1GHz-26.5GHz

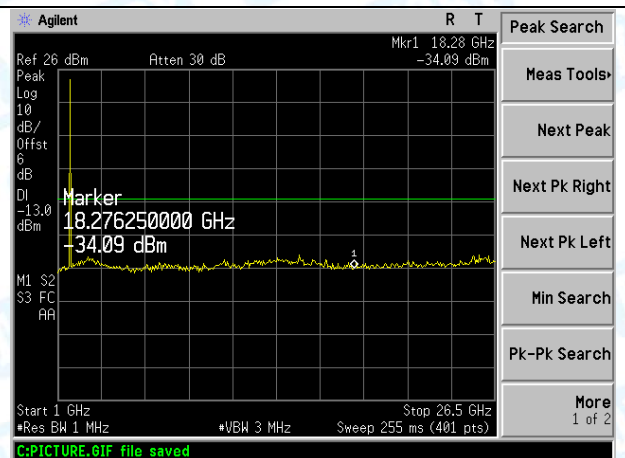
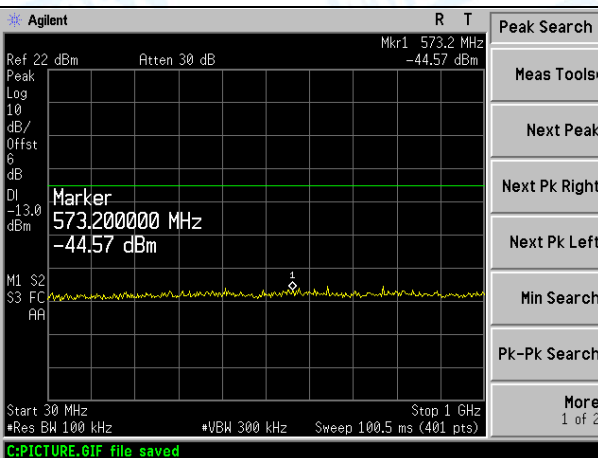
LTE BAND 4 (1.4MHz RB Size 6& RB Offset 0 QPSK-Low CH)



LTE BAND 4 (1.4MHz RB Size 6& RB Offset 0 QPSK-Middle CH)



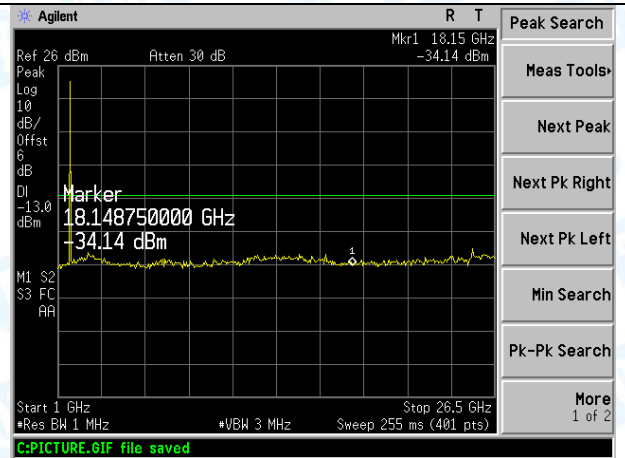
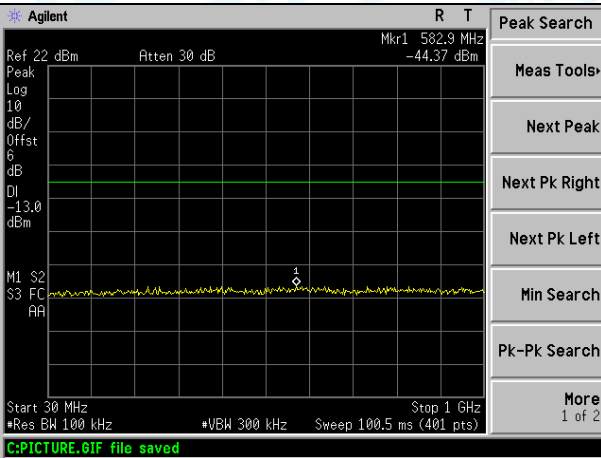
LTE BAND 4 (1.4MHz RB Size 6& RB Offset 0 QPSK-High CH)



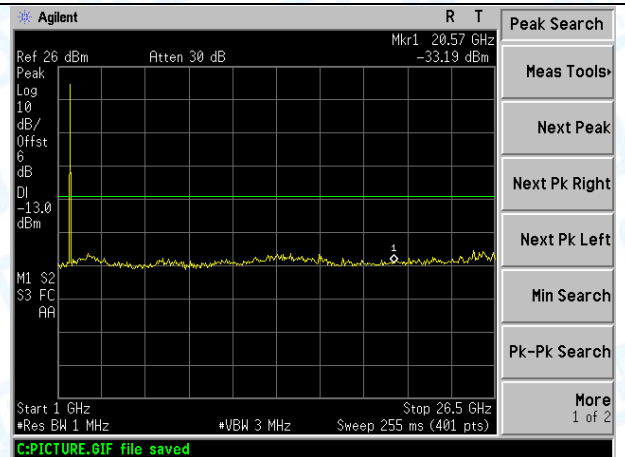
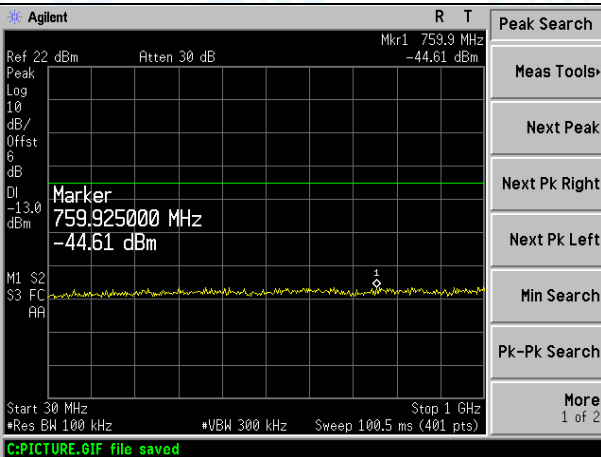
30MHz-1GHz

1GHz-26.5GHz

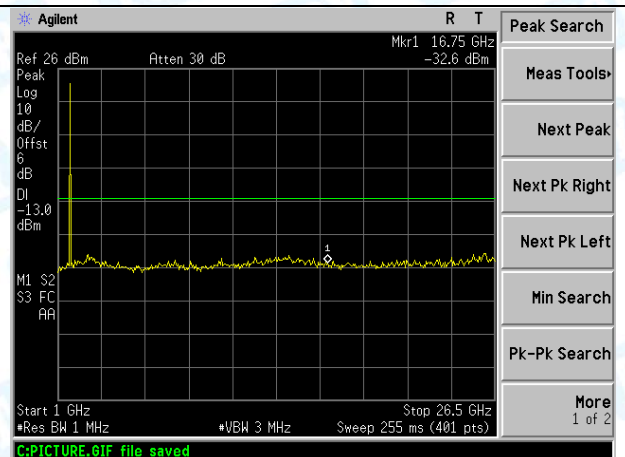
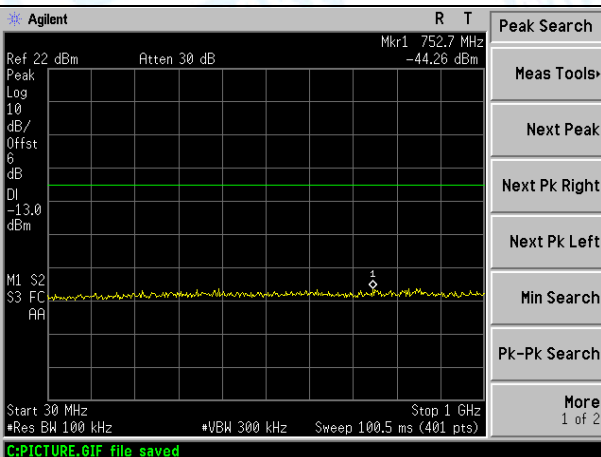
LTE BAND 4 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



LTE BAND 4 (3MHz RB Size 15& RB Offset 0 QPSK-Middle CH)

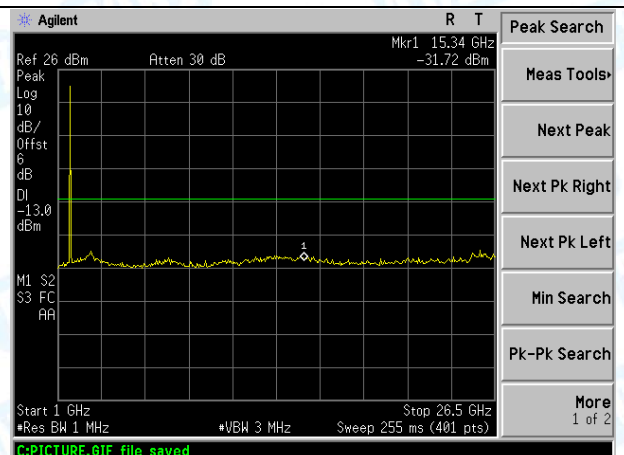
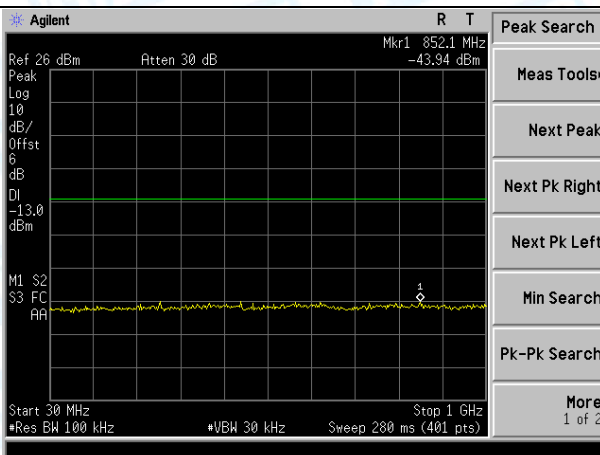


LTE BAND 4 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)

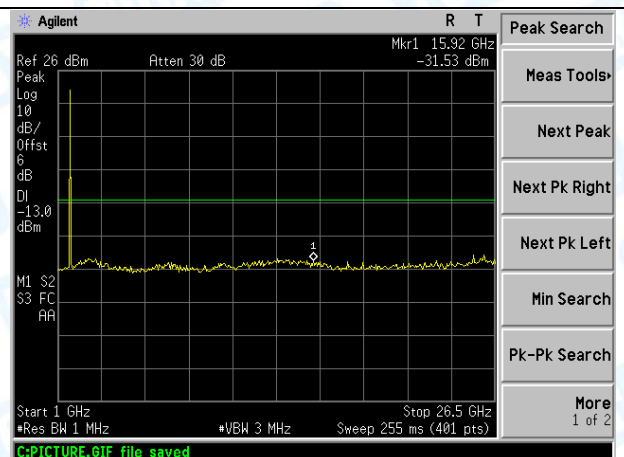
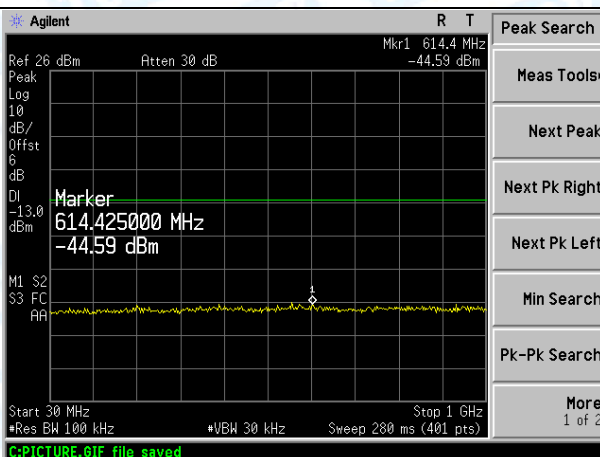


30MHz-1GHz

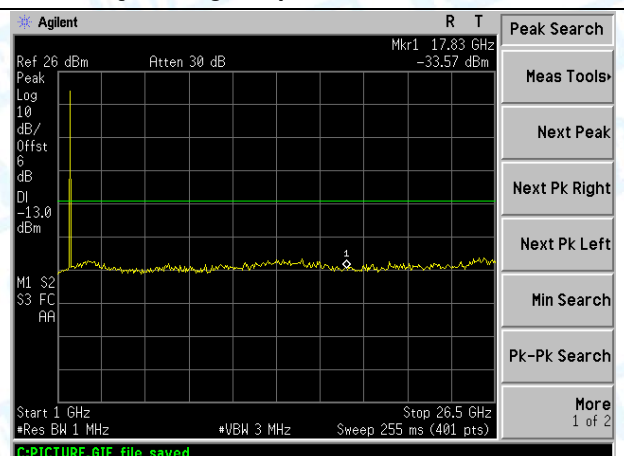
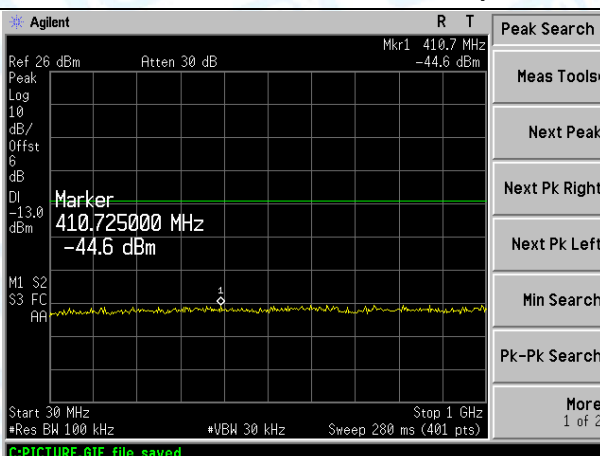
LTE BAND 4 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



LTE BAND 4 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)



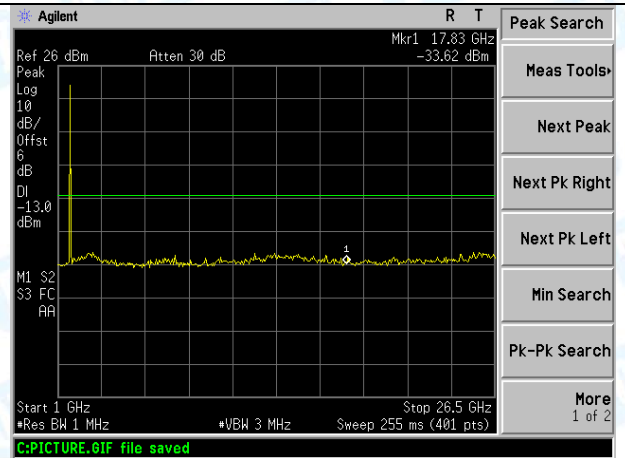
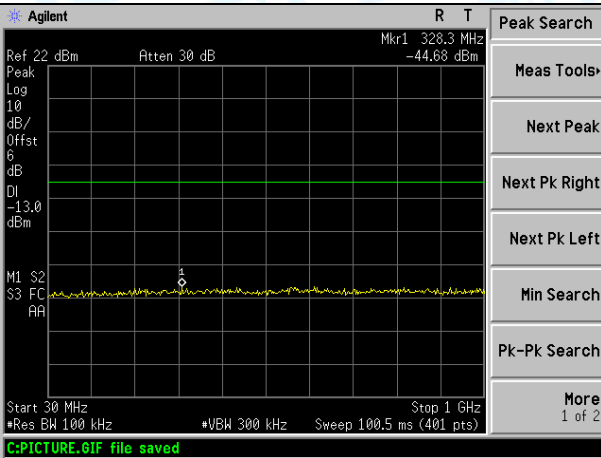
LTE BAND 4 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)



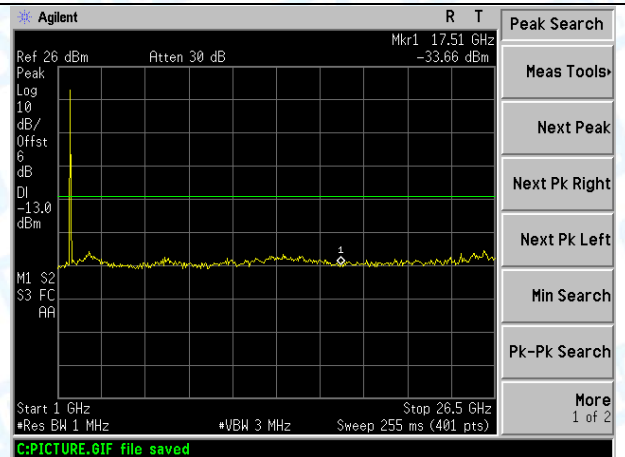
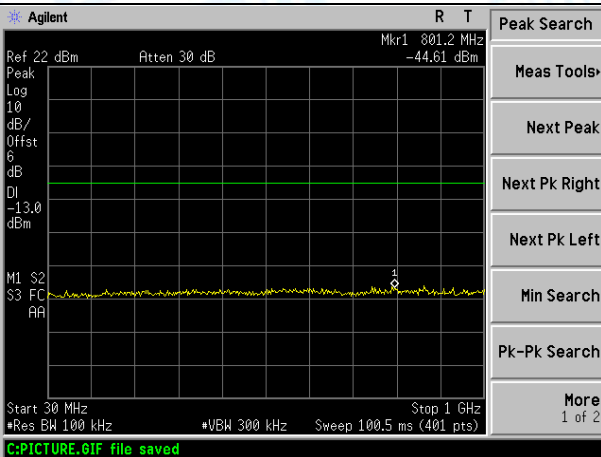
30MHz-1GHz

1GHz-26.5GHz

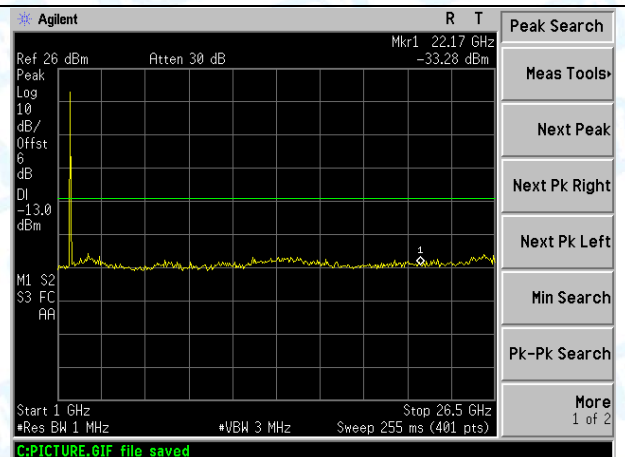
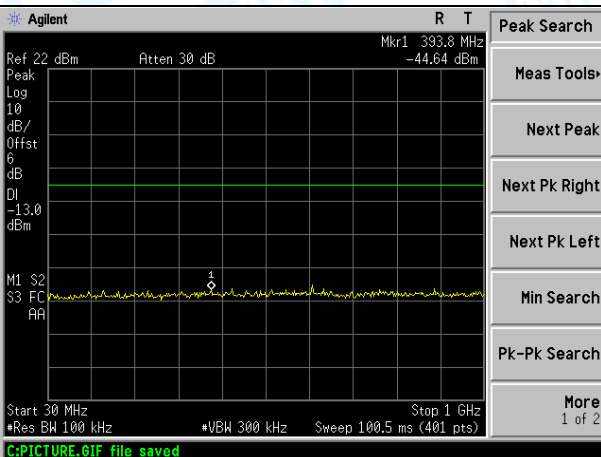
LTE BAND 4 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



LTE BAND 4 (10MHz RB Size 50& RB Offset 0 QPSK-Middle CH)



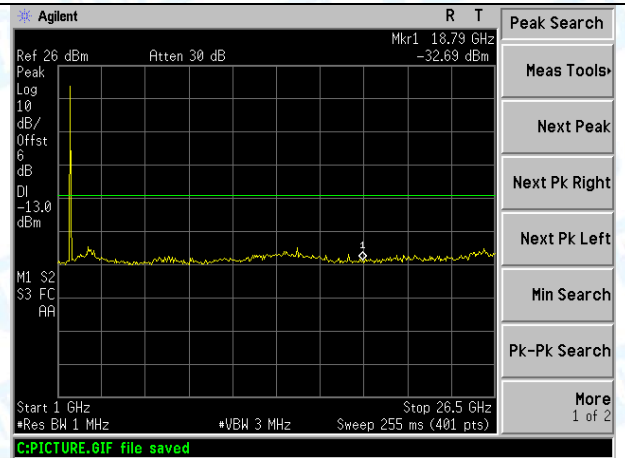
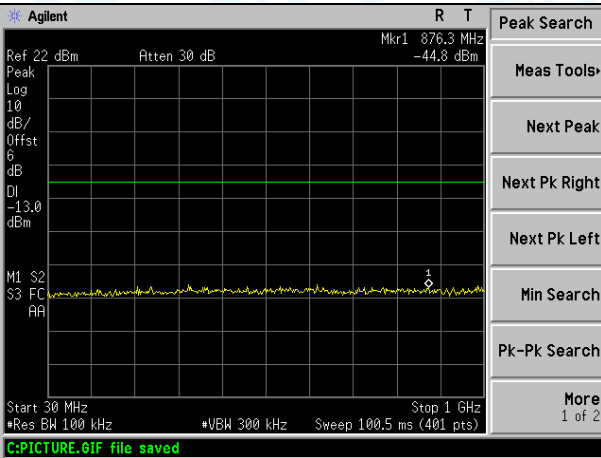
LTE BAND 4 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)



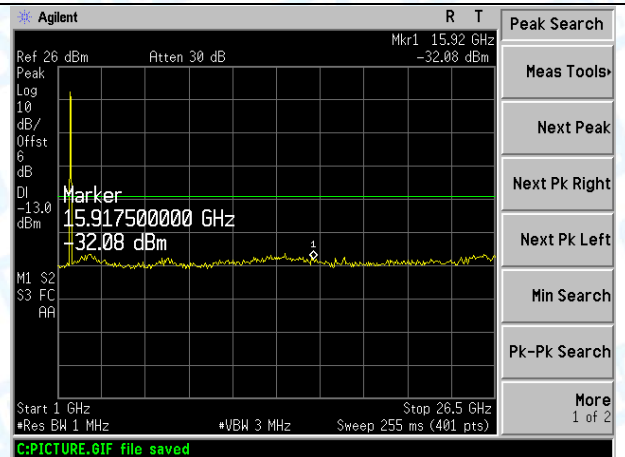
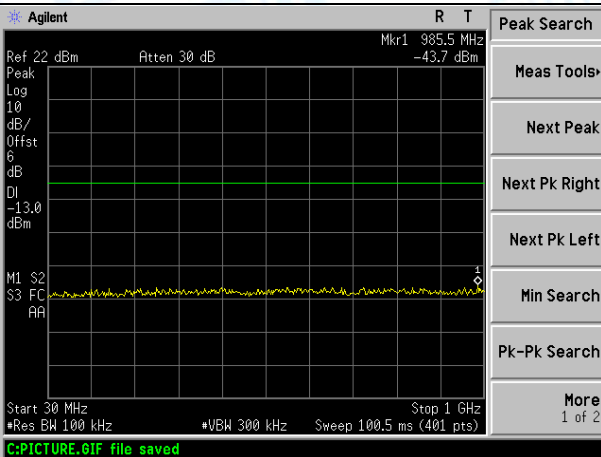
30MHz-1GHz

1GHz-26.5GHz

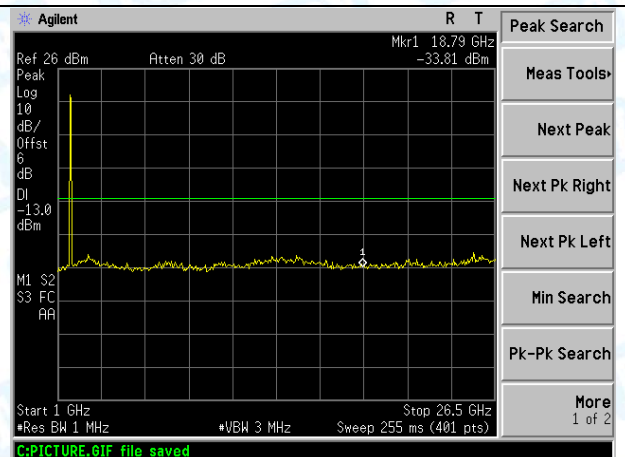
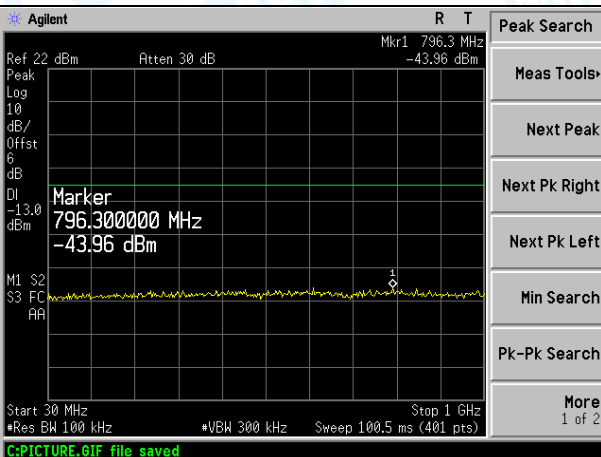
LTE BAND 4 (15MHz RB Size 75& RB Offset 0 QPSK-Low CH)



LTE BAND 4 (15MHz RB Size 75& RB Offset 0 QPSK-Middle CH)



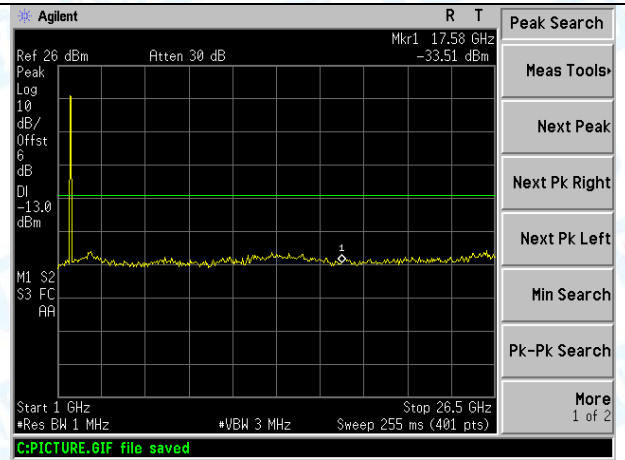
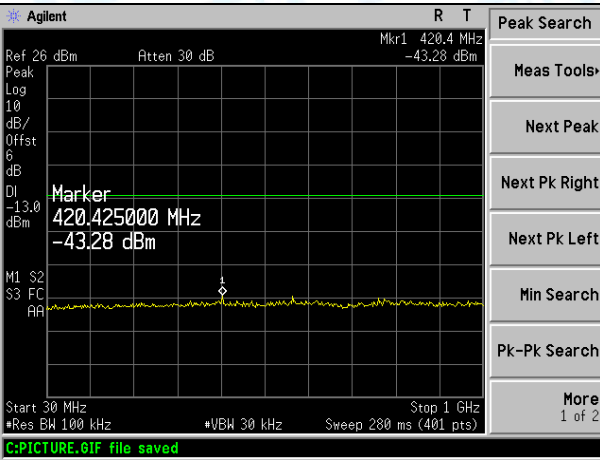
LTE BAND 4 (15MHz RB Size 75& RB Offset 0 QPSK-High CH)



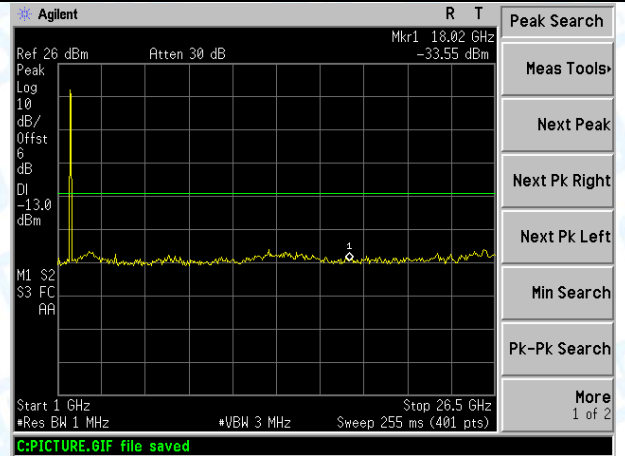
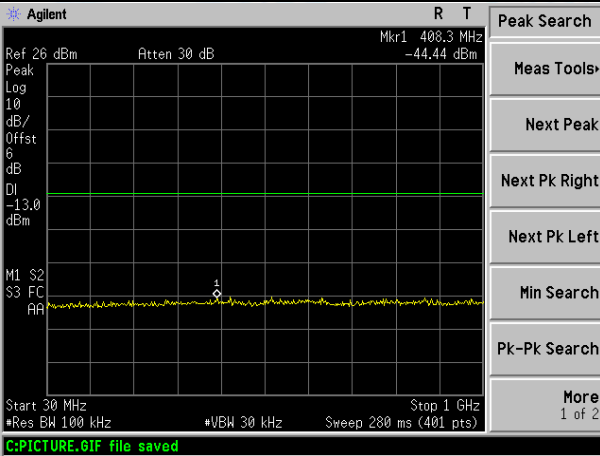
30MHz-1GHz

1GHz-26.5GHz

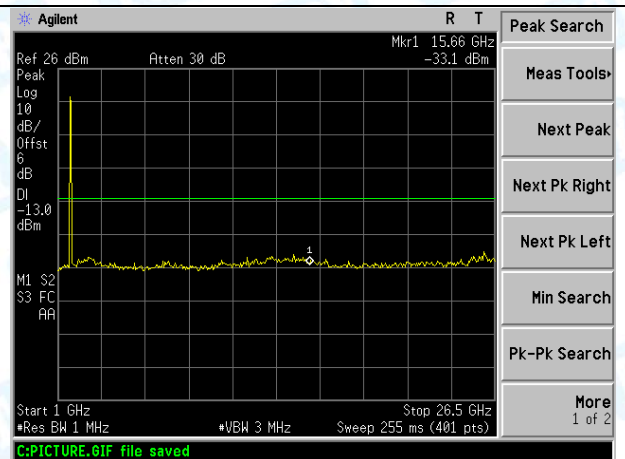
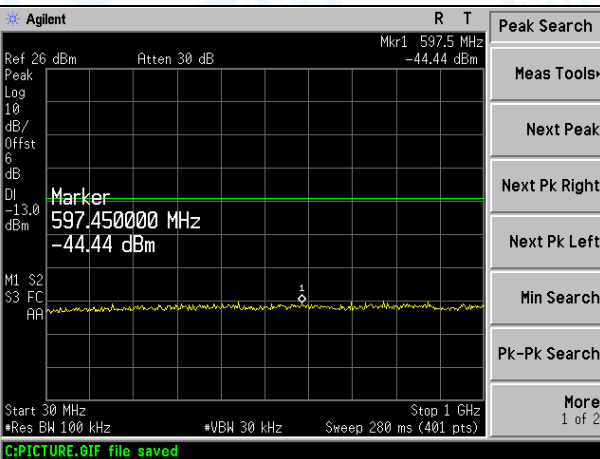
LTE BAND 4 (20MHz RB Size 100& RB Offset 0 QPSK-Low CH)



LTE BAND 4 (20MHz RB Size 100& RB Offset 0 QPSK-Middle CH)



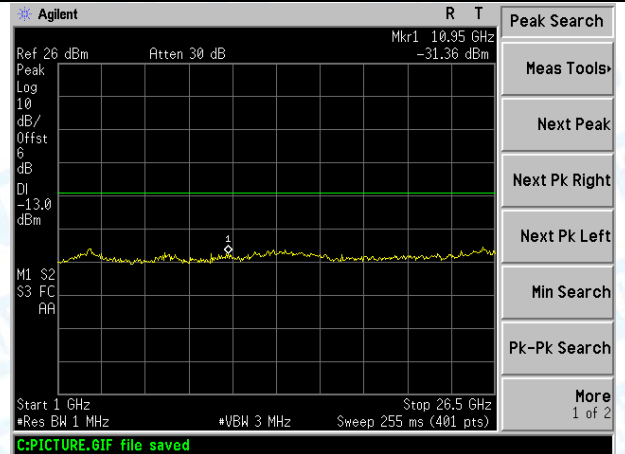
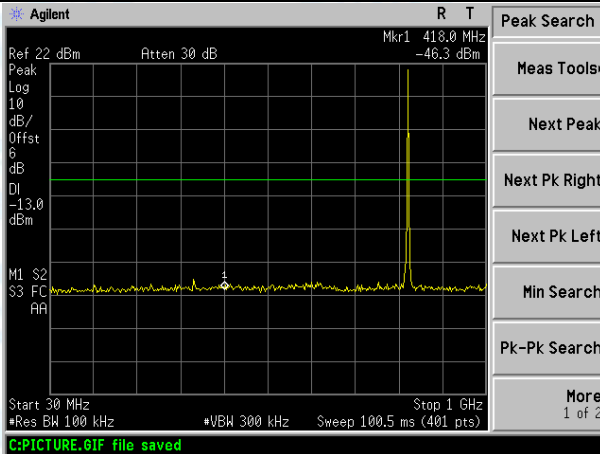
LTE BAND 4 (20MHz RB Size 100& RB Offset 0 QPSK-High CH)



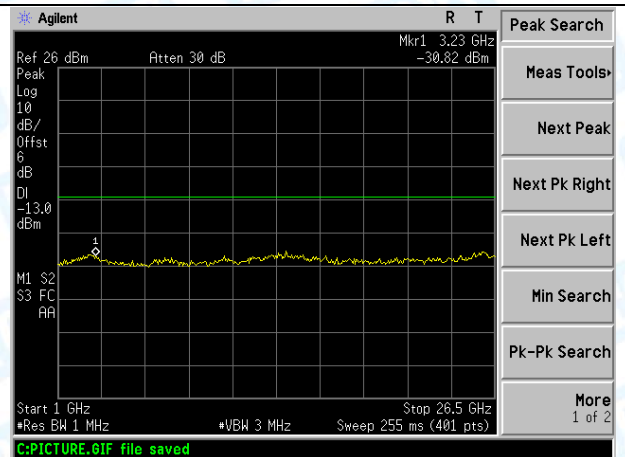
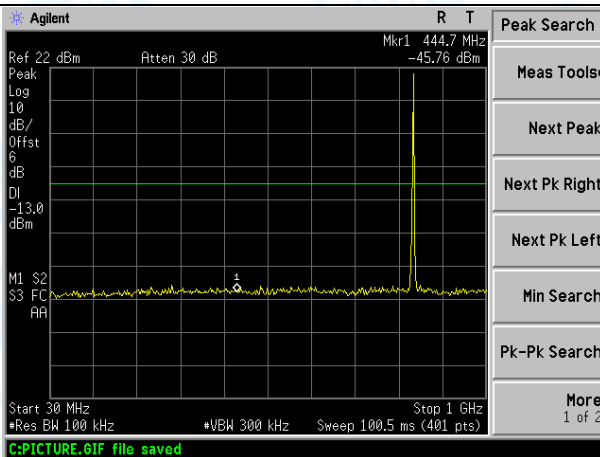
30MHz-1GHz

1GHz-26.5GHz

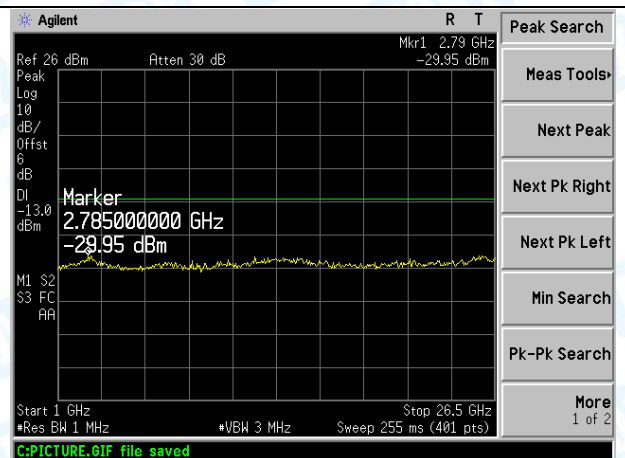
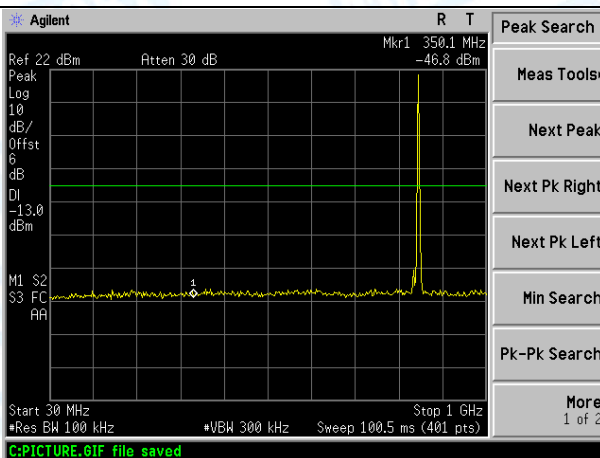
LTE BAND 5 (1.4MHz RB Size 6& RB Offset 0 QPSK-Low CH)



LTE BAND 5 (1.4MHz RB Size 6& RB Offset 0 QPSK-Middle CH)



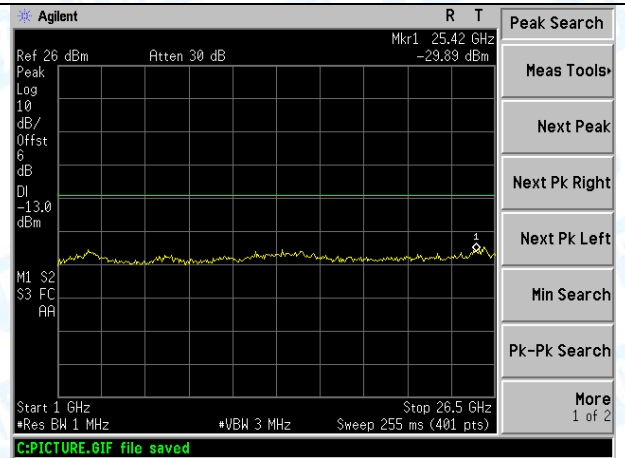
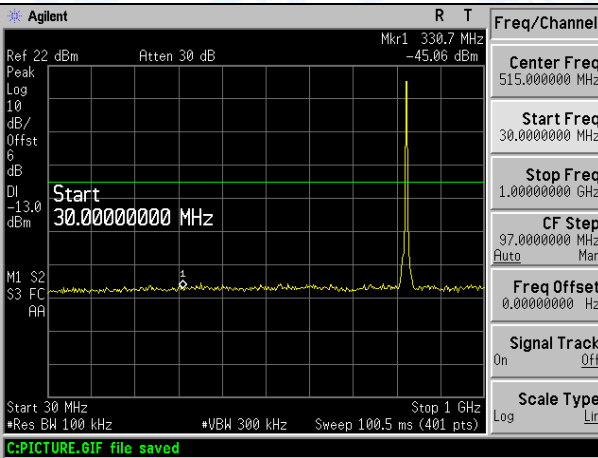
LTE BAND 5 (1.4MHz RB Size 6& RB Offset 0 QPSK-High CH)



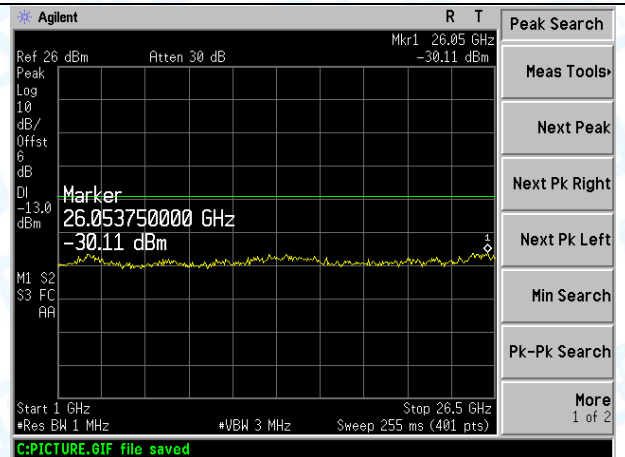
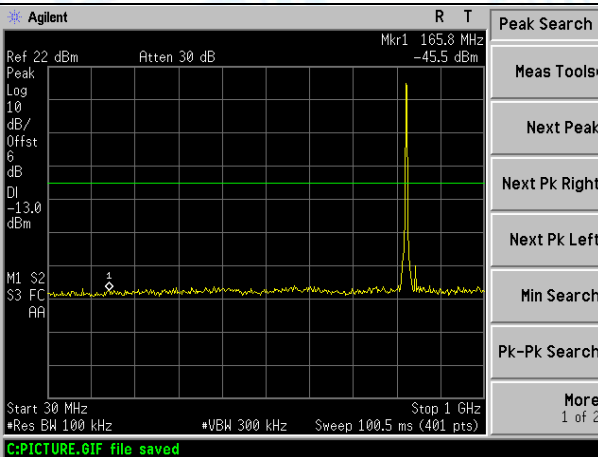
30MHz-1GHz

1GHz-26.5GHz

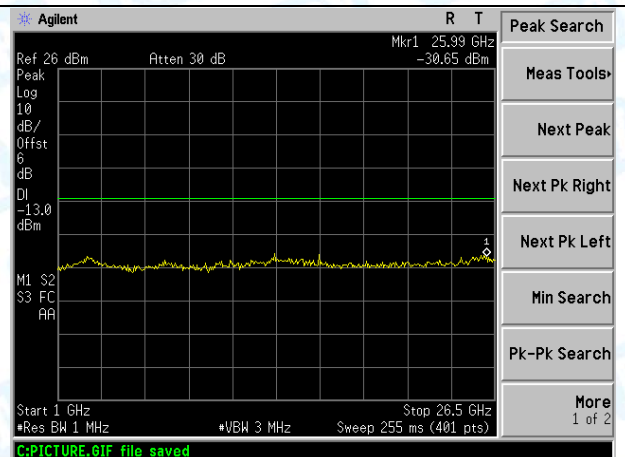
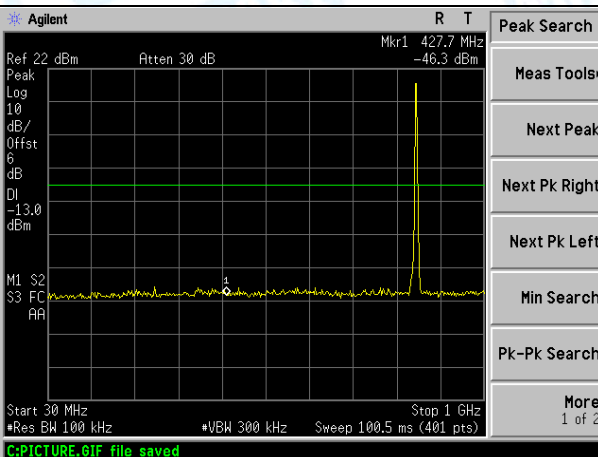
LTE BAND 5 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



LTE BAND 5 (3MHz RB Size 15& RB Offset 0 QPSK-Middle CH)



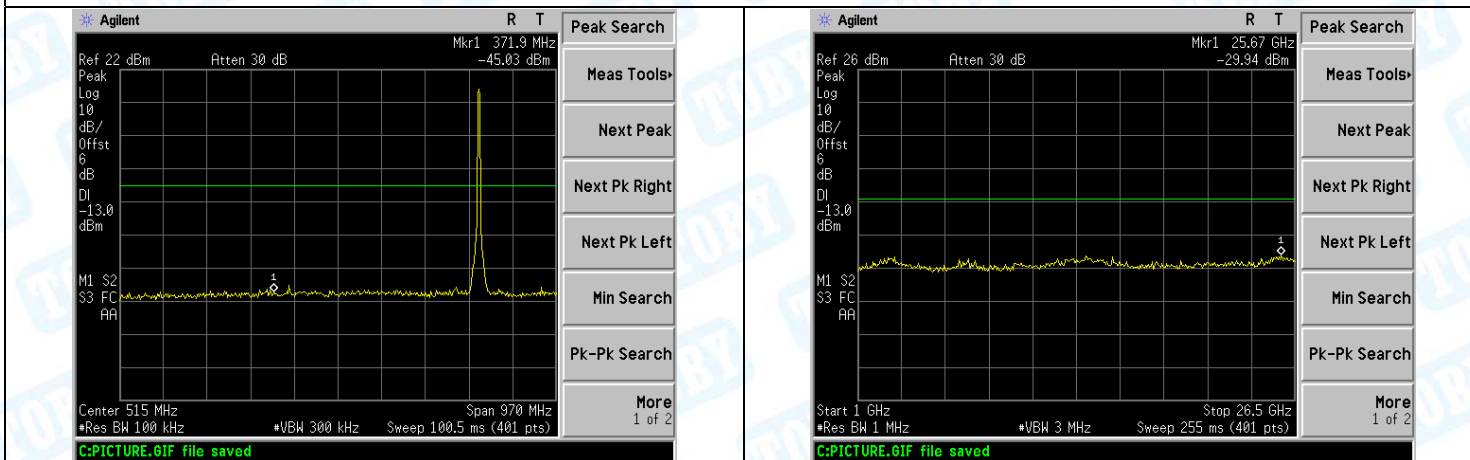
LTE BAND 5 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)



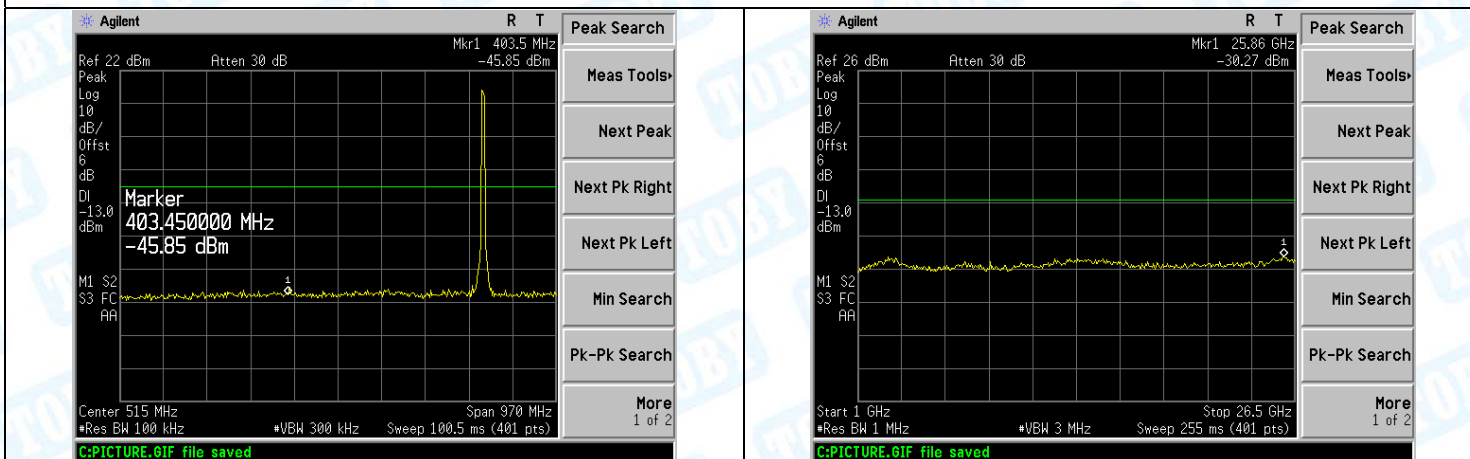
30MHz-1GHz

1GHz-26.5GHz

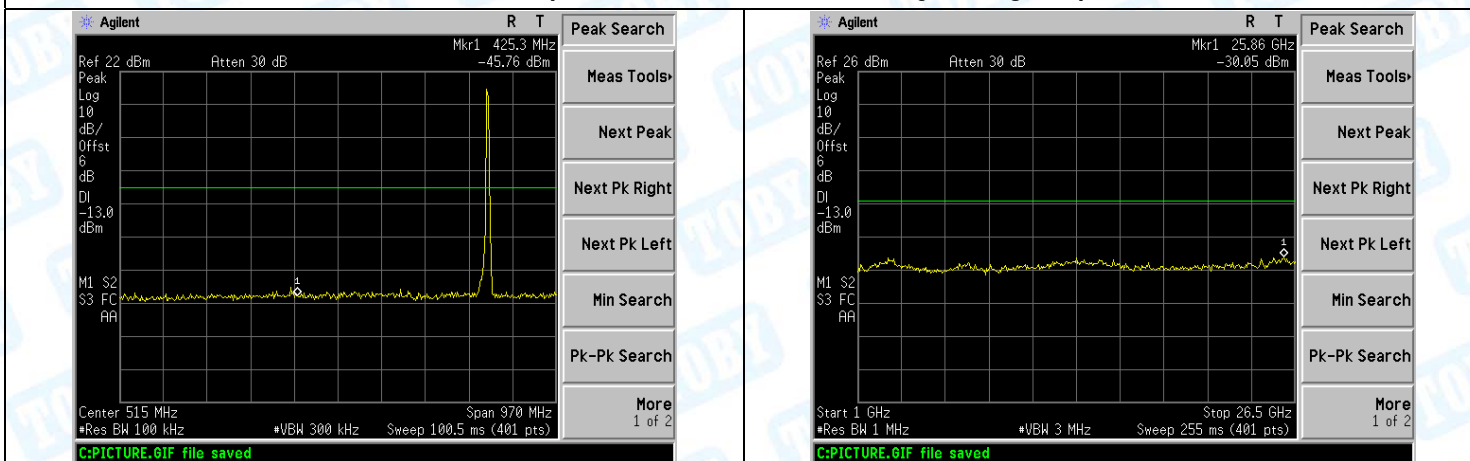
LTE BAND 5 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



LTE BAND 5 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)



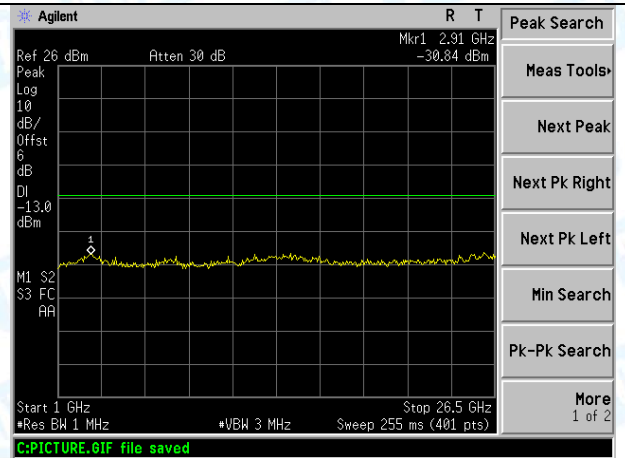
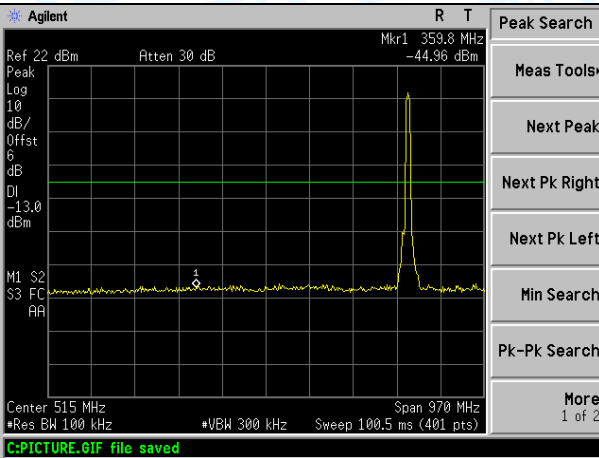
LTE BAND 5 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)



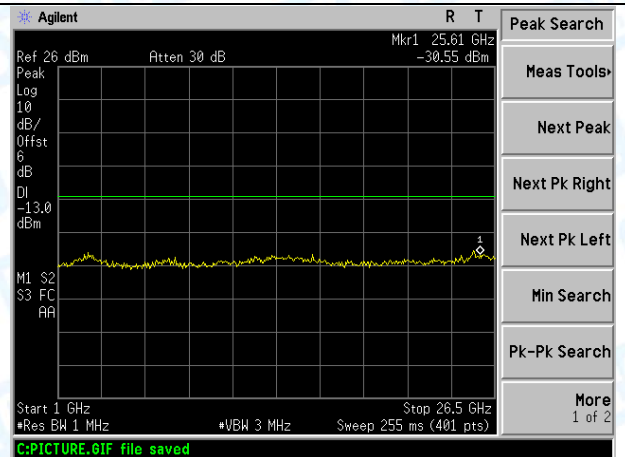
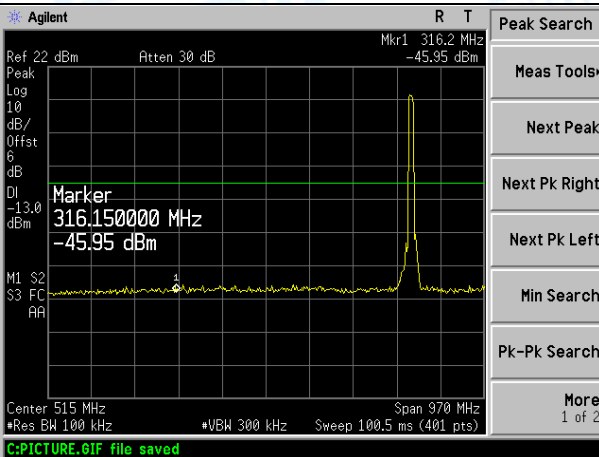
30MHz-1GHz

1GHz-26.5GHz

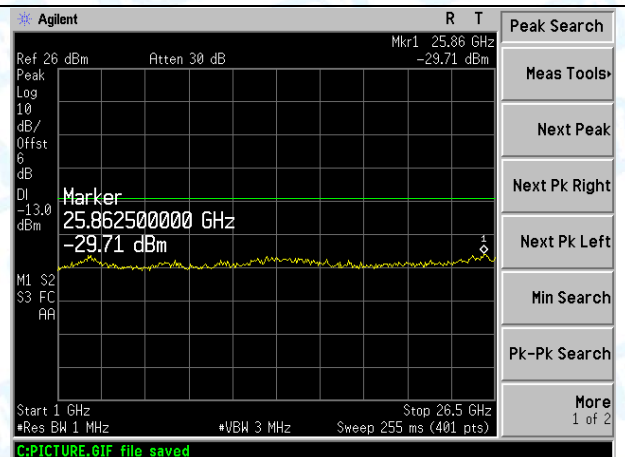
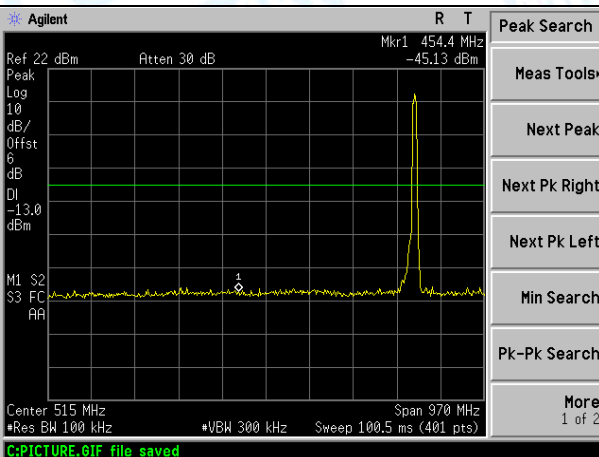
LTE BAND 5 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



LTE BAND 5 (10MHz RB Size 50& RB Offset 0 QPSK-Middle CH)



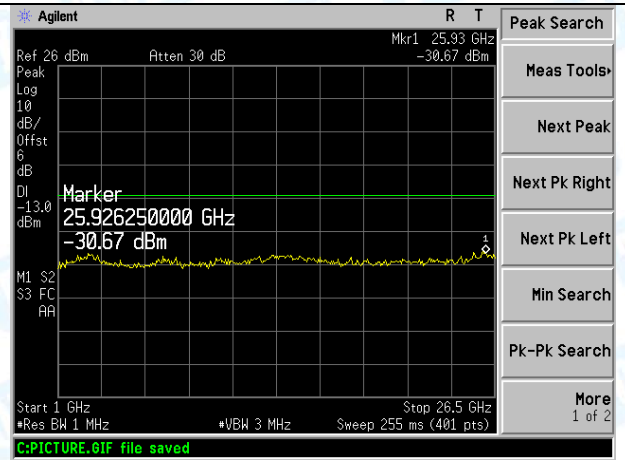
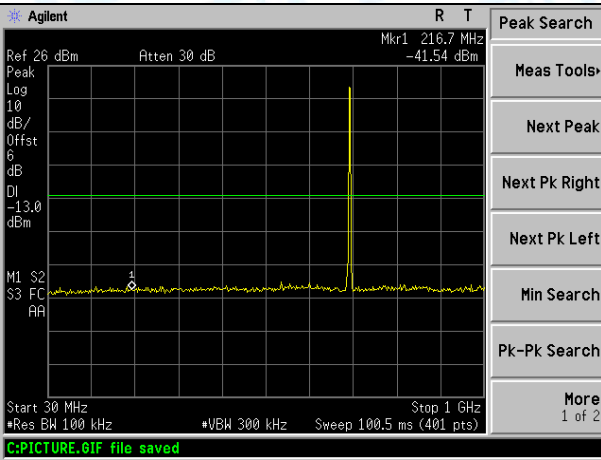
LTE BAND 5 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)



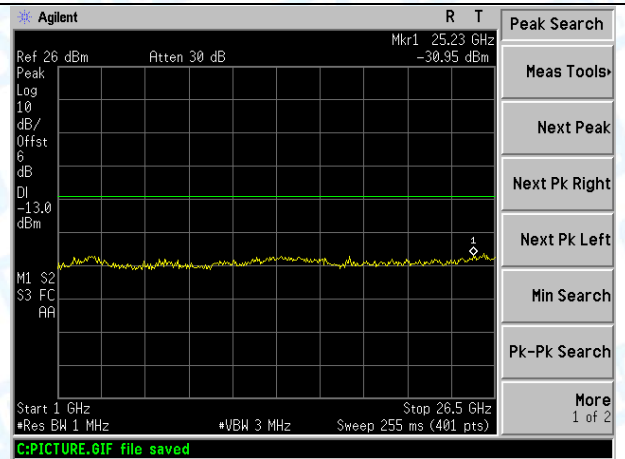
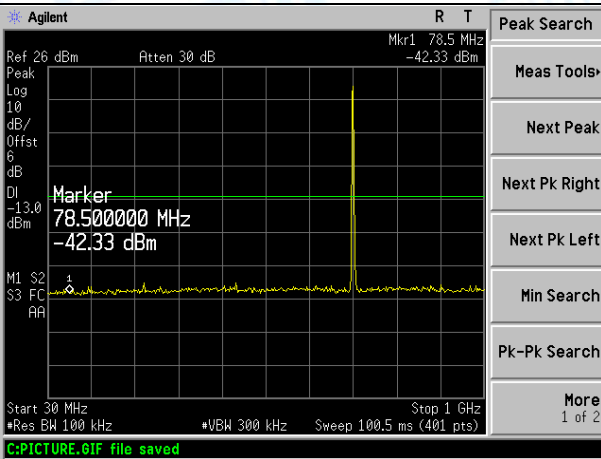
30MHz-1GHz

1GHz-26.5GHz

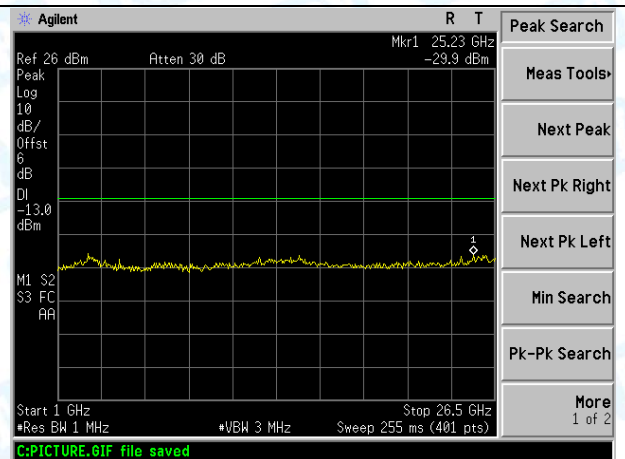
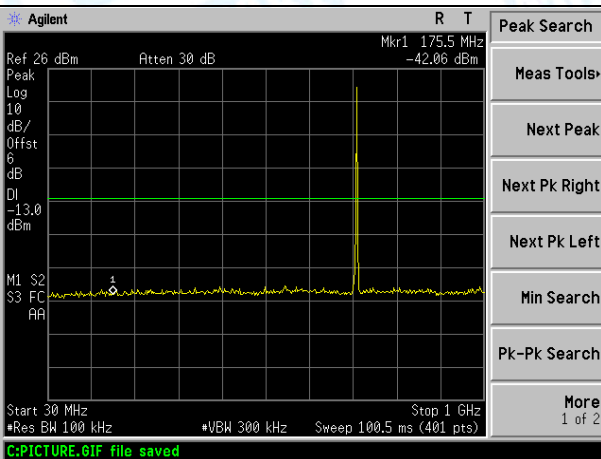
LTE BAND 12 (1.4MHz RB Size 6& RB Offset 0 QPSK-Low CH)



LTE BAND 12 (1.4MHz RB Size 6& RB Offset 0 QPSK-Middle CH)



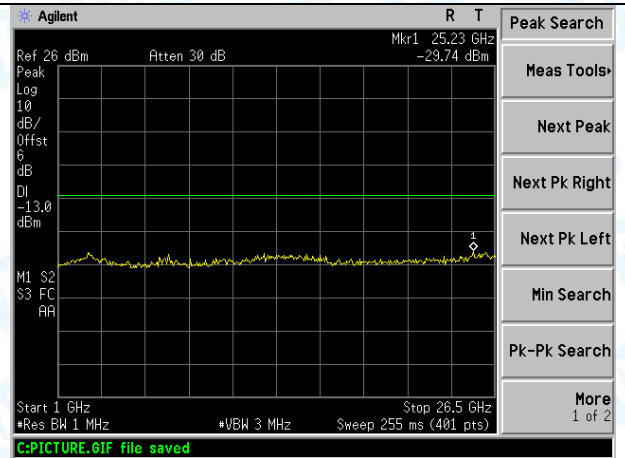
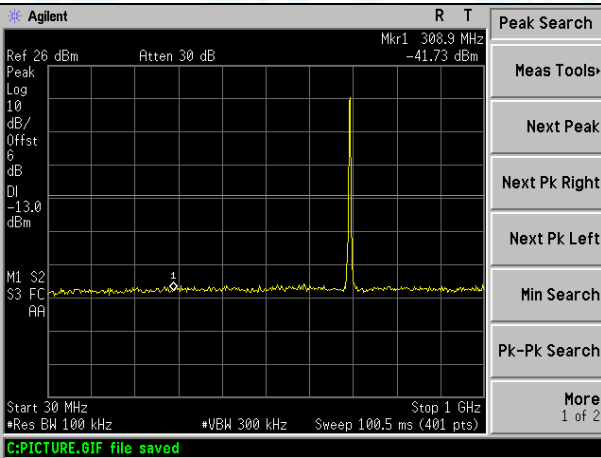
LTE BAND 12 (1.4MHz RB Size 6& RB Offset 0 QPSK-High CH)



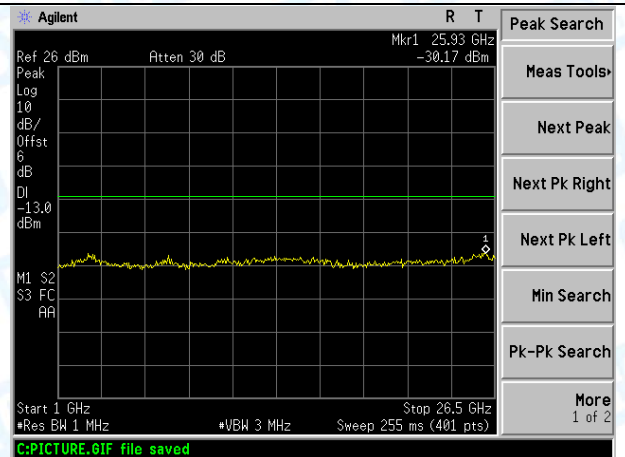
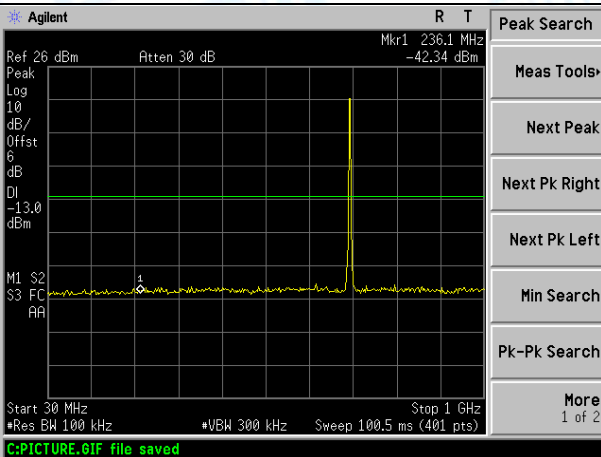
30MHz-1GHz

1GHz-26.5GHz

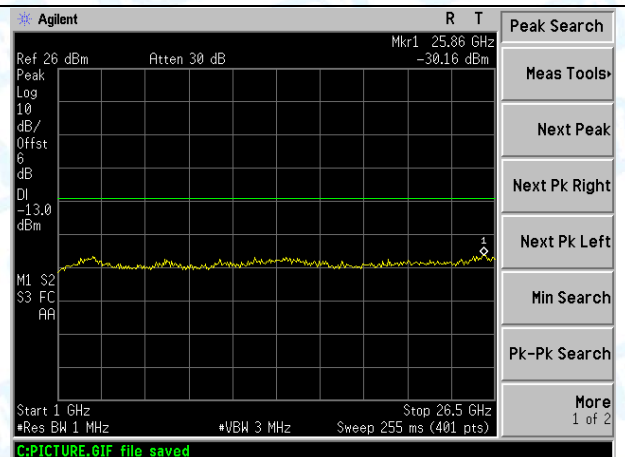
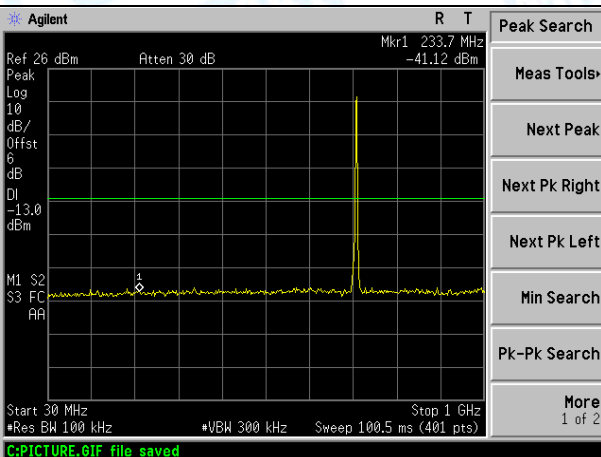
LTE BAND 12 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



LTE BAND 12 (3MHz RB Size 15& RB Offset 0 QPSK-Middle CH)



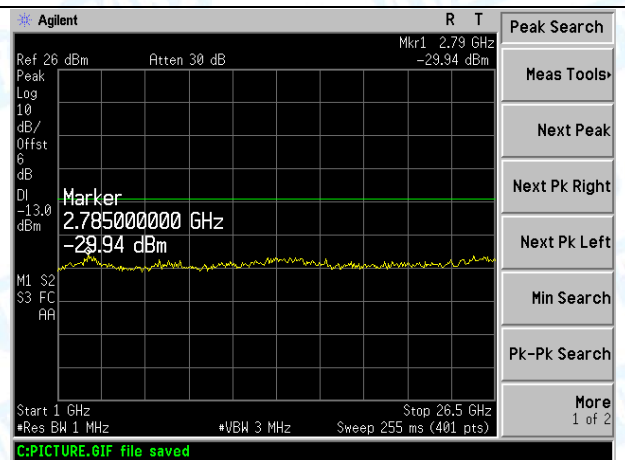
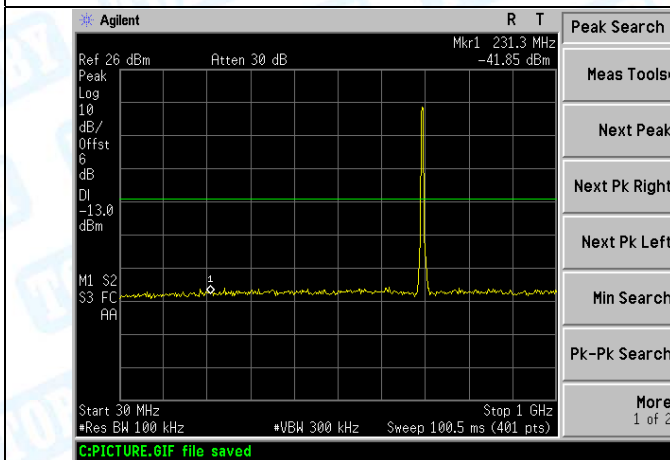
LTE BAND 12 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)



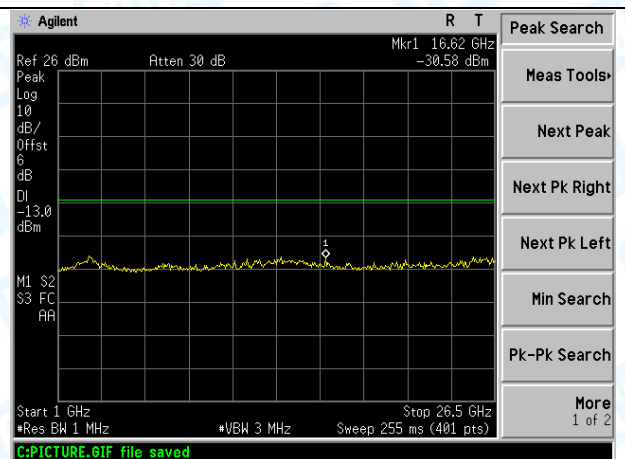
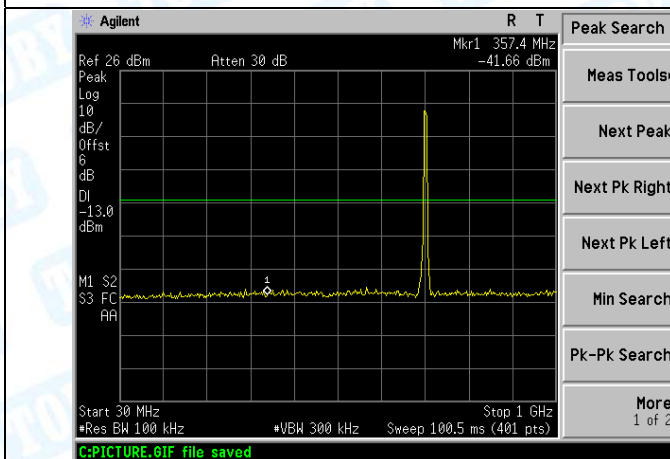
30MHz-1GHz

1GHz-26.5GHz

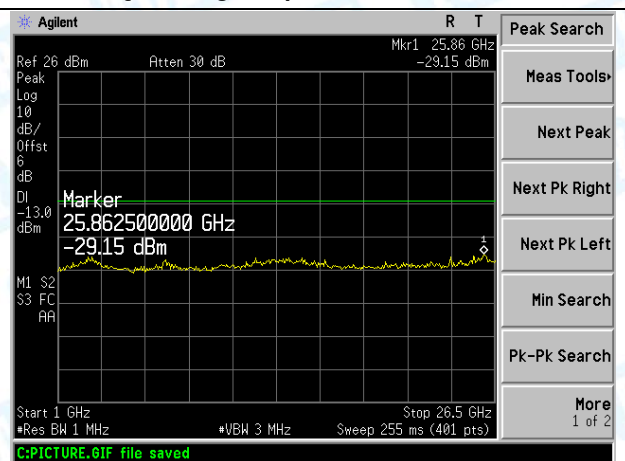
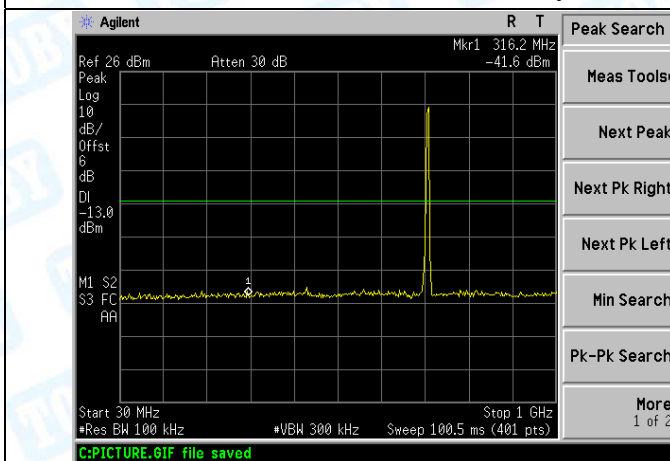
LTE BAND 12 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



LTE BAND 12 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)



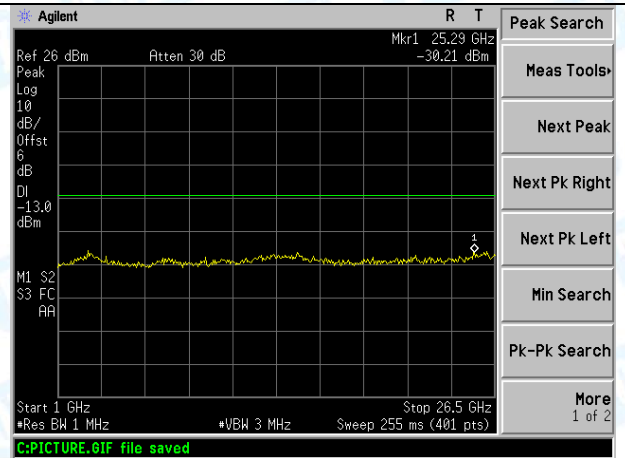
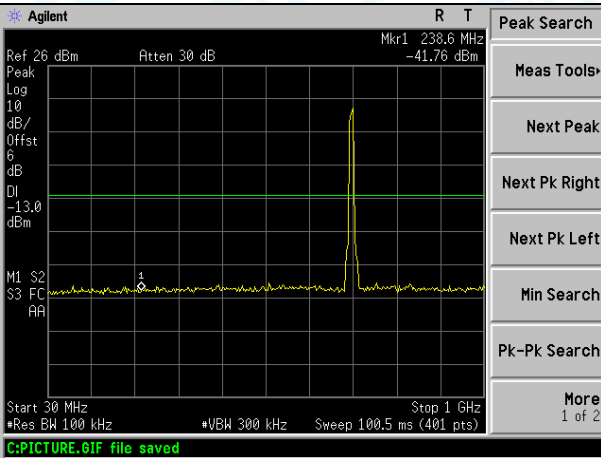
LTE BAND 12 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)



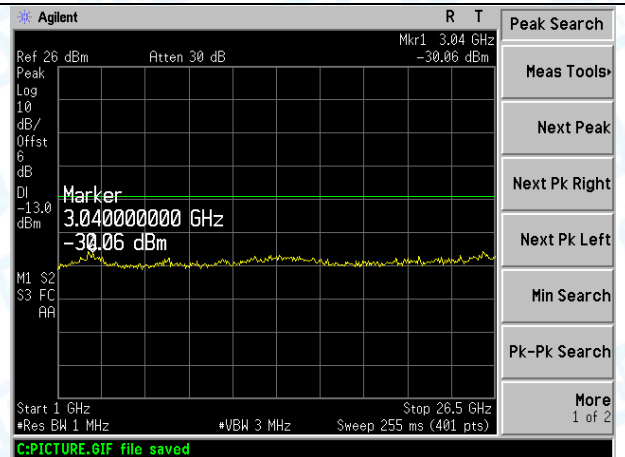
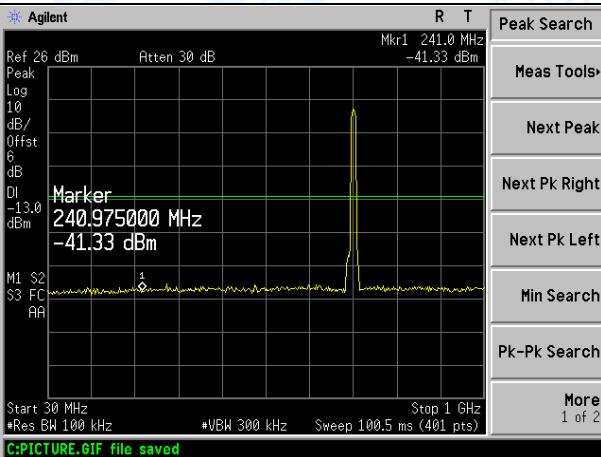
30MHz-1GHz

1GHz-26.5GHz

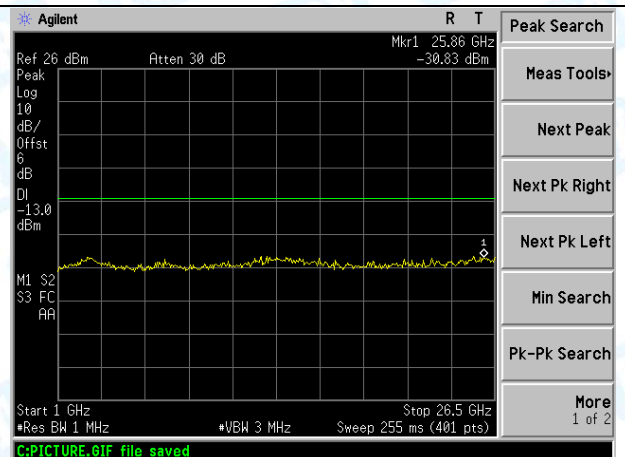
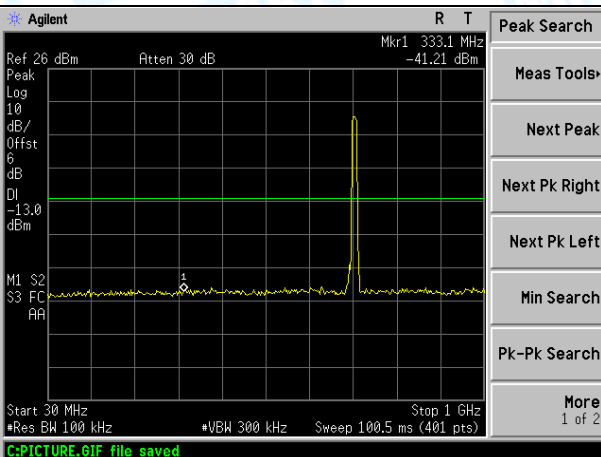
LTE BAND 12 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



LTE BAND 12 (10MHz RB Size 50& RB Offset 0 QPSK-Middle CH)



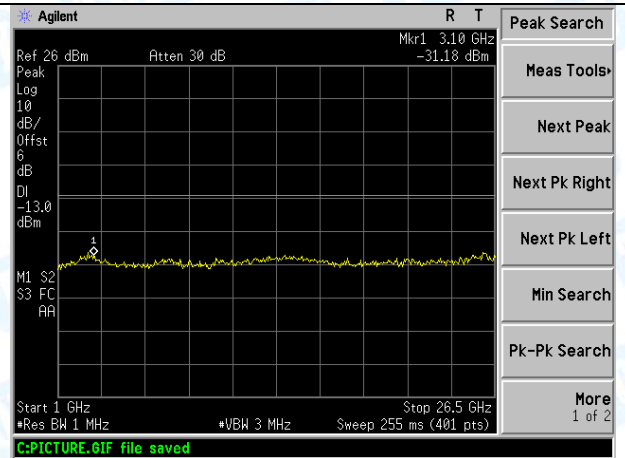
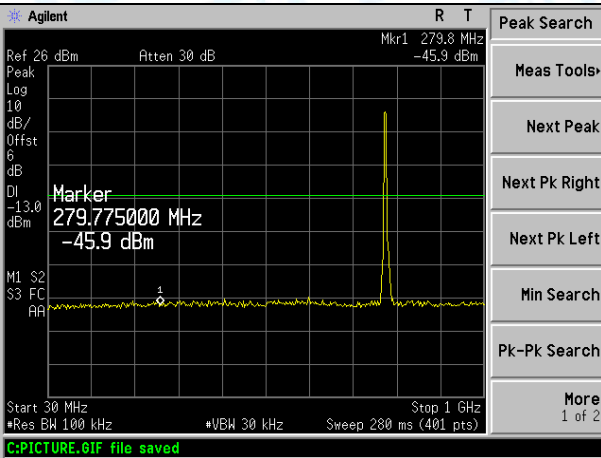
LTE BAND 12 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)



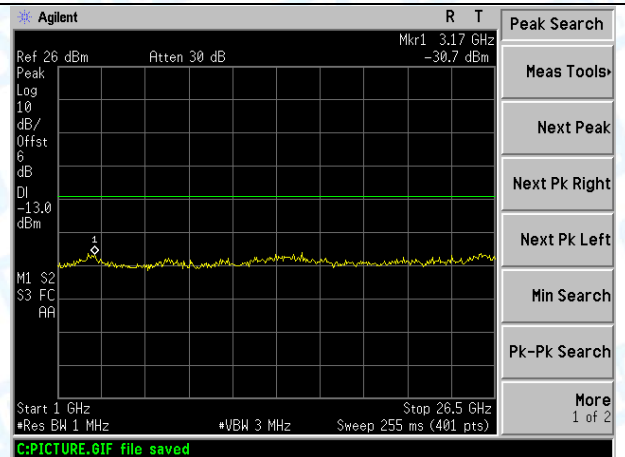
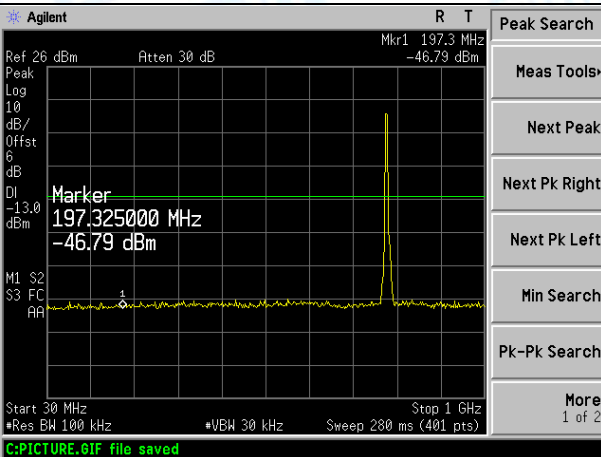
30MHz-1GHz

1GHz-26.5GHz

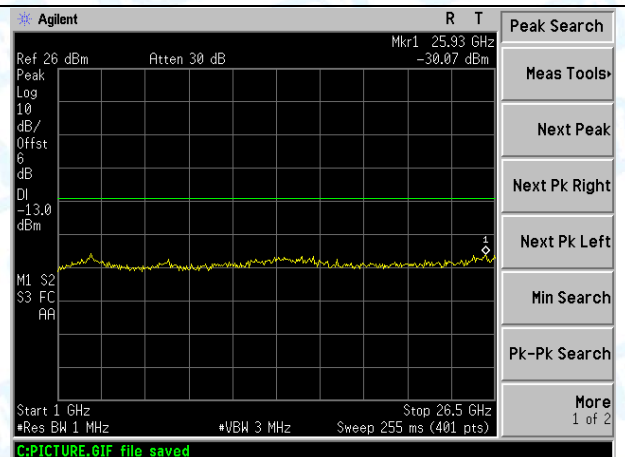
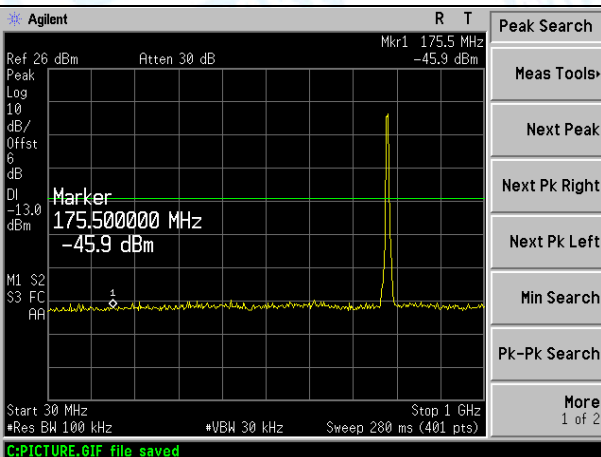
LTE BAND 13 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)

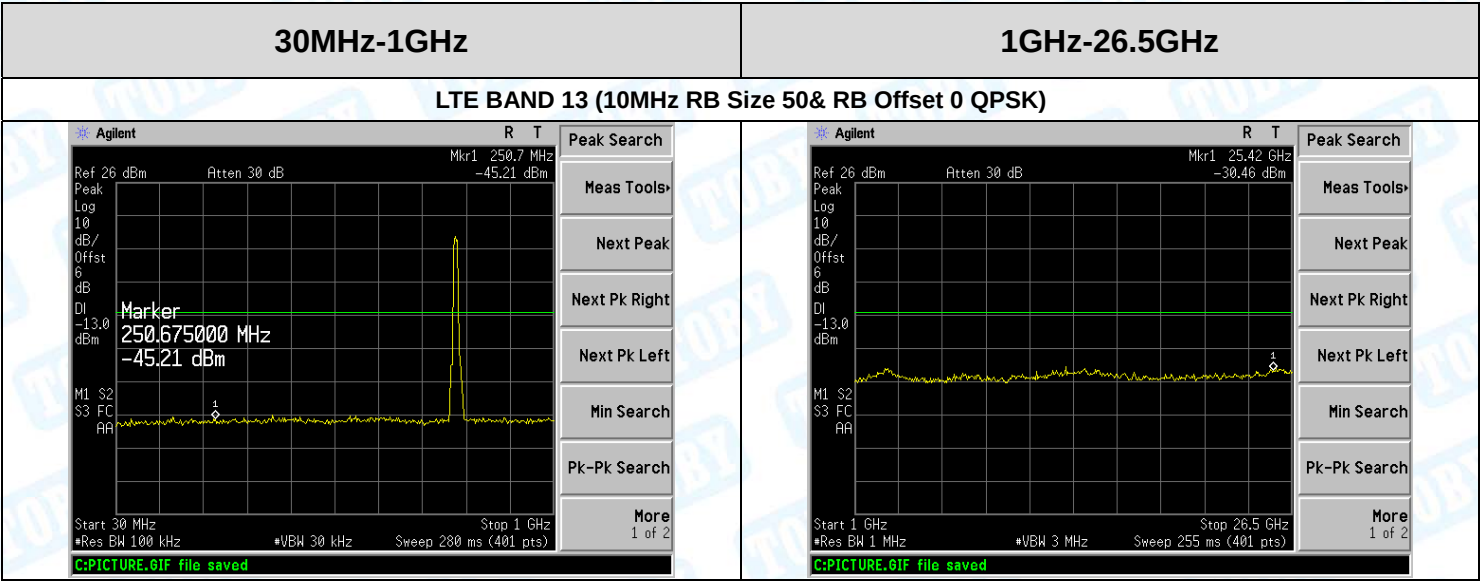


LTE BAND 13 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)



LTE BAND 13 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)

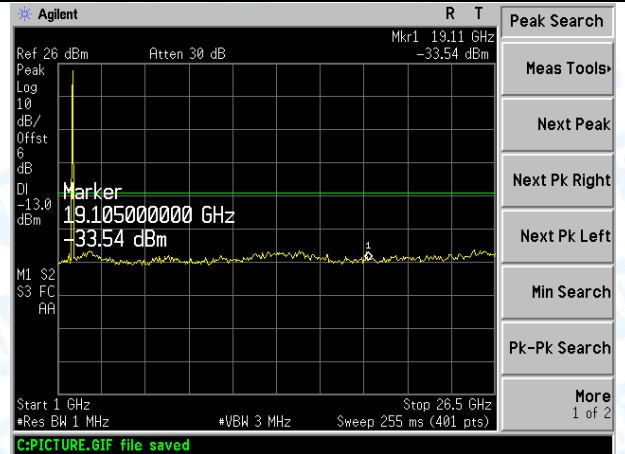
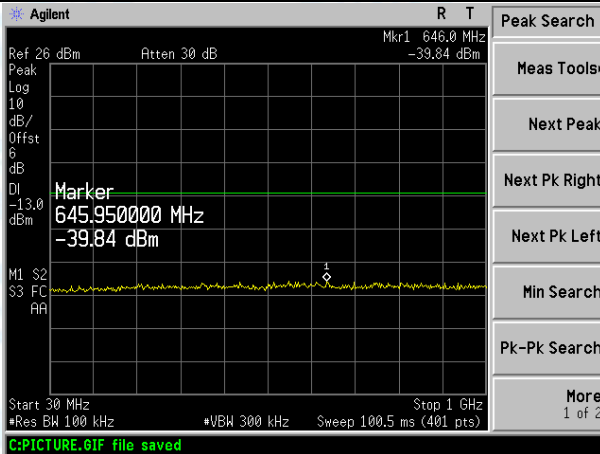




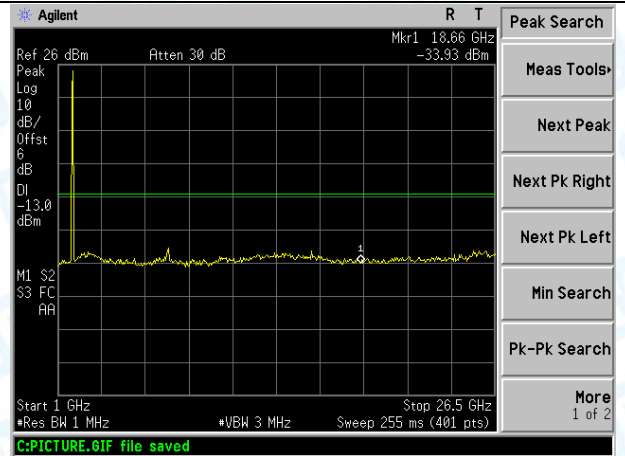
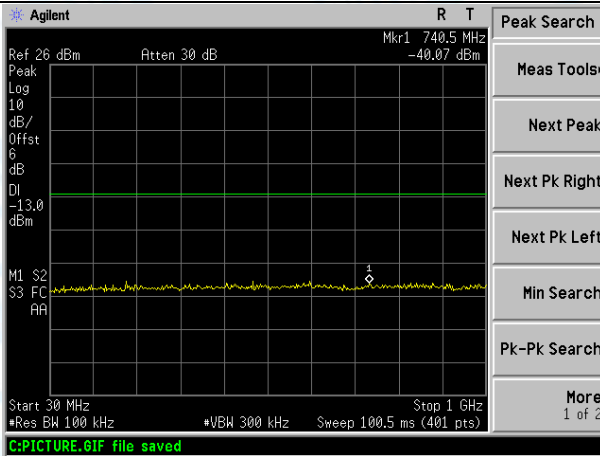
30MHz-1GHz

1GHz-26.5GHz

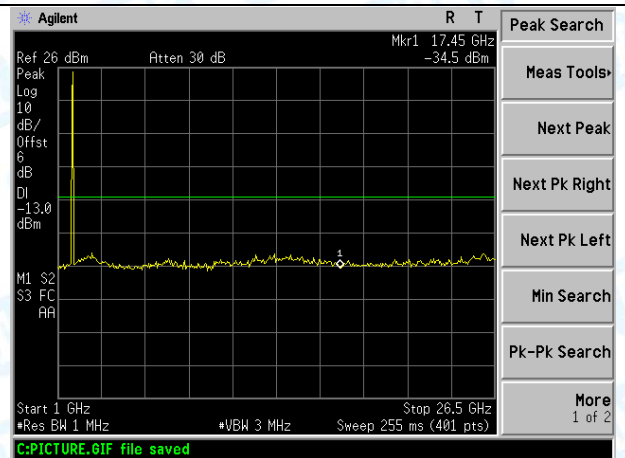
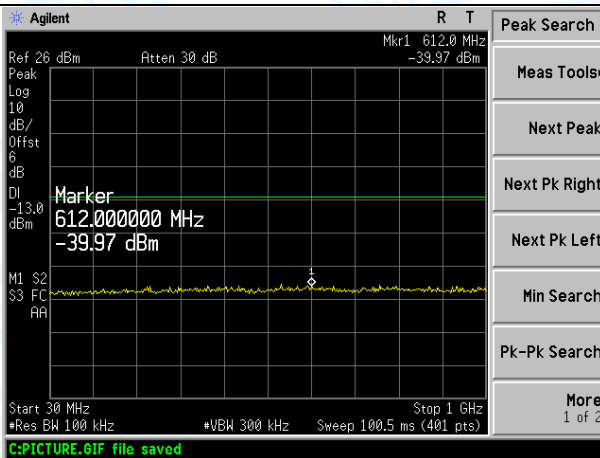
LTE BAND 25 (1.4MHz RB Size 6& RB Offset 0 QPSK-Low CH)



LTE BAND 25 (1.4MHz RB Size 6& RB Offset 0 QPSK-Middle CH)



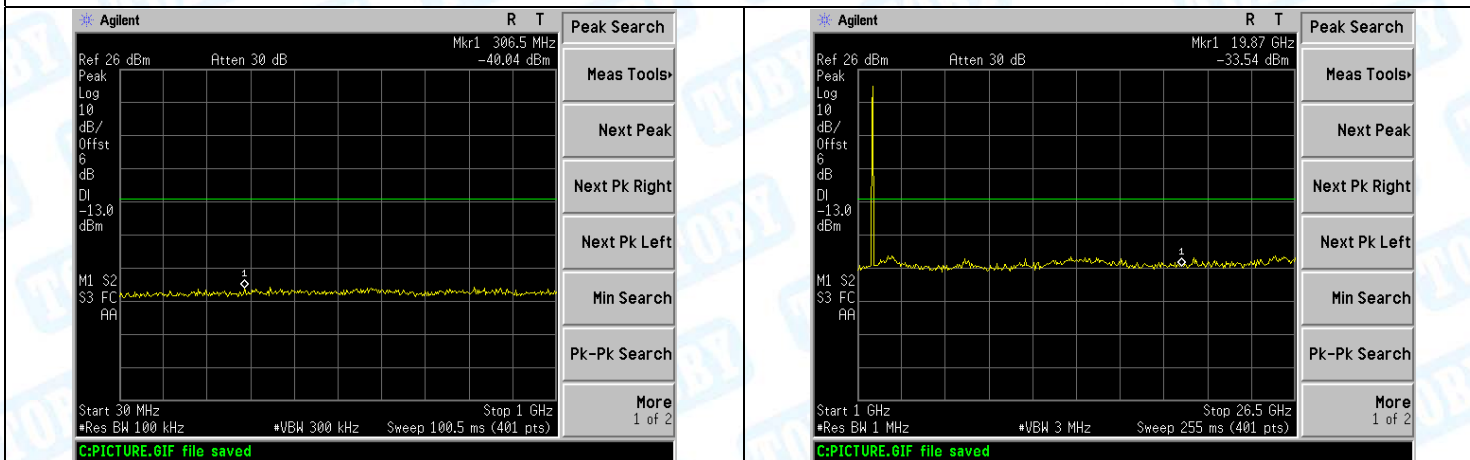
LTE BAND 25 (1.4MHz RB Size 6& RB Offset 0 QPSK-High CH)



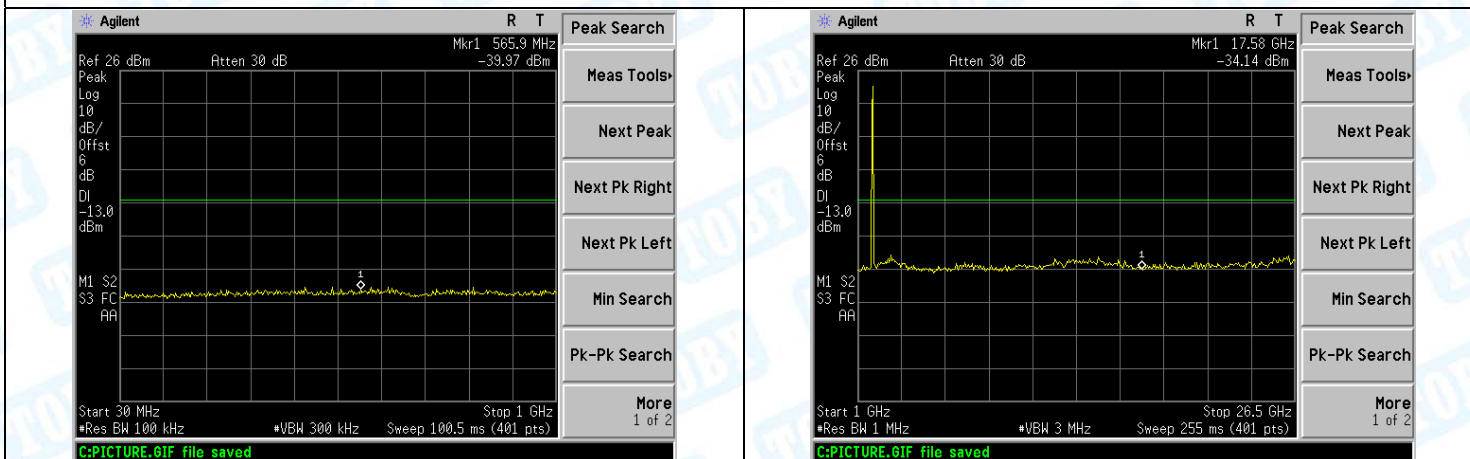
30MHz-1GHz

1GHz-26.5GHz

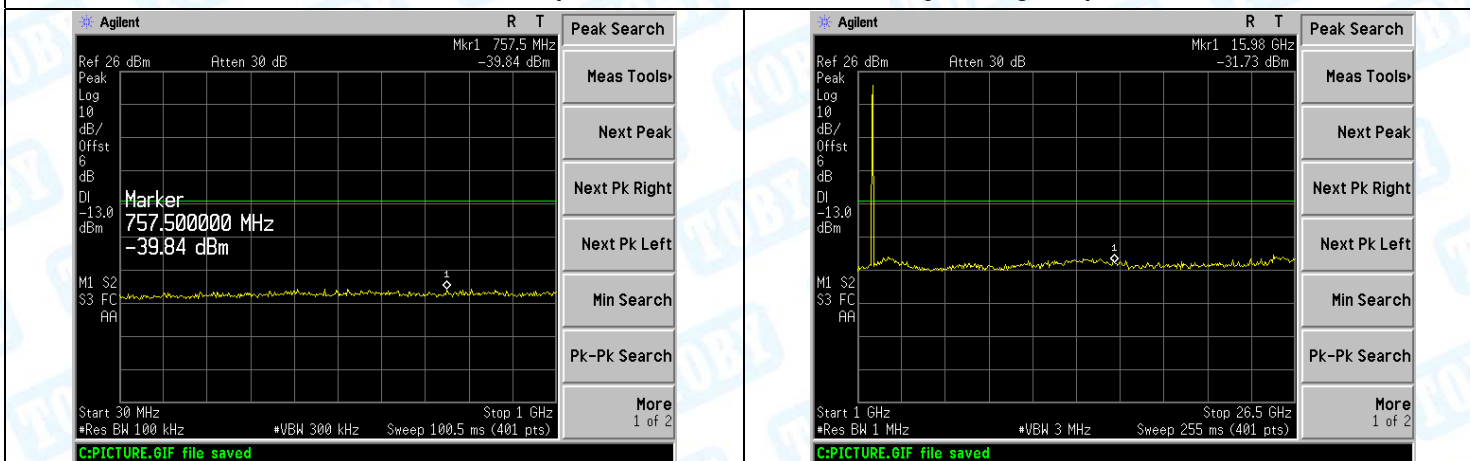
LTE BAND 25 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



LTE BAND 25 (3MHz RB Size 15& RB Offset 0 QPSK-Middle CH)



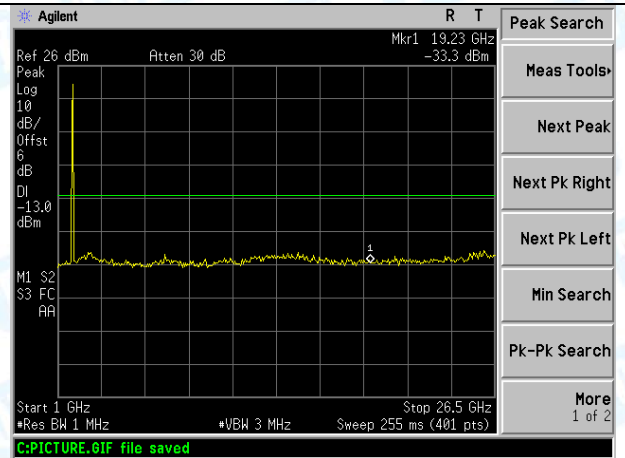
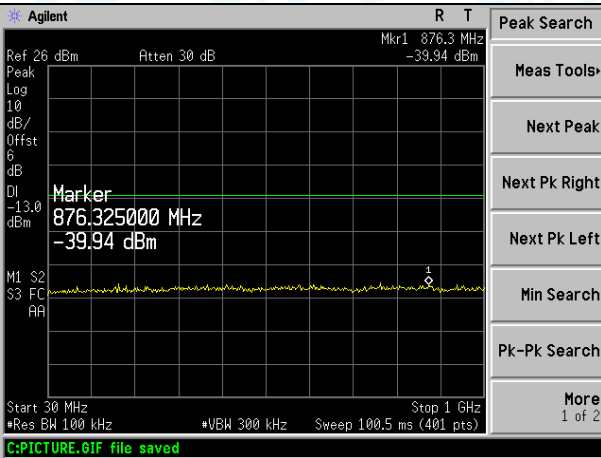
LTE BAND 25 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)



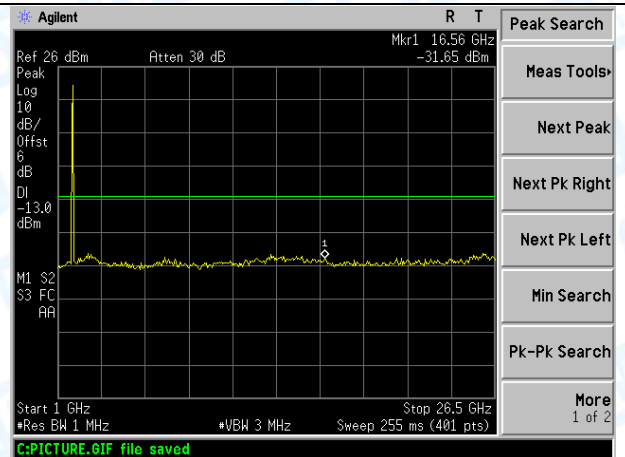
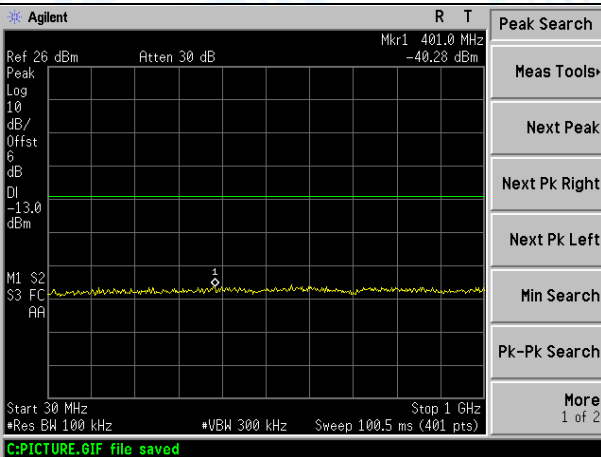
30MHz-1GHz

1GHz-26.5GHz

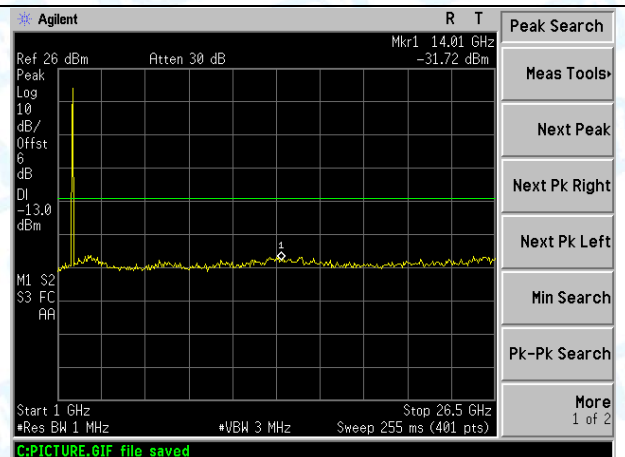
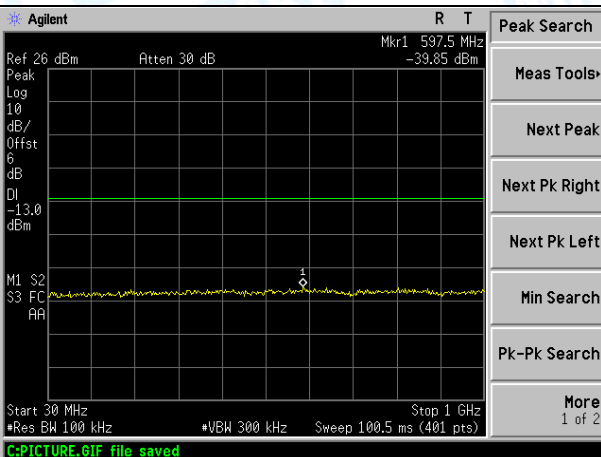
LTE BAND 25 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



LTE BAND 25 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)



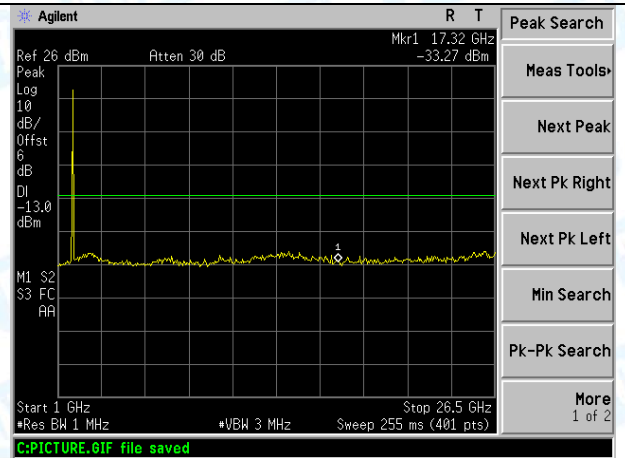
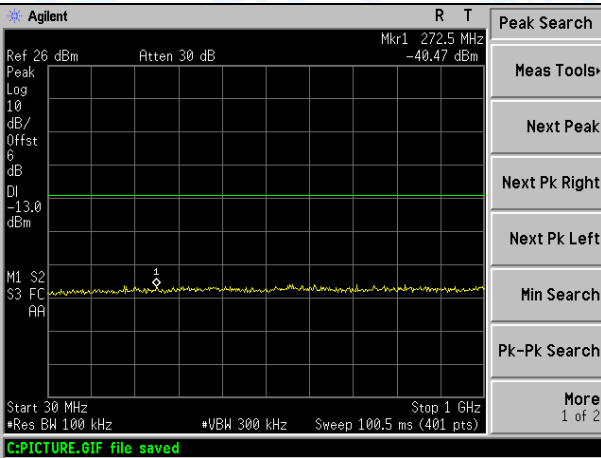
LTE BAND 25 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)



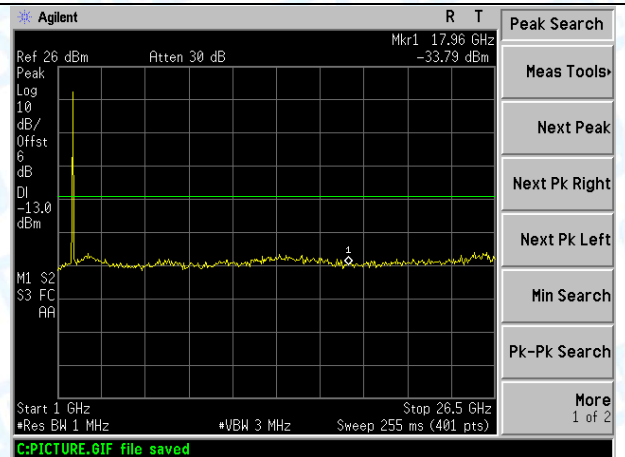
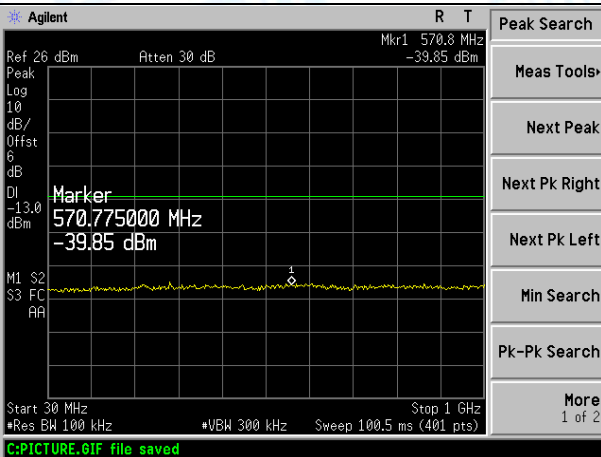
30MHz-1GHz

1GHz-26.5GHz

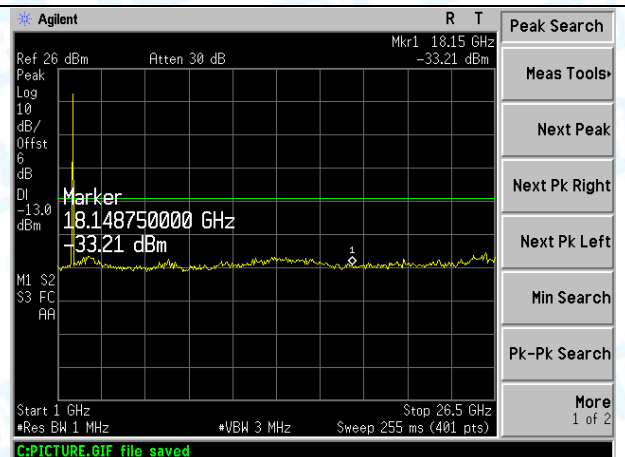
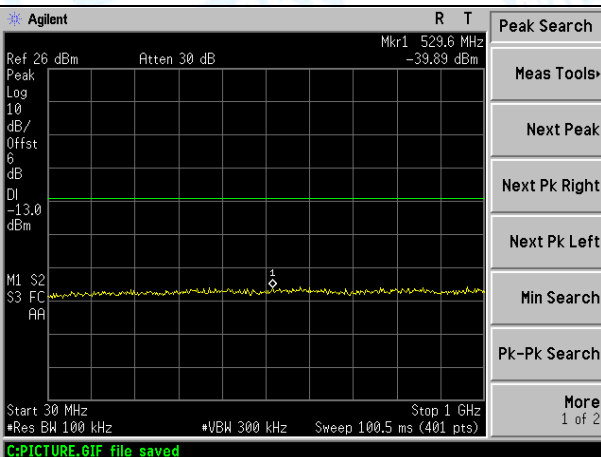
LTE BAND 25 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



LTE BAND 25 (10MHz RB Size 50& RB Offset 0 QPSK-Middle CH)



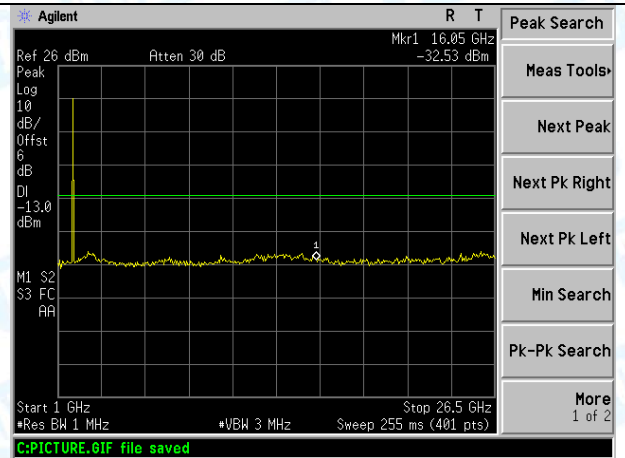
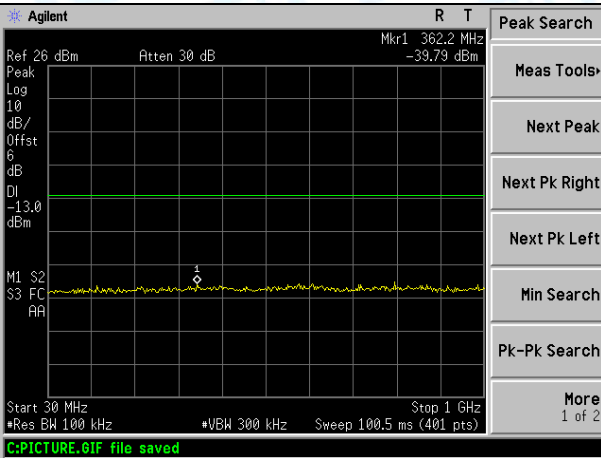
LTE BAND 25 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)



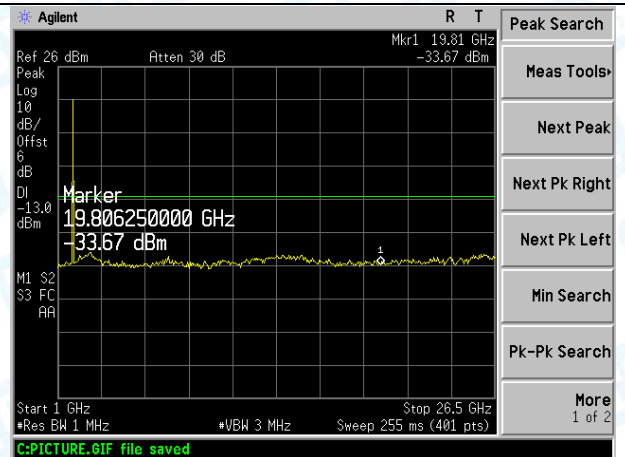
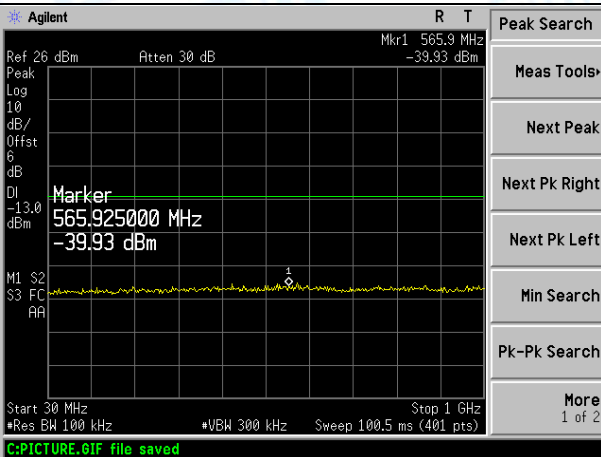
30MHz-1GHz

1GHz-26.5GHz

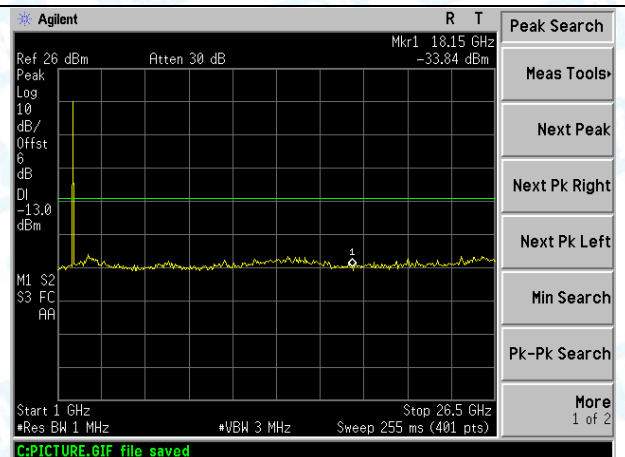
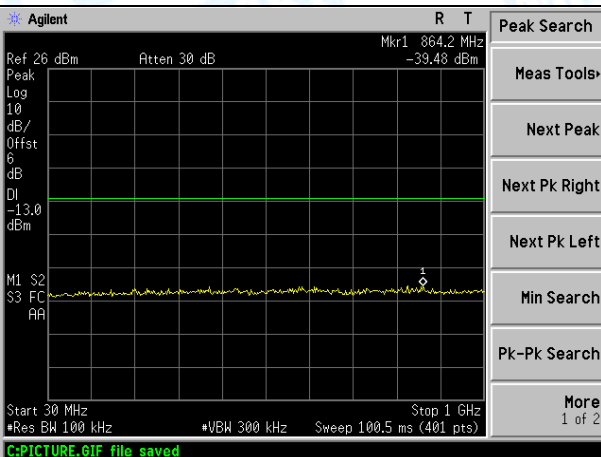
LTE BAND 25 (15MHz RB Size 75& RB Offset 0 QPSK-Low CH)



LTE BAND 25 (15MHz RB Size 75& RB Offset 0 QPSK-Middle CH)



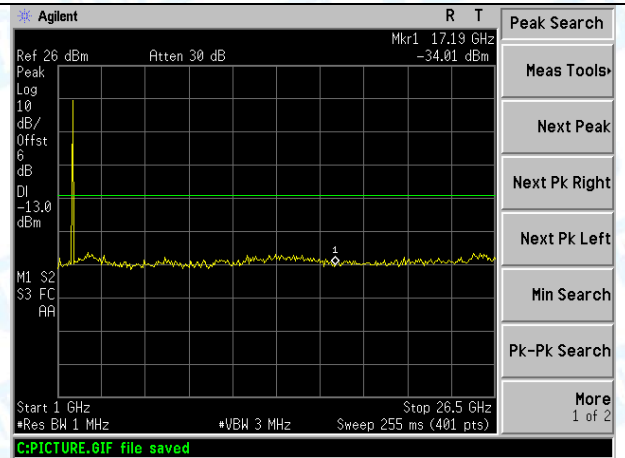
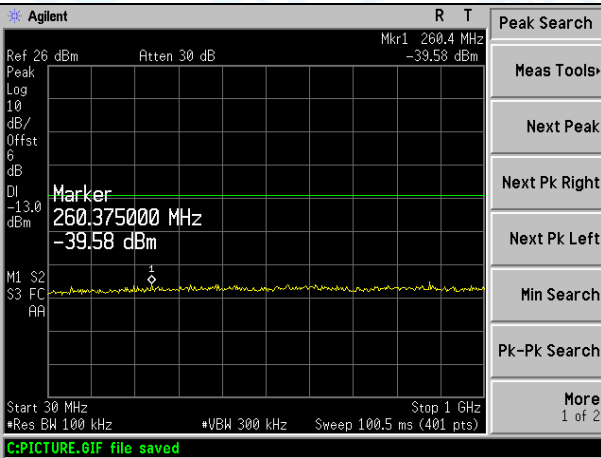
LTE BAND 25 (15MHz RB Size 75& RB Offset 0 QPSK-High CH)



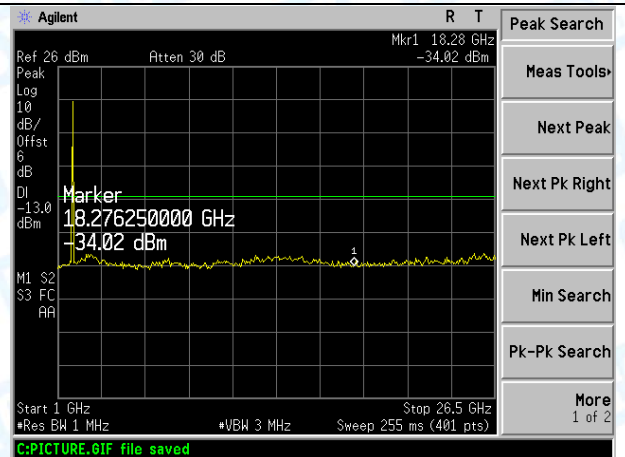
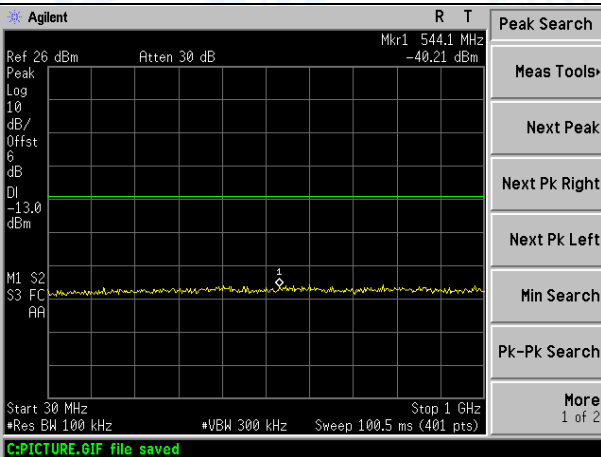
30MHz-1GHz

1GHz-26.5GHz

LTE BAND 25 (20MHz RB Size 100& RB Offset 0 QPSK-Low CH)



LTE BAND 25 (20MHz RB Size 100& RB Offset 0 QPSK-Middle CH)



LTE BAND 25 (20MHz RB Size 100& RB Offset 0 QPSK-High CH)

