FCC TEST REPORT
(Part 90 Subpart Z)

REPORT NO.: RF120725E06

MODEL NO.: RG300-3.7-FLF-81, RG300-3.7-1D-FLF-81, RG300-3.7-1D1V-FLF-81, RG300-3.7-1D1V1W-FLF-81, RG300-3.7 2D1V-FLF-81, RG300-3.7-2D1V1W-FLF-81, RG300-3.7-2D1V1W-FLF-81

FCC ID: V8YFW181RG30015W

RECEIVED: July 24, 2012

TESTED: Aug. 17 to 23, 2012

ISSUED: Sep. 25, 2012

APPLICANT: Accton Wireless Broadband Corp.

ADDRESS: 3F, No. 1 Creation Rd. III, Science-based Industrial Park Hsinchu 30077, Taiwan, R.O.C.

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

LAB ADDRESS : No. 81-1, Lu Liao Keng, 9th Ling,Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.

This report should not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120725E06	Original release	Sep. 25, 2012

1 CERTIFICATION

PRODUCT:	WiMAX 802.16e Indoor Gateway
BRAND:	AWB
MODEL:	RG300-3.7-FLF-81, RG300-3.7-1D-FLF-81, RG300-3.7-1D1V-FLF-81, RG300-3.7-1D1V1W-FLF-81, RG300-3.7 2D1V-FLF-81, RG300-3.7-2D1V1W-FLF-81, RG300-3.7-2D1V1W-FLF-81
TEST SAMPLE:	R&D SAMPLE
APPLICANT:	Accton Wireless Broadband Corp.
TESTED:	Aug. 17 to 23, 2012
TEST STANDARDS:	**FCC Part 90, Subpart Z**

The above equipment (Model No.: RG300-3.7-FLF-81) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch,** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____ , **DATE:** *Sep. 25, 2012*
(Claire Kuan, Specialist)

APPROVED BY : _____ , **DATE:** *Sep. 25, 2012*
(May Chen, Deputy Manager)

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

STANDARD SECTION FCC Part 2& Part 90	TEST TYPE	RESULT	REMARK
2.1046 90.1321	Maximum Output Power	PASS	Meet the requirement of limit.
2.1055 90.213	Frequency Stability	PASS	Meet the requirement of limit.
2.1049 90.1323	Emission Bandwidth	PASS	Meet the requirement of limit.
90.210	Emission masks	PASS	Meet the requirement of limit.
2.1051 90.1323	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 90.1323	Radiated Spurious Emissions	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Radiated emissions	30MHz ~ 1000MHz	4.89 dB
	1GHz ~ 18GHz	2.49 dB
	18GHz ~ 40GHz	2.70 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	WiMAX 802.16e Indoor Gateway
MODEL NO.	RG300-3.7-FLF-81, RG300-3.7-1D-FLF-81, RG300-3.7-1D1V-FLF-81, RG300-3.7-1D1V1W-FLF-81, RG300-3.7 2D1V-FLF-81, RG300-3.7-2D1V1W-FLF-81, RG300-3.7-2D1V1W-FLF-81
POWER SUPPLY	DC 12V from power adapter
MODULATION TYPE	Up-Link： QPSK-1/2, -3/4, 16QAM-1/2, -3/4
	Down-Link： QPSK-1/2, -3/4, 16QAM-1/2, -3/4, 64QAM-1/2, -2/3, -3/4, -5/6
MODULATION TECHNOLOGY	OFDMA
MULTIPLE ACCESS METHOD	TDMA
OPERATING FREQUENCY	5MHz: 3652.5 ~ 3697.5MHz 10MHz: 3655 ~ 3695MHz
CHANNEL BANDWIDTH	5MHz, 10MHz
MAX. EIRP POWER	35.70dBm
ANTENNA TYPE	Please see note
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	NA

NOTE:

1. There are WiMAX technology and WiFi technology used for the EUT, this report was recorded the WiMAX test data. For the WiFi test data was recorded in another test report<RF120725E06A>.

2. Spurious emission of the simultaneous operation (WiFi & WiMAX) has been evaluated and no non-compliance found.

3. The EUT has seven model names which are identical to each other in all aspects except for the following table:

Brand	Model Name	Description
AWB	RG300-3.7-FLF-81	for marketing requirement
	RG300-3.7-1D-FLF-81	
	RG300-3.7-1D1V-FLF-81	
	RG300-3.7-1D1V1W-FLF-81	
	RG300-3.7 2D1V-FLF-81	
	RG300-3.7-2D1V1W-FLF-81	
	RG300-3.7-2D1V1W-FLF-81	

From the above models, model: **RG300-3.7-FLF-81** was selected as representative model for the test and its data was recorded in this report.

4. The EUT must be supplied with a power adapter as following table:

Brand	Model No.	Spec.
Sunny	SYS1381-1212-W2	AC input: 100~240V, 0.5A, 50-60Hz DC output: 12V, 1.0A DC output cable: Unshielded, 1.9m

5. There is one antenna provided to this EUT, please refer to the following table:

Antenna Type	Antenna Connector	Gain (dBi) Include cable loss	Cable Loss(dB) (External only, if any)	Frequency range (MHz to MHz)
Monopole	IPEX	9.9	0.5	3600~3800

6. The EUT incorporates a SIMO function for WiMAX. Physically, the EUT provides one completed transmit and two receivers.

7. EUT can supports different UL / DL ratio, max transmit ratio is up to 18 (UL): 29 (DL). After pretesting of output power and spurious emission, 18 (UL): 29 (DL) was found to be worst case and was selected for the final test configuration.

8. The above EUT information was declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

The following channels had been tested for each channel bandwidth.

CHANNEL BANDWIDTH: 5MHz
Low channel (L): 3652.5MHz
Middle channel (M): 3675MHz
High channel (H): 3697.5MHz
CHANNEL BANDWIDTH: 10MHz
Low channel (L): 3655MHz
Middle channel (M): 3675MHz
High channel (H): 3695MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO							DESCRIPTION
	OP	FS	EB	EM	CSE	RE<1G	RE≥1G	
-	√	√	√	√	√	√	√	-

Where **OP:** Output power **FS:** Frequency stability
EB: Emission bandwidth **EM:** Emission masks
CSE: Conducted spurious emissions **RE<1G:** Radiated emission below 1GHz
RE≥1G: Radiated emission above 1GHz **NOTE:** "-": Means no effect.

OUTPUT POWER MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, coding rate and antenna ports (if EUT with antenna diversity architecture).

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

TESTED CHANNEL	MODULATION TECHNOLOGY	CHANNEL BANDWIDTH	MODULATION TYPE	CODING RATE
L, M, H	OFDMA	5MHz	QPSK	1/2
L, M, H	OFDMA	10MHz	QPSK	1/2

FREQUENCY STABILITY MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, coding rate, and antenna ports (if EUT with antenna diversity architecture).

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

TESTED CHANNEL	MODULATION TECHNOLOGY	CHANNEL BANDWIDTH	MODULATION TYPE
M	OFDMA	5MHz	Unmodulation

EMISSION BANDWIDTH MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, coding rate, and antenna ports (if EUT with antenna diversity architecture).

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

TESTED CHANNEL	MODULATION TECHNOLOGY	CHANNEL BANDWIDTH	MODULATION TYPE	CODING RATE
L, M, H	OFDMA	5MHz	QPSK	1/2
L, M, H	OFDMA	10MHz	QPSK	1/2

EMISSION MASKS MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, coding rate, and antenna ports (if EUT with antenna diversity architecture).

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

TESTED CHANNEL	MODULATION TECHNOLOGY	CHANNEL BANDWIDTH	MODULATION TYPE	CODING RATE
L, M, H	OFDMA	5MHz	QPSK	1/2
L, M, H	OFDMA	10MHz	QPSK	1/2

CONDUCTED SPURIOUS EMISSIONS MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, coding rate, and antenna ports (if EUT with antenna diversity architecture).

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

TESTED CHANNEL	MODULATION TECHNOLOGY	CHANNEL BANDWIDTH	MODULATION TYPE	CODING RATE
L, M, H	OFDMA	5MHz	QPSK	1/2
L, M, H	OFDMA	10MHz	QPSK	1/2

RADIATED EMISSION MEASUREMENT (BELOW 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, coding rate and antenna ports (if EUT with antenna diversity architecture).

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

TESTED CHANNEL	MODULATION TECHNOLOGY	CHANNEL BANDWIDTH	MODULATION TYPE	CODING RATE
H	OFDMA	5MHz	QPSK	1/2
H	OFDMA	10MHz	QPSK	1/2

RADIATED EMISSION MEASUREMENT (ABOVE 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, coding rate and antenna ports (if EUT with antenna diversity architecture).

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

TESTED CHANNEL	MODULATION TECHNOLOGY	CHANNEL BANDWIDTH	MODULATION TYPE	CODING RATE
L, M, H	OFDMA	5MHz	QPSK	1/2
L, M, H	OFDMA	10MHz	QPSK	1/2

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
OP	25deg°C, 60%RH	120Vac, 60Hz	Wen Yu
FS	25deg°C, 60%RH	120Vac, 60Hz	Wen Yu
EB	25deg°C, 60%RH	120Vac, 60Hz	Wen Yu
EM	25deg°C, 60%RH	120Vac, 60Hz	Wen Yu
CSE	25deg°C, 60%RH	120Vac, 60Hz	Wen Yu
RE < 1G	25deg°C, 60%RH	120Vac, 60Hz	Amos Chuang
RE ≥ 1G	25deg°C, 60%RH	120Vac, 60Hz	Amos Chuang

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 90

965270 D01 Pwr Meas Part 90 Z Equipment v01

ANSI/TIA/EIA-603-C-2004

All test items have been performed and recorded as per the above standards.

NOTE: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

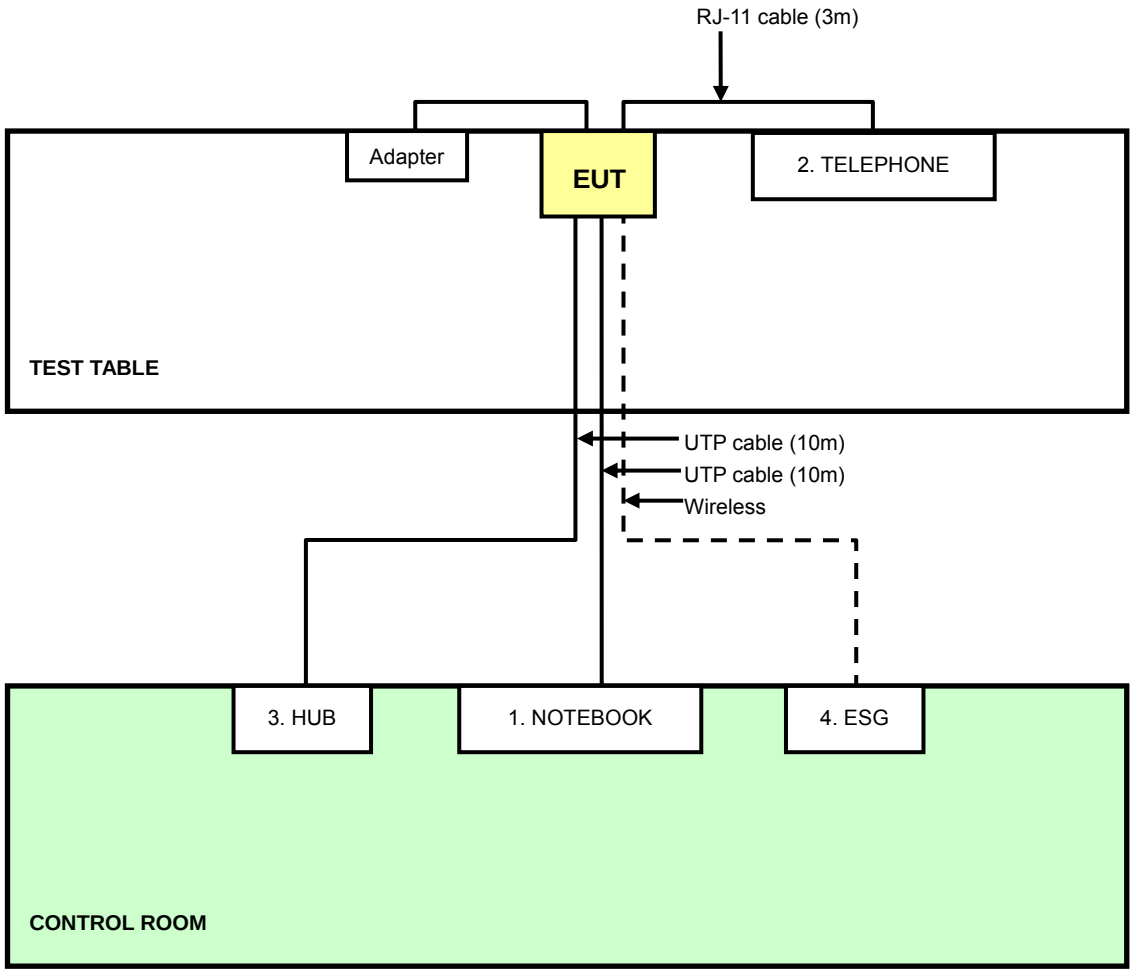
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP32LA	FSLB32S	FCC DoC
2	TELEPHONE	WONDER	WD-303	7C17KA 04011	NA
3	HUB	ZyXEL	ES-116P	S060H02000215	FCC DoC
4	ESG	Agilent	E4438C	MY45094468/005 506 602 UK6 UNJ	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	UTP cable (10m)
2	RJ-11 cable (3m)
3	UTP cable (10m)
4	NA

NOTE: All power cords of the above support units are non shielded (1.8m).

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST



4 TEST TYPES AND RESULTS

4.1 OUTPUT POWER AND POWER DENSITY MEASUREMENT

4.1.1 LIMITS OF OUTPUT POWER AND POWER DENSITY

PER FCC PART 90.1321

BASE AND FIXED STATIONS

Base and fixed stations are limited to 25 Watts/25 MHz equivalent isotropical radiated power (EIRP). In any event, the peak EIRP power density shall not exceed 1 Watt in any one-megahertz slice of spectrum.

MOBILE AND PORTABLE STATIONS

Mobile and portable stations are limited to 1 Watt/25 MHz EIRP. In any event, the peak EIRP density shall not exceed 40 milliWatts in any one-megahertz slice of spectrum.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
AGILENT SPECTRUM ANALYZER	E4446A	MY51100039	July 31, 2012	July 30, 2013
SUHNER RF cable	SUCOFLEX 104	222684/4	Jan. 26, 2012	Jan. 25, 2013
JFW 10dB attenuation	50HF-010-SMA	NA	NA	NA

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date: Aug. 21, 2012

4.1.3 TEST PROCEDURES

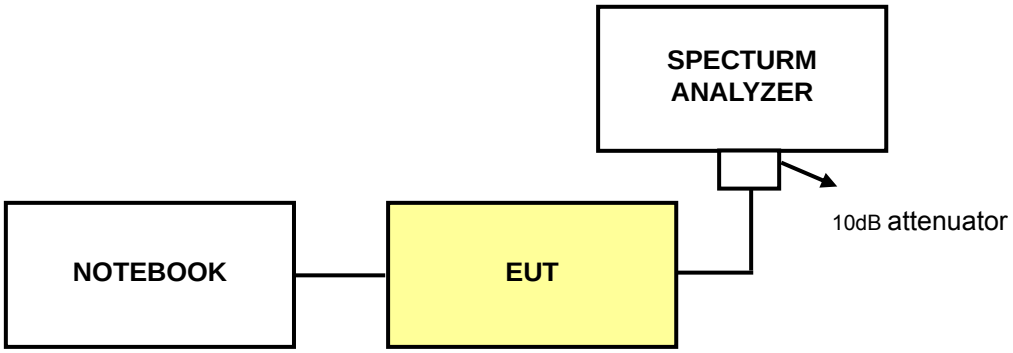
OUTPUT POWER

1. Connect the EUT transmitter output to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
2. Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW).
3. Set the span to twice the nominal EBW (span = 2 x EBW).
4. Set the resolution bandwidth (RBW) to approximately 1% of EBW.
5. Set the video bandwidth (VBW) to≥ 3 x RBW.
6. Select the average power (RMS) display detector.
7. Set the number of measurement points to ≥ 1001.
8. Use auto-coupled sweep time.
9. Perform measurement over an interval of time when the transmission is continuous and at its maximum power level.
10. Utilize trace averaging over 100 traces in the power averaging mode.
11. Use the Band/Channel Power function to determine the integrated power over the full EBW.
12. Record the band power level.
13. Adjust the recorded level by applying appropriate correction factors for the measurement set-up.
14. Determine the EIRP by adding the effective antenna gain to the adjusted power level.

POWER DENSITY

1. Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
2. Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW).
3. Set the span to twice the nominal EBW (span = 2 x EBW).
4. Set the resolution bandwidth (RBW) to 1 MHz.
5. Set the video bandwidth (VBW) to 3MHz.
6. Select the average power (RMS) display detector.
7. Set the number of measurement points to ≥ 1001.
8. Use auto-coupled sweep time.
9. Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
10. Utilize trace averaging over 100 traces in the power averaging mode.
11. Find the maximum trace amplitude (peak search) and record.
12. Adjust the recorded level by applying appropriate correction factors for the measurement set-up.
13. Determine the EIRP by adding the effective antenna gain to the adjusted power level.

4.1.4 TEST SETUP



4.1.5 EUT OPERATING CONDITIONS

a. Placed the EUT on the testing table.
b. Prepared one notebook system outside of testing area to act as a communication partners.
c. The communication partner connected with EUT and run a test program (X 350 VSG Control Panel Release v 4.02.00) to enable EUT under transmission condition continuously at specific channel frequency.

4.1.6 TEST RESULTS

CHANNEL BANDWIDTH: 5MHz

CONDUCTED POWER			
CHANNEL	**FREQUENCY (MHz)**	**POWER (mW)**	**POWER (dBm)**
Low	3652.5	349.95	25.44
Middle	3675	371.54	25.70
High	3697.5	345.94	25.39

EIRP POWER					
CHANNEL	**FREQUENCY (MHz)**	**ANTENNA GAIN (dBi)**	**POWER (mW)**	**POWER (dBm)**	**Limit (dBm)**
Low	3652.5	9.90	3419.8	35.34	36.99
Middle	3675	9.90	3630.8	35.60	36.99
High	3697.5	9.90	3380.6	35.29	36.99

NOTE:

1. EIRP = Conducted power + Antenna Gain

CONDUCTED POWER DENSITY			
Channel Number	**Freq. (MHz)**	**PSD (dBm/MHz)**	**PSD Limit (dBm/MHz)**
Low	3652.5	19.67	20.10
Middle	3675	20.08	20.10
High	3697.5	19.56	20.10

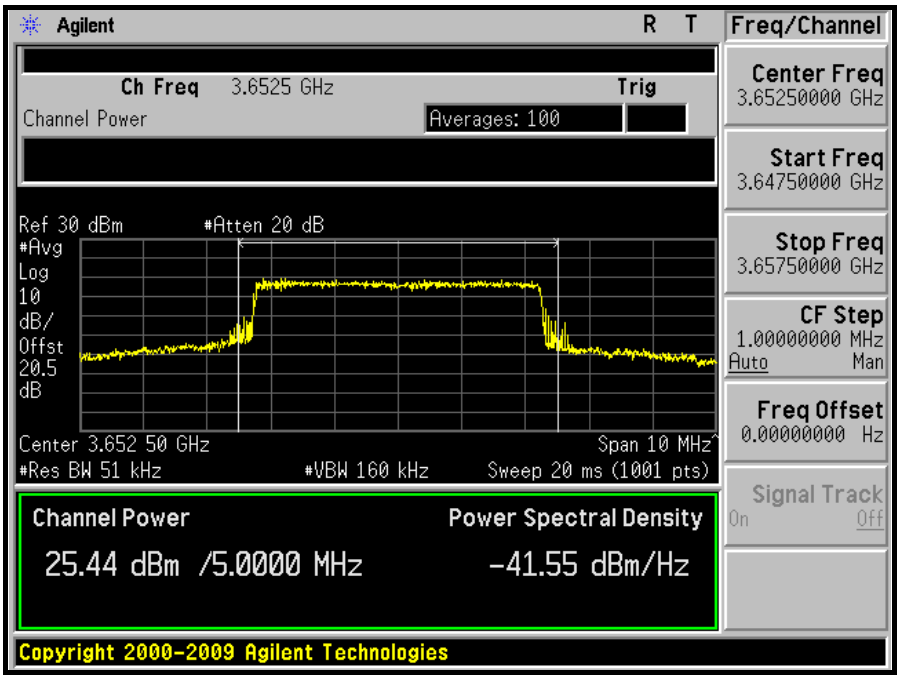
EIRP POWER DENSITY			
Channel Number	**Freq. (MHz)**	**PSD (dBm/MHz)**	**PSD Limit (dBm/MHz)**
Low	3652.5	29.57	30.00
Middle	3675	29.98	30.00
High	3697.5	29.46	30.00

NOTE:

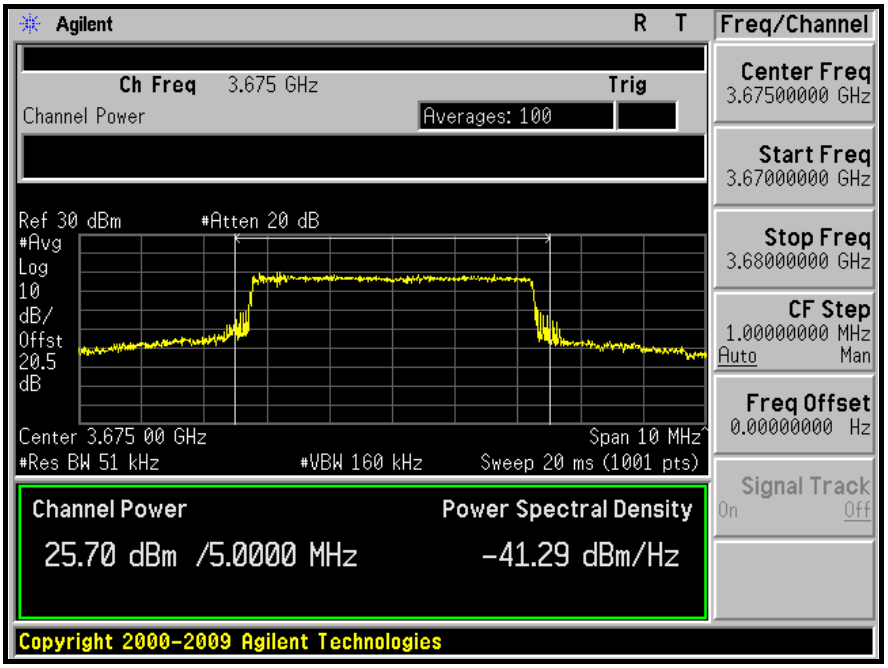
1.EIRP density = Conducted power density + Antenna Gain

OUTPUT POWER

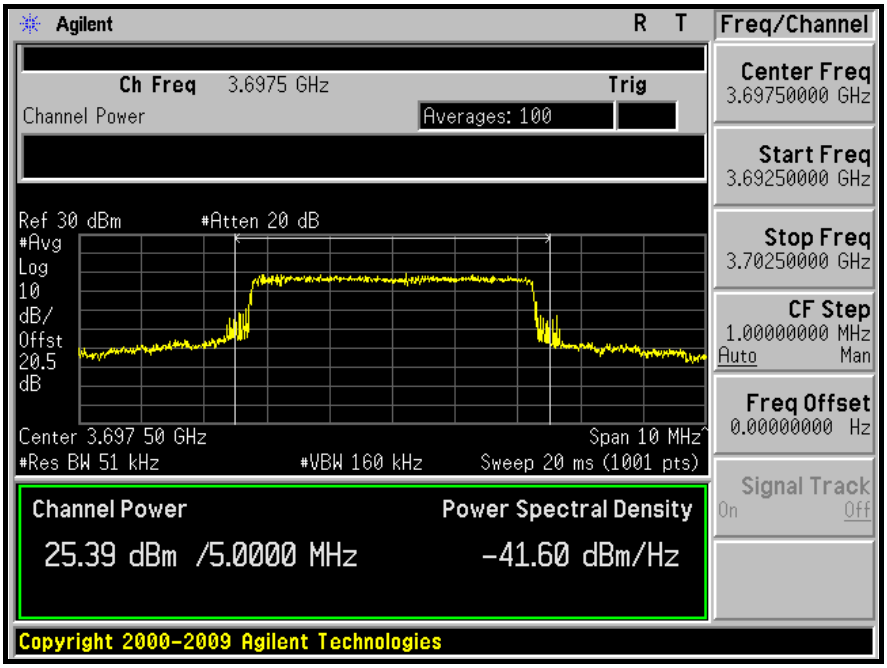
LOW CHANNEL



MIDDLE CHANNEL

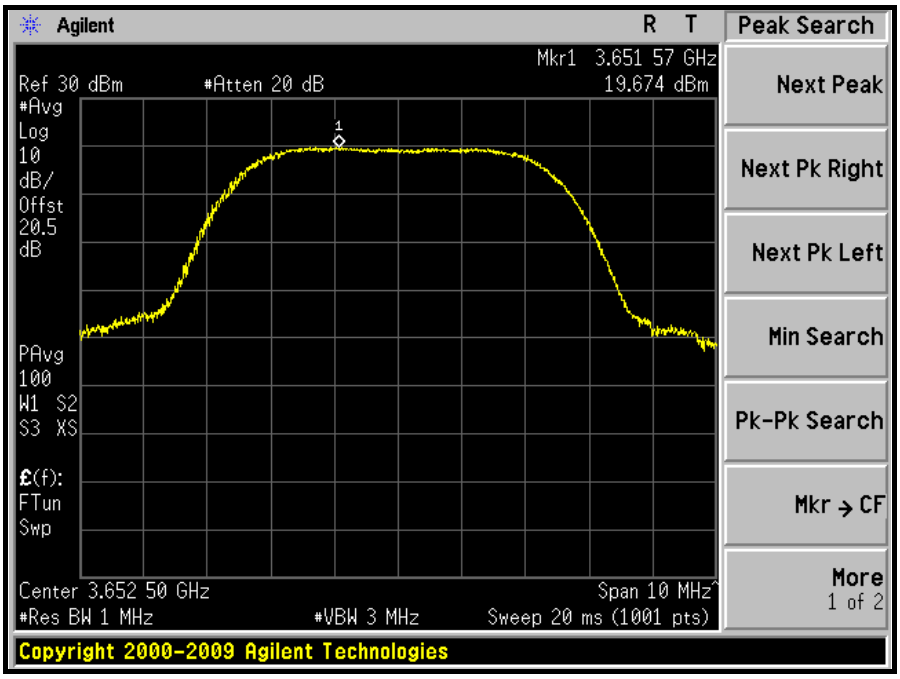


HIGH CHANNEL

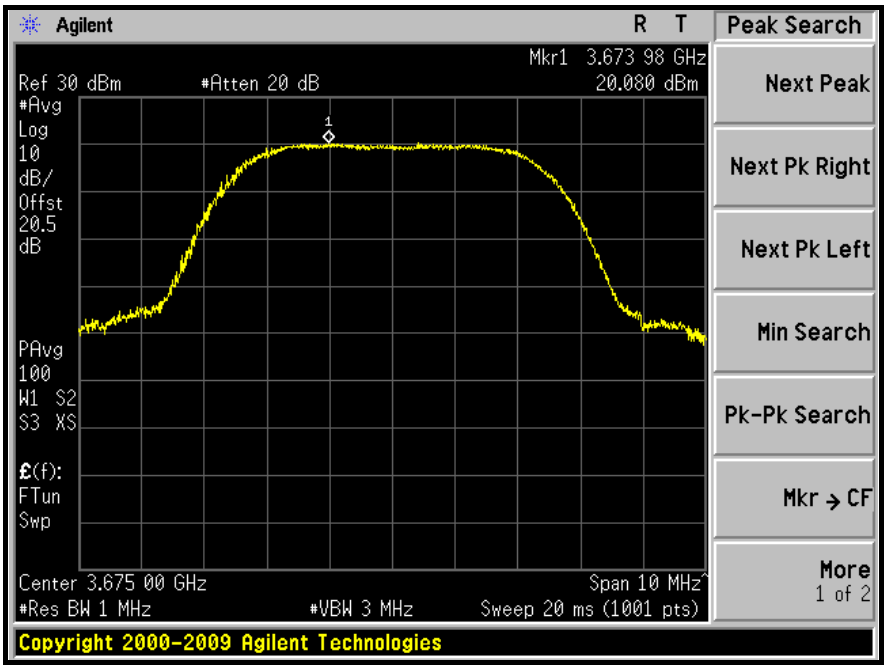


POWER DENSITY

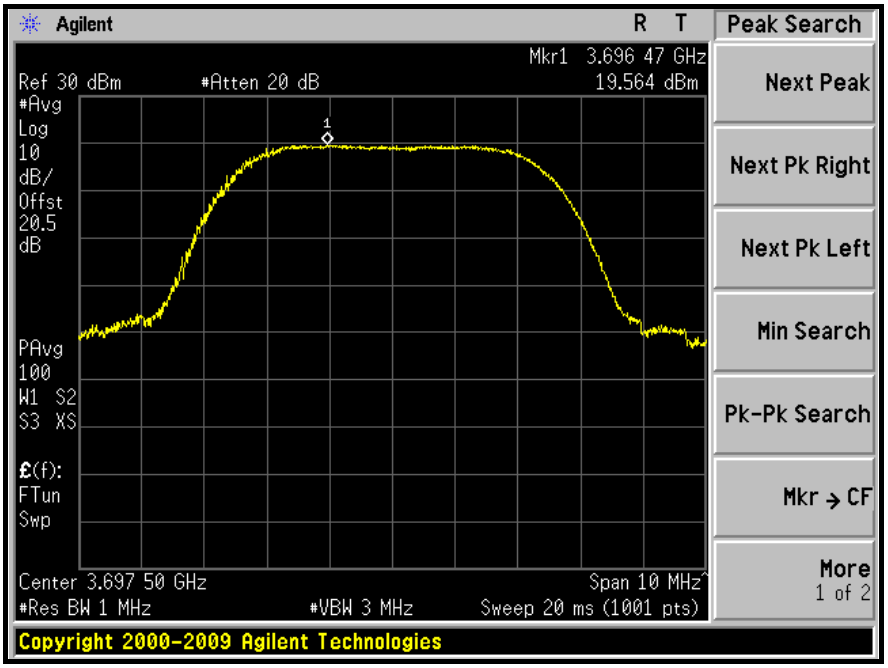
LOW CHANNEL



MIDDLE CHANNEL



HIGH CHANNEL



CHANNEL BANDWIDTH: 10MHz

CONDUCTED POWER			
CHANNEL	FREQUENCY (MHz)	POWER (mW)	POWER (dBm)
Low	3655	347.54	25.41
Middle	3675	380.19	25.80
High	3695	350.75	25.45

EIRP POWER					
CHANNEL	FREQUENCY (MHz)	ANTENNA GAIN (dBi)	POWER (mW)	POWER (dBm)	Limit (dBm)
Low	3655	9.90	3396.3	35.31	40.00
Middle	3675	9.90	3715.4	35.70	40.00
High	3695	9.90	3427.7	35.35	40.00

NOTE:

1. EIRP = Conducted power + Antenna Gain

CONDUCTED POWER DENSITY			
Channel Number	**Freq. (MHz)**	**PSD (dBm/MHz)**	**PSD Limit (dBm/MHz)**
Low	3655	16.93	20.10
Middle	3675	17.31	20.10
High	3695	16.83	20.10

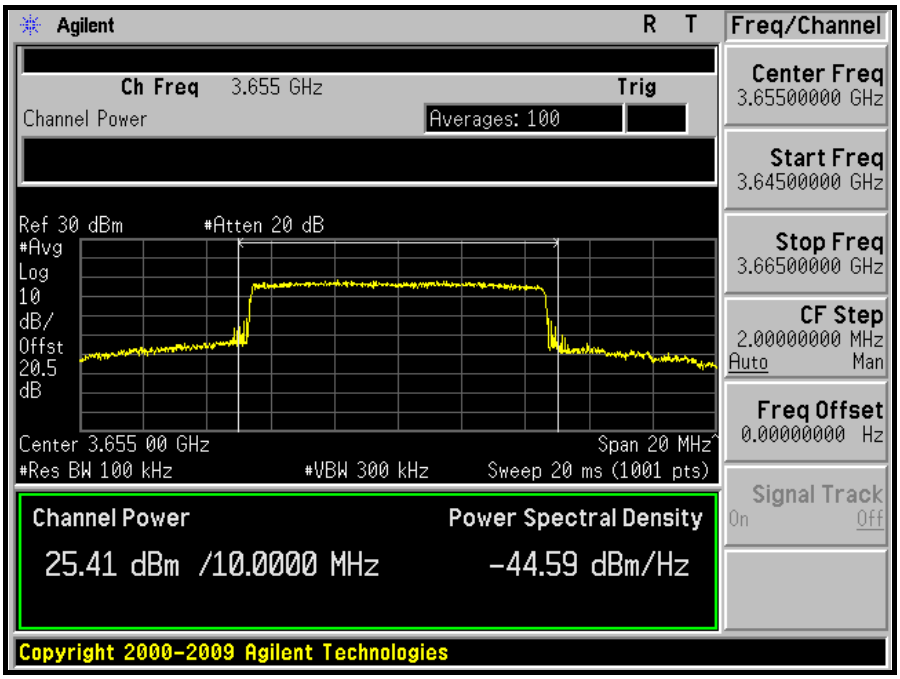
EIRP POWER DENSITY			
Channel Number	**Freq. (MHz)**	**PSD (dBm/MHz)**	**PSD Limit (dBm/MHz)**
Low	3655	26.83	30.00
Middle	3675	27.21	30.00
High	3695	26.73	30.00

NOTE:

1.EIRP density = Conducted power density + Antenna Gain

OUTPUT POWER

LOW CHANNEL



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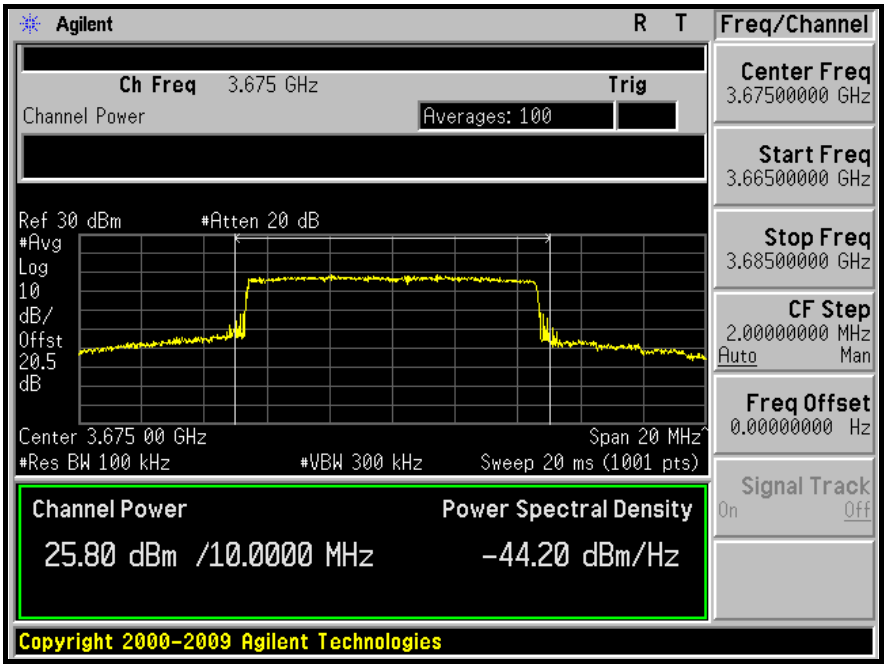
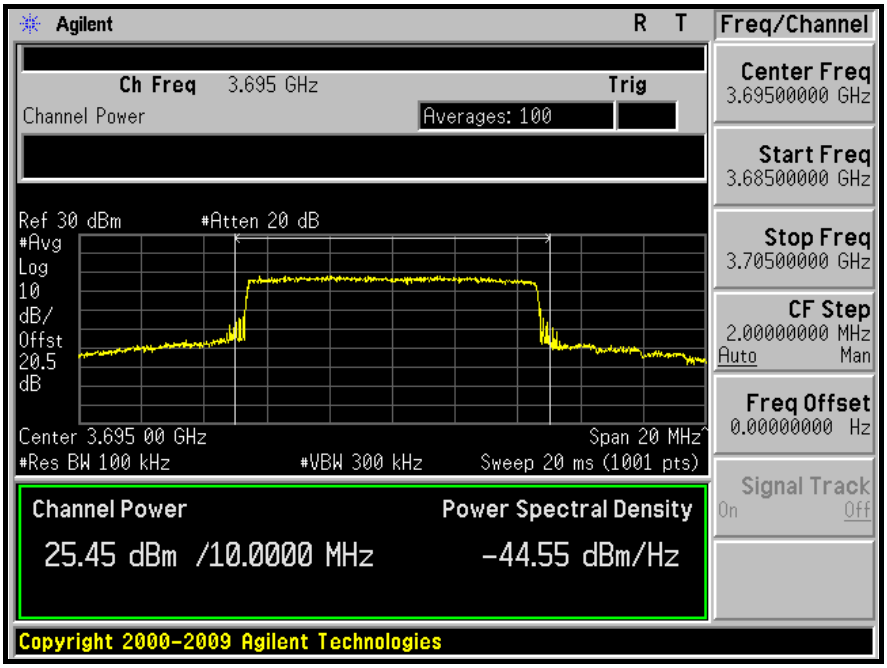
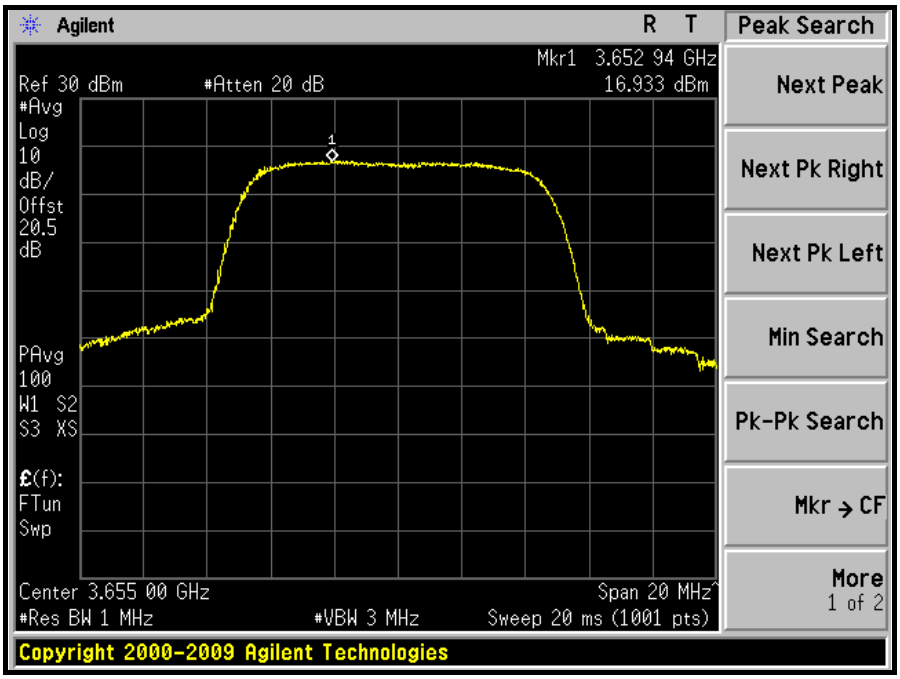


HIGH CHANNEL

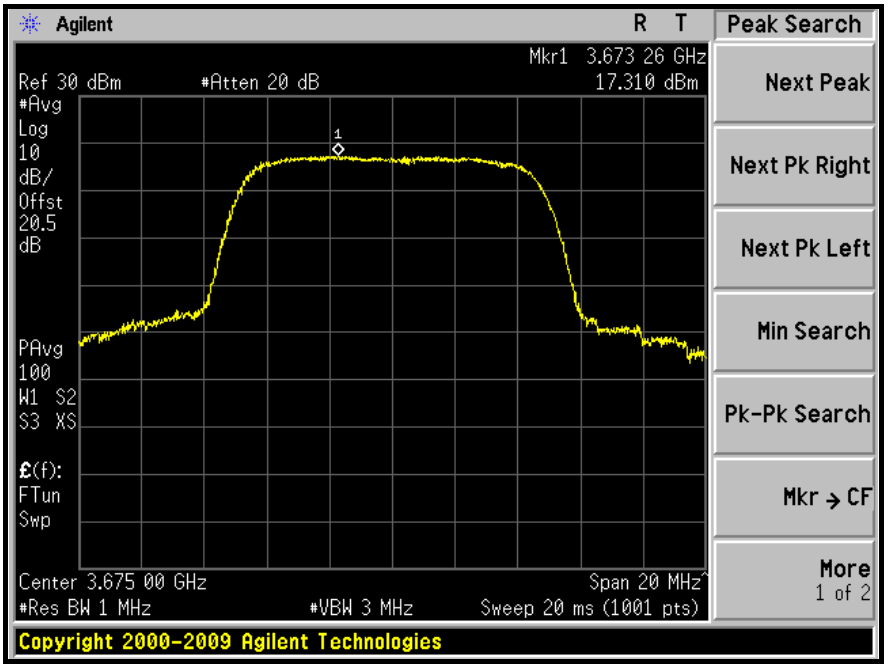


POWER DENSITY

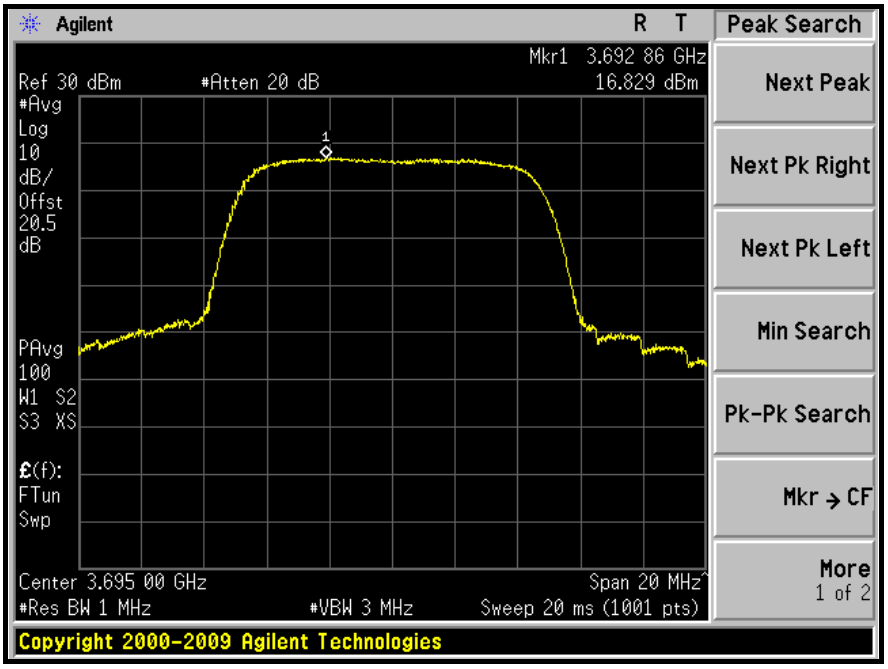
LOW CHANNEL



MIDDLE CHANNEL



HIGH CHANNEL



4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

According to the FCC part 2.1055 shall be tested the frequency stability. The rule is defined that" The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block." The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with specification of EUT -30°C ~ 50°C.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
AGILENT SPECTRUM ANALYZER	E4446A	MY51100039	July 31, 2012	July 30, 2013
SUHNER RF cable	SUCOFLEX 104	222684/4	Jan. 26, 2012	Jan. 25, 2013
JFW 10dB attenuation	50HF-010-SMA	NA	NA	NA
OVEN	MHU-225AU	911033	Dec. 12, 2011	Dec. 11, 2012
Electronics AC Power Source	6502	1140503	NA	NA

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date: Aug. 21, 2012

4.2.3 TEST PROCEDURE

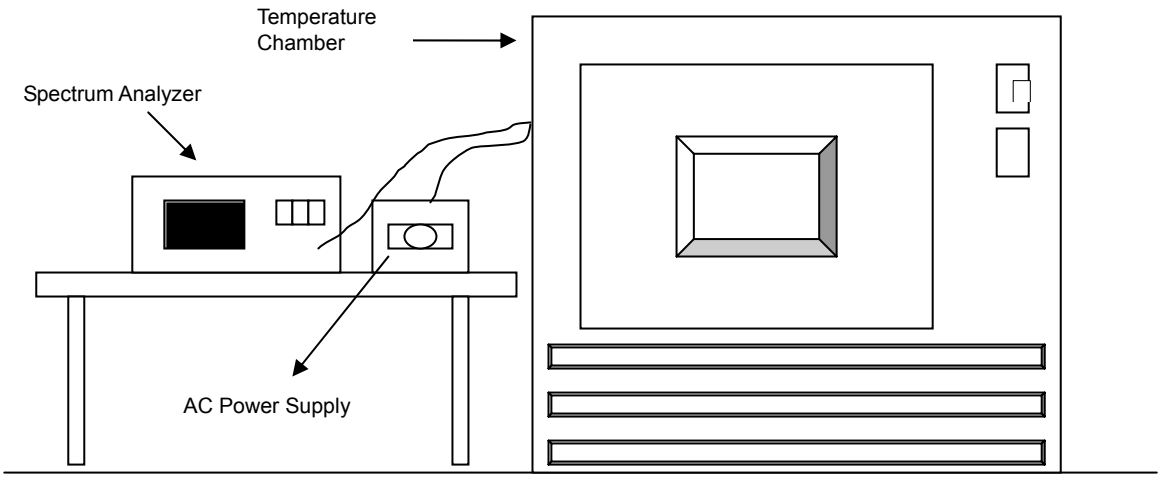
a. Power must be removed when changing from one temperature to another or one voltage to another voltage. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. EUT is connected the external power supply to control the AC input power. The various Volts from the minimum 102 Volts to 138 Volts. Each step shall be record the frequency error rate.

c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ during the measurement testing.

d. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

4.2.4 TEST SETUP



4.2.5 EUT OPERATING CONDITIONS

The EUT connected to the notebook. Use software to control the EUT channel and transmit a single tone.

4.2.6 TEST RESULTS

AFC FREQUENCY ERROR VS. VOLTAGE								
VOLTAGE (Volts)	0Minutes		2Minutes		5Minutes		10Minutes	
	FREQUENCY (MHz)	PPM	FREQUENCY (MHz)	PPM	FREQUENCY (MHz)	PPM	FREQUENCY (MHz)	PPM
138	3675.0121	3.2925	3675.0067	1.8231	3675.0106	2.8844	3675.0055	1.4966
120	3675.0122	3.3197	3675.0065	1.7687	3675.0098	2.6667	3675.0059	1.6054
102	3675.0111	3.0204	3675.0061	1.6599	3675.0093	2.5306	3675.0054	1.4694

AFC FREQUENCY ERROR VS. TEMP								
TEMP (℃)	0Minutes		2Minutes		5Minutes		10Minutes	
	FREQUENCY (MHz)	PPM	FREQUENCY (MHz)	PPM	FREQUENCY (MHz)	PPM	FREQUENCY (MHz)	PPM
50	3674.9894	-2.8844	3674.9897	-2.8027	3674.9892	-2.9388	3674.9836	-4.4626
40	3675.0099	2.6939	3675.0151	4.1088	3675.0162	4.4082	3675.0168	4.5714
30	3675.0046	1.2517	3675.0027	0.7347	3675.0051	1.3878	3675.0051	1.3878
20	3675.0122	3.3197	3675.0065	1.7687	3675.0098	2.6667	3675.0059	1.6054
10	3675.0159	4.3265	3675.0148	4.0272	3675.0129	3.5102	3675.0163	4.4354
0	3674.9874	-3.4286	3674.9859	-3.8367	3674.9887	-3.0748	3674.99	-2.7211
-10	3675.0183	4.9796	3675.0177	4.8163	3675.0157	4.2721	3675.0141	3.8367
-20	3675.0015	0.4082	3674.999	-0.2721	3674.9958	-1.1429	3674.9923	-2.0952
-30	3674.9954	-1.2517	3674.9958	-1.1429	3674.9965	-0.9524	3674.9933	-1.8231

4.3 EMISSION BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF EMISSION BANDWIDTH MEASUREMENT

According to FCC 90.1323 specified that emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
AGILENT SPECTRUM ANALYZER	E4446A	MY51100039	July 31, 2012	July 30, 2013
SUHNER RF cable	SUCOFLEX 104	222684/4	Jan. 26, 2012	Jan. 25, 2013
JFW 10dB attenuation	50HF-010-SMA	NA	NA	NA

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date: Aug. 21, 2012

4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW = 51kHz (5MHz bandwidth), 100kHz (10MHz bandwidth), VBW = 160kHz (5MHz bandwidth), 300kHz (10MHz bandwidth). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

4.3.4 TEST SETUP

Same as 4.1.4

4.3.5 EUT OPERATING CONDITIONS

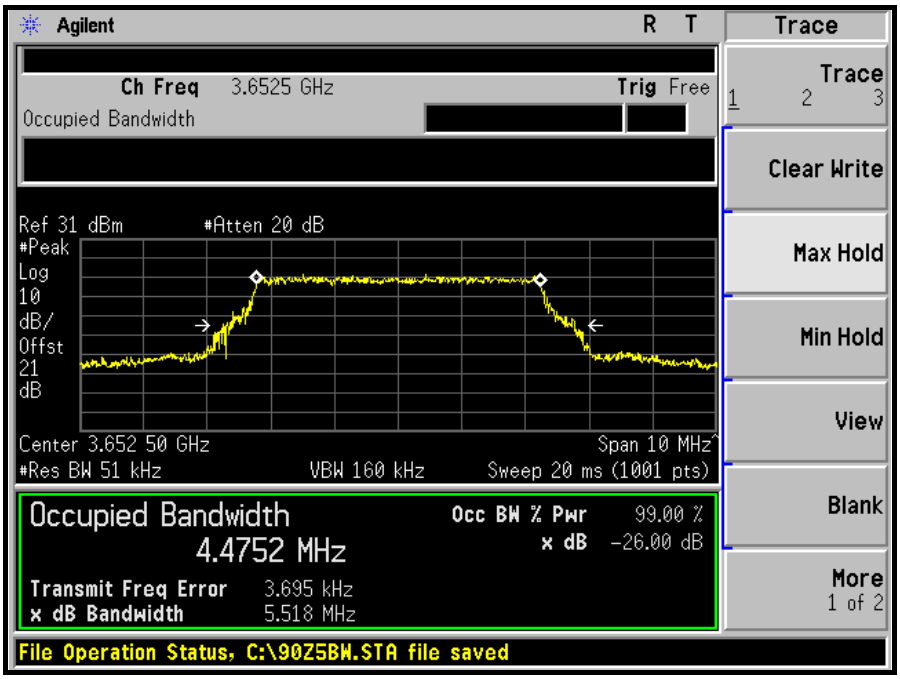
Same as 4.1.5

4.3.6 TEST RESULTS

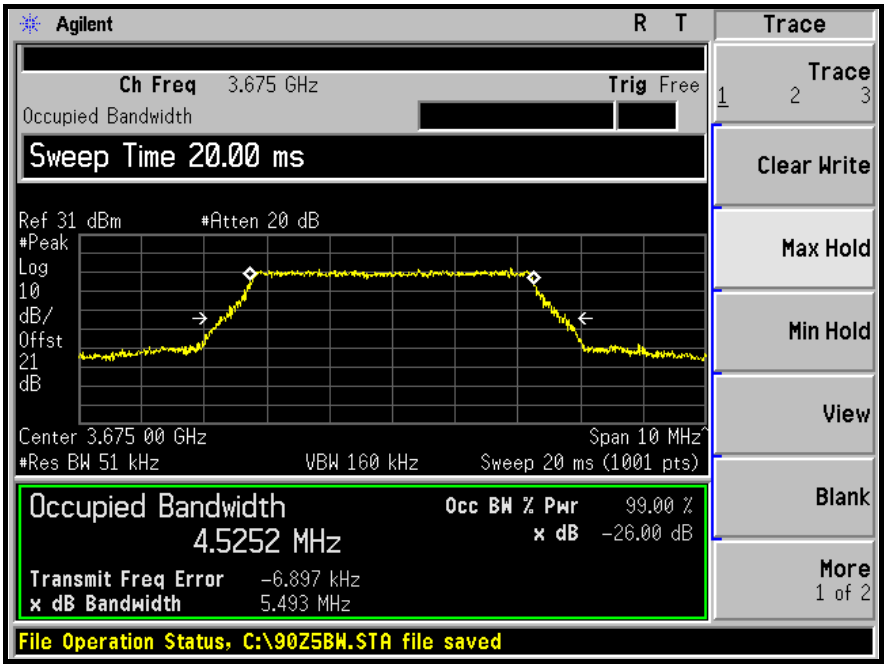
CHANNEL BANDWIDTH: 5MHz

CHANNEL	-26dBc BANDWIDTH (MHz)
Low	5.51
Middle	5.49
High	5.48

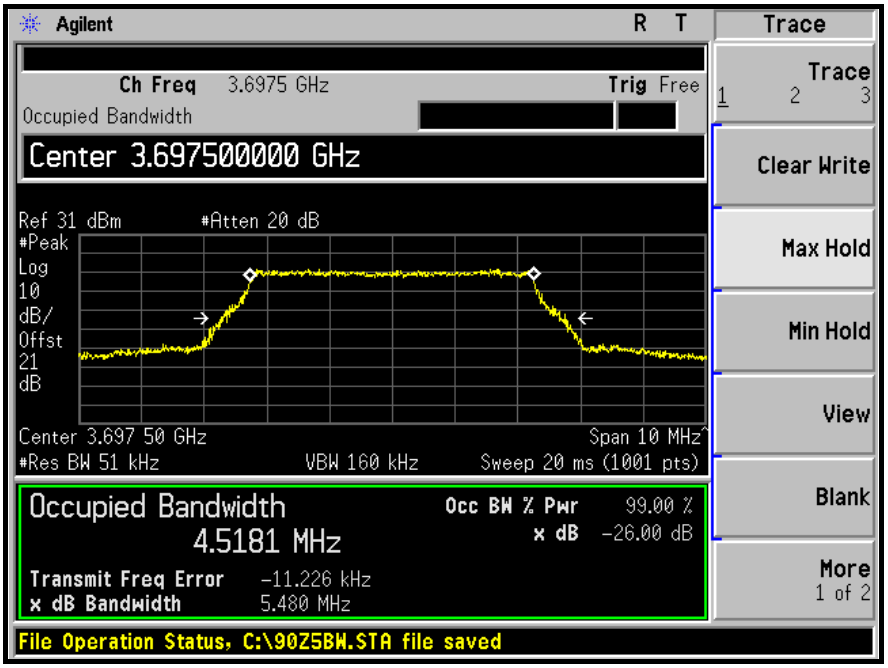
LOW CHANNEL



MIDDLE CHANNEL



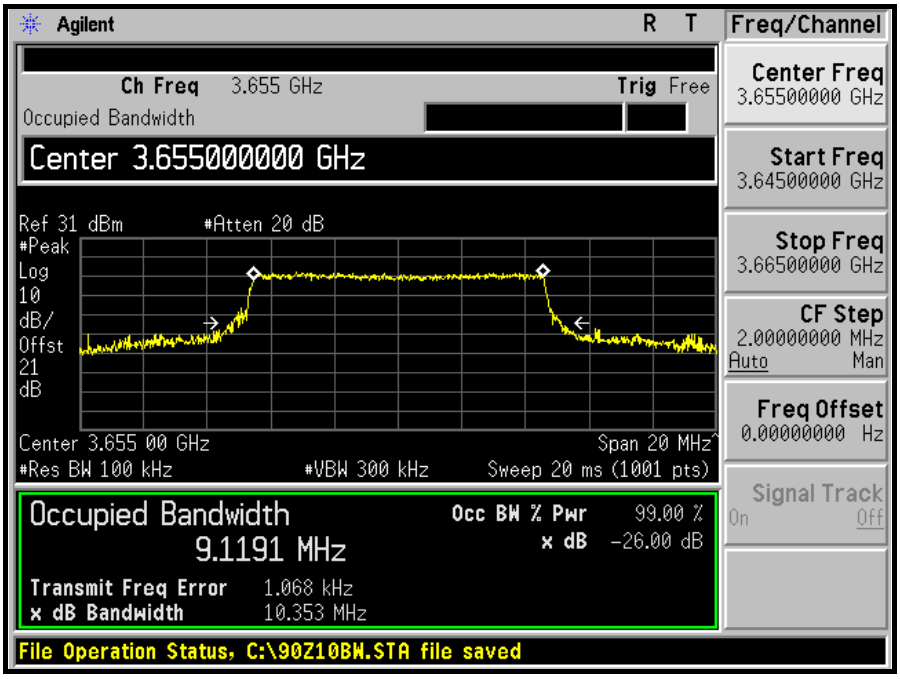
HIGH CHANNEL



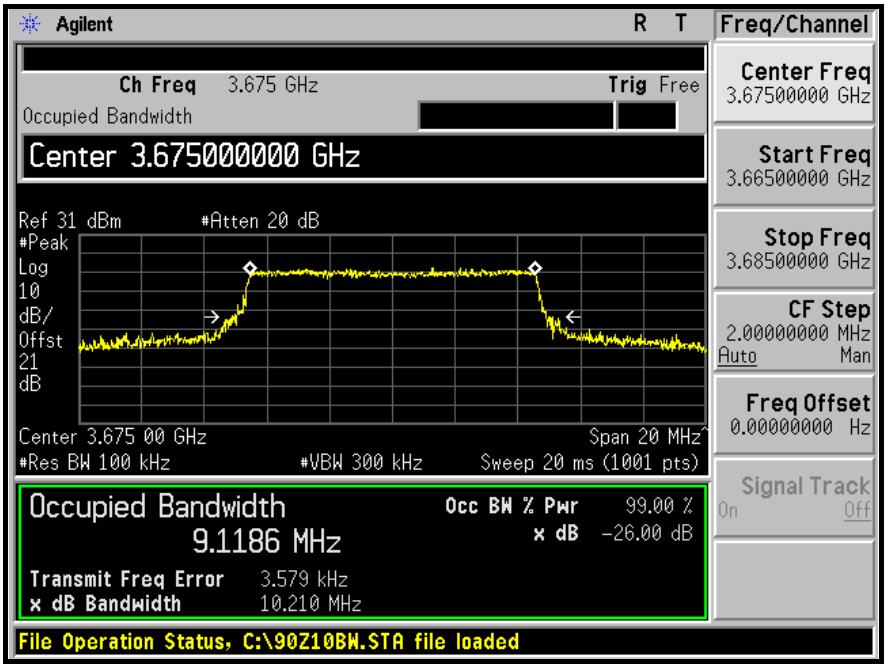
CHANNEL BANDWIDTH: 10MHz

CHANNEL	-26dBc BANDWIDTH (MHz)
Low	10.35
Middle	10.21
High	10.27

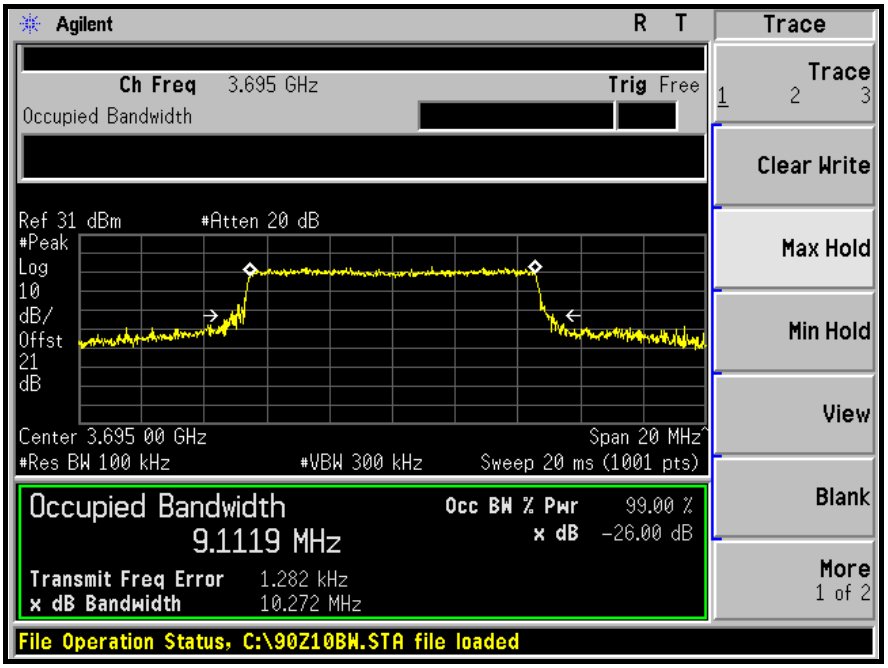
LOW CHANNEL



MIDDLE CHANNEL



HIGH CHANNEL



4.4 EMISSION MASKS

4.4.1 LIMITS OF EMISSION MASKS

For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

(1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.

(2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB.

(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 + 10log (P) dB.

4.4.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
AGILENT SPECTRUM ANALYZER	E4446A	MY51100039	July 31, 2012	July 30, 2013
SUHNER RF cable	SUCOFLEX 104	222684/4	Jan. 26, 2012	Jan. 25, 2013
JFW 10dB attenuation	50HF-010-SMA	NA	NA	NA

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date: Aug. 21, 2012

4.4.3 TEST SETUP

Same as 4.1.4

4.4.4 TEST PROCEDURES

a. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW = 51kHz (5MHz bandwidth), 100kHz (10MHz bandwidth), VBW = 160kHz (5MHz bandwidth), 300kHz (10MHz bandwidth).
b. Set EUT to transmit signal at un-modulation mode to get reference level, R_L.
c. According R_L and Channel bandwidth to define Emission Mask range.
d. Set EUT to transmit signal at modulation mode to check signal can comply with Emission Mask or not.

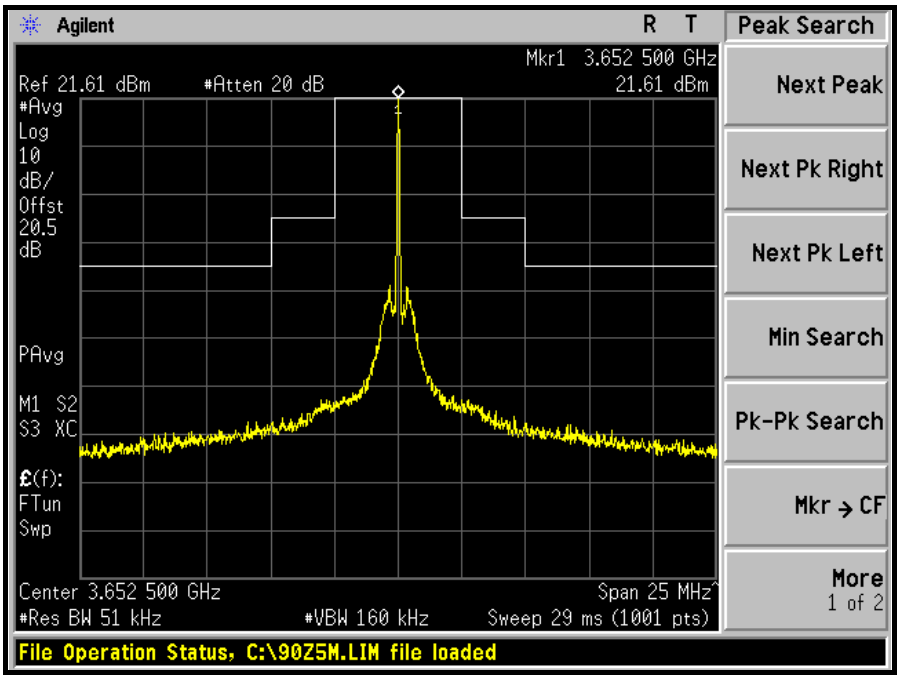
4.4.5 EUT OPERATING CONDITION

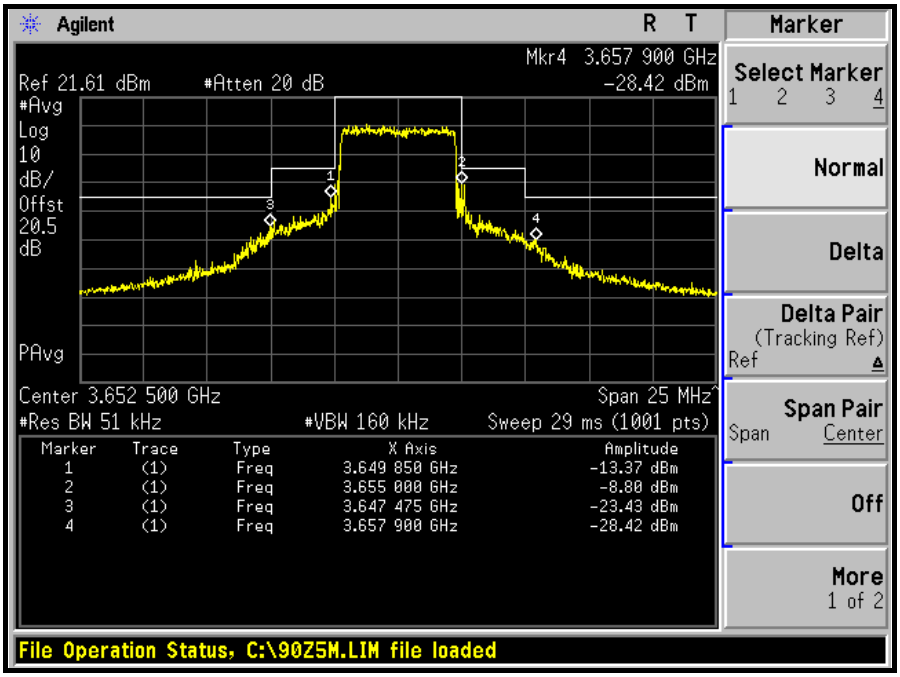
Same as 4.1.5

4.4.6 TEST RESULTS

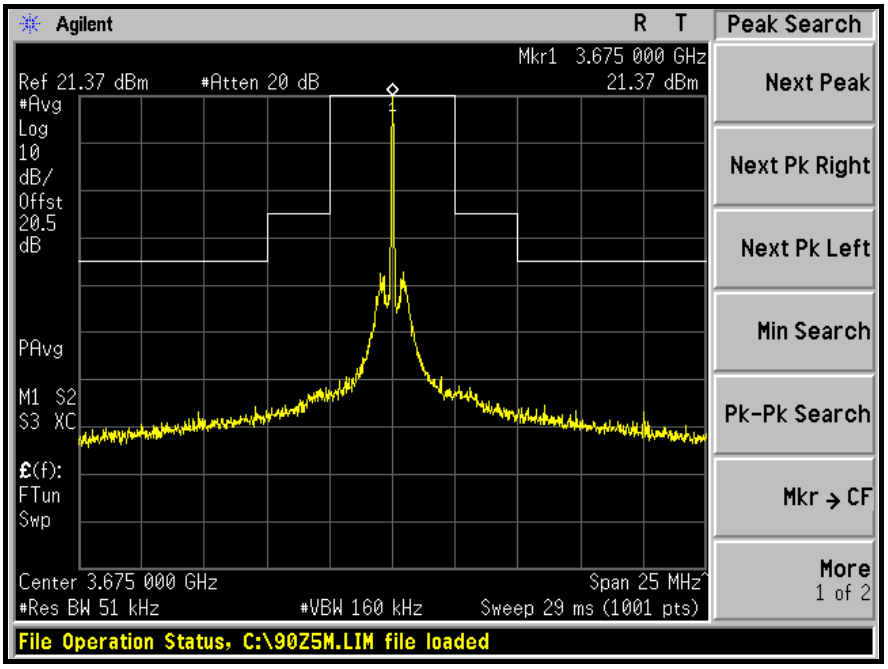
CHANNEL BANDWIDTH: 5MHz

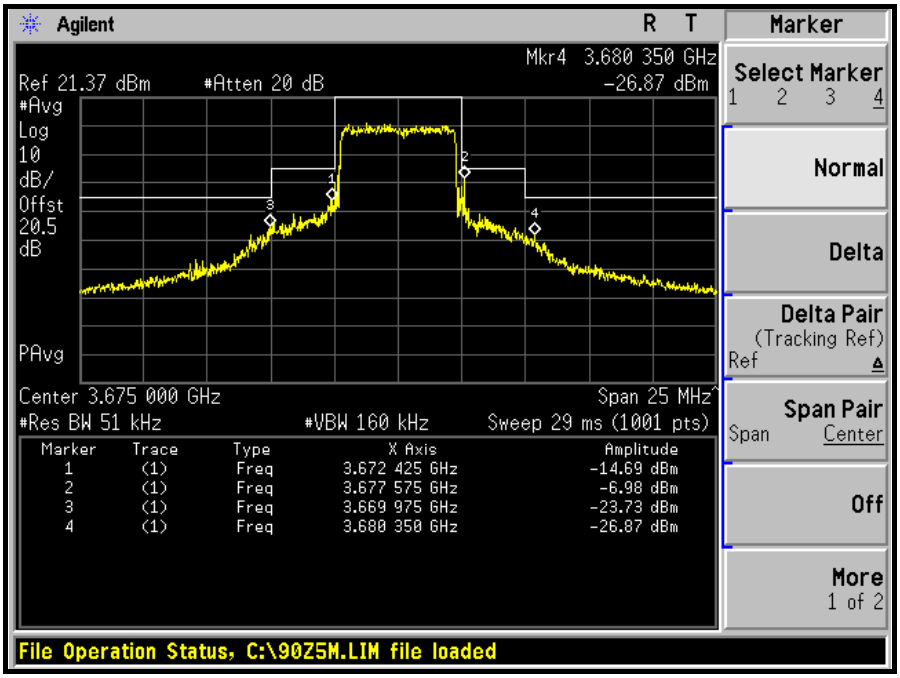
LOW CHANNEL



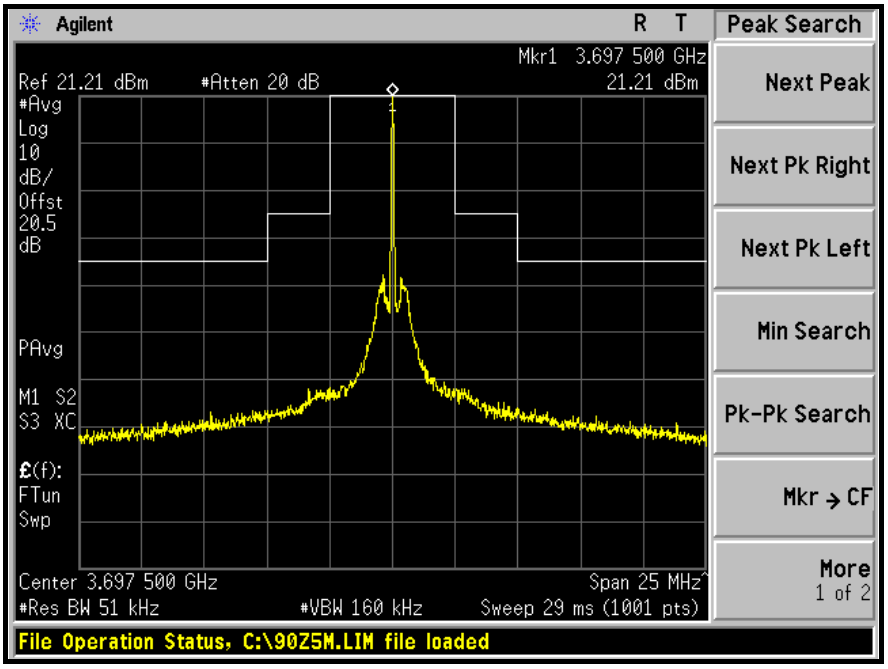


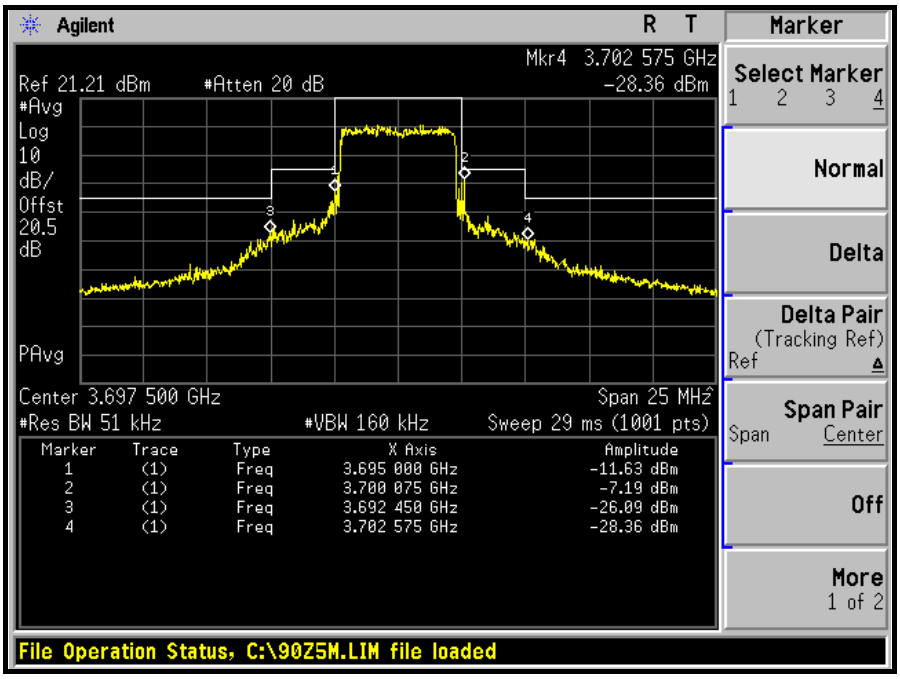
MIDDLE CHANNEL





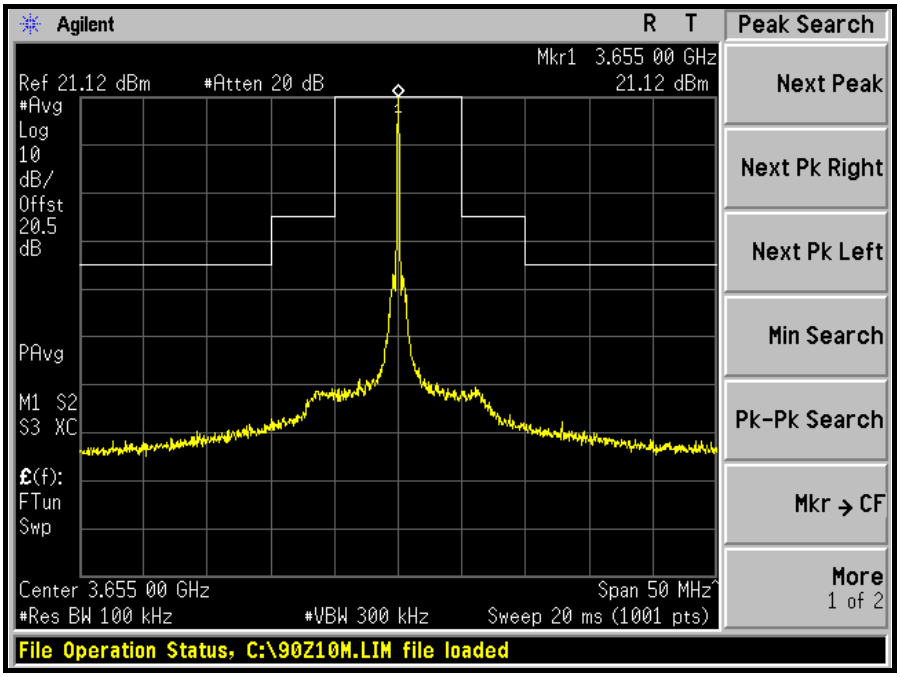
HIGH CHANNEL

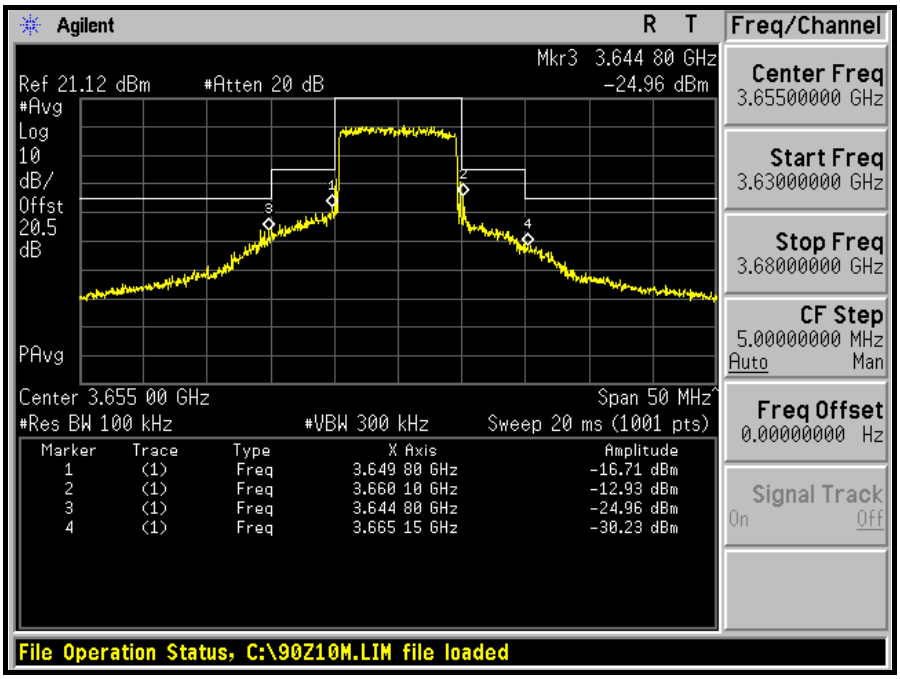




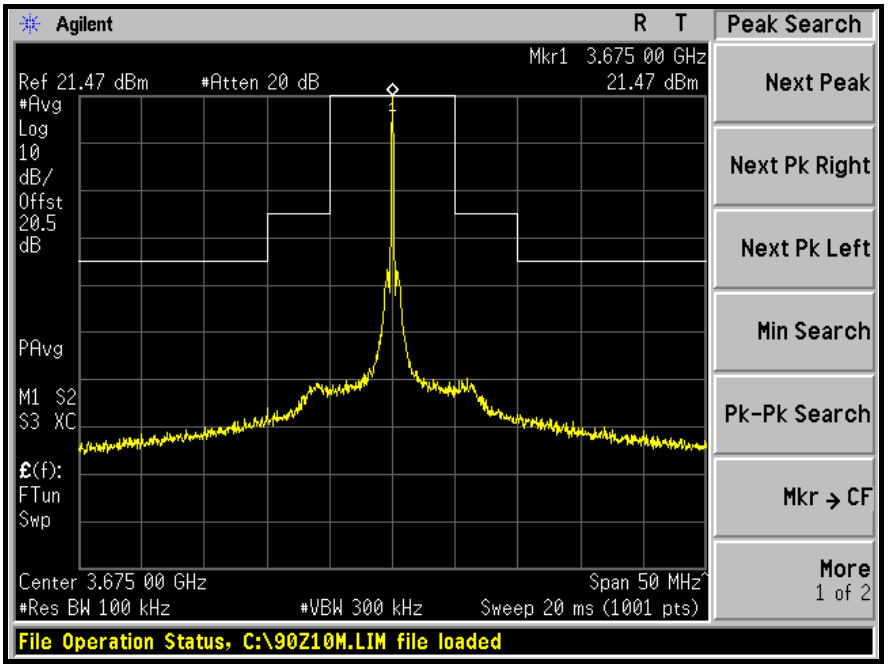
CHANNEL BANDWIDTH: 10MHz

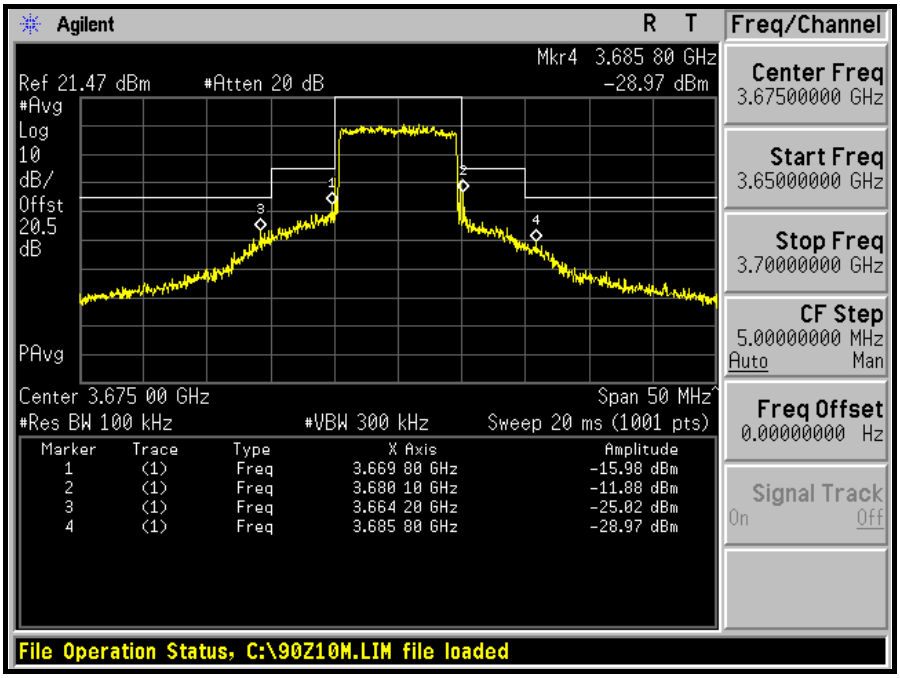
LOW CHANNEL



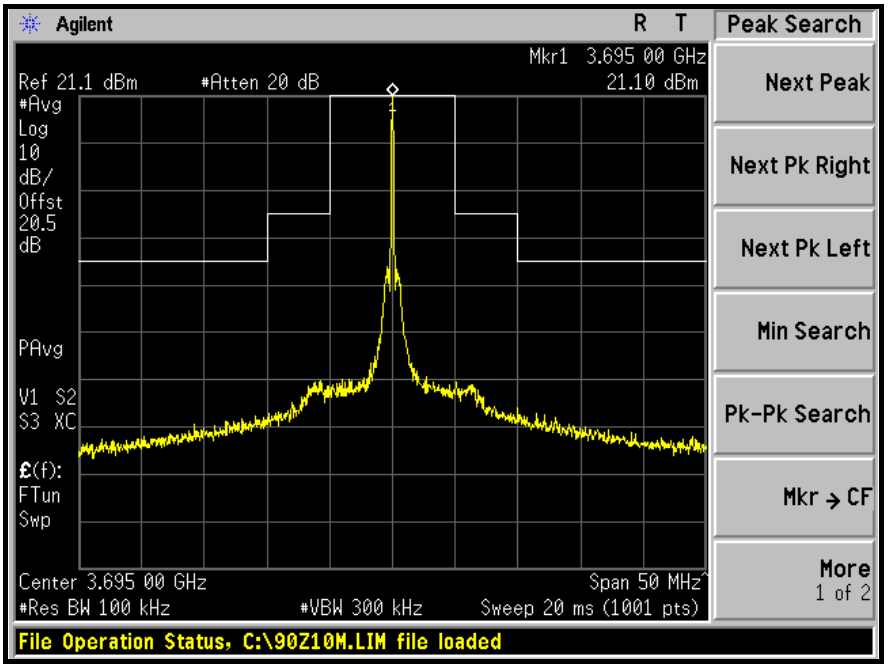


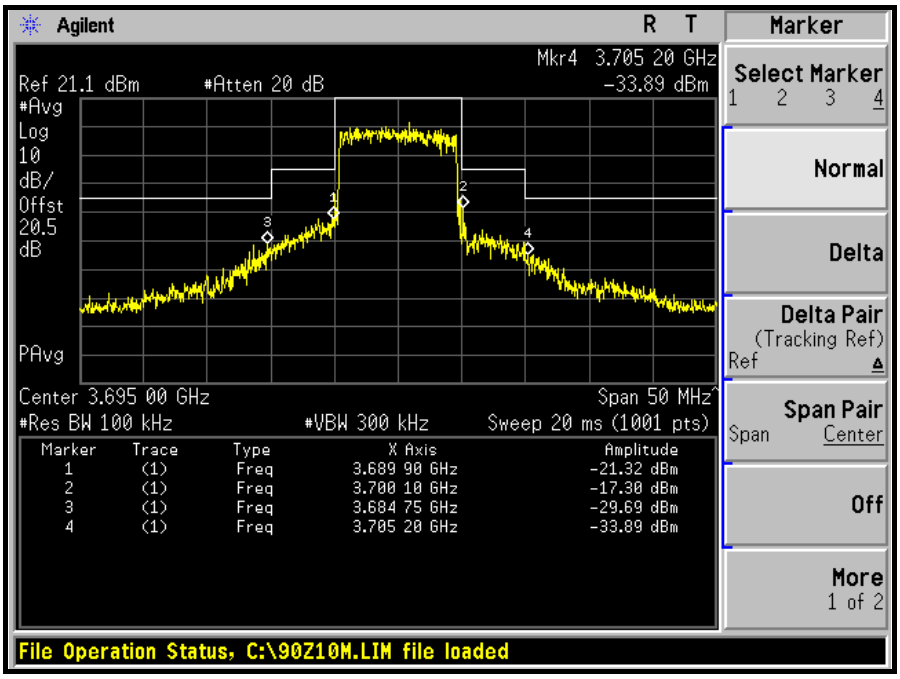
MIDDLE CHANNEL





HIGH CHANNEL





4.5 CONDUCTED SPURIOUS EMISSIONS

4.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

According to FCC 90.1323 specified that the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in Watts, by at least 43 + 10 log (P) dB. The limit of emission equal to –13dBm Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth

4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
AGILENT SPECTRUM ANALYZER	E4446A	MY51100039	July 31, 2012	July 30, 2013
SUHNER RF cable	SUCOFLEX 104	222684/4	Jan. 26, 2012	Jan. 25, 2013
JFW 10dB attenuation	50HF-010-SMA	NA	NA	NA

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date: Aug. 21, 2012

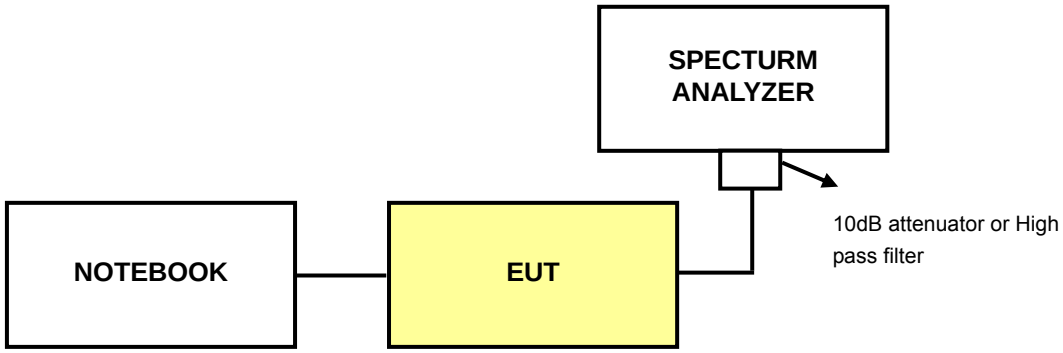
4.5.3 TEST PROCEDURE

a. All measurements were done at 3 channels: low, middle and high operational frequency range.

b. When the spectrum scanned from 30MHz to 5GHz, it shall be connected to the 10dB pad attenuated the carried frequency. The spectrum set RB = 1MHz, VB = 3MHz.

c. When the spectrum scanned from 5GHz to 40GHz, it shall be connected to the high pass filter attenuated the carried frequency. The spectrum set RB = 1MHz, VB = 3MHz.

4.5.4 TEST SETUP



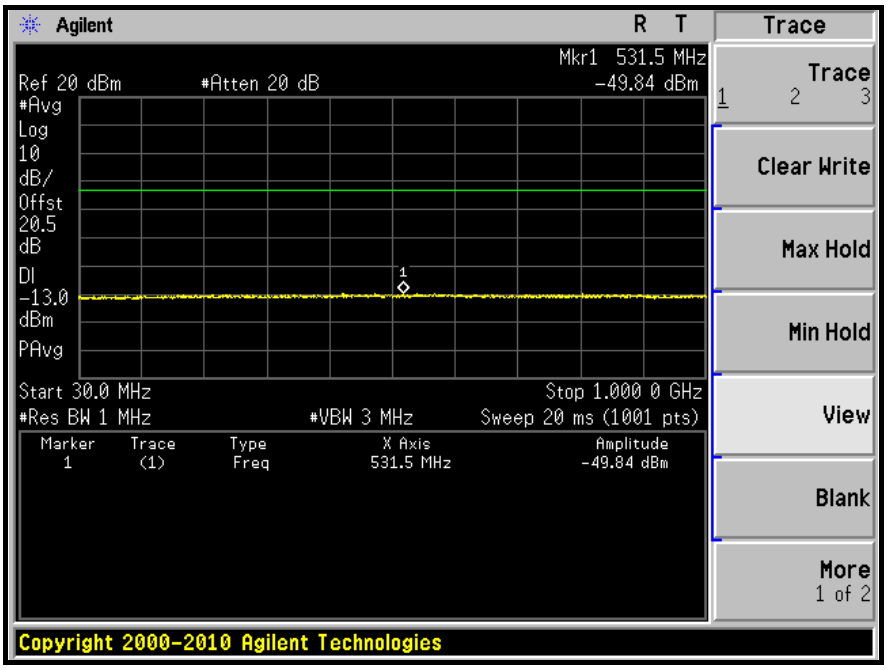
4.5.5 EUT OPERATING CONDITIONS

Same as 4.1.5

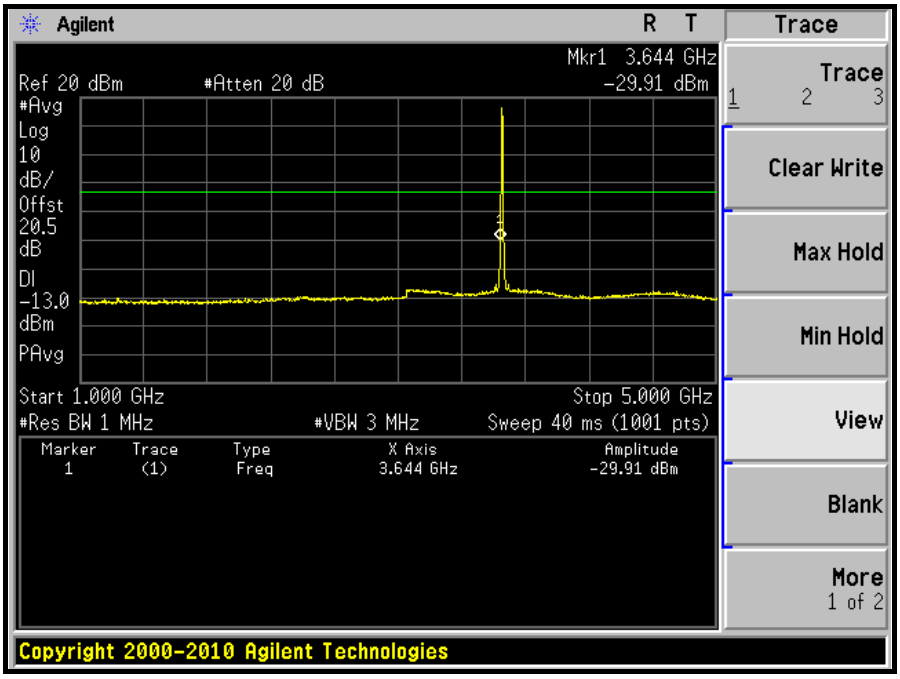
4.5.6 TEST RESULTS

CHANNEL BANDWIDTH: 5MHz

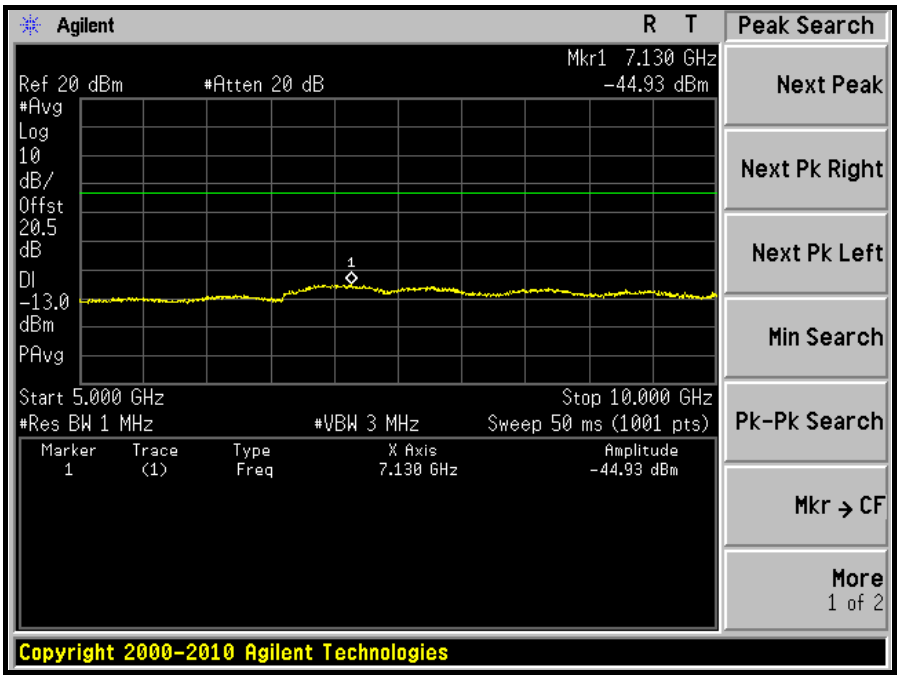
LOW CHANNEL: 30MHz ~ 1GHz:



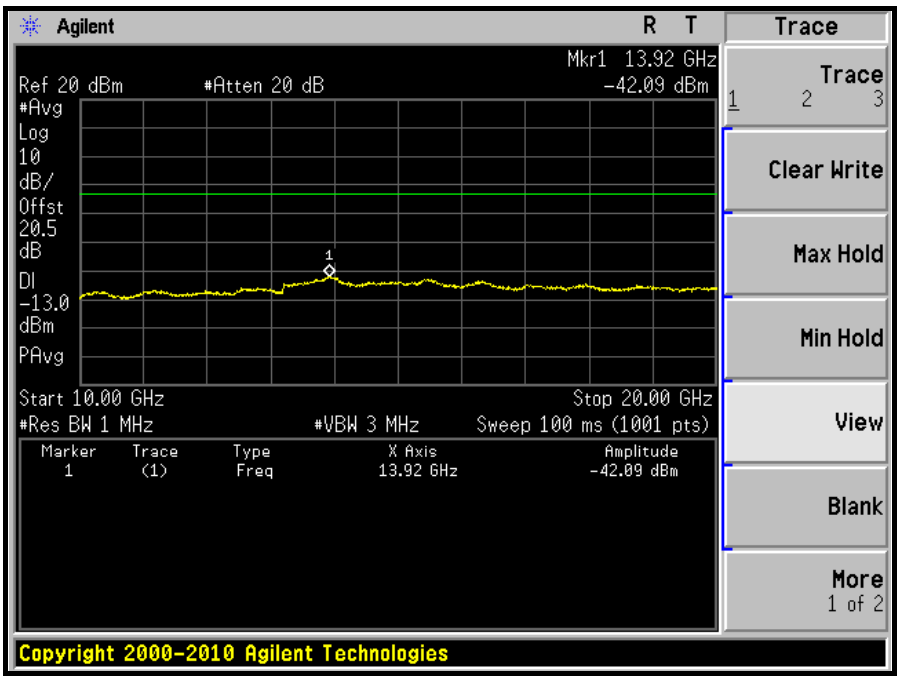
1GHz ~ 5GHz:



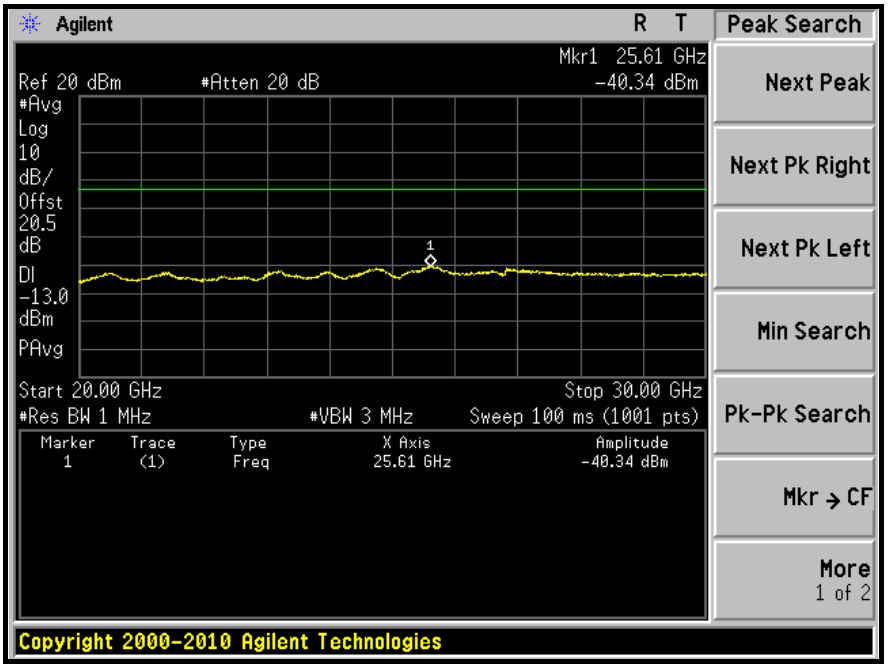
5GHz ~ 10GHz:



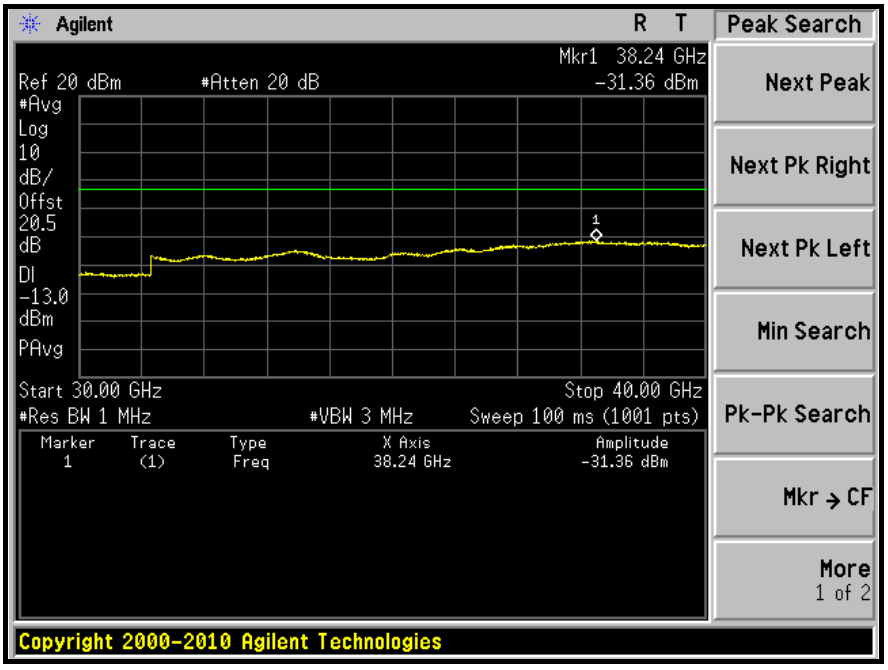
10GHz ~ 20GHz:



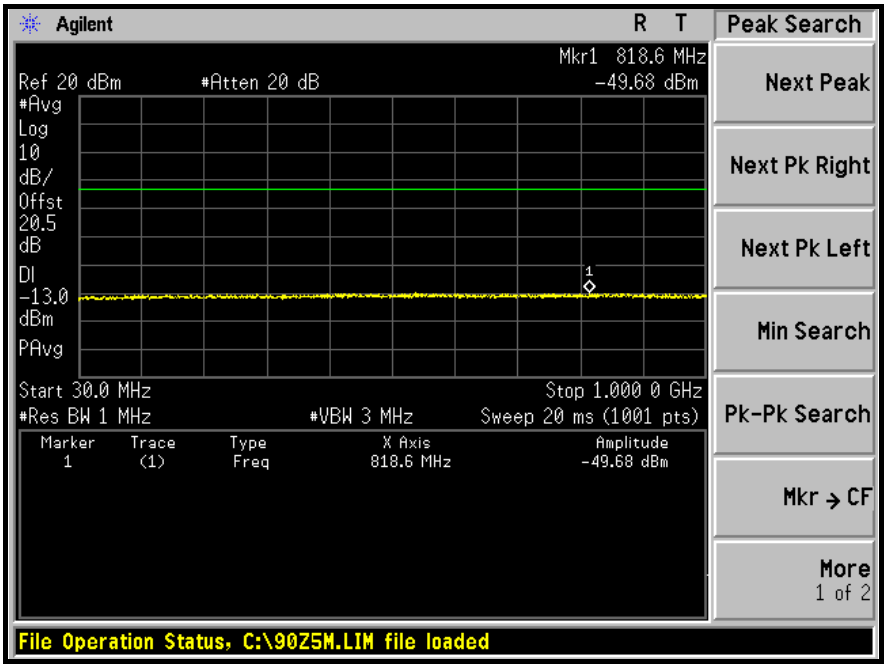
20GHz ~ 30GHz:



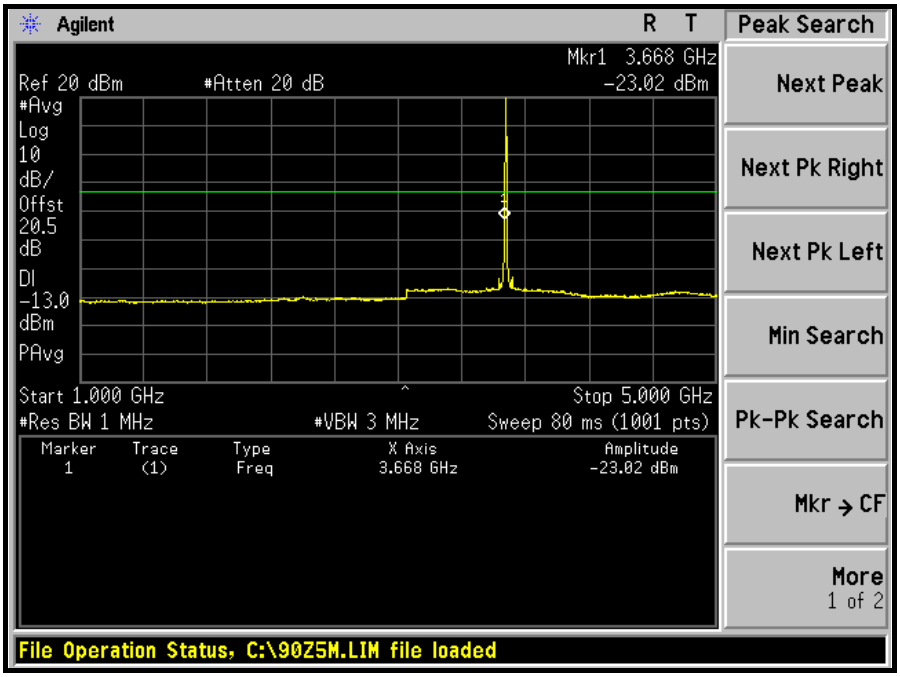
30GHz ~ 40GHz:



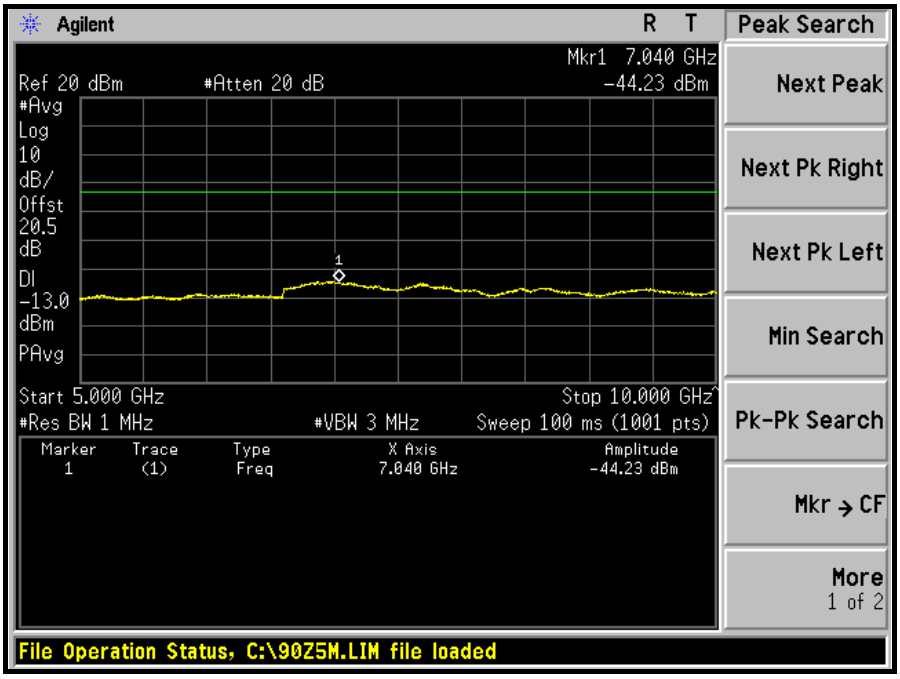
MIDDLE CHANNEL: 30MHz ~ 1GHz:



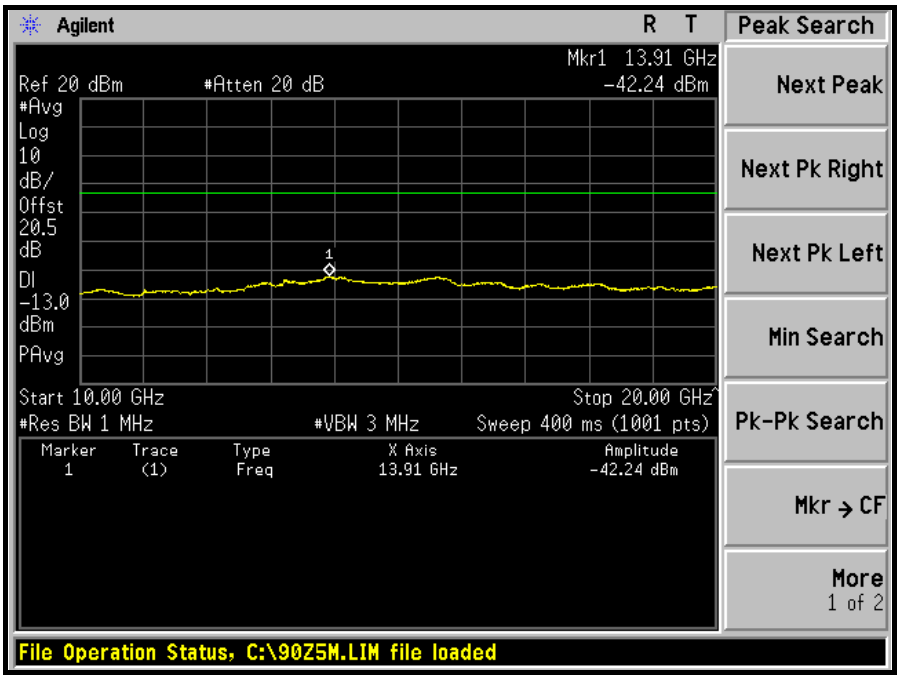
1GHz ~ 5GHz:



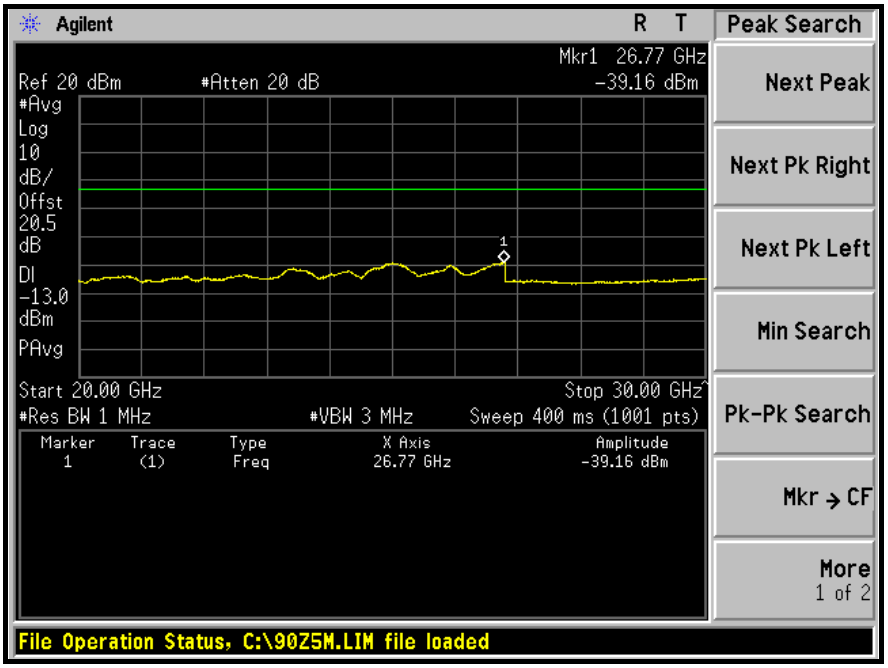
5GHz ~ 10GHz:



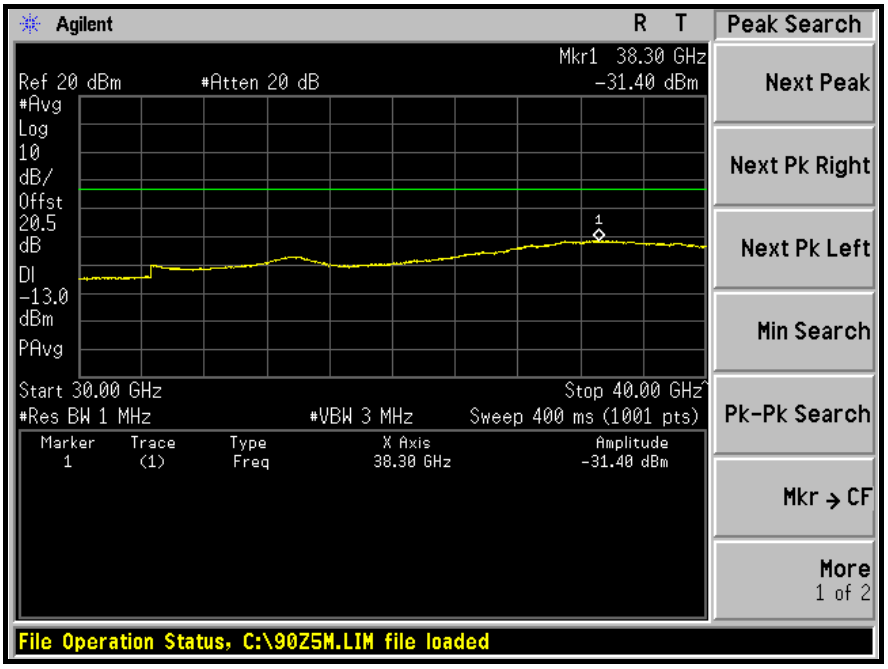
10GHz ~ 20GHz:



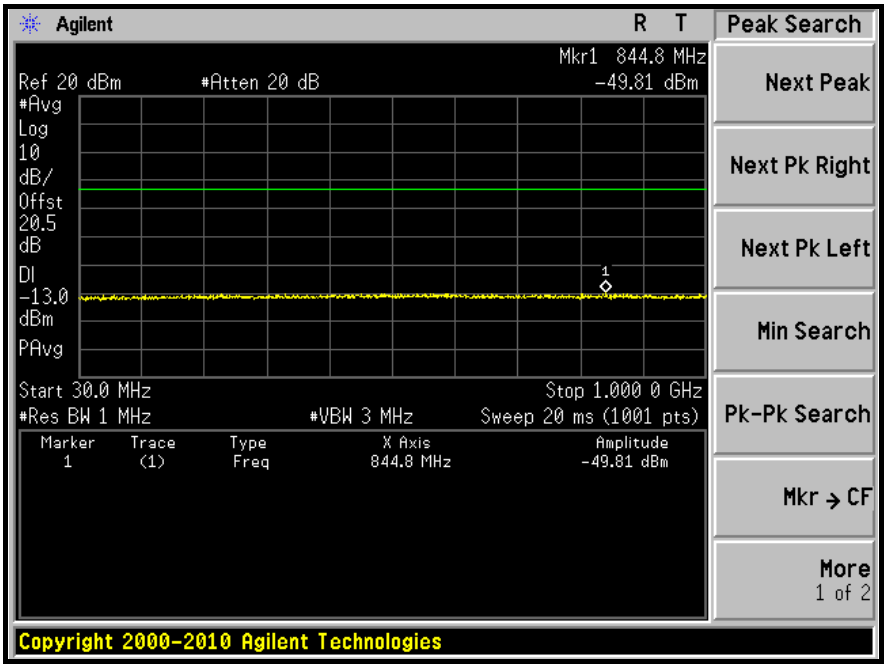
20GHz ~ 30GHz:



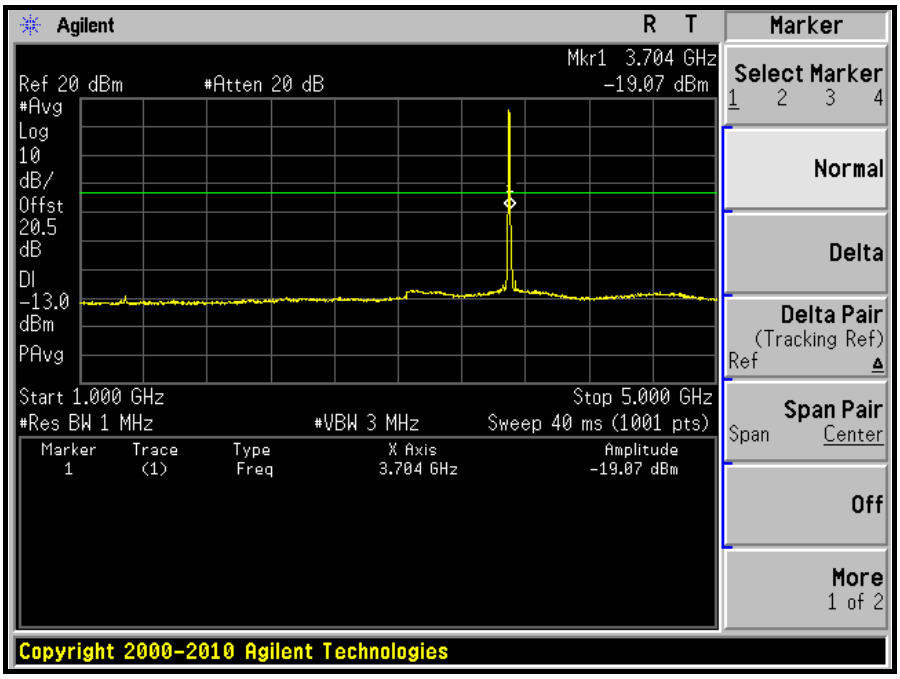
30GHz ~ 40GHz:



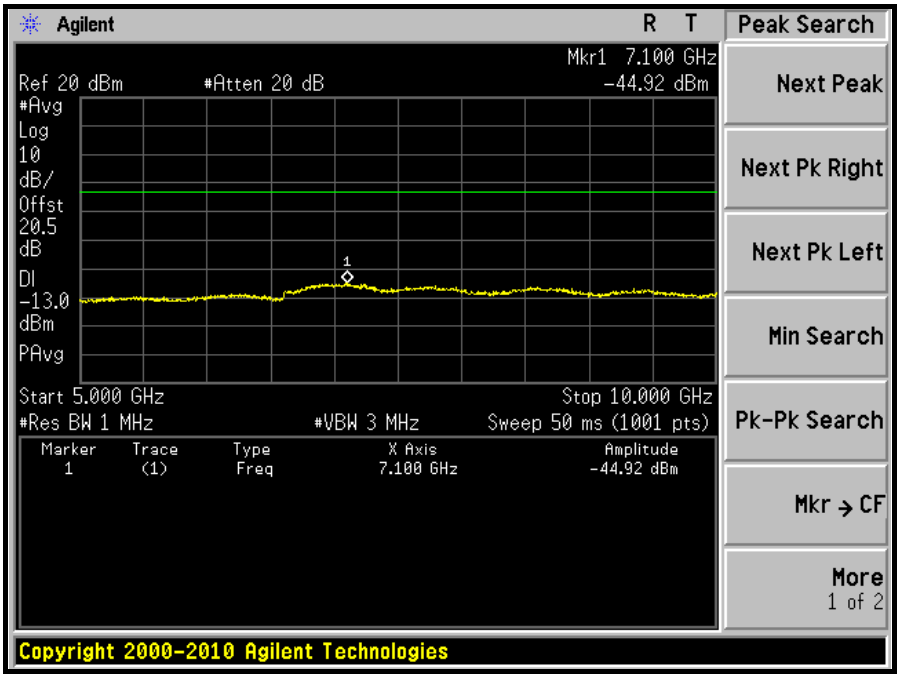
HIGH CHANNEL: 30MHz ~ 1GHz:



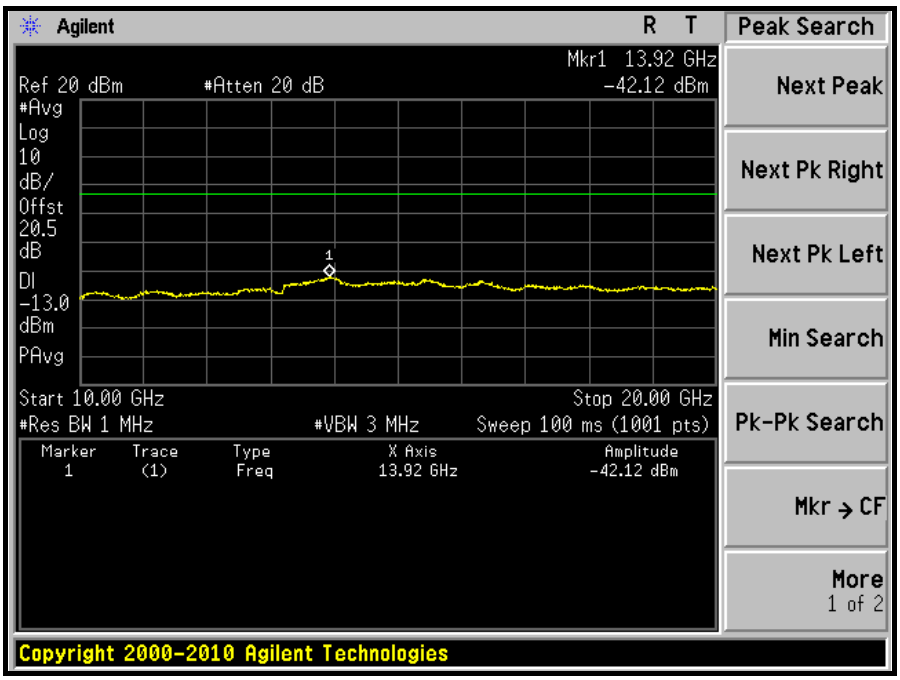
1GHz ~ 5GHz:



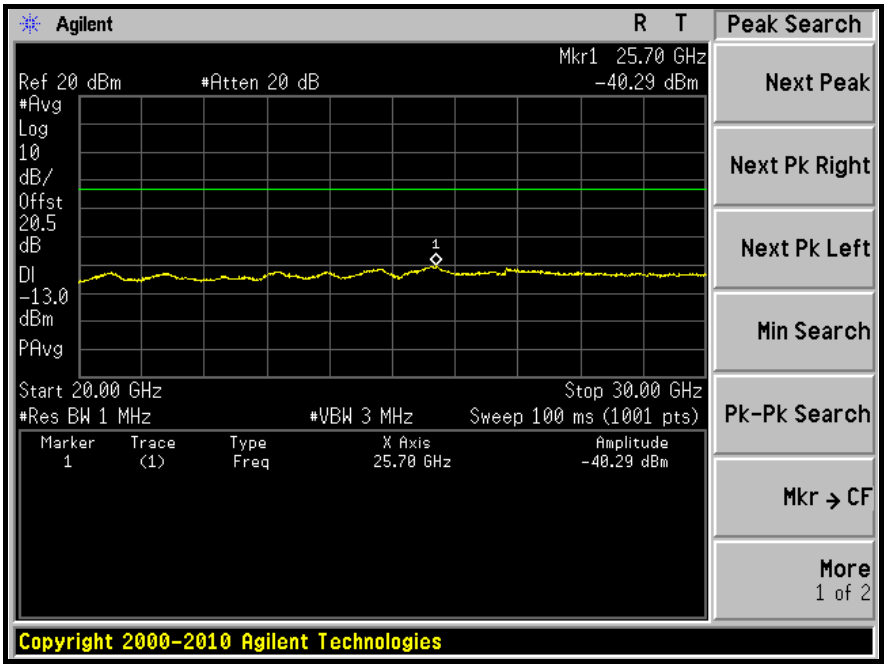
5GHz ~ 10GHz:



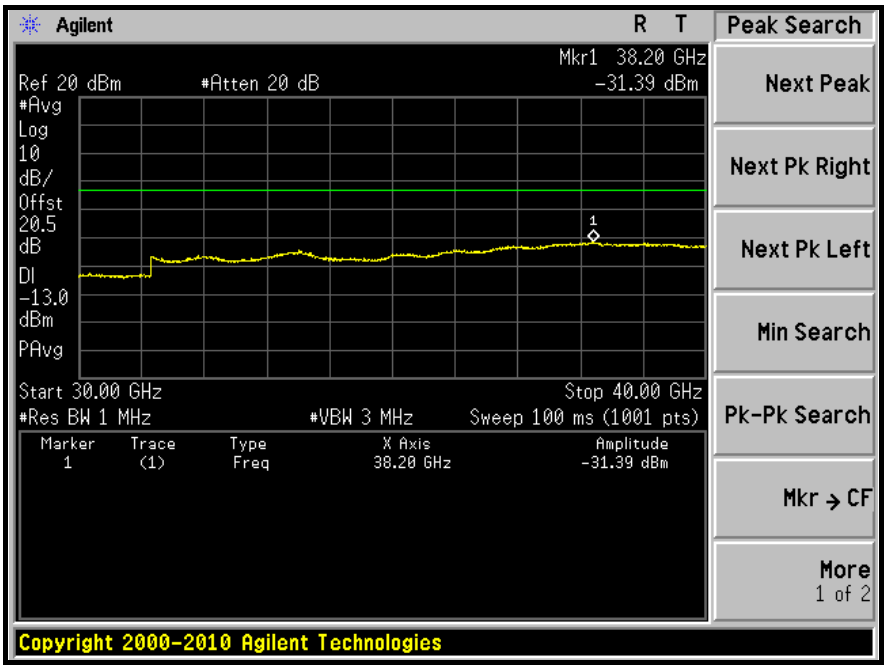
10GHz ~ 20GHz:



20GHz ~ 30GHz:

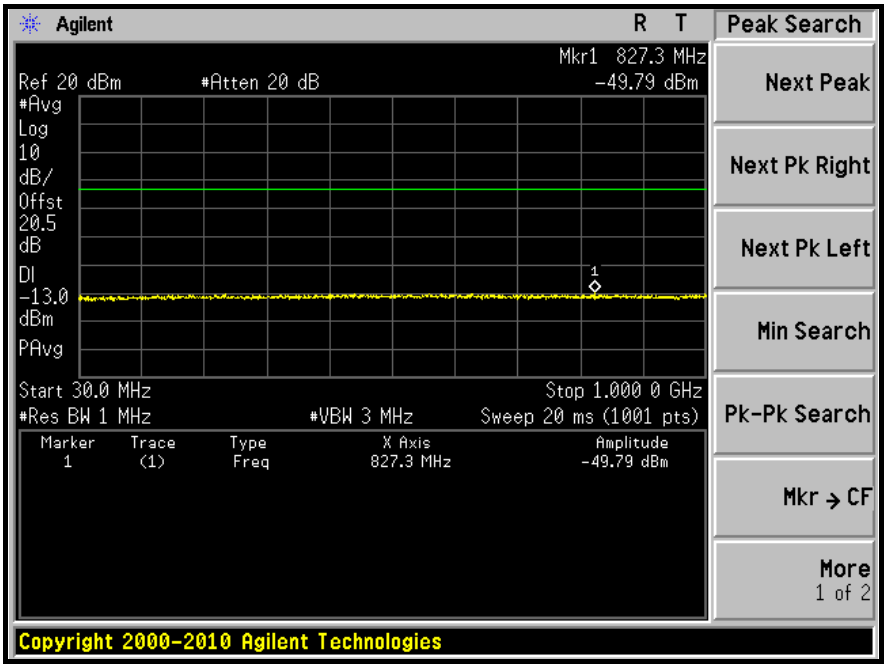


30GHz ~ 40GHz:

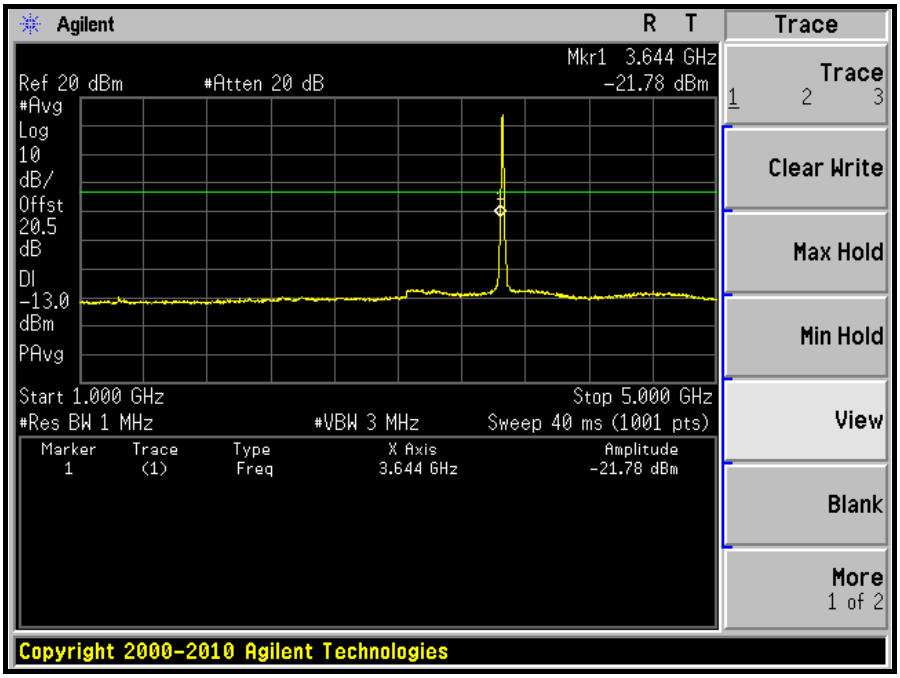


CHANNEL BANDWIDTH: 10MHz

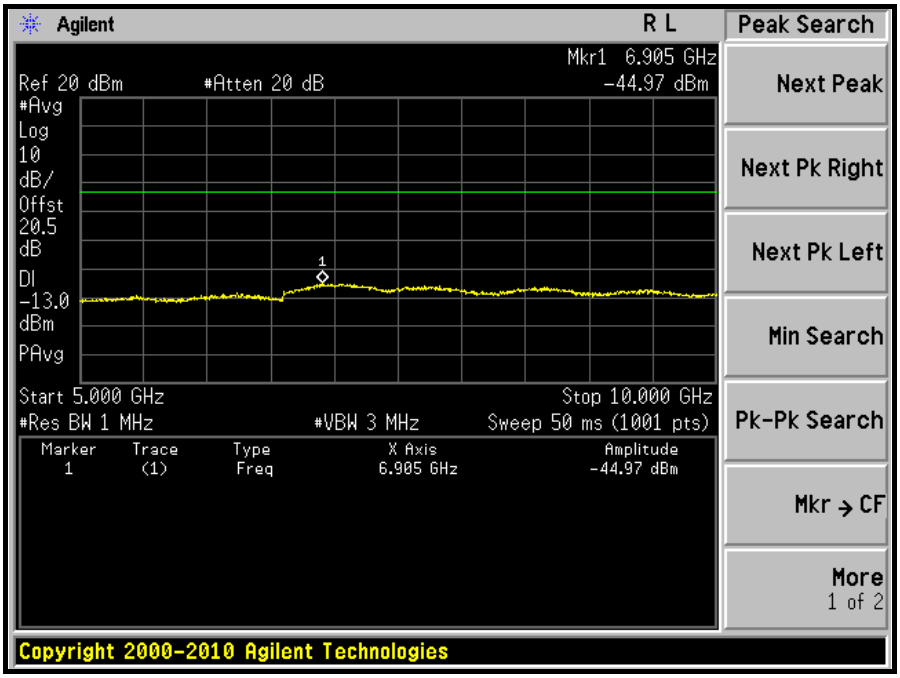
LOW CHANNEL: 30MHz ~ 1GHz:



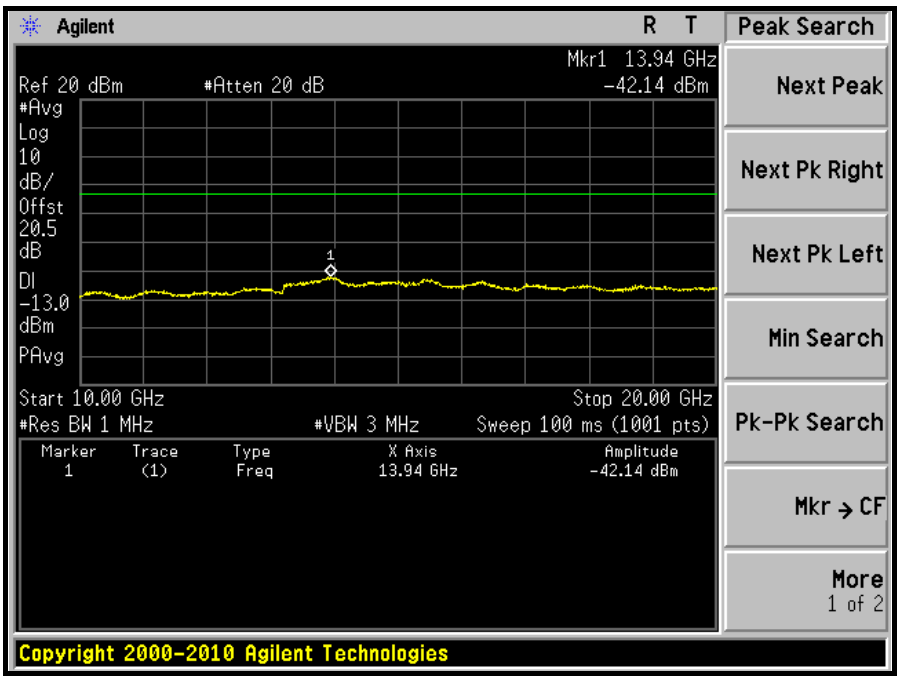
1GHz ~ 5GHz:



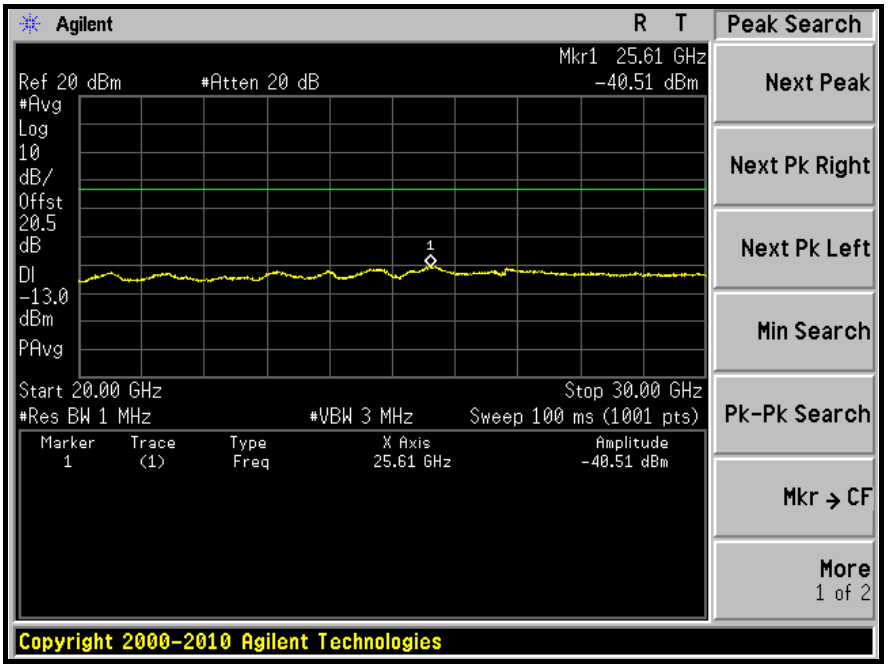
5GHz ~ 10GHz:



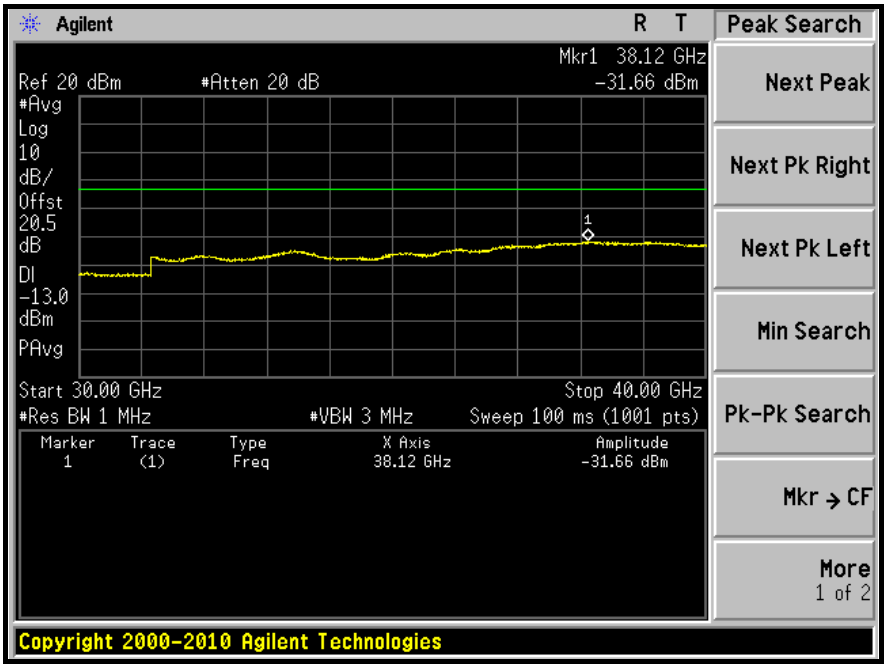
10GHz ~ 20GHz:



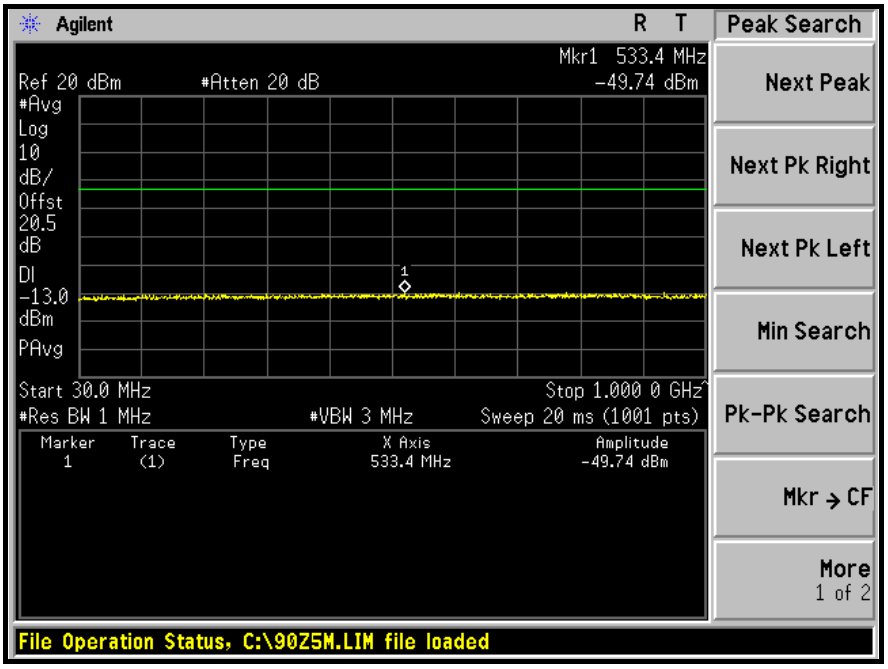
20GHz ~ 30GHz:



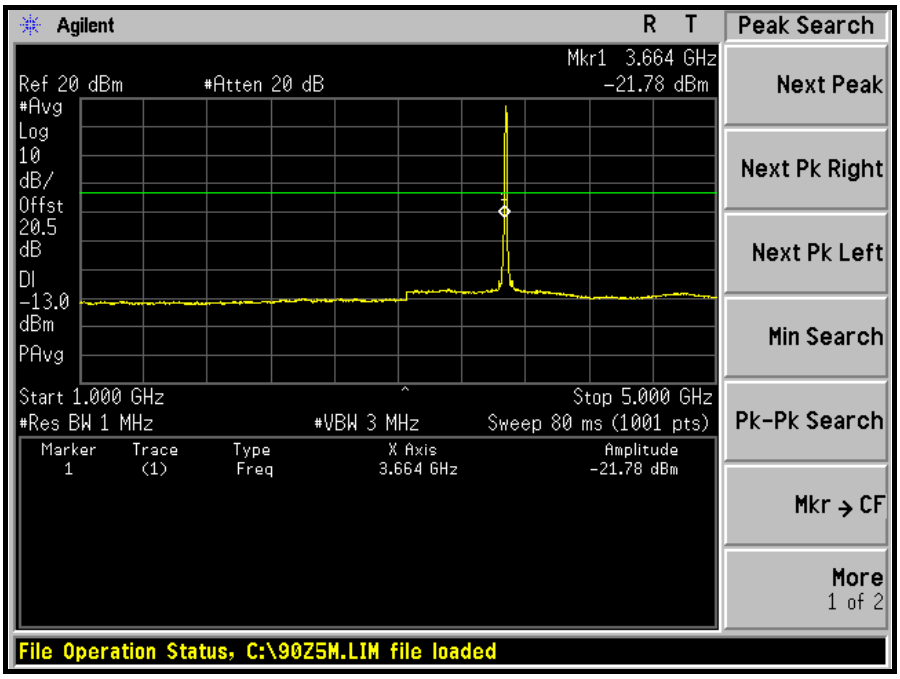
30GHz ~ 40GHz:



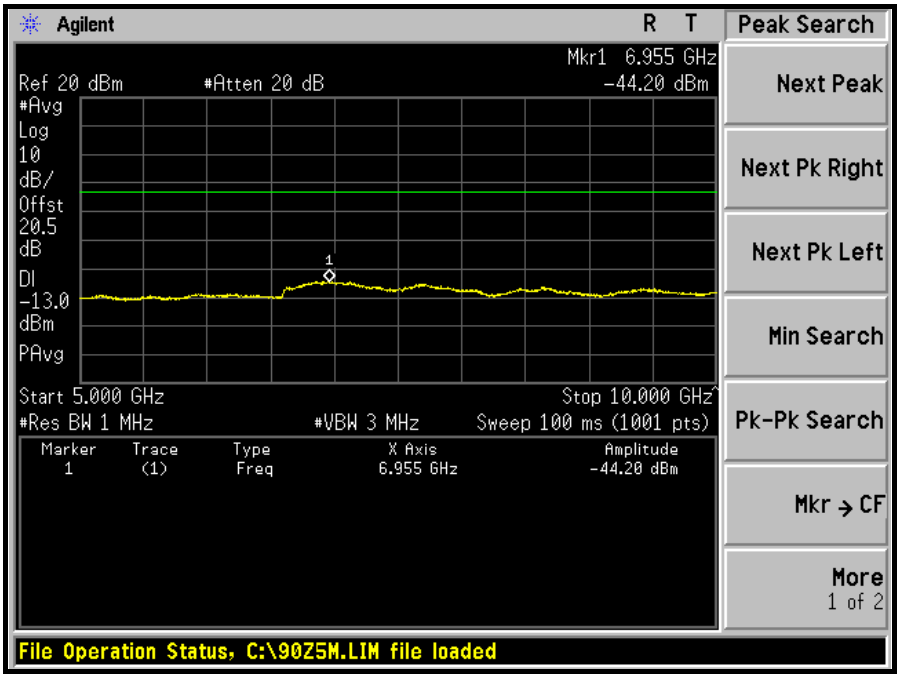
MIDDLE CHANNEL: 30MHz ~ 1GHz:



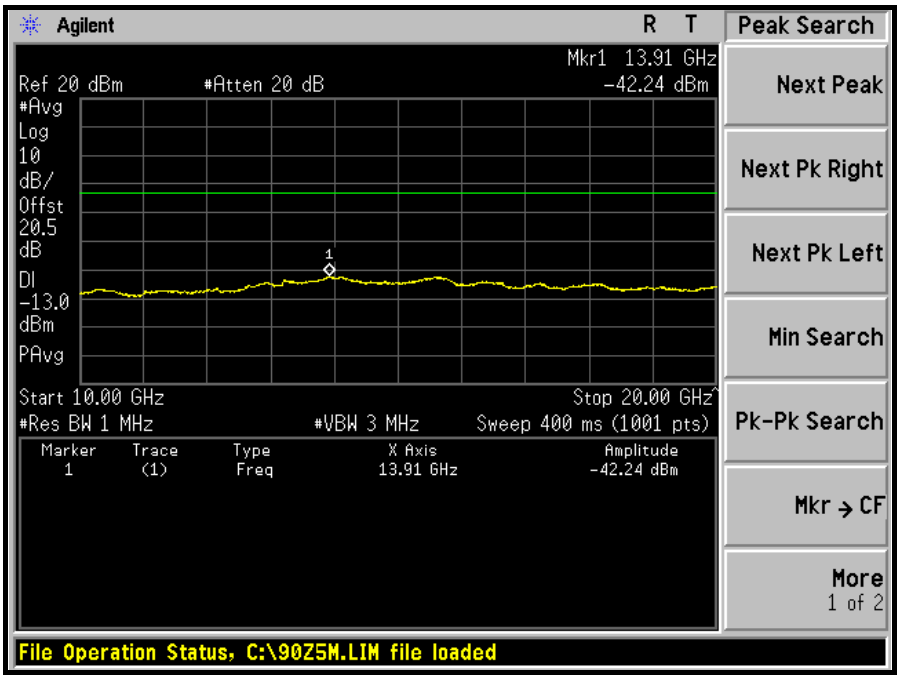
1GHz ~ 5GHz:



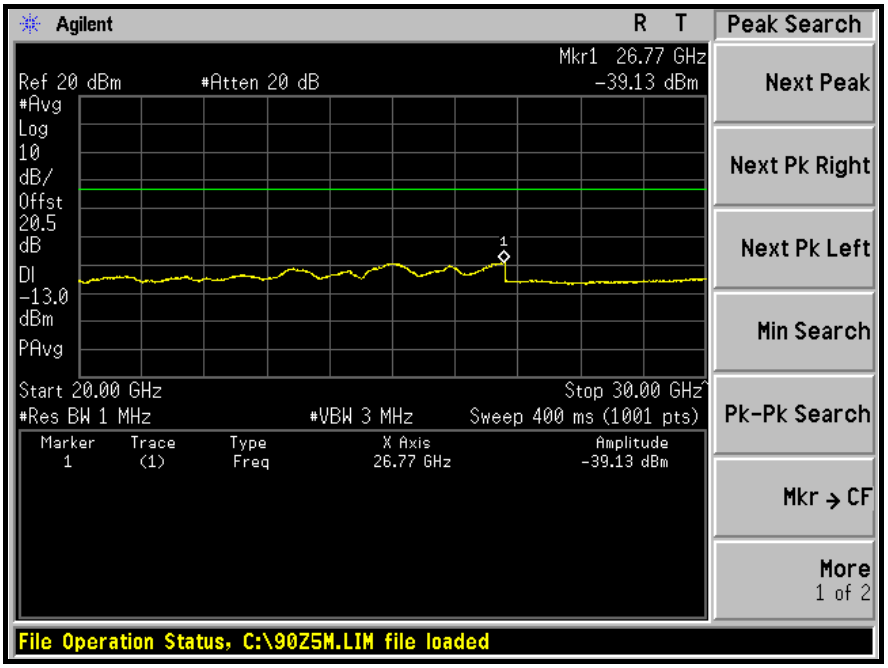
5GHz ~ 10GHz:



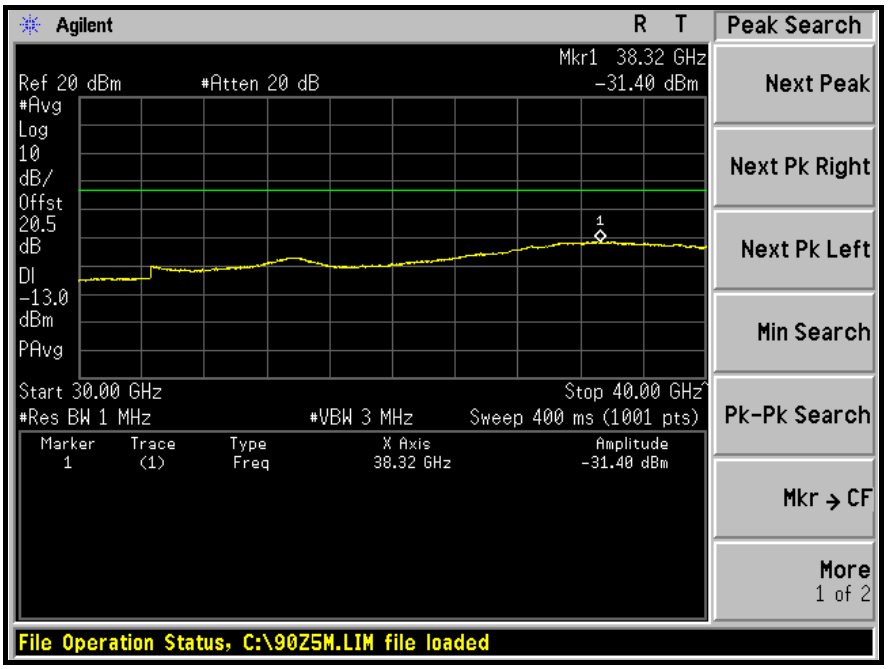
10GHz ~ 20GHz:



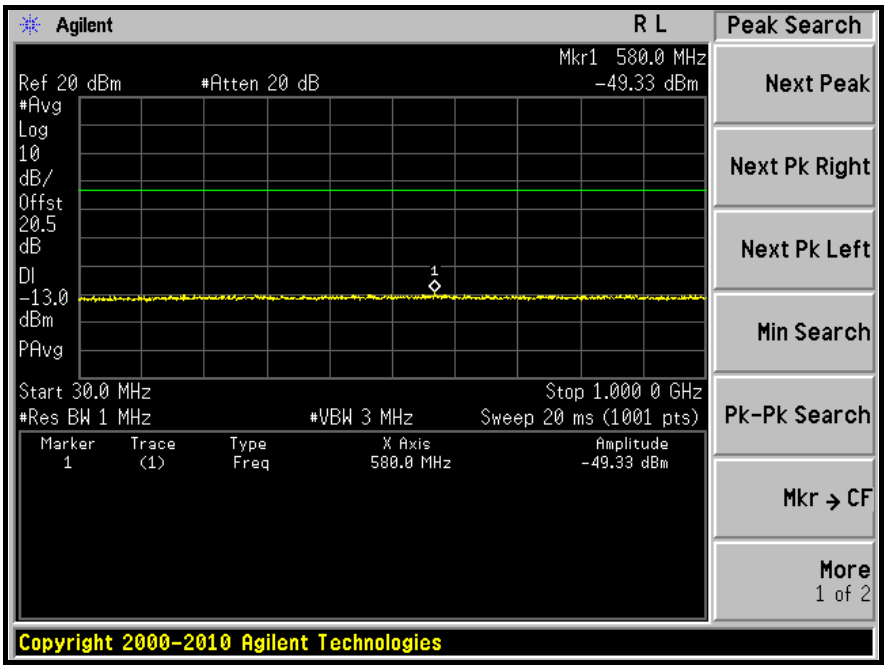
20GHz ~ 30GHz:



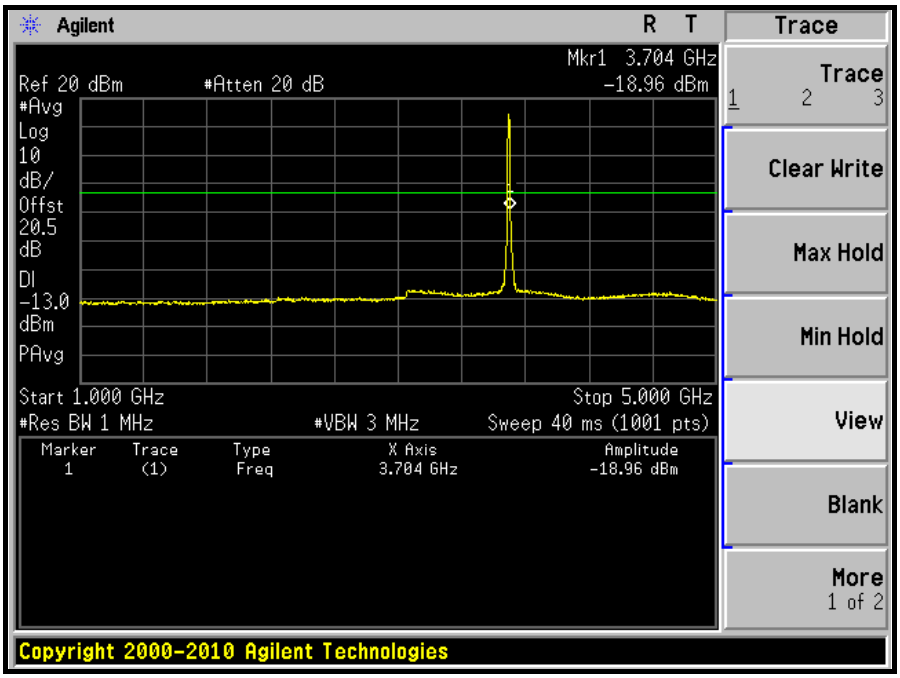
30GHz ~ 40GHz:



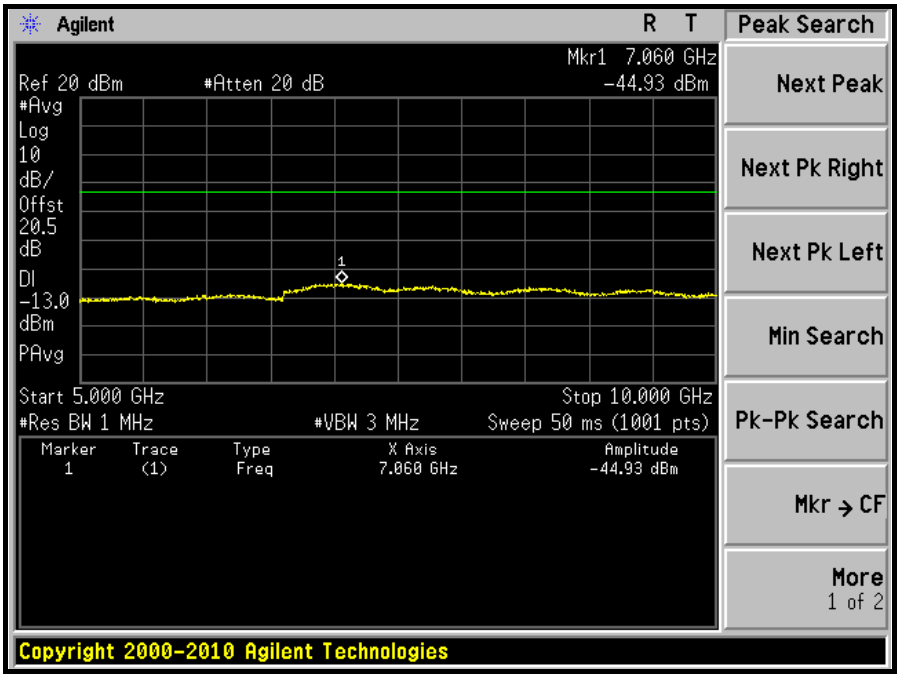
HIGH CHANNEL: 30MHz ~ 1GHz:



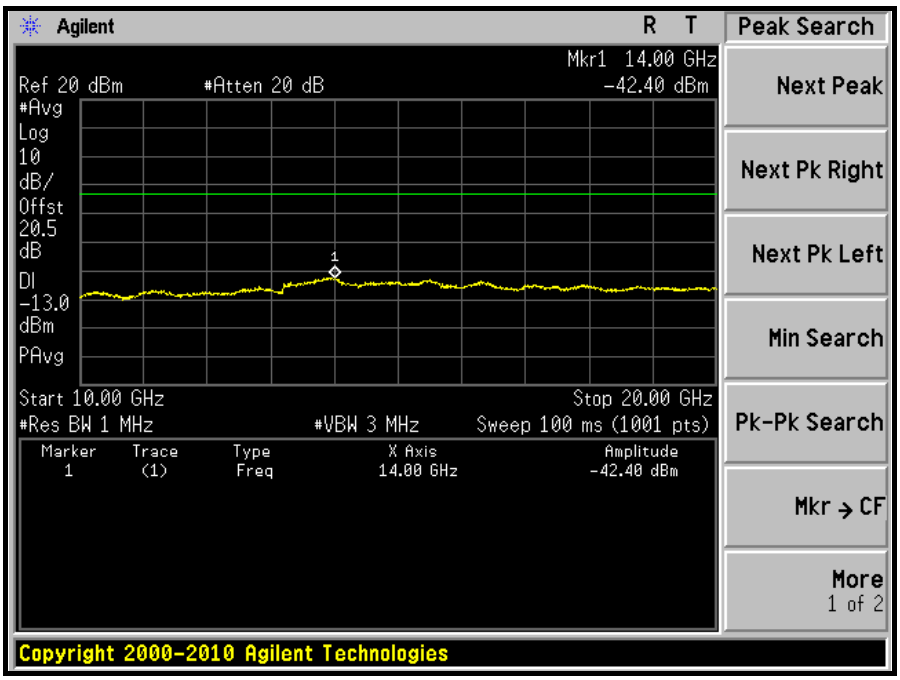
1GHz ~ 5GHz:



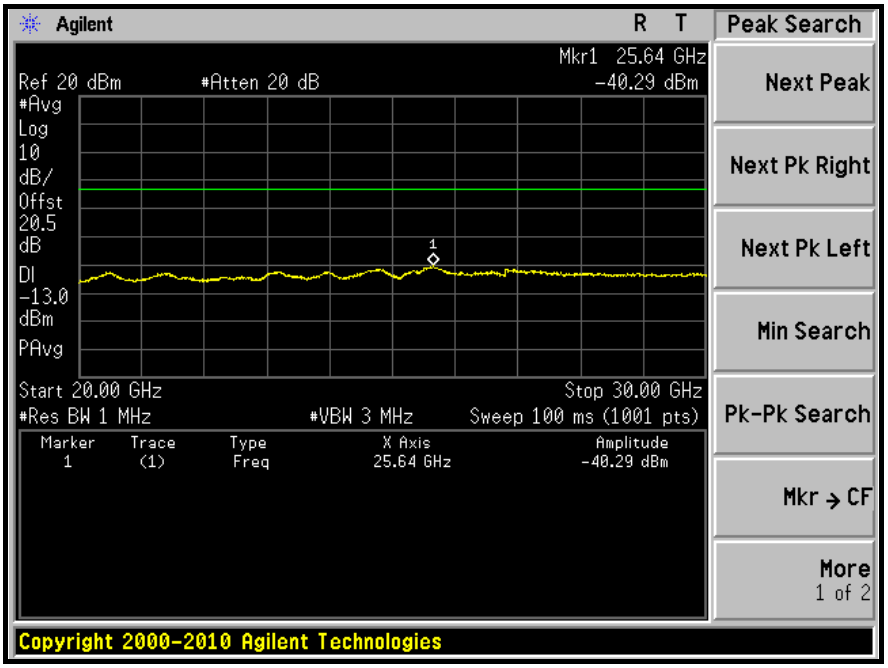
5GHz ~ 10GHz:



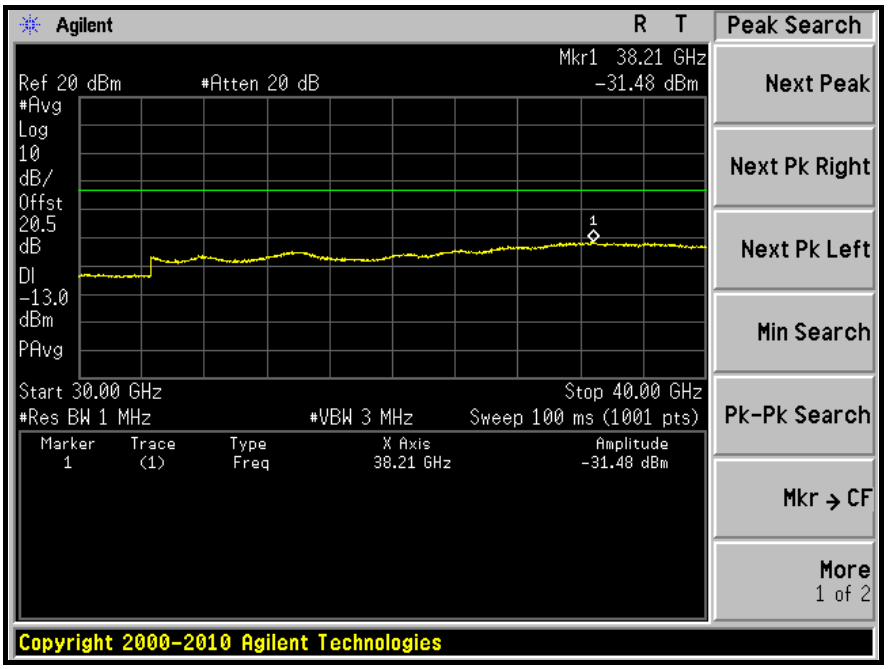
10GHz ~ 20GHz:



20GHz ~ 30GHz:



30GHz ~ 40GHz:



4.6 RADIATED EMISSION MEASUREMENT (BELOW 1GHz)

4.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

According to FCC 90.1323 specified that the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in Watts, by at least 43 + 10 log (P) dB. The limit of emission equal to –13dBm Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth.

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100036	Dec. 14, 2011	Dec. 13, 2012
Spectrum Analyzer Agilent PSA	E4446A	MY48250113	Nov. 30 , 2011	Nov. 29 , 2012
Pre_Amplifier HP	8449B	300801923	Oct. 31, 2011	Oct. 30, 2012
Test Receiver ROHDE & SCHWARZ	ESCS30	847124/029	Sep. 02, 2011	Sep. 01, 2012
TRILOG Broadband Antenna SCHWARZBECK	VULB 9168	138	Apr. 02, 2012	Apr. 01, 2013
Horn_Antenna SCHWARZBECK	BBHA9120	D124	Dec. 16, 2011	Dec. 15, 2012
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170153	Jan. 17, 2012	Jan. 16, 2013
RF Switches	EMH-011	1001	Sep. 24, 2011	Sep. 23, 2012
RF Cable (Chaintek)	Sucoflex 106	RF106-102	Jan. 19, 2012	Jan. 18, 2013
RF Cable	8DFB	STCCAB-30M -1GHz	Sep. 24, 2011	Sep. 23, 2012
Software	ADT_Radiated _V7.6.15.9.2	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna, preamplifier (model: 8449B) and Spectrum Analyzer (model: FSP40) are used only for the measurement of emission frequency above 1GHz if tested.
3 The test was performed in Open Site No. C.
4. The FCC Site Registration No. is 656396.
5 The VCCI Site Registration No. is R-1626.
6 The CANADA Site Registration No. is IC 7450G-3.
7 Tested Date: Aug. 23, 2012

4.6.3 TEST PROCEDURES

a. Substitution method is used for EIRP measurement. The EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The substitution antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a tx cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step a. Record the power level of S.G

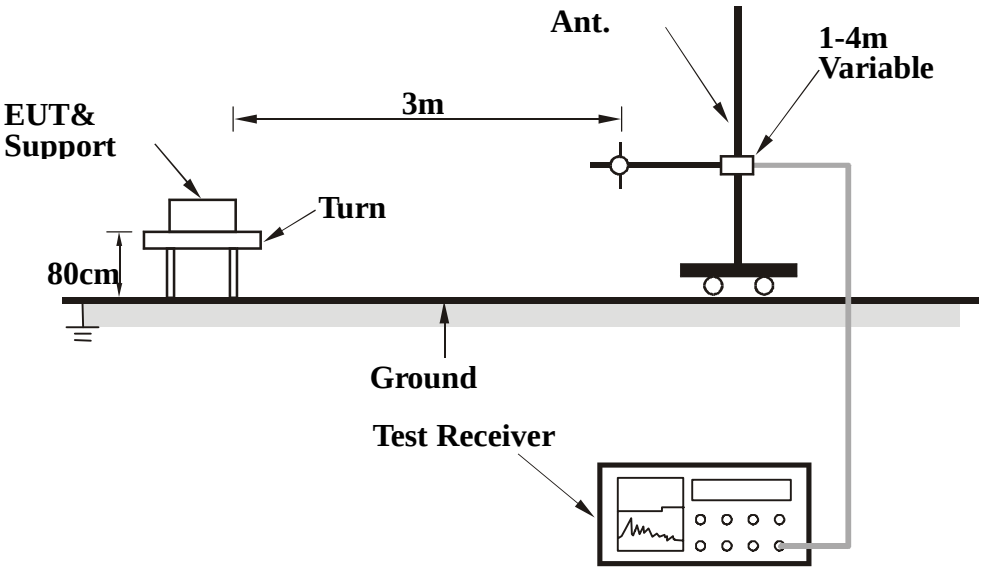
   EIRP = Output power level of S.G – TX cable loss + Antenna gain of Substitution antenna

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.6.6 EUT OPERATING CONDITIONS

Same as 4.1.5.

4.6.7 TEST RESULTS

MODE	Low channel	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg°C, 60%RH
TESTED BY	Amos Chuang	CHANNEL BANDWIDTH	5MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	105.32	33.92	-13	-56.47	-0.77	-57.24
2	150	33.62	-13	-57.45	-1.00	-58.46
3	210	40.46	-13	-55.00	4.21	-50.79
4	365	30.36	-13	-67.50	3.52	-63.98
5	655	33.12	-13	-62.01	1.73	-60.28
6	750	30.29	-13	-66.09	0.82	-65.27
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	53.2	34.62	-13	-45.04	-9.24	-54.28
2	106	36.59	-13	-53.76	-0.79	-54.55
3	276.71	32.95	-13	-62.13	3.86	-58.26
4	500	29.31	-13	-66.21	2.89	-63.32
5	625	28.63	-13	-66.18	1.77	-64.41
6	750	28.86	-13	-67.52	0.82	-66.70

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

MODE	Low channel	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg°C, 60%RH
TESTED BY	Amos Chuang	CHANNEL BANDWIDTH	10MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	105.35	34.02	-13	-56.37	-0.78	-57.14
2	156.57	33.54	-13	-55.65	-0.80	-56.45
3	209	40.76	-13	-54.70	4.22	-50.48
4	364.64	30.19	-13	-67.67	3.52	-64.15
5	654.54	32.97	-13	-62.15	1.73	-60.41
6	749.54	30.56	-13	-65.81	0.82	-64.99
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	53.35	38.82	-13	-40.89	-9.20	-50.10
2	106.11	36.73	-13	-53.61	-0.80	-54.41
3	276.86	32.91	-13	-62.17	3.86	-58.31
4	500	30.21	-13	-65.31	2.89	-62.42
5	625	28.76	-13	-66.05	1.77	-64.28
6	750	28.97	-13	-67.41	0.82	-66.59

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

4.7 RADIATED EMISSION MEASUREMENT (ABOVE 1GHz)

4.7.1 LIMITS OF RADIATED EMISSION MEASUREMENT

According to FCC 90.1323 specified that the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in Watts, by at least 43 + 10 log (P) dB. The limit of emission equal to –13dBm Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth.

4.7.2 TEST INSTRUMENTS

Same as 4.6.2.

4.7.3 TEST PROCEDURES

Same as 4.6.3.

4.7.4 DEVIATION FROM TEST STANDARD

No deviation

4.7.5 TEST SETUP

Same as 4.6.5.

4.7.6 EUT OPERATING CONDITIONS

Same as 4.1.5

4.7.7 TEST RESULTS

MODE	Low channel	FREQUENCY RANGE	Above 1000MHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg°C, 60%RH
TESTED BY	Wen Yu	CHANNEL BANDWIDTH	5MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7305	51.90	-13	-50.49	4.71	-45.77
2	10957.5	53.60	-13	-48.00	3.13	-44.87
3	14610	58.10	-13	-39.85	3.13	-36.72
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7305	53.70	-13	-48.69	4.71	-43.97
2	10957.5	60.60	-13	-41.00	3.13	-37.87
3	14610	57.10	-13	-40.85	3.13	-37.72

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

MODE	Middle channel	FREQUENCY RANGE	Above 1000MHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg°C, 60%RH
TESTED BY	Wen Yu	CHANNEL BANDWIDTH	5MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7350	52.10	-13	-50.34	4.67	-45.67
2	11025	53.90	-13	-47.65	3.13	-44.52
3	14700	58.30	-13	-39.51	3.26	-36.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7350	55.80	-13	-46.64	4.67	-41.97
2	11025	61.50	-13	-40.05	3.13	-36.92
3	14700	57.60	-13	-40.21	3.26	-36.95

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

MODE	High channel	FREQUENCY RANGE	Above 1000MHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg°C, 60%RH
TESTED BY	Wen Yu	CHANNEL BANDWIDTH	5MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7395	51.70	-13	-50.79	4.63	-46.16
2	11092	53.50	-13	-48.03	3.22	-44.81
3	14790	58.00	-13	-39.67	3.39	-36.28
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7395	55.30	-13	-47.19	4.63	-42.56
2	11092	61.90	-13	-39.63	3.22	-36.41
3	14790	57.30	-13	-40.37	3.39	-36.98

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

MODE	Low channel	**FREQUENCY RANGE**	Above 1000MHz
INPUT POWER	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	25deg°C, 60%RH
TESTED BY	Wen Yu	**CHANNEL BANDWIDTH**	10MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3m						
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV)**	**LIMIT (dBm)**	**S.G POWER VALUE (dBm)**	**CORRECTION FACTOR (dB)**	**POWER VALUE (dBm)**
1	7310	51.70	-13	-50.69	4.71	-45.98
2	10965	54.90	-13	-46.69	3.12	-43.57
3	14620	58.30	-13	-39.64	3.14	-36.49
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3m						
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBm)**	**S.G POWER VALUE (dBm)**	**CORRECTION FACTOR (dB)**	**POWER VALUE (dBm)**
1	7310	54.80	-13	-47.59	4.71	-42.88
2	10965	60.60	-13	-40.99	3.12	-37.87
3	14620	58.50	-13	-39.44	3.14	-36.29

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

MODE	Middle channel	FREQUENCY RANGE	Above 1000MHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg°C, 60%RH
TESTED BY	Wen Yu	CHANNEL BANDWIDTH	10MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7350	51.80	-13	-50.64	4.67	-45.97
2	11025	54.00	-13	-47.55	3.13	-44.42
3	14700	58.70	-13	-39.11	3.26	-35.85
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7350	54.90	-13	-47.54	4.67	-42.87
2	11025	61.10	-13	-40.45	3.13	-37.32
3	14700	58.70	-13	-39.11	3.26	-35.85

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

MODE	High channel	FREQUENCY RANGE	Above 1000MHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg°C, 60%RH
TESTED BY	Wen Yu	CHANNEL BANDWIDTH	10MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7390	51.70	-13	-50.79	4.64	-46.15
2	11085	54.20	-13	-47.33	3.21	-44.12
3	14780	58.20	-13	-39.49	3.38	-36.11
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3m						
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBm)	S.G POWER VALUE (dBm)	CORRECTION FACTOR (dB)	POWER VALUE (dBm)
1	7390	55.20	-13	-47.29	4.64	-42.65
2	11085	61.50	-13	-40.03	3.21	-36.82
3	14780	58.60	-13	-39.09	3.38	-35.71

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6 INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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