

FCC Part 22H & 24E & 27 L&M Test Report

Product Name : Wireless Module
Model No. : AR7558
FCC ID : N7NAR7558
IC : 2417C-AR7558

Applicant : Sierra Wireless Inc.

Address : 13811 Wireless Way Richmond, British Columbia,
Canada, V6V 3A4.

Date of Receipt : Jan. 14, 2015
Test Date : Jan. 14, 2015~ Feb. 02, 2015
Issued Date : Feb. 11, 2015
Report No. : 1510280R-HP-US-P07V01
Report Version : V 1.0



The test results relate only to the samples tested.

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

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Test Report Certification

Issued Date : Feb. 11, 2015

Report No. : 1510280R-HP-US-P07V01



Product Name : Wireless Module
Applicant : Sierra Wireless Inc.
Address : 13811 Wireless Way Richmond, British Columbia, Canada,
V6V 3A4.
Manufacturer : Sierra Wireless Inc.
Address : 13811 Wireless Way Richmond, British Columbia, Canada,
V6V 3A4.
Model No. : AR7558
FCC ID : N7NAR7558
IC : 2417C-AR7558
EUT Voltage : Low: 3.4V, High: 4.2V, Normal: 3.7V
Brand Name : AirPrime
Applicable Standard : FCC CFR Title 47 Part 2, TIA/EIA 603-C
FCC Part 22 Subpart H
FCC Part 24 Subpart E
FCC Part 27 Subpart L & M
Industry Canada RSS-132, Issue 3
Industry Canada RSS-133, Issue 6
Industry Canada RSS-139, Issue 2
Industry Canada RSS-199, Issue 2
Test Result : Complied
Performed Location : Suzhou EMC Laboratory
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Development Zone., Suzhou, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
FCC Registration Number: 800392; IC Lab Code: 4075B

Documented By : Alice Ni
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Laboratory Information

We, **QuietTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC, TAF
Germany	:	TUV Rheinland
Norway	:	Nemko, DNV
USA	:	FCC
Japan	:	VCCI

The related certificate for our laboratories about the test site and management system can be downloaded from QuietTek Corporation's Web Site :<http://www.quietek.com/tw/ctg/cts/accreditations.htm>

The address and introduction of QuietTek Corporation's laboratories can be founded in our Web site :
<http://www.quietek.com/>

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1510280R-HP-US-P07V01	V1.0	Initial Issued Report	Feb. 11, 2015

1. General Information

1.1. EUT Description

Product Name	Wireless Module
Model No.	AR7558
Brand Name	AirPrime
EUT Voltage	Low: 3.4V, High: 4.2V, Normal: 3.7V
2G	
Support Band	GSM850/PCS1900
GPRS Class	Class 12
Uplink	GSM 850: 824~849MHz PCS 1900: 1850~1910MHz
Downlink	GSM 850: 869~894MHz PCS 1900: 1930~1990MHz
Type of modulation	GMSK for GPRS; 8PSK for EDGE
Antenna Type	Dipole
Antenna Gain	GSM 850: 1.2dBi PCS1900: 1.3dBi
CDMA	
Support Band	BC0/BC1/BC10
Uplink	BC0: 824~849MHz BC1: 1850~1910MHz BC10:809~824MHz
Downlink	BC0: 869~894MHz BC1: 1930~1990MHz BC10: 854~869MHz
Type of Modulation	QPSK
Antenna Type	Dipole
Peak Antenna Gain	BC0: 1.2dBi BC1: 1.3dBi BC10: 1.2dBi
3G	
Support Band	WCDMA Band 2/WCDMA Band 5
Uplink	WCDMA Band 2: 1850~1910MHz WCDMA Band 5: 824~849MHz
Downlink	WCDMA Band 2: 1930~1990MHz

	WCDMA Band 5: 869~894MHz
Type of modulation	QPSK for Uplink
Antenna Type	Dipole
Antenna Gain	Band 2: 1.3dBi Band 5: 1.2dBi
1XEVD0	
Support Band	BC0/BC1/BC10
Uplink	BC0: 824~849MHz BC1: 1850~1910MHz BC10:809~824MHz
Downlink	BC0: 869~894MHz BC1: 1930~1990MHz BC10: 854~869MHz
Release Version	Rel-A
Type of Modulation	QPSK
Antenna Type	Dipole
Peak Antenna Gain	BC0: 1.2dBi BC1: 1.3dBi BC10: 1.2dBi
4G	
Support Band	LTE Band 4/25/26/41
Uplink	Band 4: 1710~1755MHz Band 25: 1850~1915MHz Band 26: 814~849MHz Band 41: 2496~2690MHz
Downlink	Band 4: 2110~2155MHz Band 25: 1930~1995MHz Band 26: 859~894MHz Band 41: 2496~2690MHz
Type of modulation	QPSK, 16QAM
Antenna Type	Dipole
Antenna Gain	Band 4: 1.3dBi Band 25: 1.3dBi Band 26: 1.2dBi Band 41: 4.2dBi

1.2. Mode of Operation

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

Test Mode
Mode 1: LTE Band 4
Mode 2: LTE Band 25
Mode 3: LTE Band 26
Mode 4: LTE Band 41

Note:

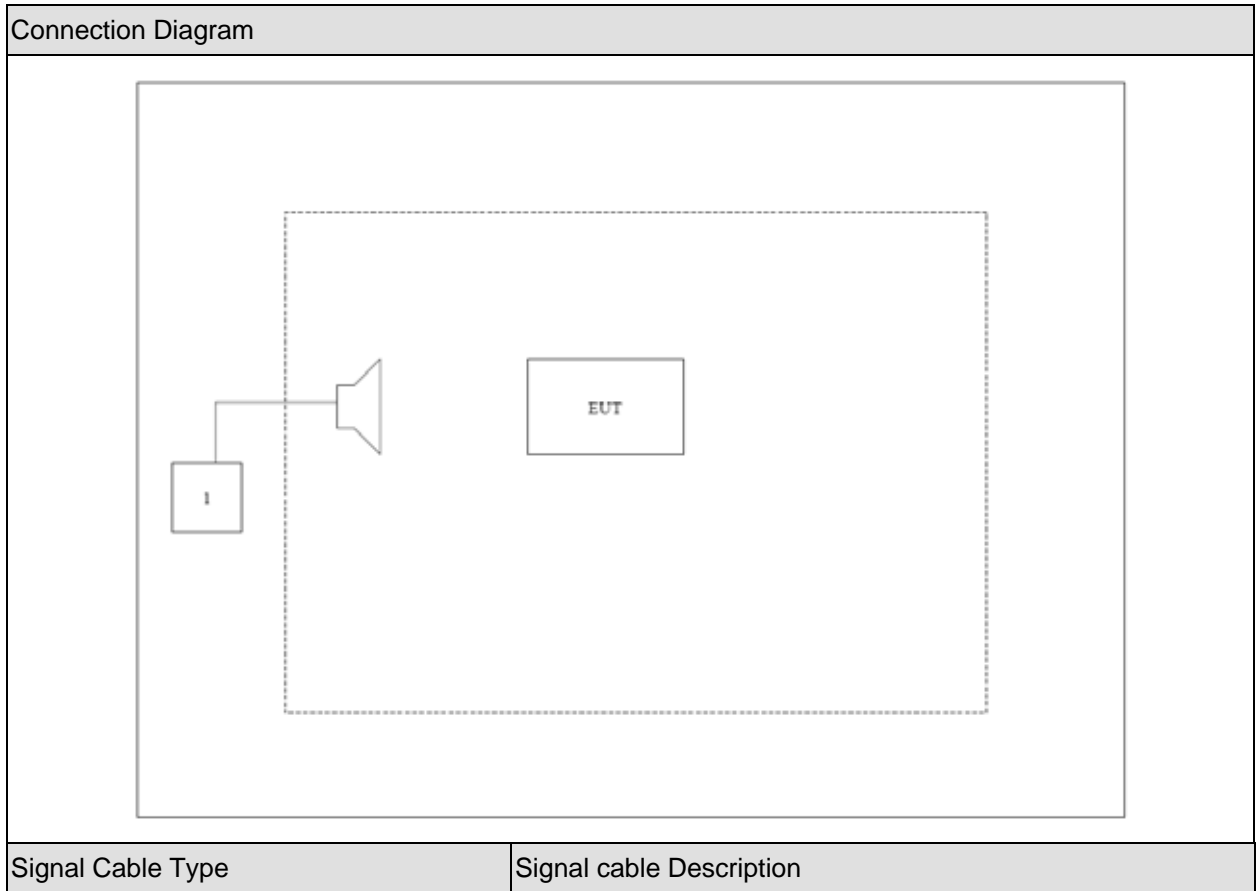
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Radio Communication Tester	Anritsu	MT8820C	6201181503	N/A

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	EUT Communicate with MT8820C, then select channel to test.

2. Technical Test

2.1. Summary of Test Result

For LTE Band 4

(FCC Part 27 Subpart L, Industry Canada RSS-139, Issue 2, Industry Canada RSS-GEN)

Performed Item	FCC Rule	IC Rule	Limit	Result
Maximum Output Power	§2.1033 §2.1046 §27.50	§6.4	< 1 Watts	Pass
Equivalent Isotropic Radiated Power	§27.50	§6,4	< 1 Watts	Pass
Modulation characteristics	§2.1047	§6.2	N/A	Pass
Occupied Bandwidth	§2.1049	RSS-GEN §4.2	N/A	Pass
Conducted Band Edge Emissions	§27.50	§6.5	< -13dBm	Pass
Field Strength of Spurious Radiation	§2.1053 §27.53	§6.5	< -13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §27.54	§6.3	< 2.5 ppm	Pass

For LTE Band 25

(FCC Part 24 Subpart E, Industry Canada RSS-133, Issue 6, Industry Canada RSS-GEN)

Performed Item	FCC Rule	IC Rule	Limit	Result
Maximum Output Power	§2.1033 §2.1046 §24.232	§6.4	< 2 Watts	Pass
Equivalent Isotropic Radiated Power	§24.232	§6.4	< 2 Watts	Pass
Modulation characteristics	§2.1047	§6.2	N/A	Pass
Occupied Bandwidth	§2.1049	RSS-GEN §4.2	N/A	Pass
Conducted Band Edge Emissions	§27.238	§6.5	< -13dBm	Pass
Field Strength of Spurious Radiation	§2.1053 §24.238	§6.5	< -13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §24.235	§6.3	< 2.5 ppm	Pass

For LTE Band 26

(FCC Part 22 Subpart H, Industry Canada RSS-132, Issue 3, Industry Canada RSS-GEN)

Performed Item	FCC Rule	IC Rule	Limit	Result
Maximum Output Power	§2.1033 §2.1046 §22.913	§5.4	< 7 Watts	Pass
Equivalent Isotropic Radiated Power	§22.913	§5.4	< 7 Watts	Pass
Modulation characteristics	§2.1047	§5.2	N/A	Pass
Occupied Bandwidth	§2.1049	RSS-GEN §4.2	N/A	Pass
Conducted Band Edge Emissions	§22.917	§5.5	< -13dBm	Pass
Field Strength of Spurious Radiation	§2.1053 §§22.917	§5.5	< -13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §22.335	§5.3	< 2.5 ppm	Pass

For LTE Band 41

(FCC Part 27 Subpart M, Industry Canada RSS-199, Issue 2, Industry Canada RSS-GEN)

Performed Item	FCC Rule	IC Rule	Limit	Result
Maximum Output Power	§2.1033 §2.1046 §27.50	§4.4	< 2 Watts	Pass
Equivalent Isotropic Radiated Power	§27.50	§4.4	< 33 dBW + 10 log(X/Y)dBW + 10 log(360/beamwidth) dBW	Pass
Modulation characteristics	§2.1047	§4.1	N/A	Pass
Occupied Bandwidth	§2.1049	RSS-GEN §4.2	N/A	Pass
Conducted Band Edge Emissions	§27.50	§4.6	< 5MHz: -10 dBm 5MHz-X MHz:-13dBm >X MHz:-25dBm	Pass
Field Strength of Spurious Radiation	§2.1053 §27.53	§4.6	< -25 dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §27.54	§4.3	< 2.5 ppm	Pass

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	23
Humidity (%RH)	25-75	52
Barometric pressure (mbar)	860-1060	950-1000

3. Maximum Output Power and Effective Isotropic Radiated Power Measurement

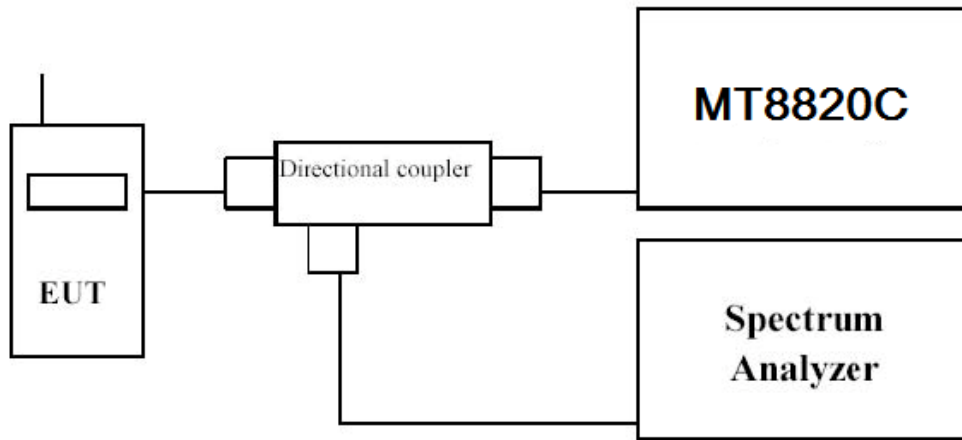
3.1. Test Equipment

Spurious Emission / AC-5

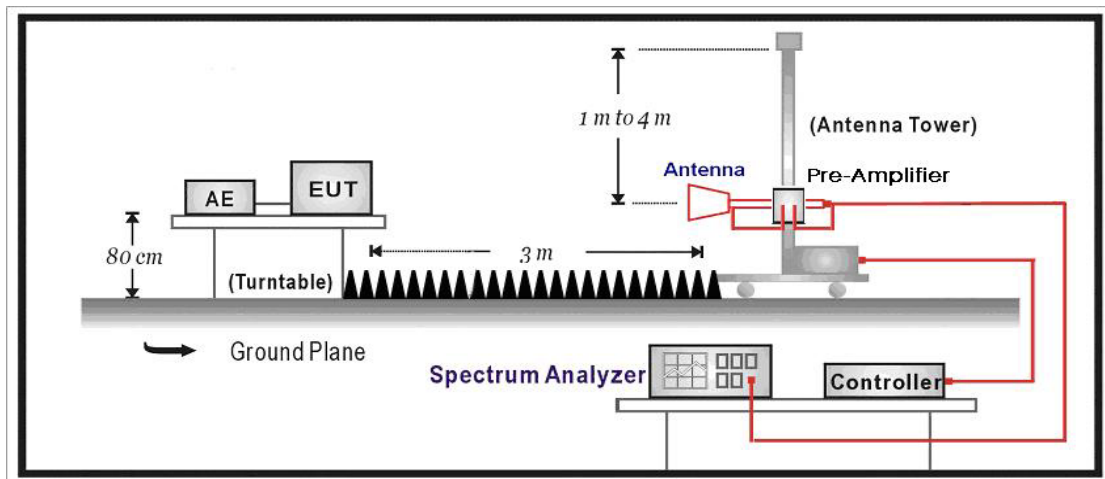
Instrument	Manufacturer	Type No.	Serial No	Cali. Due Date
PSA Series Spectrum Analyzer	Agilent	E4440A	MY49420184	2015.03.28
Radio Communication Tester	Anritsu	MT8820C	6201181503	2015.03.28
Dual Directional Coupler	Agilent	778D	20160	2015.03.28
10dB Coaxial Coupler	Agilent	87300C	MY44300299	2015.03.28
PSG Analog Signal Generator	Agilent	E8257D	MY44321116	2015.03.28
Preamplifier	QuieTek	AP-025C	CHM-0503006	2015.04.11
Preamplifier	Miteq	NSP1800-25	1364185	2015.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2015.10.15
Half Wave Tuned Dipole Antenna	COM-POWER	AD-100	40137	2016.02.26
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	737	2016.02.26
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2015.06.08
DRG Horn	ETS-Lindgren	3117	00167055	2015.07.16
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC5-TH	2016.01.07

3.2. Test Setup

Conducted Power Measurement:



Radiated Power Measurement:



3.3. Test Procedure

For Conducted Power Measurement:

- a) The RF output of the transmitter was connected to base station simulator.
- b) The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement..
- c) Set EUT at maximum average power by base station simulator.
- d) Measure lowest, middle, and highest channels for each bandwidth and different modulation.

For Effective Isotropic Radiated Power Measurement:

- e) The EUT was placed on a turntable with 1.5 meter height in a fully anechoic chamber.
- f) The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower
- g) LTE operating modes: Set RBW= 100 KHz, VBW= 300 KHz, RMS detector over frame, and use
- h) channel power option with bandwidth=5MHz, per section 4.0 of KDB 971168 D01.
- i) The table was rotated 360 degrees to determine the position of the highest radiated power.
- j) The height of the receiving antenna is adjusted to look for the maximum EIRP.
- k) Taking the record of maximum EIRP.
- l) A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
- m) The conducted power at the terminal of the dipole antenna is measured.
- n) Repeat step 3 to step 5 to get the maximum EIRP of the substitution antenna.
- o) $EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$.
- p) P_s (dBm) : Input power to substitution antenna
- q) G_s (dBi or dBd) : Substitution antenna Gain.
- r) $E_t = R_t + AF$
- s) $E_s = R_s + AF$
- t) AF (dB/m) : Receive antenna factor
- u) R_t : The highest received signal in spectrum analyzer for EUT.
- v) R_s : The highest received signal in spectrum analyzer for substitution antenna.

3.4. Uncertainty

The measurement uncertainty is defined as for Conducted Power Measurement ± 1.2 dB, for Radiated Power Measurement ± 3.2 dB

3.5. Test Result

Product	Wireless Module		
Test Item	Maximum Output Power		
Test Mode	Mode 1: LTE Band 4		
Date of Test	2014/12/23	Test Site	TR-8

BW [MHz]	RB Size	RB Offset	Mod	Maximum Average Power [dBm]		
				Low Ch. / Freq.	Mid Ch. / Freq.	High Ch. / Freq.
Channel				20050	20175	20300
Frequency				1720	1732.5	1745
20	1	0	QPSK	22.73	23.01	22.96
20	1	49		22.85	23.15	23.03
20	1	99		22.80	23.09	23.13
20	50	0		21.76	21.85	21.81
20	50	24		21.63	21.93	21.97
20	50	49		21.66	22.03	21.92
20	100	0		21.61	21.95	21.88
20	1	0	16-QAM	21.70	22.00	21.95
20	1	49		21.84	22.14	22.03
20	1	99		21.79	22.09	22.13
20	50	0		20.74	20.84	20.80
20	50	24		20.62	20.93	20.98
20	50	49		20.67	21.02	20.92
20	100	0		20.60	20.93	20.88
Channel				20025	20175	20325
Frequency				1717.5	1732.5	1747.5
15	1	0	QPSK	23.01	22.99	22.92
15	1	37		22.74	22.97	23.04
15	1	74		22.73	23.00	23.08
15	36	0		21.72	21.81	21.99
15	36	18		21.66	21.92	21.94
15	36	37		21.67	21.93	21.97
15	75	0		21.69	21.82	21.91
15	1	0	16-QAM	22.00	21.98	21.93
15	1	37		21.72	21.96	22.05

15	1	74		21.73	21.99	22.08
15	36	0		20.71	20.81	21.00
15	36	18		20.67	20.91	20.93
15	36	37		20.68	20.94	20.96
15	75	0		20.68	20.81	20.92
Channel				20000	20175	20350
Frequency				1715	1732.5	1750
10	1	0	QPSK	22.78	23.03	22.92
10	1	24		22.75	22.86	22.94
10	1	49		22.77	23.12	23.05
10	25	0		21.75	21.85	21.95
10	25	12		21.75	21.92	22.03
10	25	24		21.69	21.94	21.88
10	50	0		21.65	21.85	21.93
10	1	0	16-QAM	21.78	22.03	21.91
10	1	24		21.74	21.86	21.95
10	1	49		21.79	22.11	22.04
10	25	0		20.74	20.84	20.94
10	25	12		20.75	20.92	21.03
10	25	24		20.68	20.94	20.89
10	50	0		20.65	20.86	20.92
Channel				19975	20175	20375
Frequency				1712.5	1732.5	1752.5
5	1	0	QPSK	22.79	22.90	23.08
5	1	12		22.82	22.85	23.02
5	1	24		22.54	22.88	23.07
5	12	0		21.77	21.89	21.99
5	12	6		21.79	21.89	21.98
5	12	11		21.84	21.93	21.96
5	25	0		21.80	21.88	21.99
5	1	0	16-QAM	21.78	21.89	22.07
5	1	12		21.82	21.86	22.02
5	1	24		21.55	21.87	22.06
5	12	0		20.76	20.88	20.98
5	12	6		20.78	20.89	20.96
5	12	11		20.84	20.92	20.96
5	25	0		20.80	20.89	20.99

Channel				19965	20175	20385
Frequency				1711.5	1732.5	1753.5
3	1	0	QPSK	22.80	22.85	23.05
3	1	7		22.86	22.81	23.25
3	1	14		22.82	22.93	23.08
3	8	0		21.97	21.92	22.07
3	8	4		21.96	21.88	22.06
3	8	7		21.88	21.95	22.26
3	15	0		21.83	21.84	22.03
3	1	0	16-QAM	21.79	21.84	22.06
3	1	7		21.87	21.81	22.24
3	1	14		21.82	21.94	22.09
3	8	0		20.96	20.92	21.06
3	8	4		20.95	20.89	21.05
3	8	7		20.89	20.94	21.28
3	15	0		20.83	20.86	21.02
Channel				19957	20175	20393
Frequency				1710.7	1732.5	1754.3
1.4	1	0	QPSK	22.80	22.83	23.26
1.4	1	2		22.84	22.78	23.23
1.4	1	5		22.88	22.85	23.20
1.4	3	0		22.85	22.84	23.25
1.4	3	1		23.17	22.80	23.24
1.4	3	2		23.20	22.79	23.23
1.4	6	0		22.23	21.88	22.31
1.4	1	0	16-QAM	21.87	21.87	22.30
1.4	1	2		21.93	21.83	22.24
1.4	1	5		21.92	21.86	22.26
1.4	3	0		21.91	21.91	22.27
1.4	3	1		22.25	21.89	22.33
1.4	3	2		22.22	21.81	22.23
1.4	6	0		21.31	20.91	21.37

Product	Wireless Module		
Test Item	Maximum Output Power		
Test Mode	Mode 2: LTE Band 25		
Date of Test	2014/12/23	Test Site	TR-8

BW [MHz]	RB Size	RB Offset	Mod	Maximum Average Power [dBm]		
				Low Ch. / Freq.	Mid Ch. / Freq.	High Ch. / Freq.
Channel				26140	26340	26590
Frequency				1860	1880	1905
20	1	0	QPSK	23.06	23.26	23.37
20	1	49		22.60	23.23	22.77
20	1	99		22.64	23.11	22.82
20	50	0		21.80	22.04	21.89
20	50	24		21.60	22.04	21.91
20	50	49		21.63	22.08	21.68
20	100	0		21.65	22.03	21.80
20	1	0	16-QAM	22.09	22.29	22.38
20	1	49		21.67	22.28	21.86
20	1	99		21.73	22.14	21.84
20	50	0		20.85	21.08	20.96
20	50	24		20.60	21.09	20.96
20	50	49		20.71	21.17	20.70
20	100	0		20.68	21.05	20.84
Channel				26115	26340	26615
Frequency				1857.5	1880	1907.5
15	1	0	QPSK	23.01	23.15	22.74
15	1	37		22.71	23.17	22.72
15	1	74		22.59	23.37	22.73
15	36	0		21.77	22.07	21.74
15	36	18		21.77	22.10	21.73
15	36	37		21.56	22.08	21.72
15	75	0		21.74	22.11	21.78
15	1	0	16-QAM	22.05	22.18	21.77
15	1	37		21.74	22.23	21.82
15	1	74		21.67	22.44	21.81
15	36	0		20.80	21.11	20.76

15	36	18		20.81	21.11	20.76
15	36	37		20.61	21.10	20.77
15	75	0		20.78	21.18	20.79
Channel				26090	26340	26640
Frequency				1855	1880	1910
10	1	0	QPSK	23.11	23.11	22.77
10	1	24		23.16	23.17	22.68
10	1	49		22.64	23.45	22.83
10	25	0		21.87	22.12	21.75
10	25	12		21.90	22.14	21.74
10	25	24		21.79	22.11	21.70
10	50	0		21.77	22.01	21.66
10	1	0	16-QAM	22.13	22.18	21.83
10	1	24		22.20	22.21	21.77
10	1	49		21.72	22.52	21.92
10	25	0		20.92	21.19	20.85
10	25	12		20.93	21.17	20.74
10	25	24		20.83	21.17	20.74
10	50	0		20.86	21.04	20.70
Channel				26065	26340	26665
Frequency				1852.5	1880	1912.5
5	1	0	QPSK	23.08	23.01	22.58
5	1	12		23.31	23.18	22.55
5	1	24		22.85	23.31	22.75
5	12	0		22.18	23.16	21.64
5	12	6		22.05	22.14	21.66
5	12	11		21.93	22.11	21.72
5	25	0		21.93	22.12	21.60
5	1	0	16-QAM	22.13	22.07	21.64
5	1	12		22.41	22.19	21.61
5	1	24		21.95	22.33	21.80
5	12	0		21.24	22.21	20.67
5	12	6		21.14	21.22	20.69
5	12	11		20.99	21.19	20.81
5	25	0		20.99	21.17	20.66
Channel				26055	26340	26675
Frequency				1851.5	1880	1913.5

3	1	0	QPSK	23.22	23.01	22.77
3	1	7		23.32	23.13	22.87
3	1	14		22.97	23.30	22.74
3	8	0		22.12	22.08	21.67
3	8	4		22.10	22.12	21.70
3	8	7		21.96	22.09	21.73
3	15	0		22.02	22.06	21.68
3	1	0	16-QAM	22.26	22.08	21.82
3	1	7		22.41	22.19	21.89
3	1	14		22.01	22.39	21.80
3	8	0		21.13	21.16	20.76
3	8	4		21.14	21.14	20.76
3	8	7		20.99	21.18	20.79
3	15	0		21.02	21.08	20.69
Channel				26047	26340	26683
Frequency				1850.7	1880	1914.3
1.4	1	0	QPSK	23.09	23.17	22.79
1.4	1	2		23.06	23.14	22.83
1.4	1	5		23.14	23.13	22.78
1.4	3	0		23.13	23.11	22.74
1.4	3	1		23.08	23.14	22.73
1.4	3	2		23.12	23.10	22.88
1.4	6	0		22.21	22.14	21.76
1.4	1	0	16-QAM	22.17	22.27	21.87
1.4	1	2		22.08	22.21	21.91
1.4	1	5		22.24	22.13	21.86
1.4	3	0		22.22	22.14	21.80
1.4	3	1		22.10	22.23	21.76
1.4	3	2		22.18	22.16	21.94
1.4	6	0		21.24	21.19	20.85

Product	Wireless Module		
Test Item	Maximum Output Power		
Test Mode	Mode 3: LTE Band 26		
Date of Test	2014/12/23	Test Site	TR-8

BW [MHz]	RB Size	RB Offset	Mod	Maximum Average Power [dBm]		
				Low Ch. / Freq.	Mid Ch. / Freq.	High Ch. / Freq.
Channel				26765	26865	26965
Frequency				821.5	831.5	841.5
15	1	0	QPSK	22.93	22.98	22.96
15	1	37		23.06	23.13	23.15
15	1	74		23.24	23.14	23.01
15	36	0		21.94	21.97	21.93
15	36	18		21.92	21.99	21.97
15	36	37		22.00	22.07	21.87
15	75	0		21.89	22.00	21.88
15	1	0	16-QAM	22.01	22.04	22.04
15	1	37		22.07	22.23	22.18
15	1	74		22.32	22.17	22.03
15	36	0		21.00	20.99	21.02
15	36	18		21.00	21.00	21.00
15	36	37		21.09	21.12	20.93
15	75	0		20.91	21.05	20.97
Channel				26740	26865	26990
Frequency				819	831.5	844
10	1	0	QPSK	22.99	23.04	23.07
10	1	24		23.04	23.03	22.99
10	1	49		23.13	23.11	22.95
10	25	0		22.04	21.95	22.02
10	25	12		21.99	21.99	22.00
10	25	24		21.98	22.08	21.91
10	50	0		21.90	22.00	21.86
10	1	0	16-QAM	22.01	22.09	22.13
10	1	24		22.05	22.11	22.05
10	1	49		22.20	22.14	21.95
10	25	0		21.07	21.00	21.11

10	25	12		21.01	21.00	21.06
10	25	24		21.06	21.10	20.91
10	50	0		20.97	21.07	20.91
Channel				26715	26865	27015
Frequency				816.5	831.5	846.5
5	1	0	QPSK	22.96	23.14	22.96
5	1	12		23.09	23.03	22.99
5	1	24		23.14	23.17	22.93
5	12	0		21.99	22.14	22.06
5	12	6		22.09	22.05	22.04
5	12	11		22.07	22.20	21.97
5	25	0		22.06	22.04	21.96
5	1	0	16-QAM	22.03	22.22	21.97
5	1	12		22.12	22.09	22.07
5	1	24		22.19	22.18	22.02
5	12	0		21.07	21.17	21.12
5	12	6		21.11	21.11	21.06
5	12	11		21.09	21.24	21.03
5	25	0		21.10	21.14	21.04
Channel				26705	26865	27025
Frequency				815.5	831.5	847.5
3	1	0	QPSK	23.02	23.01	22.97
3	1	7		23.12	23.08	22.99
3	1	14		23.11	23.17	22.90
3	8	0		22.05	22.12	22.00
3	8	4		22.11	22.10	21.98
3	8	7		22.08	22.17	21.87
3	15	0		22.04	22.05	21.99
3	1	0	16-QAM	22.07	22.03	22.01
3	1	7		22.14	22.16	21.99
3	1	14		22.13	22.24	21.92
3	8	0		21.08	21.19	21.03
3	8	4		21.18	21.11	20.99
3	8	7		21.16	21.24	20.91
3	15	0		21.09	21.13	21.08
Channel				26697	26865	27033
Frequency				814.7	831.5	848.3

1.4	1	0	QPSK	23.05	23.11	22.94
1.4	1	2		23.00	23.20	22.97
1.4	1	5		23.13	23.16	22.91
1.4	3	0		23.06	23.11	22.96
1.4	3	1		23.01	23.12	22.95
1.4	3	2		22.96	23.11	22.94
1.4	6	0		22.07	22.17	22.92
1.4	1	0	16-QAM	22.11	22.17	21.95
1.4	1	2		22.01	22.21	21.98
1.4	1	5		22.13	22.19	21.94
1.4	3	0		22.10	22.17	22.02
1.4	3	1		22.02	22.17	22.03
1.4	3	2		22.05	22.20	21.98
1.4	6	0		21.15	21.18	21.92

Product	Wireless Module		
Test Item	Maximum Output Power		
Test Mode	Mode 4: LTE Band 41		
Date of Test	2014/12/23	Test Site	TR-8

BW [MHz]	RB Size	RB Offset	Mod	Maximum Average Power [dBm]		
				Low Ch. / Freq.	Mid Ch. / Freq.	High Ch. / Freq.
Channel				39750	40620	41490
Frequency				2506	2593	2680
20	1	0	QPSK	22.52	22.35	22.81
20	1	49		22.29	22.21	22.91
20	1	99		22.26	22.09	23.09
20	50	0		21.31	21.15	21.75
20	50	24		21.21	21.08	21.79
20	50	49		21.24	21.04	21.80
20	100	0		21.14	21.10	21.87
20	1	0	16-QAM	21.53	21.44	21.81
20	1	49		21.35	21.27	21.96
20	1	99		21.29	21.16	22.16
20	50	0		20.36	20.16	20.78
20	50	24		20.24	20.09	20.83
20	50	49		20.32	20.14	20.82
20	100	0		20.15	20.14	20.93
Channel				39725	40620	41515
Frequency				2503.5	2593	2682.5
15	1	0	QPSK	22.38	22.30	22.90
15	1	37		22.31	22.24	22.89
15	1	74		22.23	22.12	23.14
15	36	0		21.34	21.24	21.90
15	36	18		21.30	21.13	21.86
15	36	37		21.23	21.08	21.83
15	75	0		21.18	21.03	21.86
15	1	0	16-QAM	21.48	21.37	21.96
15	1	37		21.38	21.31	21.93
15	1	74		21.24	21.12	22.21
15	36	0		20.39	20.24	20.96

15	36	18		20.38	20.14	20.90
15	36	37		20.30	20.10	20.92
15	75	0		20.19	20.09	20.95
Channel				39700	40620	41540
Frequency				2501	2593	2685
10	1	0	QPSK	22.34	22.23	22.78
10	1	24		22.38	22.22	22.96
10	1	49		22.26	22.21	23.14
10	25	0		21.39	21.27	21.89
10	25	12		21.38	21.22	21.90
10	25	24		21.32	21.14	22.03
10	50	0		21.21	21.13	21.87
10	1	0	16-QAM	21.43	21.25	21.78
10	1	24		21.48	21.23	21.99
10	1	49		21.26	21.29	22.15
10	25	0		20.45	20.30	20.90
10	25	12		20.47	20.26	20.94
10	25	24		20.38	20.15	21.07
10	50	0		20.27	20.19	20.90
Channel				39675	40620	41565
Frequency				2498.5	2593	2687.5
5	1	0	QPSK	22.38	22.21	22.96
5	1	12		22.31	22.16	22.95
5	1	24		22.34	22.20	23.00
5	12	0		21.48	21.31	22.00
5	12	6		21.50	21.32	22.07
5	12	11		21.47	21.22	22.05
5	25	0		21.40	21.21	22.02
5	1	0	16-QAM	21.45	21.27	21.99
5	1	12		21.41	21.17	22.01
5	1	24		21.35	21.24	22.03
5	12	0		20.49	20.33	21.03
5	12	6		20.50	20.37	21.09
5	12	11		20.57	20.25	21.10
5	25	0		20.44	20.29	21.09

Note: All conducted measurements are based on a RMS detector.

Product	Wireless Module		
Test Item	Effective Isotropic Radiated Power		
Test Mode	Mode 1: LTE Band 4		
Date of Test	2014/12/23	Test Site	AC-5

LTE Band 7 Radiated Power EIRP							
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	H/V
			RB Size	RB Offset			
4	20	QPSK	1	49	1720.0	24.71	H
4	20	QPSK	1	49	1723.5	24.96	H
4	20	QPSK	1	99	1745.0	24.95	H
4	20	QPSK	1	49	1720.0	23.43	V
4	20	QPSK	1	49	1723.5	23.78	V
4	20	QPSK	1	99	1745.0	23.72	V
4	20	16QAM	1	49	1720.0	23.63	H
4	20	16QAM	1	49	1723.5	23.95	H
4	20	16QAM	1	99	1745.0	23.91	H
4	20	16QAM	1	49	1720.0	22.42	V
4	20	16QAM	1	49	1723.5	22.77	V
4	20	16QAM	1	99	1745.0	22.71	V
4	15	QPSK	1	0	1717.5	24.80	H
4	15	QPSK	1	74	1732.5	24.77	H
4	15	QPSK	1	74	1747.5	24.89	H
4	15	QPSK	1	0	1717.5	23.62	V
4	15	QPSK	1	74	1732.5	23.61	V
4	15	QPSK	1	74	1747.5	23.64	V
4	15	16QAM	1	0	1717.5	23.82	H
4	15	16QAM	1	74	1732.5	23.77	H
4	15	16QAM	1	74	1747.5	23.83	H
4	15	16QAM	1	0	1717.5	22.62	V

4	15	16QAM	1	74	1732.5	22.57	V
4	15	16QAM	1	74	1747.5	22.66	V
4	10	QPSK	1	0	1715.0	24.57	H
4	10	QPSK	1	49	1732.5	24.93	H
4	10	QPSK	1	49	1750.0	24.82	H
4	10	QPSK	1	0	1715.0	23.37	V
4	10	QPSK	1	49	1732.5	23.71	V
4	10	QPSK	1	49	1750.0	23.67	V
4	10	16QAM	1	49	1715.0	23.56	H
4	10	16QAM	1	49	1732.5	23.92	H
4	10	16QAM	1	49	1750.0	23.87	H
4	10	16QAM	1	49	1715.0	22.33	V
4	10	16QAM	1	49	1732.5	22.74	V
4	10	16QAM	1	49	1750.0	22.66	V
4	5	QPSK	1	12	1712.5	24.61	H
4	5	QPSK	1	0	1732.5	24.75	H
4	5	QPSK	1	0	1752.5	24.83	H
4	5	QPSK	1	12	1712.5	23.41	V
4	5	QPSK	1	0	1732.5	23.58	V
4	5	QPSK	1	0	1752.5	23.69	V
4	5	16QAM	1	12	1712.5	23.63	H
4	5	16QAM	1	0	1732.5	23.67	H
4	5	16QAM	1	0	1752.5	23.86	H
4	5	16QAM	1	12	1712.5	22.43	V
4	5	16QAM	1	0	1732.5	22.46	V
4	5	16QAM	1	0	1752.5	22.69	V
4	3	QPSK	1	7	1711.5	24.68	H
4	3	QPSK	1	14	1732.5	24.66	H
4	3	QPSK	1	7	1753.5	25.01	H
4	3	QPSK	1	7	1711.5	23.43	V

4	3	QPSK	1	14	1732.5	23.41	V
4	3	QPSK	1	7	1753.5	23.89	V
4	3	16QAM	1	7	1711.5	23.66	H
4	3	16QAM	1	14	1732.5	23.72	H
4	3	16QAM	1	7	1753.5	24.09	H
4	3	16QAM	1	7	1711.5	22.46	V
4	3	16QAM	1	14	1732.5	22.53	V
4	3	16QAM	1	7	1753.5	22.82	V
4	1.4	QPSK	3	2	1710.7	24.67	H
4	1.4	QPSK	1	5	1732.5	24.64	H
4	1.4	QPSK	1	0	1754.3	25.05	H
4	1.4	QPSK	3	2	1710.7	23.47	V
4	1.4	QPSK	1	5	1732.5	23.43	V
4	1.4	QPSK	1	0	1754.3	23.85	V
4	1.4	16QAM	3	1	1710.7	23.72	H
4	1.4	16QAM	3	0	1732.5	23.74	H
4	1.4	16QAM	3	1	1754.3	24.17	H
4	1.4	16QAM	3	1	1710.7	22.52	V
4	1.4	16QAM	3	0	1732.5	22.50	V
4	1.4	16QAM	3	1	1754.3	22.96	V

Product	Wireless Module		
Test Item	Maximum Output Power		
Test Mode	Mode 2: LTE Band 25		
Date of Test	2014/12/23	Test Site	AC-5

LTE Band 7 Radiated Power EIRP							
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	H/V
			RB Size	RB Offset			
25	20	QPSK	1	0	1860.0	24.57	H
25	20	QPSK	1	0	1880.0	24.74	H
25	20	QPSK	1	0	1905.0	24.83	H
25	20	QPSK	1	0	1860.0	23.32	V
25	20	QPSK	1	0	1880.0	23.55	V
25	20	QPSK	1	0	1905.0	23.61	V
25	20	16QAM	1	0	1860.0	23.53	H
25	20	16QAM	1	0	1880.0	23.78	H
25	20	16QAM	1	0	1905.0	23.82	H
25	20	16QAM	1	0	1860.0	22.31	V
25	20	16QAM	1	0	1880.0	22.57	V
25	20	16QAM	1	0	1905.0	22.62	V
25	15	QPSK	1	0	1857.5	24.50	H
25	15	QPSK	1	74	1880.0	24.85	H
25	15	QPSK	1	0	1907.5	24.22	H
25	15	QPSK	1	0	1857.5	23.33	V
25	15	QPSK	1	37	1880.0	23.66	V
25	15	QPSK	1	0	1907.5	23.03	V
25	15	16QAM	1	0	1857.5	23.54	H
25	15	16QAM	1	74	1880.0	23.91	H
25	15	16QAM	1	0	1907.5	23.31	H
25	15	16QAM	1	0	1857.5	22.36	V

25	15	16QAM	1	74	1880.0	22.73	V
25	15	16QAM	1	0	1907.5	22.17	V
25	10	QPSK	1	24	1855.0	24.68	H
25	10	QPSK	1	49	1880.0	24.94	H
25	10	QPSK	1	49	1910.0	24.31	H
25	10	QPSK	1	24	1855.0	23.44	V
25	10	QPSK	1	49	1880.0	23.73	V
25	10	QPSK	1	49	1910.0	23.12	V
25	10	16QAM	1	24	1855.0	23.77	H
25	10	16QAM	1	49	1880.0	24.01	H
25	10	16QAM	1	49	1910.0	23.43	H
25	10	16QAM	1	24	1855.0	22.52	V
25	10	16QAM	1	49	1880.0	22.85	V
25	10	16QAM	1	49	1910.0	22.21	V
25	5	QPSK	1	12	1852.5	24.80	H
25	5	QPSK	1	24	1880.0	24.84	H
25	5	QPSK	1	24	1912.5	24.22	H
25	5	QPSK	1	12	1852.5	23.60	V
25	5	QPSK	1	24	1880.0	23.67	V
25	5	QPSK	1	24	1912.5	23.03	V
25	5	16QAM	1	12	1852.5	23.90	H
25	5	16QAM	1	24	1880.0	23.81	H
25	5	16QAM	1	24	1912.5	23.32	H
25	5	16QAM	1	12	1852.5	22.75	V
25	5	16QAM	1	24	1880.0	22.64	V
25	5	16QAM	1	24	1912.5	22.19	V
25	3	QPSK	1	7	1851.5	24.84	H
25	3	QPSK	1	14	1880.0	24.82	H
25	3	QPSK	1	7	1913.5	24.31	H
25	3	QPSK	1	7	1851.5	23.63	V

25	3	QPSK	1	14	1880.0	23.67	V
25	3	QPSK	1	7	1913.5	23.15	V
25	3	16QAM	1	7	1851.5	23.92	H
25	3	16QAM	1	14	1880.0	23.88	H
25	3	16QAM	1	7	1913.5	23.37	H
25	3	16QAM	1	7	1851.5	22.74	V
25	3	16QAM	1	14	1880.0	22.63	V
25	3	16QAM	1	7	1913.5	22.17	V
25	1.4	QPSK	1	5	1850.7	24.63	H
25	1.4	QPSK	1	0	1880.0	24.66	H
25	1.4	QPSK	3	2	1914.3	24.35	H
25	1.4	QPSK	1	5	1850.7	23.43	V
25	1.4	QPSK	1	0	1880.0	23.45	V
25	1.4	QPSK	3	2	1914.3	23.19	V
25	1.4	16QAM	1	5	1850.7	23.73	H
25	1.4	16QAM	1	0	1880.0	23.75	H
25	1.4	16QAM	3	2	1914.3	23.43	H
25	1.4	16QAM	1	5	1850.7	22.52	V
25	1.4	16QAM	1	0	1880.0	22.55	V
25	1.4	16QAM	1	2	1914.3	22.21	V

Product	Wireless Module		
Test Item	Maximum Output Power		
Test Mode	Mode 3: LTE Band 26		
Date of Test	2014/12/23	Test Site	AC-5

LTE Band 7 Radiated Power EIRP							
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	H/V
			RB Size	RB Offset			
26	15	QPSK	1	74	821.5	24.63	H
26	15	QPSK	1	74	831.5	24.55	H
26	15	QPSK	1	37	841.5	24.57	H
26	15	QPSK	1	74	821.5	23.43	V
26	15	QPSK	1	74	831.5	23.31	V
26	15	QPSK	1	37	841.5	23.36	V
26	15	16QAM	1	74	821.5	23.73	H
26	15	16QAM	1	74	831.5	23.62	H
26	15	16QAM	1	37	841.5	23.57	H
26	15	16QAM	1	74	821.5	22.51	V
26	15	16QAM	1	74	831.5	22.42	V
26	15	16QAM	1	37	841.5	22.37	V
26	10	QPSK	1	49	819.0	24.55	H
26	10	QPSK	1	49	831.5	24.50	H
26	10	QPSK	1	24	844.0	24.46	H
26	10	QPSK	1	49	819.0	23.32	V
26	10	QPSK	1	49	831.5	23.33	V
26	10	QPSK	1	24	844.0	23.21	V
26	10	16QAM	1	49	819.0	23.93	H
26	10	16QAM	1	49	831.5	23.52	H
26	10	16QAM	1	24	844.0	23.57	H
26	10	16QAM	1	49	819.0	22.41	V

26	10	16QAM	1	49	831.5	22.33	V
26	10	16QAM	1	24	844.0	22.32	V
26	5	QPSK	1	24	816.5	24.55	H
26	5	QPSK	1	24	831.5	24.55	H
26	5	QPSK	1	12	846.5	24.34	H
26	5	QPSK	1	24	816.5	23.31	V
26	5	QPSK	1	24	831.5	23.35	V
26	5	QPSK	1	12	846.5	23.18	V
26	5	16QAM	1	24	816.5	23.57	H
26	5	16QAM	1	0	831.5	23.61	H
26	5	16QAM	1	12	846.5	23.46	H
26	5	16QAM	1	24	816.5	22.35	V
26	5	16QAM	1	0	831.5	22.41	V
26	5	16QAM	1	12	846.5	22.25	V
26	3	QPSK	1	7	815.5	24.51	H
26	3	QPSK	1	14	831.5	24.56	H
26	3	QPSK	1	7	847.5	24.35	H
26	3	QPSK	1	7	815.5	23.31	V
26	3	QPSK	1	14	831.5	23.35	V
26	3	QPSK	1	7	847.5	23.16	V
26	3	16QAM	1	7	815.5	23.53	H
26	3	16QAM	1	14	831.5	23.61	H
26	3	16QAM	1	0	847.5	23.45	H
26	3	16QAM	1	7	815.5	22.33	V
26	3	16QAM	1	14	831.5	22.41	V
26	3	16QAM	1	0	847.5	22.25	V
26	1.4	QPSK	1	5	814.7	24.52	H
26	1.4	QPSK	1	2	831.5	24.71	H
26	1.4	QPSK	1	2	848.3	24.35	H
26	1.4	QPSK	1	5	814.7	23.31	V

26	1.4	QPSK	1	2	831.5	23.41	V
26	1.4	QPSK	1	2	848.3	23.14	V
26	1.4	16QAM	1	5	814.7	23.52	H
26	1.4	16QAM	1	2	831.5	23.63	H
26	1.4	16QAM	3	1	848.3	23.47	H
26	1.4	16QAM	1	5	814.7	22.34	V
26	1.4	16QAM	1	2	831.5	22.47	V
26	1.4	16QAM	1	1	848.3	22.22	V

Product	Wireless Module		
Test Item	Maximum Output Power		
Test Mode	Mode 4: LTE Band 41		
Date of Test	2014/12/23	Test Site	AC-5

LTE Band 7 Radiated Power EIRP							
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	H/V
			RB Size	RB Offset			
41	20	QPSK	1	0	2506.0	26.83	H
41	20	QPSK	1	0	2593.0	26.64	H
41	20	QPSK	1	99	2680.0	27.38	H
41	20	QPSK	1	0	2506.0	25.61	V
41	20	QPSK	1	0	2593.0	25.44	V
41	20	QPSK	1	99	2680.0	26.18	V
41	20	16QAM	1	0	2506.0	25.82	H
41	20	16QAM	1	0	2593.0	25.71	H
41	20	16QAM	1	99	2680.0	26.43	H
41	20	16QAM	1	0	2506.0	24.62	V
41	20	16QAM	1	0	2593.0	24.51	V
41	20	16QAM	1	99	2680.0	25.29	V
41	15	QPSK	1	0	2503.5	26.67	H
41	15	QPSK	1	0	2593.0	26.62	H
41	15	QPSK	1	74	2682.5	27.41	H
41	15	QPSK	1	0	2503.5	25.44	V
41	15	QPSK	1	0	2593.0	25.43	V
41	15	QPSK	1	74	2682.5	26.22	V
41	15	16QAM	1	0	2505.0	25.71	H
41	15	16QAM	1	0	2535.0	25.65	H
41	15	16QAM	1	74	2565.0	26.52	H
41	15	16QAM	1	0	2505.0	24.55	V

41	15	16QAM	1	0	2535.0	24.43	V
41	15	16QAM	1	74	2565.0	25.30	V
41	10	QPSK	1	24	2501.0	26.67	H
41	10	QPSK	1	0	2593.0	26.52	H
41	10	QPSK	1	49	2685.0	27.41	H
41	10	QPSK	1	24	2501.0	25.44	V
41	10	QPSK	1	0	2593.0	25.32	V
41	10	QPSK	1	49	2685.0	26.23	V
41	10	16QAM	1	24	2501.0	25.72	H
41	10	16QAM	1	49	2593.0	25.51	H
41	10	16QAM	1	49	2685.0	26.44	H
41	10	16QAM	1	24	2501.0	24.52	V
41	10	16QAM	1	49	2593.0	24.38	V
41	10	16QAM	1	49	2685.0	25.21	V
41	5	QPSK	1	0	2498.5	26.67	H
41	5	QPSK	1	0	2593.0	26.50	H
41	5	QPSK	1	24	2687.5	27.36	H
41	5	QPSK	1	0	2498.5	25.47	V
41	5	QPSK	1	0	2593.0	25.32	V
41	5	QPSK	1	24	2687.5	26.21	V
41	5	16QAM	1	0	2498.5	26.05	H
41	5	16QAM	1	0	2593.0	25.51	H
41	5	16QAM	1	24	2687.5	26.32	H
41	5	16QAM	1	0	2498.5	24.54	V
41	5	16QAM	1	0	2593.0	24.33	V
41	5	16QAM	1	24	2687.5	25.12	V

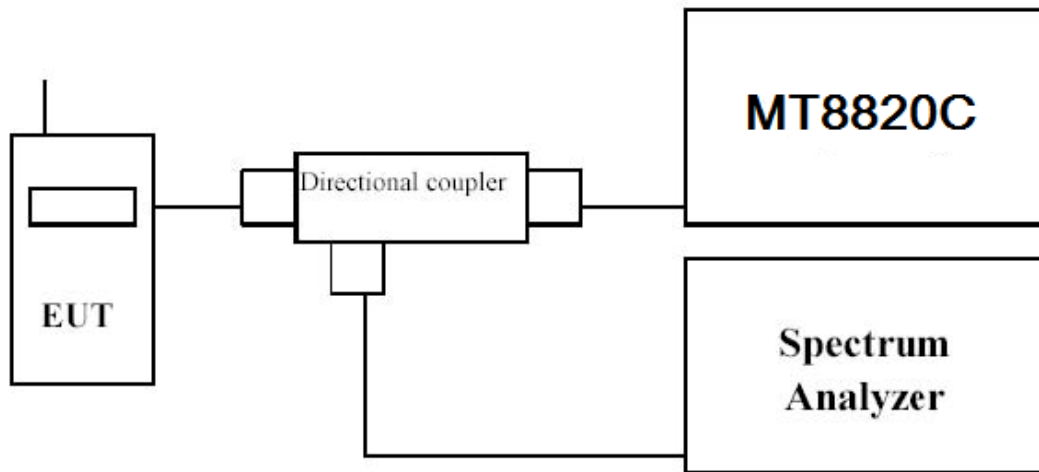
4. Modulation Characteristic

4.1. Test Equipment

Modulation Characteristic / AC-6

Instrument	Manufacturer	Type No.	Serial No	Cal. Due Date
PSA Series Spectrum Analyzer	Agilent	E4440A	MY49420184	2015.03.28
Radio Communication Tester	Anritsu	MT8820C	6201181503	2015.03.28
Dual Directional Coupler	Agilent	778D	20160	2015.03.28
10dB Coaxial Coupler	Agilent	87300C	MY44300299	2015.03.28
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC6-TH	2015.01.08

4.2. Test Setup



4.3. Limit

N/A

4.4. Uncertainty

The measurement uncertainty is defined as 0.1%

4.5. Test Result

The modulation of GSM/WCDMA was verified and confirmed compliance with requirement.

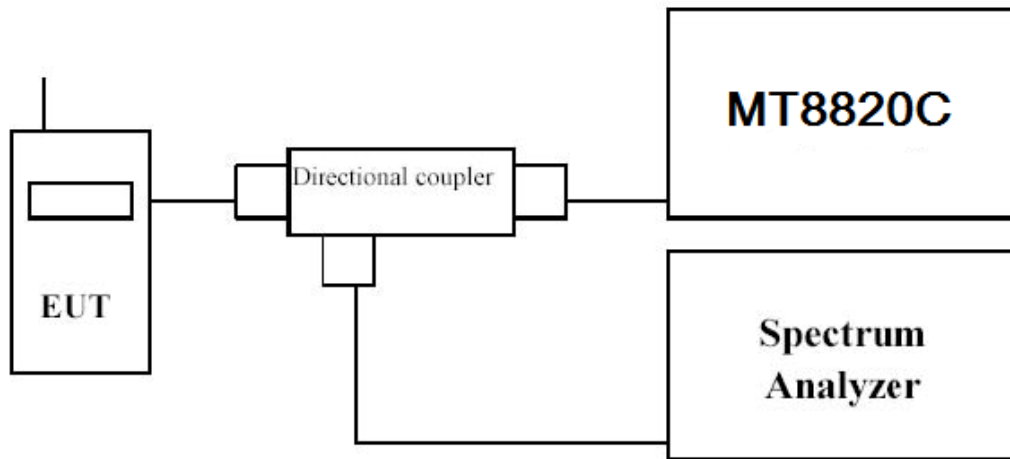
5. Occupied Bandwidth

5.1. Test Equipment

Occupied Bandwidth / AC-6

Instrument	Manufacturer	Type No.	Serial No	Cali. Due Date
PSA Series Spectrum Analyzer	Agilent	E4440A	MY49420184	2015.03.28
Radio Communication Tester	Anritsu	MT8820C	6201181503	2015.03.28
Dual Directional Coupler	Agilent	778D	20160	2015.03.28
10dB Coaxial Coupler	Agilent	87300C	MY44300299	2015.03.28
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC6-TH	2016.01.07

5.2. Test Setup



5.3. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The 99% occupied bandwidth and 26 dB bandwidth of the middle channel for the highest RF powers were measured.

5.4. Uncertainty

The measurement uncertainty is defined as ± 10 Hz

5.5. Test Result

Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4(20M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
20050	1720.00	17856.50	19508.00
20175	1732.50	17842.80	19535.00
20300	1745.00	17867.30	19585.00

Figure Channel 20050 100RB0 (1720.00MHz)

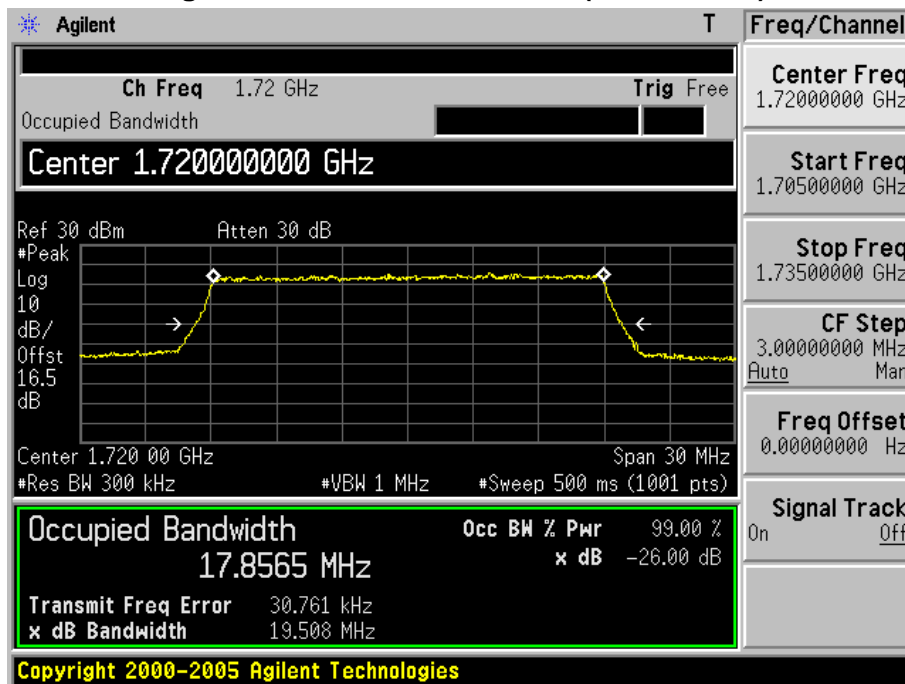


Figure Channel 20175 100RB0 (1732.50MHz)

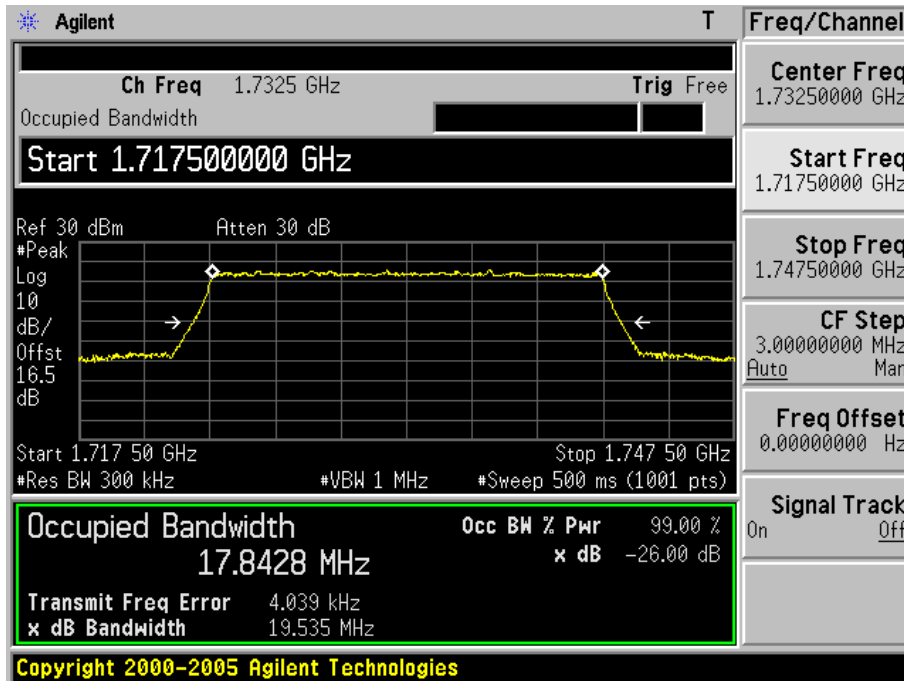
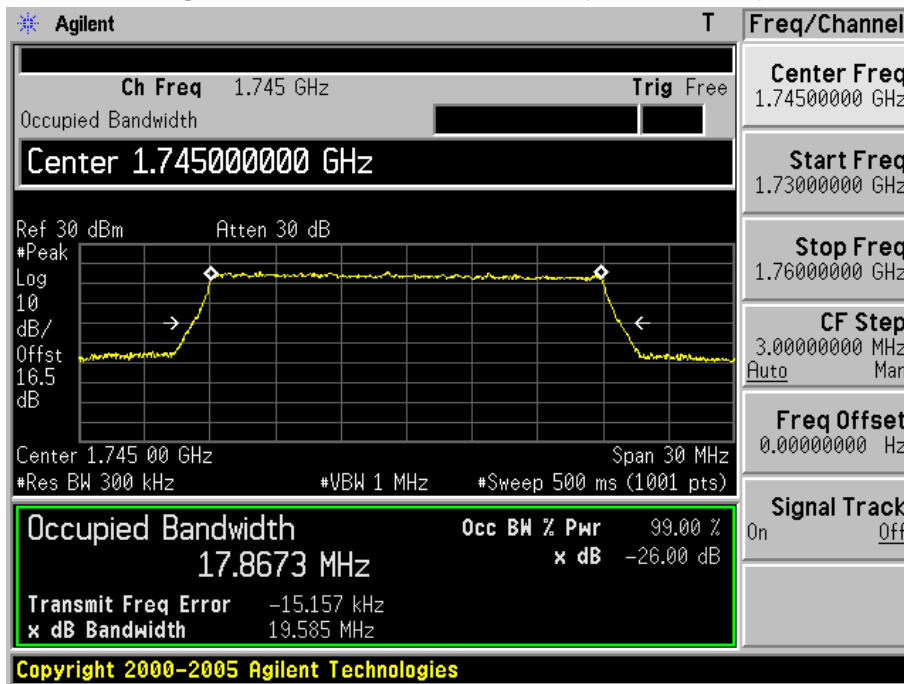


Figure Channel 20300 100RB0 (1745.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4 (20M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
20050	1720.00	17833.60	19390.00
20175	1732.50	17825.40	19442.00
20300	1745.00	17836.00	19407.00

Figure Channel 20050 100RB0 (1720.00MHz)

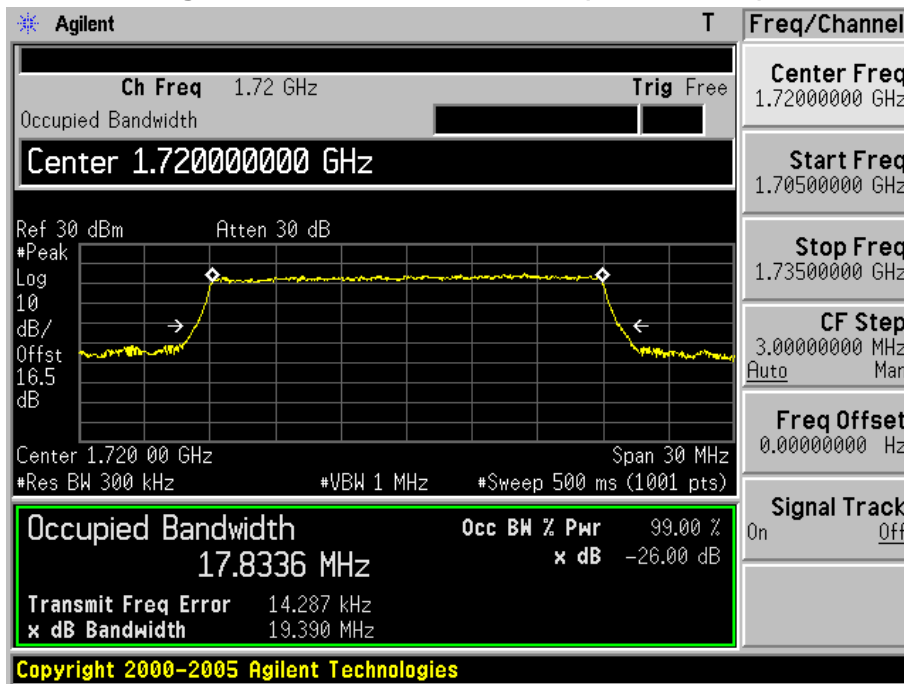


Figure Channel 20175 100RB0 (1732.50MHz)

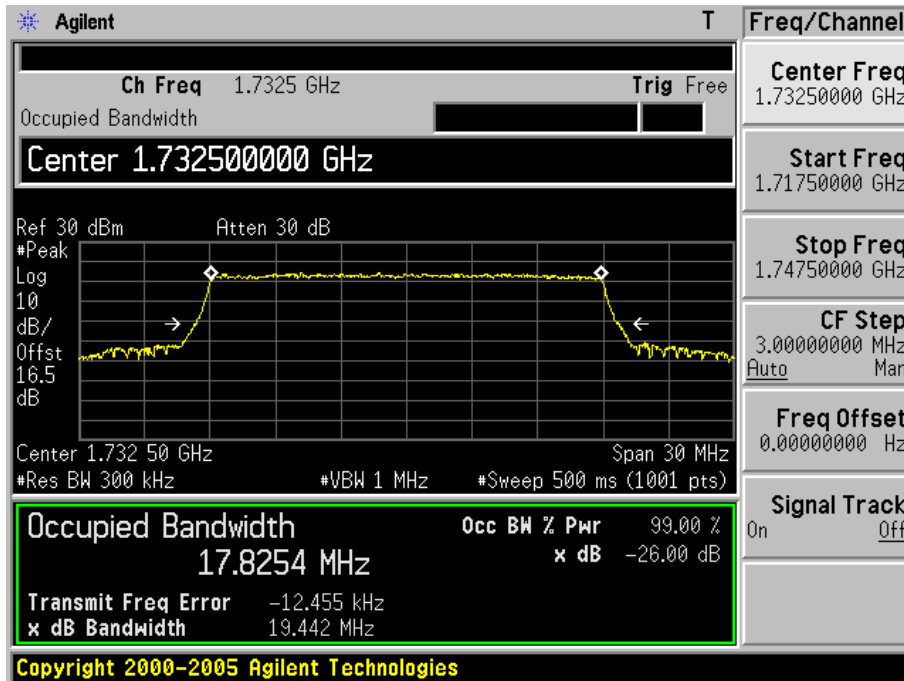
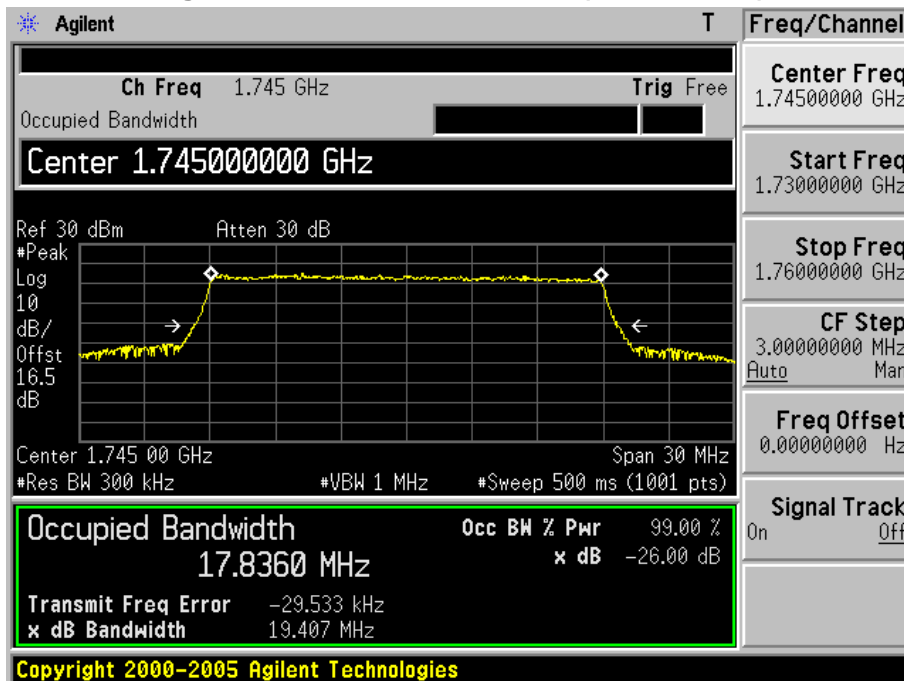


Figure Channel 20300 100RB0 (1745.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4(15M/QPSK)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
20025	1717.50	13443.40	14921.00
20175	1732.50	13428.90	14860.00
20325	1747.50	13442.20	14934.00

Figure Channel 20025 75RB0 (1717.00MHz)

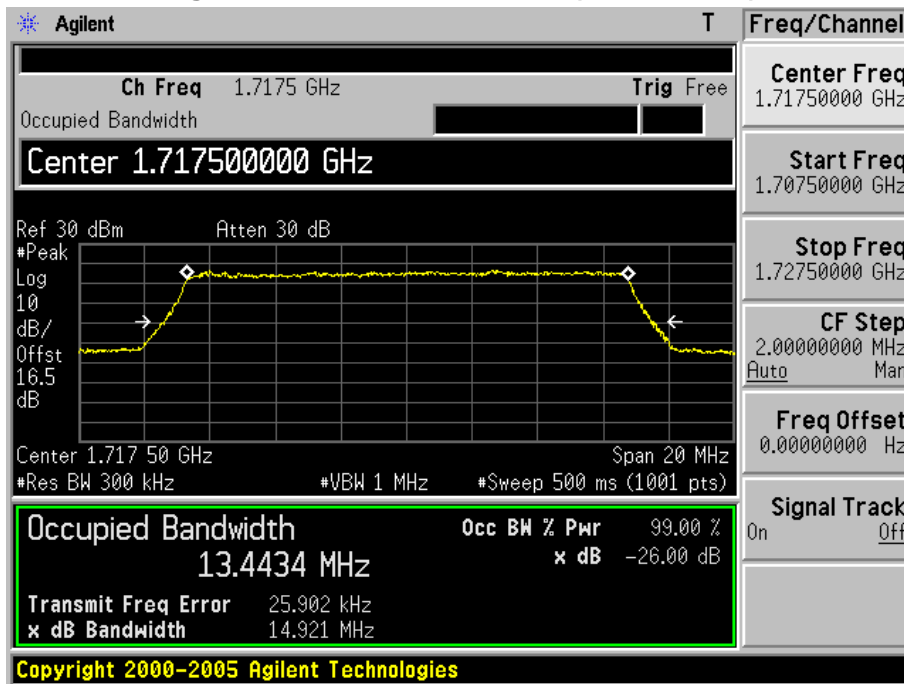


Figure Channel 20175 75RB0 (1732.50MHz)

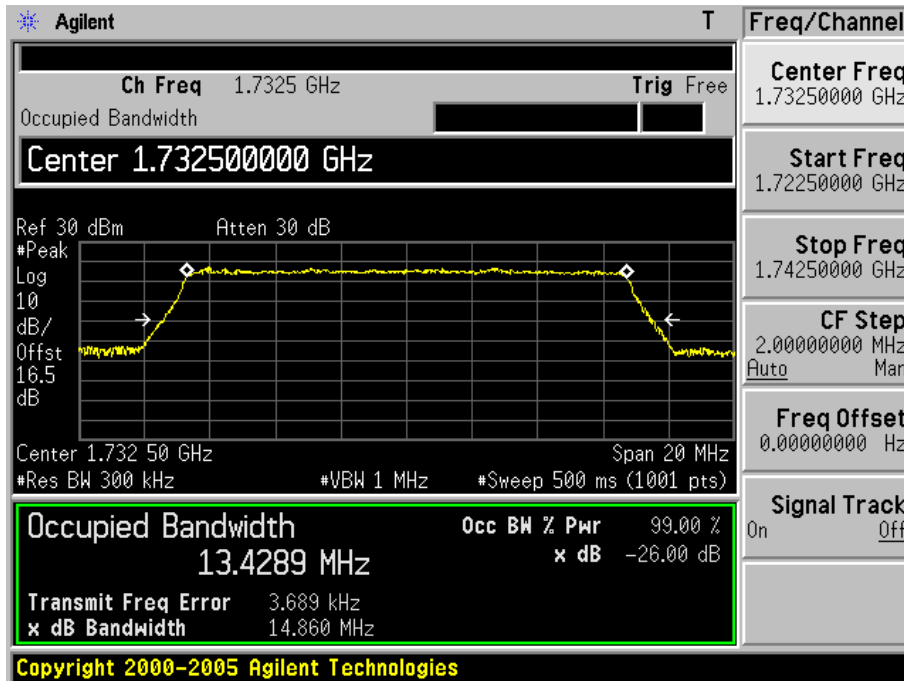
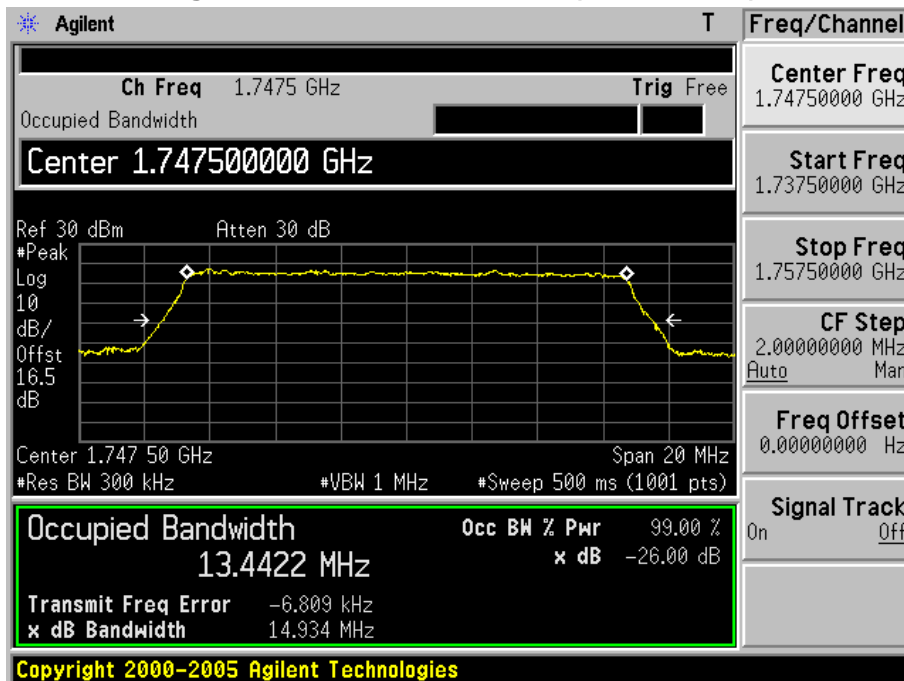


Figure Channel 20325 75RB0 (1747.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4 (15M/16QAM)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
20025	1717.50	13444.30	14837.00
20175	1732.50	13436.00	14858.00
20325	1747.50	13436.30	14864.00

Figure Channel 20025 75RB0 (1717.50MHz)

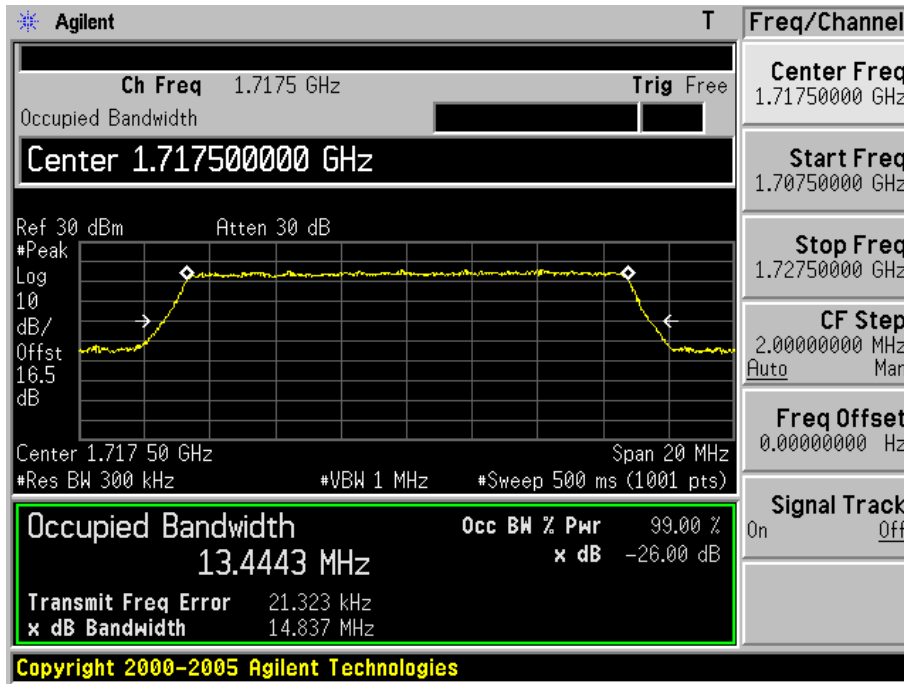


Figure Channel 20175 75RB0 (1732.50MHz)

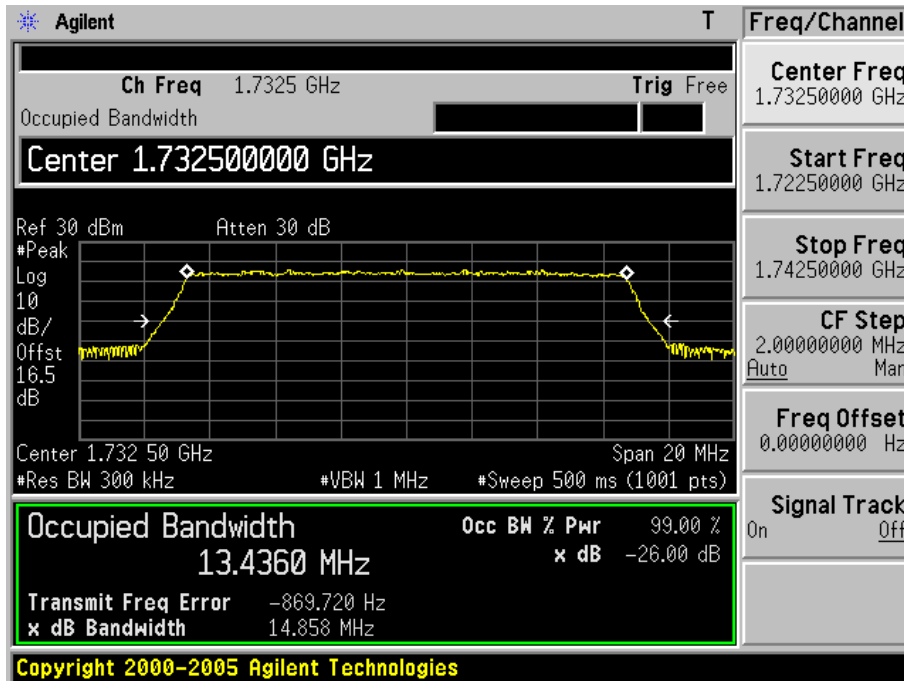
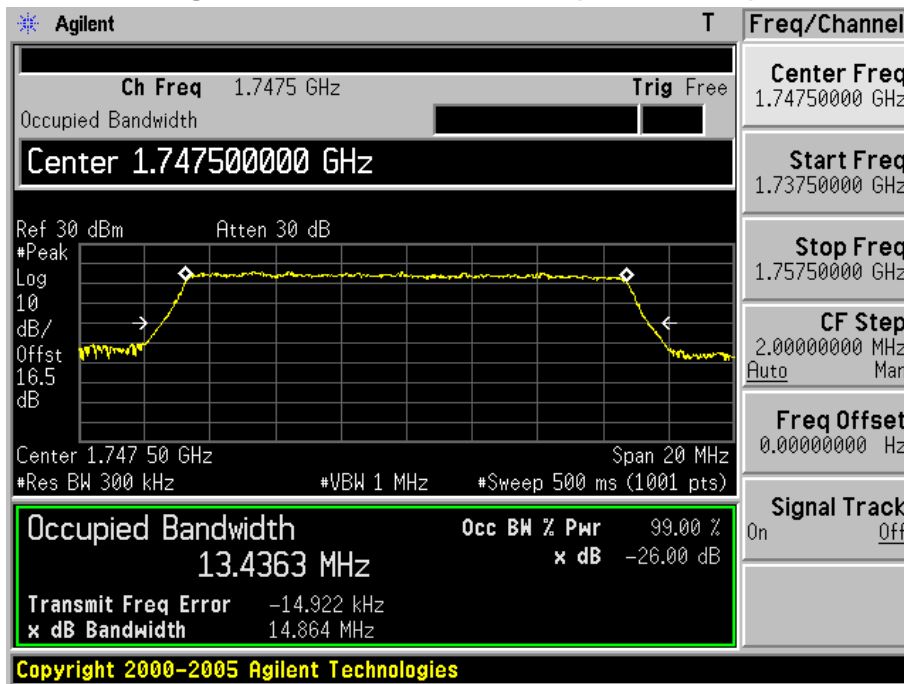


Figure Channel 20325 75RB0 (1747.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4(10M/QPSK)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
20000	1715.00	9058.30	10120.00
20175	1732.50	9028.20	10094.00
20350	1750.00	9044.20	10148.00

Figure Channel 20000 50RB0 (1715.00MHz)

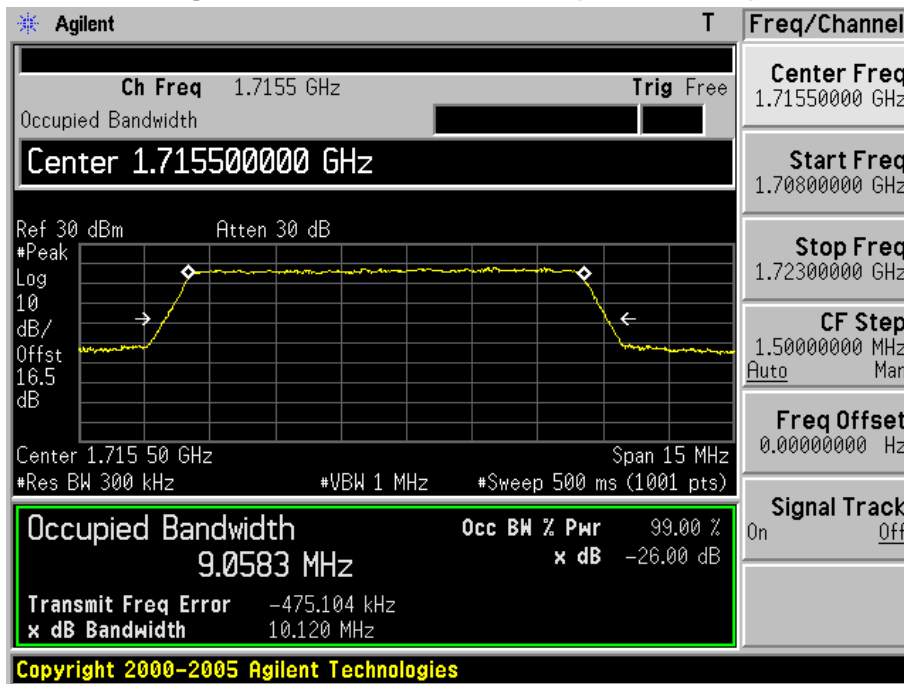


Figure Channel 20175 50RB0 (1732.50MHz)

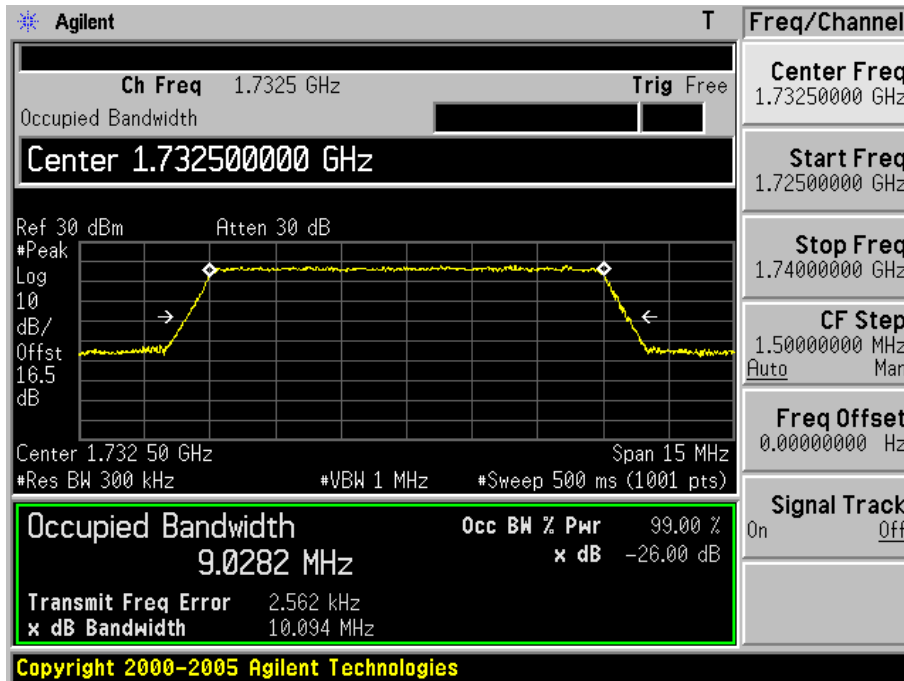
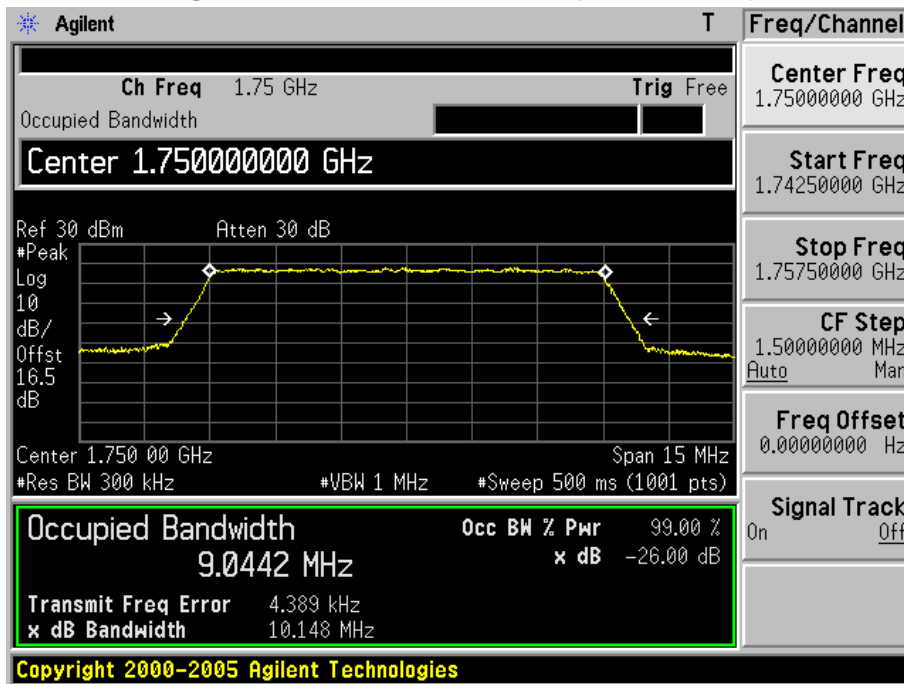


Figure Channel 20350 50RB0 (1750.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4 (10M/16QAM)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
20000	1715.00	9012.10	10106.00
20175	1732.50	9002.20	10094.00
20350	1750.00	9009.60	10107.00

Figure Channel 20000 50RB0 (1715.00MHz)

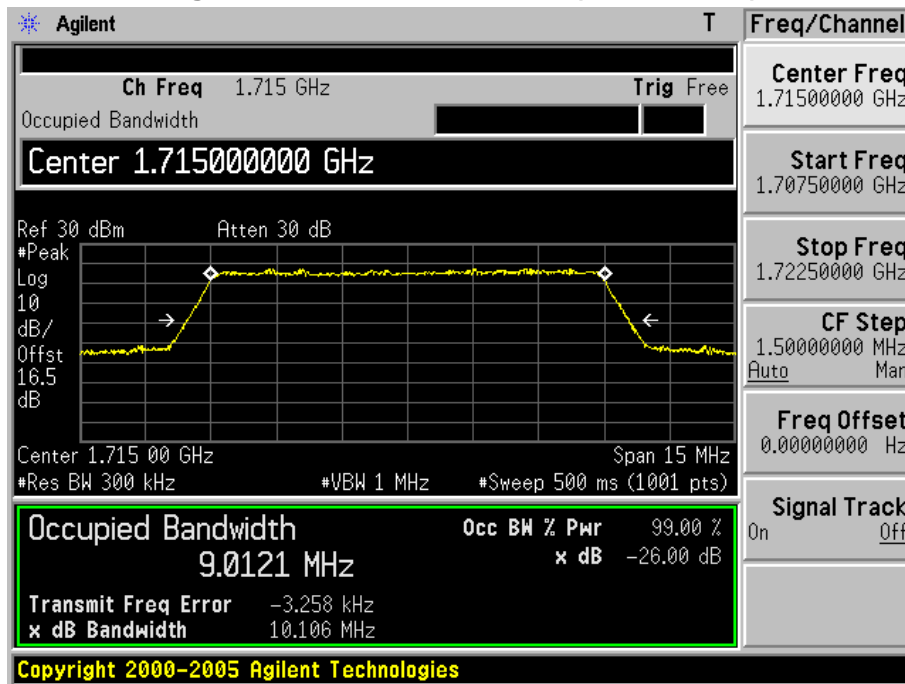


Figure Channel 20175 50RB0 (1732.50MHz)

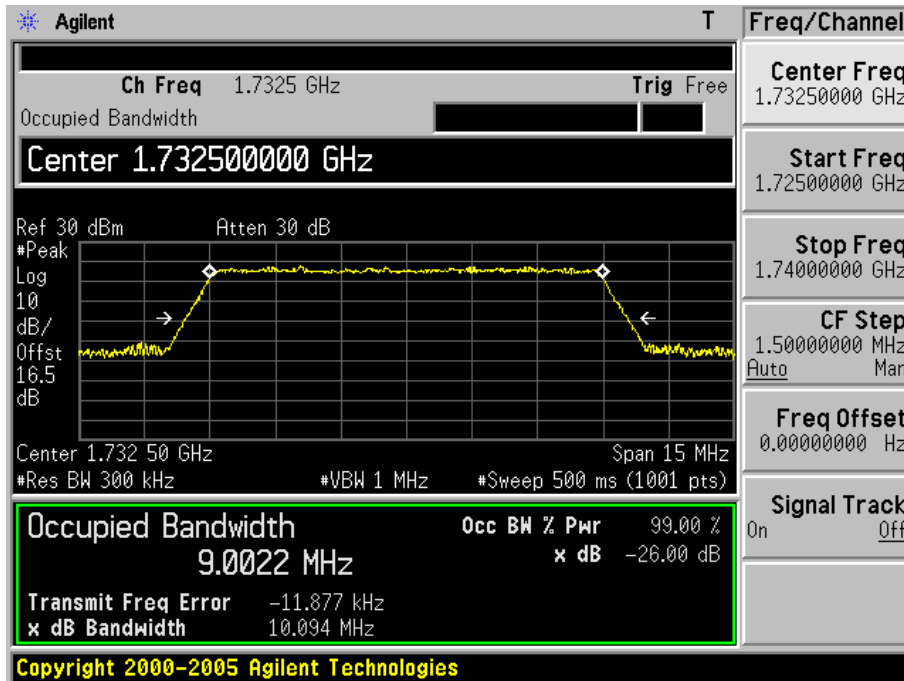
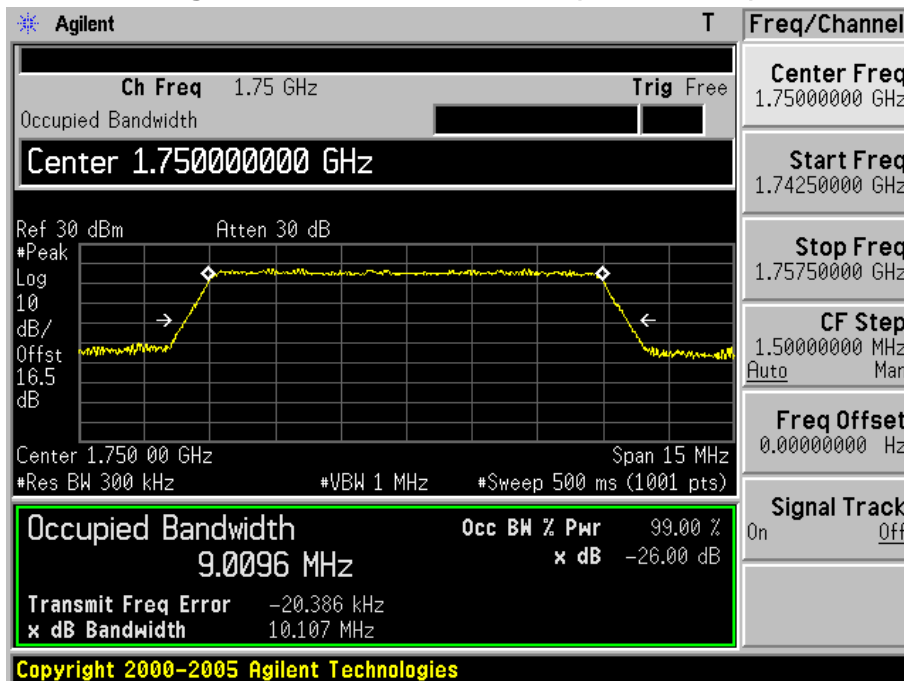


Figure Channel 20350 50RB0 (1750.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4(5M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
19975	1712.50	4503.30	5089.00
20175	1732.50	4500.30	5078.00
20375	1752.50	4496.70	5085.00

Figure Channel 19975 25RB0 (1712.50MHz)

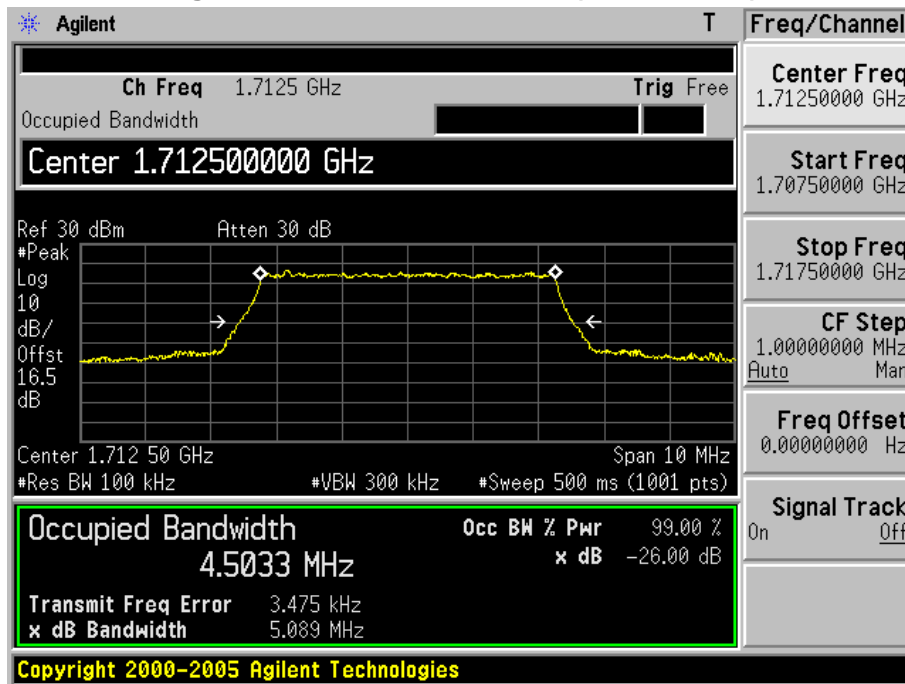


Figure Channel 20175 25RB0 (1732.50MHz)

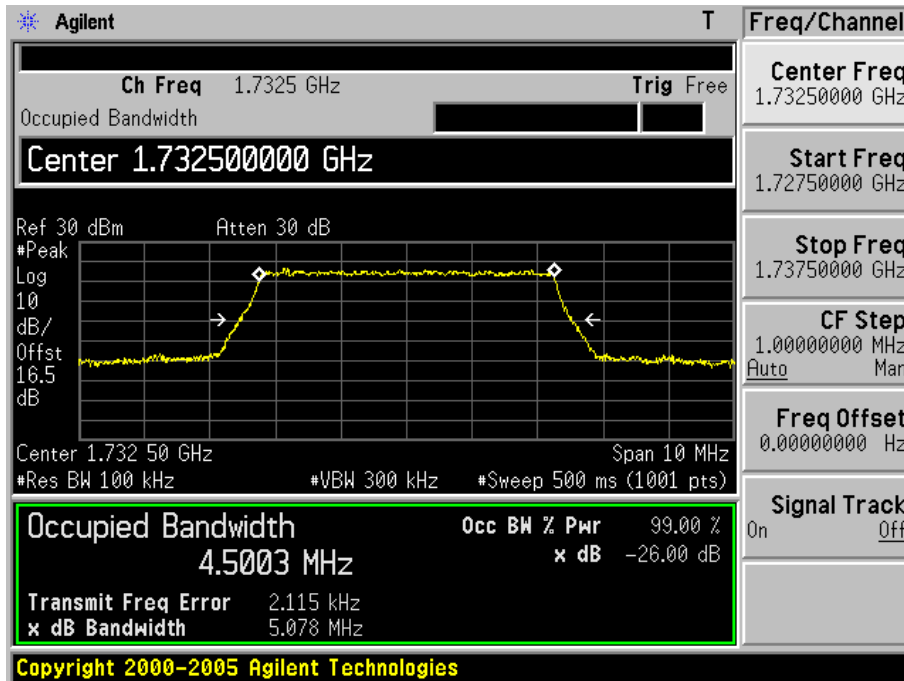
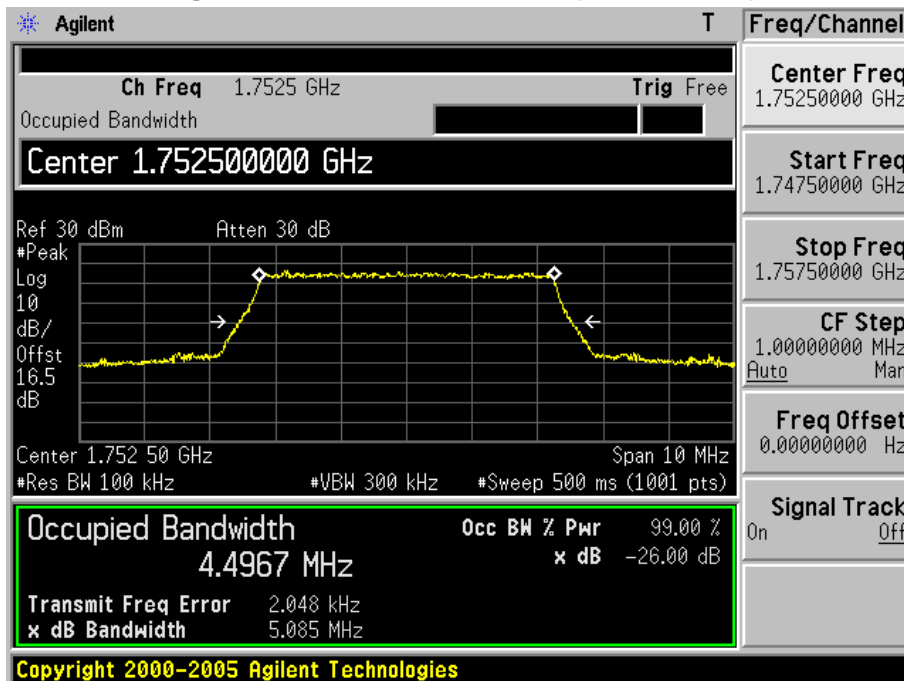


Figure Channel 20375 25RB0 (1752.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4 (5M/16QAM)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
19975	1712.50	4479.80	5020.00
20175	1732.50	4483.10	5014.00
20375	1752.50	4479.80	5005.00

Figure Channel 19975 25RB0 (1712.50MHz)

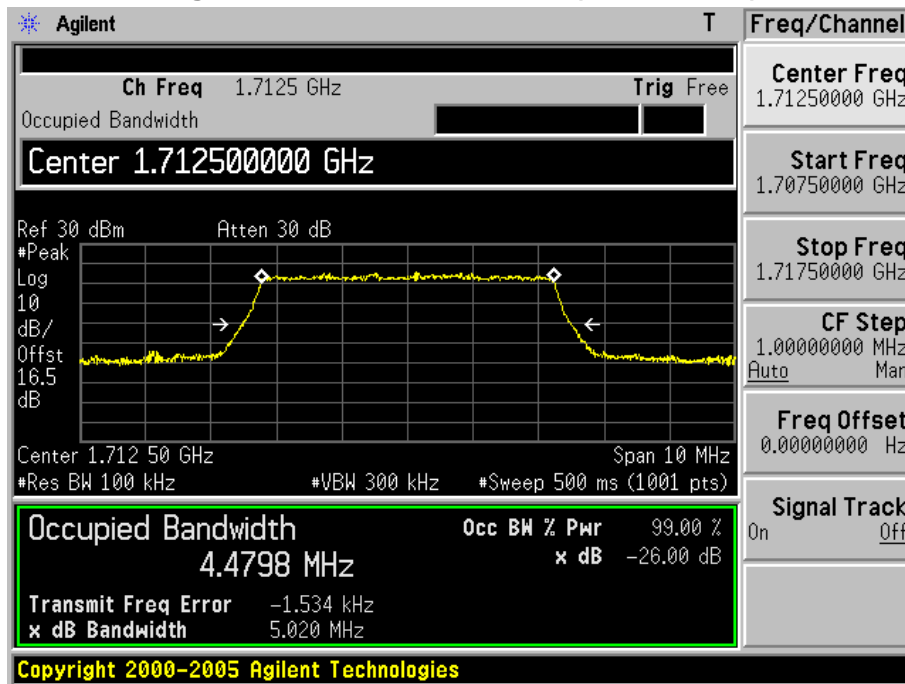


Figure Channel 20175 25RB0 (1732.50MHz)

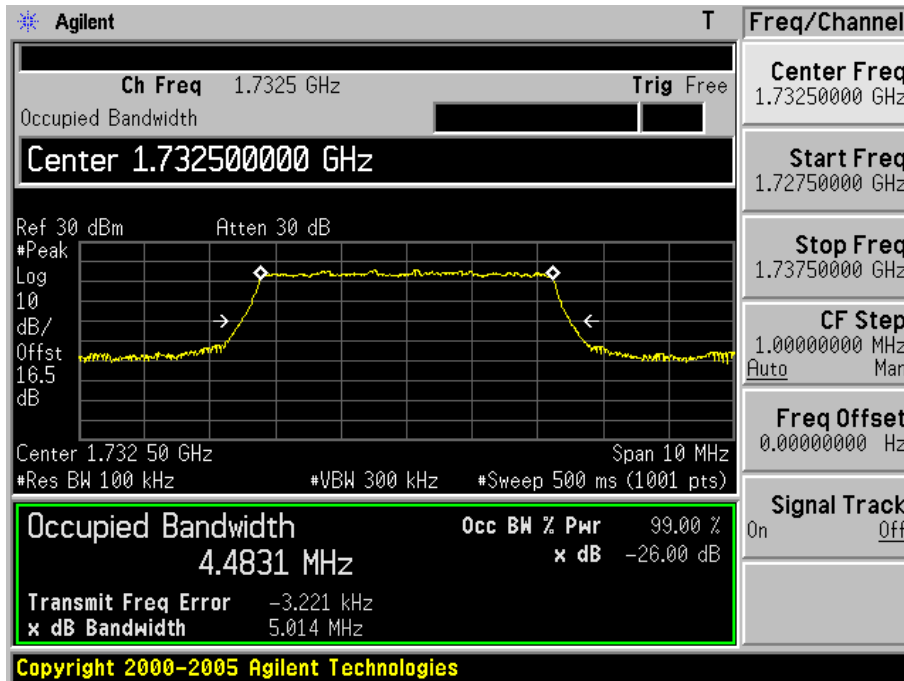
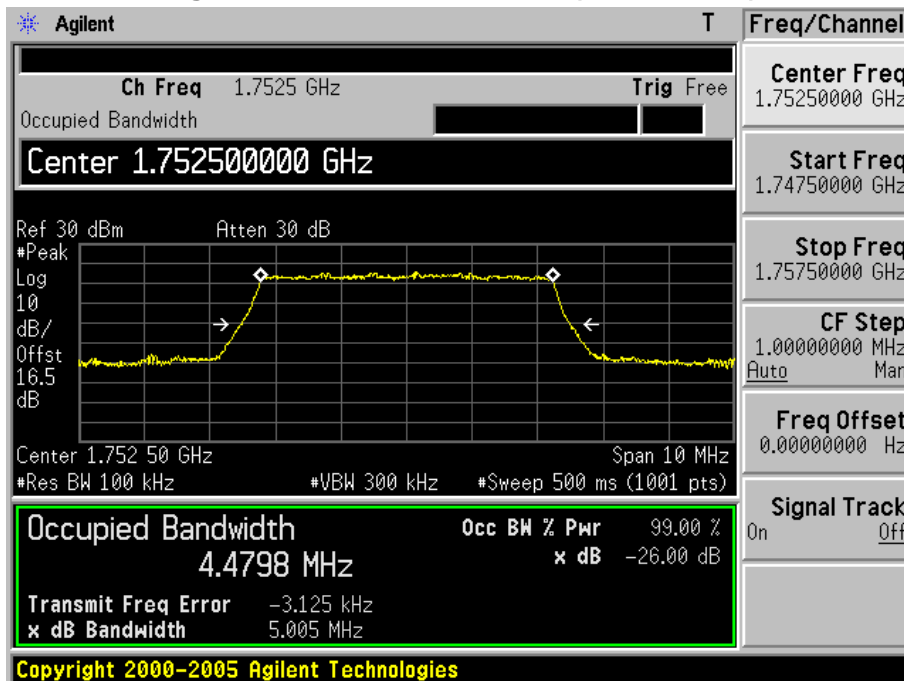


Figure Channel 20375 25RB0 (1752.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4(3M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
19965	1711.50	2731.40	3146.00
20175	1732.50	2735.00	3149.00
20385	1753.50	2739.40	3149.00

Figure Channel 19965 15RB0 (1711.50MHz)

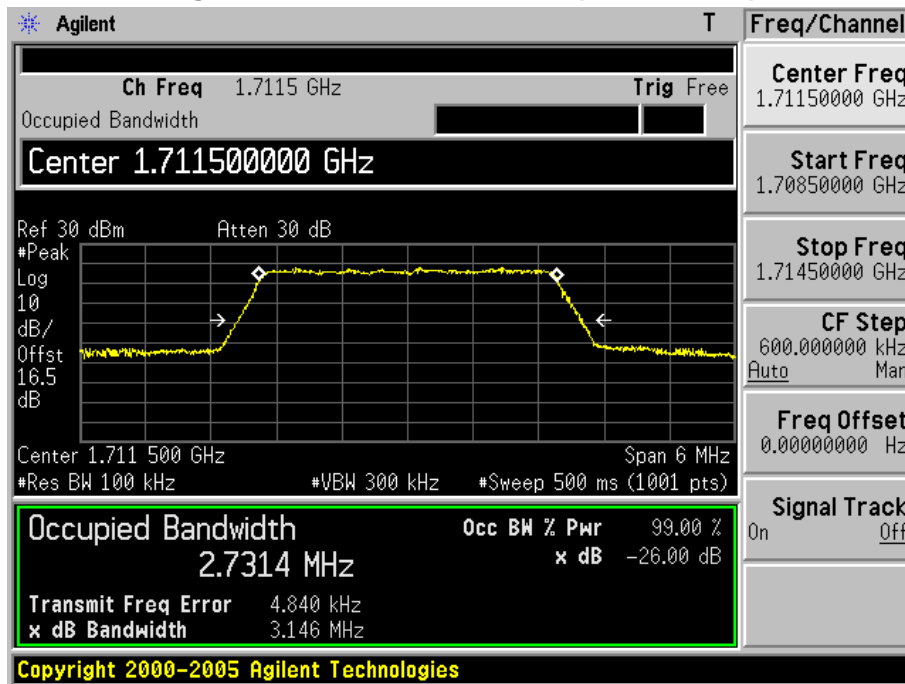


Figure Channel 20175 15RB0 (1732.50MHz)

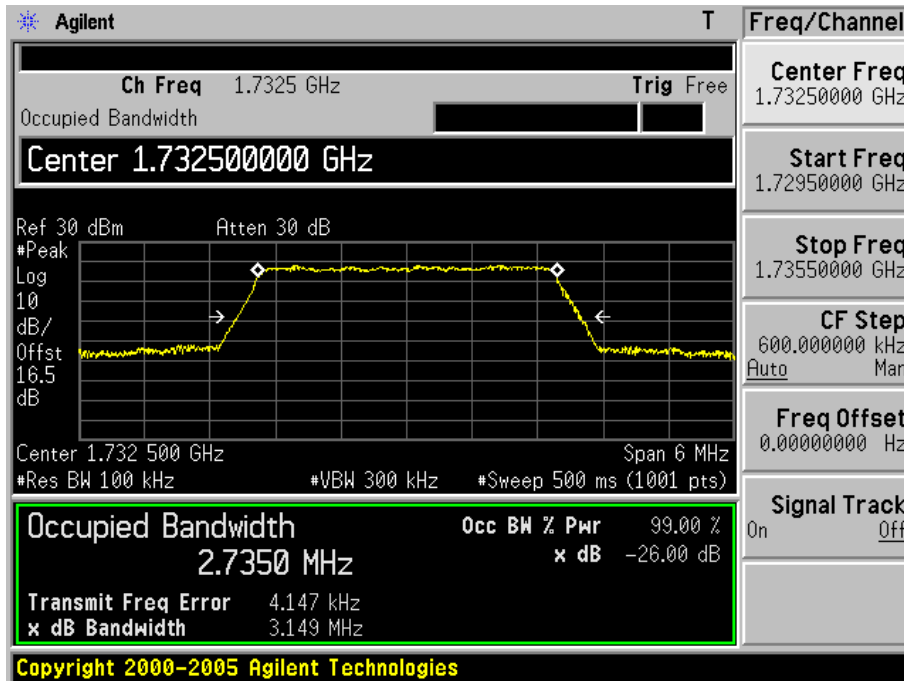
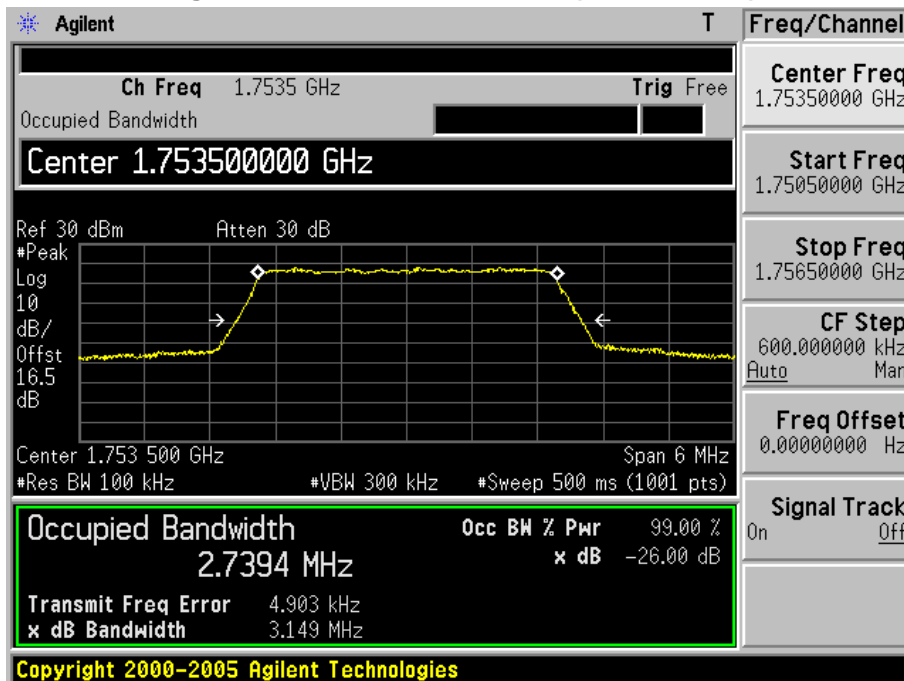


Figure Channel 20385 15RB0 (1753.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4 (3M/16QAM)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
19965	1711.50	2742.20	3161.00
20175	1732.50	2746.80	3178.00
20385	1753.50	2740.80	3150.00

Figure Channel 19965 15RB0 (1711.50MHz)

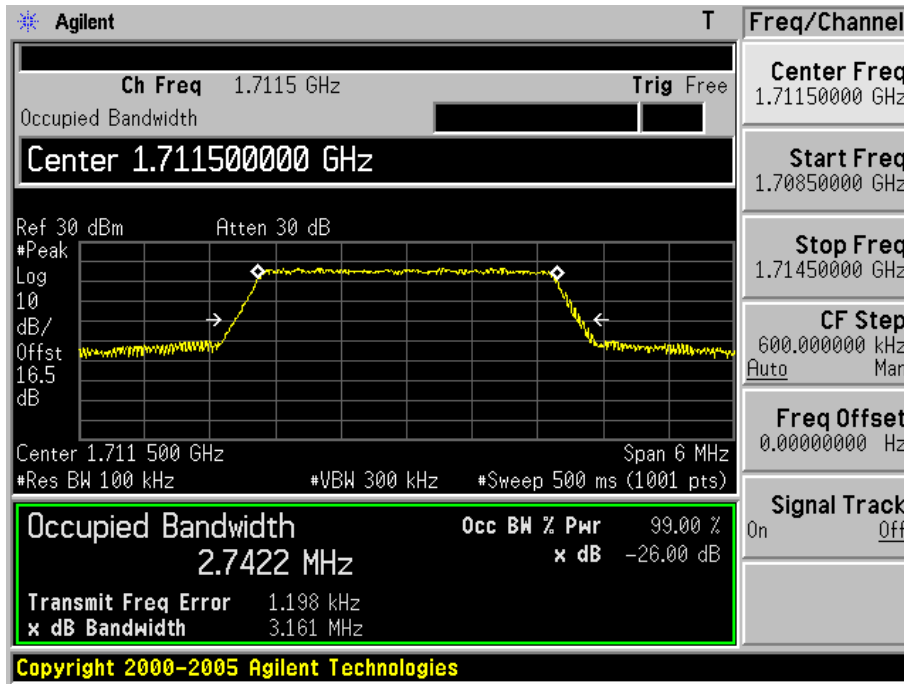


Figure Channel 20175 15RB0 (1732.50MHz)

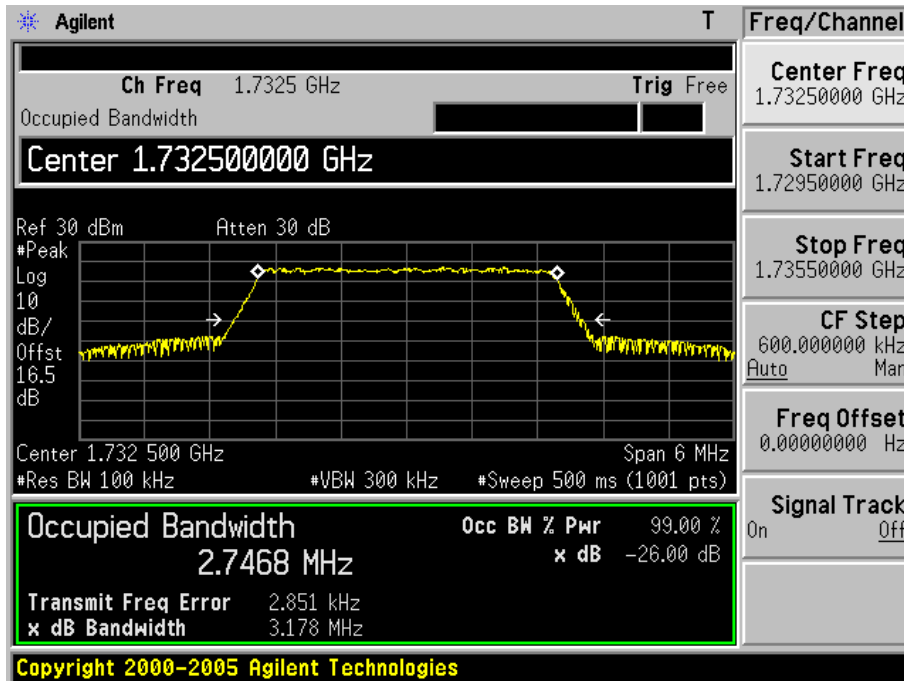
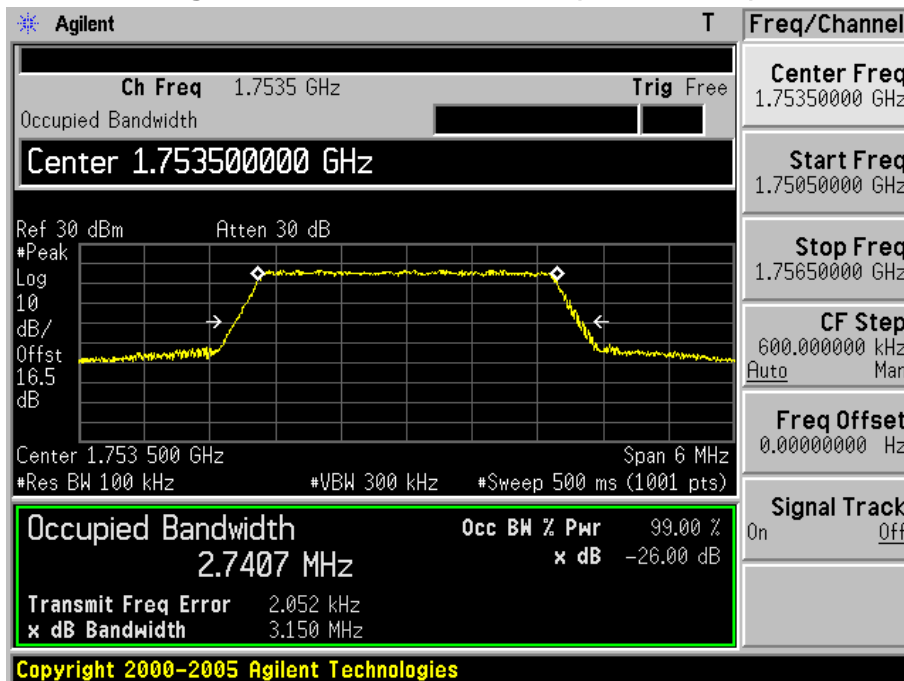


Figure Channel 20385 15RB0 (1753.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4(1.4M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
19957	1710.70	1092.00	1316.00
20175	1732.50	1091.50	1309.00
20393	1754.30	1092.40	1313.00

Figure Channel 19957 7RB0 (1710.70MHz)

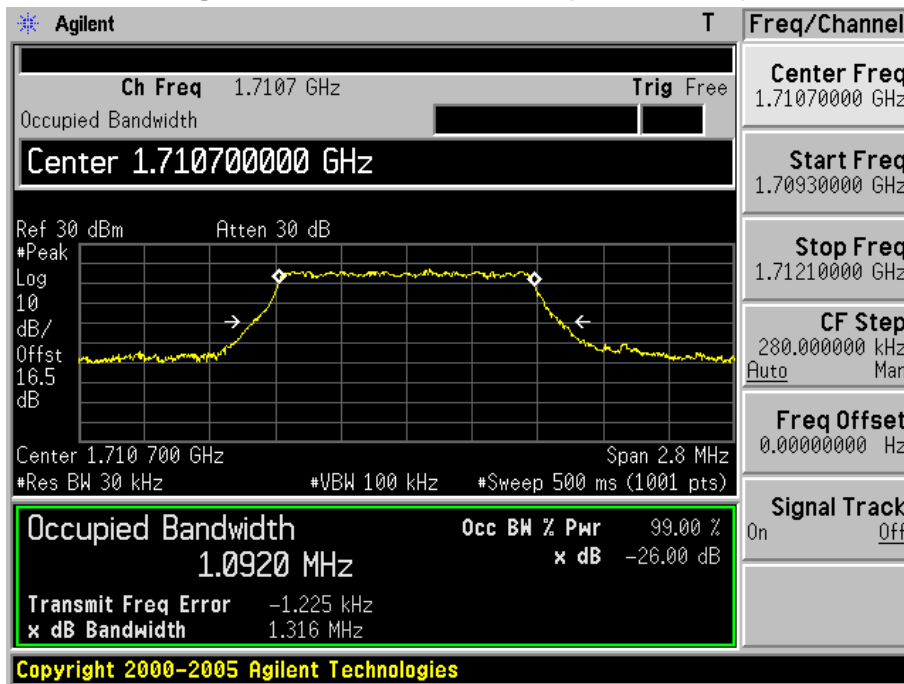


Figure Channel 20175 7RB0 (1732.50MHz)

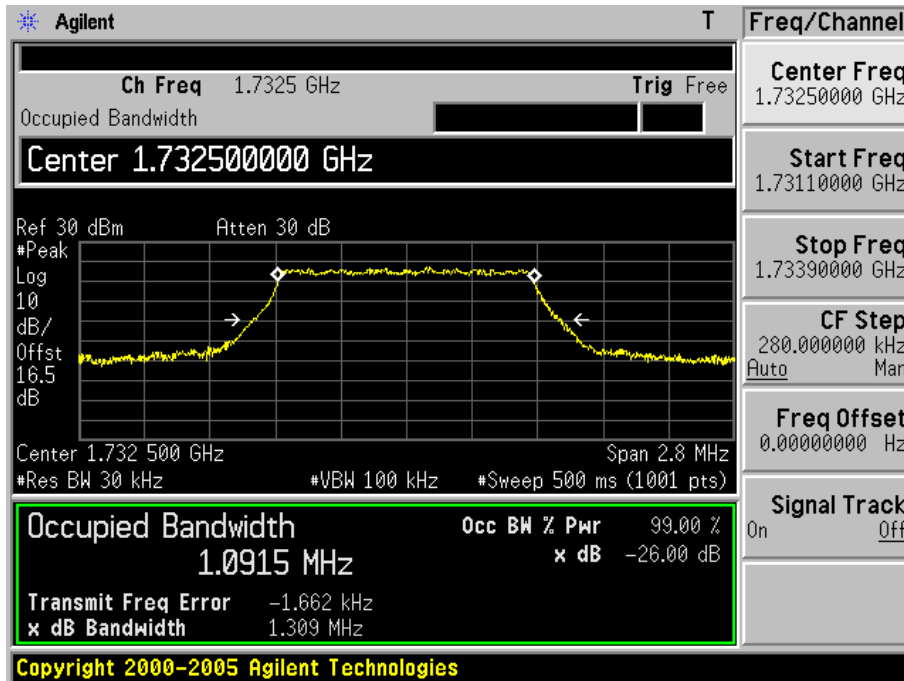
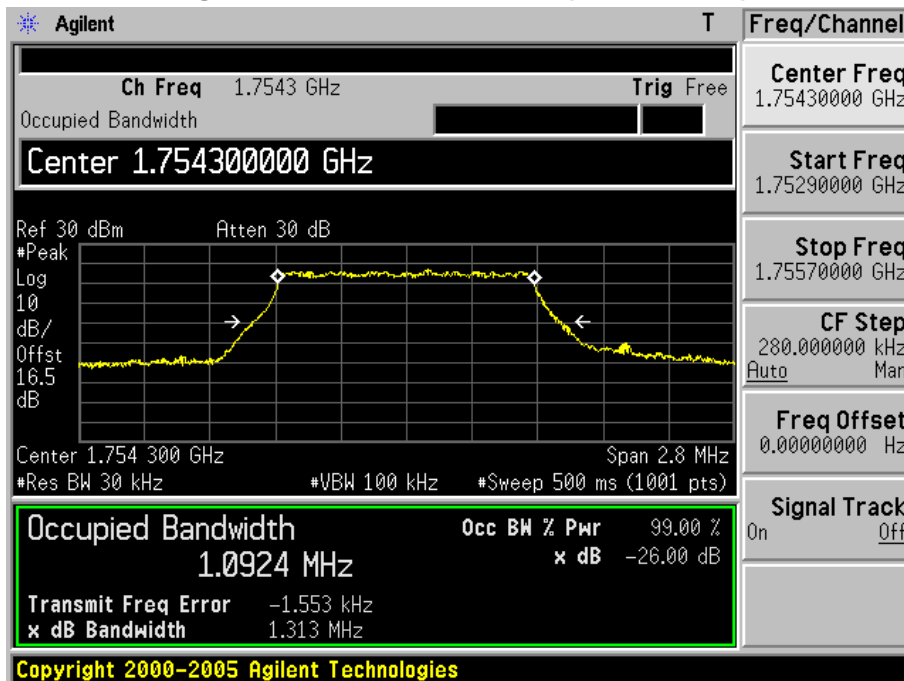


Figure Channel 20393 7RB0 (1754.30MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: LTE Band 4 (1.4M/16QAM)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
19957	1710.70	1103.80	1311.00
20175	1732.50	1103.20	1307.00
20393	1754.30	1105.50	1305.00

Figure Channel 19957 7RB0 (1710.70MHz)

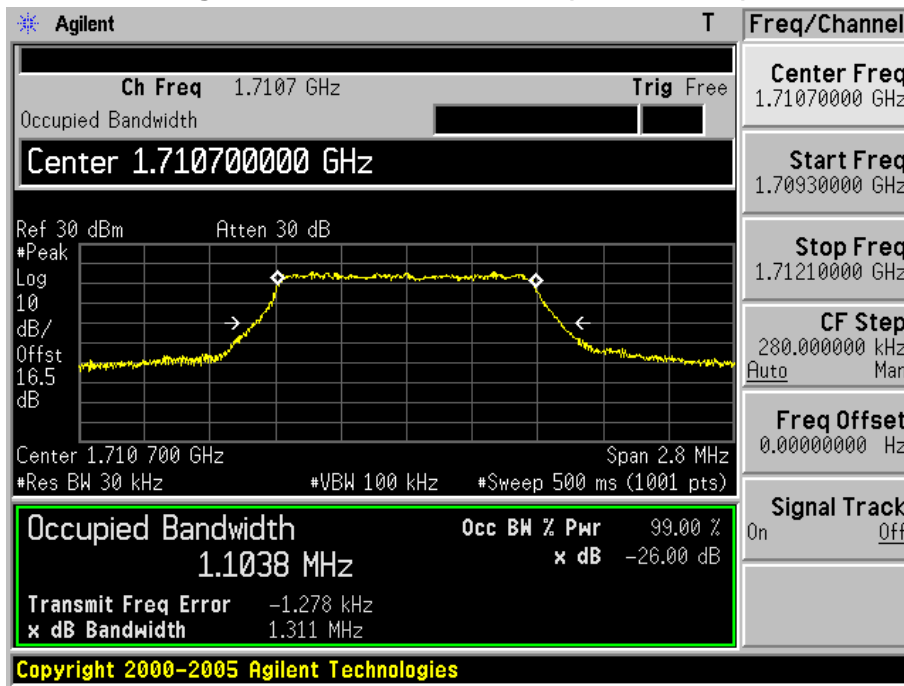


Figure Channel 20175 7RB0 (1732.50MHz)

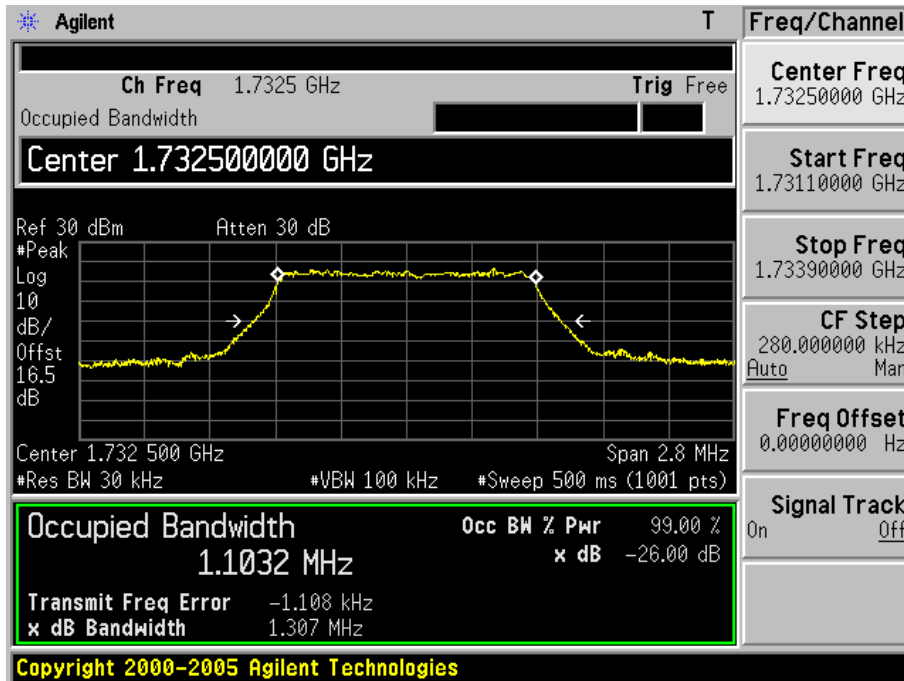
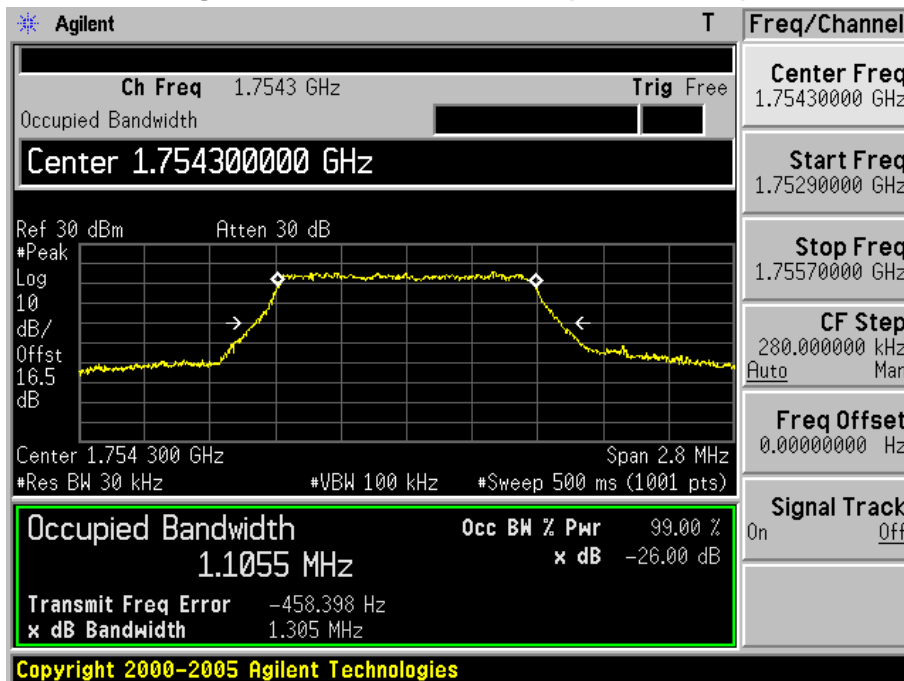


Figure Channel 20393 7RB0 (1754.30MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25(20M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26140	1860.00	17864.50	19629.00
26340	1880.00	17865.20	19637.00
26590	1907.50	17849.80	19637.00

Figure Channel 26140 100RB0 (1860.00MHz)

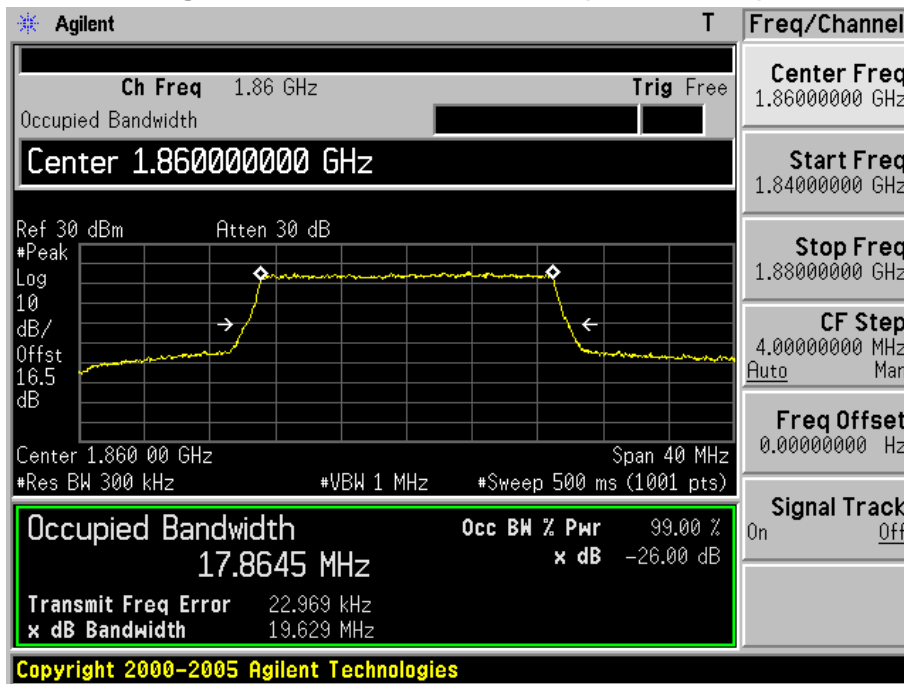


Figure Channel 26340 100RB0 (1880.00MHz)

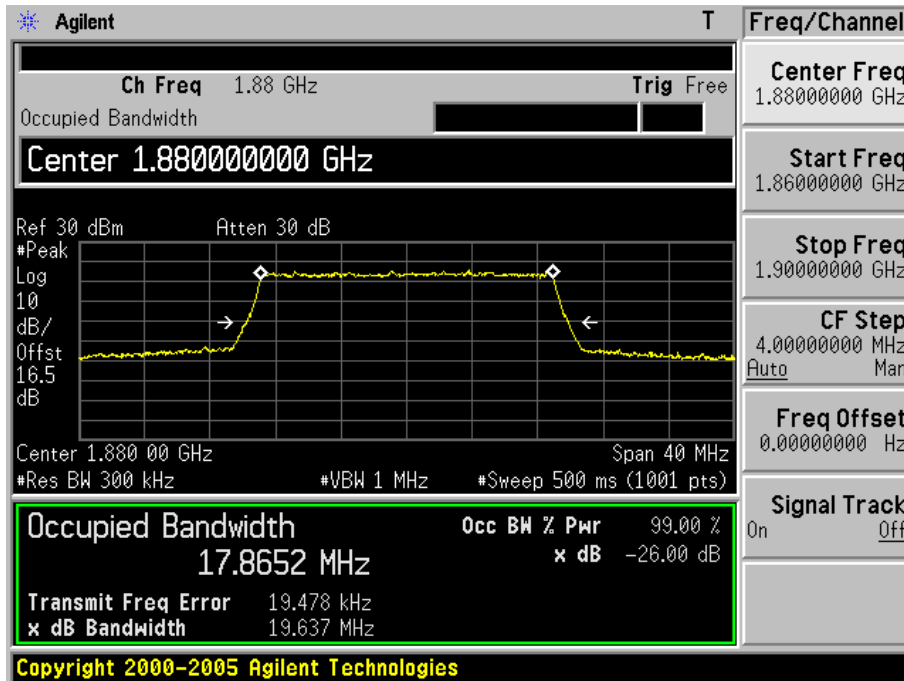
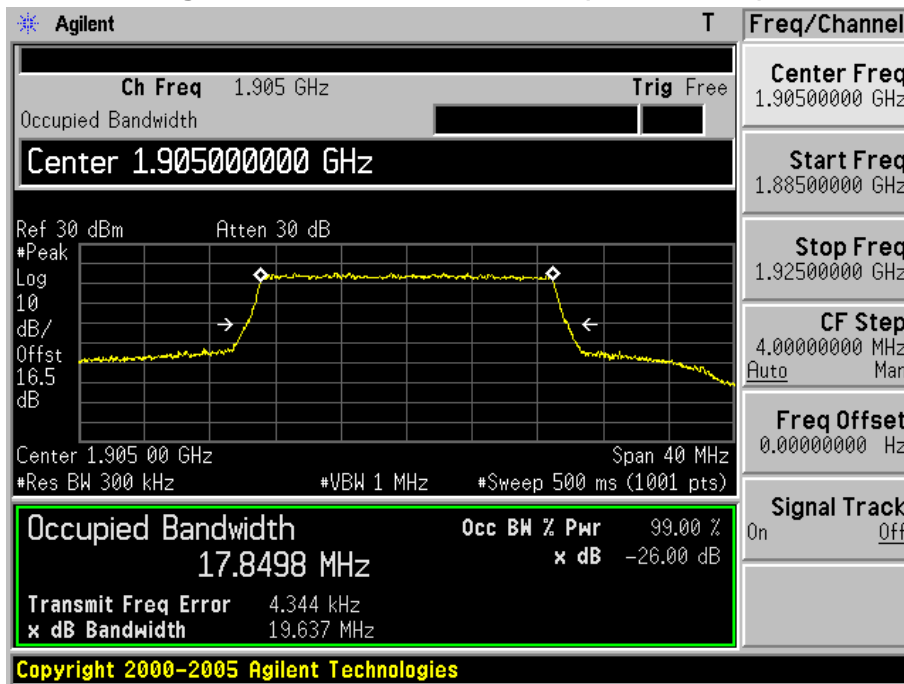


Figure Channel 26590 100RB0 (1905.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25 (20M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26140	1860.00	17840.60	19432.00
26340	1880.00	17840.10	19414.00
26590	1907.50	17831.90	19409.00

Figure Channel 20140 100RB0 (1860.00MHz)

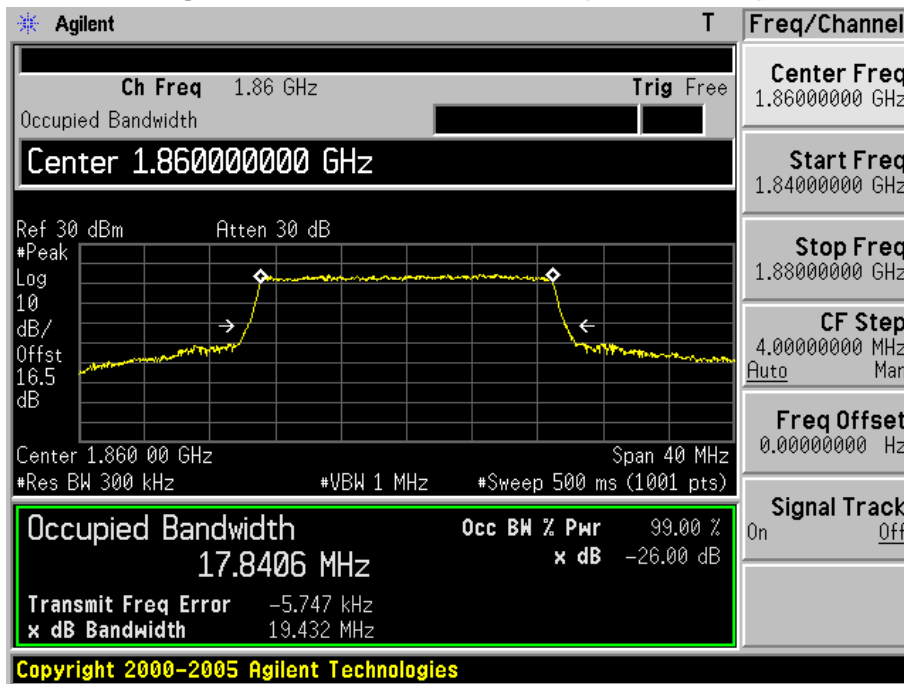


Figure Channel 26340 100RB0 (1880.00MHz)

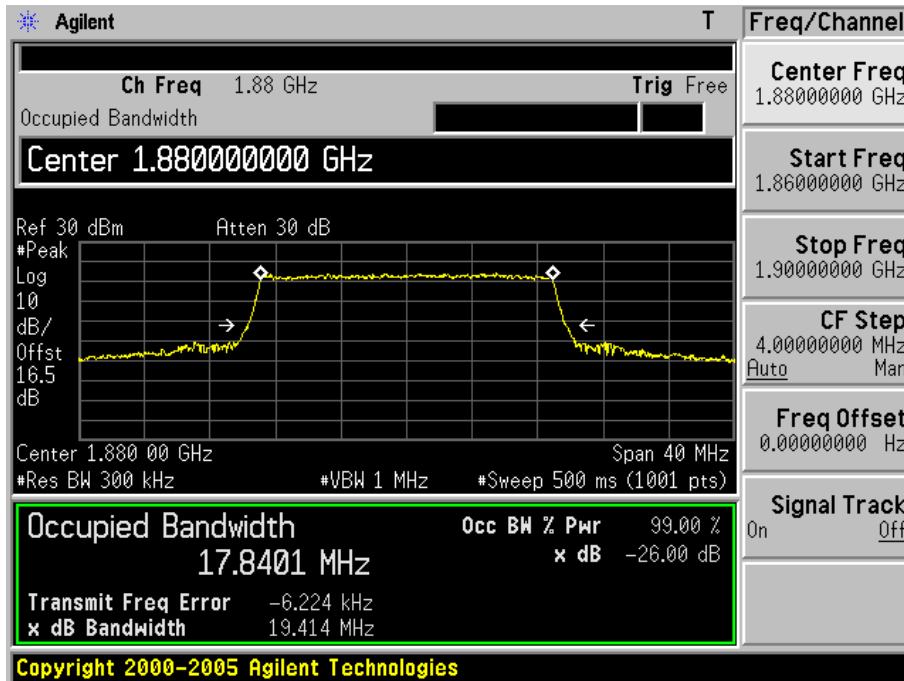
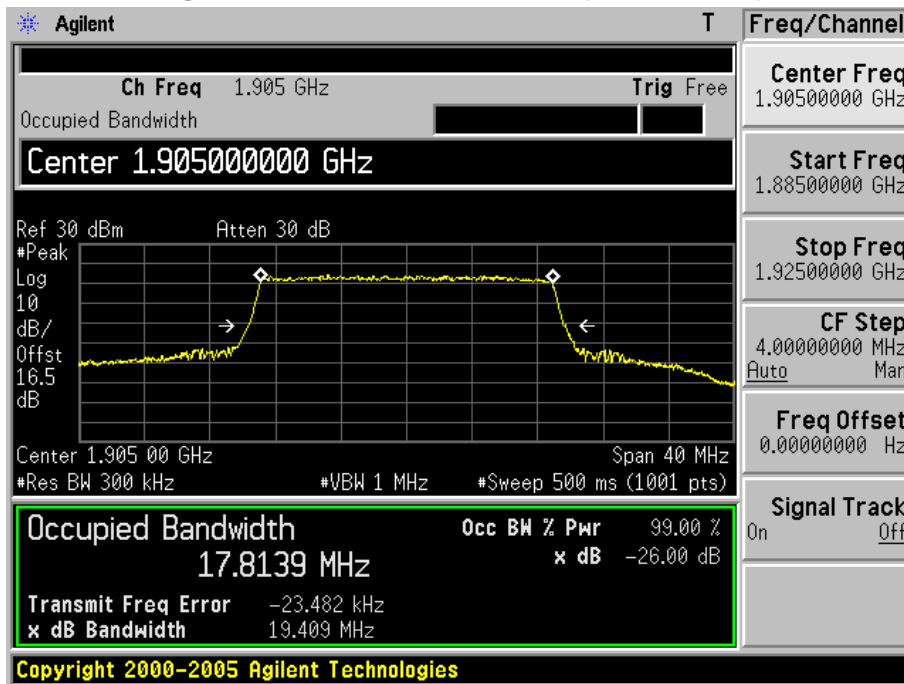


Figure Channel 26590 100RB0 (1905.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25(15M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26115	1857.50	13452.60	15021.00
26340	1880.00	13434.80	14964.00
26615	1907.50	13430.20	14951.00

Figure Channel 26115 75RB0 (1857.50MHz)

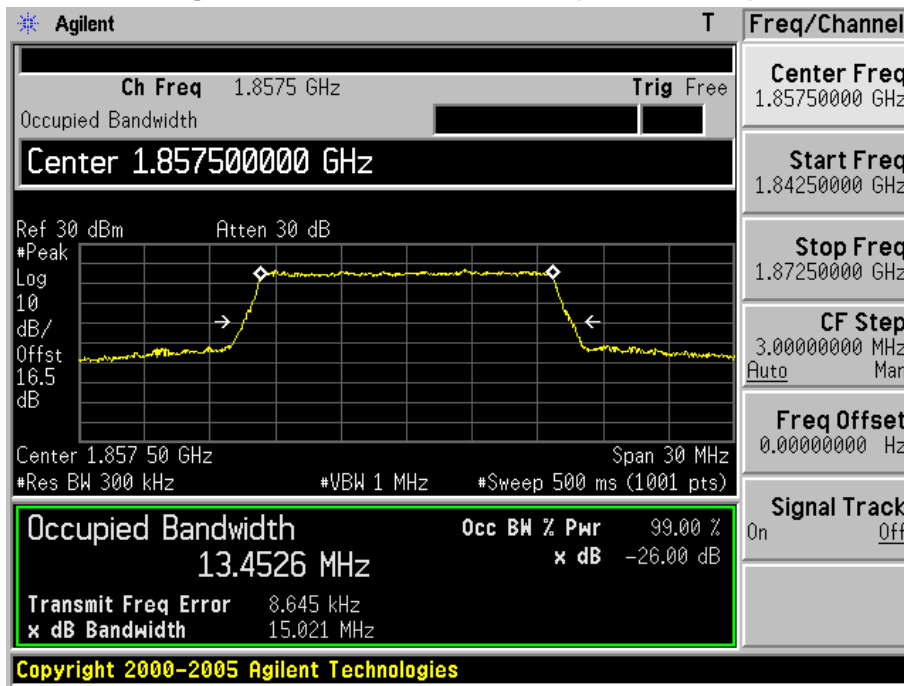


Figure Channel 26340 75RB0 (1880.00MHz)

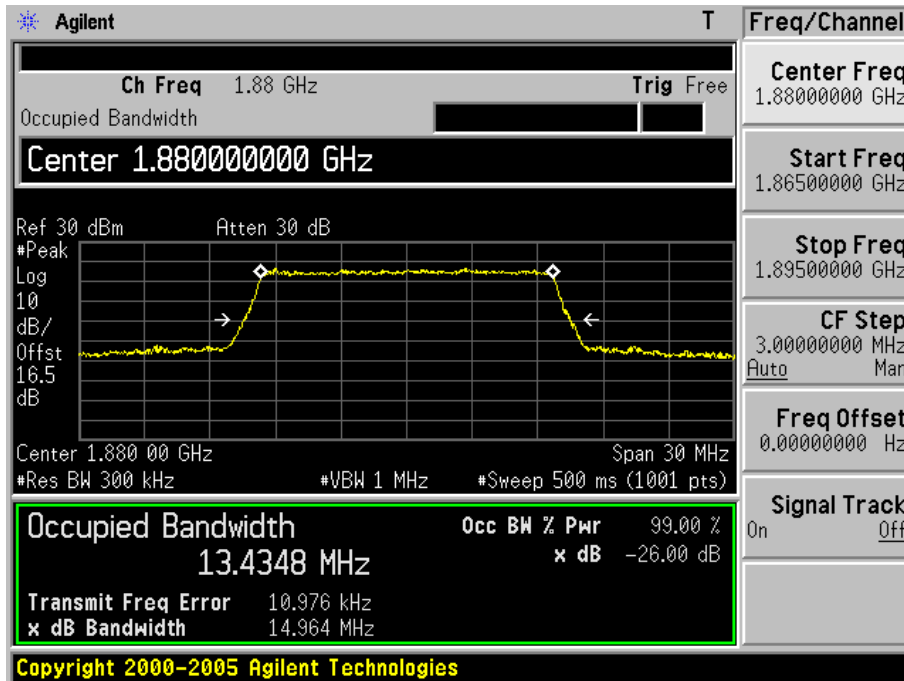
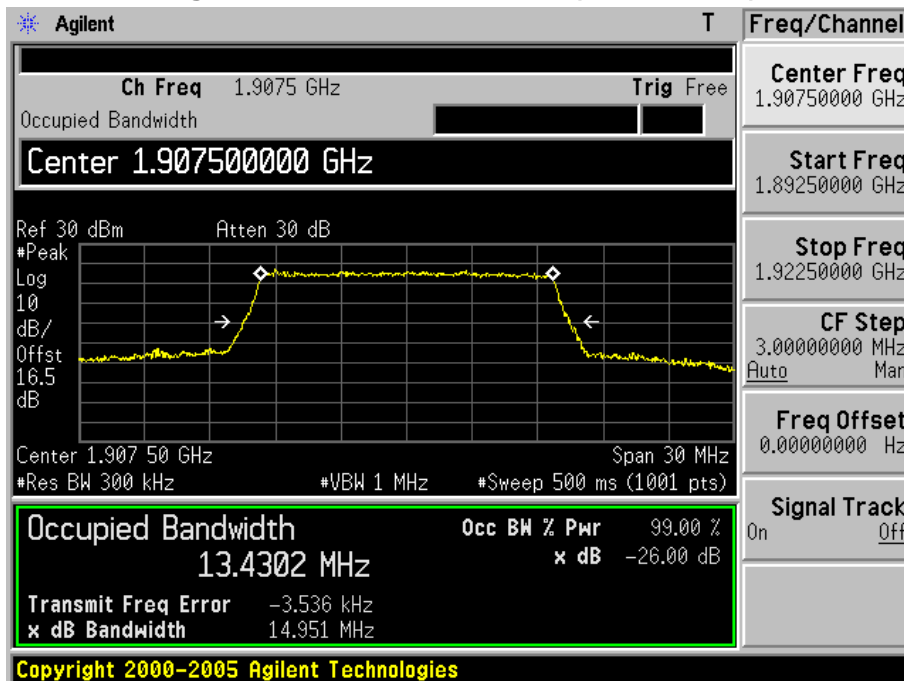


Figure Channel 26615 75RB0 (1907.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25 (15M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26115	1857.50	13555.60	15121.00
26340	1880.00	13434.50	14869.00
26615	1907.50	13423.60	14858.00

Figure Channel 26115 75RB0 (1857.50MHz)

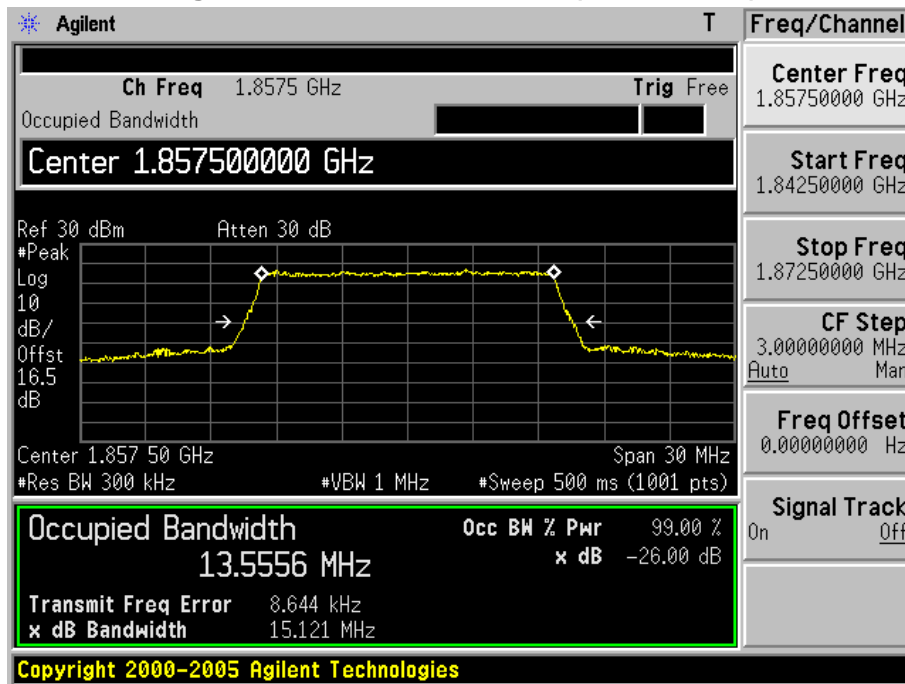


Figure Channel 26340 75RB0 (1880.00MHz)

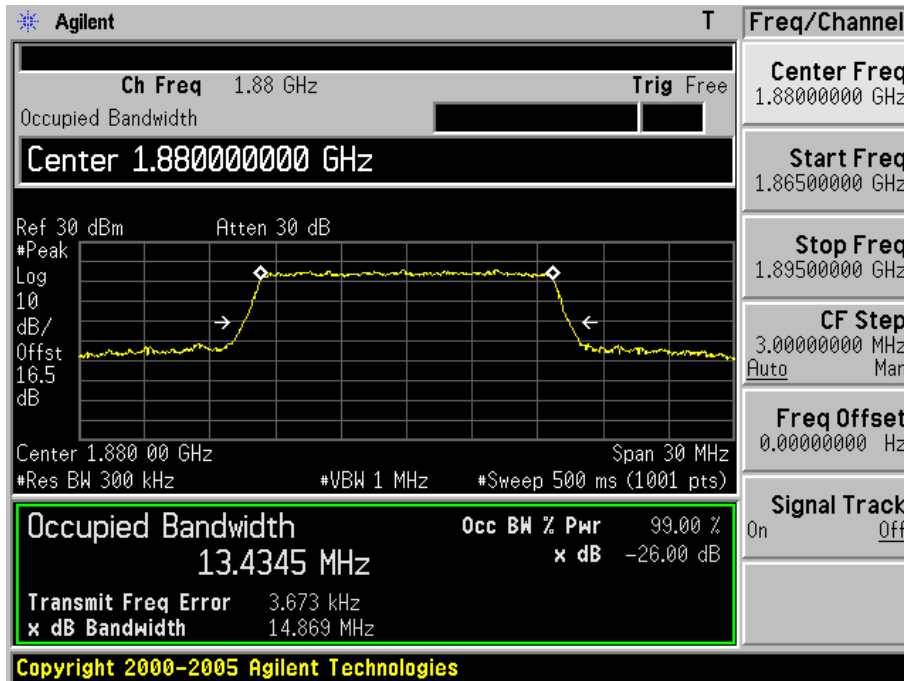
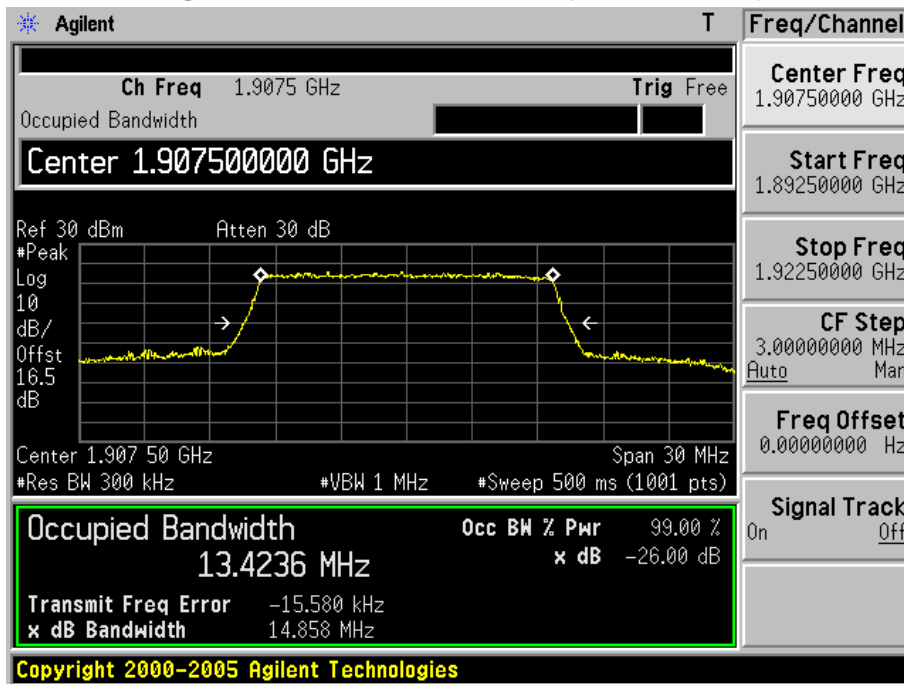


Figure Channel 26615 75RB0 (1907.500MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25(10M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26090	1855.00	9054.70	10153.00
26340	1880.00	9041.00	10142.00
26640	1910.00	9032.20	10164.00

Figure Channel 26090 50RB0 (1855.00MHz)

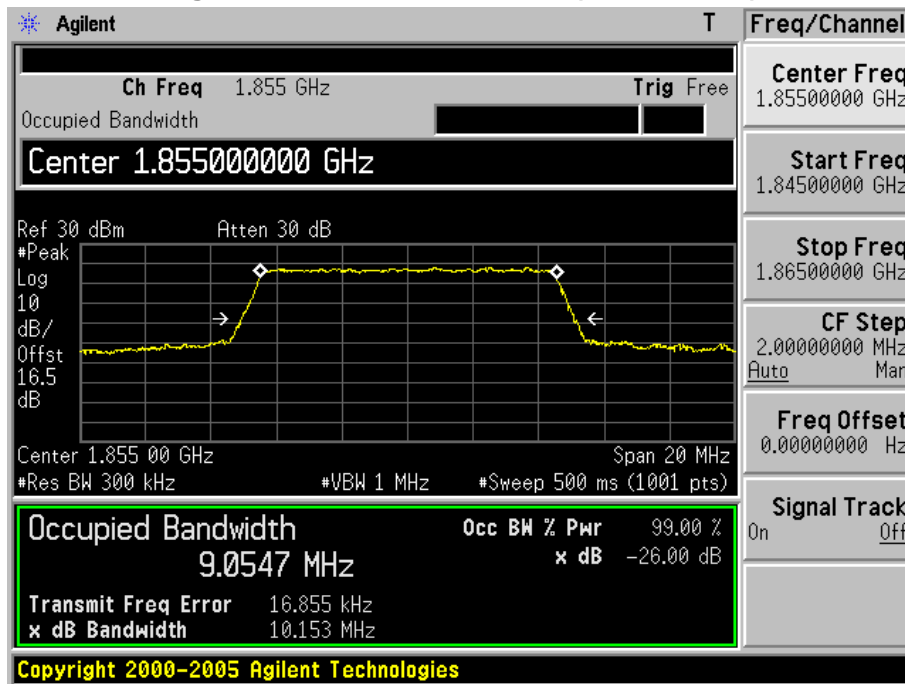


Figure Channel 26340 50RB0 (1880.00MHz)

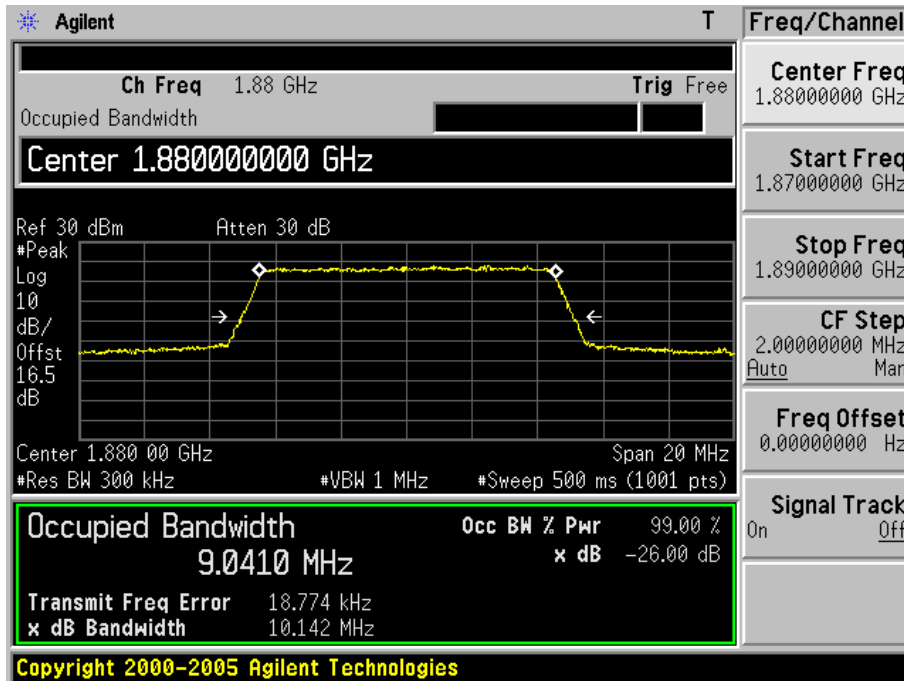
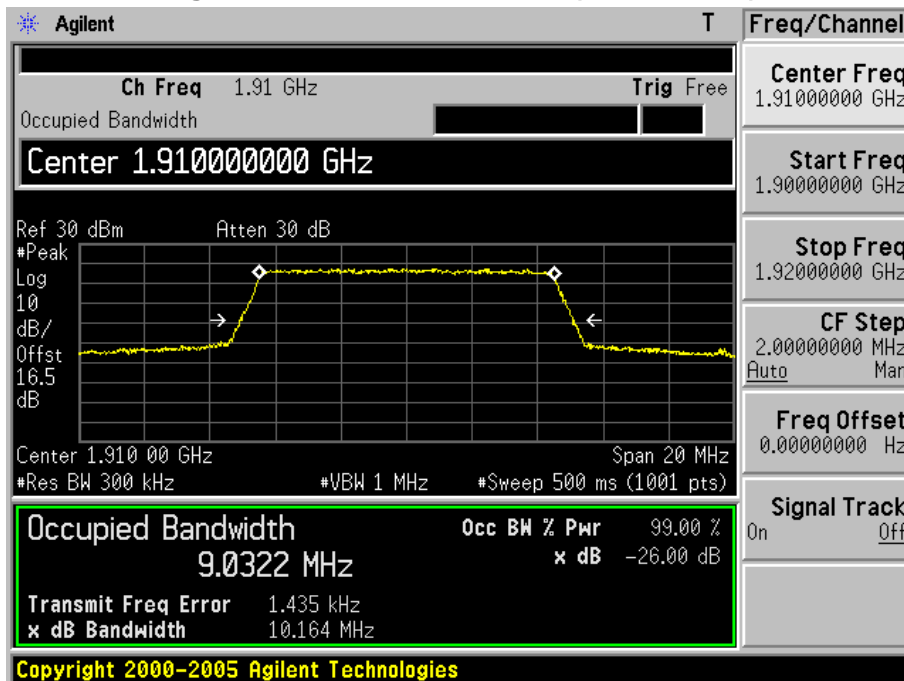


Figure Channel 26640 50RB0 (1910.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25 (10M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26090	1855.00	9017.70	10120.00
26340	1880.00	9011.30	10087.00
26640	1910.00	9007.50	10093.00

Figure Channel 26090 50RB0 (1855.00MHz)

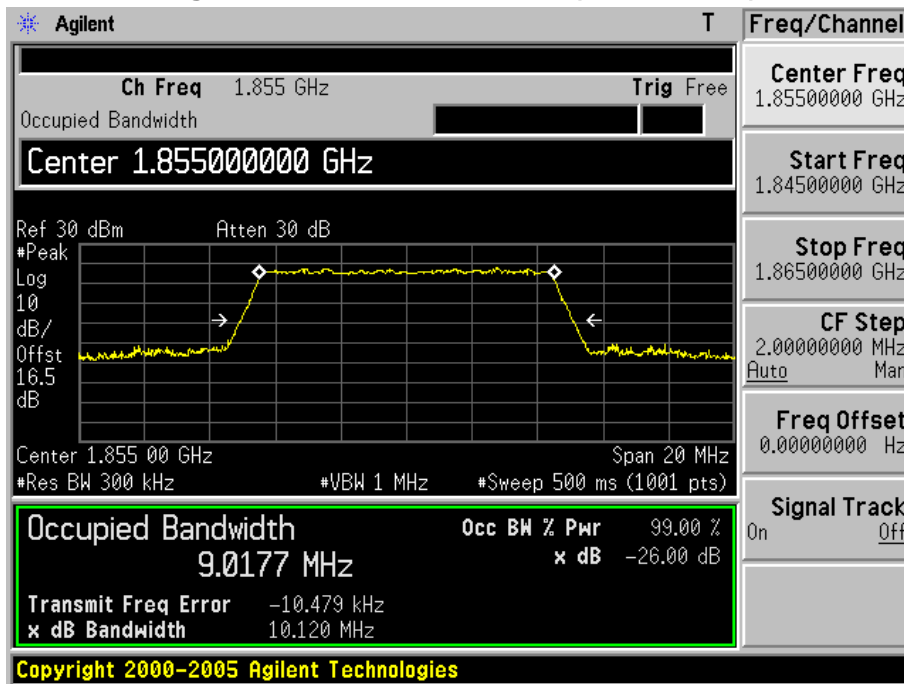


Figure Channel 26340 50RB0 (1880.00MHz)

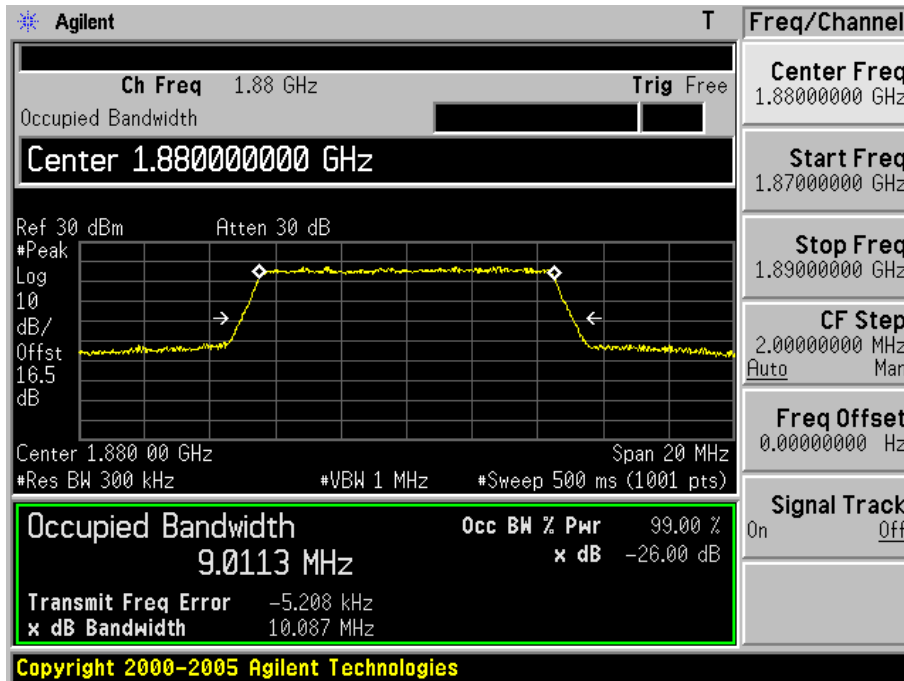
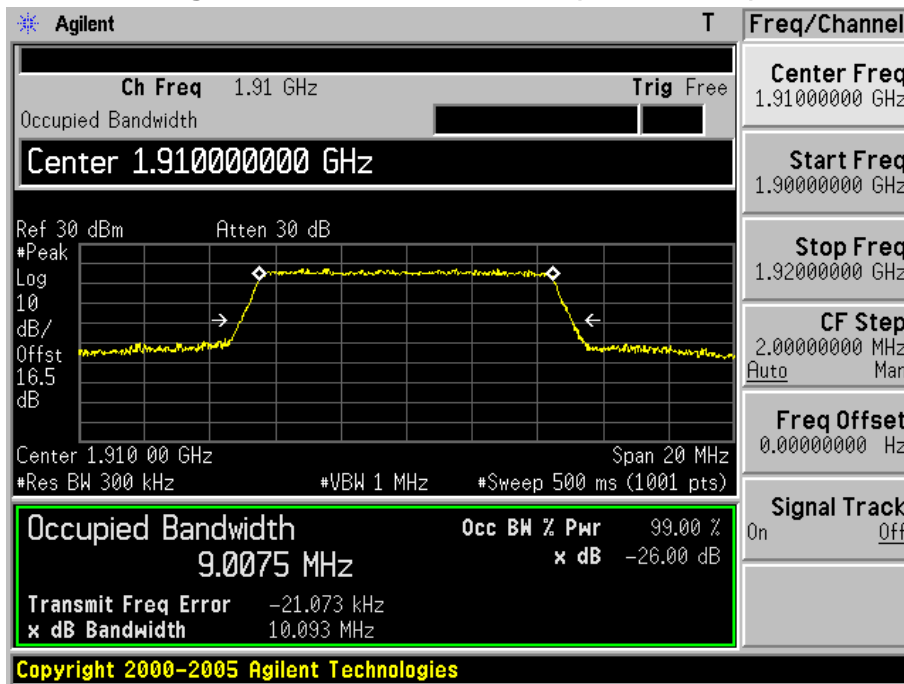


Figure Channel 26640 50RB0 (1910.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25(5M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26065	1852.50	4501.10	5087.00
26340	1880.00	4490.20	5092.00
26665	1912.50	4499.40	5077.00

Figure Channel 26065 25RB0 (1852.50MHz)

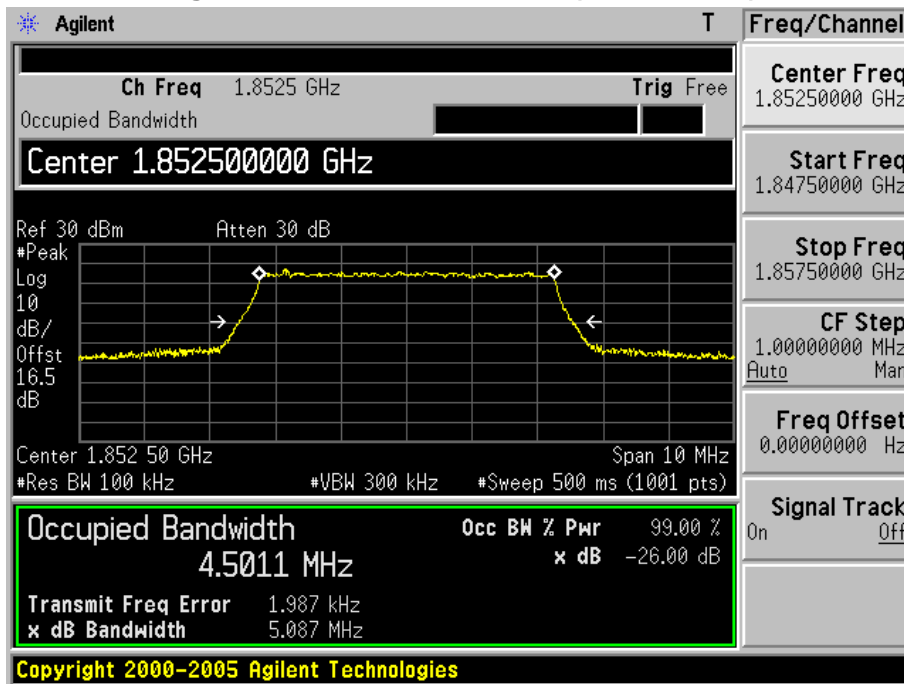


Figure Channel 26340 25RB0 (1880.00MHz)

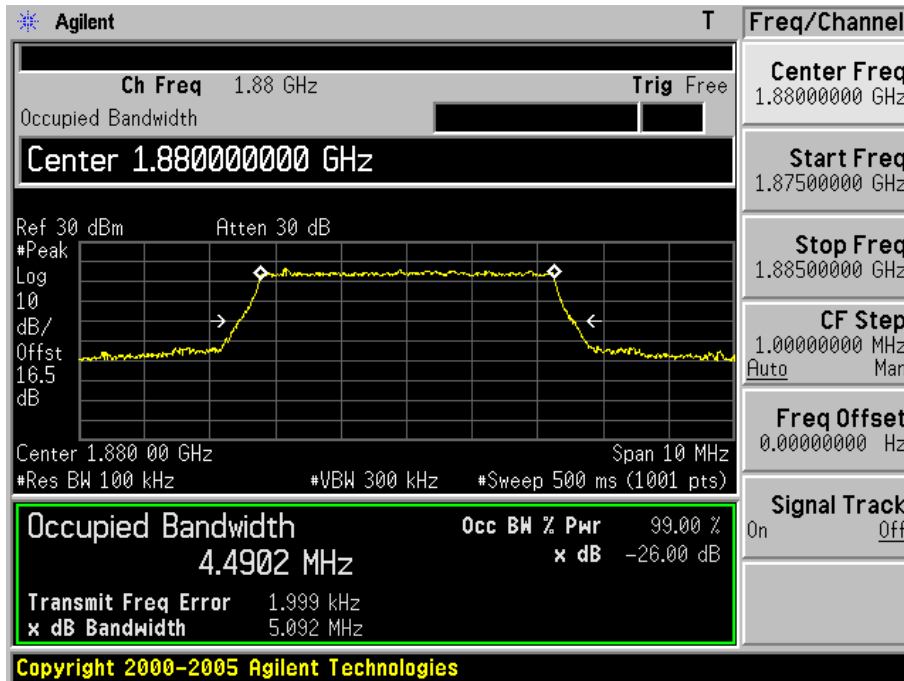
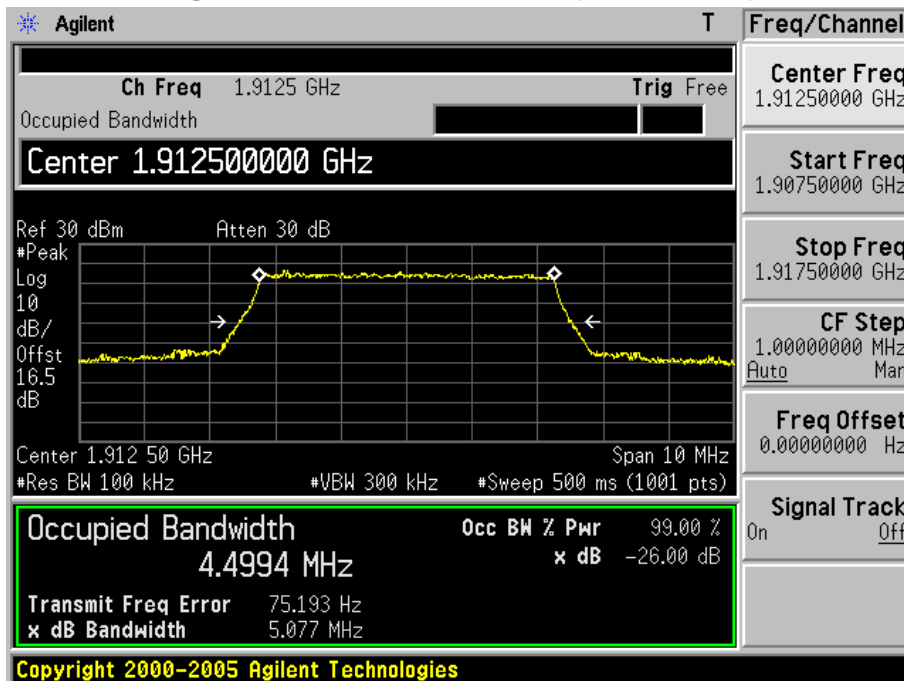


Figure Channel 26665 25RB0 (1912.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25 (5M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26065	1852.50	4478.30	4996.00
26340	1880.00	4475.90	5002.00
26665	1912.50	4476.70	4994.00

Figure Channel 26065 25RB0 (1852.50MHz)

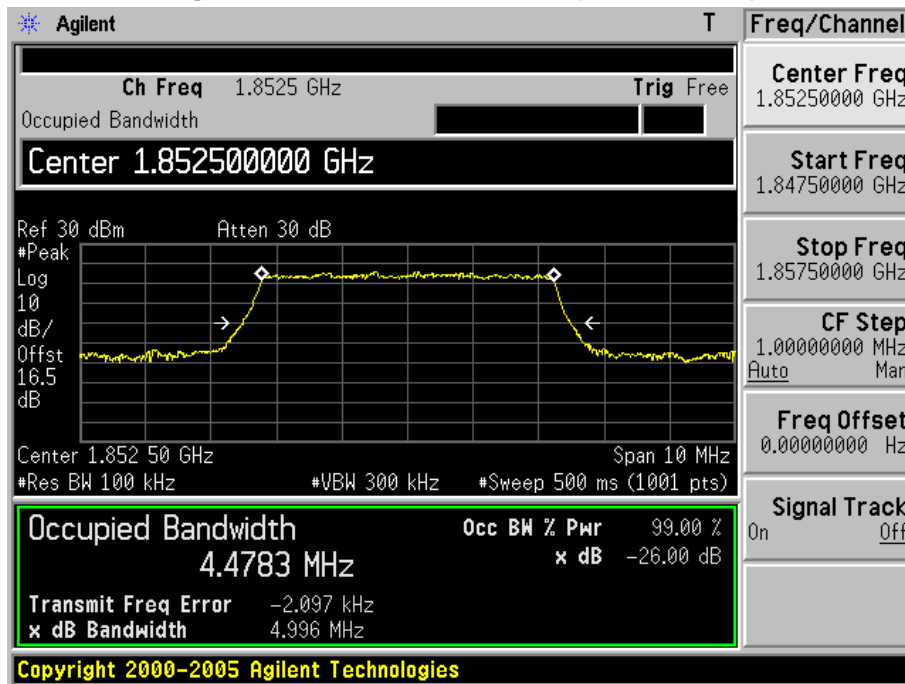


Figure Channel 26340 25RB0 (1880.00MHz)

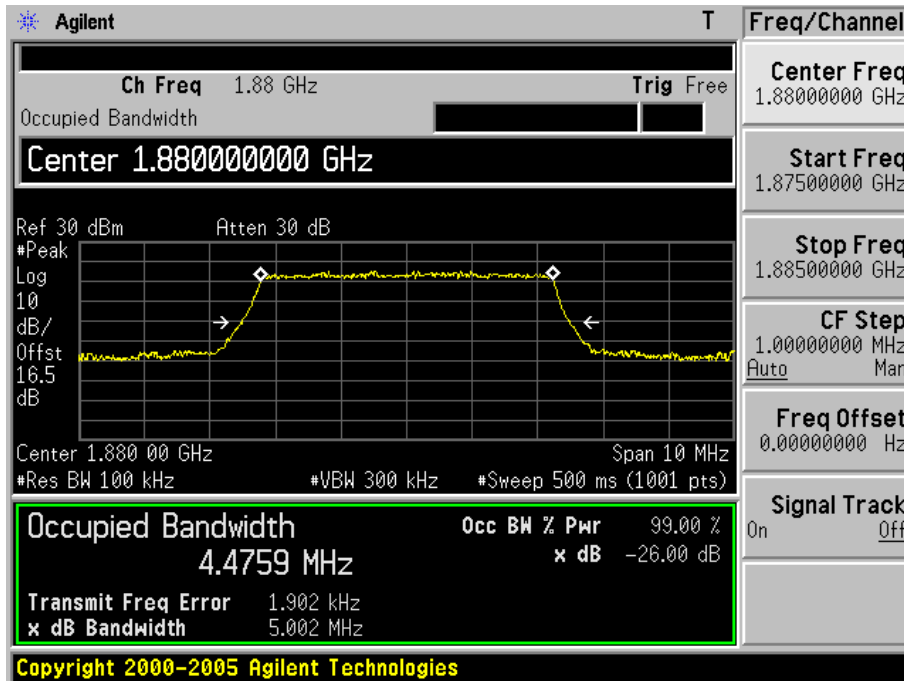
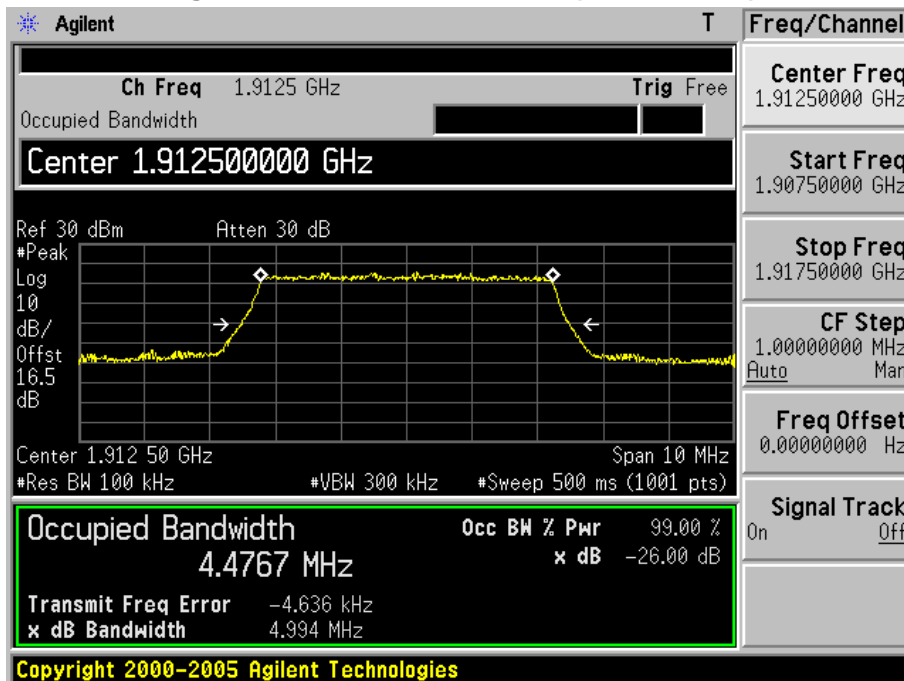


Figure Channel 26665 25RB0 (1912.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25(3M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26055	1851.50	2733.20	3144.00
26340	1880.00	2734.00	3132.00
26675	1913.50	2731.60	3135.00

Figure Channel 26055 15RB0 (1851.50MHz)

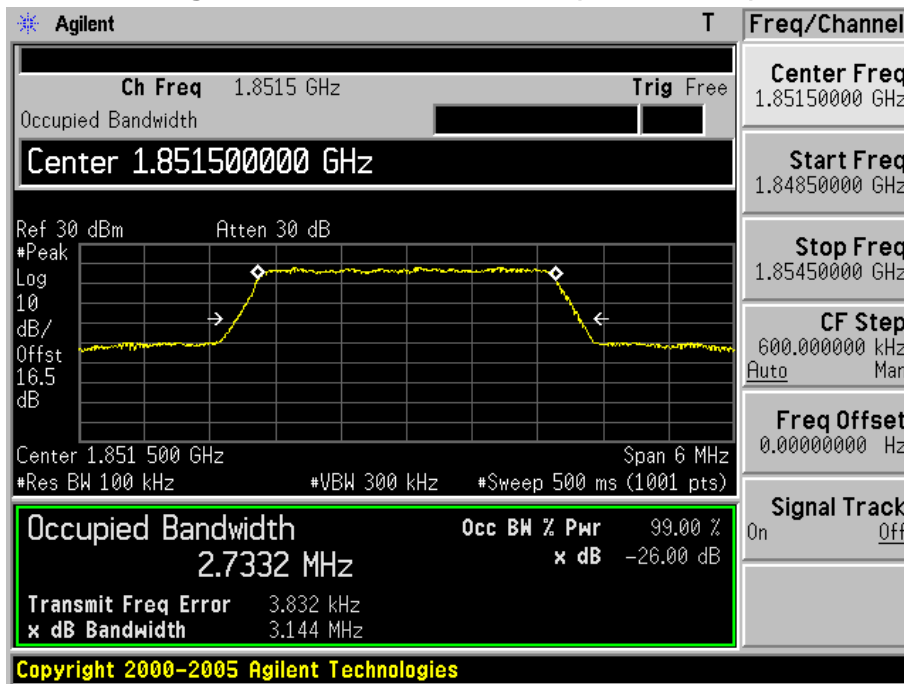


Figure Channel 26340 15RB0 (1880.00MHz)

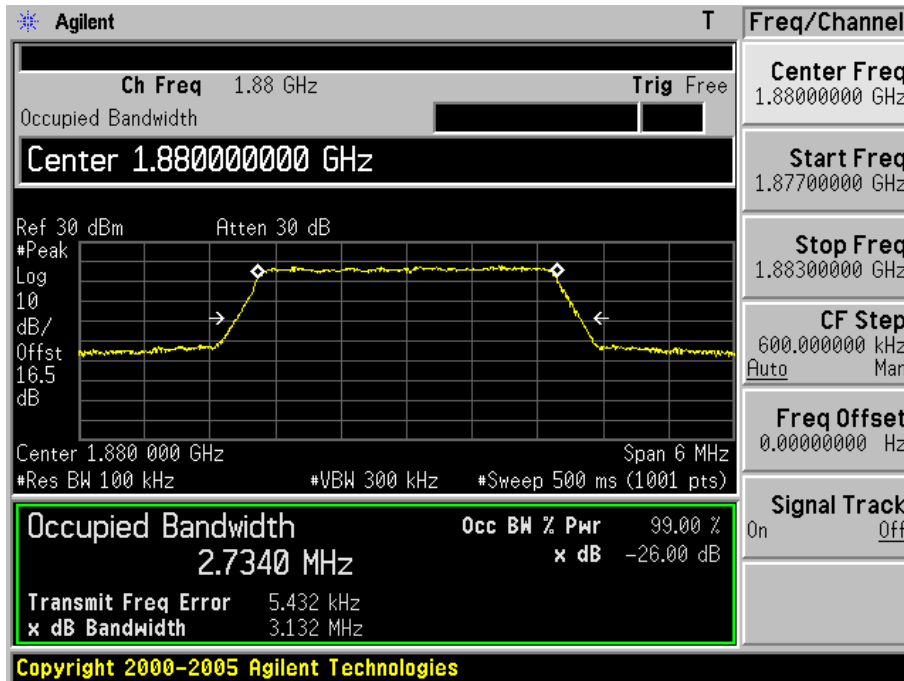
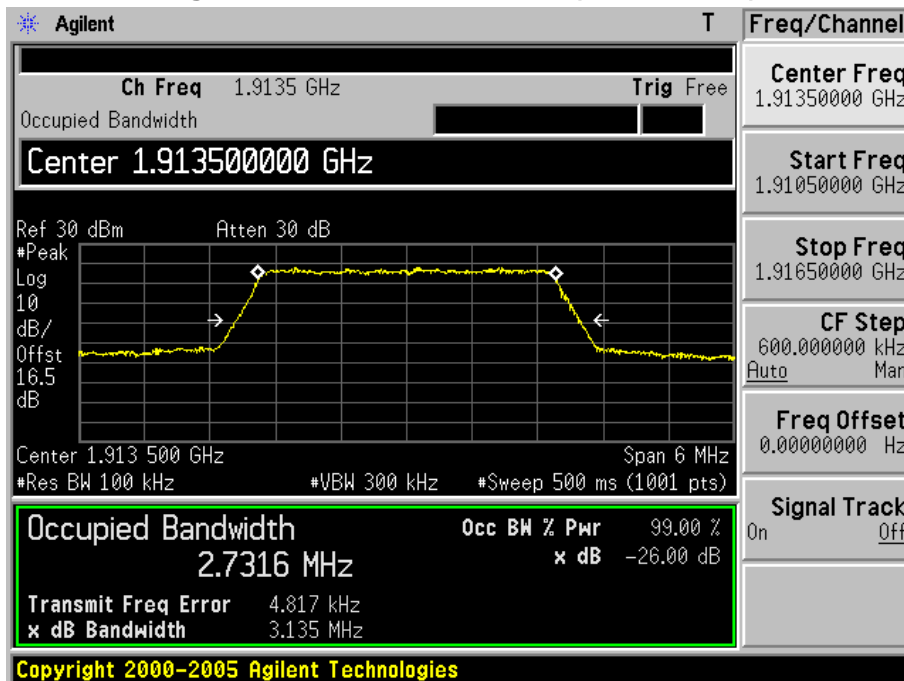


Figure Channel 26675 15RB0 (1913.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25 (3M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26055	1851.50	2745.50	3176.00
26340	1880.00	2730.90	3153.00
26675	1913.50	2738.70	3156.00

Figure Channel 26055 15RB0 (1851.50MHz)

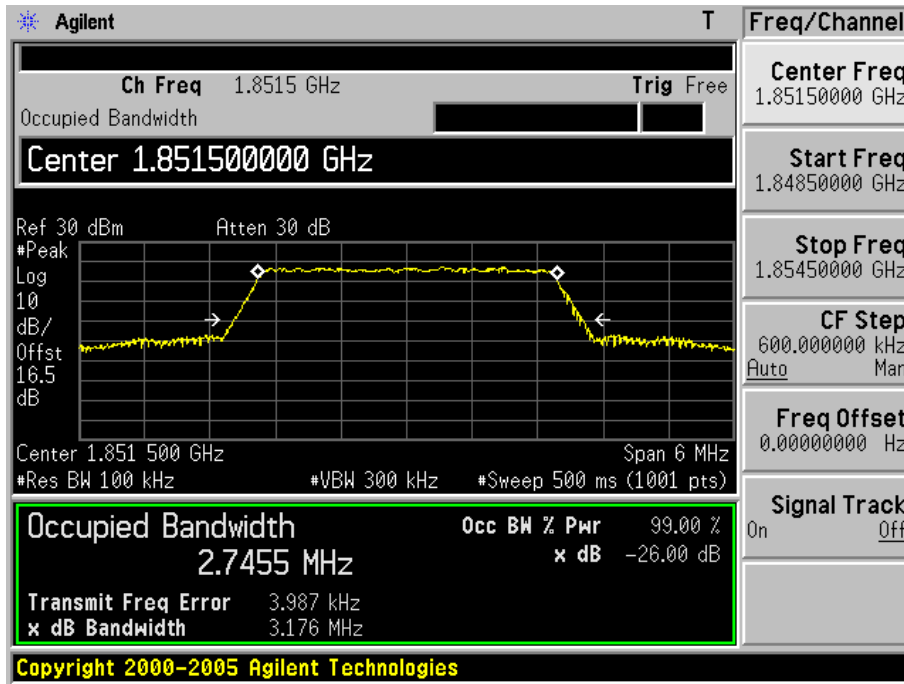


Figure Channel 26340 15RB0 (1880.00MHz)

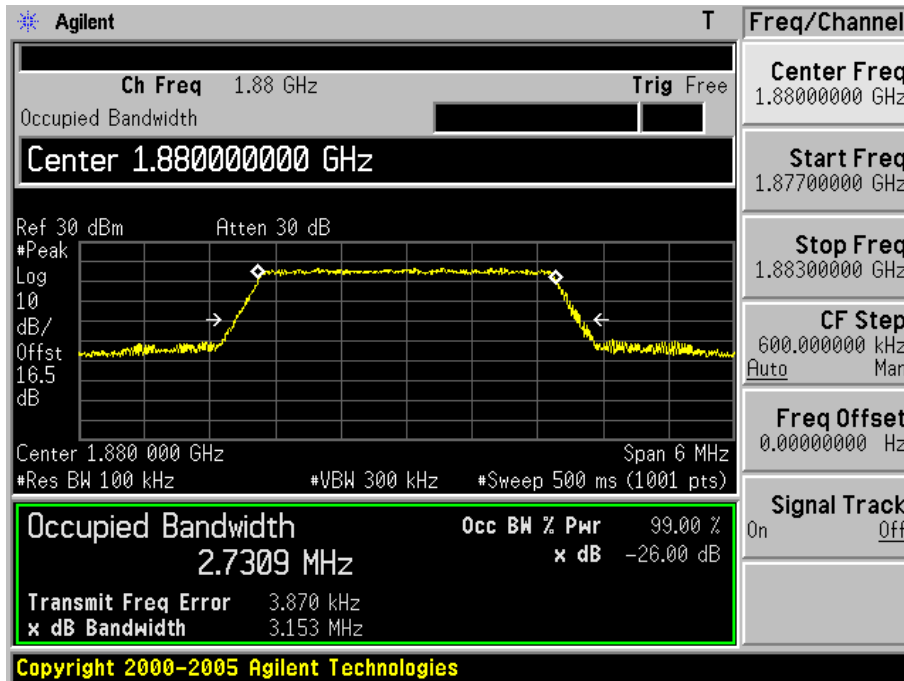
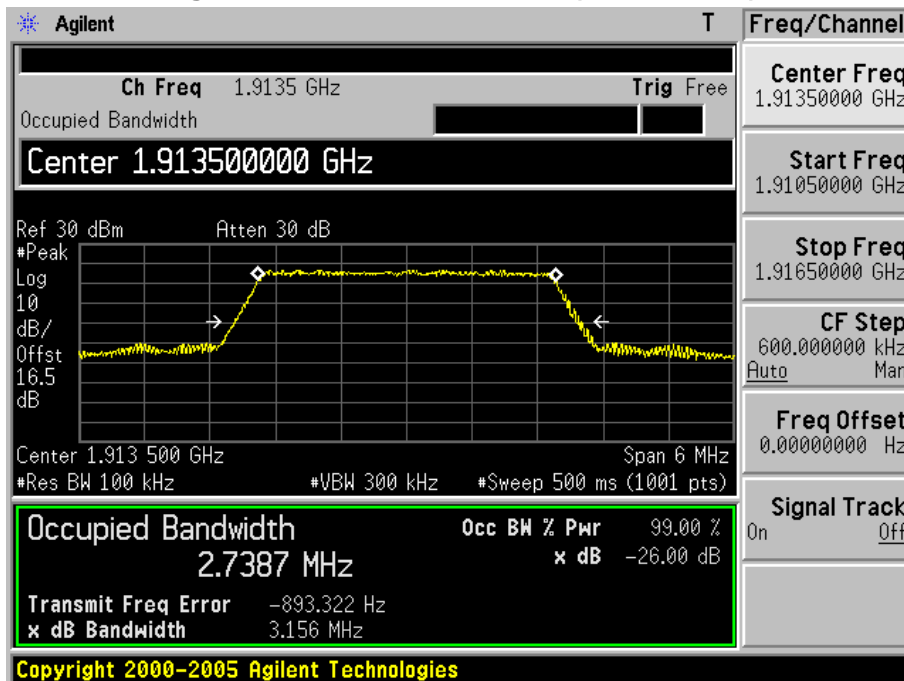


Figure Channel 26675 15RB0 (1913.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25(1.4M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26047	1850.70	1092.40	1314.00
26340	1880.00	1092.40	1309.00
26683	1914.30	1091.80	1322.00

Figure Channel 26047 7RB0 (1850.70MHz)

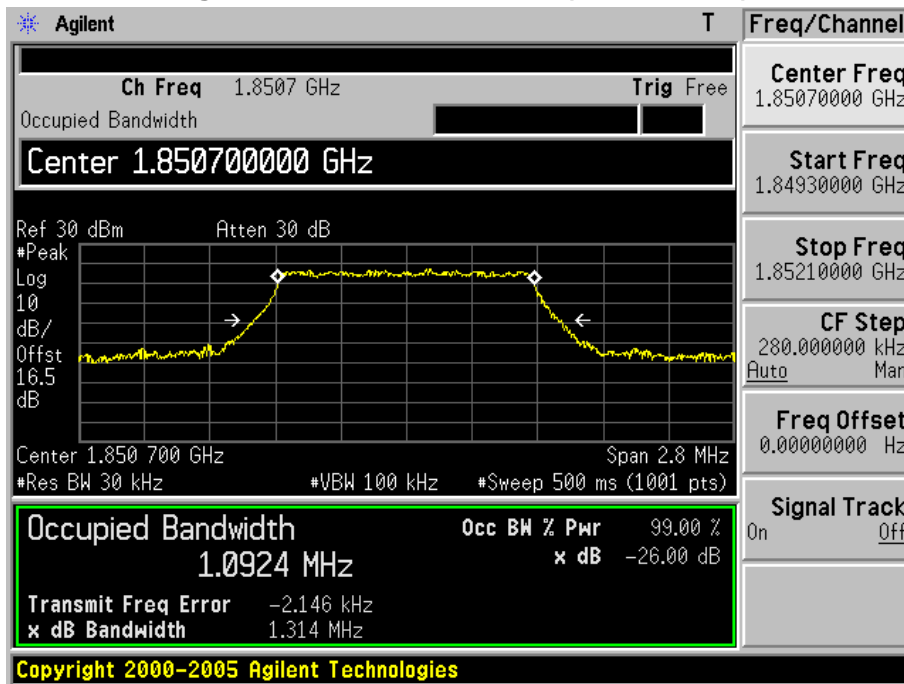


Figure Channel 26340 7RB0 (1880.00MHz)

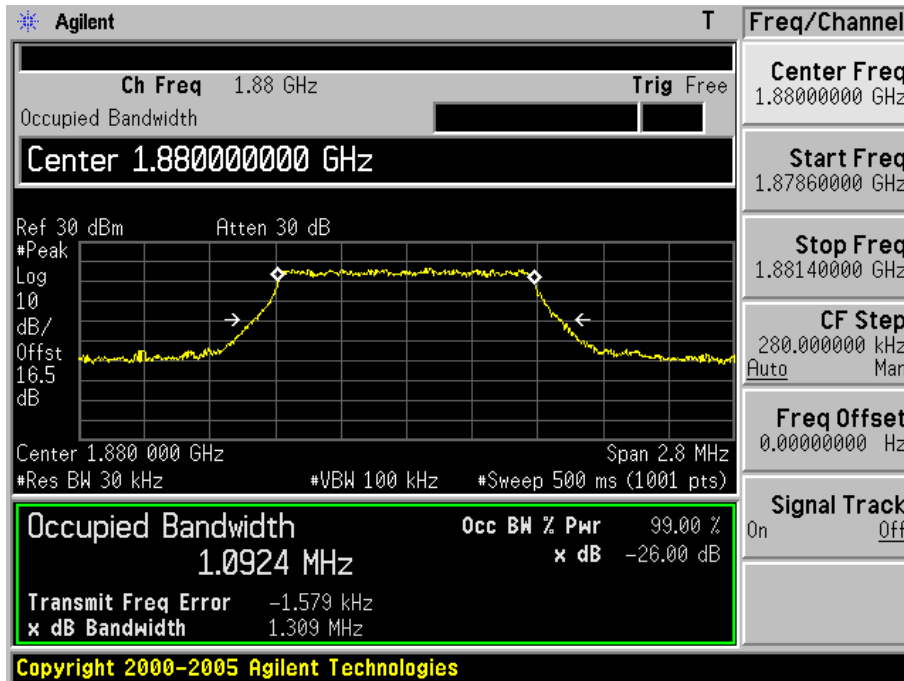
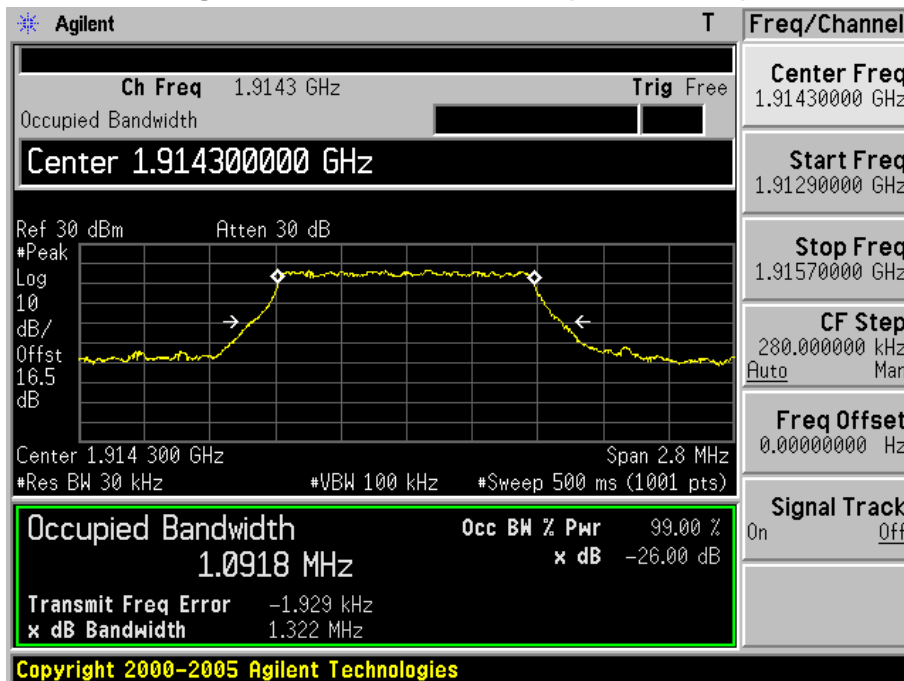


Figure Channel 26683 7RB0 (1914.30MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: LTE Band 25 (1.4M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26047	1850.70	1104.80	1330.00
26340	1880.00	1103.90	1329.00
26683	1914.30	1105.40	1327.00

Figure Channel 26047 7RB0 (1850.70MHz)

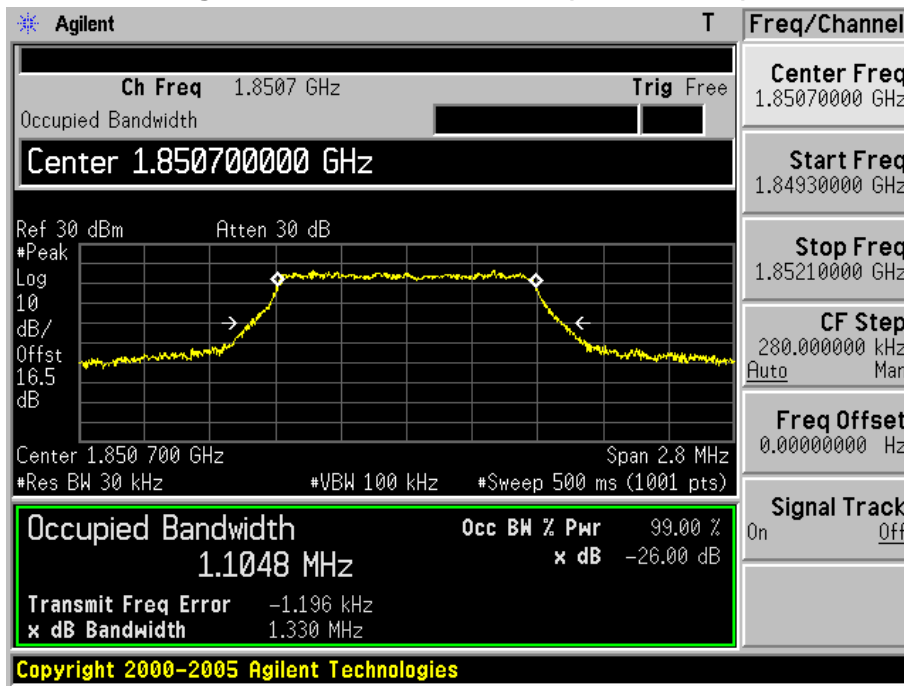


Figure Channel 26340 7RB0 (1880.00MHz)

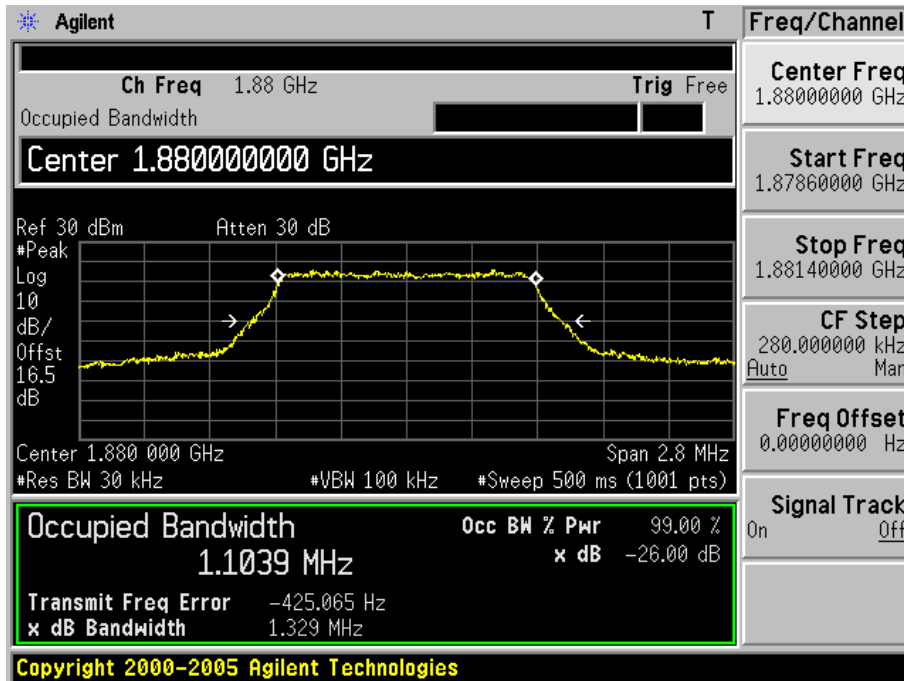
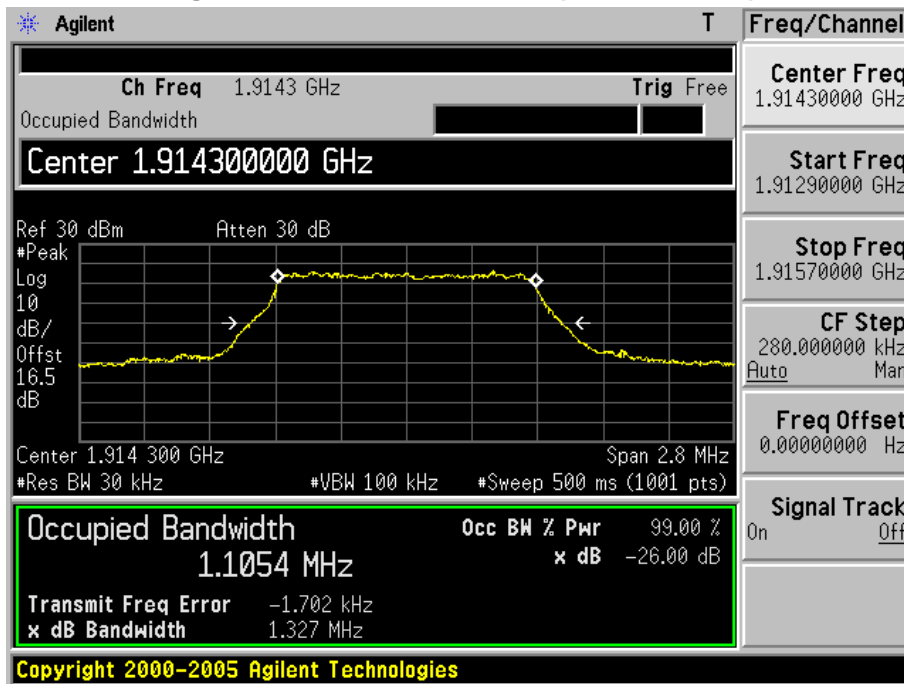


Figure Channel 26683 7RB0 (1914.300MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26(15M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26765	821.50	13432.30	14980.00
26865	831.50	13460.50	14983.00
26965	841.50	13453.80	14797.00

Figure Channel 26765 75RB0 (821.50MHz)

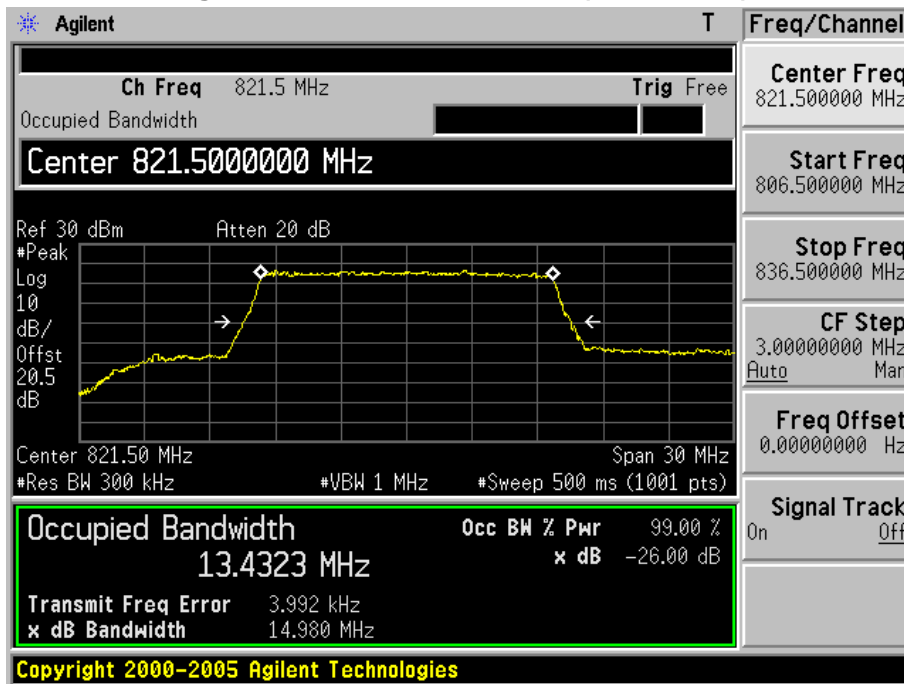


Figure Channel 26865 75RB0 (831.500MHz)

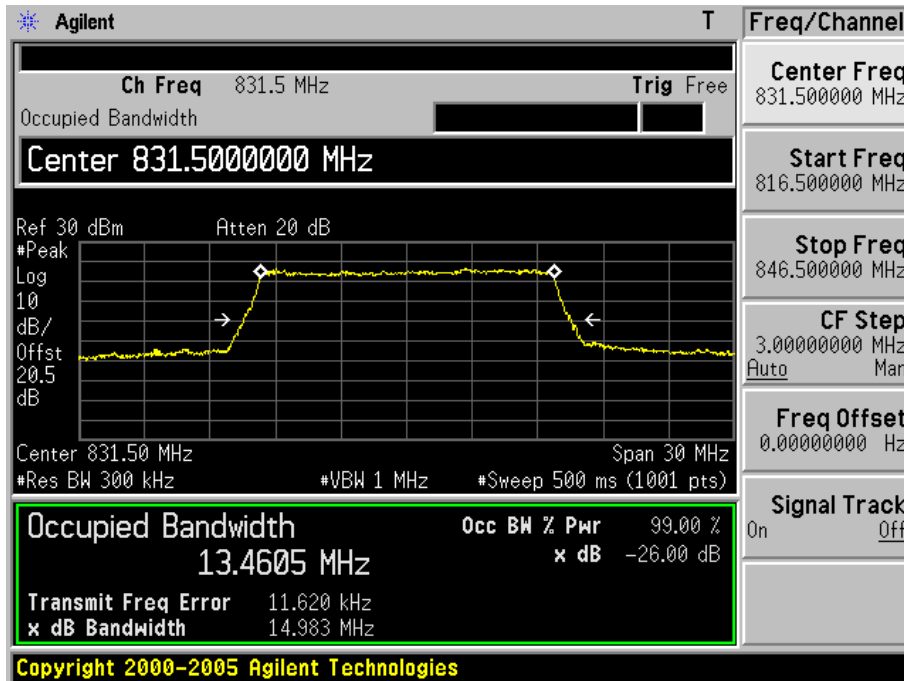
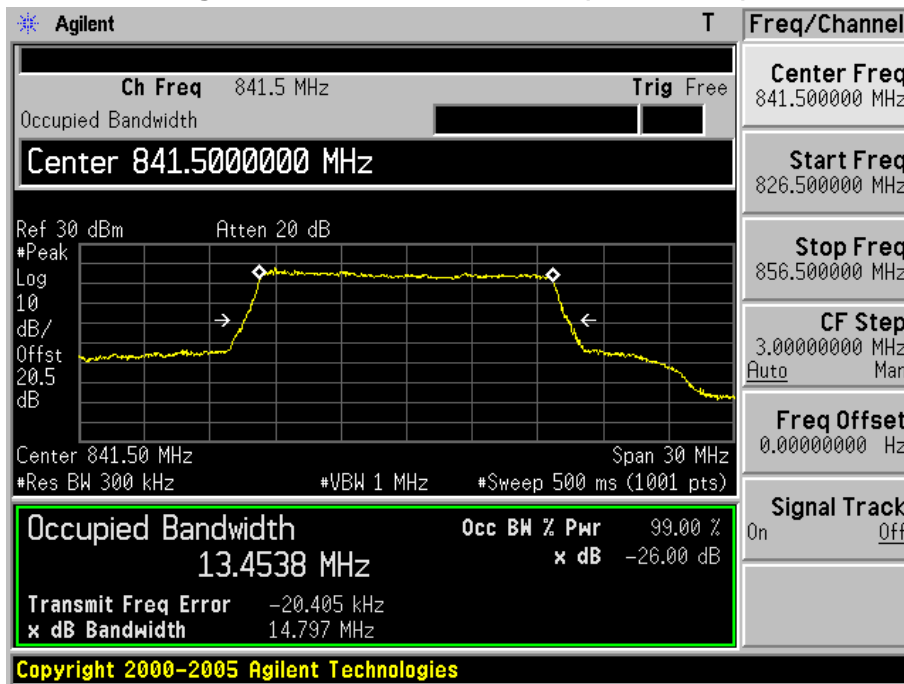


Figure Channel 26965 75RB0 (841.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26 (15M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26765	821.50	13432.80	14825.00
26865	831.50	13464.70	14866.00
26965	841.50	13456.20	14818.00

Figure Channel 26765 75RB0 (821.50MHz)

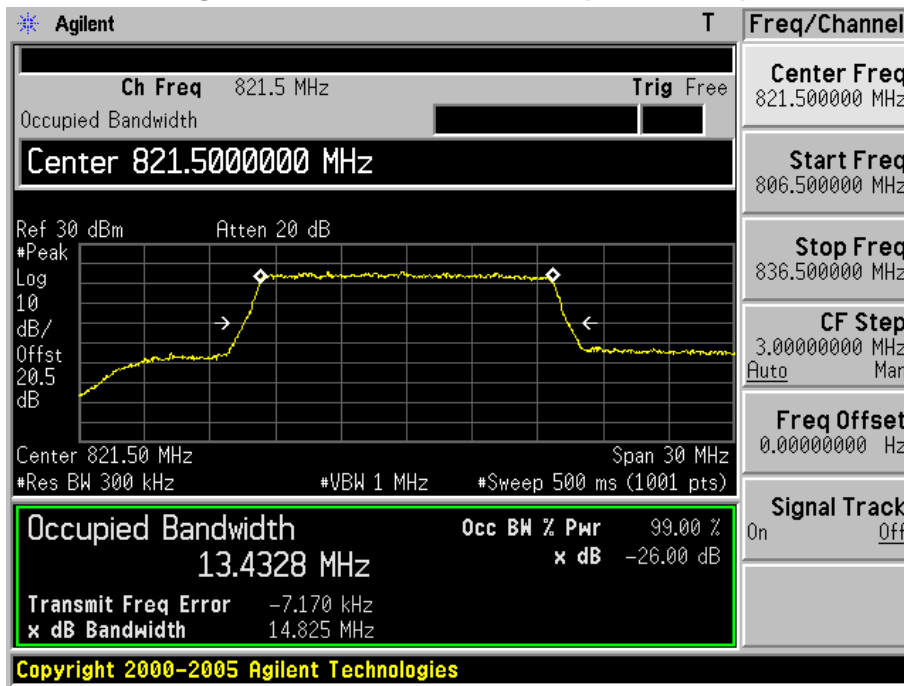


Figure Channel 26865 75RB0 (831.50MHz)

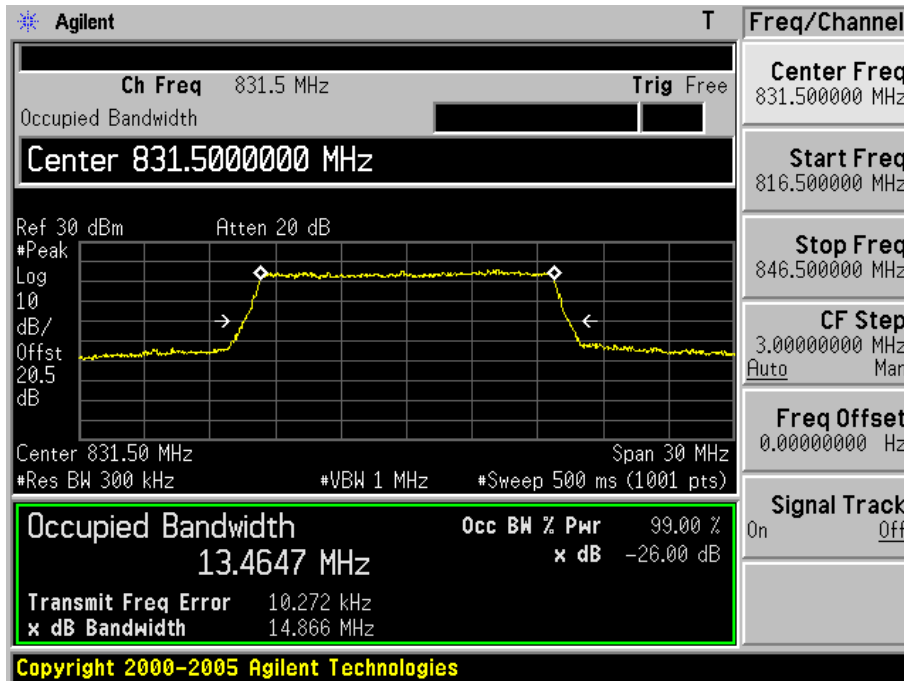
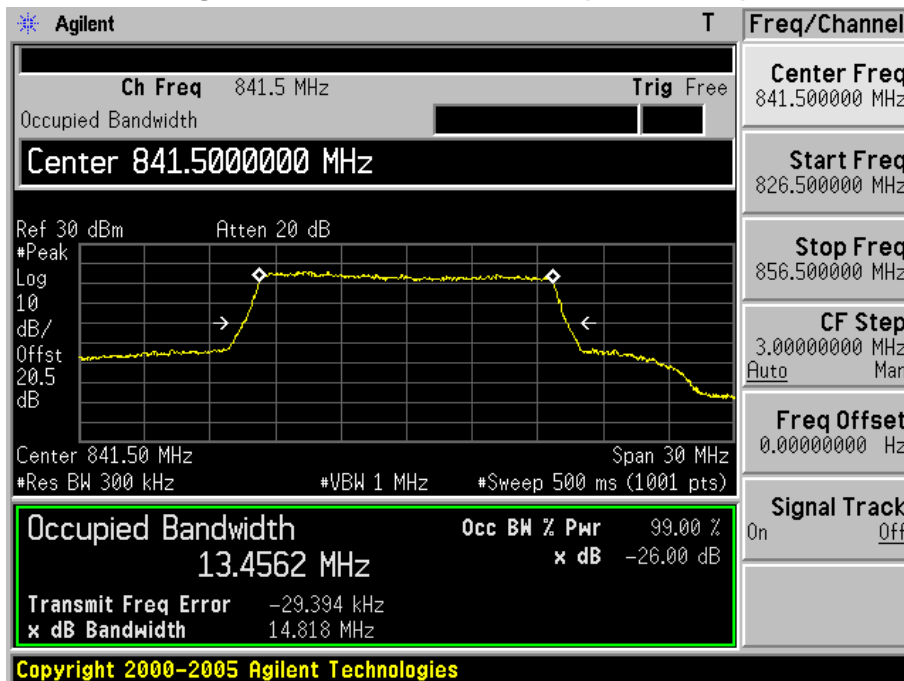


Figure Channel 26965 75RB0 (841.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26(10M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26740	819.00	9031.50	10091.00
26865	831.50	9058.30	10086.00
26990	844.00	9056.70	10146.00

Figure Channel 26740 50RB0 (819.00MHz)

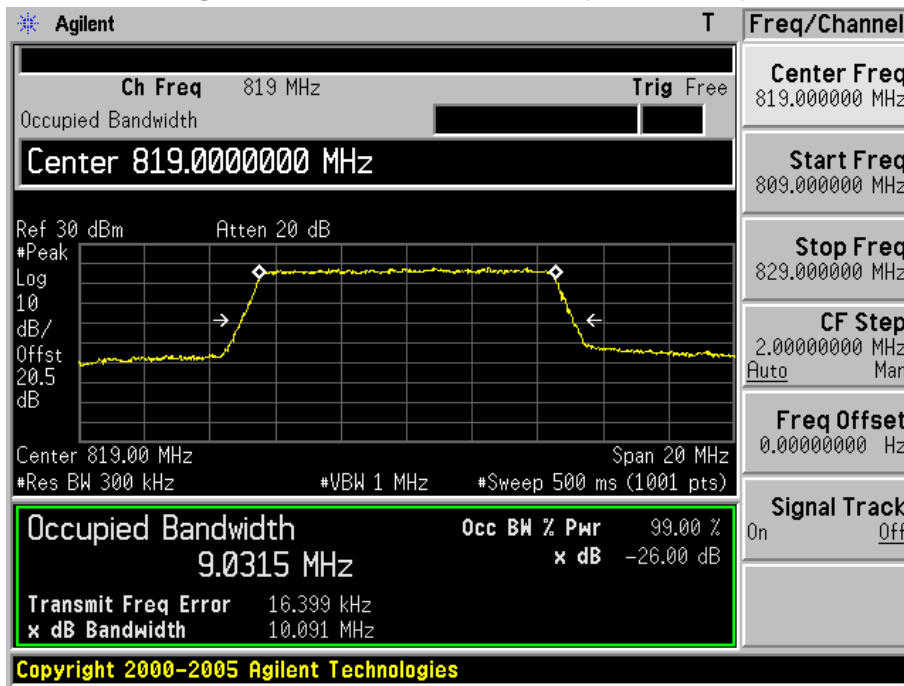


Figure Channel 26865 50RB0 (831.50MHz)

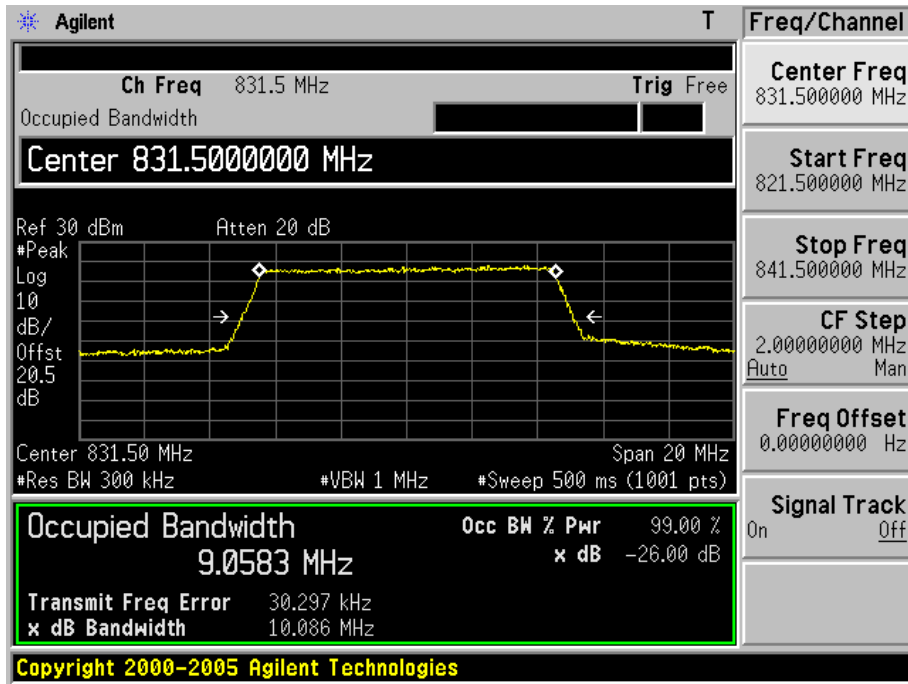
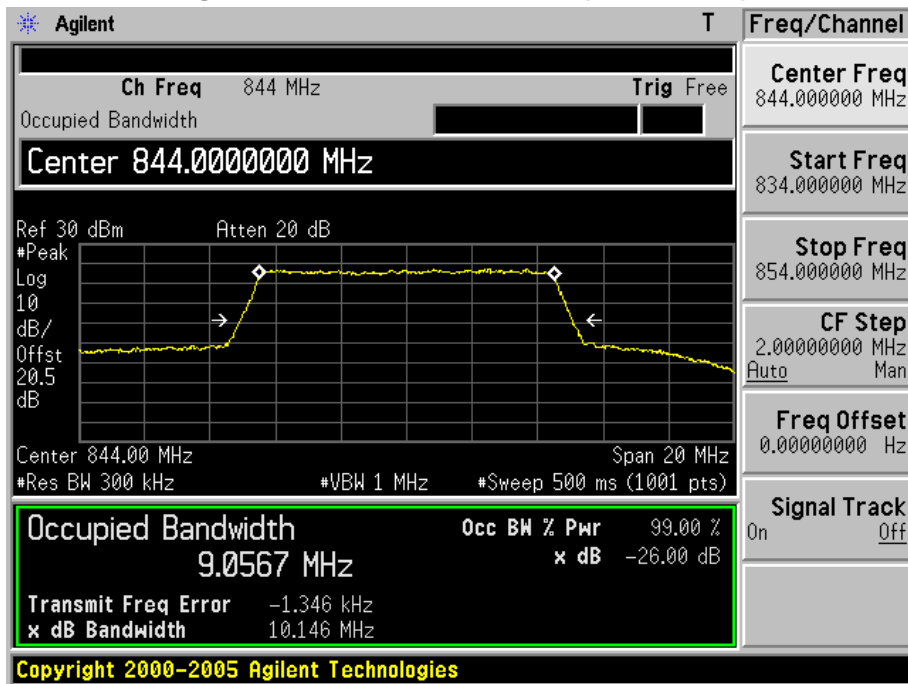


Figure Channel 26990 50RB0 (844.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26 (10M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26740	819.00	9004.60	10074.00
26865	831.50	9025.80	10080.00
26990	844.00	9029.70	10085.00

Figure Channel 26740 50RB0 (819.00MHz)

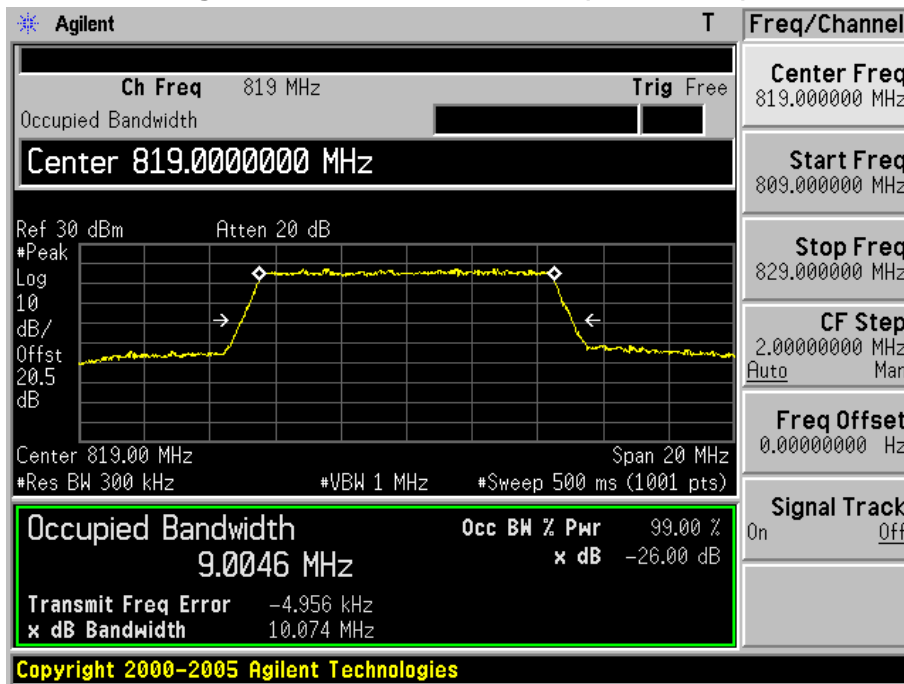


Figure Channel 26865 50RB0 (831.50MHz)

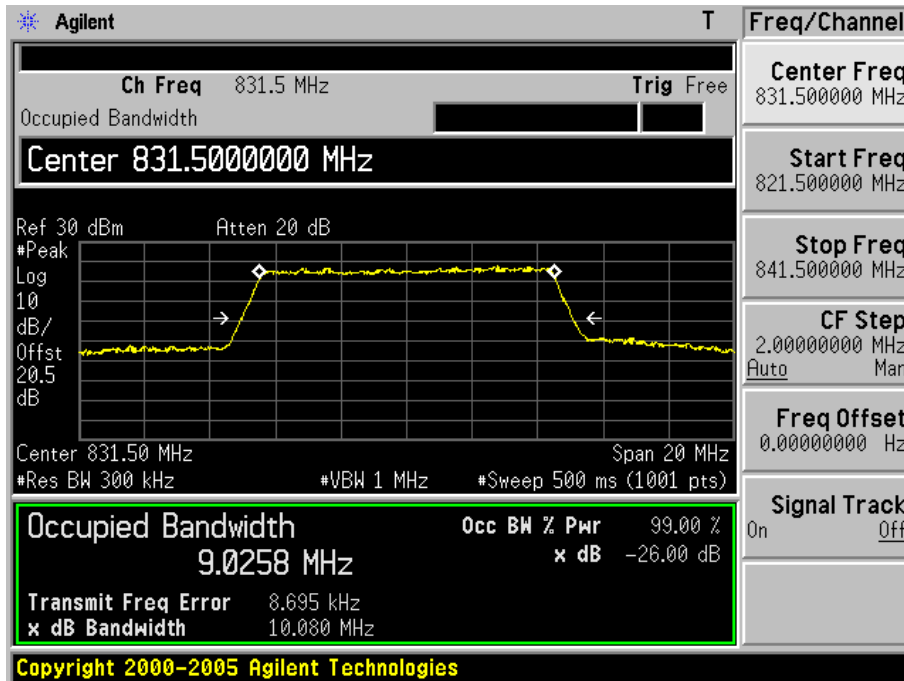
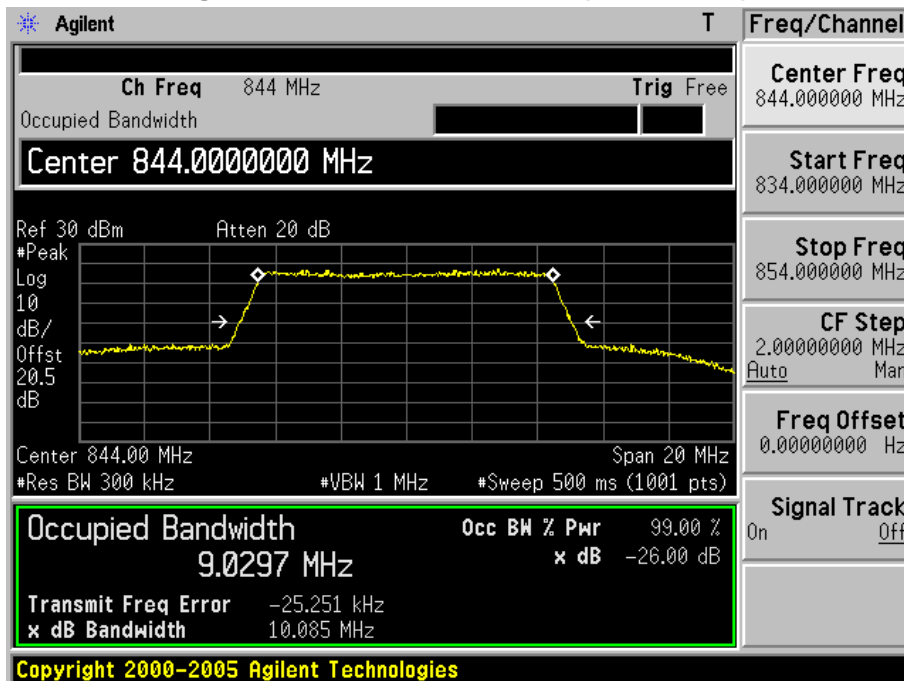


Figure Channel 26990 50RB0 (844.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26(5M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26715	816.50	4501.40	5093.00
26865	831.50	4506.20	5096.00
27015	846.50	4496.20	5072.00

Figure Channel 26715 25RB0 (816.50MHz)

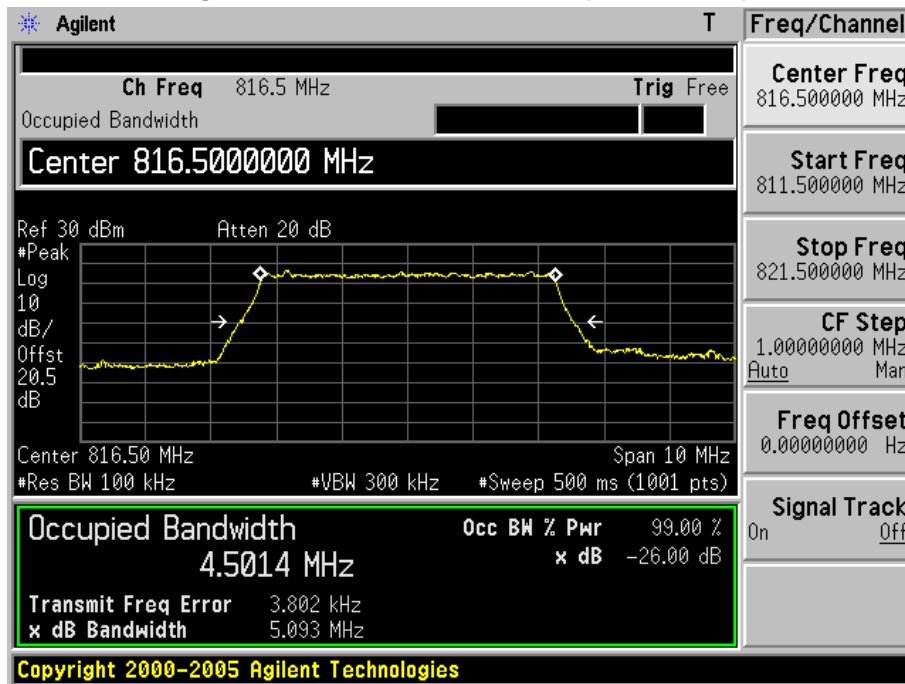


Figure Channel 26865 25RB0 (831.50MHz)

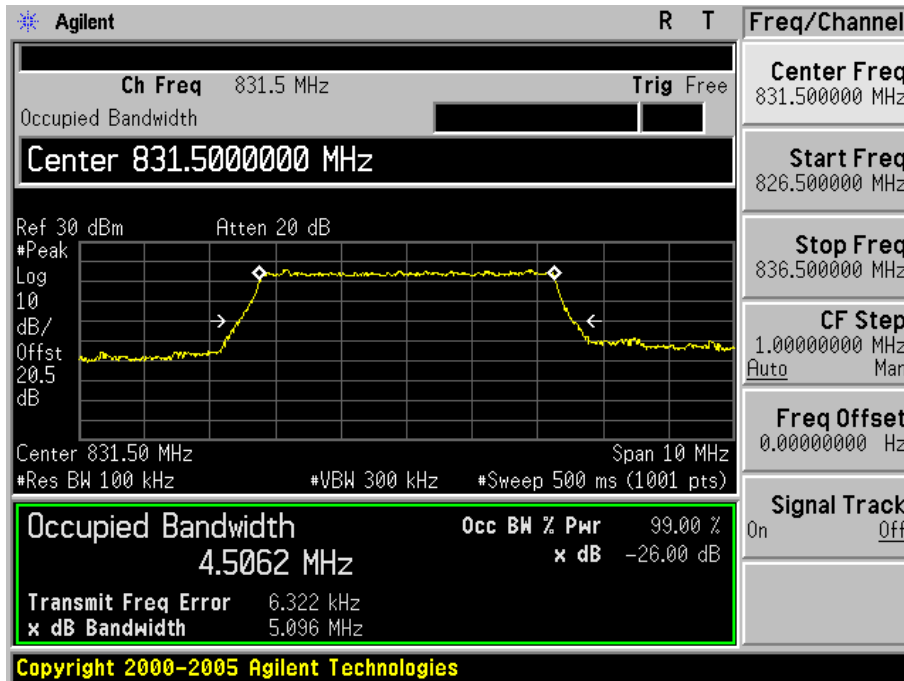
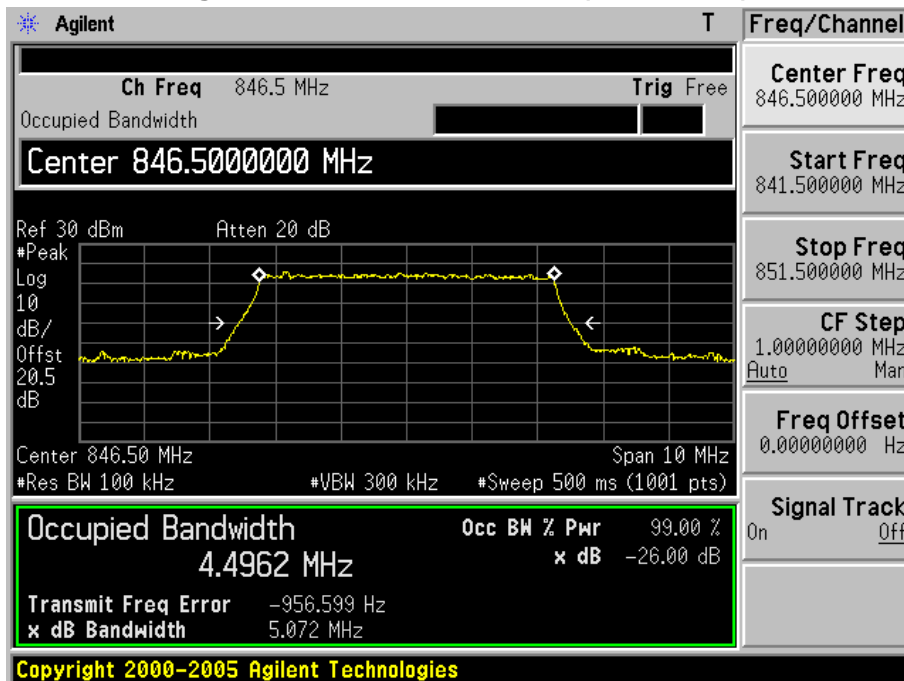


Figure Channel 20715 25RB0 (846.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26 (5M/16QAM)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26715	816.50	4484.00	5017.00
26865	831.50	4487.30	5032.00
27015	846.50	4474.30	5000.00

Figure Channel 26715 25RB0 (816.50MHz)

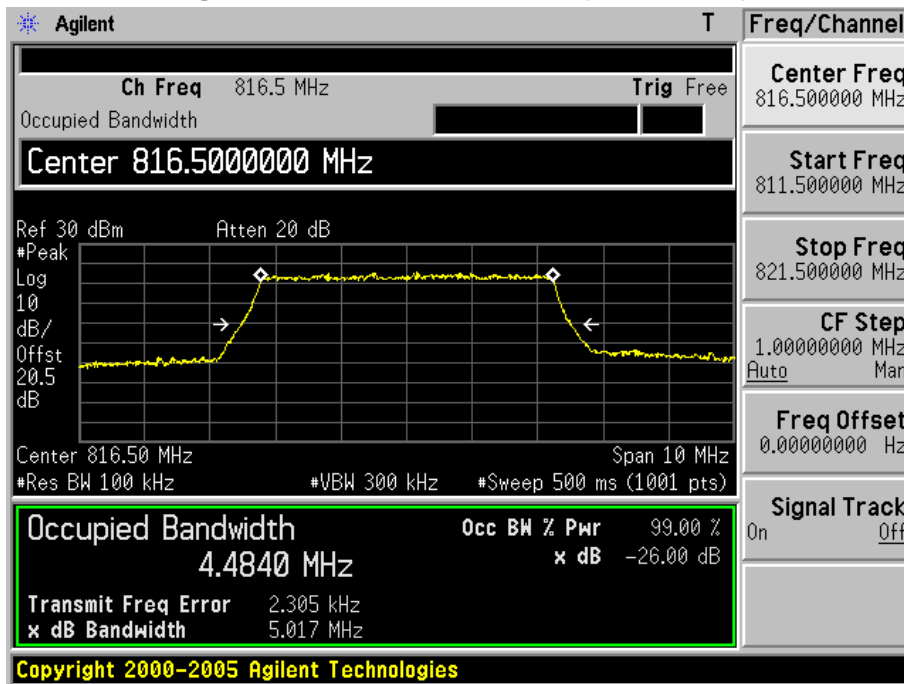


Figure Channel 26865 25RB0 (831.50MHz)

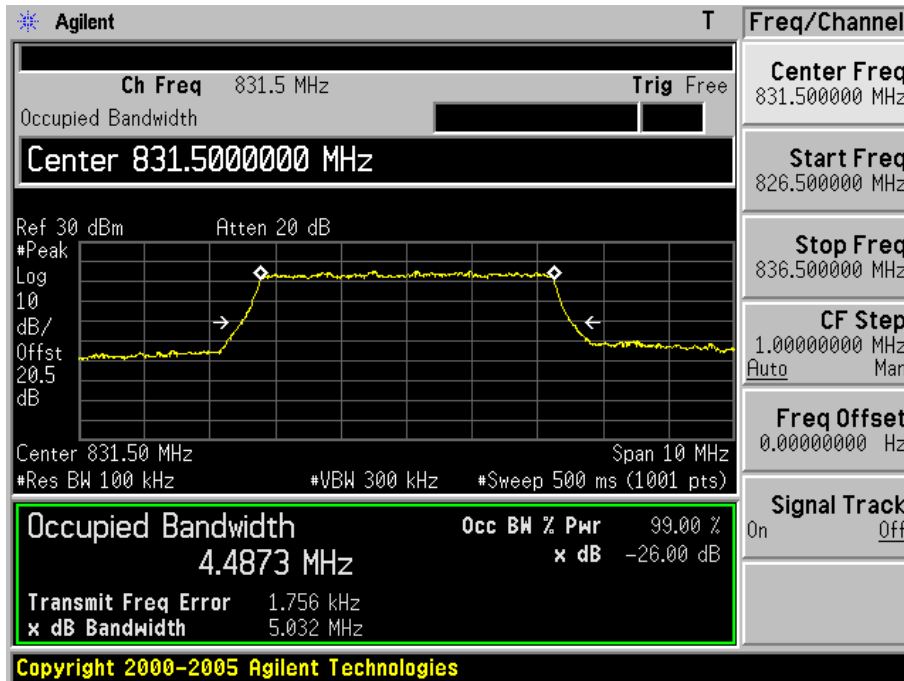
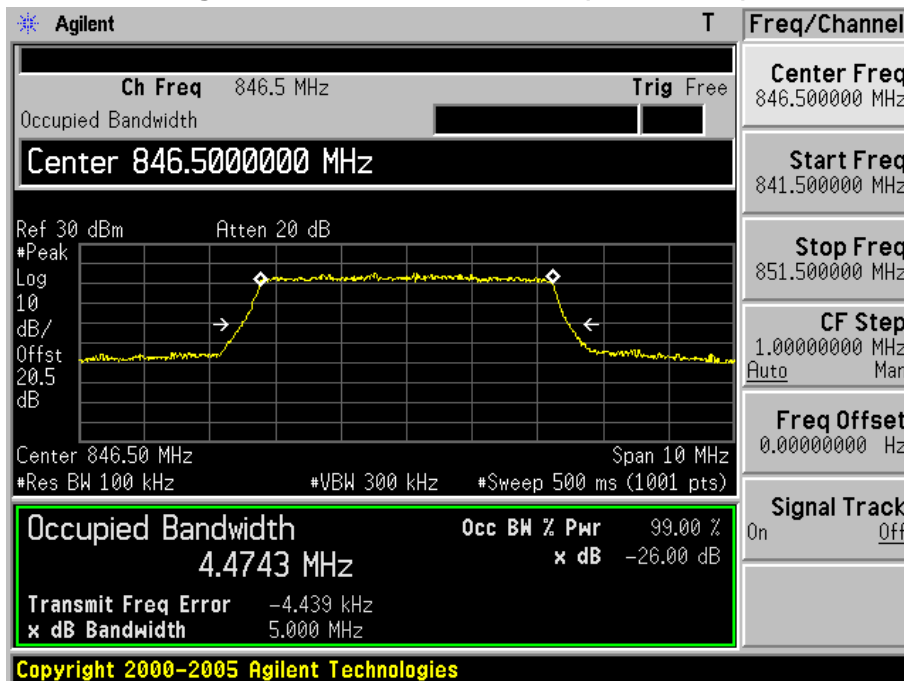


Figure Channel 27015 25RB0 (846.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26(3M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26705	815.50	2739.30	3149.00
26865	831.50	2738.80	3142.00
27025	847.50	2731.40	3122.00

Figure Channel 26705 15RB0 (815.50MHz)

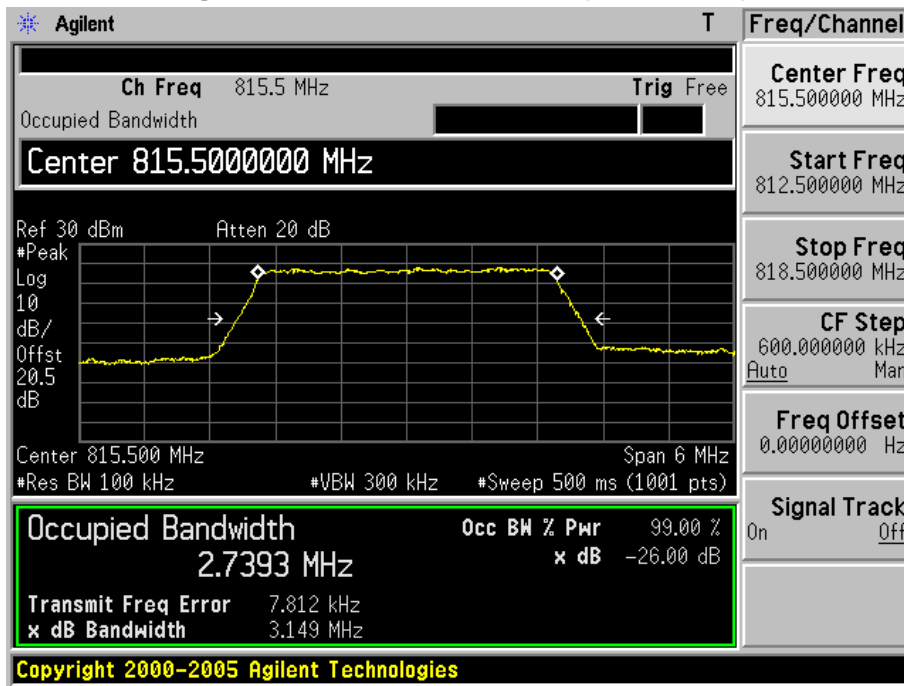


Figure Channel 26865 15RB0 (831.50MHz)

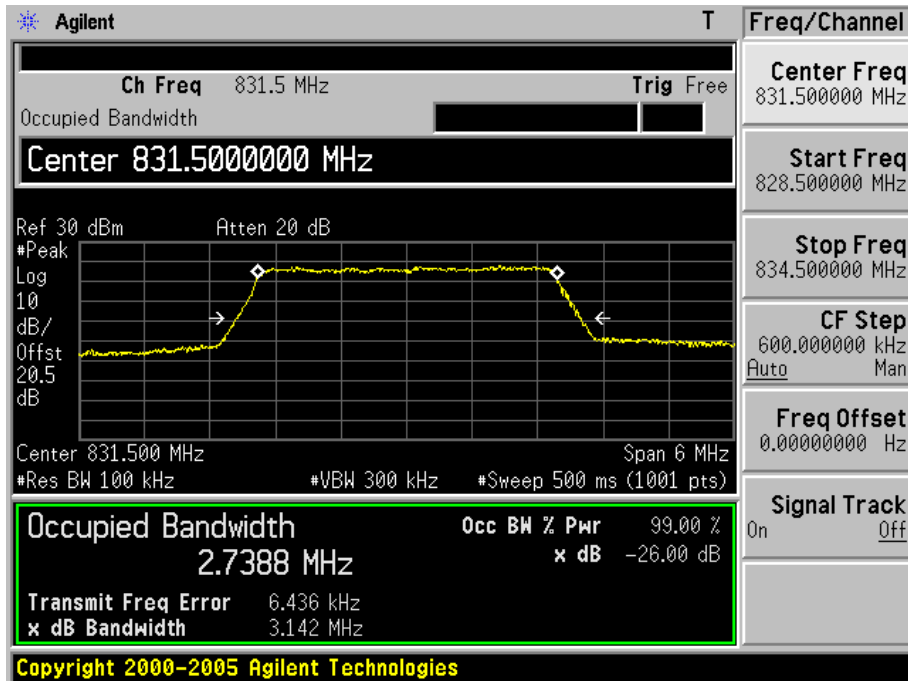
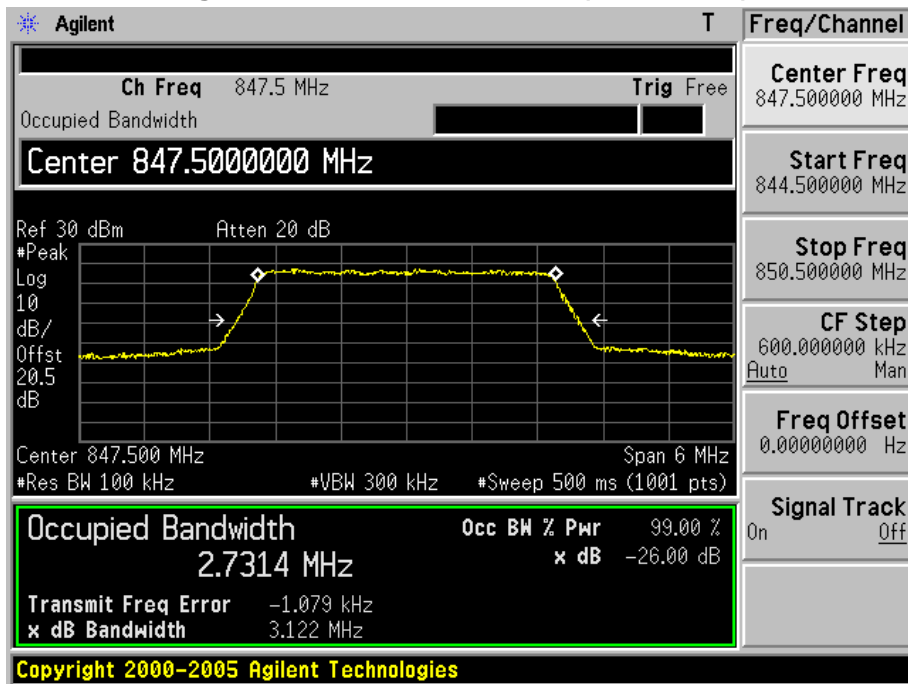


Figure Channel 27025 15RB0 (847.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26 (3M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26705	815.50	2739.90	3150.00
26865	831.50	2743.20	3181.00
27025	847.50	2733.50	3150.00

Figure Channel 26705 15RB0 (815.50MHz)

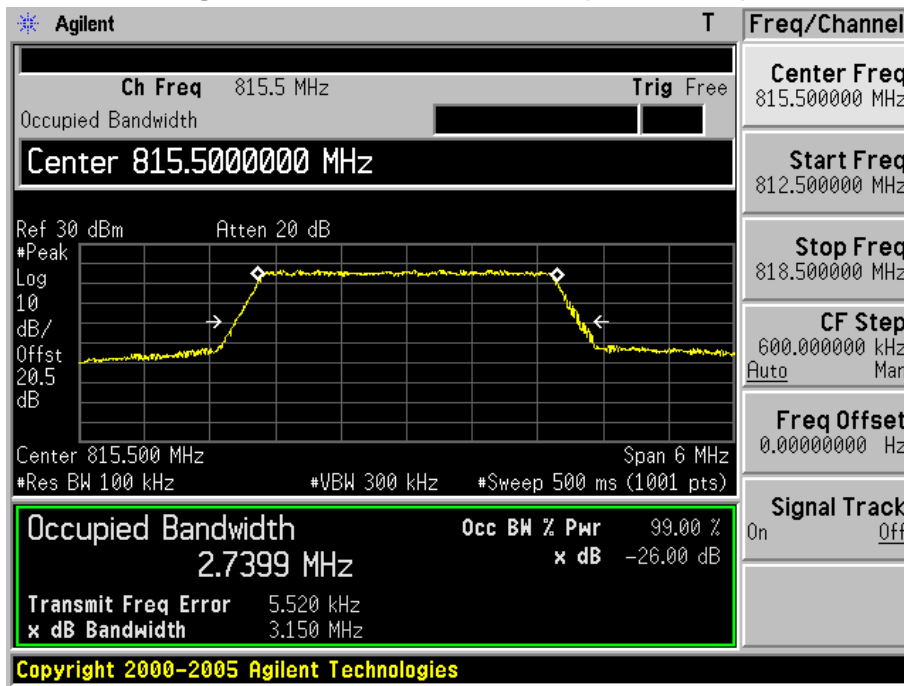


Figure Channel 26868 15RB0 (831.50MHz)

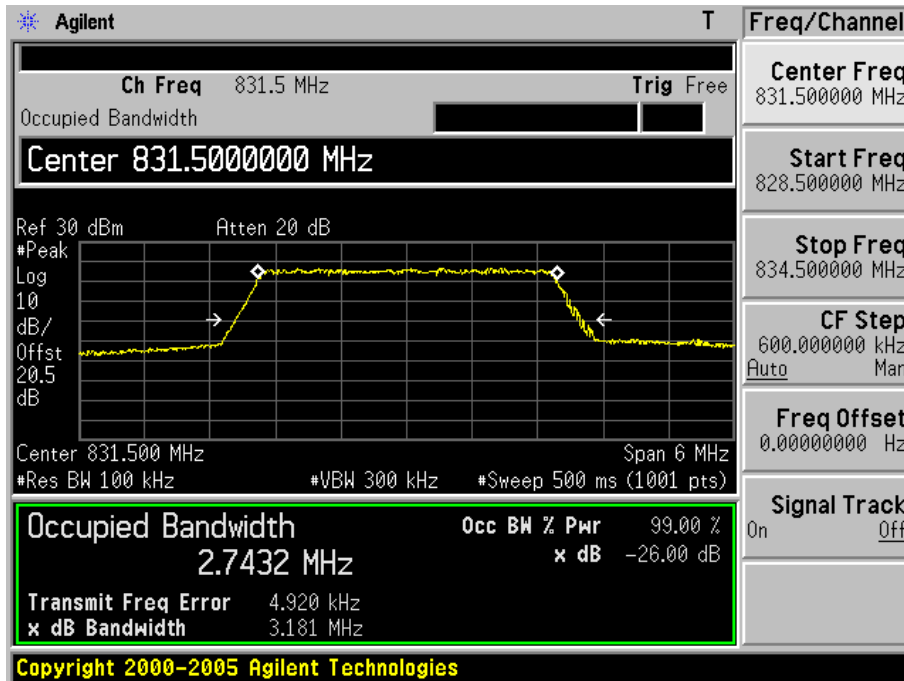
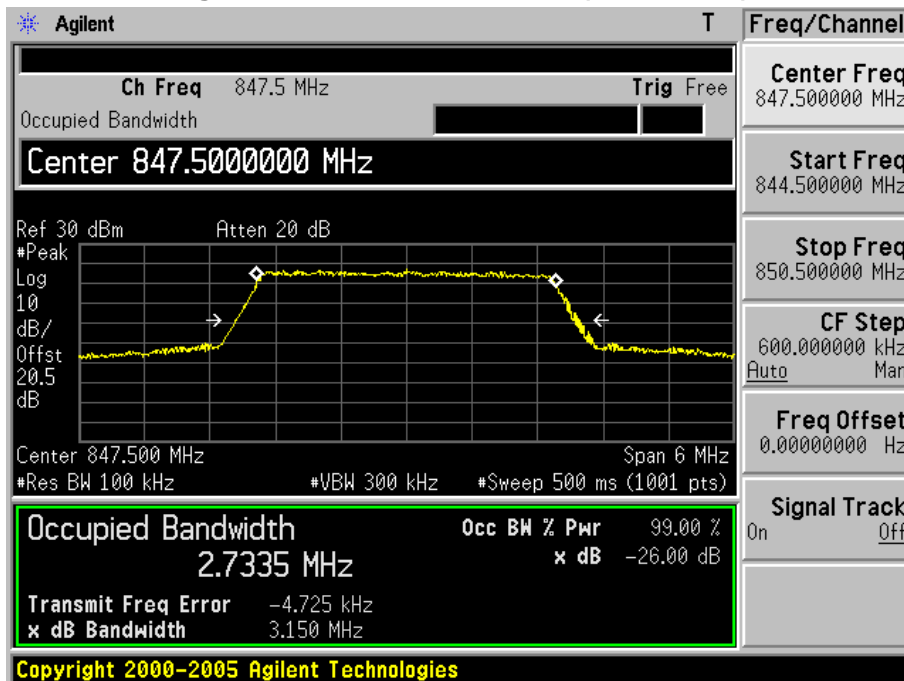


Figure Channel 27025 15RB0 (847.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26(1.4M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26697	814.70	1091.20	1296.00
26868	831.50	1092.00	1380.00
27033	848.30	1091.00	1300.00

Figure Channel 26697 7RB0 (814.70MHz)

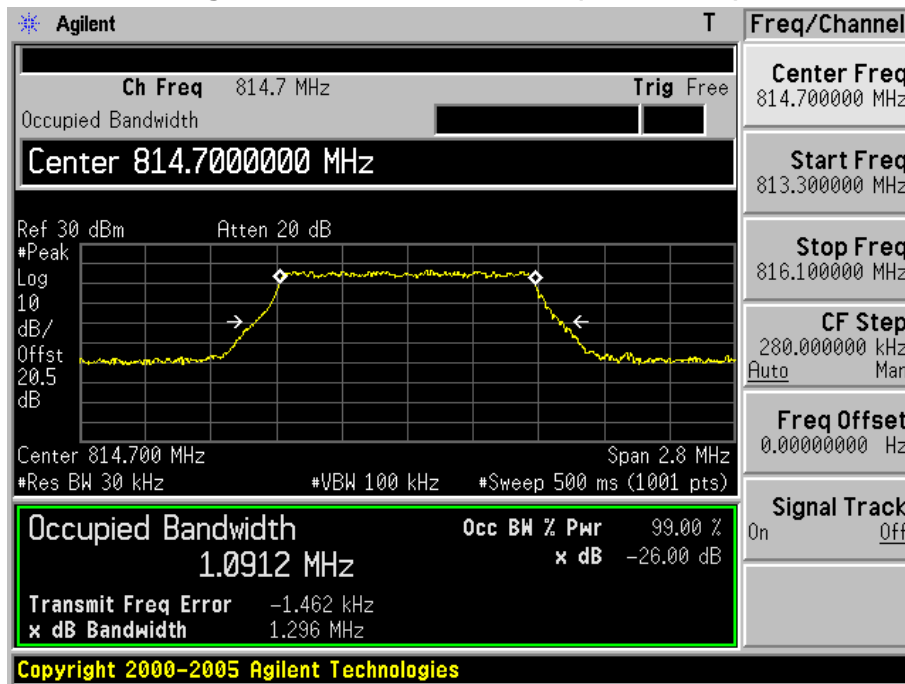


Figure Channel 26865 7RB0 (831.50MHz)

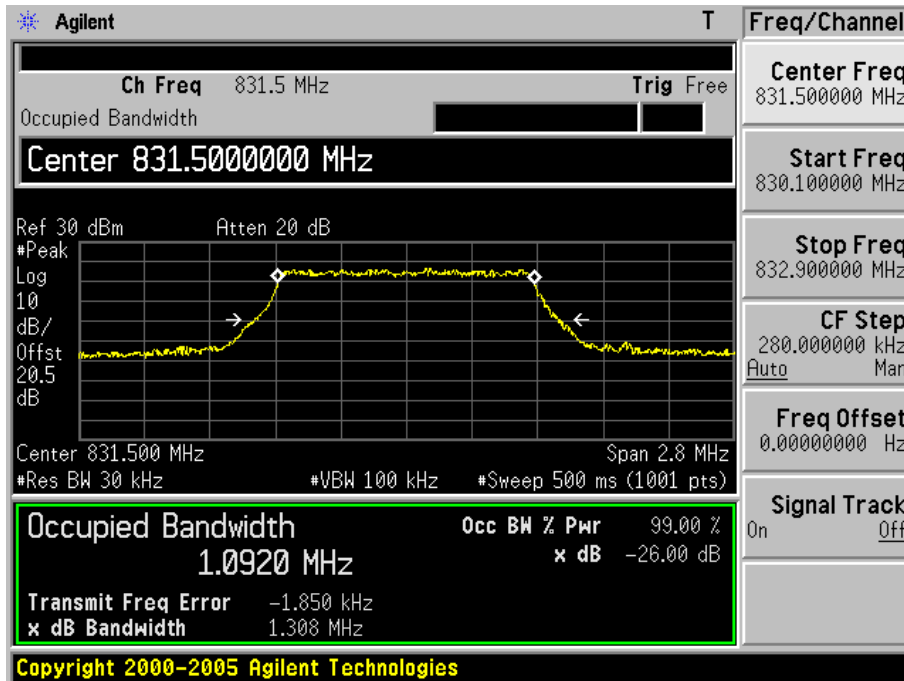
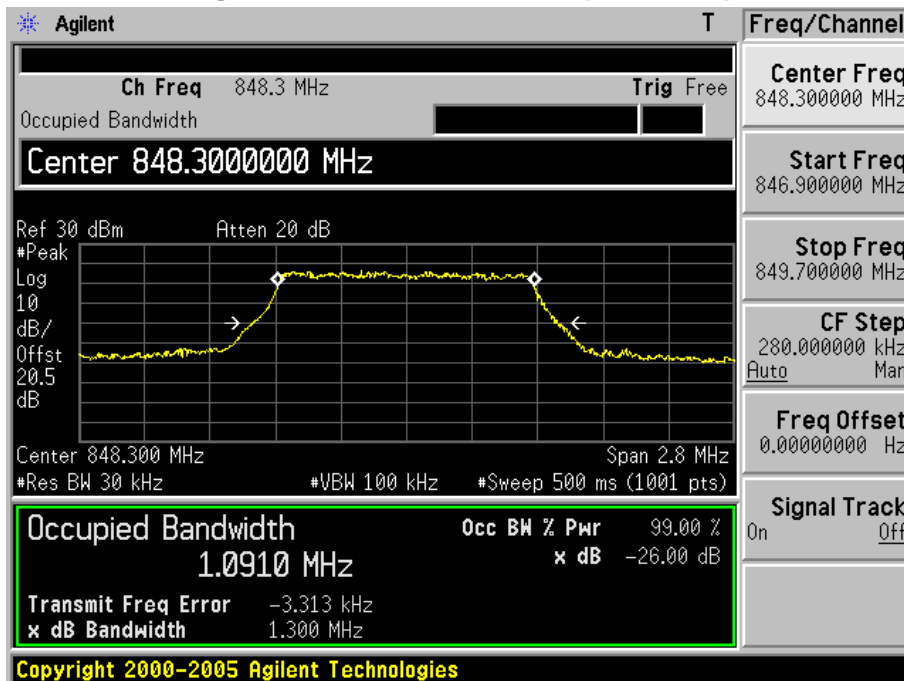


Figure Channel 27033 7RB0 (848.3MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: LTE Band 26 (1.4M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
26697	814.70	1103.90	1312.00
26868	831.50	1105.00	1310.00
27033	848.30	1099.90	1315.00

Figure Channel 26697 7RB0 (814.70MHz)

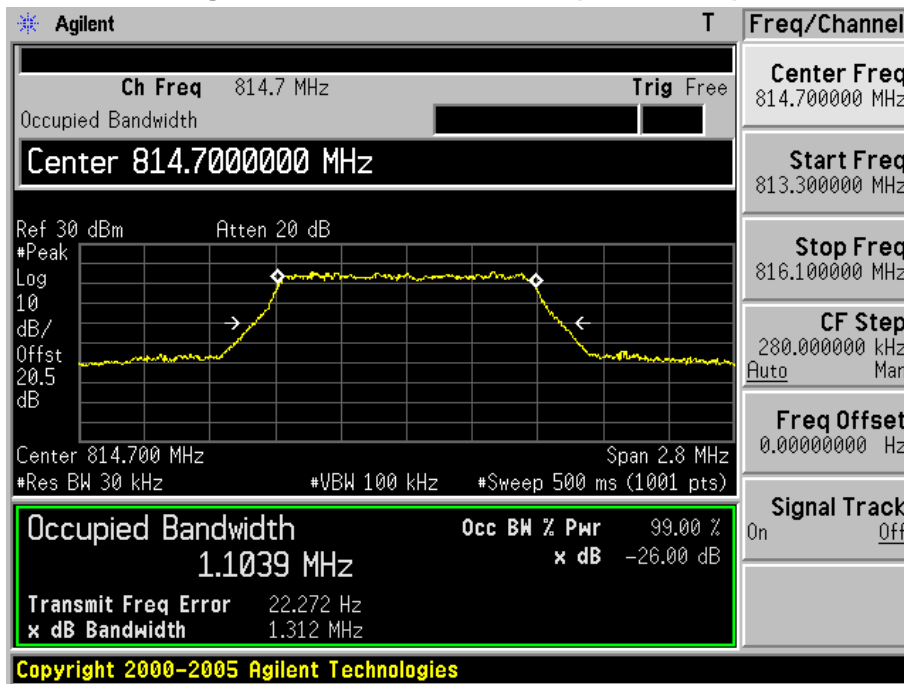


Figure Channel 26865 7RB0 (831.50MHz)

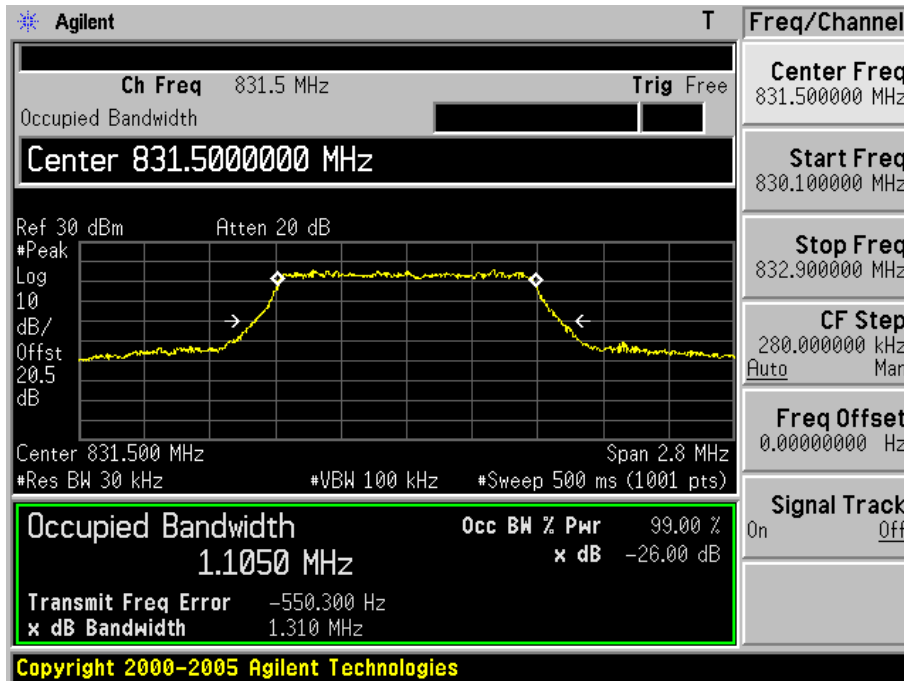
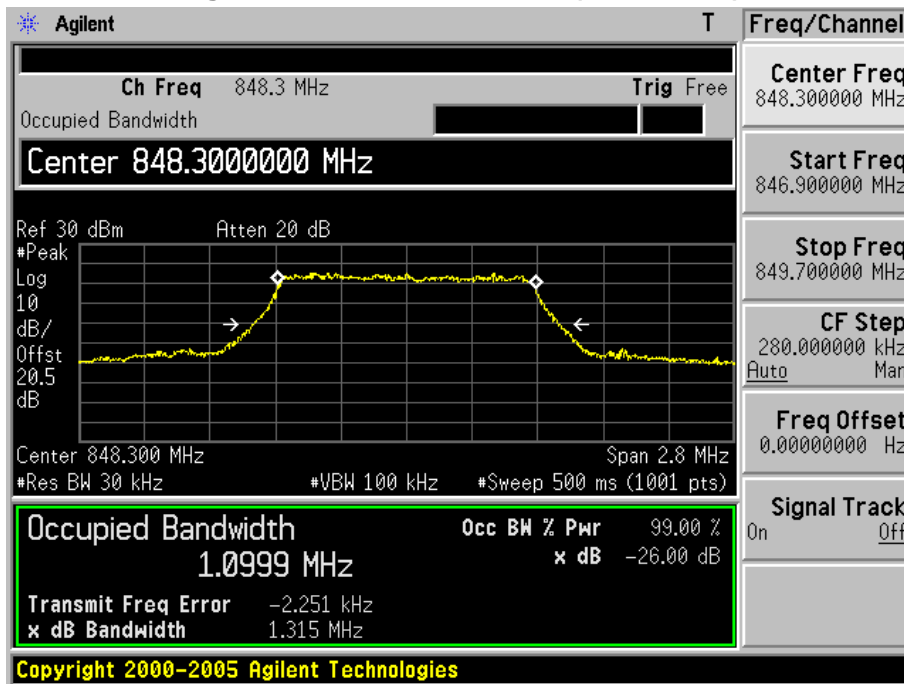


Figure Channel 27033 7RB0 (848.30MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: LTE Band 41(20M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
39750	2506.00	17899.20	20956.00
40620	2593.00	17902.30	20890.0
41490	2680.00	17919.00	20937.00

Figure Channel 39750 100RB0 (2506.00MHz)

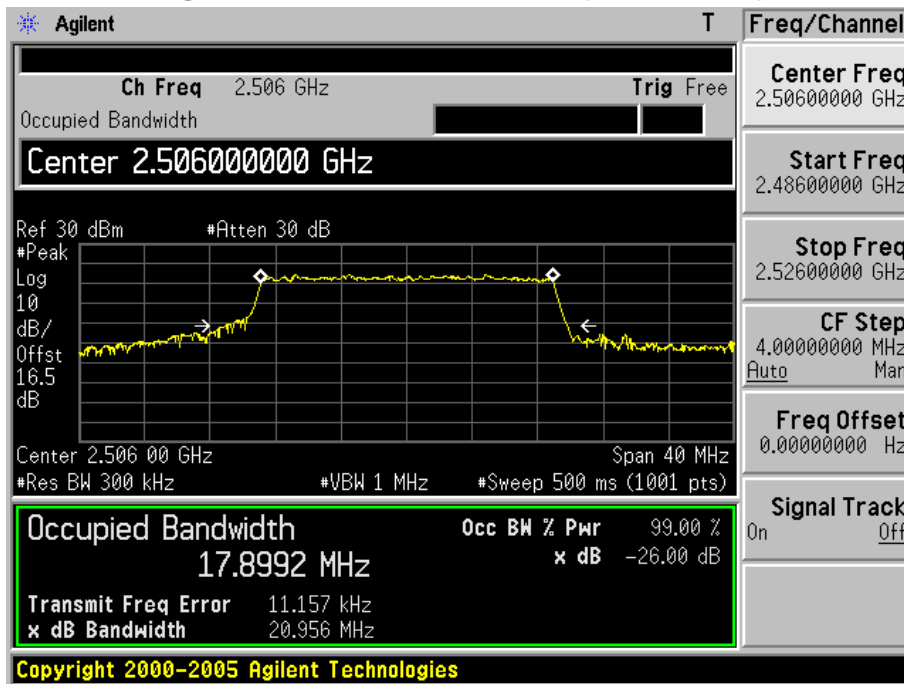


Figure Channel 40620 100RB0 (2593.00MHz)

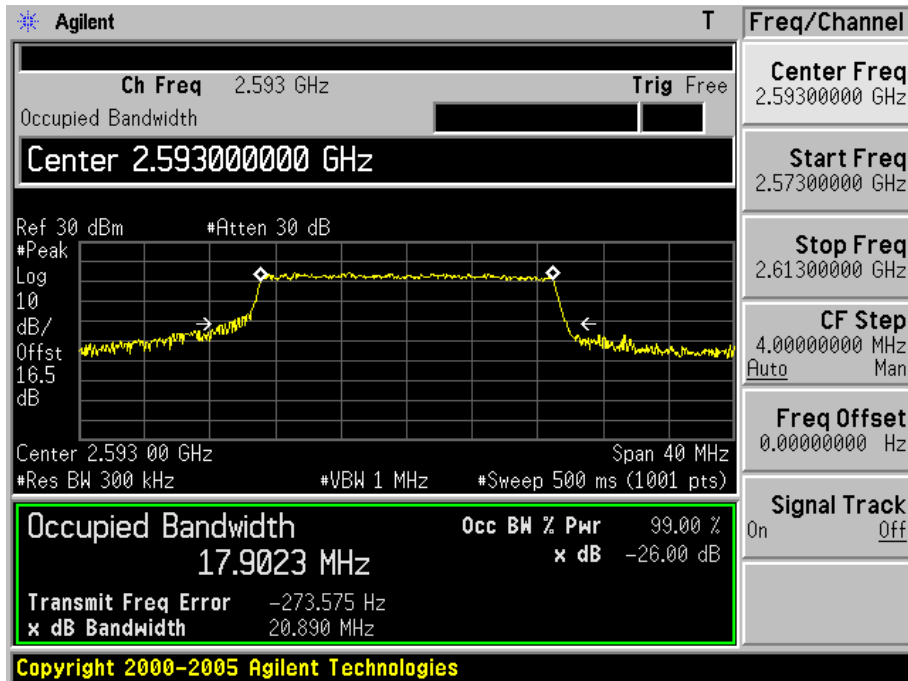
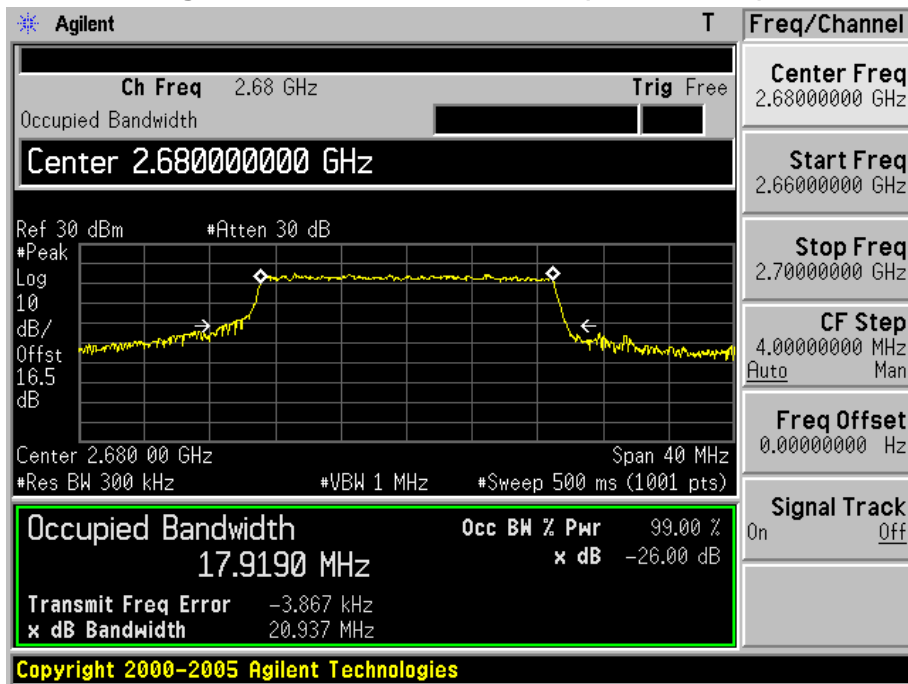


Figure Channel 41490 100RB0 (2680.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: LTE Band 41 (20M/16QAM)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
39750	2506.00	17849.30	20621.00
40620	2593.00	17845.10	20932.00
41490	2680.00	17840.90	21071.00

Figure Channel 39750 100RB0 (2506.0MHz)

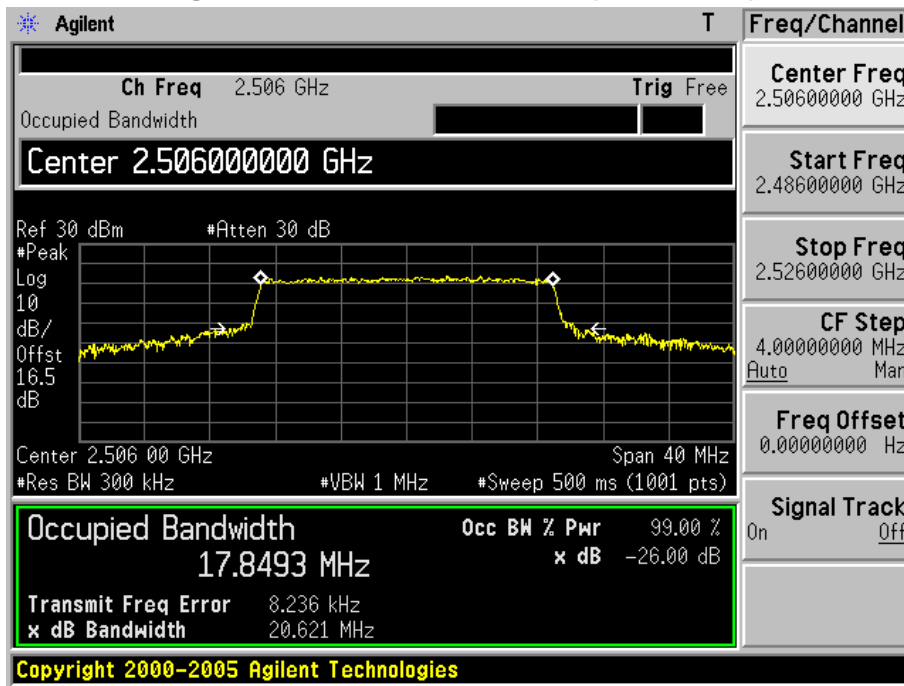


Figure Channel 40620 100RB0 (2593.00MHz)

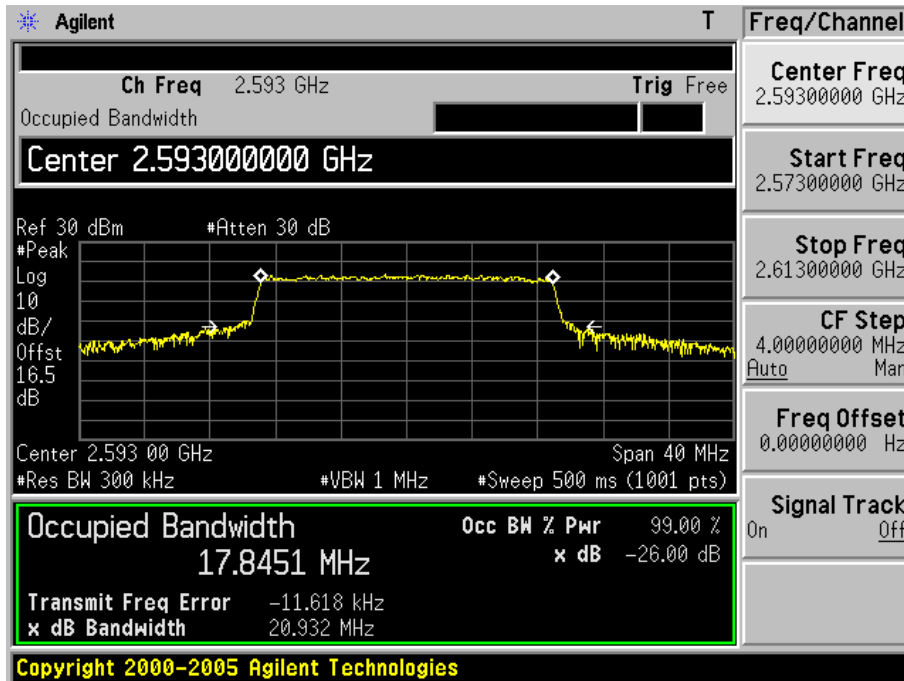
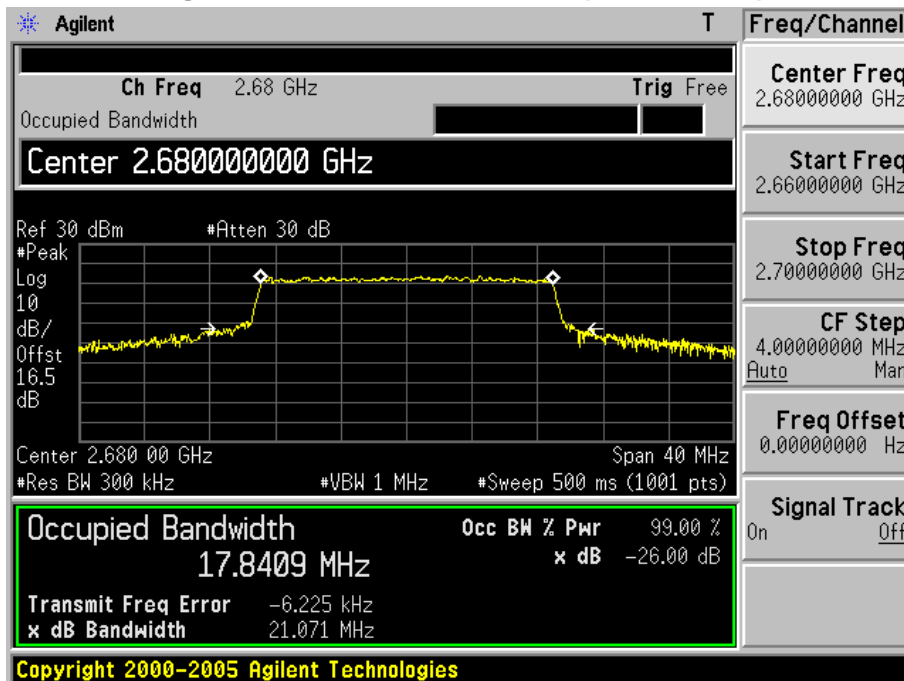


Figure Channel 41490 100RB0 (2680.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: LTE Band 41(15M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
39725	2503.50	13389.40	15610.00
40620	2593.00	13398.20	16121.00
41515	2682.50	13398.90	16356.00

Figure Channel 39725 75RB0 (2503.50MHz)

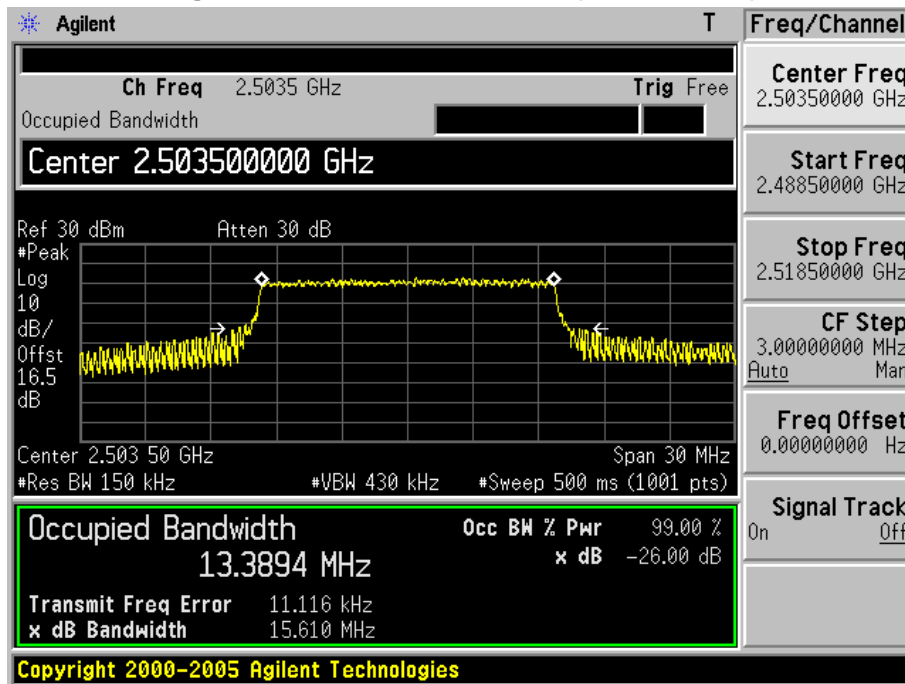


Figure Channel 40620 75RB0 (2593.00MHz)

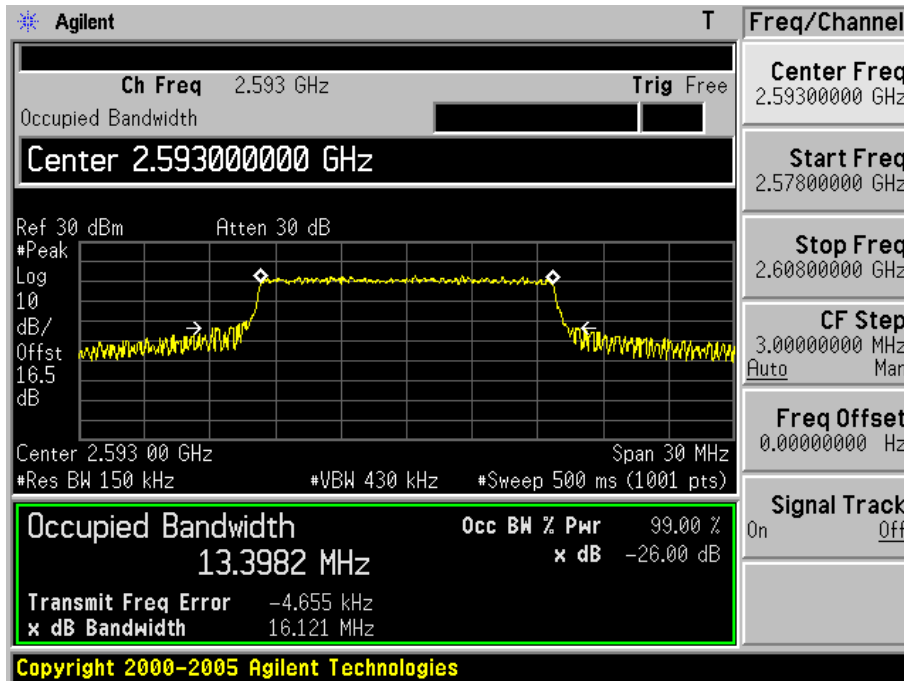
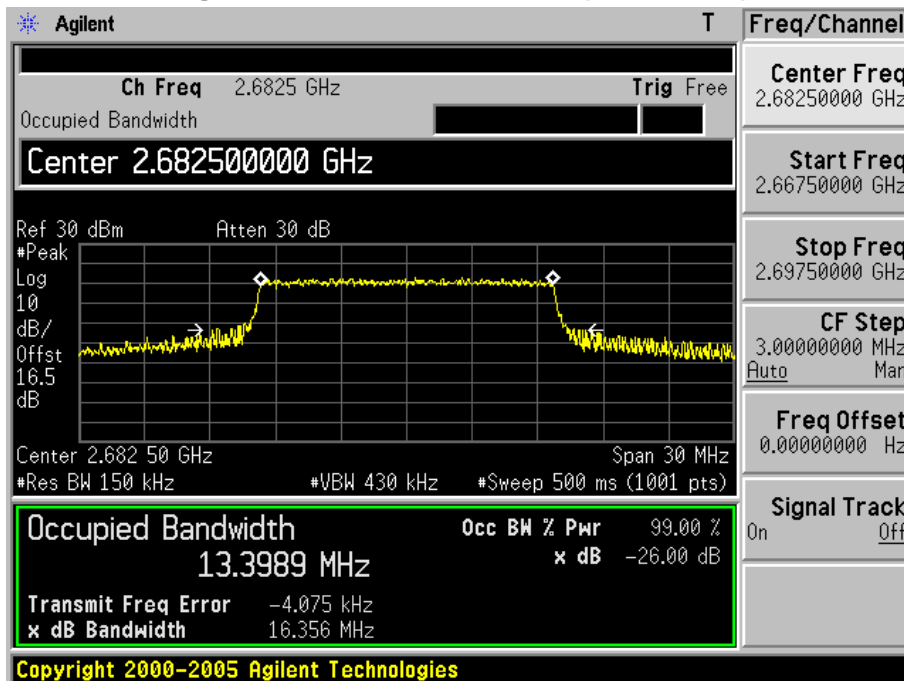


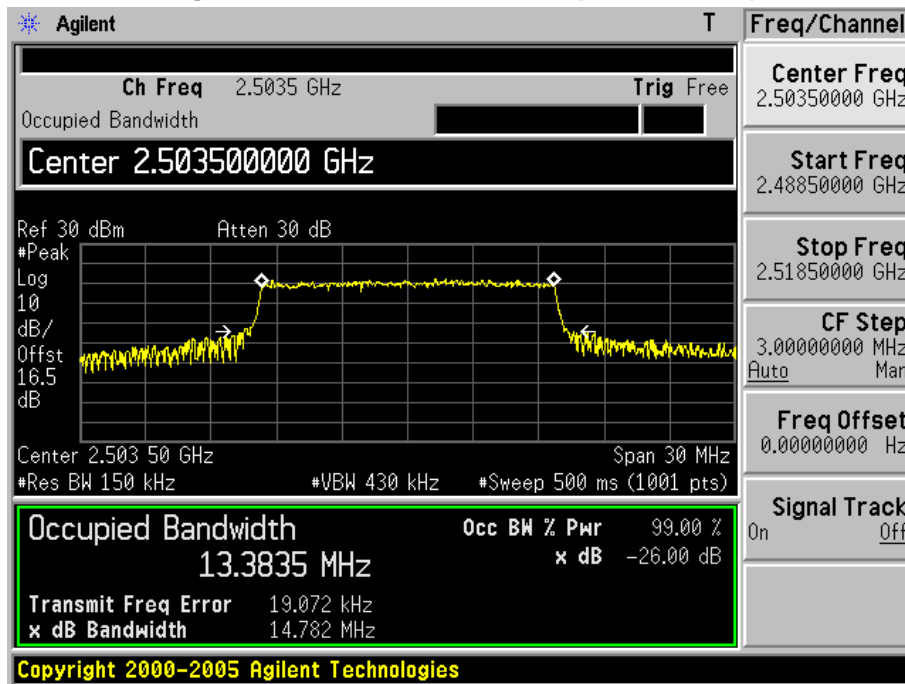
Figure Channel 41515 75RB0 (2682.5MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: LTE Band VII (15M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
39725	2503.50	13383.50	14782.00
40620	2593.00	13400.70	14731.00
41515	2682.50	13396.70	14776.00

Figure Channel 39725 75RB0 (2503.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: LTE Band 41(10M/QPSK)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
39700	2501.00	8999.80	10034.00
40620	2593.00	8994.30	10043.00
41540	2685.00	8897.40	9683.00

Figure Channel 39700 50RB0 (2501.00MHz)

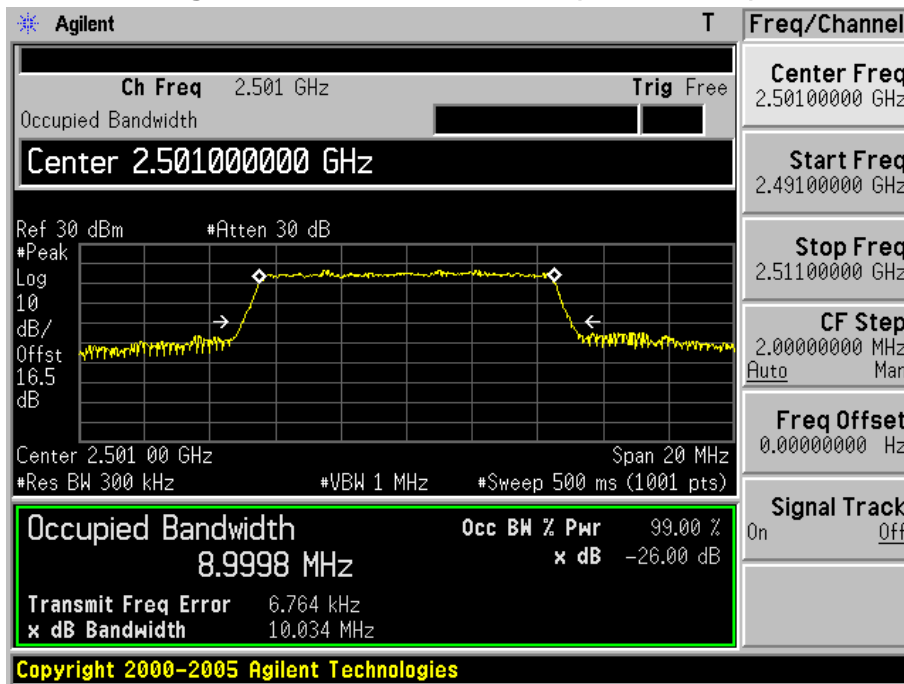


Figure Channel 40620 50RB0 (2593.00MHz)

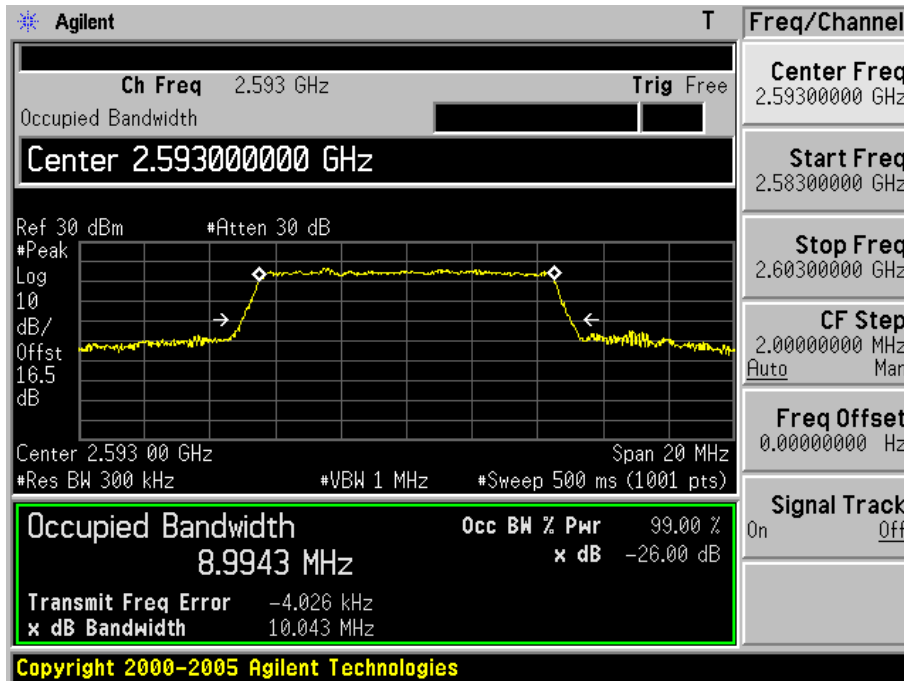
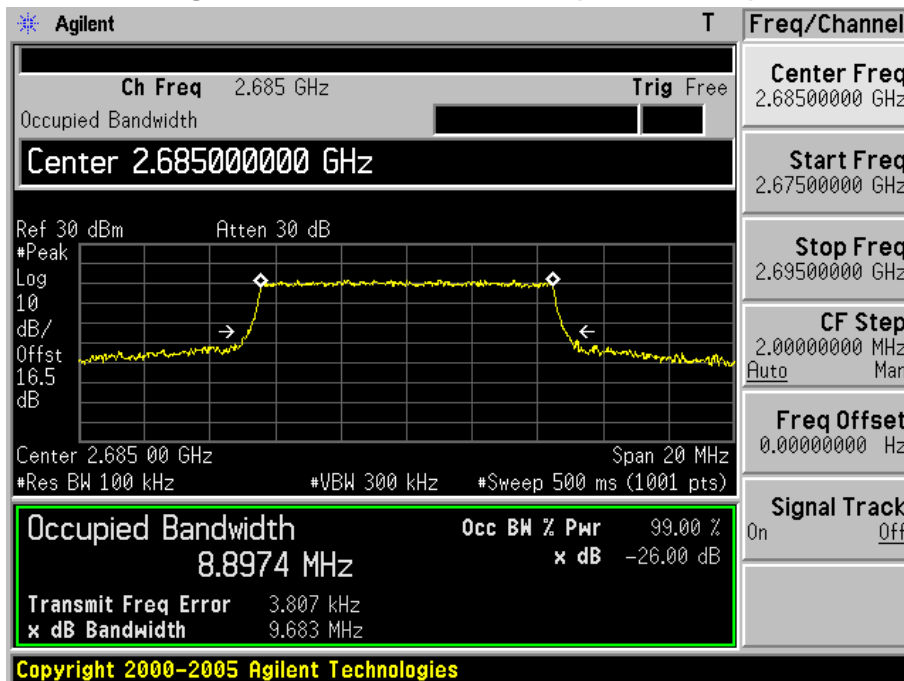


Figure Channel 41540 50RB0 (2685.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: LTE Band 41 (10M/16QAM)		
Date of Test	2014/12/06	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
39700	2501.00	8888.80	9663.00
40620	2593.00	8887.70	9550.00
41540	2685.00	8892.00	9620.00

Figure Channel 39700 50RB0 (2501.00MHz)

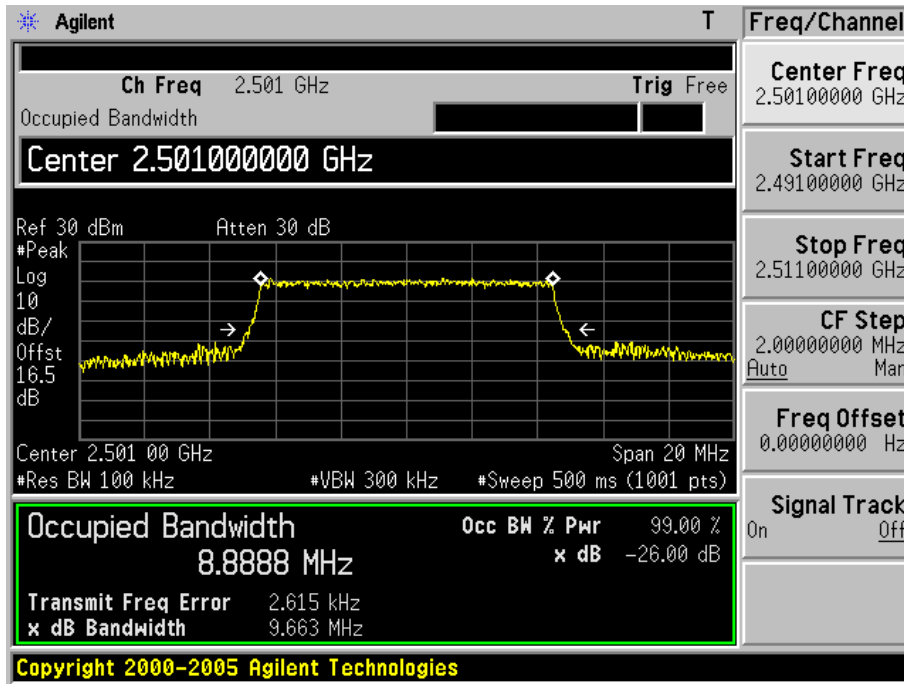


Figure Channel 40620 50RB0 (2593.00MHz)

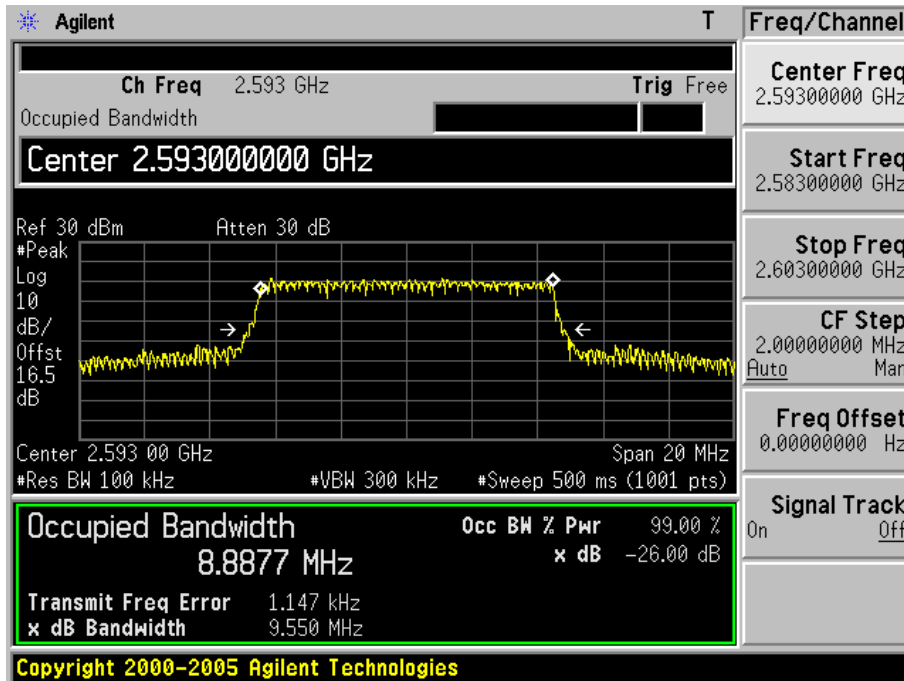
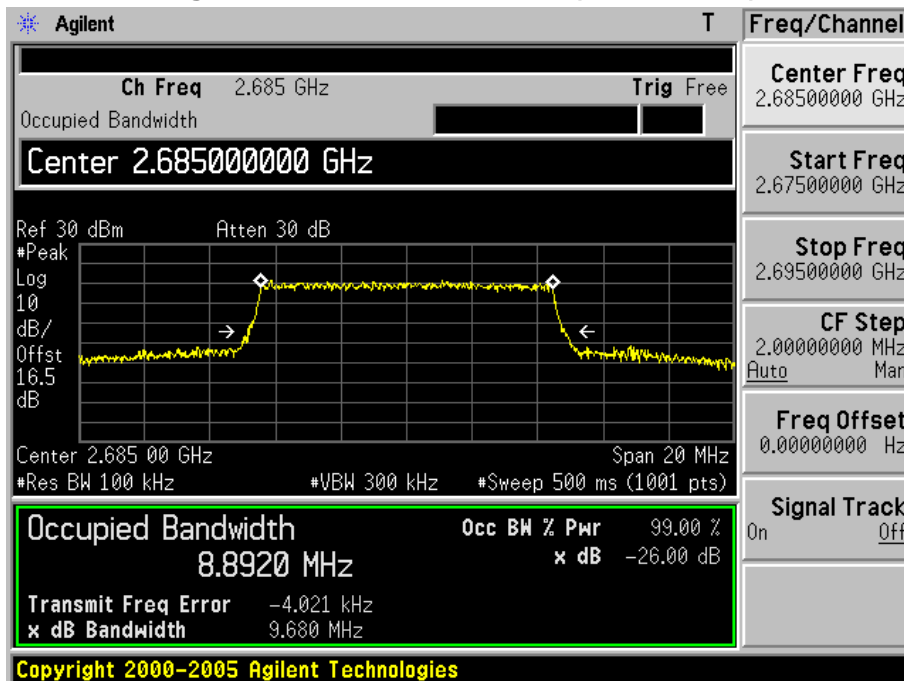


Figure Channel 41540 50RB0 (2685.00MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: LTE Band 41(5M/QPSK)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
39675	2498.50	4489.40	5046.00
40620	2593.00	4491.80	5038.00
41565	2687.50	4492.60	5071.00

Figure Channel 39675 25RB0 (2498.5MHz)

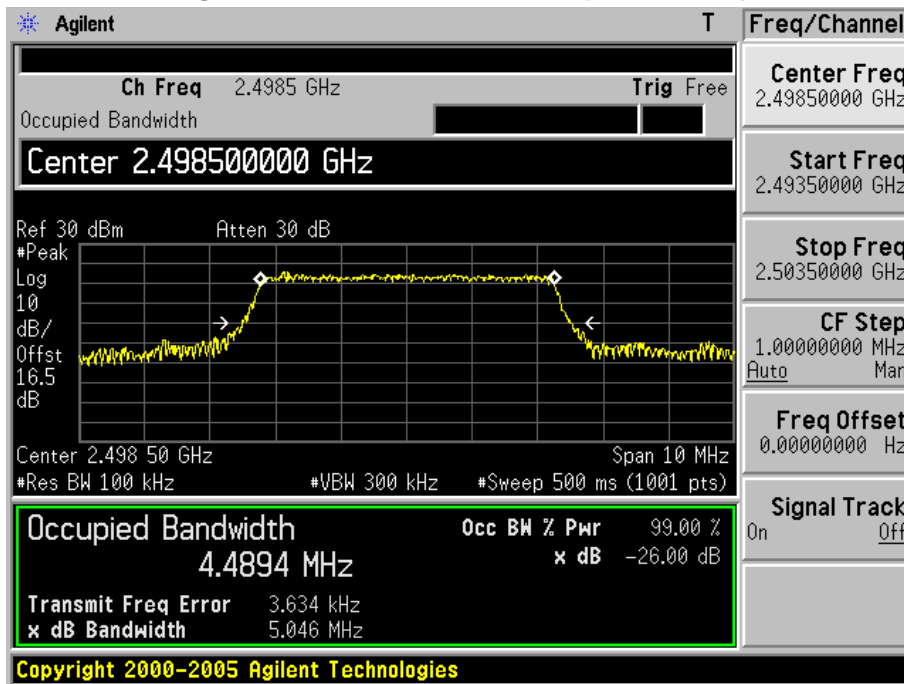


Figure Channel 40620 25RB0 (2593.00MHz)

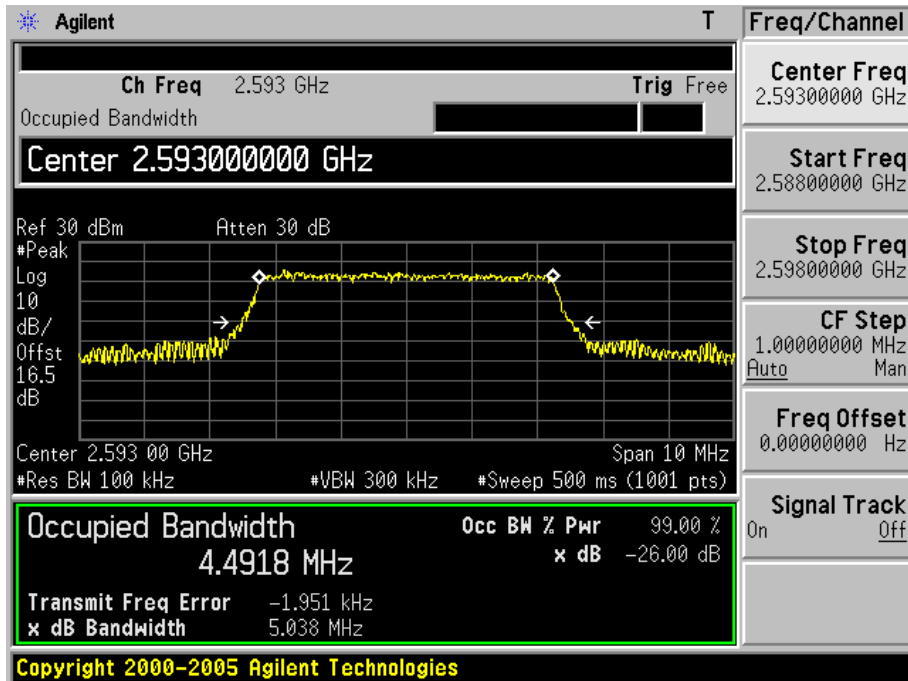
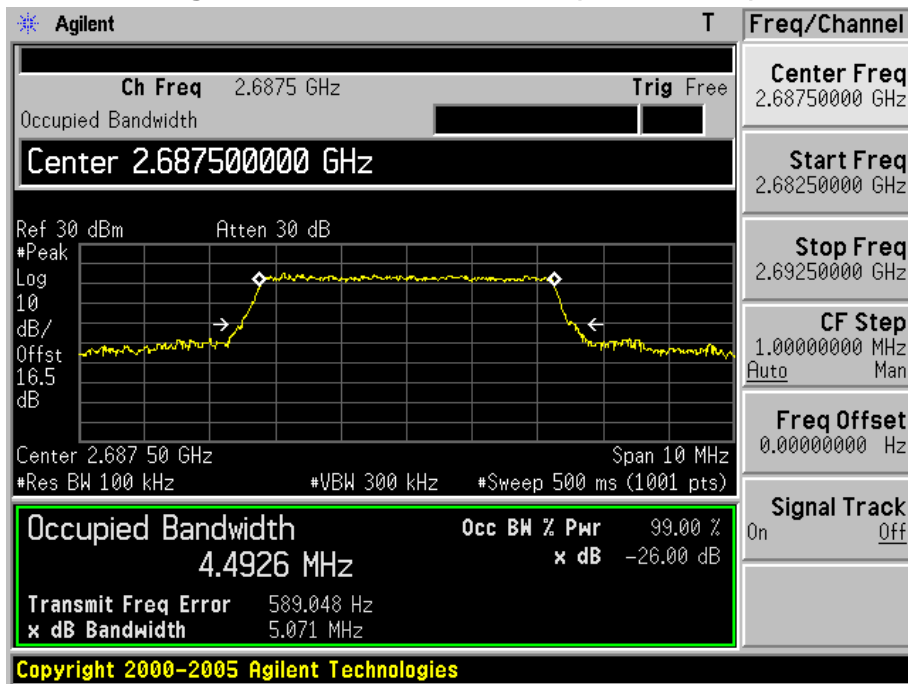


Figure Channel 41565 25RB0 (2687.50MHz)



Product	Wireless Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 4: LTE Band 41 (5M/16QAM)		
Date of Test	2014/12/23	Test Site	AC6

Channel No.	Frequency (MHz)	99% Occupied Bandwidth (kHz)	-26dB Occupied Bandwidth (kHz)
39675	2498.50	4488.70	5003.00
40620	2593.00	4489.90	5027.00
41565	2687.50	4491.40	5034.00

Figure Channel 39675 25RB0 (2498.5MHz)

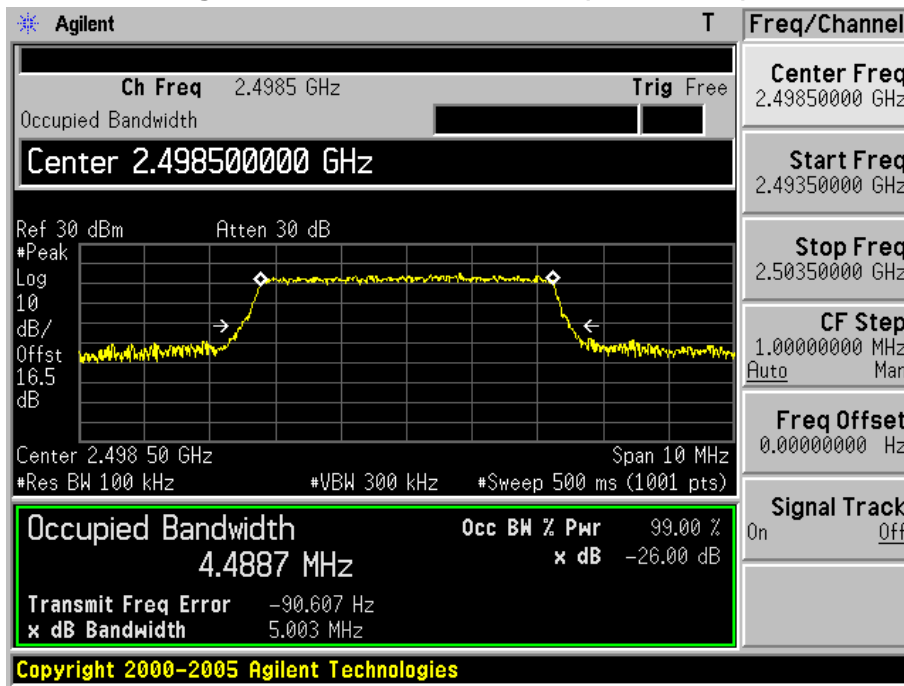


Figure Channel 40620 25RB0 (2593.00MHz)

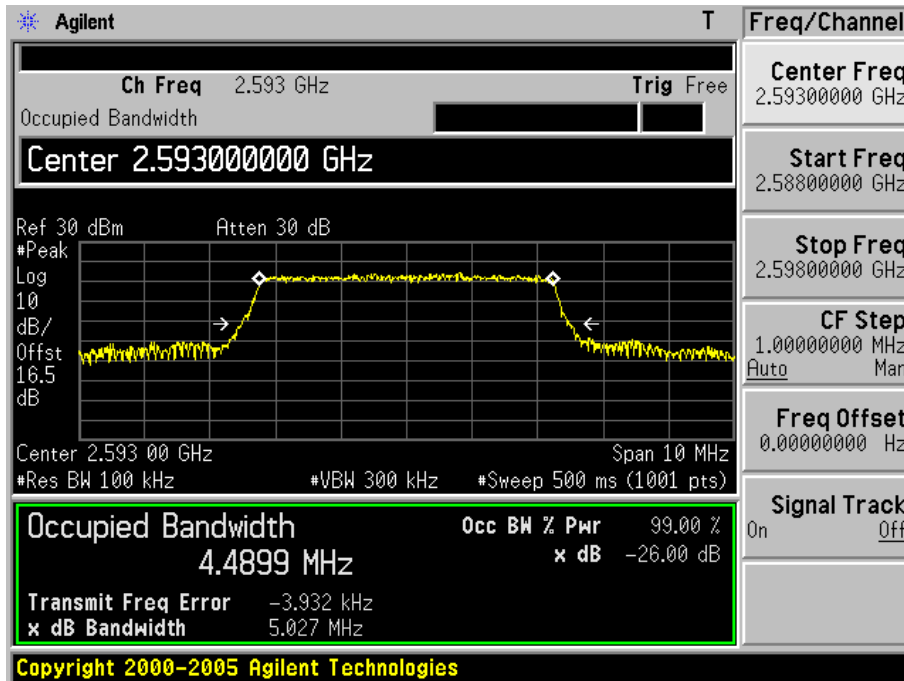
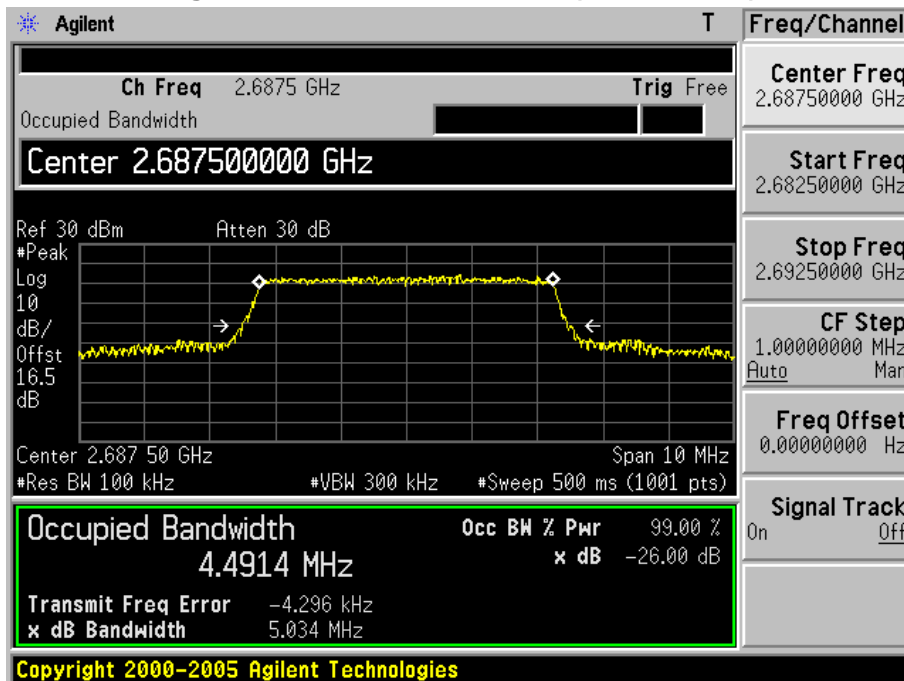


Figure Channel 41565 25RB0 (2687.50MHz)



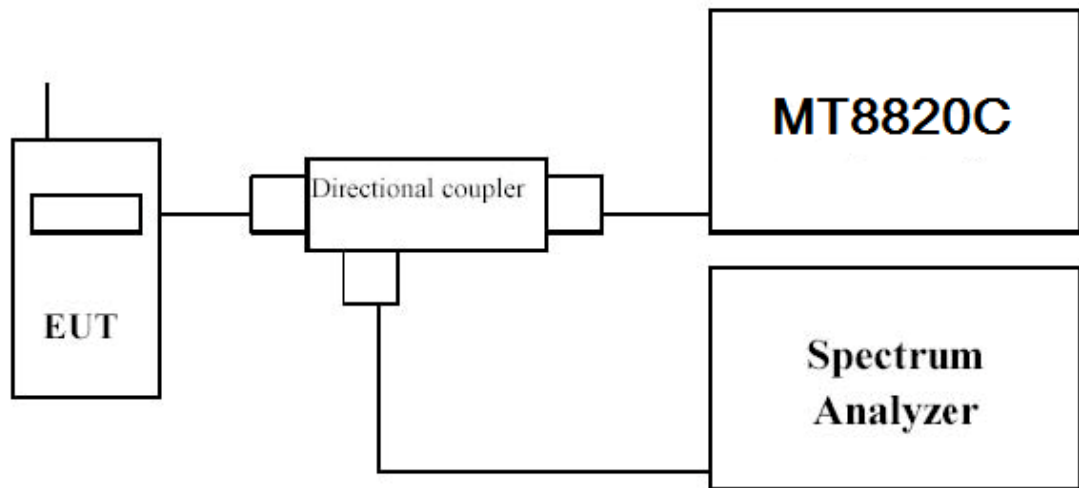
6. Conducted Band Edge

6.1. Test Equipment

Spurious Emission At Antenna Terminals (+/- 1MHz) / AC-6

Instrument	Manufacturer	Type No.	Serial No	Cali. Due Date
PSA Series Spectrum Analyzer	Agilent	E4440A	MY49420184	2015.03.28
Radio Communication Tester	Anritsu	MT8820C	6201181503	2015.03.28
Dual Directional Coupler	Agilent	778D	20160	2015.03.28
10dB Coaxial Coupler	Agilent	87300C	MY44300299	2015.03.28
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC6-TH	2016.01.07

6.2. Test Setup



6.3. Test Procedure

1. The EUT was connected to spectrum analyzer and System Simulator via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The conducted spurious emission for the whole frequency range was taken.

6.4. Uncertainty

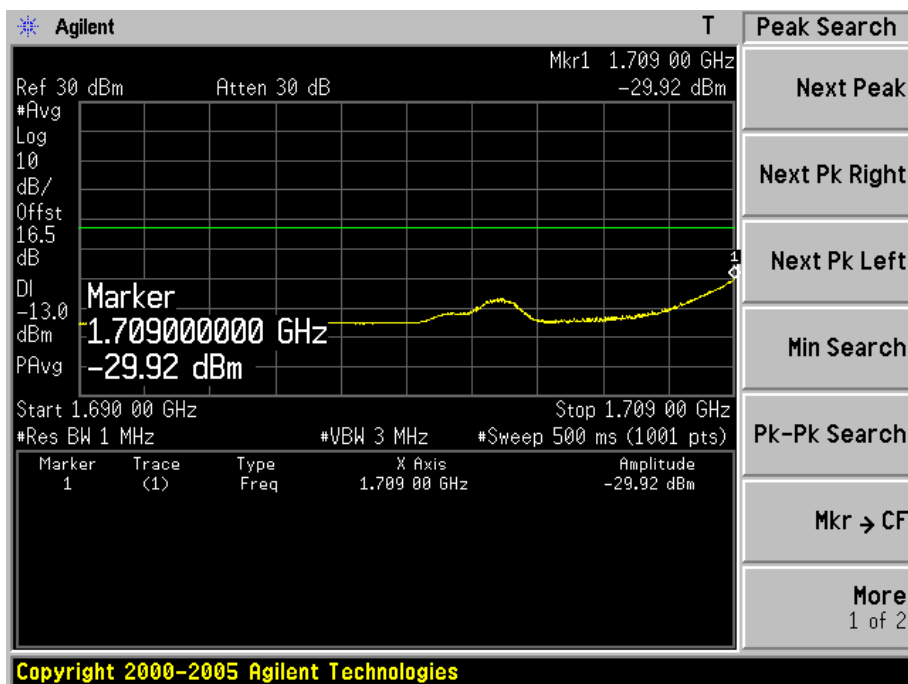
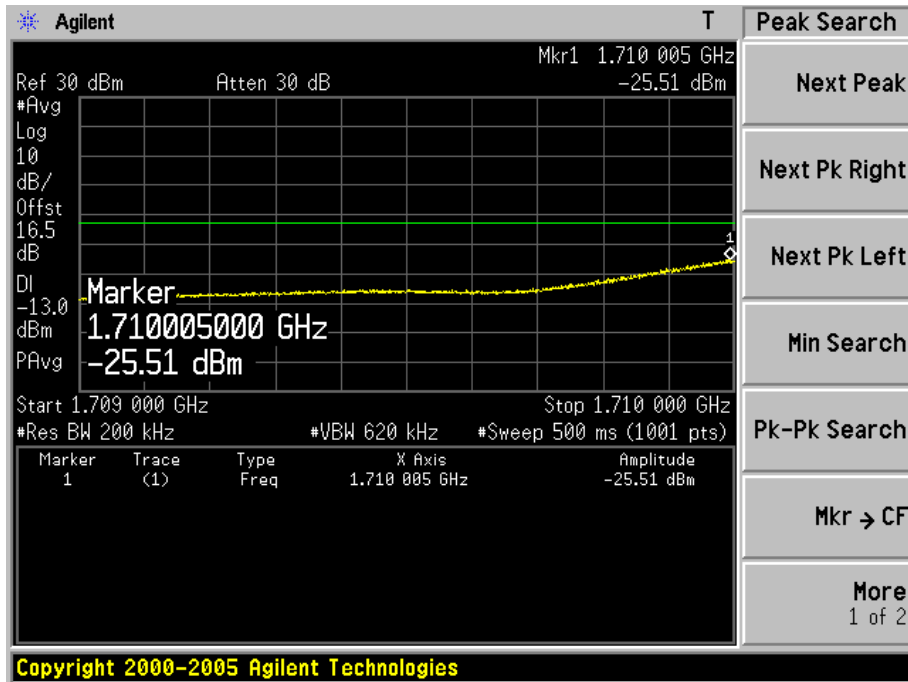
The measurement uncertainty is defined as ± 1.2 dB.

6.5. Test Result

Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (20M/QPSK)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 20050 (1720.00MHz)

1RB0



100RB0

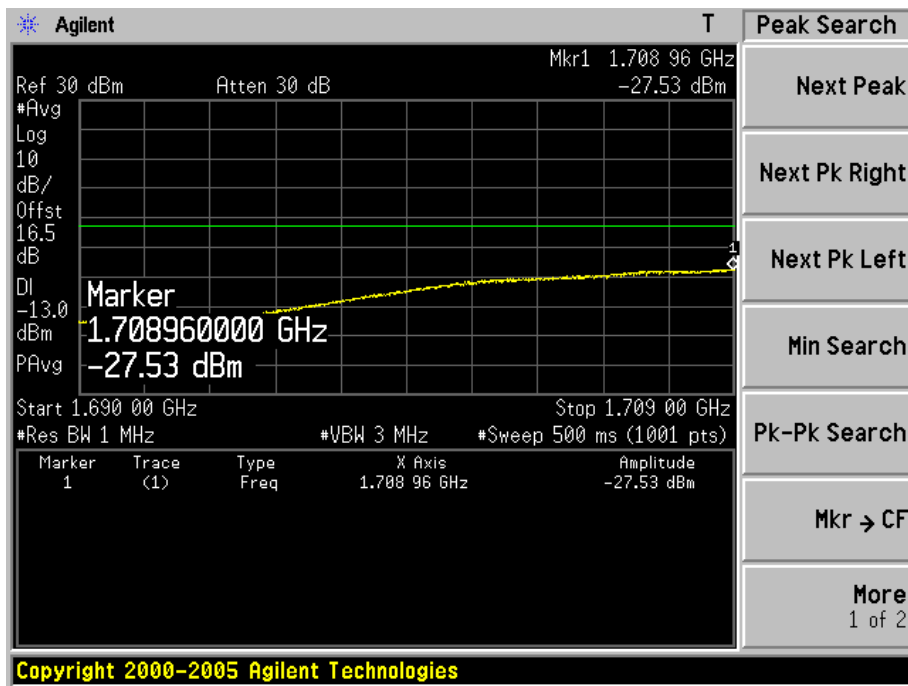
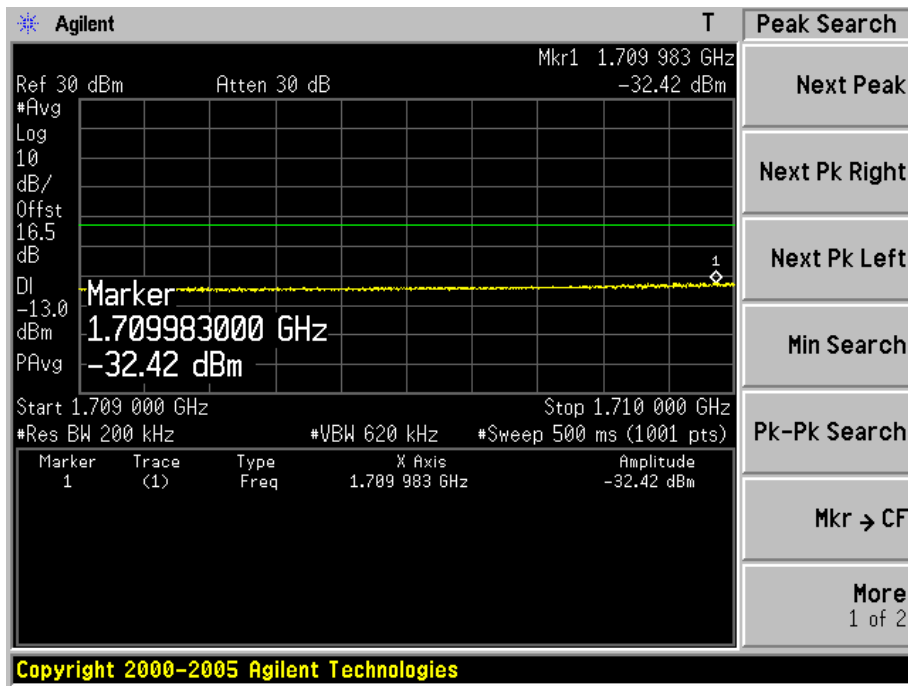
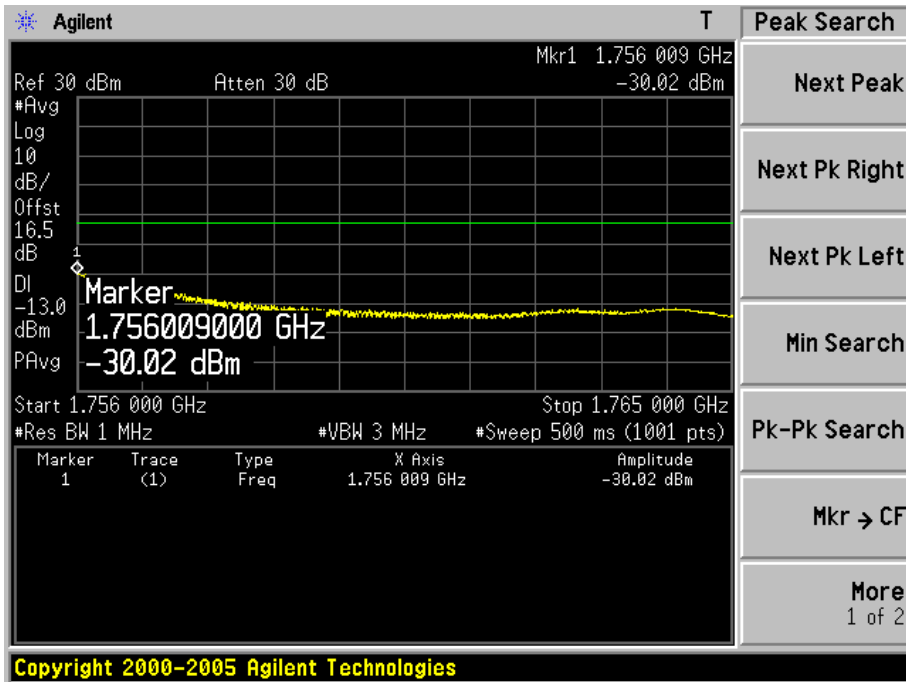
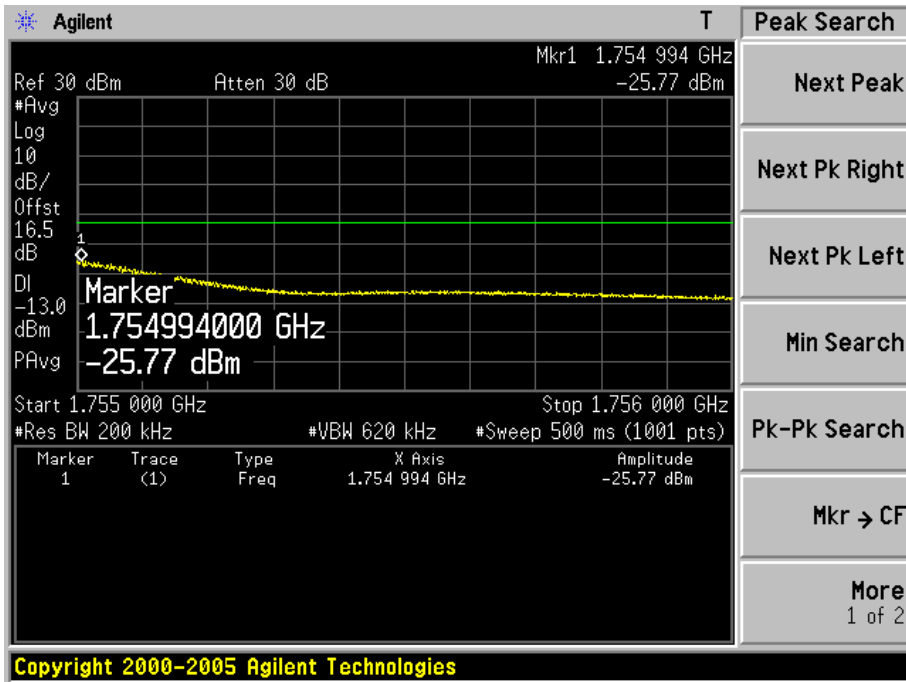
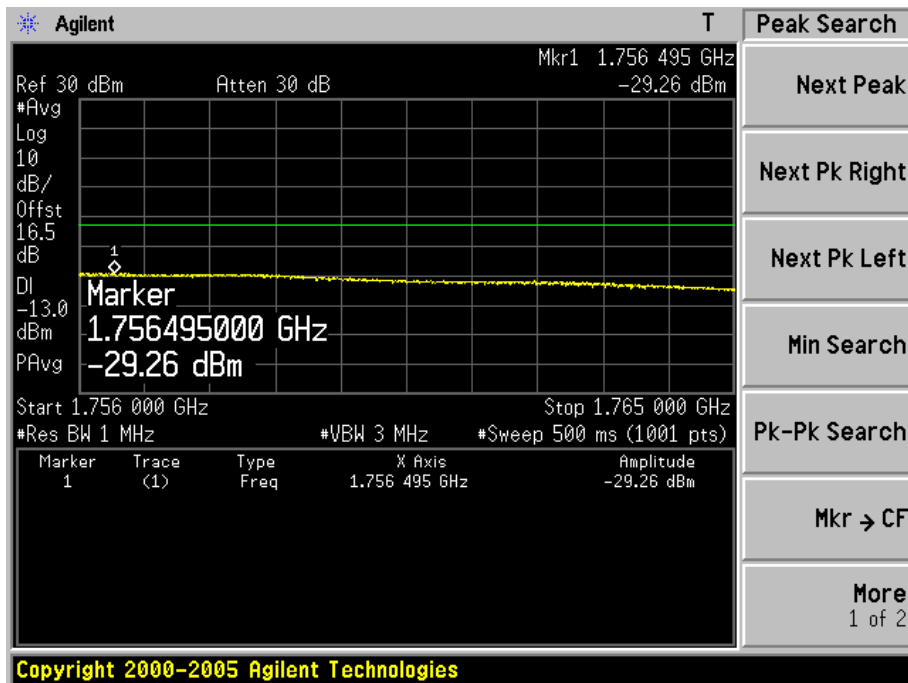
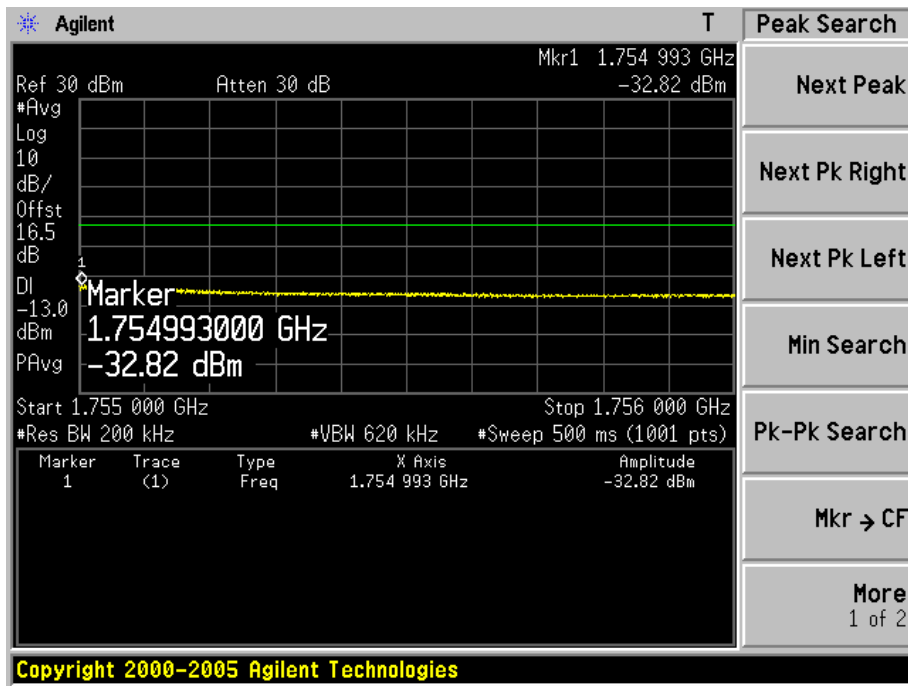


Figure Channel 20300 (1745.00MHz)

1RB99

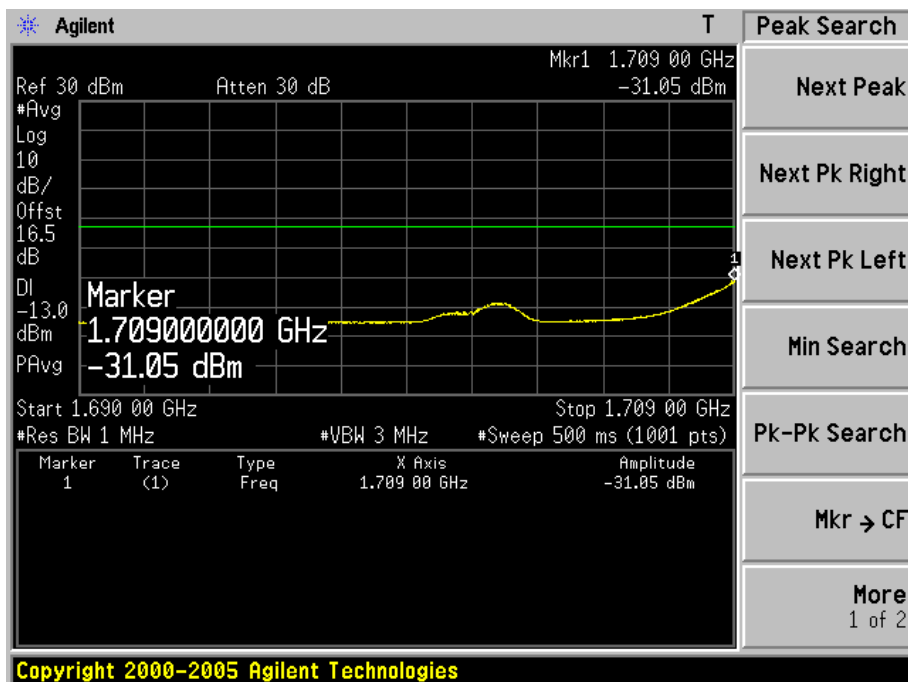
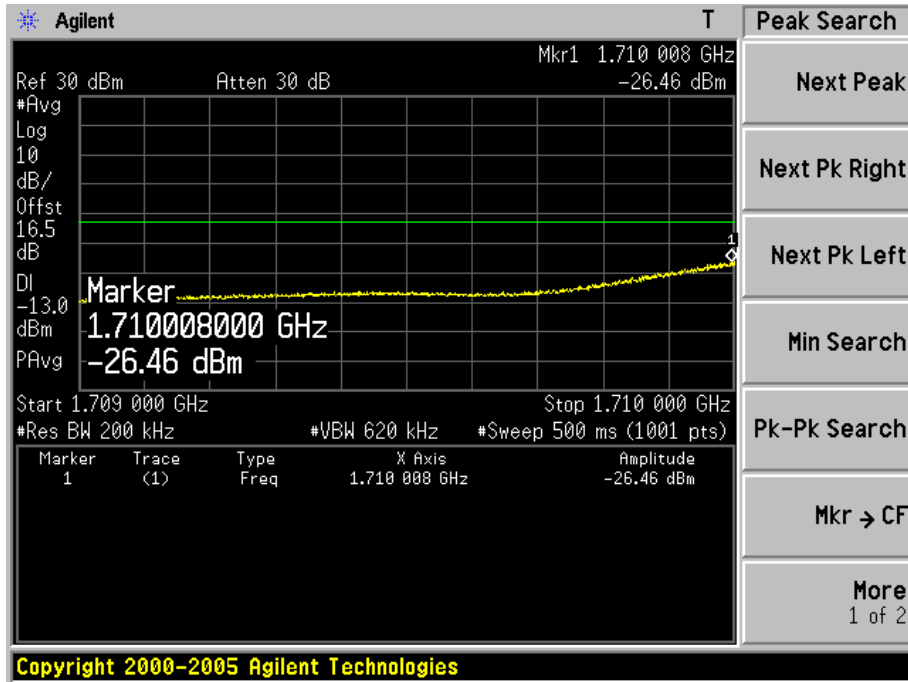


100RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (20M/16QAM)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 20775 (2502.5MHz)
1RB0



100RB0

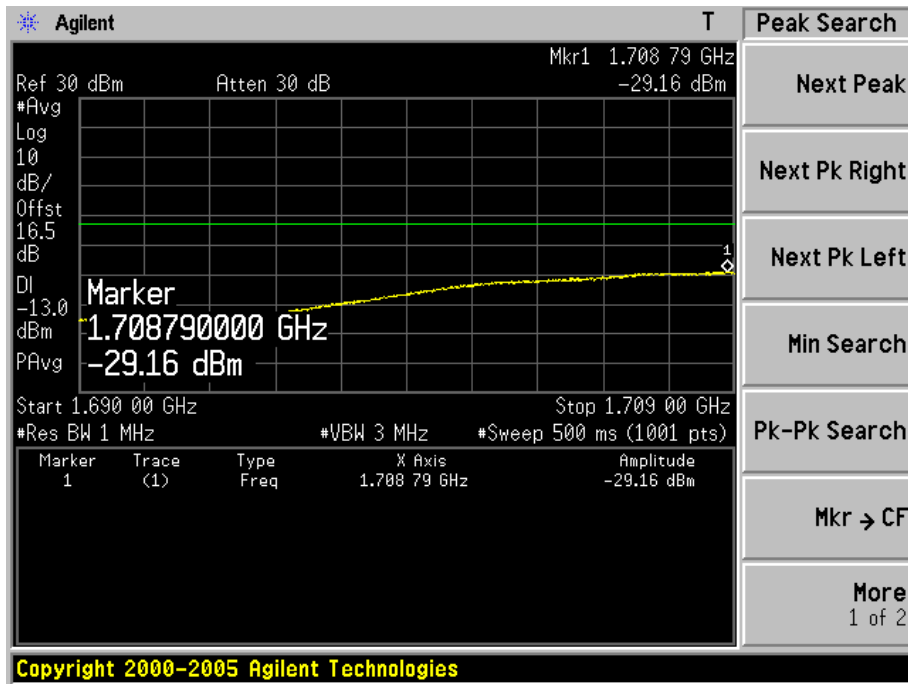
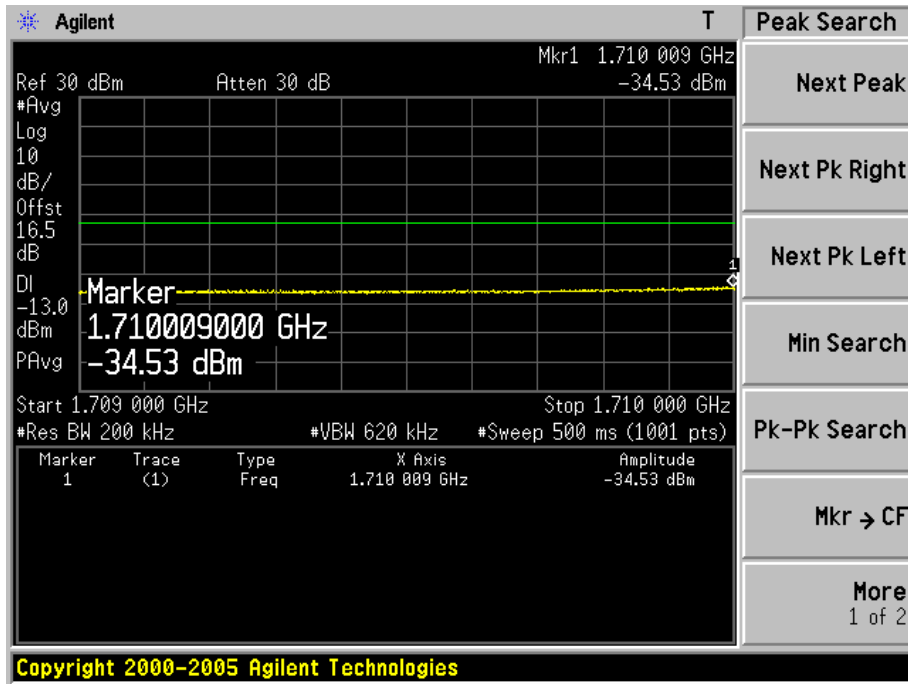
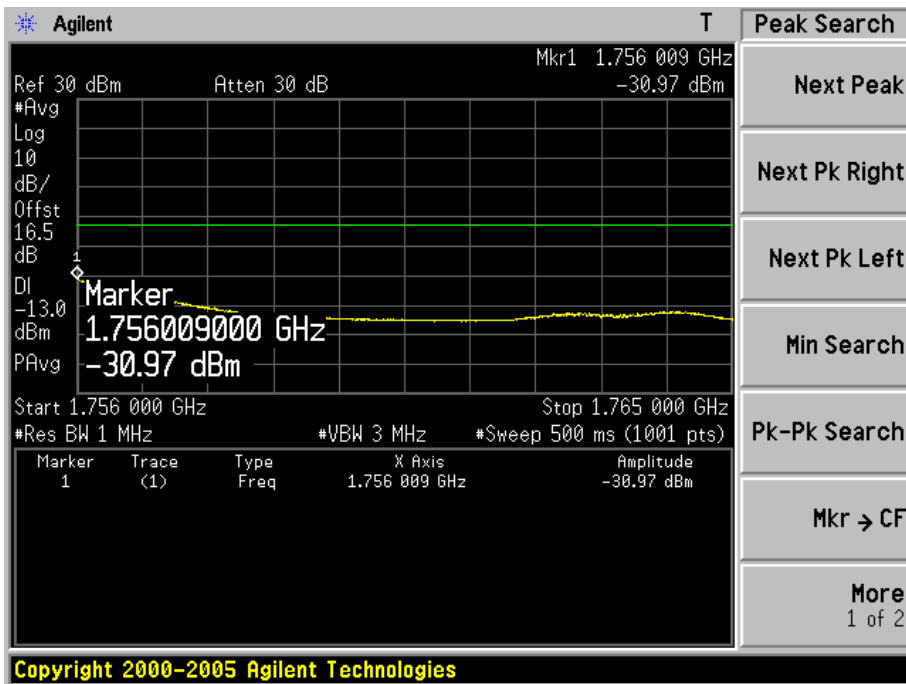
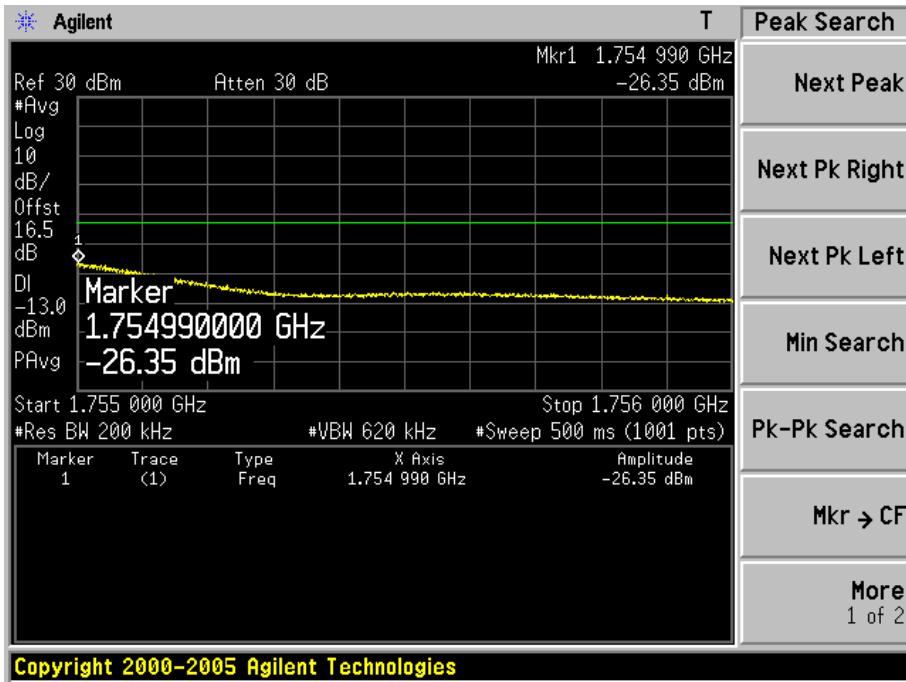
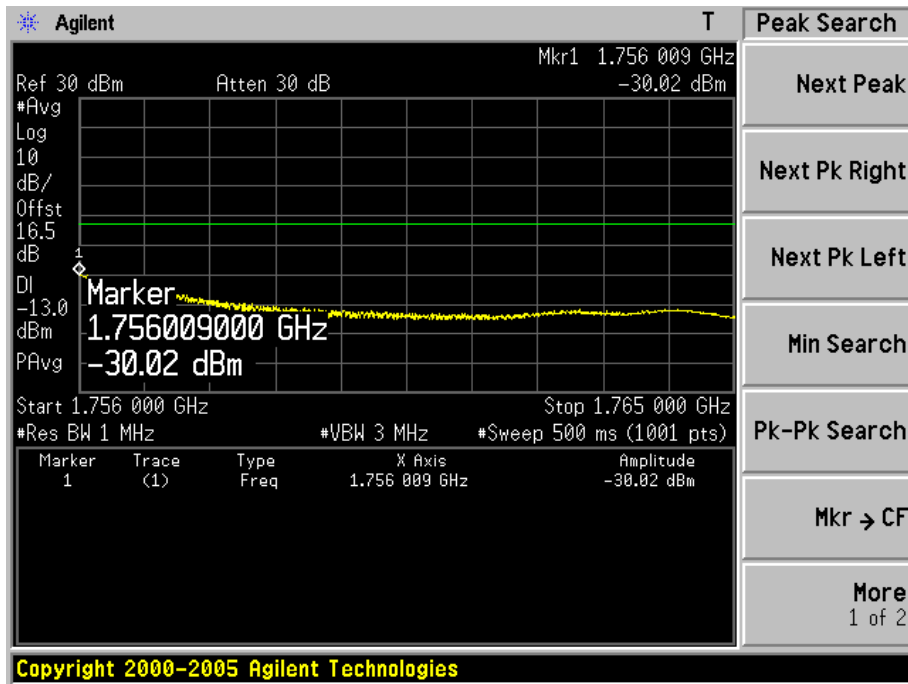
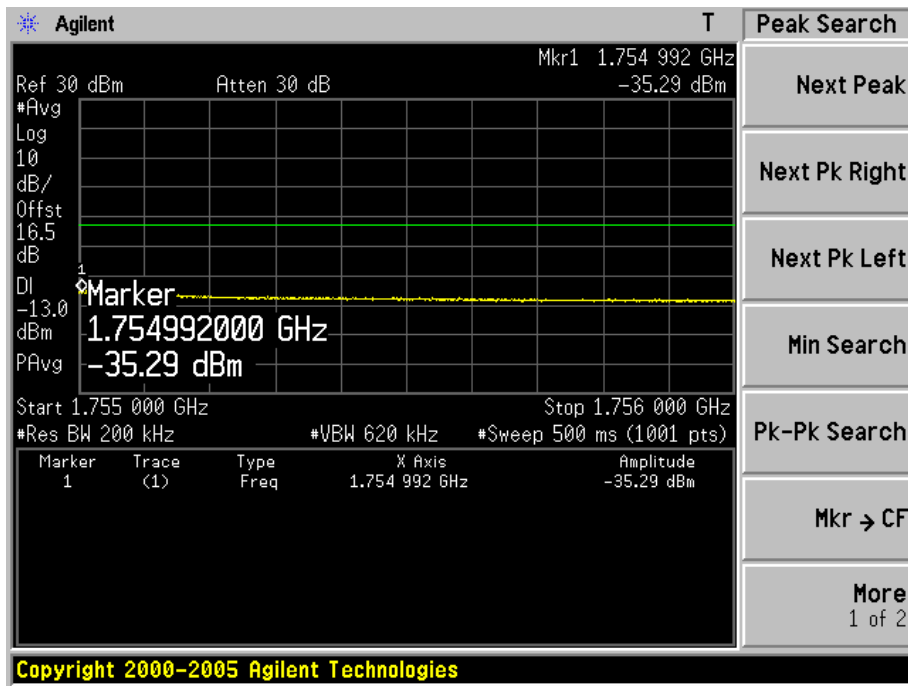


Figure Channel 20300 (1745.00MHz)

1RB99

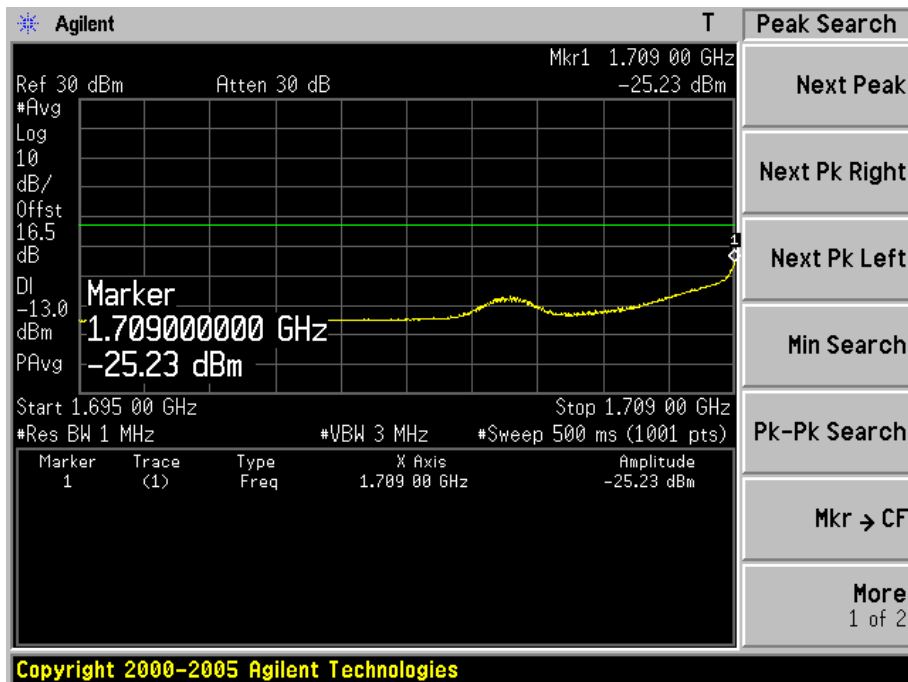
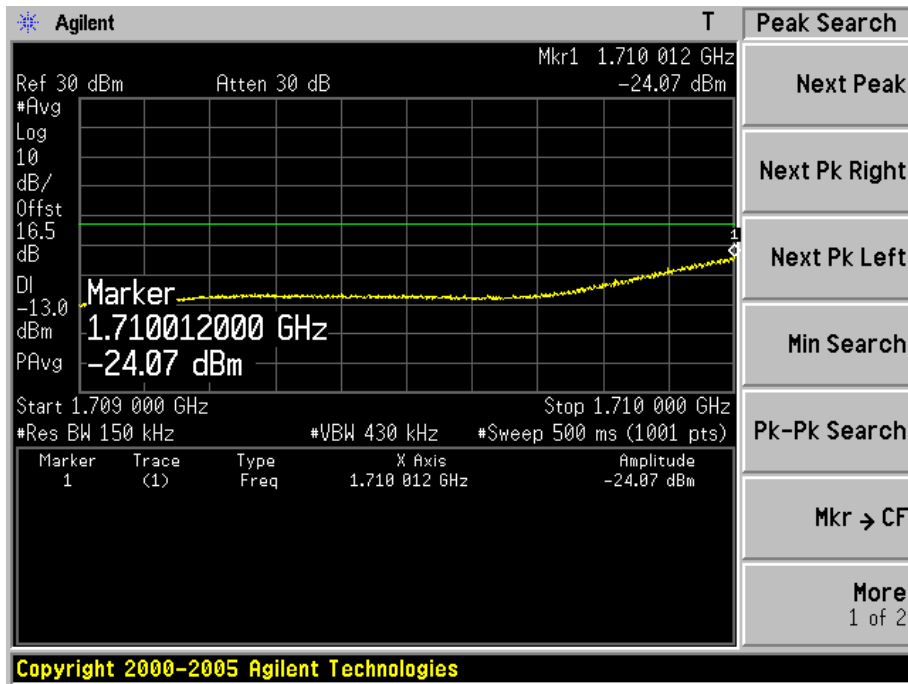


100RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (15M/QPSK)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 20025 (1717.50MHz)
1RB0



75RB0

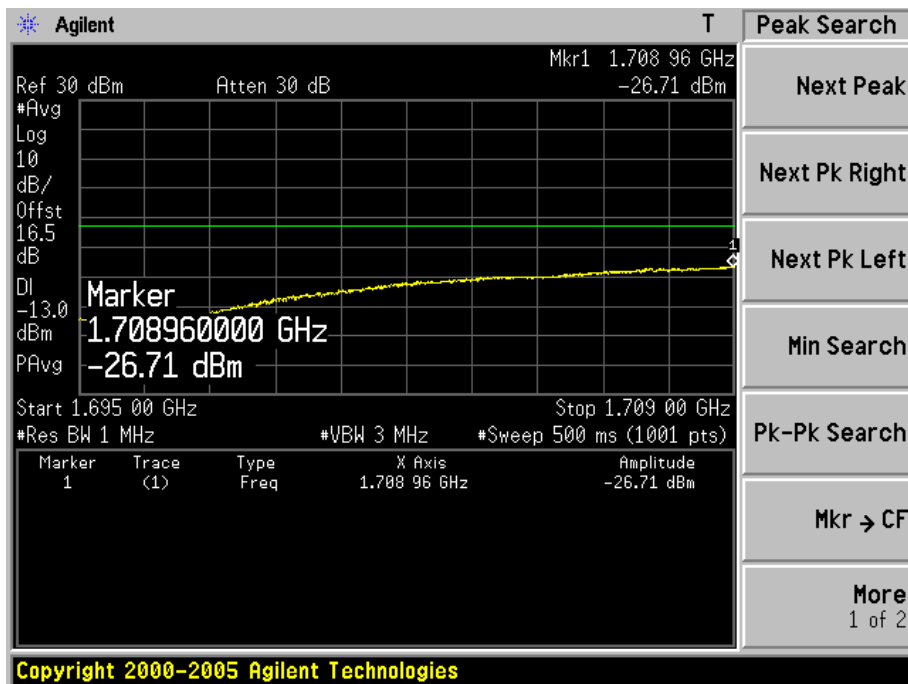
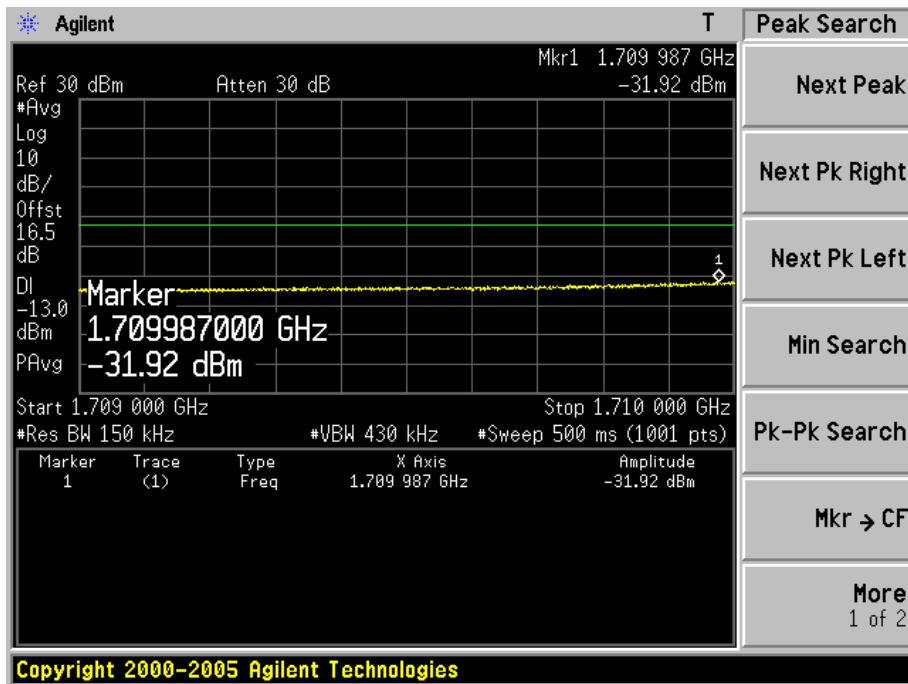
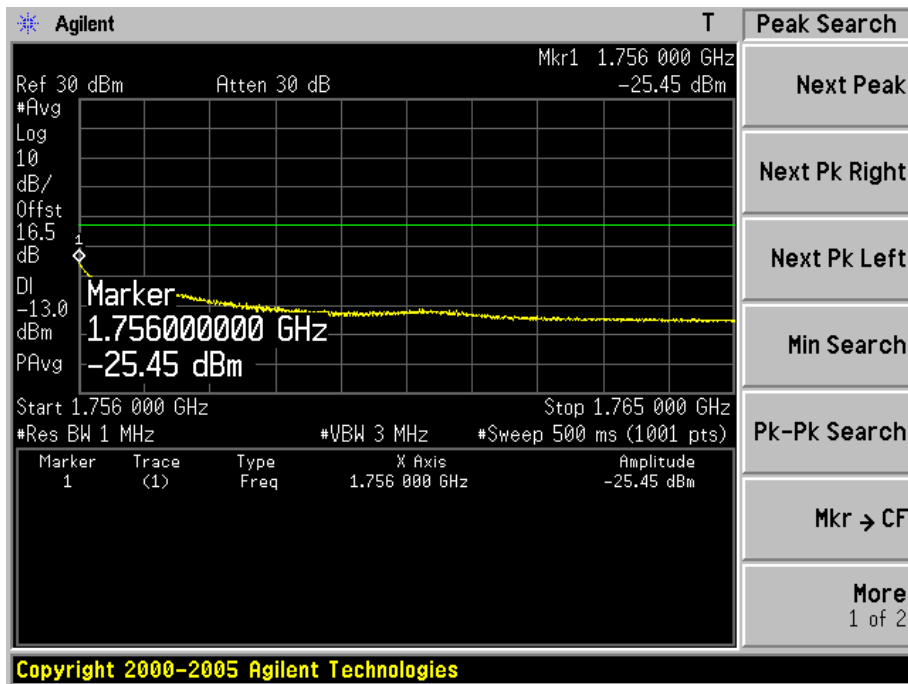
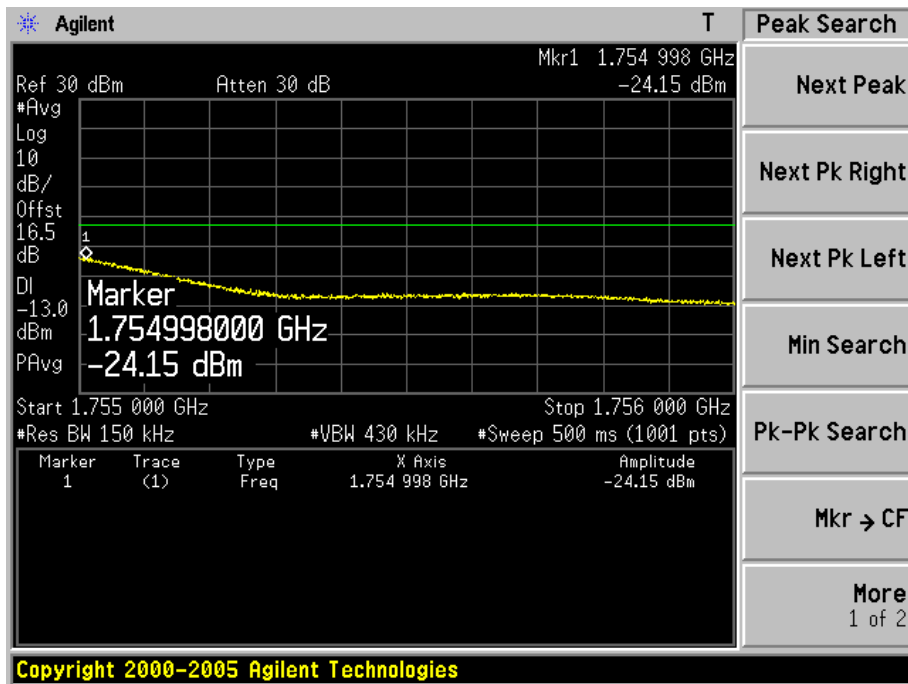
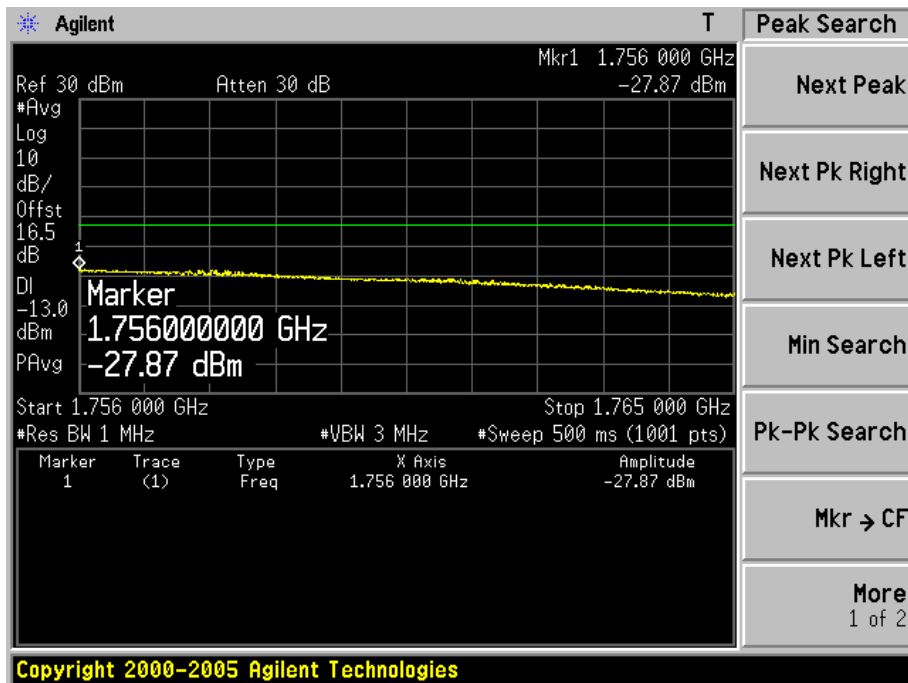
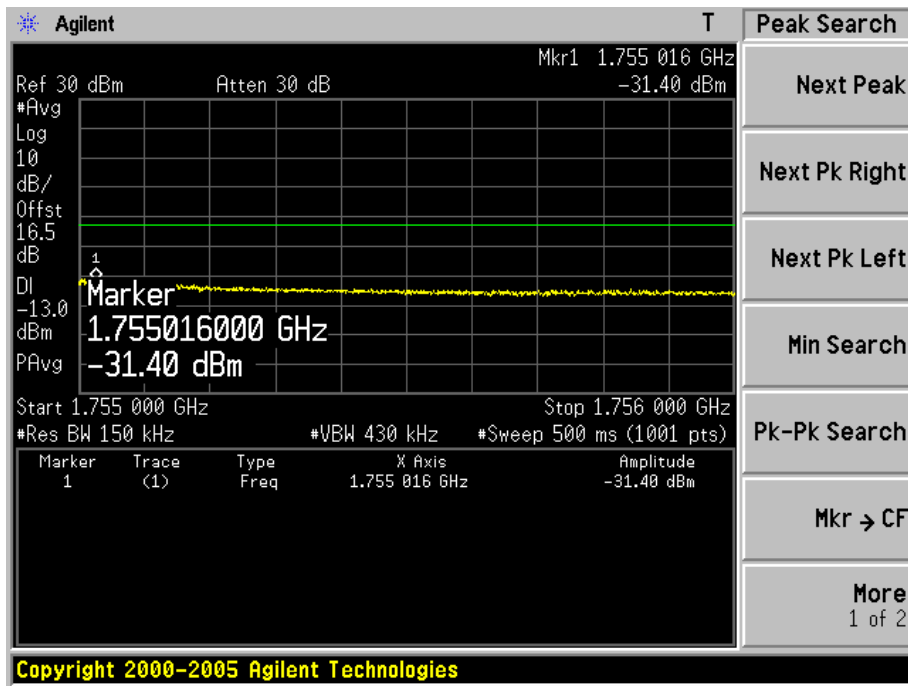


Figure Channel 20325 (1747.5MHz)
1RB74

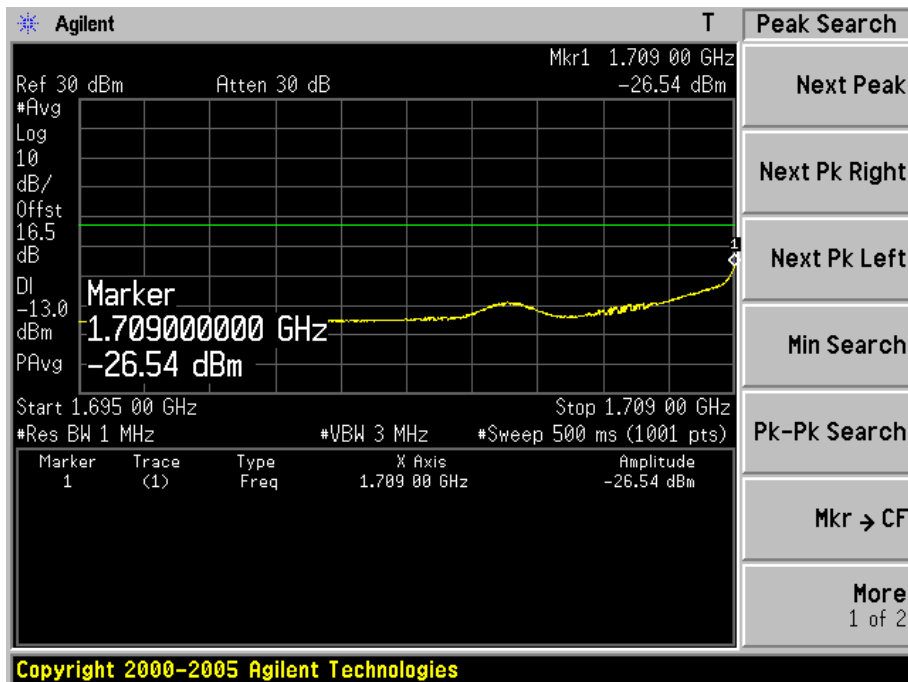
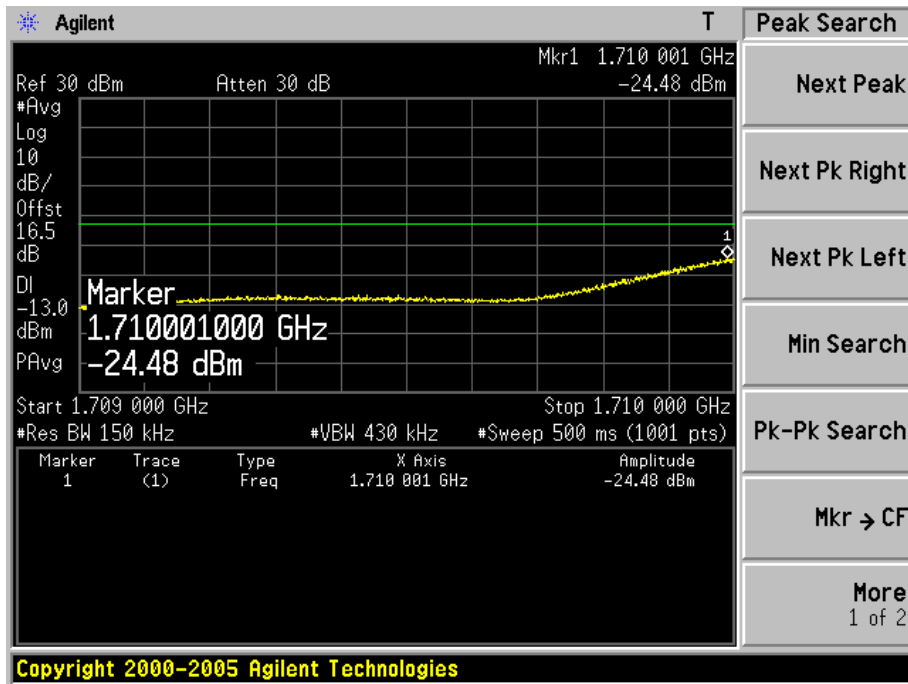


75RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (15M/16QAM)		
Date of Test	2014/12/25	Test Site	AC6

**Figure Channel 20025 (1717.50MHz)
1RB75**



75RB0

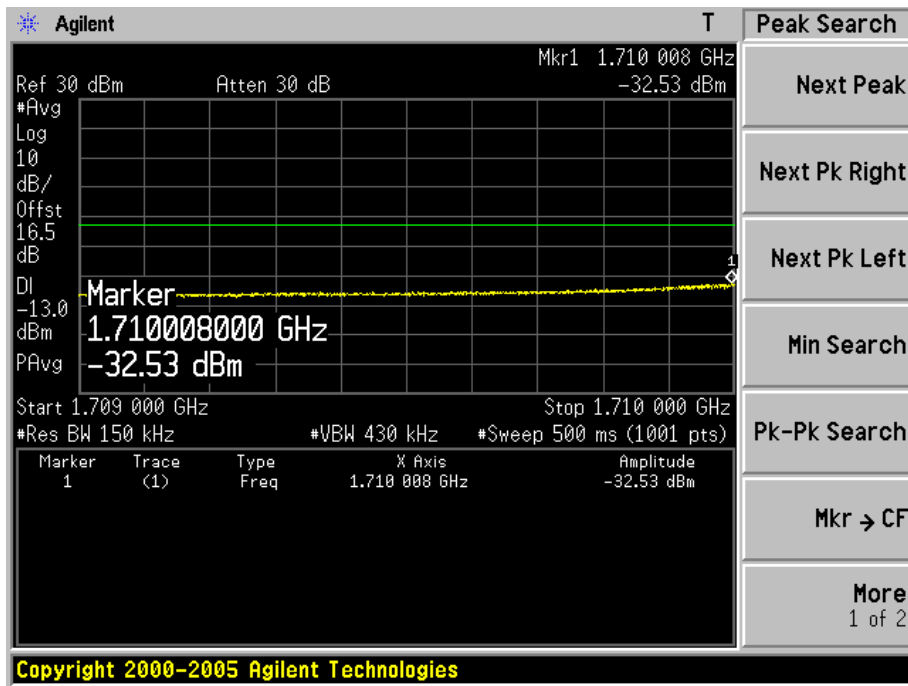
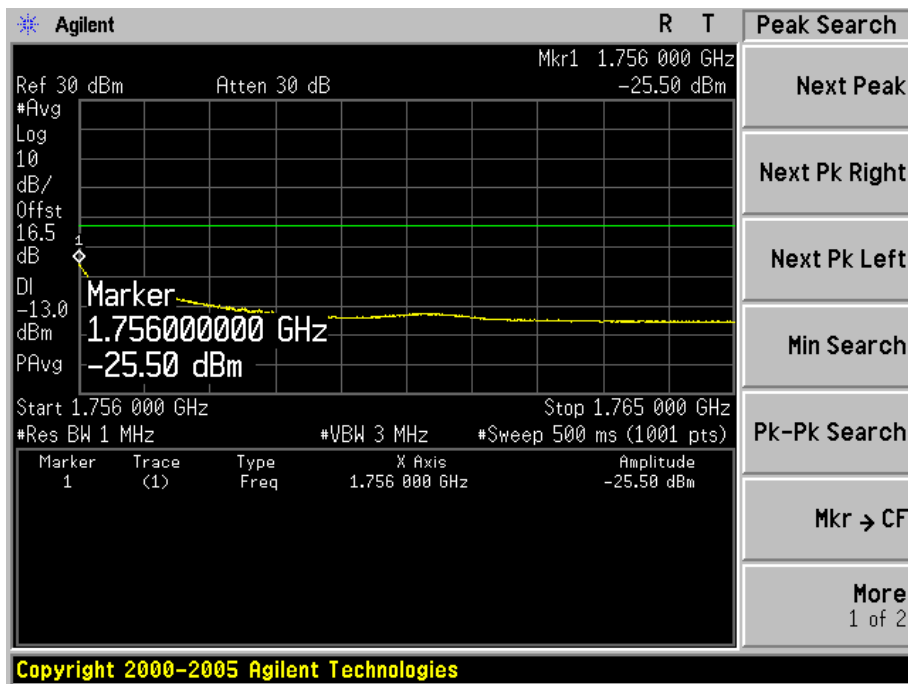
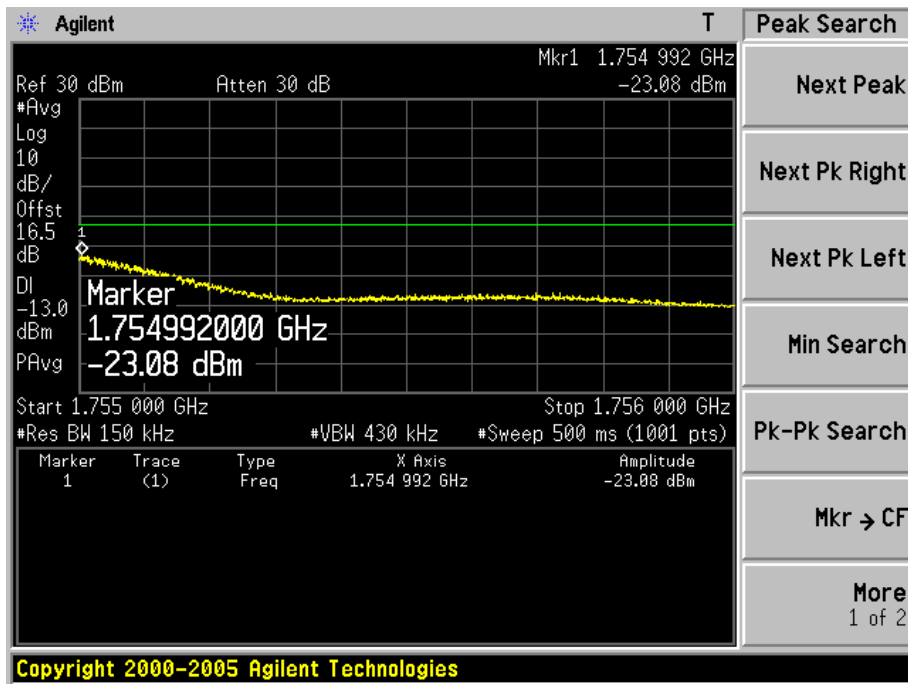
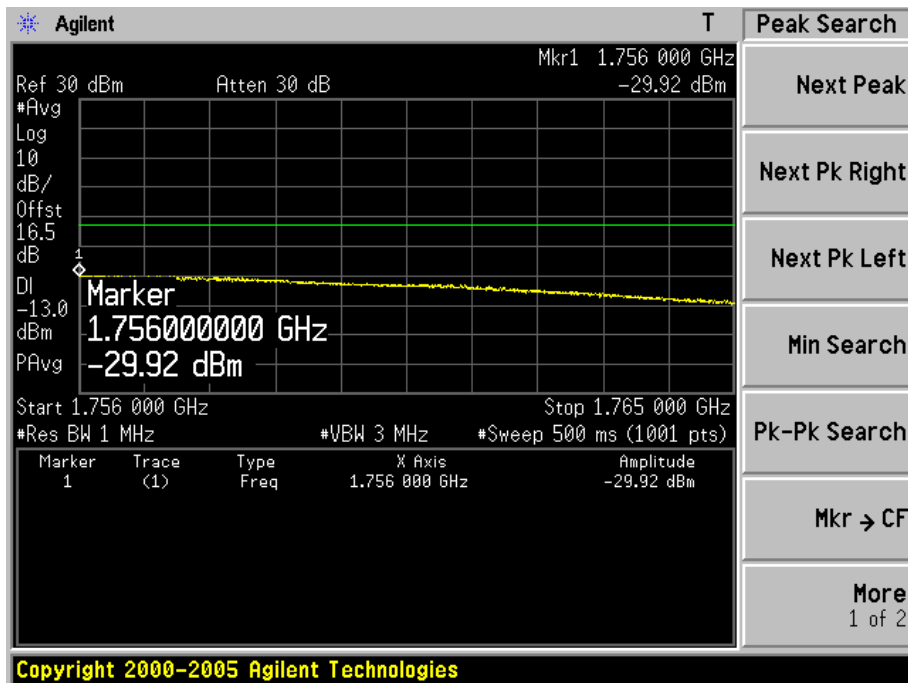
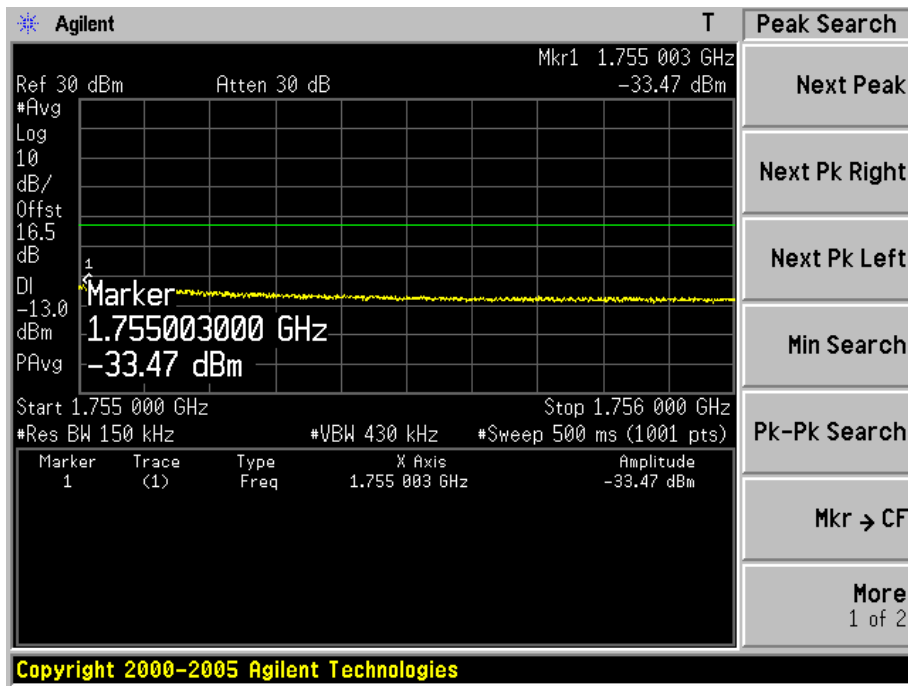


Figure Channel 20325 (1747.50MHz)

1RB74



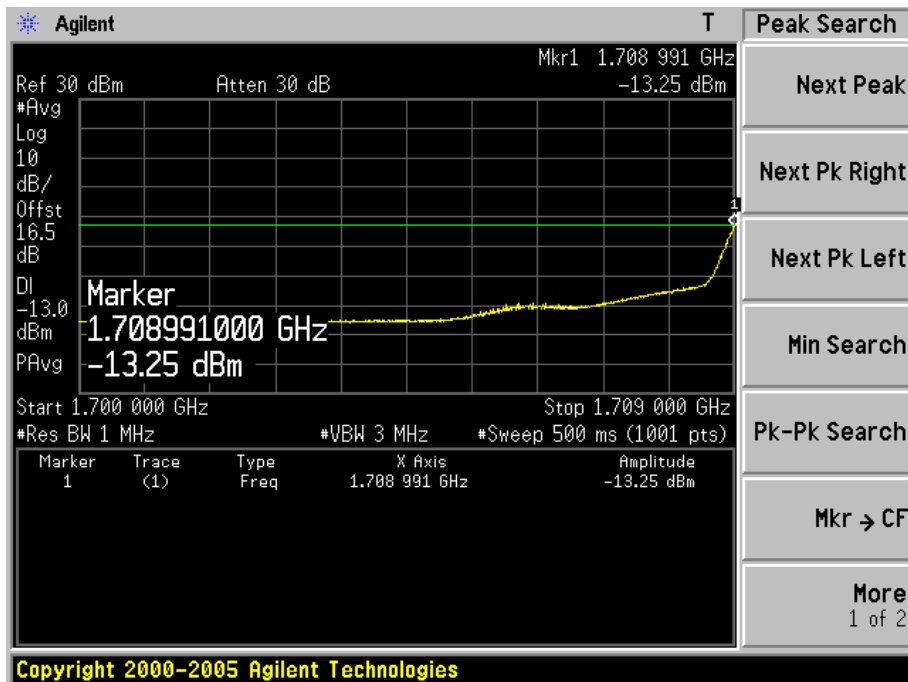
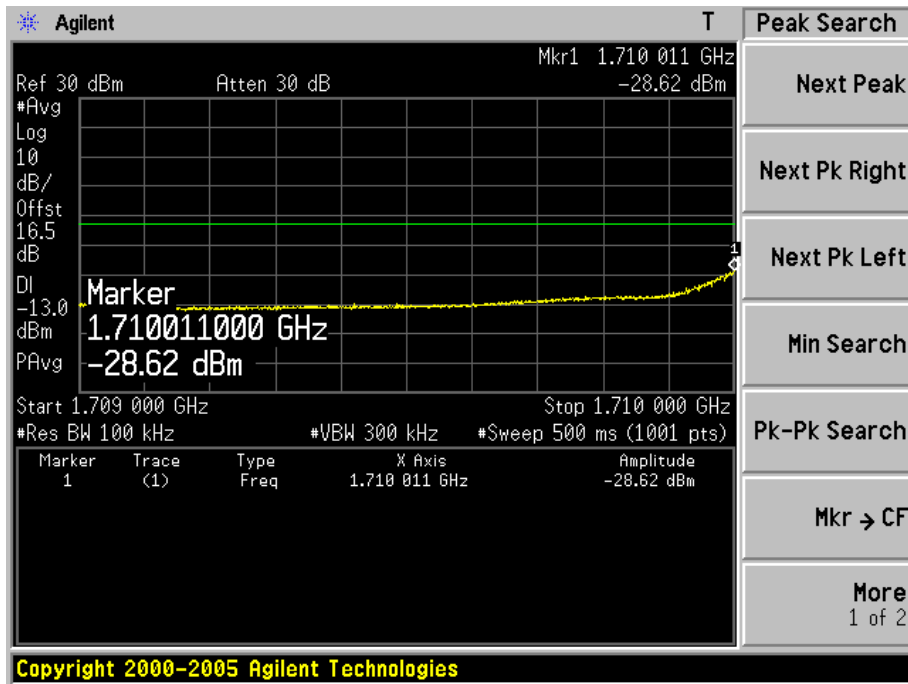
75RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (10M/QPSK)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 20000 (1715.00MHz)

1RB0



50RB0

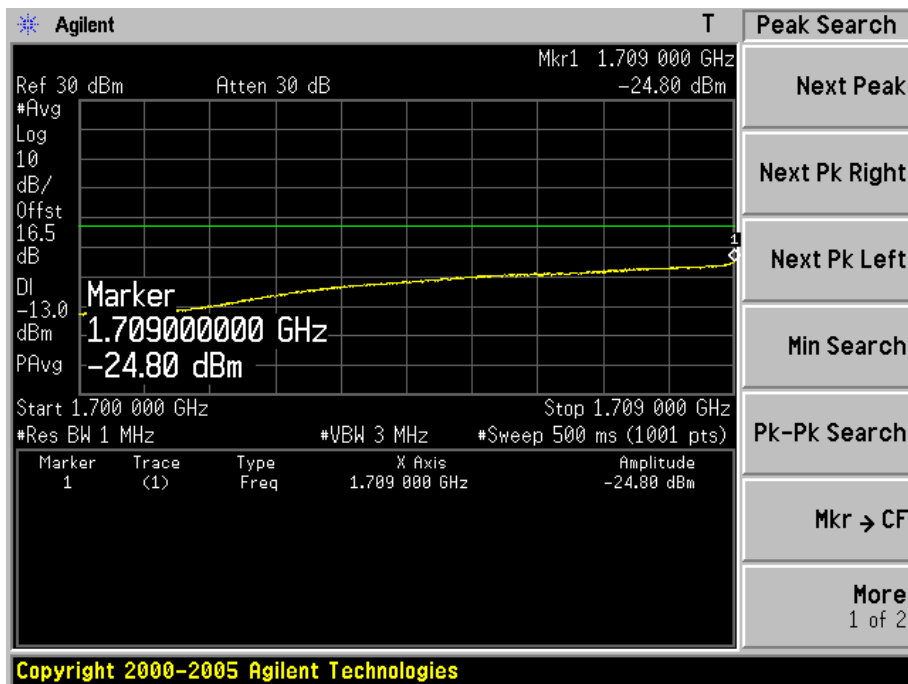
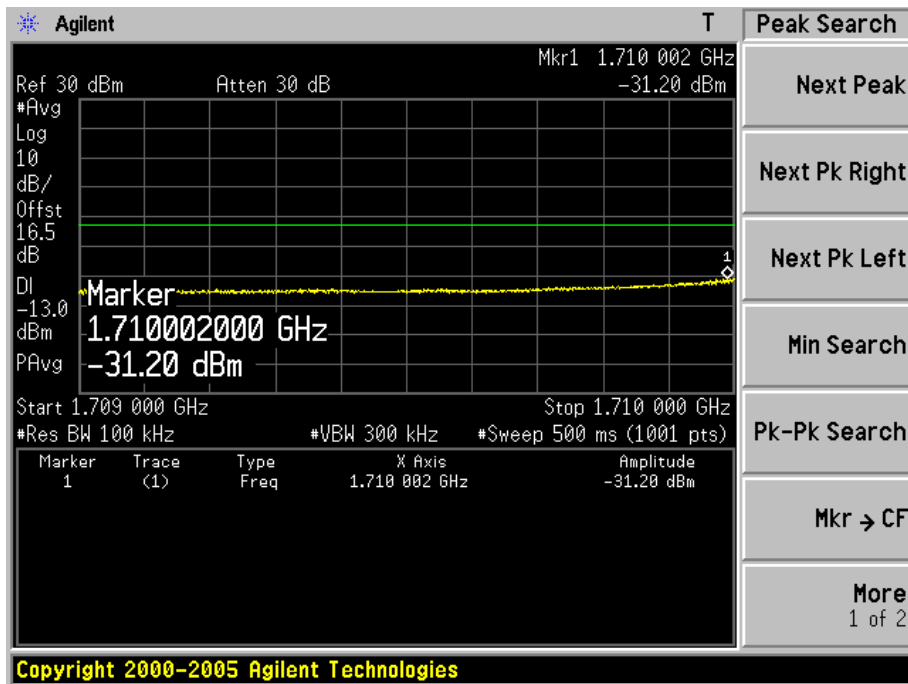
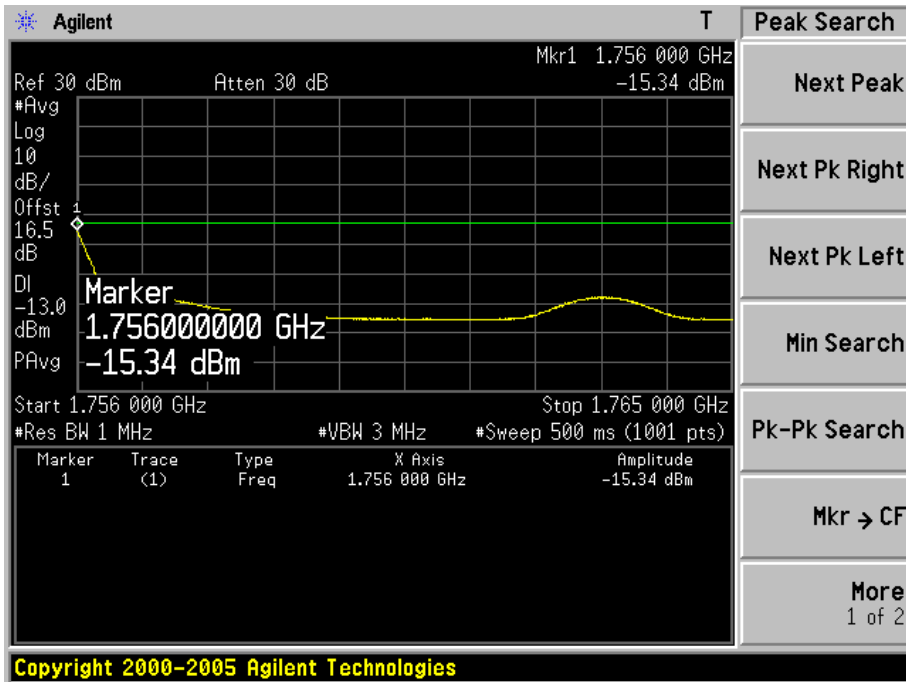
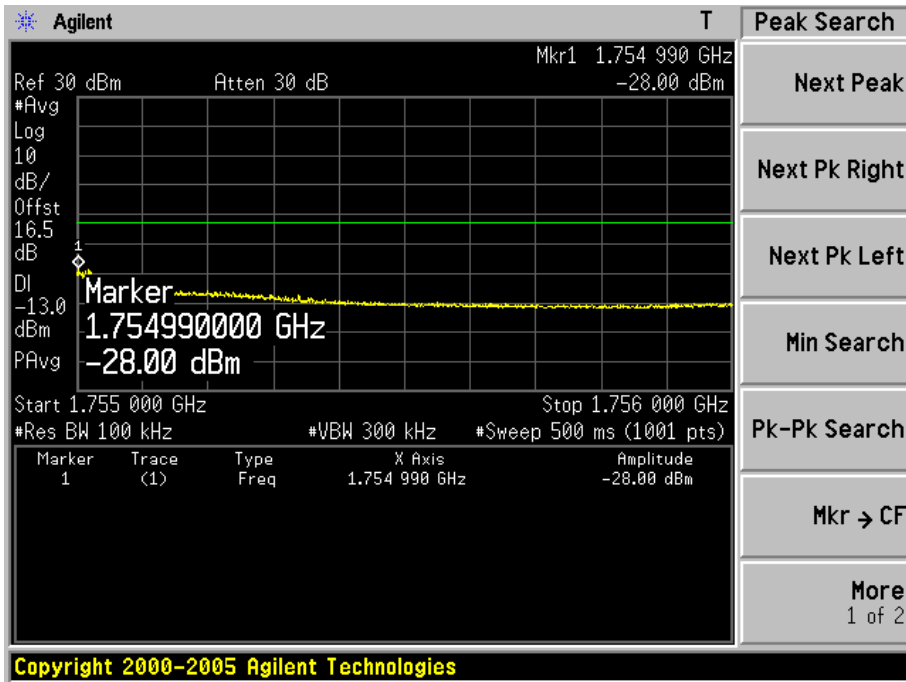
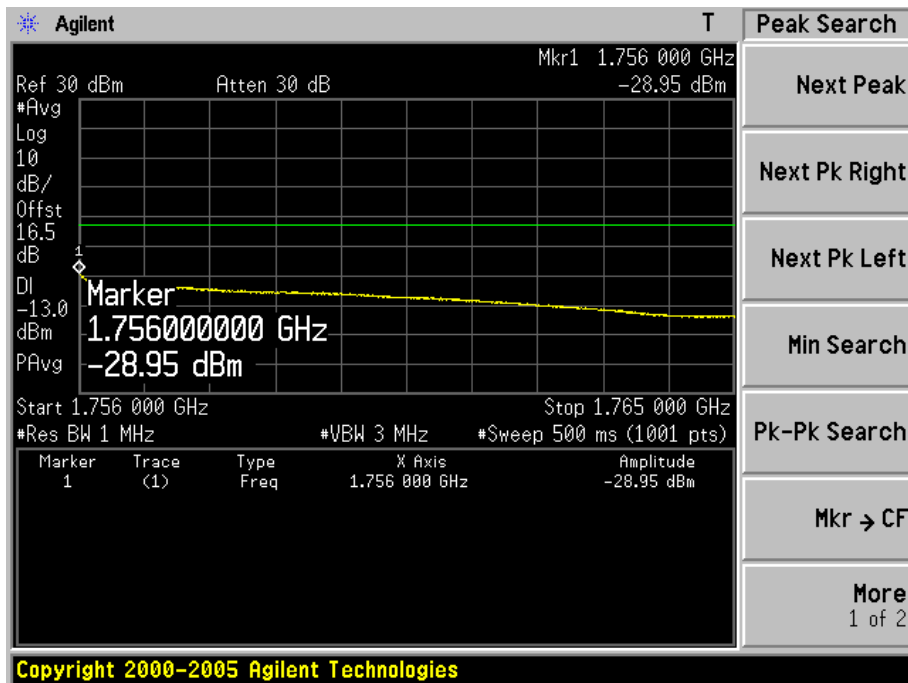
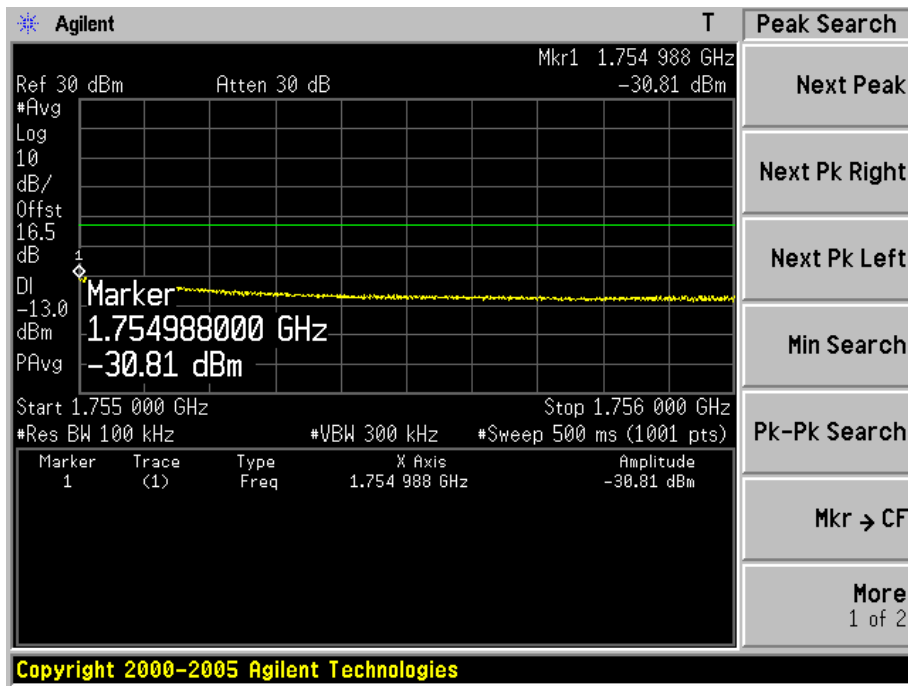


Figure Channel 20235 (1759.00MHz)

1RB74



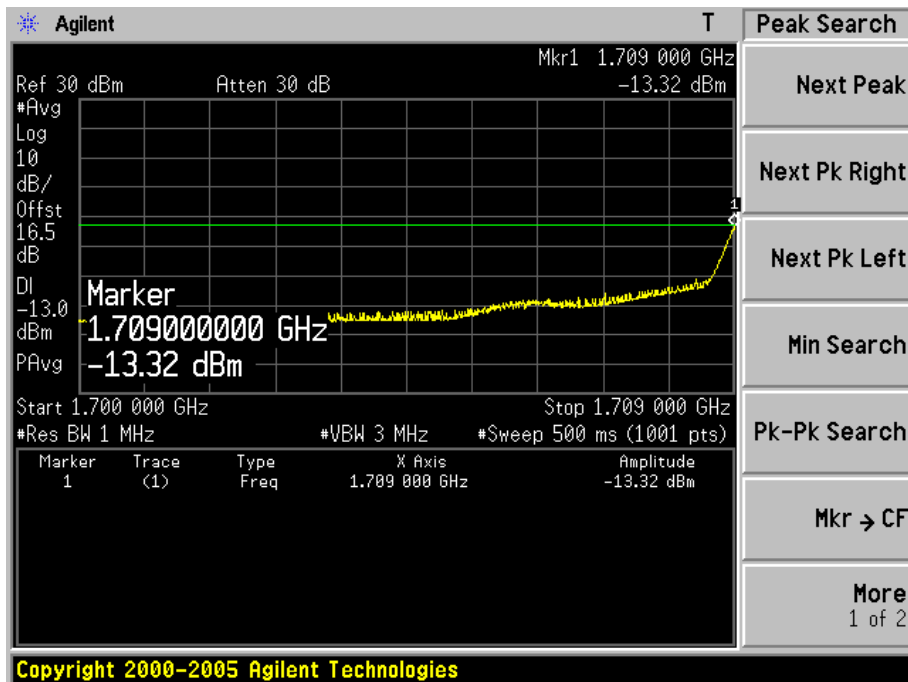
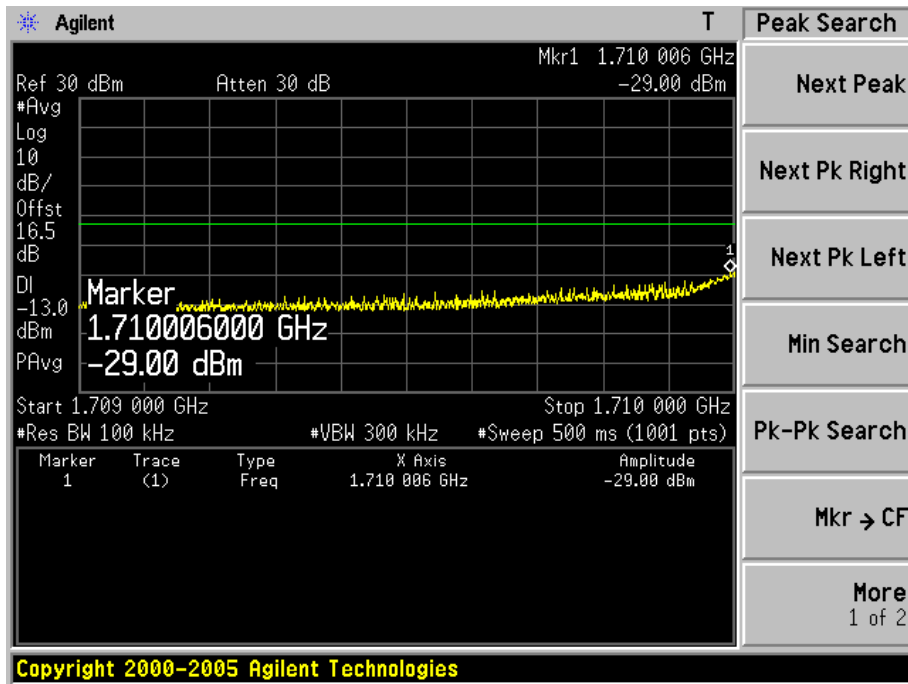
50RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (10M/16QAM)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 20000 (1715.00MHz)

1RB0



75RB0

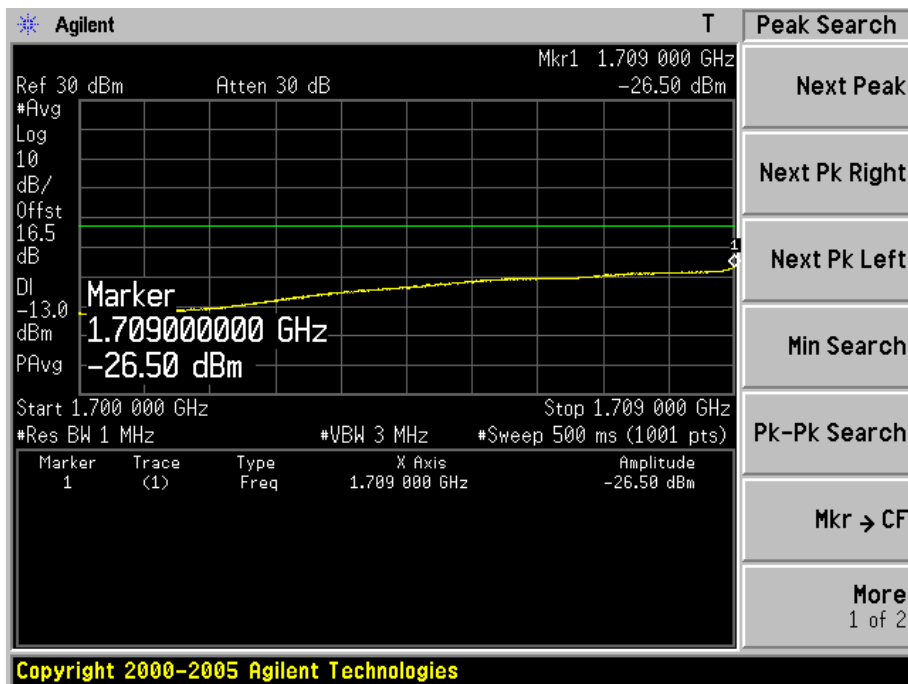
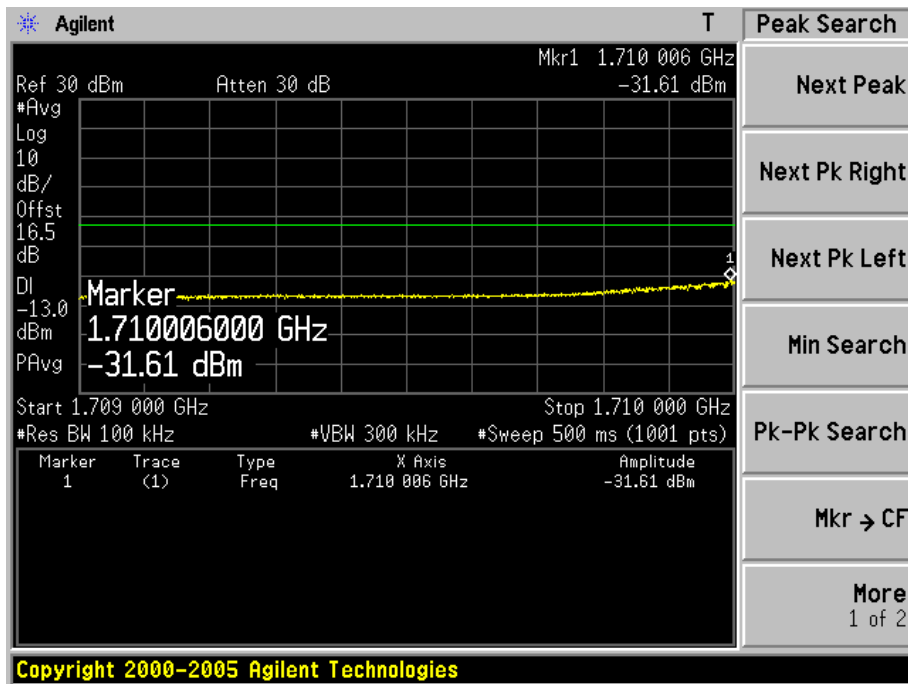
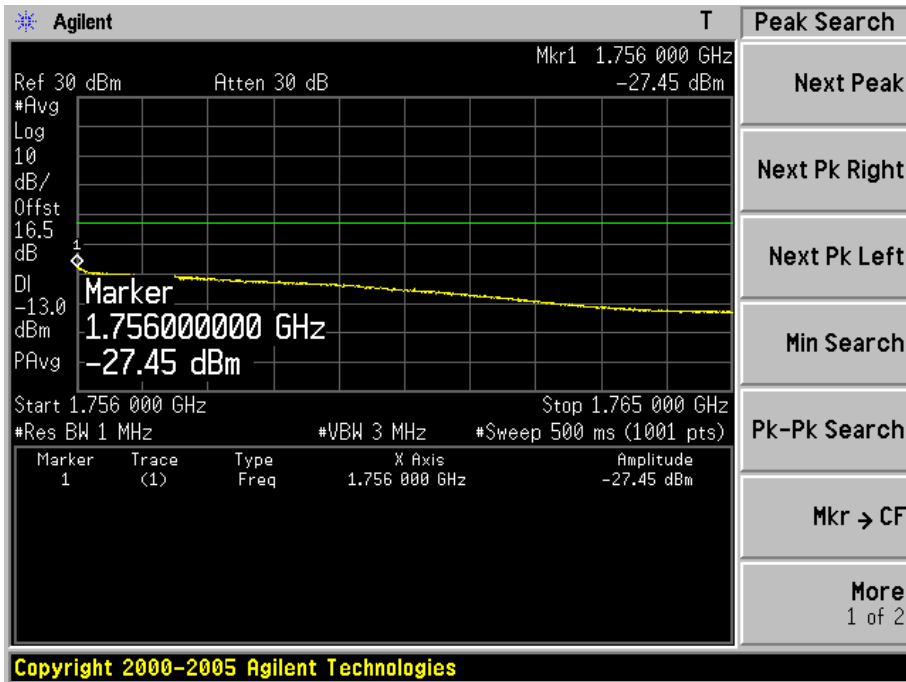
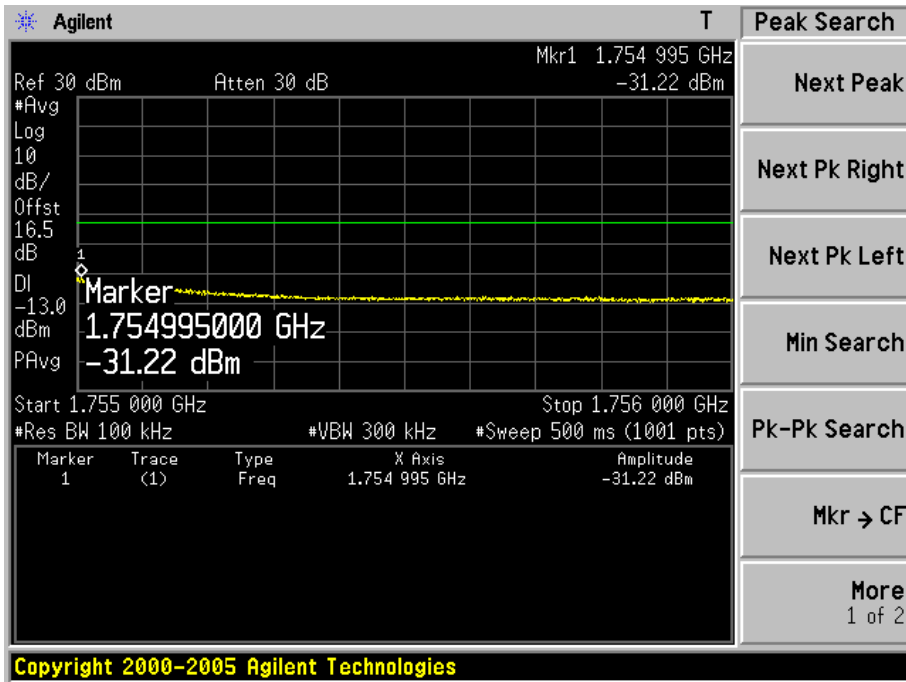
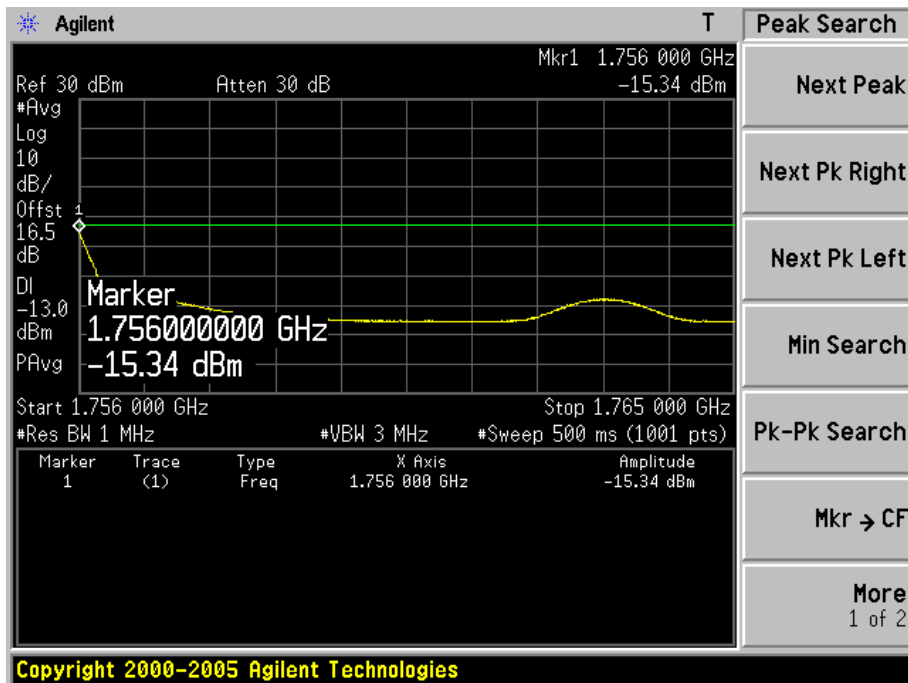
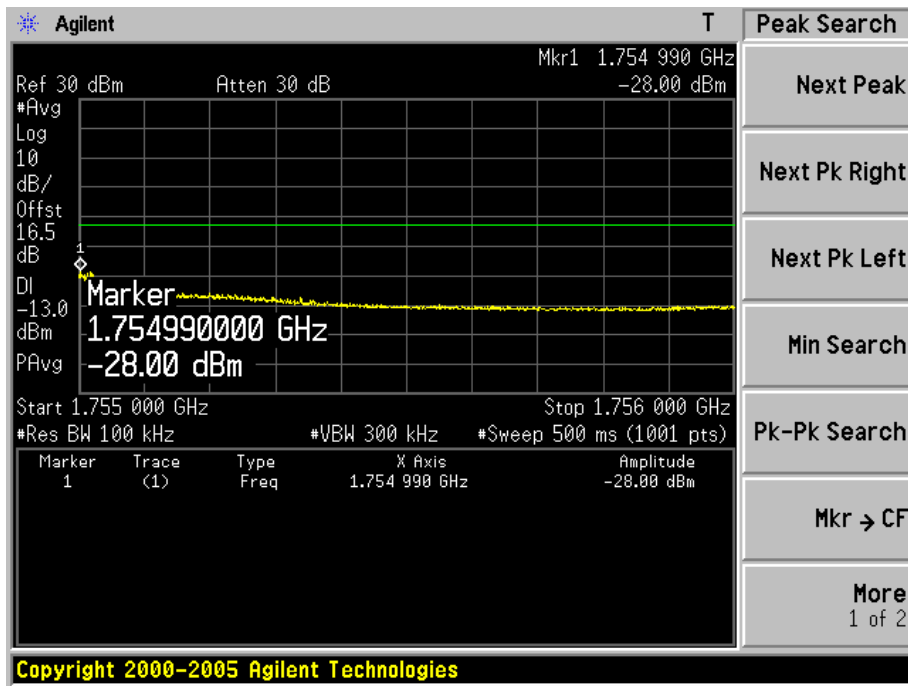


Figure Channel 20350 (1750.00MHz)

1RB49



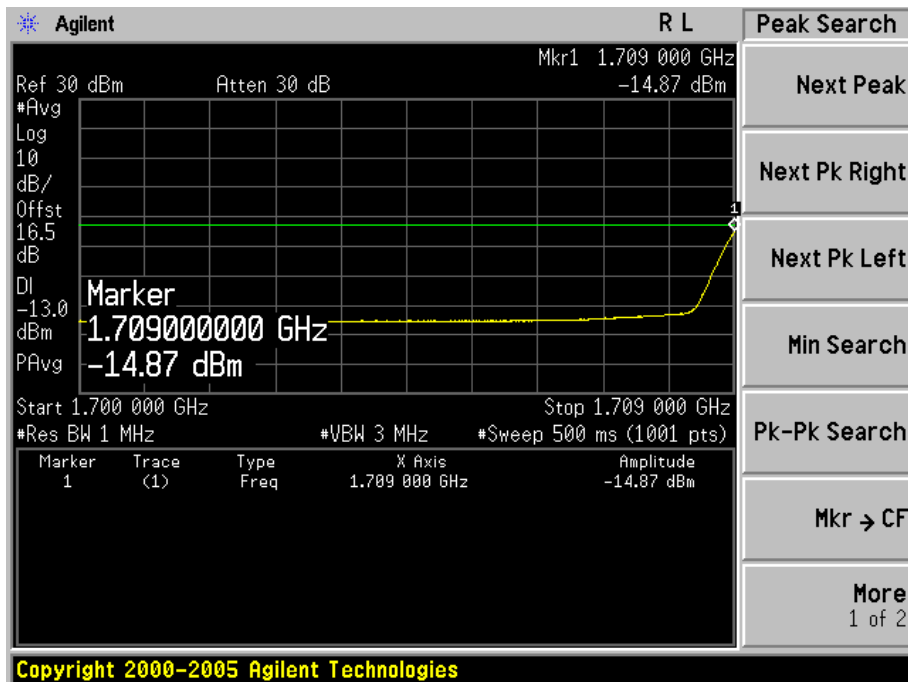
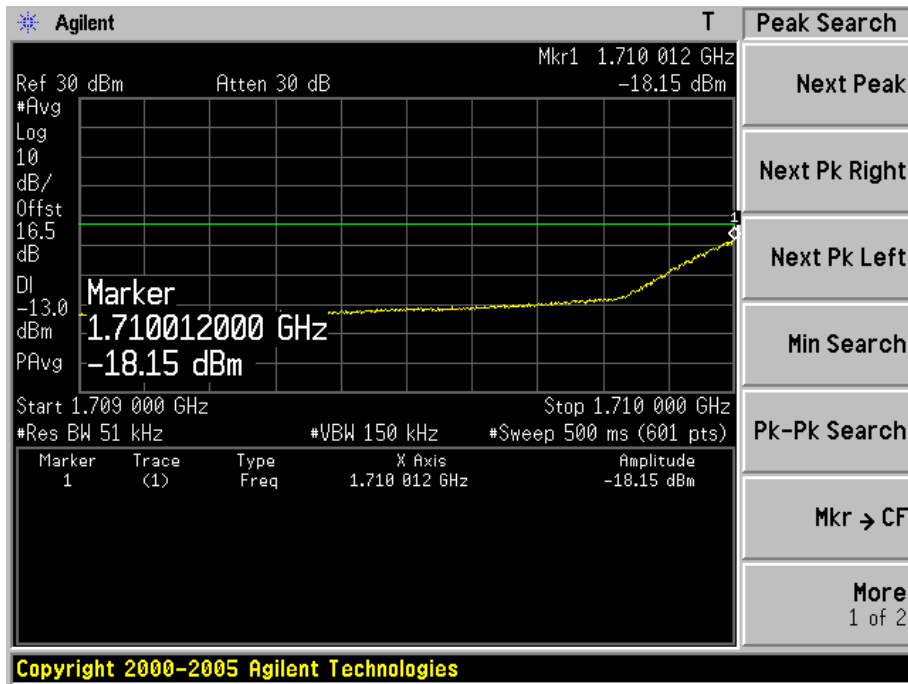
50RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (5M/QPSK)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 19975 (1712.50MHz)

1RB0



25RB0

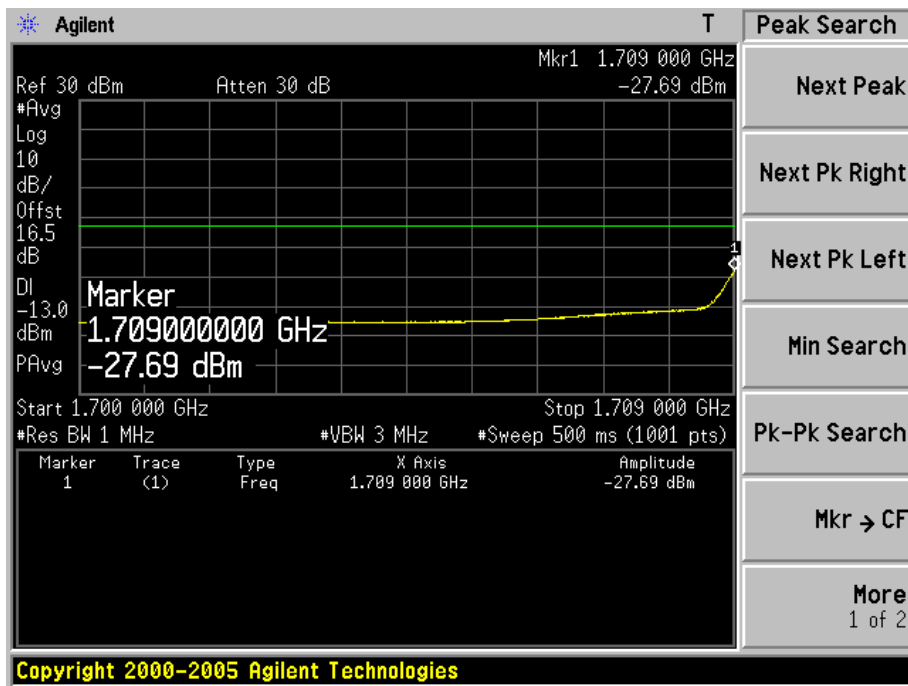
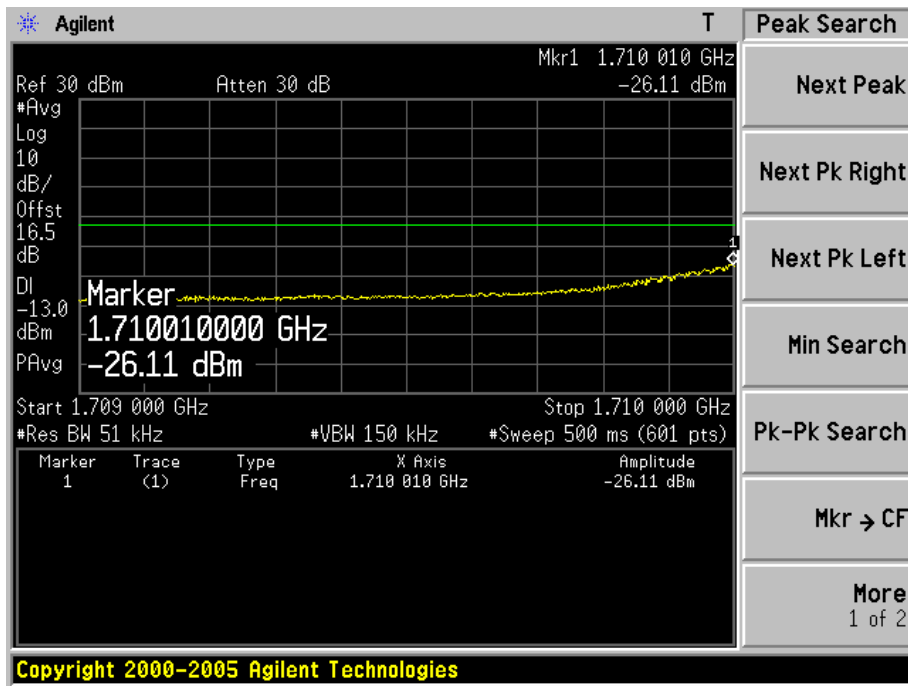
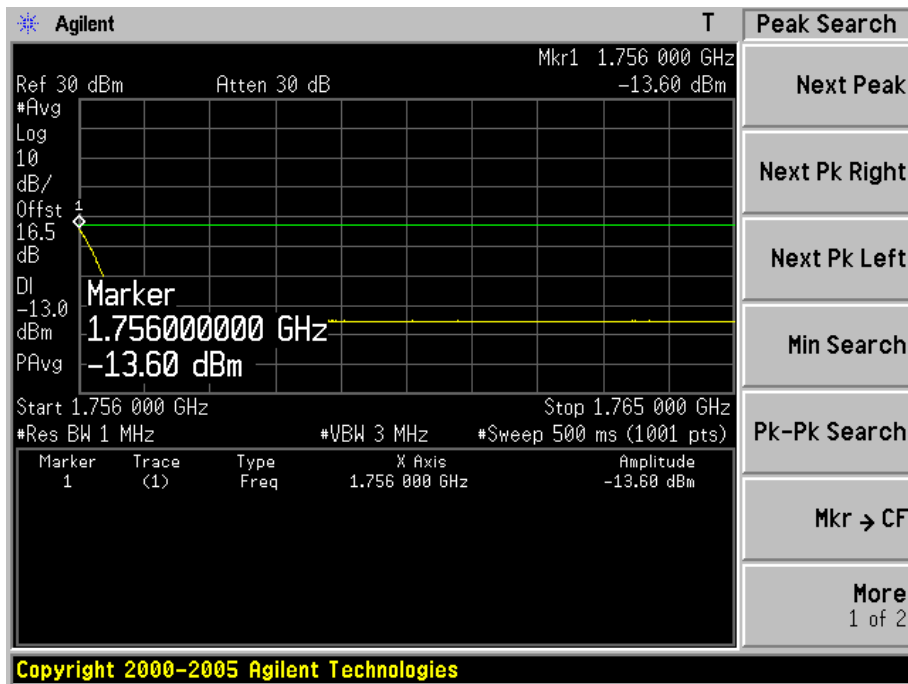
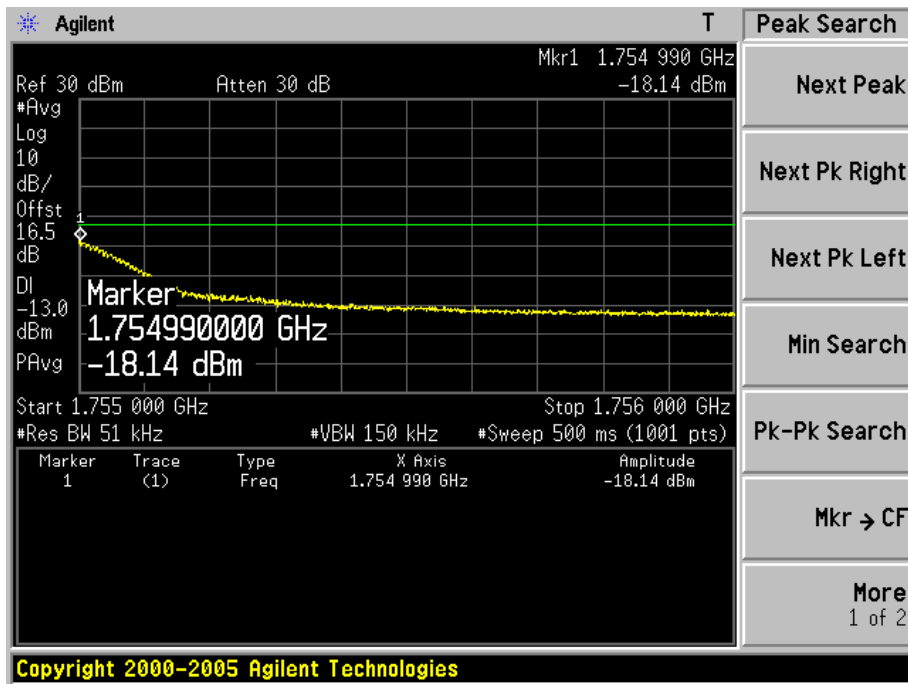
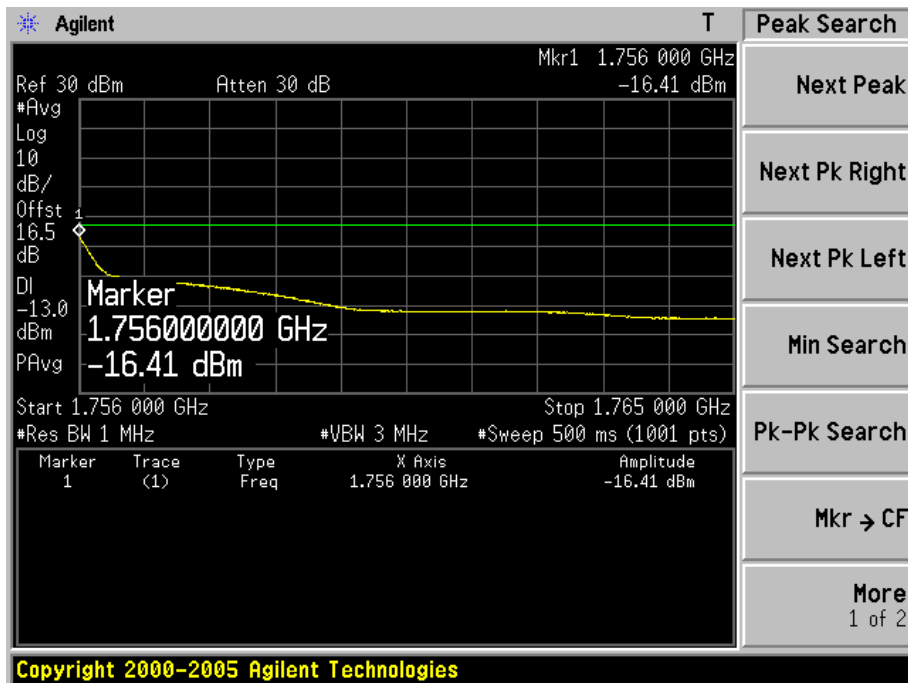
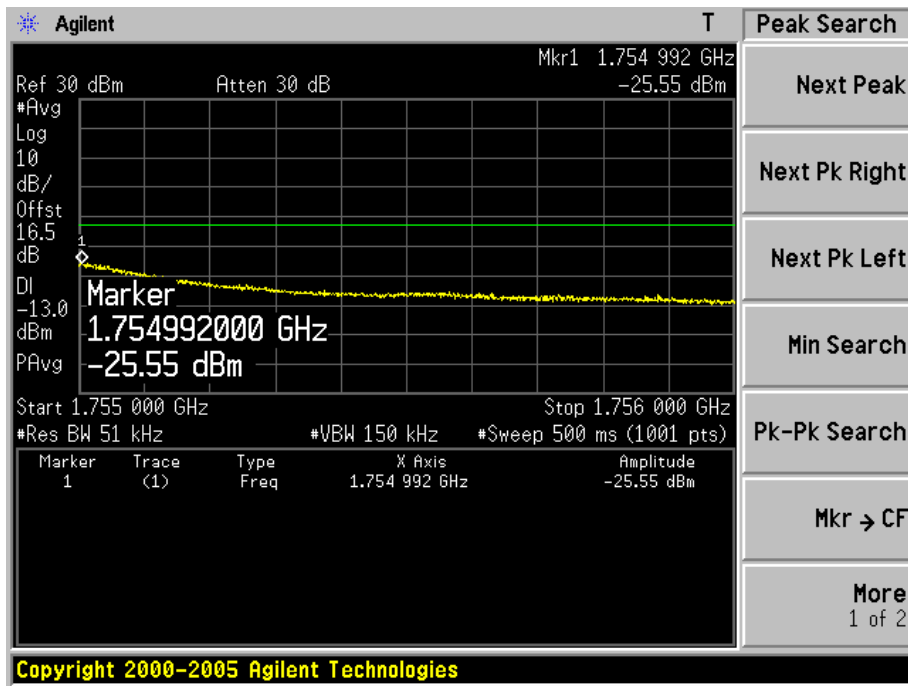


Figure Channel 20375 (1752.50MHz)

1RB24

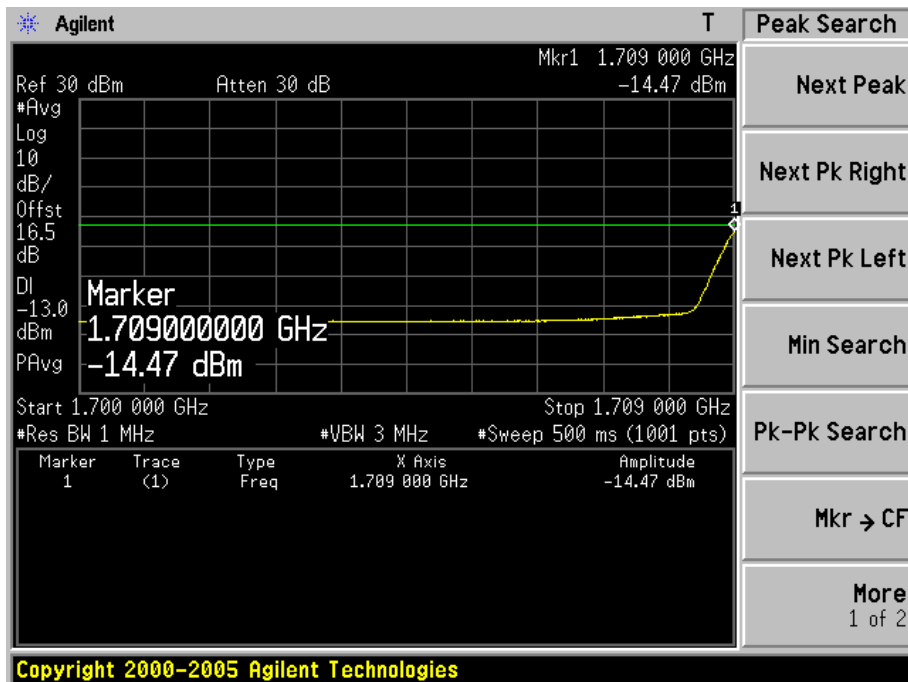
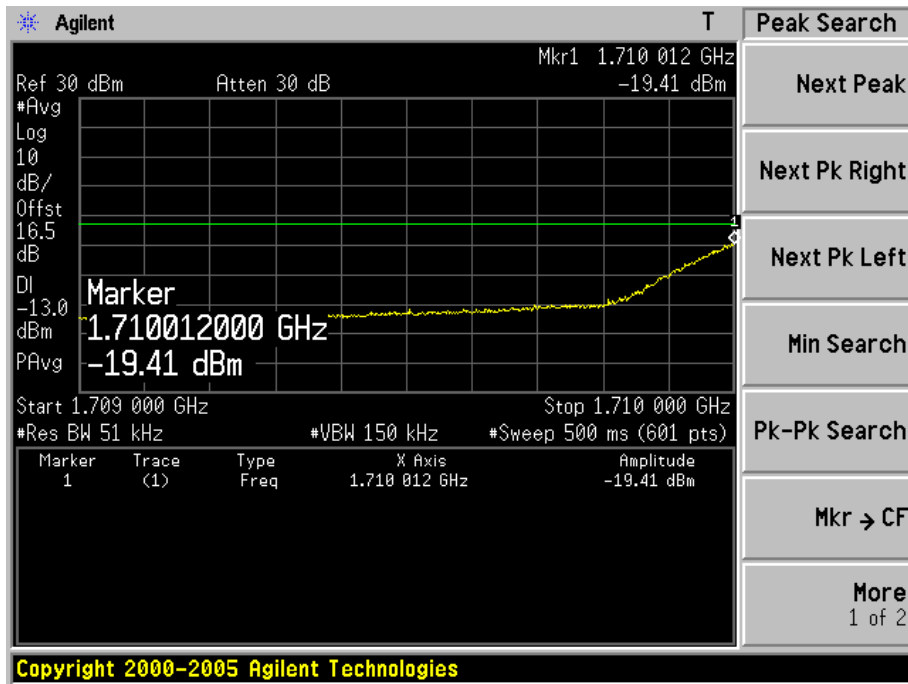


25RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (5M/16QAM)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 19975 (1712.5MHz)
1RB0



25RB0

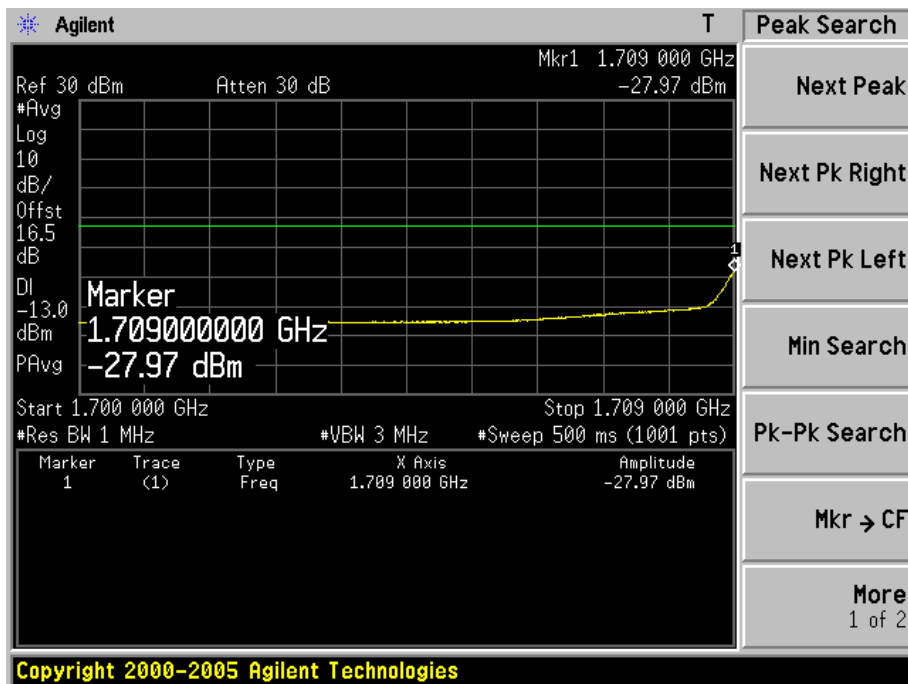
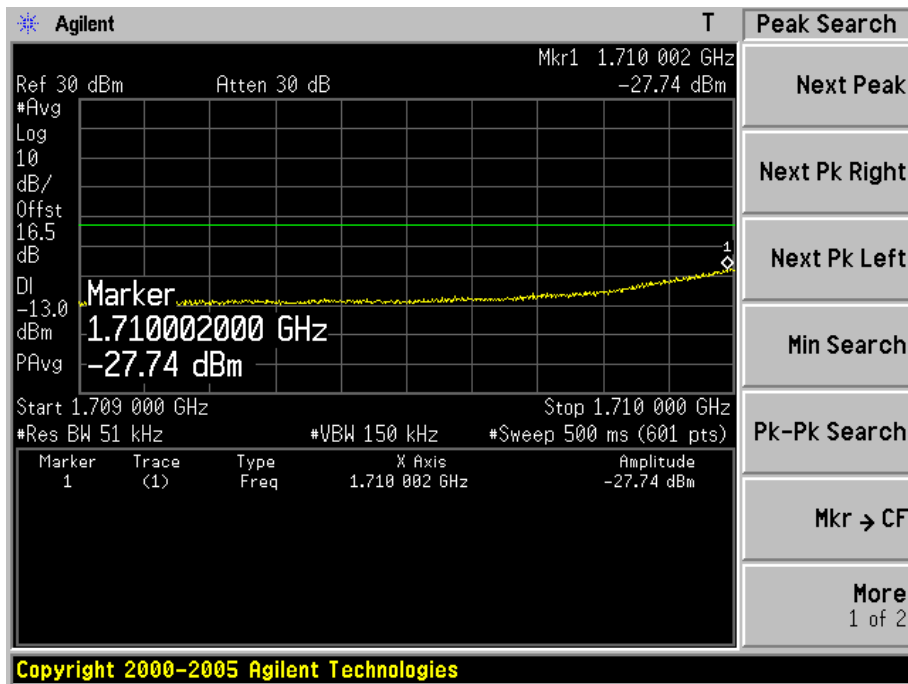
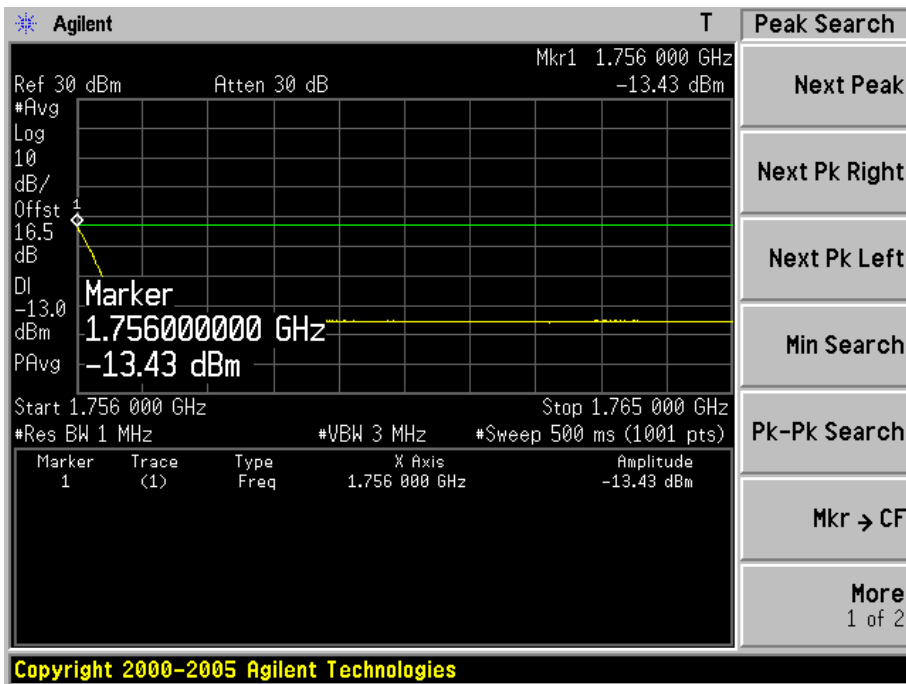
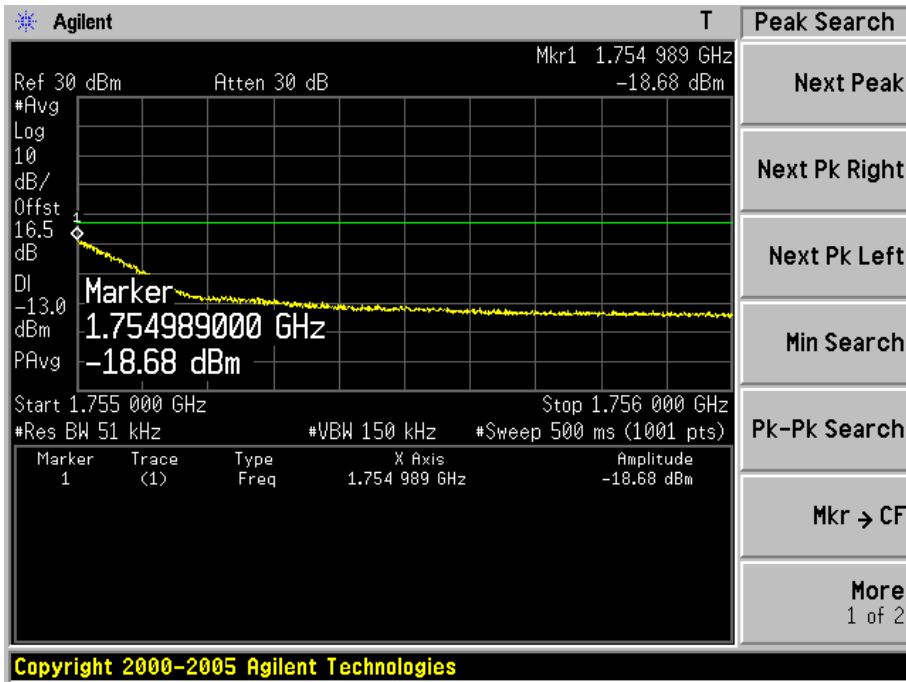
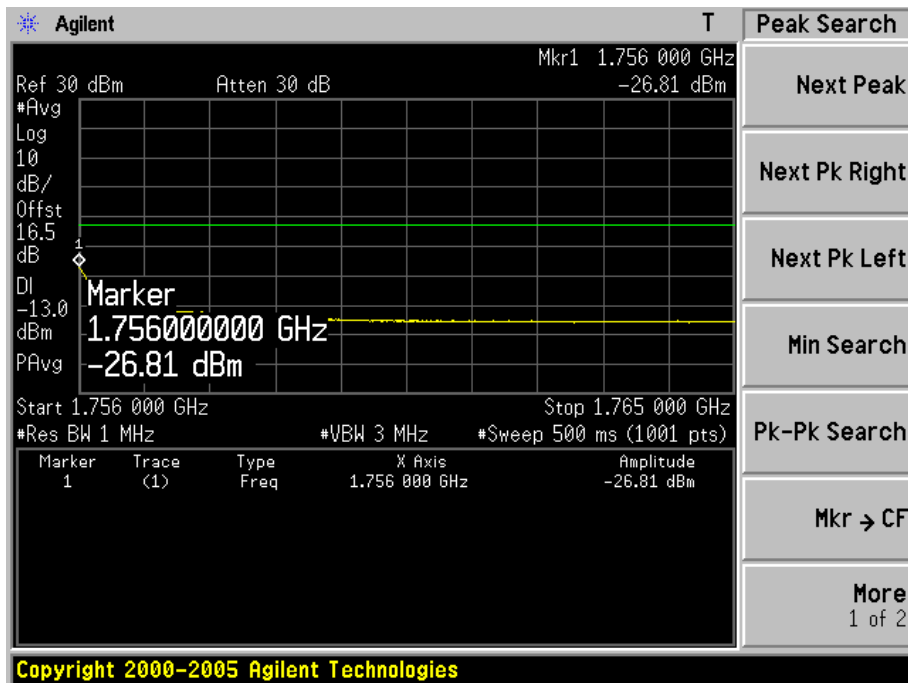
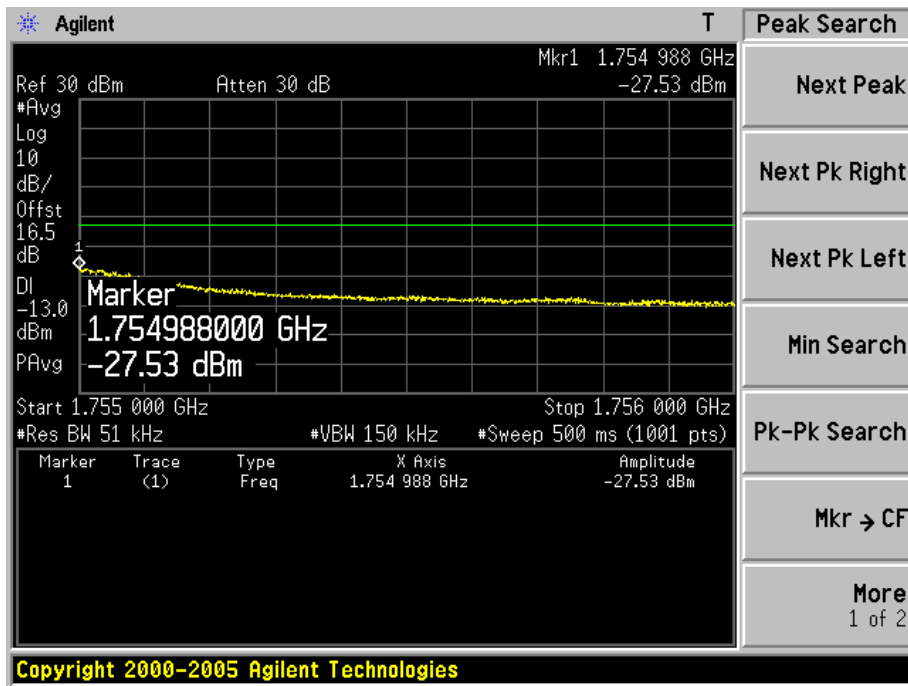


Figure Channel 20375 (1750.00MHz)

1RB24



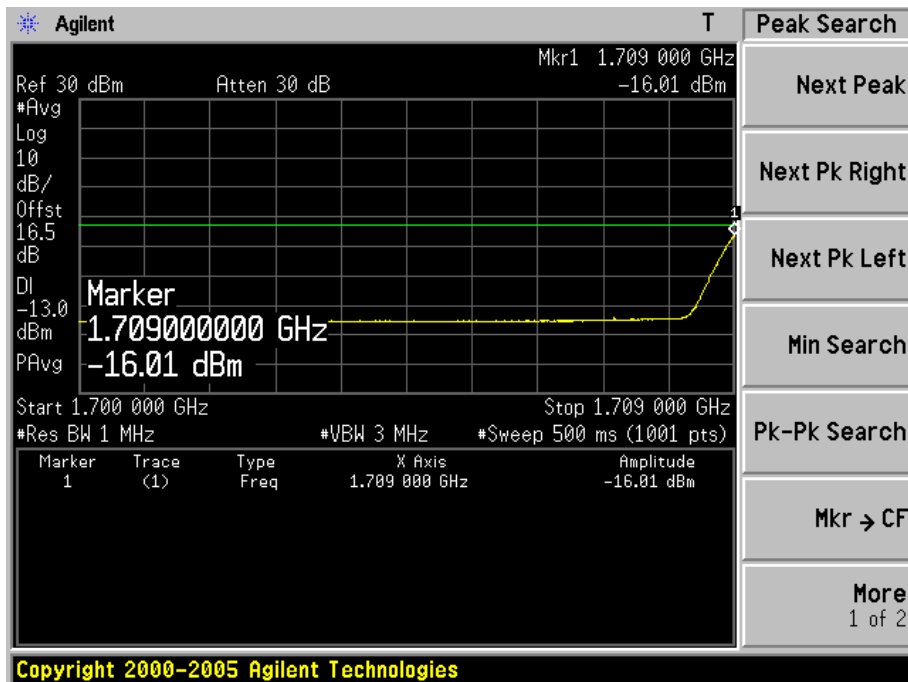
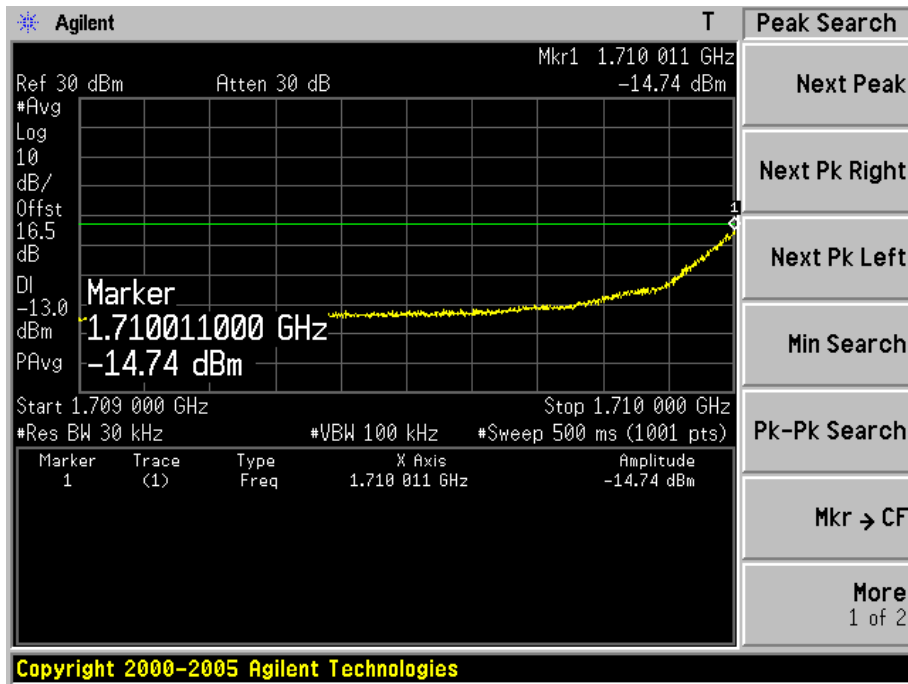
25RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (3M/QPSK)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 19965 (1711.50MHz)

1RB0



15RB0

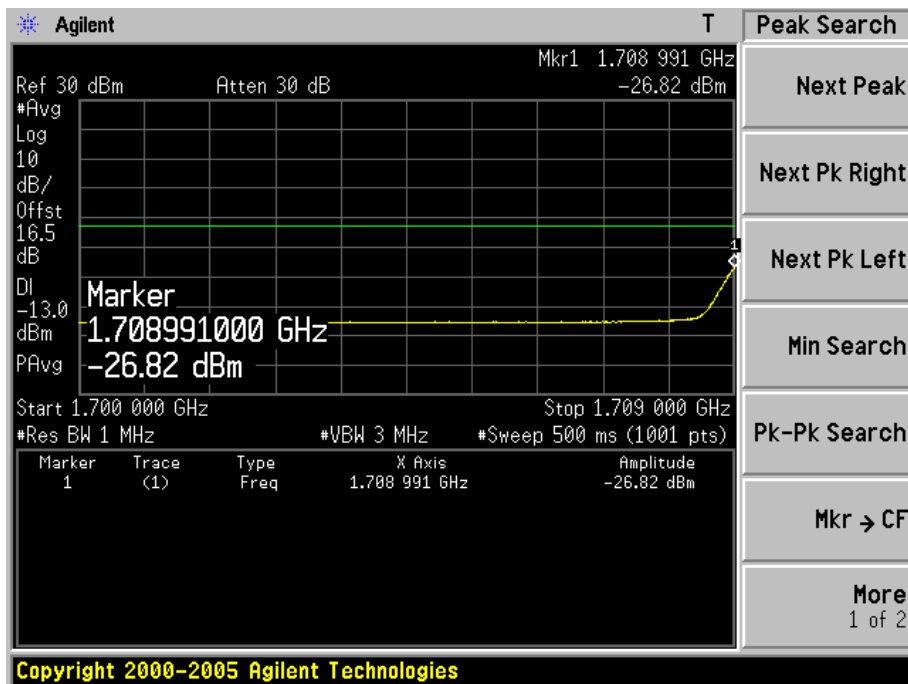
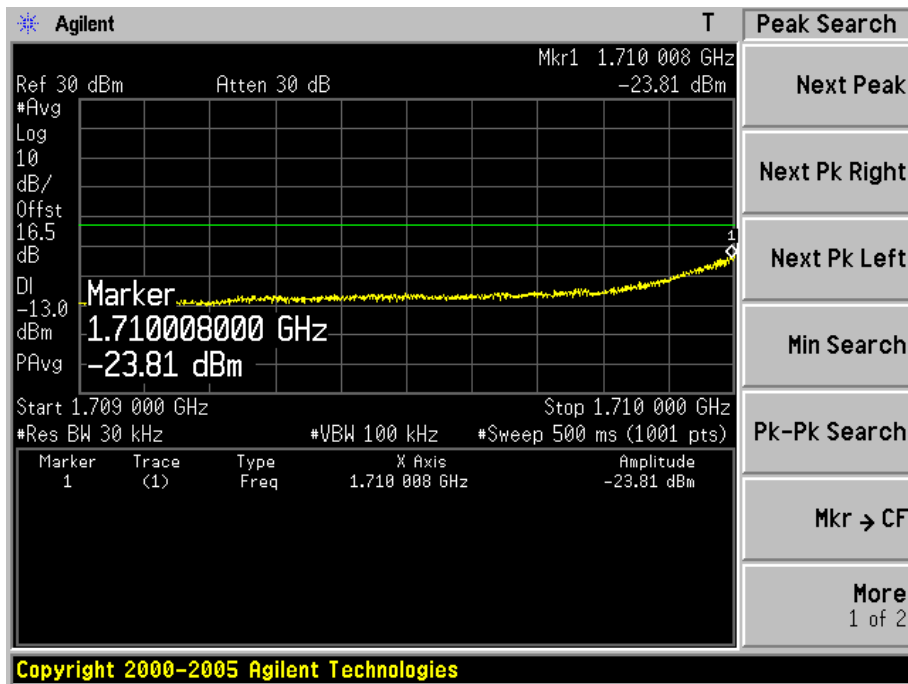
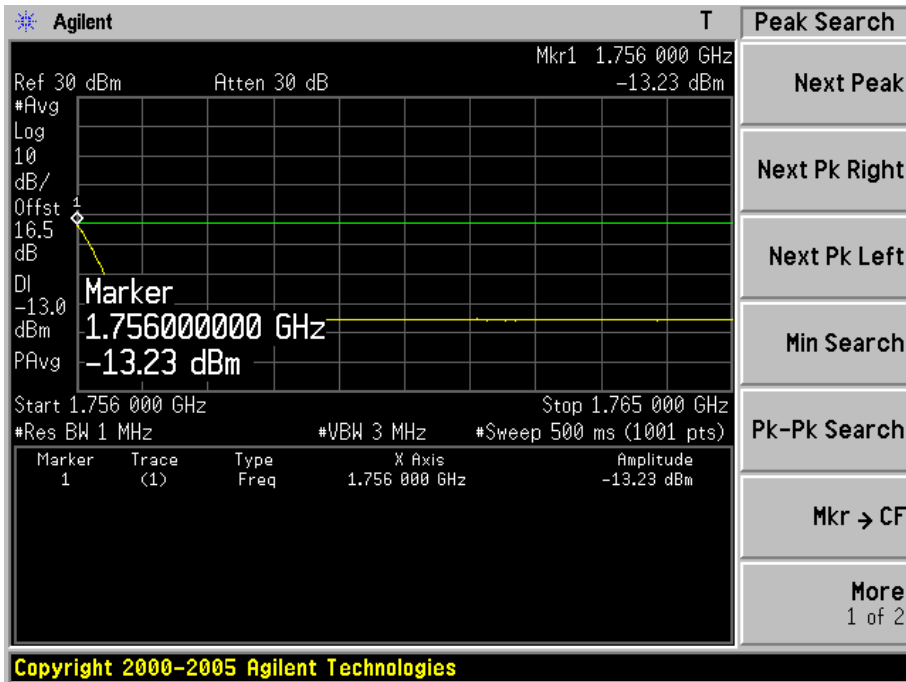
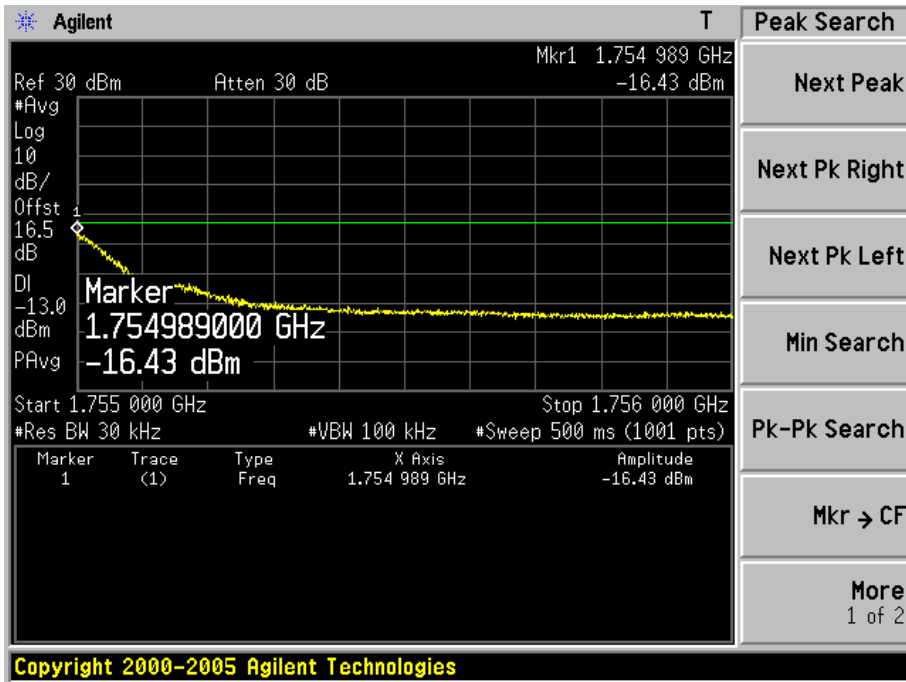
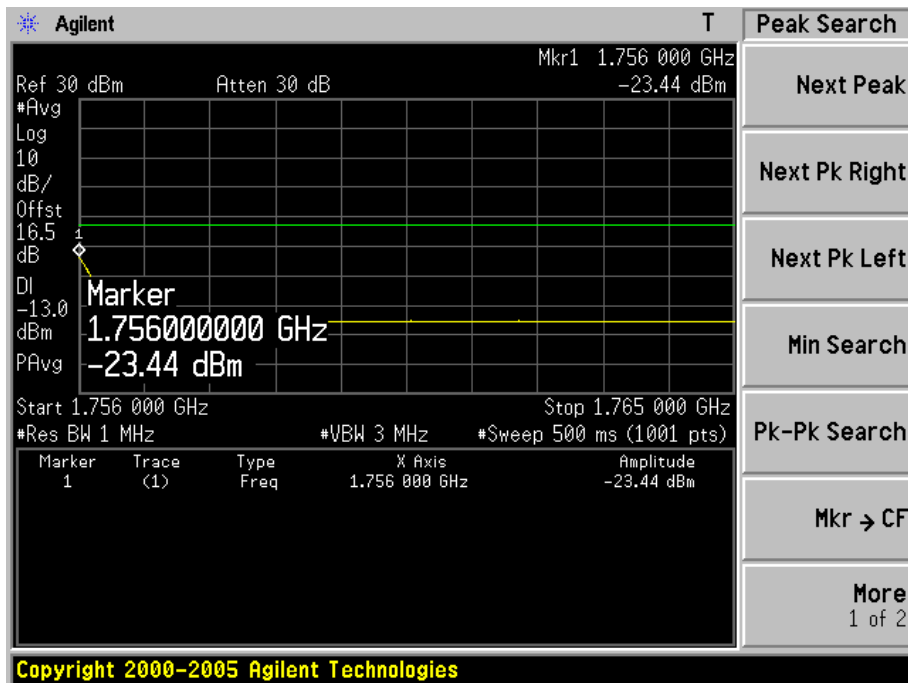
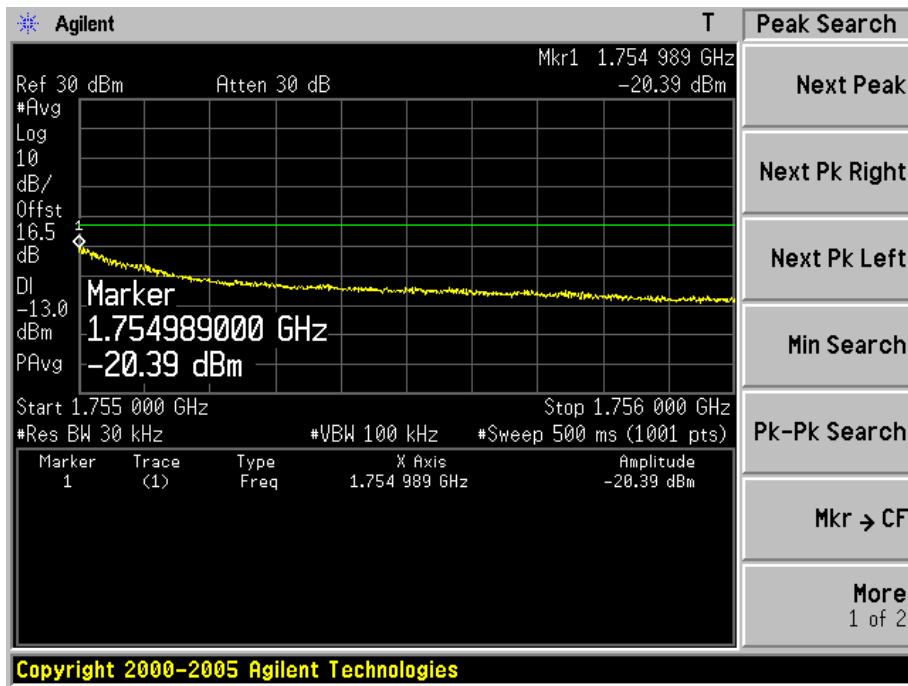


Figure Channel 20385 (1753.50MHz)

1RB14



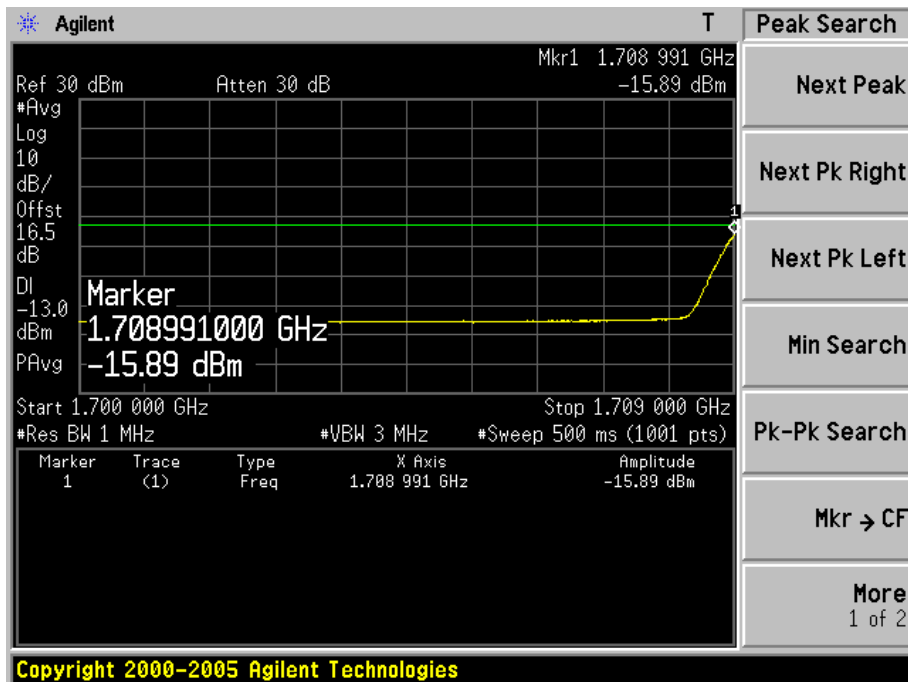
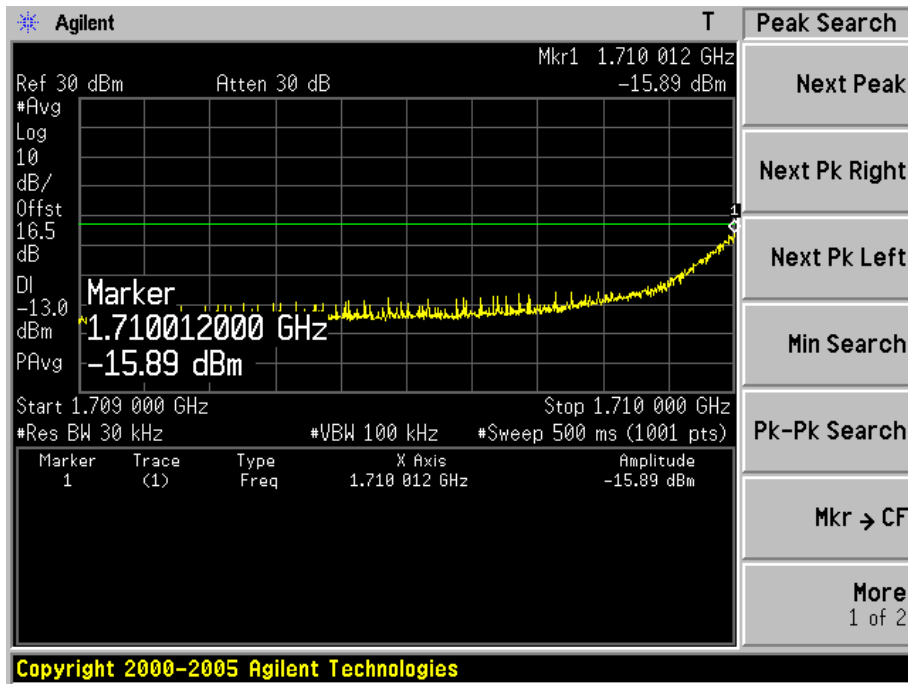
15RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (3M/16QAM)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 19965 (1711.50MHz)

1RB0



15RB0

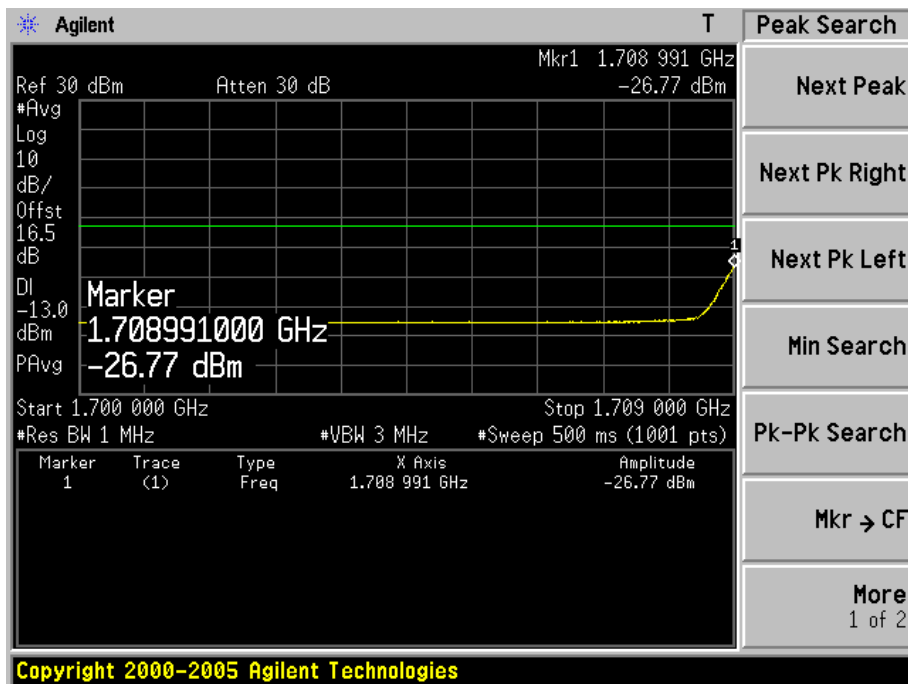
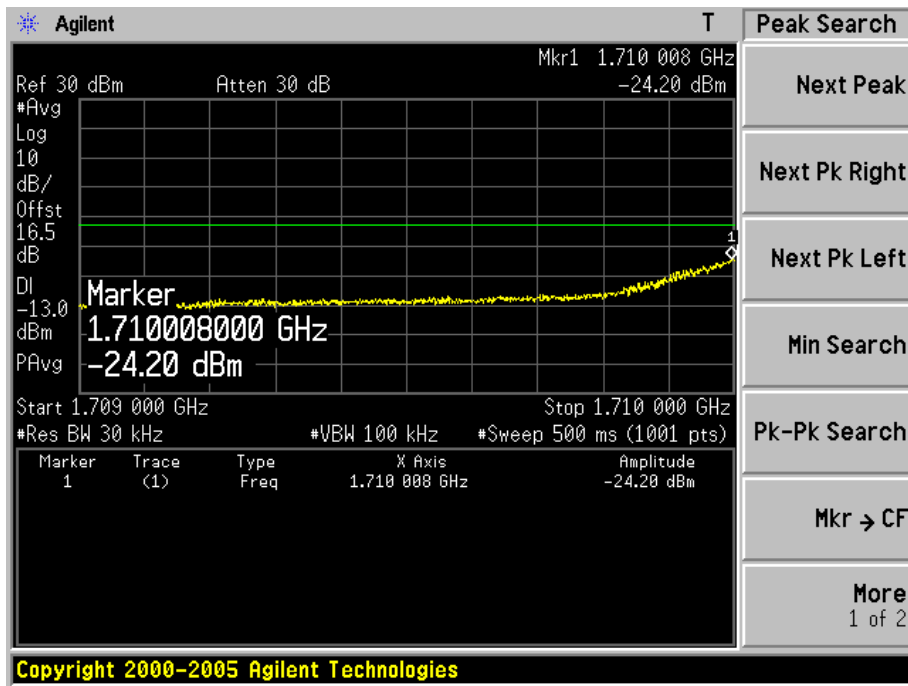
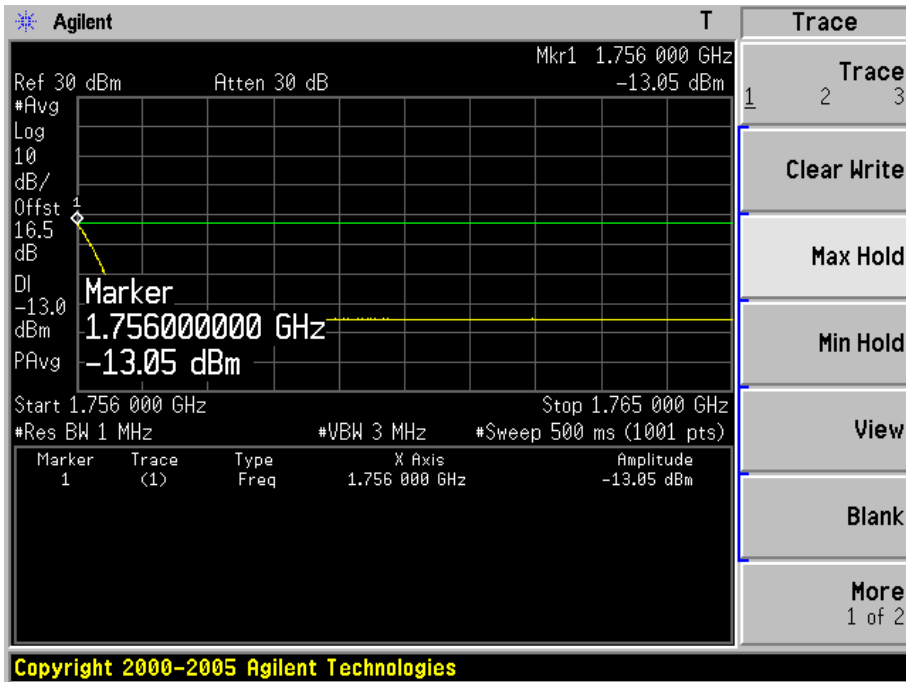
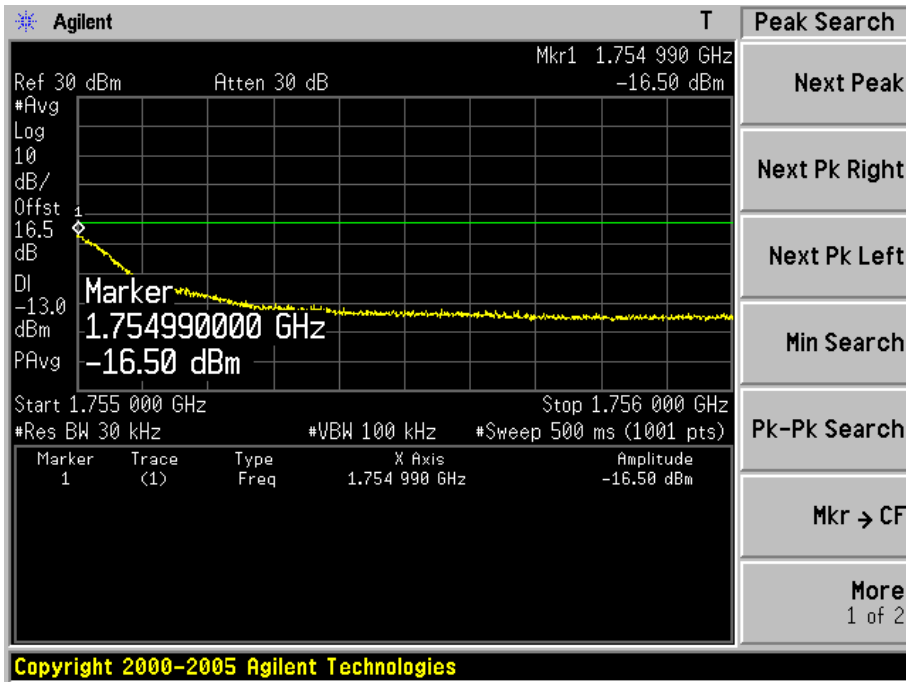
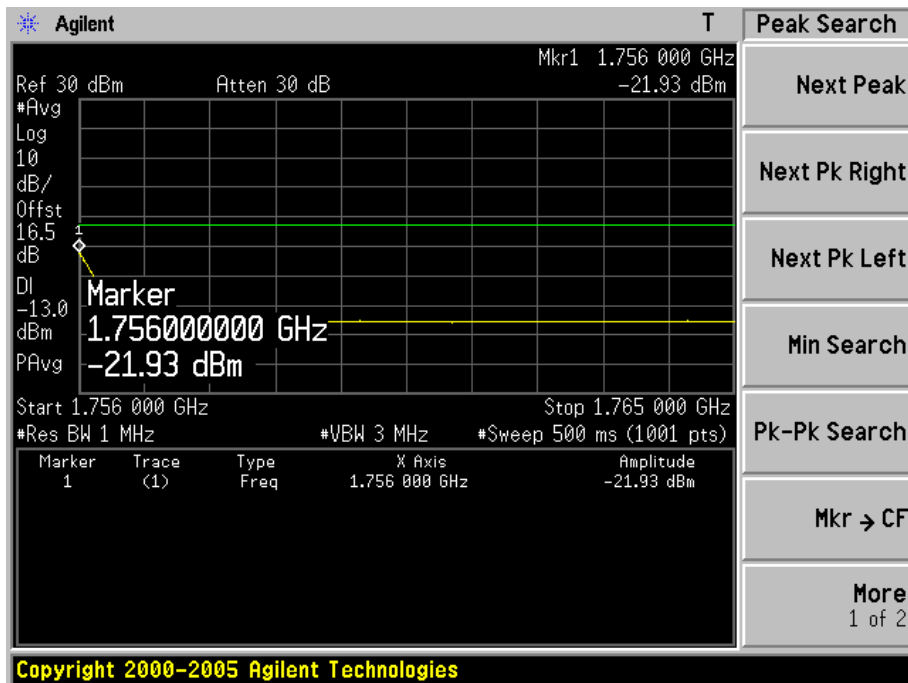
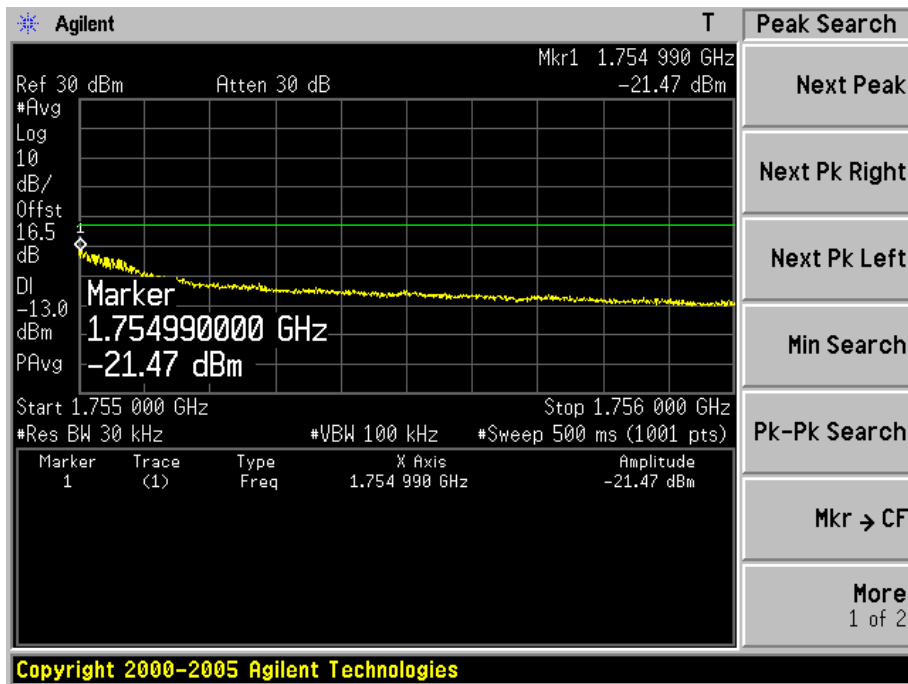


Figure Channel 20385 (1753.50MHz)

1RB14



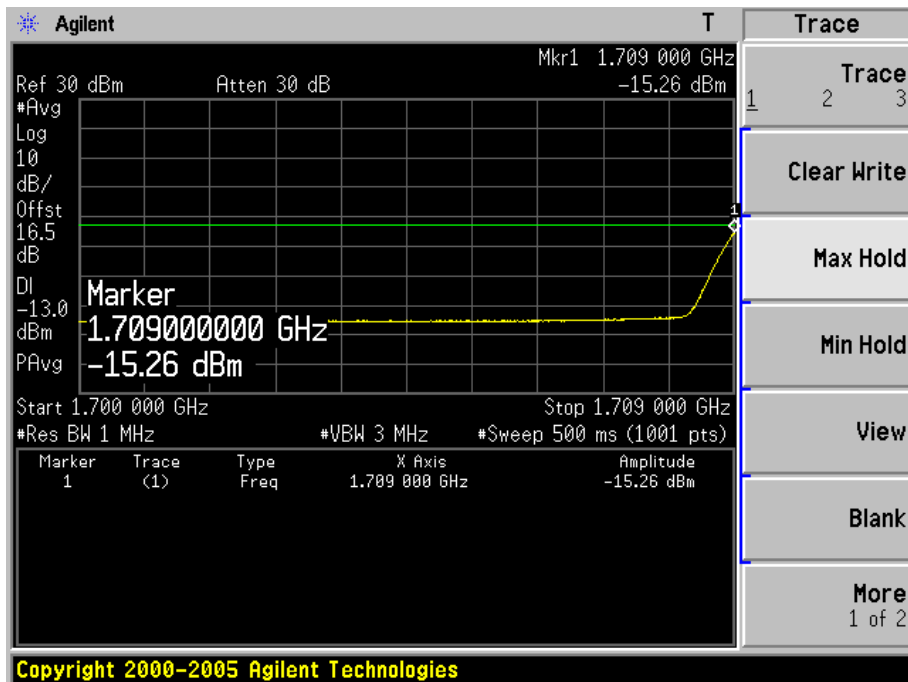
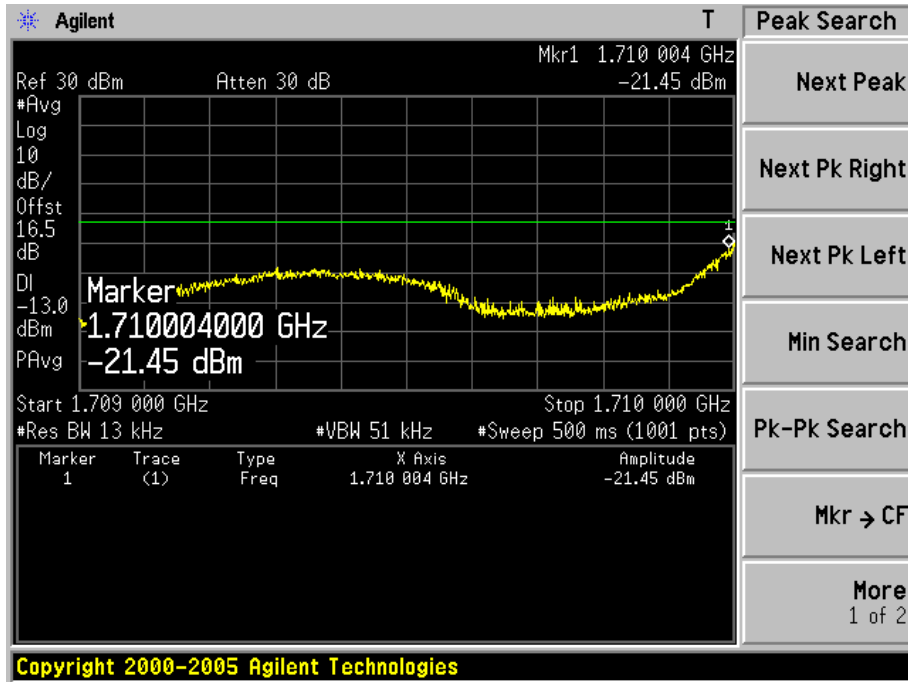
15RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (1.4M/QPSK)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 19957 (1710.70MHz)

1RB0



7RB0

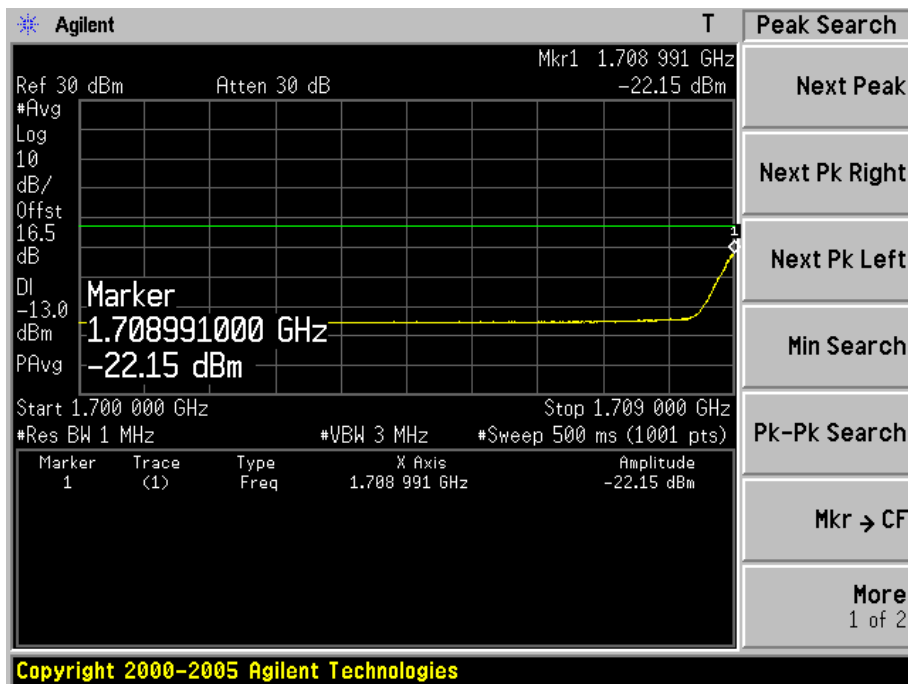
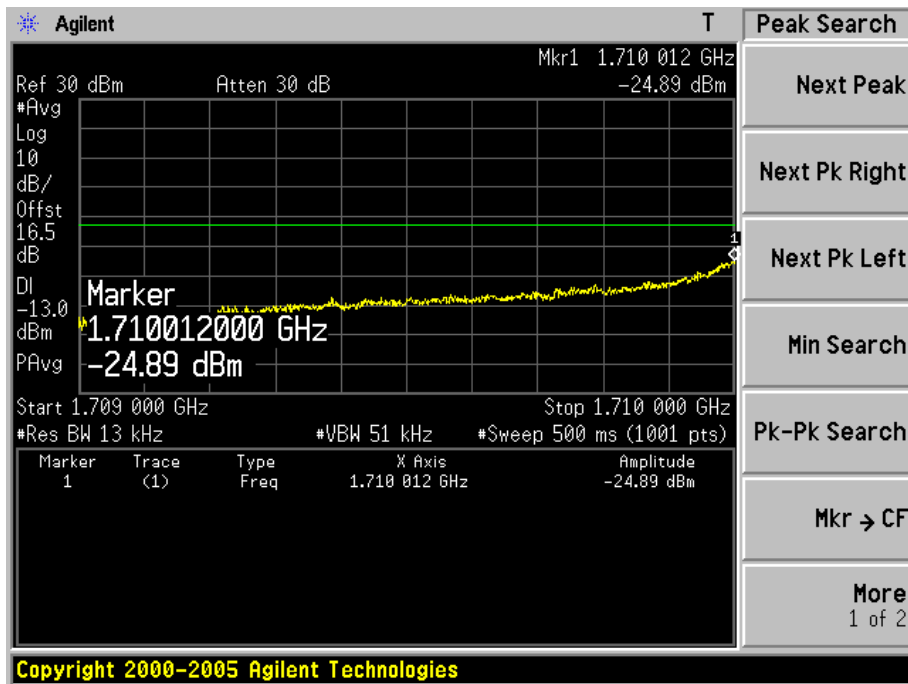
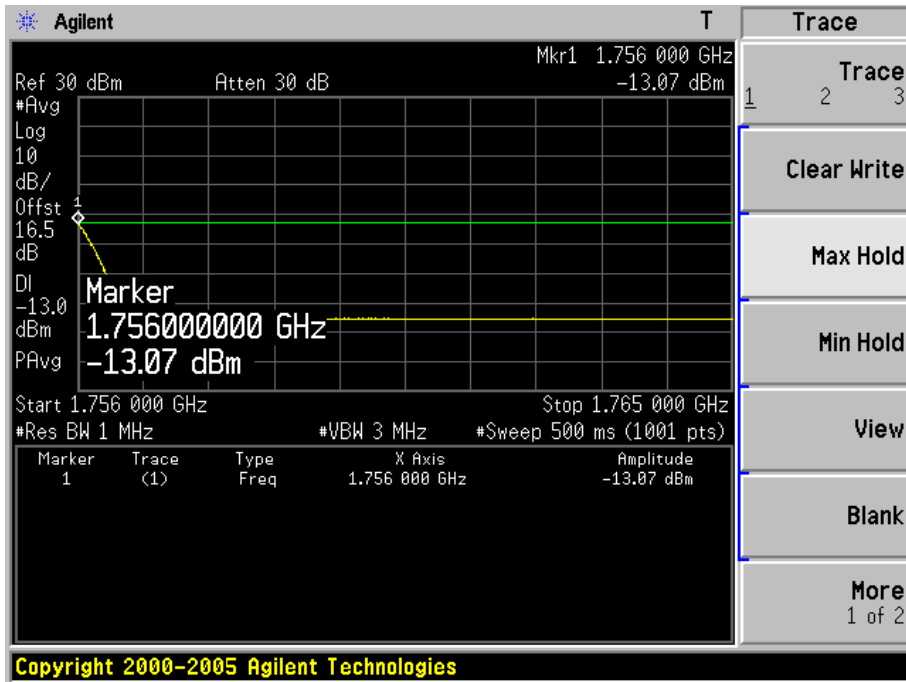
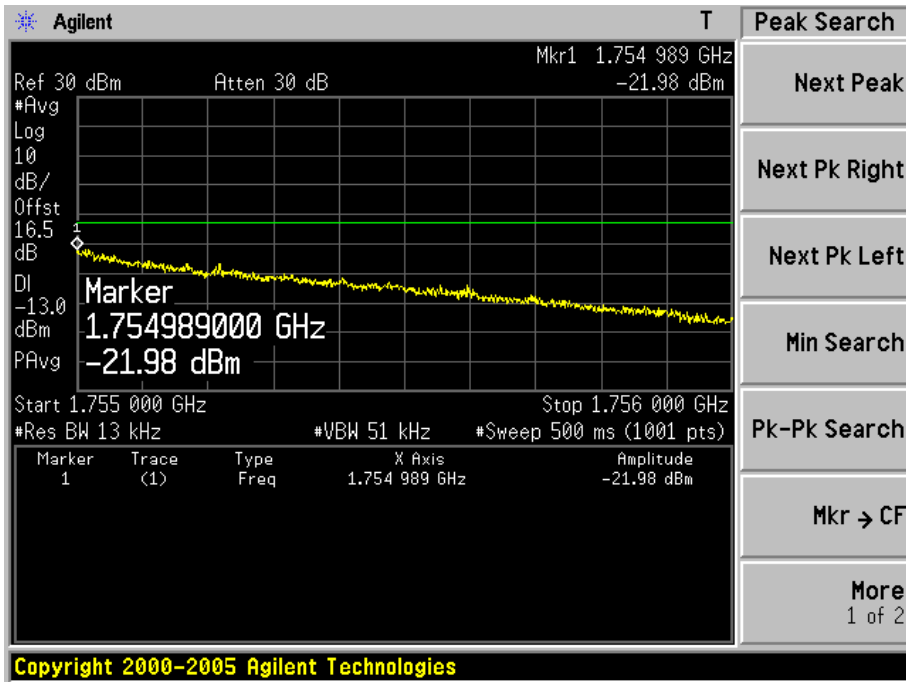
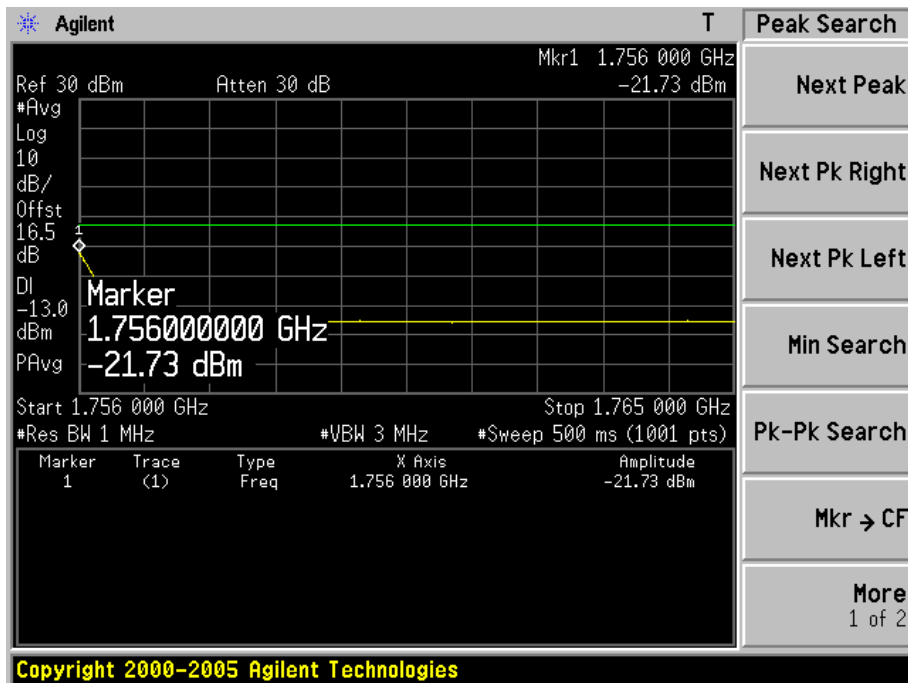
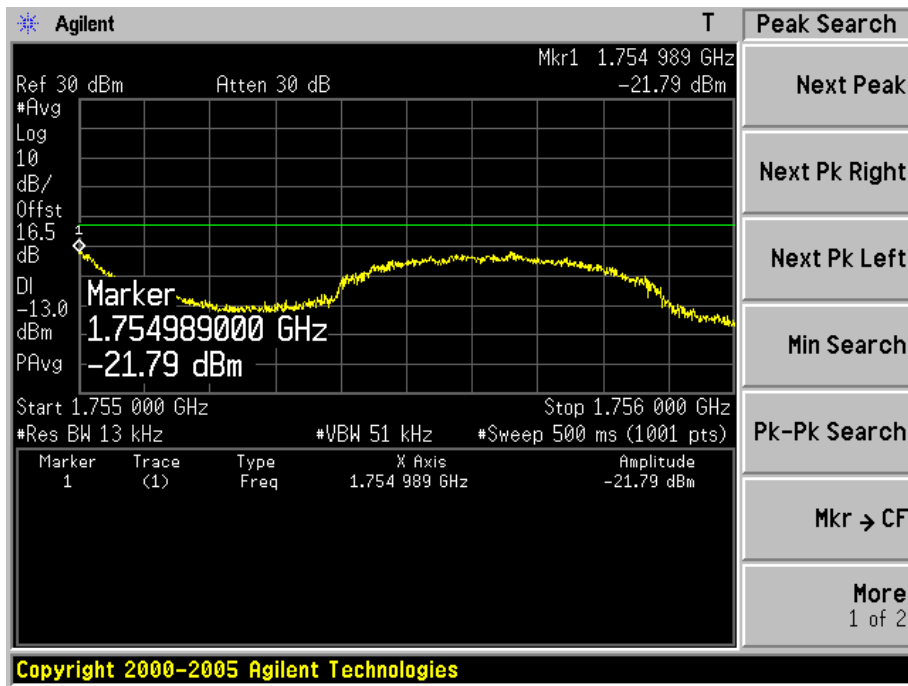


Figure Channel 20393 (1754.30MHz)

1RB6



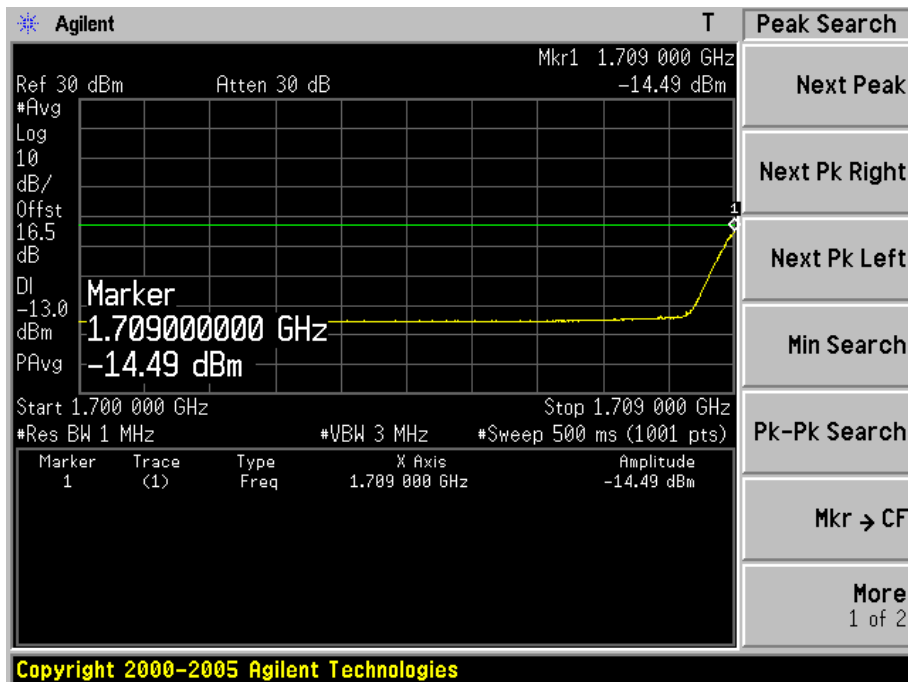
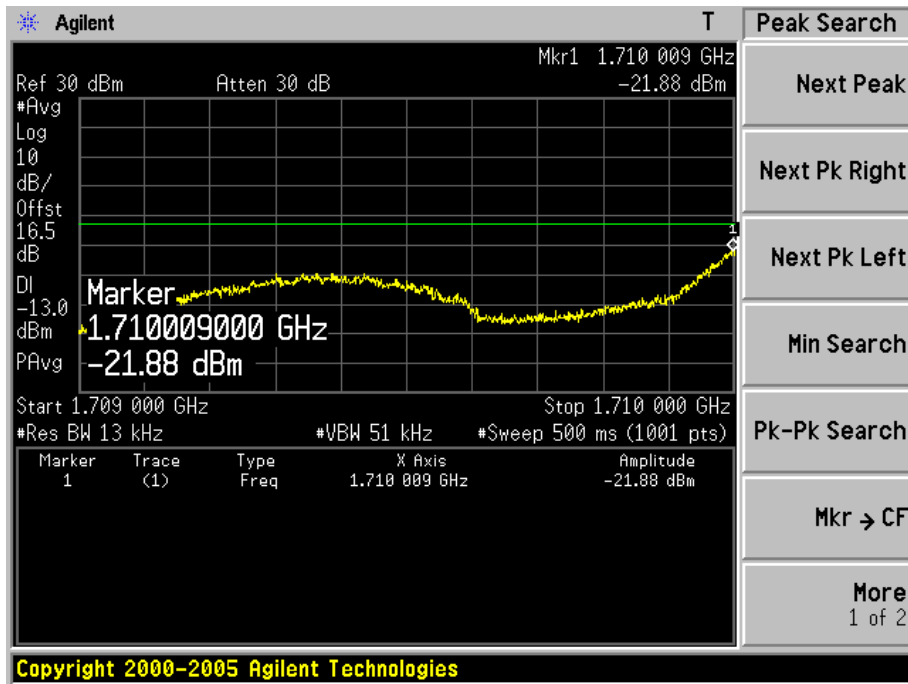
7RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 1: LTE Band 4 (1.4M/16QAM)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 19957 (1710.70MHz)

1RB0



7RB0

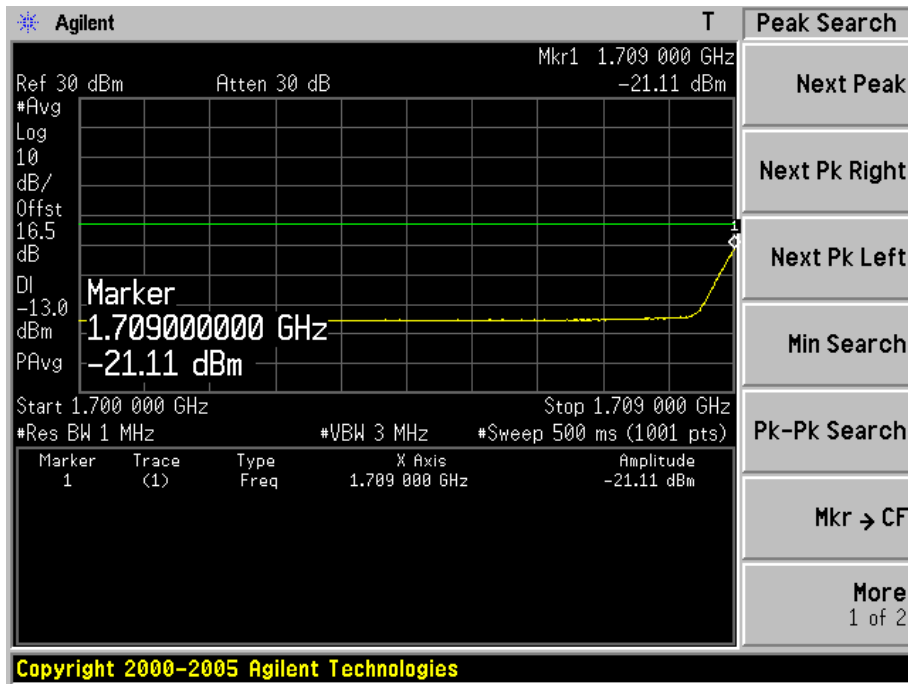
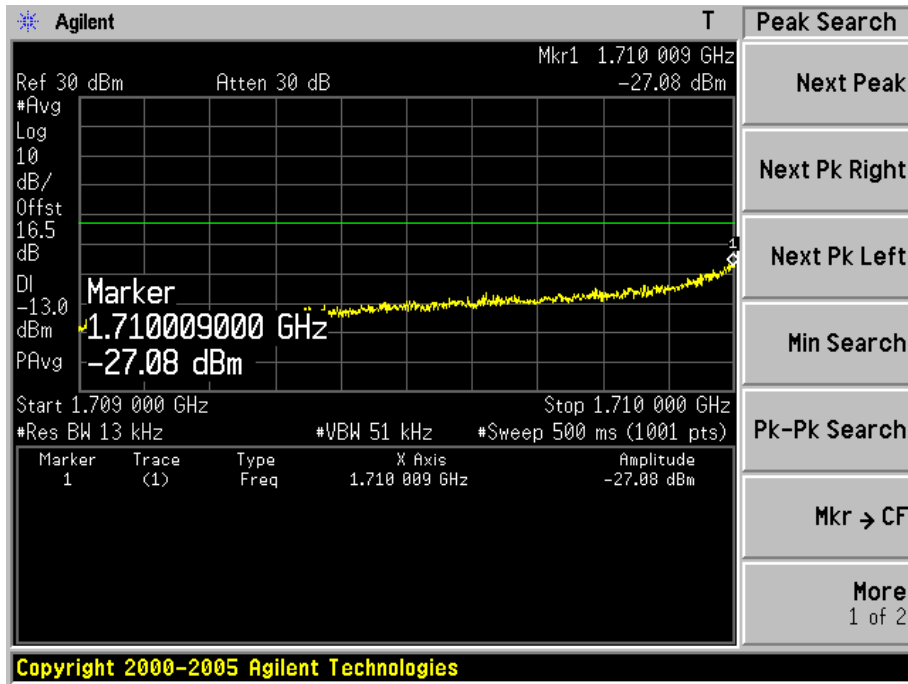
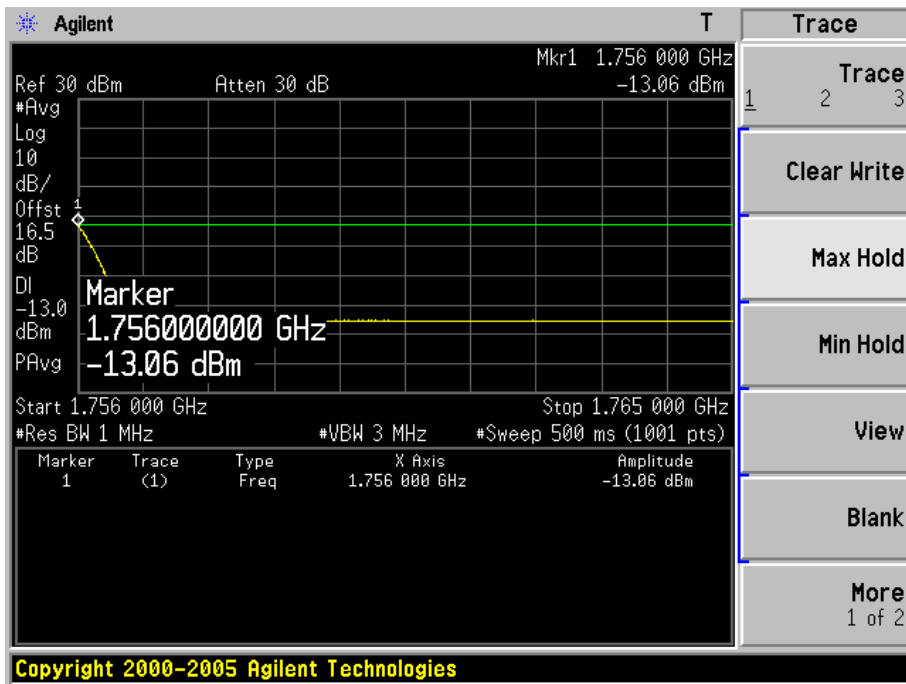
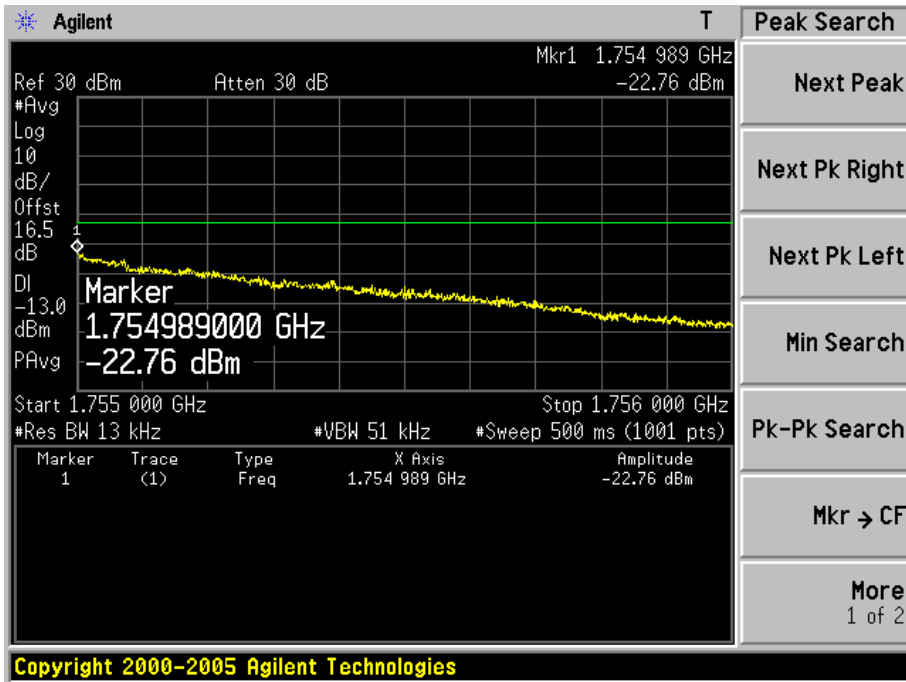
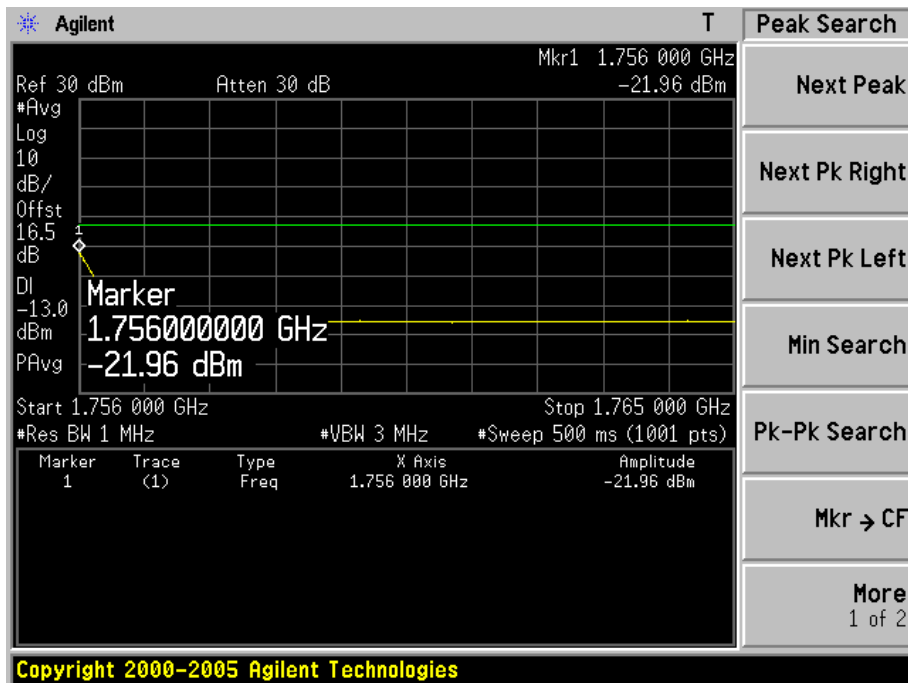
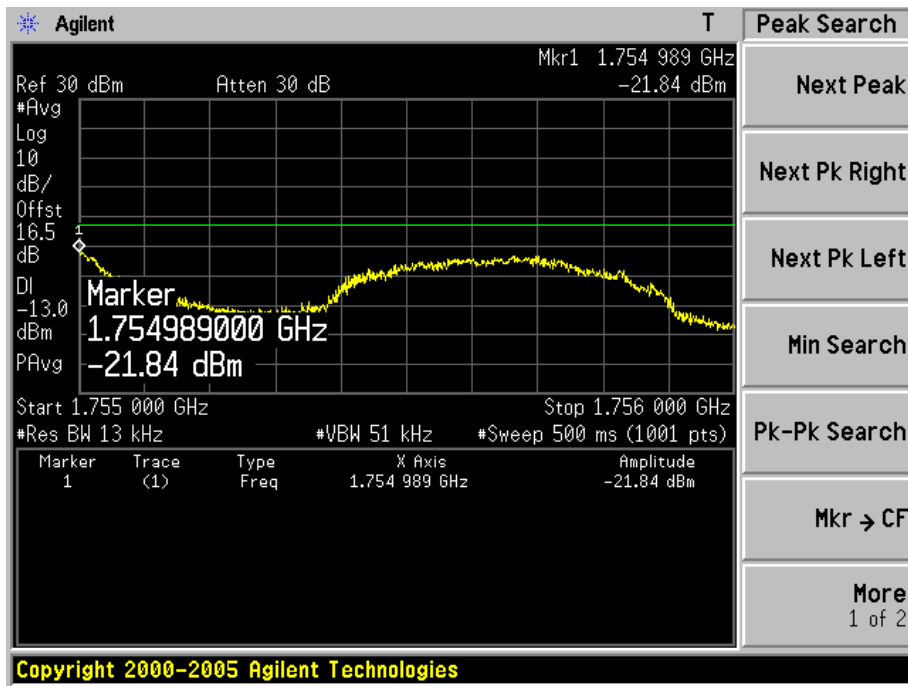


Figure Channel 20393 (1754.30MHz)

1RB6



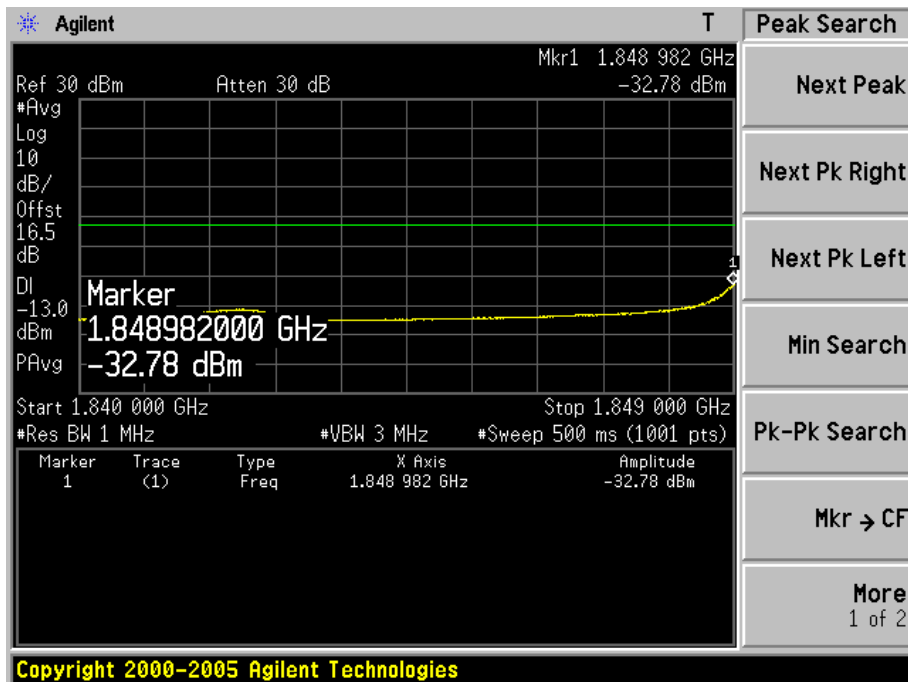
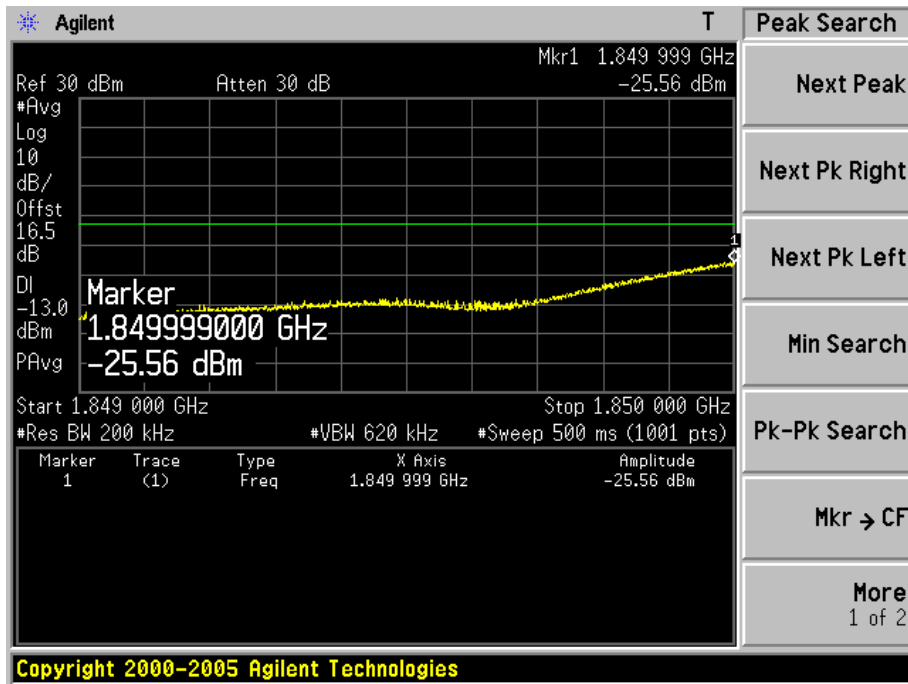
7RB0



Product	Wireless Module		
Test Item	Conducted Band Edge		
Test Mode	Mode 2: LTE Band 25 (20M/QPSK)		
Date of Test	2014/12/25	Test Site	AC6

Figure Channel 26140 (1860.00MHz)

1RB0



100RB0

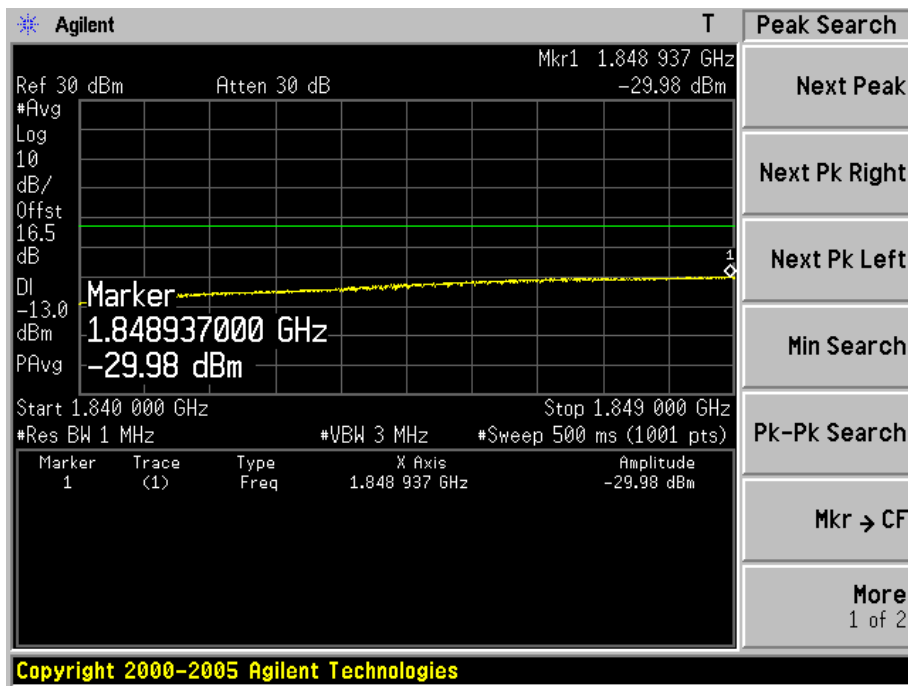
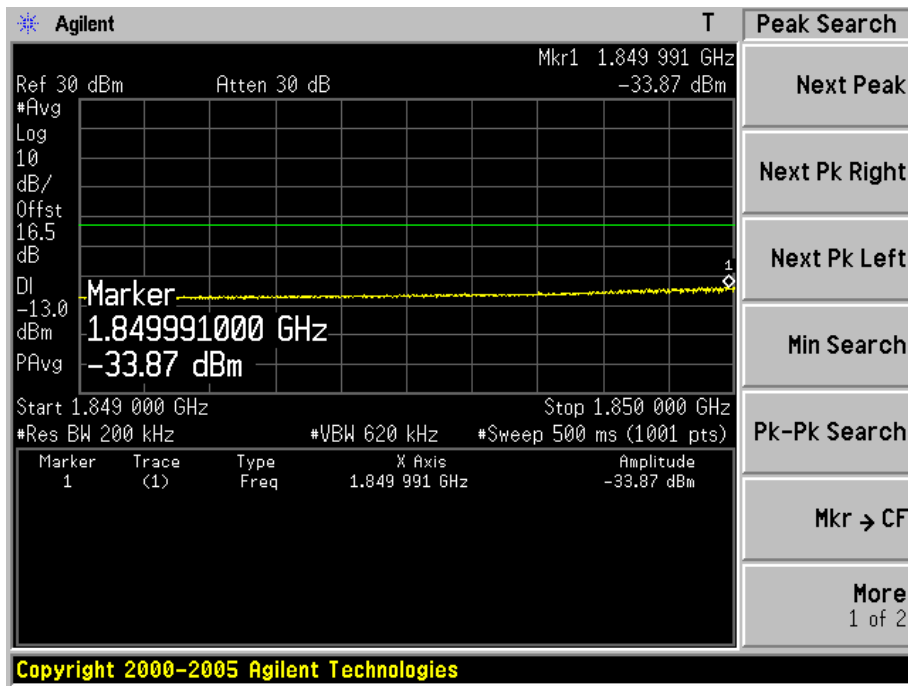


Figure Channel 26590 (1905.00MHz)

1RB99

