

FCC Radio Test Report

FCC ID: 2AM8GCHAMELEON8

Original Grant

Report No. : TB-FCC164424
Applicant : Guangzhou Lie Dun Electronics Technology CO.,Ltd
Equipment Under Test (EUT)
EUT Name : RUGGEDIZED TABLET
Model No. : 8-DUAL
Series Model No. : 8-MICRO, 8-SINGLE, 8-SINGLE+, 8-SLAP
Brand Name : CHAMELEON
Receipt Date : 2019-02-27
Test Date : 2019-03-04 to 2019-06-25
Issue Date : 2019-06-25
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 : *Jason Xu* Jason Xu

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.

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1. General Information about EUT

1.1 Client Information

Applicant	:	Guangzhou Lie Dun Electronics Technology CO.,Ltd
Address	:	No.4 plant of No.43 South International Trade Avenue, Hualong Town, Panyu District, Guangzhou, Guangdong, China
Manufacturer	:	Guangzhou Lie Dun Electronics Technology CO.,Ltd
Address	:	No.4 plant of No.43 South International Trade Avenue, Hualong Town, Panyu District, Guangzhou, Guangdong, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	RUGGEDIZED TABLET				
Models No.	:	8-DUAL, 8-MICRO, 8-SINGLE, 8-SINGLE+, 8-SLAP				
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name for commercial.				
Product Description	:	<p>Frequency Bands: 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 7:TX: 2500MHz~2570MHz, RX: 2620MHz~2690MHz 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: 814MHz-849MHz, RX: 859MHz-894MHz</p>				
	:	<table border="1"> <tr> <td>Antenna Type:</td> <td>1.5 dBi FPC Antenna</td> </tr> <tr> <td>Modulation Type:</td> <td>QPSK, 16QAM</td> </tr> </table>	Antenna Type:	1.5 dBi FPC Antenna	Modulation Type:	QPSK, 16QAM
	Antenna Type:	1.5 dBi FPC Antenna				
Modulation Type:	QPSK, 16QAM					
:	<p>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 7 :5MHz/10MHz/15MHz/20MHz 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</p>					
Power Rating	:	<p>Adapter(B036-125): Input: AC 100-240V, 50/60Hz, 1.2A max Output: DC 12V, 3A DC 7.6V by 7600mAh rechargeable Li-ion battery.</p>				

Software Version	:	Windows Pro
Hardware Version	:	V12
Connecting I/O Port(S)	:	Please refer to the User's Manual

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	18607	1850.70
18608	1850.80	18608	1850.80
.....
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
.....
19192	1909.20	19192	1909.20
19193	1909.30	19193	1909.30
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

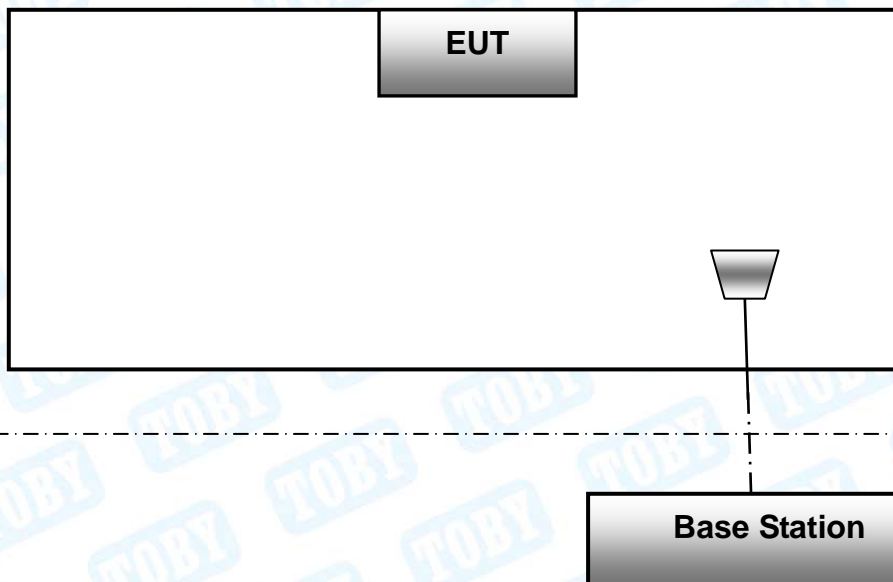
LTE Band 5(1.4MHz)		LTE Band 5(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20407	824.70	20415	825.50
20408	824.80	20416	825.60
.....
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
.....
20643	848.20	20634	847.40
20643	848.30	20635	847.50
LTE Band 5(5MHz)		LTE 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 7(5MHz)		LTE Band 7(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20775	2502.50	20800	2505.00
20776	2502.60	20801	2505.10
.....
21099	2534.90	21099	2534.90
21100	2535.00	21100	2535.00
21101	2535.10	21101	2535.10
.....
21424	2567.40	21399	2561.90
21425	2567.50	21400	2565.00
LTE Band 7(15MHz)		LTE Band 7(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20825	2505.70	20850	2510.00
20826	2505.80	20851	2510.10
.....
21099	2534.90	21099	2534.90
21100	2535.00	21100	2535.00
21101	2535.10	21101	2535.10
.....

21374	2562.40	21349	2559.90
21375	2562.50	21350	2560.00
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)
26697	814.70	26705	815.50
26698	814.60	26706	814.60
.....
26864	831.40	26864	831.40
26865	831.50	26865	831.50
26866	831.60	26866	831.60
.....
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)
26715	816.50	26750	820.00
26698	816.60	26751	814.60
.....

26864	831.40	26864	831.40
26865	831.50	26865	831.50
26866	831.60	26866	831.60
.....
27014	846.40	26989	843.90
27015	846.50	26990	844.00
LTE Band 26(15MHz)			
Channel	Frequency (MHz)		
26775	822.50		
26776	822.60		
.....		
26864	831.40		
26865	831.50		
26866	831.60		
.....		
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 ortho-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
	7	--	--	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
	7	--	--	--	--	--	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
	7	--	--	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

	7	--	--	V	V	V	V	V	V	V		V	V	V	V
	12	V	V	V	V	--	--	V	V	V		V	V	V	V
	13	--	--	V	V	--	--	V	V	V		V	V	V	V
	25	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
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	
	7	--	--	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	
Out of band emission, Band Edge	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
	7	--	--	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
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	
	7	--	--	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		

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	±4.40 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-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.

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 Equipment

Conducted Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul.18, 2018	Jul. 17, 2019
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul.18, 2018	Jul. 17, 2019
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul.18, 2018	Jul. 17, 2019
LISN	Rohde & Schwarz	ENV216	101131	Jul.18, 2018	Jul. 17, 2019
Radiation Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul.18, 2018	Jul. 17, 2019
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul.18, 2018	Jul. 17, 2019
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Jan. 27, 2019	Jan. 26, 2020
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Jan. 27, 2019	Jan. 26, 2020
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.03, 2019	Mar. 02, 2020
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar.03, 2019	Mar. 02, 2020
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 14, 2018	Jul.13, 2019
Pre-amplifier	Sonoma	310N	185903	Mar.04, 2019	Mar. 03, 2020
Pre-amplifier	HP	8449B	3008A00849	Mar.03, 2019	Mar. 02, 2020
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.03, 2019	Mar. 02, 2020
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.18, 2018	Jul. 17, 2019
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul.18, 2018	Jul. 17, 2019
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 15, 2018	Sep. 14, 2019
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 15, 2018	Sep. 14, 2019
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 15, 2018	Sep. 14, 2019
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 15, 2018	Sep. 14, 2019
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 15, 2018	Sep. 14, 2019
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 15, 2018	Sep. 14, 2019
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 15, 2018	Sep. 14, 2019

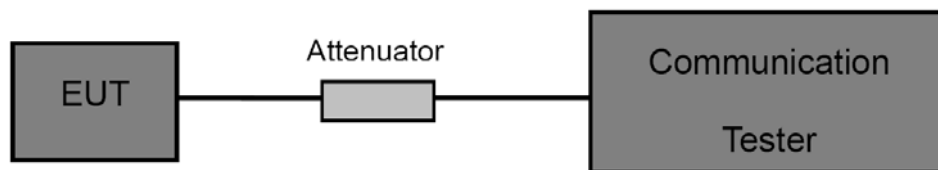
4. Conducted RF Output Power

4.1 Test Standard and Limit

4.1.1 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)

4.2 Test Setup



4.3 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.

4.4 EUT Operating Condition

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

4.5 Test Data

Please refer to the Attachment A.

5. Peak-Average Ratio

5.1 Test Standard and Limit

5.1.1 Test Standard

FCC part 24.232(d)

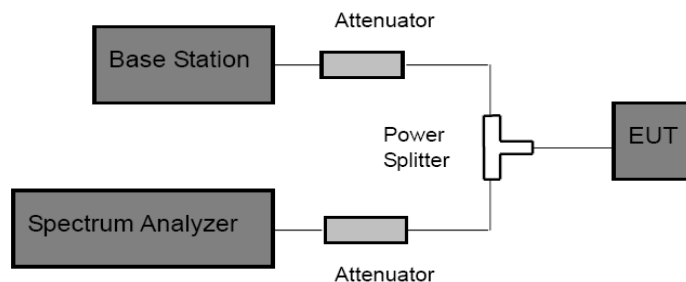
FCC Part 27.50(d), FCC Part 27.50 (h)

5.1.2 Test Limit

Peak-to-Average Ratio

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

5.2 Test Setup



5.3 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.

5.4 EUT Operating Condition

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

5.5 Test Data

Please refer to the Attachment B.

6. Occupied Bandwidth

6.1 Test Standard and Limit

6.1.1 Test Standard

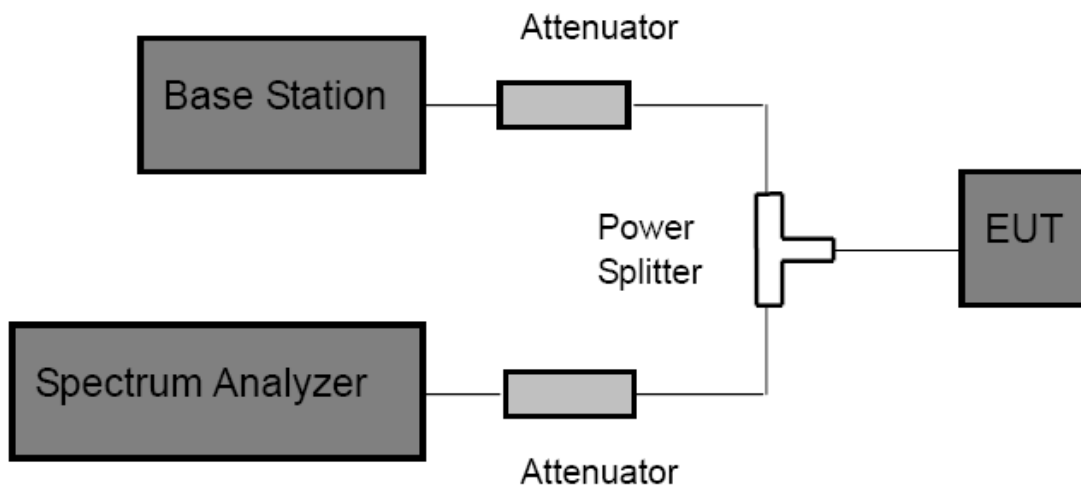
FCC Part 2: 2.1049, FCC Part 22.917(a),
FCC part 24.238(b)
FCC Part 27.53(h)
FCC Part 27.53(m)

6.1.2 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.

6.2 Test Setup



6.3 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.

6.4 EUT Operating Condition

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

6.5 Test Data

Please refer to the Attachment C.

7. Out of Band Emission at Antenna Terminals

7.1 Test Standard and Limit

7.1.1 Test Standard

FCC Part 2: 2.1051, 2.1057

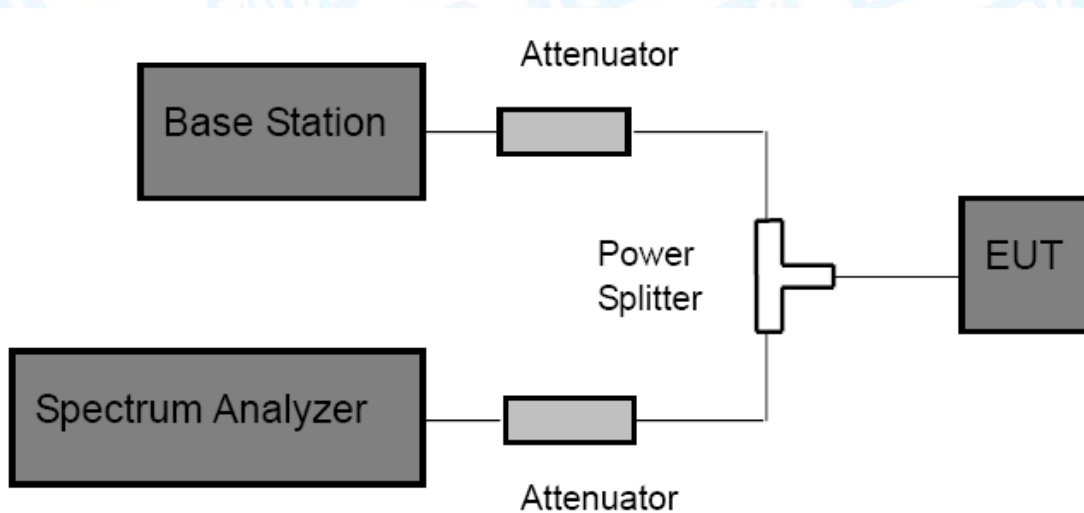
FCC Part 22.917(a), FCC part 24.238(a)

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

7.1.2 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 that $43 + 10 \log (P)$ 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.

7.2 Test Setup



7.3 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 1 GHz, 1 MHz 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.

7.4 EUT Operating Condition

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

7.5 Test Data

Please refer to the Attachment D.

8. Band Edge Test

8.1 Test Standard and Limit

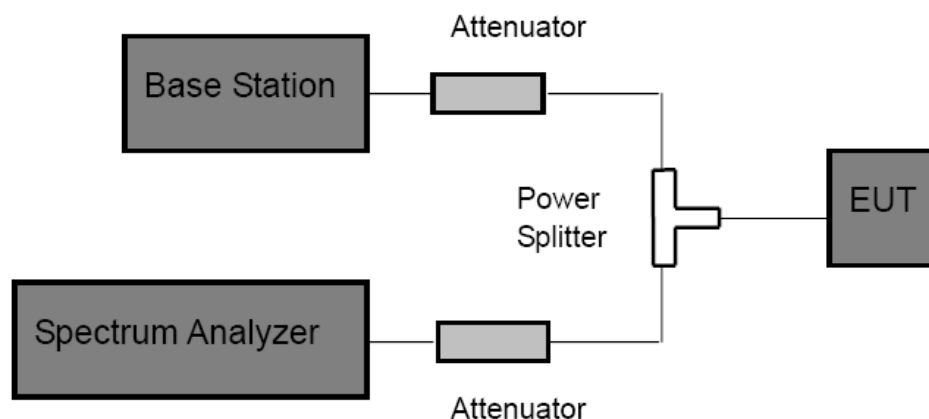
8.1.1 Test Standard

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

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 that $43 + 10 \log (P)$ 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 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.

8.4 EUT Operating Condition

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

8.5 Test Data

Please refer to the Attachment E.

9. Radiated Output Power

9.1 Test Standard and Limit

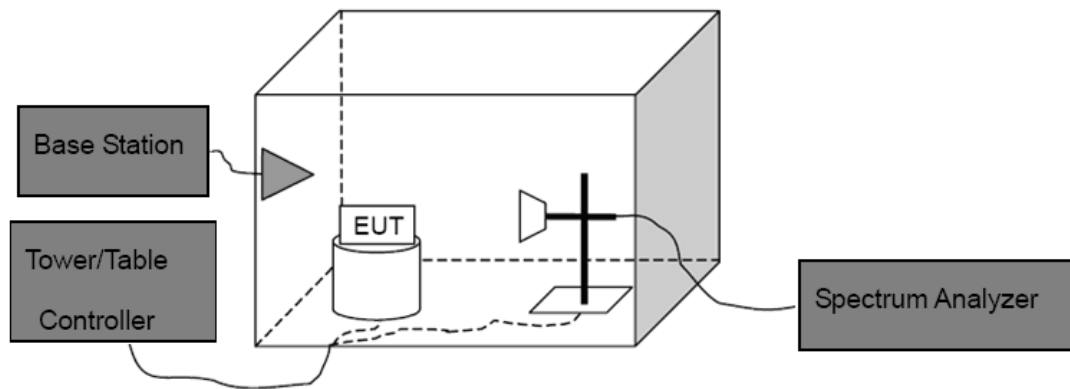
9.1.1 Test Standard

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)

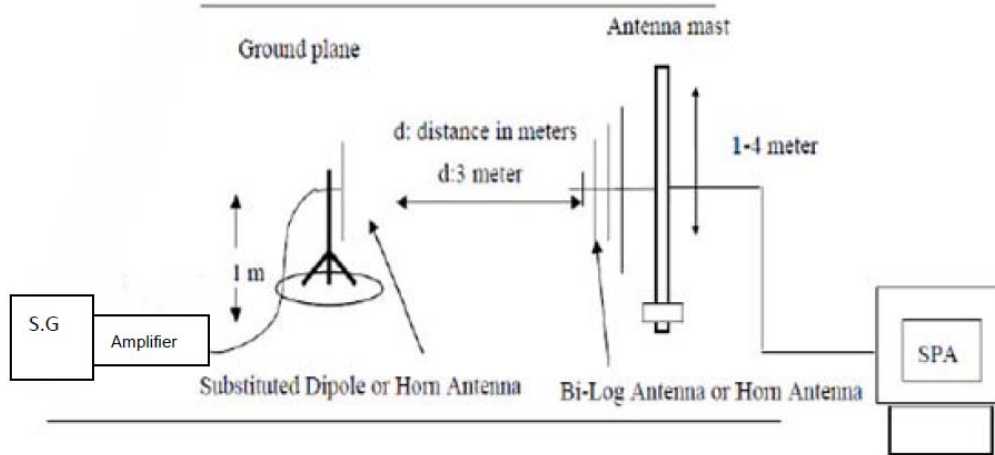
9.1.2 Test Limit

E.I.R.P	E.I.R.P	E.R.P	E.I.R.P
LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7
2W(33 dBm)	1W(30 dBm)	7W(38.45dBm)	2W(33 dBm)
E.R.P	E.I.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)

9.2 Test Setup



Above 1G



Substituted Method

9.3 Test Procedure

- (1) The EUT was placed on a 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:

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

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

9.4 EUT Operating Condition

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

9.5 Test Data

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

10. Radiated Out Band of Emissions

10.1 Test Standard and Limit

10.1.1 Test Standard

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

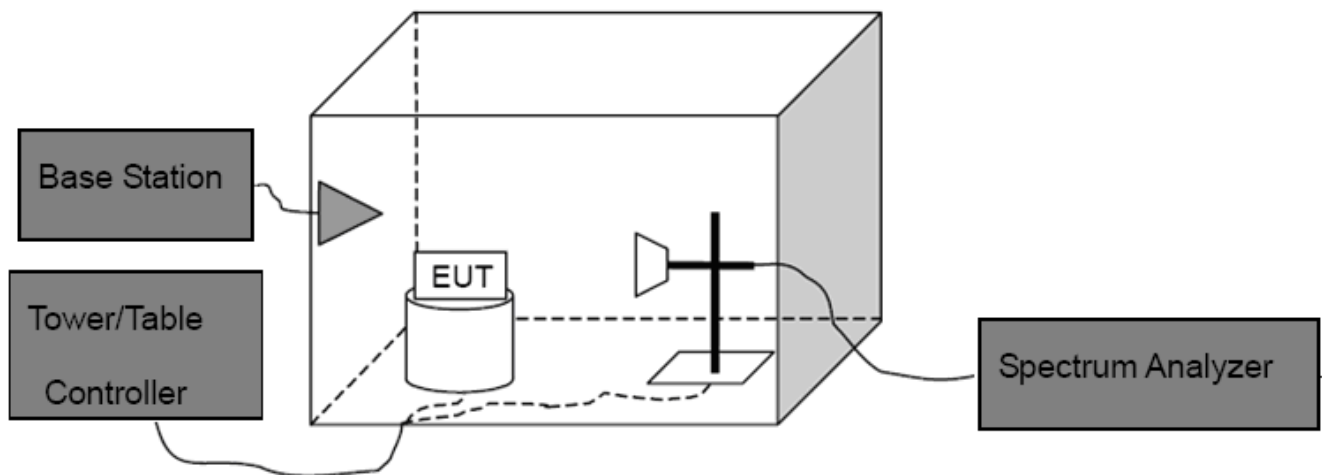
FCC part 24.238(a)

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

10.1.2 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.

10.2 Test Setup



10.3 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 $\text{dB}=10 \log(\text{TX power in Watts}/0.001)$ -the absolute level
Spurious attenuation limit in $\text{dB}=43+10 \log(\text{power out in Watts})$

10.4 EUT Operating Condition

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

10.5 Test Data

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

11. Frequency Stability

11.1 Test Standard and Limit

11.1.1 Test Standard

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

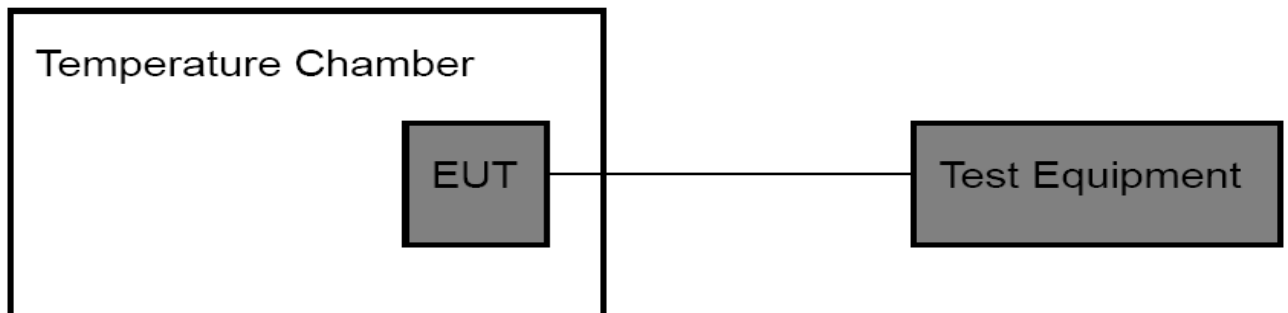
FCC Part 24.235, Part 27.54

11.1.2 Limit

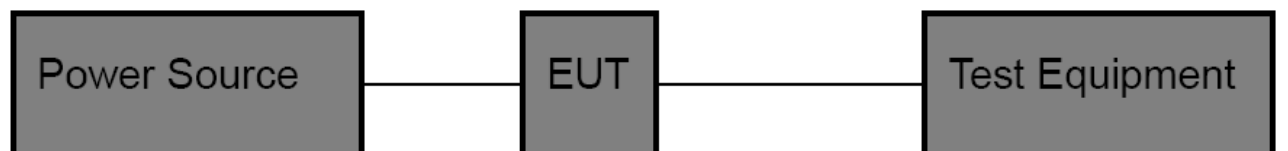
Limit
$\pm 2.5\text{ppm}$

11.2 Test Setup

For Temperature Test:



For Voltage Test:



11.3 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.

11.4 EUT Operating Condition

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

11.5 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	23.33	23.23	23.02	PASS
	1	3	23.29	23.16	23.13	PASS
	1	5	23.16	23.20	23.14	PASS
	3	0	23.08	23.12	23.09	PASS
	3	1	23.19	23.14	23.10	PASS
	3	3	23.11	23.11	23.12	PASS
	6	0	22.03	22.11	21.98	PASS
16QAM	1	0	21.99	22.39	22.34	PASS
	1	3	22.22	22.36	22.41	PASS
	1	5	22.02	22.34	22.41	PASS
	3	0	22.10	22.08	21.98	PASS
	3	1	22.17	22.09	21.96	PASS
	3	3	22.03	22.08	22.06	PASS
	6	0	21.15	21.19	21.05	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.28	23.27	23.11	PASS
	1	7	23.32	23.19	23.64	PASS
	1	14	23.21	23.28	23.18	PASS
	8	0	22.09	22.17	22.07	PASS
	8	4	22.19	22.19	22.12	PASS
	8	7	22.20	22.12	22.07	PASS
	15	0	22.18	22.17	22.12	PASS
16QAM	1	0	22.44	22.43	22.26	PASS
	1	7	22.34	22.62	22.31	PASS
	1	14	22.37	22.37	22.51	PASS
	8	0	21.31	21.29	21.12	PASS
	8	4	21.35	21.33	21.15	PASS
	8	7	21.34	21.28	21.20	PASS
	15	0	21.15	21.22	21.15	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	23.27	23.37	23.28	PASS
	1	12	23.14	23.27	23.19	PASS
	1	24	23.19	23.41	23.20	PASS
	12	0	22.17	22.22	22.09	PASS
	12	6	22.19	22.17	22.10	PASS
	12	11	22.25	22.16	22.09	PASS
	25	0	22.19	22.13	22.01	PASS
16QAM	1	0	22.35	22.29	22.54	PASS
	1	12	22.26	22.53	22.42	PASS
	1	24	22.26	22.41	22.44	PASS
	12	0	21.22	21.34	20.98	PASS
	12	6	21.22	21.36	21.00	PASS
	12	11	21.35	21.29	20.98	PASS
	25	0	21.21	21.12	21.04	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.26	23.28	23.07	PASS
	1	24	23.39	23.19	23.23	PASS
	1	49	23.26	23.19	23.26	PASS
	25	0	22.12	22.21	22.05	PASS
	25	12	22.22	22.16	22.09	PASS
	25	24	22.22	22.25	22.11	PASS
	50	0	22.18	22.15	22.12	PASS
16QAM	1	0	22.42	22.36	22.52	PASS
	1	24	22.40	22.41	22.42	PASS
	1	49	22.46	22.29	22.54	PASS
	25	0	21.18	21.21	21.06	PASS
	25	12	21.29	21.28	21.16	PASS
	25	24	21.26	21.25	21.22	PASS
	50	0	21.15	21.16	21.07	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	22.99	23.14	22.99	PASS
	1	37	23.01	23.27	22.89	PASS
	1	74	22.92	22.91	22.88	PASS
	36	0	22.04	22.17	21.88	PASS
	36	16	22.07	22.06	21.93	PASS
	36	35	21.98	21.98	21.83	PASS
	75	0	21.99	22.11	21.87	PASS
16QAM	1	0	22.30	22.24	21.95	PASS
	1	37	22.16	22.18	21.94	PASS
	1	74	22.21	22.10	21.86	PASS
	36	0	21.14	21.16	20.90	PASS
	36	16	21.11	21.08	20.90	PASS
	36	35	21.02	21.02	20.87	PASS
	75	0	20.98	21.13	20.80	PASS
Channel Bandwidth: 20 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.03	23.09	22.94	PASS
	1	49	23.05	23.13	23.02	PASS
	1	99	22.92	22.84	22.67	PASS
	50	0	22.11	22.13	21.94	PASS
	50	24	22.12	22.10	22.04	PASS
	50	49	22.00	21.96	21.96	PASS
	100	0	22.11	22.04	22.01	PASS
16QAM	1	0	22.09	22.59	22.60	PASS
	1	49	22.01	22.58	22.55	PASS
	1	99	21.87	22.15	22.31	PASS
	50	0	21.14	21.10	22.26	PASS
	50	24	21.12	21.11	20.98	PASS
	50	49	21.01	20.95	20.92	PASS
	100	0	21.09	20.97	21.06	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	23.26	23.04	23.17	PASS
	1	2	23.33	23.20	23.19	PASS
	1	5	23.28	23.18	23.12	PASS
	3	0	23.24	23.15	23.21	PASS
	3	1	23.19	23.25	23.26	PASS
	3	2	23.20	23.15	23.23	PASS
	6	0	22.17	22.09	22.08	PASS
16QAM	1	0	22.14	22.28	22.58	PASS
	1	2	22.40	22.20	22.46	PASS
	1	5	22.18	22.32	22.54	PASS
	3	0	22.37	22.05	22.19	PASS
	3	1	22.34	22.14	22.12	PASS
	3	2	22.23	22.04	22.12	PASS
	6	0	21.24	20.97	21.21	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.35	23.19	23.37	PASS
	1	7	23.46	23.07	23.79	PASS
	1	14	23.35	23.14	23.25	PASS
	8	0	22.33	22.15	22.15	PASS
	8	4	22.35	22.11	22.27	PASS
	8	7	22.28	22.07	22.18	PASS
	15	0	22.32	22.05	22.26	PASS
16QAM	1	0	22.57	22.33	22.49	PASS
	1	7	22.64	22.50	22.54	PASS
	1	14	22.59	22.26	22.56	PASS
	8	0	21.47	21.27	21.17	PASS
	8	4	21.52	21.20	21.32	PASS
	8	7	21.43	21.15	21.31	PASS
	15	0	21.32	21.07	21.28	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	23.47	23.29	23.43	PASS
	1	12	23.36	23.08	23.27	PASS
	1	24	23.49	23.45	23.47	PASS
	12	0	22.35	22.09	22.36	PASS
	12	6	22.39	22.07	22.32	PASS
	12	11	22.36	22.15	22.31	PASS
	25	0	22.29	22.05	22.24	PASS
16QAM	1	0	22.41	22.34	22.73	PASS
	1	12	22.45	22.28	22.73	PASS
	1	24	22.44	22.19	22.73	PASS
	12	0	21.37	21.15	21.23	PASS
	12	6	21.39	21.18	21.20	PASS
	12	11	21.41	21.22	21.22	PASS
	25	0	21.34	21.04	21.26	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.49	23.18	23.34	PASS
	1	24	23.46	23.09	23.37	PASS
	1	49	23.30	23.05	23.25	PASS
	25	0	22.34	22.10	22.12	PASS
	25	12	22.37	22.16	22.23	PASS
	25	24	22.32	22.10	22.20	PASS
	50	0	22.33	22.18	22.22	PASS
16QAM	1	0	22.62	22.38	22.71	PASS
	1	24	22.64	22.38	22.59	PASS
	1	49	22.65	22.30	22.72	PASS
	25	0	21.38	21.18	21.19	PASS
	25	12	21.44	21.23	21.33	PASS
	25	24	21.36	21.06	21.27	PASS
	50	0	21.35	21.10	21.18	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	23.24	23.12	21.18	PASS
	1	37	23.32	23.19	21.14	PASS
	1	74	23.05	23.04	23.16	PASS
	36	0	22.33	22.18	23.15	PASS
	36	16	22.28	22.19	23.21	PASS
	36	35	22.25	22.15	22.15	PASS
	75	0	22.26	22.19	22.26	PASS
16QAM	1	0	22.80	22.39	22.13	PASS
	1	37	22.38	22.37	22.20	PASS
	1	74	22.58	22.27	22.15	PASS
	36	0	21.39	21.17	22.12	PASS
	36	16	21.33	21.14	22.13	PASS
	36	35	21.27	21.18	21.19	PASS
	75	0	21.27	21.14	21.22	PASS
Channel Bandwidth: 20 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.33	23.06	23.15	PASS
	1	49	23.21	23.26	23.13	PASS
	1	99	23.04	23.01	23.03	PASS
	50	0	22.27	22.14	22.17	PASS
	50	24	22.25	22.22	22.17	PASS
	50	49	22.24	22.21	22.15	PASS
	100	0	22.25	22.20	22.13	PASS
16QAM	1	0	22.31	22.95	22.75	PASS
	1	49	22.34	22.64	22.73	PASS
	1	99	22.44	22.39	22.69	PASS
	50	0	21.36	21.10	21.69	PASS
	50	24	21.34	21.16	21.12	PASS
	50	49	21.26	21.17	21.09	PASS
	100	0	21.32	21.19	21.16	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	22.96	23.04	23.08	PASS
	1	2	23.02	23.14	23.25	PASS
	1	5	23.01	23.08	23.02	PASS
	3	0	22.97	22.85	23.01	PASS
	3	1	22.90	22.97	23.06	PASS
	3	2	22.76	22.86	23.00	PASS
	6	0	21.86	21.87	21.99	PASS
16QAM	1	0	22.03	22.23	22.29	PASS
	1	2	22.17	22.16	22.23	PASS
	1	5	21.99	22.17	22.25	PASS
	3	0	21.99	21.91	22.15	PASS
	3	1	21.96	22.08	22.09	PASS
	3	2	21.99	21.98	21.08	PASS
	6	0	21.94	20.96	22.85	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.85	23.06	23.27	PASS
	1	7	22.89	22.87	23.21	PASS
	1	14	22.83	22.97	23.12	PASS
	8	0	21.87	22.00	22.14	PASS
	8	4	21.95	21.98	22.16	PASS
	8	7	21.91	21.98	22.09	PASS
	15	0	21.90	21.97	22.16	PASS
16QAM	1	0	22.14	22.19	22.28	PASS
	1	7	22.20	22.32	22.31	PASS
	1	14	22.13	22.09	22.24	PASS
	8	0	21.05	21.23	21.08	PASS
	8	4	21.07	21.19	21.11	PASS
	8	7	21.06	21.14	21.09	PASS
	15	0	20.91	21.03	21.05	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	22.96	23.36	23.15	PASS
	1	12	23.06	23.05	23.01	PASS
	1	24	23.03	23.31	22.99	PASS
	12	0	21.95	22.00	22.04	PASS
	12	6	21.97	22.00	22.02	PASS
	12	11	21.91	21.94	21.99	PASS
	25	0	21.81	22.10	21.97	PASS
16QAM	1	0	21.95	22.03	22.48	PASS
	1	12	22.06	22.02	22.42	PASS
	1	24	22.04	22.18	22.50	PASS
	12	0	20.96	21.12	20.89	PASS
	12	6	20.99	21.13	20.92	PASS
	12	11	20.99	21.13	20.88	PASS
	25	0	20.81	21.07	20.98	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	22.93	23.36	PASS
	1	24	22.95	23.07	23.39	PASS
	1	49	22.80	22.99	23.03	PASS
	25	0	21.90	22.05	22.17	PASS
	25	12	21.91	22.10	22.11	PASS
	25	24	21.82	22.02	22.11	PASS
	50	0	21.84	22.10	22.19	PASS
16QAM	1	0	22.28	22.13	22.59	PASS
	1	24	22.23	22.23	22.30	PASS
	1	49	22.13	22.19	22.45	PASS
	25	0	20.93	21.10	21.28	PASS
	25	12	21.01	21.20	21.22	PASS
	25	24	20.85	21.07	21.20	PASS
	50	0	20.83	21.03	21.23	PASS

FDD-LTE Band 7						
Channel Bandwidth: 5 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	21.53	21.34	20.94	PASS
	1	12	21.46	21.41	20.83	PASS
	1	24	21.52	21.39	20.98	PASS
	12	0	20.52	20.26	19.82	PASS
	12	6	20.46	20.27	19.82	PASS
	12	11	20.48	20.23	19.82	PASS
	25	0	20.50	20.21	19.78	PASS
16QAM	1	0	20.61	20.34	20.11	PASS
	1	12	20.61	20.33	20.23	PASS
	1	24	20.62	20.32	20.16	PASS
	12	0	19.57	19.38	19.67	PASS
	12	6	19.49	19.38	19.76	PASS
	12	11	19.58	19.35	19.69	PASS
	25	0	19.53	19.37	19.80	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	21.57	21.31	21.04	PASS
	1	24	21.60	21.33	21.10	PASS
	1	49	21.44	21.06	20.99	PASS
	25	0	20.56	20.26	19.83	PASS
	25	12	20.52	20.25	19.84	PASS
	25	24	20.40	20.26	19.85	PASS
	50	0	20.50	20.23	19.80	PASS
16QAM	1	0	20.81	20.44	20.21	PASS
	1	24	20.78	20.47	20.19	PASS
	1	49	20.76	20.26	20.30	PASS
	25	0	19.63	19.32	19.93	PASS
	25	12	19.62	19.39	19.00	PASS
	25	24	19.49	19.28	19.97	PASS
	50	0	19.51	19.23	19.85	PASS

FDD-LTE Band 7						
Channel Bandwidth: 15 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	21.39	21.20	20.78	PASS
	1	37	21.67	21.19	20.64	PASS
	1	74	21.34	20.81	20.75	PASS
	36	0	20.54	20.22	19.72	PASS
	36	16	20.60	20.26	19.84	PASS
	36	35	20.42	19.95	19.75	PASS
	75	0	20.44	20.18	19.76	PASS
16QAM	1	0	20.76	20.37	19.76	PASS
	1	37	20.37	20.41	19.76	PASS
	1	74	20.47	20.04	19.79	PASS
	36	0	19.55	19.23	19.84	PASS
	36	16	19.57	19.28	19.87	PASS
	36	35	19.45	19.04	19.74	PASS
	75	0	19.45	19.24	19.61	PASS
Channel Bandwidth: 20 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	21.41	21.18	20.72	PASS
	1	49	21.40	21.25	20.63	PASS
	1	99	21.14	20.80	19.84	PASS
	50	0	20.41	20.23	19.83	PASS
	50	24	20.41	20.26	19.80	PASS
	50	49	20.36	20.09	19.83	PASS
	100	0	20.43	20.71	20.26	PASS
16QAM	1	0	20.55	20.69	19.80	PASS
	1	49	20.48	20.29	19.84	PASS
	1	99	20.10	19.52	19.36	PASS
	50	0	19.53	19.27	19.68	PASS
	50	24	19.48	19.37	19.86	PASS
	50	49	19.44	19.48	19.67	PASS
	100	0	19.45	20.71	19.85	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	24.24	23.85	23.86	PASS
	1	2	24.14	23.90	23.85	PASS
	1	5	24.22	23.80	23.76	PASS
	3	0	23.94	23.74	23.85	PASS
	3	1	23.89	23.75	23.83	PASS
	3	2	23.88	23.77	23.79	PASS
	6	0	22.84	22.67	22.73	PASS
16QAM	1	0	22.81	23.25	23.11	PASS
	1	2	23.12	23.12	23.10	PASS
	1	5	22.92	23.10	22.99	PASS
	3	0	22.82	22.69	22.74	PASS
	3	1	22.81	22.71	22.75	PASS
	3	2	22.82	22.63	22.79	PASS
	6	0	21.96	21.80	21.79	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	24.00	23.85	23.88	PASS
	1	7	24.08	23.84	24.22	PASS
	1	14	23.88	23.79	23.75	PASS
	8	0	22.94	22.85	22.82	PASS
	8	4	23.01	22.85	22.90	PASS
	8	7	22.79	22.73	22.91	PASS
	15	0	22.93	22.83	22.83	PASS
16QAM	1	0	23.20	23.05	23.15	PASS
	1	7	23.11	23.12	23.16	PASS
	1	14	23.04	23.03	22.97	PASS
	8	0	22.12	21.99	21.88	PASS
	8	4	22.11	22.00	21.90	PASS
	8	7	21.98	21.85	21.91	PASS
	15	0	21.96	21.88	21.93	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	23.95	24.03	23.86	PASS
	1	12	23.72	23.76	23.84	PASS
	1	24	23.89	24.07	23.83	PASS
	12	0	22.88	22.78	22.73	PASS
	12	6	22.80	22.83	22.79	PASS
	12	11	22.83	22.75	22.79	PASS
	25	0	22.85	22.80	22.74	PASS
16QAM	1	0	23.06	22.92	23.33	PASS
	1	12	22.92	22.83	23.13	PASS
	1	24	22.96	22.79	23.34	PASS
	12	0	21.95	21.90	21.65	PASS
	12	6	21.86	21.97	21.75	PASS
	12	11	21.89	21.85	21.70	PASS
	25	0	21.90	21.81	21.82	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.96	23.85	24.03	PASS
	1	24	23.94	23.90	24.06	PASS
	1	49	23.81	23.84	24.04	PASS
	25	0	22.86	22.91	22.79	PASS
	25	12	22.89	22.85	22.79	PASS
	25	24	22.85	22.77	22.74	PASS
	50	0	22.82	22.83	22.85	PASS
16QAM	1	0	23.37	23.09	23.33	PASS
	1	24	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	24	21.88	21.82	21.85	PASS
	50	0	21.81	21.80	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	23.57	23.58	23.55	PASS
	1	12	23.33	23.47	23.58	PASS
	1	24	23.42	23.60	23.51	PASS
	12	0	22.39	22.44	22.44	PASS
	12	6	22.47	22.52	22.47	PASS
	12	11	22.40	22.42	22.43	PASS
	25	0	22.37	22.46	22.35	PASS
16QAM	1	0	22.70	22.57	23.16	PASS
	1	12	22.55	22.75	22.84	PASS
	1	24	22.51	22.40	23.04	PASS
	12	0	21.57	21.61	21.38	PASS
	12	6	21.52	21.61	21.37	PASS
	12	11	21.48	21.51	21.32	PASS
	25	0	21.53	21.52	21.43	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	--	23.51	--	PASS
	1	24	--	23.53	--	PASS
	1	49	--	23.43	--	PASS
	25	0	--	22.51	--	PASS
	25	12	--	22.52	--	PASS
	25	24	--	22.40	--	PASS
	50	0	--	22.57	--	PASS
16QAM	1	0	--	22.90	--	PASS
	1	24	--	22.89	--	PASS
	1	49	--	22.79	--	PASS
	25	0	--	21.60	--	PASS
	25	12	--	21.60	--	PASS
	25	24	--	21.48	--	PASS
	50	0	--	21.40	--	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	23.06	23.07	22.87	PASS
	1	3	22.98	22.97	23.00	PASS
	1	5	22.84	22.90	22.83	PASS
	3	0	22.87	22.92	22.79	PASS
	3	1	23.00	23.01	22.81	PASS
	3	3	22.86	22.97	22.89	PASS
	6	0	21.74	21.90	21.72	PASS
16QAM	1	0	21.79	22.03	22.14	PASS
	1	3	22.12	22.05	22.13	PASS
	1	5	21.97	21.98	22.07	PASS
	3	0	21.90	21.80	21.79	PASS
	3	1	22.04	21.98	21.80	PASS
	3	3	21.85	21.85	21.86	PASS
	6	0	20.80	20.89	20.90	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	22.94	23.00	22.99	PASS
	1	7	23.10	23.06	23.43	PASS
	1	14	23.00	23.60	22.86	PASS
	8	0	21.96	22.04	21.84	PASS
	8	4	21.94	22.00	21.90	PASS
	8	7	21.92	22.00	21.89	PASS
	15	0	21.87	21.98	21.94	PASS
16QAM	1	0	22.06	22.15	22.06	PASS
	1	7	22.02	22.35	22.18	PASS
	1	14	22.02	22.26	22.15	PASS
	8	0	21.10	21.23	20.97	PASS
	8	4	21.12	21.20	20.98	PASS
	8	7	21.14	21.13	21.02	PASS
	15	0	20.91	21.06	20.96	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	23.06	23.41	23.14	PASS
	1	12	23.19	23.17	23.03	PASS
	1	24	22.97	23.35	23.09	PASS
	12	0	21.95	22.01	21.99	PASS
	12	6	21.98	22.06	22.05	PASS
	12	11	21.89	22.05	22.05	PASS
	25	0	21.93	21.98	21.96	PASS
16QAM	1	0	22.18	22.24	22.36	PASS
	1	12	22.03	22.27	22.25	PASS
	1	24	22.11	22.17	22.41	PASS
	12	0	21.01	21.15	20.85	PASS
	12	6	21.06	21.20	20.95	PASS
	12	11	20.98	21.21	20.96	PASS
	25	0	20.86	21.03	20.99	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.15	23.12	22.91	PASS
	1	24	23.05	23.03	23.02	PASS
	1	49	22.94	22.81	23.12	PASS
	25	0	22.02	22.08	21.84	PASS
	25	12	21.94	22.08	21.88	PASS
	25	24	22.03	22.04	21.82	PASS
	50	0	22.01	22.05	21.90	PASS
16QAM	1	0	22.31	22.21	22.06	PASS
	1	24	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	24	21.07	21.05	20.92	PASS
	50	0	21.02	21.06	20.88	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	22.93	22.99	22.78	PASS
	1	37	23.02	23.13	22.96	PASS
	1	74	22.81	22.80	22.93	PASS
	36	0	21.95	22.08	21.84	PASS
	36	16	22.03	22.16	22.01	PASS
	36	35	22.09	22.02	21.87	PASS
	75	0	21.95	22.02	22.02	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
	36	0	21.07	21.20	20.88	PASS
	36	16	21.12	21.15	21.00	PASS
	36	35	21.13	21.03	20.90	PASS
	75	0	21.01	21.06	20.93	PASS
Channel Bandwidth: 20 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.08	23.12	22.77	PASS
	1	49	23.17	23.09	21.87	PASS
	1	99	22.86	22.78	21.95	PASS
	50	0	22.02	22.05	21.99	PASS
	50	24	22.12	22.08	22.01	PASS
	50	49	21.98	22.04	22.46	PASS
	100	0	22.04	22.08	22.40	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
	50	0	21.11	20.96	20.92	PASS
	50	24	21.19	20.98	20.98	PASS
	50	49	21.01	22.90	20.92	PASS
	100	0	21.06	22.93	21.36	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	23.47	23.13	23.43	PASS
	1	3	23.23	23.13	23.43	PASS
	1	5	23.27	23.13	23.39	PASS
	3	0	23.21	23.09	23.28	PASS
	3	1	23.31	23.09	23.36	PASS
	3	3	23.23	23.05	23.28	PASS
	6	0	22.27	22.06	23.36	PASS
16QAM	1	0	22.24	22.43	23.28	PASS
	1	3	22.34	22.35	22.26	PASS
	1	5	22.20	22.41	22.60	PASS
	3	0	22.40	22.08	22.63	PASS
	3	1	22.51	22.12	22.53	PASS
	3	3	22.22	22.09	22.37	PASS
	6	0	21.37	21.05	22.41	PASS
Channel Bandwidth: 3 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.34	23.18	23.52	PASS
	1	7	23.49	23.12	23.81	PASS
	1	14	23.36	23.14	23.44	PASS
	8	0	22.33	22.14	22.43	PASS
	8	4	22.38	22.14	22.38	PASS
	8	7	22.33	22.18	22.42	PASS
	15	0	22.33	22.19	22.54	PASS
16QAM	1	0	22.74	22.37	22.54	PASS
	1	7	22.59	22.54	22.53	PASS
	1	14	22.48	22.34	22.64	PASS
	8	0	21.49	21.27	21.47	PASS
	8	4	21.50	21.27	21.48	PASS
	8	7	21.44	21.32	21.48	PASS
	15	0	21.30	21.29	21.37	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	23.45	23.30	23.36	PASS
	1	12	23.30	23.24	23.45	PASS
	1	24	23.28	23.47	23.59	PASS
	12	0	22.39	22.04	22.36	PASS
	12	6	22.35	22.27	22.38	PASS
	12	11	22.24	22.12	22.36	PASS
	25	0	22.23	22.11	22.37	PASS
16QAM	1	0	22.52	22.24	22.64	PASS
	1	12	22.40	22.36	22.76	PASS
	1	24	22.39	22.34	22.72	PASS
	12	0	21.46	21.11	21.17	PASS
	12	6	21.35	21.35	21.27	PASS
	12	11	21.32	21.19	21.25	PASS
	25	0	21.23	21.11	21.35	PASS
Channel Bandwidth: 10 MHz						
Modulation	RB Size	RB Offset	Conducted Power (dBm)			Result
			Low CH	Middle CH	High CH	
QPSK	1	0	23.24	23.11	23.51	PASS
	1	24	23.24	23.19	23.60	PASS
	1	49	23.07	23.02	23.69	PASS
	25	0	22.29	22.14	22.30	PASS
	25	12	22.22	22.16	22.32	PASS
	25	24	22.03	22.12	22.38	PASS
	50	0	22.11	22.19	22.33	PASS
16QAM	1	0	22.50	22.25	22.68	PASS
	1	24	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	24	21.03	21.14	21.35	PASS
	50	0	21.14	21.13	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	23.39	23.17	23.37	PASS
	1	37	23.46	23.25	23.25	PASS
	1	74	23.11	23.25	23.38	PASS
	36	0	22.32	22.25	22.30	PASS
	36	16	22.35	22.34	22.44	PASS
	36	35	22.23	22.31	22.34	PASS
	75	0	22.23	22.21	22.48	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
	36	0	21.34	21.27	21.35	PASS
	36	16	21.39	21.27	21.46	PASS
	36	35	21.27	21.28	21.41	PASS
	75	0	21.23	21.22	21.38	PASS

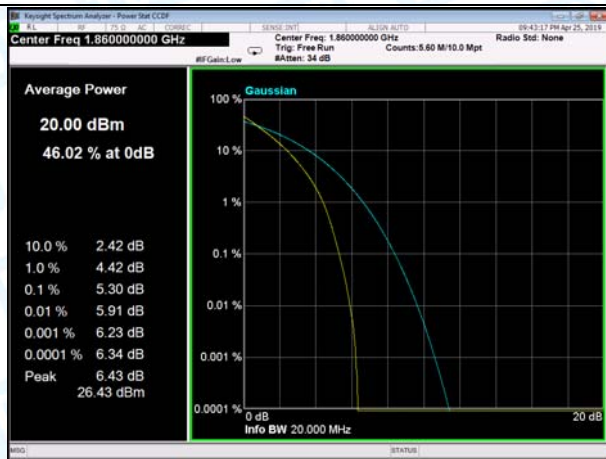
ATTACHMENT B--PEAK-AVERAGE RATIO

Test Mode	Modulation	RB Size	RB Offset	PAPR with 0.1% probability (dB)	Limit (dB)	Result
LTE BAND 2 20MHz (Low Channel)	QPSK	100	0	5.30	≤ 13	PASS
	16QAM	100	0	5.31	≤ 13	PASS
LTE BAND 2 20MHz (Middle Channel)	QPSK	100	0	5.40	≤ 13	PASS
	16QAM	100	0	5.42	≤ 13	PASS
LTE BAND 2 20MHz (High Channel)	QPSK	100	0	5.17	≤ 13	PASS
	16QAM	100	0	5.16	≤ 13	PASS
LTE BAND 4 20MHz (Low Channel)	QPSK	100	0	4.89	≤ 13	PASS
	16QAM	100	0	4.87	≤ 13	PASS
LTE BAND 4 20MHz (Middle Channel)	QPSK	100	0	5.13	≤ 13	PASS
	16QAM	100	0	5.13	≤ 13	PASS
LTE BAND 4 20MHz (High Channel)	QPSK	100	0	5.28	≤ 13	PASS
	16QAM	100	0	5.26	≤ 13	PASS
LTE BAND 5 10MHz (Low Channel)	QPSK	50	0	4.53	≤ 13	PASS
	16QAM	50	0	4.56	≤ 13	PASS
LTE BAND 5 10MHz (Middle Channel)	QPSK	50	0	5.13	≤ 13	PASS
	16QAM	50	0	5.90	≤ 13	PASS
LTE BAND 5 10MHz (High Channel)	QPSK	50	0	5.07	≤ 13	PASS
	16QAM	50	0	5.93	≤ 13	PASS
LTE BAND 7 20MHz (Low Channel)	QPSK	100	0	4.93	≤ 13	PASS
	16QAM	100	0	5.79	≤ 13	PASS
LTE BAND 7 20MHz (Middle Channel)	QPSK	100	0	5.15	≤ 13	PASS
	16QAM	100	0	5.85	≤ 13	PASS
LTE BAND 7 20MHz (High Channel)	QPSK	100	0	4.85	≤ 13	PASS
	16QAM	100	0	5.72	≤ 13	PASS
LTE BAND 12 10MHz (Low Channel)	QPSK	50	0	5.26	≤ 13	PASS
	16QAM	50	0	6.06	≤ 13	PASS
LTE BAND 12 10MHz (Middle Channel)	QPSK	50	0	5.36	≤ 13	PASS
	16QAM	50	0	6.12	≤ 13	PASS
LTE BAND 12 10MHz (High Channel)	QPSK	50	0	5.25	≤ 13	PASS
	16QAM	50	0	6.10	≤ 13	PASS
LTE BAND 13 5MHz (Low Channel)	QPSK	25	0	5.31	≤ 13	PASS
	16QAM	25	0	6.12	≤ 13	PASS
LTE BAND 13 5MHz (Middle Channel)	QPSK	25	0	4.65	≤ 13	PASS
	16QAM	25	0	5.56	≤ 13	PASS
LTE BAND 13 5MHz (High Channel)	QPSK	25	0	5.18	≤ 13	PASS
	16QAM	25	0	6.05	≤ 13	PASS
LTE BAND 13 10MHz (High Channel)	QPSK	50	0	5.07	≤ 13	PASS
	16QAM	50	0	5.95	≤ 13	PASS

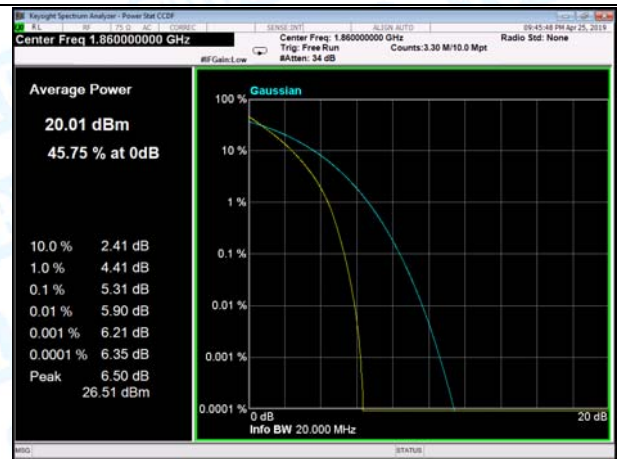
LTE BAND 25 20MHz (Low Channel)	QPSK	100	0	4.95	≤ 13	PASS
	16QAM	100	0	5.79	≤ 13	PASS
LTE BAND 25 20MHz (Middle Channel)	QPSK	100	0	4.90	≤ 13	PASS
	16QAM	100	0	5.65	≤ 13	PASS
LTE BAND 25 20MHz (High Channel)	QPSK	100	0	4.99	≤ 13	PASS
	16QAM	100	0	5.75	≤ 13	PASS
LTE BAND 26 15MHz (Low Channel)	QPSK	75	0	4.92	≤ 13	PASS
	16QAM	75	0	5.69	≤ 13	PASS
LTE BAND 26 15MHz (Middle Channel)	QPSK	75	0	4.85	≤ 13	PASS
	16QAM	75	0	5.71	≤ 13	PASS
LTE BAND 26 15MHz (High Channel)	QPSK	75	0	5.34	≤ 13	PASS
	16QAM	75	0	5.84	≤ 13	PASS

Note: Only show the worst case data.

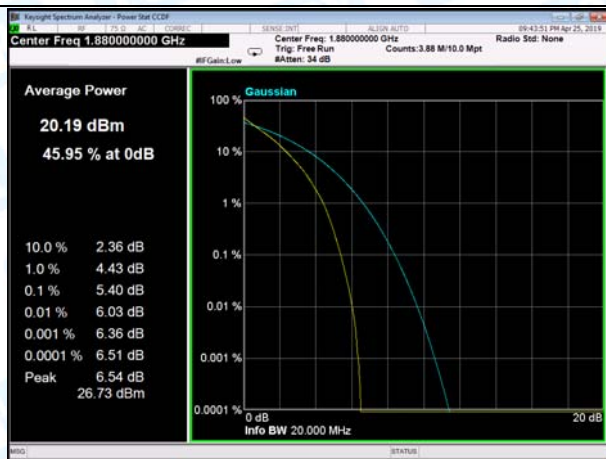
LTE Band 2 20MHz (Low Channel)-QPSK



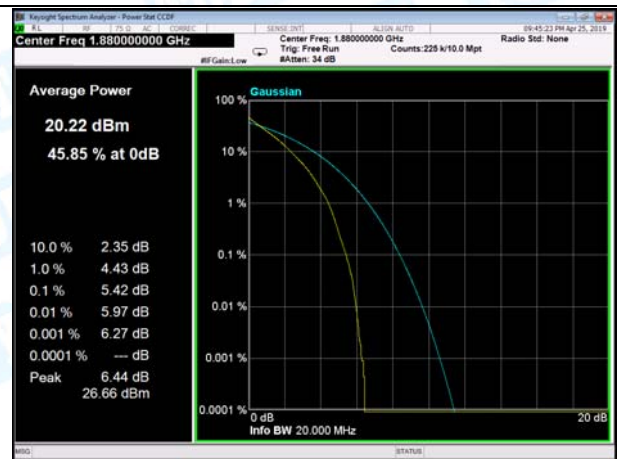
LTE Band 2 20MHz (Low Channel)-16QAM



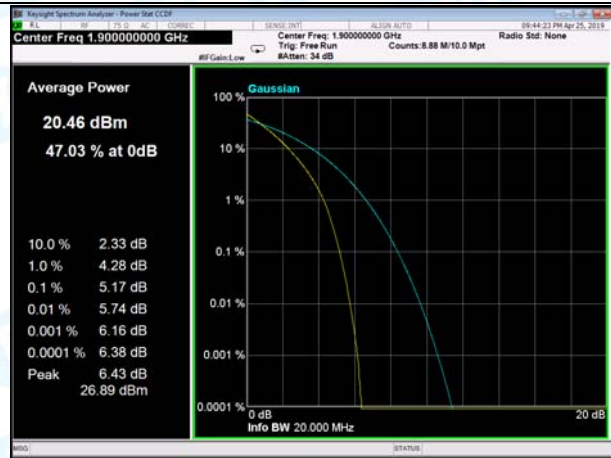
LTE Band 2 20MHz (Middle Channel)-QPSK



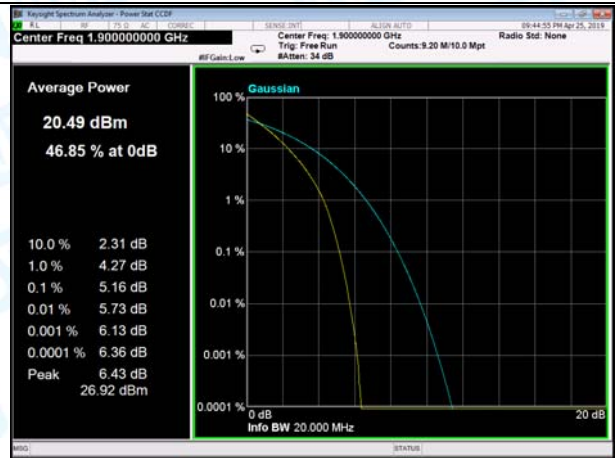
LTE Band 2 20MHz (Middle Channel)-16QAM



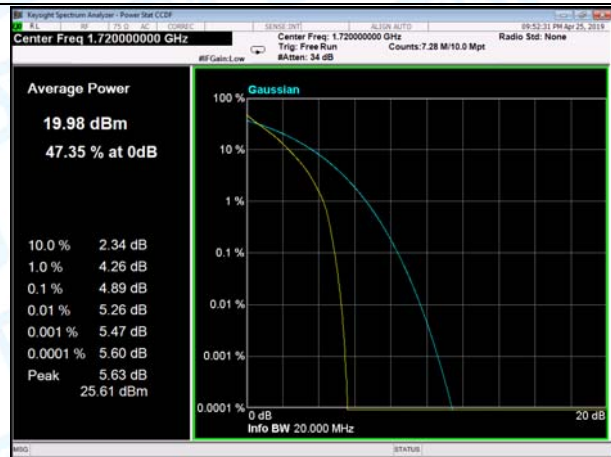
LTE Band 2 20MHz (High Channel)-QPSK



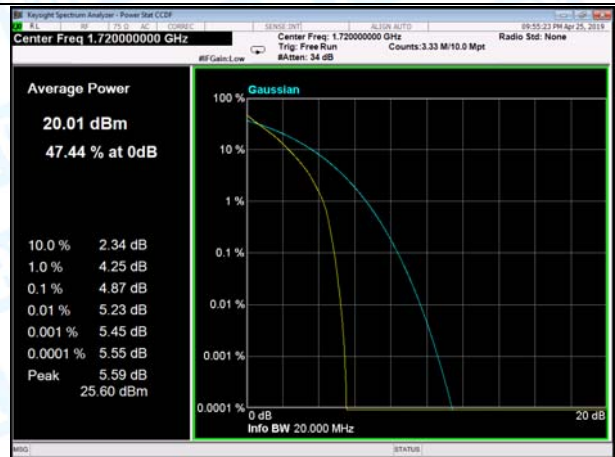
LTE Band 2 20MHz (High Channel)-16QAM



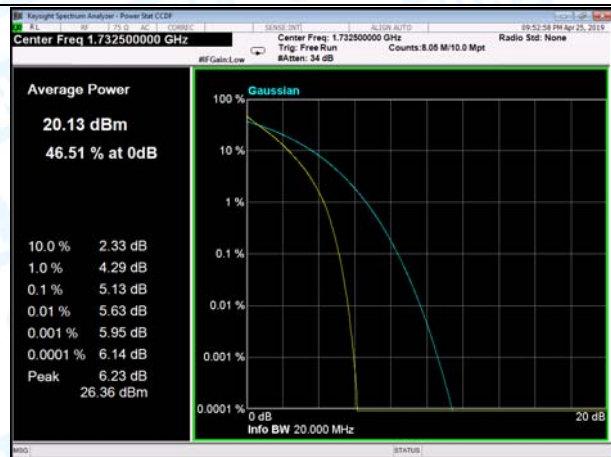
LTE Band 4 20MHz (Low Channel)-QPSK



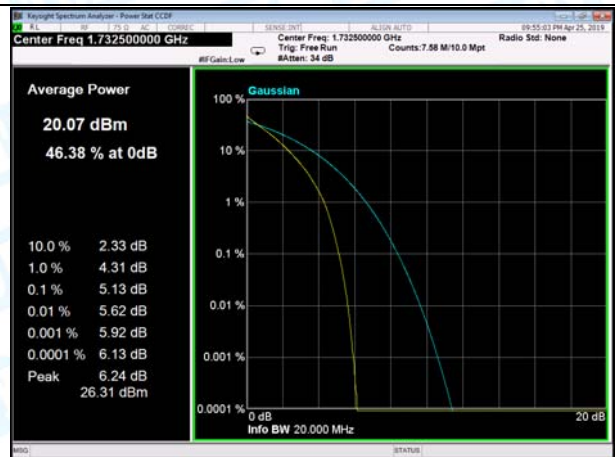
LTE Band 4 20MHz (Low Channel)-16QAM

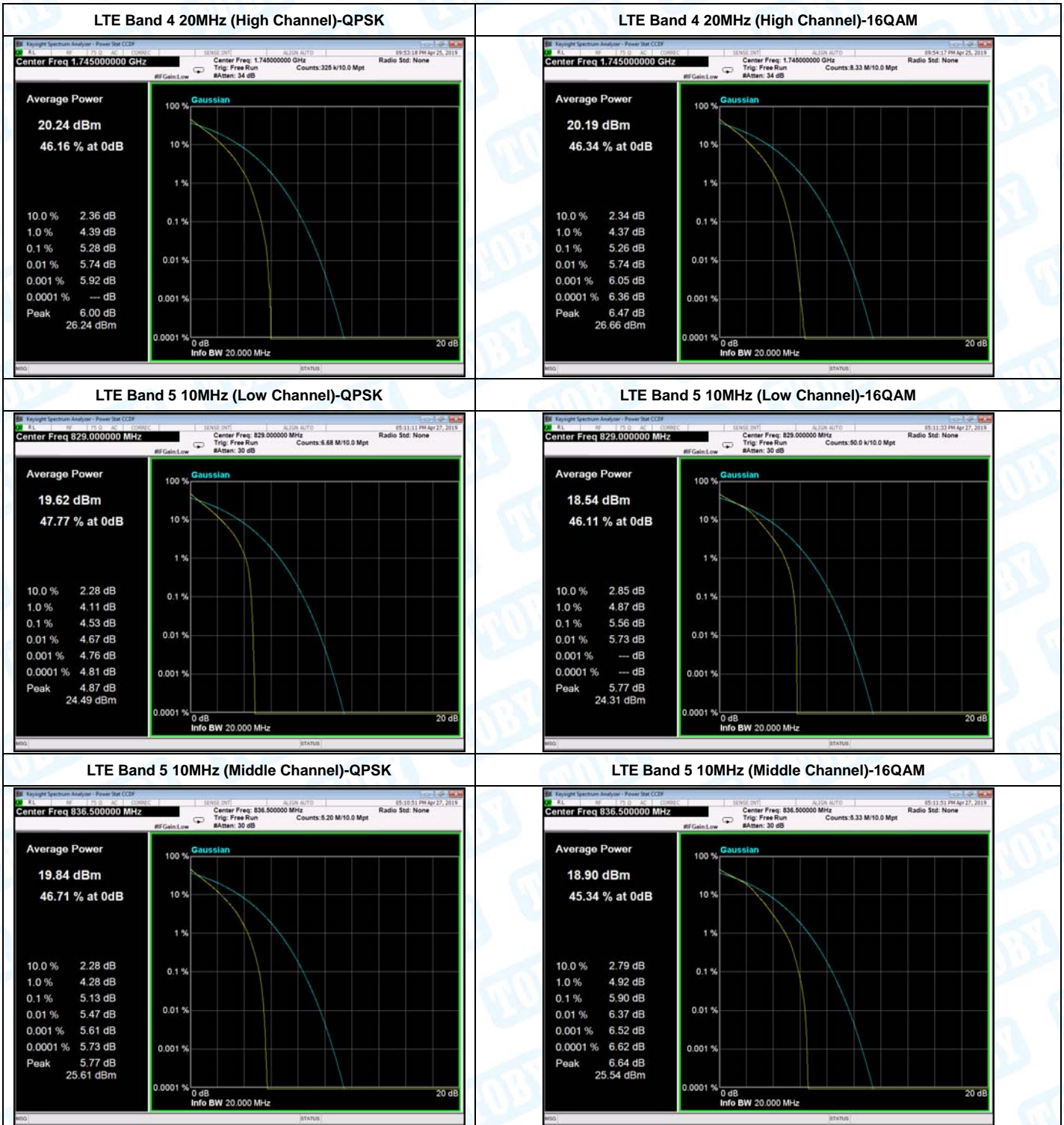


LTE Band 4 20MHz (Middle Channel)-QPSK

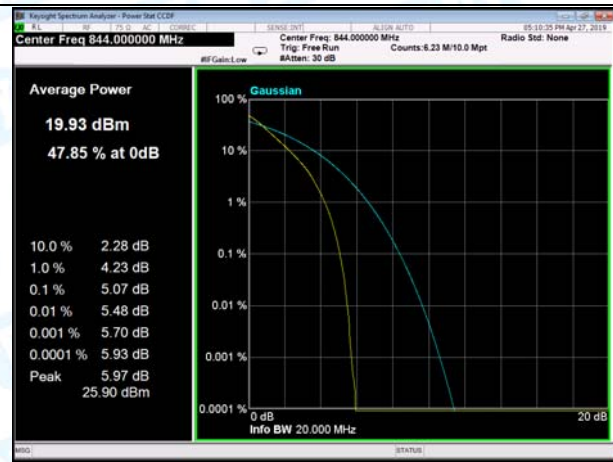


LTE Band 4 20MHz (Middle Channel)-16QAM

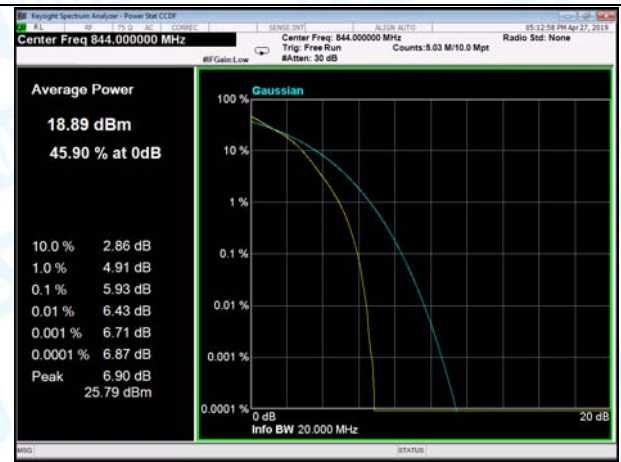




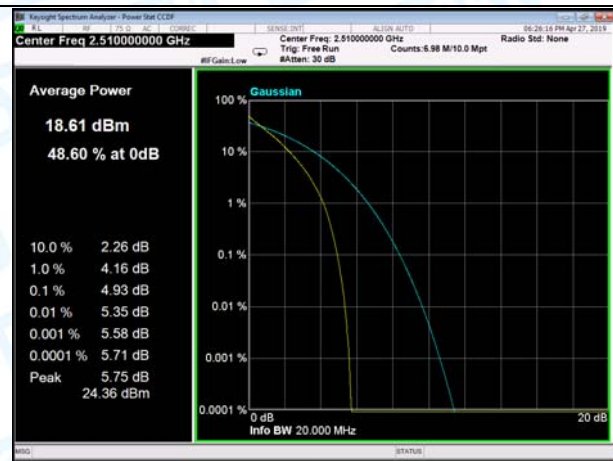
LTE Band 5 10MHz (High Channel)-QPSK



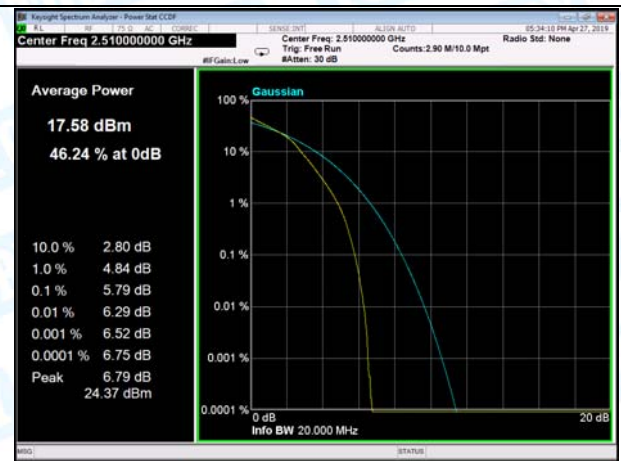
LTE Band 5 10MHz (High Channel)-16QAM



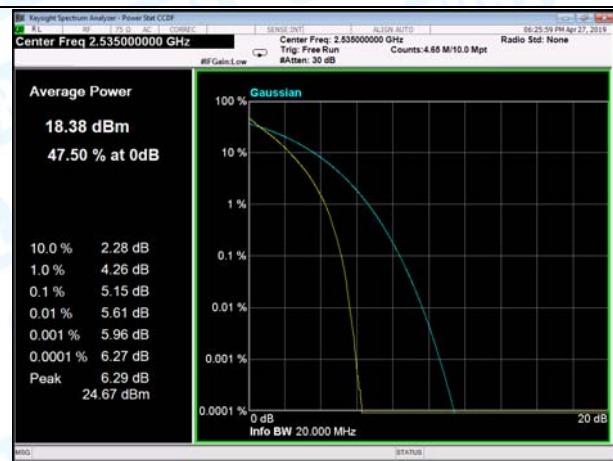
LTE Band 7 20MHz (Low Channel)-QPSK



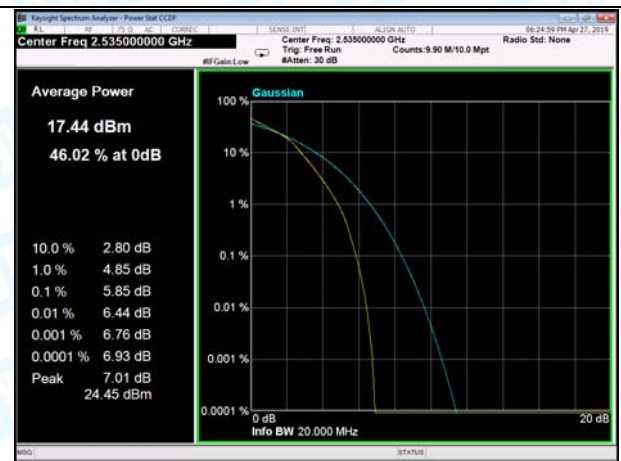
LTE Band 7 20MHz (Low Channel)-16QAM



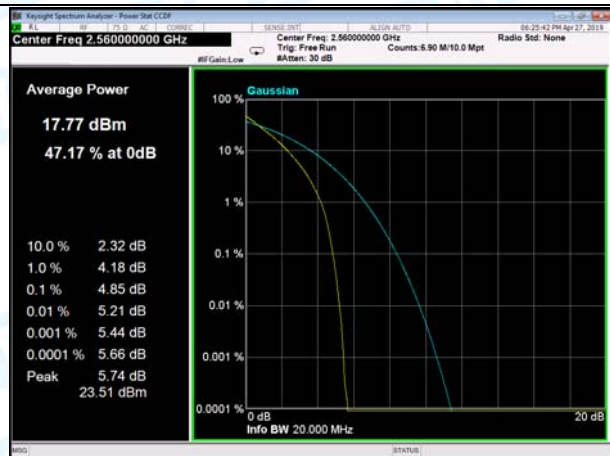
LTE Band 7 20MHz (Middle Channel)-QPSK



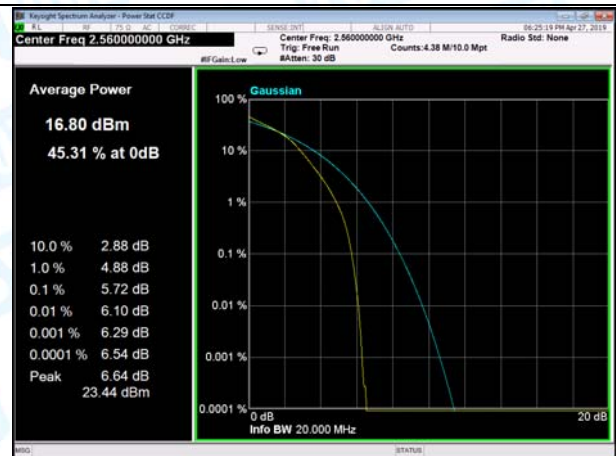
LTE Band 7 20MHz (Middle Channel)-16QAM



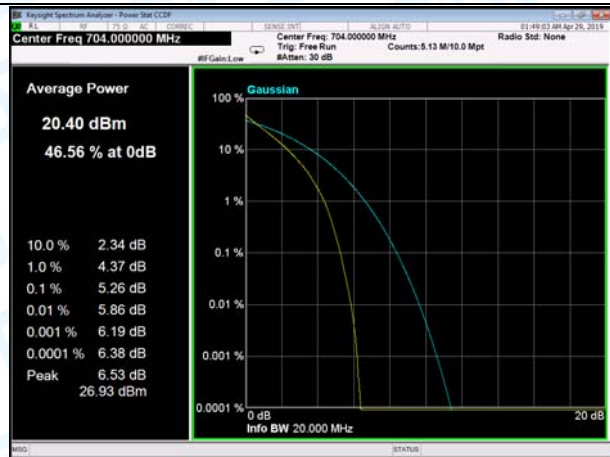
LTE Band 7 20MHz (High Channel)-QPSK



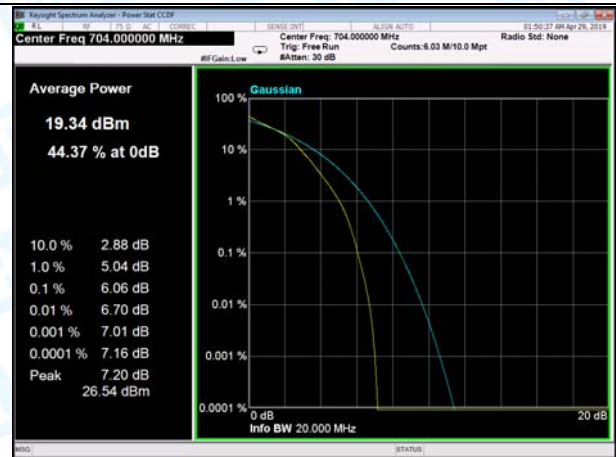
LTE Band 7 20MHz (High Channel)-16QAM



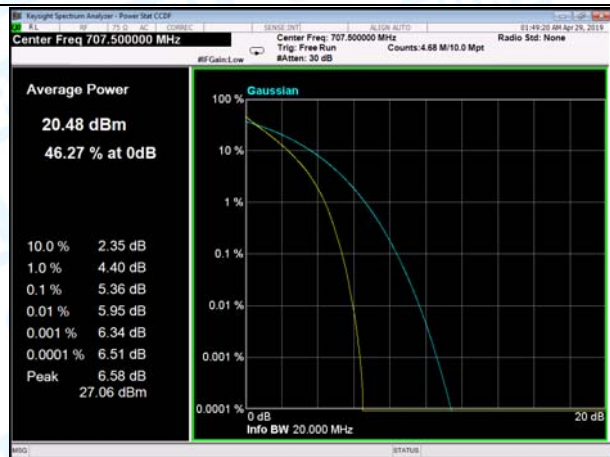
LTE Band 12 10MHz (Low Channel)-QPSK



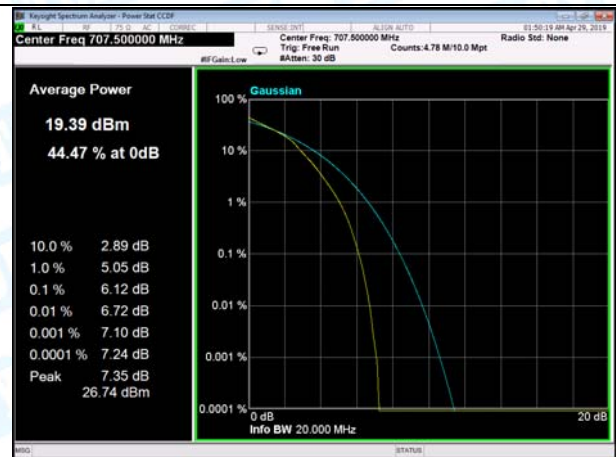
LTE Band 12 10MHz (Low Channel)-16QAM



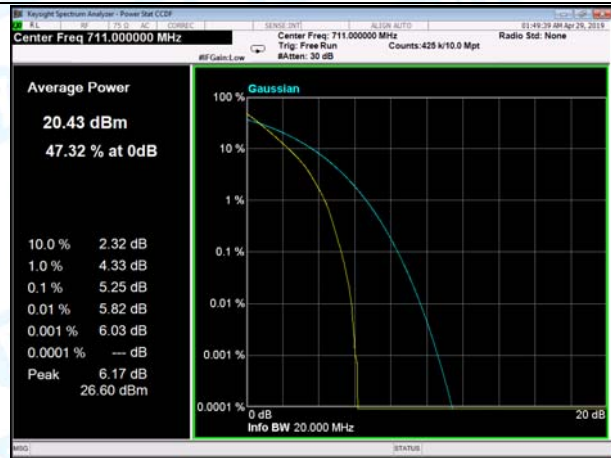
LTE Band 12 10MHz (Middle Channel)-QPSK



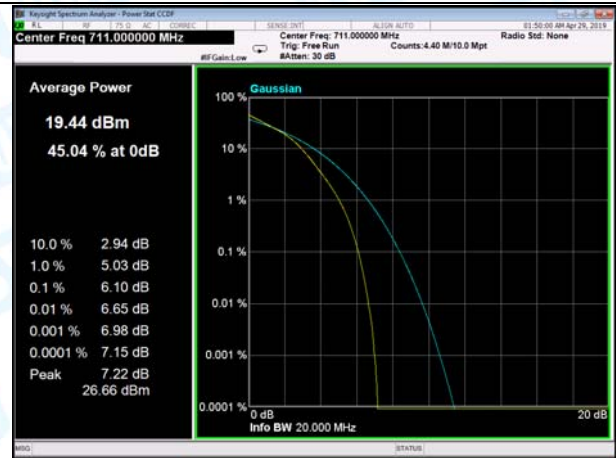
LTE Band 12 10MHz (Middle Channel)-16QAM



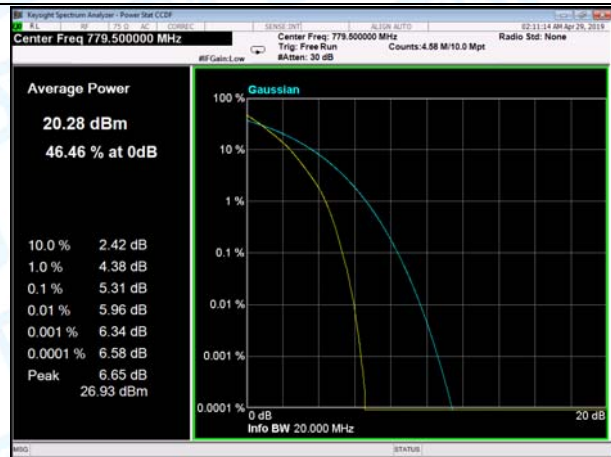
LTE Band 12 10MHz (High Channel)-QPSK



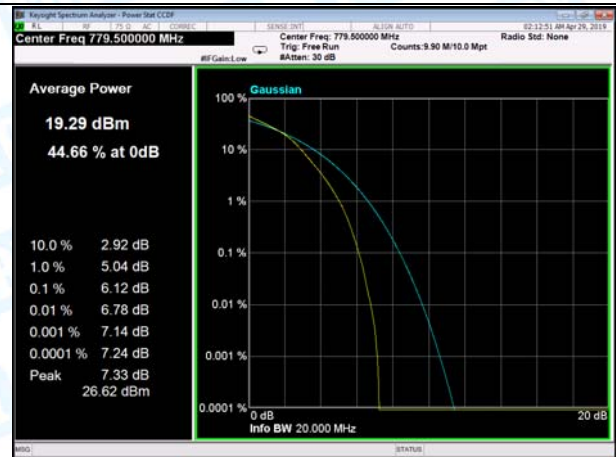
LTE Band 12 10MHz (High Channel)-16QAM



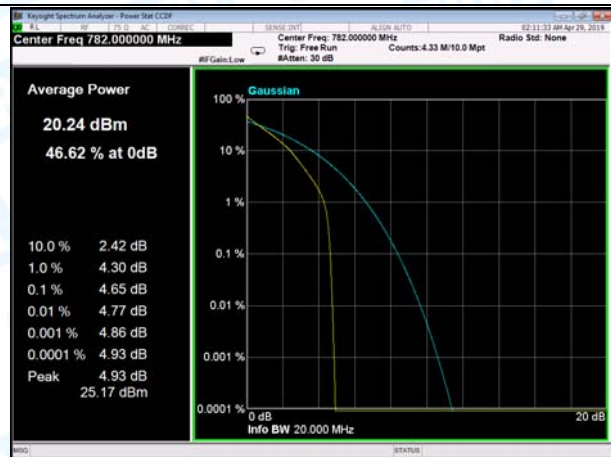
LTE Band 13 5MHz (Low Channel)-QPSK



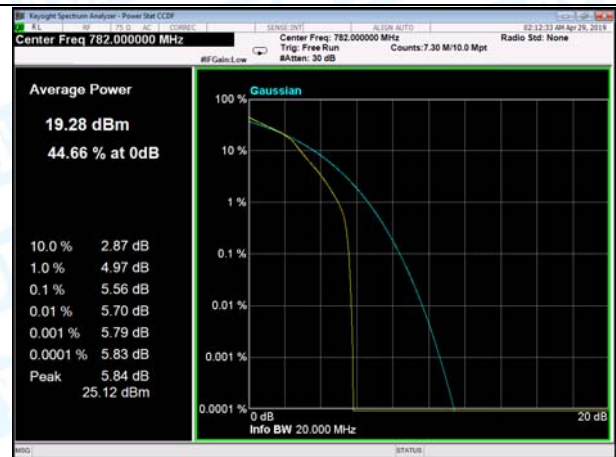
LTE Band 13 50MHz (Low Channel)-16QAM

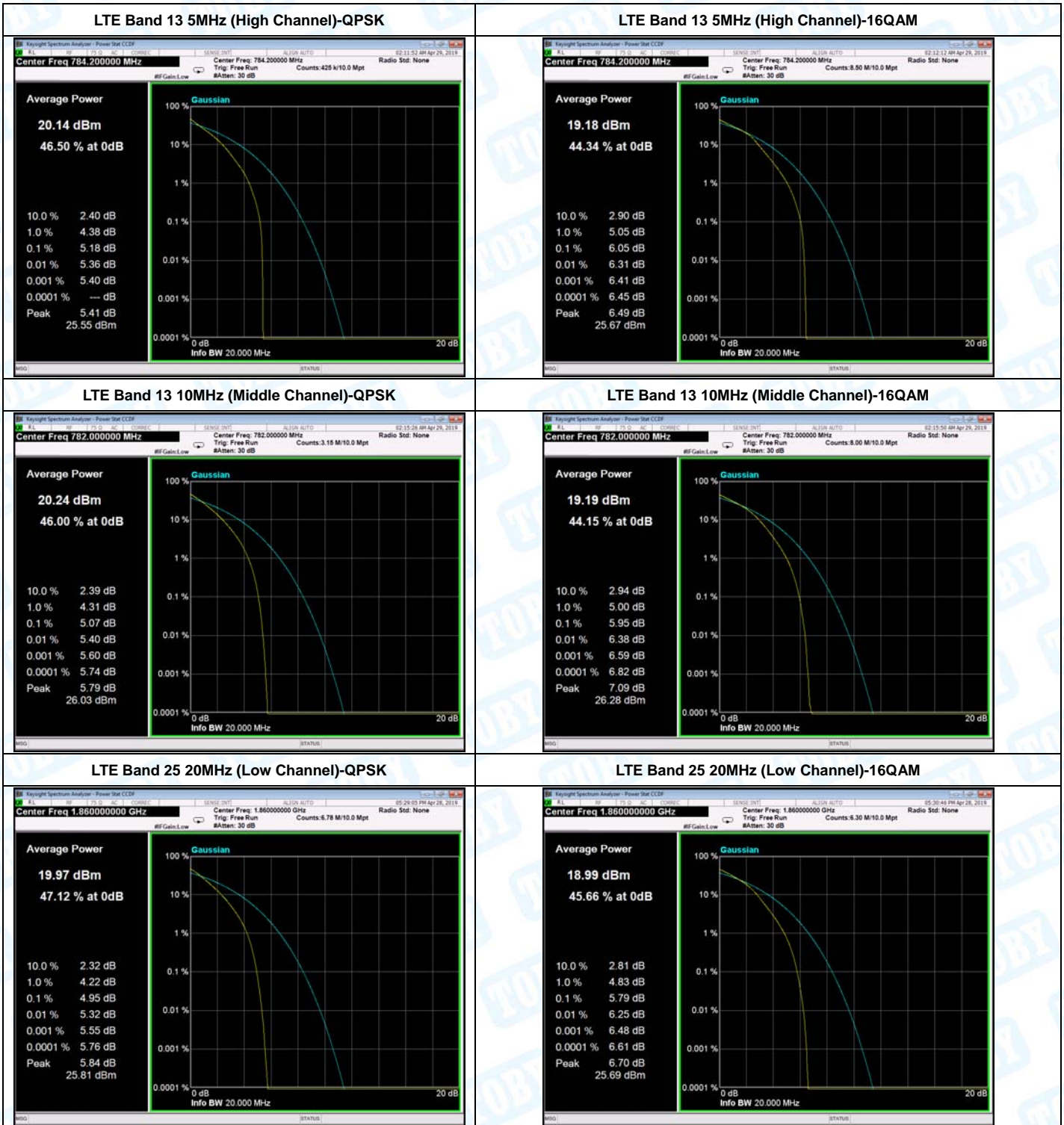


LTE Band 13 5MHz (Middle Channel)-QPSK

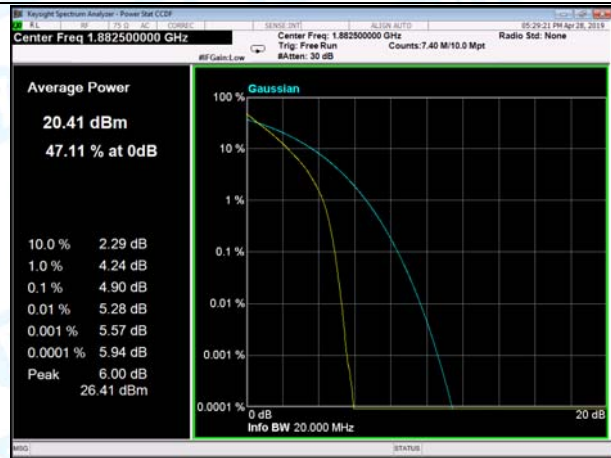


LTE Band 13 5MHz (Middle Channel)-16QAM

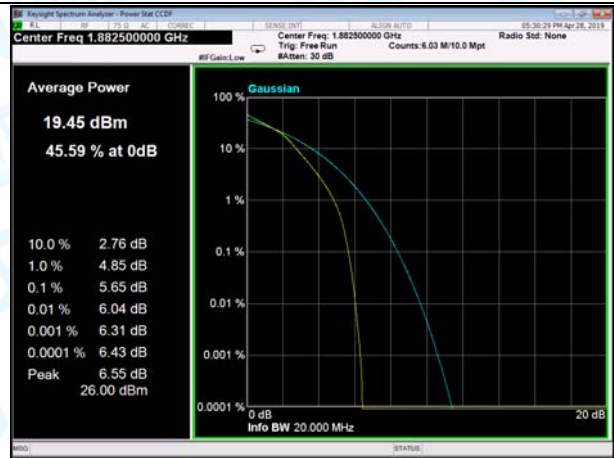




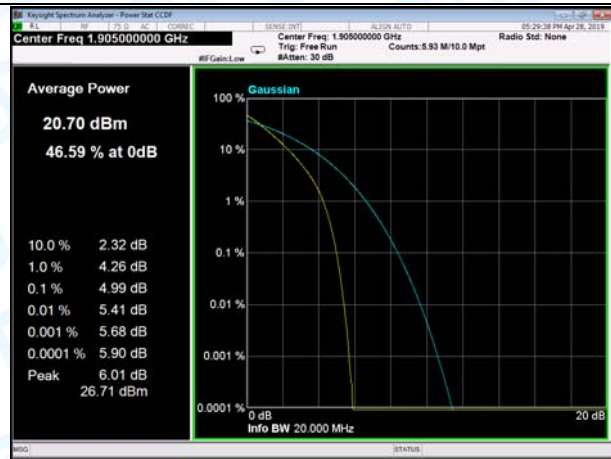
LTE Band 25 20MHz (Middle Channel)-QPSK



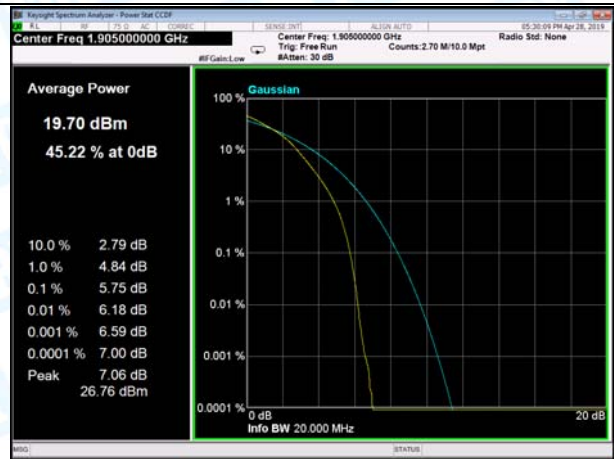
LTE Band 25 20MHz (Middle Channel)-16QAM



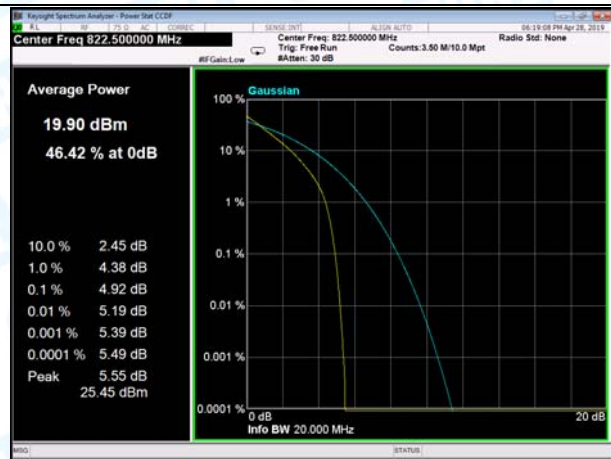
LTE Band 25 20MHz (High Channel)-QPSK



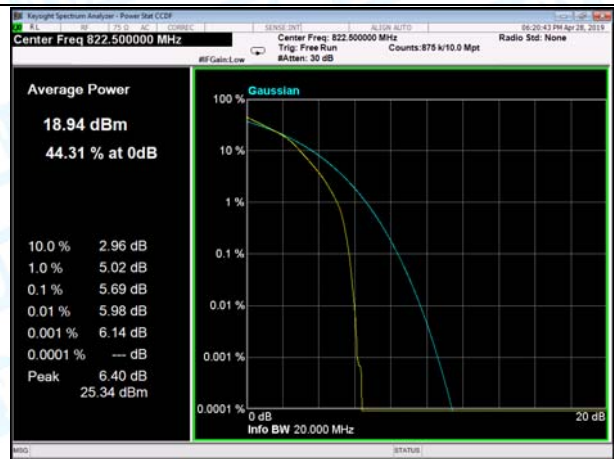
LTE Band 25 20MHz (High Channel)-16QAM

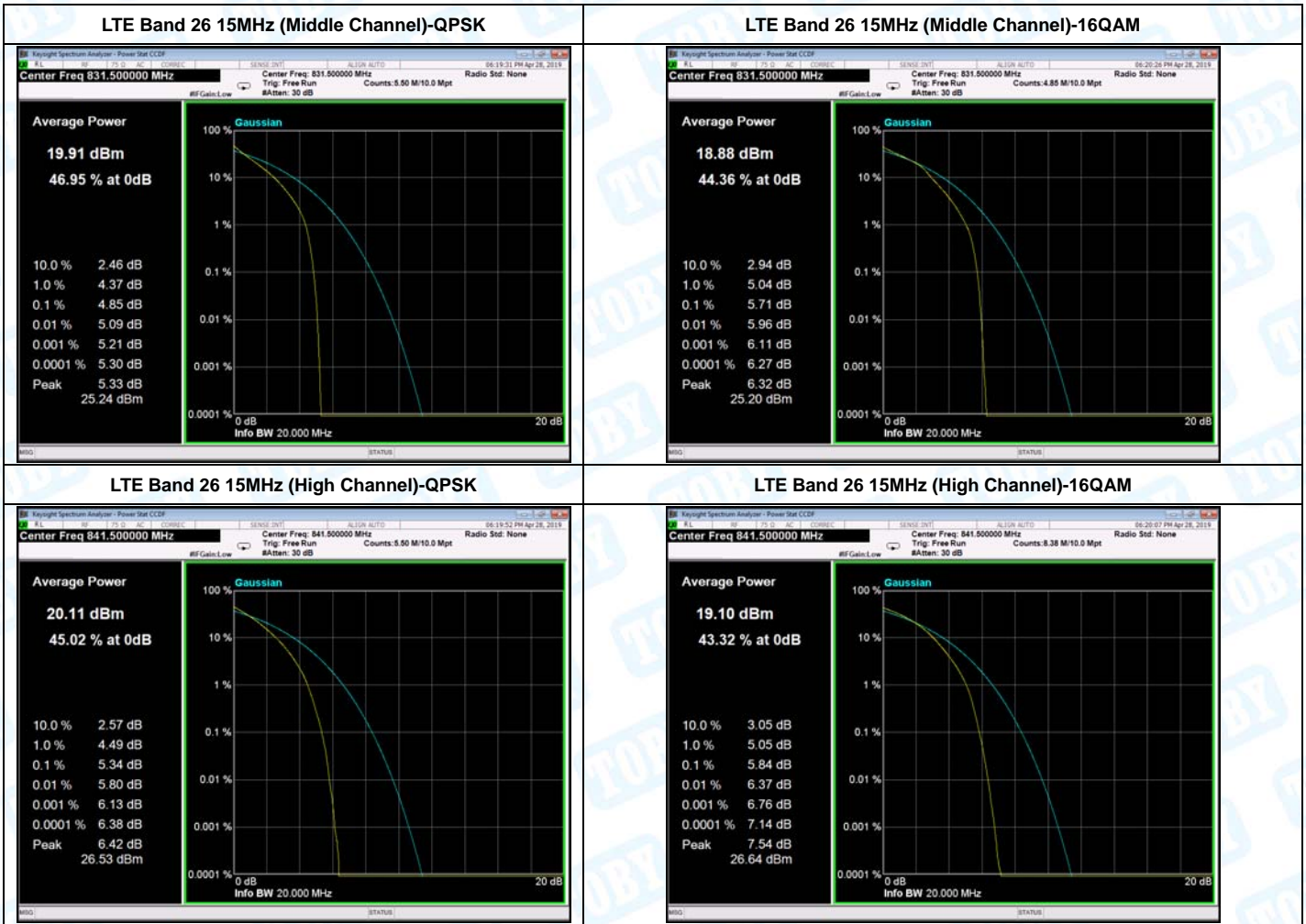


LTE Band 26 15MHz (Low Channel)-QPSK



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





ATTACHMENT C--OCCUPY BANDWIDTH

LTE Band 2					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	18607	1850.70	QPSK	1.0946	1.244
			16QAM	1.0899	1.241
	18900	1880.00	QPSK	1.0941	1.231
			16QAM	1.0822	1.238
	19193	1909.30	QPSK	1.0710	1.224
			16QAM	1.0885	1.248
3MHz	18615	1851.50	QPSK	2.6865	2.951
			16QAM	2.6865	2.951
	18900	1880.00	QPSK	2.6789	2.972
			16QAM	2.6721	2.876
	19185	1908.50	QPSK	2.6823	2.936
			16QAM	2.6809	2.938
5MHz	18625	1852.50	QPSK	4.4880	4.930
			16QAM	4.5203	5.003
	18900	1880.00	QPSK	4.4855	4.985
			16QAM	4.4988	4.930
	19175	1907.50	QPSK	4.5084	4.976
			16QAM	4.5207	5.004
10MHz	18650	1855.00	QPSK	8.9448	9.663
			16QAM	8.9253	9.557
	18900	1880.00	QPSK	8.9620	9.702
			16QAM	8.9239	9.686
	19150	1905.00	QPSK	8.9258	9.595
			16QAM	8.9334	9.584
15MHz	18675	1857.50	QPSK	13.4708	14.704
			16QAM	13.4678	14.726
	18900	1880.00	QPSK	13.4498	14.753
			16QAM	13.4649	14.703
	19125	1902.50	QPSK	13.4042	14.561
			16QAM	13.4573	14.860
20MHz	18700	1860.00	QPSK	17.8780	19.301
			16QAM	18.4824	21.297
	18900	1880.00	QPSK	17.8324	19.053
			16QAM	18.5839	21.473
	19100	1900.00	QPSK	17.7817	19.134
			16QAM	17.7676	19.213

LTE Band 4					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	19957	1710.70	QPSK	1.1026	1.257
			16QAM	1.0931	1.239
	20175	1732.50	QPSK	1.0881	1.242
			16QAM	1.0927	1.243
	20393	1754.30	QPSK	1.0882	1.241
			16QAM	1.0886	1.230
3MHz	19965	1711.50	QPSK	2.6866	2.917
			16QAM	2.6658	2.938
	20175	1732.50	QPSK	2.6933	2.947
			16QAM	2.6838	2.938
	20385	1753.50	QPSK	2.6867	2.935
			16QAM	2.6757	2.922
5MHz	19975	1712.50	QPSK	4.5158	5.004
			16QAM	4.4933	4.942
	20175	1732.50	QPSK	4.5121	5.013
			16QAM	4.5094	4.999
	20375	1752.50	QPSK	4.4928	4.946
			16QAM	4.5104	4.979
10MHz	20000	1715.00	QPSK	8.9458	9.648
			16QAM	8.9368	9.607
	20175	1732.50	QPSK	8.9325	9.665
			16QAM	8.9302	9.626
	20350	1750.00	QPSK	8.9055	9.558
			16QAM	8.9198	9.615
15MHz	20025	1717.50	QPSK	13.4365	14.691
			16QAM	13.4506	14.601
	20175	1732.50	QPSK	13.4610	14.741
			16QAM	13.4785	14.704
	20325	1747.50	QPSK	13.4983	14.723
			16QAM	13.4397	14.744
20MHz	20050	1720.00	QPSK	17.9442	19.461
			16QAM	17.9082	19.221
	20175	1732.50	QPSK	17.8876	19.660
			16QAM	17.8879	19.455
	20300	1745.00	QPSK	17.8467	19.231
			16QAM	17.8358	19.155

LTE Band 5					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	20407	824.70	QPSK	1.0869	1.238
			16QAM	1.0957	1.250
	20525	836.50	QPSK	1.0857	1.224
			16QAM	1.0948	1.247
	20643	848.30	QPSK	1.0921	1.236
			16QAM	1.0938	1.233
3MHz	20415	825.50	QPSK	2.6759	2.935
			16QAM	2.6777	2.942
	20525	836.50	QPSK	2.6787	2.926
			16QAM	2.6717	2.935
	20635	847.50	QPSK	2.6790	2.956
			16QAM	2.6797	2.899
5MHz	20425	826.50	QPSK	4.5090	4.968
			16QAM	4.4969	4.976
	20525	836.50	QPSK	4.5008	4.978
			16QAM	4.5060	4.902
	20625	846.50	QPSK	4.5007	4.998
			16QAM	4.4853	4.928
10MHz	20450	829.00	QPSK	8.9440	9.671
			16QAM	8.9258	9.679
	20525	836.50	QPSK	8.9301	9.567
			16QAM	8.9460	9.657
	20600	844.00	QPSK	8.9469	9.602
			16QAM	8.9265	9.558

LTE Band 7					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
5MHz	20775	2502.50	QPSK	4.5097	4.999
			16QAM	4.4996	4.894
	21100	2535.00	QPSK	4.4959	4.975
			16QAM	4.5036	5.007
	21425	2567.50	QPSK	4.4966	4.978
			16QAM	4.5103	4.999
10MHz	20800	2505.00	QPSK	8.9360	9.755
			16QAM	8.9227	9.589
	21100	2535.00	QPSK	8.9587	9.614
			16QAM	8.9539	9.692
	21400	2565.00	QPSK	8.9444	9.586
			16QAM	8.9381	9.623
15MHz	20825	2507.50	QPSK	13.4893	14.732
			16QAM	13.4232	14.794
	21100	2535.00	QPSK	13.4604	14.724
			16QAM	13.4630	14.793
	21375	2562.50	QPSK	13.4661	14.782
			16QAM	13.4476	14.590
20MHz	20850	2510.00	QPSK	17.9171	19.283
			16QAM	17.9644	19.407
	21100	2535.00	QPSK	17.8812	19.217
			16QAM	17.9195	19.394
	21350	2560.00	QPSK	17.8657	19.444
			16QAM	17.9036	19.021

LTE Band 12					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	23017	699.70	QPSK	1.0869	1.223
			16QAM	1.0925	1.226
	23095	707.50	QPSK	1.0907	1.249
			16QAM	1.1004	1.244
	23173	715.30	QPSK	1.0919	1.254
			16QAM	1.0893	1.242
3MHz	23025	700.50	QPSK	2.6696	2.904
			16QAM	2.6880	2.926
	23095	707.50	QPSK	2.6861	2.942
			16QAM	2.6800	2.937
	23165	714.50	QPSK	2.6822	2.944
			16QAM	2.6767	2.933
5MHz	23035	701.50	QPSK	4.5065	4.985
			16QAM	4.4812	4.913
	23095	707.50	QPSK	4.5183	4.977
			16QAM	4.5082	4.909
	23155	713.50	QPSK	4.4967	4.992
			16QAM	4.5092	5.034
10MHz	23060	704.00	QPSK	8.9123	9.445
			16QAM	8.9083	9.609
	23095	707.50	QPSK	8.9504	9.719
			16QAM	8.9267	9.534
	23130	711.00	QPSK	8.9247	9.494
			16QAM	8.9365	9.608

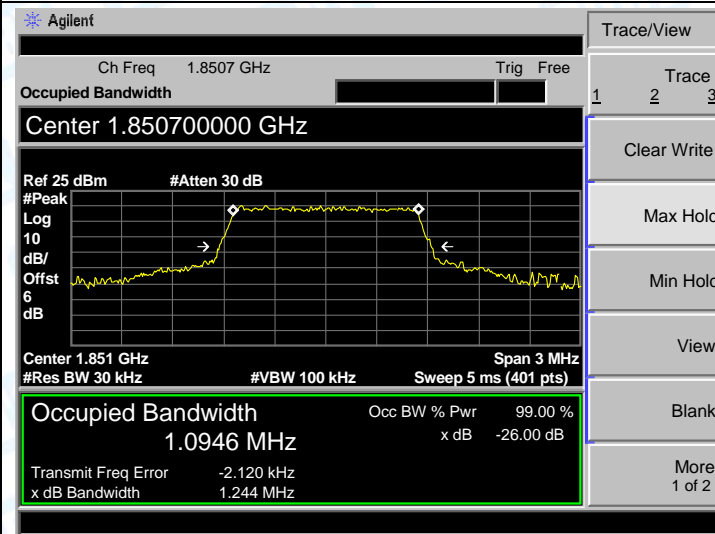
LTE Band 13					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
5MHz	23205	779.5	QPSK	4.5005	4.978
			16QAM	4.4975	4.937
	23230	782.0	QPSK	4.5086	5.003
			16QAM	4.5020	4.989
	23255	784.5	QPSK	4.5219	5.007
			16QAM	4.5250	4.999
10MHz	---	----	----	----	----
			----	----	----
	23230	782.0	QPSK	8.9500	10.151
			16QAM	8.8994	10.133
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LTE Band 25					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	26047	1850.70	QPSK	1.0946	1.245
			16QAM	1.0986	1.256
	26365	1882.50	QPSK	1.0948	1.257
			16QAM	1.0938	1.231
	26683	1914.30	QPSK	1.0904	1.232
			16QAM	1.0906	1.248
3MHz	26055	1851.50	QPSK	2.6762	2.969
			16QAM	2.6794	2.945
	26365	1882.50	QPSK	2.6699	2.928
			16QAM	2.6791	2.886
	26675	1913.50	QPSK	2.6756	2.957
			16QAM	2.6690	2.917
5MHz	26065	1852.50	QPSK	4.5144	4.995
			16QAM	4.5050	4.956
	26365	1882.50	QPSK	4.5057	5.004
			16QAM	4.5164	4.977
	26665	1912.50	QPSK	4.5164	4.996
			16QAM	4.5164	4.996
10MHz	26090	1855.00	QPSK	8.9253	9.577
			16QAM	8.9242	9.516
	26365	1882.50	QPSK	8.9322	9.581
			16QAM	8.9335	9.548
	26640	1910.00	QPSK	8.9566	9.681
			16QAM	8.9242	9.697
15MHz	26115	1857.50	QPSK	13.4960	14.701
			16QAM	13.5099	14.803
	26365	1882.50	QPSK	13.5071	14.828
			16QAM	13.4762	14.711
	26615	1917.50	QPSK	13.4444	14.730
			16QAM	13.5135	14.772
20MHz	26140	1860.00	QPSK	17.9295	19.364
			16QAM	17.8674	19.477
	26365	1882.50	QPSK	17.9455	19.275
			16QAM	17.9608	19.282
	26590	1915.00	QPSK	17.9263	19.292
			16QAM	17.8634	19.250

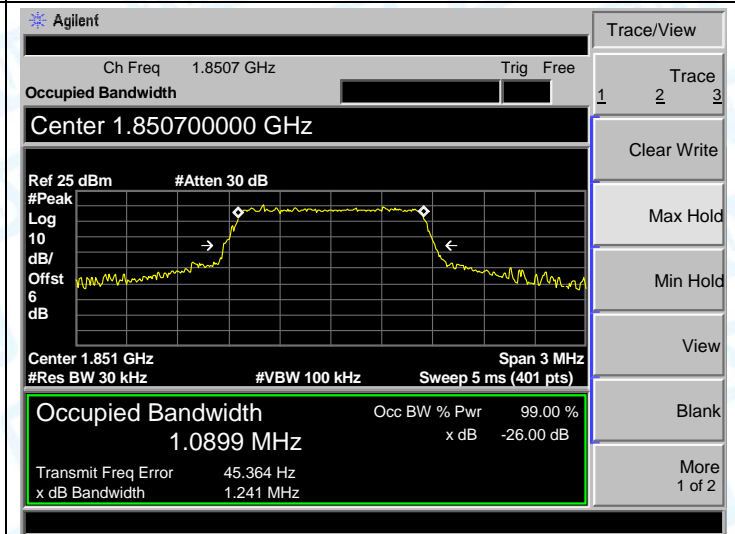
LTE Band 26					
Mode	Channel	Frequency (MHz)	Modulation	99% OBW (MHz)	-26dB Bandwidth (MHz)
1.4MHz	26997	814.70	QPSK	1.0844	1.226
			16QAM	1.0891	1.241
	26865	831.50	QPSK	1.0871	1.228
			16QAM	1.0931	1.240
	27033	848.30	QPSK	1.0943	1.223
			16QAM	1.0954	1.244
3MHz	26705	814.70	QPSK	2.6821	2.891
			16QAM	2.6810	2.935
	26865	831.50	QPSK	2.6665	2.896
			16QAM	2.6779	2.942
	27025	847.50	QPSK	2.6839	2.914
			16QAM	2.6782	2.898
5MHz	26715	814.70	QPSK	4.5055	5.009
			16QAM	4.4948	4.927
	26865	831.50	QPSK	4.5077	4.954
			16QAM	4.4956	4.990
	27015	846.50	QPSK	4.4968	4.950
			16QAM	4.5059	4.976
10MHz	26750	814.70	QPSK	8.9120	9.535
			16QAM	8.9461	9.683
	26865	831.50	QPSK	8.9568	9.568
			16QAM	8.9217	9.61
	26990	844.00	QPSK	8.9243	9.697
			16QAM	8.9248	9.525
15MHz	26775	814.70	QPSK	13.5092	14.724
			16QAM	13.5212	14.703
	26865	831.50	QPSK	13.4663	14.739
			16QAM	13.4672	14.681
	26965	841.50	QPSK	13.4902	14.738
			16QAM	13.4384	14.777

Occupancy Bandwidth Test Plot

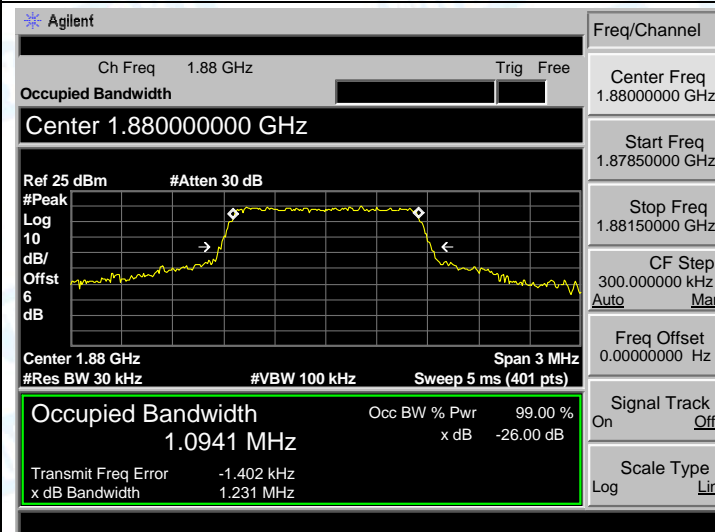
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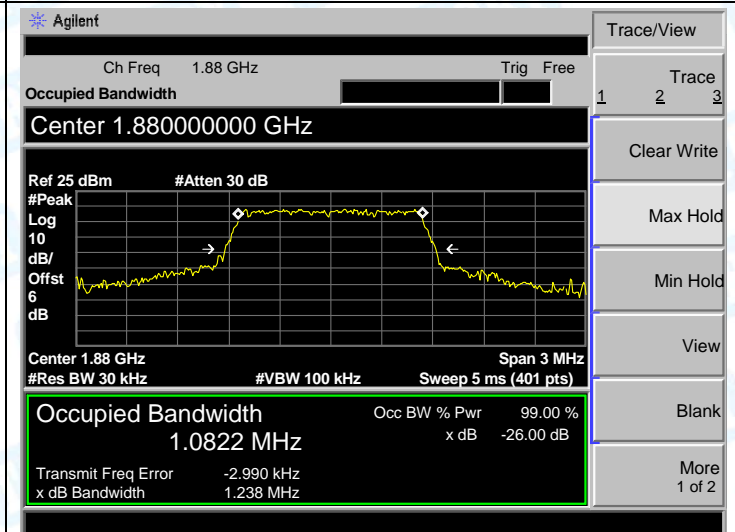
LTE BAND 2 (1.4MHz 16QAM-Low CH)



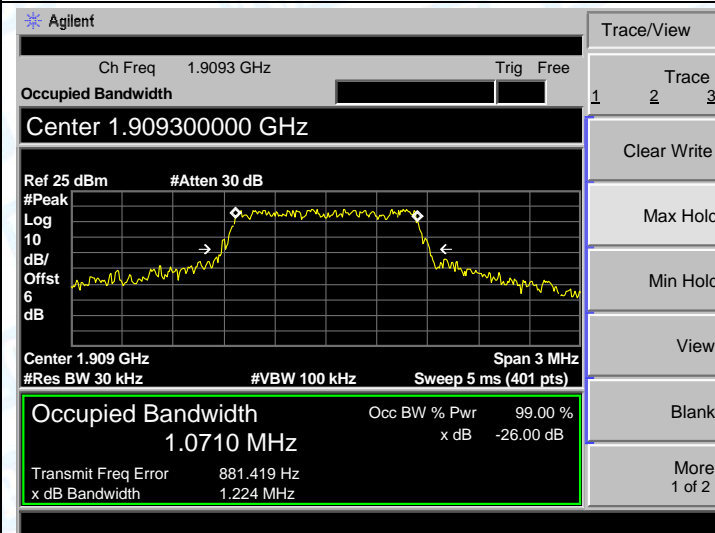
LTE BAND 2 (1.4MHz QPSK-Middle CH)



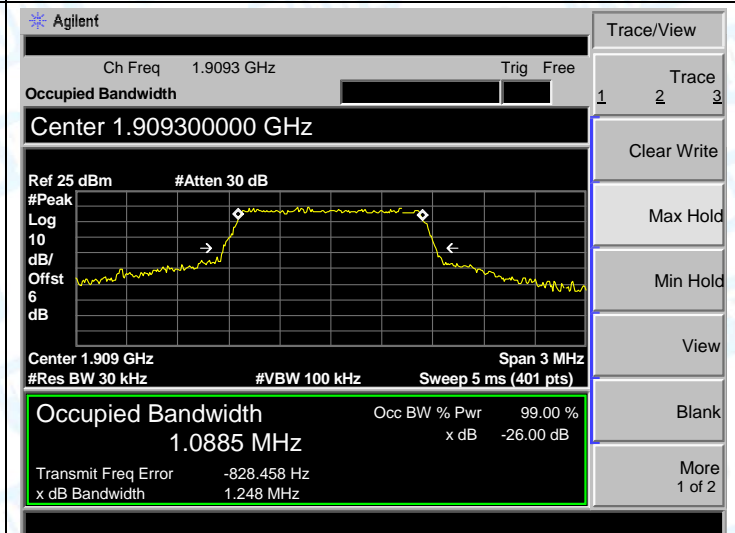
LTE BAND 2 (1.4MHz 16QAM- Middle CH)

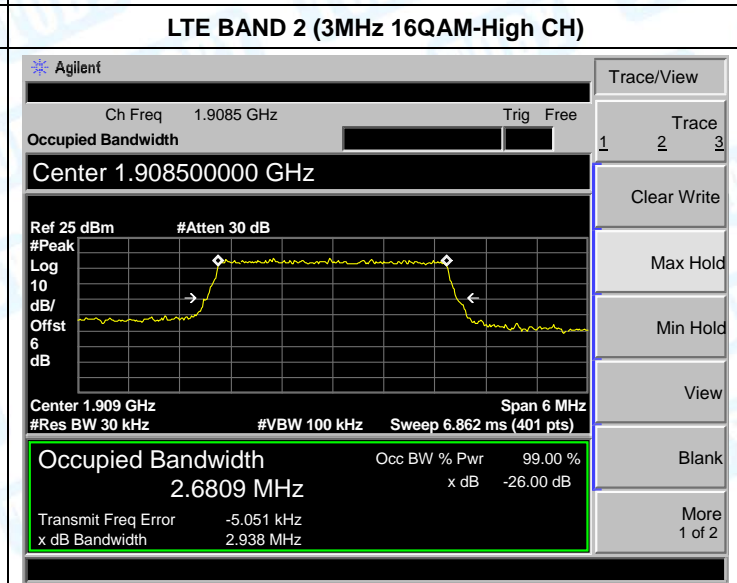
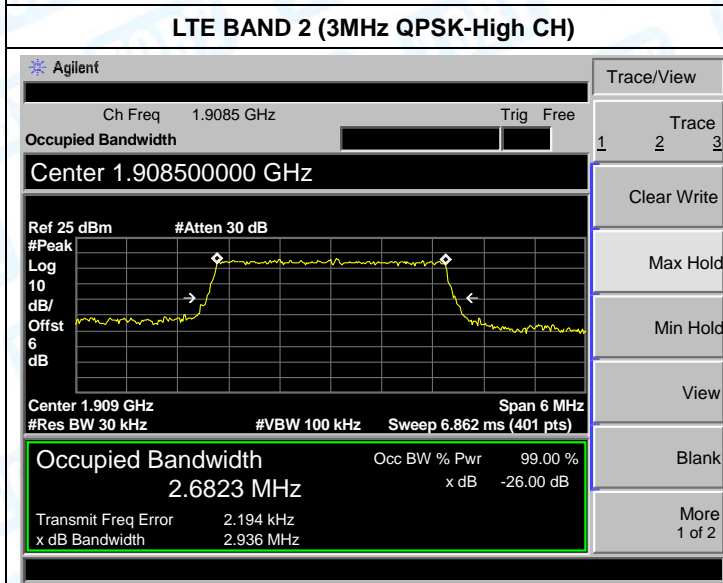
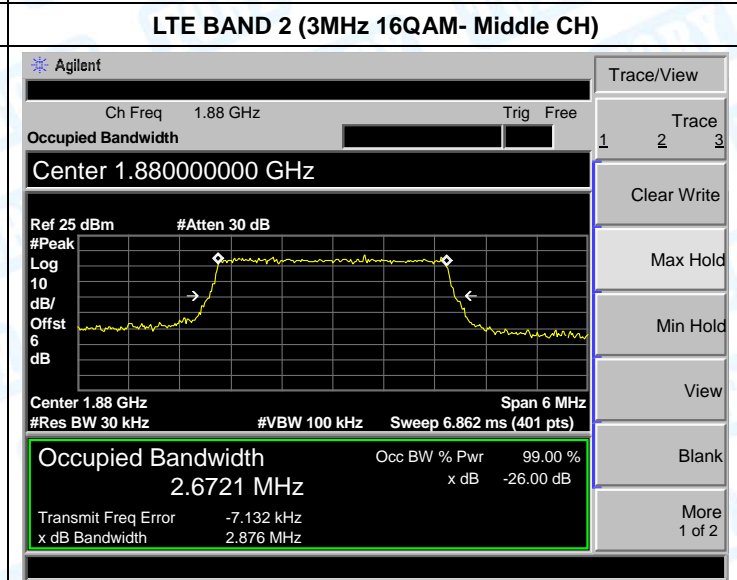
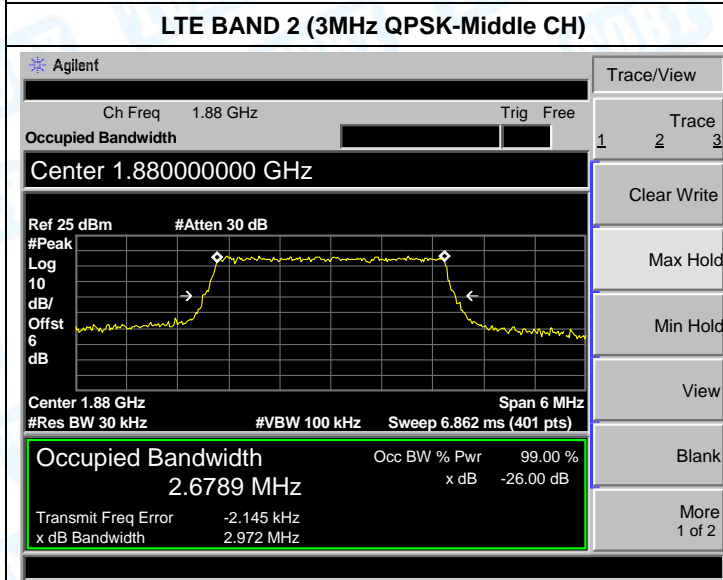
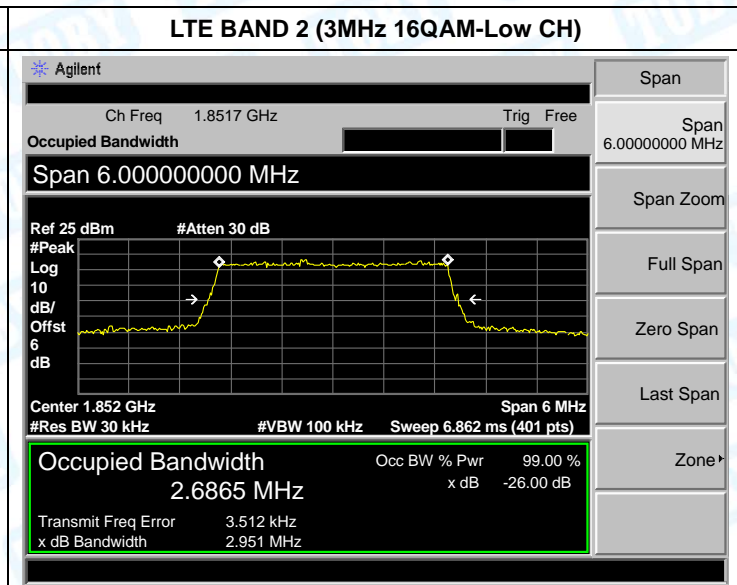
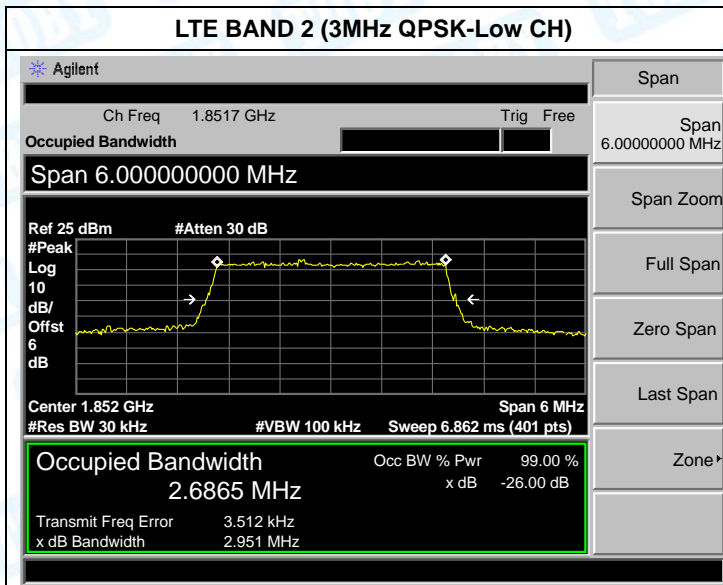


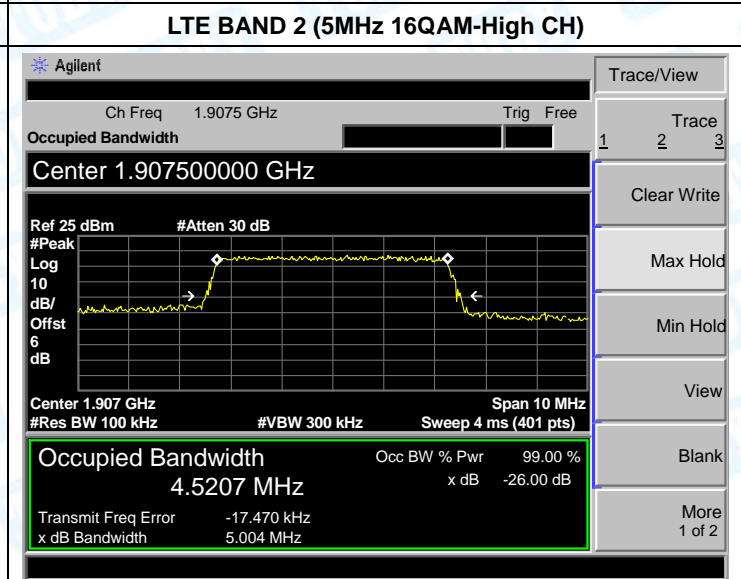
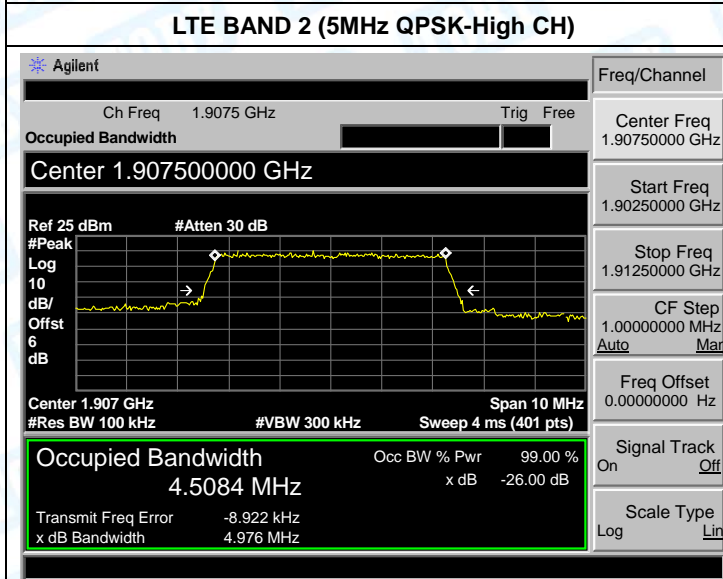
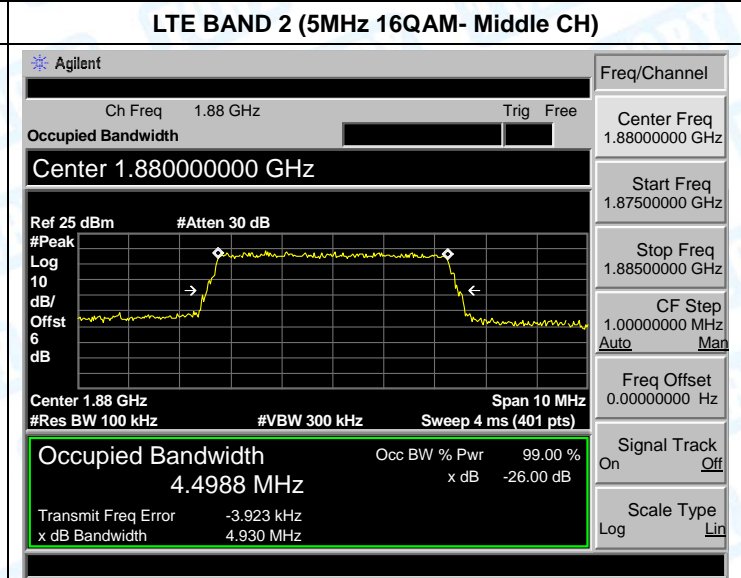
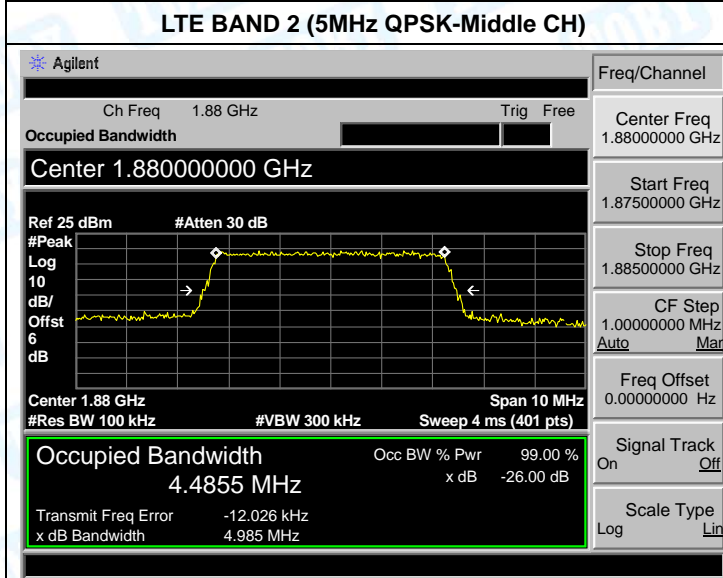
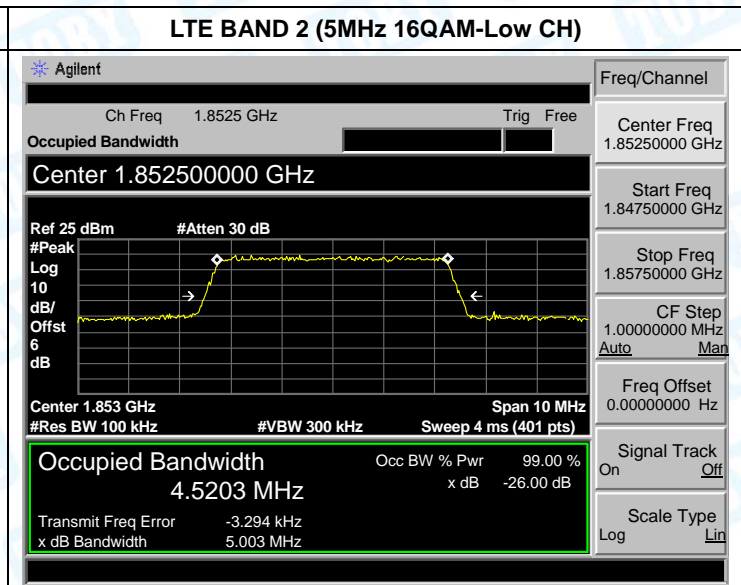
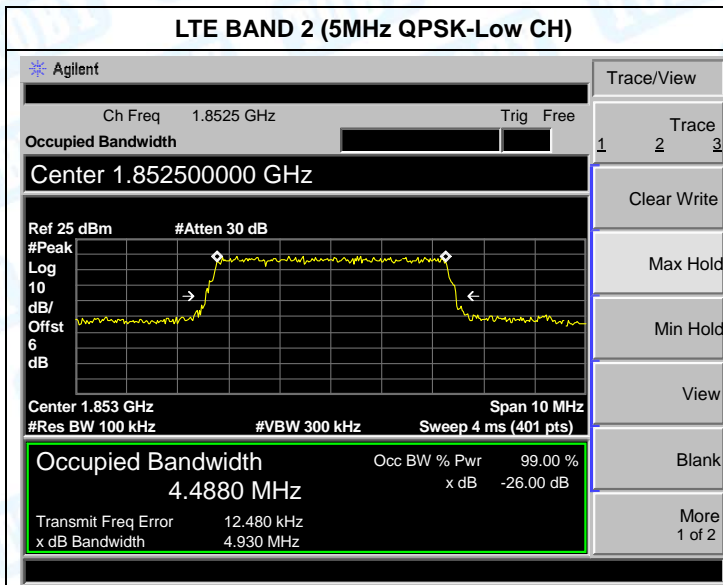
LTE BAND 2 (1.4MHz QPSK-High CH)

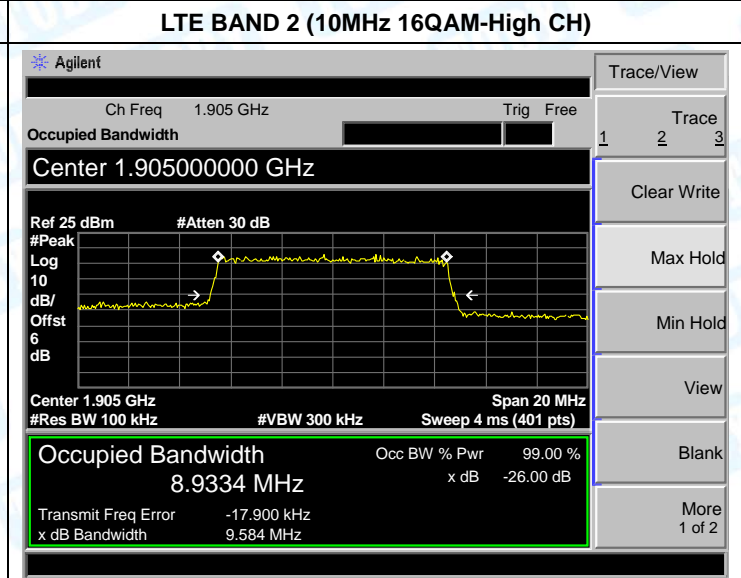
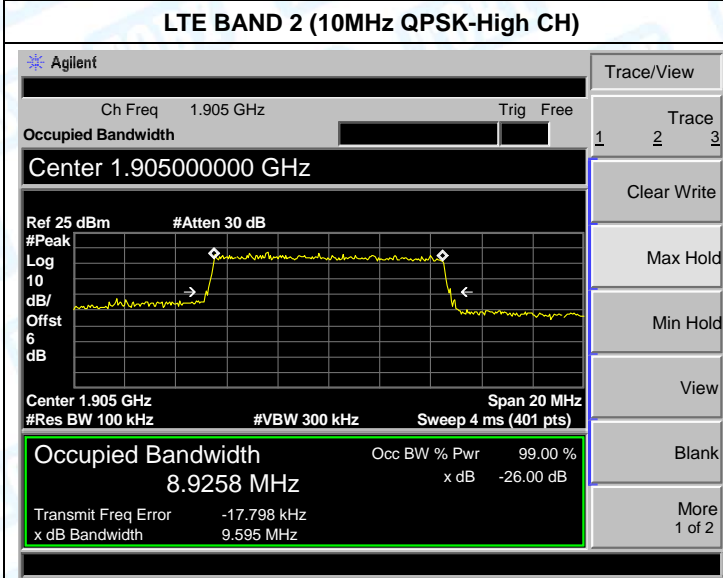
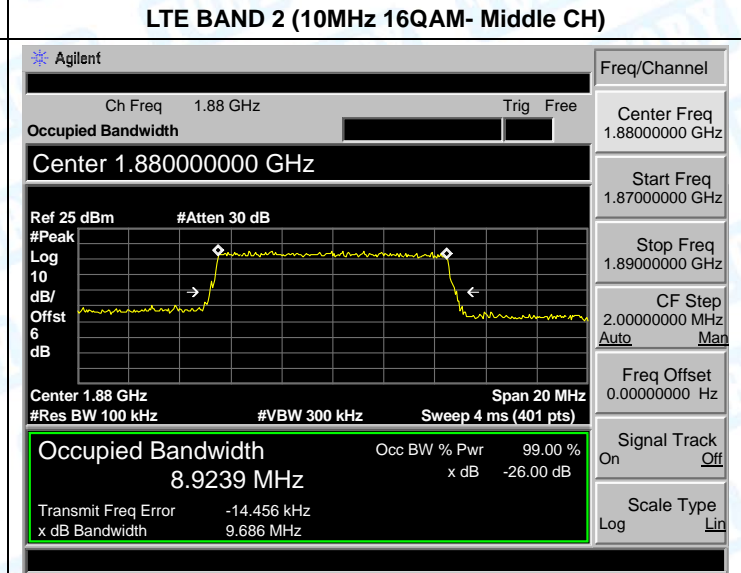
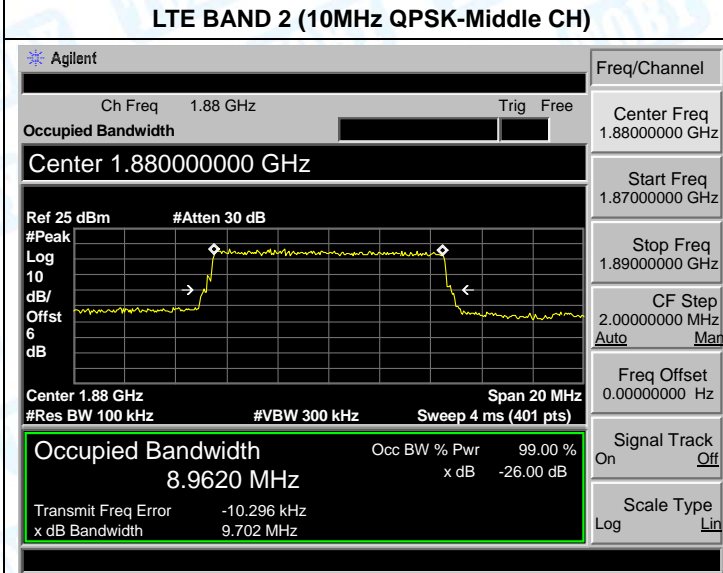
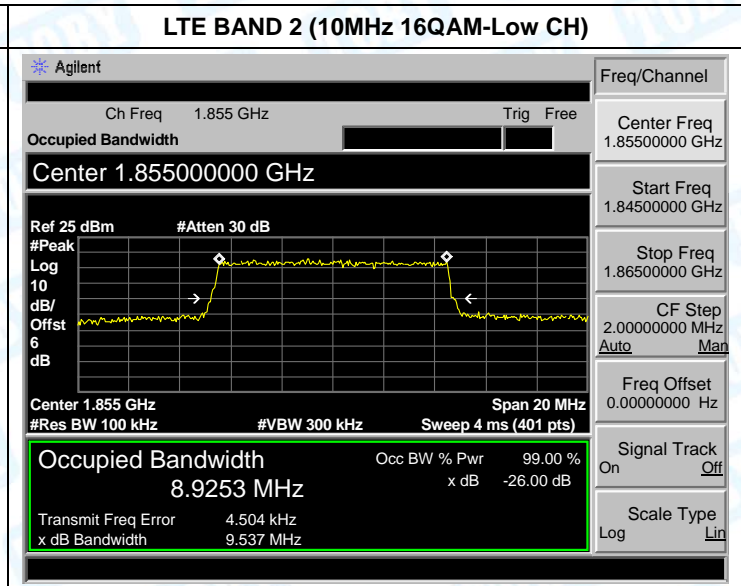
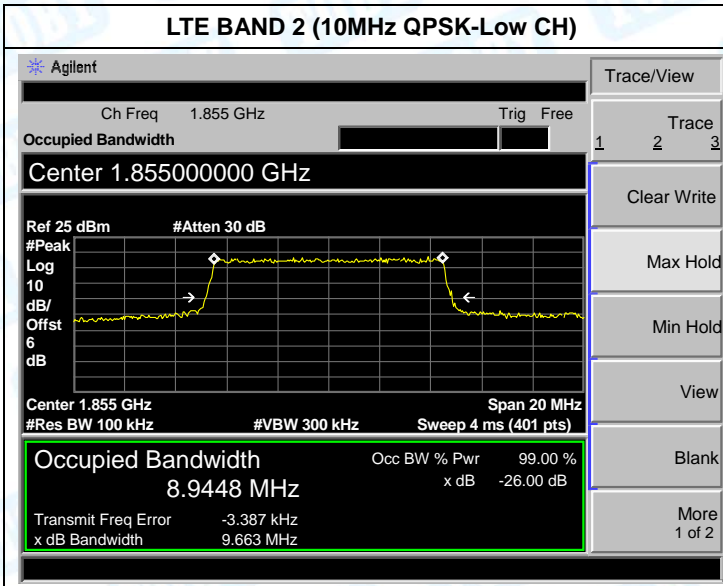


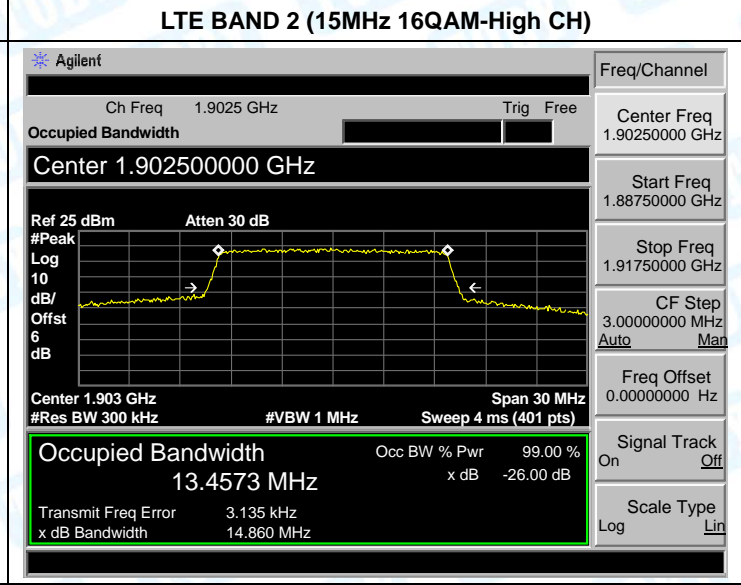
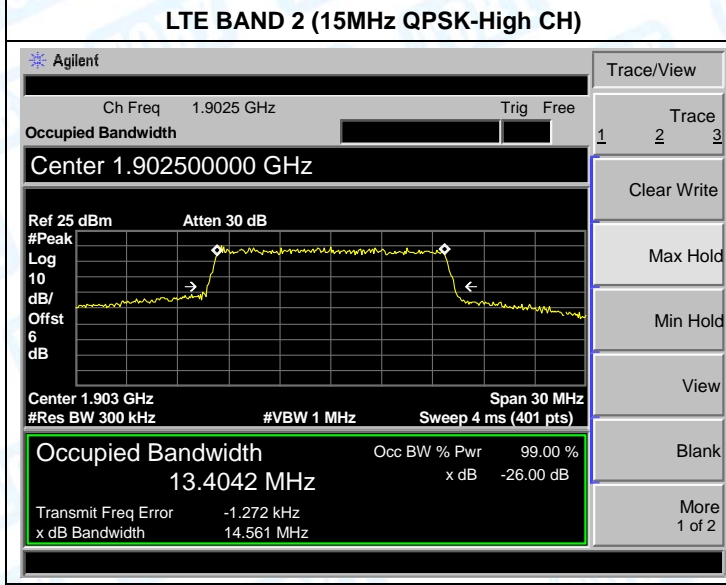
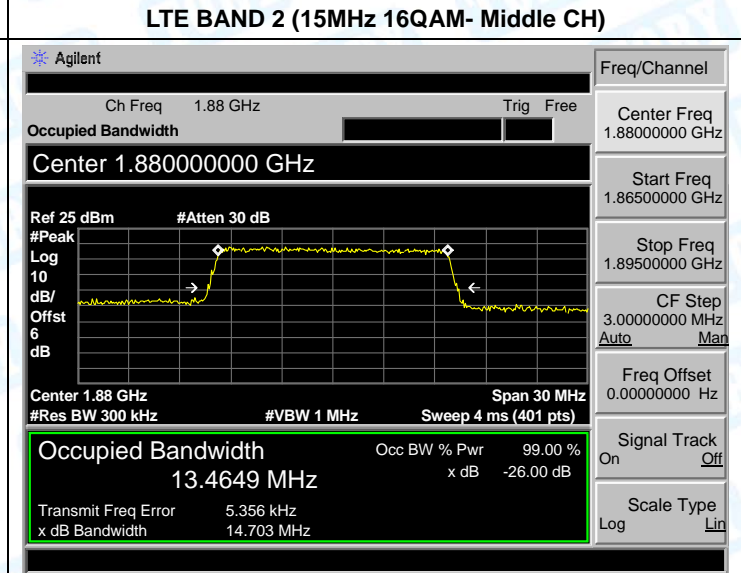
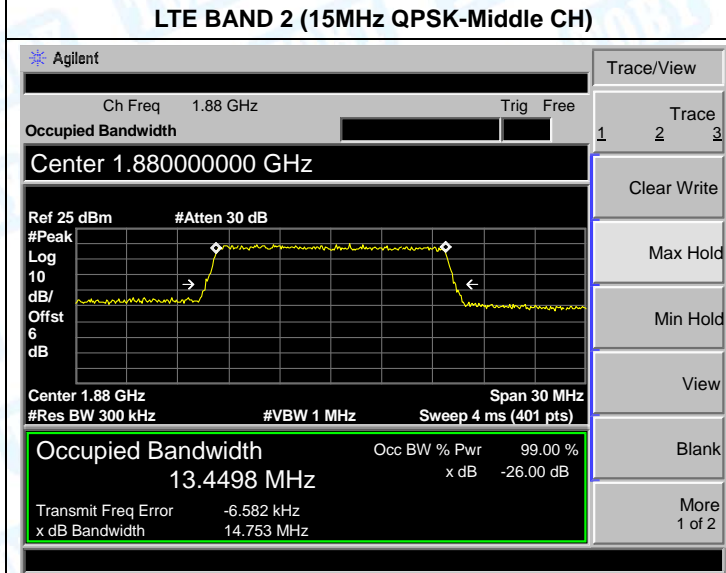
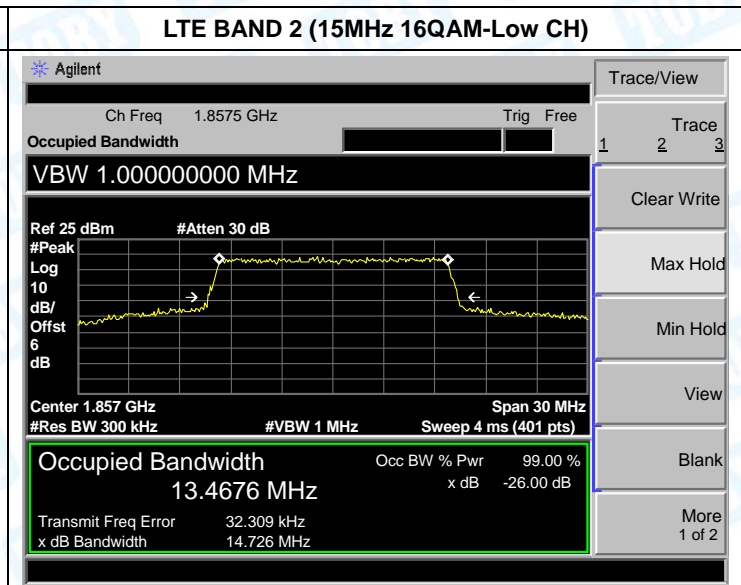
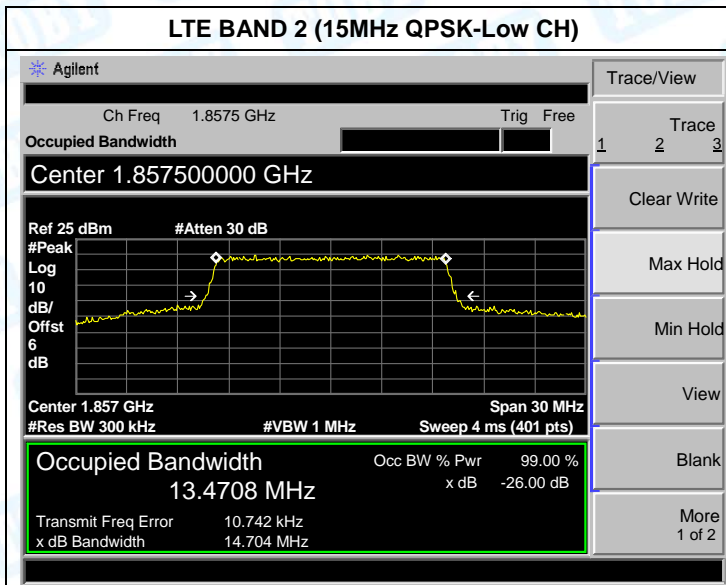
LTE BAND 2 (1.4MHz 16QAM-High CH)

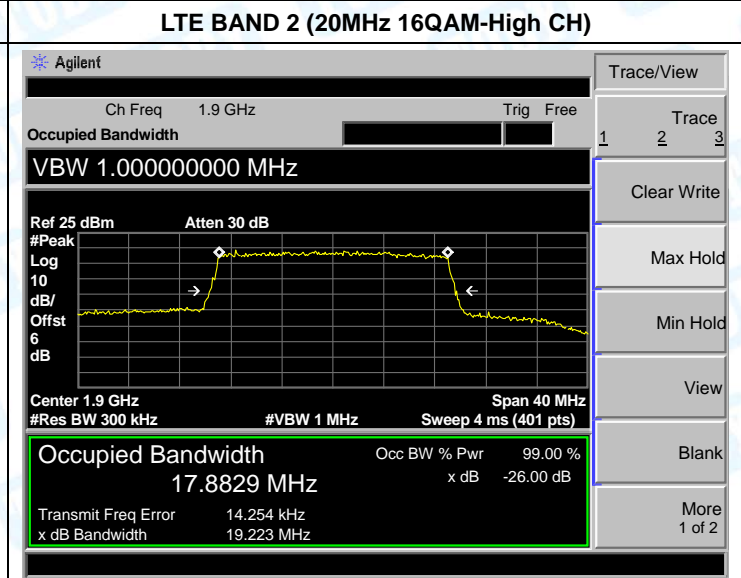
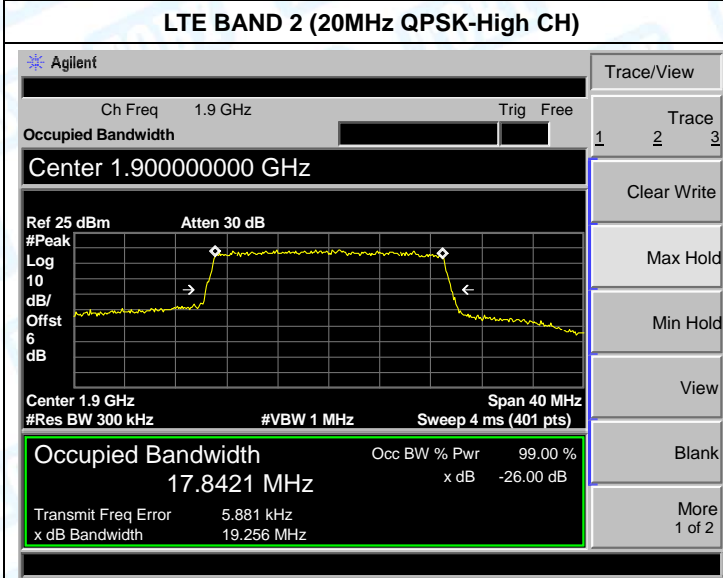
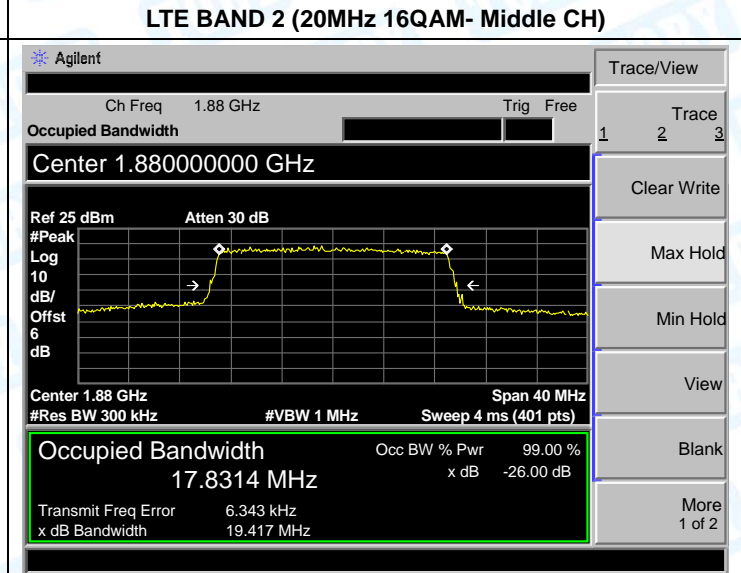
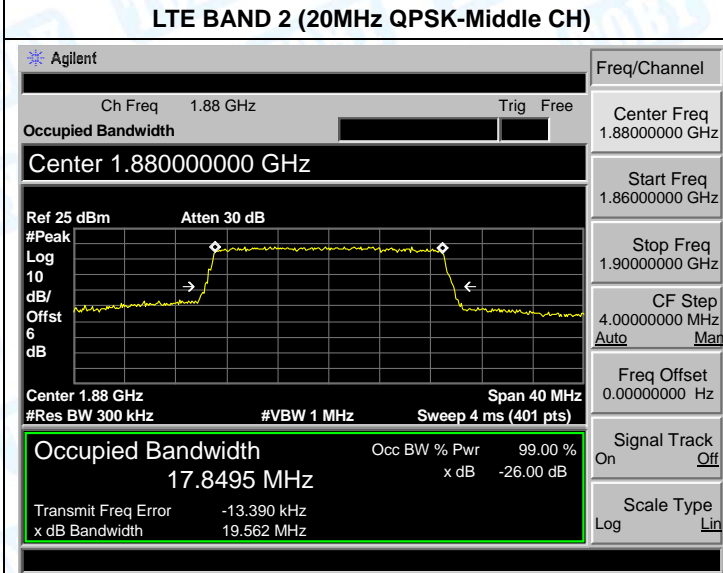
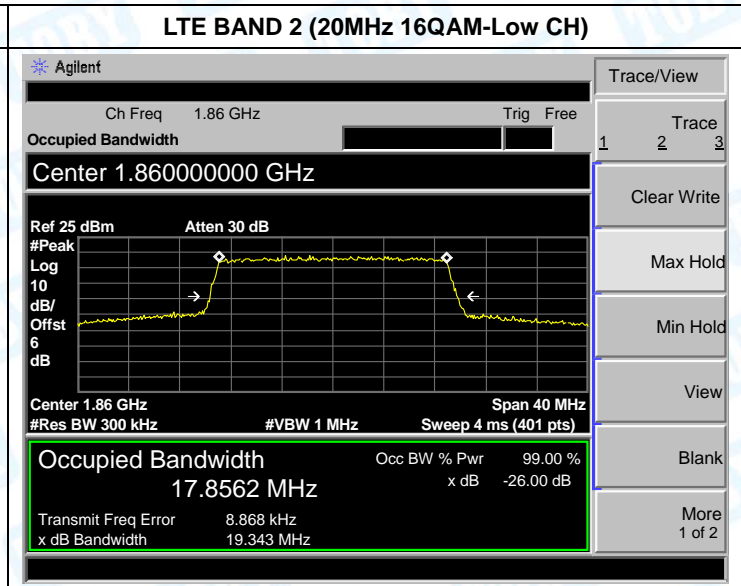
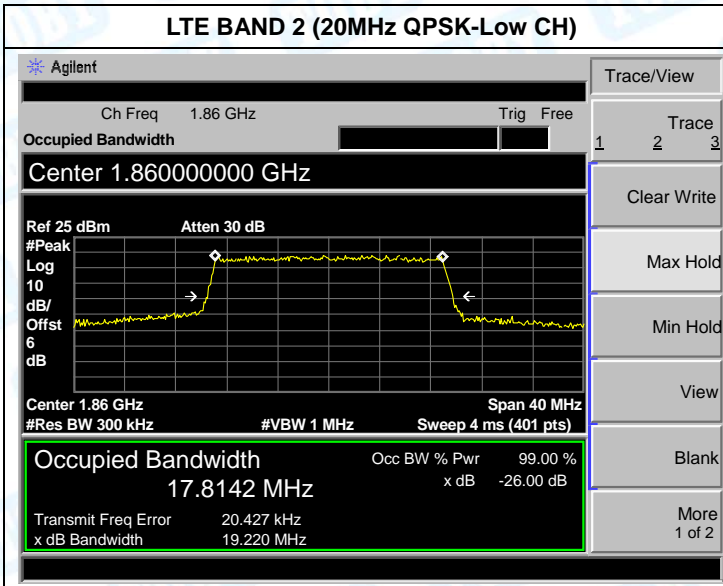




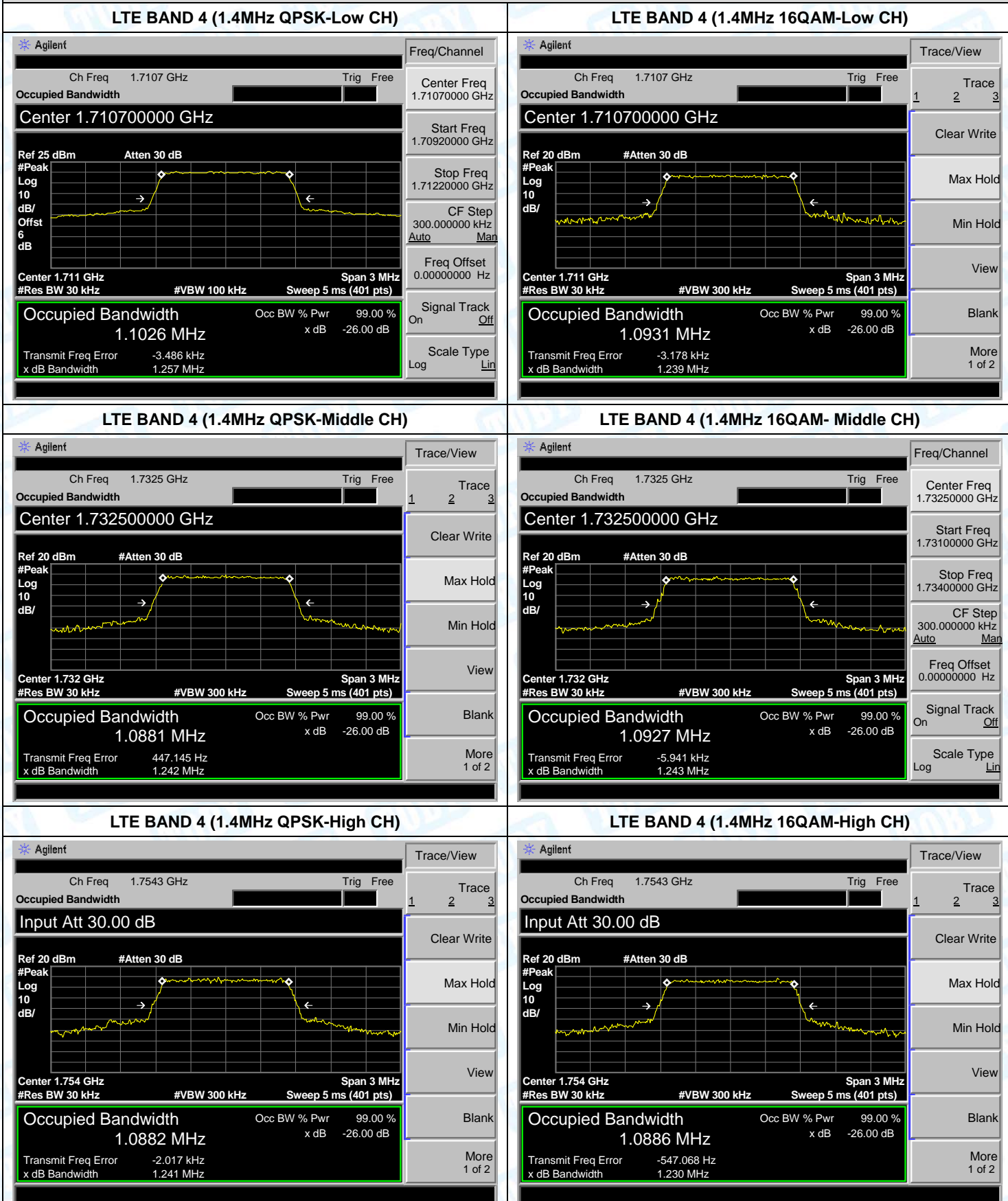


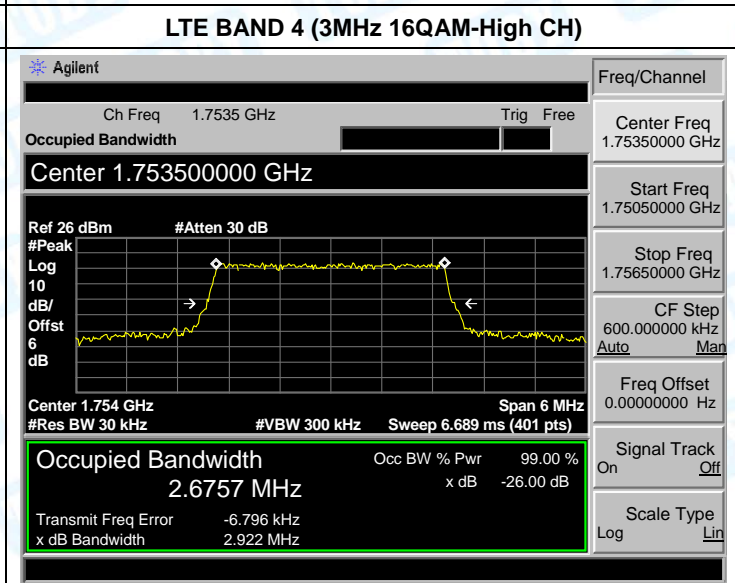
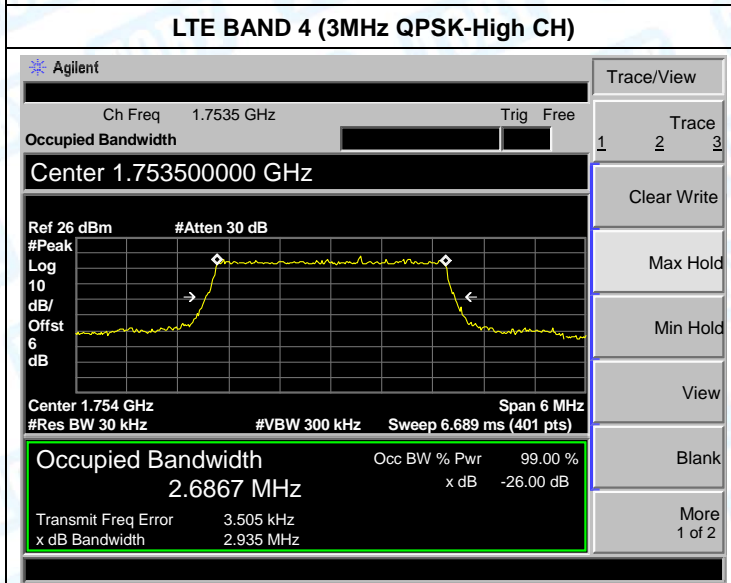
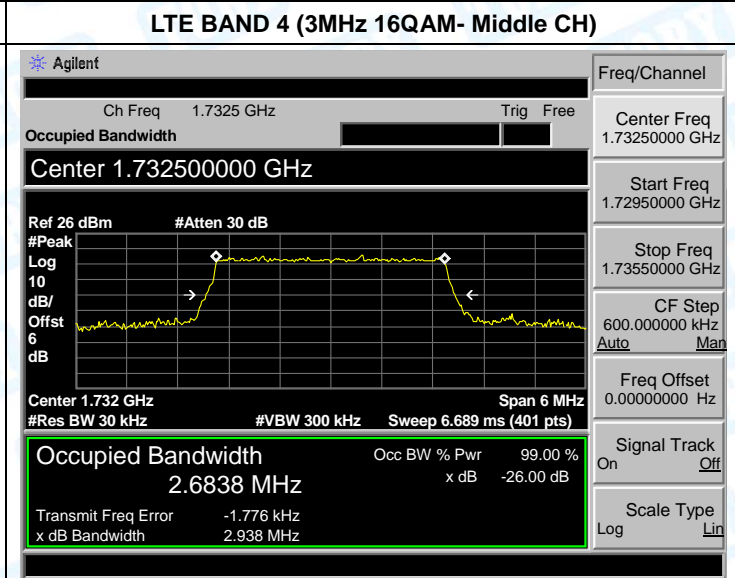
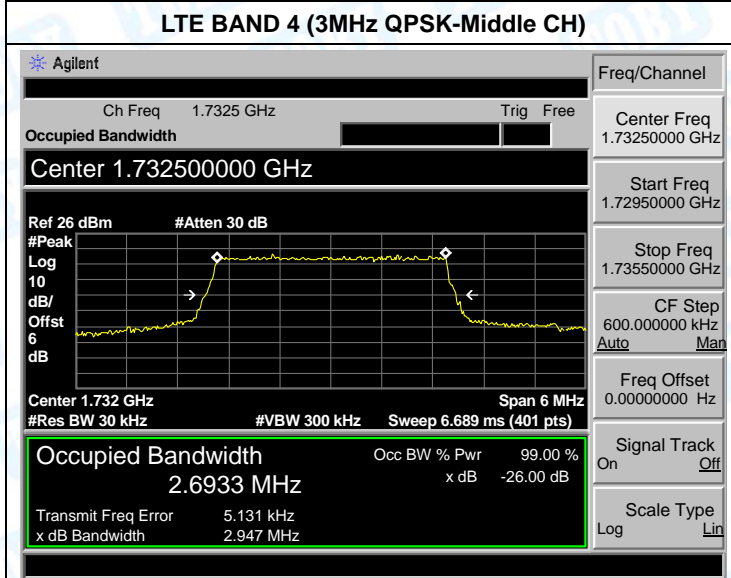
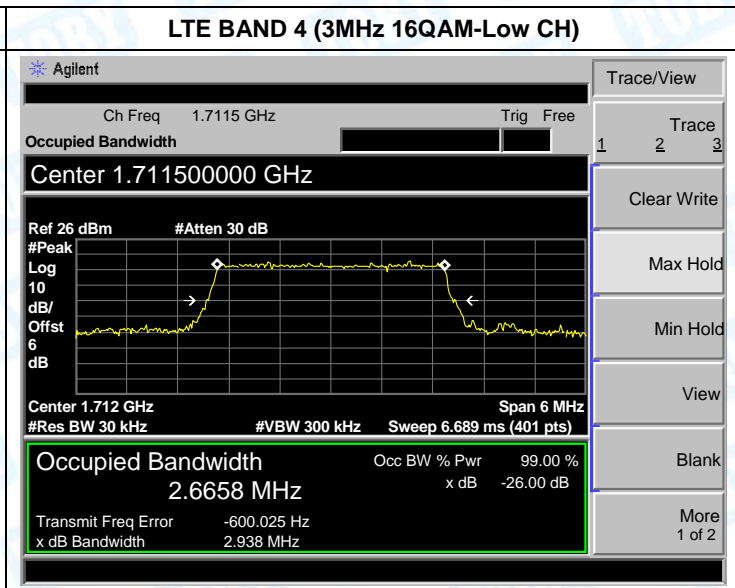
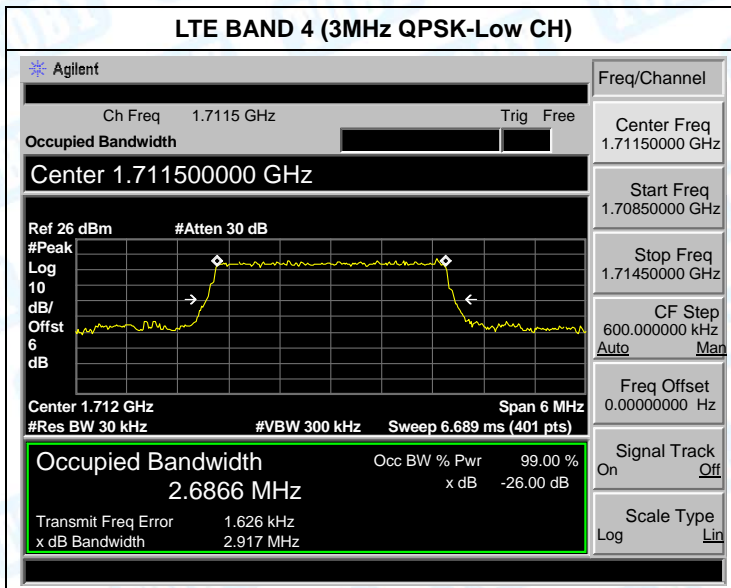


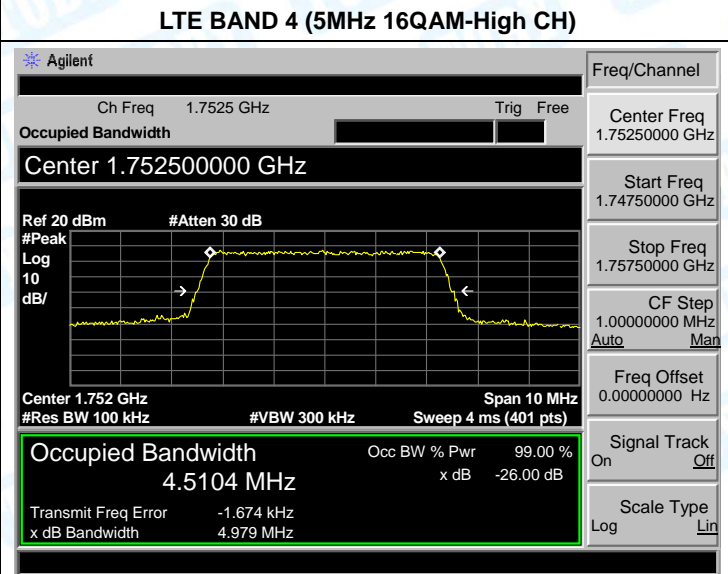
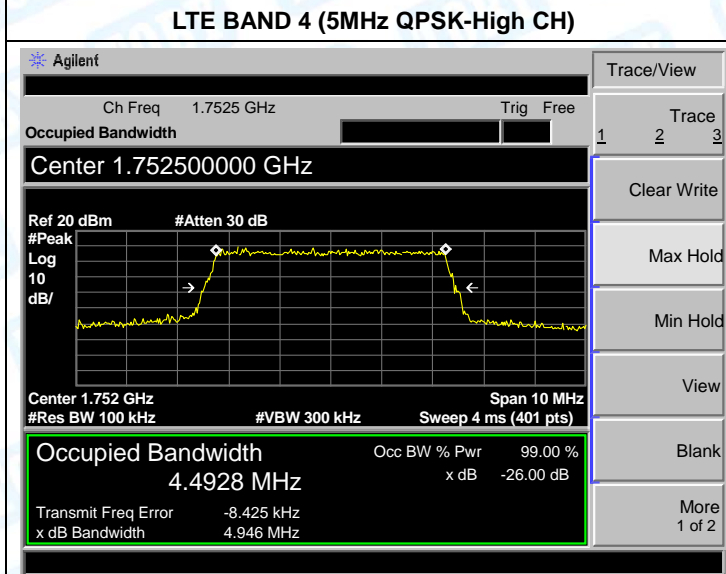
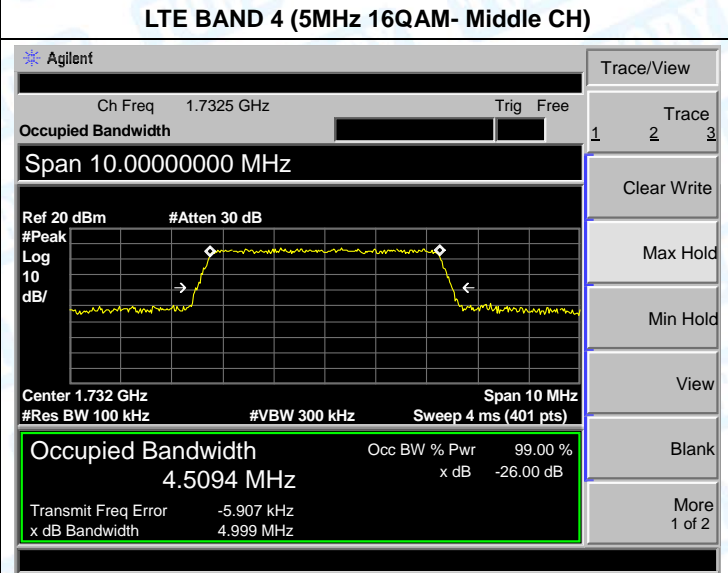
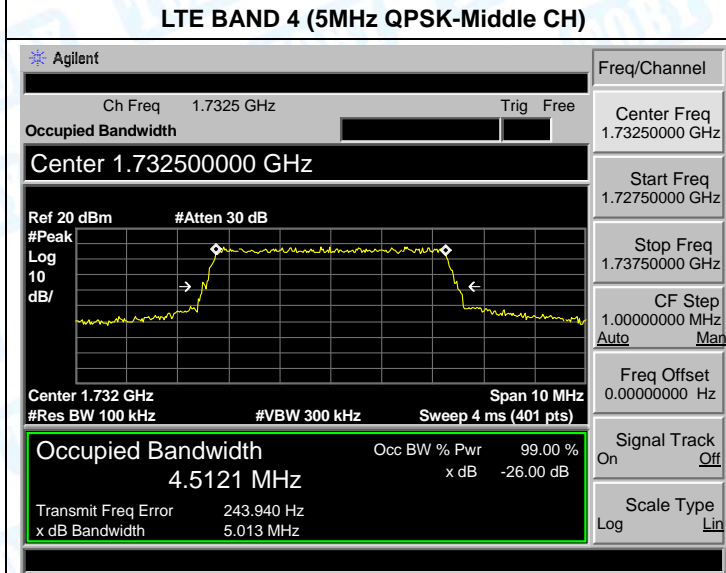
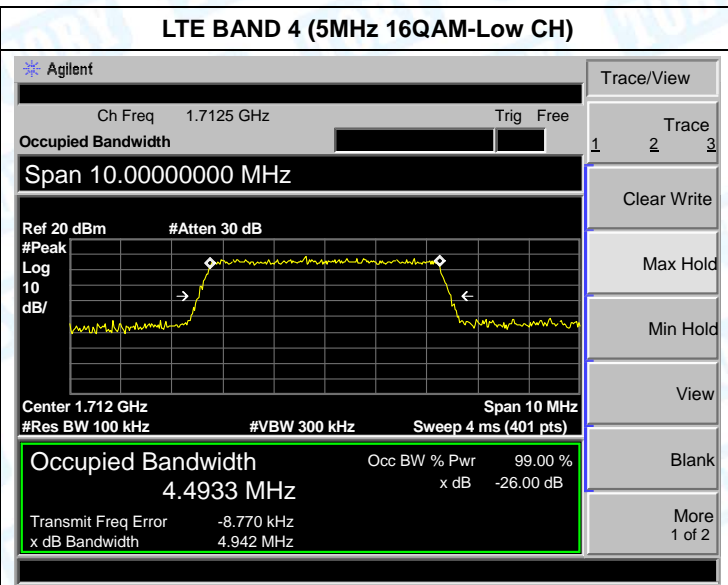
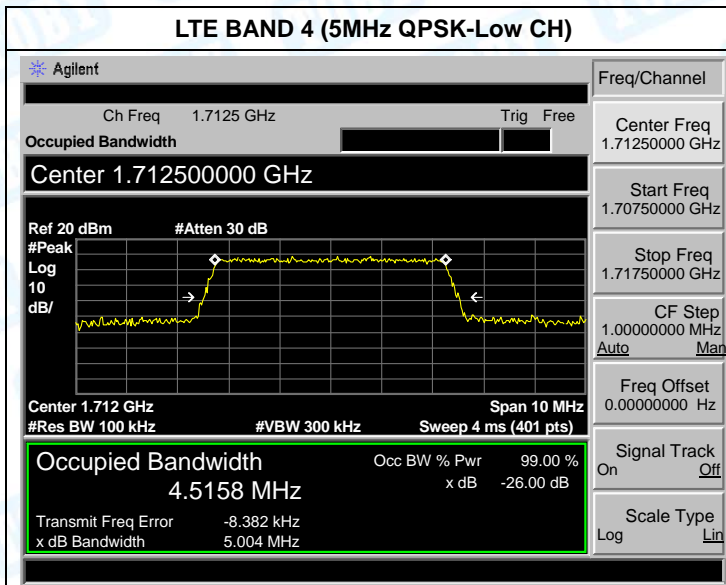


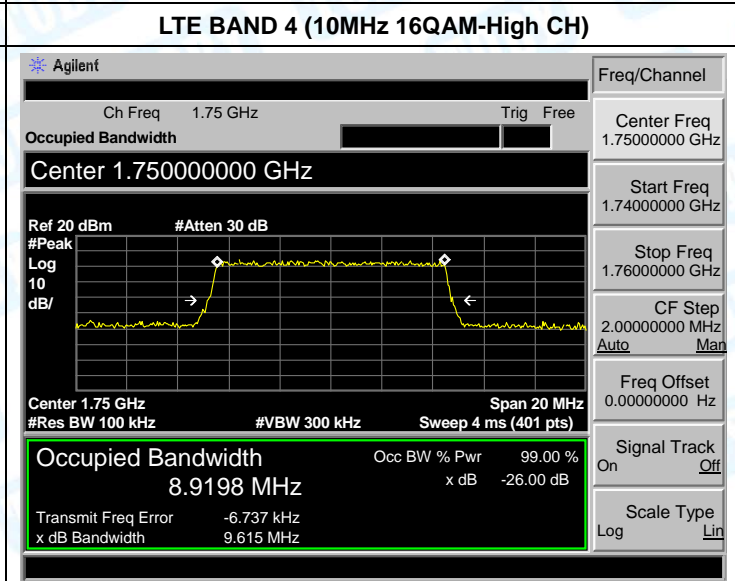
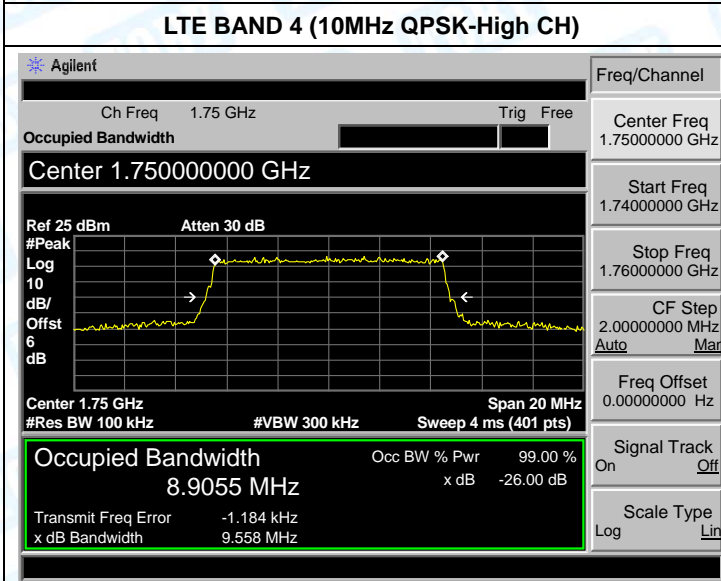
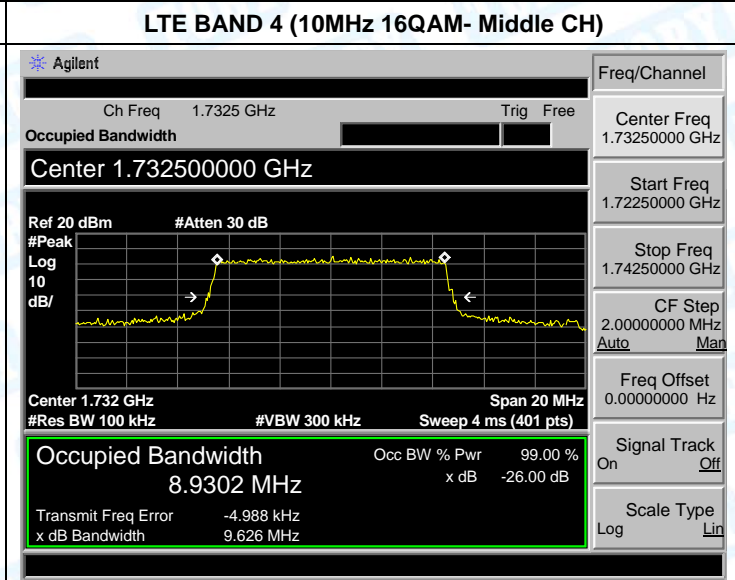
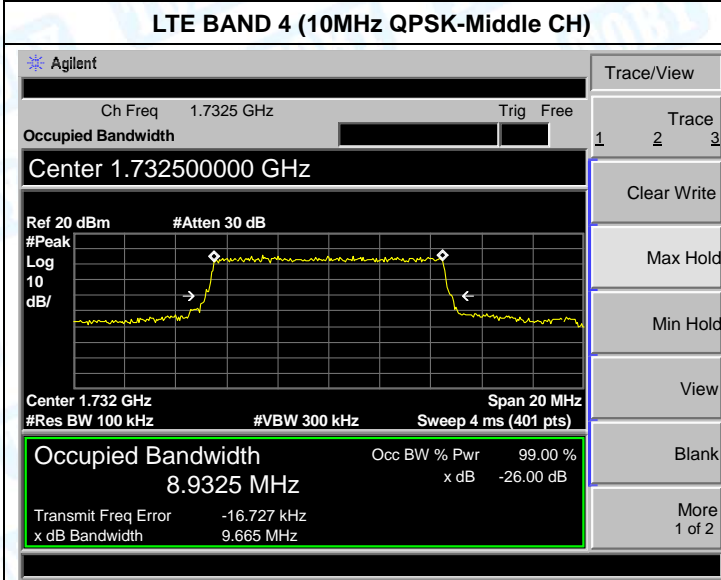
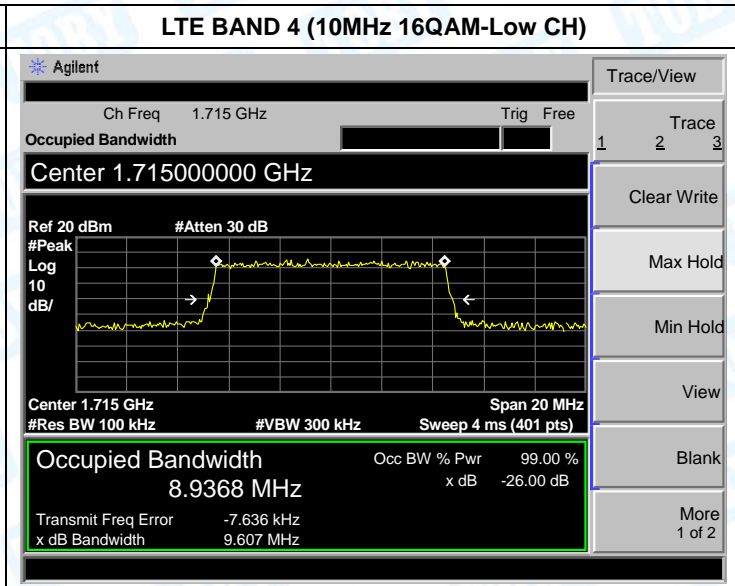
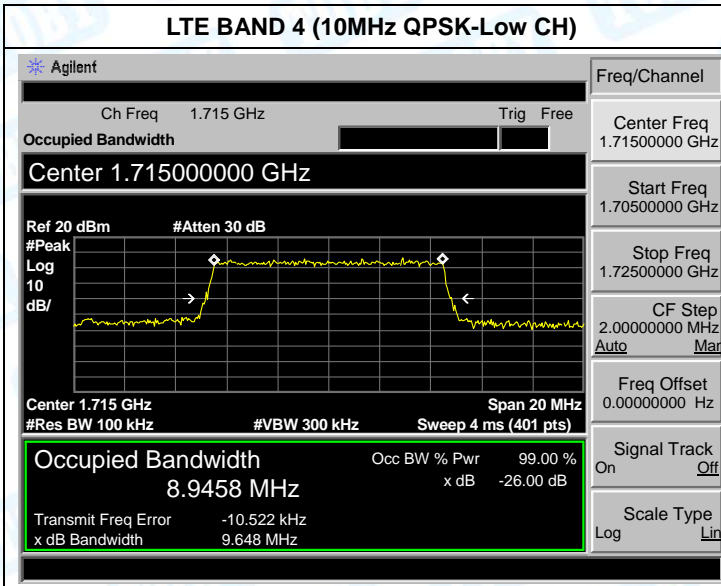


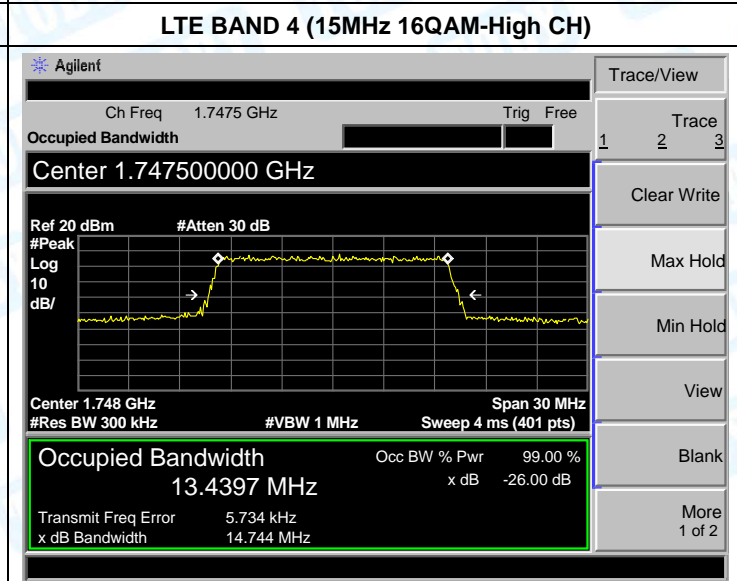
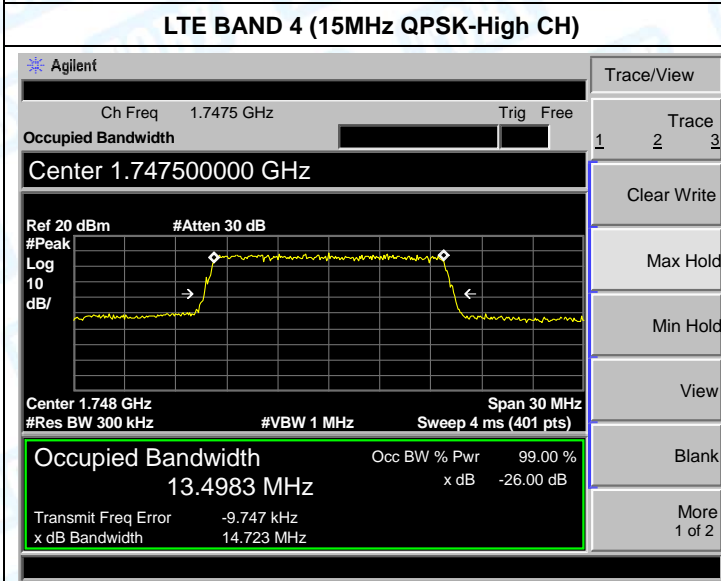
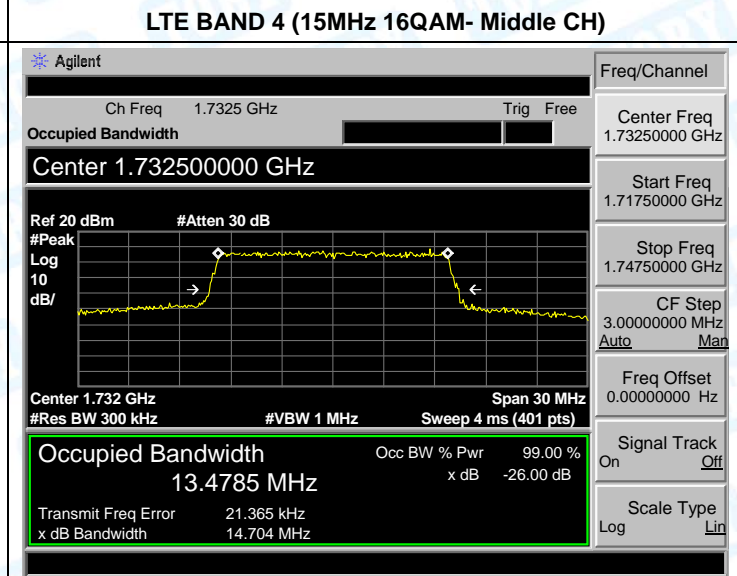
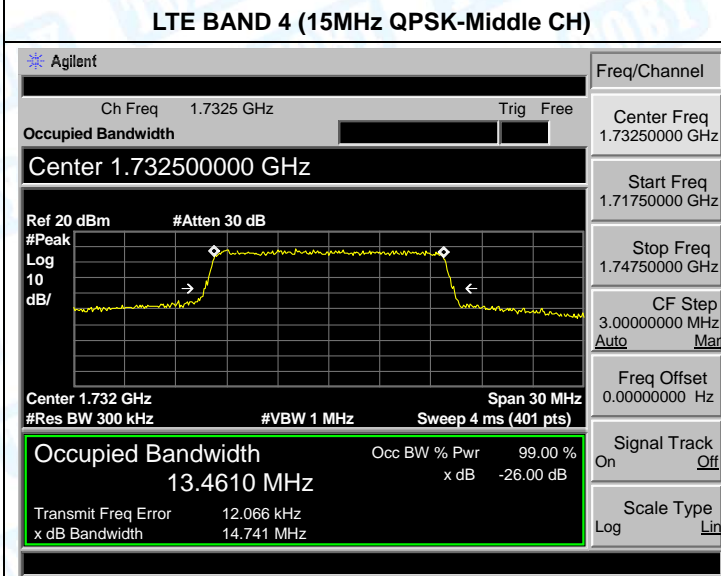
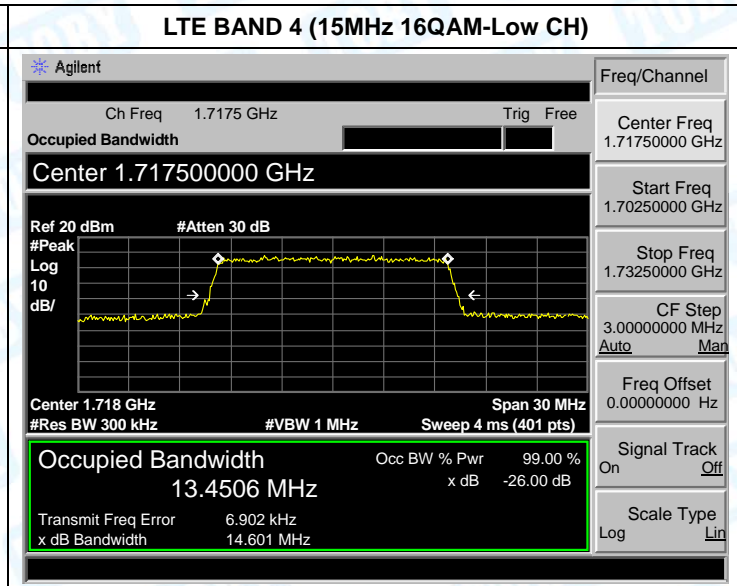
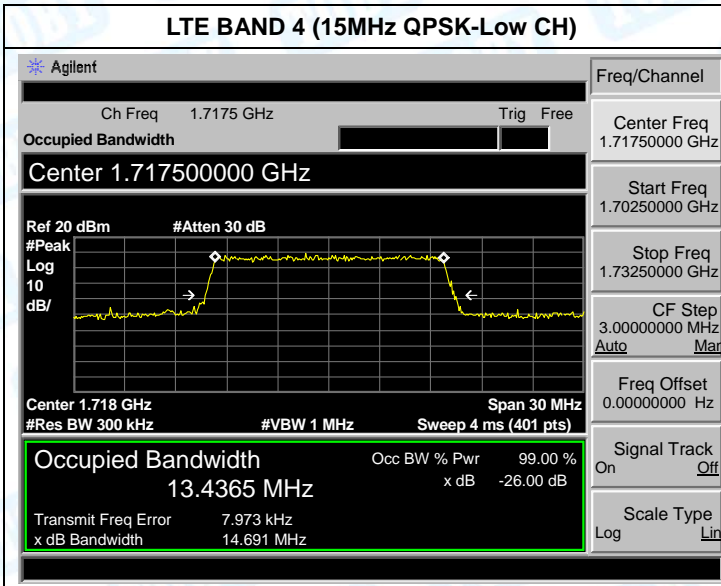
Occupancy Bandwidth Test Plot

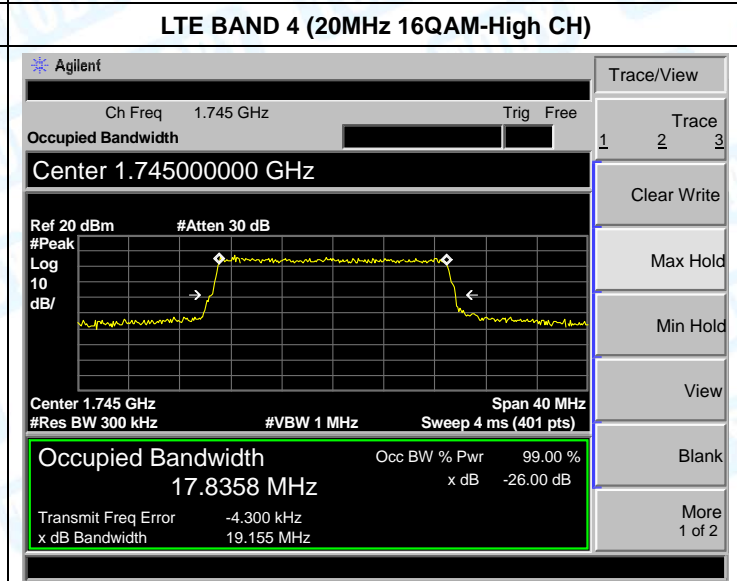
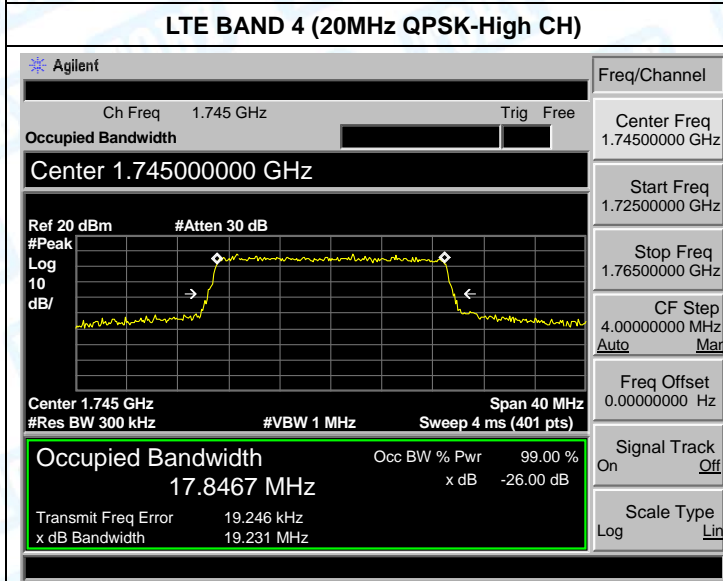
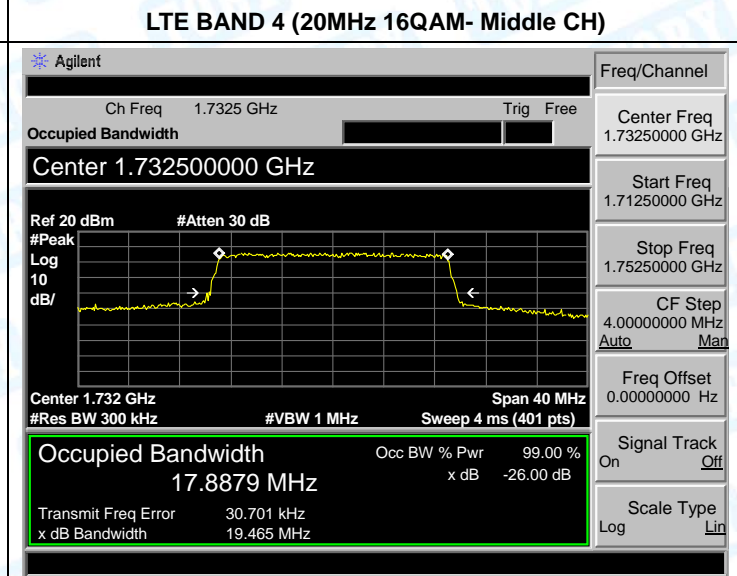
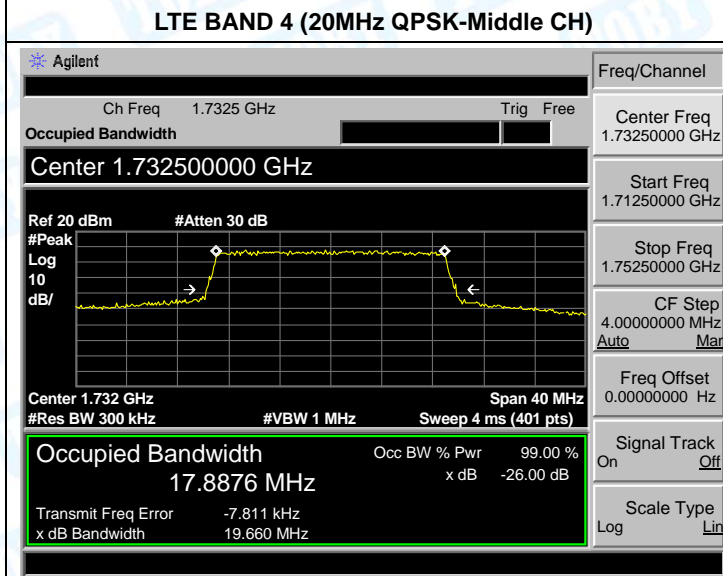
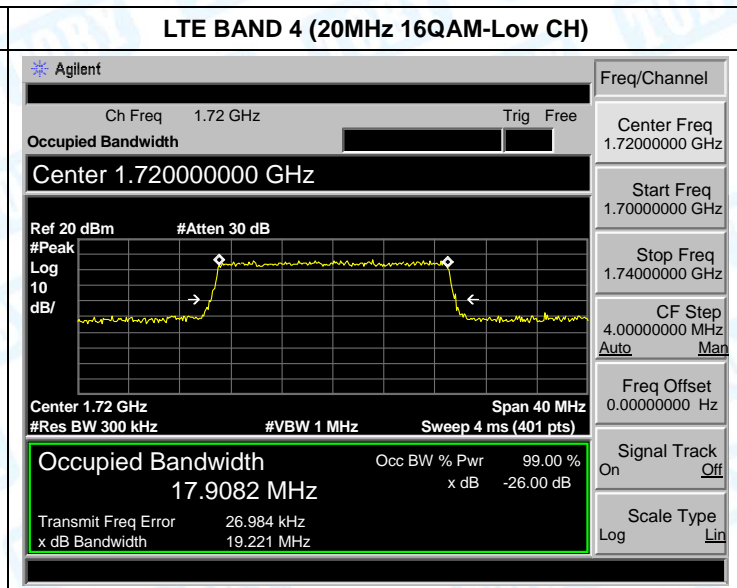
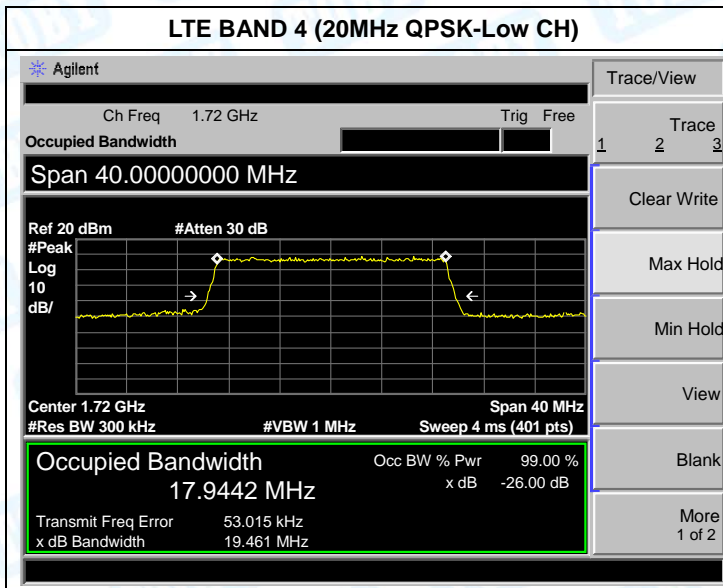






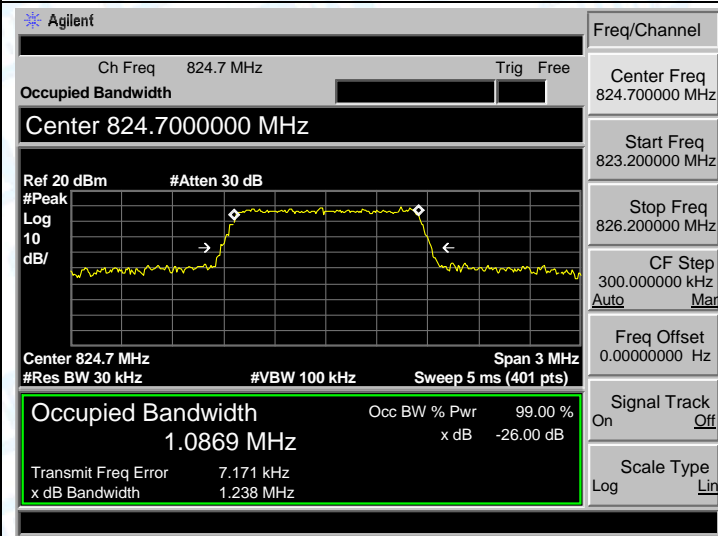




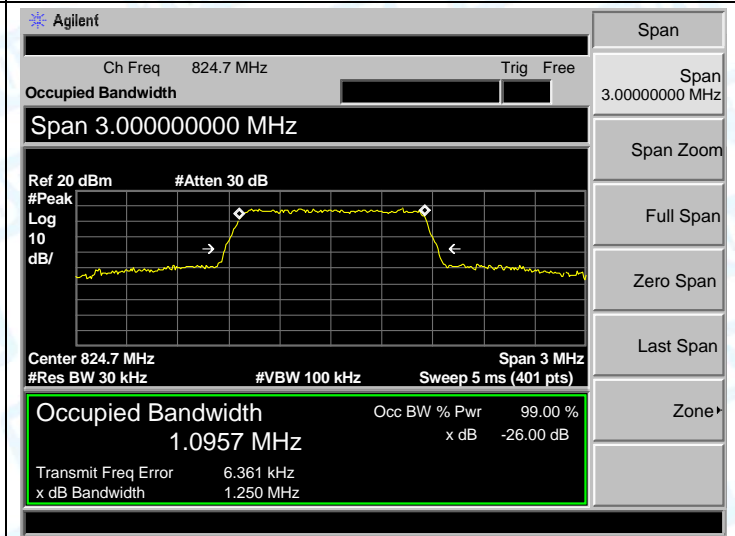


Occupancy Bandwidth Test Plot

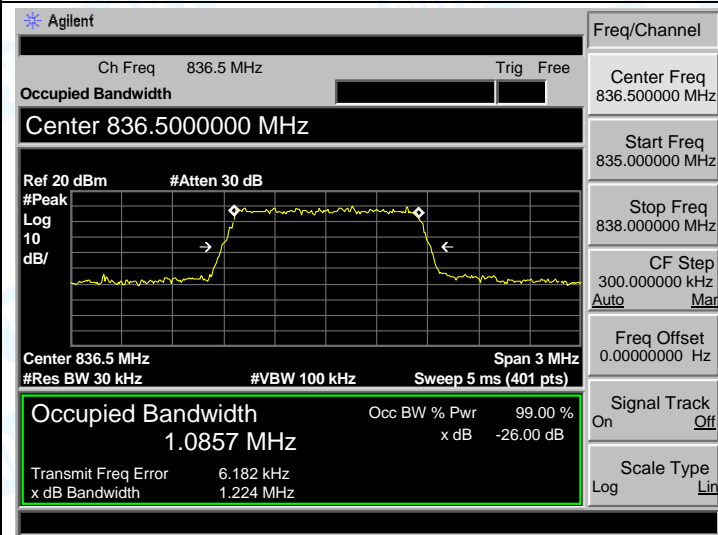
LTE BAND 5 (1.4MHz QPSK-Low CH)



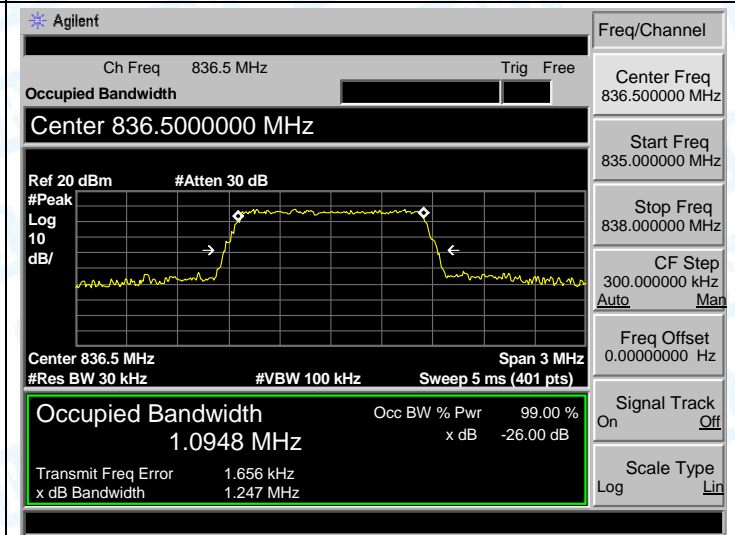
LTE BAND 5 (1.4MHz 16QAM-Low CH)



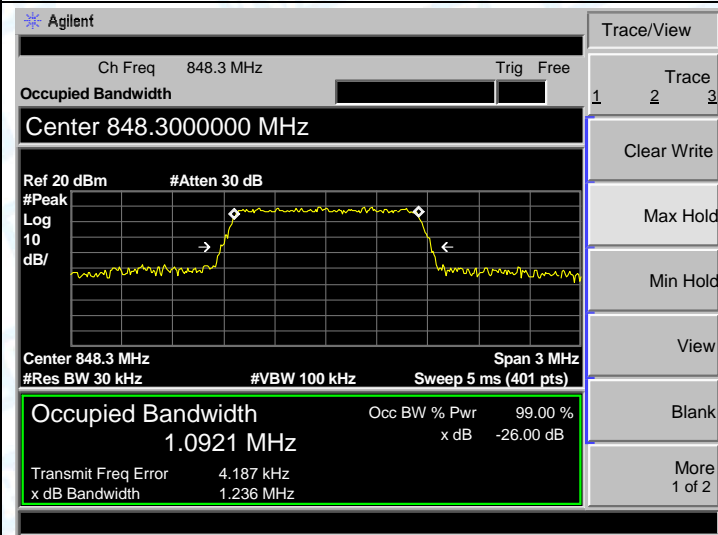
LTE BAND 5 (1.4MHz QPSK-Middle CH)



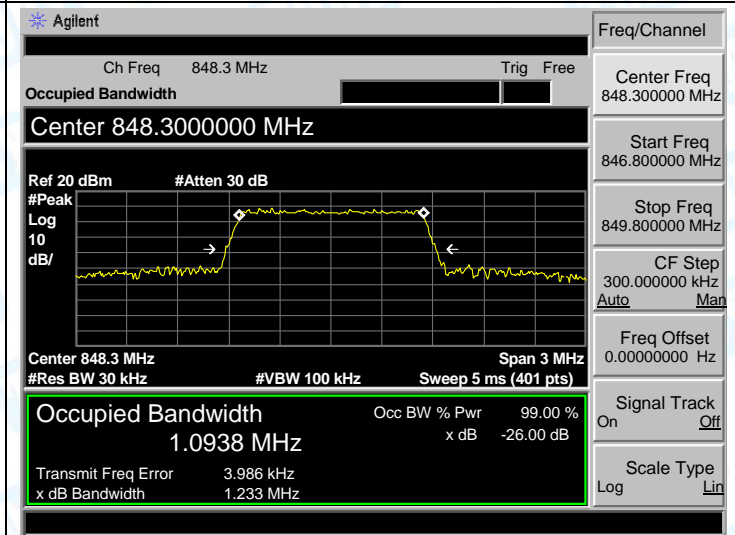
LTE BAND 5 (1.4MHz 16QAM- Middle CH)

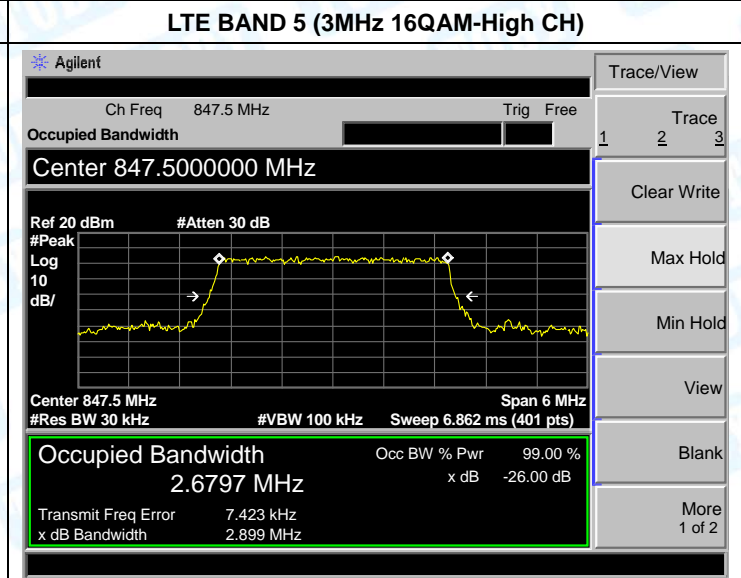
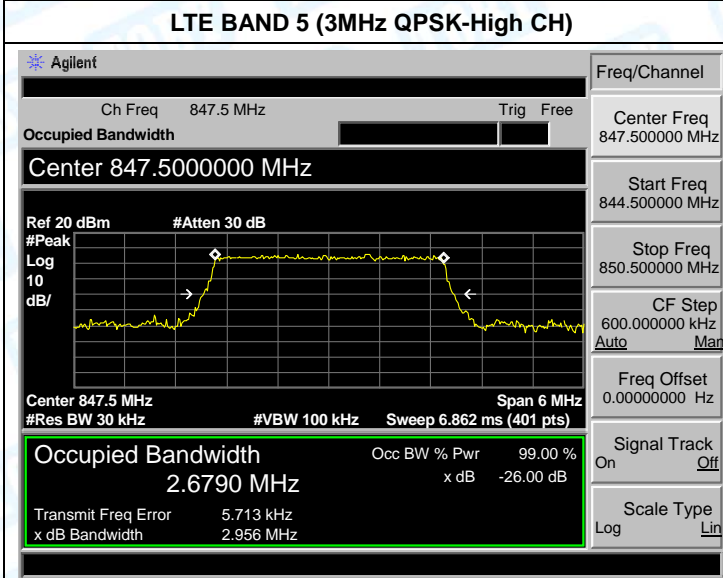
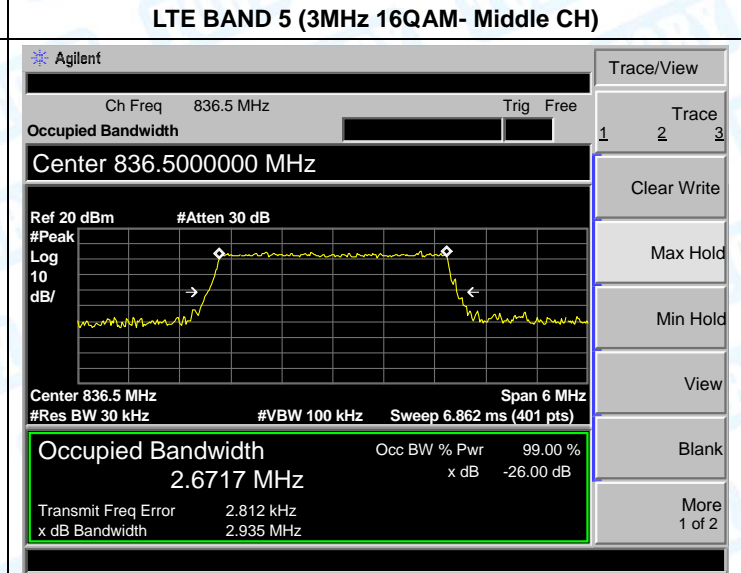
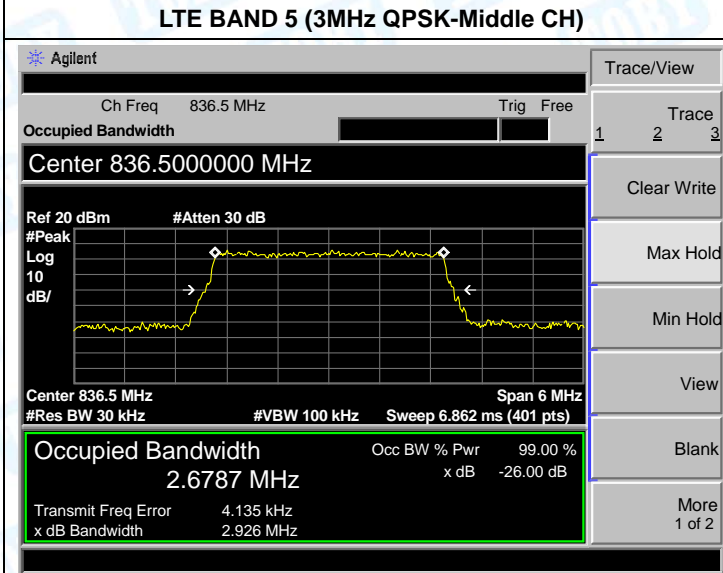
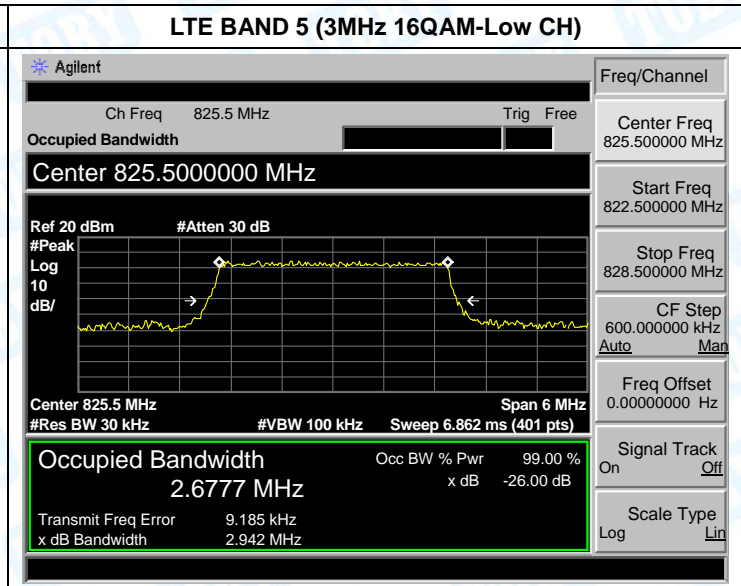
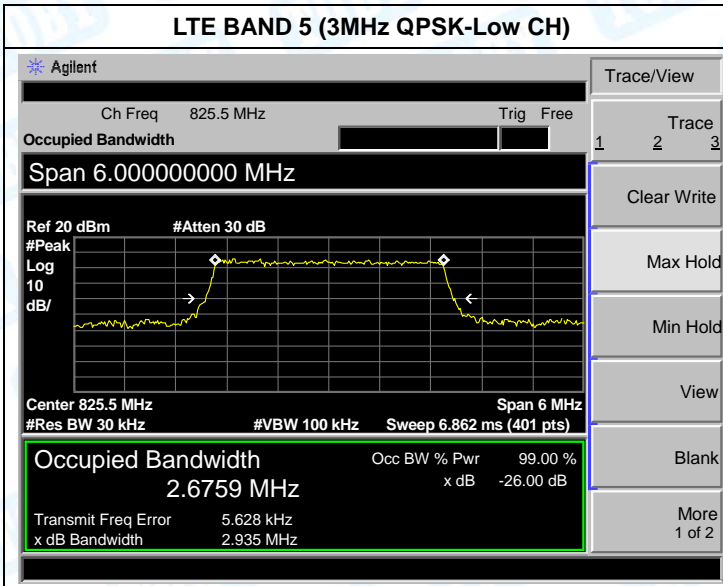


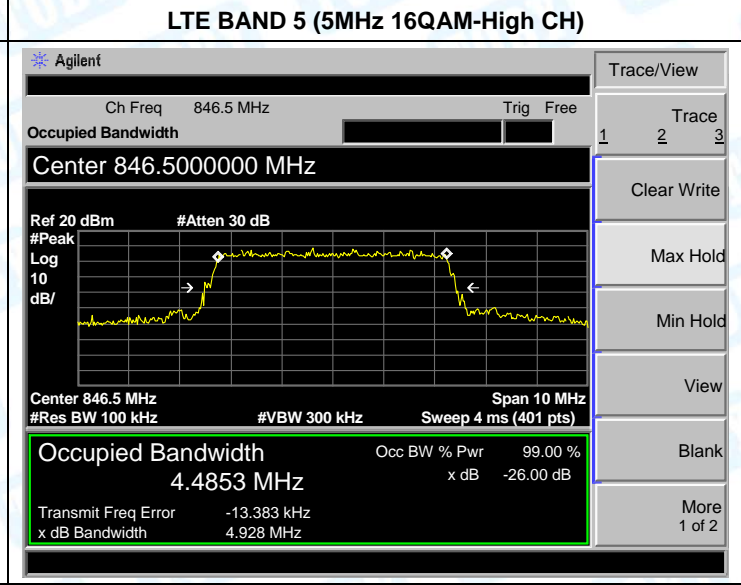
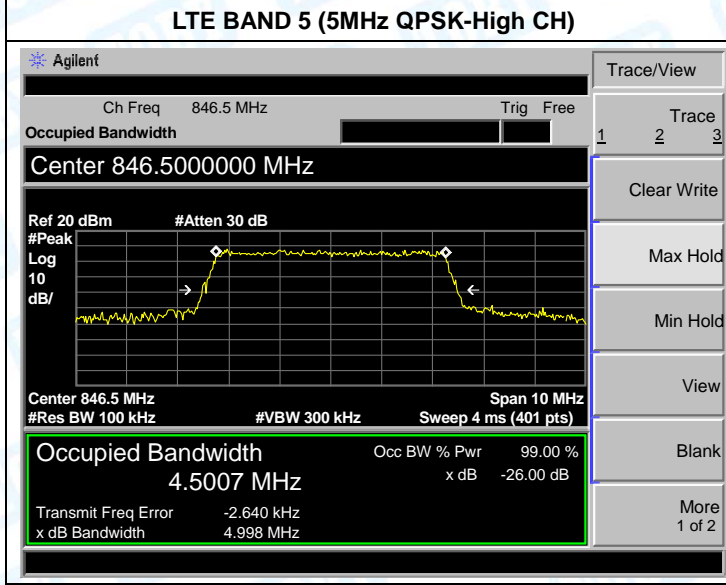
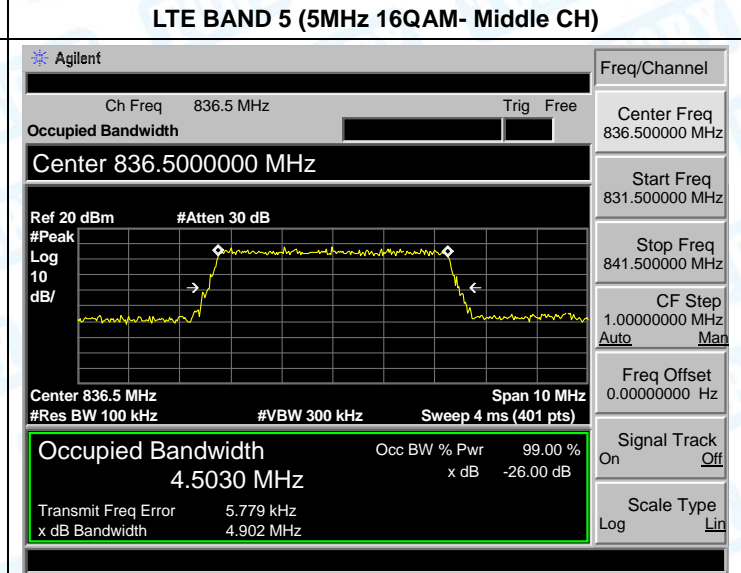
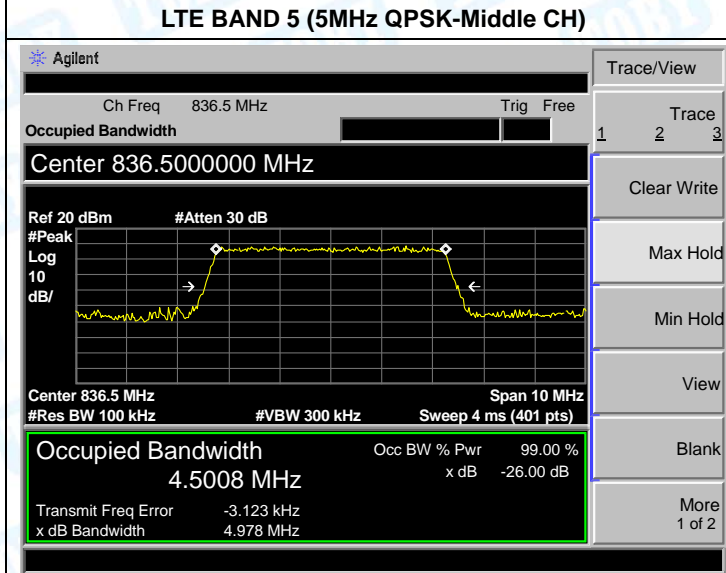
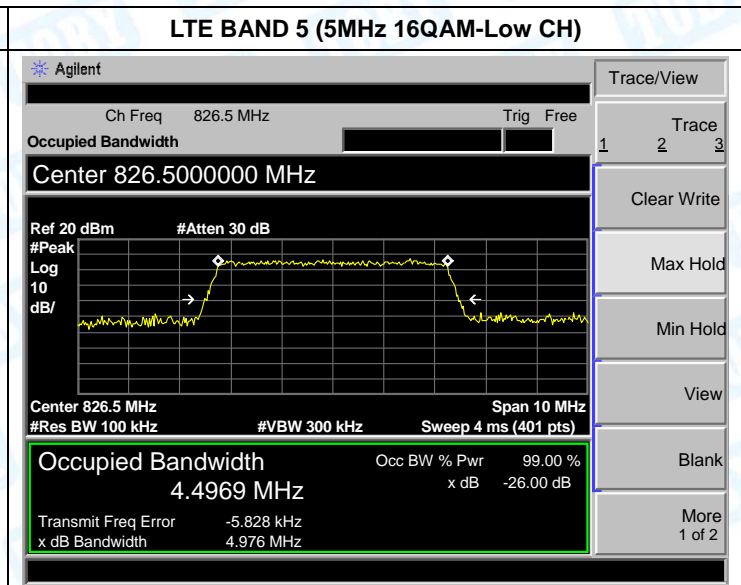
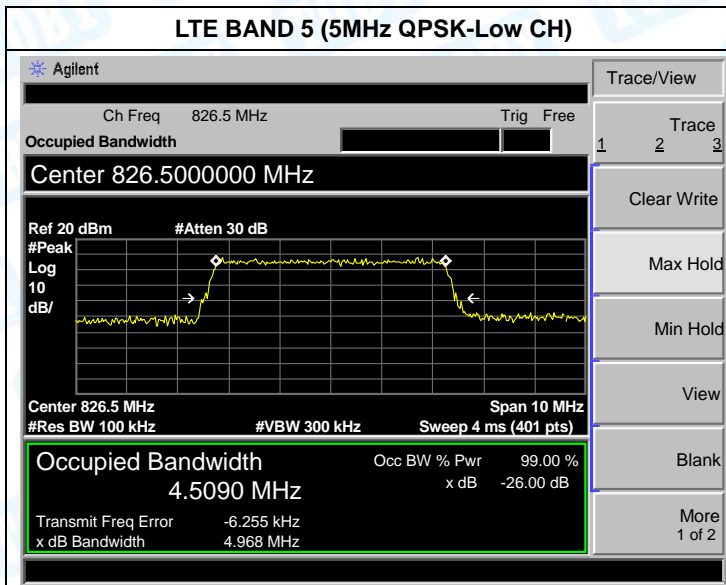
LTE BAND 5 (1.4MHz QPSK-High CH)

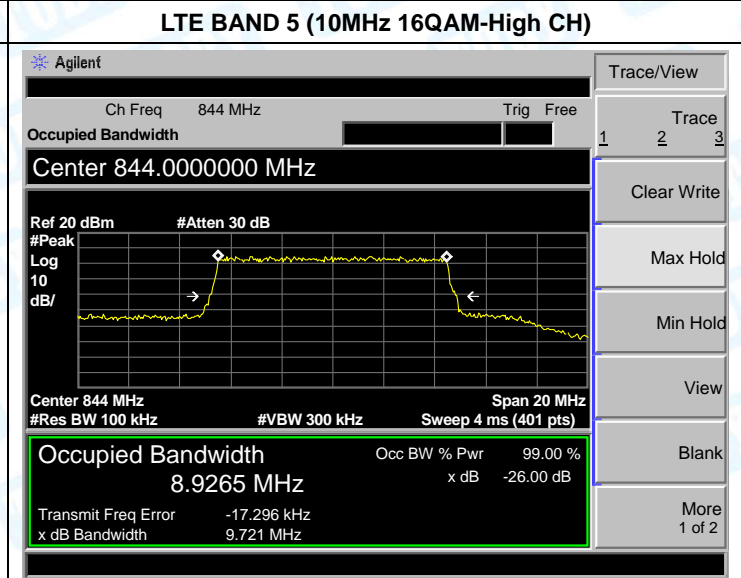
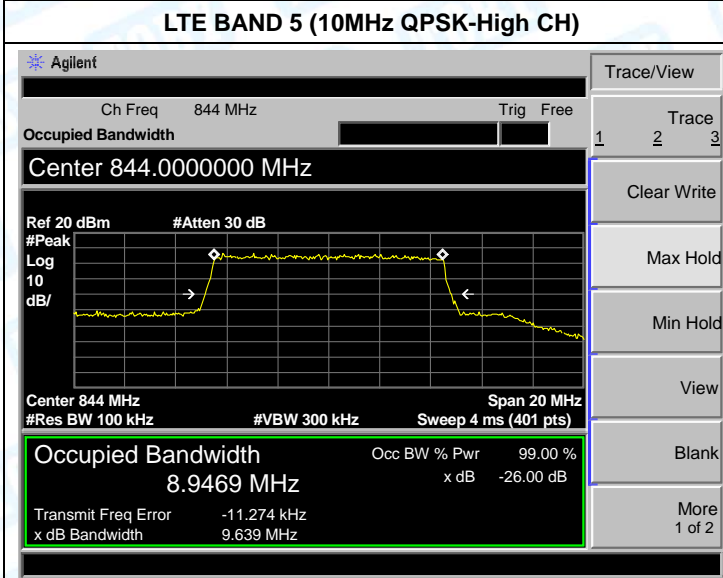
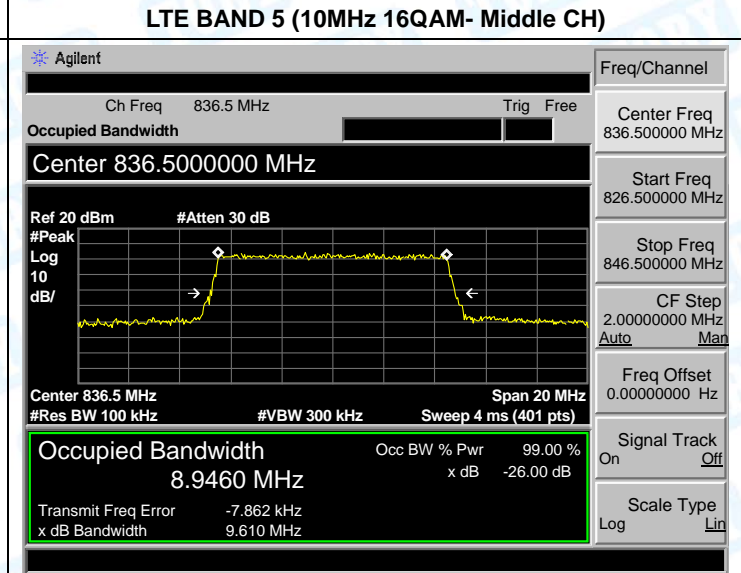
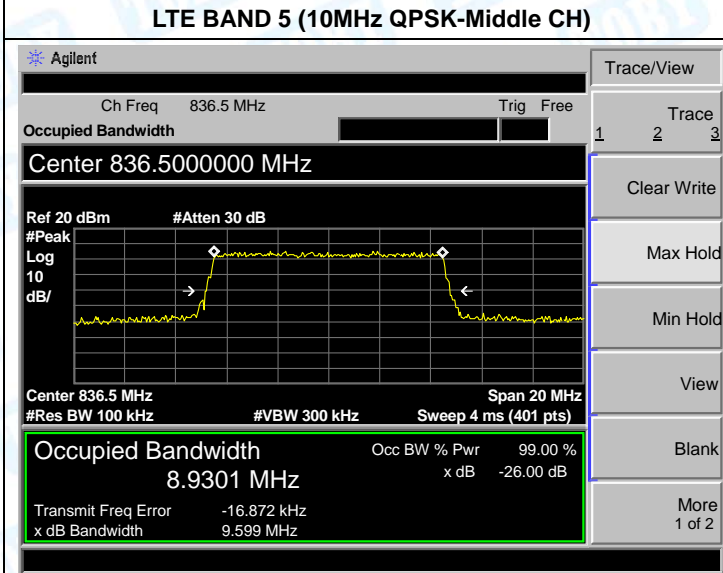
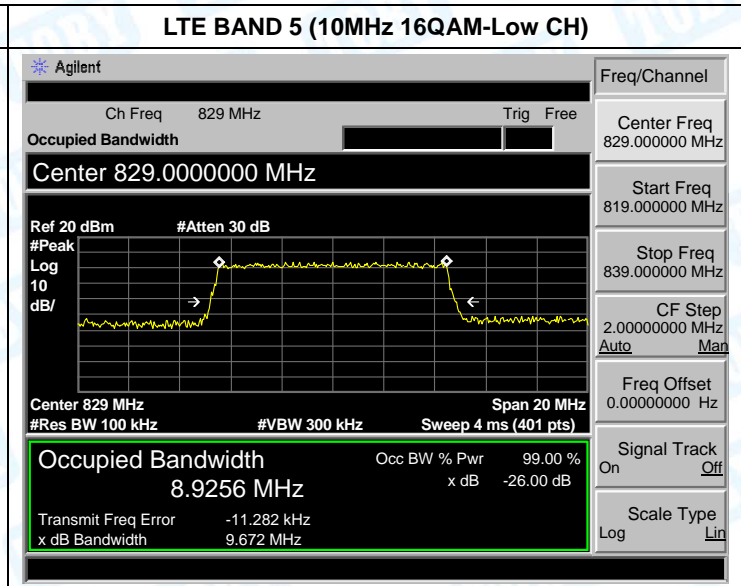
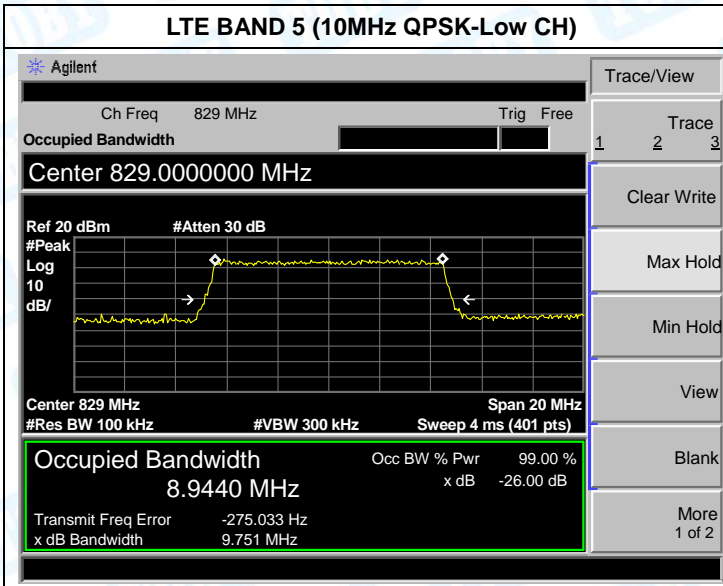


LTE BAND 5 (1.4MHz 16QAM-High CH)

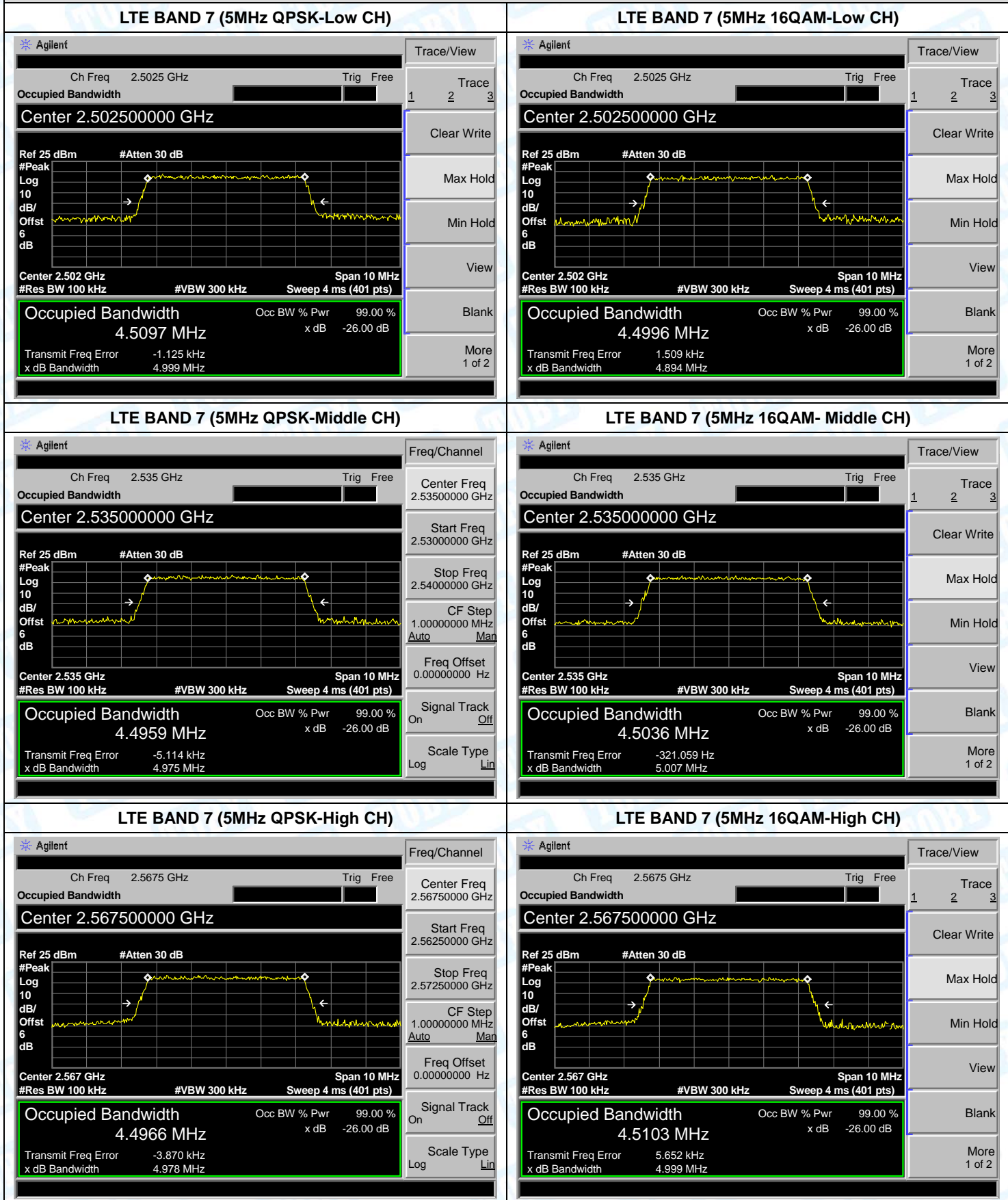


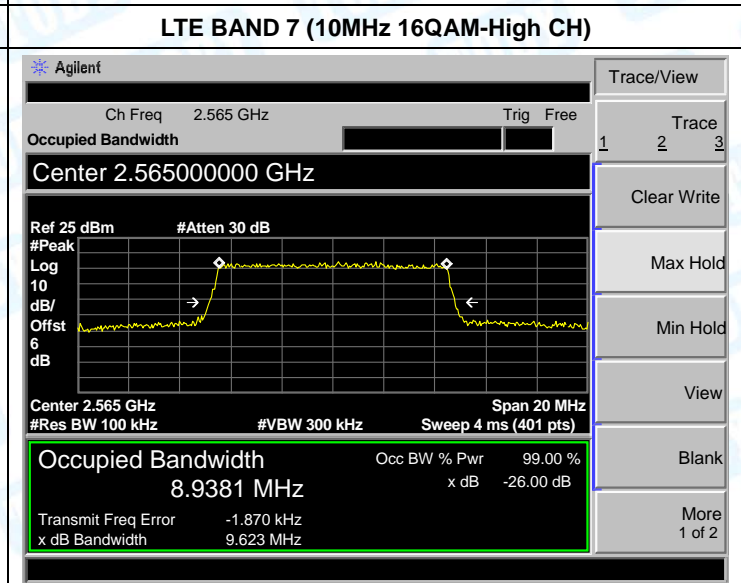
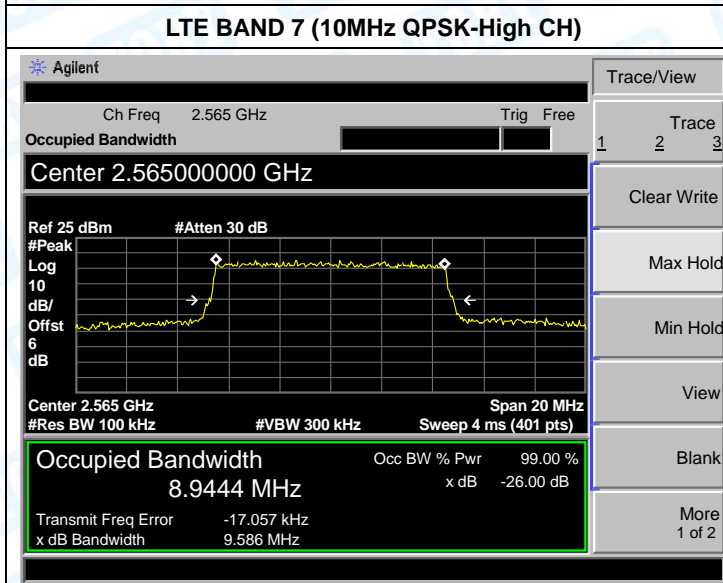
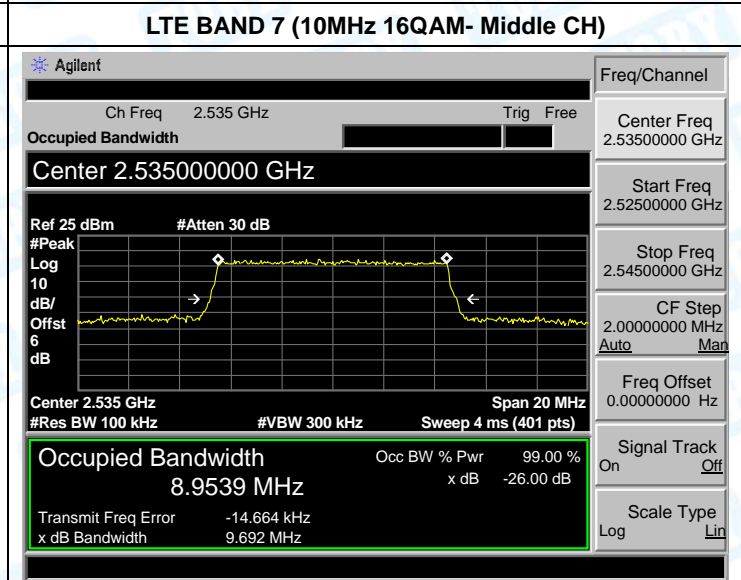
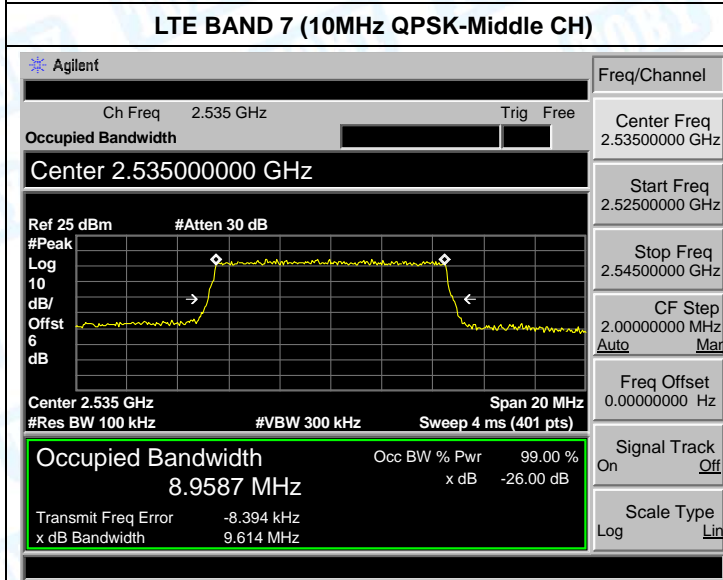
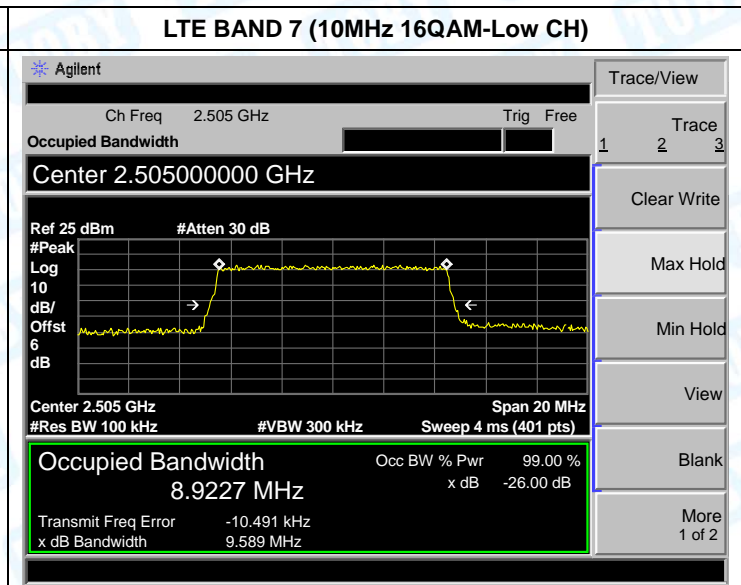
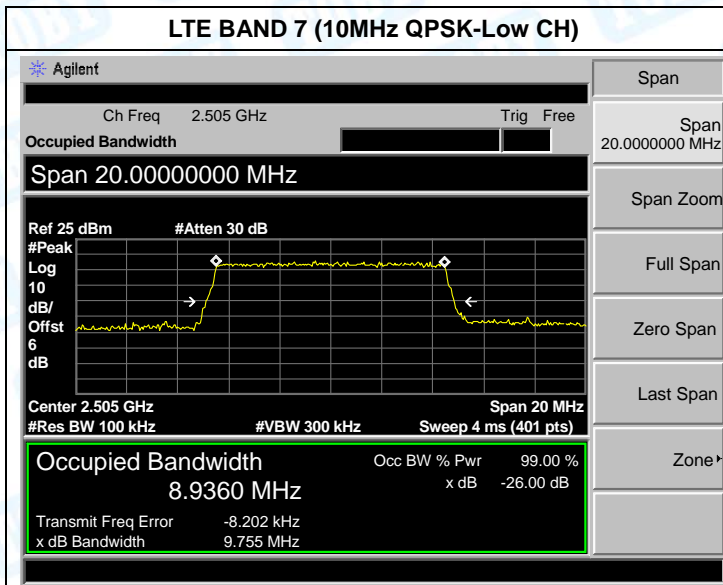


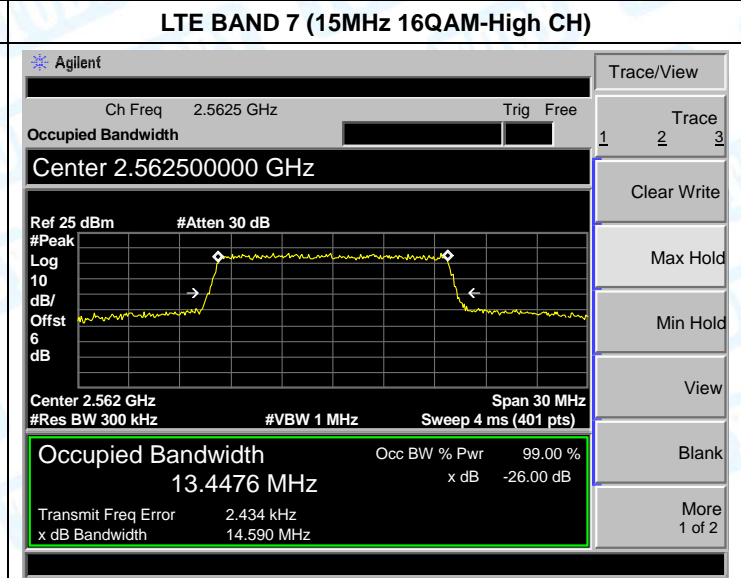
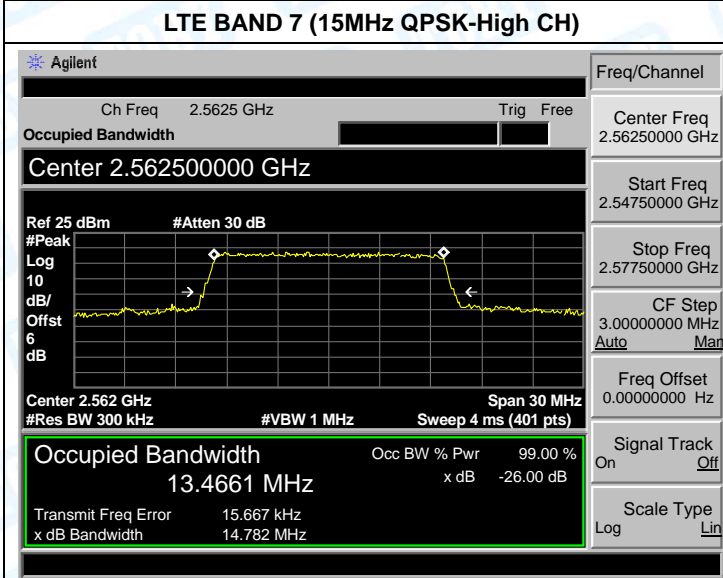
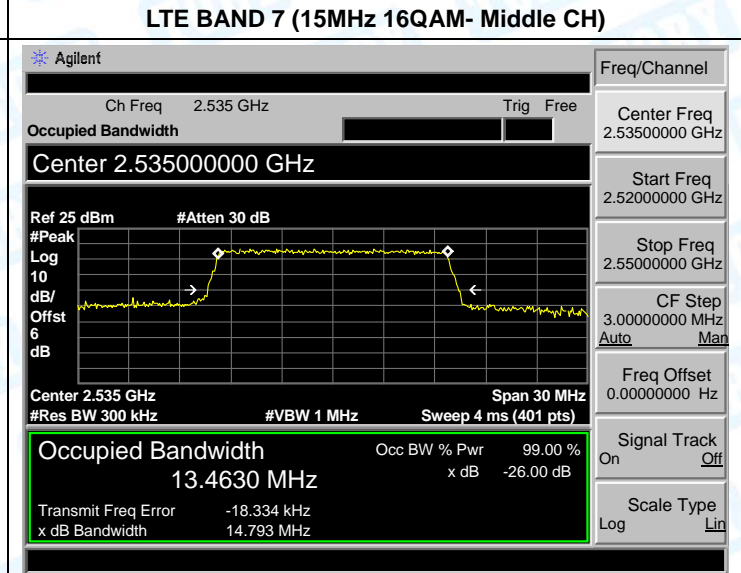
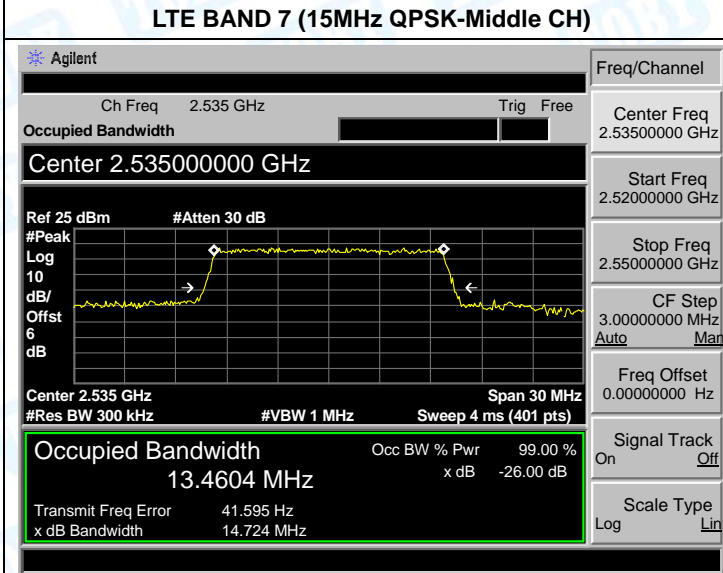
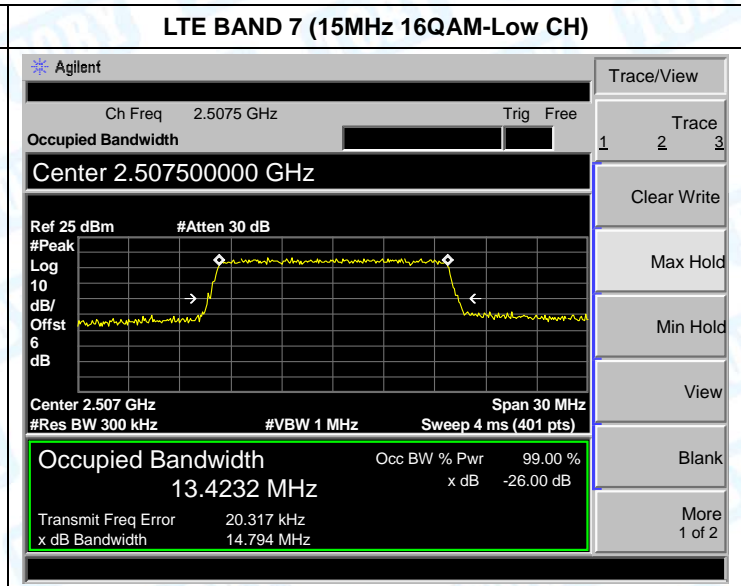
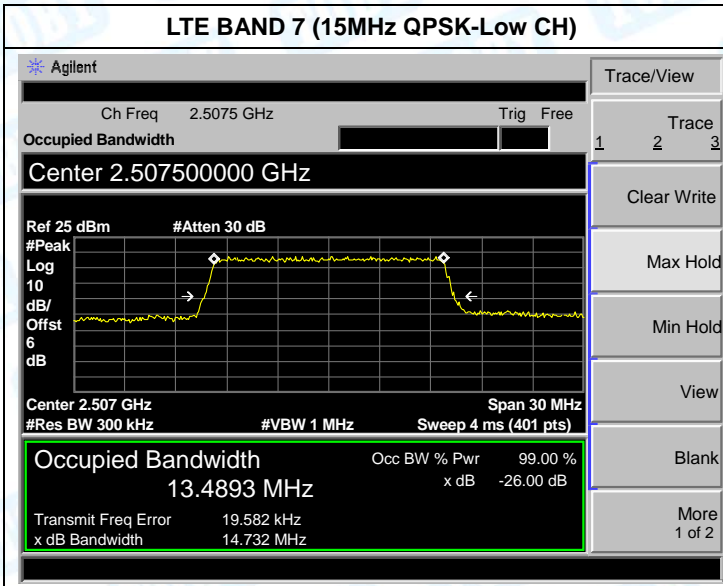


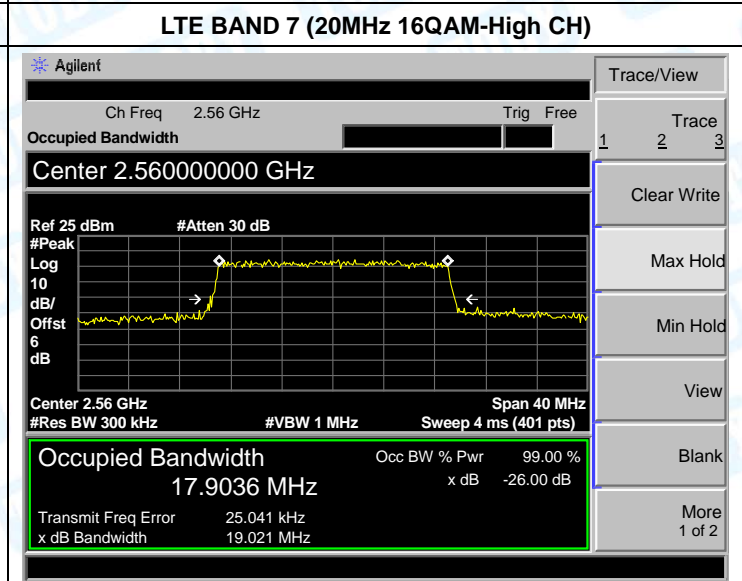
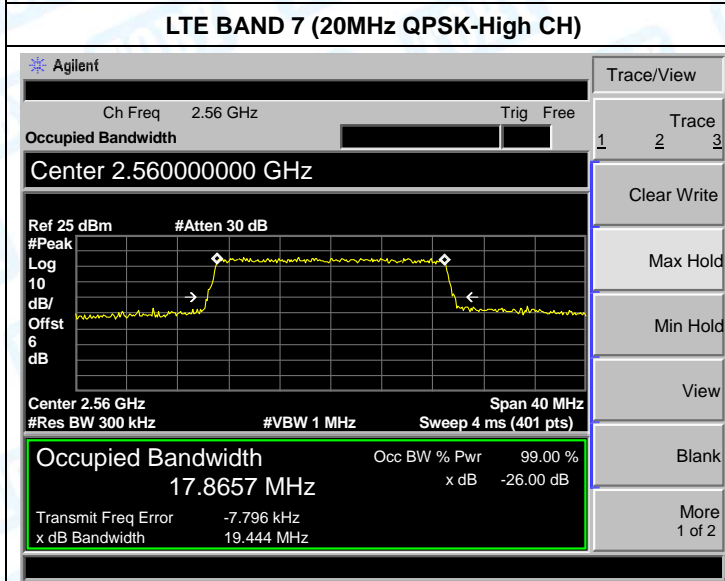
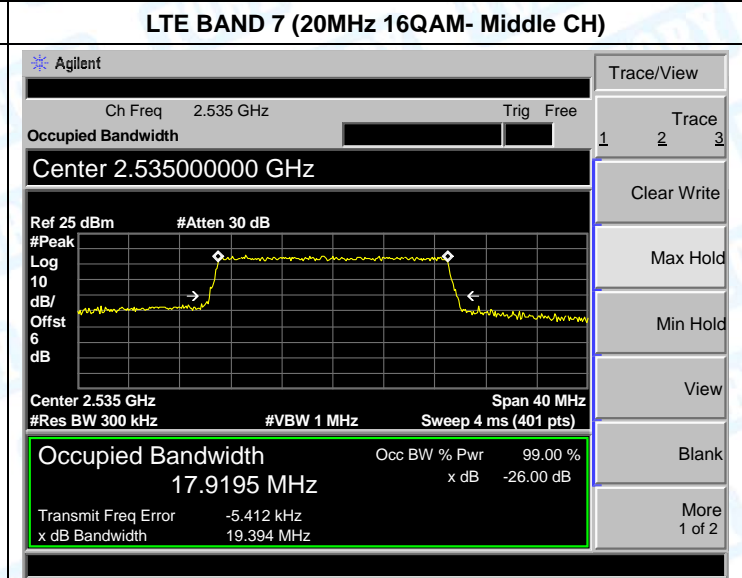
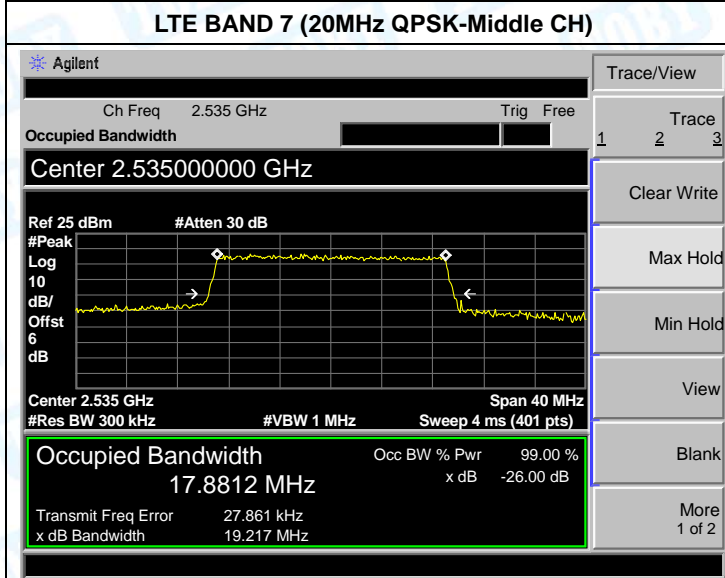
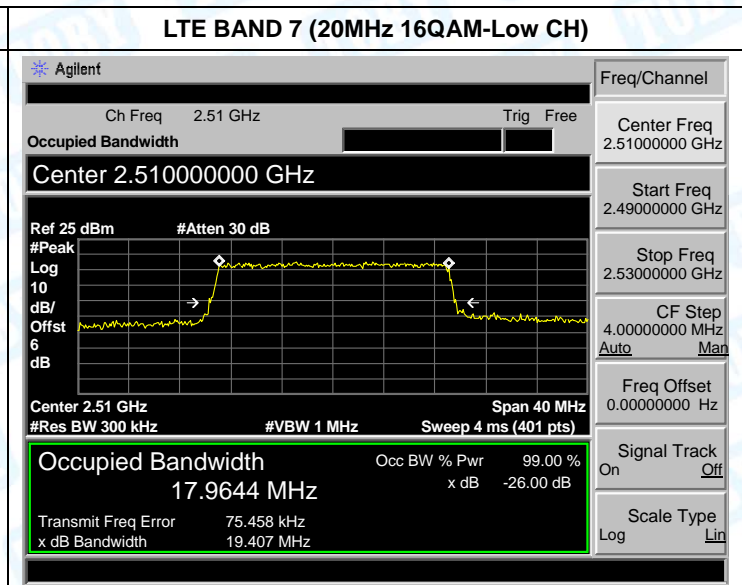
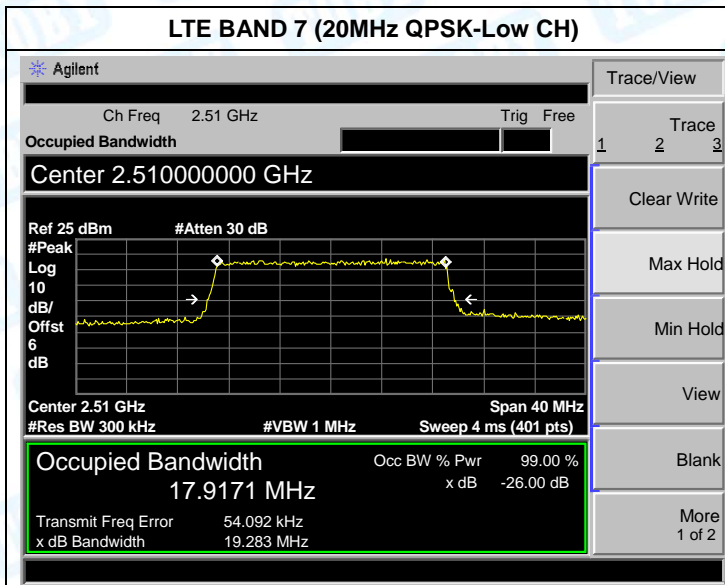


Occupancy Bandwidth Test Plot

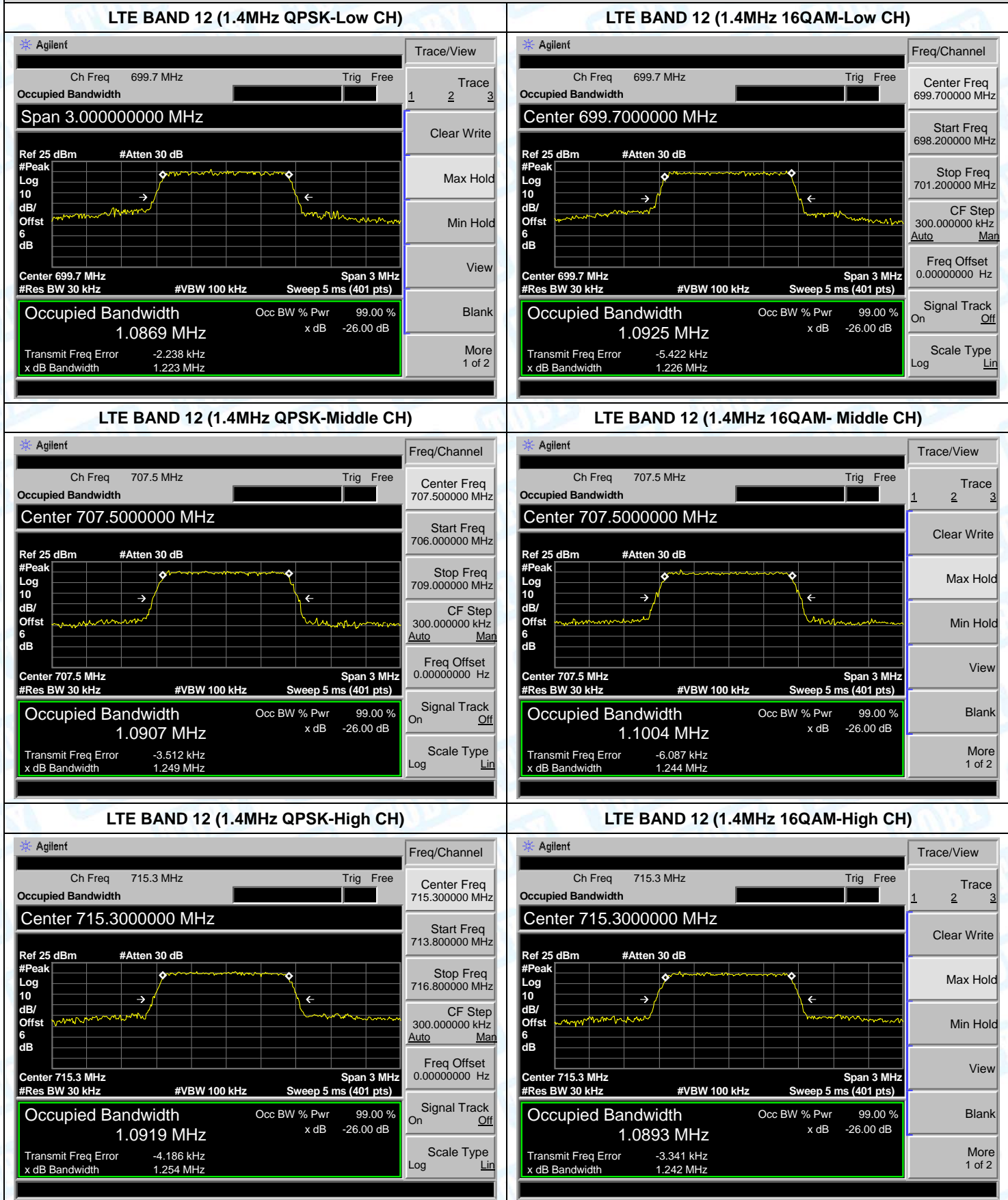


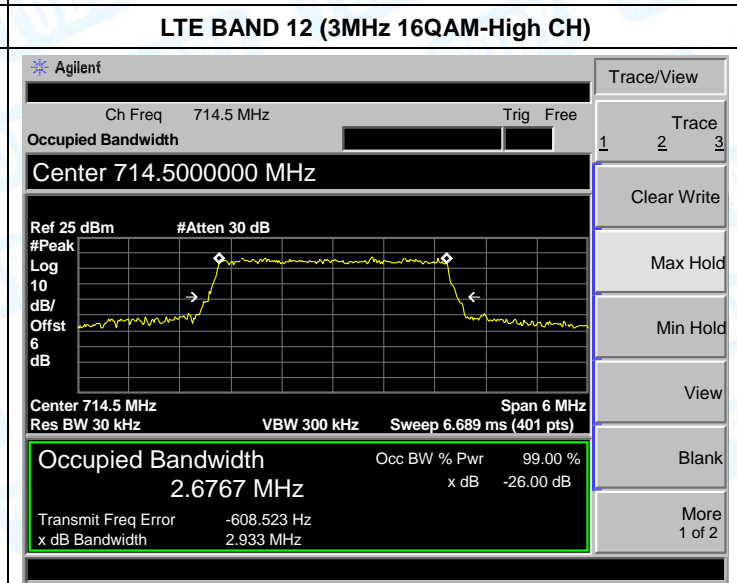
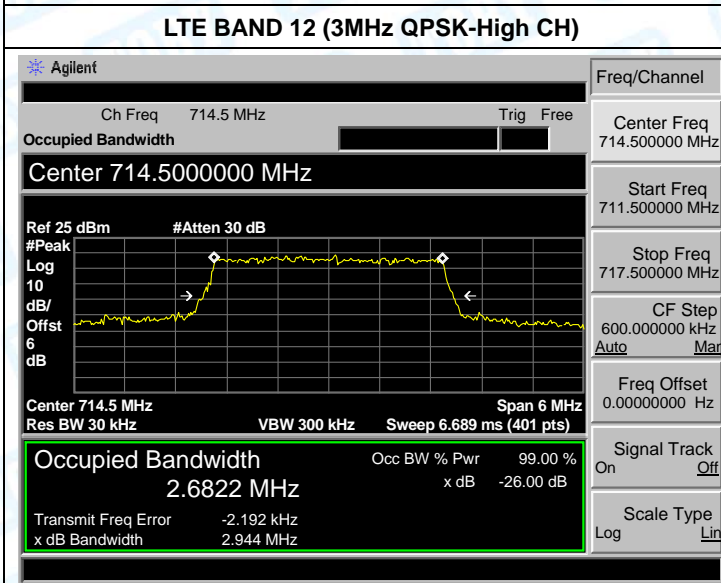
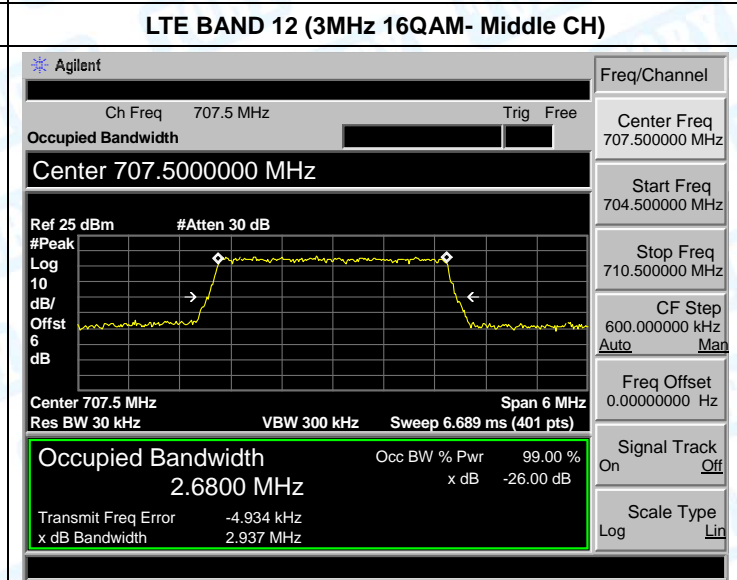
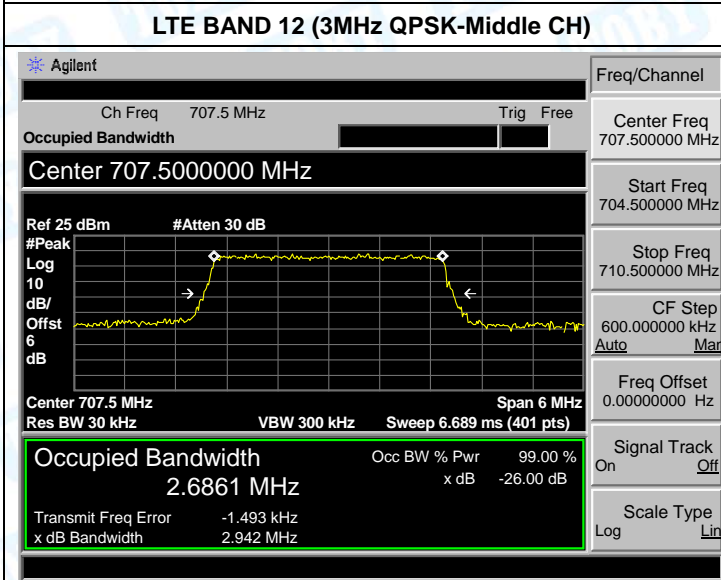
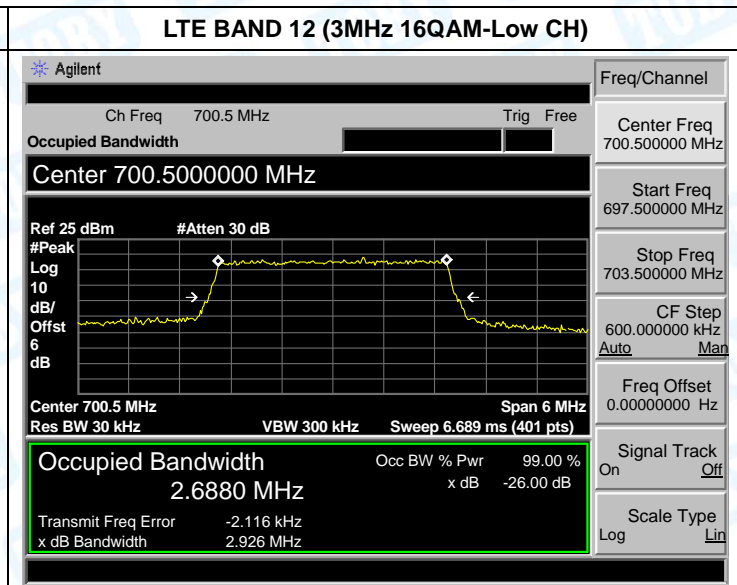
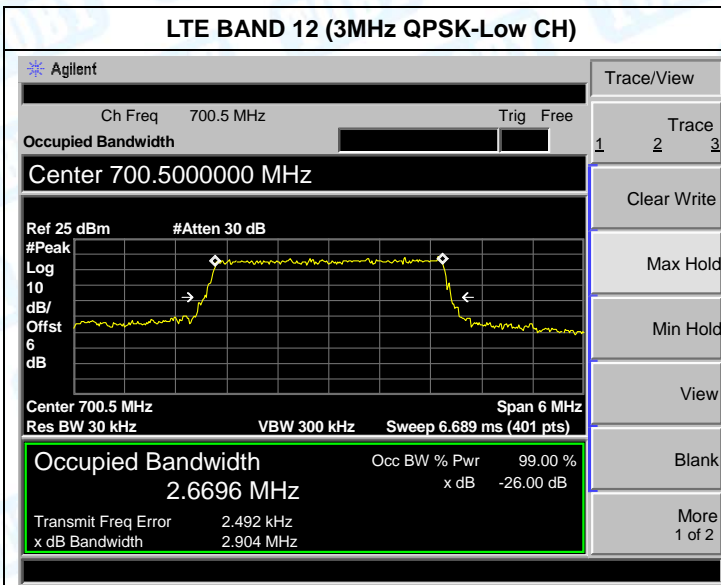


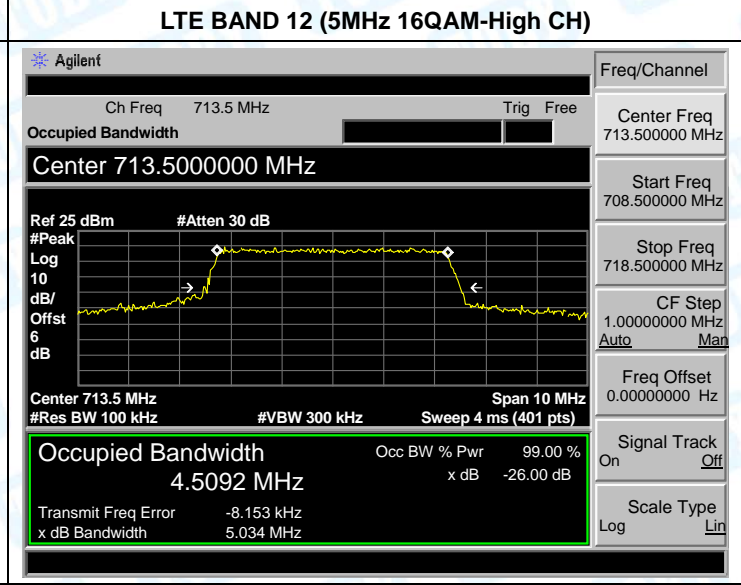
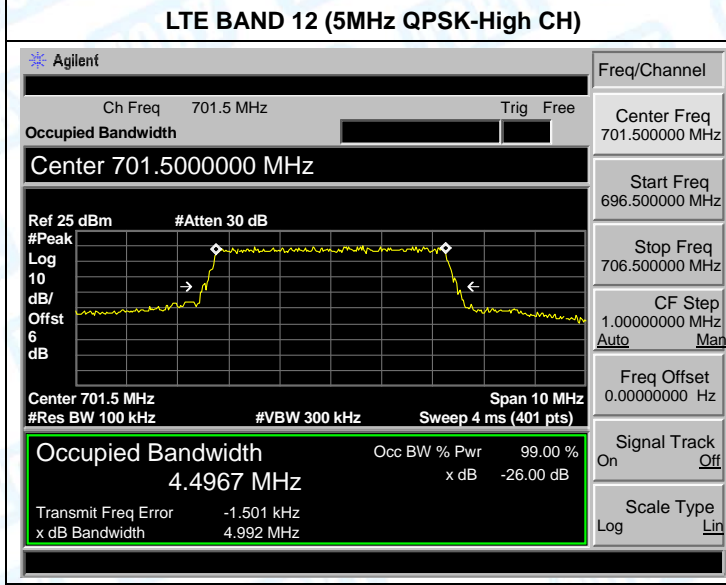
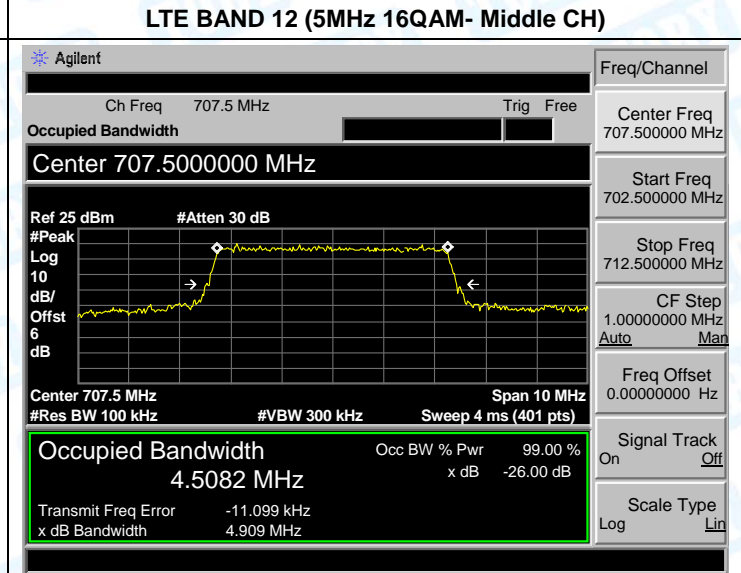
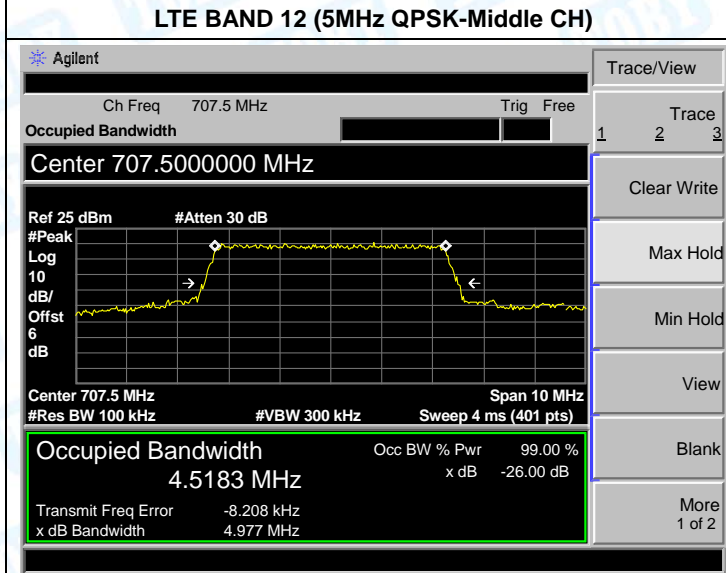
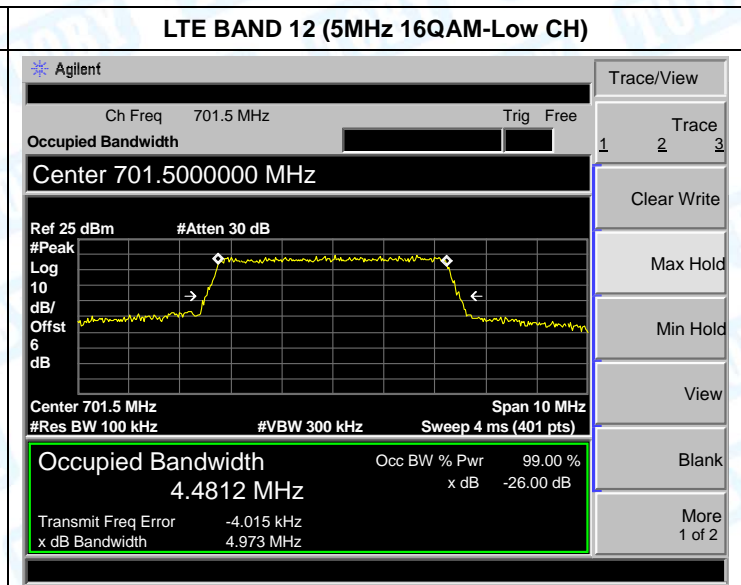
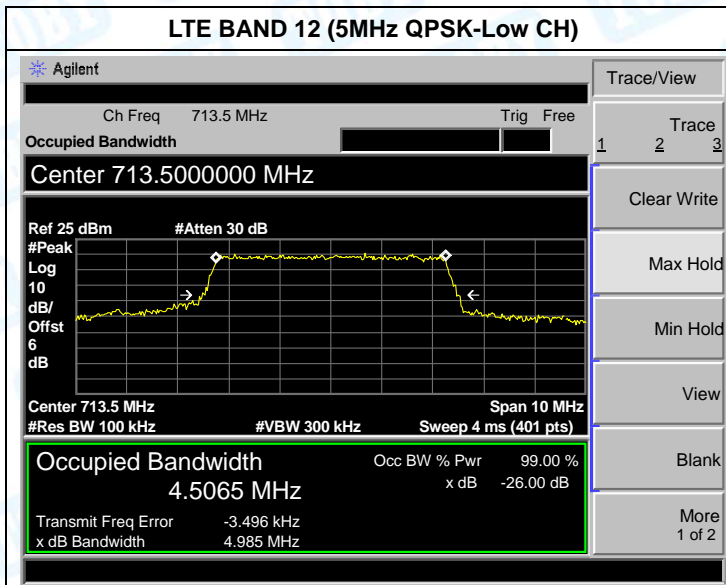


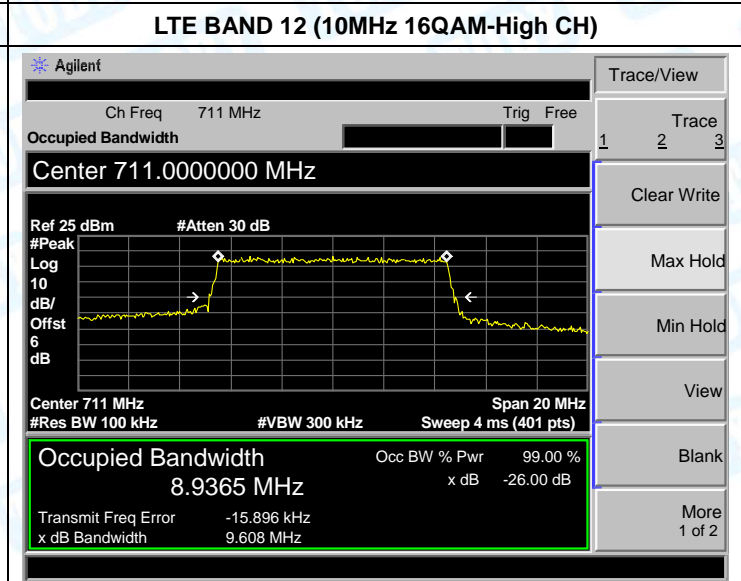
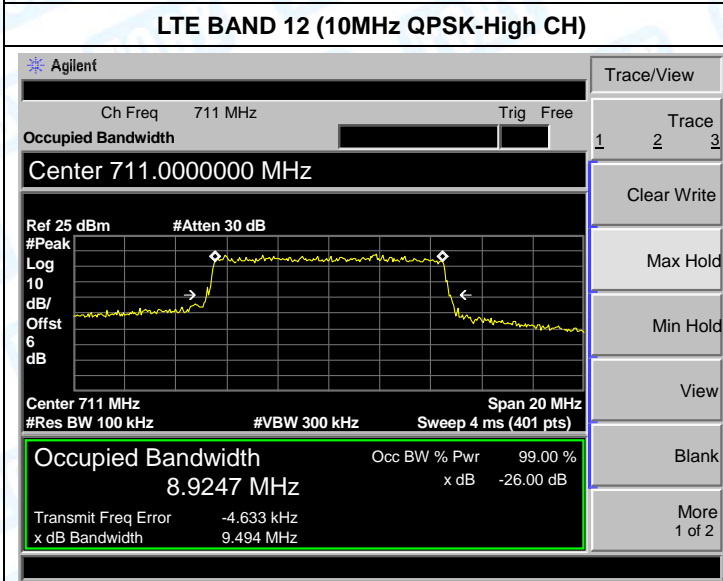
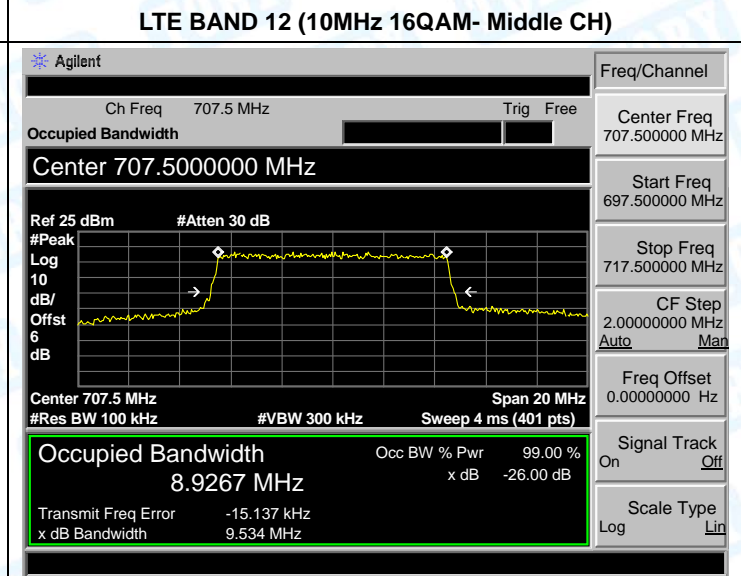
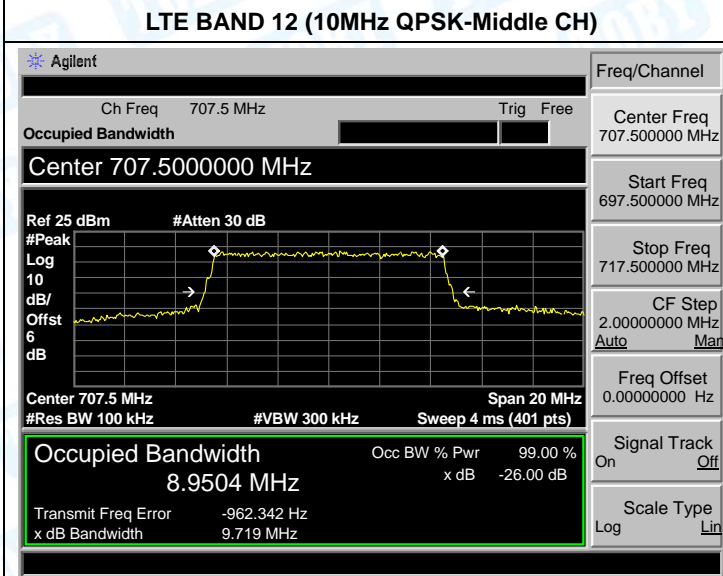
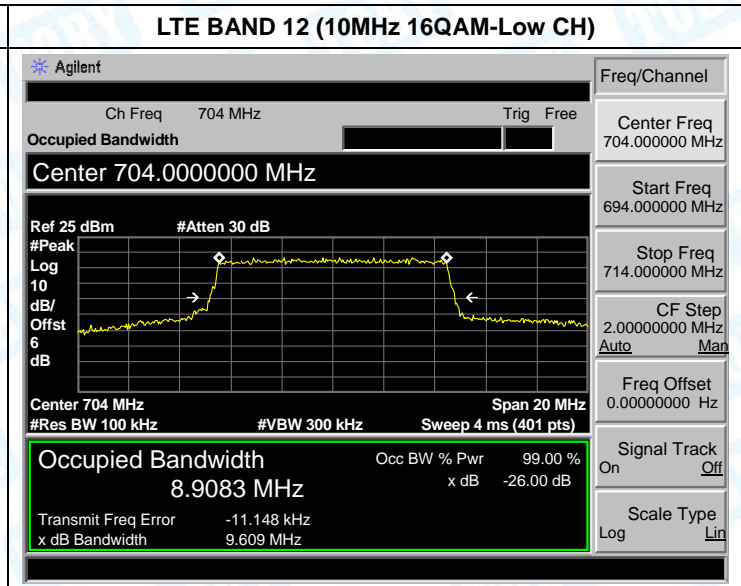
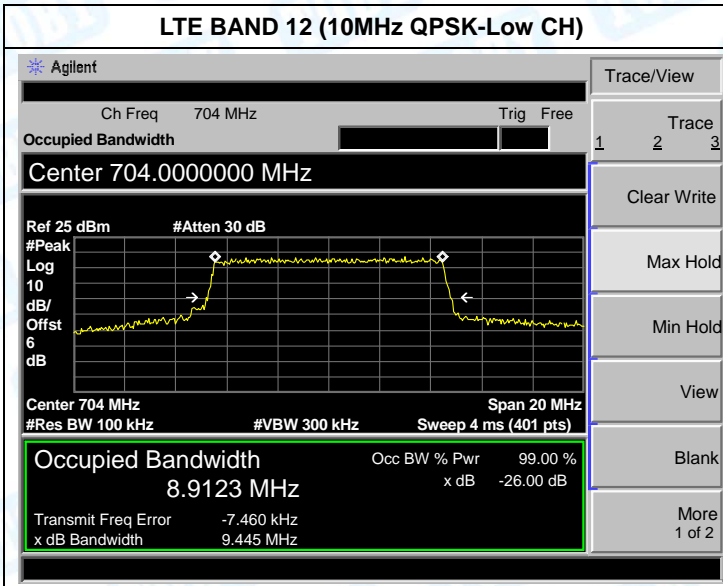


Occupancy Bandwidth Test Plot

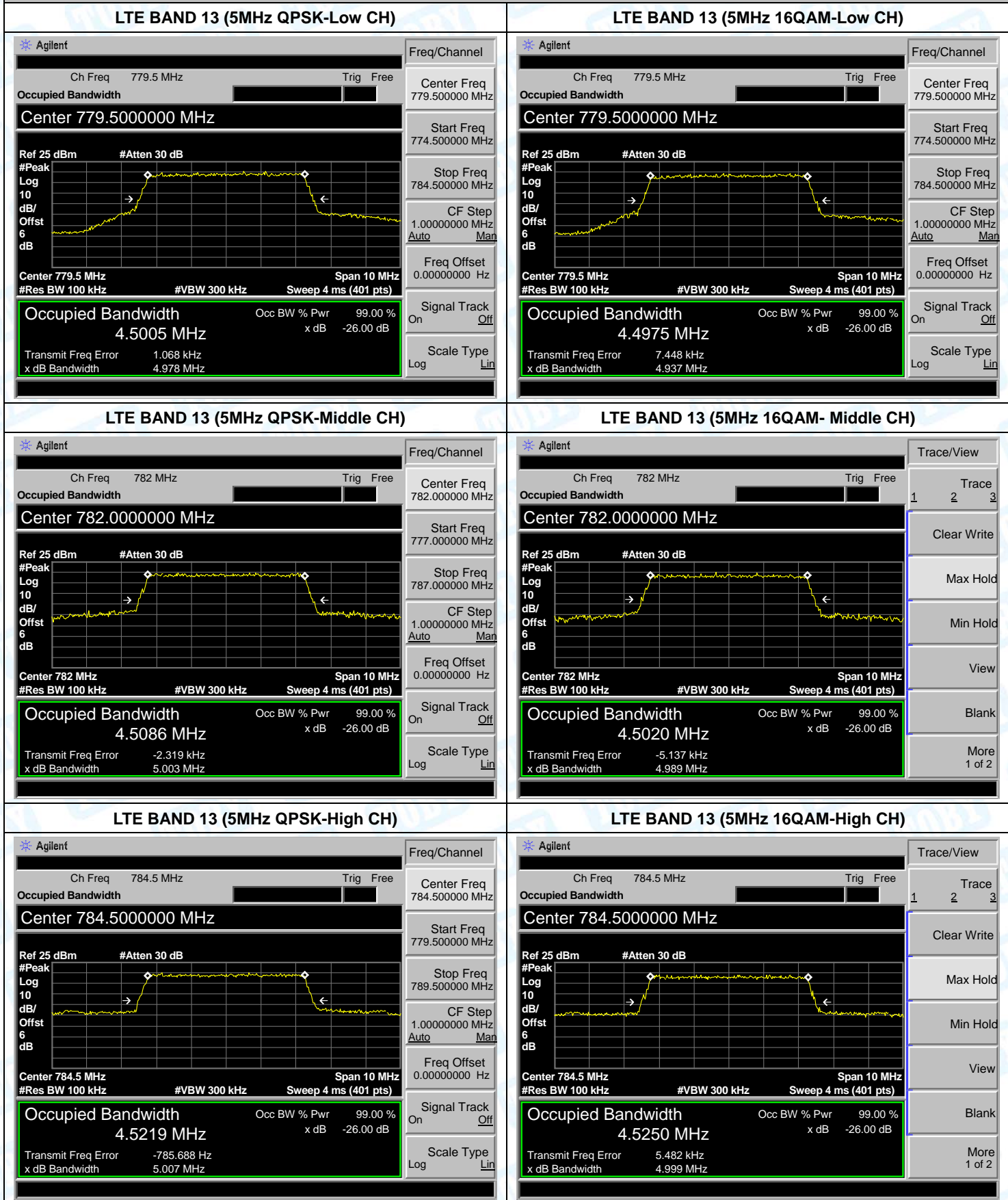


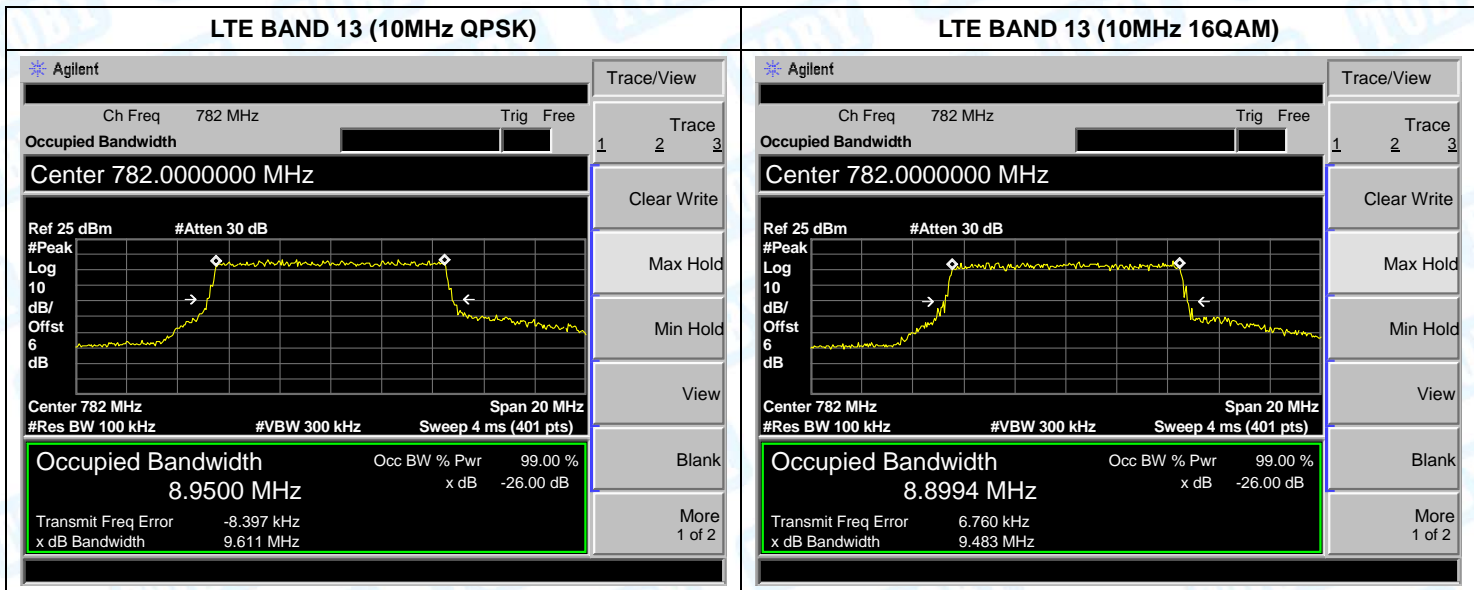






Occupancy Bandwidth Test Plot

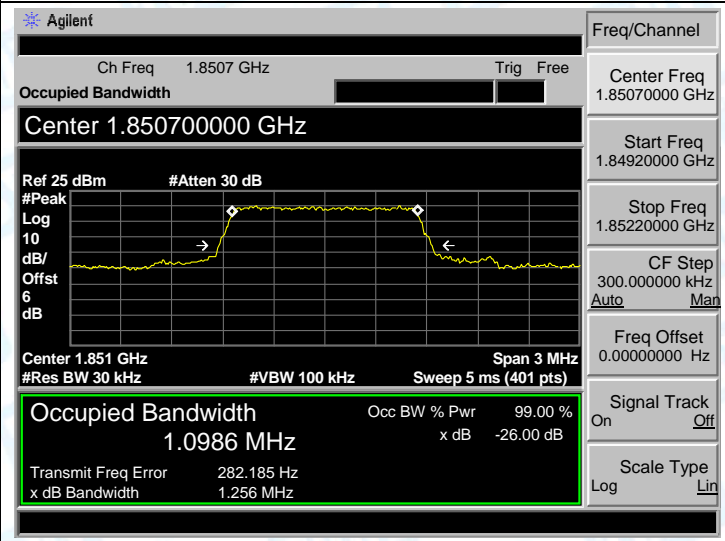
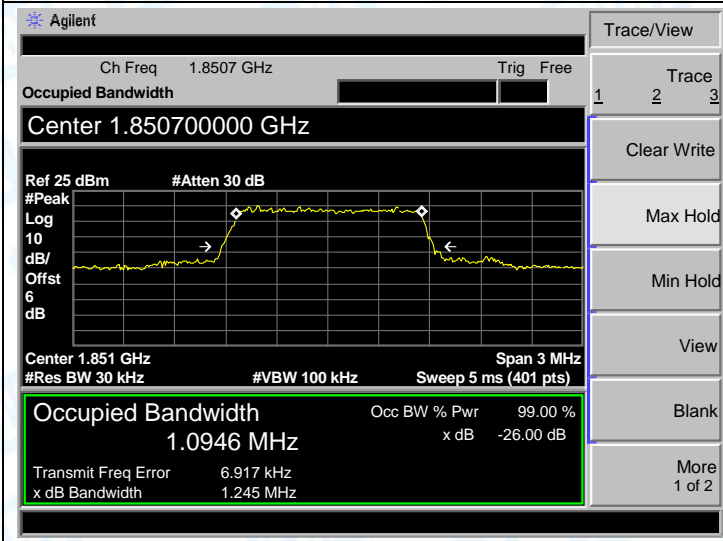




Occupancy Bandwidth Test Plot

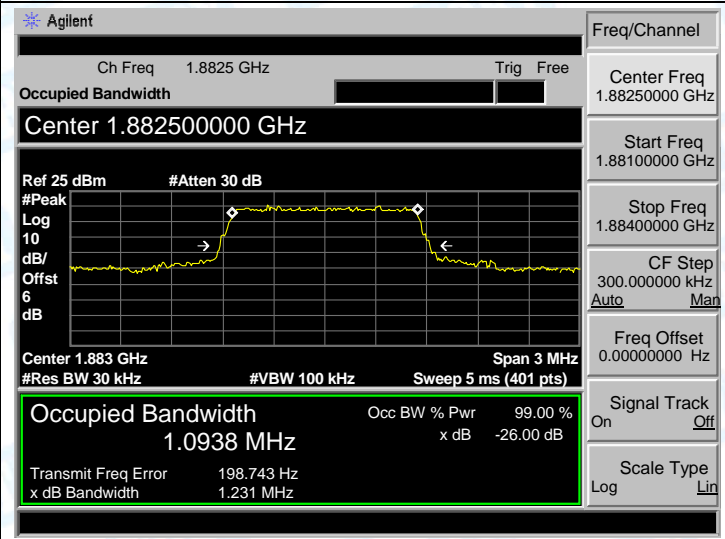
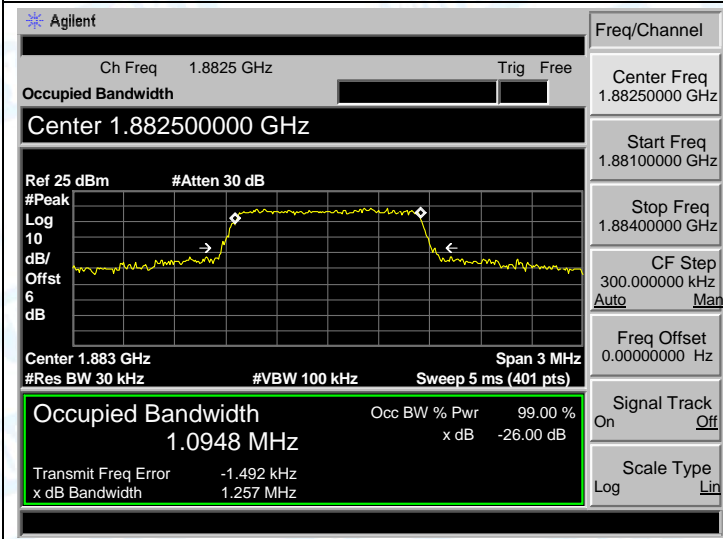
LTE BAND 25 (1.4MHz QPSK-Low CH)

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



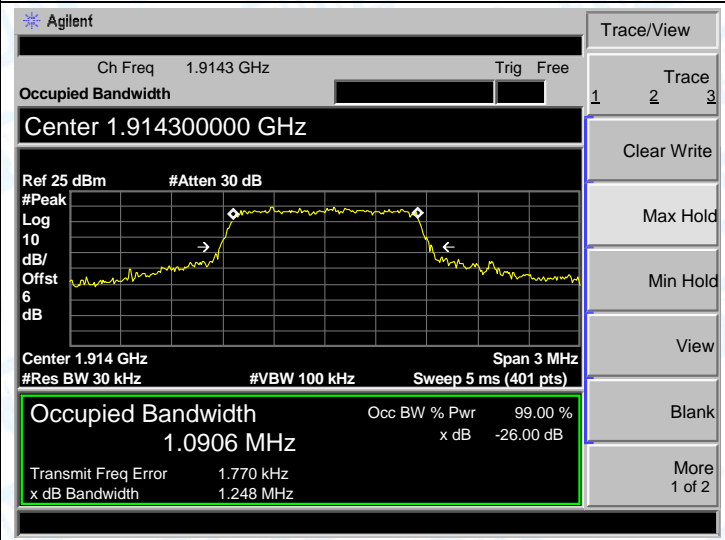
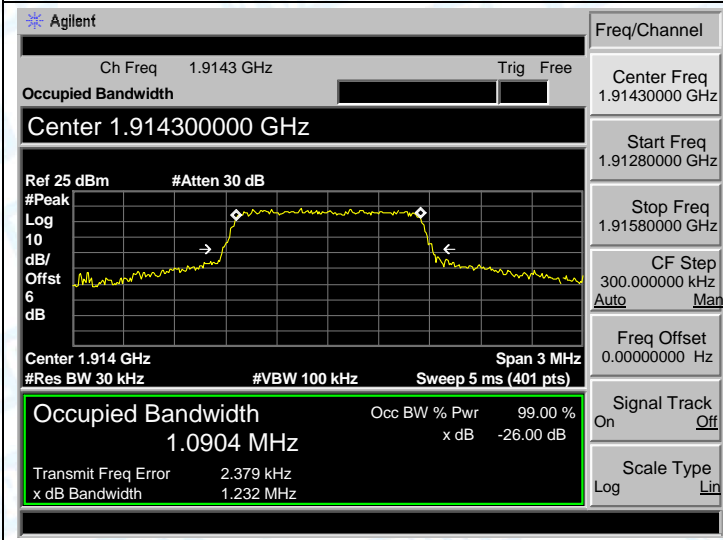
LTE BAND 25 (1.4MHz QPSK-Middle CH)

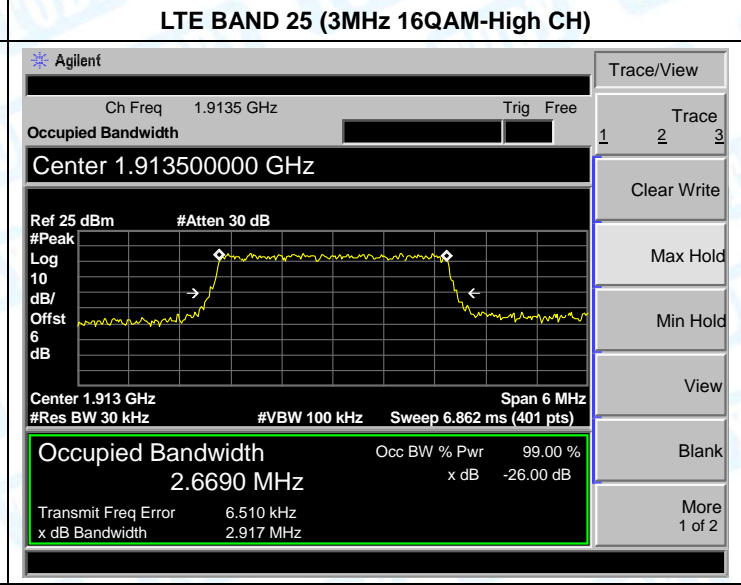
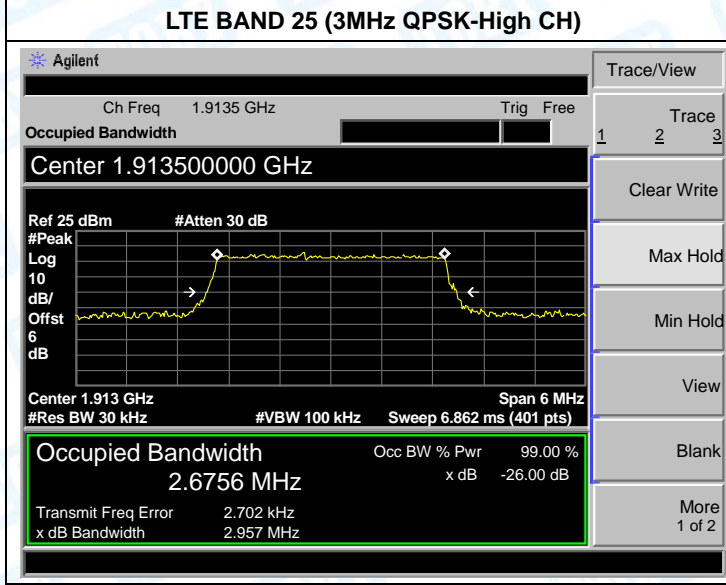
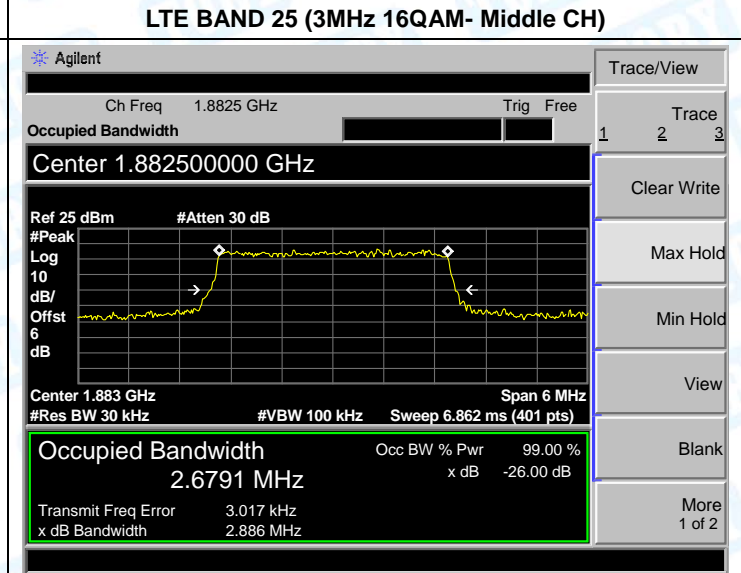
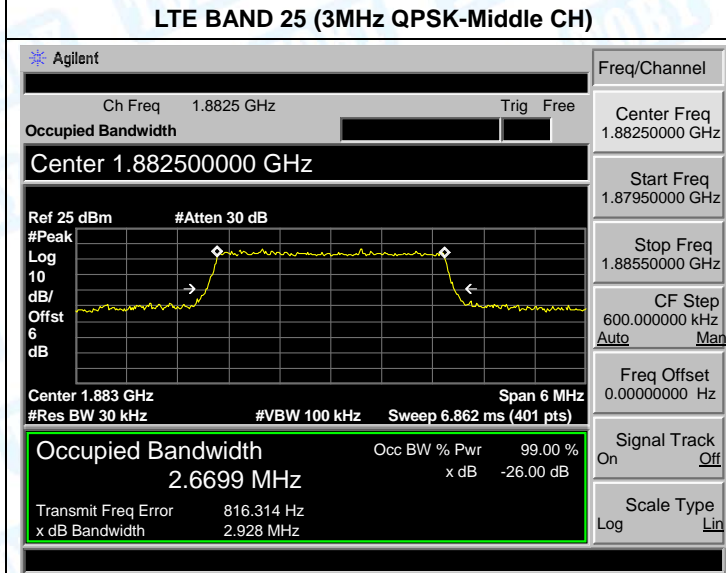
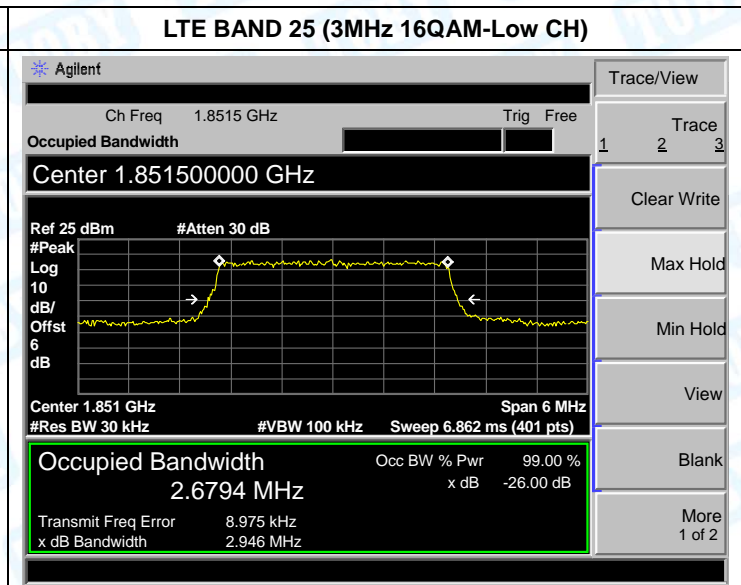
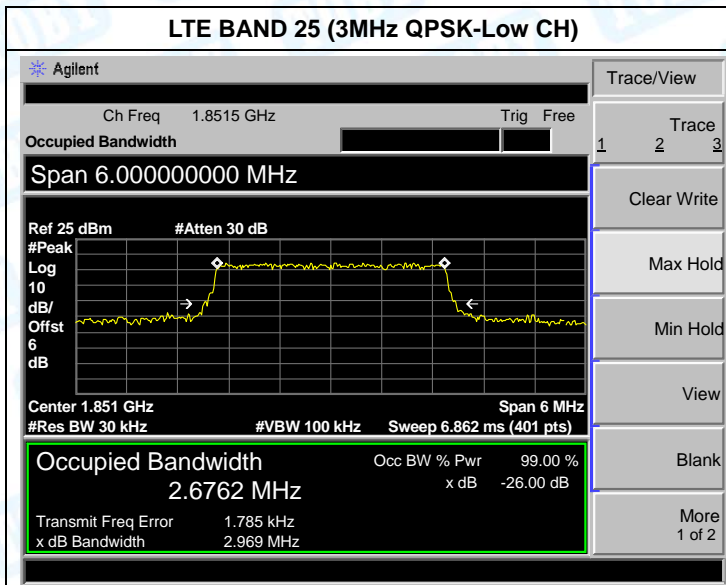
LTE BAND 25 (1.4MHz 16QAM- Middle CH)

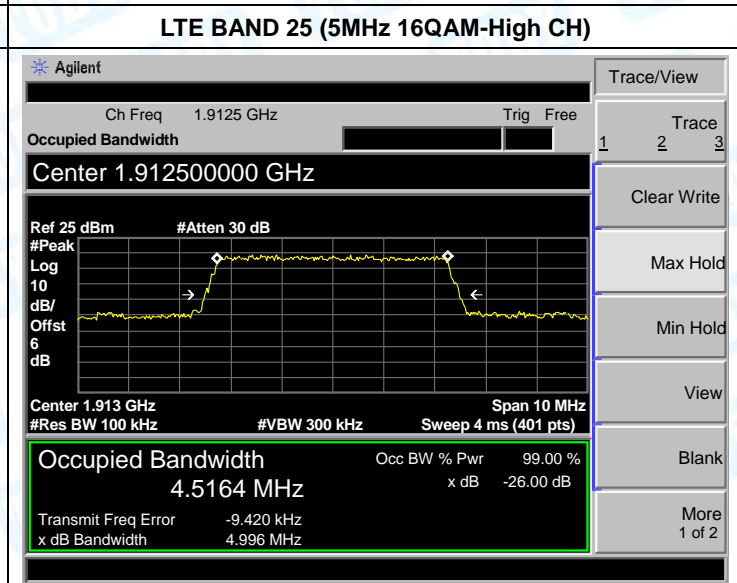
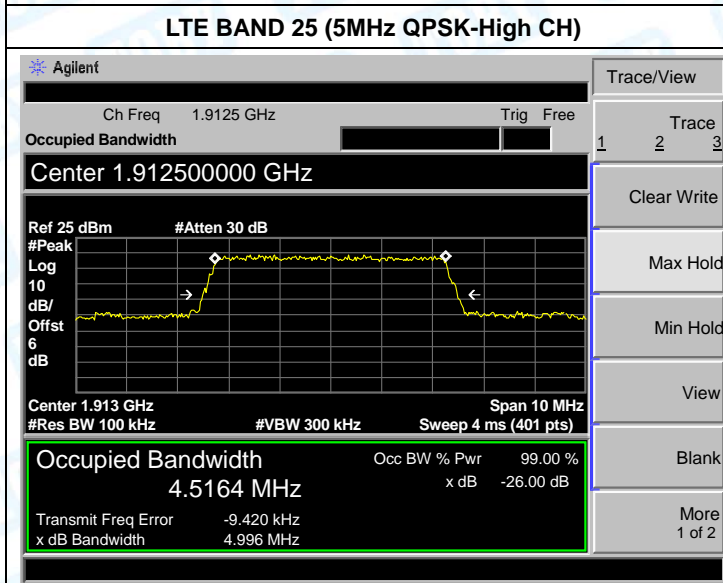
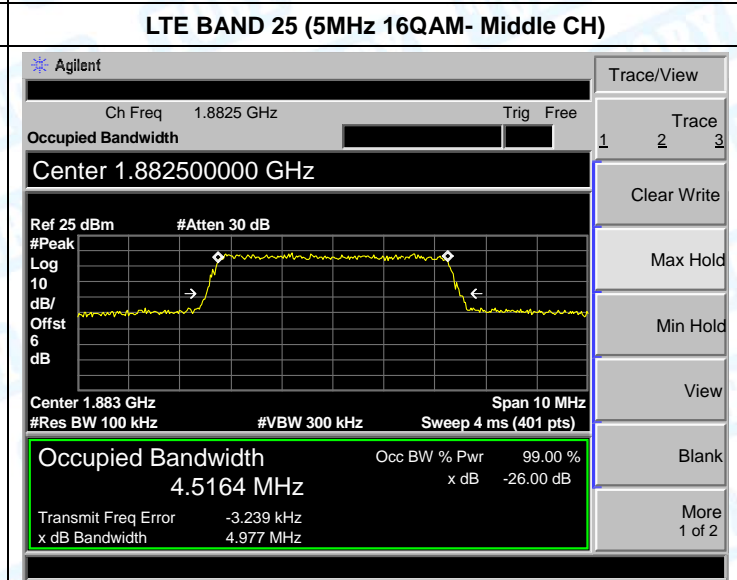
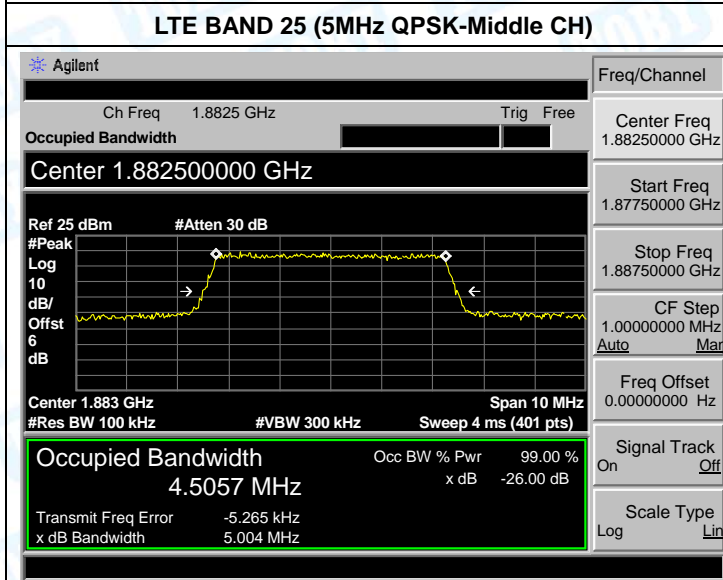
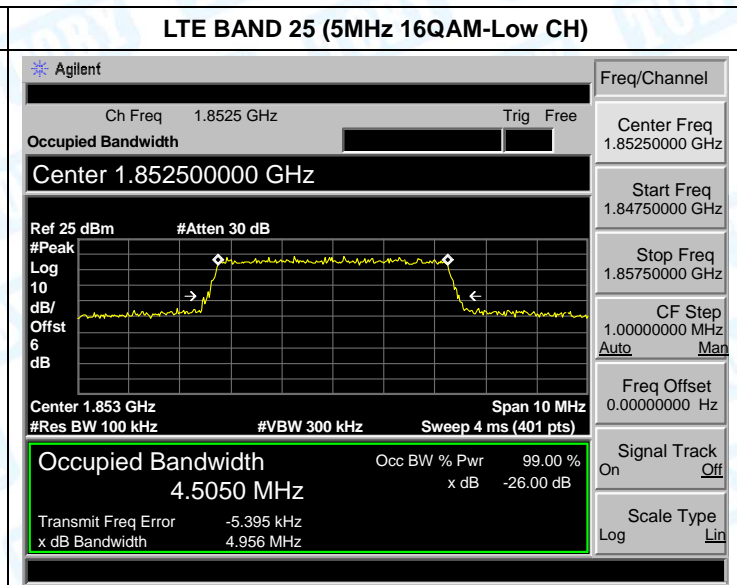
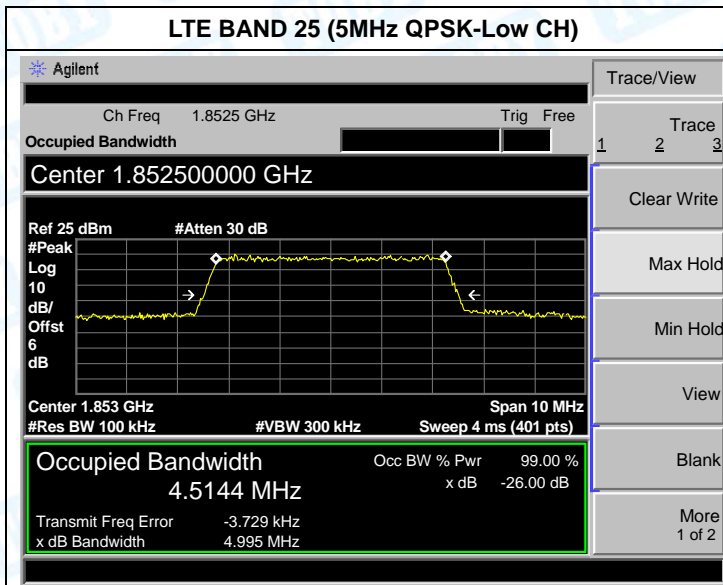


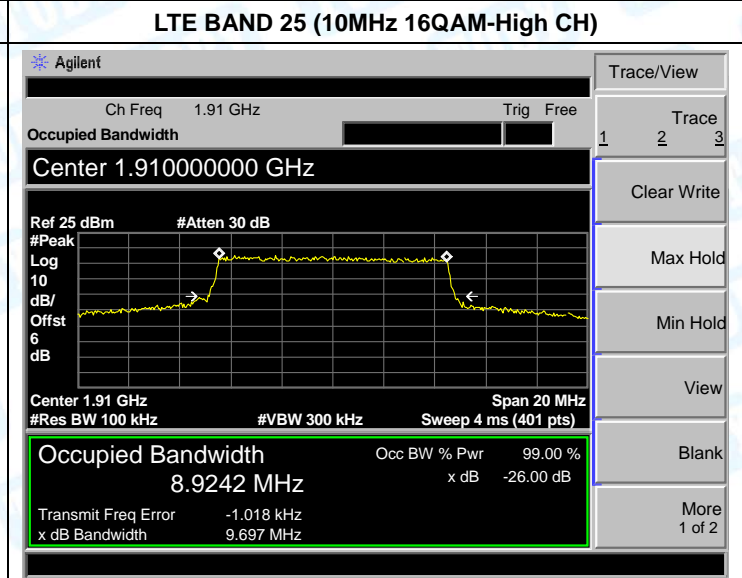
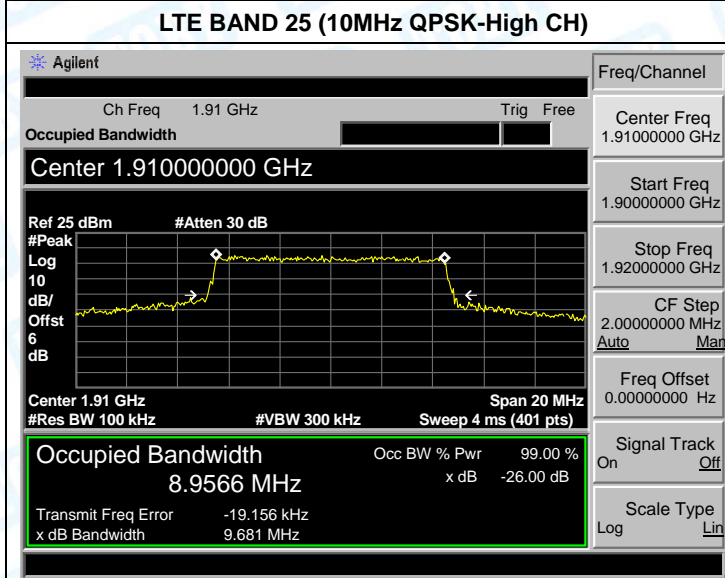
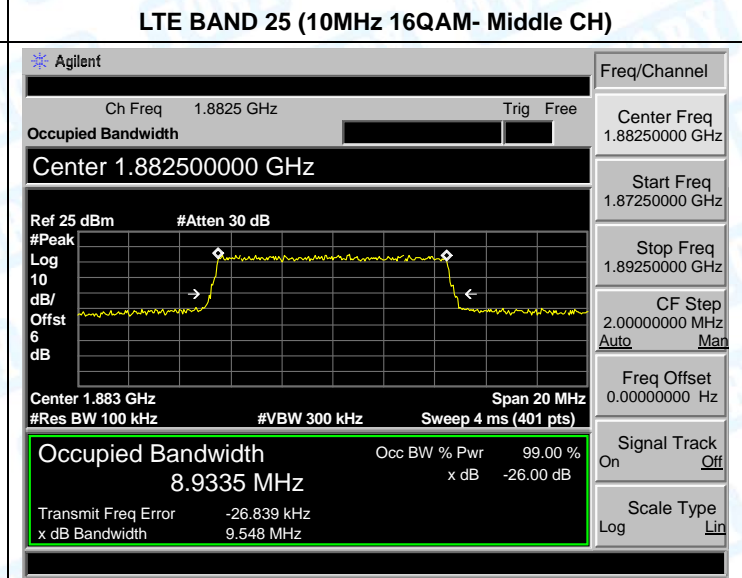
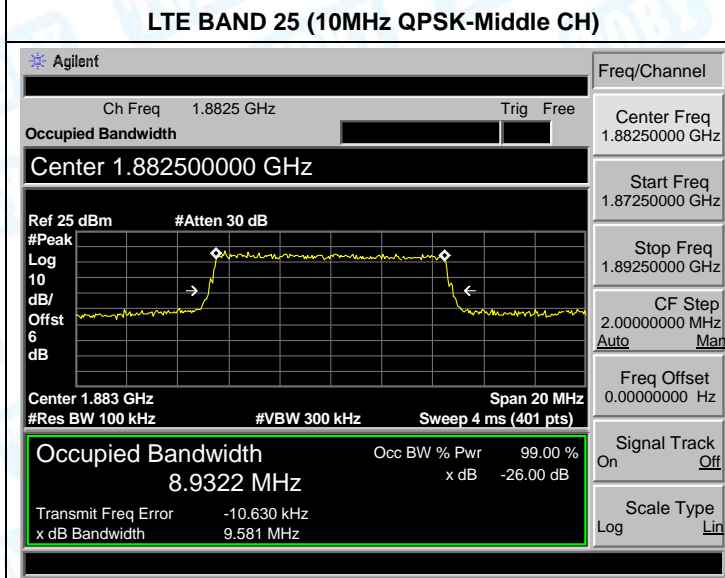
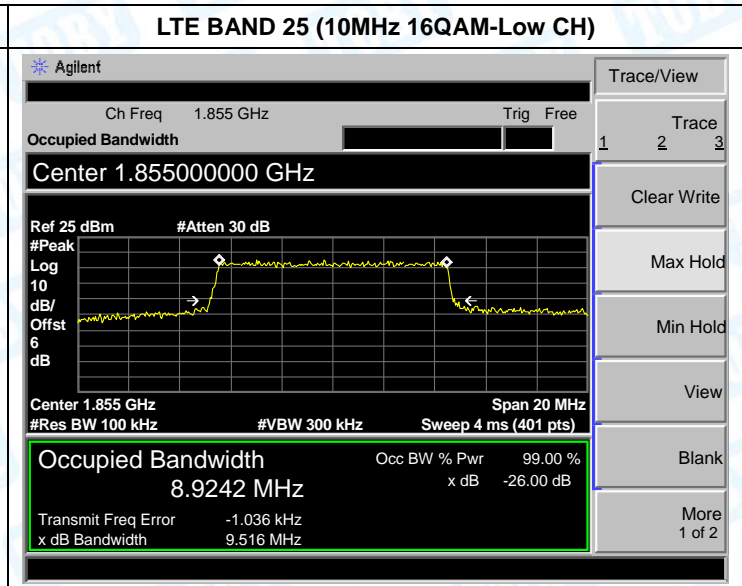
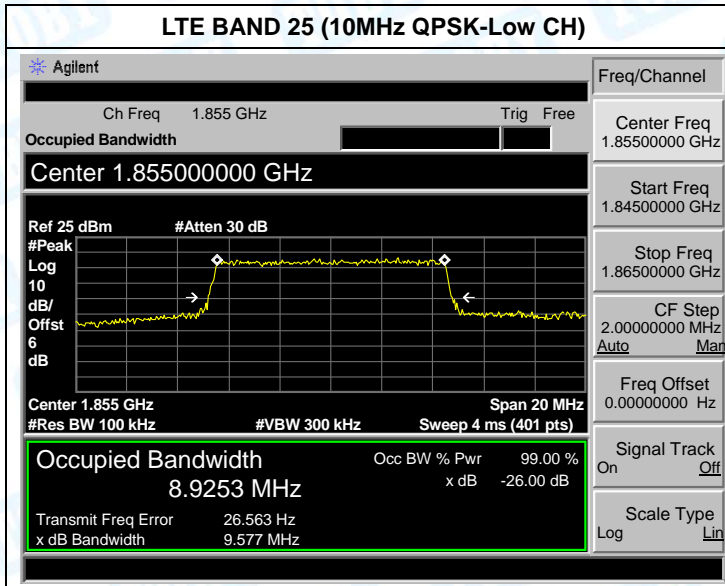
LTE BAND 25 (1.4MHz QPSK-High CH)

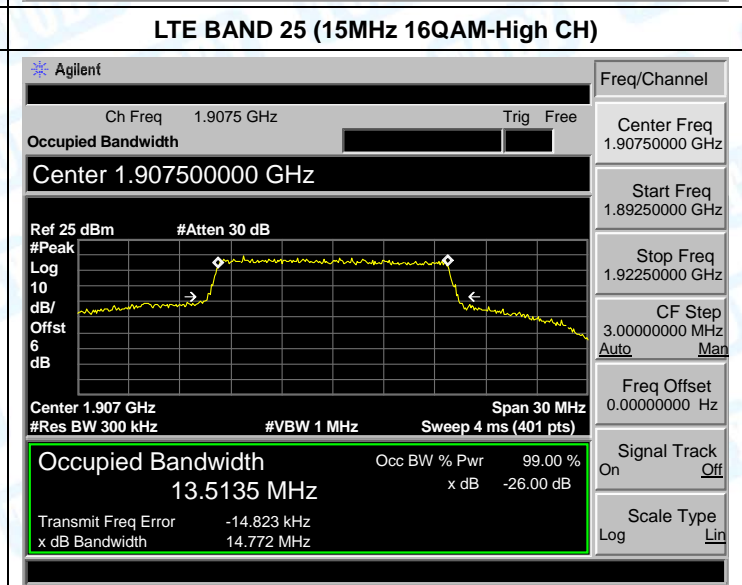
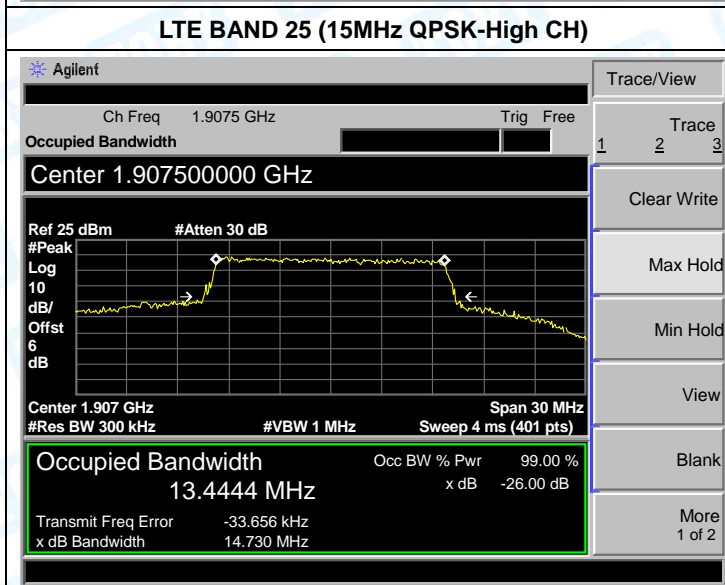
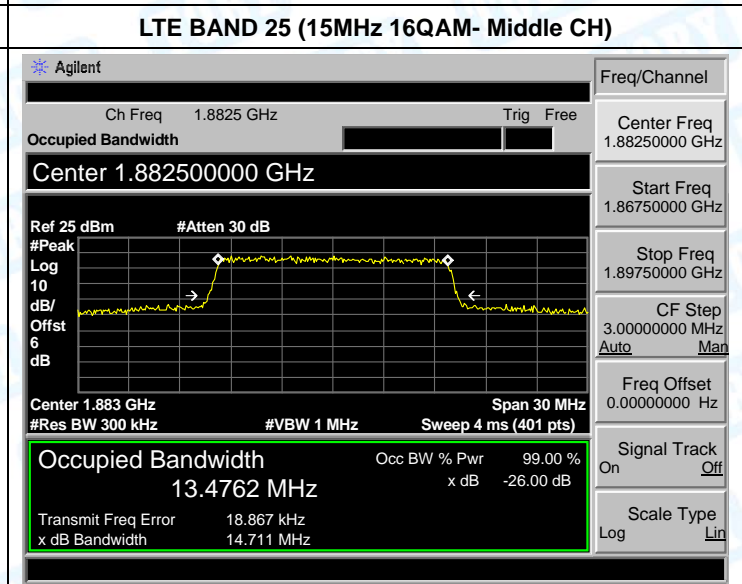
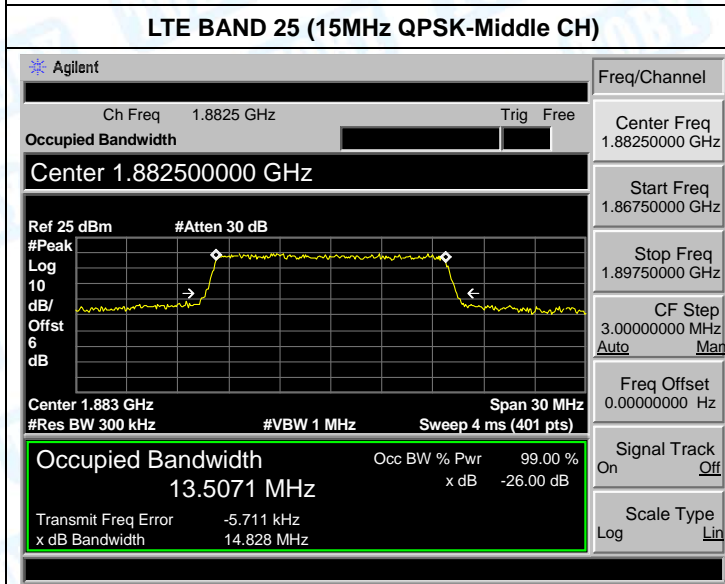
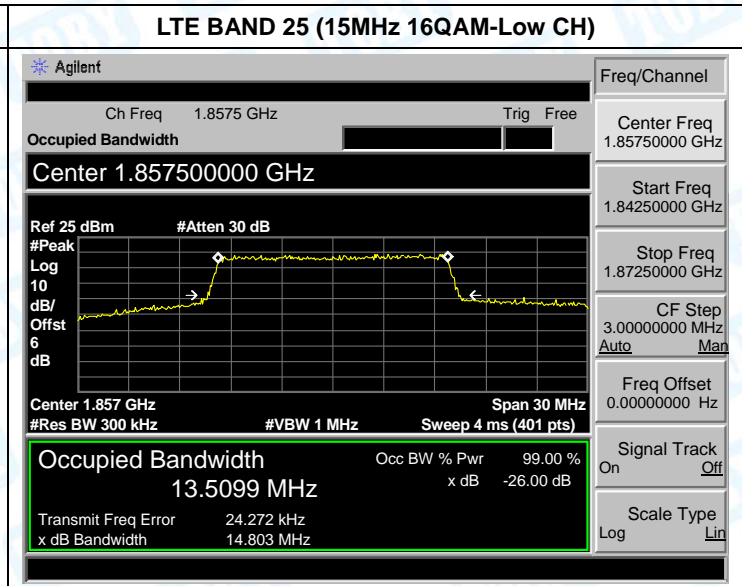
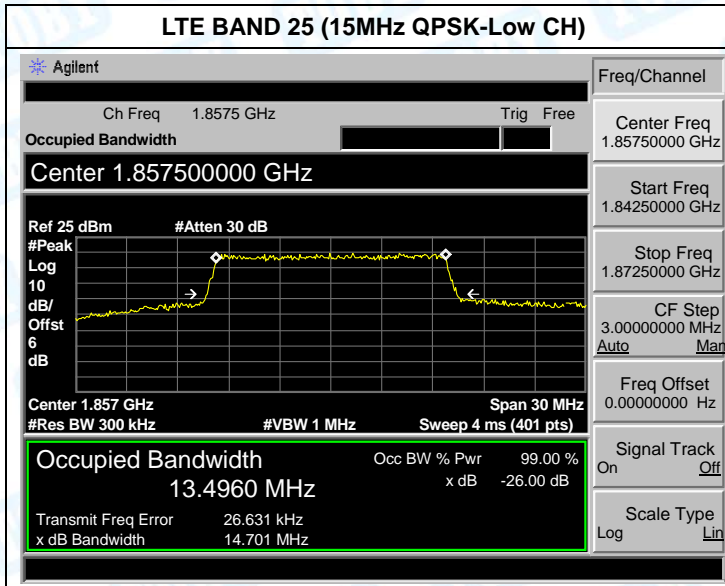
LTE BAND 25 (1.4MHz 16QAM-High CH)

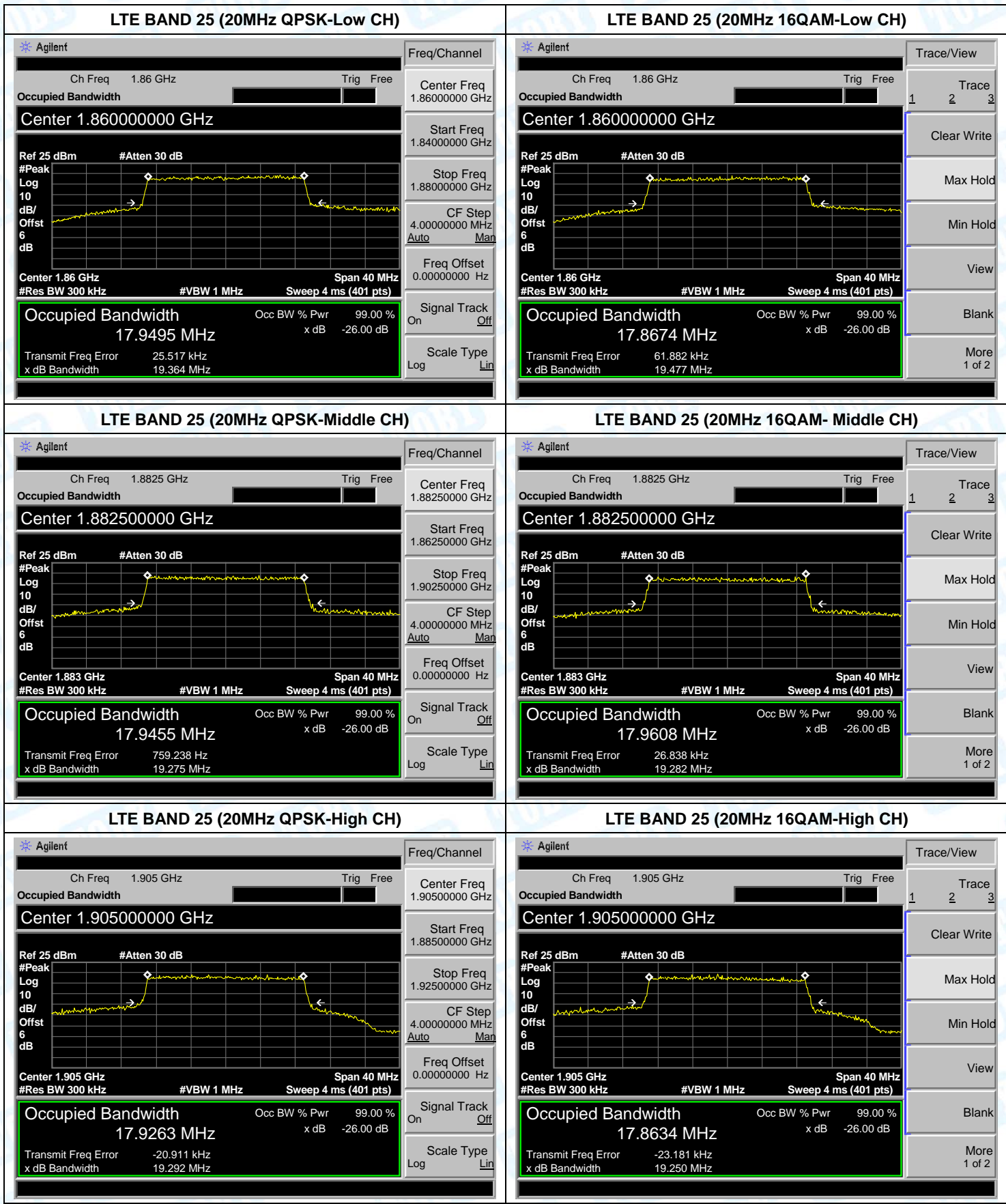








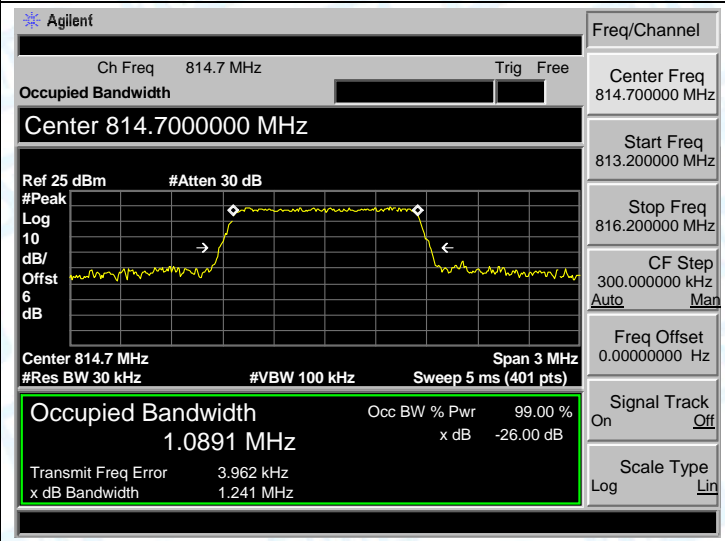
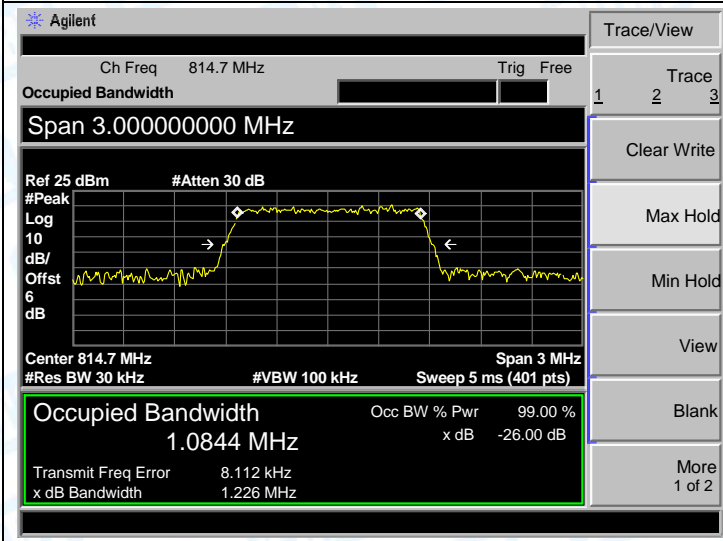




Occupancy Bandwidth Test Plot

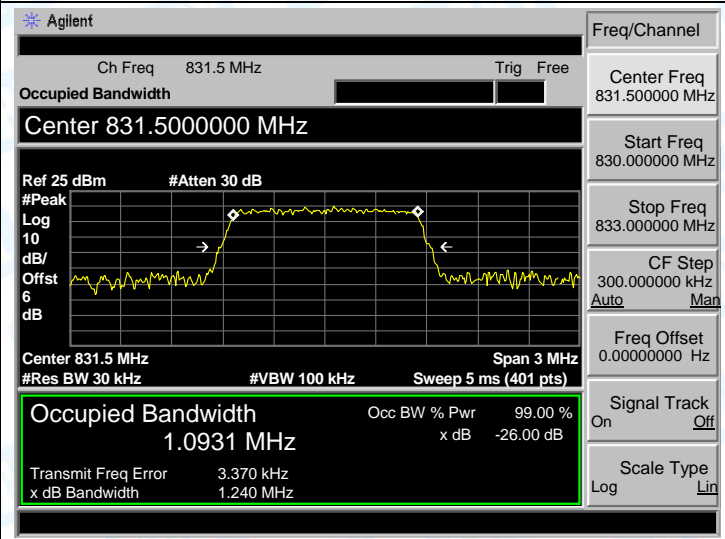
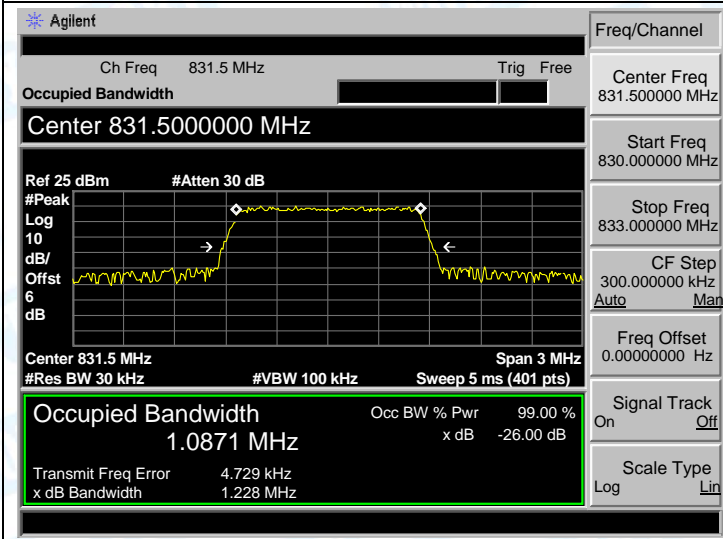
LTE BAND 26 (1.4MHz QPSK-Low CH)

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



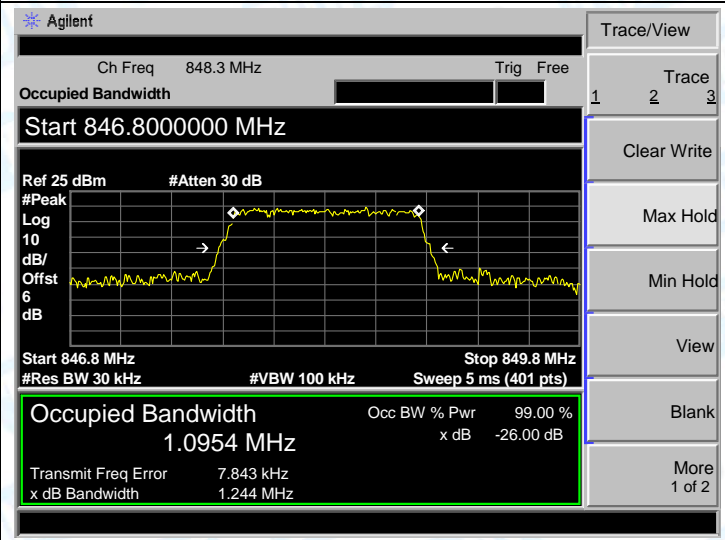
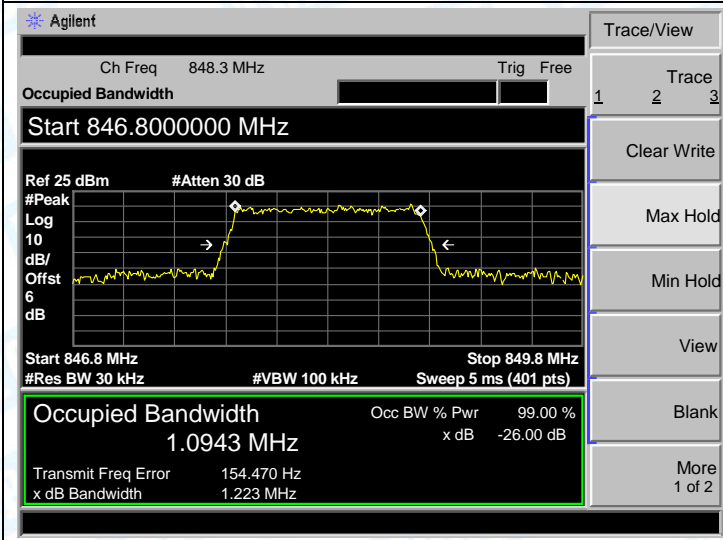
LTE BAND 26 (1.4MHz QPSK-Middle CH)

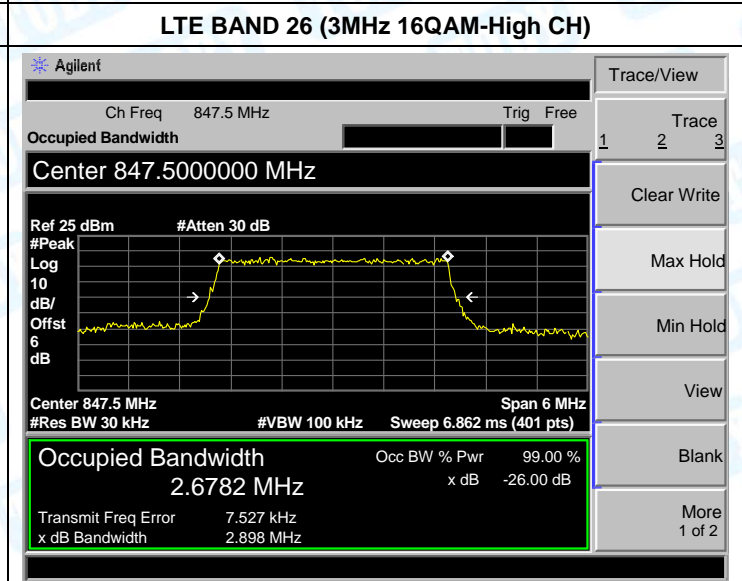
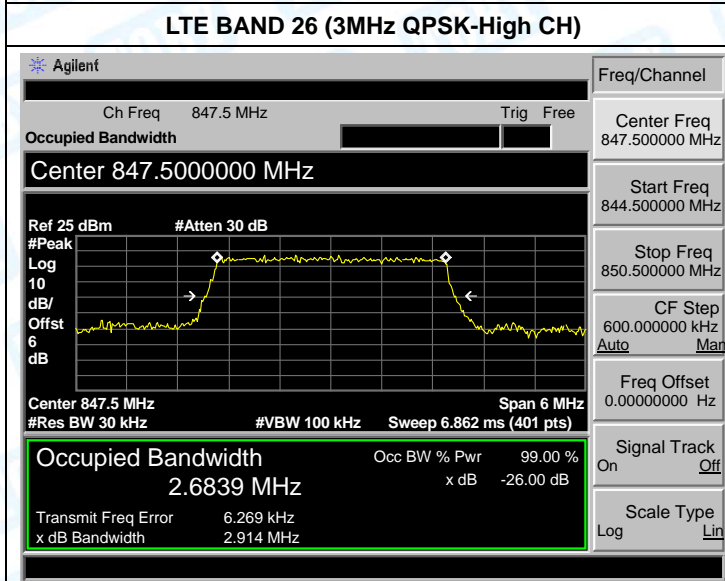
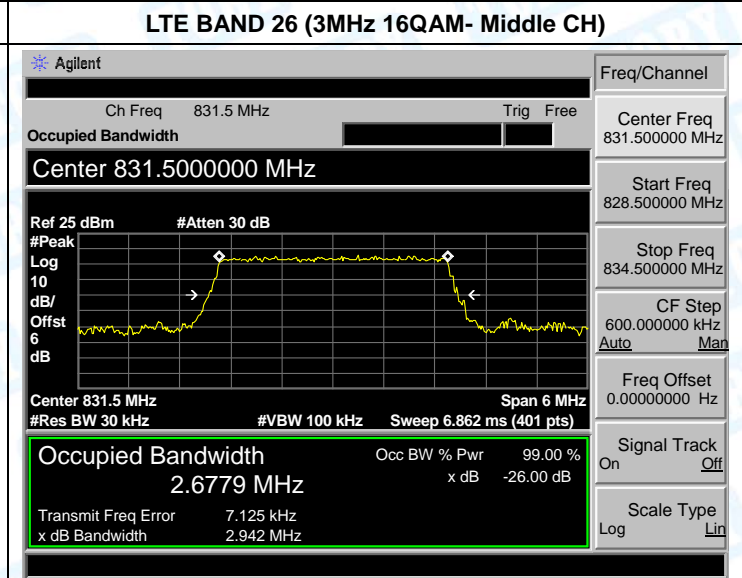
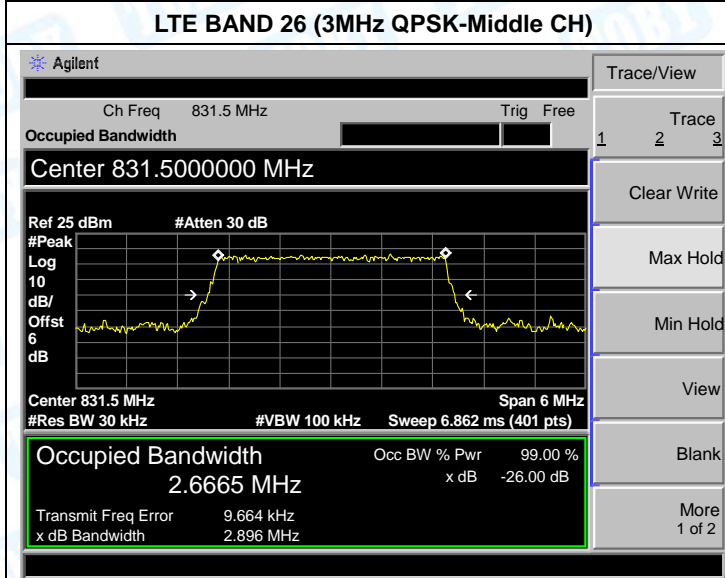
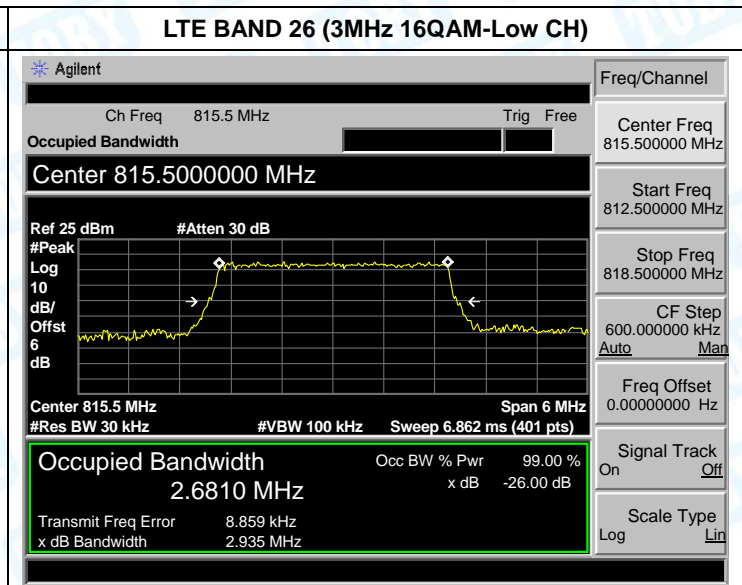
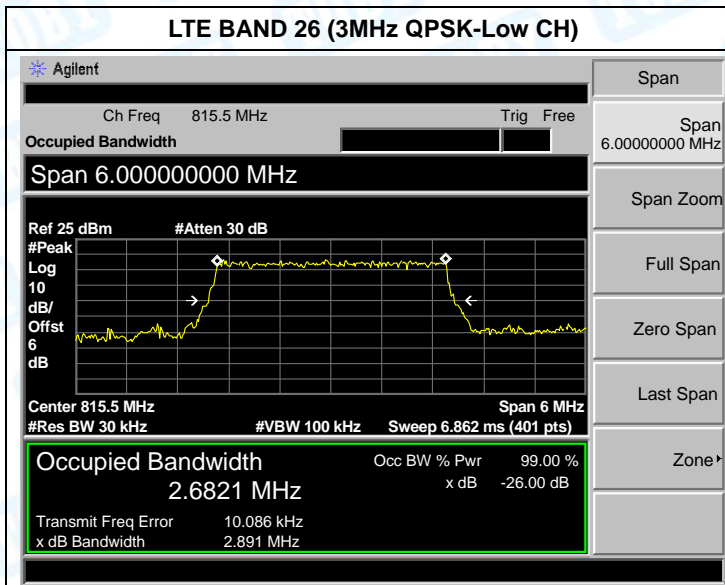
LTE BAND 26 (1.4MHz 16QAM- Middle CH)

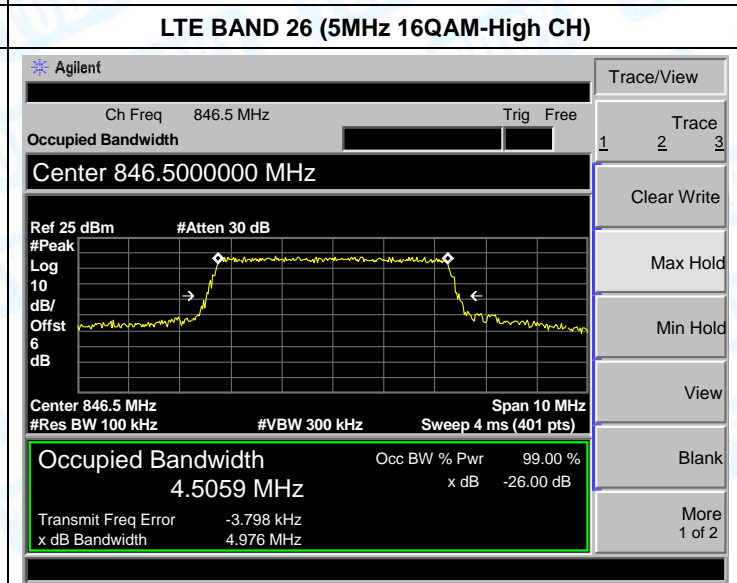
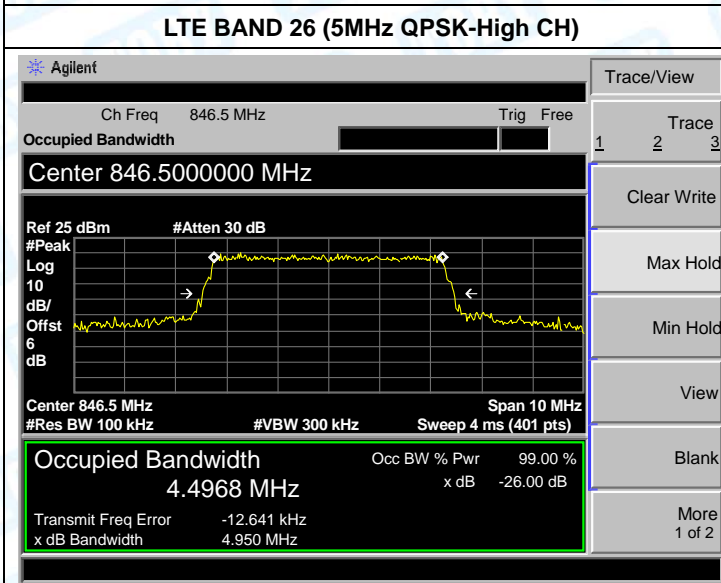
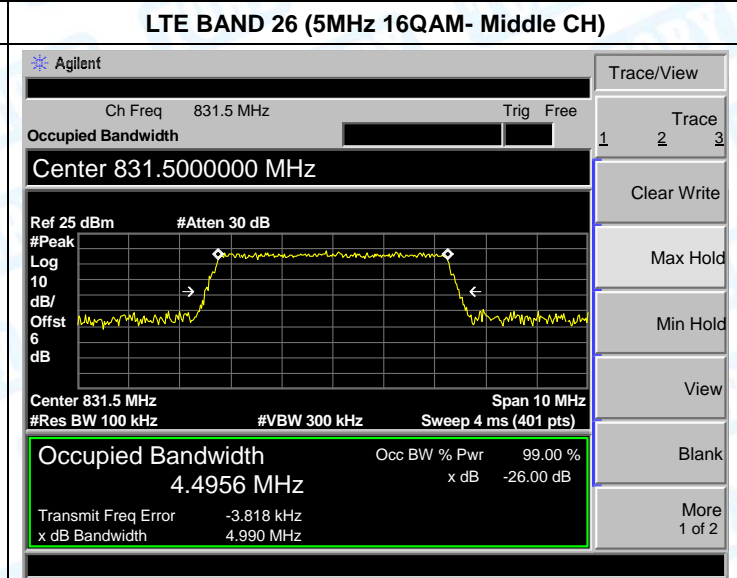
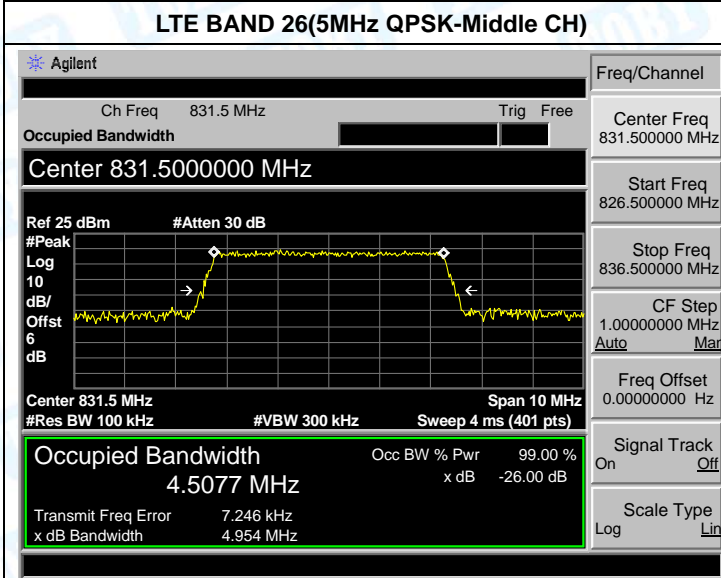
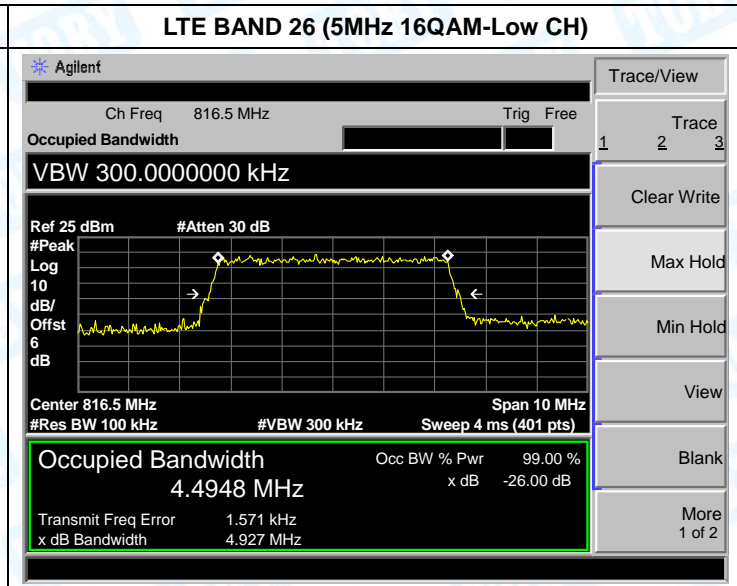
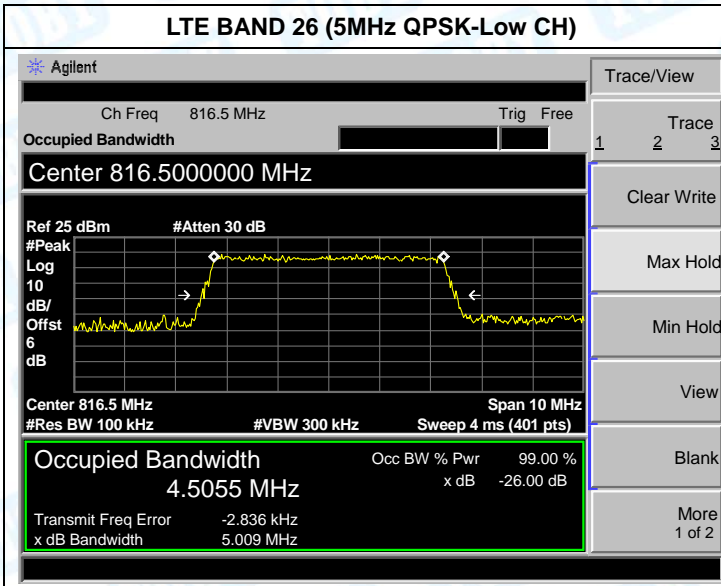


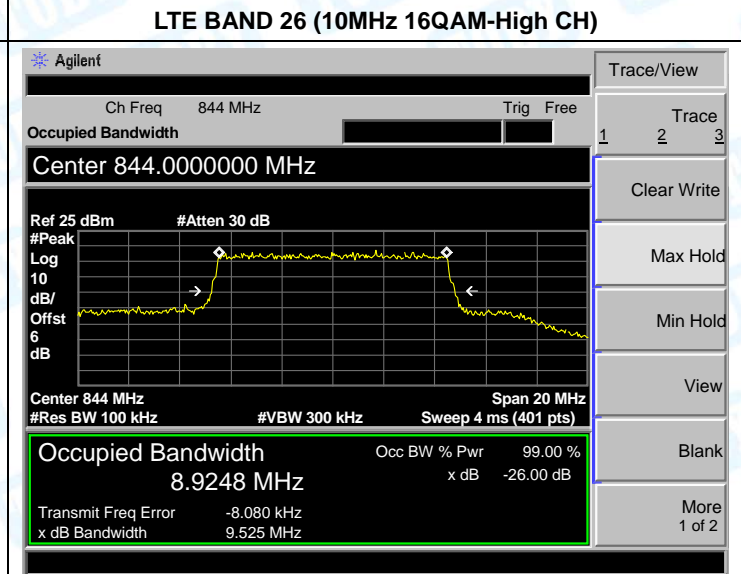
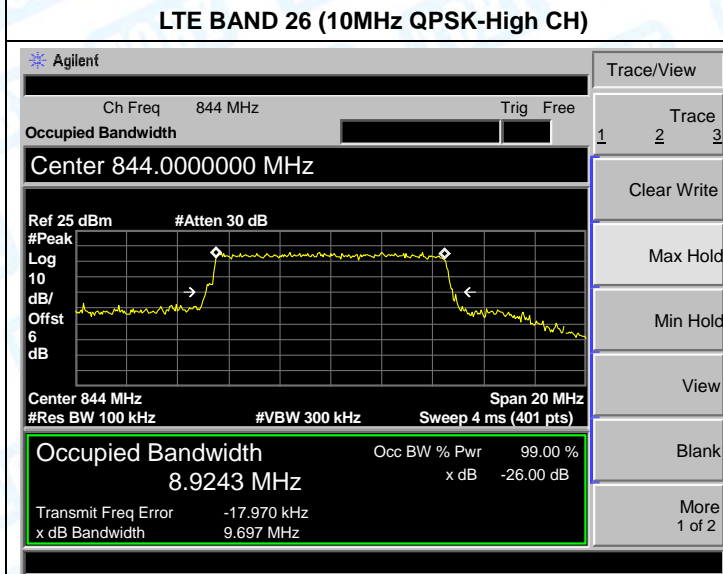
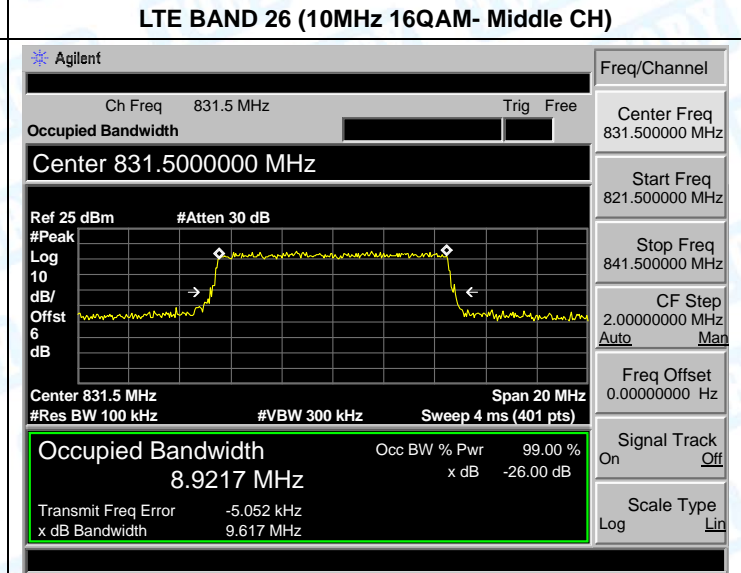
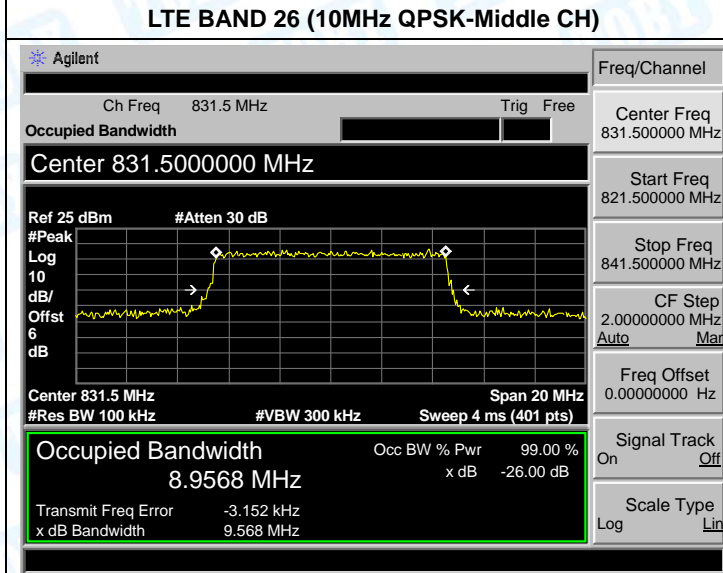
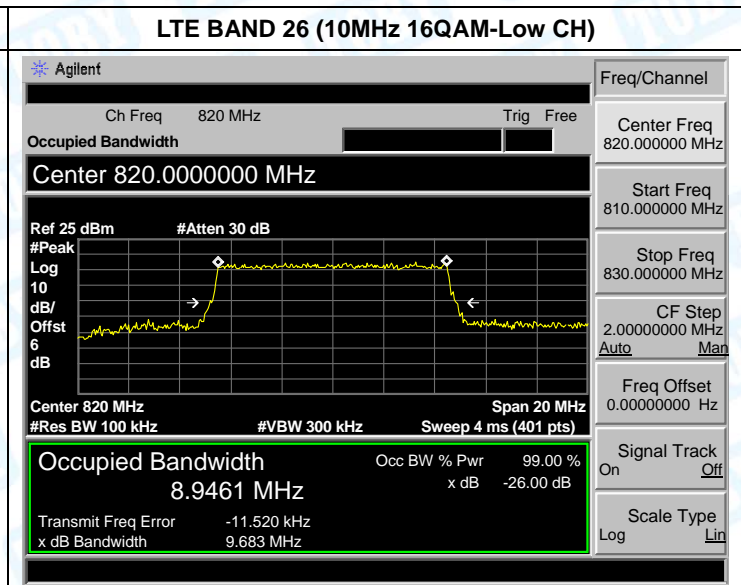
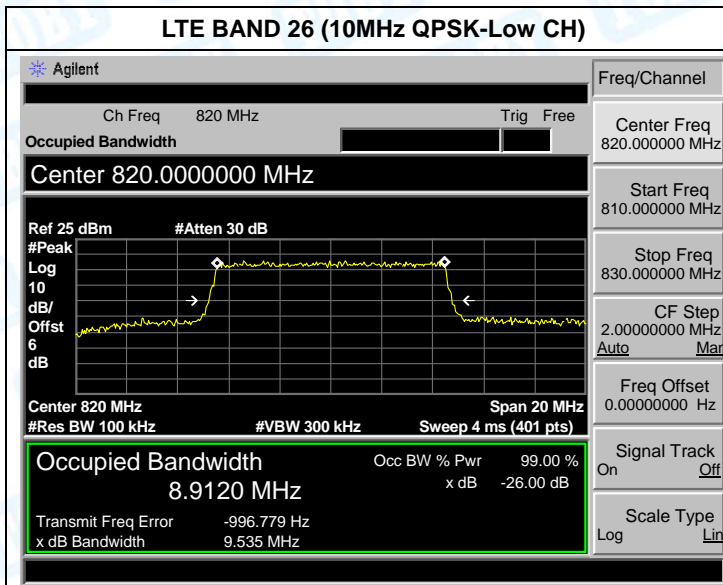
LTE BAND 26 (1.4MHz QPSK-High CH)

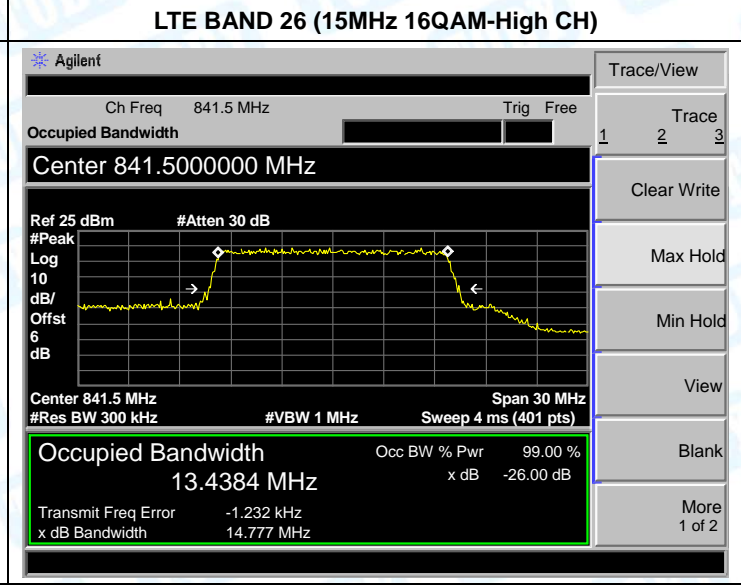
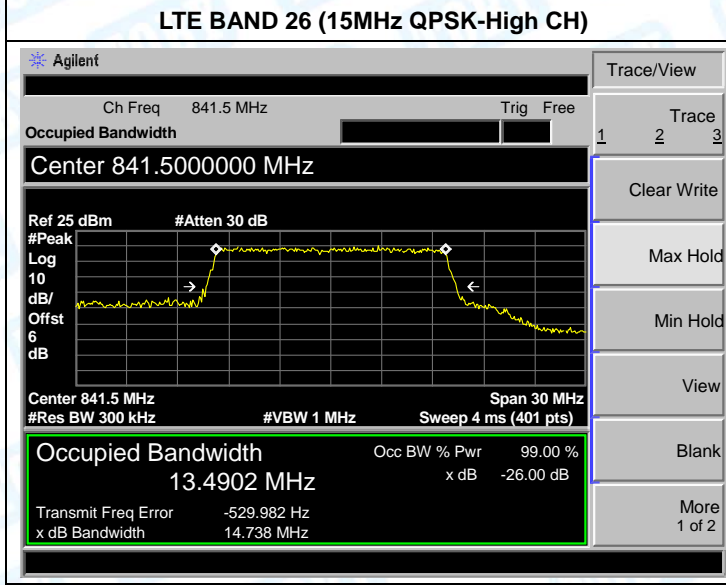
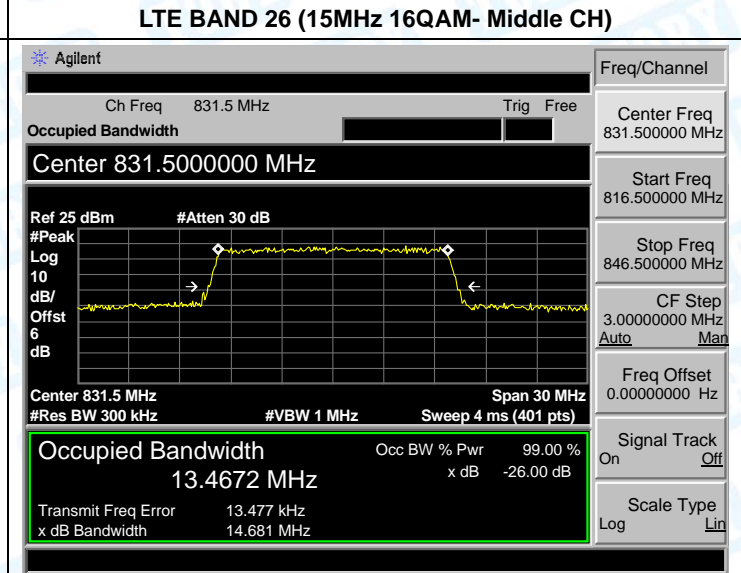
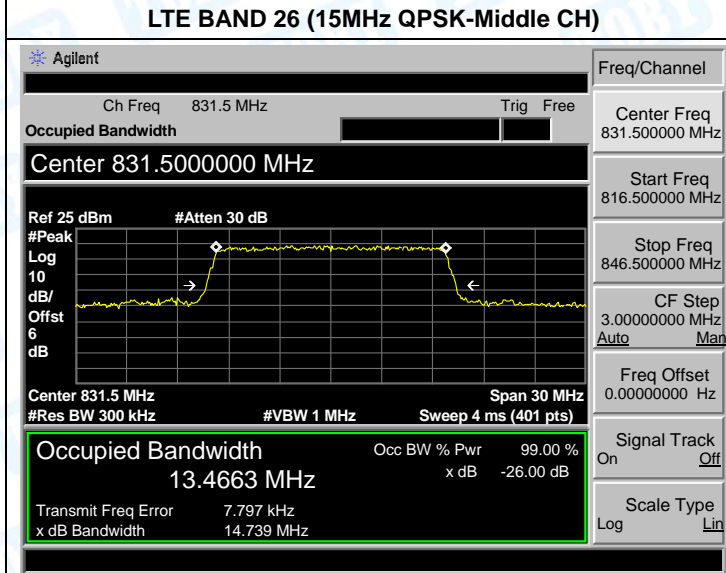
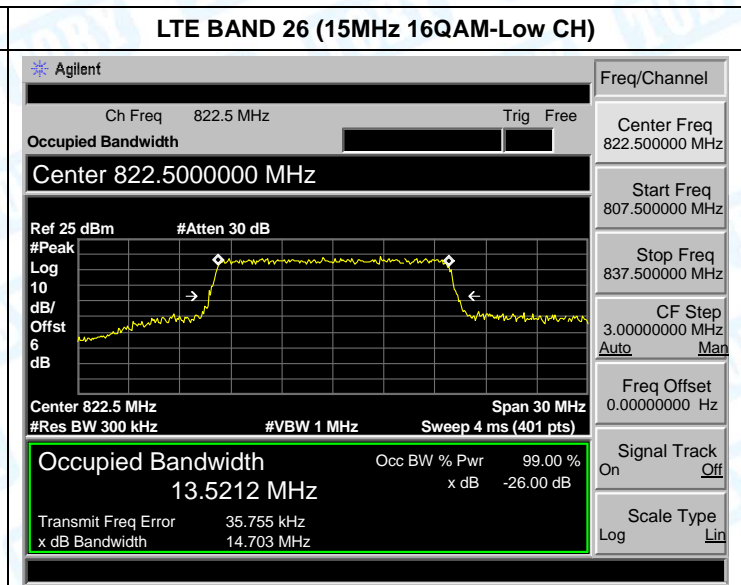
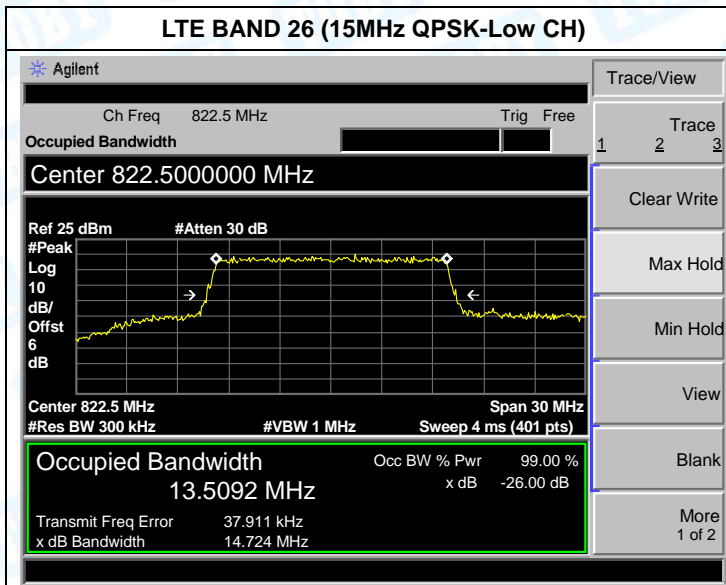
LTE BAND 26 (1.4MHz 16QAM-High CH)





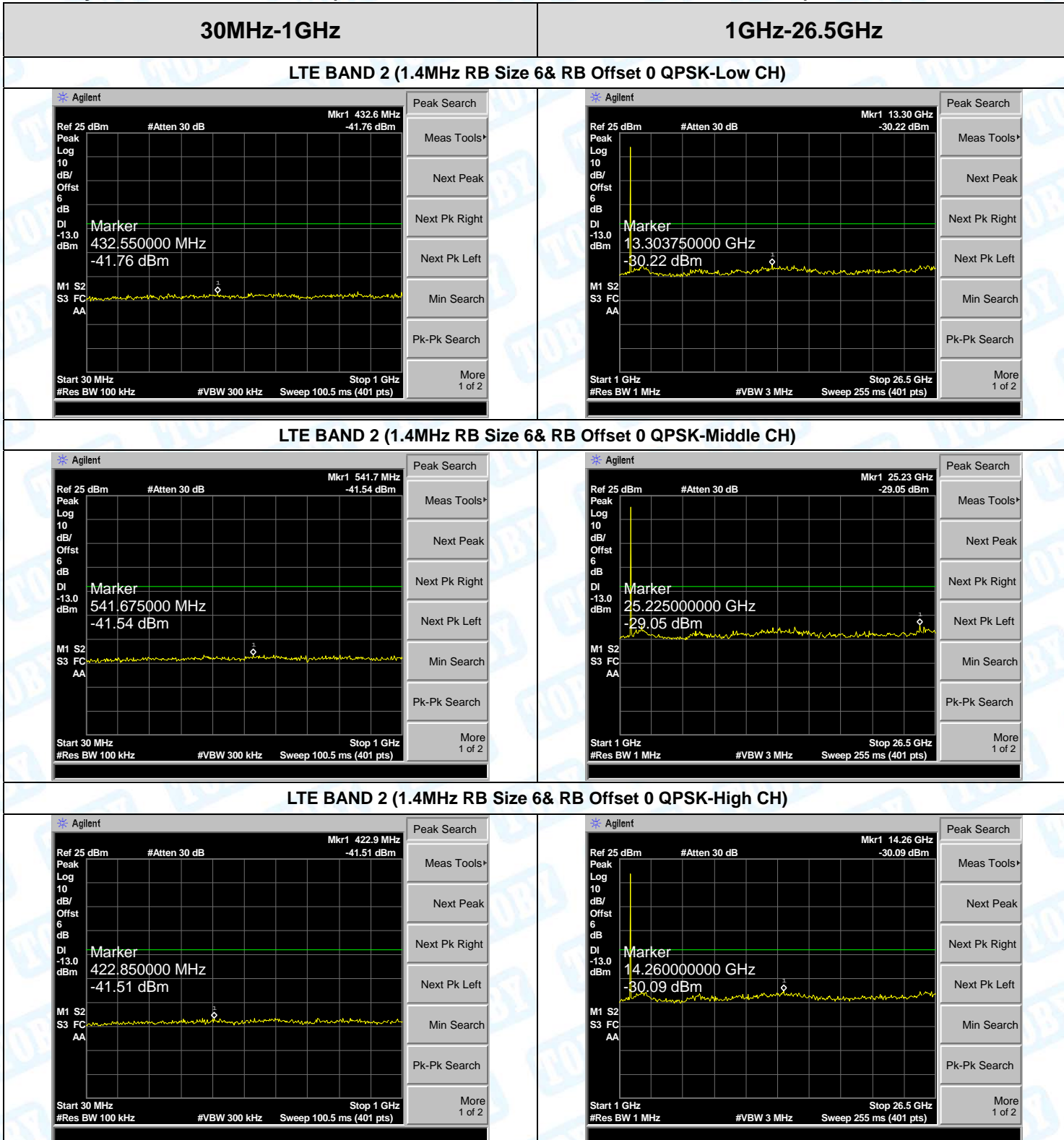






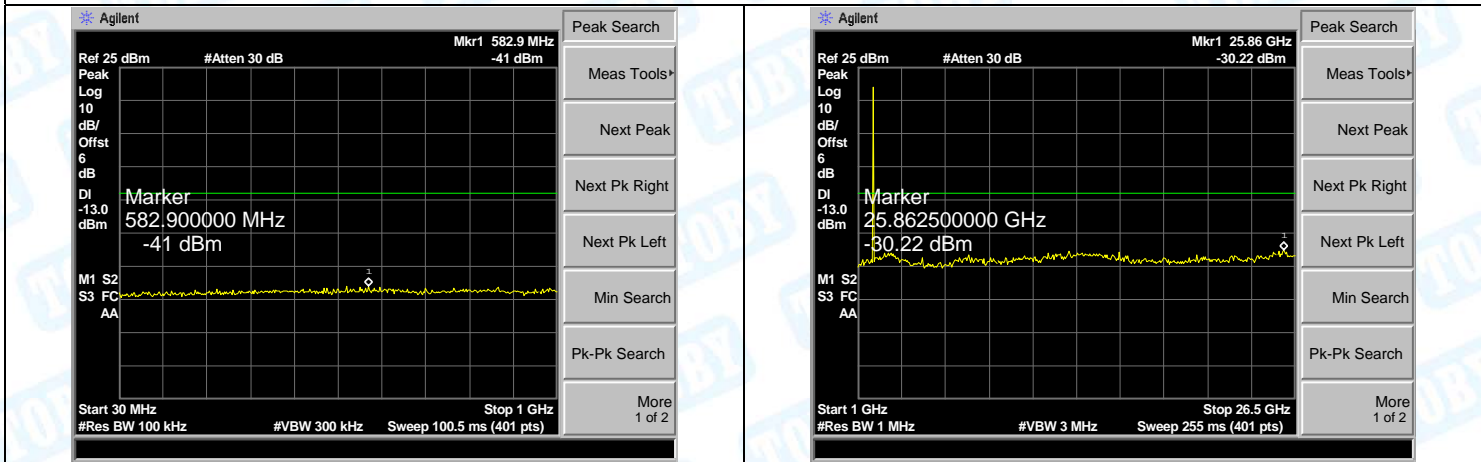
ATTACHMENT D--OUT OF BAND EMISSION AT ANTENNA TERMINALS

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

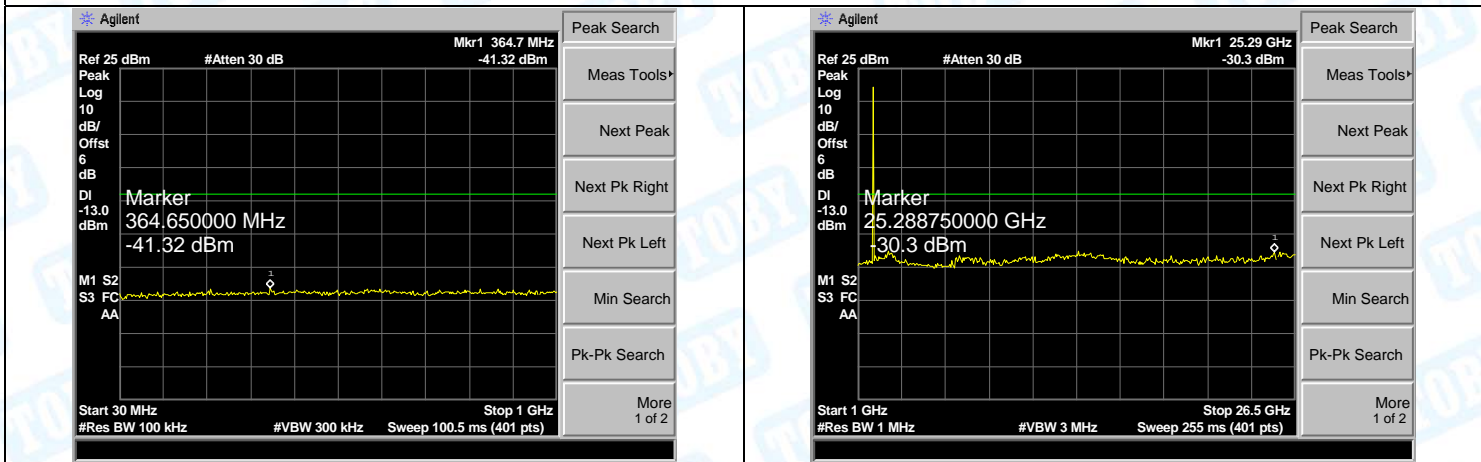


30MHz-1GHz **1GHz-26.5GHz**

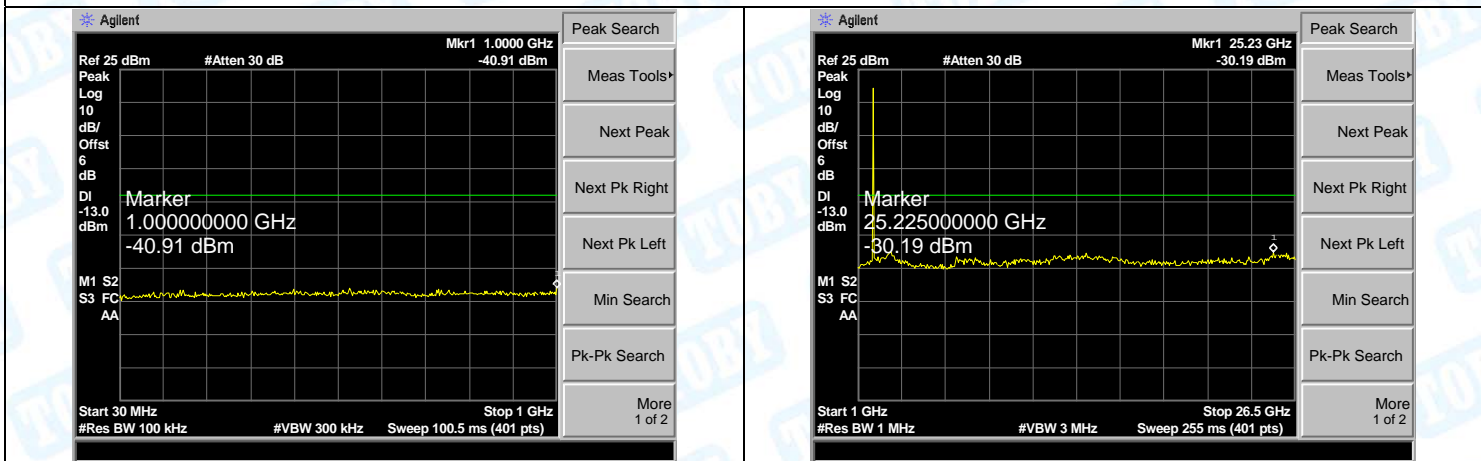
LTE BAND 2 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



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

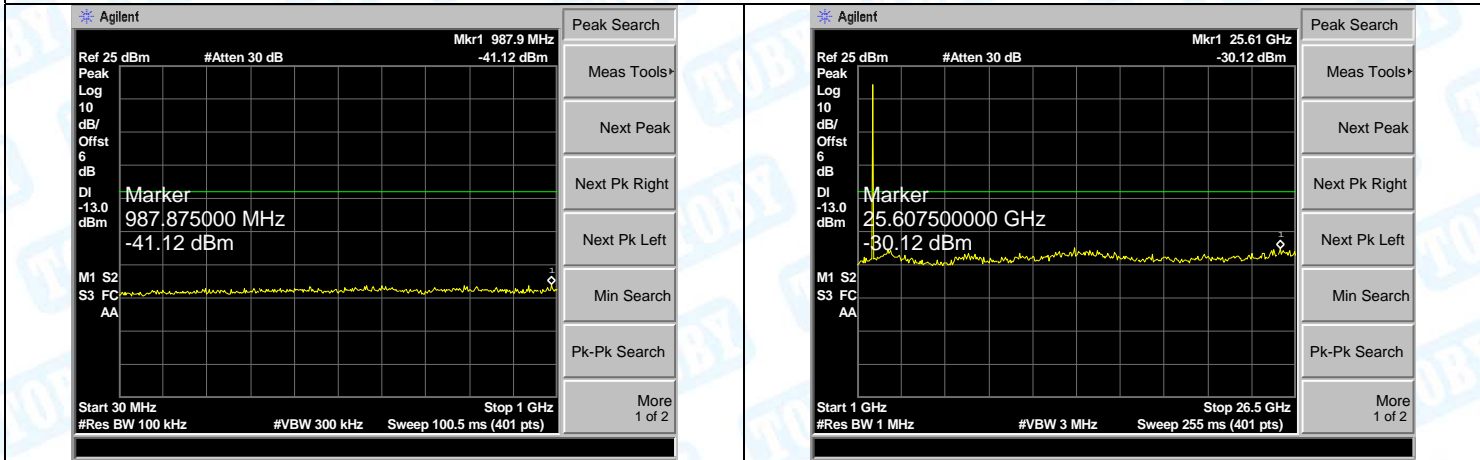


LTE BAND 2 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)

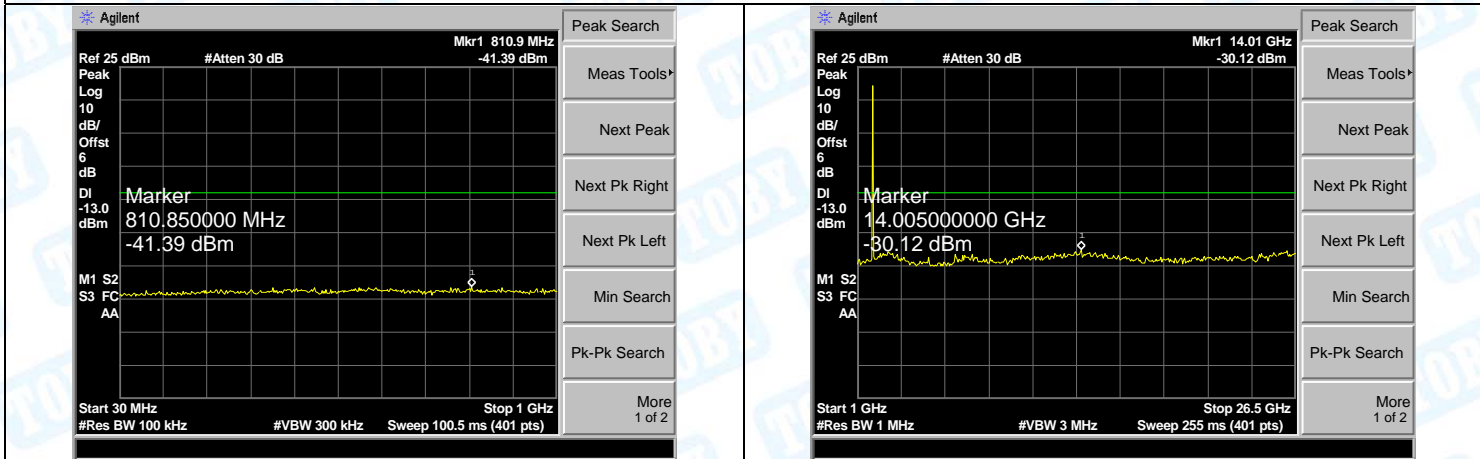


30MHz-1GHz	1GHz-26.5GHz
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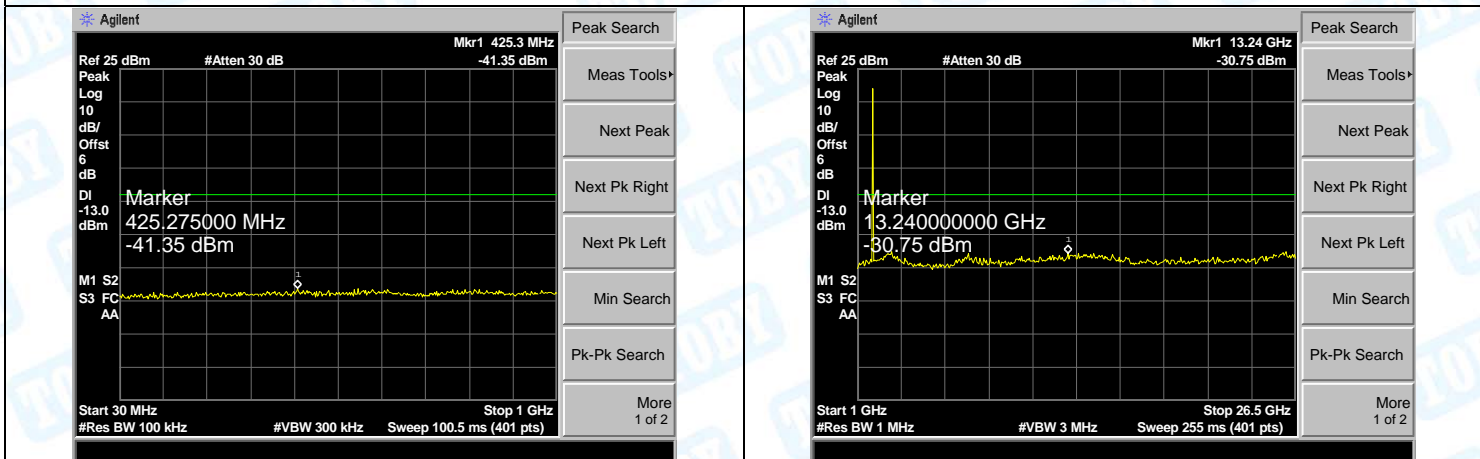
LTE BAND 2 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



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

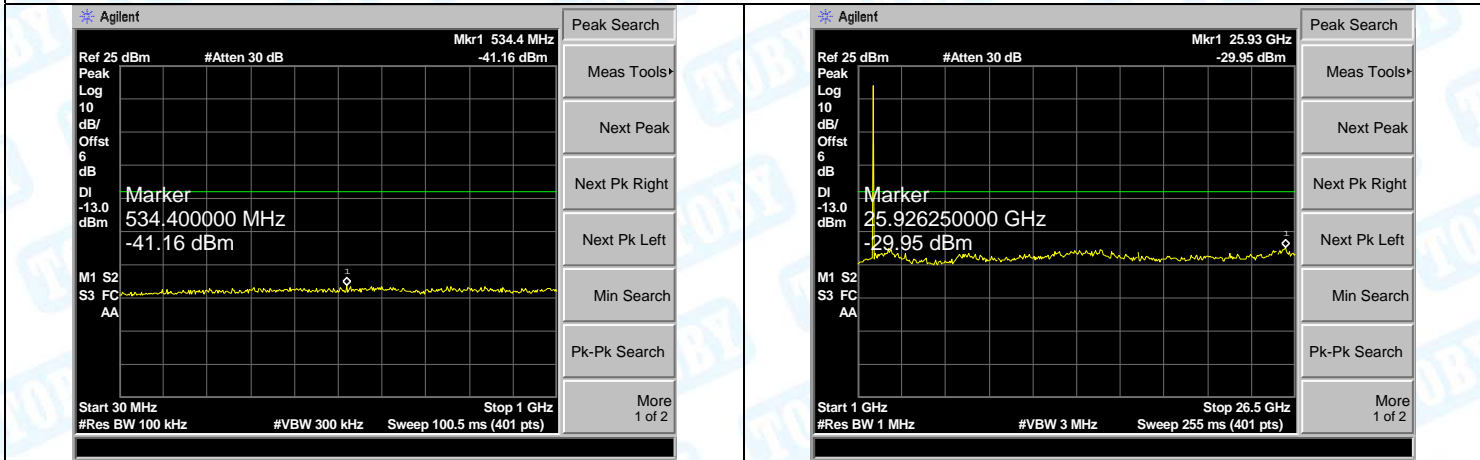


LTE BAND 2 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)

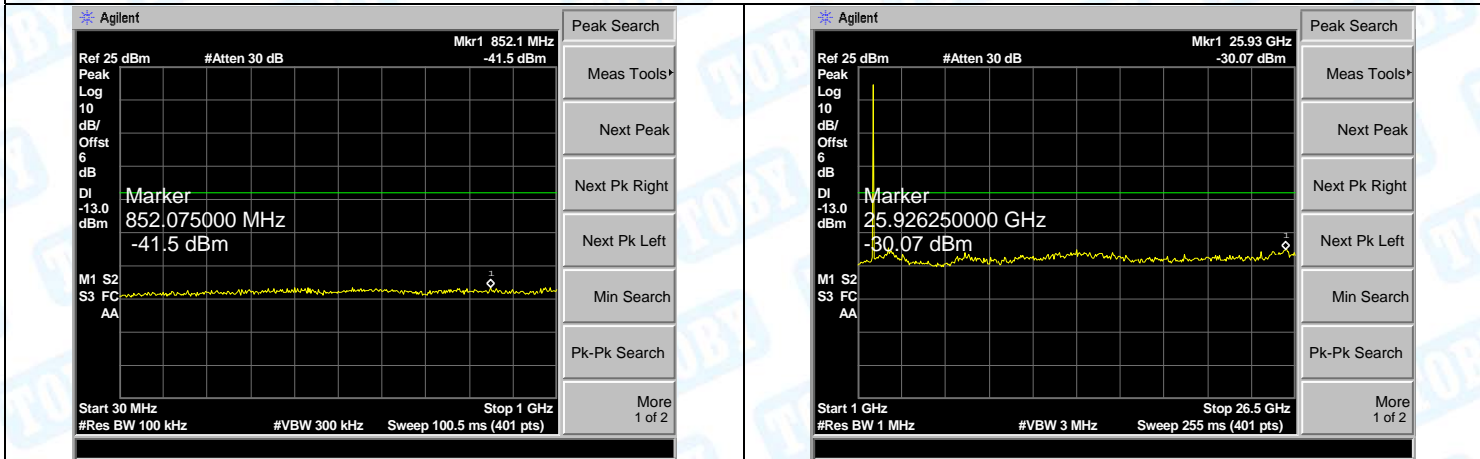


30MHz-1GHz	1GHz-26.5GHz
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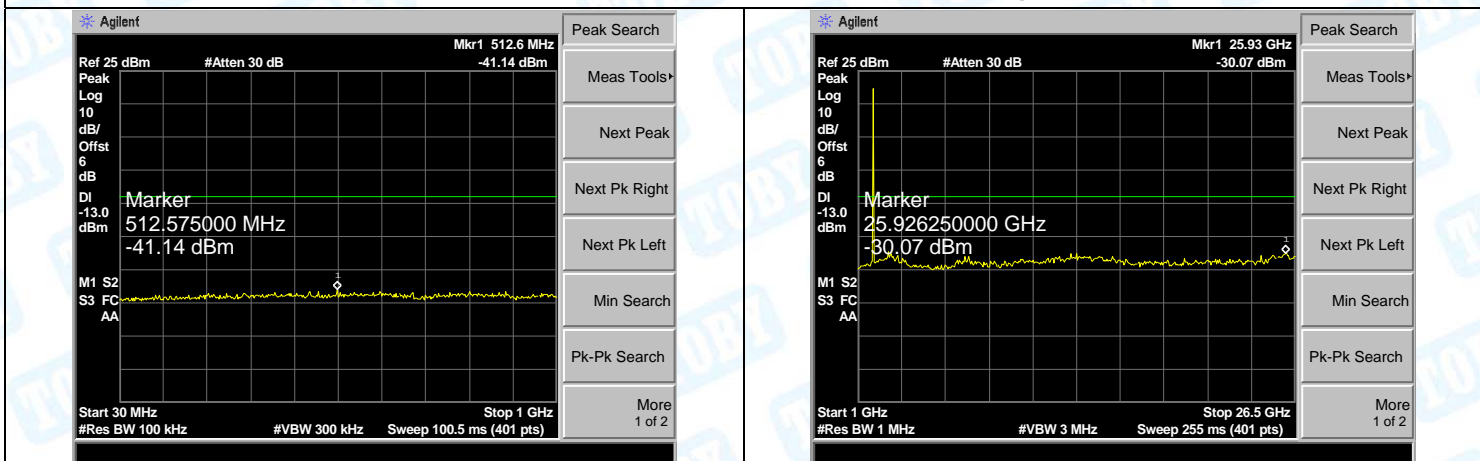
LTE BAND 2 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



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

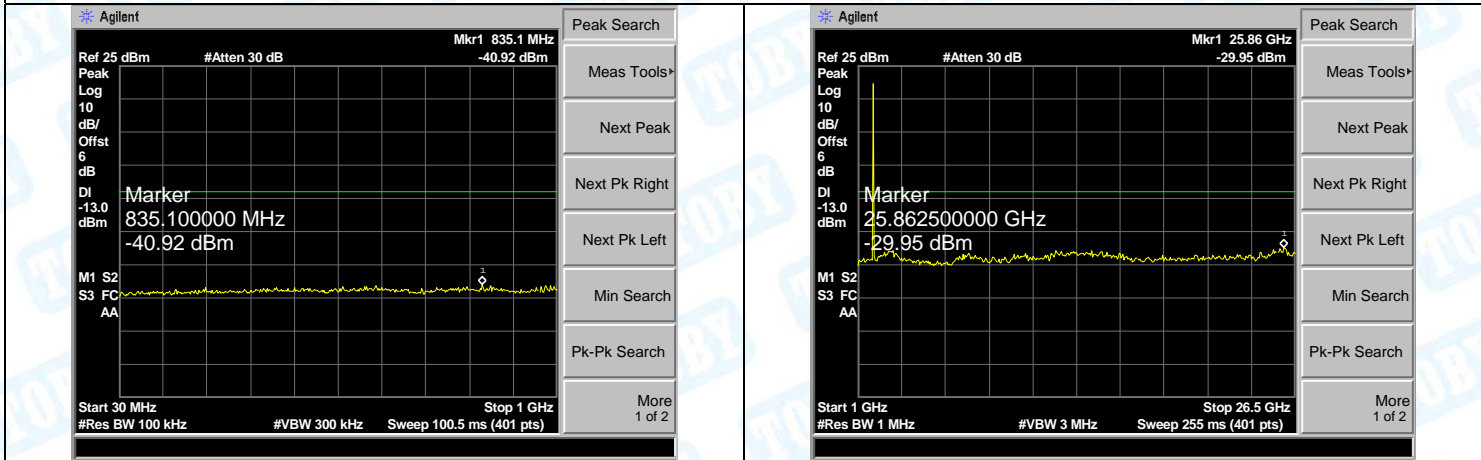


LTE BAND 2 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)

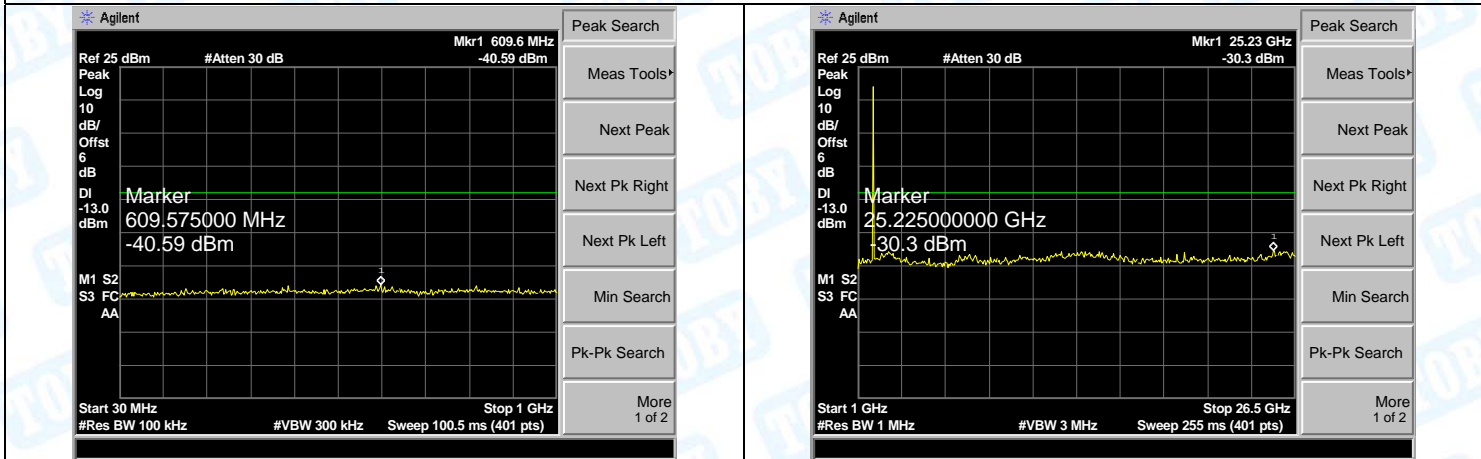


30MHz-1GHz **1GHz-26.5GHz**

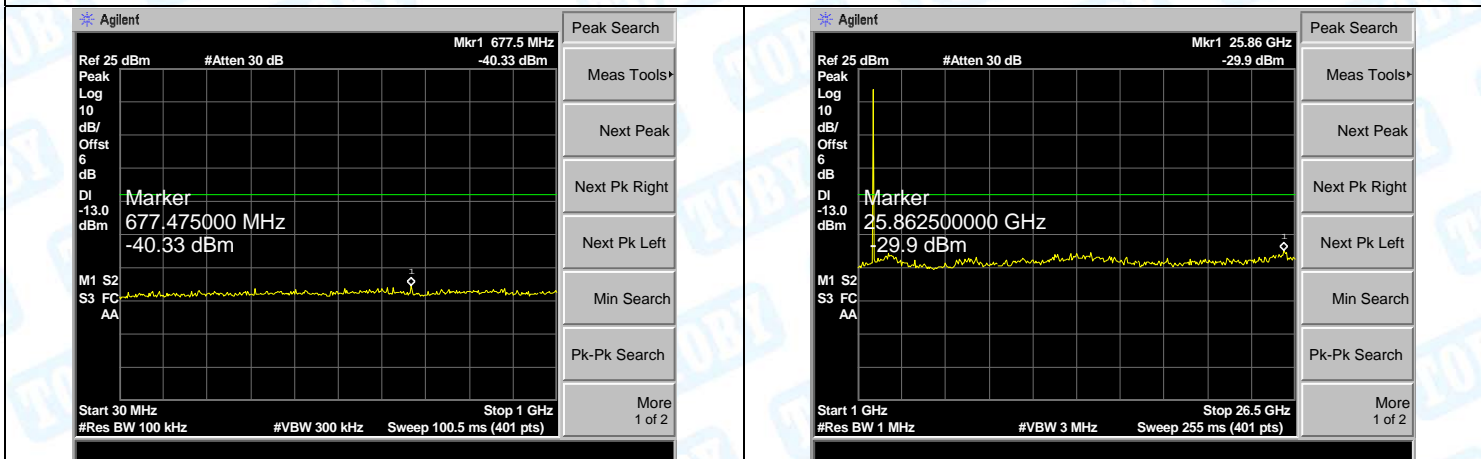
LTE BAND 2 (15MHz RB Size 75& RB Offset 0 QPSK-Low CH)



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

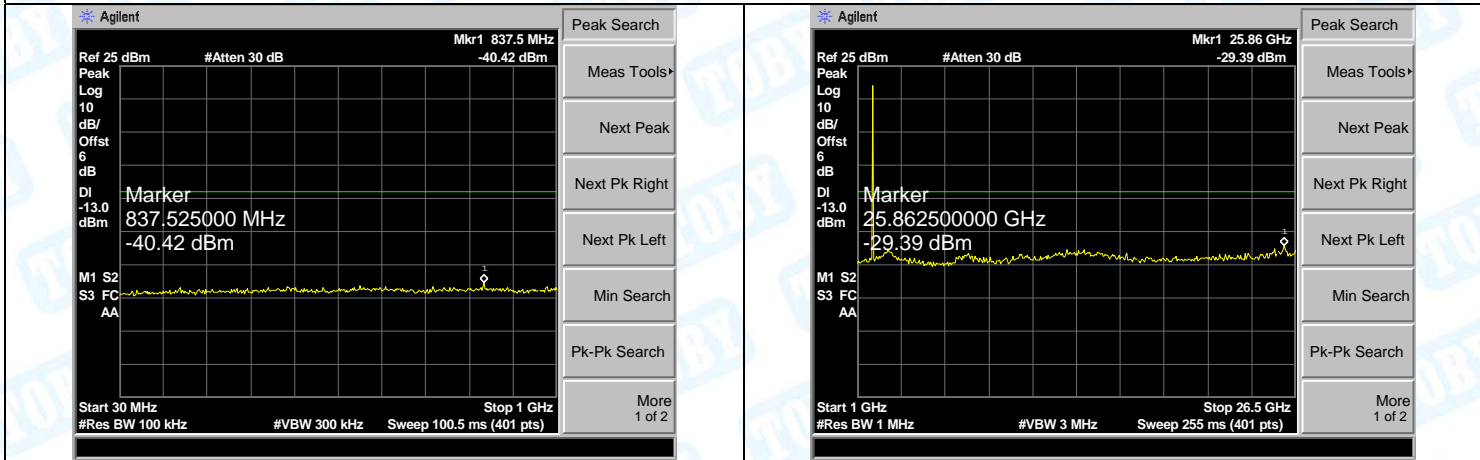


LTE BAND 2 (15MHz RB Size 75& RB Offset 0 QPSK-High CH)

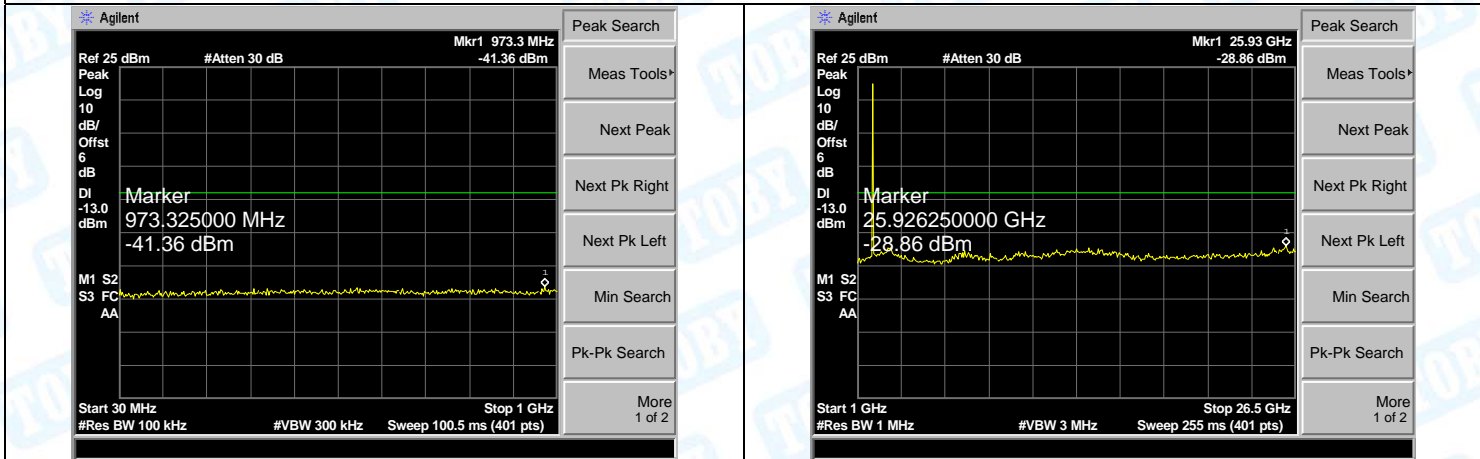


30MHz-1GHz	1GHz-26.5GHz
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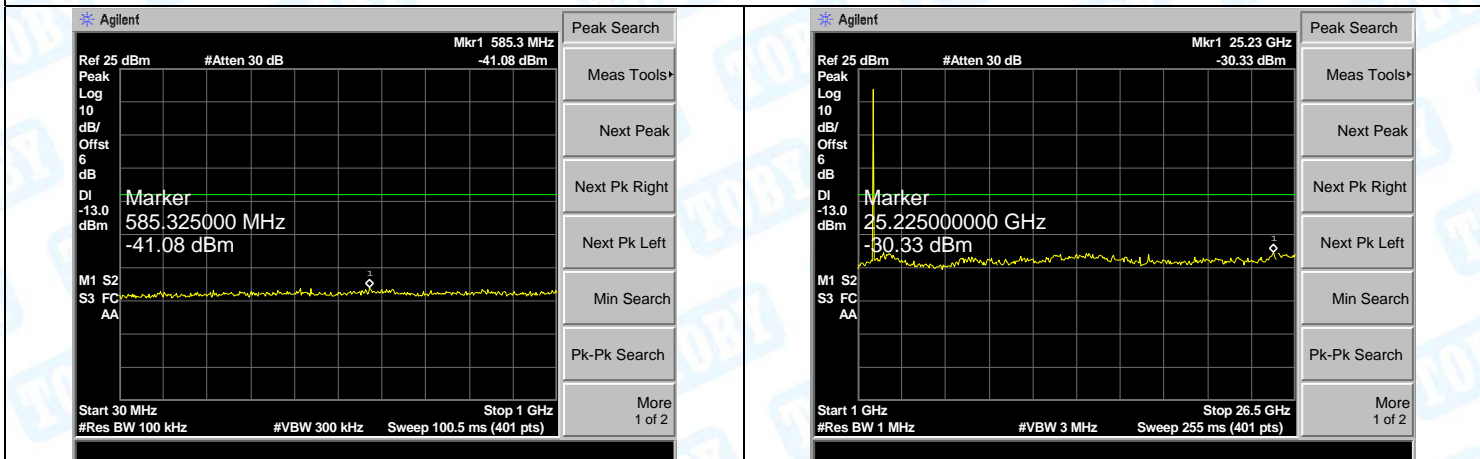
LTE BAND 2 (20MHz RB Size 100& RB Offset 0 QPSK-Low CH)



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



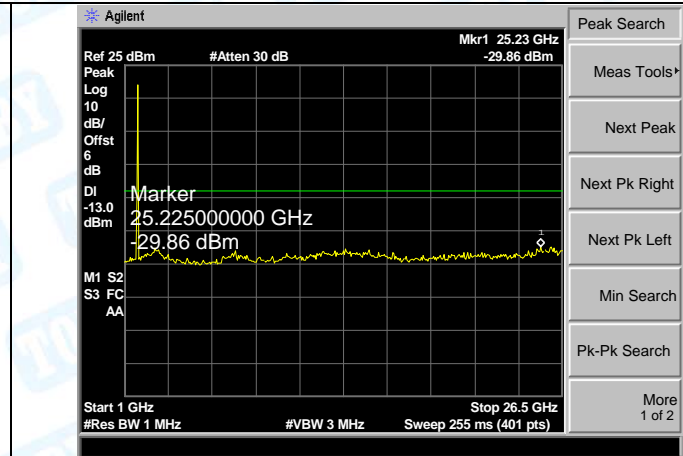
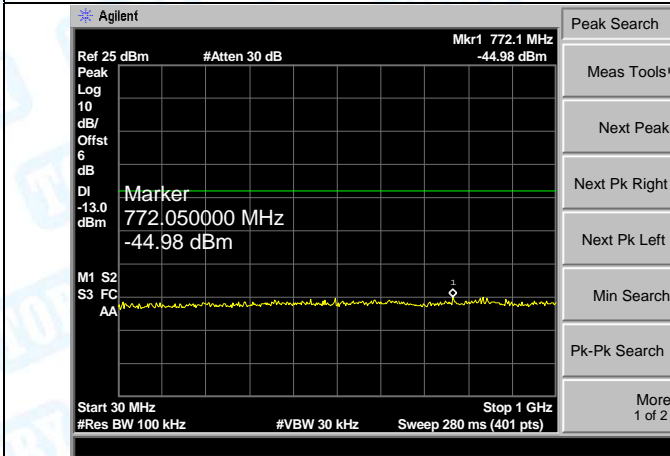
LTE BAND 2 (20MHz RB Size 100& RB Offset 0 QPSK-High CH)



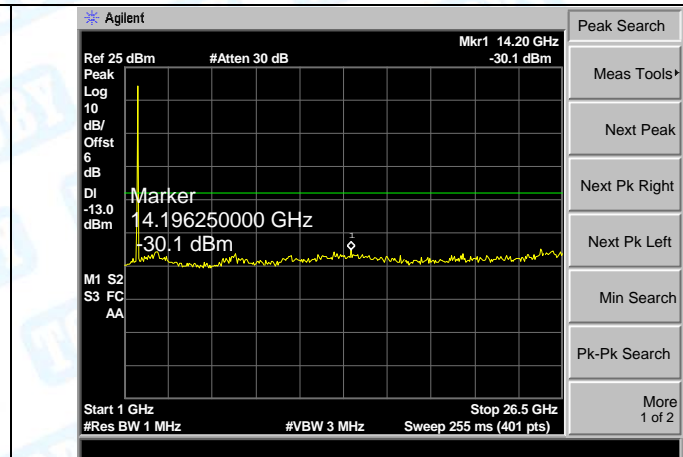
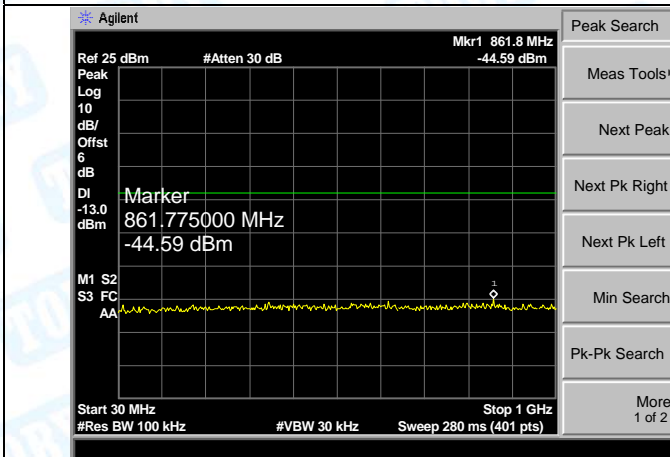
30MHz-1GHz

1GHz-26.5GHz

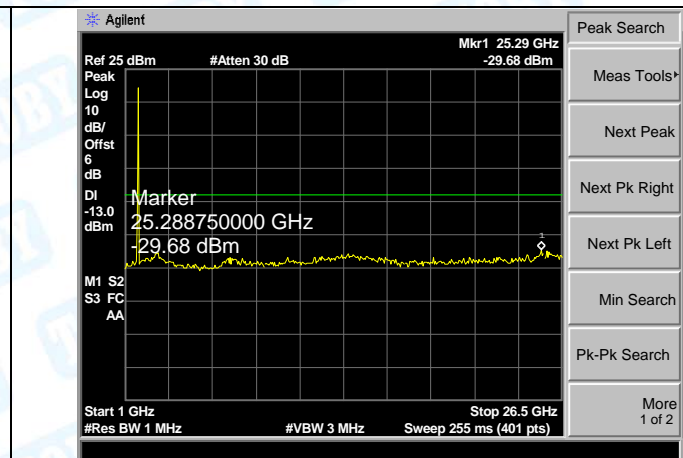
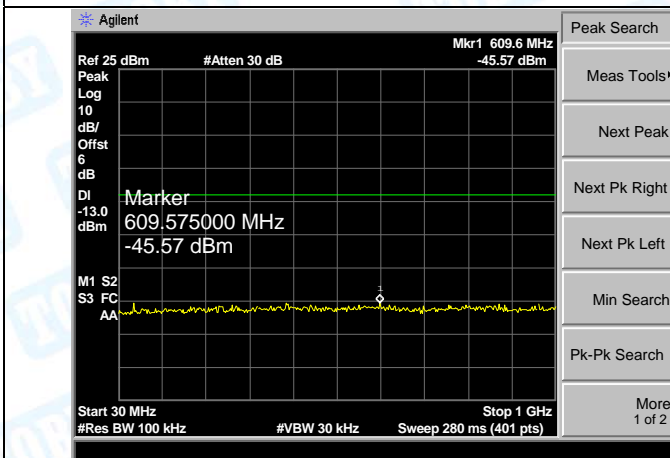
LTE BAND 4 (1.4MHz RB Size 6& RB Offset 0 QPSK-Low CH)



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

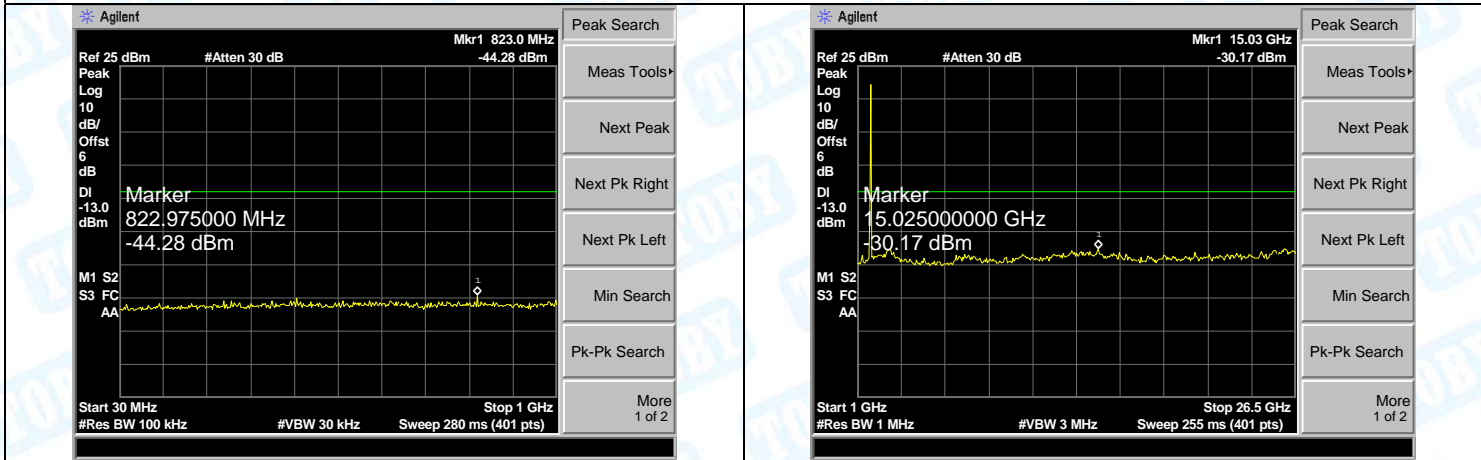


LTE BAND 4 (1.4MHz RB Size 6& RB Offset 0 QPSK-High CH)

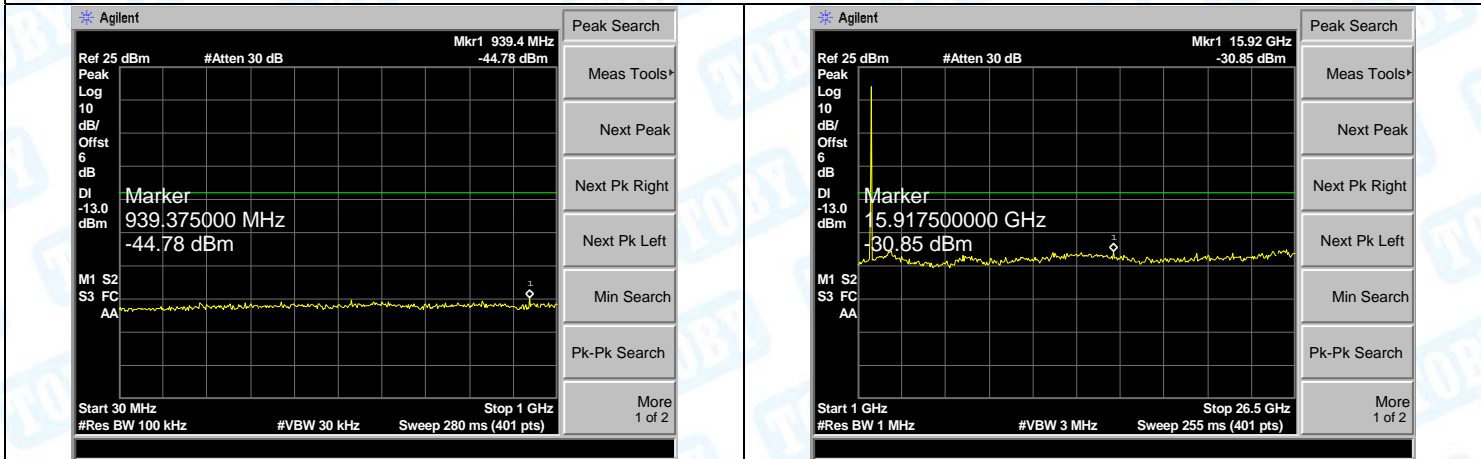


30MHz-1GHz **1GHz-26.5GHz**

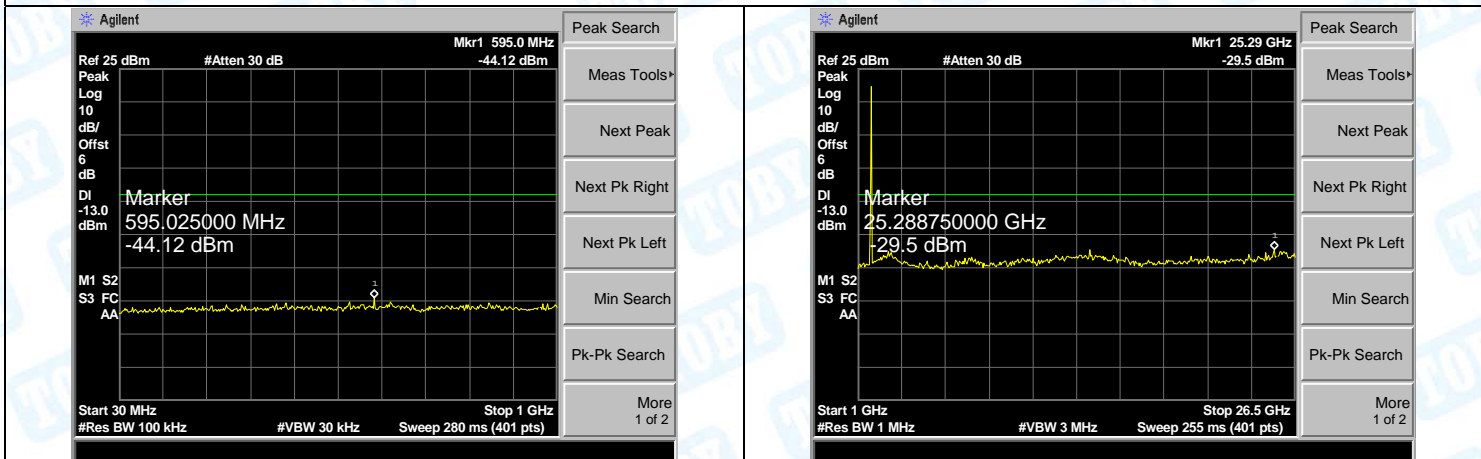
LTE BAND 4 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



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

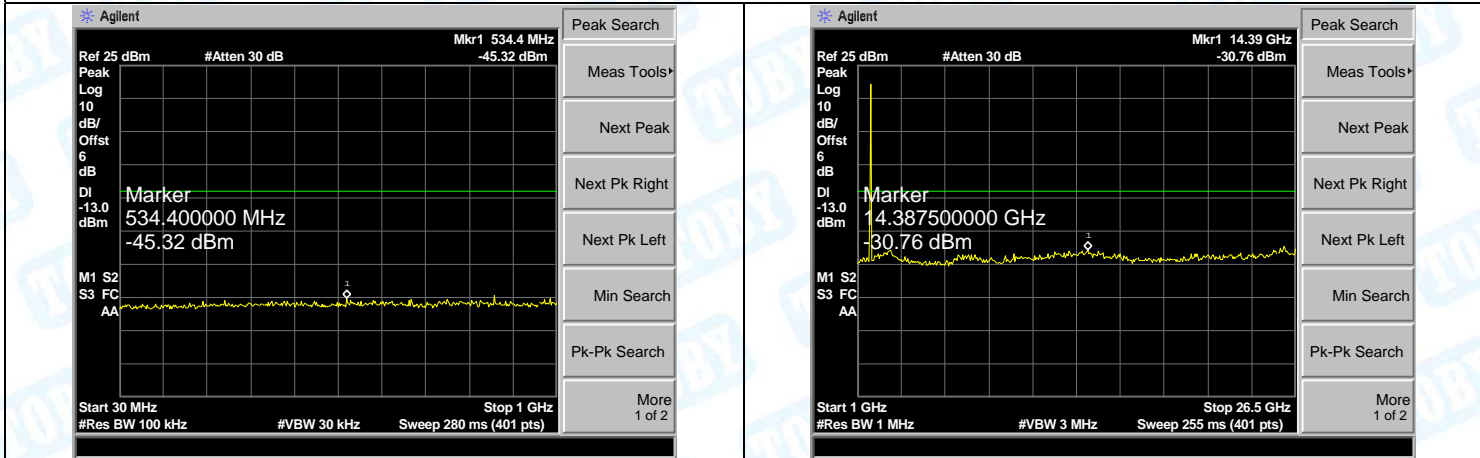


LTE BAND 4 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)

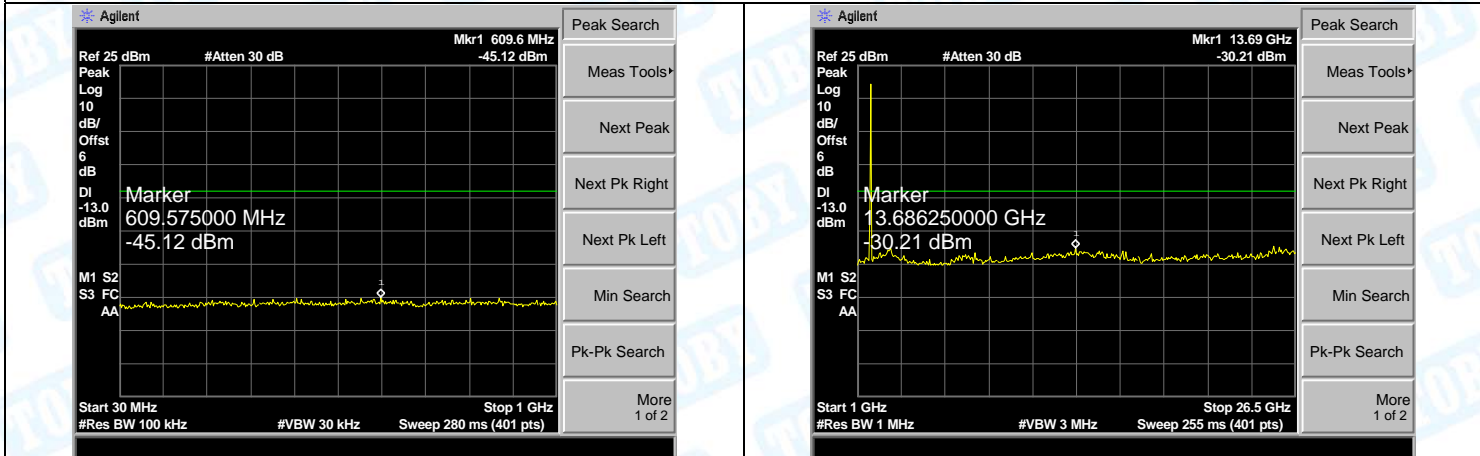


30MHz-1GHz **1GHz-26.5GHz**

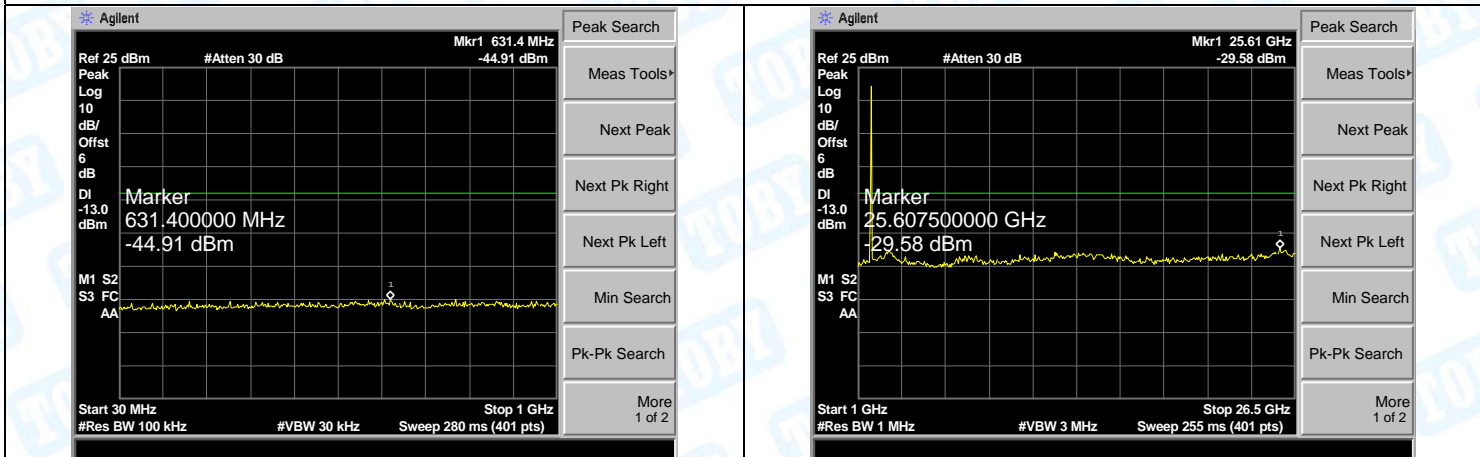
LTE BAND 4 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



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

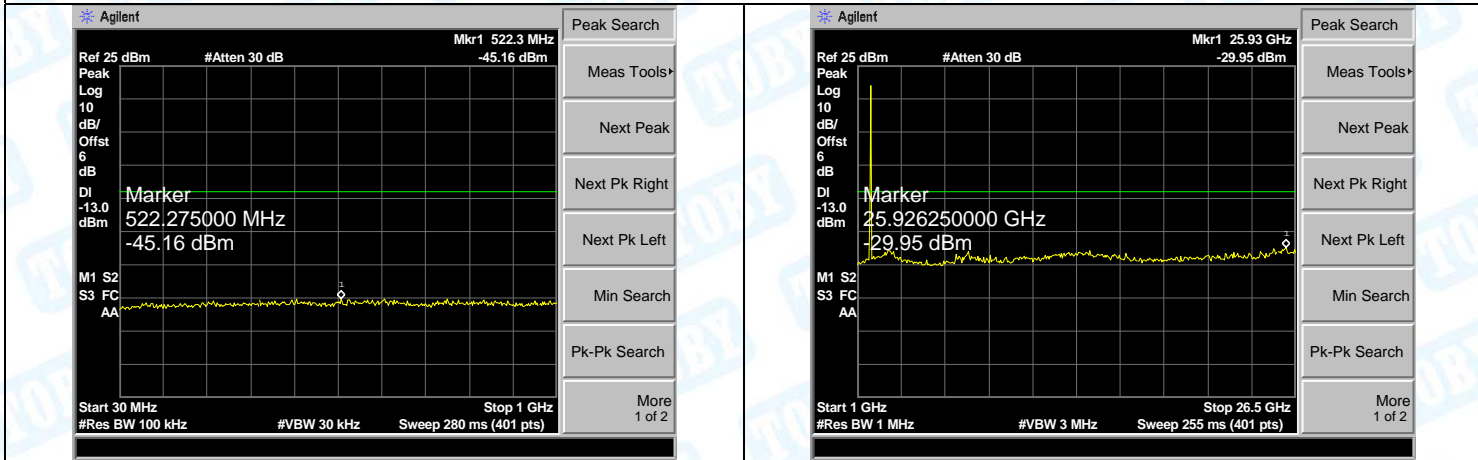


LTE BAND 4 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)

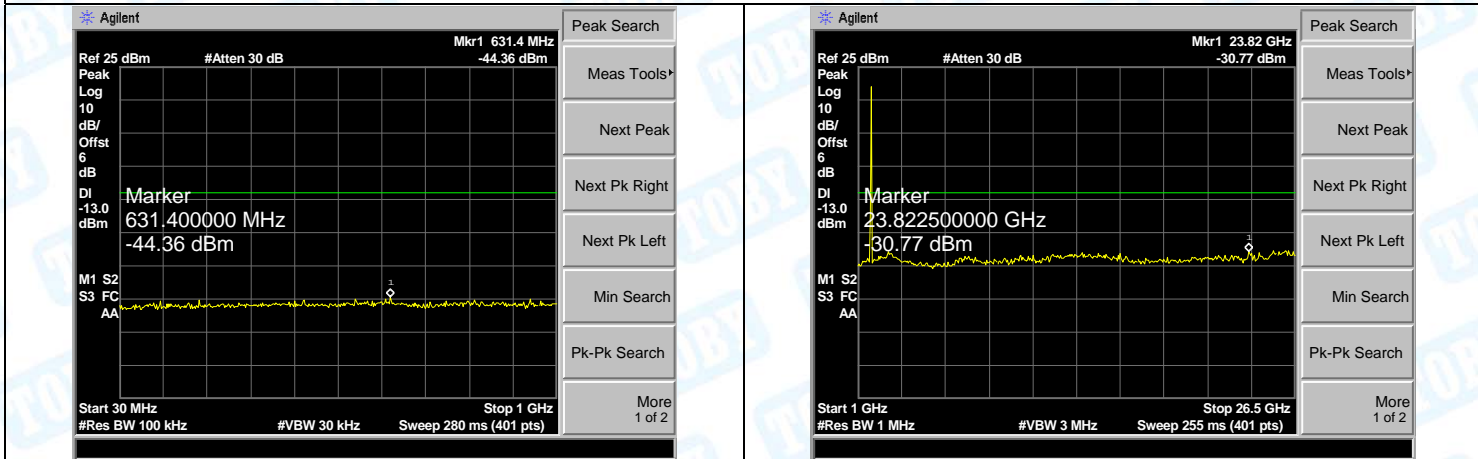


30MHz-1GHz	1GHz-26.5GHz
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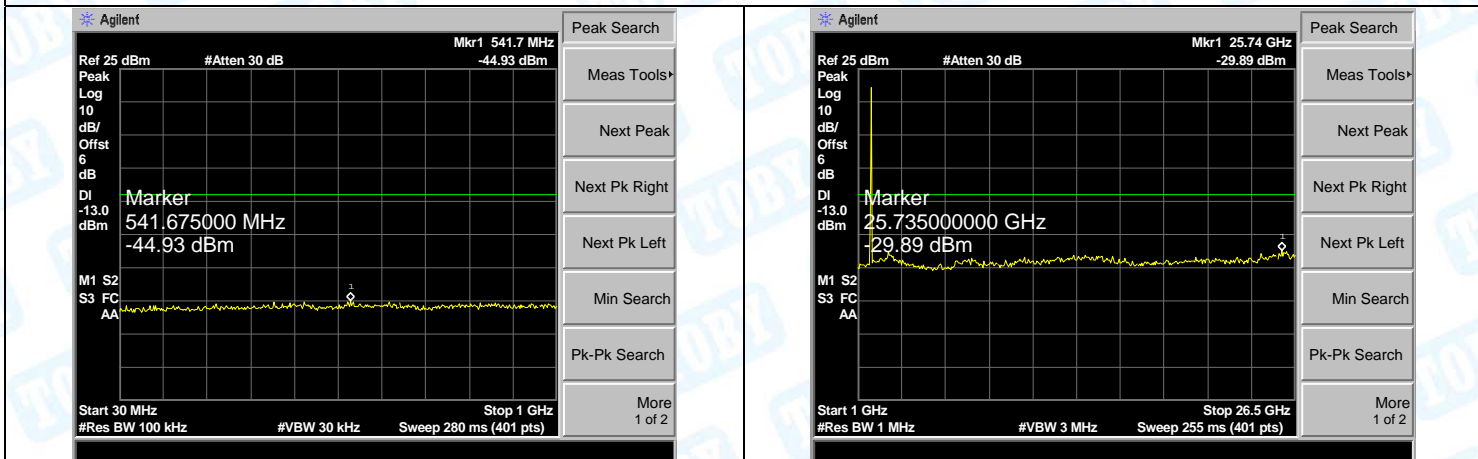
LTE BAND 4 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



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

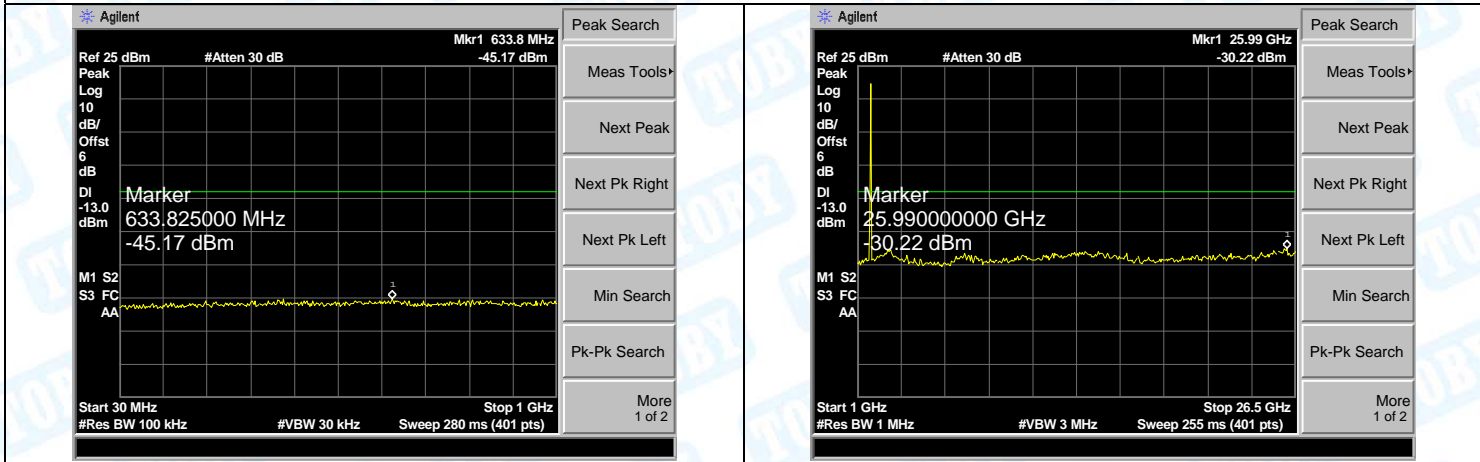


LTE BAND 4 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)

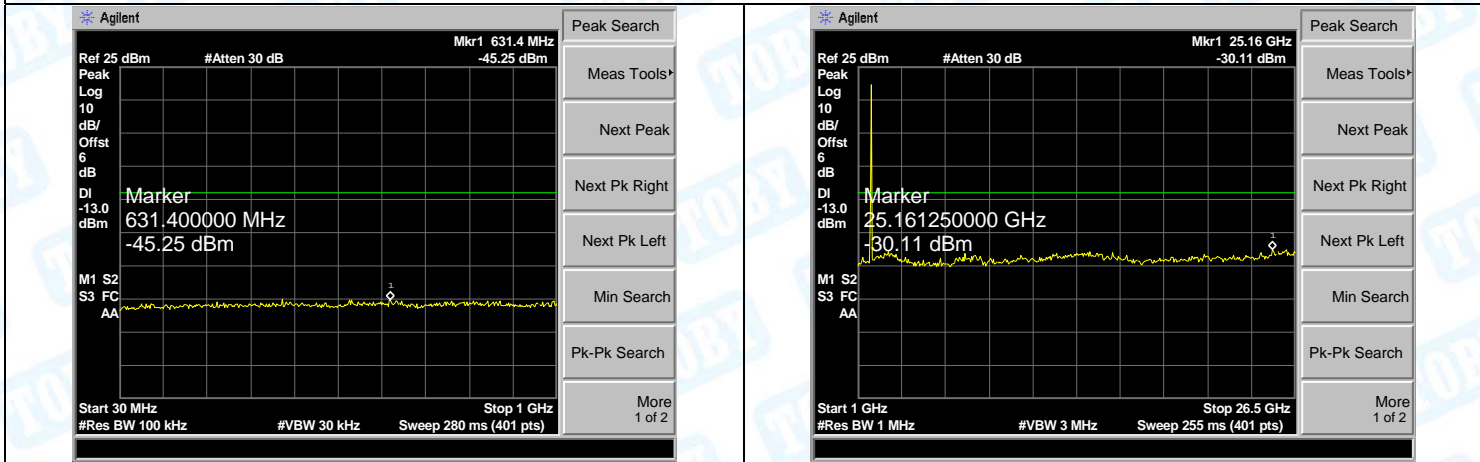


30MHz-1GHz	1GHz-26.5GHz
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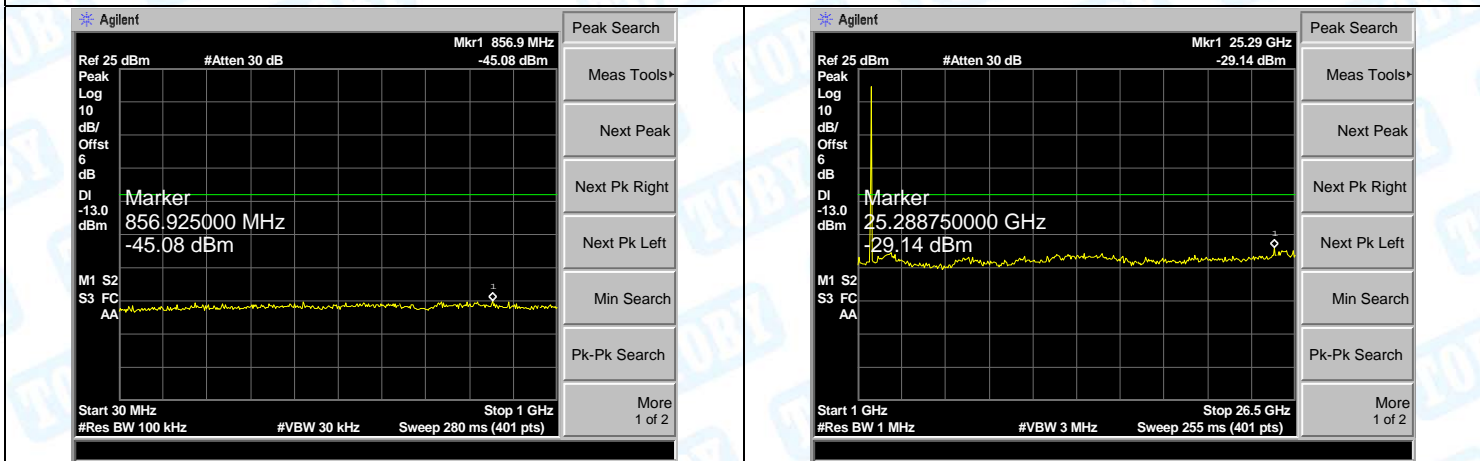
LTE BAND 4 (15MHz RB Size 75& RB Offset 0 QPSK-Low CH)



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

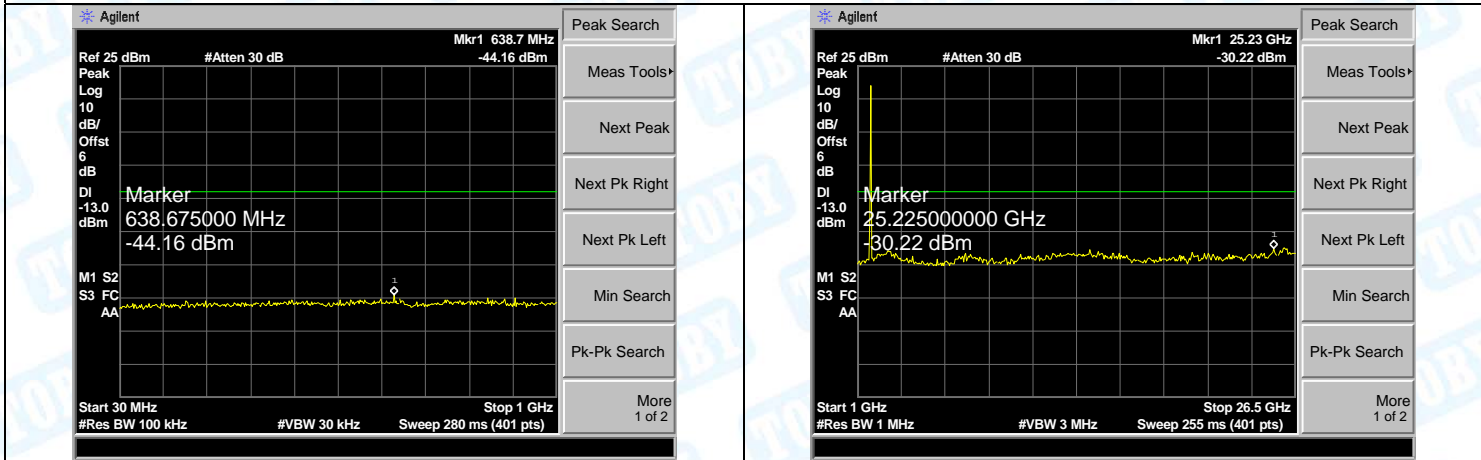


LTE BAND 4 (15MHz RB Size 75& RB Offset 0 QPSK-High CH)

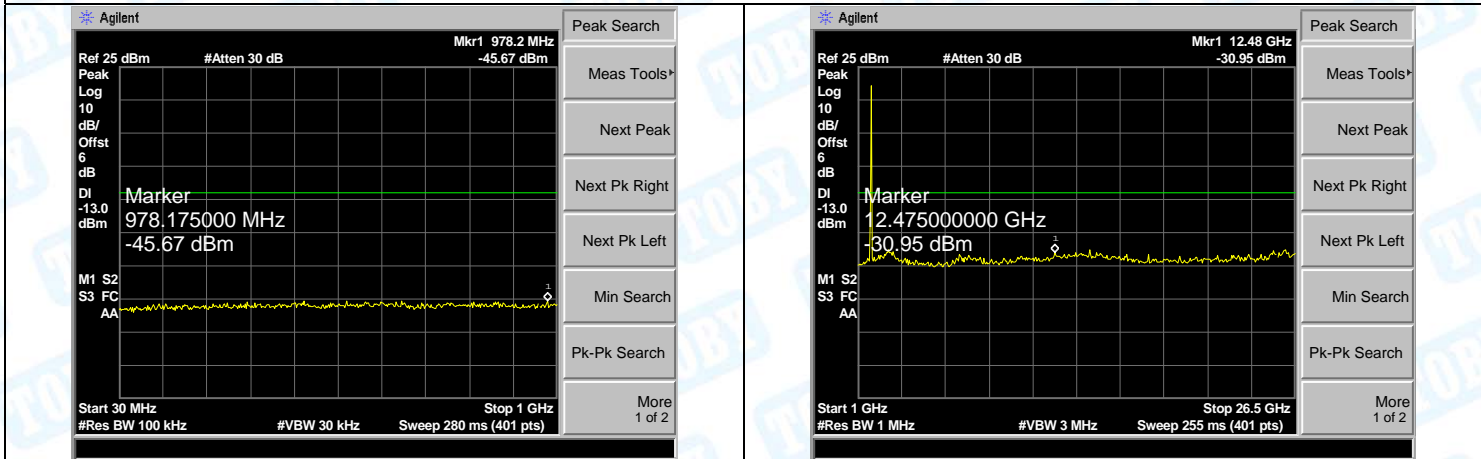


30MHz-1GHz	1GHz-26.5GHz
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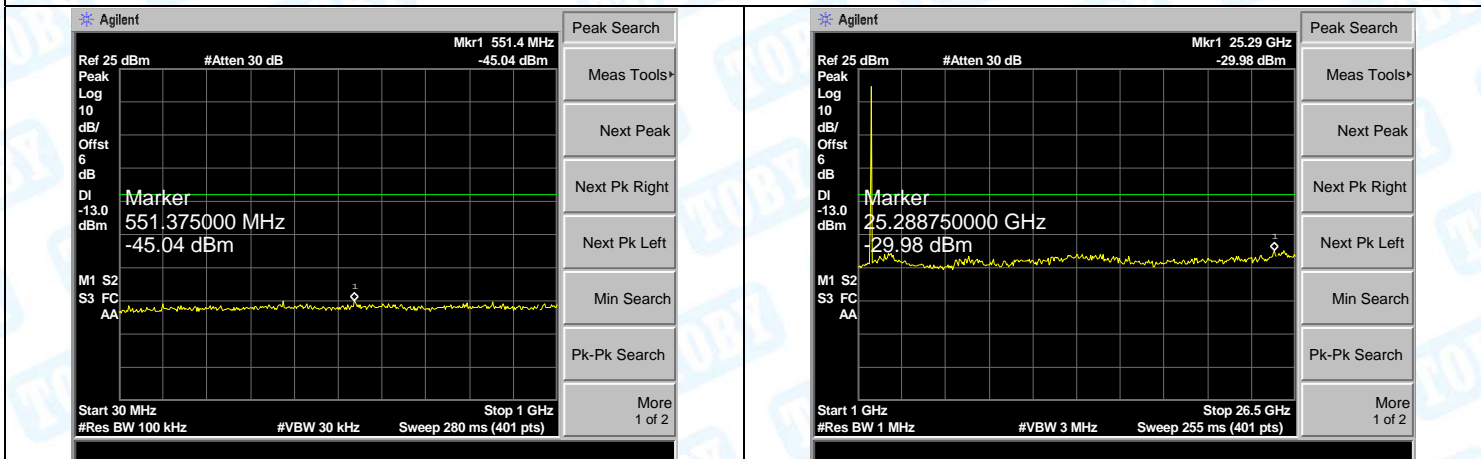
LTE BAND 4 (20MHz RB Size 100& RB Offset 0 QPSK-Low CH)



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



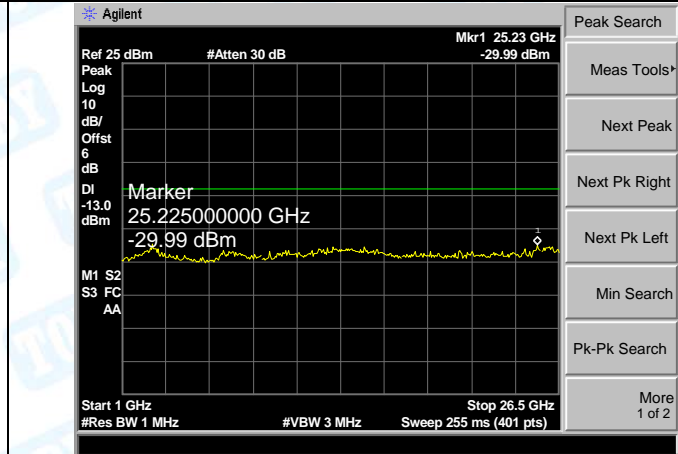
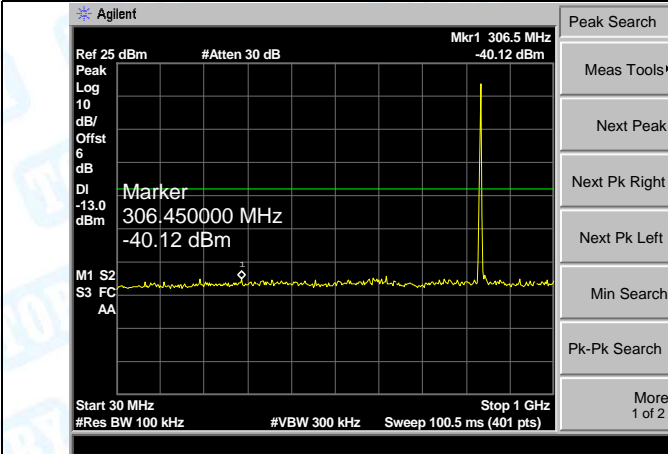
LTE BAND 4 (20MHz RB Size 100& RB Offset 0 QPSK-High CH)



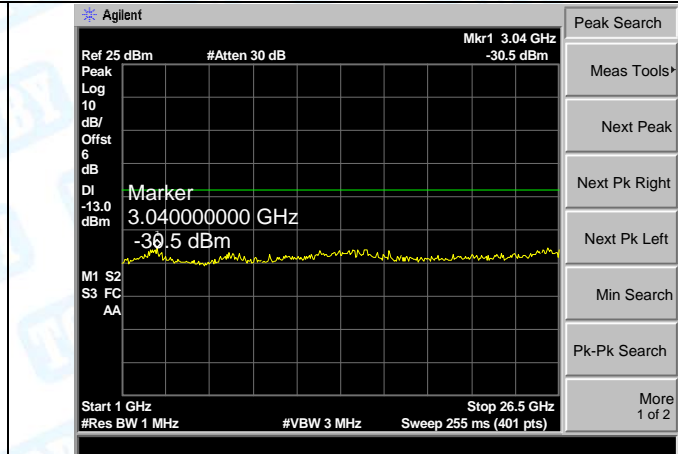
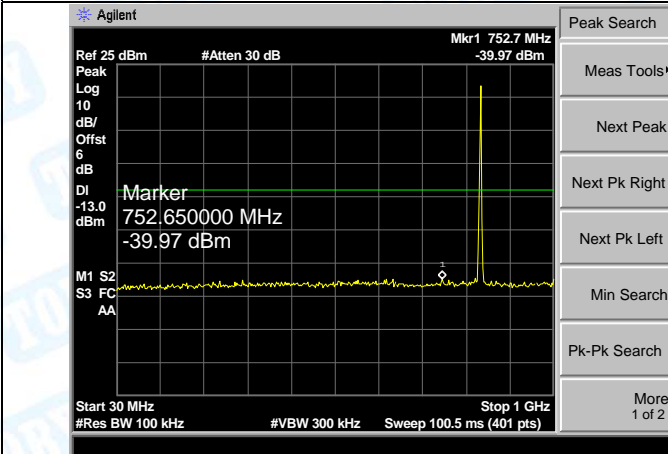
30MHz-1GHz

1GHz-26.5GHz

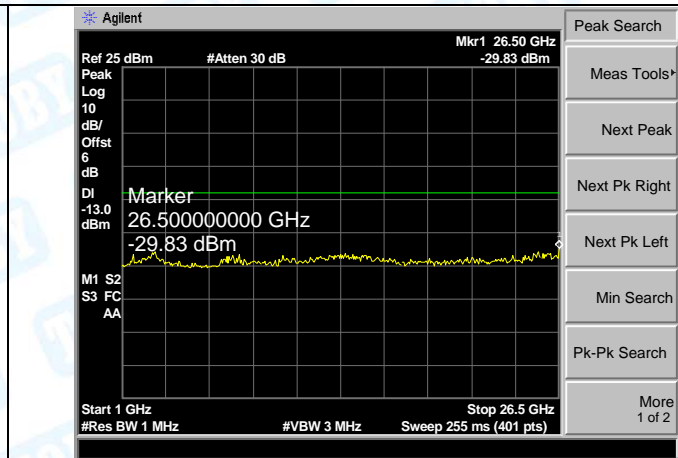
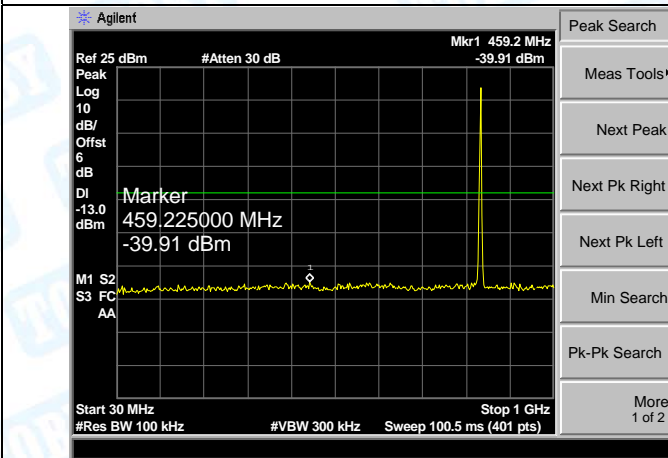
LTE BAND 5 (1.4MHz RB Size 6& RB Offset 0 QPSK-Low CH)



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

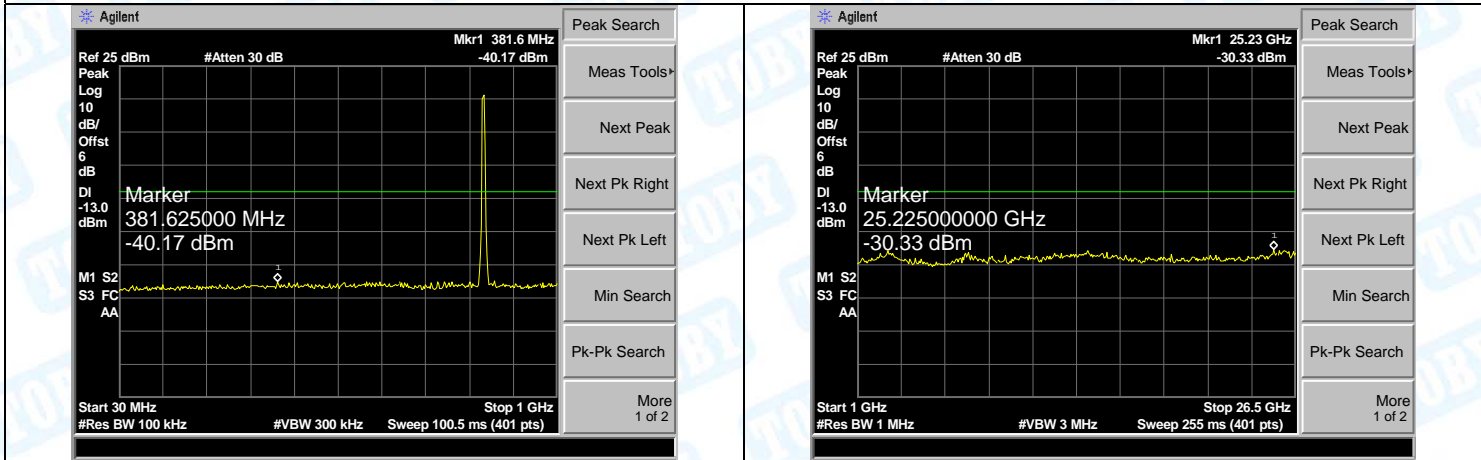


LTE BAND 5 (1.4MHz RB Size 6& RB Offset 0 QPSK-High CH)

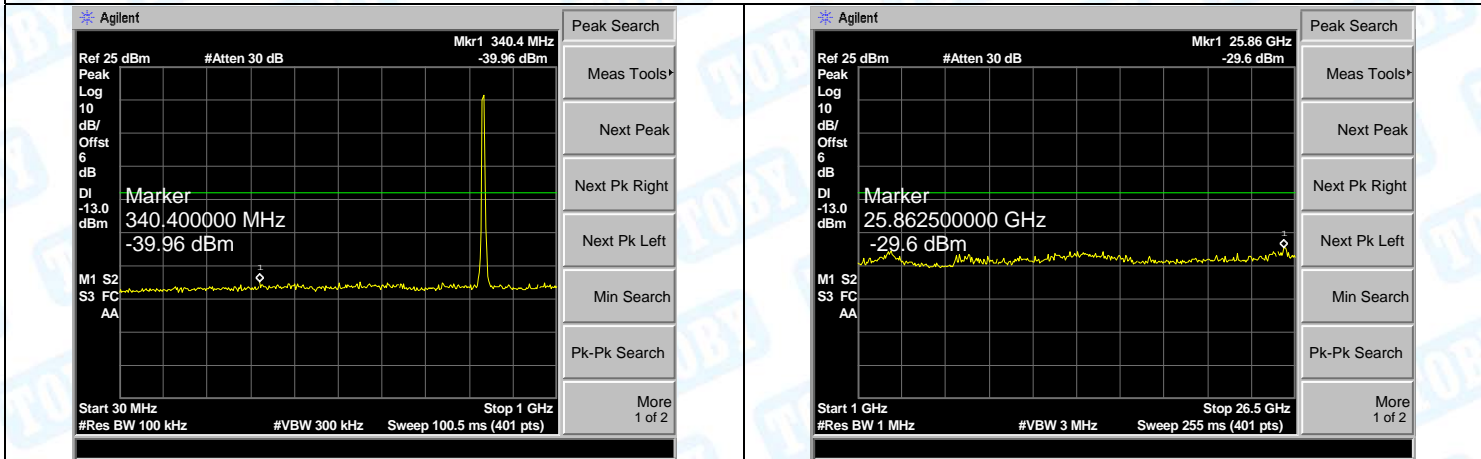


30MHz-1GHz **1GHz-26.5GHz**

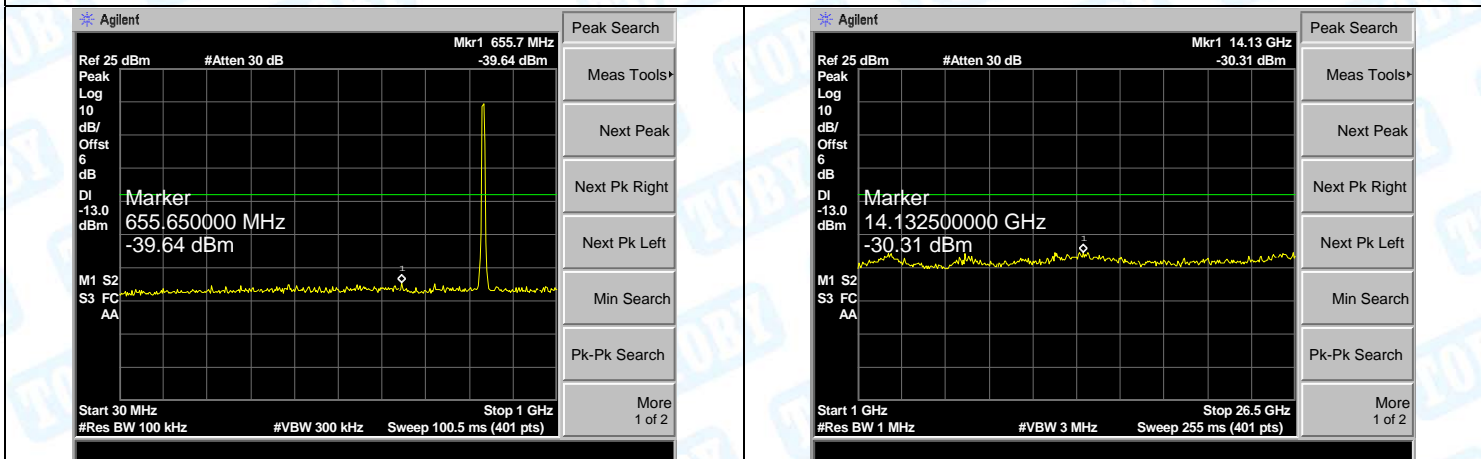
LTE BAND 5 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



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

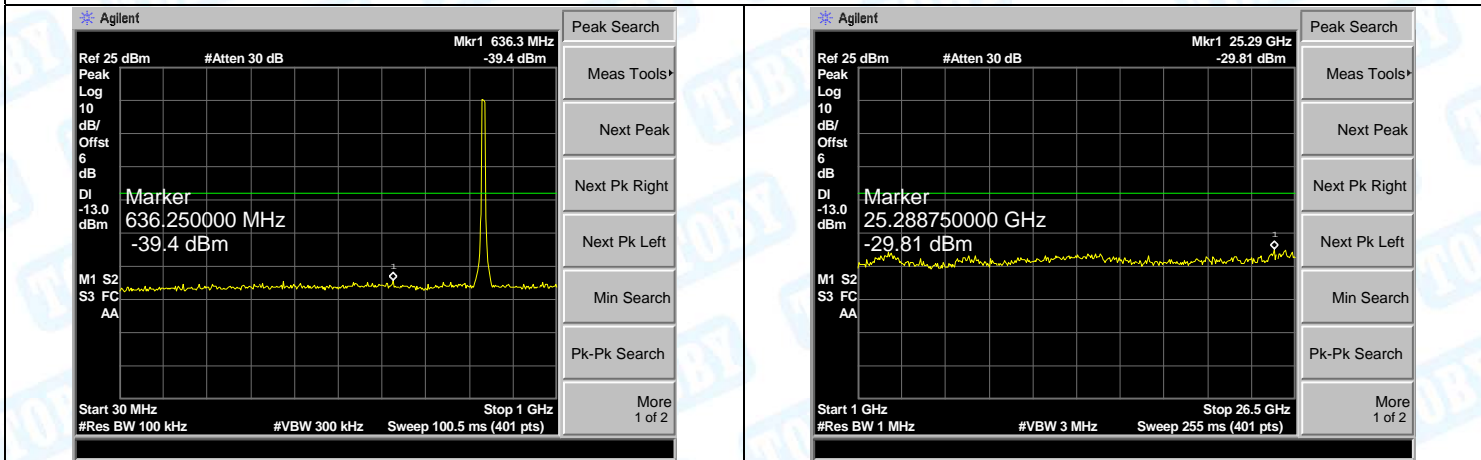


LTE BAND 5 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)

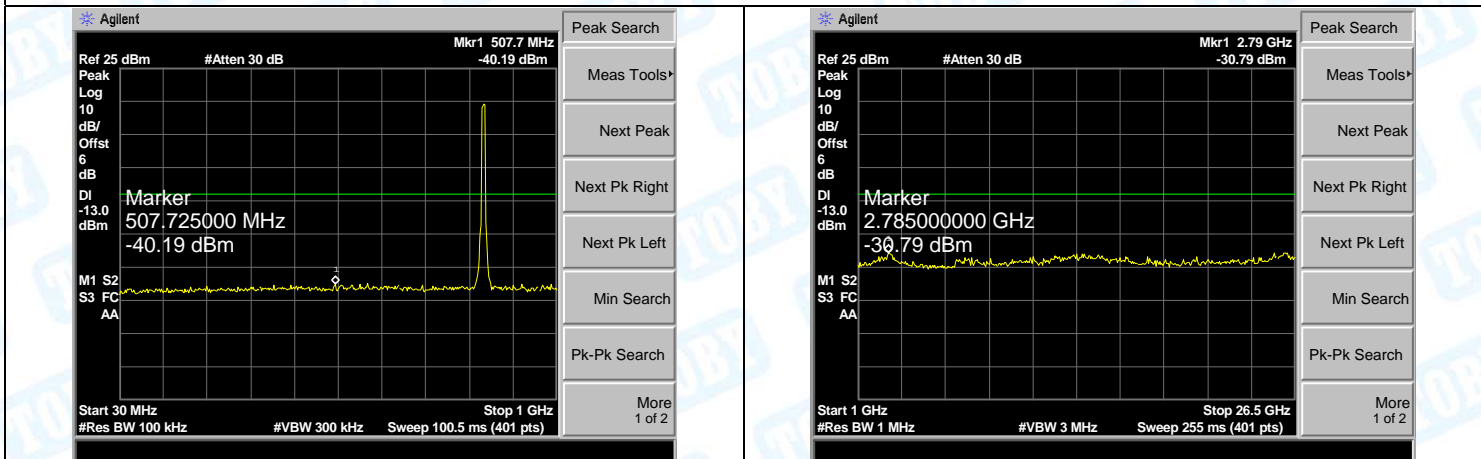


30MHz-1GHz **1GHz-26.5GHz**

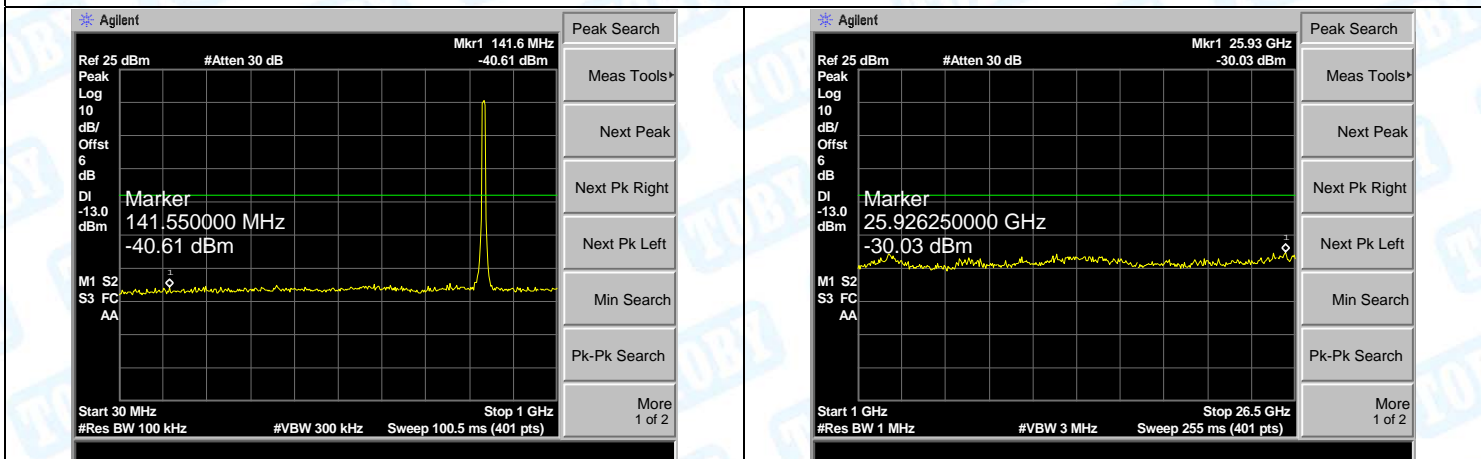
LTE BAND 5 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



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

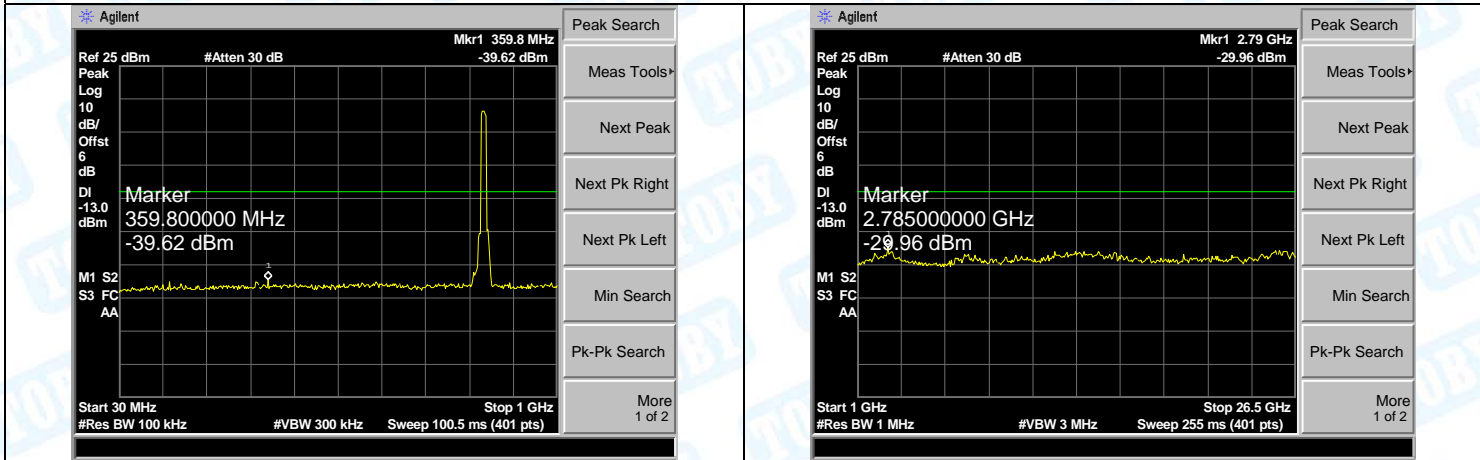


LTE BAND 5 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)

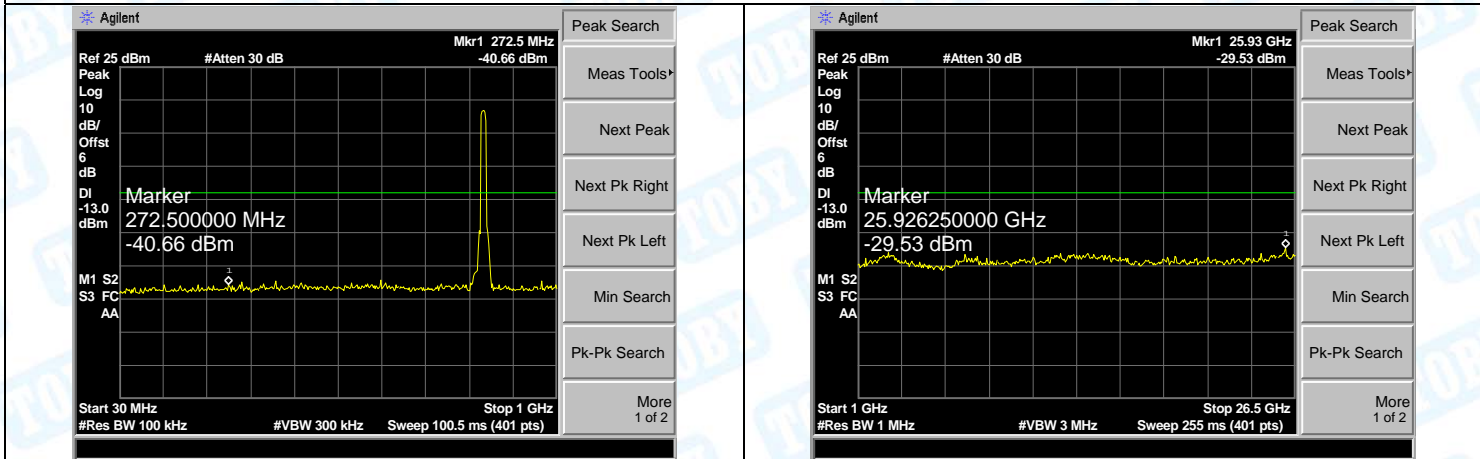


30MHz-1GHz	1GHz-26.5GHz
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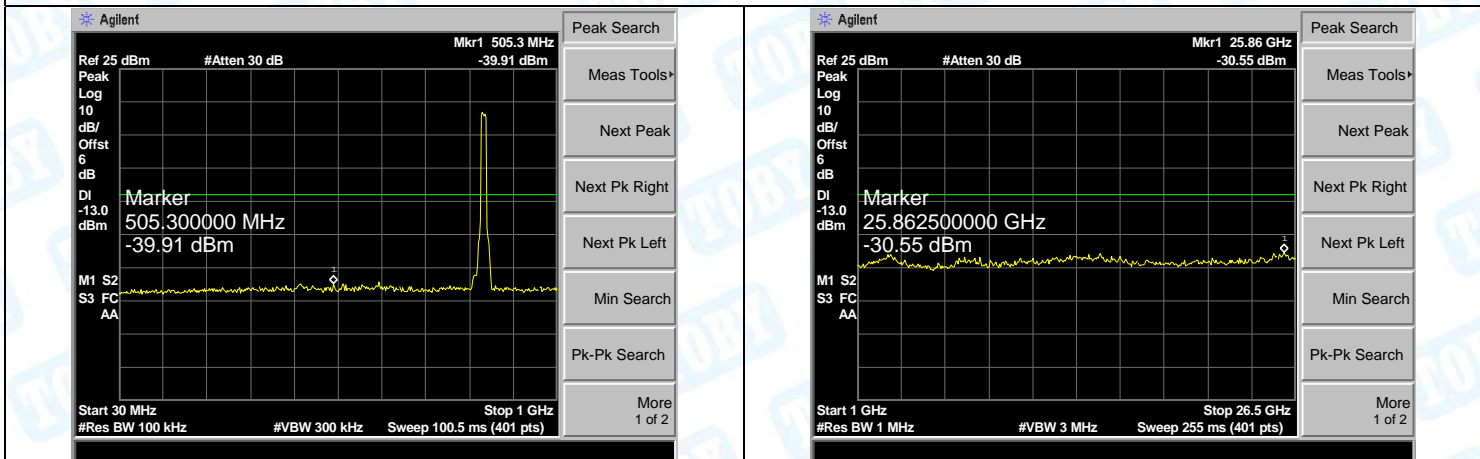
LTE BAND 5 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



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

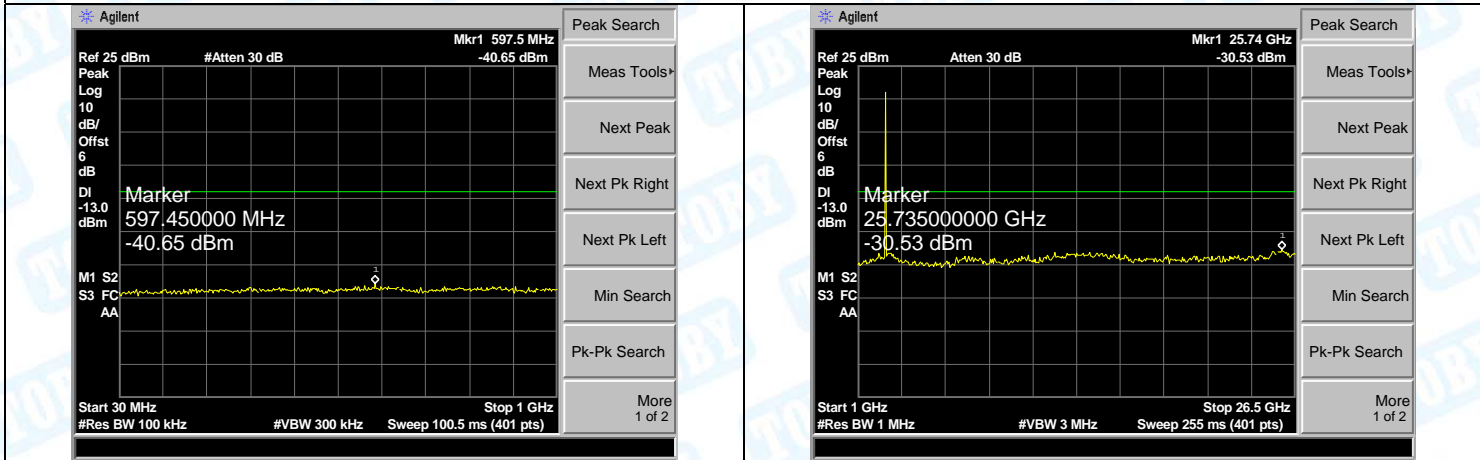


LTE BAND 5 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)

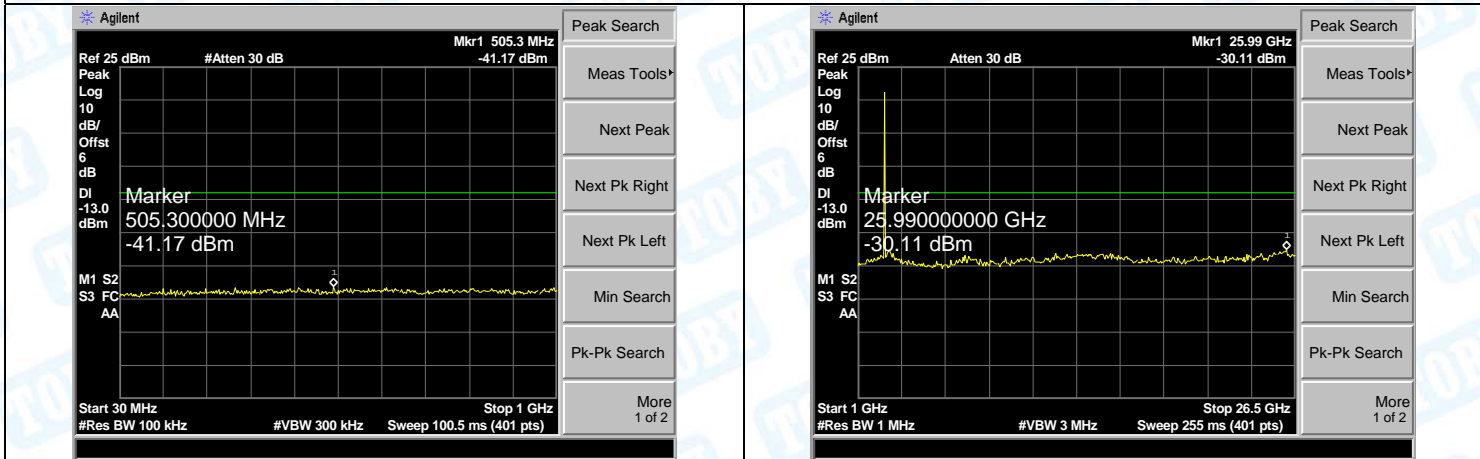


30MHz-1GHz	1GHz-26.5GHz
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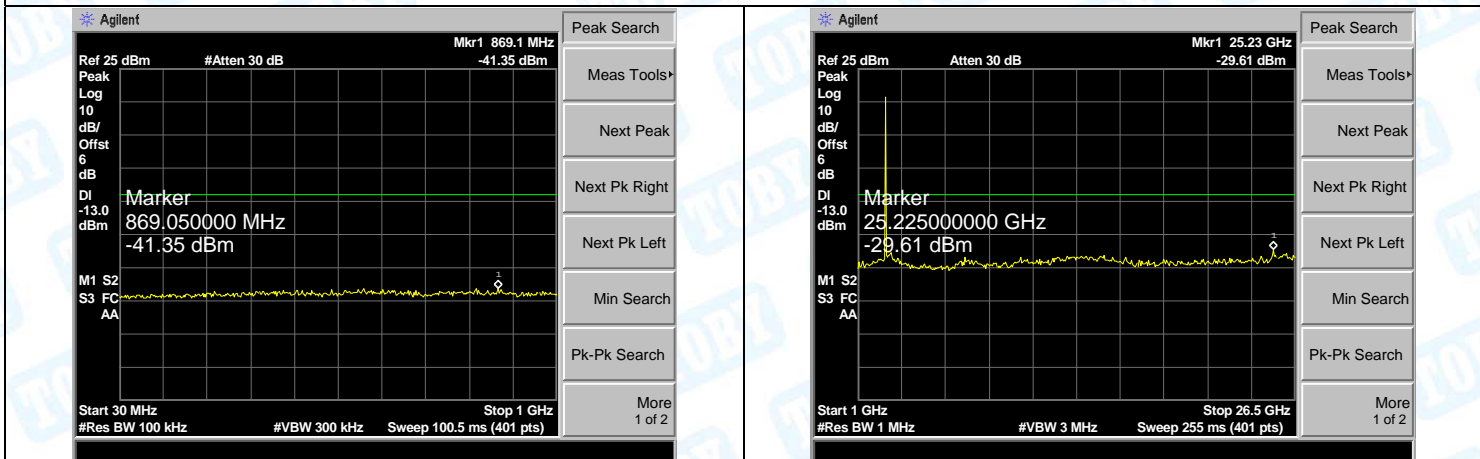
LTE BAND 7 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



LTE BAND 7 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)

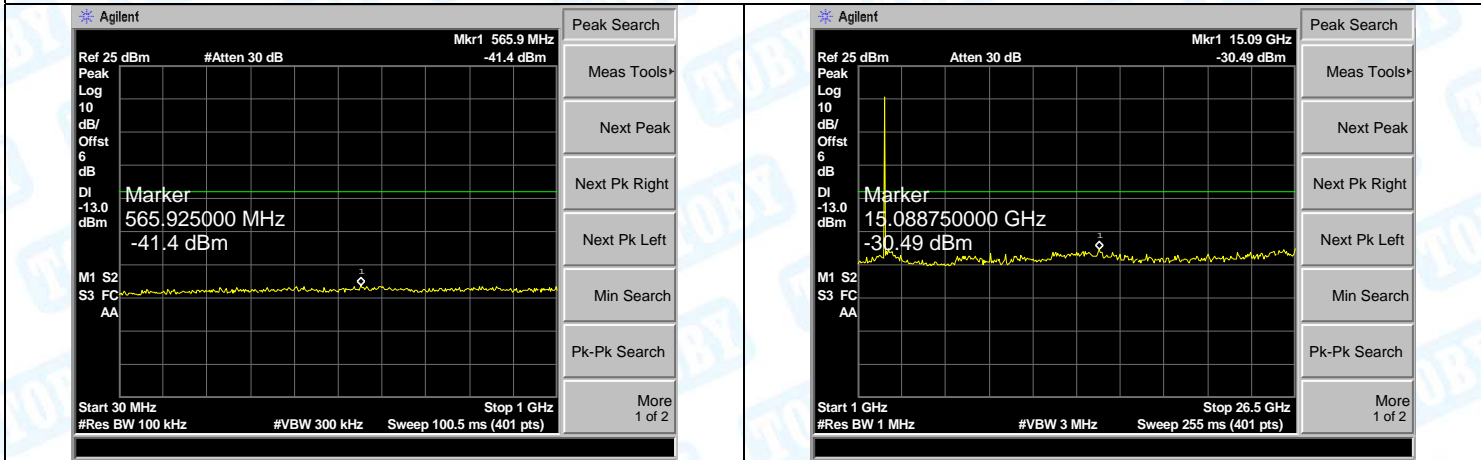


LTE BAND 7 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)

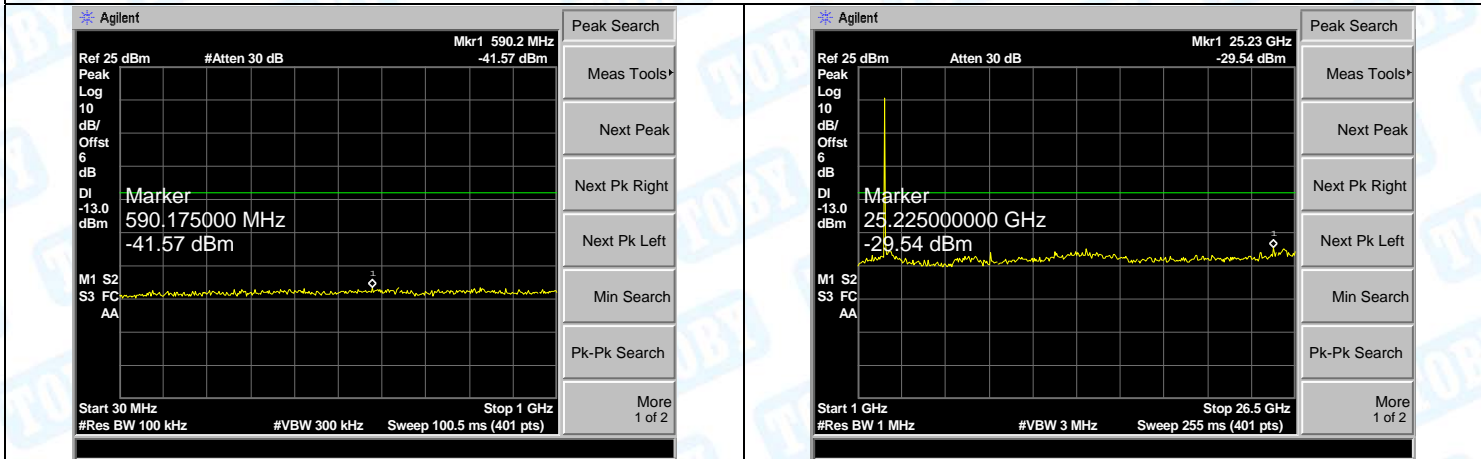


30MHz-1GHz **1GHz-26.5GHz**

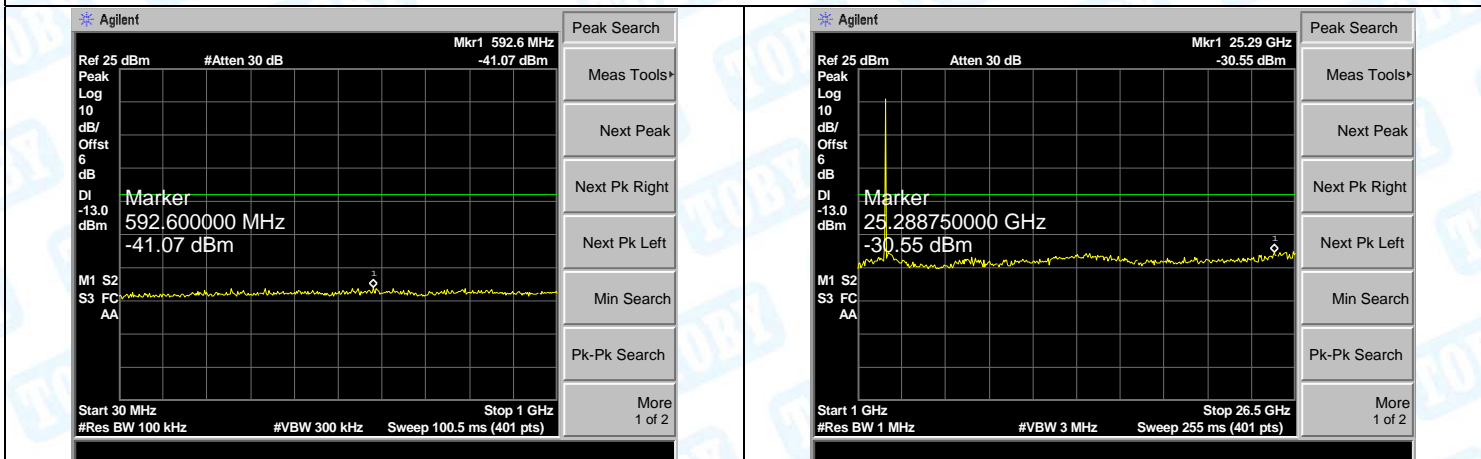
LTE BAND 7 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



LTE BAND 7 (10MHz RB Size 50& RB Offset 0 QPSK-Middle CH)

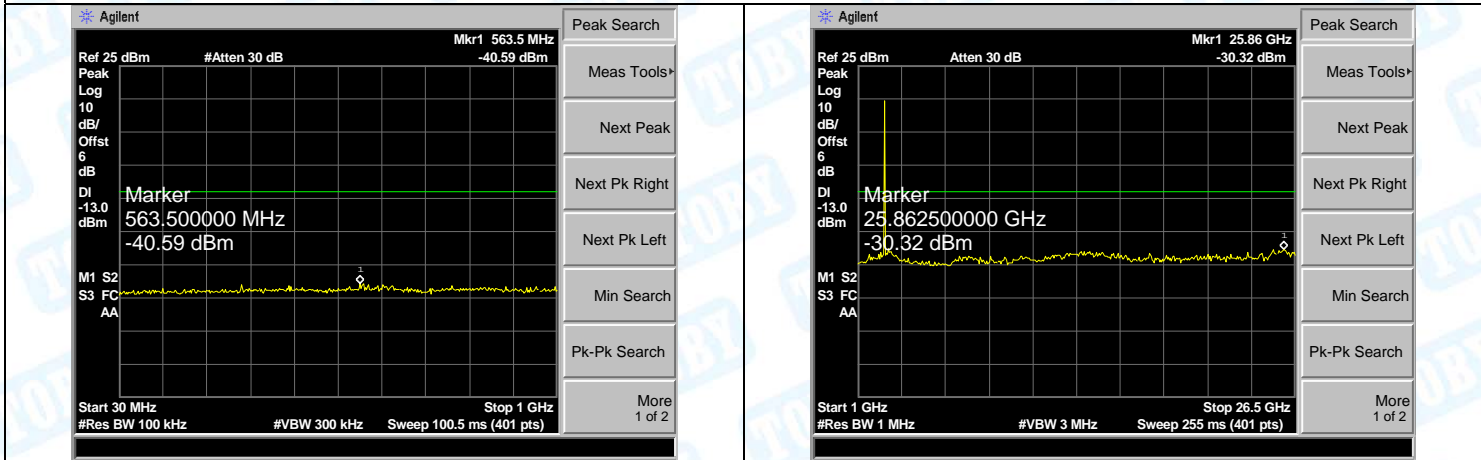


LTE BAND 7 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)

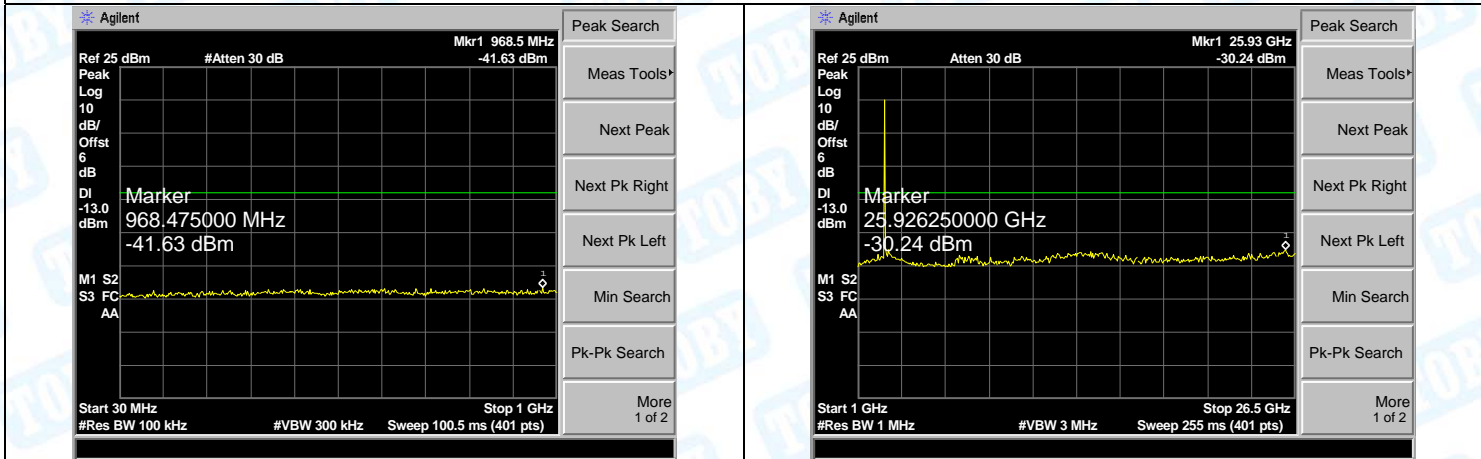


30MHz-1GHz **1GHz-26.5GHz**

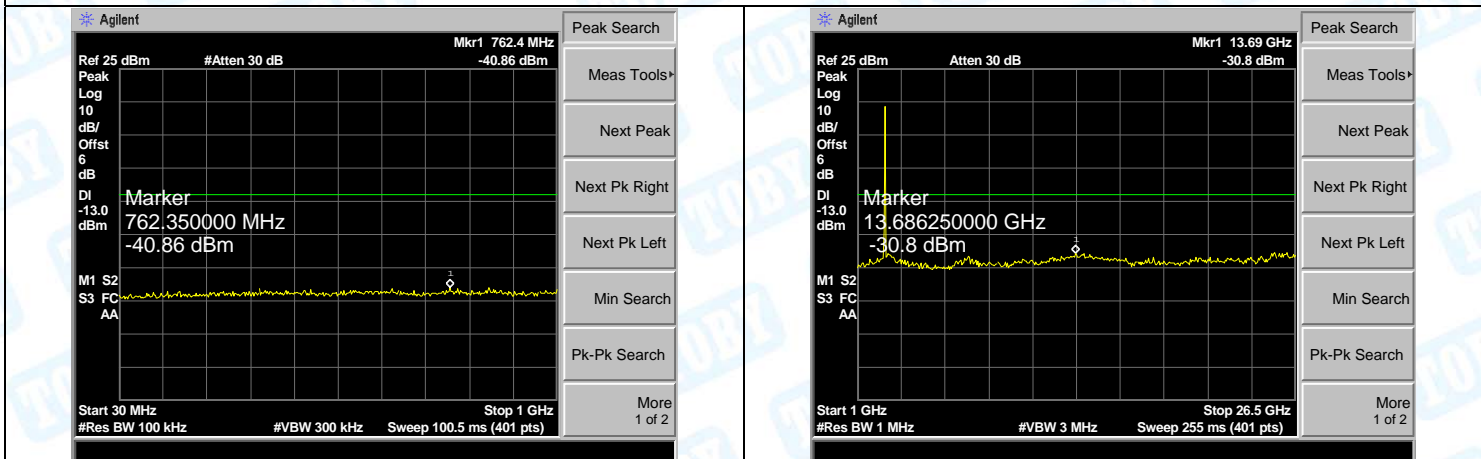
LTE BAND 7 (15MHz RB Size 75& RB Offset 0 QPSK-Low CH)



LTE BAND 7 (15MHz RB Size 75& RB Offset 0 QPSK-Middle CH)

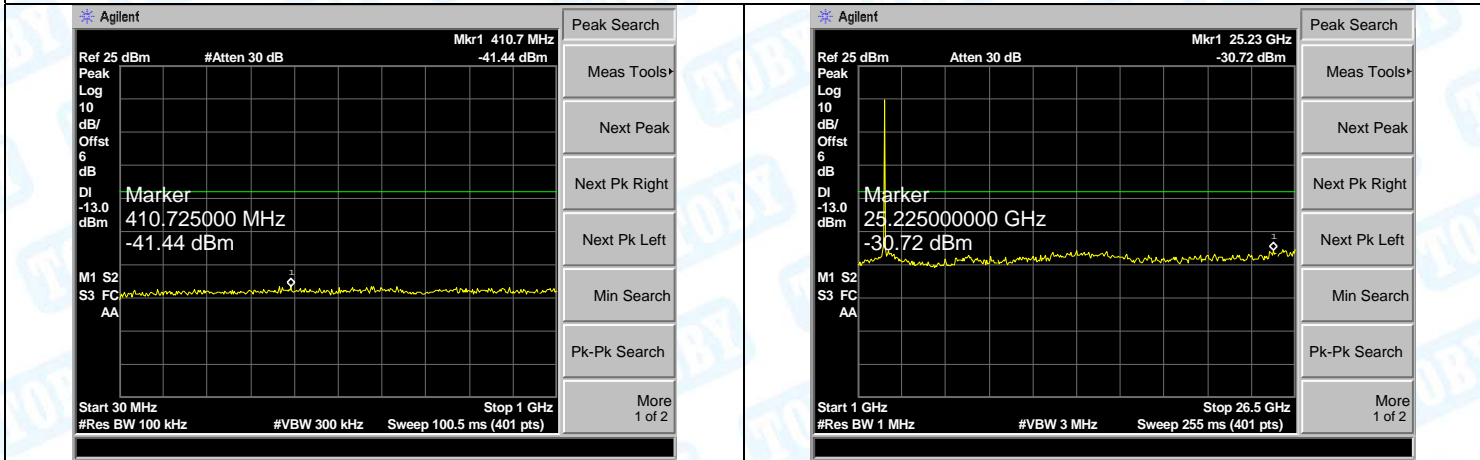


LTE BAND 7 (15MHz RB Size 75& RB Offset 0 QPSK-High CH)

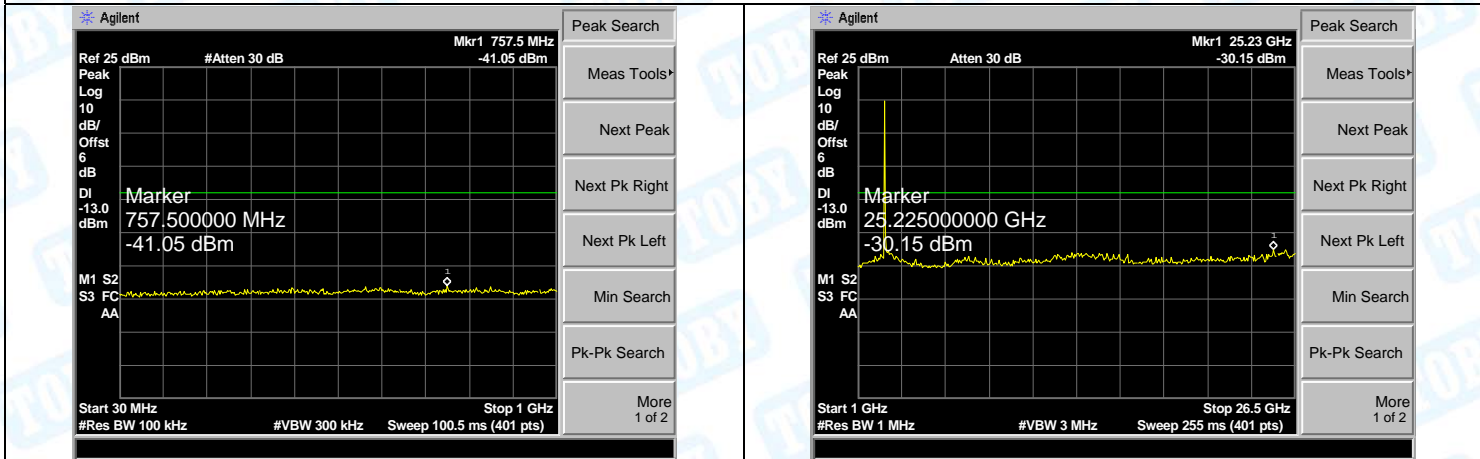


30MHz-1GHz	1GHz-26.5GHz
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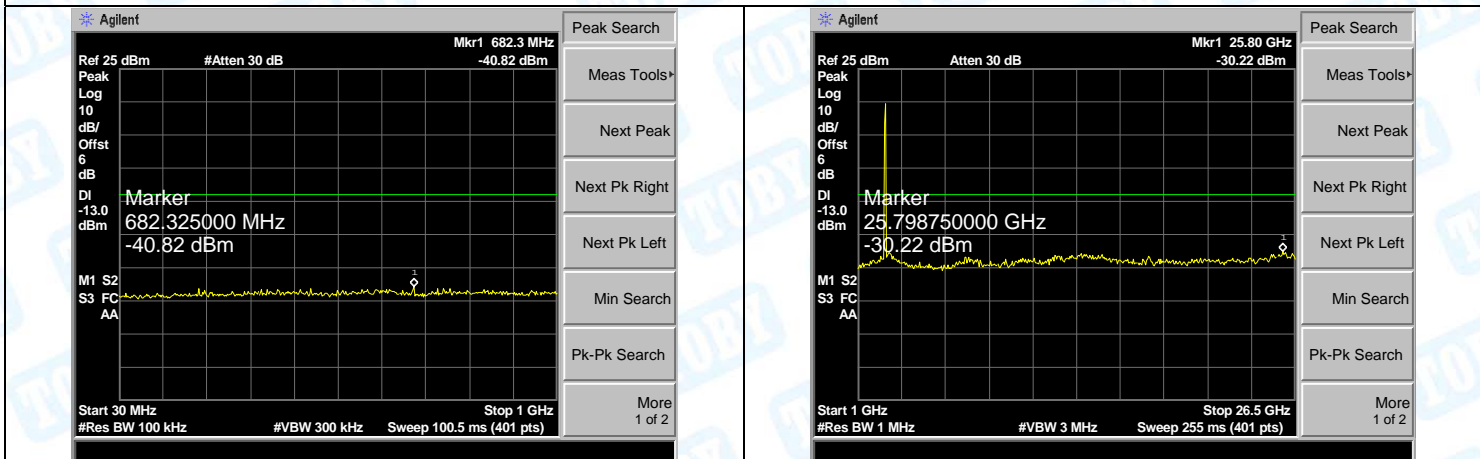
LTE BAND 7 (20MHz RB Size 100& RB Offset 0 QPSK-Low CH)



LTE BAND 7 (20MHz RB Size 100& RB Offset 0 QPSK-Middle CH)

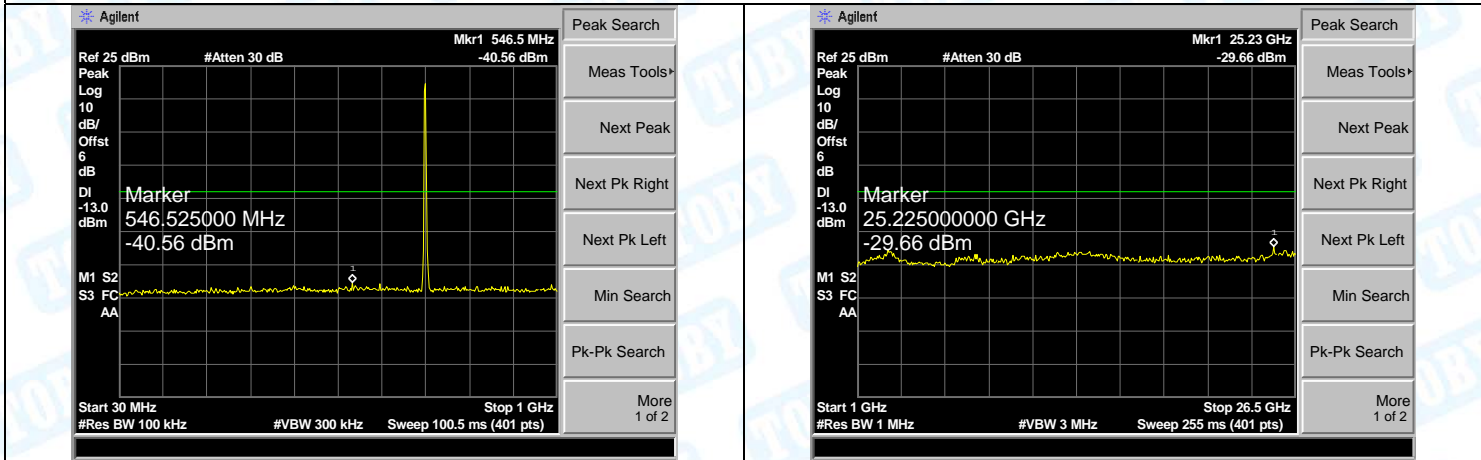


LTE BAND 7 (20MHz RB Size 100& RB Offset 0 QPSK-High CH)

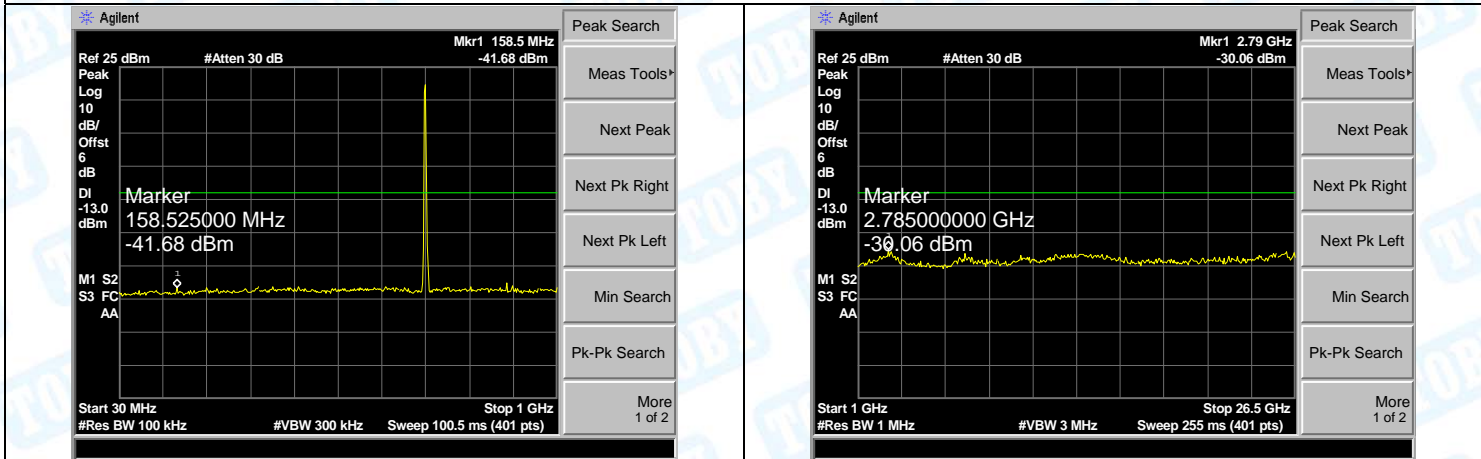


30MHz-1GHz	1GHz-26.5GHz
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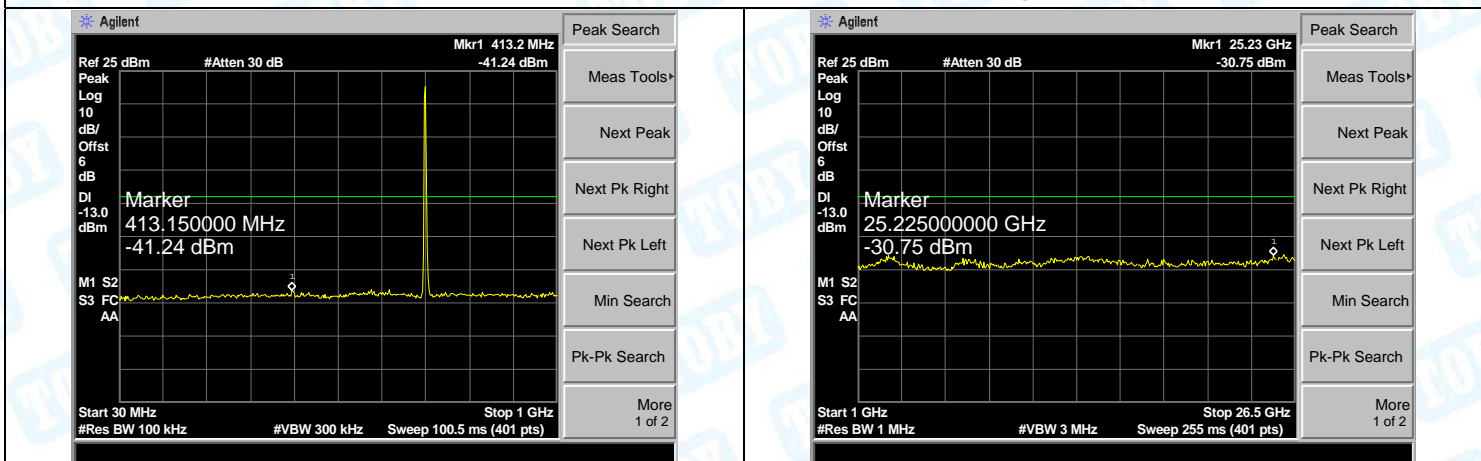
LTE BAND 12 (1.4MHz RB Size 6& RB Offset 0 QPSK-Low CH)



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

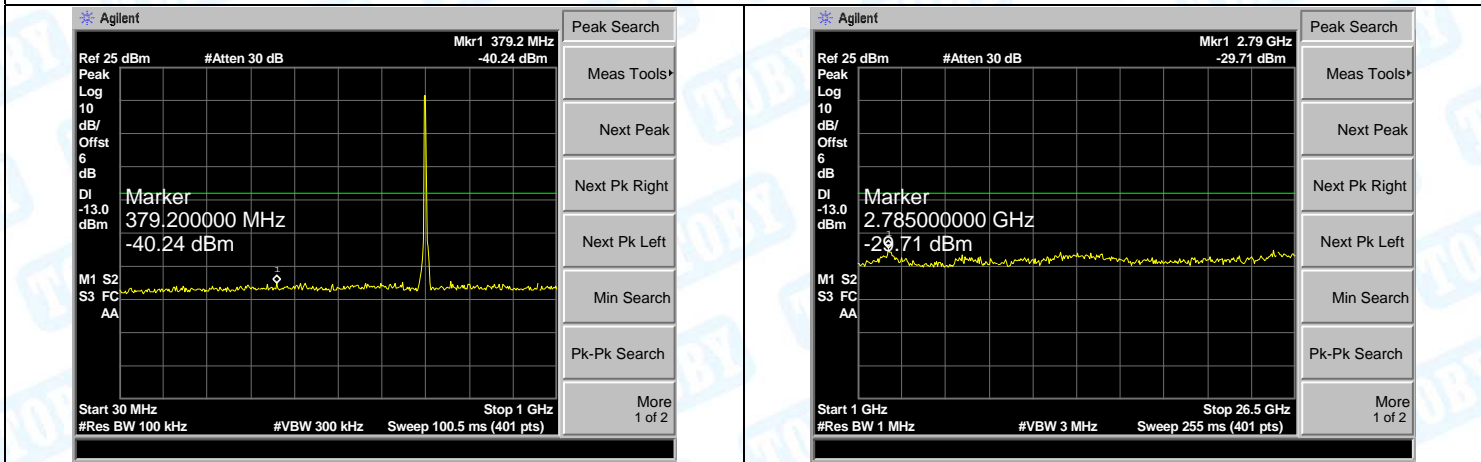


LTE BAND 12 (1.4MHz RB Size 6& RB Offset 0 QPSK-High CH)

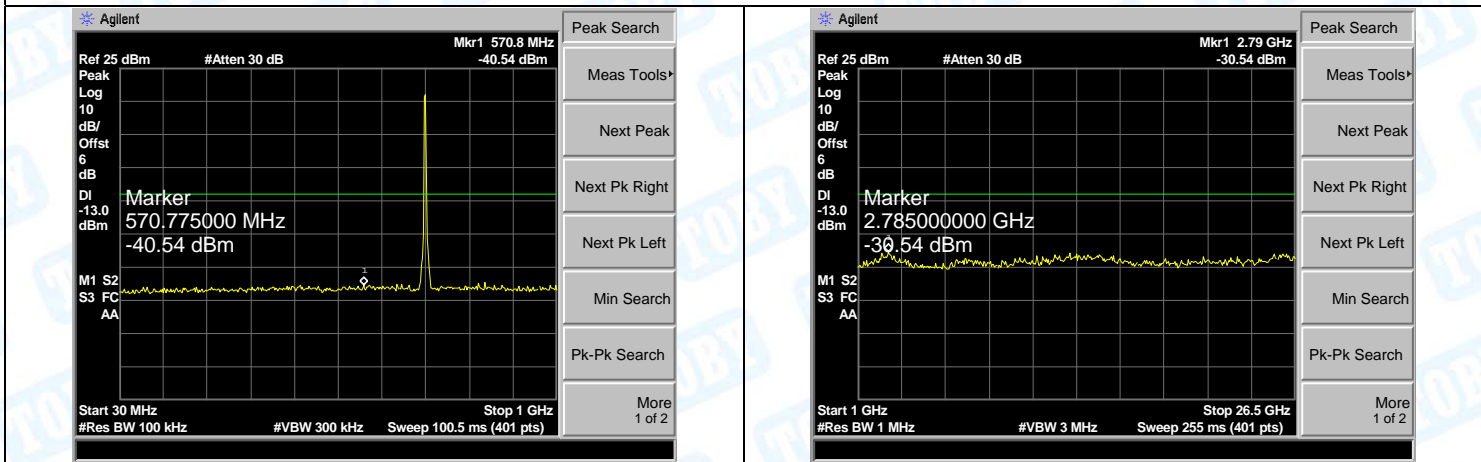


30MHz-1GHz **1GHz-26.5GHz**

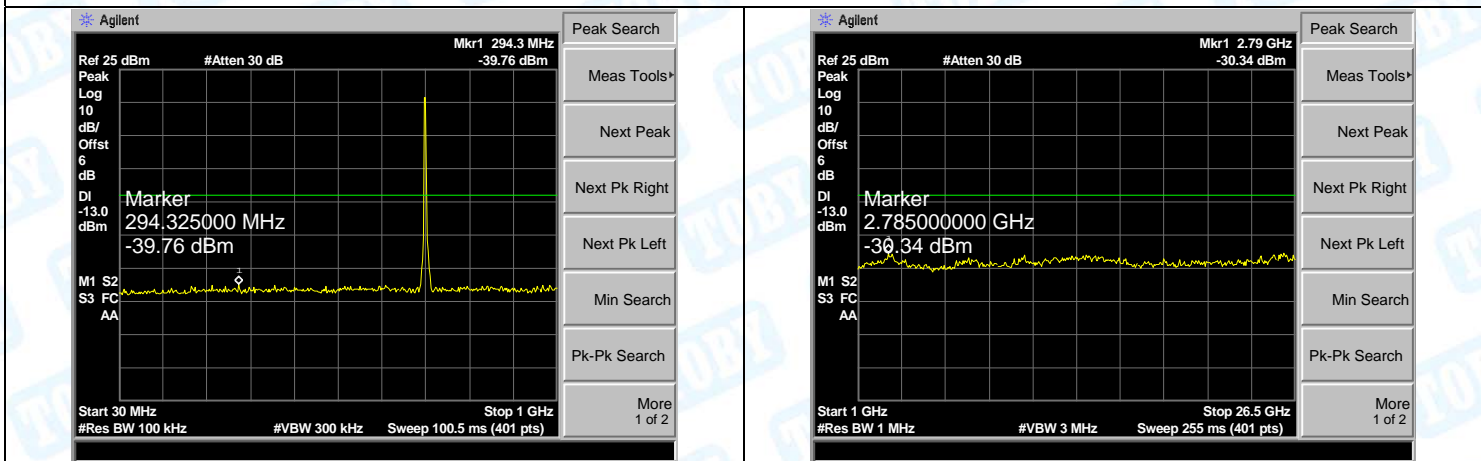
LTE BAND 12 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



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

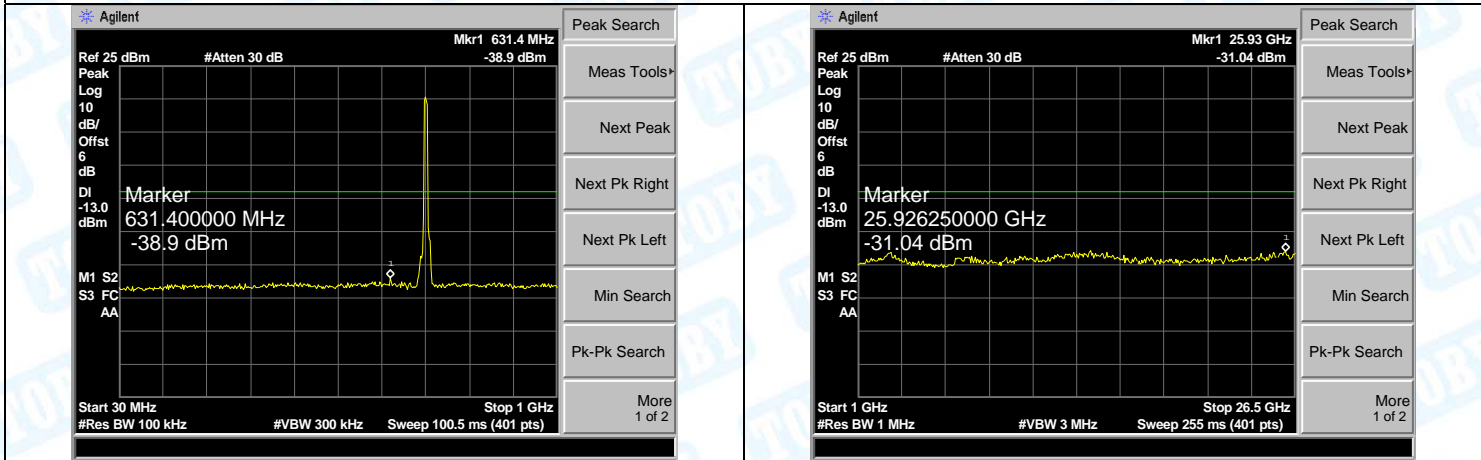


LTE BAND 12 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)

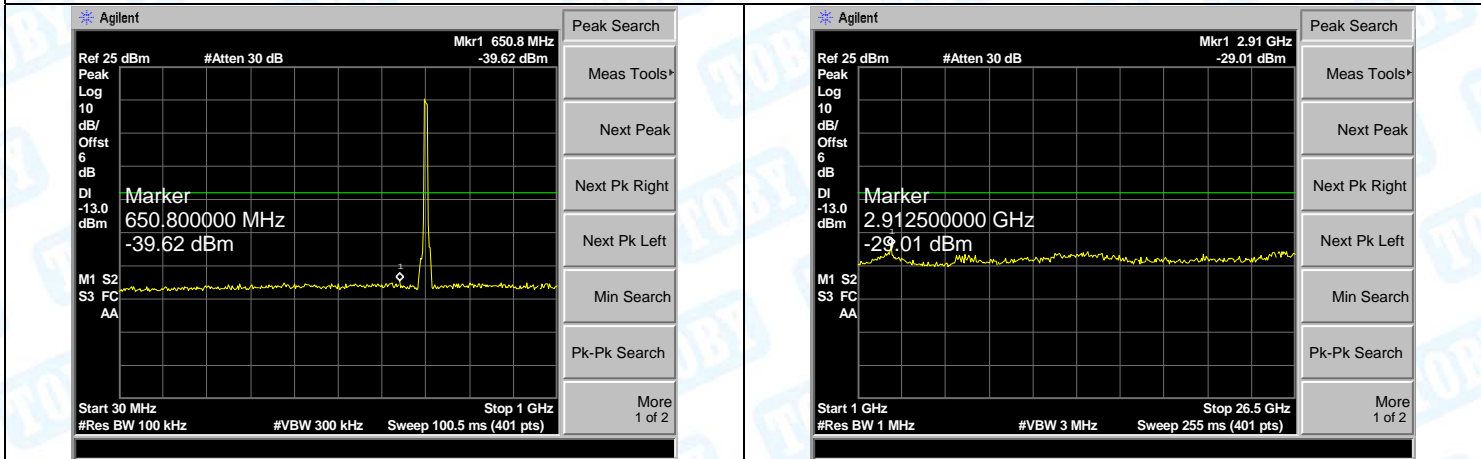


30MHz-1GHz	1GHz-26.5GHz
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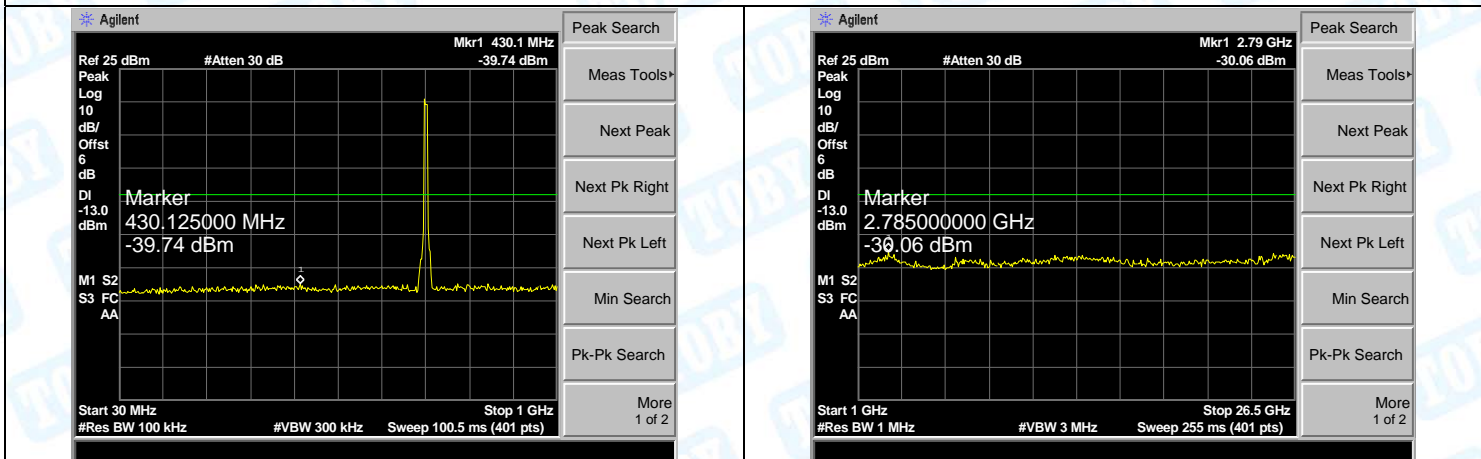
LTE BAND 12 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



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

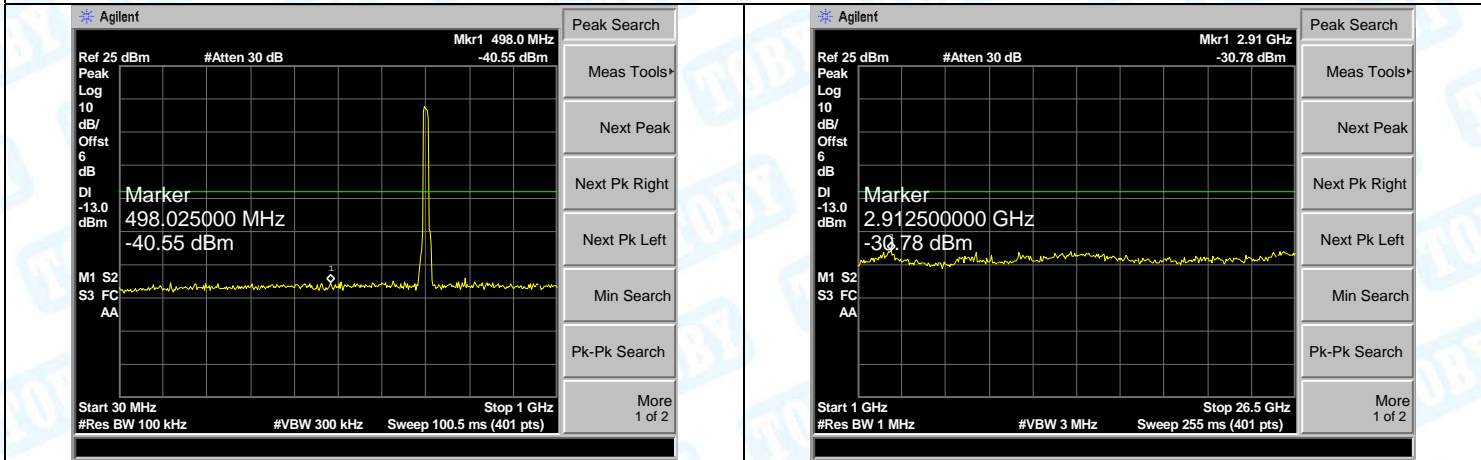


LTE BAND 12 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)

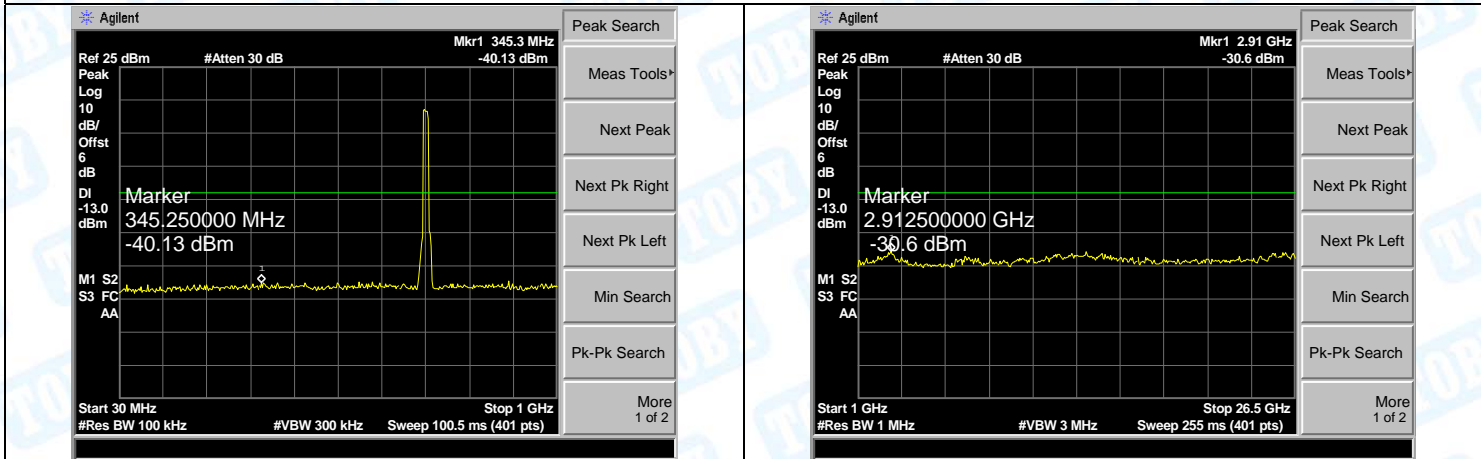


30MHz-1GHz	1GHz-26.5GHz
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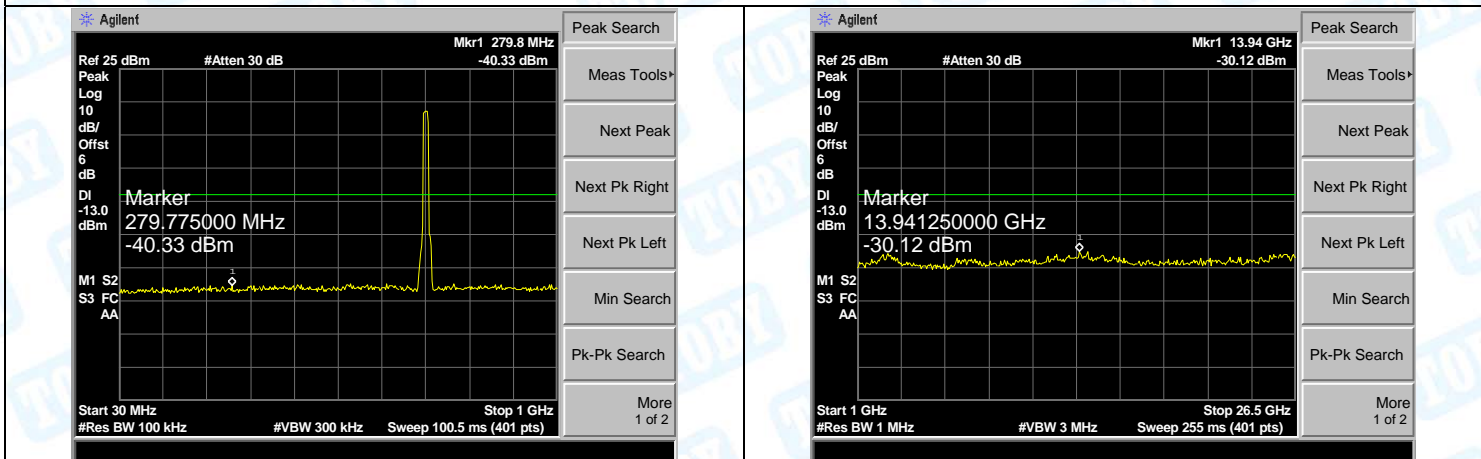
LTE BAND 12 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



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

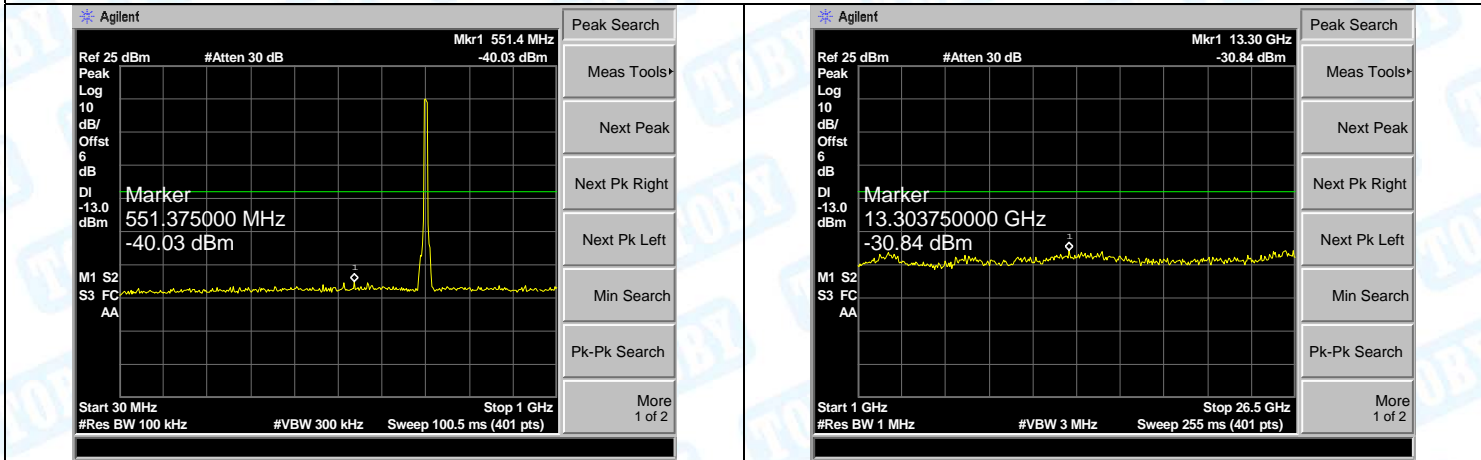


LTE BAND 12 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)

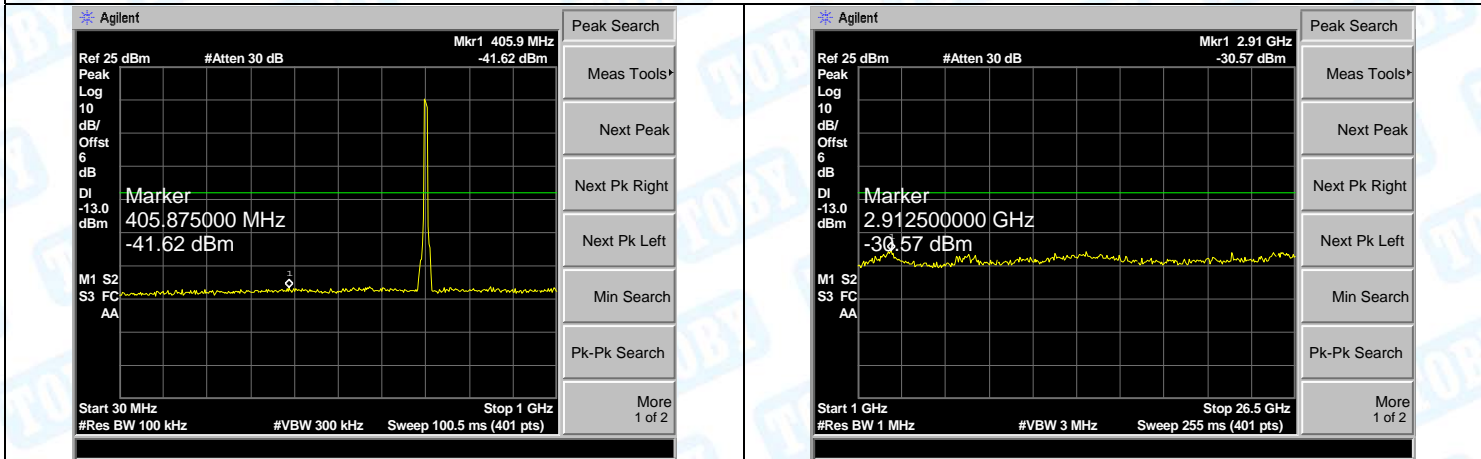


30MHz-1GHz	1GHz-26.5GHz
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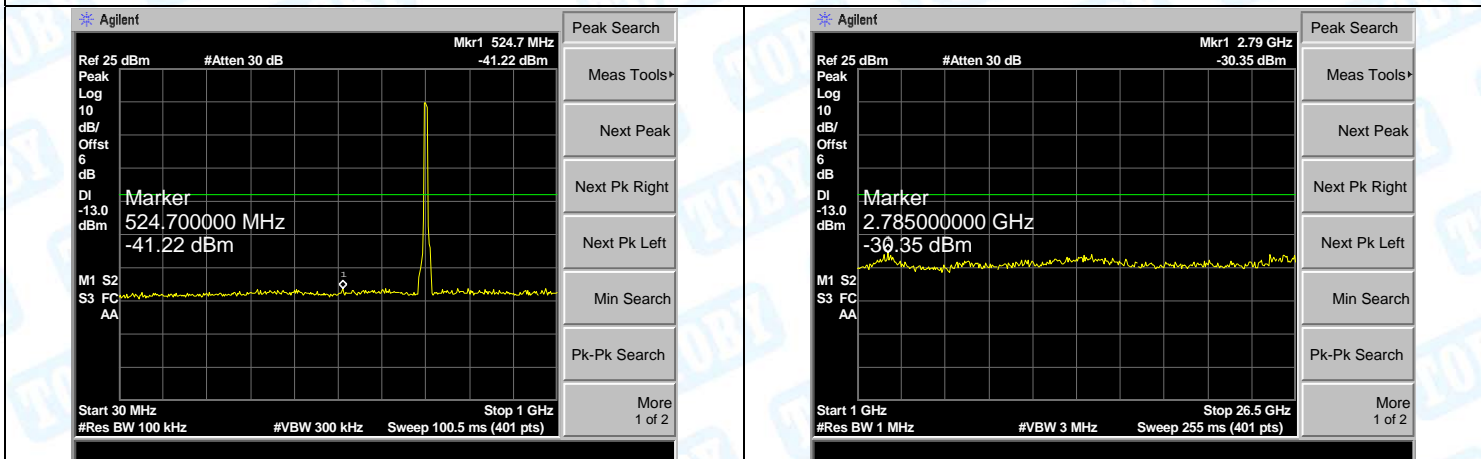
LTE BAND 13 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)

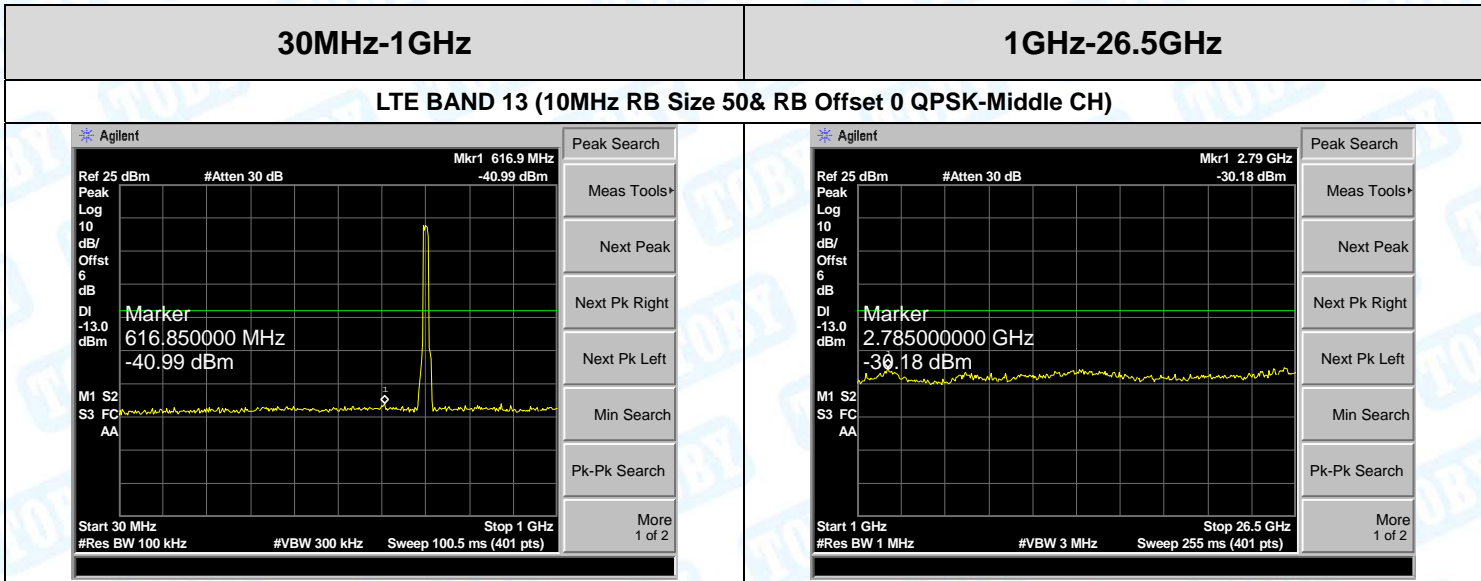


LTE BAND 13 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)



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

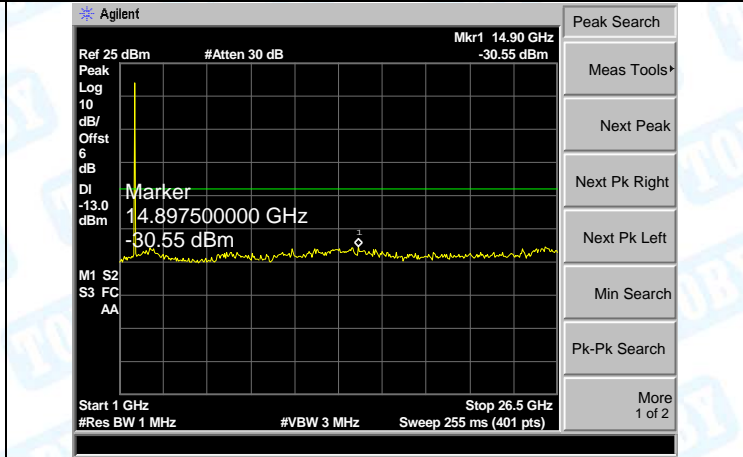
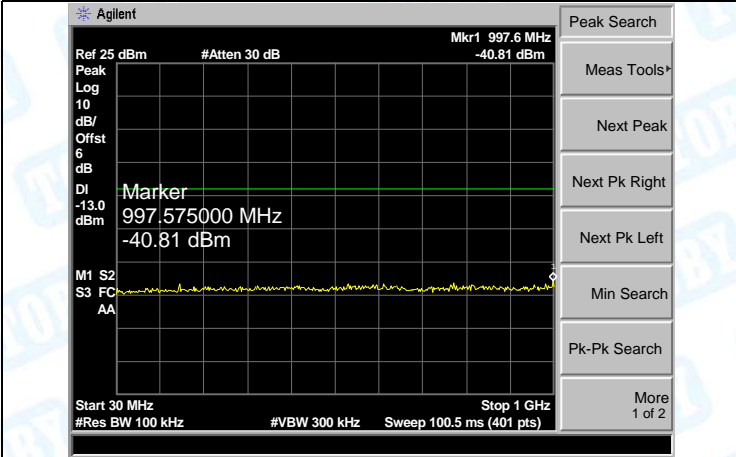




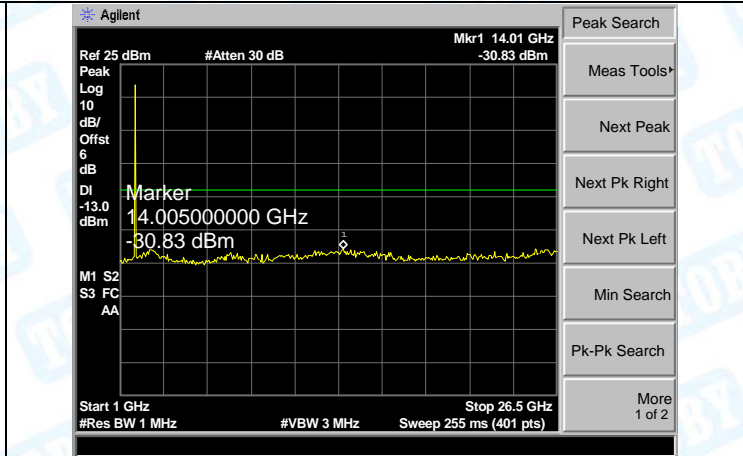
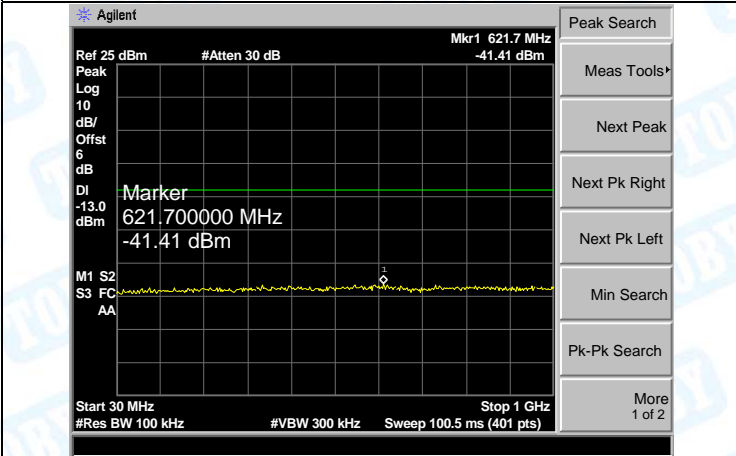
30MHz-1GHz

1GHz-26.5GHz

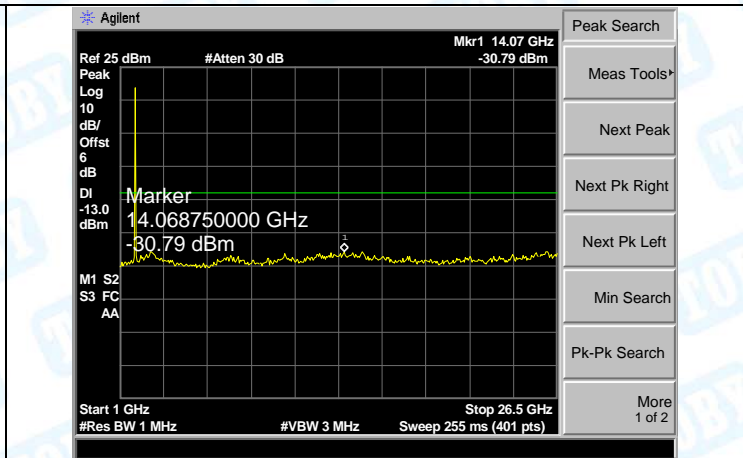
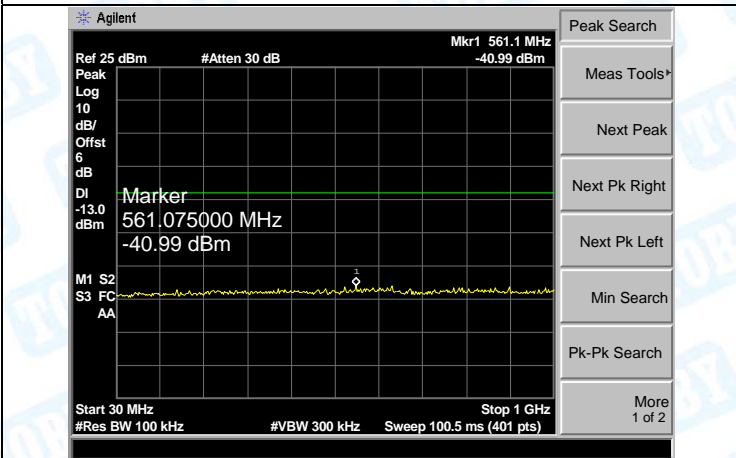
LTE BAND 25 (1.4MHz RB Size 6& RB Offset 0 QPSK-Low CH)



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

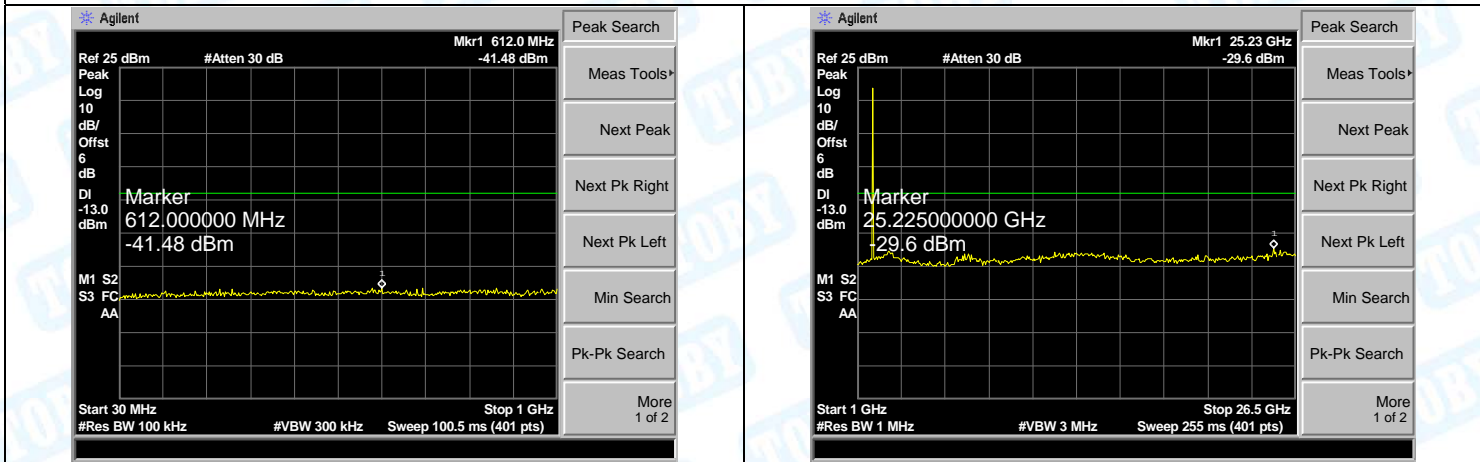


LTE BAND 25 (1.4MHz RB Size 6& RB Offset 0 QPSK-High CH)

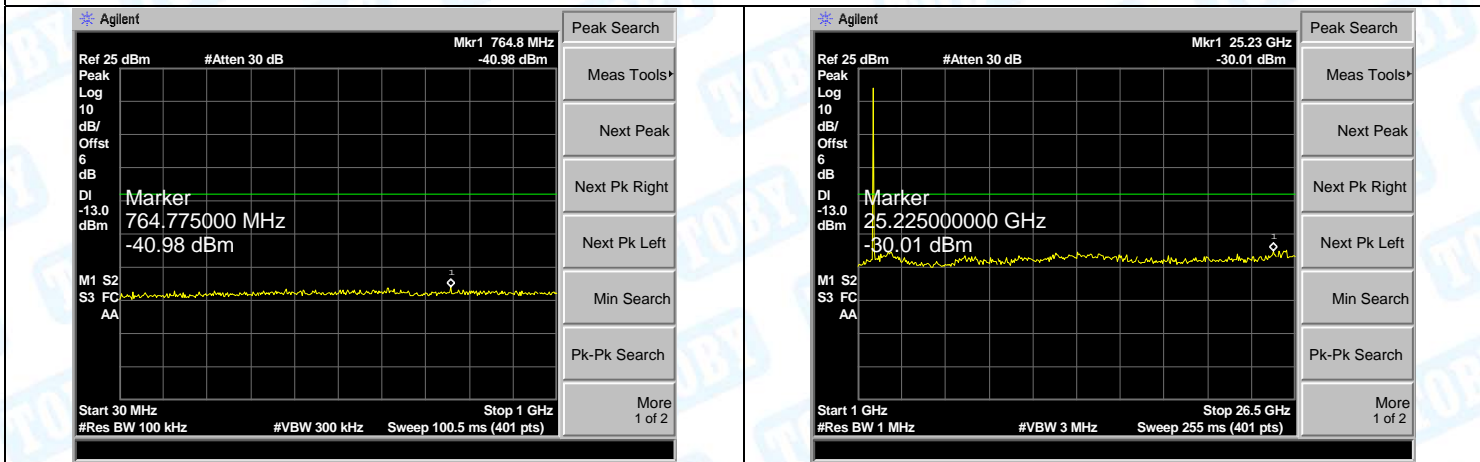


30MHz-1GHz	1GHz-26.5GHz
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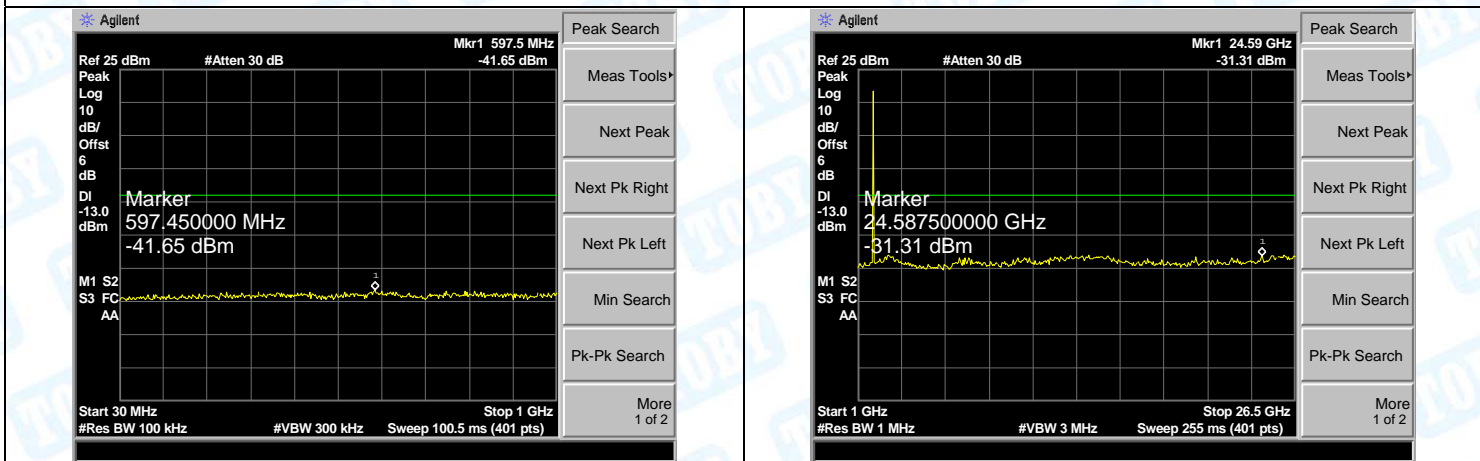
LTE BAND 25 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



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

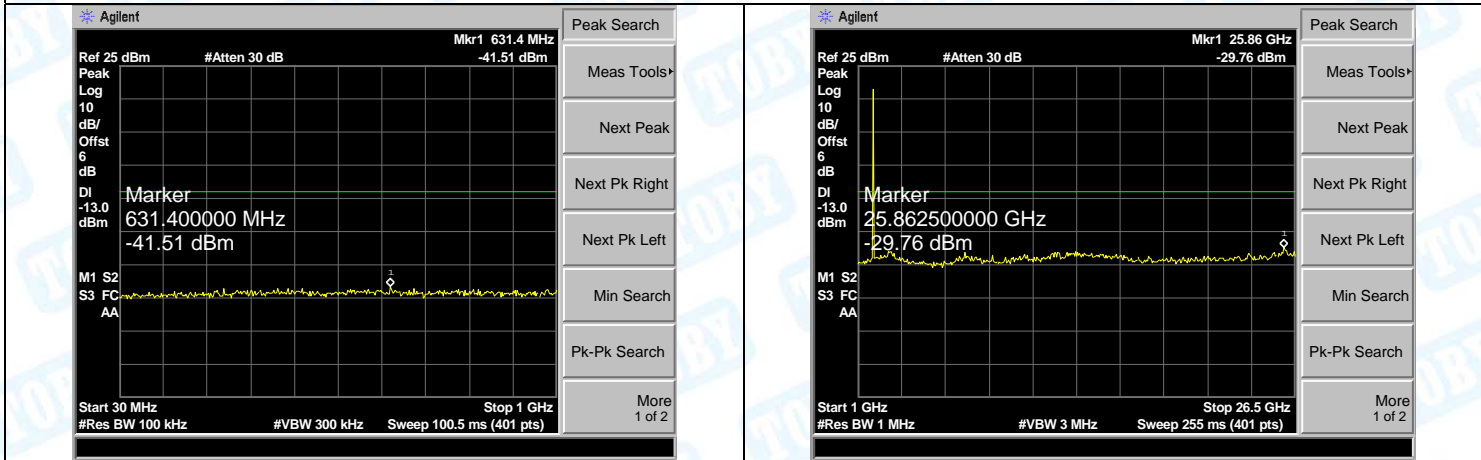


LTE BAND 25 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)

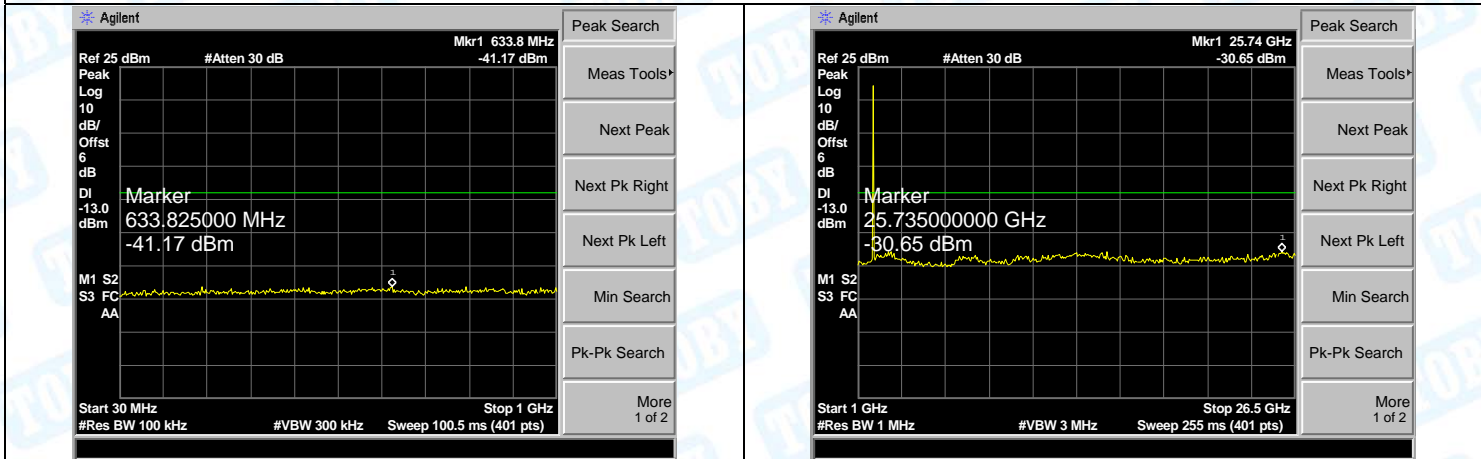


30MHz-1GHz **1GHz-26.5GHz**

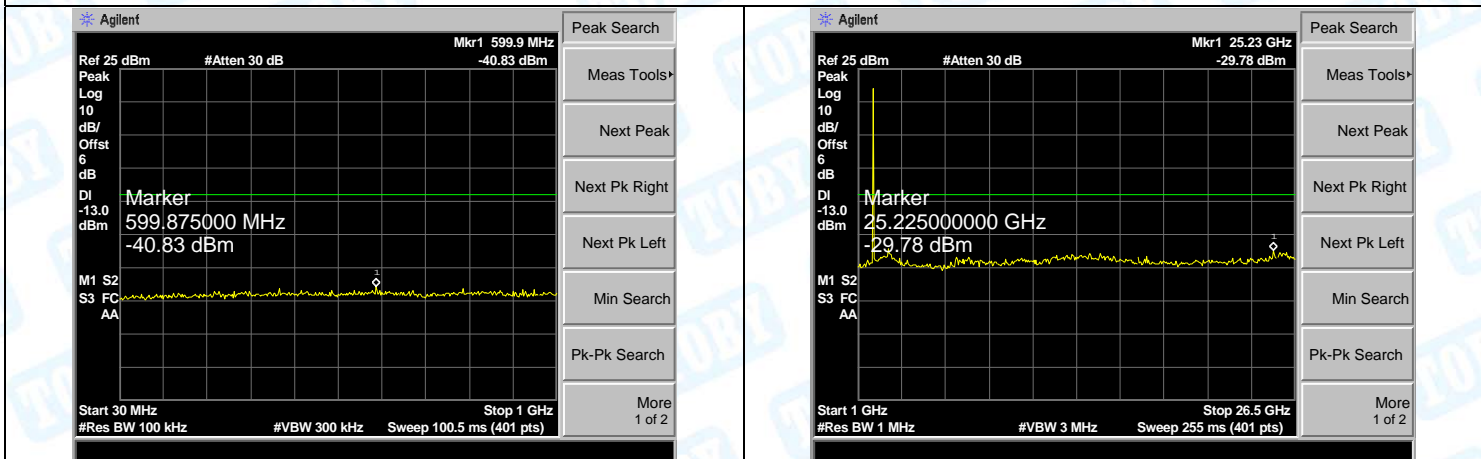
LTE BAND 25 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



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

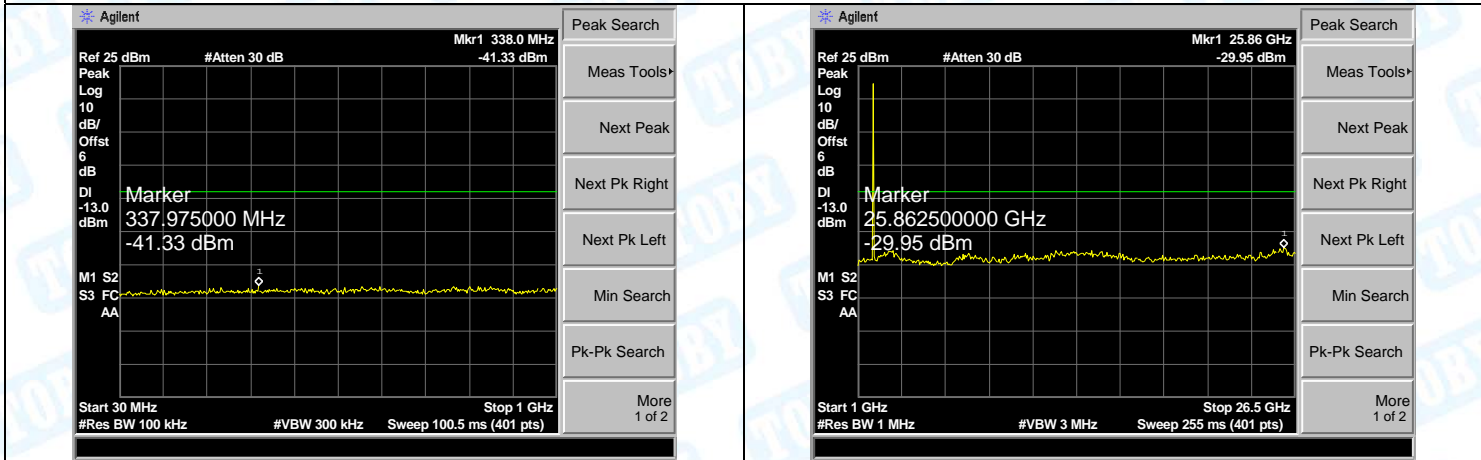


LTE BAND 25 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)

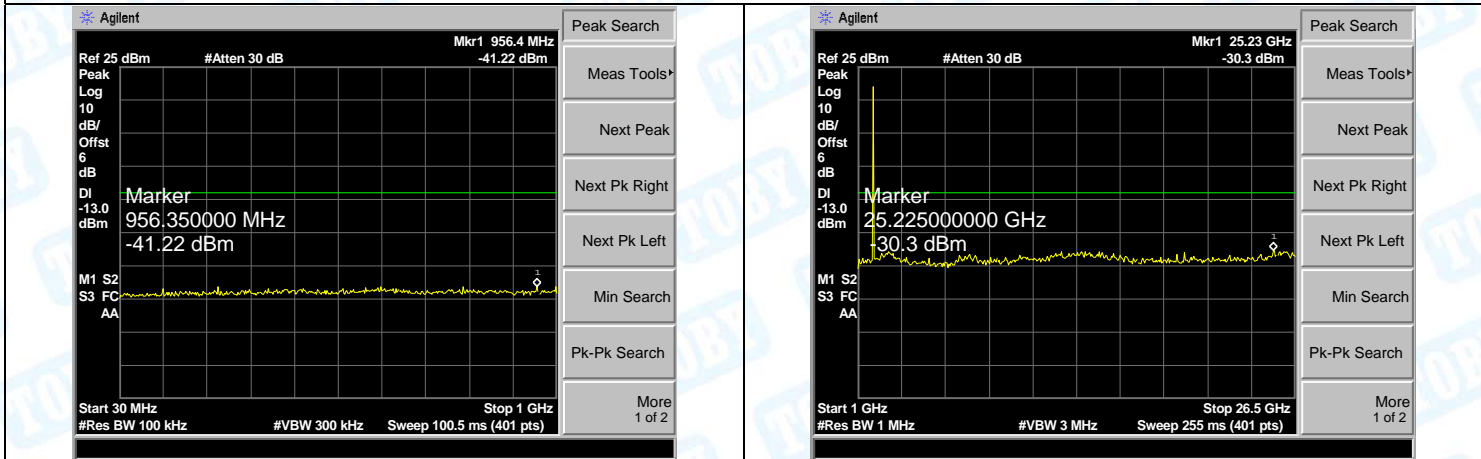


30MHz-1GHz **1GHz-26.5GHz**

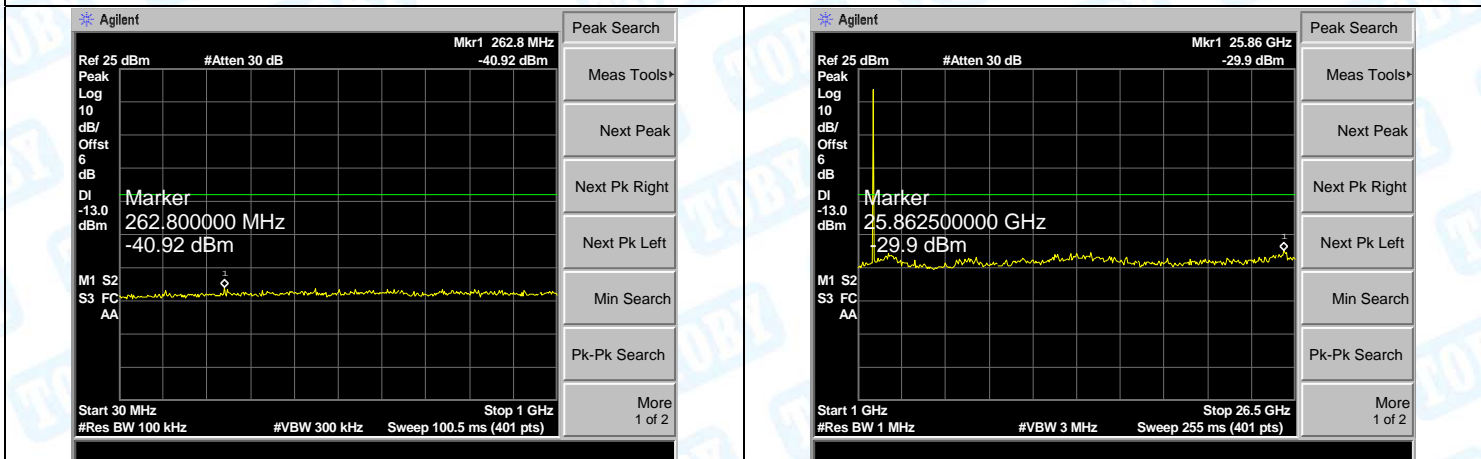
LTE BAND 25 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



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

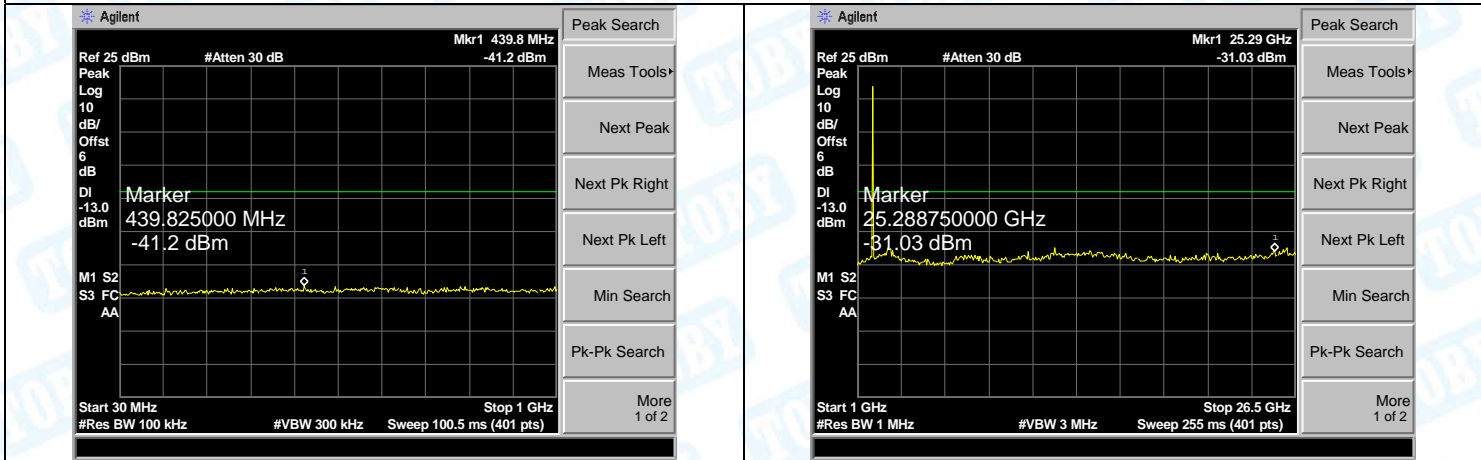


LTE BAND 25 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)

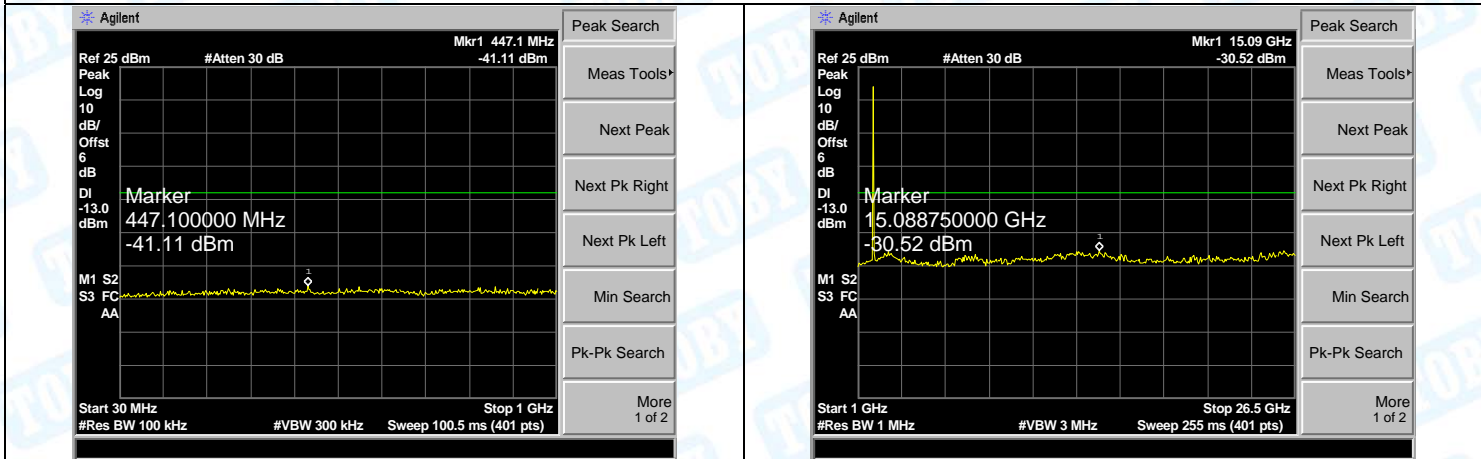


30MHz-1GHz	1GHz-26.5GHz
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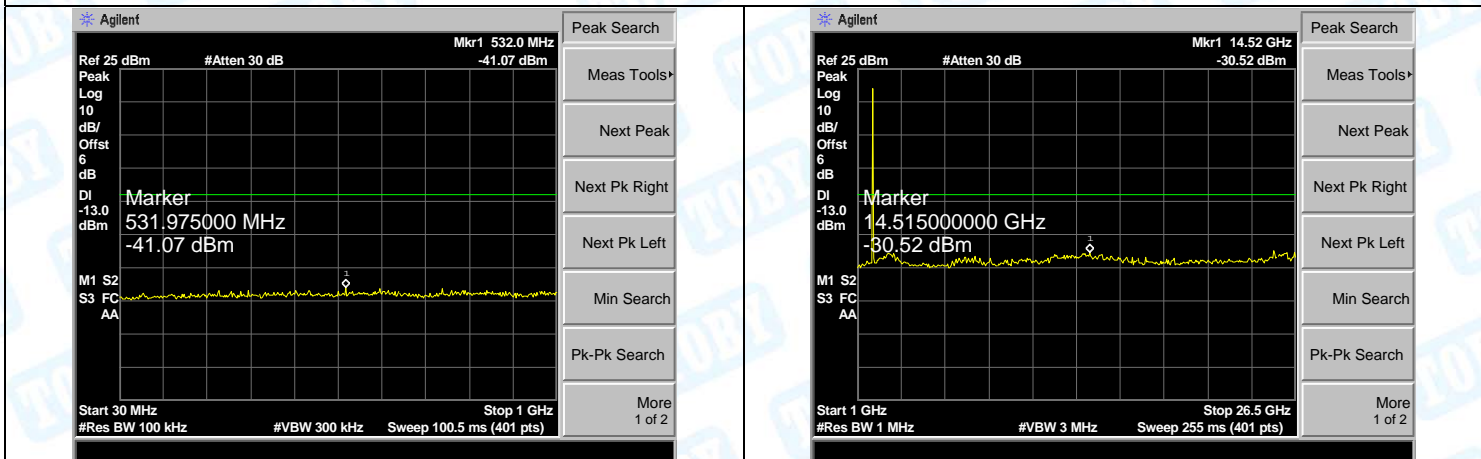
LTE BAND 25 (15MHz RB Size 75& RB Offset 0 QPSK-Low CH)



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

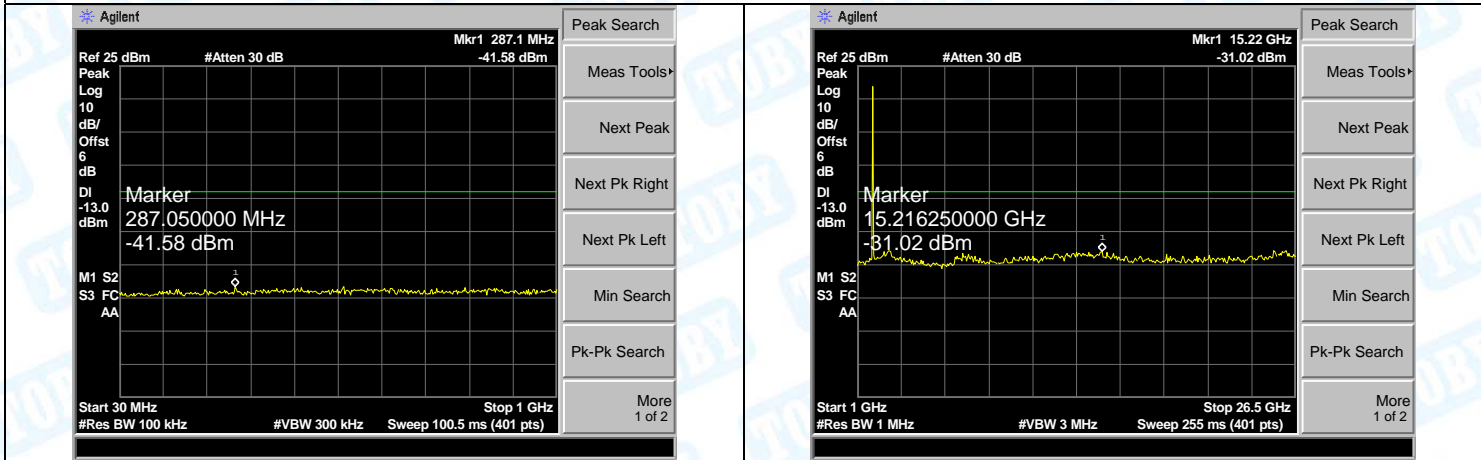


LTE BAND 25 (15MHz RB Size 75& RB Offset 0 QPSK-High CH)

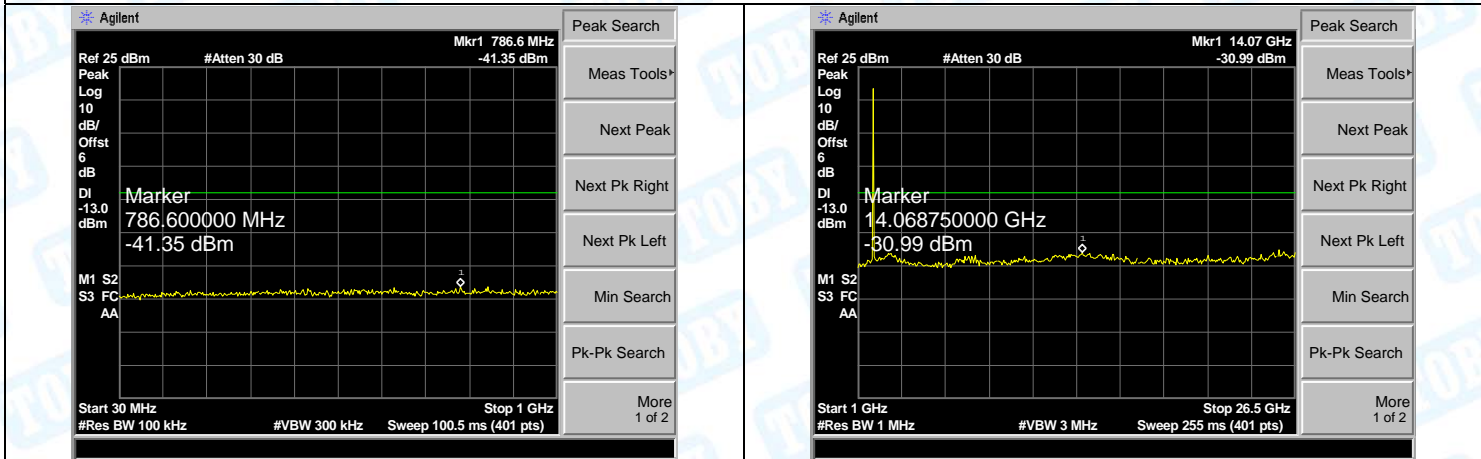


30MHz-1GHz	1GHz-26.5GHz
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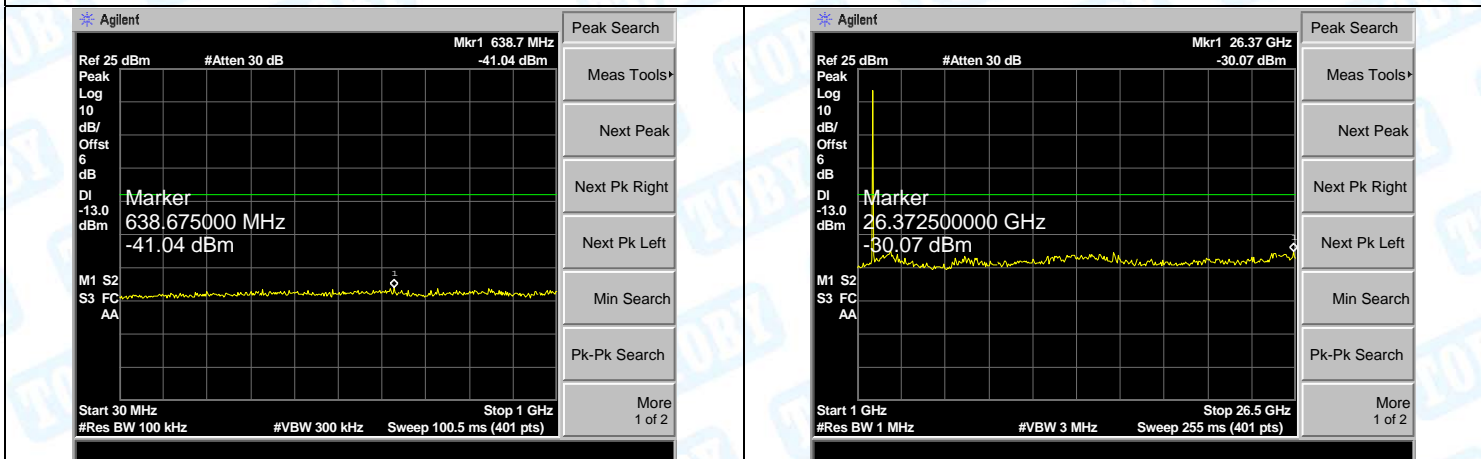
LTE BAND 25 (20MHz RB Size 100& RB Offset 0 QPSK-Low CH)

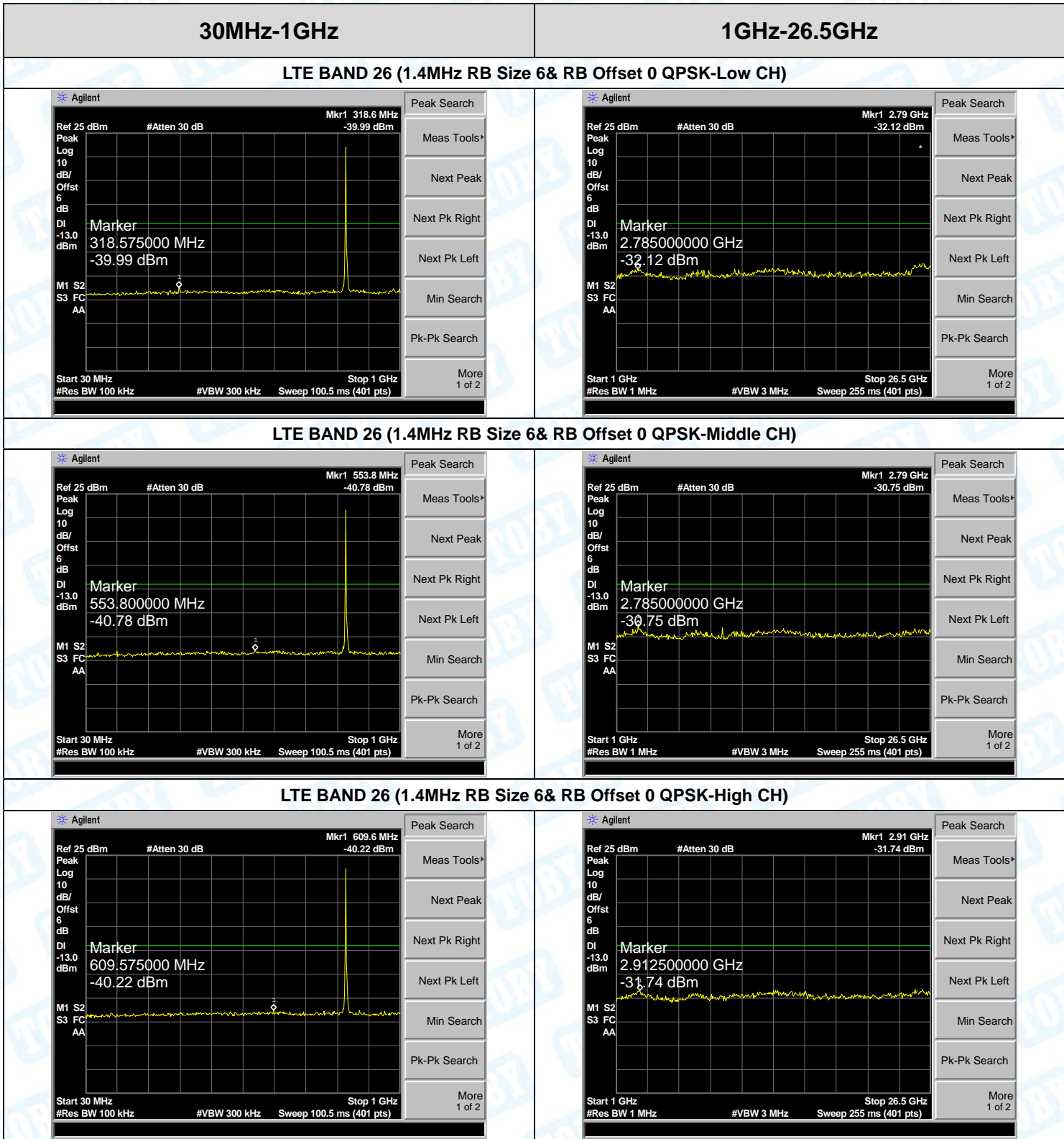


LTE BAND 25 (20MHz RB Size 100& RB Offset 0 QPSK-Middle CH)



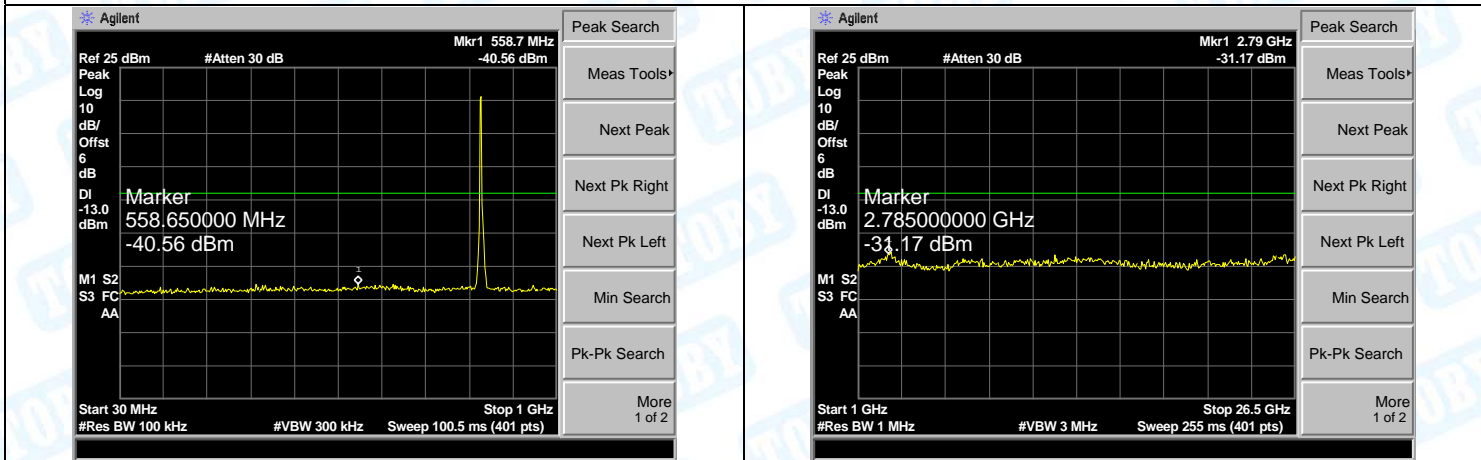
LTE BAND 25 (20MHz RB Size 100& RB Offset 0 QPSK-High CH)



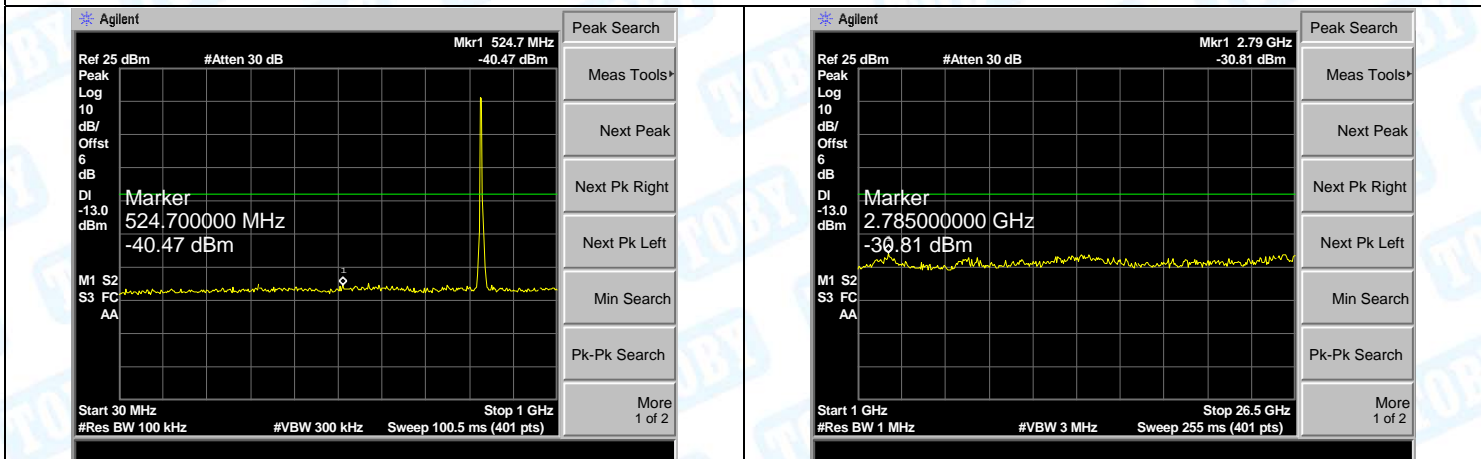


30MHz-1GHz **1GHz-26.5GHz**

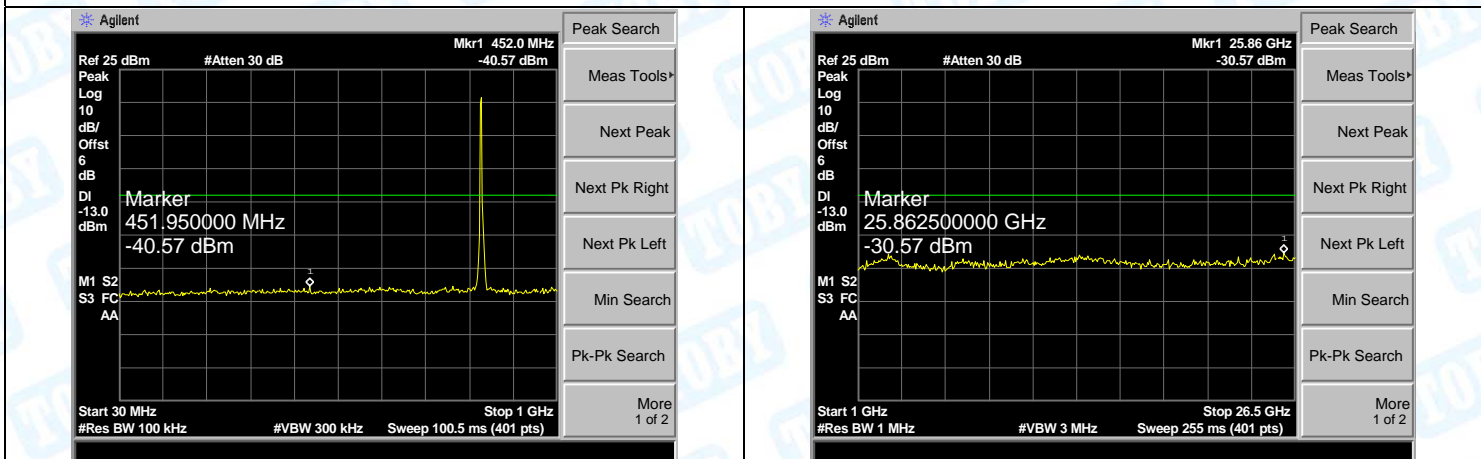
LTE BAND 26 (3MHz RB Size 15& RB Offset 0 QPSK-Low CH)



LTE BAND 26 (3MHz RB Size 15& RB Offset 0 QPSK-Middle CH)

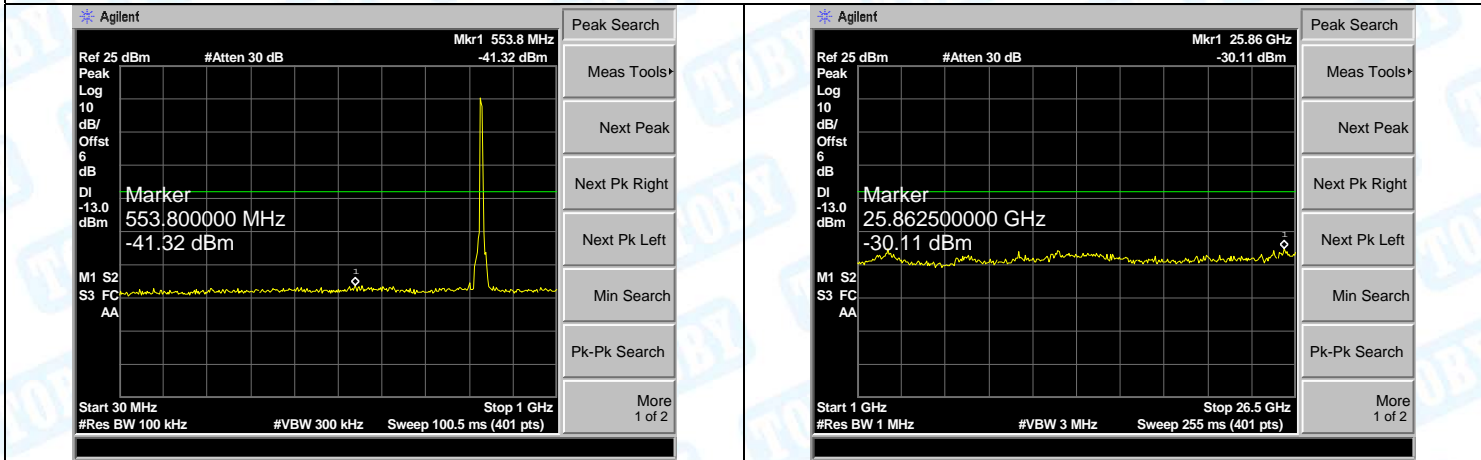


LTE BAND 26 (3MHz RB Size 15& RB Offset 0 QPSK-High CH)

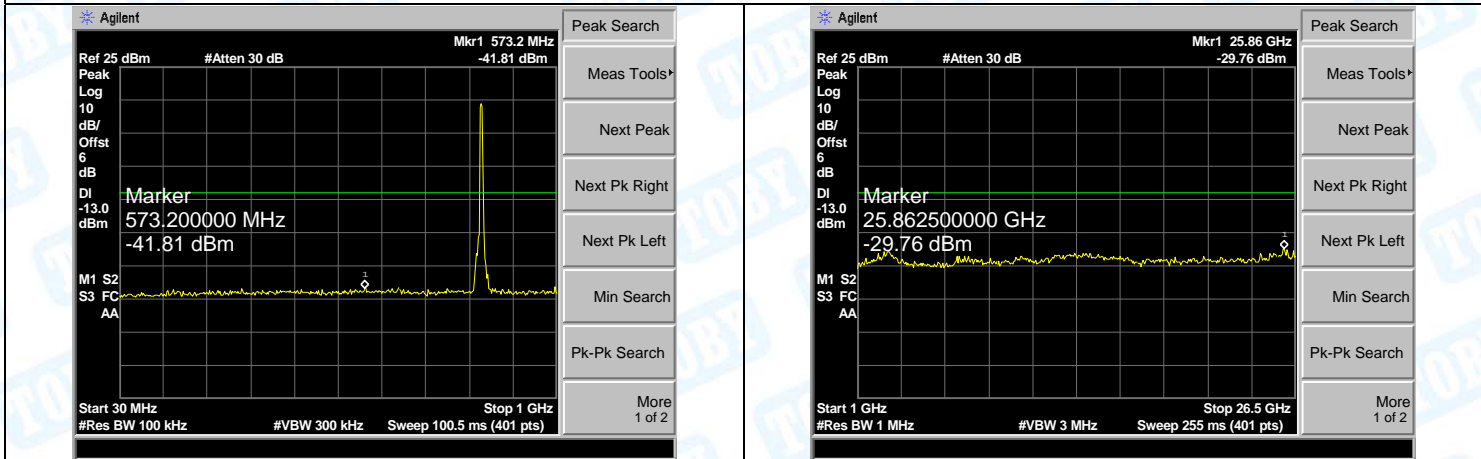


30MHz-1GHz	1GHz-26.5GHz
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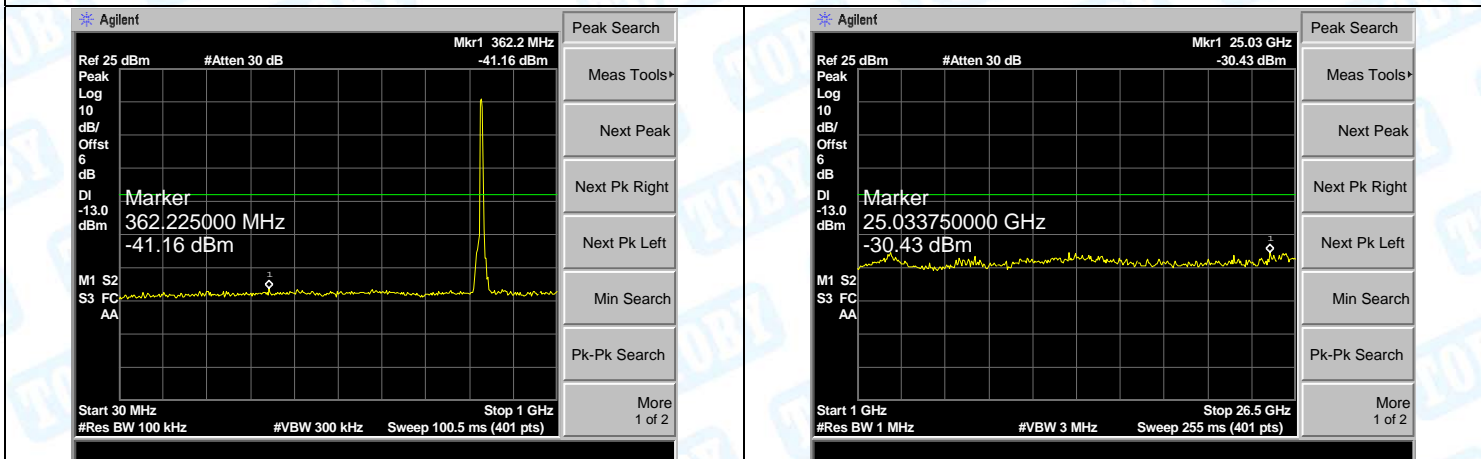
LTE BAND 26 (5MHz RB Size 25& RB Offset 0 QPSK-Low CH)



LTE BAND 26 (5MHz RB Size 25& RB Offset 0 QPSK-Middle CH)

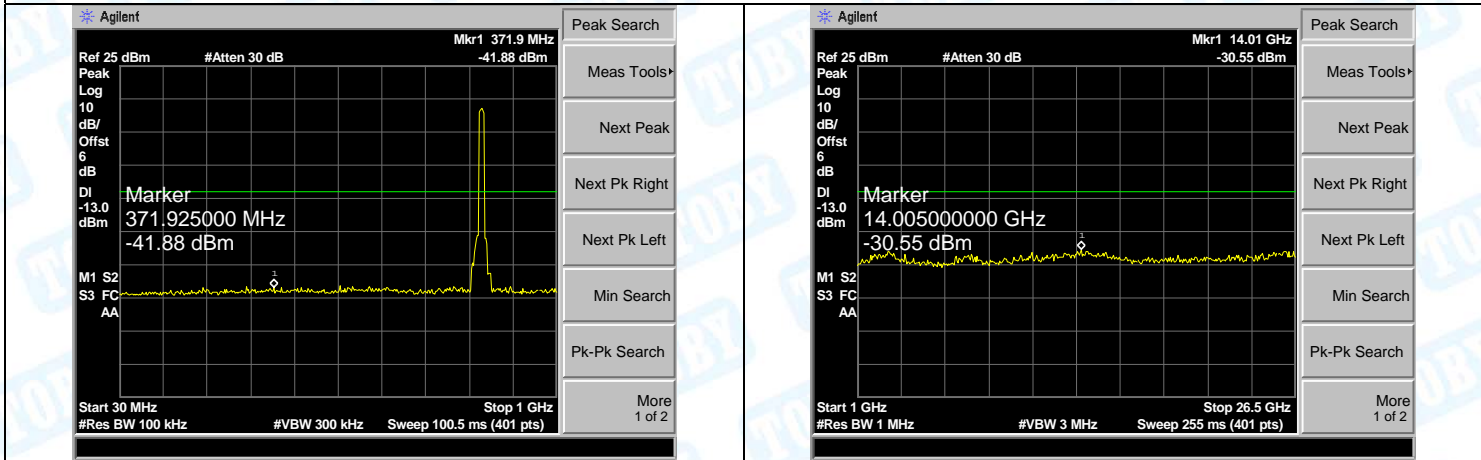


LTE BAND 26 (5MHz RB Size 25& RB Offset 0 QPSK-High CH)

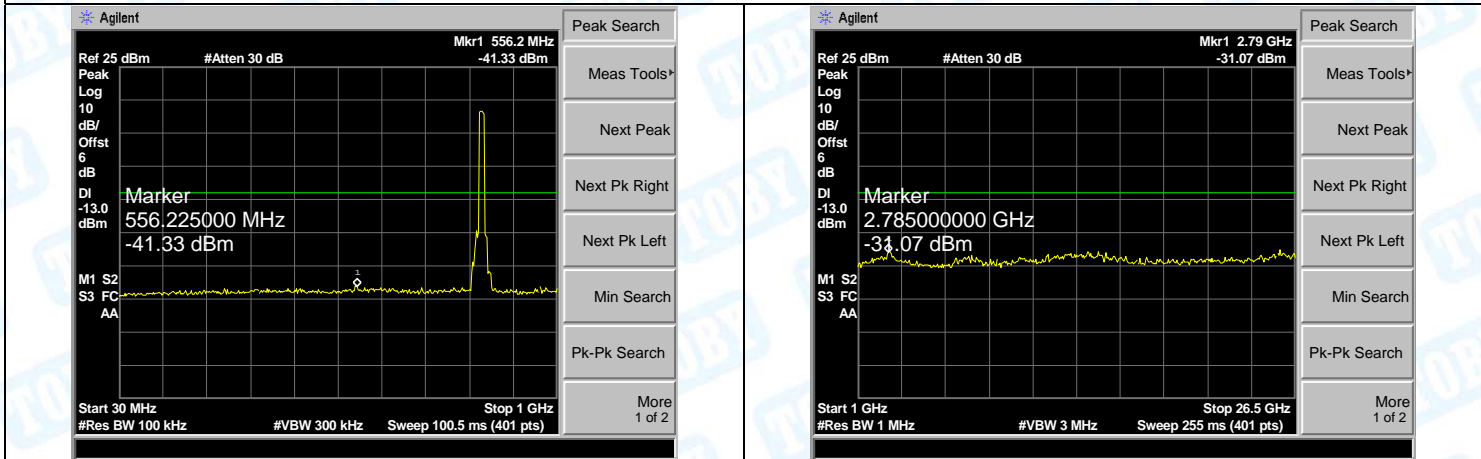


30MHz-1GHz	1GHz-26.5GHz
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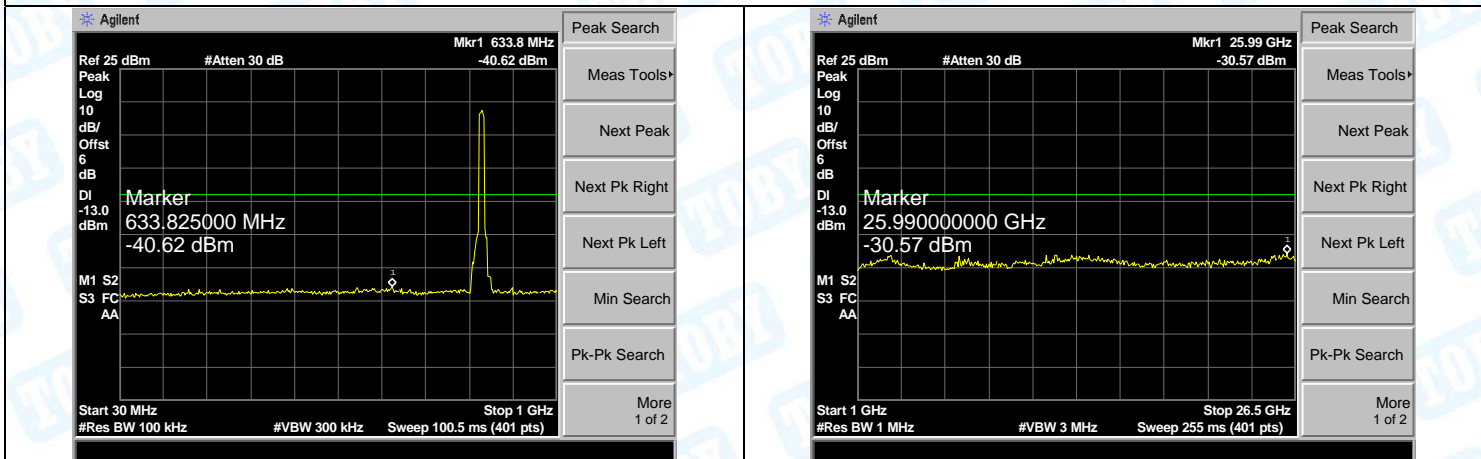
LTE BAND 26 (10MHz RB Size 50& RB Offset 0 QPSK-Low CH)



LTE BAND 26 (10MHz RB Size 50& RB Offset 0 QPSK-Middle CH)

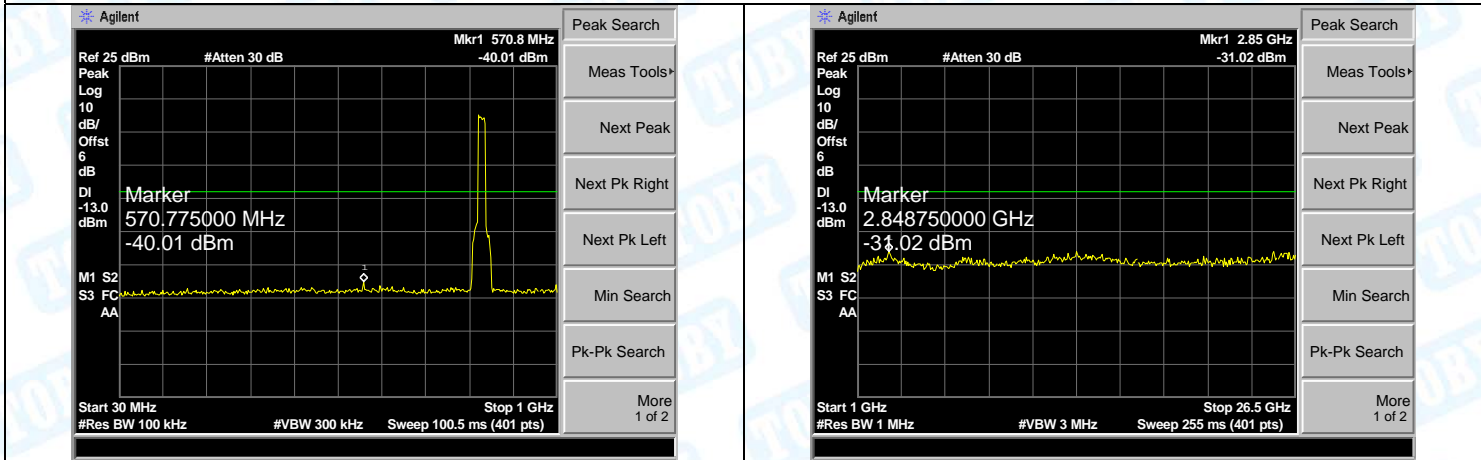


LTE BAND 26 (10MHz RB Size 50& RB Offset 0 QPSK-High CH)

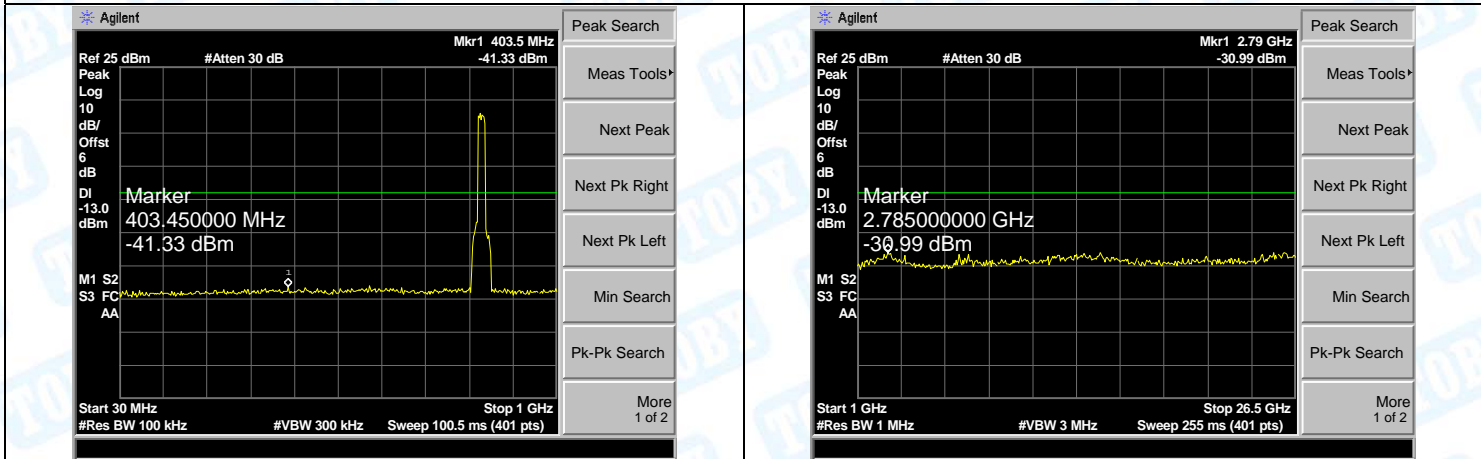


30MHz-1GHz	1GHz-26.5GHz
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LTE BAND 26 (15MHz RB Size 75& RB Offset 0 QPSK-Low CH)



LTE BAND 26 (15MHz RB Size 75& RB Offset 0 QPSK-Middle CH)



LTE BAND 26 (15MHz RB Size 75& RB Offset 0 QPSK-High CH)

