



# FCC TEST REPORT (15.407)

**REPORT NO.:** RF970702L10-1

**MODEL NO.:** DMC250

**RECEIVED:** July 02, 2008

**TESTED:** Aug. 23 to Oct. 17, 2008

**ISSUED:** Nov. 27, 2008

**APPLICANT:** Cisco-Linksys LLC

**ADDRESS:** 121 Theory Drive Irvine, CA 92617 (USA)

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

**TEST LOCATION:** No. 81-1, Lu Liao Keng, 9th Ling,Wu Lung  
Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien  
307, Taiwan

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## 1. CERTIFICATION

**PRODUCT:** Director-Wireless-N Music Player with Integrated Amp  
( Wireless Home Audio )

**BRAND NAME:** LINKSYS® by Cisco

**MODEL NO.:** DMC250

**TEST SAMPLE:** R&D SAMPLE

**TESTED:** Aug. 23 to Oct. 17, 2008

**APPLICANT:** Cisco-Linksys LLC

**STANDARDS:** FCC Part 15, Subpart E (Section 15.407),  
ANSI C63.4-2003

The above equipment (Model: DMC250) 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** : Midoli Peng , **DATE:** Nov. 27, 2008  
( Midoli Peng, Specialist )

**TECHNICAL ACCEPTANCE** : Hank Chung , **DATE:** Nov. 27, 2008  
Responsible for RF ( Hank Chung, Deputy Manager )

**APPROVED BY** : May Chen , **DATE:** Nov. 27, 2008  
( May Chen, Deputy Manager )

## 2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

For 802.11a

APPLIED STANDARD: FCC Part 15, Subpart E (Section 15.407)			
Standard Section	Test Type	Result	Remark
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -12.72dB at 0.580MHz
15.407(b/1/2/3) (b)(5)	Electric Field Strength Spurious Emissions, 30MHz ~ 40000MHz	PASS	Meet the requirement of limit. Minimum passing margin is -0.30dB at 624.99MHz
15.407(a/1/2/3)	Peak Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a/1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.

### NOTE:

- The EUT was operating in 2.412 ~ 2.462GHz, 5.15~5.35GHz, 5.47~5.725GHz and 5.725~5.825GHz frequencies band. This report was recorded the RF parameters including 5.15~5.35GHz, 5.47~5.725GHz and 5.725~5.825GHz. For the 2.412 ~ 2.462GHz RF parameters was recorded in another test report.

## 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:

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

Measurement	Value
Conducted emissions	2.44 dB
Radiated emissions (30MHz-1GHz)	3.94 dB
Radiated emissions (1GHz -18GHz)	2.49 dB
Radiated emissions (18GHz -40GHz)	2.70 dB

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	Director-Wireless-N Music Player with Integrated Amp ( Wireless Home Audio )
<b>MODEL NO.</b>	DMC250
<b>FCC ID</b>	Q87-DMC250
<b>POWER SUPPLY</b>	DC 29V / 5V from internal power supply
<b>MODULATION TYPE</b>	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
<b>MODULATION TECHNOLOGY</b>	DSSS, OFDM
<b>TRANSFER RATE</b>	802.11b: 11 / 5.5 / 2 / 1Mbps 802.11g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps 802.11a: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps Draft 802.11n (20MHz): 130 / 117 / 104 / 78 / 65 / 58.5 / 52 / 39 / 26 / 19.5 / 13 / 6.5Mbps Draft 802.11n (40MHz): 270 / 243 / 216 / 162 / 135 / 121.5 / 108 / 81 / 54 / 40.5 / 27 / 13.5Mbps
<b>FREQUENCY RANGE</b>	802.11b & 802.11g: 2412 ~ 2462MHz 802.11a: 5.18 ~ 5.32GHz, 5.50 ~ 5.70GHz and 5.745 ~ 5.805GHz
<b>NUMBER OF CHANNEL</b>	<b>For 15.247(2.4GHz)</b> 11 for 802.11b, 802.11g, draft 802.11n (20MHz) 7 for draft 802.11n (40MHz) <b>For 15.407(5GHz)</b> 23 for 802.11a, draft 802.11n (20MHz) 11 for draft 802.11n (40MHz)
<b>MAXIMUM OUTPUT POWER</b>	<b>For 15.247(2.4GHz)</b> 802.11b: 96.383mW 802.11g: 227.510mW draft 802.11n (20MHz): 229.930mW draft 802.11n (40MHz): 215.604mW <b>For 15.407(5GHz)</b> 802.11a: 28.119mW draft 802.11n (20MHz): 34.813mW draft 802.11n (40MHz): 42.318mW
<b>ANTENNA TYPE</b>	Please see note 1
<b>DATA CABLE</b>	NA



<b>I/O PORT</b>	Please refer to the manual
<b>ASSOCIATED DEVICES</b>	NA

**NOTE:**

1. There are two antennas provided to this EUT, please refer to the following table:

No.	Antenna Type	For 2.4GHz Gain (dBi)	For 5GHz Gain (dBi)	Antenna Connector
CHAIN(0)	Dipole	3	3	UFL-style
CHAIN(1)	Dipole	2.5	3.5(5250-5350MHz) 3.75(5470-5725MHz) 3.75(5725-5825MHz)	UFL-style

2. The EUT must be supplied with an internal power supply as following:

Brand	Model No.	Spec.
ENG	3B-1C10AXX	Input: 100-240 Vac, 2.5A, 50~60Hz Output: (1) 29V, 3.33A (2) 5V, 3.25A

3. The EUT incorporates a MIMO function with 802.11a, 802.11b, 802.11g, draft 802.11n. Physically, the EUT provides two completed transmit and two completed receivers.
4. The EUT is 2 \* 2 spatial MIMO (2Tx & 2Rx) without beam forming function. The antenna configurations are two transmitter antennas and two receiver antennas, as there are 2 Dipole antennas. Spatial multiplexing modes for simultaneous transmission using 2 antennas, and for simultaneous receiver using 2 antennas. The 11a and 11bg legacy mode is limited to single transmitter only.
5. When the EUT operating in draft 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 15.
6. The EUT complies with draft 802.11n standards and backwards compatible with 802.11a, 802.11b, 802.11g products.
7. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.



### 3.2 DESCRIPTION OF TEST MODES

#### Operated in 5150MHz ~ 5350MHz bands:

Eight channels are provided for 802.11a and draft 802.11n (20MHz):

CHANNEL	FREQUENCY
1	5180 MHz
2	5200 MHz
3	5220 MHz
4	5240 MHz
5	5260 MHz
6	5280 MHz
7	5300 MHz
8	5320 MHz

Four channels are provided for draft 802.11n (40MHz):

CHANNEL	FREQUENCY
1	5190 MHz
2	5230 MHz
3	5270 MHz
4	5310 MHz

**Operated in 5470MHz ~ 5725MHz bands:**

Eleven channels are provided for 802.11a and draft 802.11n (20MHz):

CHANNEL	FREQUENCY
9	5500 MHz
10	5520 MHz
11	5540 MHz
12	5560 MHz
13	5580 MHz
14	5600 MHz
15	5620 MHz
16	5640 MHz
17	5660 MHz
18	5680 MHz
19	5700 MHz

Five channels are provided for draft 802.11n (40MHz):

CHANNEL	FREQUENCY
5	5510 MHz
6	5550 MHz
7	5590 MHz
8	5630 MHz
9	5670 MHz

**Operated in 5725 ~ 5825MHz band:**

Four channels are provided for 802.11a, draft 802.11n (20MHz):

CHANNEL	FREQUENCY
20	5745 MHz
21	5765 MHz
22	5785 MHz
23	5805 MHz

Two channels are provided for draft 802.11n (40MHz):

CHANNEL	FREQUENCY
10	5755 MHz
11	5795 MHz

### 3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	PLC	RE < 1G	RE ≥ 1G	APCM	
-	√	√	√	√	-

Where **PLC**: Power Line Conducted Emission      **RE < 1G**: Radiated Emission below 1GHz  
**RE ≥ 1G**: Radiated Emission above 1GHz      **APCM**: Antenna Port Conducted Measurement

### ANTENNA COMBINATION MODE:

COMBINATION MODE	OPERATION MODE	CHAIN(0) (TX)	CHAIN(1) (TX)
A	802.11a	√	
B	802.11a		√
C	DRAFT 802.11n(20MHz)	√	√
D	DRAFT 802.11n(40MHz)	√	√

Note:

1. The above information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.
2. Antenna 1 and Antenna 2 are Dipole antennas.

### POWER LINE CONDUCTED EMISSION TEST:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11a	1 to 23	1	OFDM	BPSK	6	B

**RADIATED EMISSION TEST (BELOW 1 GHz):**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11a	1 to 23	1	OFDM	BPSK	6	B

**RADIATED EMISSION TEST (ABOVE 1 GHz):**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11a	1 to 23	1, 2, 4, 5, 7, 8, 9, 14, 19, 20, 22, 23	OFDM	BPSK	6	B
For 5 GHz Draft 802.11n (20MHz)	1 to 23	1, 2, 4, 5, 7, 8, 9, 14, 19, 20, 22, 23	OFDM	BPSK	13	C
For 5 GHz Draft 802.11n (40MHz)	1 to 12	1, 2, 3, 4, 5, 7, 9, 10, 11	OFDM	BPSK	27	D

**CONDUCTED OUT-BAND EMISSION MEASUREMENT:**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11a	1 to 23	1, 8, 9, 19, 20, 23	OFDM	BPSK	6	B
For 5 GHz Draft 802.11n (20MHz)	1 to 23	1, 8, 9, 19, 20, 23	OFDM	BPSK	13	C
For 5 GHz Draft 802.11n (40MHz)	1 to 12	1, 4, 5, 9, 10, 11	OFDM	BPSK	27	D

**ANTENNA PORT CONDUCTED MEASUREMENT:**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11a	1 to 23	1, 2, 4, 5, 7, 8, 9, 14, 19, 20, 22, 23	OFDM	BPSK	6	B
For 5 GHz Draft 802.11n (20MHz)	1 to 23	1, 2, 4, 5, 7, 8, 9, 14, 19, 20, 22, 23	OFDM	BPSK	13	C
For 5 GHz Draft 802.11n (40MHz)	1 to 12	1, 2, 3, 4, 5, 7, 9, 10, 11	OFDM	BPSK	27	D

### 3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Director-Wireless-N Music Player with Integrated Amp ( Wireless Home Audio ). According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC Part 15, Subpart E (15.407)**

**ANSI C63.4-2003**

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

**NOTE:** The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It 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

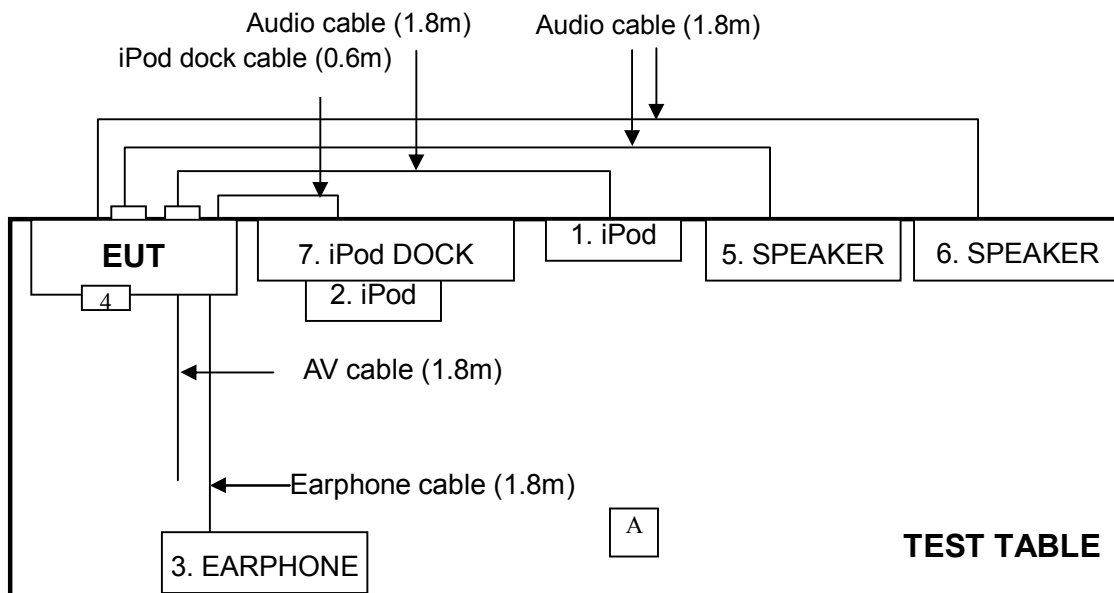
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	iPod	Apple	A1137	6U6078FMUPR	FCC DoC
2	iPod	Apple	A1137	5K7170JBUPR	FCC DoC
3	EARPHONE	KOKA	ST-8	H201026	NA
4	USB Flash Drive	SanDisk	SDCZ2-512-A10	5391912401	FCC DoC
5	SPEAKER	SANYO	SYSP-802	SP07500040300824	NA
6	SPEAKER	Linksys	NA	NA	NA
7	iPod DOCK	Linksys	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.8 m wrapped shielded wire, terminal by drain wire, with 3.5 mm phone plug, w/o core.
2	NA
3	1.8 m wrapped shielded wire, terminal by drain wire, with 3.5 mm phone plug, w/o core.
4	NA
5	1.8 m wrapped shielded wire, terminated via drain wire, with 3.5 mm phone plug, w/o core.
6	1.8 m wrapped shielded wire, terminated via drain wire, with 3.5 mm phone plug, w/o core.
7	0.6 m iPod dock cable, terminated with iPod dock connector, w/o core.

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

### 3.5 CONFIGURATION OF SYSTEM UNDER TEST



- Note:** 1. The item 4 is USB Flash Drive.  
 2. The item A is remote control.



## 4. TEST TYPES AND RESULTS

### 4.1 CONDUCTED EMISSION MEASUREMENT

#### 4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
  3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver	ESCS 30	847124/029	Feb. 29, 2008	Feb. 28, 2009
Line-Impedance Stabilization Network(for EUT)	ENV-216	100071	Nov. 27, 2007	Nov. 26, 2008
Line-Impedance Stabilization Network(for Peripheral)	ESH3-Z5	848773/004	Nov. 09, 2007	Nov. 08, 2008
RF Cable (JYEBAO)	5DFB	COBCAB-001	July 24, 2008	July 23, 2009
50 ohms Terminator	50	3	Nov. 16, 2007	Nov. 15, 2008
Software	BV ADT_Cond_V7.3.6	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 test was performed in Shielded Room No. B.
3. The VCCI Con B Registration No. is C-2193.

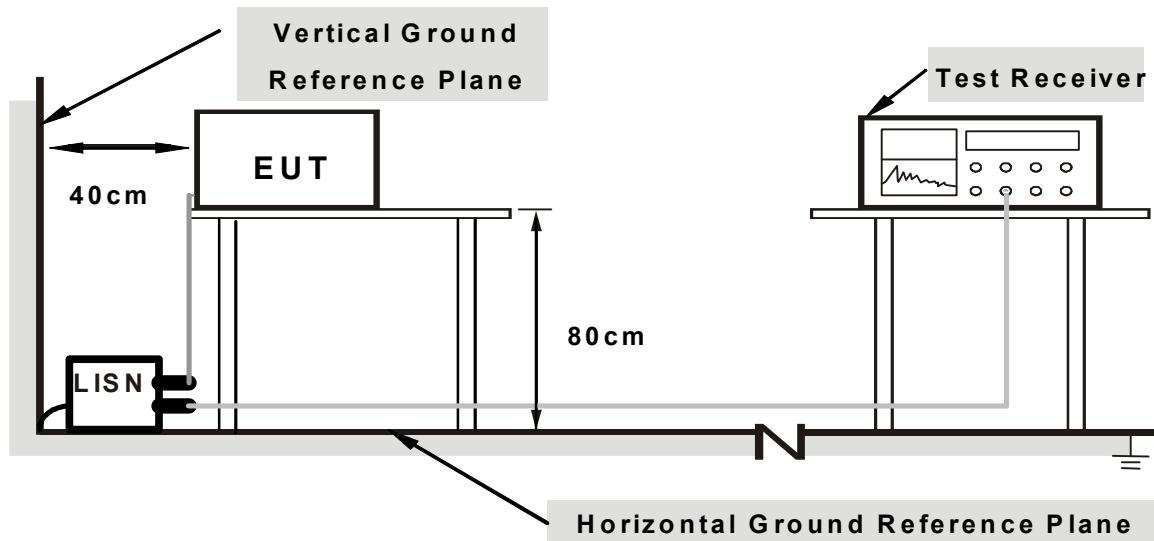
#### 4.1.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs
- b. provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- c. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- d. The frequency range from 150kHz to 30MHz was searched. Emission level under (Limit – 20dB) was not recorded.

#### 4.1.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.1.5 TEST SETUP



**Note: 1. Support units were connected to second LISN.**

**2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes**

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

#### 4.1.6 EUT OPERATING CONDITIONS

- a. Turn on the power of all equipment.
- b. The communication partner run test program “telnet.exe” to enable EUT under transmission/receiving condition continuously at specific channel frequency.



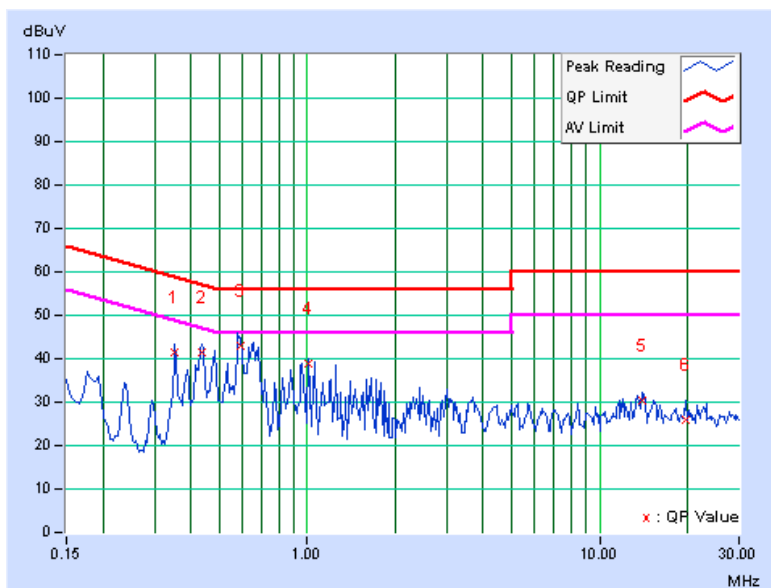
### 4.1.7 TEST RESULTS

#### DRAFT 802.11a OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line (L)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Rex Huang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
	1	0.353	9.89	31.54	-	41.43	-	58.89	48.89	-17.46
2	0.435	9.93	31.41	-	41.34	-	57.15	47.15	-15.81	-
3	0.593	9.86	33.23	-	43.09	-	56.00	46.00	-12.91	-
4	1.012	9.67	29.12	-	38.79	-	56.00	46.00	-17.21	-
5	14.031	9.89	20.55	-	30.44	-	60.00	50.00	-29.56	-
6	19.711	9.96	16.03	-	25.99	-	60.00	50.00	-34.01	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.



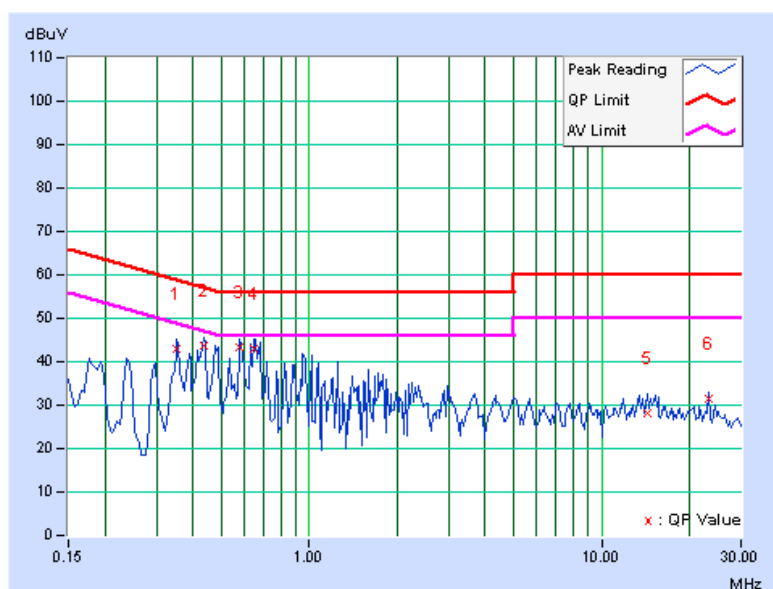


A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Neutral (N)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Rex Huang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
	1	0.353	9.88	33.26	-	43.14	-	58.89	48.89	-15.74
2	0.435	9.92	33.73	-	43.65	-	57.15	47.15	-13.50	-
3	<b>0.580</b>	<b>9.86</b>	<b>33.42</b>	-	<b>43.28</b>	-	<b>56.00</b>	<b>46.00</b>	<b>-12.72</b>	-
4	0.650	9.83	33.01	-	42.84	-	56.00	46.00	-13.16	-
5	14.332	9.95	18.06	-	28.01	-	60.00	50.00	-31.99	-
6	23.129	10.12	21.37	-	31.49	-	60.00	50.00	-28.51	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.



## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

#### 4.2.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dB $\mu$ V/m) *note 3
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
5725~5825	-27 *note 1	68.3
	-17 *note 2	78.3

**NOTE:**

1. For frequencies 10MHz or greater above or below the band edge.
2. All emissions within the frequency range from the band edge to 10MHz above or below the band edge.
3. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

#### 4.2.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
ADVANTEST Spectrum Analyzer	R3271A	85060311	July 16, 2008	July 15, 2009
HP Pre_Amplifier	8449B	3008A0192 2	Sep. 25, 2008	Sep. 24, 2009
ROHDE & SCHWARZ Test Receiver	ESCS30	100375	April 01, 2008	Mar. 31, 2009
SCHWARZBECK TRILOG Broadband Antenna	VULB 9168	138	April 30, 2008	April 29, 2009
Schwarzbeck Horn_Antenna	BBHA9120	D124	Dec. 17, 2007	Dec. 16, 2008
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA91701 53	Jan. 28, 2008	Jan. 27, 2009
RF Switches	EMH-011	08009	Oct. 07, 2008	Oct. 06, 2009
RF CABLE (Chaintek)	SF102	22054-2	Dec. 07, 2007	Dec. 06, 2008
RF Cable	8DFB	STCCAB-30 M-1GHz	Oct. 07, 2008	Oct. 06, 2009
Software	ADT_Radiated _V7.6.15.9.2	NA	NA	NA
CT Antenna Tower & Turn Table	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, HP preamplifier (model: 8449B) and Spectrum Analyzer (model: R3271A) 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.



#### 4.2.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

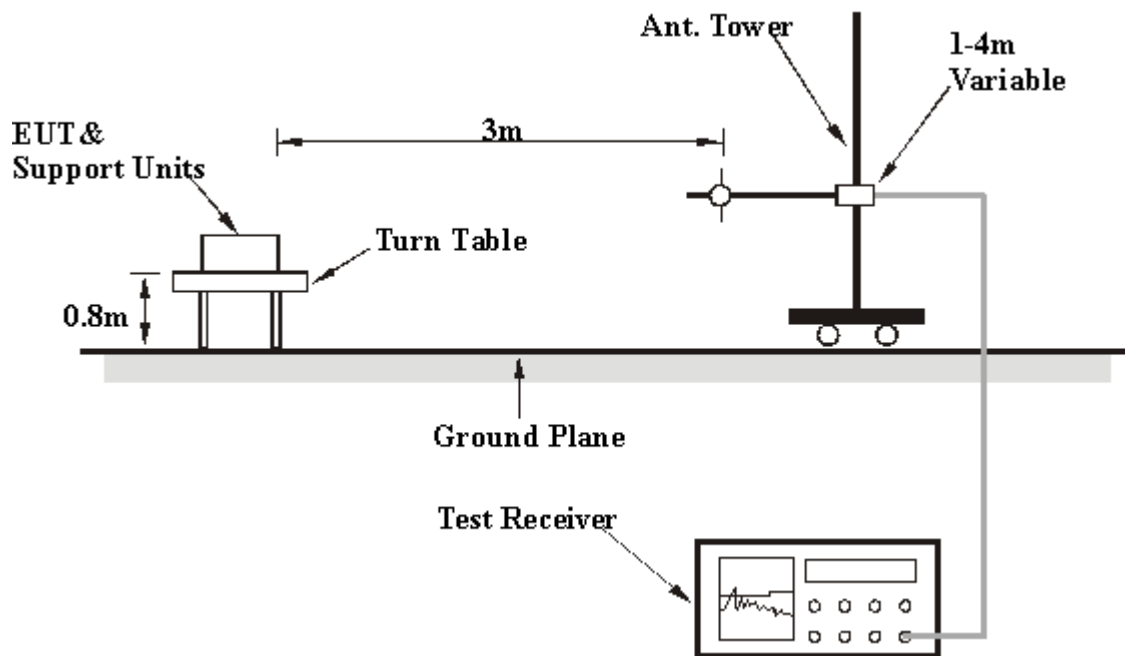
**NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

#### 4.2.5 DEVIATION FROM TEST STANDARD

No deviation

#### 4.2.6 TEST SETUP



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

#### 4.2.7 EUT OPERATING CONDITION

Same as 4.1.6



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## Below 1GHz Test Data

### 4.2.8 TEST RESULTS

#### 802.11a OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 971hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	110.94	35.42 QP	43.50	-8.08	1.69 H	275	23.77	11.65
2	125.00	37.97 QP	43.50	-5.53	2.20 H	301	24.51	13.46
3	141.22	33.65 QP	43.50	-9.85	2.20 H	97	19.21	14.44
4	250.00	38.63 QP	46.00	-7.37	1.00 H	72	24.13	14.50
5	375.00	34.88 QP	46.00	-11.12	2.06 H	325	15.72	19.16
6	500.00	34.05 QP	46.00	-11.95	1.58 H	68	12.74	21.31
7	<b>624.99</b>	<b>45.70 QP</b>	<b>46.00</b>	<b>-0.30</b>	<b>1.24 H</b>	<b>44</b>	<b>21.79</b>	<b>23.91</b>
8	656.24	36.27 QP	46.00	-9.73	1.41 H	298	11.60	24.67
9	718.74	34.60 QP	46.00	-11.40	1.07 H	152	8.45	26.15
10	750.02	44.76 QP	46.00	-1.24	1.00 H	44	17.76	27.00
11	770.84	41.00 QP	46.00	-5.00	1.00 H	52	13.40	27.60
12	799.90	39.83 QP	46.00	-6.17	1.00 H	39	11.38	28.45
13	812.50	37.62 QP	46.00	-8.38	1.00 H	343	9.04	28.58
14	875.00	42.50 QP	46.00	-3.50	1.09 H	50	13.23	29.27
15	1000.00	45.65 QP	54.00	-8.35	1.00 H	94	14.36	31.29
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	42.60	30.99 QP	40.00	-9.01	1.00 V	15	18.19	12.80
2	125.00	33.83 QP	43.50	-9.67	1.00 V	116	20.37	13.46
3	249.99	35.23 QP	46.00	-10.77	1.00 V	31	20.73	14.50
4	400.00	30.33 QP	46.00	-15.67	1.00 V	354	10.20	20.13
5	500.00	35.77 QP	46.00	-10.23	1.18 V	52	14.46	21.31
6	624.99	42.32 QP	46.00	-3.68	1.04 V	100	18.41	23.91
7	768.33	40.78 QP	46.00	-5.22	1.00 V	40	13.25	27.53
8	875.02	42.54 QP	46.00	-3.46	1.00 V	78	13.27	29.27
9	1000.00	47.80 QP	54.00	-6.20	1.00 V	84	16.51	31.29

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.

## Above 1GHz Test Data

### 4.2.9 TEST RESULTS

#### 802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4144.00	45.20 PK	74.00	-28.80	1.26 H	199	11.21	33.99
2	4144.00	33.40 AV	54.00	-20.60	1.26 H	199	-0.59	33.99
3	5150.00	58.30 PK	74.00	-15.70	1.50 H	230	22.30	36.00
4	5150.00	44.20 AV	54.00	-9.80	1.50 H	230	8.20	36.00
5	*5180.00	104.00 PK			1.51 H	231	67.95	36.05
6	*5180.00	93.20 AV			1.51 H	231	57.15	36.05
7	#10360.00	57.70 PK	68.30	-10.60	1.21 H	52	11.78	45.92
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4144.00	47.10 PK	74.00	-26.90	1.02 V	156	13.11	33.99
2	4144.00	39.00 AV	54.00	-15.00	1.02 V	156	5.01	33.99
3	5150.00	58.40 PK	74.00	-15.60	1.27 V	257	22.40	36.00
4	5150.00	44.92 AV	54.00	-9.08	1.27 V	257	8.92	36.00
5	*5180.00	109.30 PK			1.30 V	266	73.25	36.05
6	*5180.00	96.30 AV			1.30 V	266	60.25	36.05
7	#10360.00	58.20 PK	68.30	-10.10	1.44 V	64	12.28	45.92

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4160.00	45.60 PK	74.00	-28.40	1.56 H	168	11.56	34.04
2	4160.00	36.00 AV	54.00	-18.00	1.56 H	168	1.96	34.04
3	*5200.00	105.60 PK			1.54 H	223	69.52	36.08
4	*5200.00	92.70 AV			1.54 H	223	56.62	36.08
5	#10400.00	58.40 PK	68.30	-9.90	1.26 H	53	12.41	45.99
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4160.00	46.80 PK	74.00	-27.20	1.19 V	166	12.76	34.04
2	4160.00	39.00 AV	54.00	-15.00	1.19 V	166	4.96	34.04
3	*5200.00	109.60 PK			1.31 V	258	73.52	36.08
4	*5200.00	96.20 AV			1.31 V	258	60.12	36.08
5	#10400.00	58.40 PK	68.30	-9.90	1.17 V	63	12.41	45.99

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4192.00	46.30 PK	74.00	-27.70	1.60 H	199	12.18	34.12
2	4192.00	36.80 AV	54.00	-17.20	1.60 H	199	2.68	34.12
3	*5240.00	103.40 PK			1.44 H	232	67.26	36.14
4	*5240.00	92.70 AV			1.44 H	232	56.56	36.14
5	#10480.00	57.30 PK	68.30	-11.00	1.27 H	69	11.18	46.12
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4192.00	47.40 PK	74.00	-26.60	1.25 V	156	13.28	34.12
2	4192.00	40.90 AV	54.00	-13.10	1.25 V	156	6.78	34.12
3	*5240.00	106.80 PK			1.13 V	264	70.66	36.14
4	*5240.00	96.10 AV			1.13 V	264	59.96	36.14
5	#10480.00	59.50 PK	68.30	-8.80	1.49 V	76	13.38	46.12

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, %RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4208.00	47.00 PK	74.00	-27.00	1.28 H	200	12.84	34.16
2	4208.00	38.00 AV	54.00	-16.00	1.28 H	200	3.84	34.16
3	*5260.00	103.20 PK			1.45 H	230	67.02	36.18
4	*5260.00	92.50 AV			1.45 H	230	56.32	36.18
5	#10520.00	57.50 PK	68.30	-10.80	1.23 H	67	11.31	46.19
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4208.00	48.70 PK	74.00	-25.30	1.50 V	157	14.54	34.16
2	4208.00	42.70 AV	54.00	-11.30	1.50 V	157	8.54	34.16
3	*5260.00	106.60 PK			1.12 V	264	70.42	36.18
4	*5260.00	96.00 AV			1.12 V	264	59.82	36.18
5	#10520.00	56.00 PK	68.30	-12.30	1.50 V	66	9.81	46.19

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4240.00	47.80 PK	74.00	-26.20	1.28 H	204	13.56	34.24
2	4240.00	37.00 AV	54.00	-17.00	1.28 H	204	2.76	34.24
3	*5300.00	102.20 PK			1.41 H	237	65.96	36.24
4	*5300.00	91.60 AV			1.41 H	237	55.36	36.24
5	10600.00	57.70 PK	74.00	-16.30	1.28 H	44	11.33	46.37
6	10600.00	44.70 AV	54.00	-9.30	1.28 H	44	-1.67	46.37
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4240.00	50.00 PK	74.00	-24.00	1.37 V	164	15.76	34.24
2	4240.00	44.70 AV	54.00	-9.30	1.37 V	164	10.46	34.24
3	*5300.00	106.10 PK			1.12 V	263	69.86	36.24
4	*5300.00	95.40 AV			1.12 V	263	59.16	36.24
5	10600.00	58.40 PK	74.00	-15.60	1.39 V	66	12.03	46.37
6	10600.00	44.30 AV	54.00	-9.70	1.39 V	66	-2.07	46.37

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.





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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 8	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4256.00	47.20 PK	74.00	-26.80	1.31 H	205	12.91	34.29
2	4256.00	39.20 AV	54.00	-14.80	1.31 H	205	4.91	34.29
3	*5320.00	104.40 PK			1.56 H	224	68.13	36.27
4	*5320.00	93.80 AV			1.56 H	224	57.53	36.27
5	5407.20	56.70 PK	74.00	-17.30	1.56 H	231	20.29	36.41
6	5407.20	44.30 AV	54.00	-9.70	1.56 H	231	7.89	36.41
7	10640.00	57.60 PK	74.00	-16.40	1.15 H	44	11.14	46.46
8	10640.00	43.80 AV	54.00	-10.20	1.15 H	44	-2.66	46.46
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4256.00	50.70 PK	74.00	-23.30	1.37 V	166	16.41	34.29
2	4256.00	45.80 AV	54.00	-8.20	1.37 V	166	11.51	34.29
3	*5320.00	107.80 PK			1.40 V	273	71.53	36.27
4	*5320.00	97.40 AV			1.40 V	273	61.13	36.27
5	5407.40	56.83 PK	74.00	-17.17	1.32 V	271	20.42	36.41
6	5407.40	45.92 AV	54.00	-8.08	1.32 V	271	9.51	36.41
7	10640.00	58.10 PK	74.00	-15.90	1.55 V	76	11.64	46.46
8	10640.00	44.90 AV	54.00	-9.10	1.55 V	76	-1.56	46.46

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4400.00	47.20 PK	74.00	-26.80	1.59 H	219	12.54	34.66
2	4400.00	40.30 AV	54.00	-13.70	1.59 H	219	5.64	34.66
3	5421.70	56.73 PK	74.00	-17.27	1.54 H	230	20.30	36.43
4	5421.70	45.08 AV	54.00	-8.92	1.54 H	230	8.65	36.43
5	#5470.00	56.00 PK	68.30	-12.30	1.54 H	234	19.49	36.51
6	*5500.00	104.90 PK			1.48 H	230	68.34	36.56
7	*5500.00	94.00 AV			1.48 H	230	57.44	36.56
8	11000.00	61.80 PK	74.00	-12.20	1.36 H	58	14.55	47.25
9	11000.00	47.60 AV	54.00	-6.40	1.36 H	58	0.35	47.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4400.00	49.10 PK	74.00	-24.90	1.24 V	197	14.44	34.66
2	4400.00	43.10 AV	54.00	-10.90	1.24 V	197	8.44	34.66
3	5448.00	57.40 PK	74.00	-16.60	1.36 V	273	20.92	36.48
4	5448.00	46.21 AV	54.00	-7.79	1.36 V	273	9.73	36.48
5	#5470.00	58.00 PK	68.30	-10.30	1.37 V	274	21.49	36.51
6	*5500.00	106.30 PK			1.35 V	275	69.74	36.56
7	*5500.00	96.60 AV			1.35 V	275	60.04	36.56
8	11000.00	61.00 PK	74.00	-13.00	1.22 V	77	13.75	47.25
9	11000.00	47.80 AV	54.00	-6.20	1.22 V	77	0.55	47.25

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 14	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#4480.00	48.50 PK	68.30	-19.80	1.51 H	219	13.63	34.87
3	*5600.00	104.80 PK			1.51 H	234	67.98	36.82
4	*5600.00	94.30 AV			1.51 H	234	57.48	36.82
5	11200.00	60.00 PK	74.00	-14.00	1.42 H	58	12.84	47.16
6	11200.00	47.25 AV	54.00	-6.75	1.42 H	58	0.09	47.16
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#4480.00	49.70 PK	68.30	-18.60	1.41 V	186	14.83	34.87
3	*5600.00	105.70 PK			1.06 V	249	68.88	36.82
4	*5600.00	95.40 AV			1.06 V	249	58.58	36.82
5	11200.00	62.20 PK	74.00	-11.80	1.31 V	37	15.04	47.16
6	11200.00	47.30 AV	54.00	-6.70	1.31 V	37	0.14	47.16

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 19	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4560.00	56.00 PK	74.00	-18.00	1.06 H	226	20.98	35.02
2	4560.00	44.00 AV	54.00	-10.00	1.06 H	226	8.98	35.02
3	*5700.00	105.90 PK			1.65 H	235	68.81	37.09
4	*5700.00	95.30 AV			1.65 H	235	58.21	37.09
5	#5725.00	61.40 PK	78.30	-16.90	1.49 H	237	24.25	37.15
6	11400.00	64.50 PK	74.00	-9.50	1.52 H	49	17.43	47.07
7	11400.00	50.40 AV	54.00	-3.60	1.52 H	49	3.33	47.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4560.00	57.40 PK	74.00	-16.60	1.14 V	295	22.38	35.02
2	4560.00	47.60 AV	54.00	-6.40	1.14 V	295	12.58	35.02
3	*5700.00	107.00 PK			1.31 V	196	69.91	37.09
4	*5700.00	96.40 AV			1.31 V	196	59.31	37.09
5	#5725.00	62.30 PK	78.30	-16.00	1.41 V	173	25.15	37.15
6	11400.00	60.90 PK	74.00	-13.10	1.57 V	37	13.83	47.07
7	11400.00	47.70 AV	54.00	-6.30	1.57 V	37	0.63	47.07

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 20	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 971hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4596.00	55.20 PK	74.00	-18.80	1.08 H	212	20.12	35.08
2	4596.00	43.80 AV	54.00	-10.20	1.08 H	212	8.72	35.08
3	#5715.00	59.62 PK	68.30	-8.68	1.59 H	239	22.49	37.13
4	#5725.00	68.80 PK	78.30	-9.50	1.59 H	239	31.65	37.15
5	*5745.00	105.40 PK			1.46 H	238	68.19	37.21
6	*5745.00	94.70 AV			1.46 H	238	57.49	37.21
7	11490.00	64.20 PK	74.00	-9.80	1.53 H	51	17.17	47.03
8	11490.00	50.60 AV	54.00	-3.40	1.53 H	51	3.57	47.03
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.00	61.10 PK	68.30	-7.20	1.13 V	244	23.97	37.13
3	#5725.00	70.20 PK	78.30	-8.10	1.41 V	174	33.05	37.15
4	*5745.00	106.80 PK			1.42 V	190	69.59	37.21
5	*5745.00	96.40 AV			1.42 V	190	59.19	37.21
6	11490.00	64.80 PK	74.00	-9.20	1.49 V	25	17.77	47.03
7	11490.00	50.30 AV	54.00	-3.70	1.49 V	25	3.27	47.03

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 22	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 971hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4628.00	55.90 PK	74.00	-18.10	1.23 H	265	20.76	35.14
2	4628.00	43.00 AV	54.00	-11.00	1.23 H	265	7.86	35.14
3	*5785.00	105.00 PK			1.76 H	237	67.69	37.31
4	*5785.00	94.60 AV			1.76 H	237	57.29	37.31
5	11570.00	62.70 PK	74.00	-11.30	1.55 H	52	15.73	46.97
6	11570.00	49.00 AV	54.00	-5.00	1.55 H	52	2.03	46.97
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4628.00	56.10 PK	74.00	-17.90	1.12 V	300	20.96	35.14
2	4628.00	44.50 AV	54.00	-9.50	1.12 V	300	9.36	35.14
3	*5785.00	106.20 PK			1.39 V	197	68.89	37.31
4	*5785.00	96.10 AV			1.39 V	197	58.79	37.31
5	11570.00	64.70 PK	74.00	-9.30	1.48 V	25	17.73	46.97
6	11570.00	50.70 AV	54.00	-3.30	1.48 V	25	3.73	46.97

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. "#":The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 23	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 971hPa	TESTED BY	Frank Liu

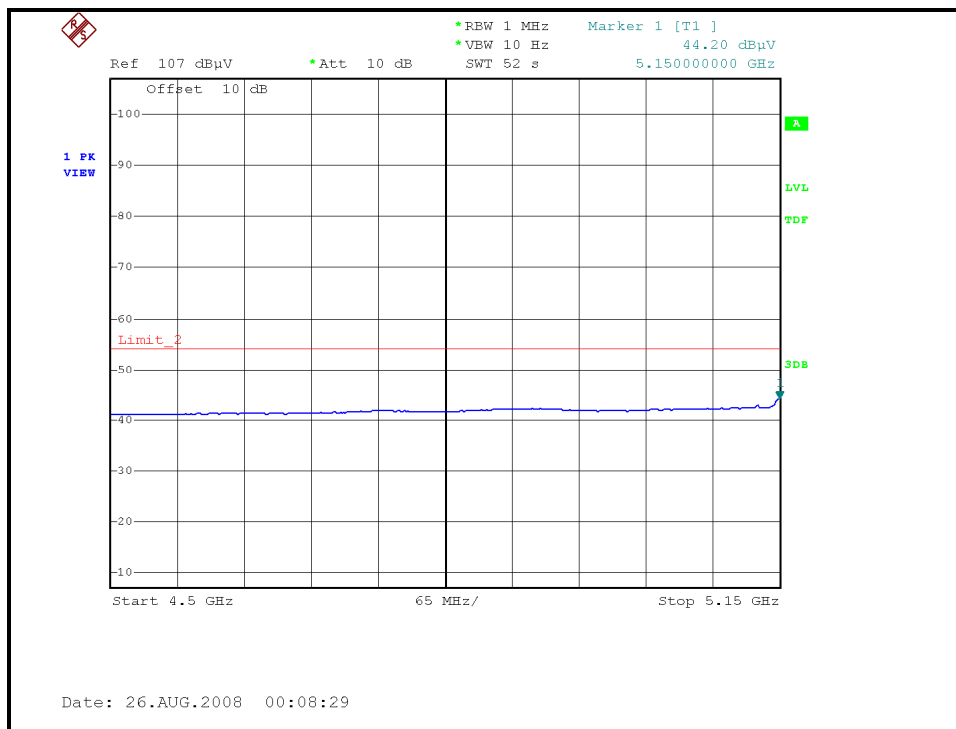
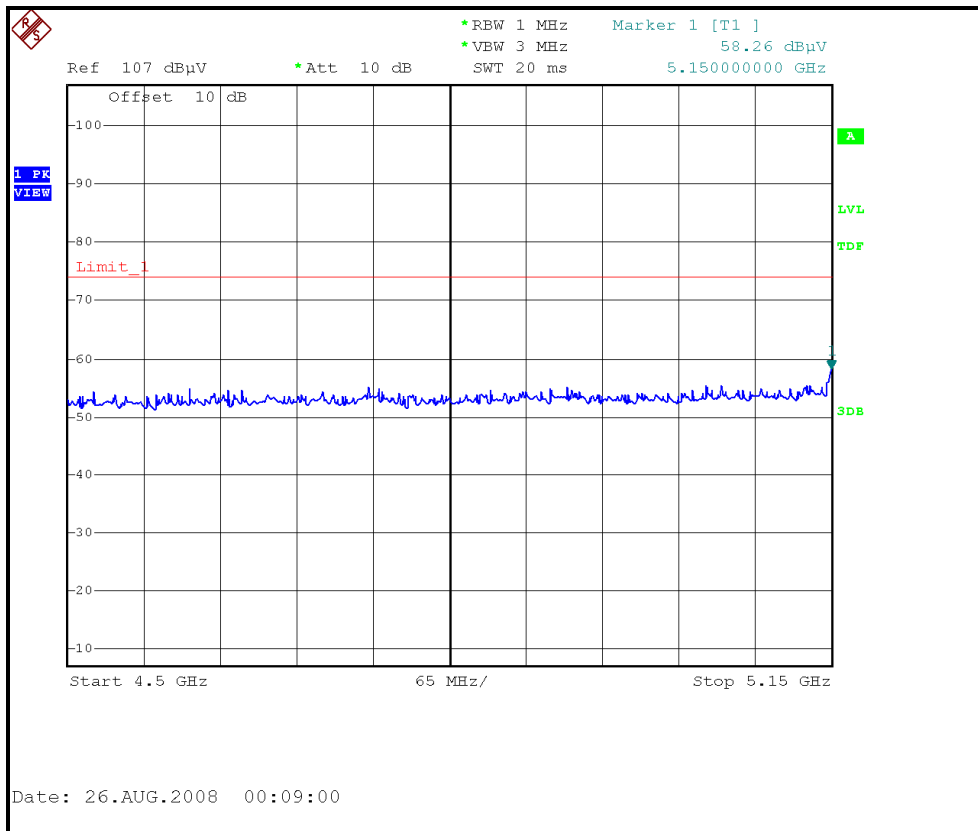
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4644.00	56.40 PK	74.00	-17.60	1.07 H	203	21.24	35.16
2	4644.00	42.80 AV	54.00	-11.20	1.07 H	203	7.64	35.16
3	*5805.00	106.50 PK			1.66 H	236	69.13	37.37
4	*5805.00	95.80 AV			1.66 H	236	58.43	37.37
5	#5825.00	67.80 PK	78.30	-10.50	1.61 H	235	30.38	37.42
6	#5835.00	60.30 PK	68.30	-8.00	1.61 H	235	22.86	37.44
7	11610.00	62.20 PK	74.00	-11.80	1.49 H	53	15.27	46.93
8	11610.00	49.30 AV	54.00	-4.70	1.49 H	53	2.37	46.93
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4644.00	57.50 PK	74.00	-16.50	1.11 V	300	22.34	35.16
2	4644.00	47.20 AV	54.00	-6.80	1.11 V	300	12.04	35.16
3	*5805.00	107.50 PK			1.39 V	199	70.13	37.37
4	*5805.00	97.00 AV			1.39 V	199	59.63	37.37
5	#5825.00	68.80 PK	78.30	-9.50	1.39 V	197	31.38	37.42
6	#5835.00	64.25 PK	68.30	-4.05	1.39 V	197	26.81	37.44
7	11610.00	65.90 PK	74.00	-8.10	1.54 V	26	18.97	46.93
8	11610.00	51.90 AV	54.00	-2.10	1.54 V	26	4.97	46.93

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”:The radiated frequency is out the restricted band.



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### RESTRICTED BANDEDGE (802.11a MODE, CH1, HORIZONTAL)

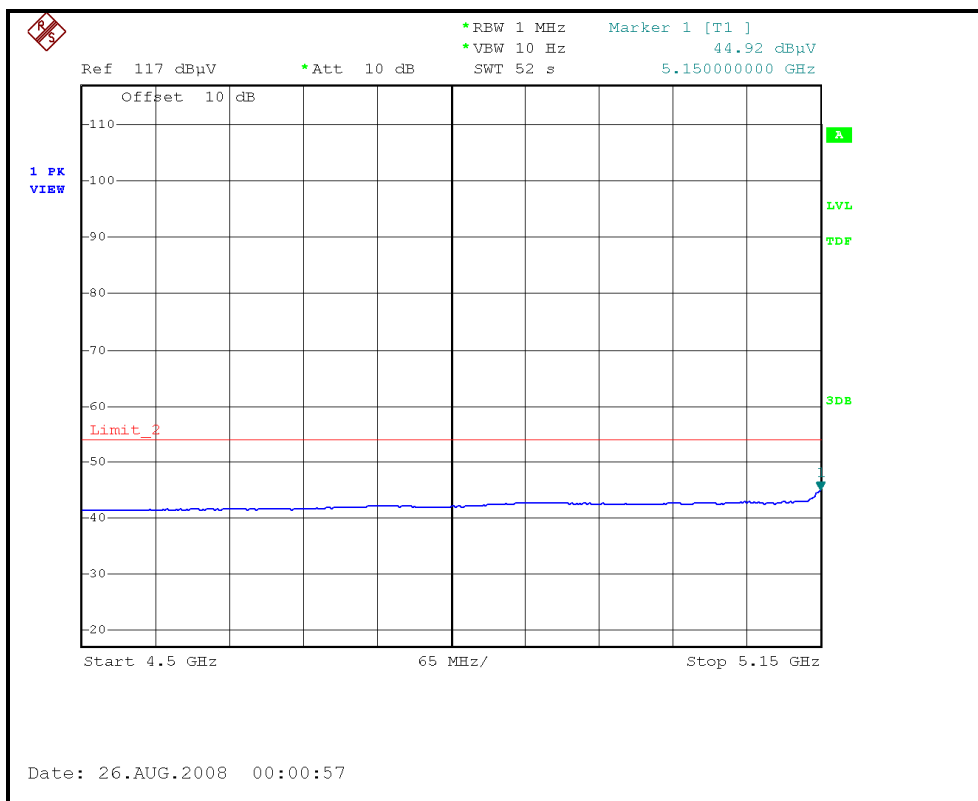
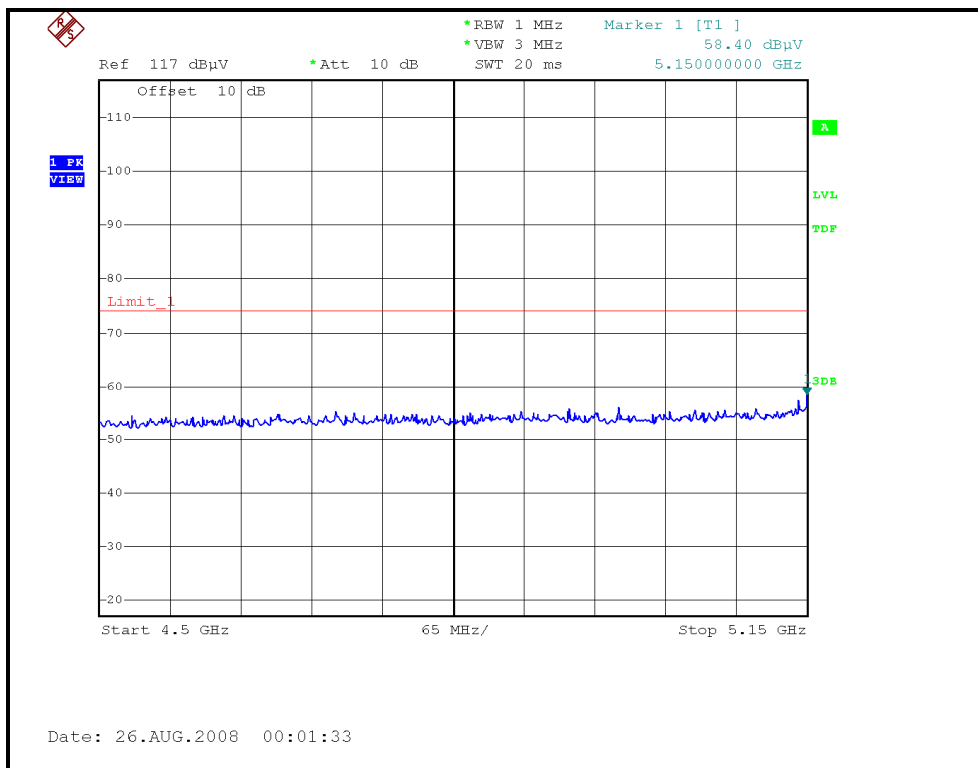






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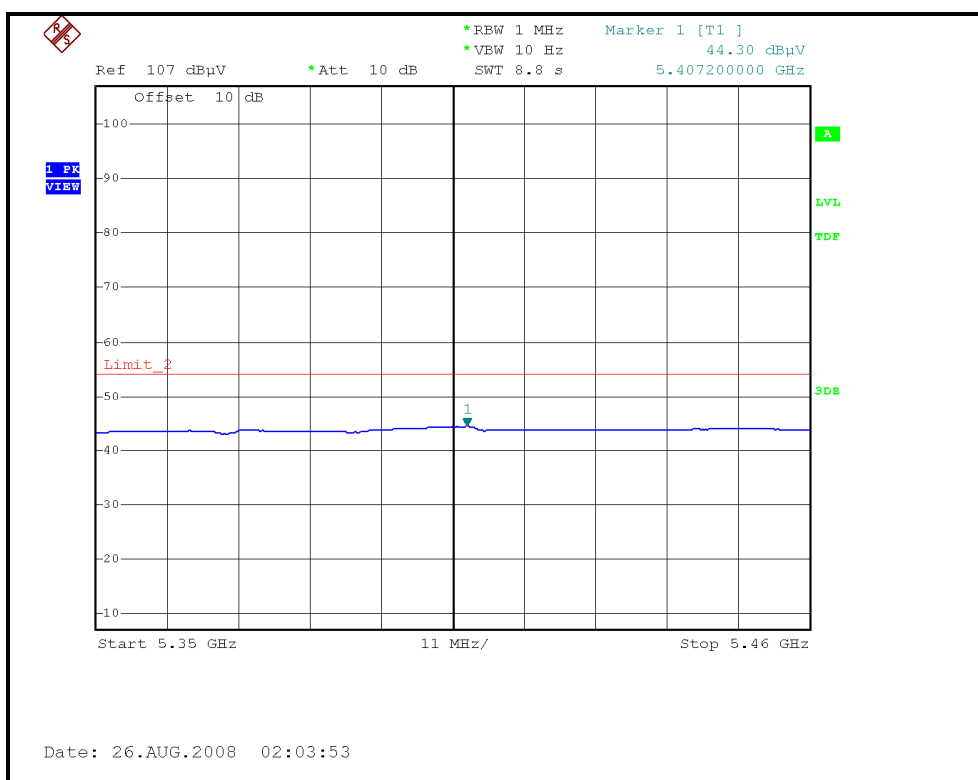
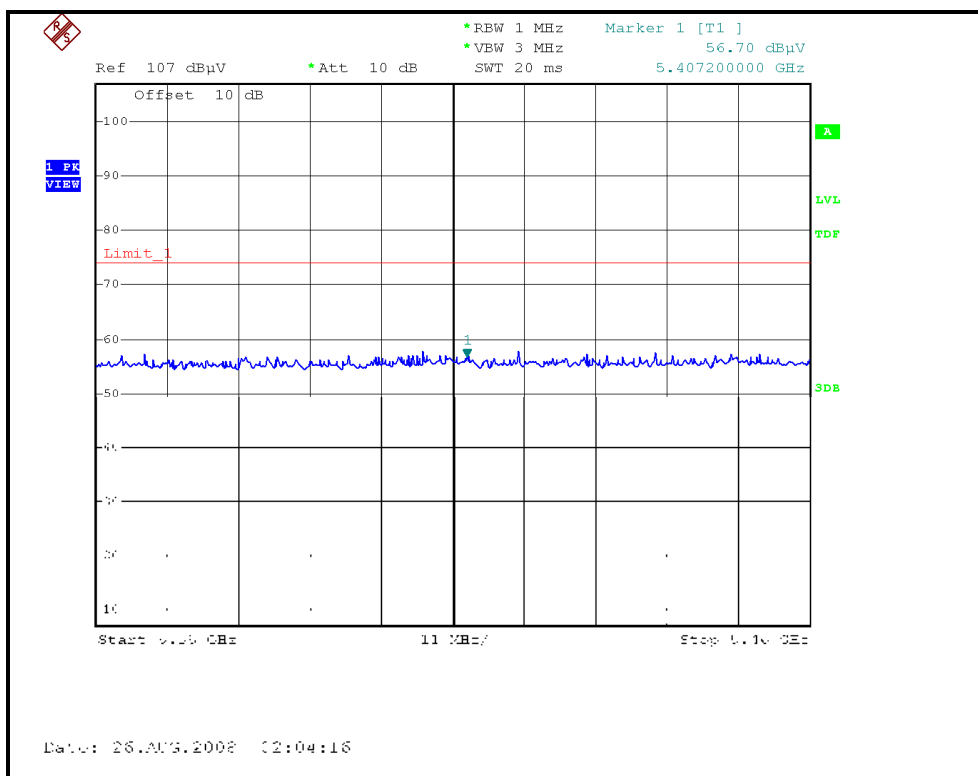
### RESTRICTED BANDEDGE (802.11a MODE, CH1, VERTICAL)





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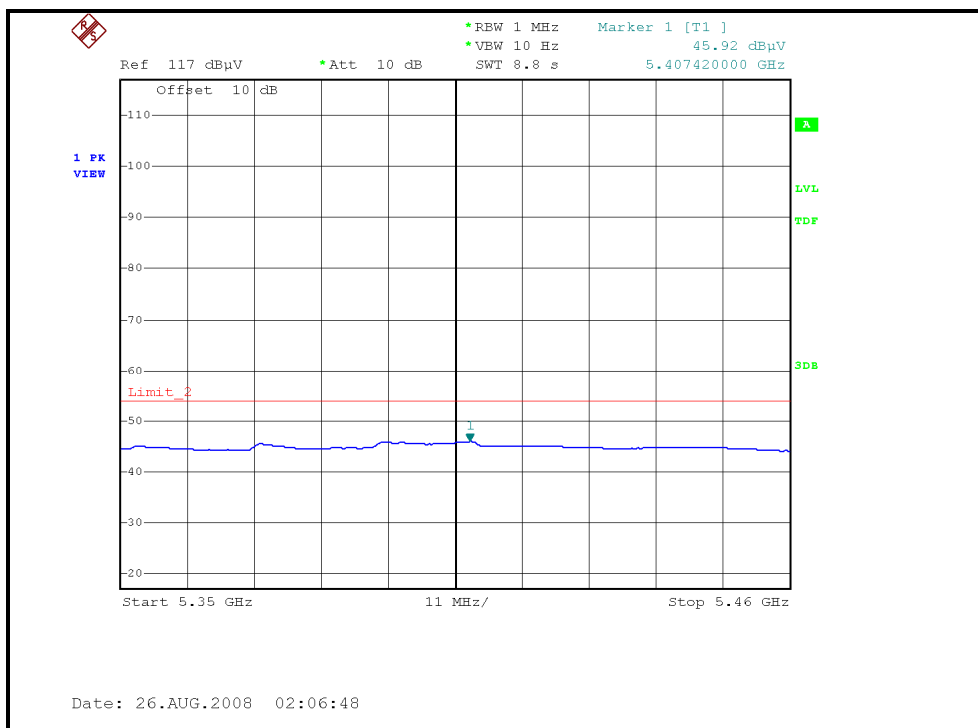
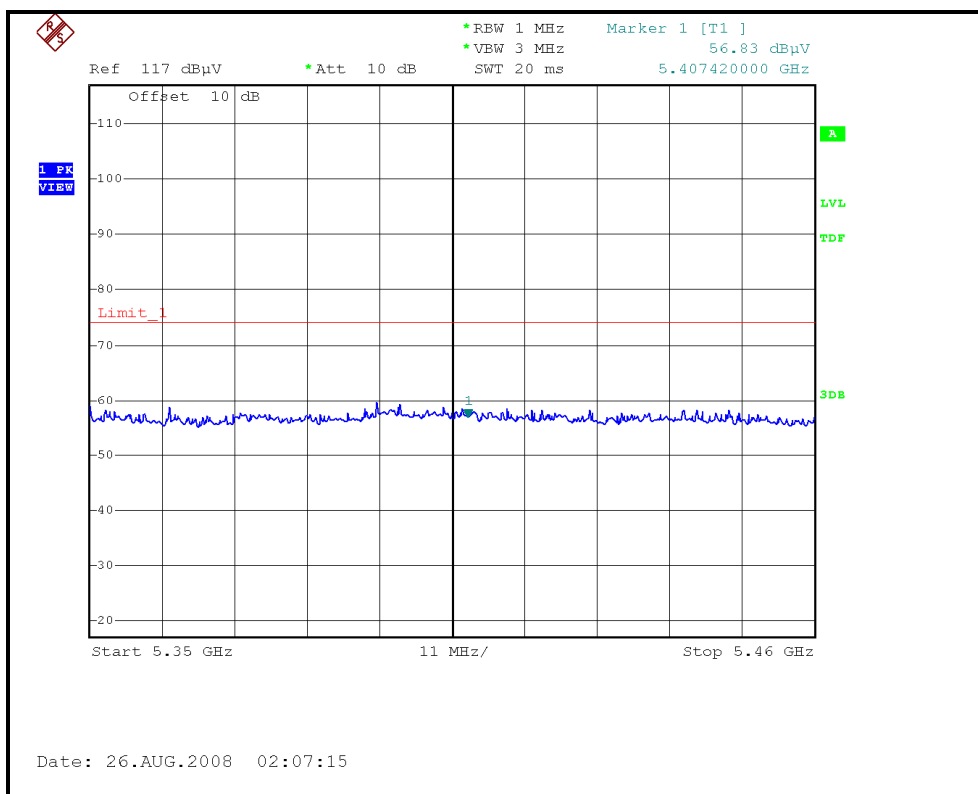
### RESTRICTED BANDEDGE (802.11a MODE, CH8, HORIZONTAL)





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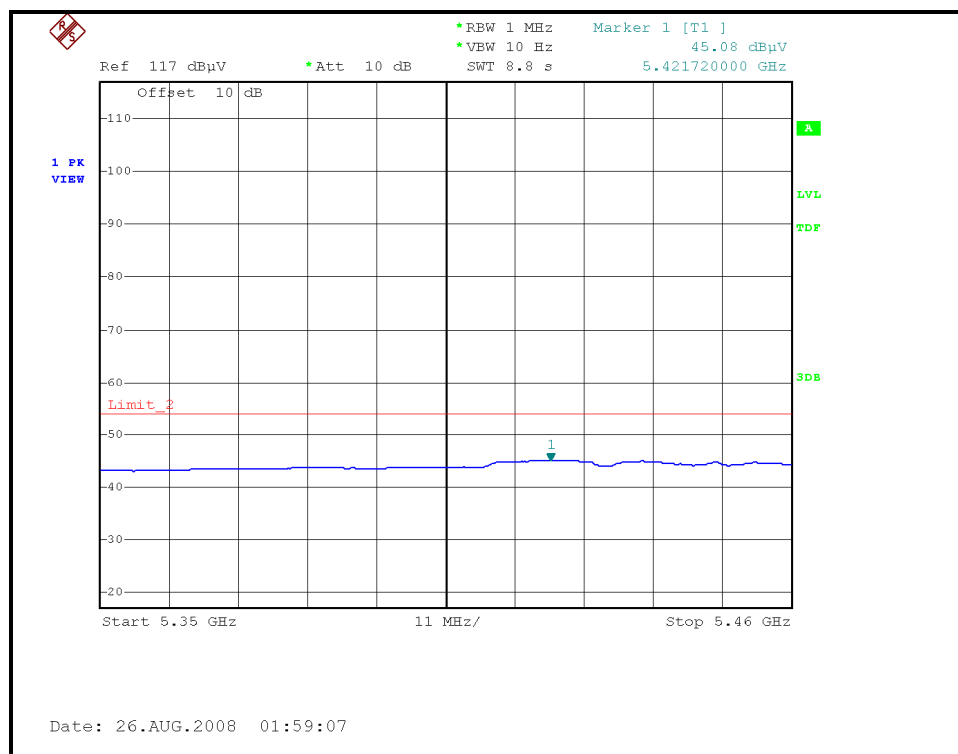
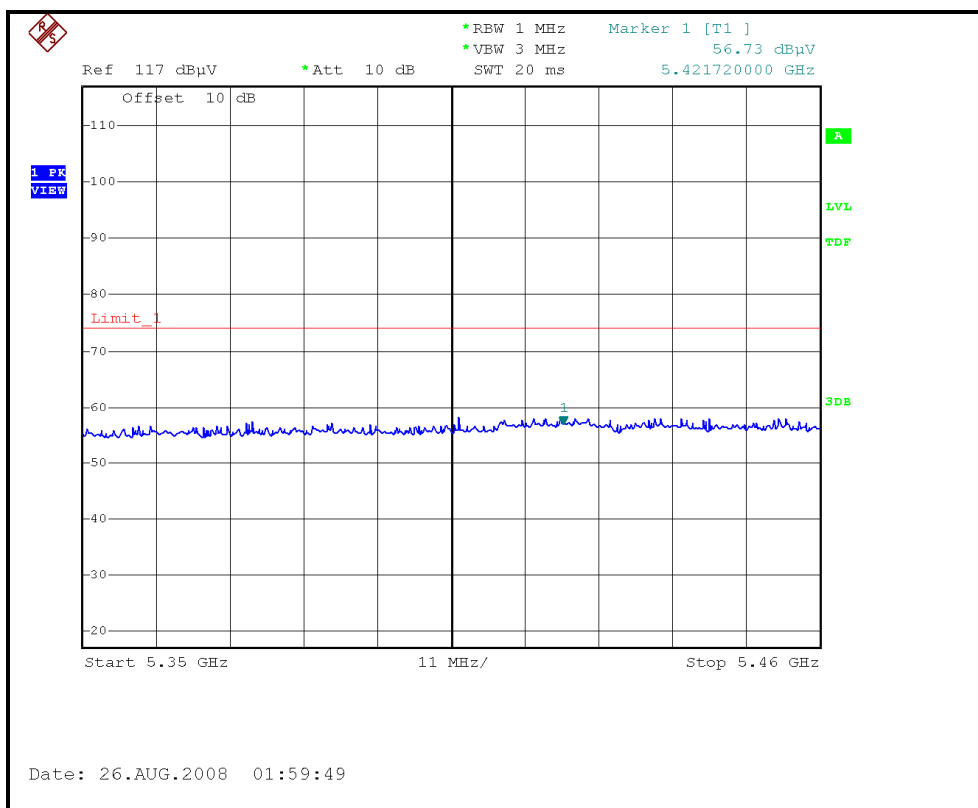
### RESTRICTED BANDEDGE (802.11a MODE, CH8, VERTICAL)





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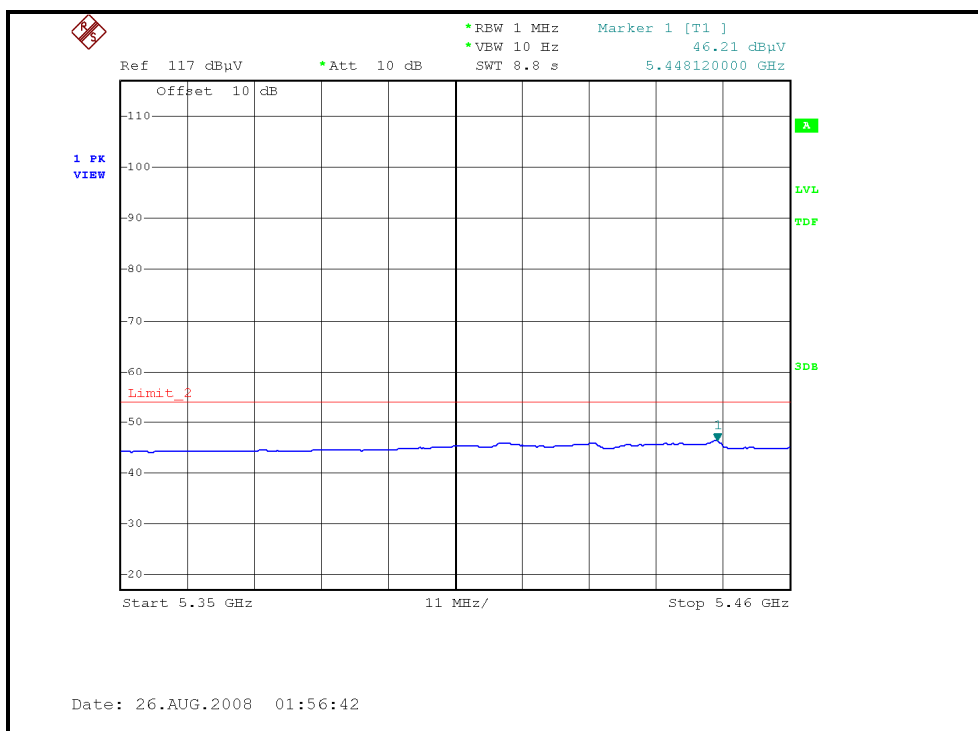
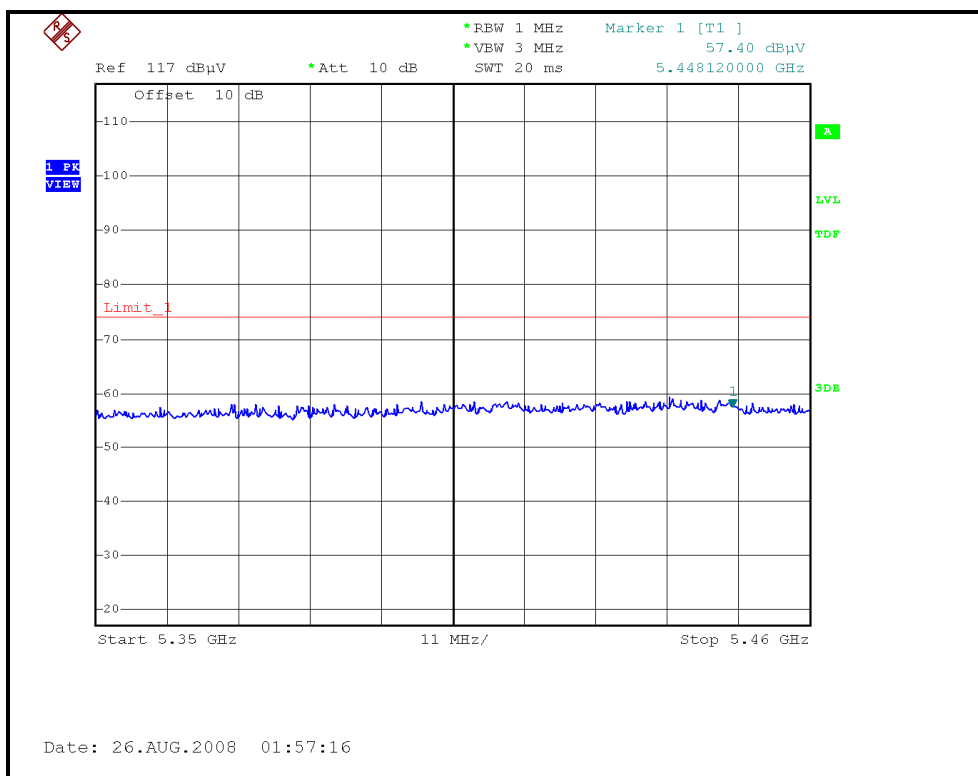
### RESTRICTED BANDEDGE (802.11a MODE, CH9, HORIZONTAL)





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### RESTRICTED BANDEDGE (802.11a MODE, CH9, VERTICAL)





DRAFT 802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4144.00	44.40 PK	74.00	-29.60	1.26 H	200	10.41	33.99
2	4144.00	33.40 AV	54.00	-20.60	1.26 H	200	-0.59	33.99
3	5150.00	53.60 PK	74.00	-20.40	1.60 H	241	17.60	36.00
4	5150.00	42.76 AV	54.00	-11.24	1.60 H	241	6.76	36.00
5	*5180.00	101.60 PK			1.59 H	241	65.55	36.05
6	*5180.00	90.10 AV			1.59 H	241	54.05	36.05
7	#10360.00	57.60 PK	68.30	-10.70	1.30 H	68	11.68	45.92

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4144.00	47.80 PK	74.00	-26.20	1.40 V	163	13.81	33.99
2	4144.00	40.10 AV	54.00	-13.90	1.40 V	163	6.11	33.99
3	5148.00	56.49 PK	74.00	-17.51	1.27 V	259	20.49	36.00
4	5148.00	45.10 AV	54.00	-8.90	1.27 V	259	9.10	36.00
5	*5180.00	107.40 PK			1.29 V	266	71.35	36.05
6	*5180.00	96.10 AV			1.29 V	266	60.05	36.05
7	#10360.00	59.90 PK	68.30	-8.40	1.65 V	309	13.98	45.92

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4160.00	46.60 PK	74.00	-27.40	1.52 H	207	12.56	34.04
2	4160.00	38.00 AV	54.00	-16.00	1.52 H	207	3.96	34.04
3	*5200.00	98.10 PK			1.34 H	300	62.02	36.08
4	*5200.00	86.70 AV			1.34 H	300	50.62	36.08
5	#10400.00	61.50 PK	68.30	-6.80	1.54 H	345	15.51	45.99
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4160.00	46.40 PK	74.00	-27.60	1.22 V	69	12.36	34.04
2	4160.00	37.00 AV	54.00	-17.00	1.22 V	69	2.96	34.04
3	*5200.00	108.90 PK			1.26 V	304	72.82	36.08
4	*5200.00	97.60 AV			1.26 V	304	61.52	36.08
5	#10400.00	60.40 PK	68.30	-7.90	1.59 V	29	14.41	45.99

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4192.00	46.00 PK	74.00	-28.00	1.35 H	207	11.88	34.12
2	4192.00	36.30 AV	54.00	-17.70	1.35 H	207	2.18	34.12
3	*5240.00	100.20 PK			1.31 H	337	64.06	36.14
4	*5240.00	88.80 AV			1.31 H	337	52.66	36.14
5	#10480.00	62.50 PK	68.30	-5.80	1.55 H	345	16.38	46.12
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4192.00	46.50 PK	74.00	-27.50	1.20 V	70	12.38	34.12
2	4192.00	37.00 AV	54.00	-17.00	1.20 V	70	2.88	34.12
3	*5240.00	108.10 PK			1.26 V	271	71.96	36.14
4	*5240.00	97.60 AV			1.26 V	271	61.46	36.14
5	#10480.00	62.30 PK	68.30	-6.00	1.52 V	22	16.18	46.12

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”: The radiated frequency is out the restricted band.





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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4208.00	46.60 PK	74.00	-27.40	1.55 H	207	12.44	34.16
2	4208.00	37.10 AV	54.00	-16.90	1.55 H	207	2.94	34.16
3	*5260.00	100.70 PK			1.30 H	337	64.52	36.18
4	*5260.00	89.80 AV			1.30 H	337	53.62	36.18
5	#10522.00	60.50 PK	68.30	-7.80	1.59 H	347	14.30	46.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4208.00	45.00 PK	74.00	-29.00	1.18 V	69	10.84	34.16
2	4208.00	37.20 AV	54.00	-16.80	1.18 V	69	3.04	34.16
3	*5260.00	110.60 PK			1.53 V	301	74.42	36.18
4	*5260.00	99.67 AV			1.53 V	301	63.49	36.18
5	#10522.00	61.90 PK	68.30	-6.40	1.57 V	22	15.70	46.20

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4240.00	47.00 PK	74.00	-27.00	1.56 H	209	12.76	34.24
2	4240.00	37.50 AV	54.00	-16.50	1.56 H	209	3.26	34.24
3	*5300.00	99.90 PK			1.25 H	337	63.66	36.24
4	*5300.00	88.30 AV			1.25 H	337	52.06	36.24
5	10600.00	64.00 PK	74.00	-10.00	1.53 H	357	17.63	46.37
6	10600.00	49.50 AV	54.00	-4.50	1.53 H	357	3.13	46.37
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4240.00	47.60 PK	74.00	-26.40	1.19 V	69	13.36	34.24
2	4240.00	37.70 AV	54.00	-16.30	1.19 V	69	3.46	34.24
3	*5300.00	110.80 PK			1.11 V	302	74.56	36.24
4	*5300.00	99.70 AV			1.11 V	302	63.46	36.24
5	10600.00	61.80 PK	74.00	-12.20	1.63 V	18	15.43	46.37
6	10600.00	47.60 AV	54.00	-6.40	1.63 V	18	1.23	46.37

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 8	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4256.00	47.70 PK	74.00	-26.30	1.51 H	207	13.41	34.29
2	4256.00	47.30 AV	54.00	-6.70	1.51 H	207	13.01	34.29
3	*5320.00	100.30 PK			1.25 H	338	64.03	36.27
4	*5320.00	89.00 AV			1.25 H	338	52.73	36.27
5	5407.80	56.16 PK	74.00	-17.84	1.25 H	338	19.75	36.41
6	5407.80	44.37 AV	54.00	-9.63	1.25 H	338	7.96	36.41
7	10640.00	63.50 PK	74.00	-10.50	1.47 H	357	17.04	46.46
8	10640.00	49.30 AV	54.00	-4.70	1.47 H	357	2.84	46.46
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4256.00	47.50 PK	74.00	-26.50	1.19 V	70	13.21	34.29
2	4256.00	37.40 AV	54.00	-16.60	1.19 V	70	3.11	34.29
3	*5320.00	110.40 PK			1.11 V	302	74.13	36.27
4	*5320.00	99.40 AV			1.11 V	302	63.13	36.27
5	5407.20	60.62 PK	74.00	-13.38	1.09 V	288	24.21	36.41
6	5407.20	48.84 AV	54.00	-5.16	1.09 V	288	12.43	36.41
7	10640.00	59.60 PK	74.00	-14.40	1.69 V	21	13.14	46.46
8	10640.00	46.30 AV	54.00	-7.70	1.69 V	21	-0.16	46.46

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4400.00	45.50 PK	74.00	-28.50	1.72 H	183	10.84	34.66
2	4400.00	32.80 AV	54.00	-21.20	1.72 H	183	-1.86	34.66
3	5442.40	56.61 PK	74.00	-17.39	1.21 H	345	20.14	36.47
4	5442.40	44.22 AV	54.00	-9.78	1.21 H	345	7.75	36.47
5	#5470.00	57.60 PK	68.30	-10.70	1.20 H	339	21.09	36.51
7	*5500.00	98.70 PK			1.20 H	339	62.14	36.56
8	*5500.00	87.60 AV			1.20 H	339	51.04	36.56
9	11000.00	61.70 PK	74.00	-12.30	1.36 H	354	14.45	47.25
10	11000.00	41.40 AV	54.00	-12.60	1.36 H	354	-5.85	47.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4400.00	46.80 PK	74.00	-27.20	1.17 V	93	12.14	34.66
2	4400.00	37.20 AV	54.00	-16.80	1.17 V	93	2.54	34.66
3	5448.30	59.90 PK	74.00	-14.10	1.08 V	301	23.42	36.48
4	5448.30	49.04 AV	54.00	-4.96	1.08 V	301	12.56	36.48
5	#5470.00	60.70 PK	68.30	-7.60	1.07 V	301	24.19	36.51
6	*5500.00	110.80 PK			1.07 V	300	74.24	36.56
7	*5500.00	99.70 AV			1.07 V	300	63.14	36.56
8	11000.00	57.90 PK	74.00	-16.10	1.36 V	22	10.65	47.25
9	11000.00	45.80 AV	54.00	-8.20	1.36 V	22	-1.45	47.25

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 14	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#4480.00	45.40 PK	68.30	-22.90	1.57 H	198	10.53	34.87
3	*5600.00	99.00 PK			1.22 H	340	62.18	36.82
4	*5600.00	87.80 AV			1.22 H	340	50.98	36.82
5	11200.00	61.60 PK	74.00	-12.40	1.41 H	330	14.44	47.16
6	11200.00	47.30 AV	54.00	-6.70	1.41 H	330	0.14	47.16
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#4480.00	49.50 PK	68.30	-18.80	1.18 V	293	14.63	34.87
3	*5600.00	111.80 PK			1.28 V	300	74.98	36.82
4	*5600.00	100.70 AV			1.28 V	300	63.88	36.82
5	11200.00	60.00 PK	74.00	-14.00	1.22 V	14	12.84	47.16
6	11200.00	45.60 AV	54.00	-8.40	1.22 V	14	-1.56	47.16

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 19	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4560.00	55.10 PK	74.00	-18.90	1.53 H	230	20.08	35.02
2	4560.00	42.20 AV	54.00	-11.80	1.53 H	230	7.18	35.02
3	*5700.00	100.60 PK			1.08 H	340	63.51	37.09
4	*5700.00	89.40 AV			1.08 H	340	52.31	37.09
5	#5725.00	56.30 PK	78.30	-22.00	1.08 H	340	19.15	37.15
6	11400.00	61.90 PK	74.00	-12.10	1.37 H	347	14.83	47.07
7	11400.00	48.40 AV	54.00	-5.60	1.37 H	347	1.33	47.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4560.00	56.50 PK	74.00	-17.50	1.37 V	206	21.48	35.02
2	4560.00	44.10 AV	54.00	-9.90	1.37 V	206	9.08	35.02
3	*5700.00	111.50 PK			1.25 V	300	74.41	37.09
4	*5700.00	100.50 AV			1.25 V	300	63.41	37.09
5	#5725.00	65.10 PK	78.30	-13.20	1.25 V	300	27.95	37.15
6	11400.00	61.30 PK	74.00	-12.70	1.36 V	149	14.23	47.07
7	11400.00	48.10 AV	54.00	-5.90	1.36 V	149	1.03	47.07

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 20	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4596.00	55.90 PK	74.00	-18.10	1.51 H	229	20.82	35.08
2	4596.00	41.90 AV	54.00	-12.10	1.51 H	229	6.82	35.08
3	#5715.00	57.30 PK	68.30	-11.00	1.19 H	341	20.17	37.13
4	#5725.00	64.00 PK	78.30	-14.30	1.19 H	341	26.85	37.15
5	*5745.00	100.80 PK			1.16 H	34	63.59	37.21
6	*5745.00	89.50 AV			1.16 H	34	52.29	37.21
7	11490.00	61.40 PK	74.00	-12.60	1.38 H	346	14.37	47.03
8	11490.00	47.80 AV	54.00	-6.20	1.38 H	346	0.77	47.03
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4596.00	57.40 PK	74.00	-16.60	1.20 V	87	22.32	35.08
2	4596.00	44.00 AV	54.00	-10.00	1.20 V	87	8.92	35.08
3	#5715.00	64.00 PK	68.30	-4.30	1.14 V	304	26.87	37.13
4	#5725.00	74.54 PK	78.30	-3.76	1.14 V	304	37.39	37.15
5	*5745.00	113.00 PK			1.13 V	305	75.79	37.21
6	*5745.00	101.80 AV			1.13 V	305	64.59	37.21
7	11489.00	63.40 PK	74.00	-10.60	1.35 V	155	16.37	47.03
8	11489.00	49.50 AV	54.00	-4.50	1.35 V	155	2.47	47.03

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 22	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, %RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4628.00	55.30 PK	74.00	-18.70	1.35 H	226	20.16	35.14
2	4628.00	41.60 AV	54.00	-12.40	1.35 H	226	6.46	35.14
3	5439.10	57.35 PK	74.00	-16.65	1.08 H	343	20.89	36.46
4	5439.10	44.70 AV	54.00	-9.30	1.08 H	343	8.24	36.46
5	*5785.00	100.85 PK			1.14 H	345	63.54	37.31
6	*5785.00	89.00 AV			1.14 H	345	51.69	37.31
7	11572.00	63.55 PK	74.00	-10.45	1.52 H	21	16.58	46.97
8	11572.00	50.00 AV	54.00	-4.00	1.52 H	21	3.03	46.97
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4628.00	56.30 PK	74.00	-17.70	1.18 V	165	21.16	35.14
2	4628.00	43.40 AV	54.00	-10.60	1.18 V	165	8.26	35.14
3	5454.70	62.27 PK	74.00	-11.73	1.46 V	301	25.78	36.49
4	5454.70	50.48 AV	54.00	-3.52	1.46 V	301	13.99	36.49
5	*5785.00	113.30 PK			1.12 V	303	75.99	37.31
6	*5785.00	101.60 AV			1.12 V	303	64.29	37.31
7	11572.00	64.60 PK	74.00	-9.40	1.40 V	155	17.63	46.97
8	11572.00	50.10 AV	54.00	-3.90	1.40 V	155	3.13	46.97

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.





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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 23	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, %RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4644.00	50.10 PK	74.00	-23.90	1.37 H	231	14.94	35.16
2	4644.00	42.30 AV	54.00	-11.70	1.37 H	231	7.14	35.16
3	5428.30	56.74 PK	74.00	-17.26	1.40 H	307	20.29	36.45
4	5428.30	44.36 AV	54.00	-9.64	1.40 H	307	7.91	36.45
5	*5805.00	102.00 PK			1.70 H	264	64.63	37.37
6	*5805.00	90.70 AV			1.70 H	264	53.33	37.37
7	#5825.00	61.00 PK	78.30	-17.30	1.13 H	347	23.58	37.42
9	11610.00	65.70 PK	74.00	-8.30	1.50 H	21	18.77	46.93
10	11610.00	51.40 AV	54.00	-2.60	1.50 H	21	4.47	46.93

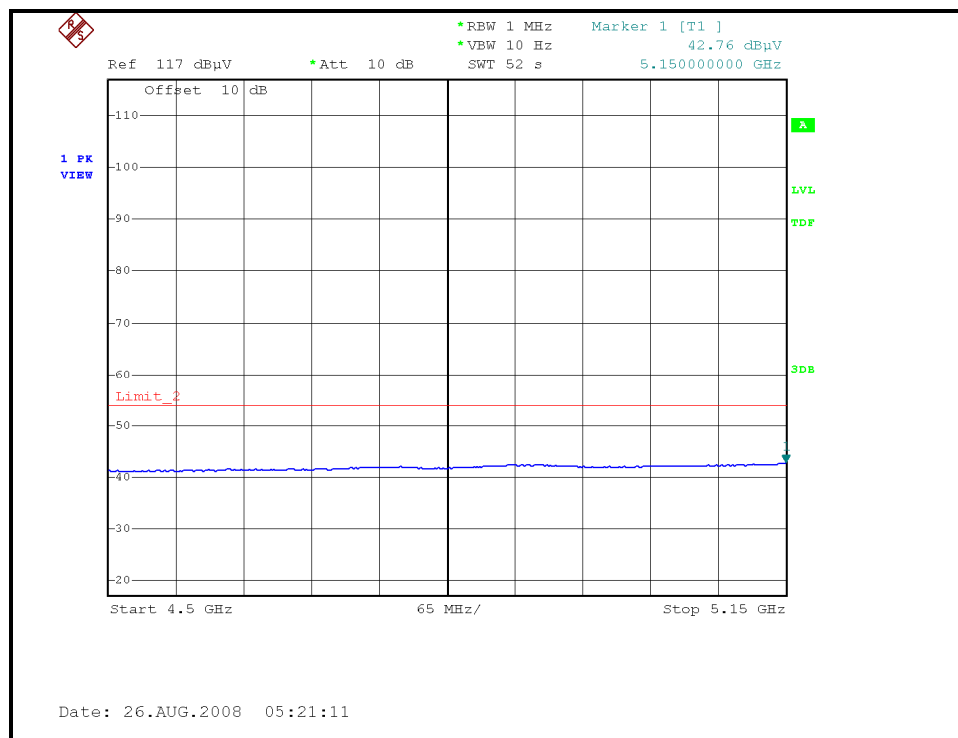
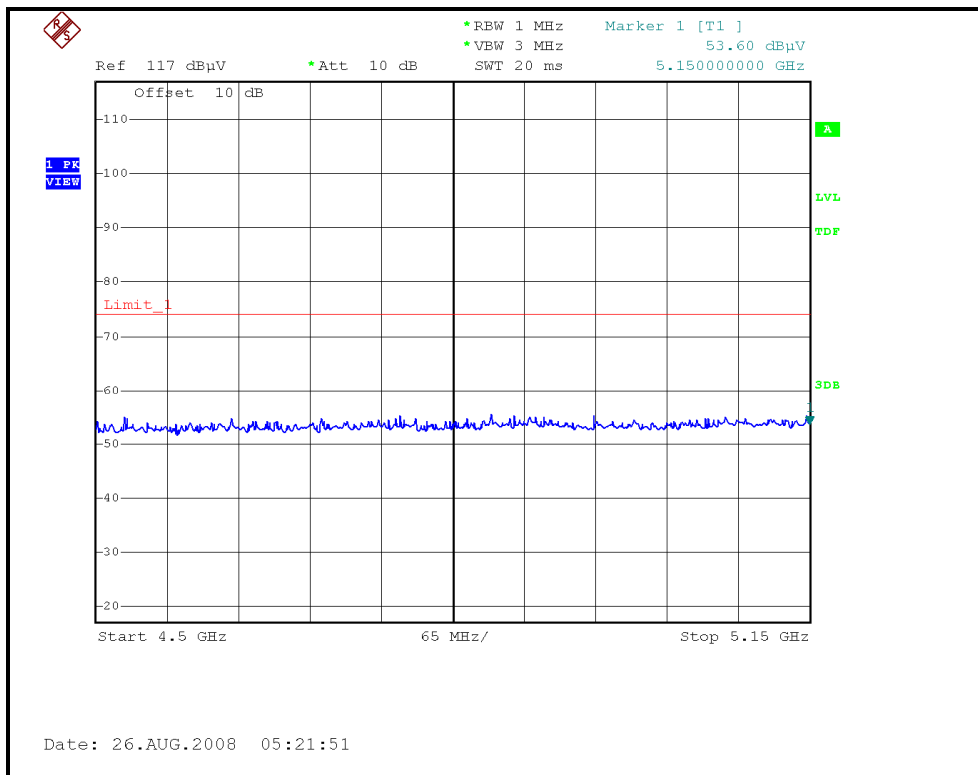
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4644.00	56.70 PK	74.00	-17.30	1.18 V	169	21.54	35.16
2	4644.00	46.70 AV	54.00	-7.30	1.18 V	169	11.54	35.16
3	5453.80	62.52 PK	74.00	-11.48	1.46 V	302	26.03	36.49
4	5453.80	50.57 AV	54.00	-3.43	1.46 V	302	14.08	36.49
5	*5805.00	113.50 PK			1.12 V	305	76.13	37.37
6	*5805.00	101.60 AV			1.12 V	305	64.23	37.37
7	#5815.00	67.70 PK	78.30	-10.60	1.12 V	303	30.31	37.39
9	11610.00	65.40 PK	74.00	-8.60	1.45 V	175	18.47	46.93
10	11610.00	51.50 AV	54.00	-2.50	1.45 V	175	4.57	46.93

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”:The radiated frequency is out the restricted band.



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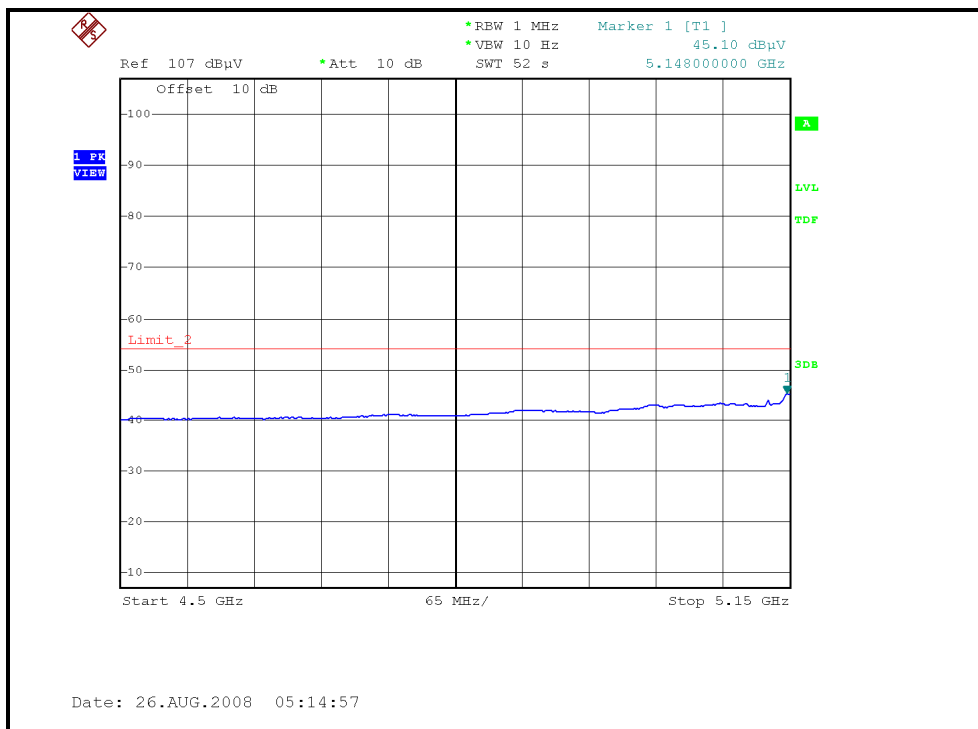
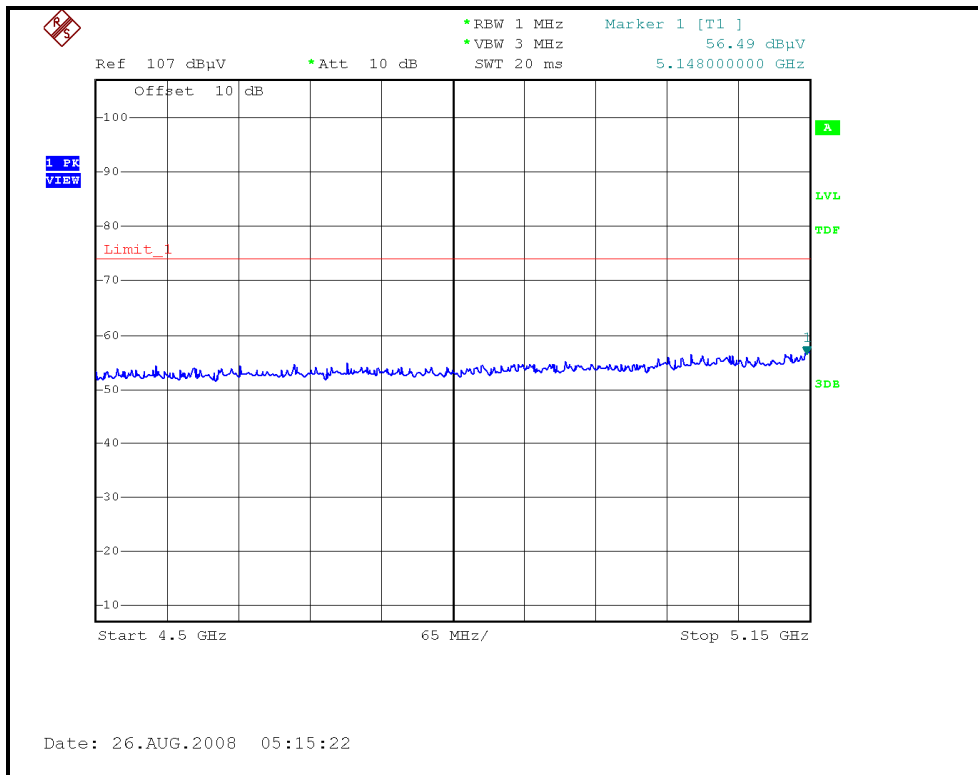
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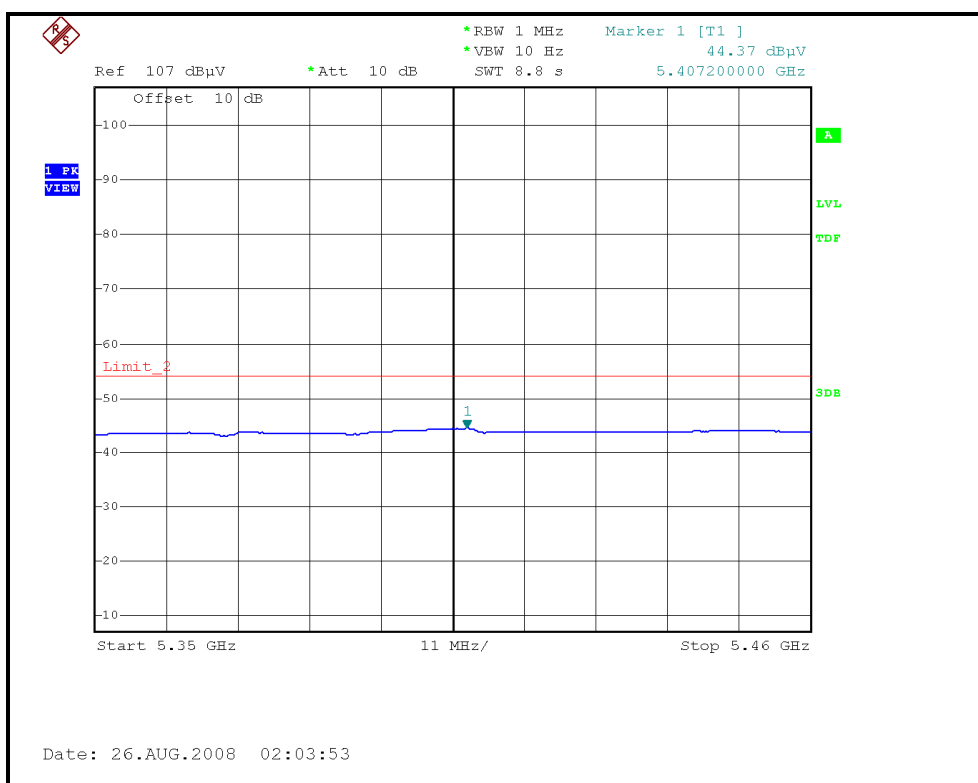
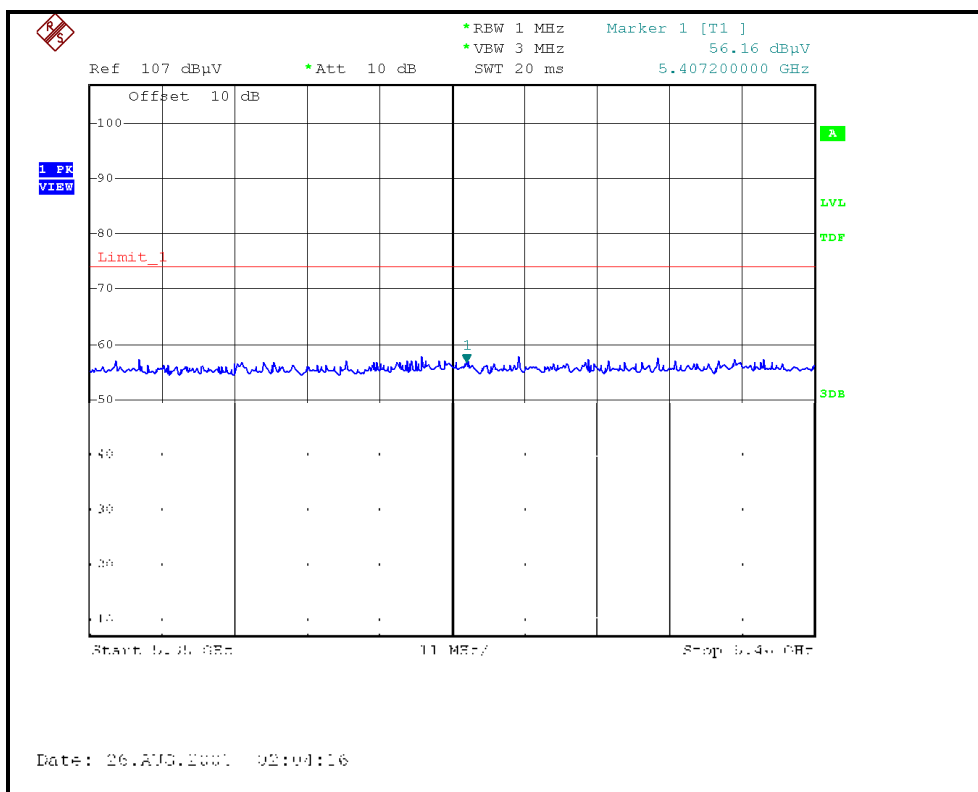
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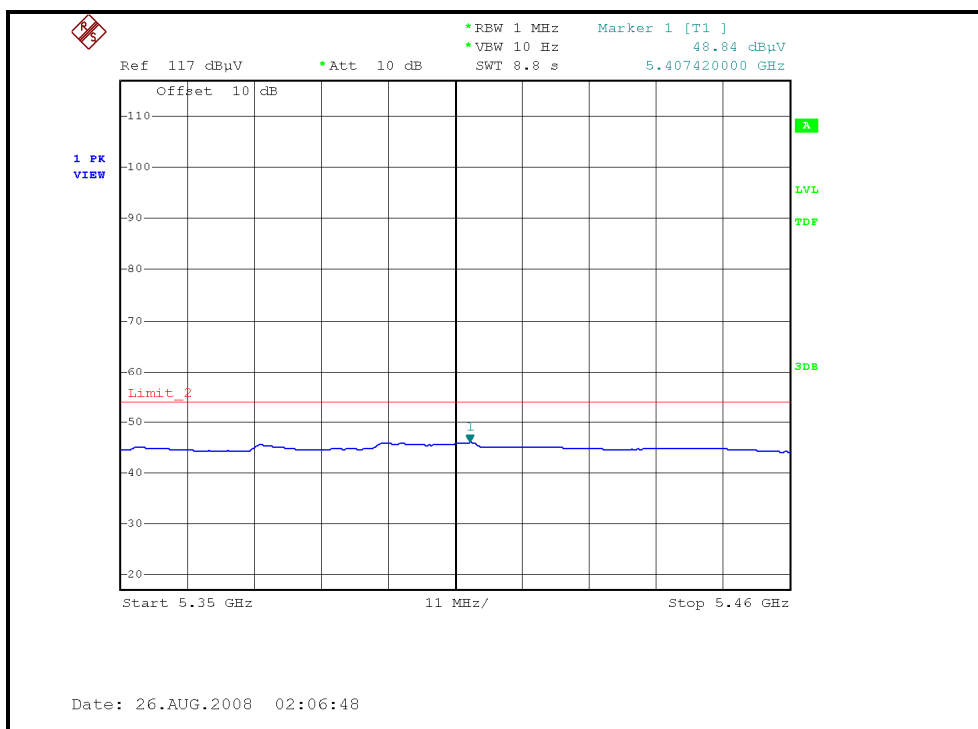
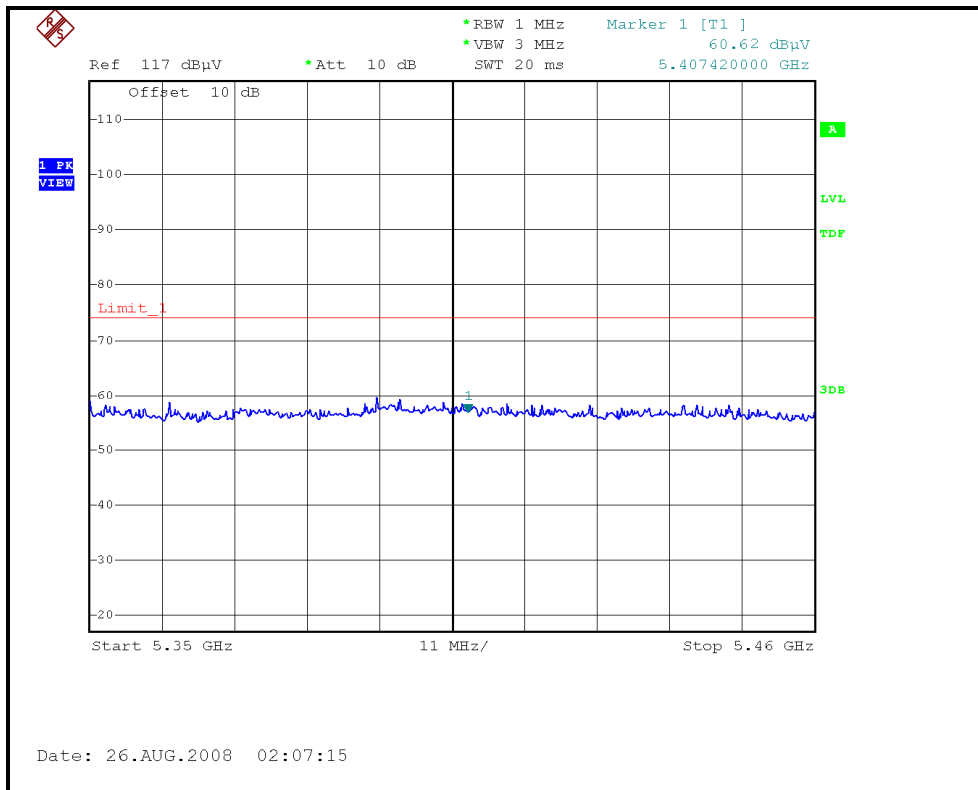
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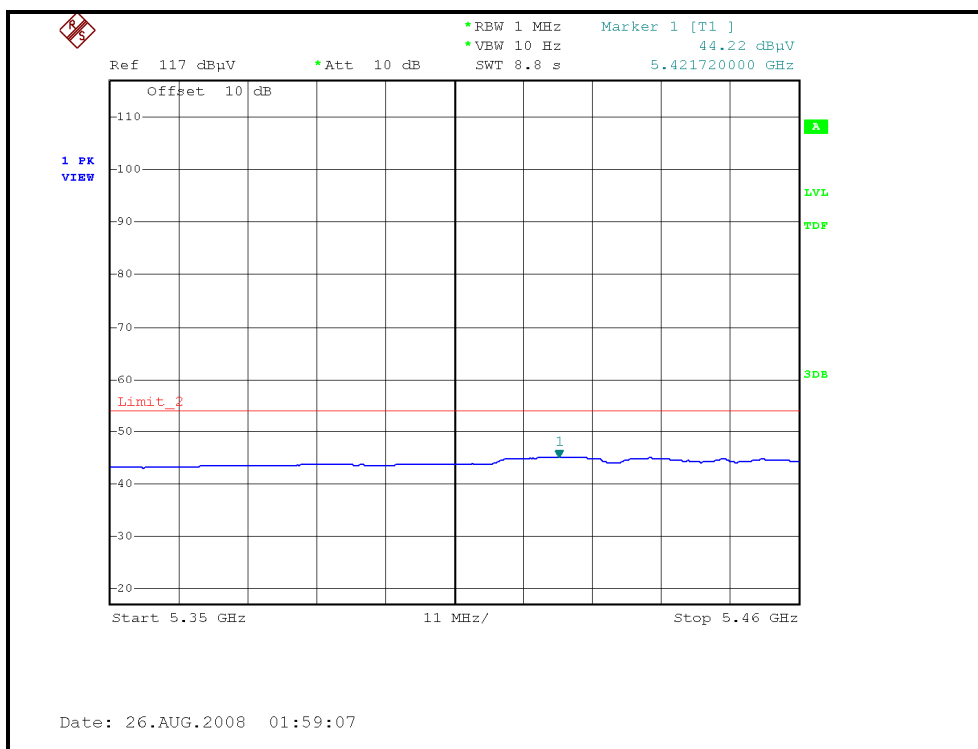
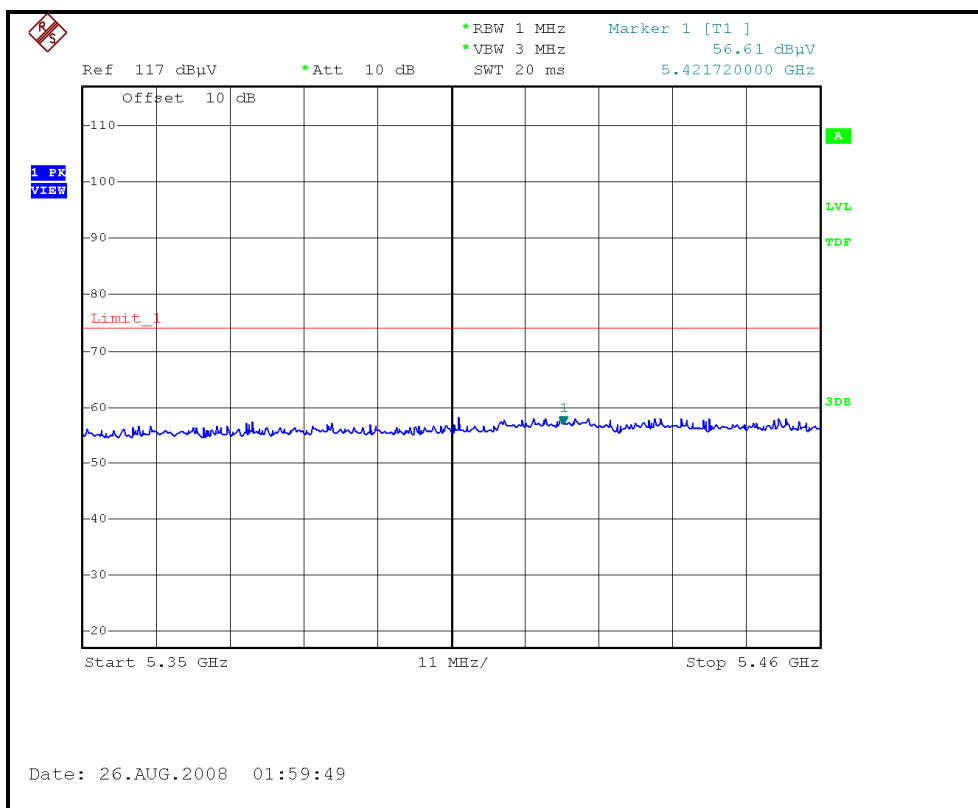
### RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH8, VERTICAL )





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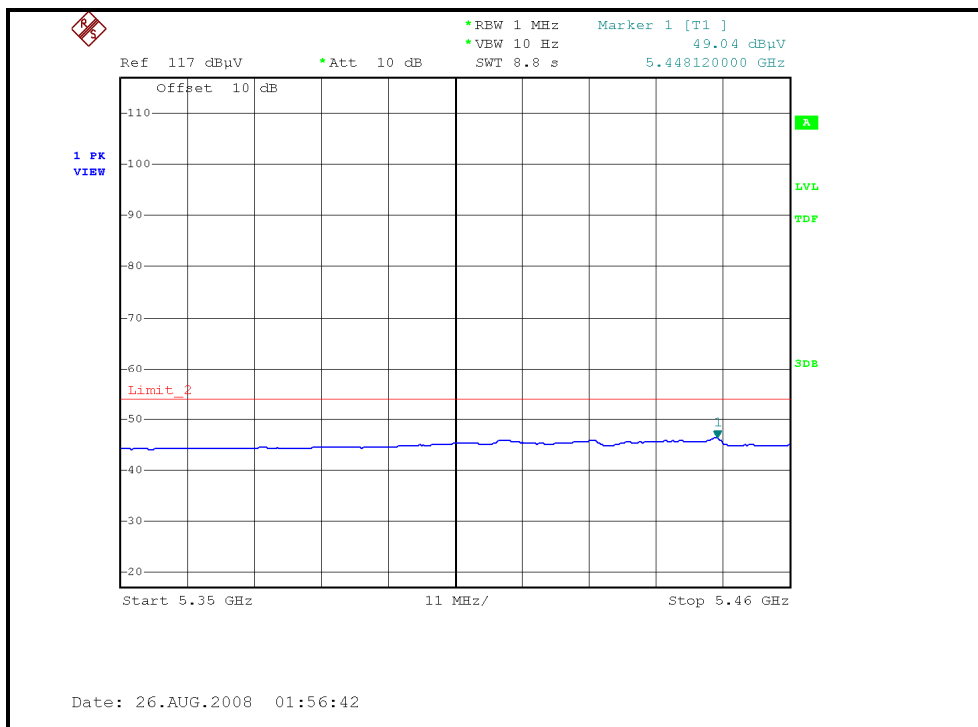
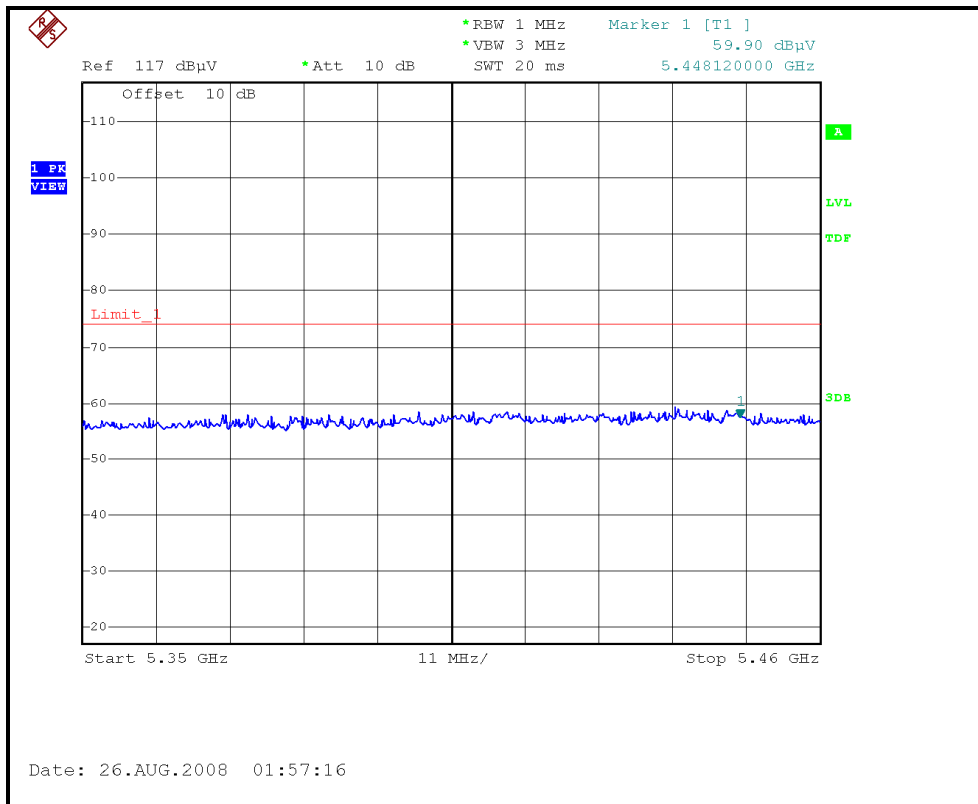
### RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH9, HORIZONTAL )





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### RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH9, VERTICAL )





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**DRAFT 802.11n (40MHz) OFDM MODULATION**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4152.00	44.60 PK	74.00	-29.40	1.51 H	202	10.58	34.02
2	4152.00	35.70 AV	54.00	-18.30	1.51 H	202	1.68	34.02
3	5150.00	58.52 PK	74.00	-15.48	1.36 H	305	22.52	36.00
4	5150.00	43.99 AV	54.00	-10.01	1.36 H	305	7.99	36.00
5	*5190.00	98.20 PK			1.36 H	305	62.14	36.06
6	*5190.00	87.70 AV			1.36 H	305	51.64	36.06
7	#10370.00	57.80 PK	68.30	-10.50	1.33 H	153	11.86	45.94

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4152.00	44.50 PK	74.00	-29.50	1.51 V	22	10.48	34.02
2	4152.00	32.80 AV	54.00	-21.20	1.51 V	22	-1.22	34.02
3	5150.00	70.16 PK	74.00	-3.84	1.38 V	291	34.16	36.00
4	5150.00	53.02 AV	54.00	-0.98	1.38 V	291	17.02	36.00
5	*5190.00	107.60 PK			1.38 V	291	71.54	36.06
6	*5190.00	96.70 AV			1.38 V	291	60.64	36.06
7	#10370.00	56.60 PK	68.30	-11.70	1.37 V	334	10.66	45.94

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. "#":The radiated frequency is out the restricted band.





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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4184.00	45.50 PK	74.00	-28.50	1.66 H	209	11.40	34.10
2	4184.00	36.00 AV	54.00	-18.00	1.66 H	209	1.90	34.10
3	*5230.00	94.90 PK			1.31 H	305	58.77	36.13
4	*5230.00	83.70 AV			1.31 H	305	47.57	36.13
5	#10460.00	57.60 PK	68.30	-10.70	1.52 H	168	11.51	46.09
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4184.00	44.70 PK	74.00	-29.30	1.56 V	29	10.60	34.10
2	4184.00	33.40 AV	54.00	-20.60	1.56 V	29	-0.70	34.10
3	*5230.00	107.80 PK			1.53 V	297	71.67	36.13
4	*5230.00	96.40 AV			1.53 V	297	60.27	36.13
5	#10400.00	57.10 PK	68.30	-11.20	1.31 V	329	11.11	45.99

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4216.00	45.20 PK	74.00	-28.80	1.60 H	209	11.02	34.18
2	4216.00	35.40 AV	54.00	-18.60	1.60 H	209	1.22	34.18
3	*5270.00	94.80 PK			1.52 H	306	58.61	36.19
4	*5270.00	83.70 AV			1.52 H	306	47.51	36.19
5	#10522.00	58.20 PK	68.30	-10.10	1.50 H	170	12.00	46.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4216.00	44.70 PK	74.00	-29.30	1.52 V	26	10.52	34.18
2	4216.00	32.90 AV	54.00	-21.10	1.52 V	26	-1.28	34.18
3	*5270.00	106.20 PK			1.52 V	300	70.01	36.19
4	*5270.00	95.10 AV			1.52 V	300	58.91	36.19
5	#10522.00	55.80 PK	68.30	-12.50	1.33 V	332	9.60	46.20

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4248.00	46.60 PK	74.00	-27.40	1.76 H	211	12.34	34.26
2	4248.00	37.30 AV	54.00	-16.70	1.76 H	211	3.04	34.26
3	*5310.00	95.80 PK			1.47 H	304	59.54	36.26
4	*5310.00	85.00 AV			1.47 H	304	48.74	36.26
5	5350.00	56.42 PK	74.00	-17.58	1.62 H	306	20.10	36.32
6	5350.00	43.00 AV	54.00	-11.00	1.62 H	306	6.68	36.32
7	10620.00	57.90 PK	74.00	-16.10	1.41 H	171	11.49	46.41
8	10620.00	45.00 AV	54.00	-9.00	1.41 H	171	-1.41	46.41
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4248.00	45.20 PK	74.00	-28.80	1.48 V	29	10.94	34.26
2	4248.00	35.20 AV	54.00	-18.80	1.48 V	29	0.94	34.26
3	*5310.00	107.60 PK			1.50 V	296	71.34	36.26
4	*5310.00	96.80 AV			1.50 V	296	60.54	36.26
5	5350.00	64.85 PK	74.00	-9.15	1.49 V	298	28.53	36.32
6	5350.00	49.86 AV	54.00	-4.14	1.49 V	298	13.54	36.32
7	10620.00	54.60 PK	74.00	-19.40	1.29 V	351	8.19	46.41
8	10620.00	44.80 AV	54.00	-9.20	1.29 V	351	-1.61	46.41

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. "#":The radiated frequency is out the restricted band.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#4408.00	47.90 PK	68.30	-20.40	1.48 H	208	13.22	34.68
3	5460.00	55.29 PK	74.00	-18.71	1.12 H	331	18.79	36.50
4	5460.00	43.81 AV	54.00	-10.19	1.12 H	331	7.31	36.50
5	#5470.00	57.00 PK	68.30	-11.30	1.12 H	330	20.49	36.51
6	*5510.00	97.00 PK			1.12 H	331	60.41	36.59
7	*5510.00	84.80 AV			1.12 H	331	48.21	36.59
8	11020.00	57.80 PK	74.00	-16.20	1.30 H	130	10.56	47.24
9	11020.00	44.30 AV	54.00	-9.70	1.30 H	130	-2.94	47.24
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#4408.00	47.80 PK	68.30	-20.50	1.53 V	291	13.12	34.68
3	5459.20	61.42 PK	74.00	-12.58	1.08 V	294	24.93	36.49
4	5459.20	48.14 AV	54.00	-5.86	1.08 V	294	11.65	36.49
5	#5470.00	60.50 PK	68.30	-7.80	1.06 V	294	23.99	36.51
6	*5510.00	105.80 PK			1.18 V	300	69.21	36.59
7	*5510.00	95.00 AV			1.18 V	300	58.41	36.59
8	11020.00	57.60 PK	74.00	-16.40	1.24 V	103	10.36	47.24
9	11020.00	44.50 AV	54.00	-9.50	1.24 V	103	-2.74	47.24

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#“: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#4472.00	46.80 PK	68.30	-21.50	1.49 H	208	11.95	34.85
3	*5590.00	99.80 PK			1.38 H	331	63.00	36.80
4	*5590.00	87.80 AV			1.38 H	331	51.00	36.80
5	11180.00	56.50 PK	74.00	-17.50	1.37 H	135	9.33	47.17
6	11180.00	44.20 AV	54.00	-9.80	1.37 H	135	-2.97	47.17
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#4472.00	48.00 PK	68.30	-20.30	1.66 V	298	13.15	34.85
3	*5590.00	105.80 PK			1.28 V	296	69.00	36.80
4	*5590.00	95.40 AV			1.28 V	296	58.60	36.80
5	11180.00	57.20 PK	74.00	-16.80	1.29 V	28	10.03	47.17
6	11180.00	45.60 AV	54.00	-8.40	1.29 V	28	-1.57	47.17

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4536.00	55.20 PK	74.00	-18.80	1.42 H	202	20.22	34.98
2	4536.00	43.20 AV	54.00	-10.80	1.42 H	202	8.22	34.98
3	*5670.00	99.50 PK			1.23 H	334	62.49	37.01
4	*5670.00	57.50 AV			1.23 H	334	20.49	37.01
5	#5725.00	58.60 PK	78.30	-19.70	1.23 H	334	21.45	37.15
6	11340.00	57.00 PK	74.00	-17.00	1.18 H	166	9.90	47.10
7	11340.00	43.60 AV	54.00	-10.40	1.18 H	166	-3.50	47.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4536.00	56.40 PK	74.00	-17.60	1.42 V	265	21.42	34.98
2	4536.00	46.50 AV	54.00	-7.50	1.42 V	265	11.52	34.98
3	*5670.00	106.90 PK			1.15 V	300	69.89	37.01
4	*5670.00	96.20 AV			1.15 V	300	59.19	37.01
5	#5725.00	61.10 PK	78.30	-17.20	1.15 V	300	23.95	37.15
6	11340.00	57.60 PK	74.00	-16.40	1.39 V	27	10.50	47.10
7	11340.00	44.20 AV	54.00	-9.80	1.39 V	27	-2.90	47.10

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 10	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4604.00	58.60 PK	74.00	-15.40	4.00 H	218	23.51	35.09
2	4604.00	46.50 AV	54.00	-7.50	4.00 H	218	11.41	35.09
3	#5715.00	60.96 PK	68.30	-7.34	1.19 H	334	23.83	37.13
4	#5725.00	63.32 PK	78.30	-14.98	1.19 H	334	26.17	37.15
5	*5755.00	97.70 PK			1.19 H	334	60.47	37.23
6	*5755.00	86.20 AV			1.19 H	334	48.97	37.23
7	11510.00	58.50 PK	74.00	-15.50	1.16 H	177	11.48	47.02
8	11510.00	45.80 AV	54.00	-8.20	1.16 H	177	-1.22	47.02
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4604.00	57.90 PK	74.00	-16.10	1.42 V	274	22.81	35.09
2	4604.00	46.00 AV	54.00	-8.00	1.42 V	274	10.91	35.09
3	#5715.00	67.90 PK	68.30	-0.40	1.24 V	300	30.77	37.13
4	#5725.00	69.90 PK	78.30	-8.40	1.24 V	300	32.75	37.15
5	*5755.00	105.60 PK			1.02 V	296	68.37	37.23
6	*5755.00	94.70 AV			1.02 V	296	57.47	37.23
7	11510.00	58.00 PK	74.00	-16.00	1.20 V	29	10.98	47.02
8	11510.00	44.70 AV	54.00	-9.30	1.20 V	29	-2.32	47.02

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. "#":The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4636.00	54.70 PK	74.00	-19.30	1.22 H	180	19.55	35.15
2	4636.00	45.50 AV	54.00	-8.50	1.22 H	180	10.35	35.15
3	*5795.00	100.20 PK			1.18 H	334	62.86	37.34
4	*5795.00	88.40 AV			1.18 H	334	51.06	37.34
5	#5825.00	62.30 PK	78.30	-16.00	1.18 H	334	24.88	37.42
6	#5835.00	60.57 PK	68.30	-7.73	1.18 H	334	23.13	37.44
7	11590.00	56.80 PK	74.00	-17.20	1.23 H	169	9.85	46.95
8	11590.00	42.90 AV	54.00	-11.10	1.23 H	169	-4.05	46.95
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4636.00	57.00 PK	74.00	-17.00	1.58 V	295	21.85	35.15
2	4636.00	44.00 AV	54.00	-10.00	1.58 V	295	8.85	35.15
3	*5795.00	106.80 PK			1.23 V	300	69.46	37.34
4	*5795.00	96.00 AV			1.23 V	300	58.66	37.34
5	#5825.00	70.30 PK	78.30	-8.00	1.23 V	300	32.88	37.42
6	#5835.00	67.70 PK	68.30	-0.60	1.23 V	300	30.26	37.44
7	11590.00	57.40 PK	74.00	-16.60	1.24 V	34	10.45	46.95
8	11590.00	43.60 AV	54.00	-10.40	1.24 V	34	-3.35	46.95

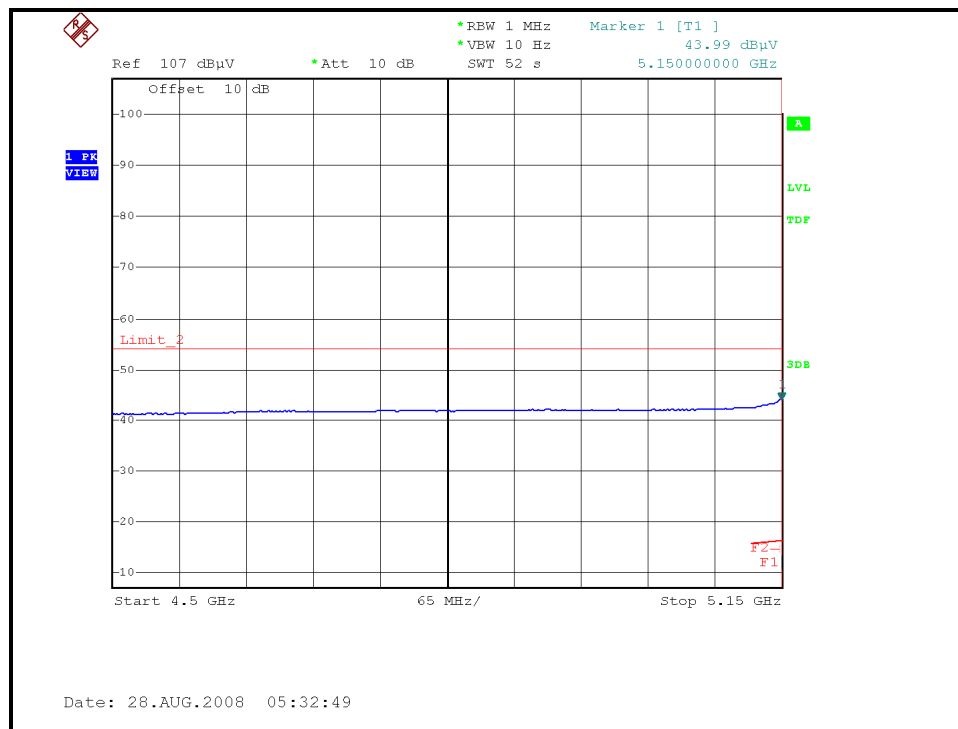
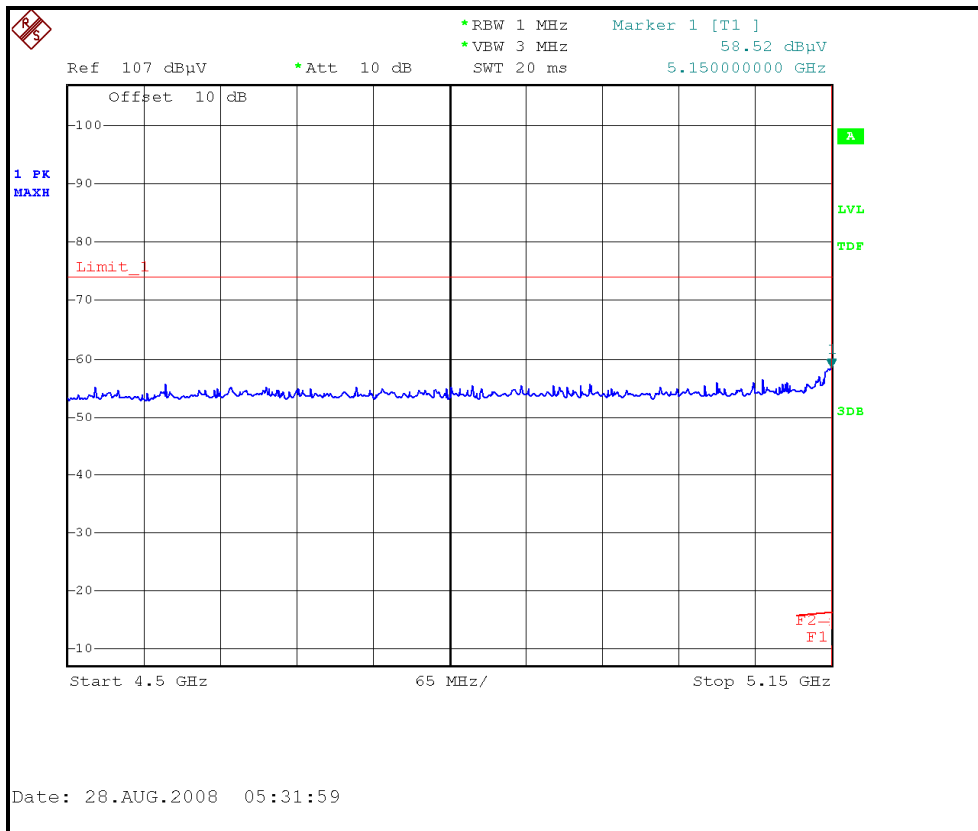
- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
  2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “: Fundamental frequency.
  6. “#”:The radiated frequency is out the restricted band.





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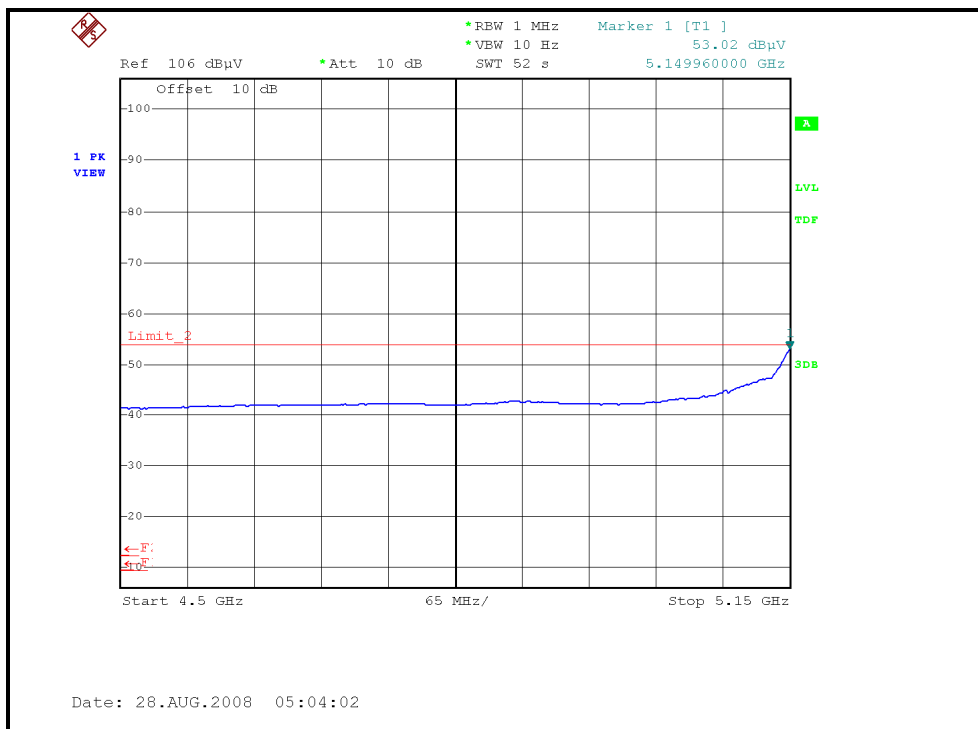
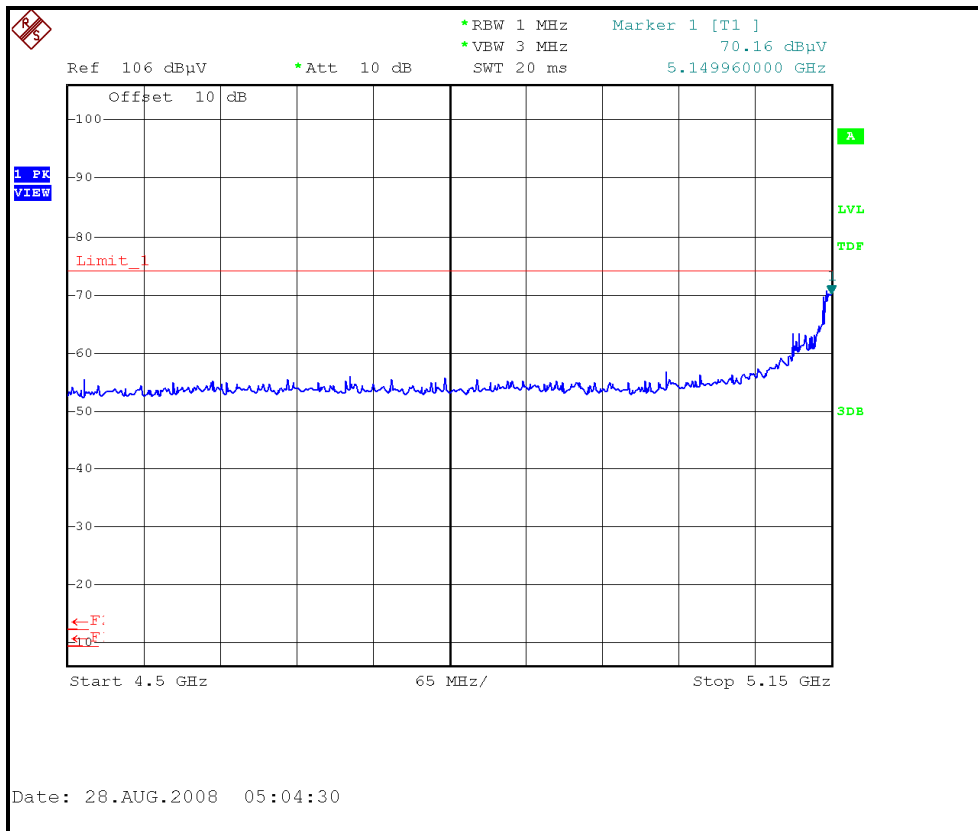
### RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH1, HORIZONTAL)





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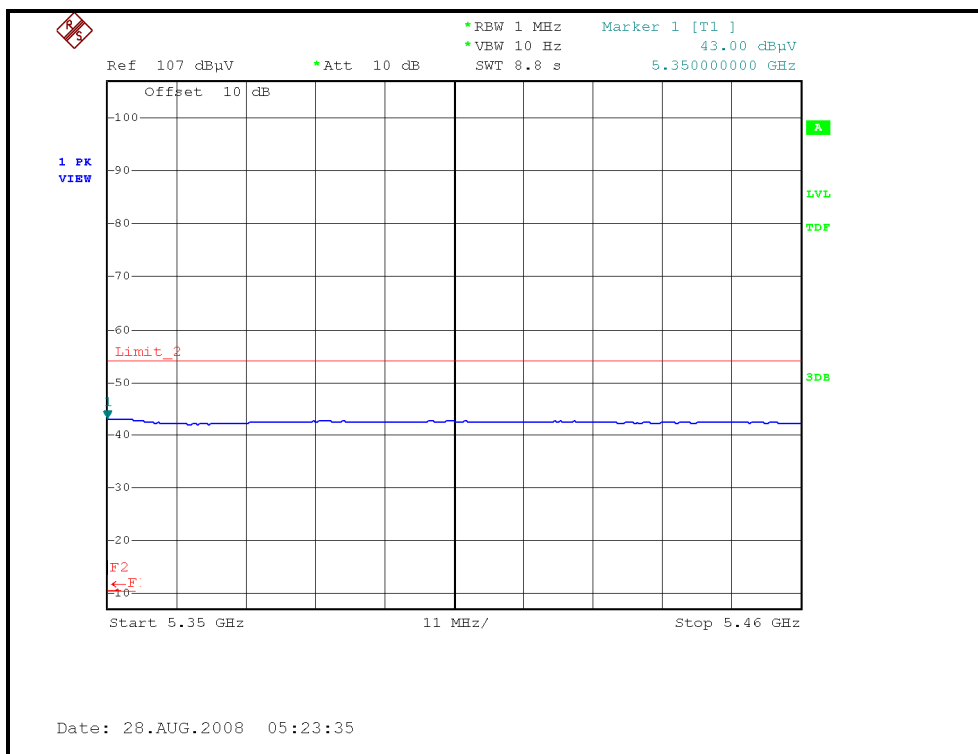
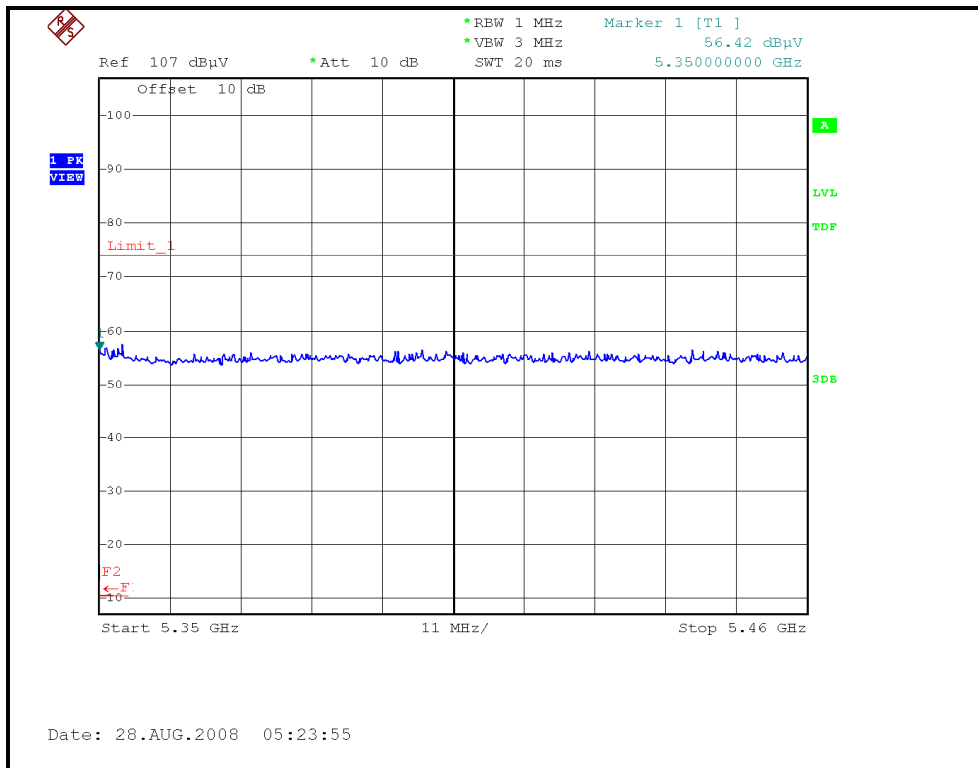
### RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, VERTICAL )





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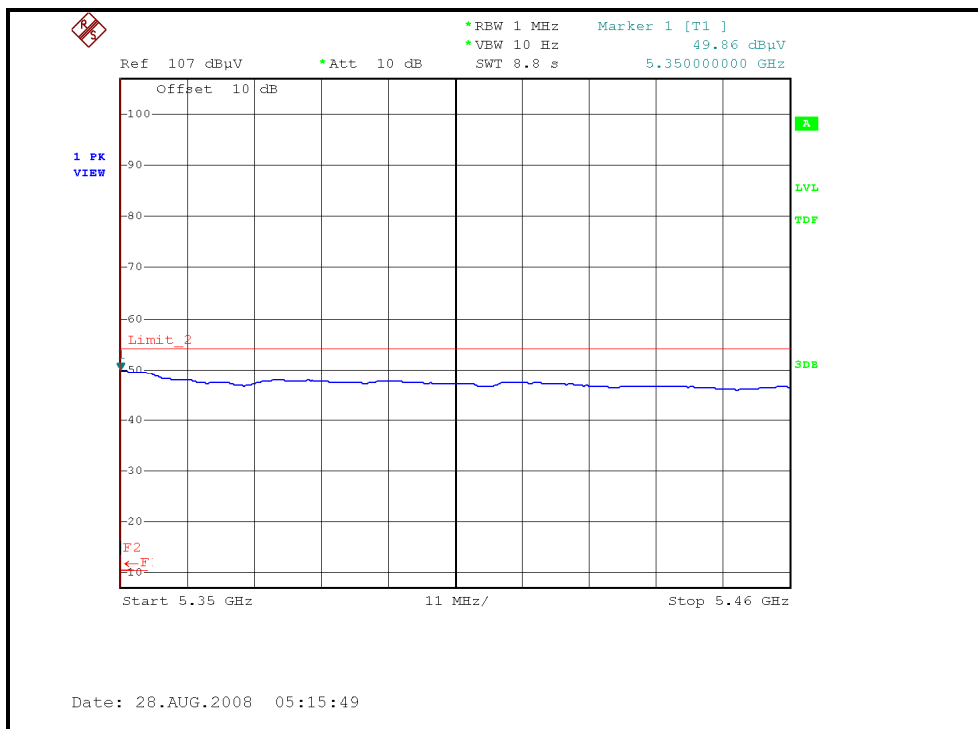
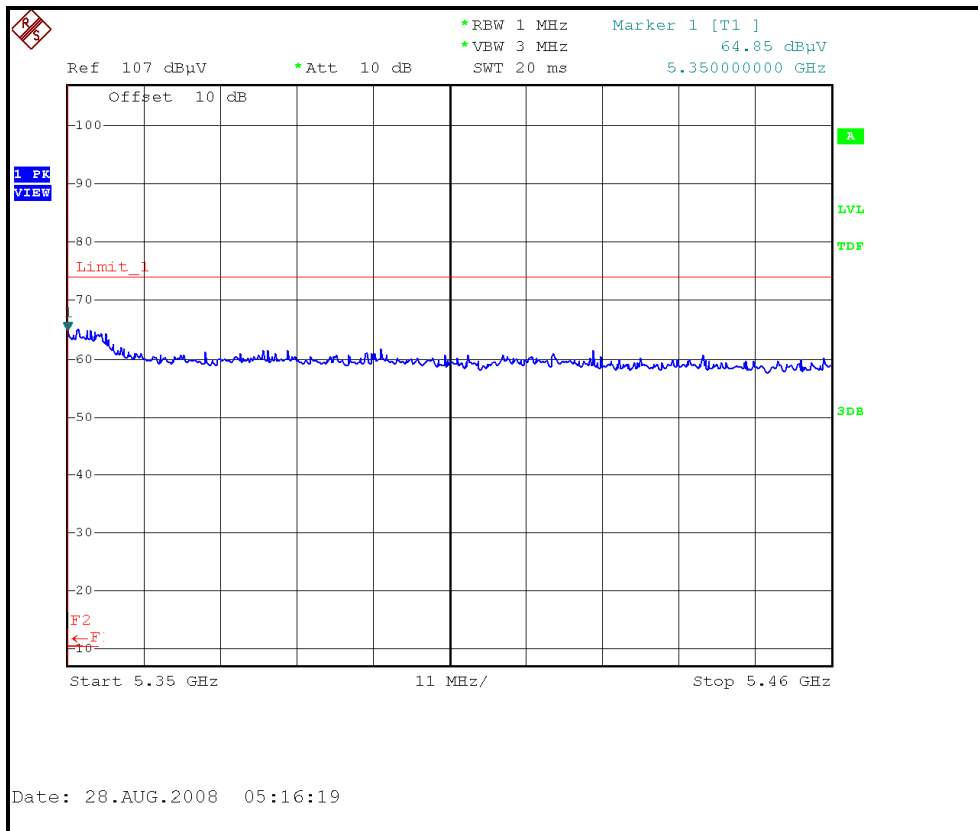
### RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH4, HORIZONTAL)





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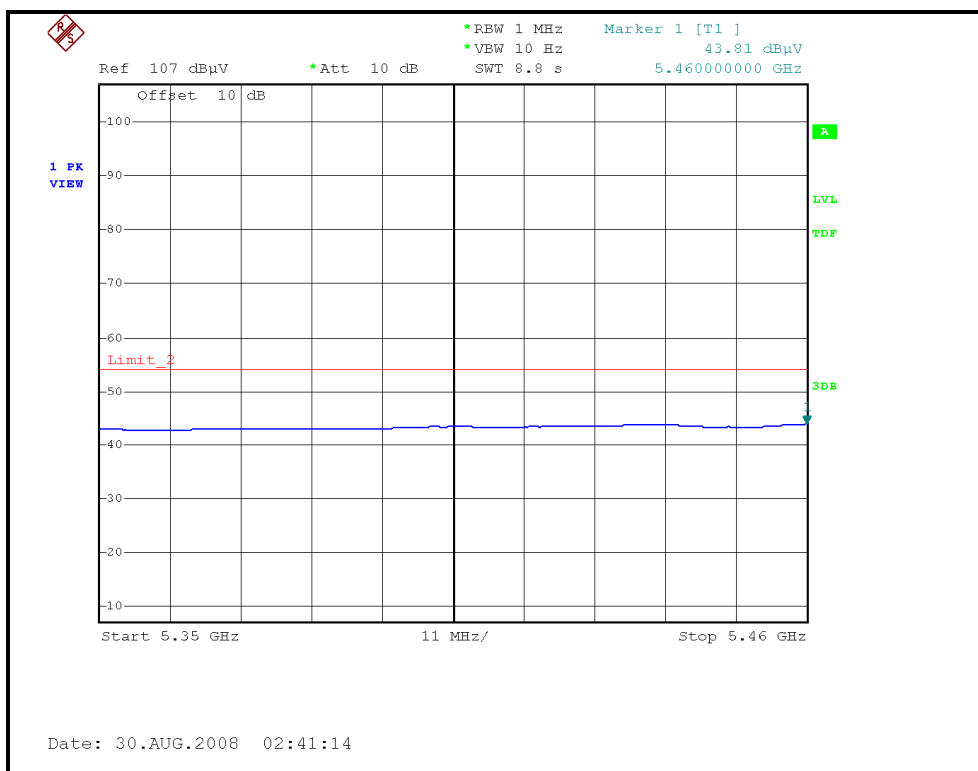
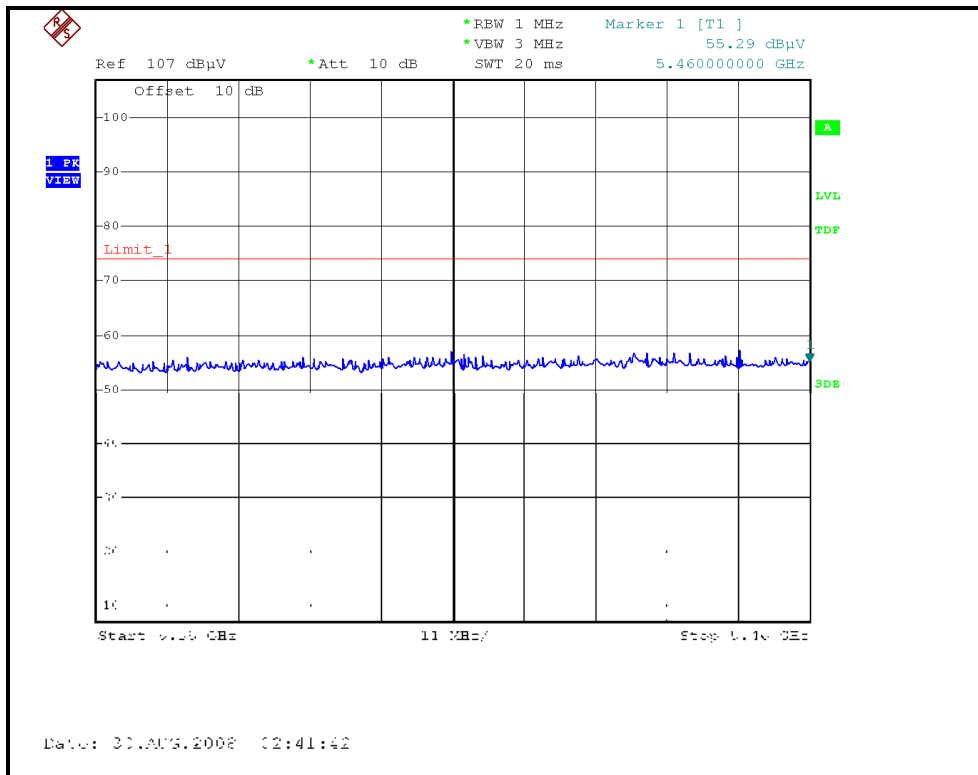
### RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH4, VERTICAL)





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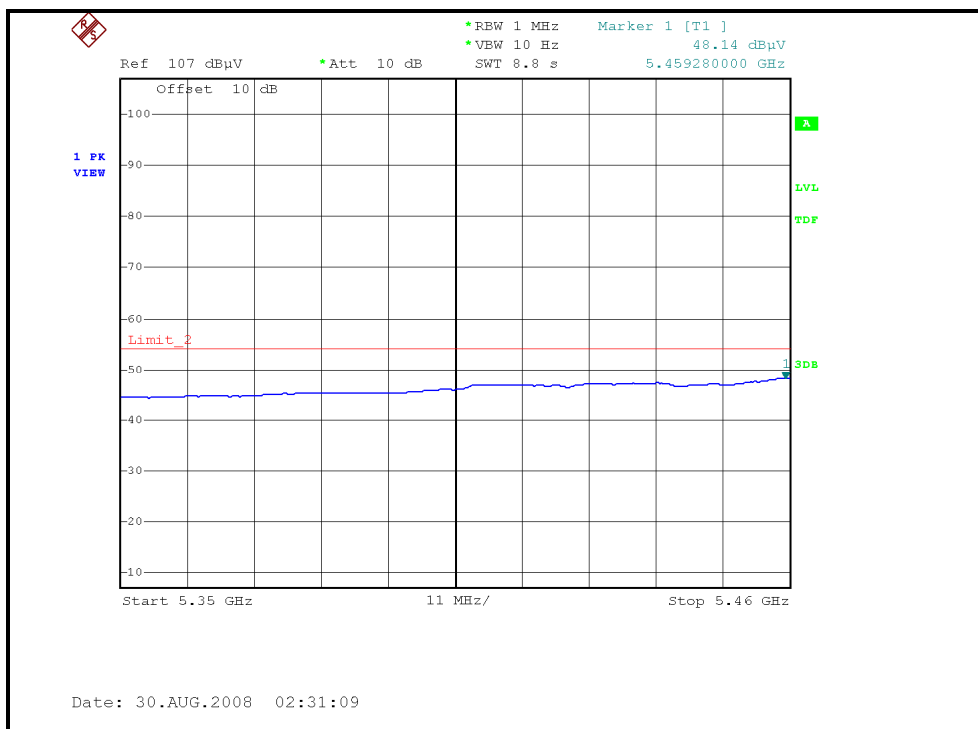
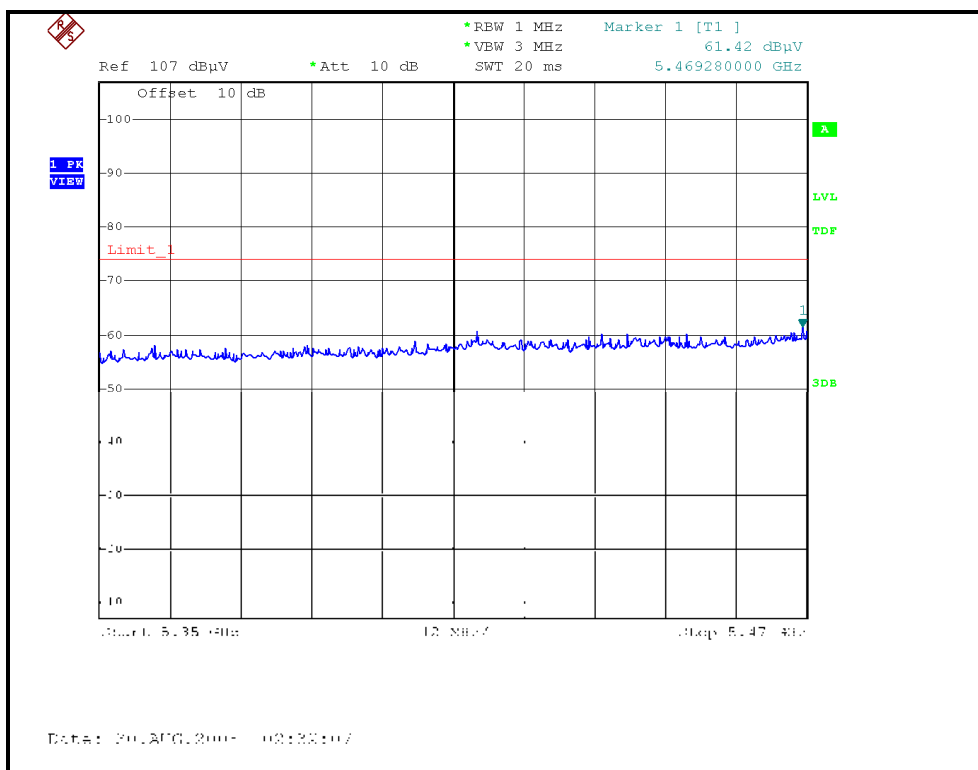
### RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH5, HORIZONTAL)





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### RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH5, VERTICAL)



### 4.3 PEAK TRANSMIT POWER MEASUREMENT

#### 4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

Frequency Band	Limit
5.15 – 5.25GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.25 – 5.35GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.47 – 5.725GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.725 – 5.825GHz	The lesser of 1W (30dBm) or 17dBm + 10logB

**NOTE:** Where B is the 26dB emission bandwidth in MHz.

#### 4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
ADVANTEST SPECTRUM ANALYZER	U3772	160100280	July 26, 2008	July 25, 2009

**NOTE:**

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
- 2.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

#### 4.3.3 TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set span to encompass the entire emission bandwidth of the signal.
3. Set RBW to 1MHz, VBW to 300kHz.
4. Using the spectrum analyzer's channel power measurement function to measure the output power.

**NOTE:**

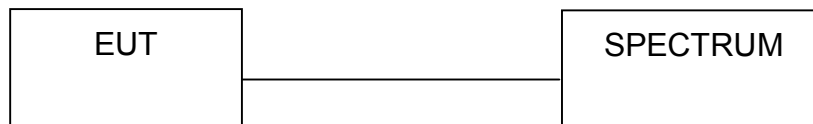
The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002.

The transmitter output operates continuously therefore Method # 1 is used.

#### 4.3.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.3.5 TEST SETUP



#### 4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



### 4.3.7 TEST RESULTS

#### 802.11a OFDM MODULATION:

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 60%RH, 971hPa
<b>TESTED BY</b>	Rex Huang		

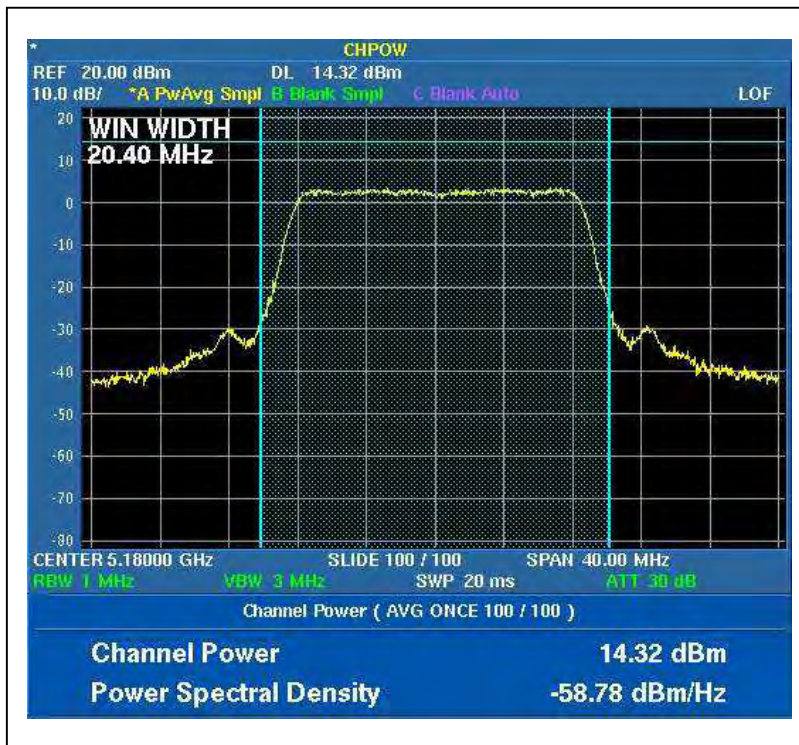
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER OUTPUT (mW)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	14.32	27.040	17	20.4	PASS
2	5200	14.49	28.119	17	20.68	PASS
4	5240	14.09	25.645	17	20.52	PASS
5	5260	13.76	23.768	24	20.64	PASS
7	5300	13.69	23.388	24	20.4	PASS
8	5320	13.74	23.659	24	20.4	PASS
9	5500	14.35	27.227	24	20.6	PASS
14	5600	13.45	22.131	24	20.72	PASS
19	5700	13.28	21.281	24	20.68	PASS
20	5745	13.06	20.230	30	20.44	PASS
22	5785	13.54	22.594	30	20.32	PASS
23	5805	13.95	24.831	30	20.68	PASS

**NOTE:** The 26dBc Occupied Bandwidth plot, please refer to the following pages.



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## Peak Power Output: CH1



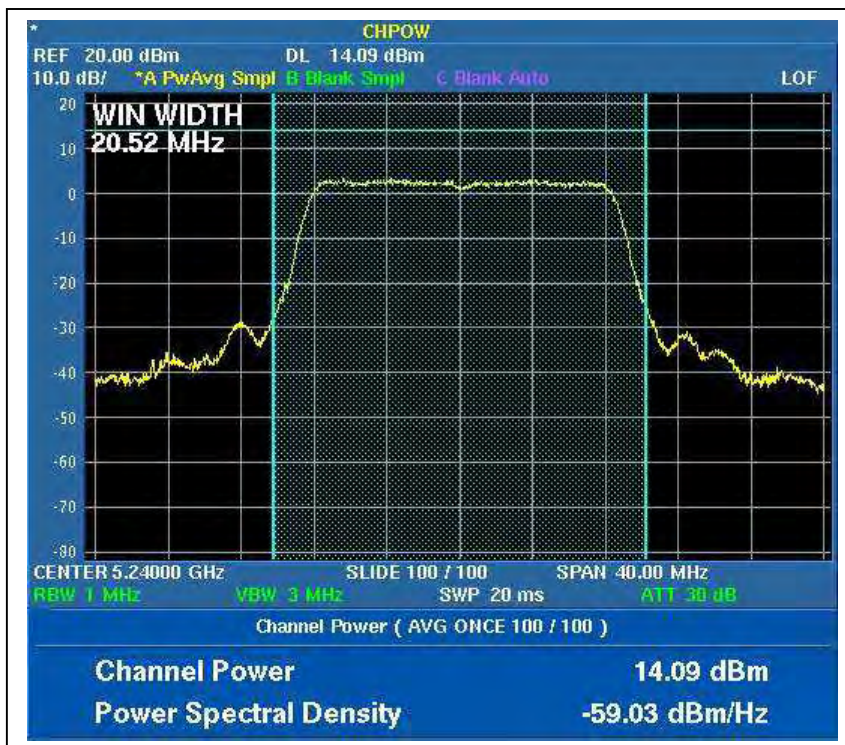
## CH2



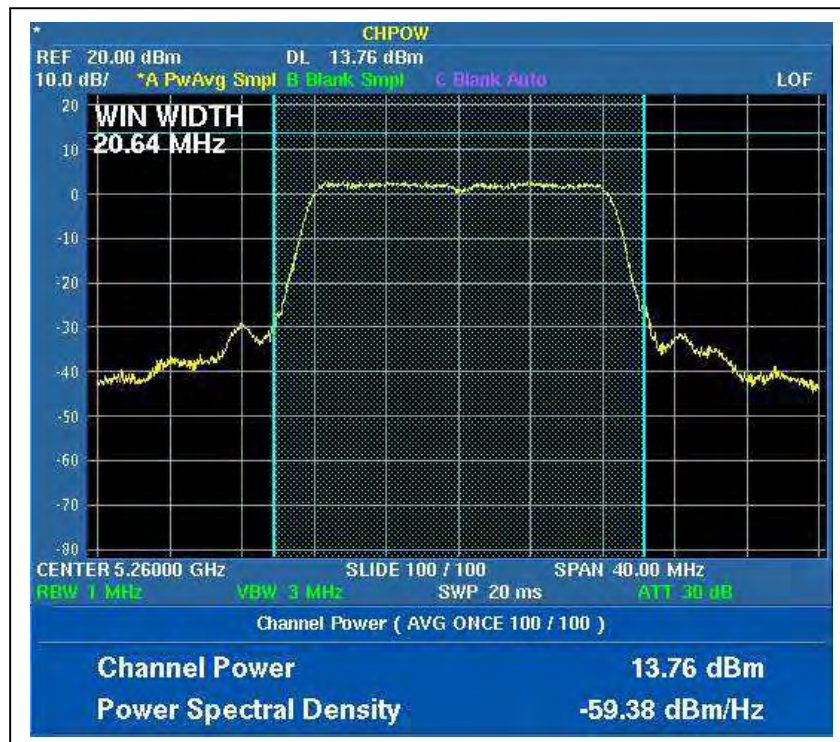


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### CH4

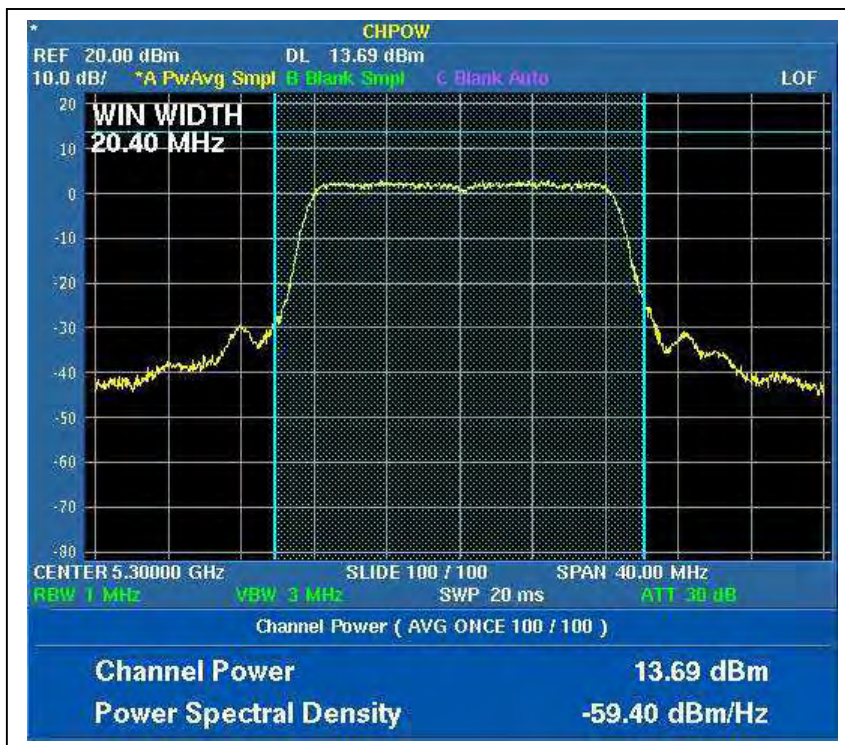


### CH5

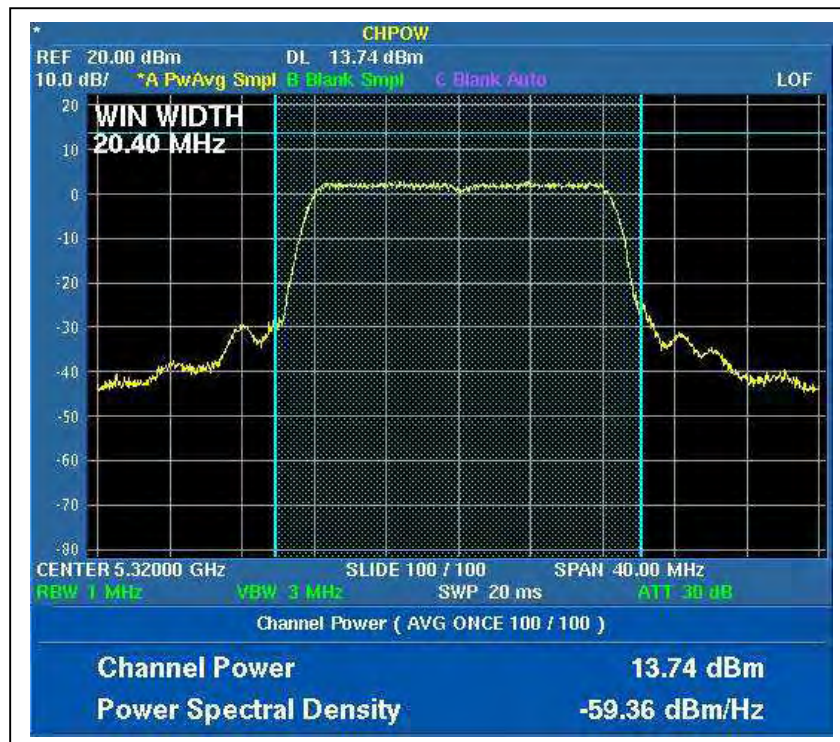




### CH7



### CH8



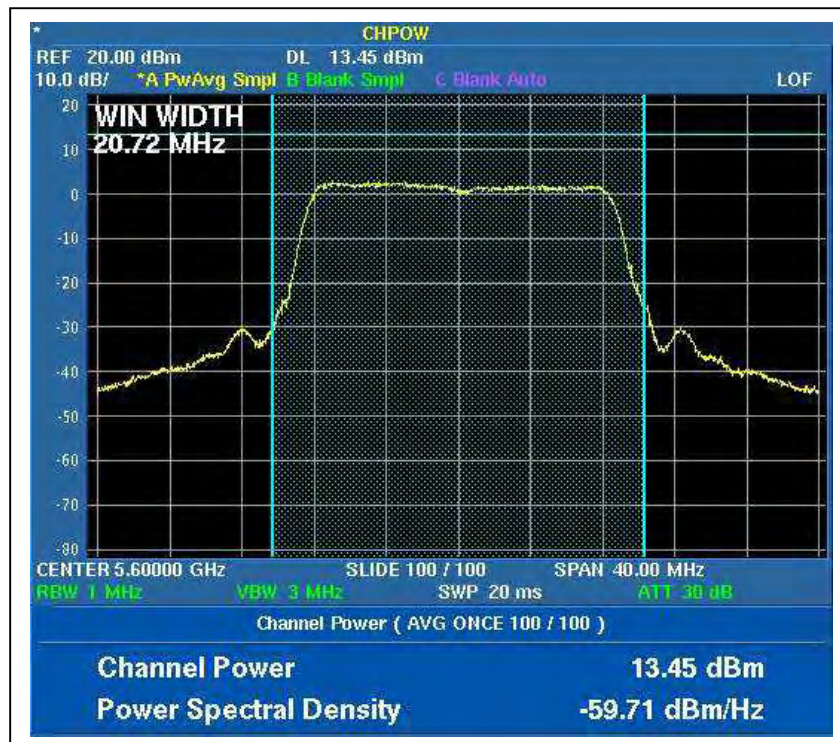


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### CH9



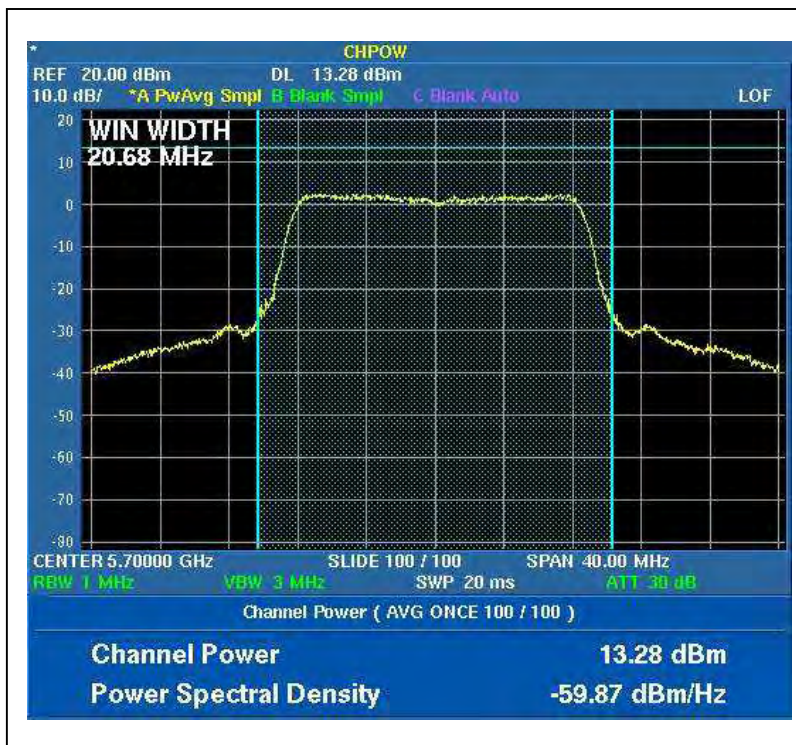
### CH14



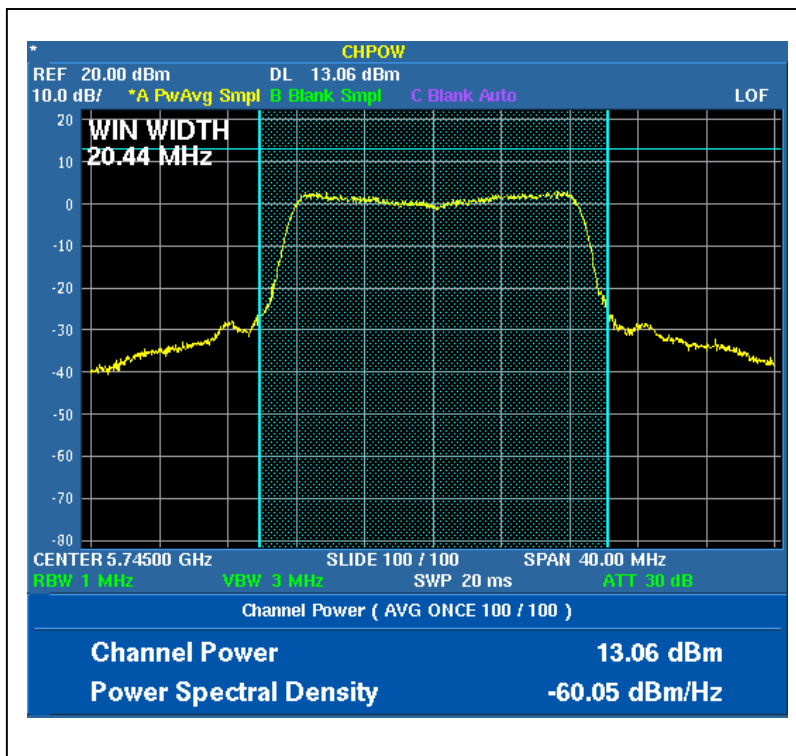


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## CH19



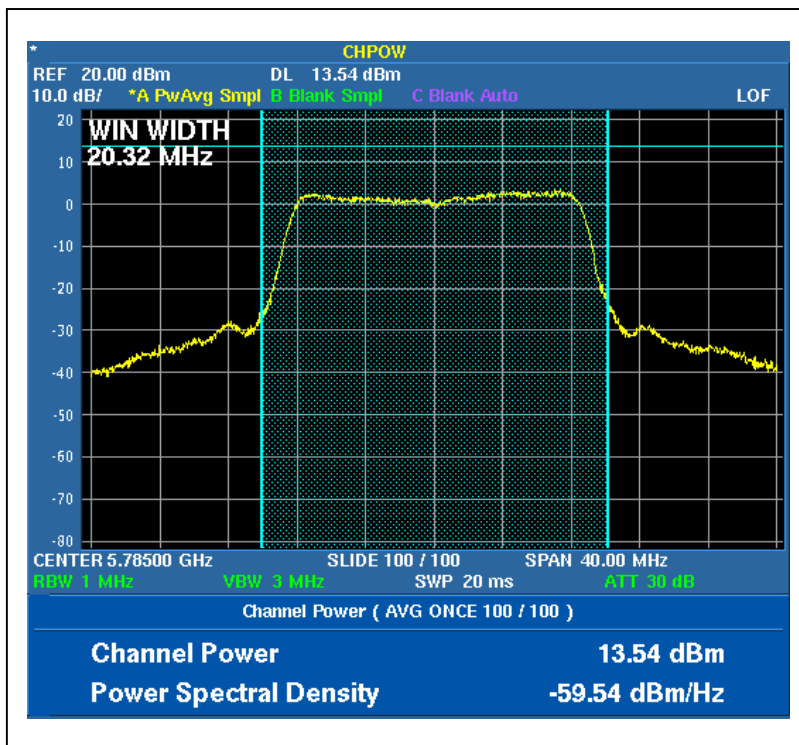
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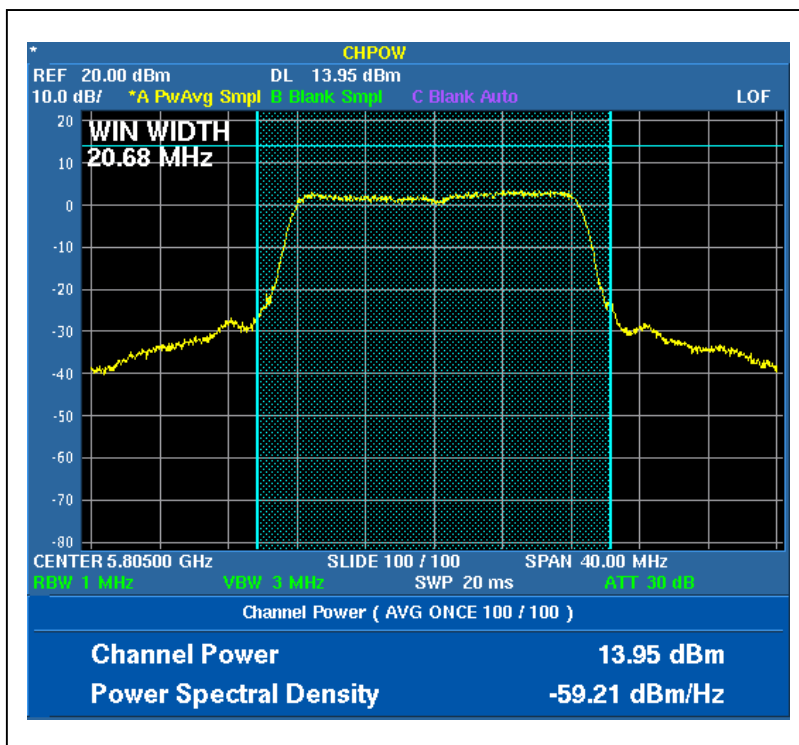


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## CH22



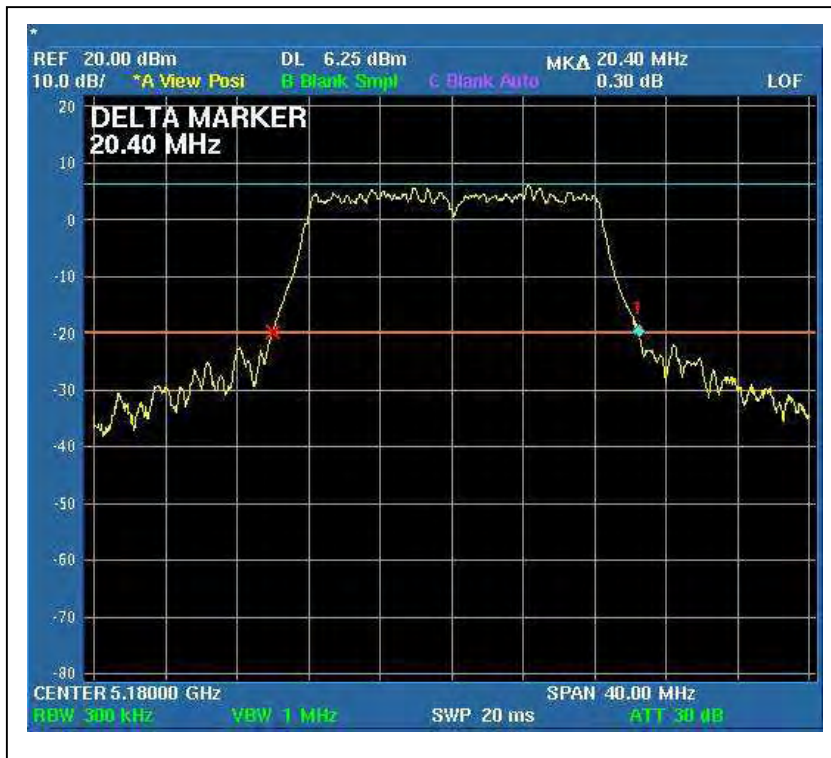
## CH23



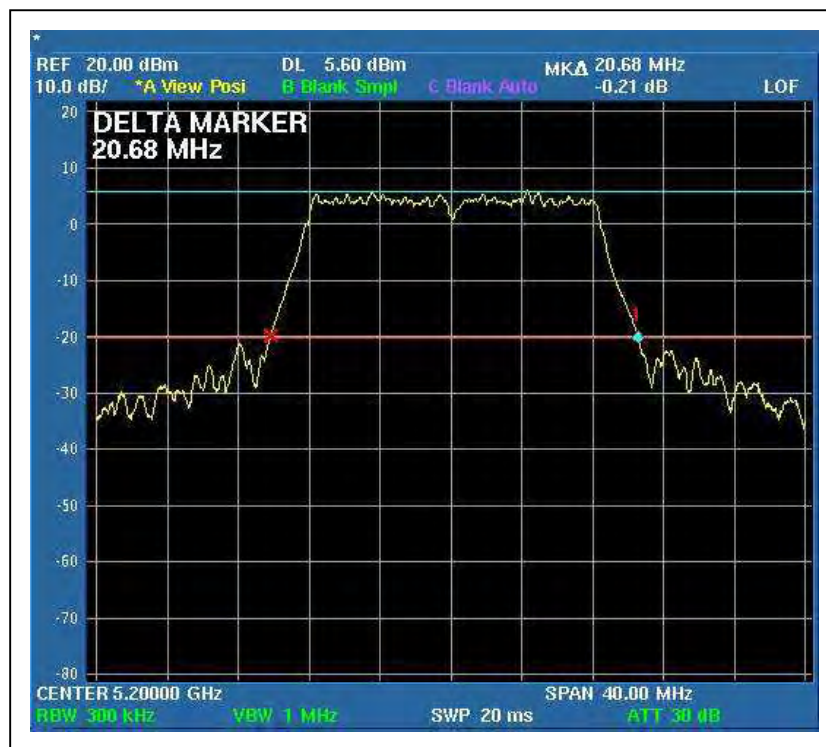


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### 26dB Occupied Bandwidth: CH1



### CH2

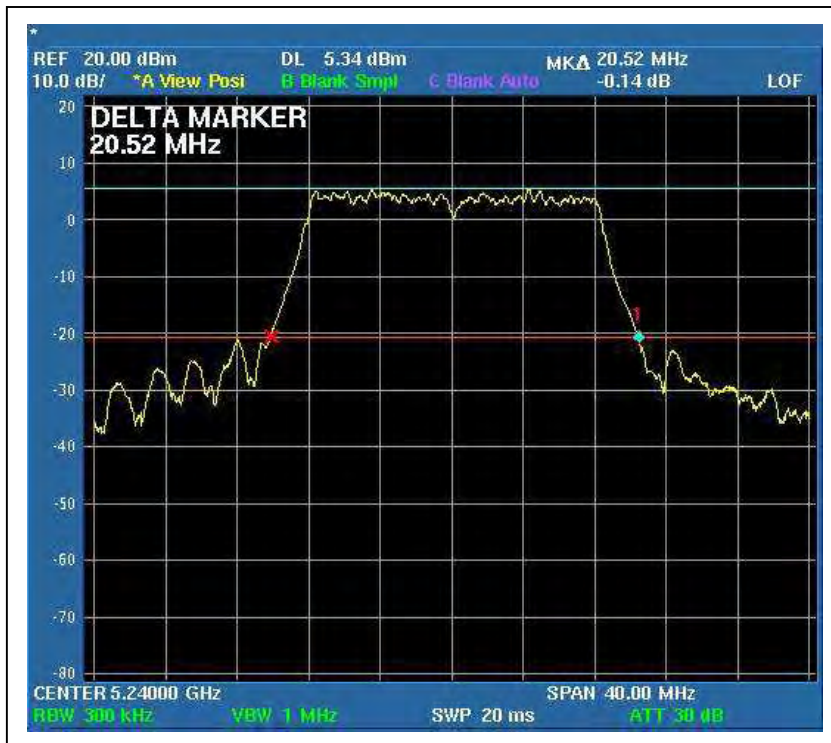




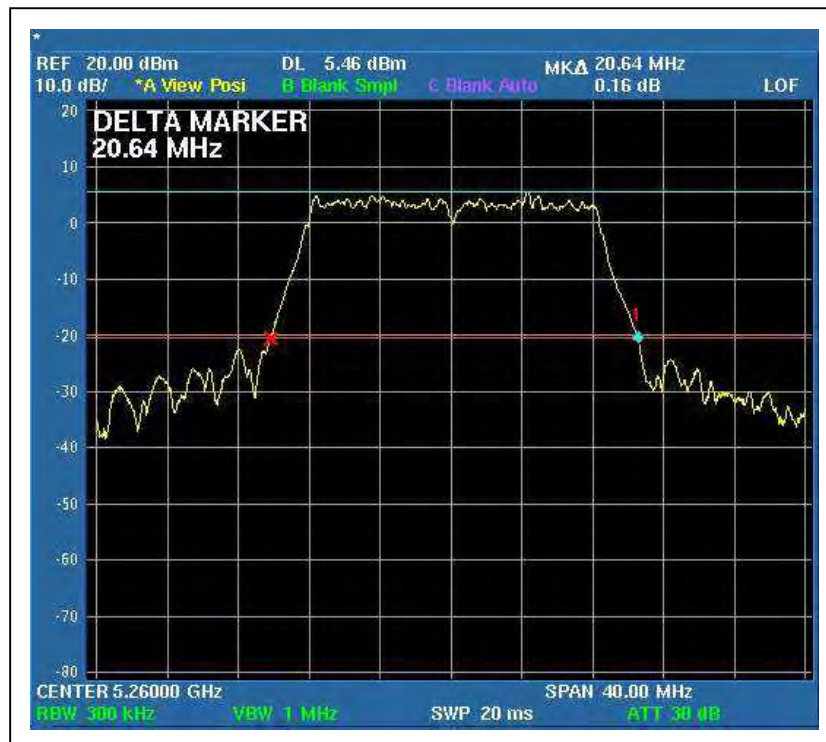


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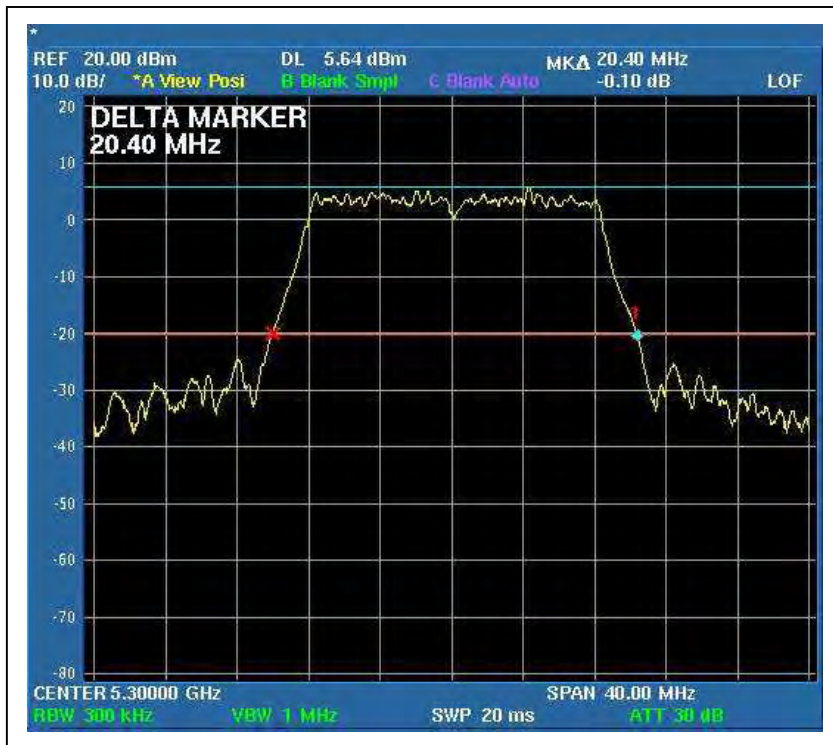
### CH4



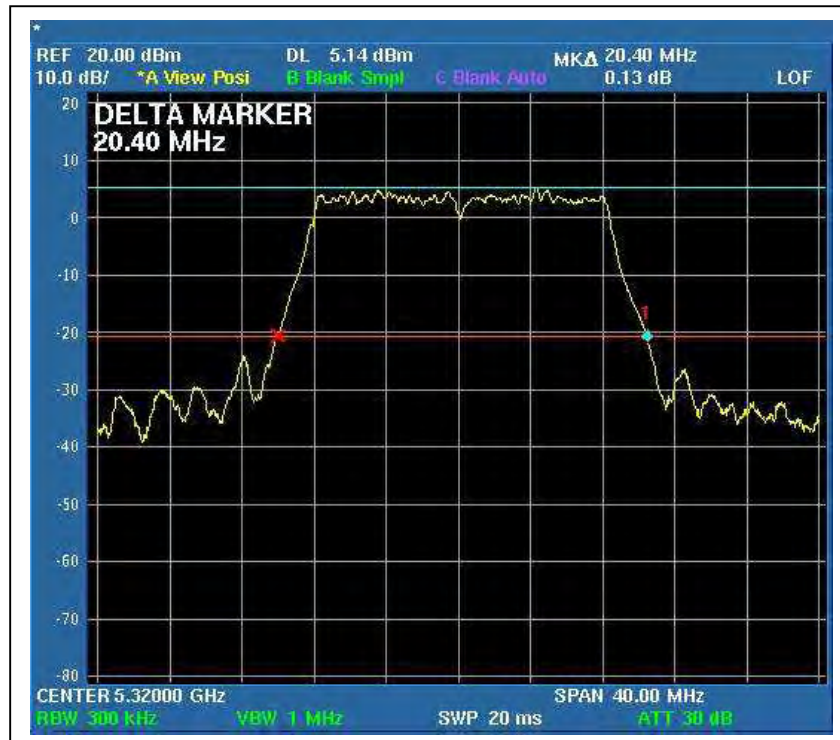
### CH5



CH7



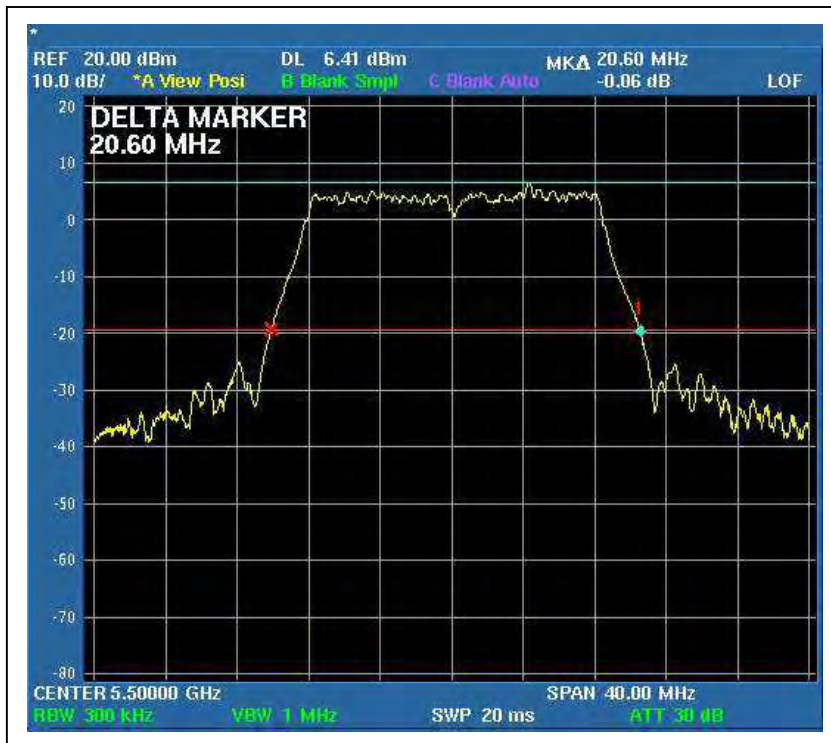
CH8



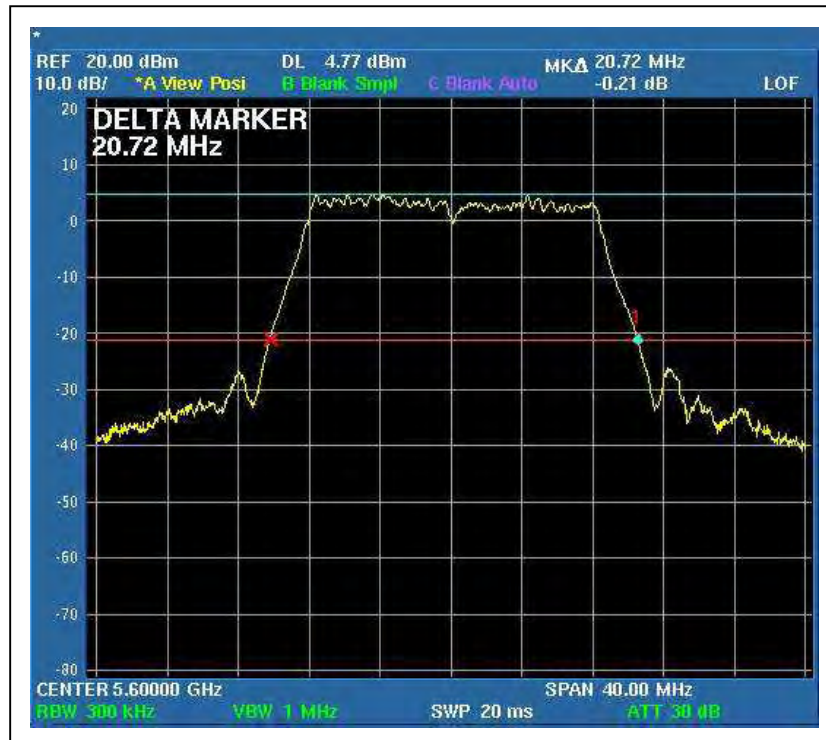


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### CH9



### CH14



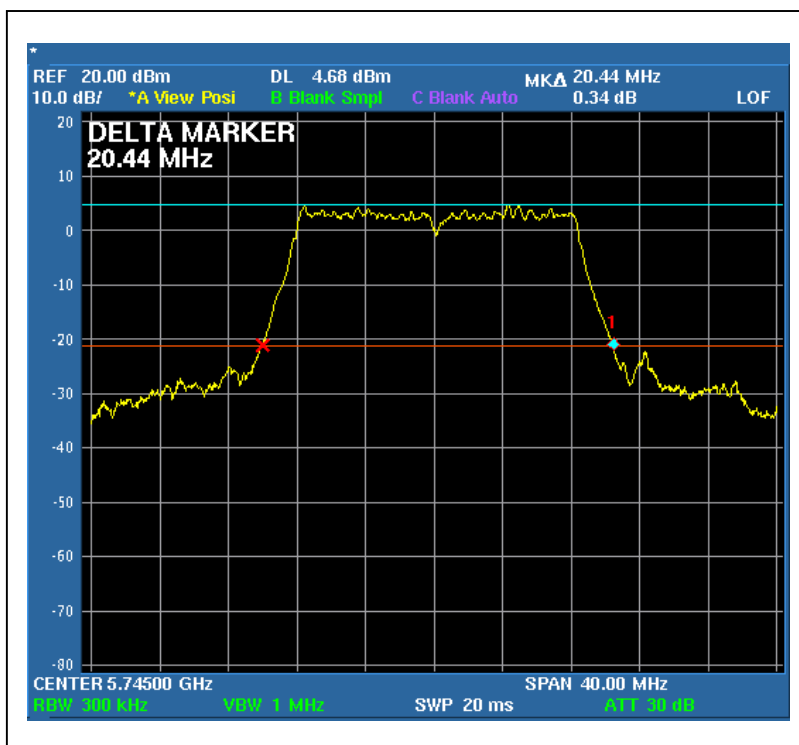


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### CH19



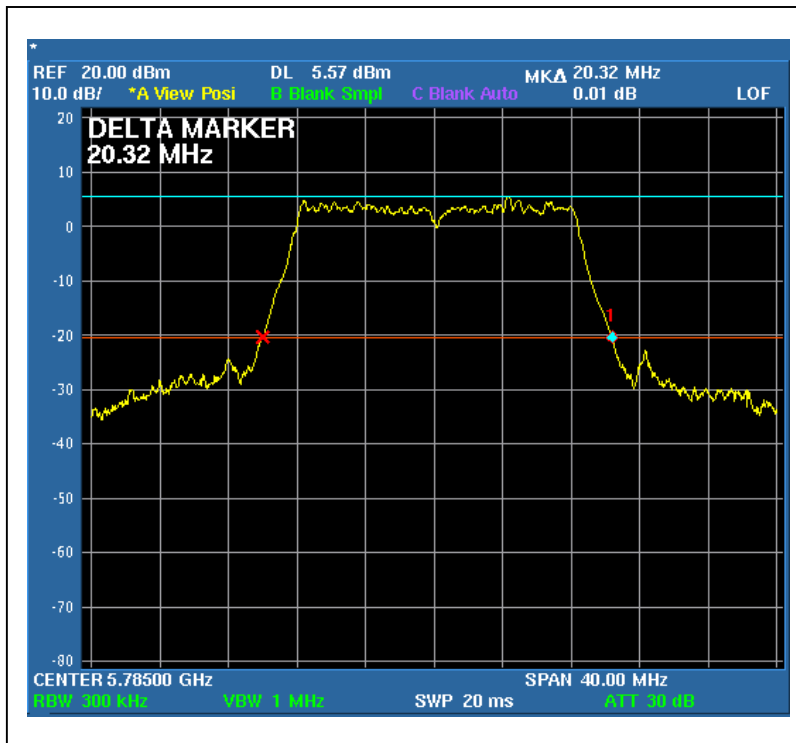
### CH20



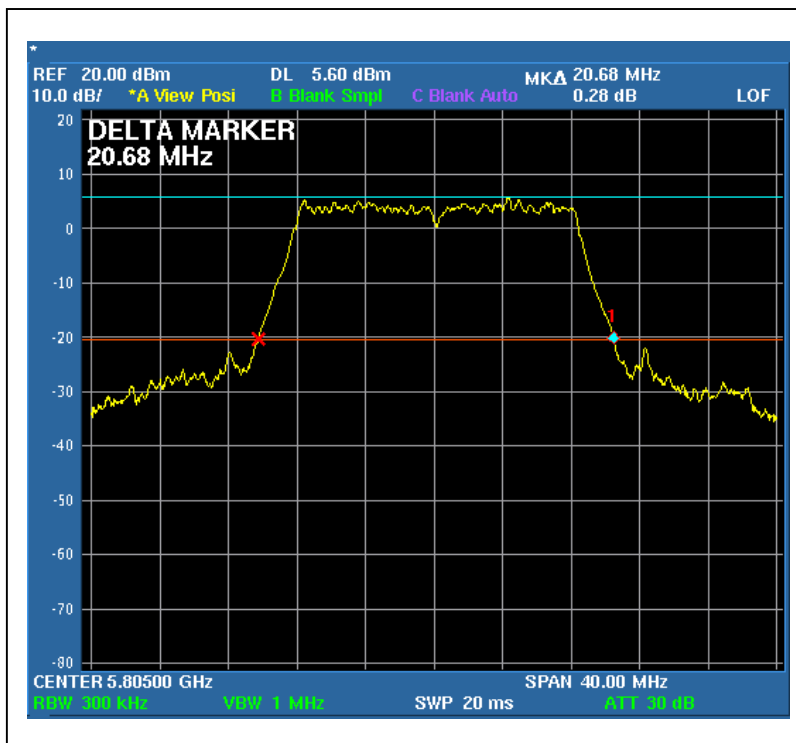


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## CH22



## CH23





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**DRAFT 802.11n (20MHz) OFDM modulation:**

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	13Mbps
<b>INPUT POWER</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 60%RH, 971hPa
<b>TESTED BY</b>	Rex Huang		

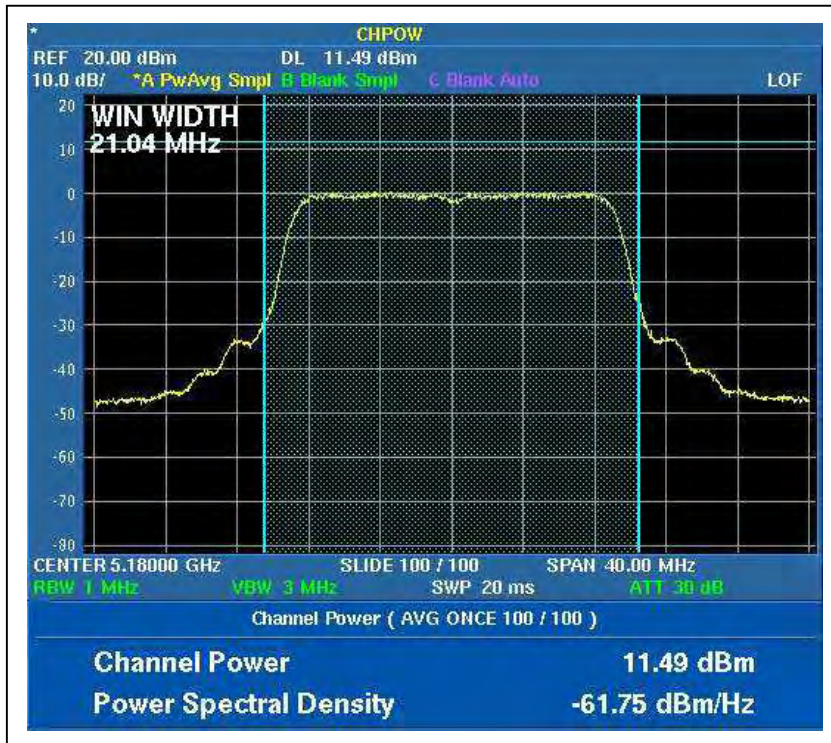
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)		PEAK POWER OUTPUT (mW)		TOTAL PEAK POWER (dBm)	TOTAL PEAK POWER (mW)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)		PASS/ FAIL
		Chain 0	Chain 1	Chain 0	Chain 1				Chain 0	Chain 1	
1	5180	11.49	10.53	14.093	11.298	14.05	25.391	17.00	21.04	20.56	PASS
2	5200	11.69	10.85	14.757	12.162	14.30	26.919	17.00	20.96	20.48	PASS
4	5240	12.11	11.63	16.255	14.555	14.89	30.810	17.00	21	20.52	PASS
5	5260	12.03	11.13	15.959	12.972	14.61	28.931	24.00	20.96	20.52	PASS
7	5300	11.49	11.15	14.093	13.032	14.33	27.125	24.00	21.12	20.56	PASS
8	5320	11.66	10.99	14.655	12.560	14.35	27.215	24.00	21	20.52	PASS
9	5500	11.48	11.91	14.060	15.524	14.71	29.584	24.00	21	20.48	PASS
14	5600	11.78	11.43	15.066	13.900	14.62	28.966	24.00	20.88	20.56	PASS
19	5700	11.54	10.94	14.256	12.417	14.26	26.673	24.00	21.16	20.52	PASS
20	5745	11.43	11.73	13.900	14.894	14.59	28.794	30.00	21.12	20.44	PASS
22	5785	11.85	12.51	15.311	17.824	15.20	33.135	30.00	21.28	20.4	PASS
23	5805	12.27	12.54	16.866	17.947	15.42	34.813	30.00	21.24	20.6	PASS

**NOTE:** The 26dBc Occupied Bandwidth plot, please refer to the following pages.

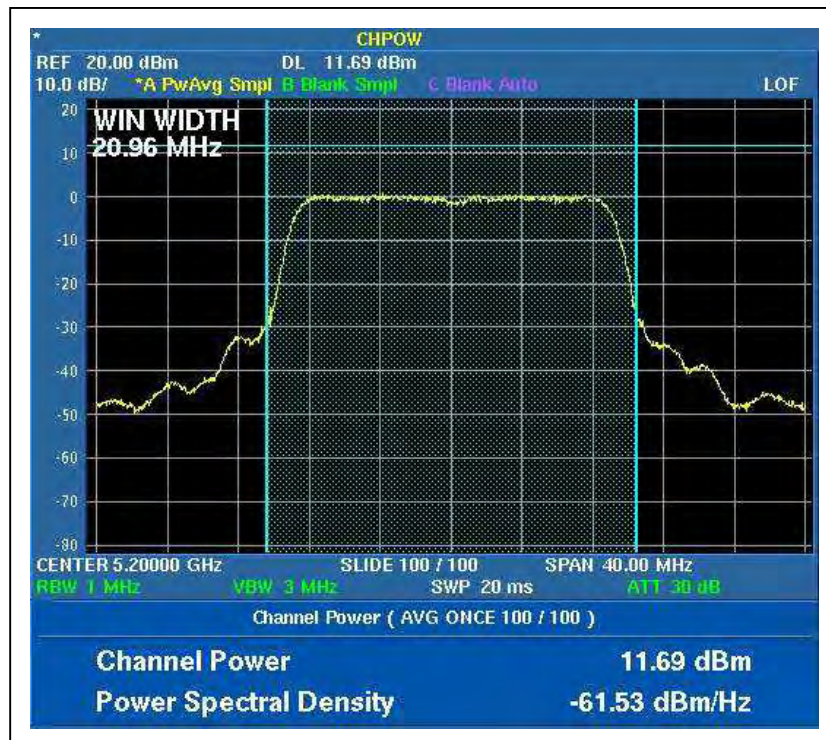


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Peak Power Output:  
For Chain (0) :CH1

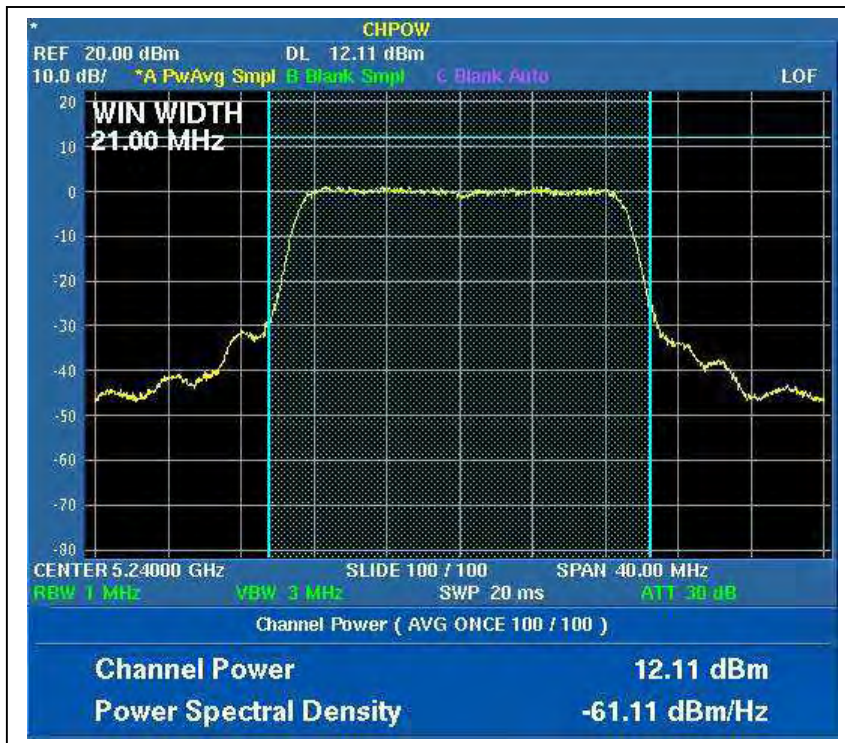


CH2

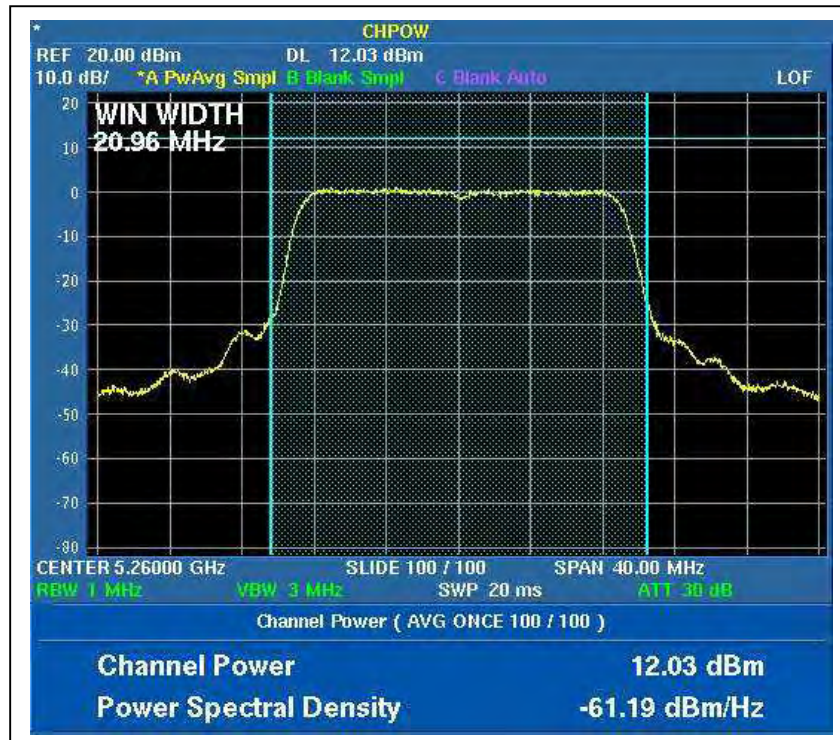




CH4

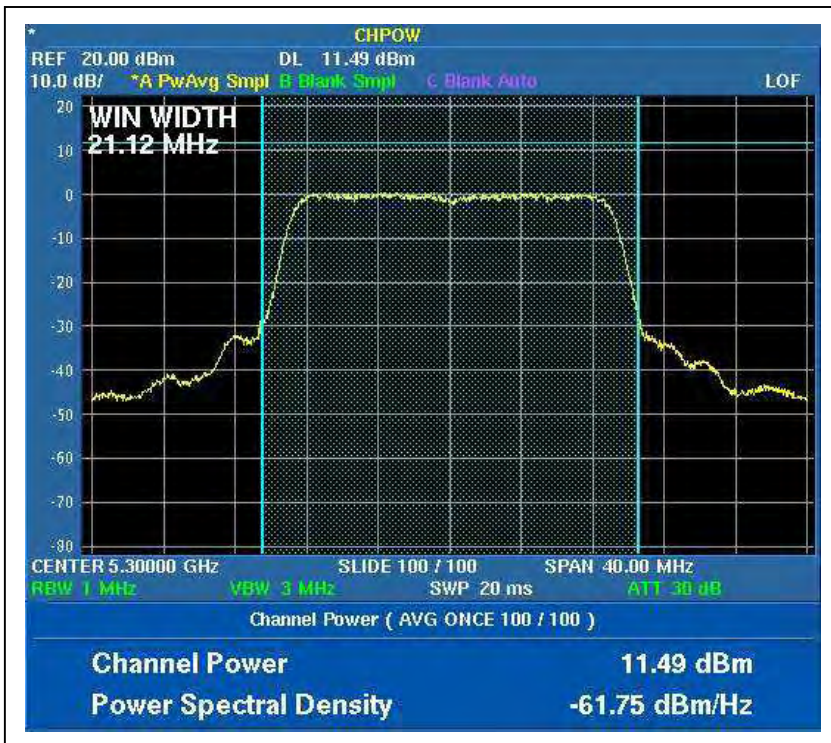


CH5

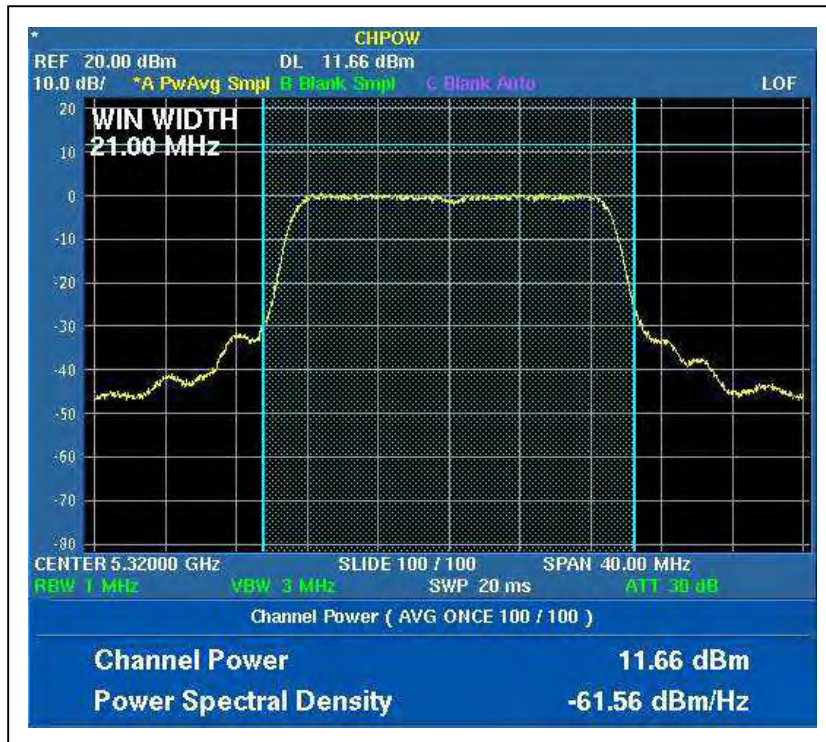




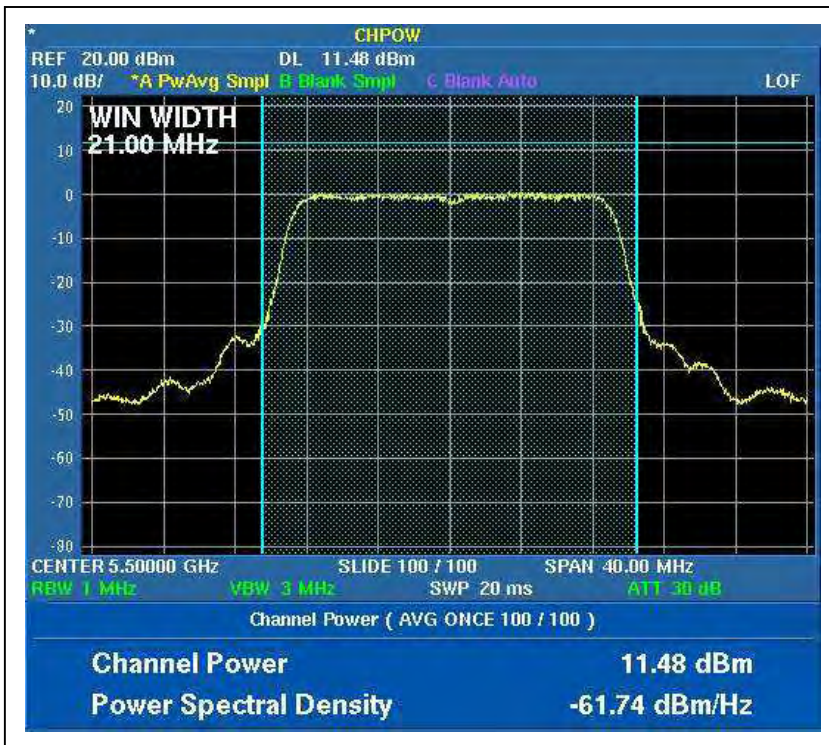
### CH7



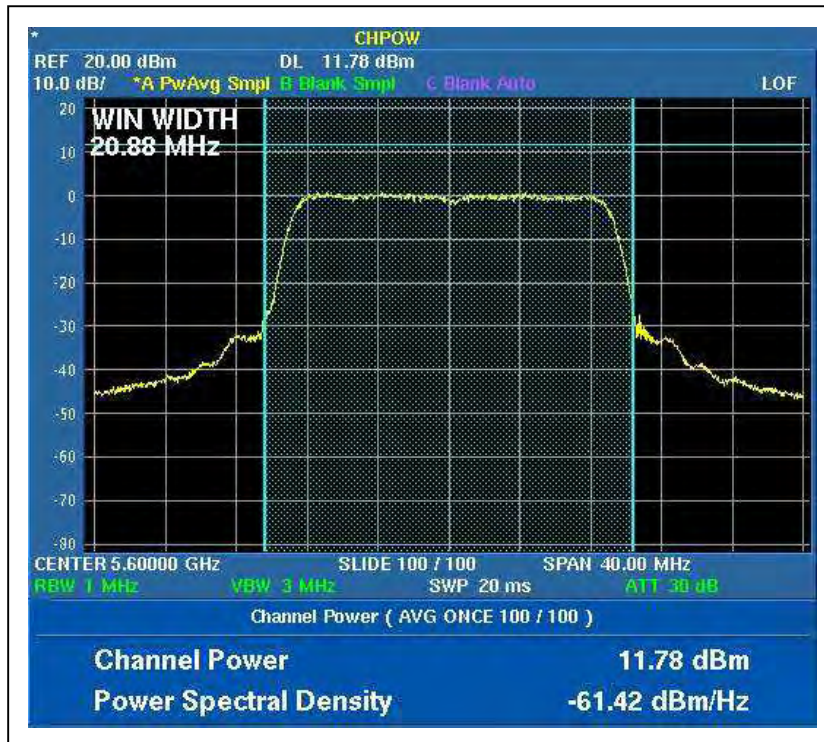
### CH8



CH9



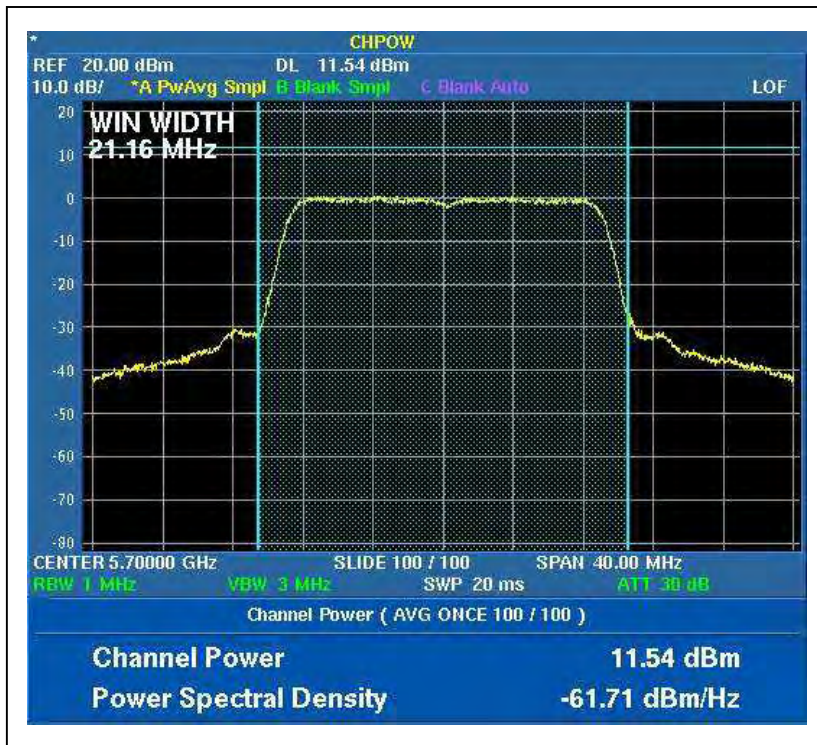
CH14



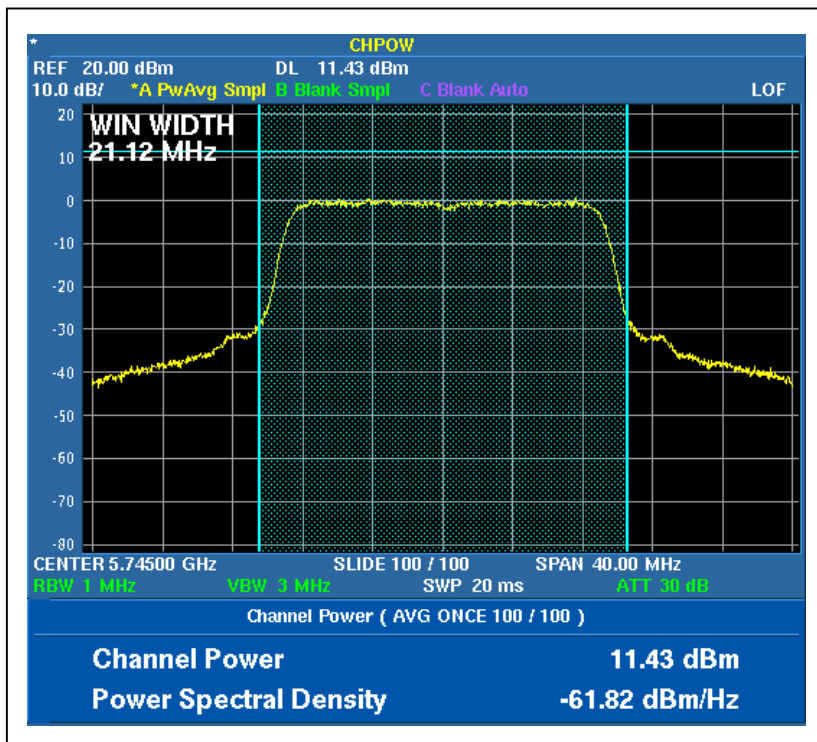


A D T

### CH19



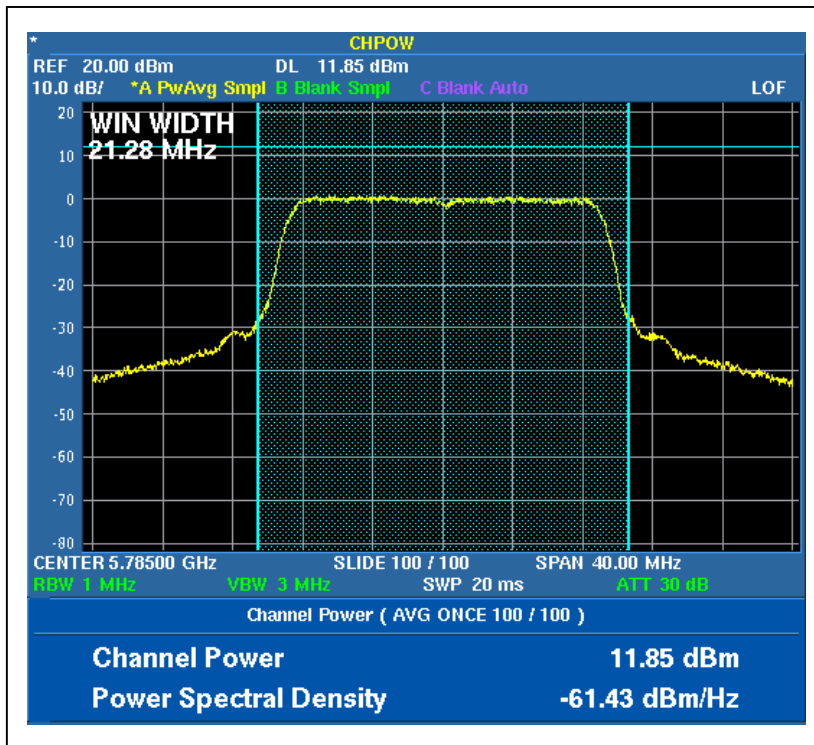
### CH20



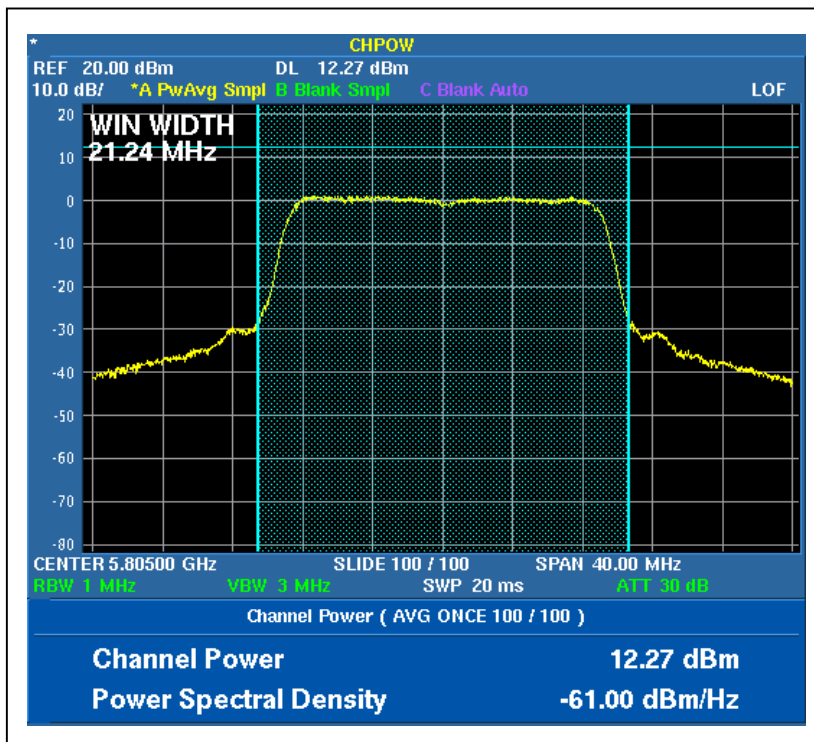


A D T

## CH22



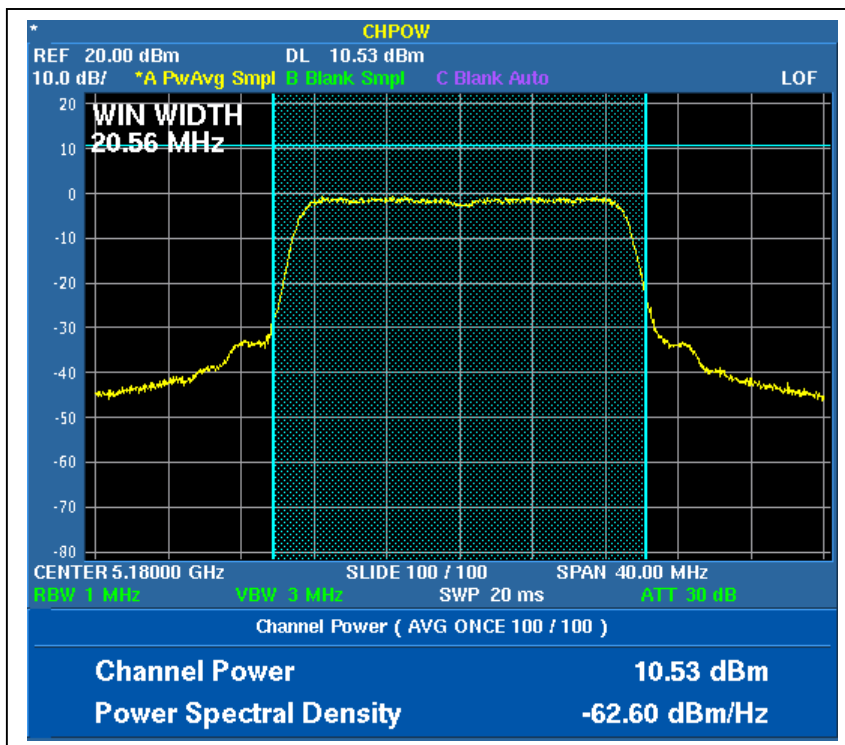
## CH23



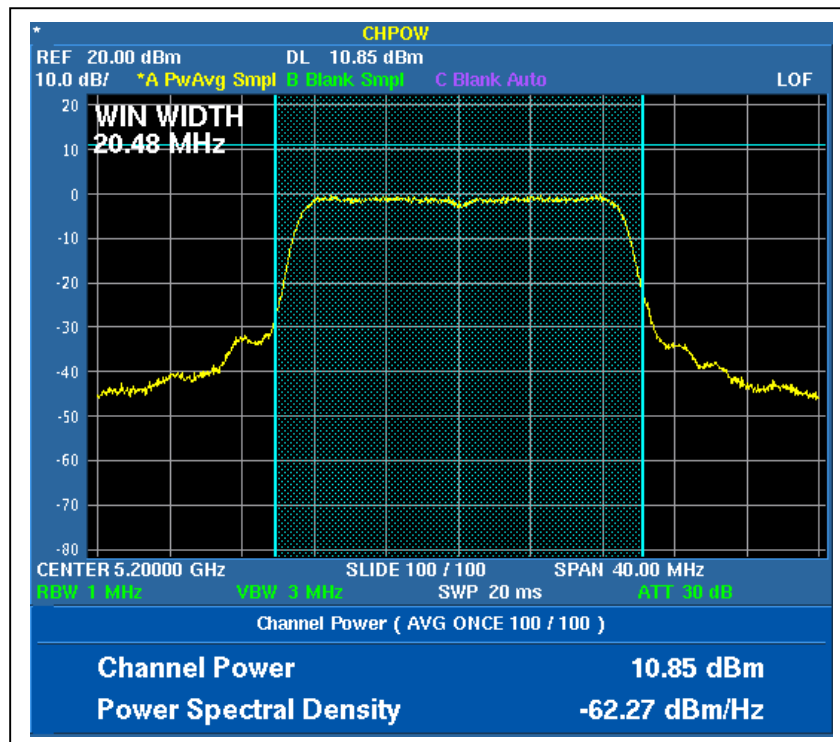


A D T

For Chain (1) :CH1



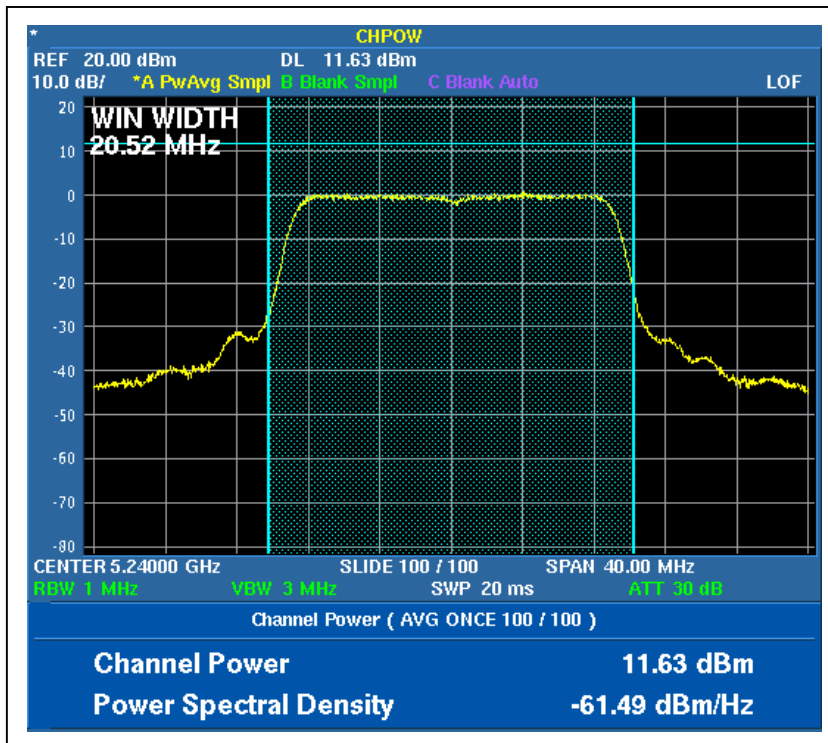
CH2



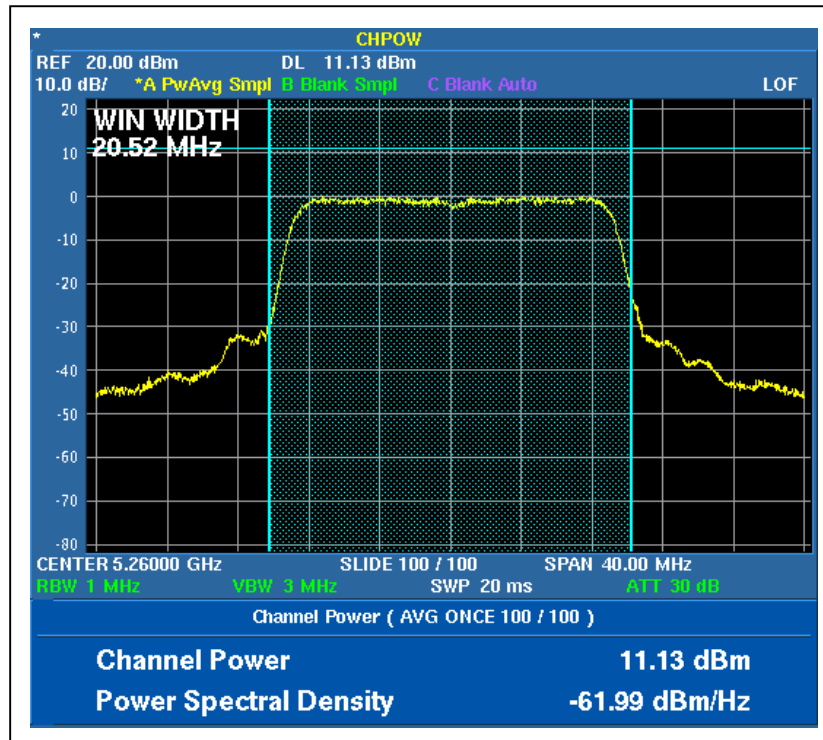


A D T

### CH4



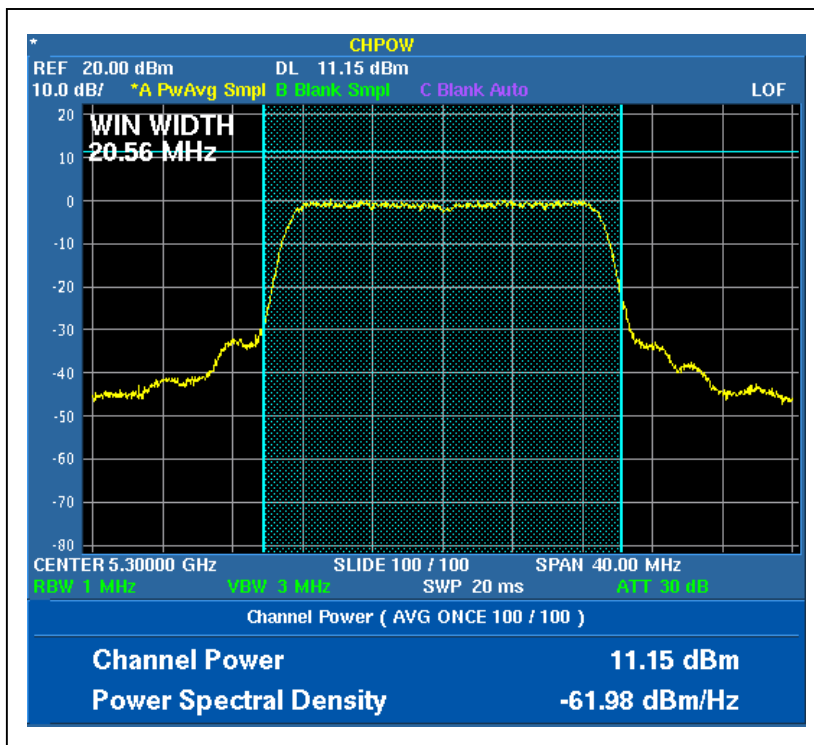
### CH5



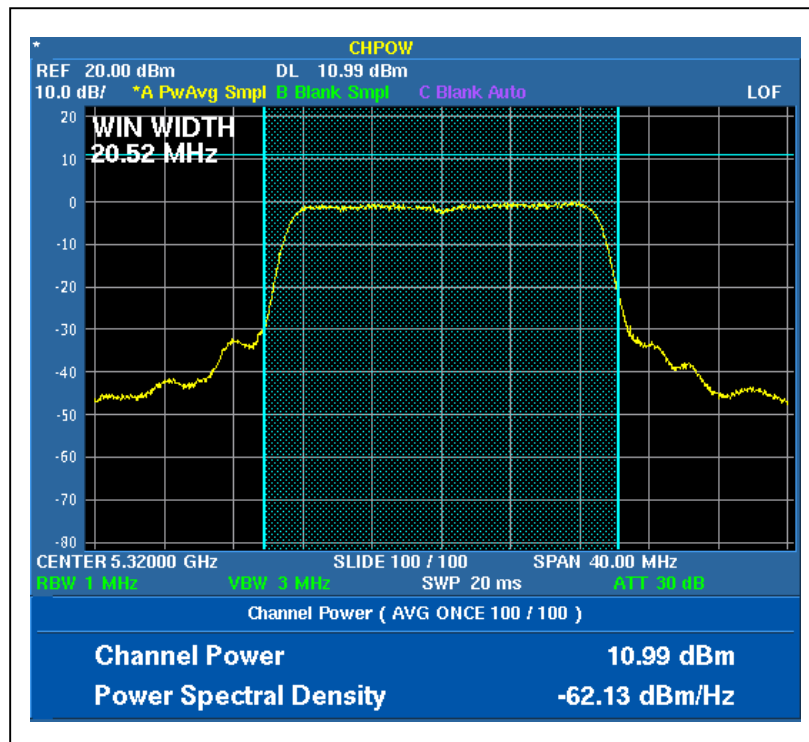


A D T

### CH7



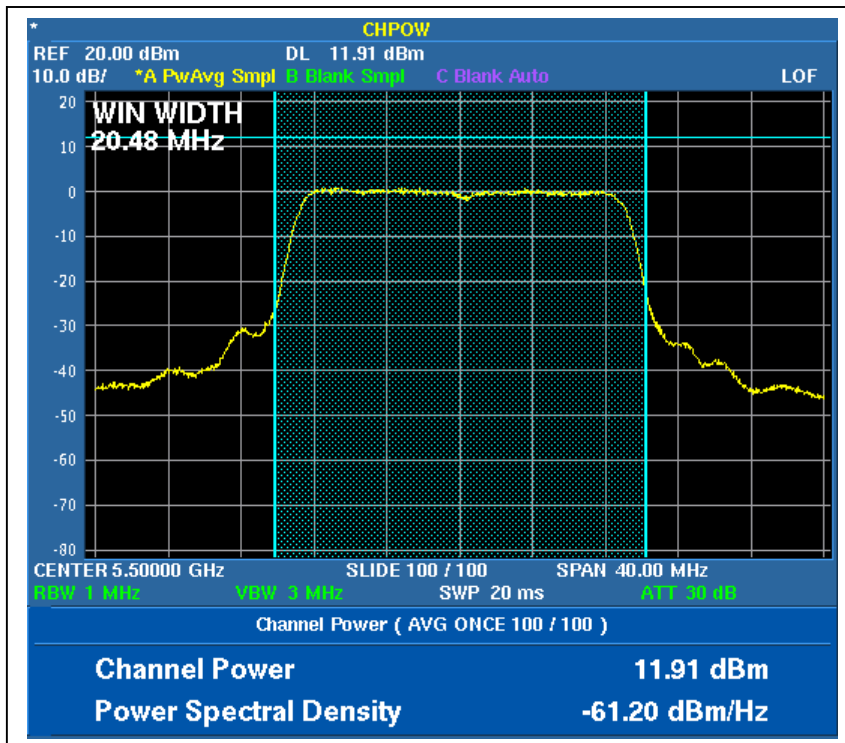
### CH8



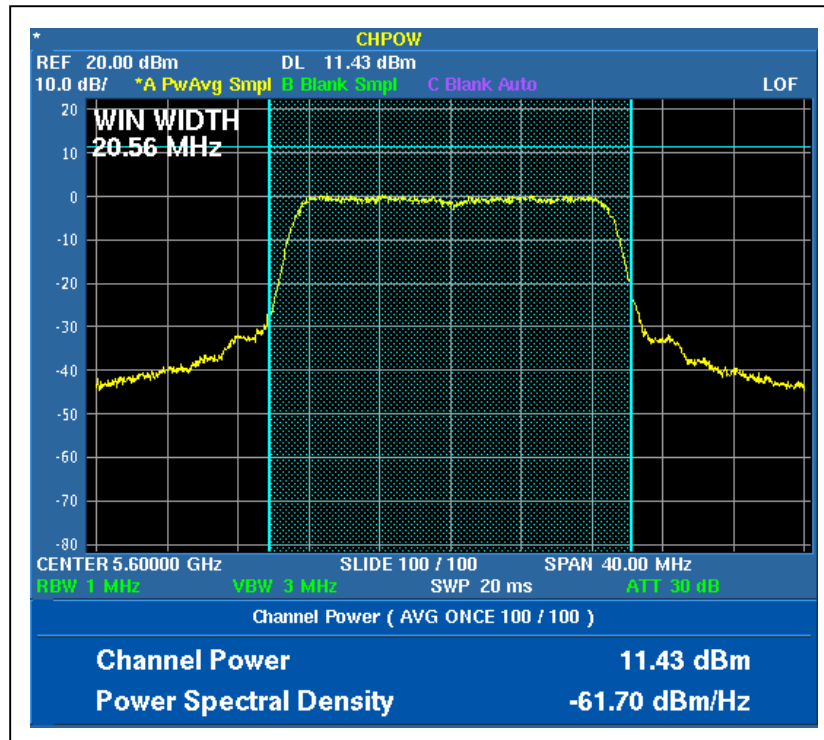


A D T

### CH9



### CH14

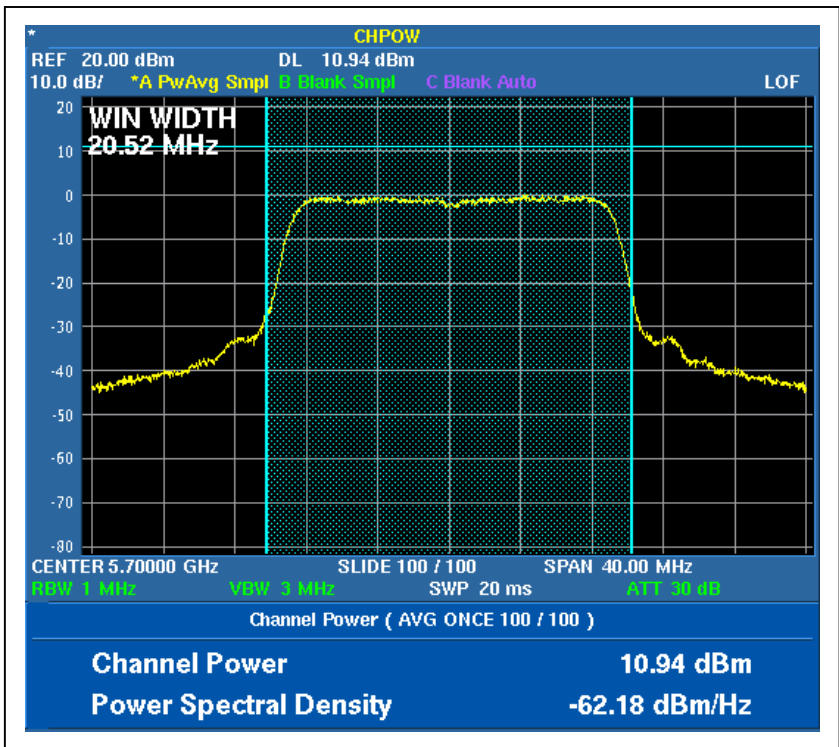




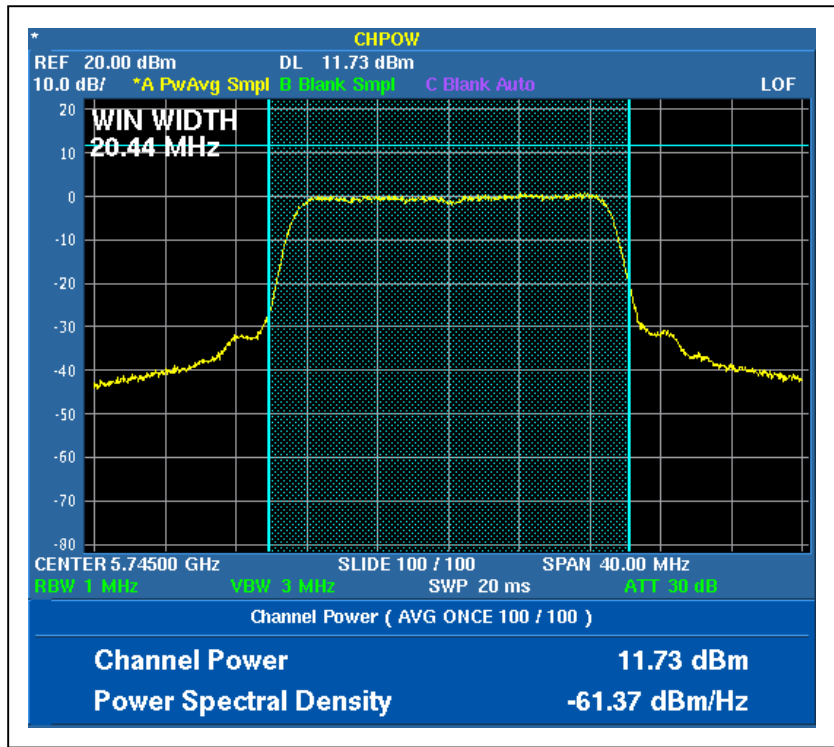


A D T

### CH19



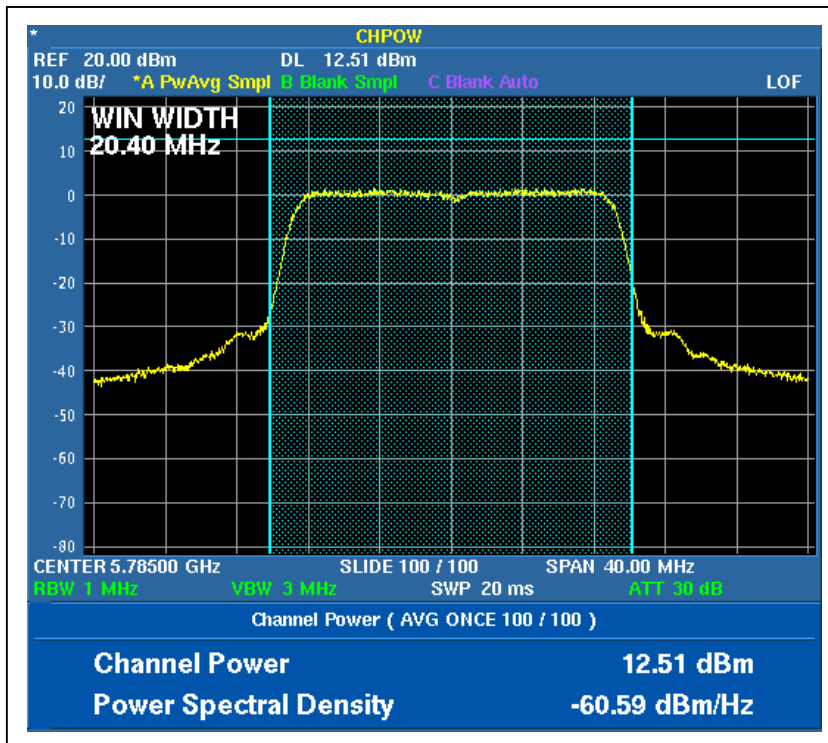
### CH20



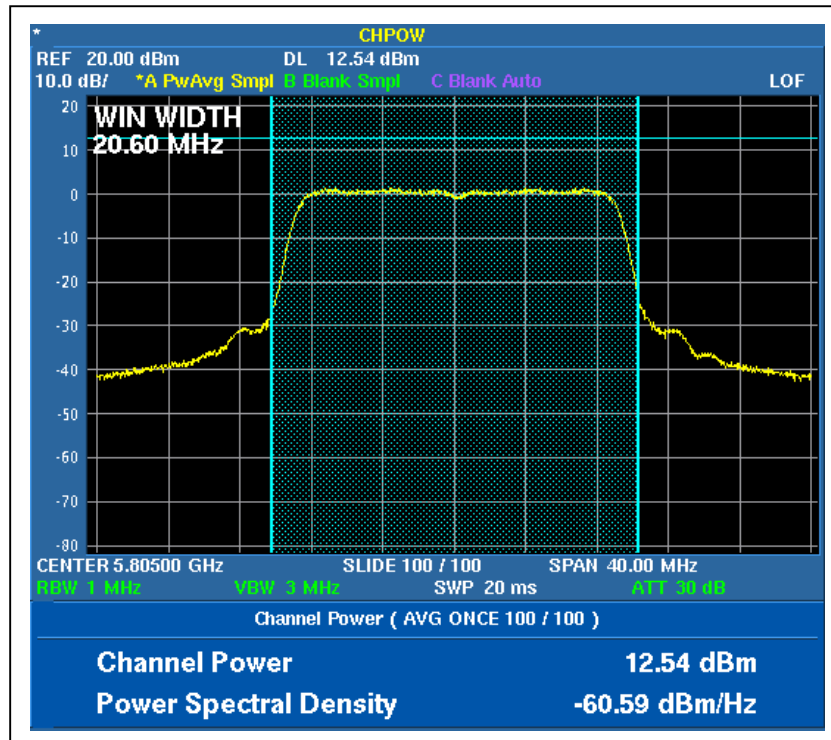


A D T

### CH22



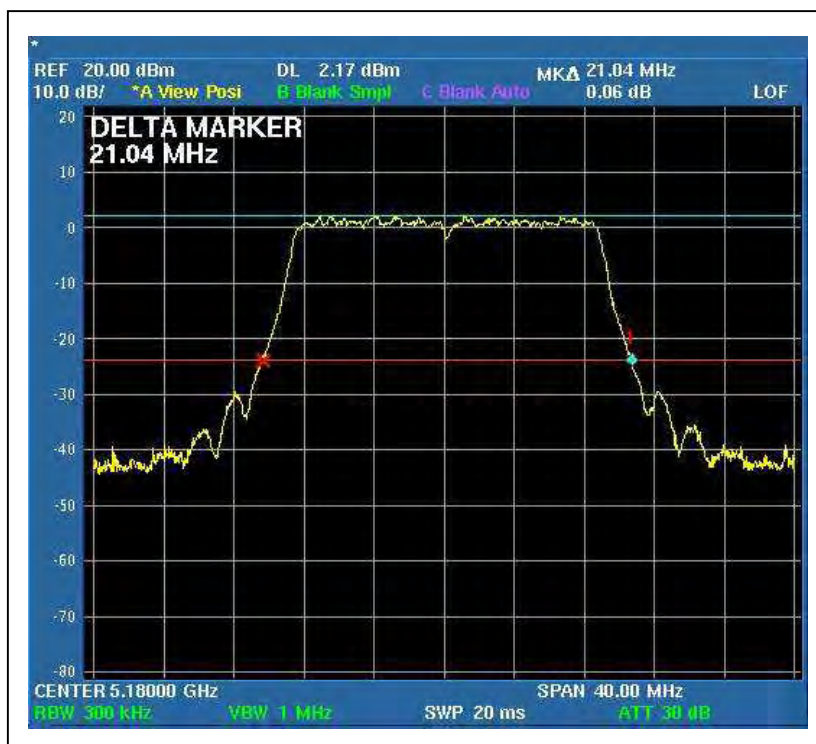
### CH23



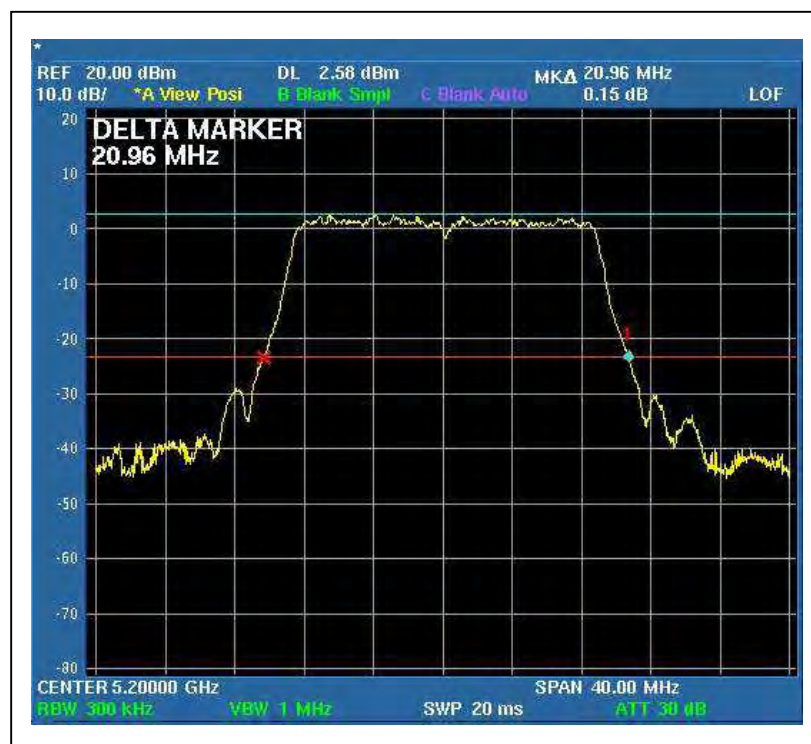


A D T

26dB Occupied Bandwidth:  
For Chain (0) :CH1



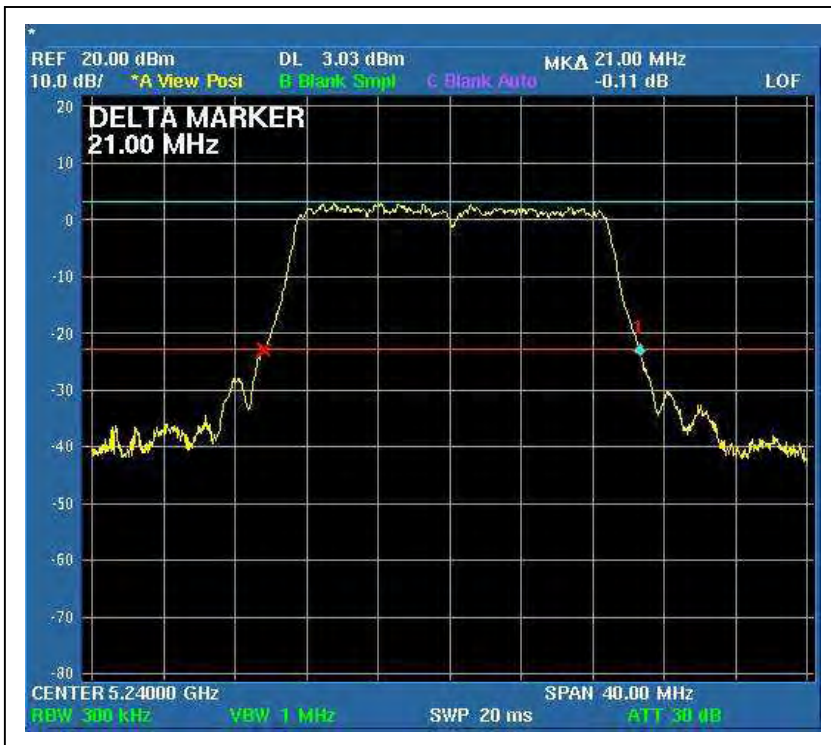
CH2





A D T

### CH4



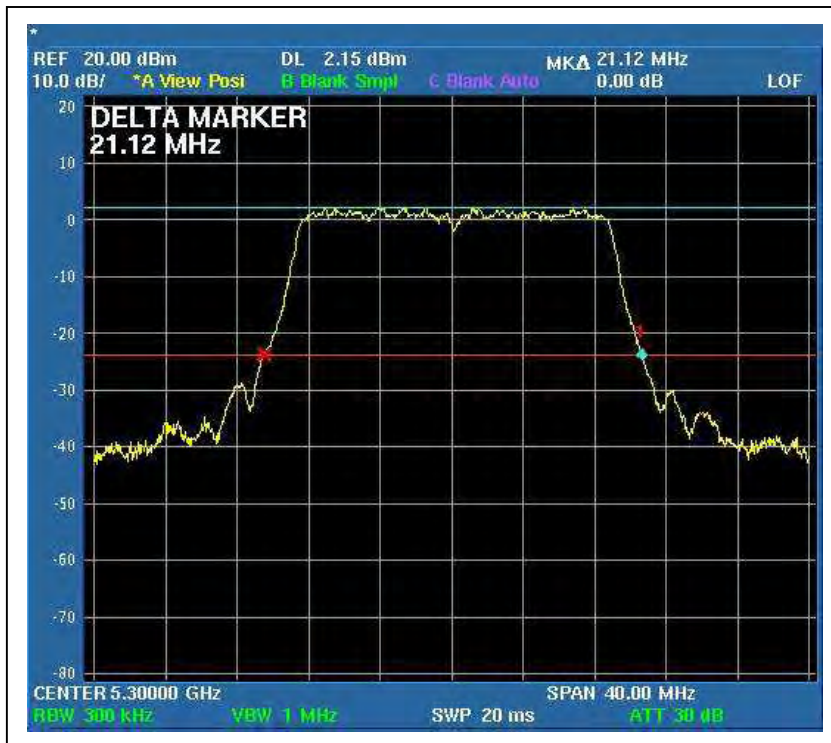
### CH5



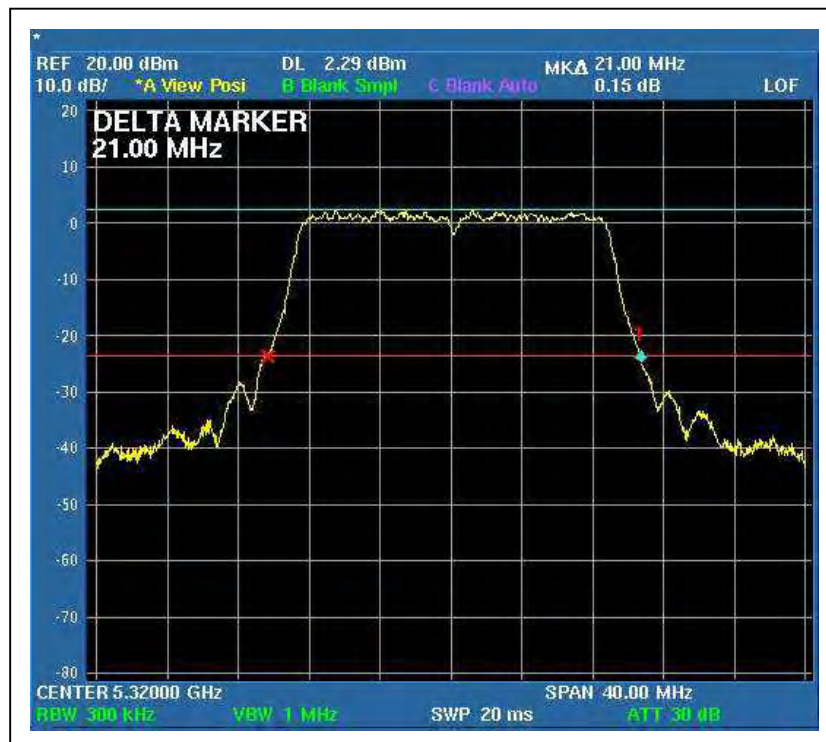


A D T

CH7

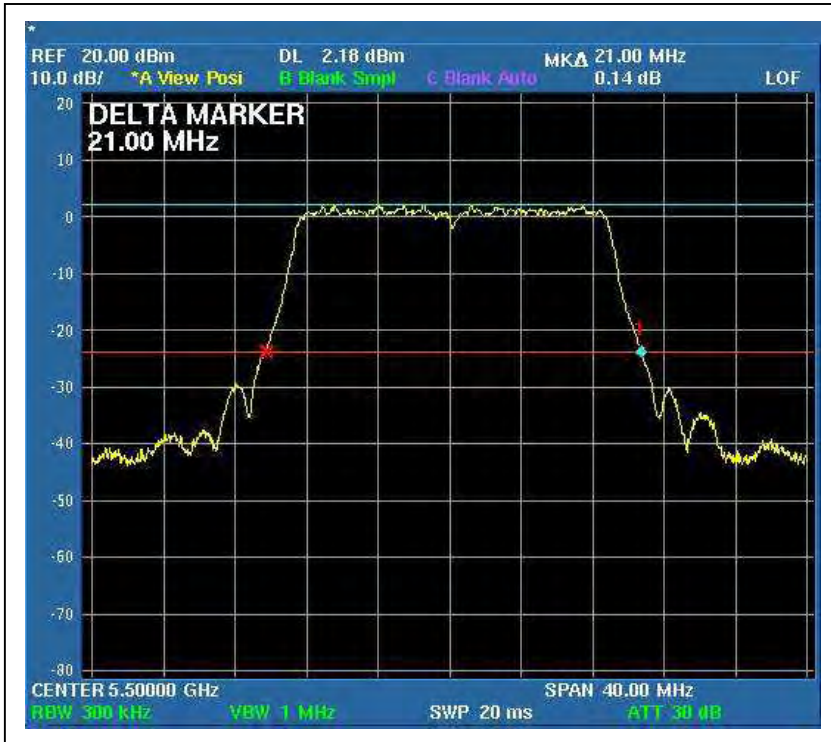


CH8

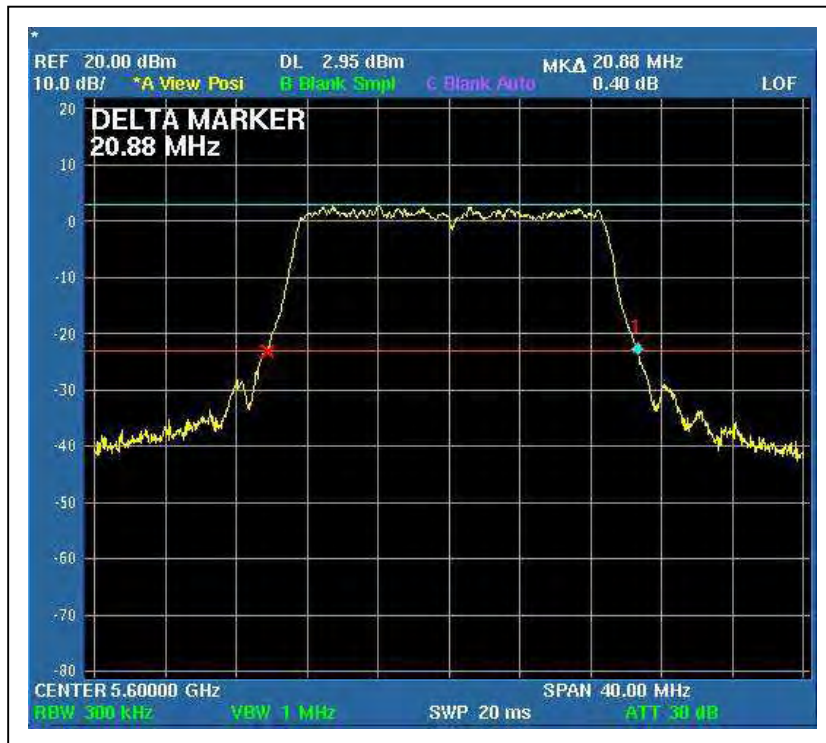




CH9



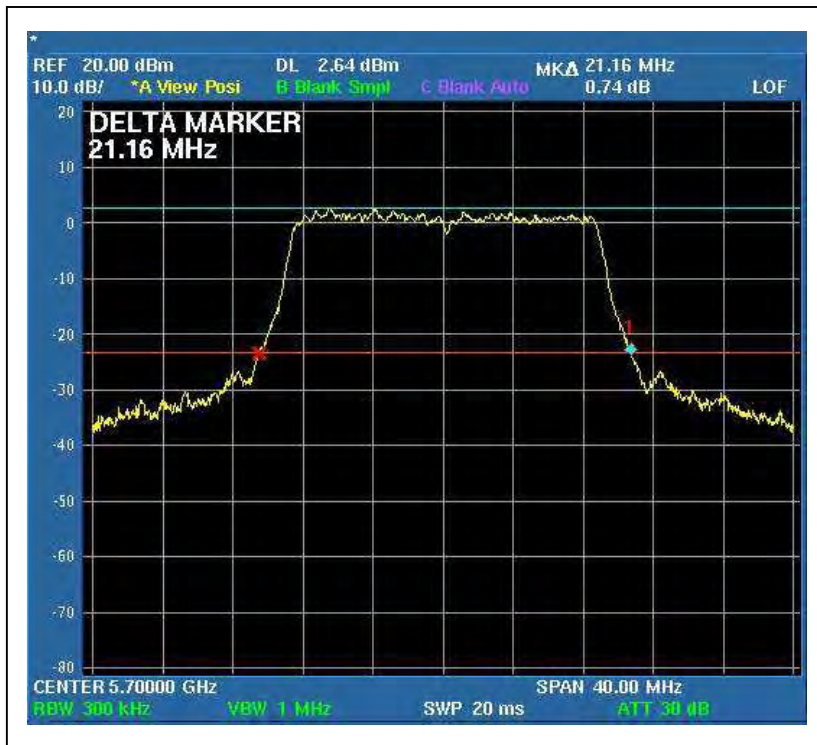
CH14



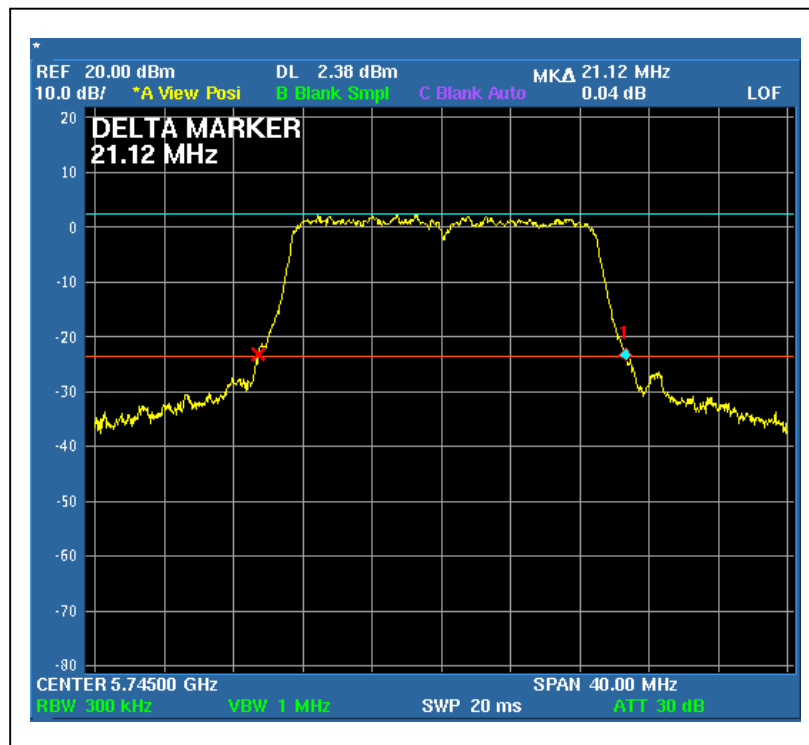


A D T

### CH19



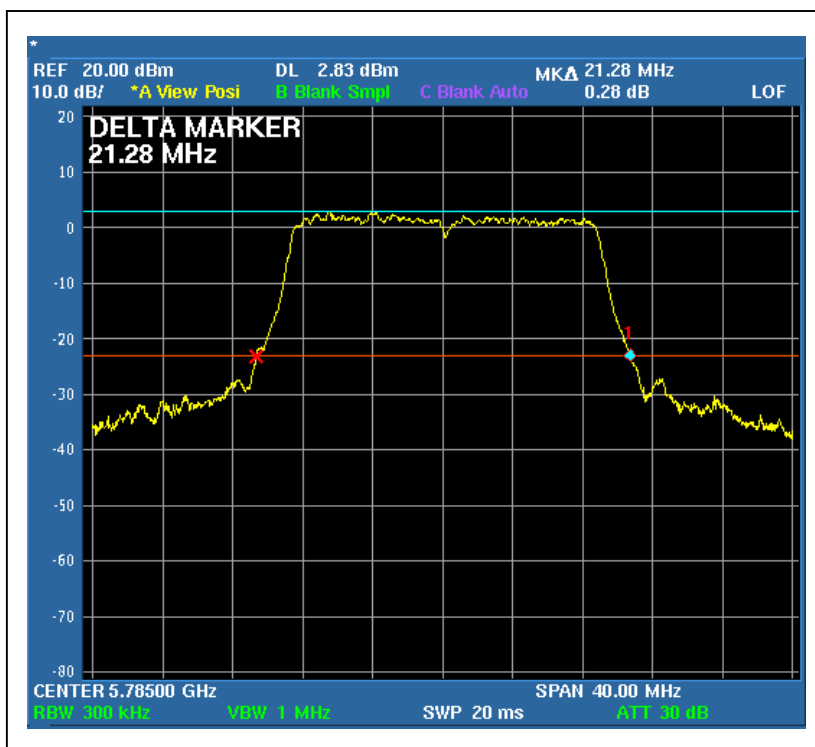
### CH20



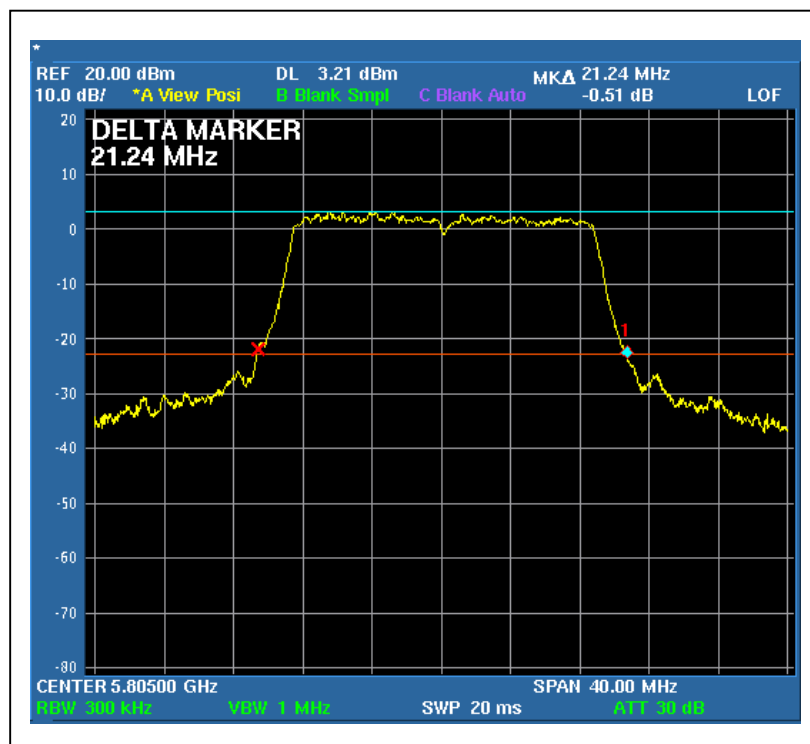


A D T

### CH22



### CH23

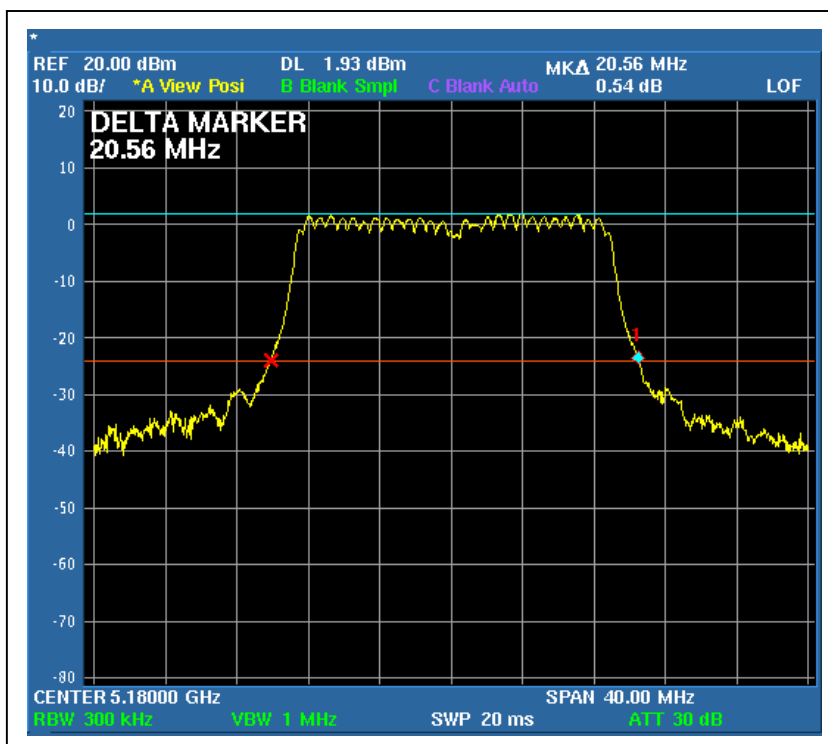




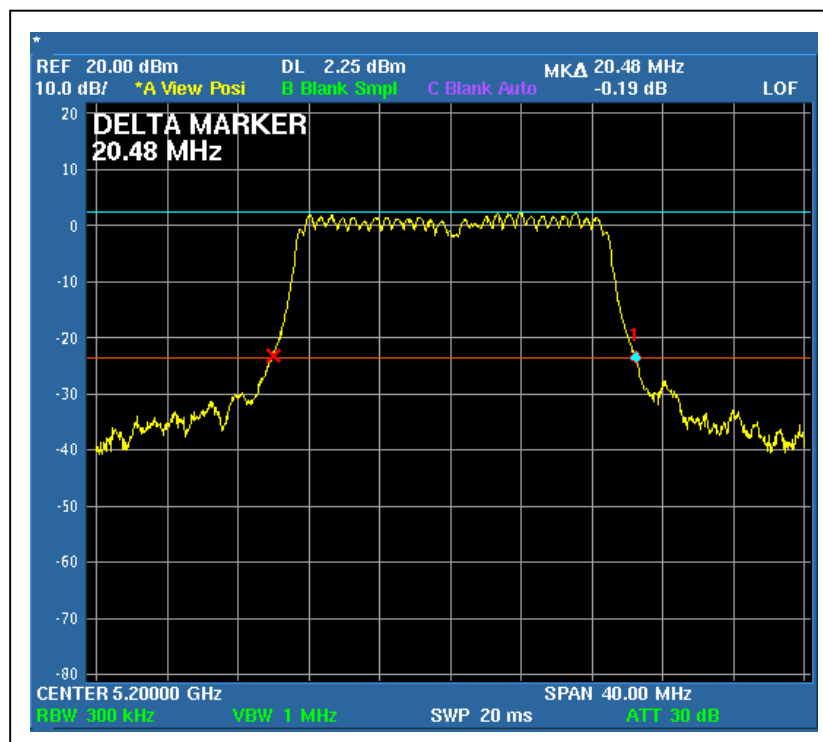


A D T

For Chain (1) :CH1



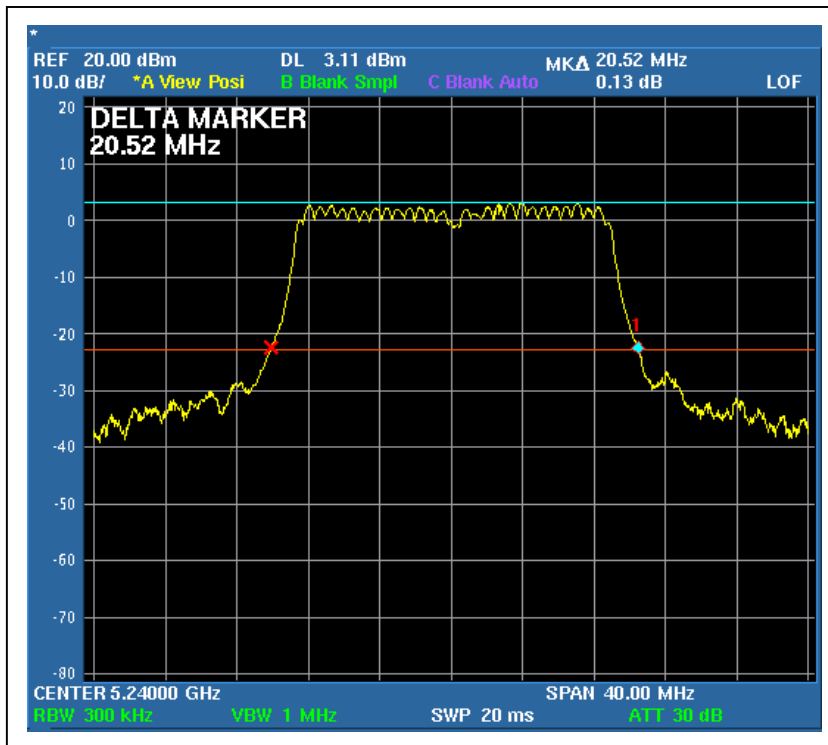
CH2



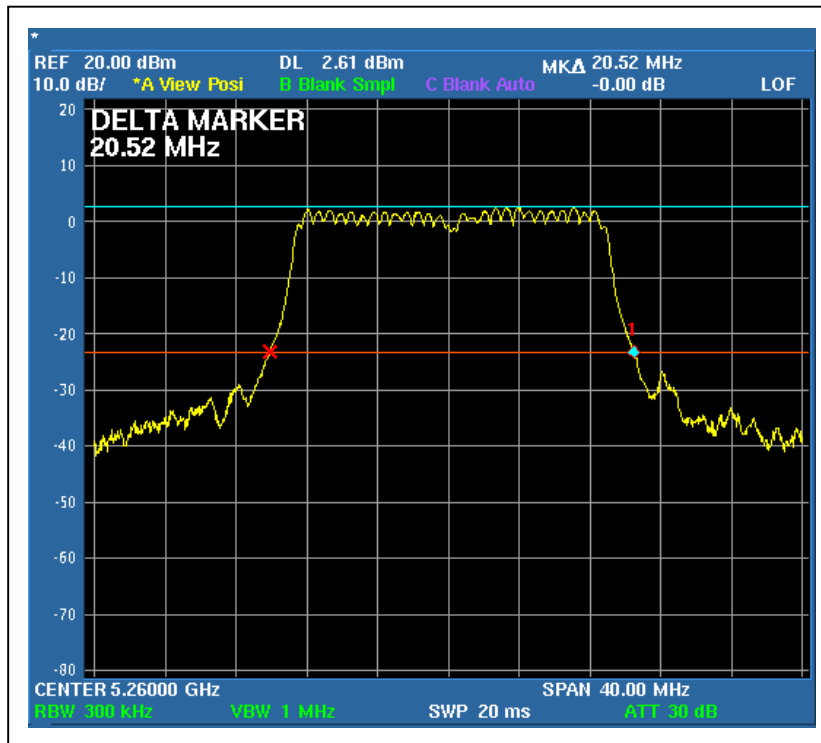


A D T

CH4



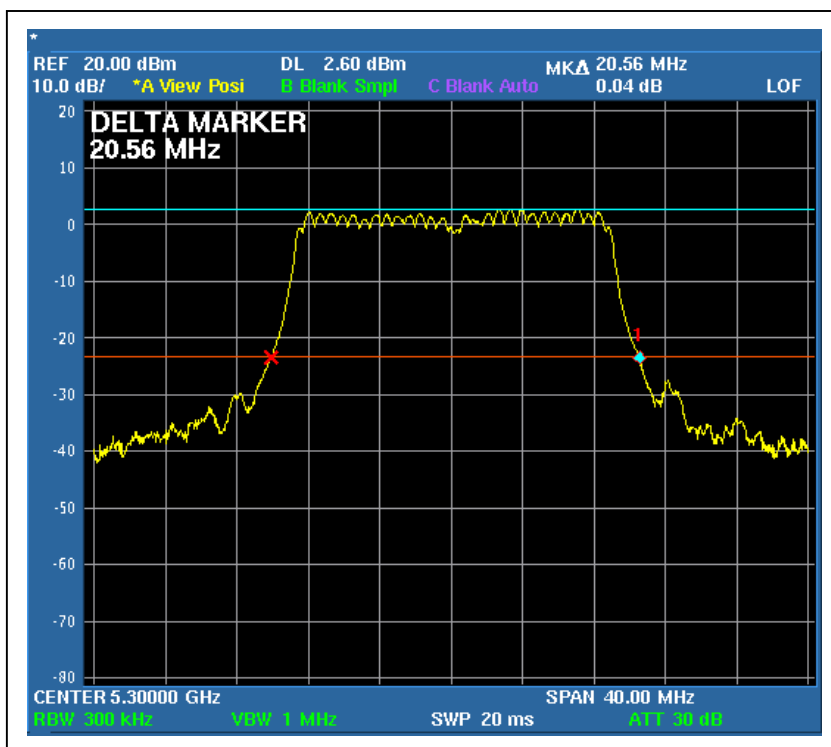
CH5



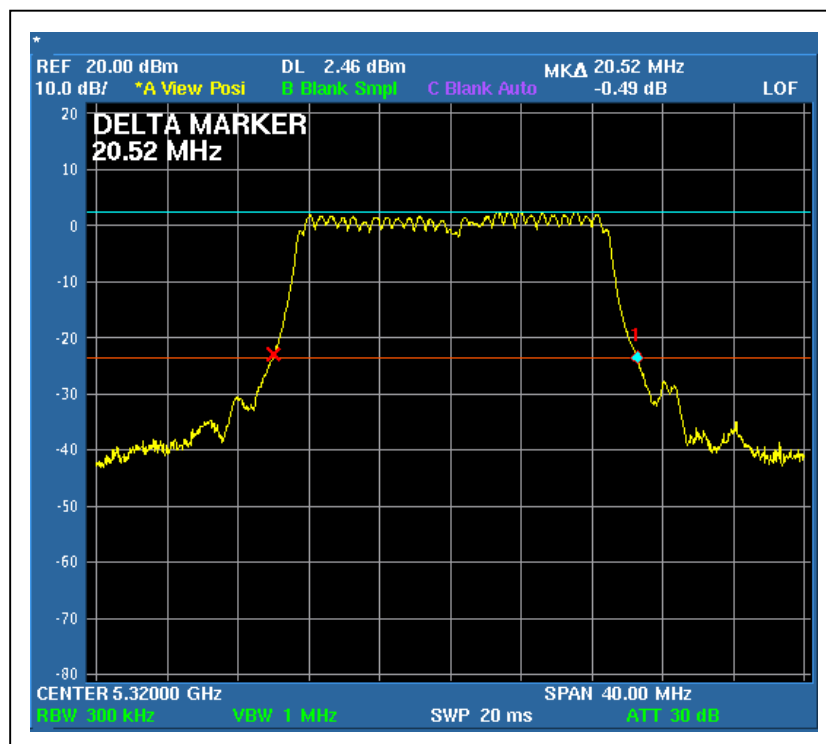


A D T

CH7



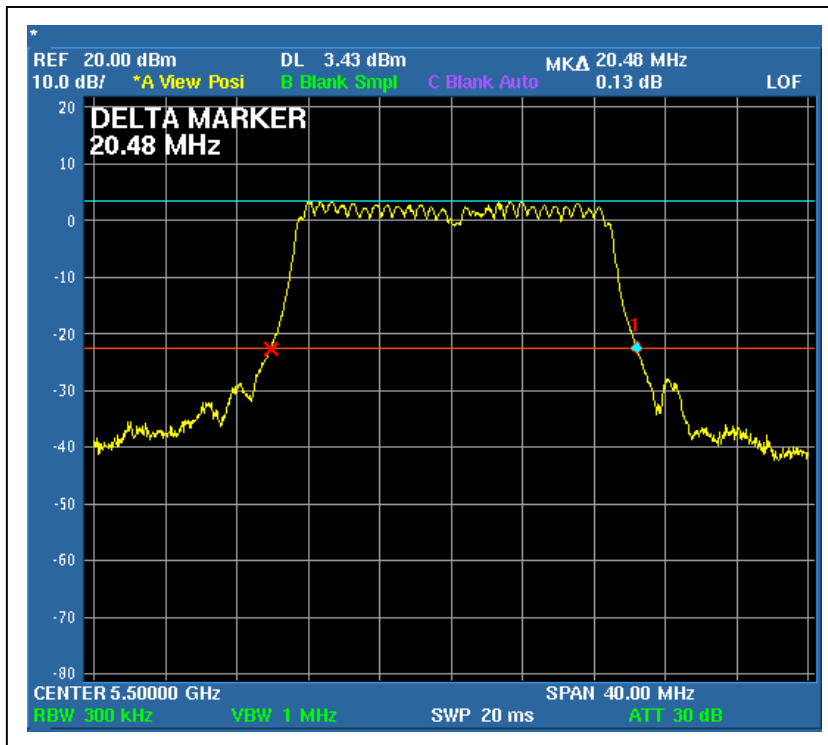
CH8



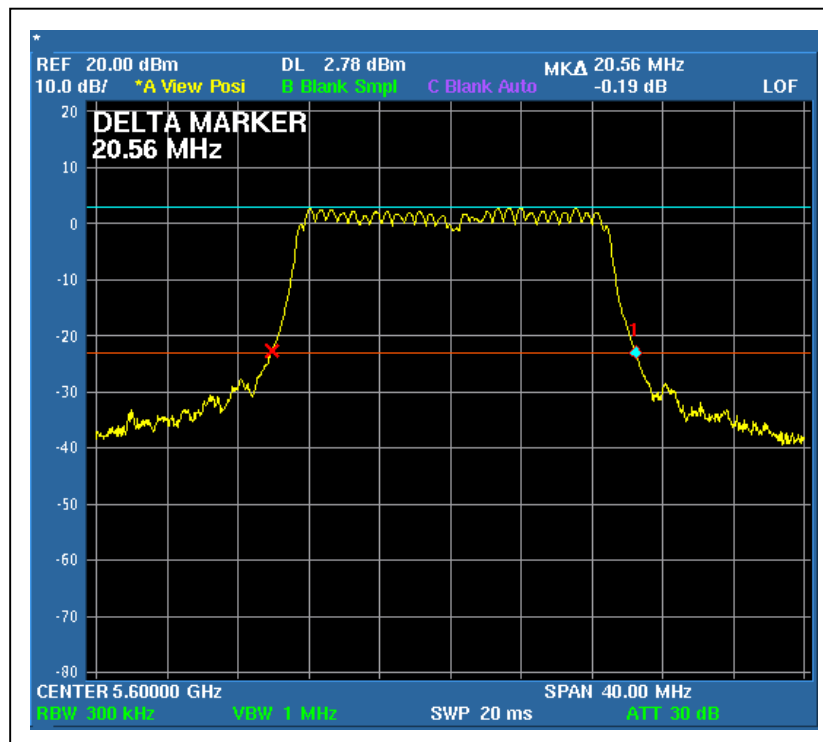


A D T

### CH9



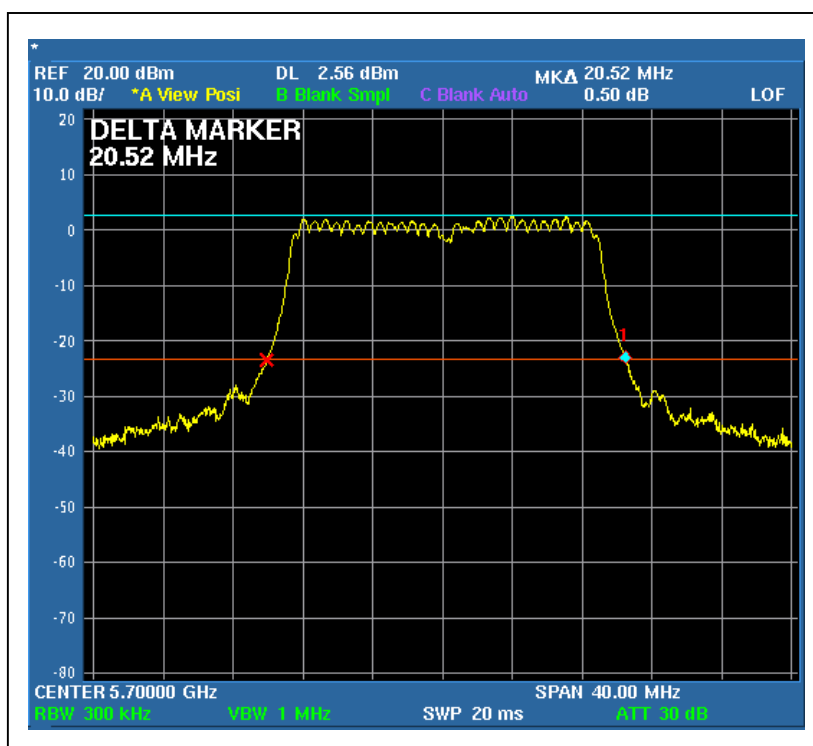
### CH14



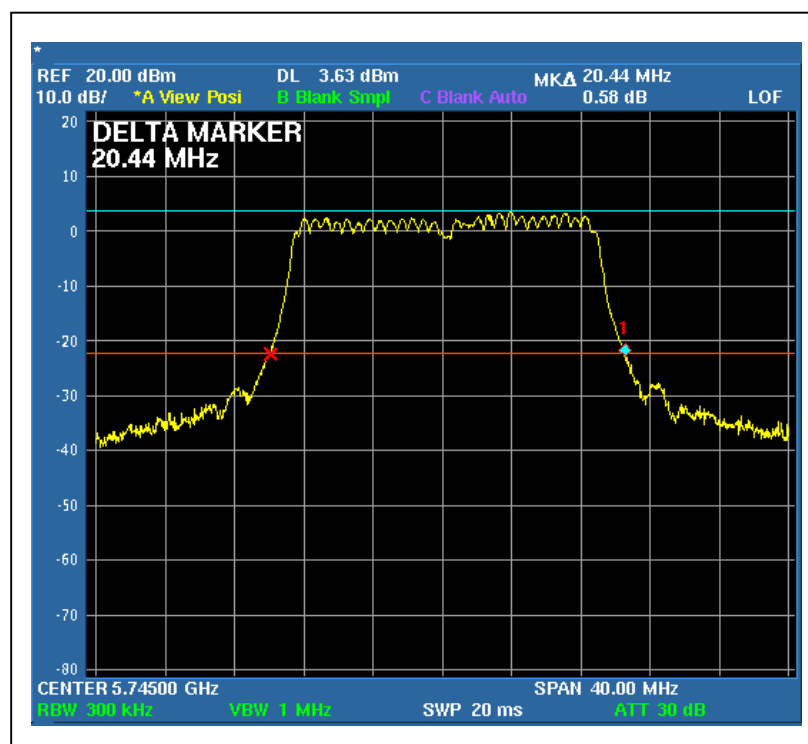


A D T

## CH19



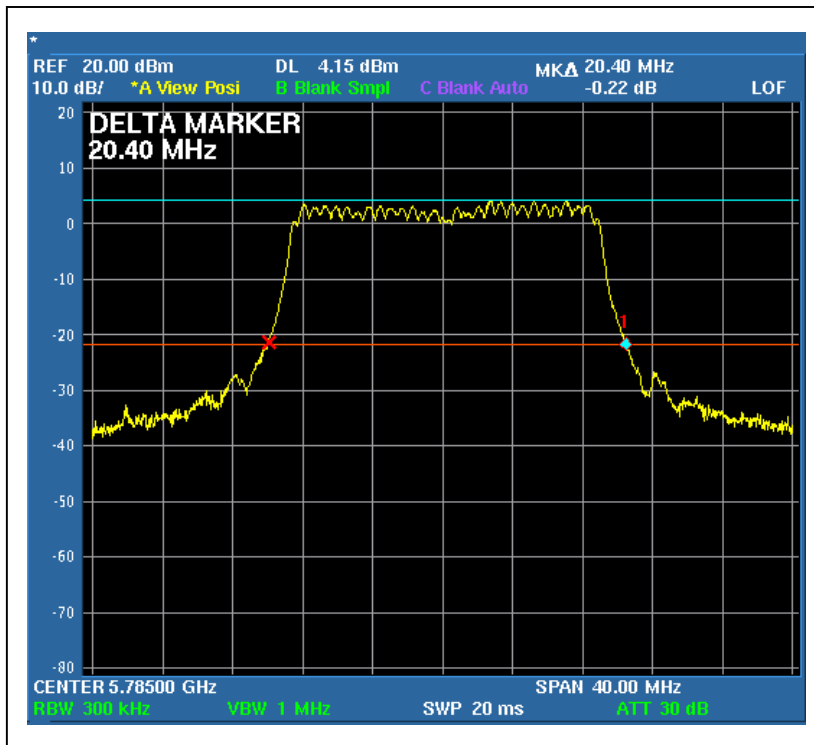
## CH20



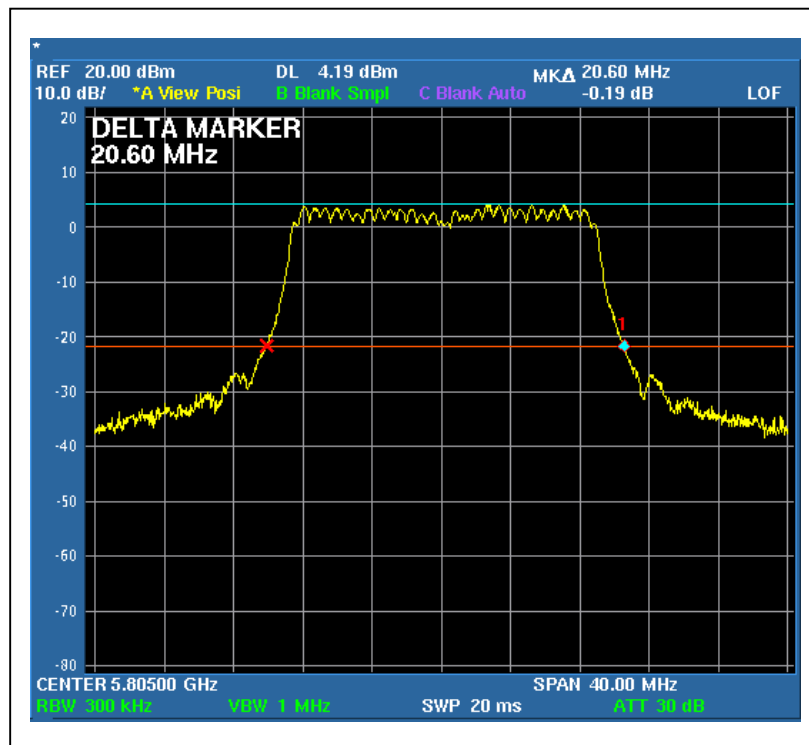


A D T

## CH22



## CH23





A D T

**DRAFT 802.11n (40MHz) OFDM MODULATION:**

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	27Mbps
<b>INPUT POWER</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 60%RH, 971hPa
<b>TESTED BY</b>	Rex Huang		

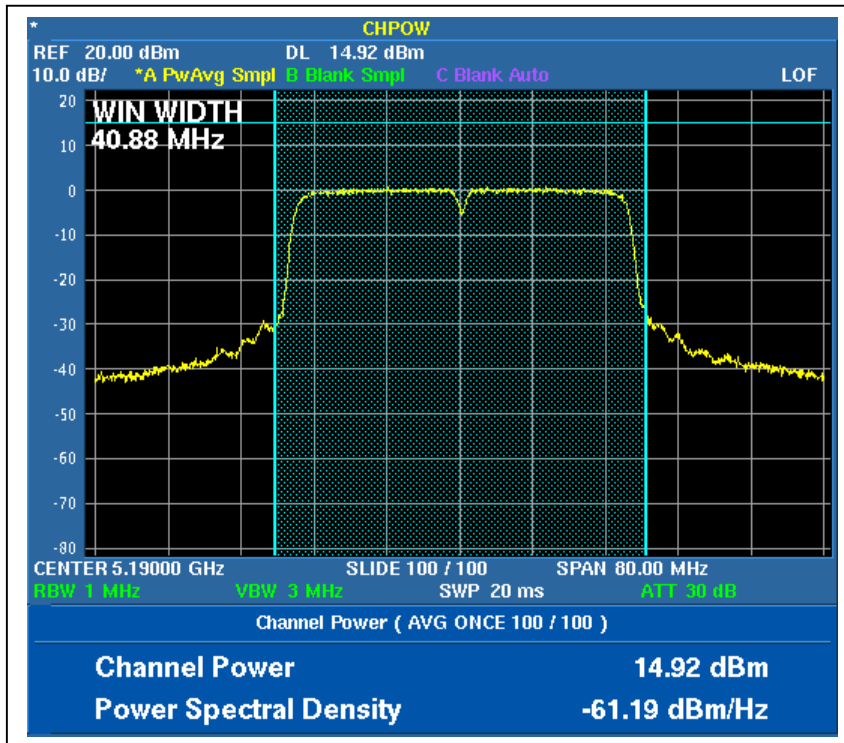
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)		PEAK POWER OUTPUT (mW)		TOTAL PEAK POWER (dBm)	TOTAL PEAK POWER (mW)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)		PASS/ FAIL
		Chain 0	Chain 1	Chain 0	Chain 1				Chain 0	Chain 1	
1	5190	14.92	10.52	31.046	11.272	16.27	42.318	17.00	40.88	40.4	PASS
2	5230	11.94	11.26	15.631	13.366	14.62	28.997	17.00	40.72	40.56	PASS
3	5270	11.35	12.12	13.646	16.293	14.76	29.939	24.00	40.56	40.4	PASS
4	5310	12.10	11.42	16.218	13.868	14.78	30.086	24.00	40.96	40.56	PASS
5	5510	11.47	11.57	14.028	14.355	14.53	28.383	24.00	40.8	40.88	PASS
7	5590	11.20	11.28	13.183	13.428	14.25	26.611	24.00	40.88	40.4	PASS
9	5670	11.40	11.72	13.804	14.859	14.57	28.663	24.00	40.88	40.8	PASS
10	5755	10.46	10.75	11.117	11.885	13.62	23.002	30.00	40.56	39.92	PASS
11	5795	12.71	12.12	18.664	16.293	15.44	34.957	30.00	40.72	40.16	PASS

**NOTE:** The 26dBc Occupied Bandwidth plot, please refer to the following pages.

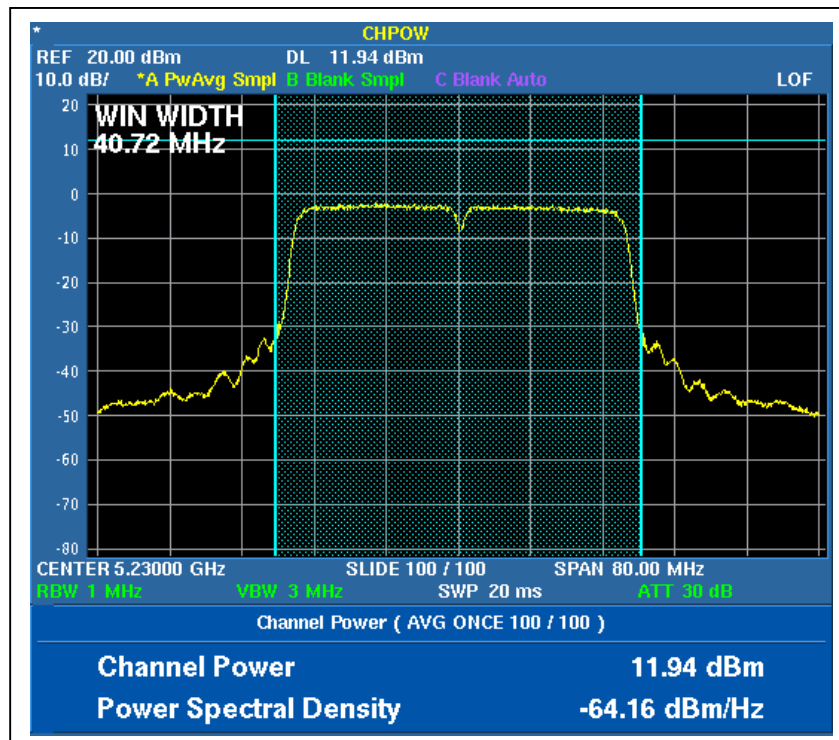


A D T

Peak Power Output:  
For Chain (0) :CH1



CH2

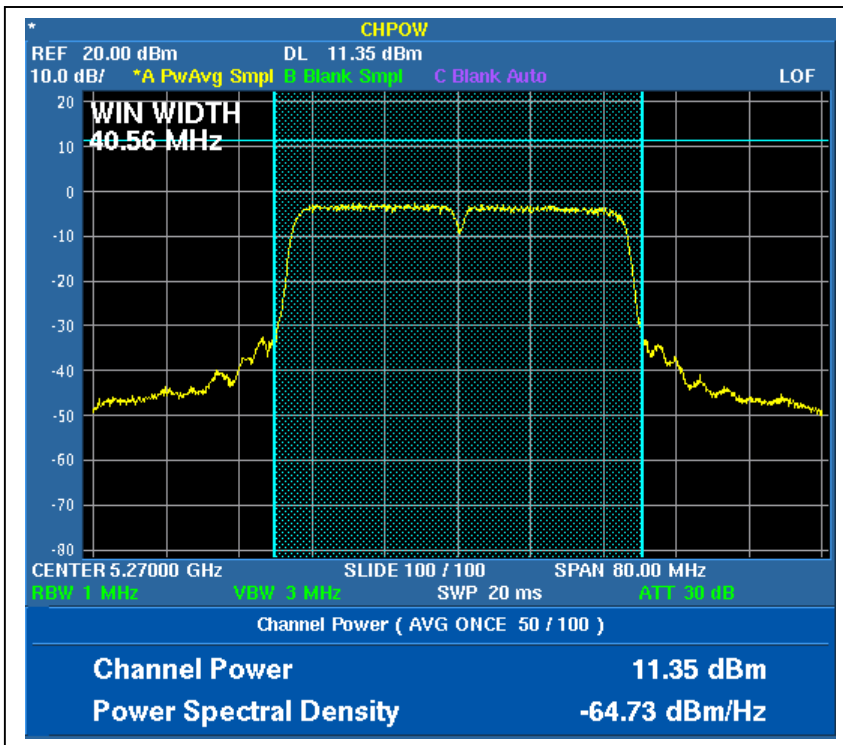




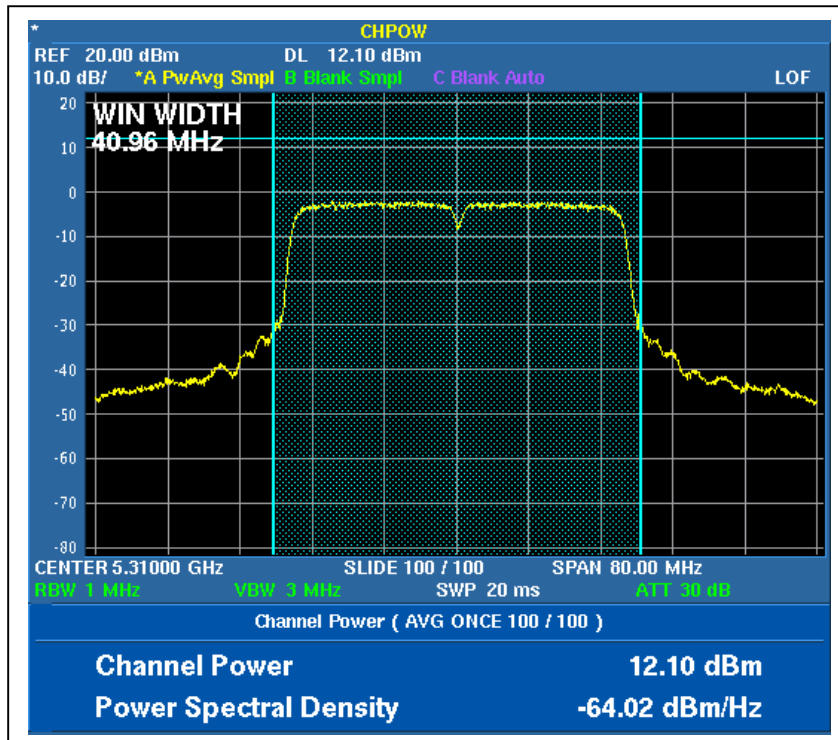


A D T

### CH3



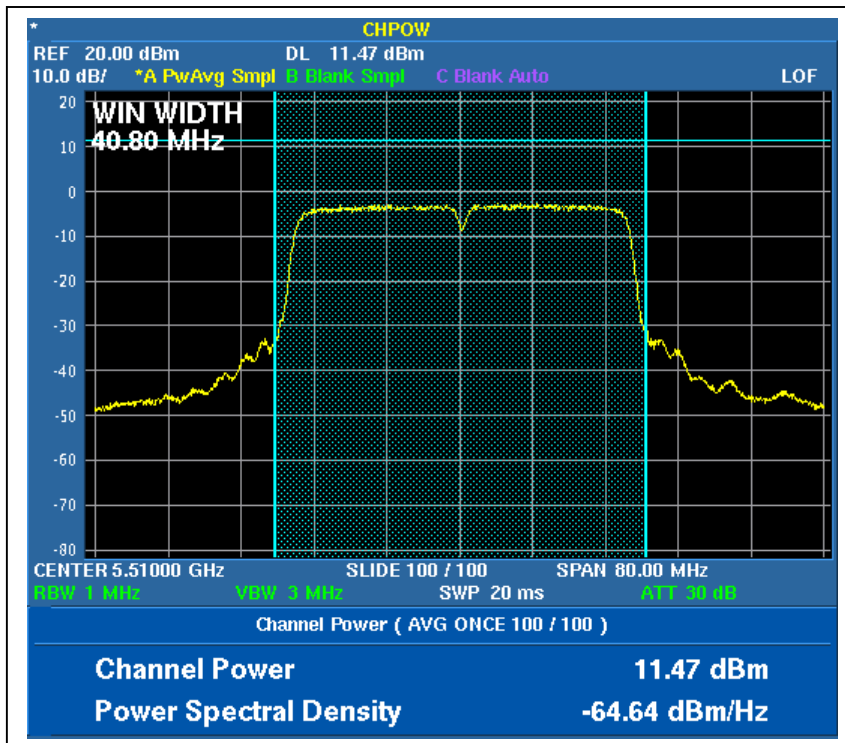
### CH4



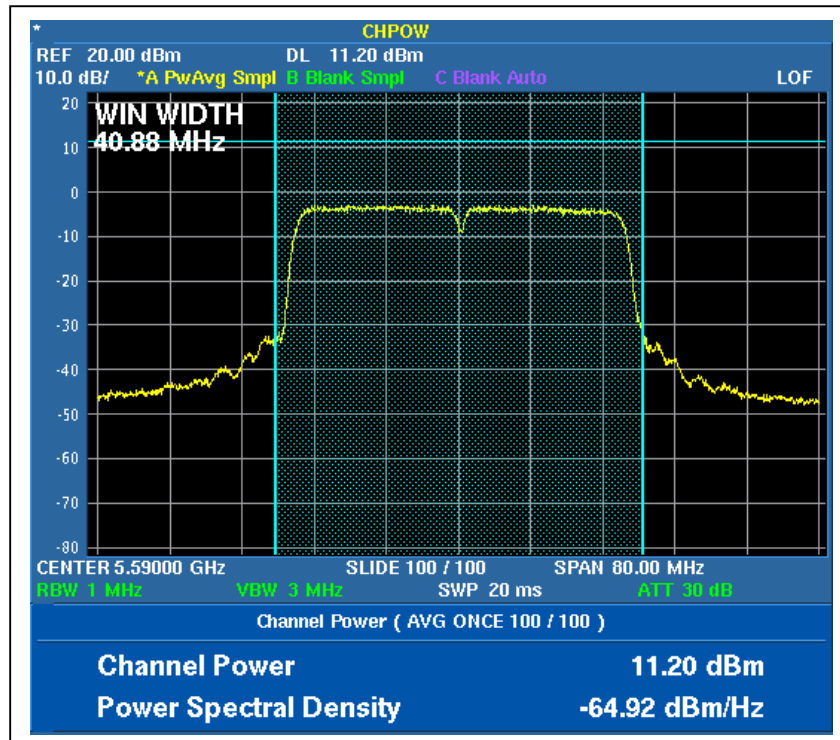


A D T

### CH5



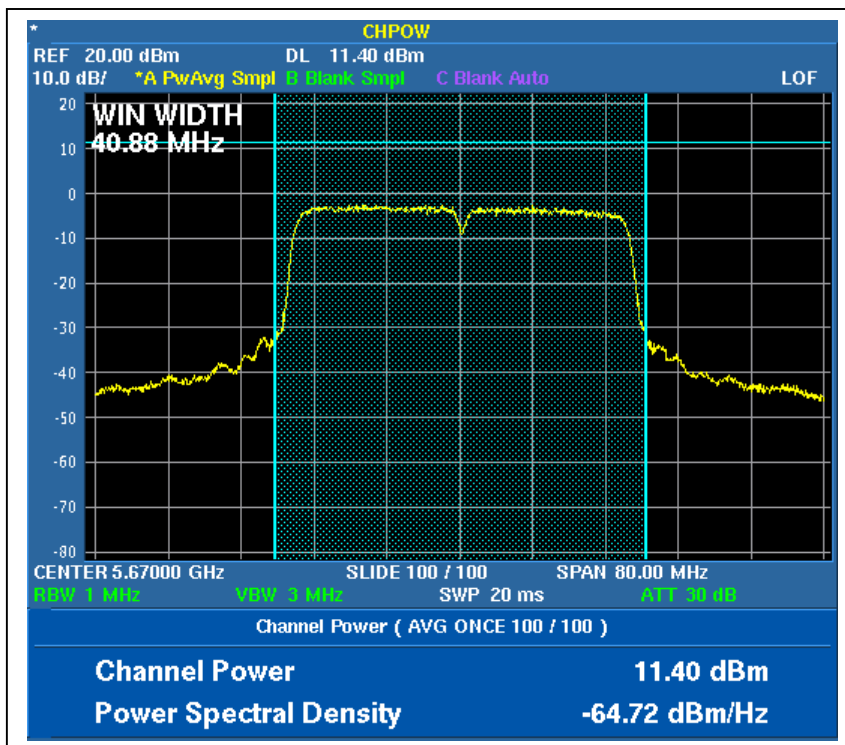
### CH7



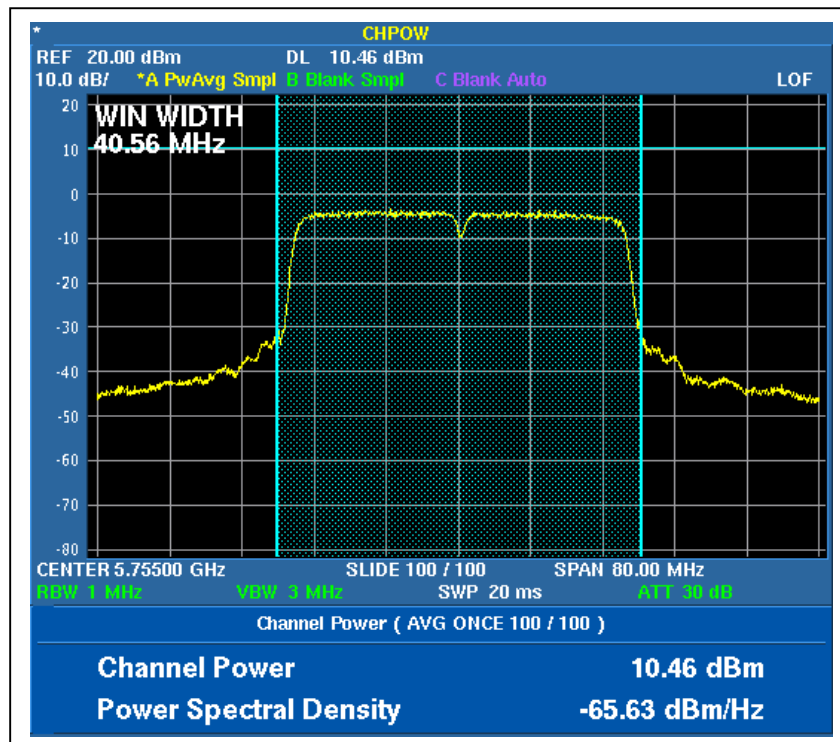


A D T

### CH9



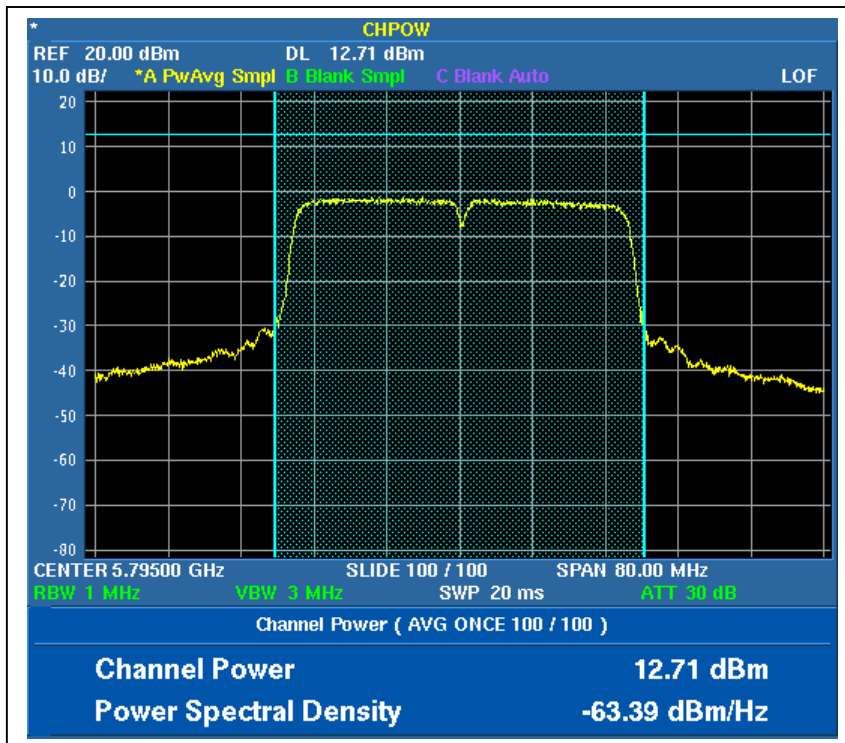
### CH10





A D T

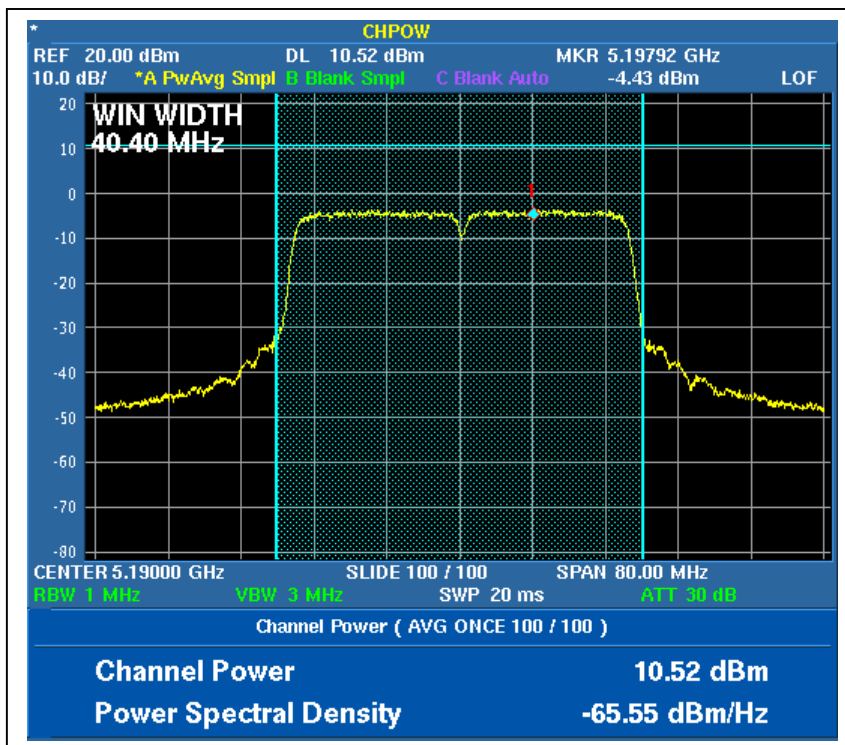
CH11



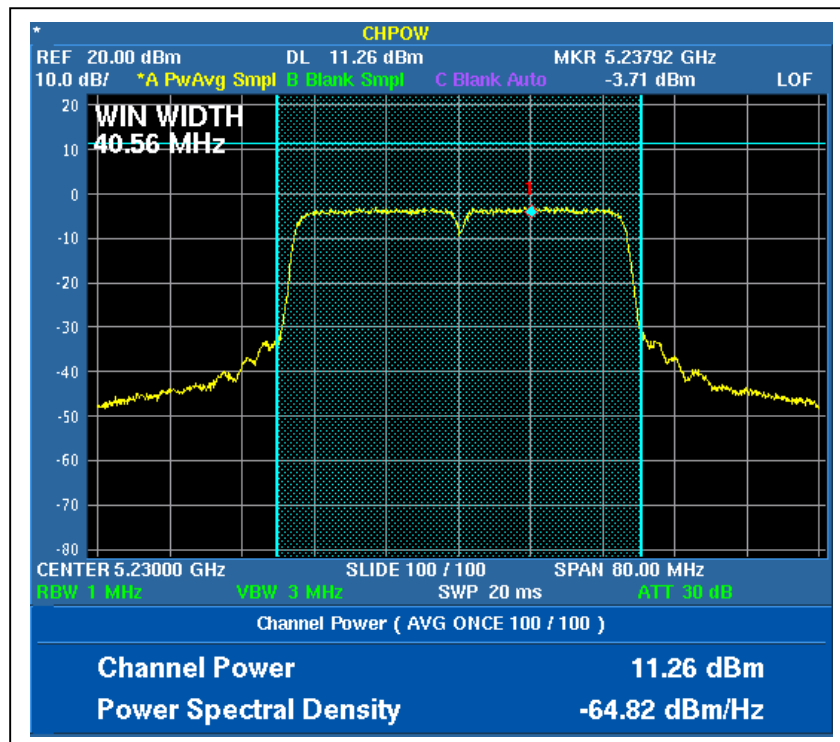


A D T

For Chain (1) :CH1



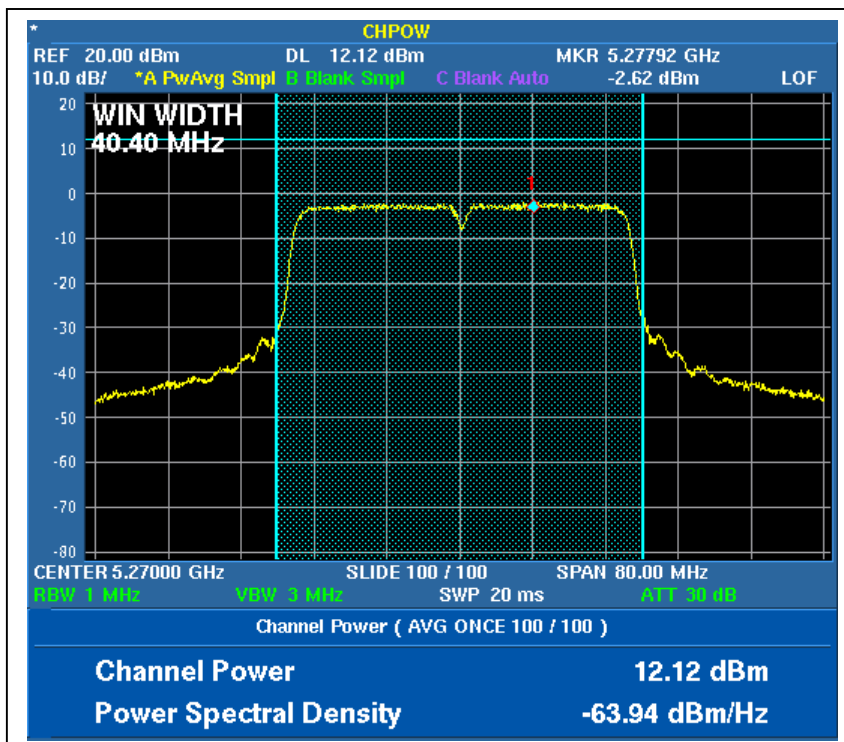
CH2



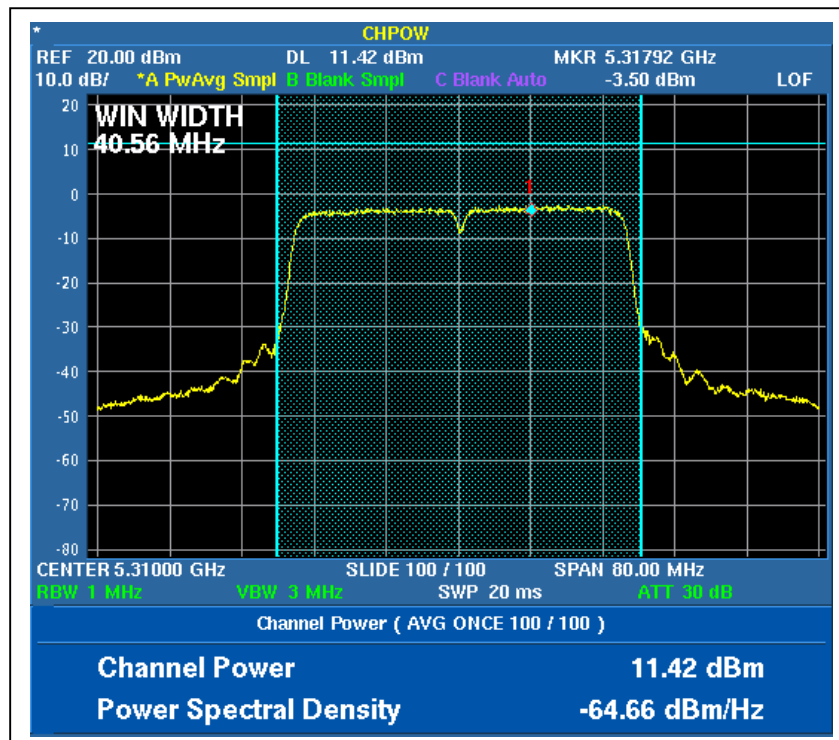


A D T

### CH3



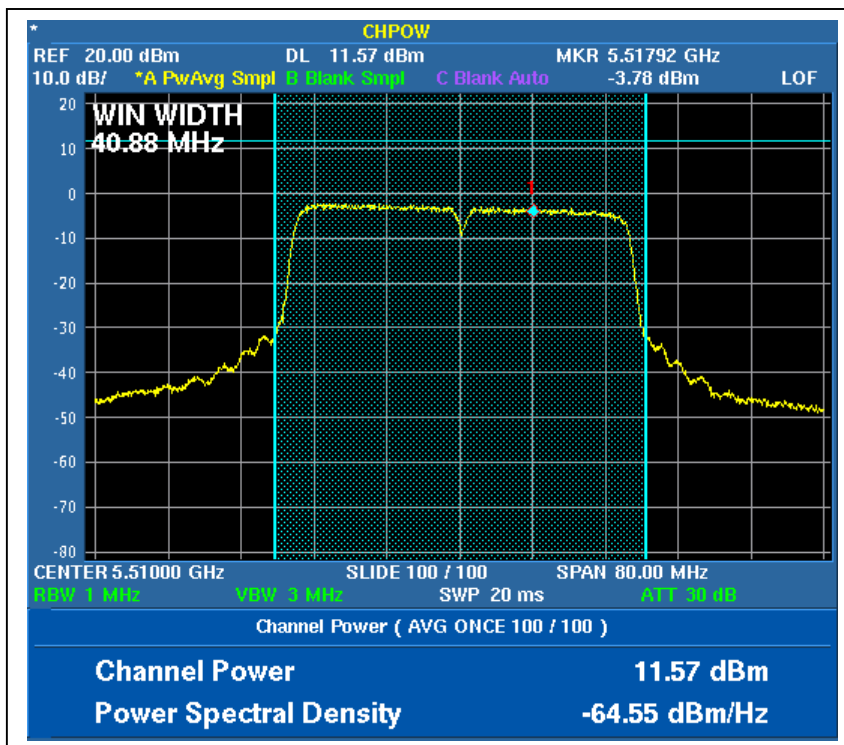
### CH4



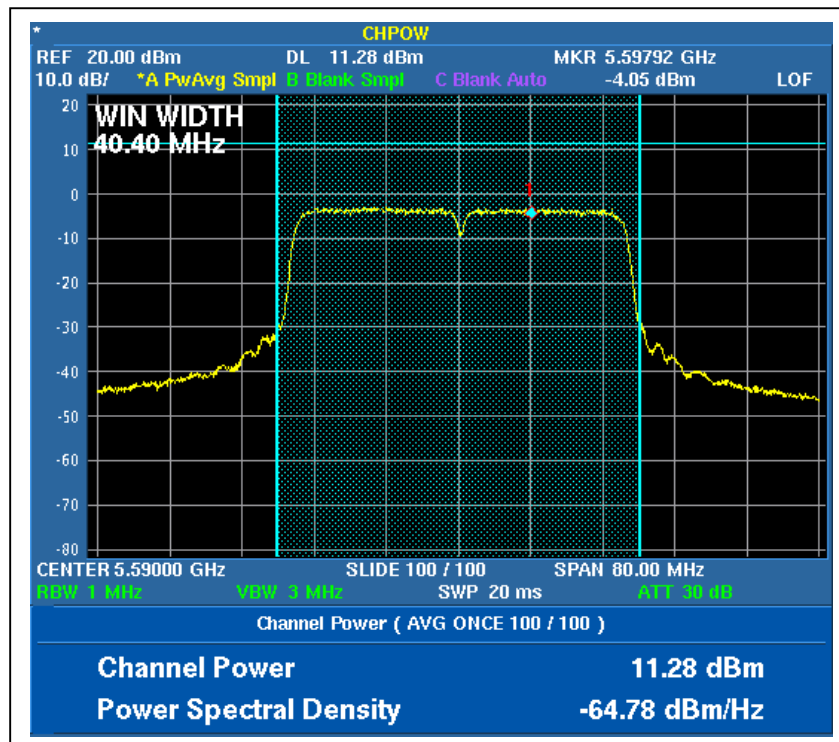


A D T

CH5



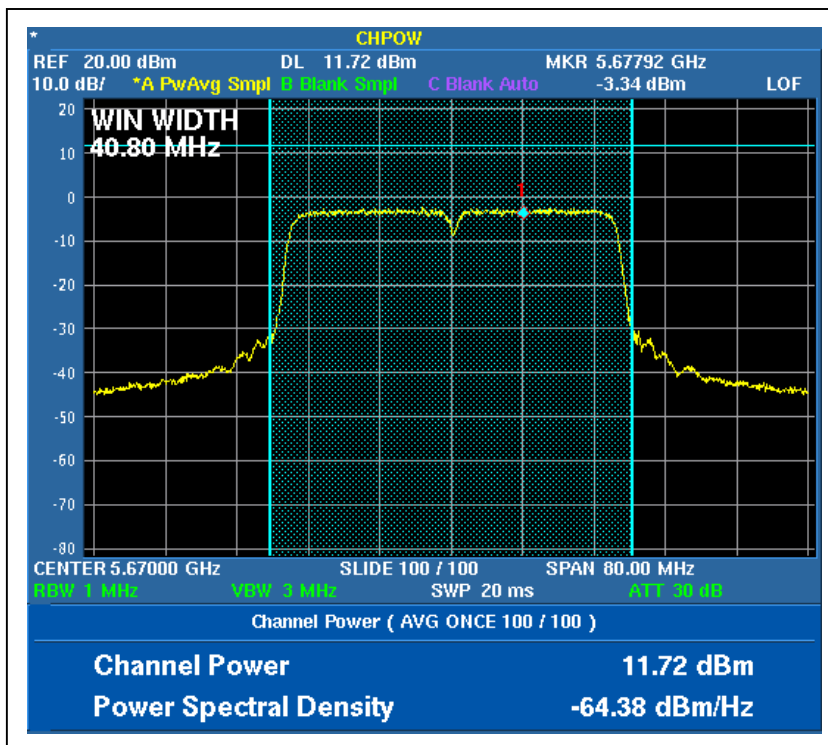
CH7



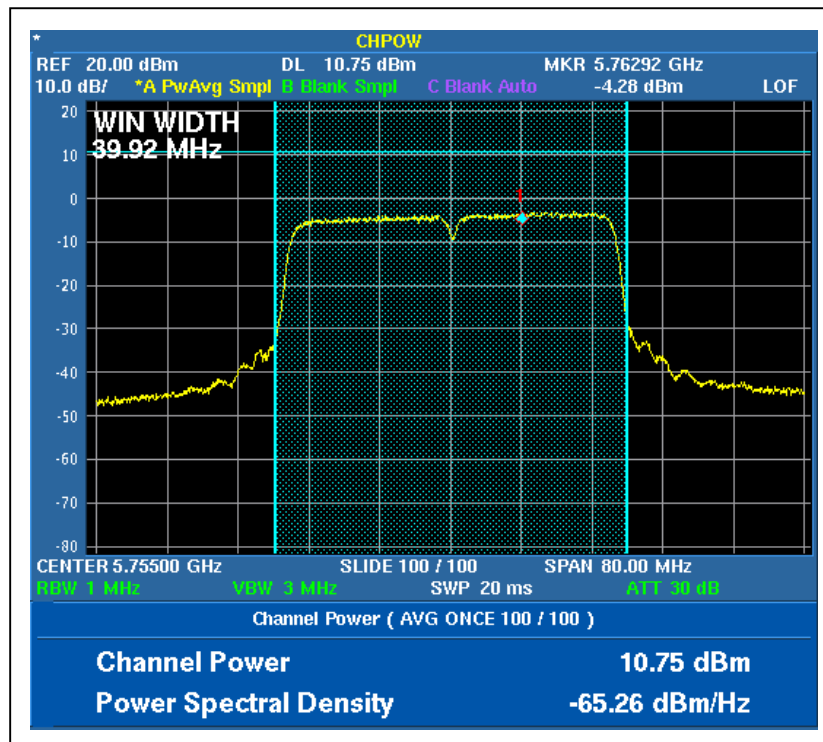


A D T

### CH9



### CH10

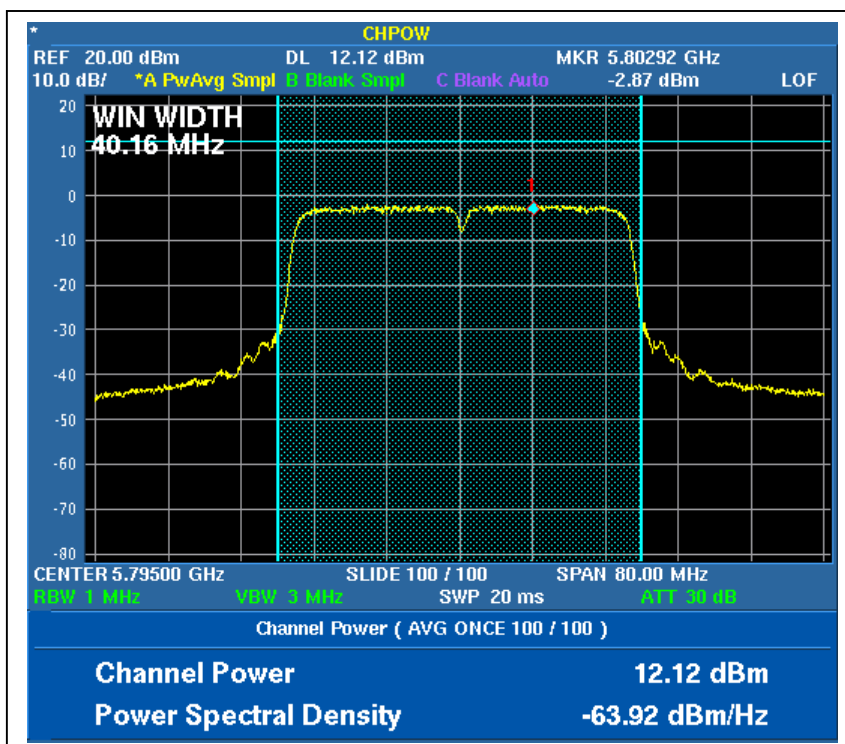






A D T

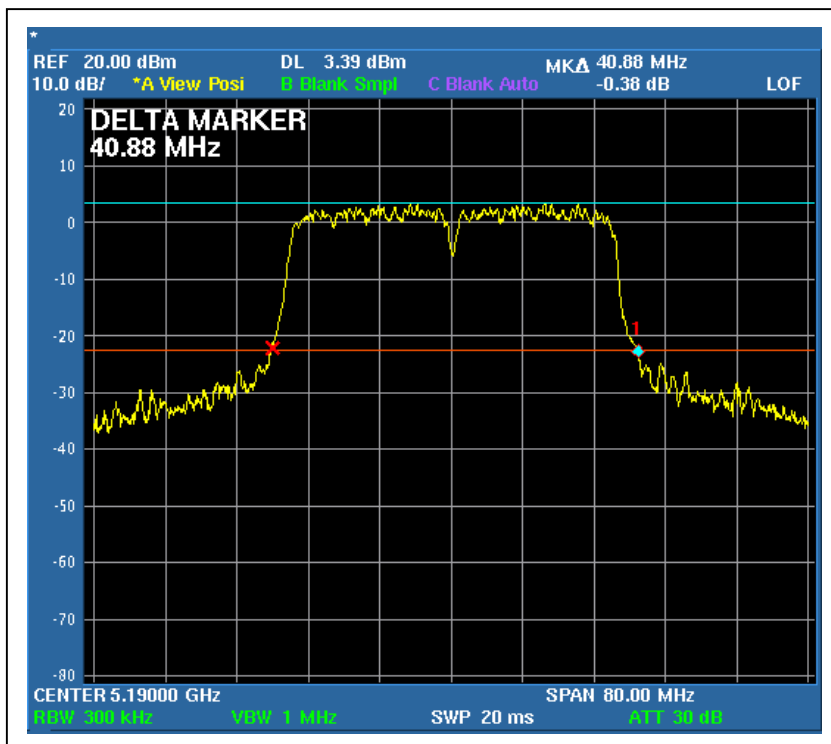
CH11



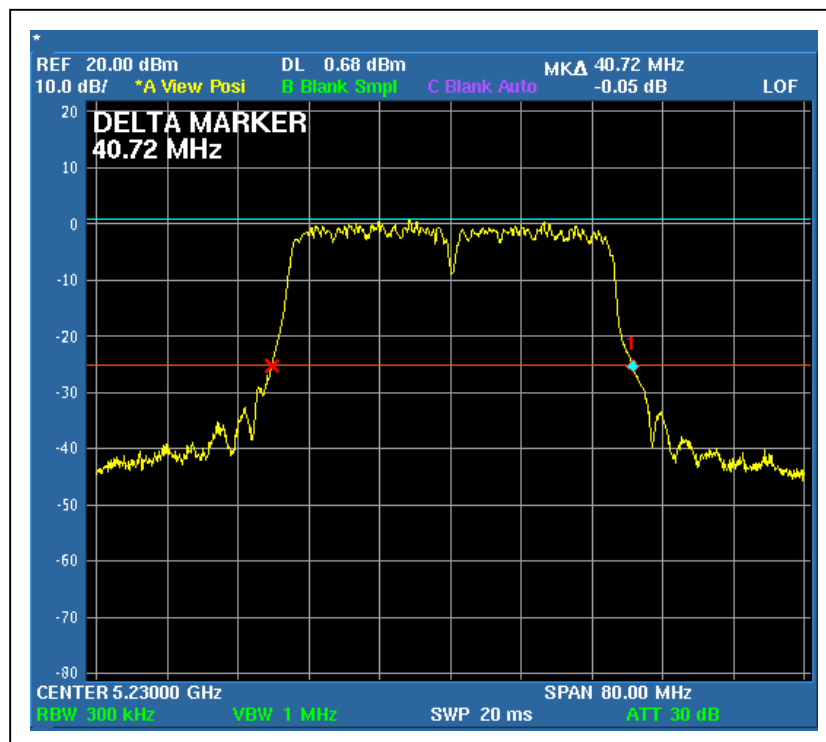


A D T

26dB Occupied Bandwidth:  
For Chain (0) :CH1



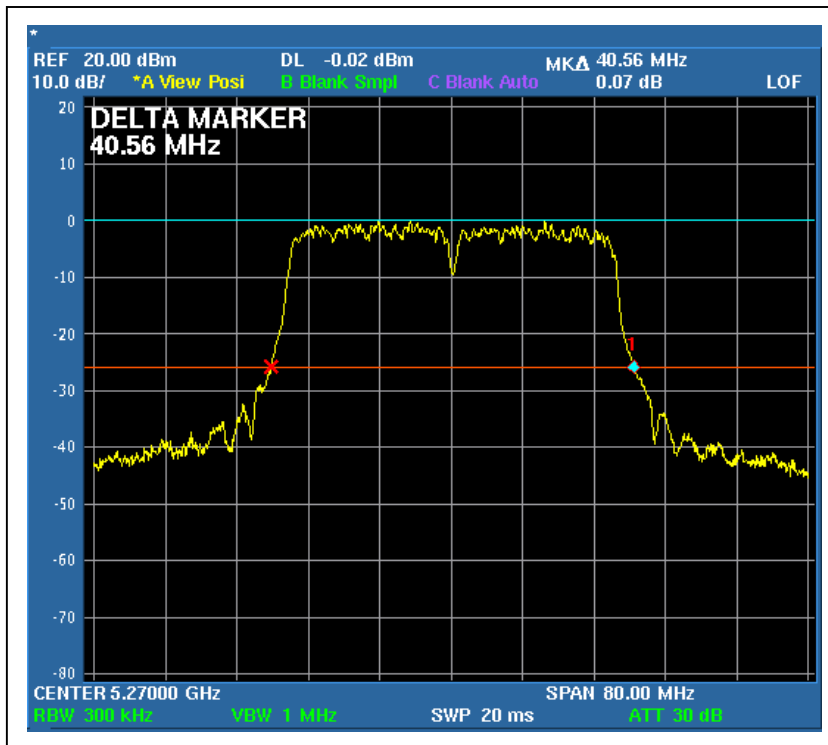
CH2



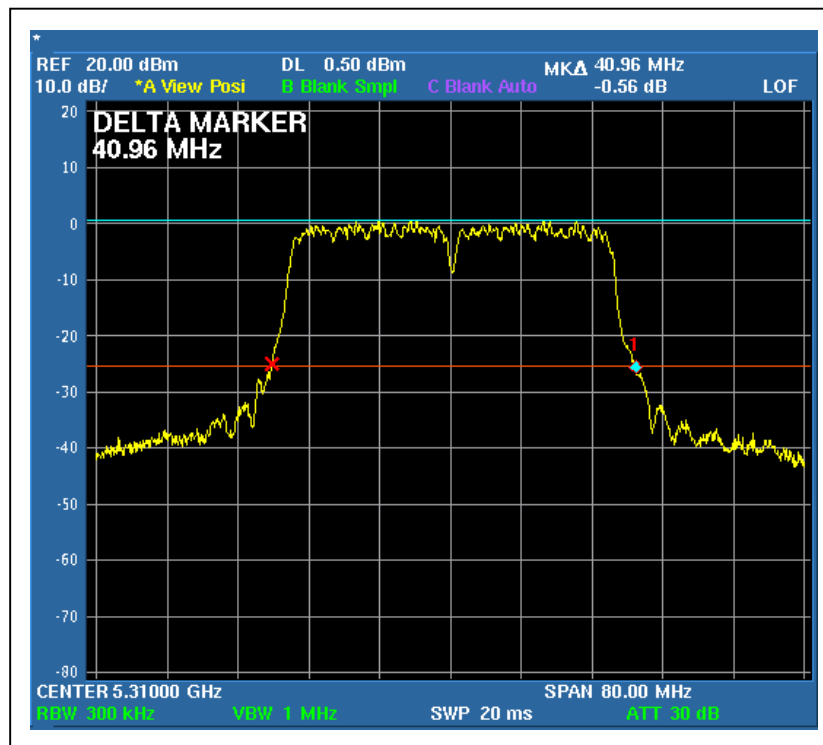


A D T

### CH3



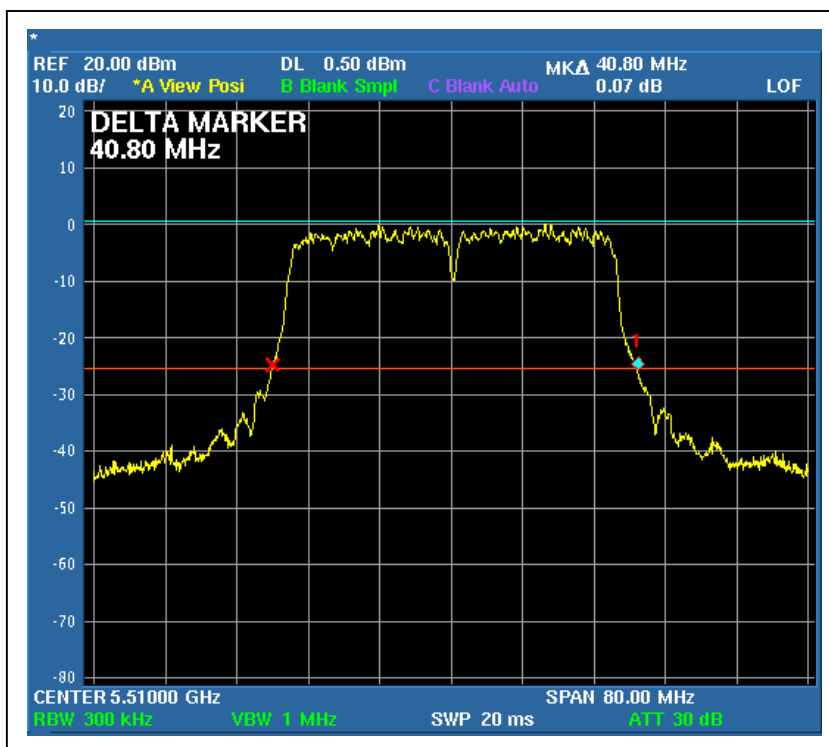
### CH4



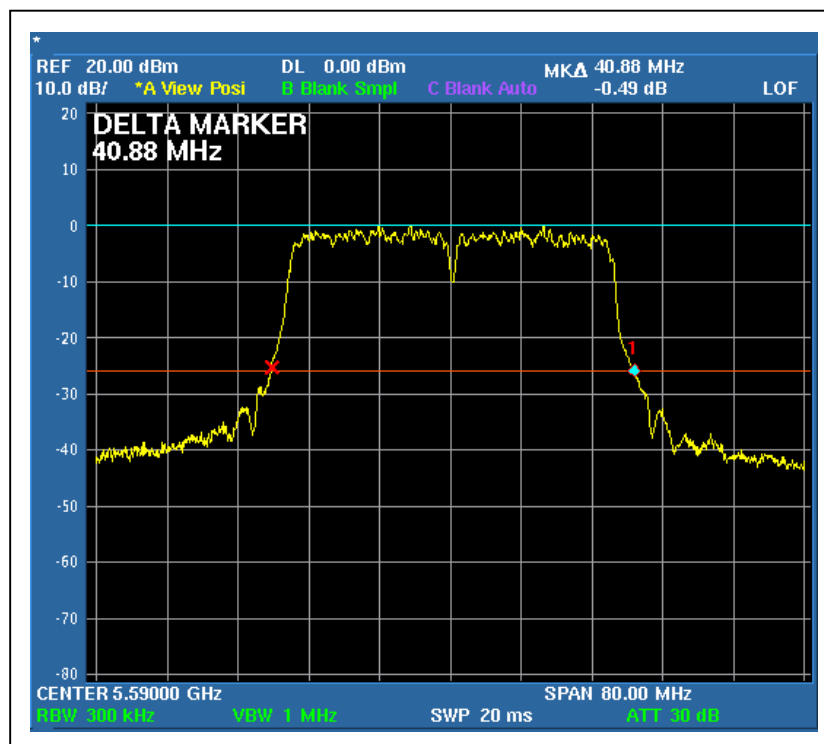


A D T

### CH5



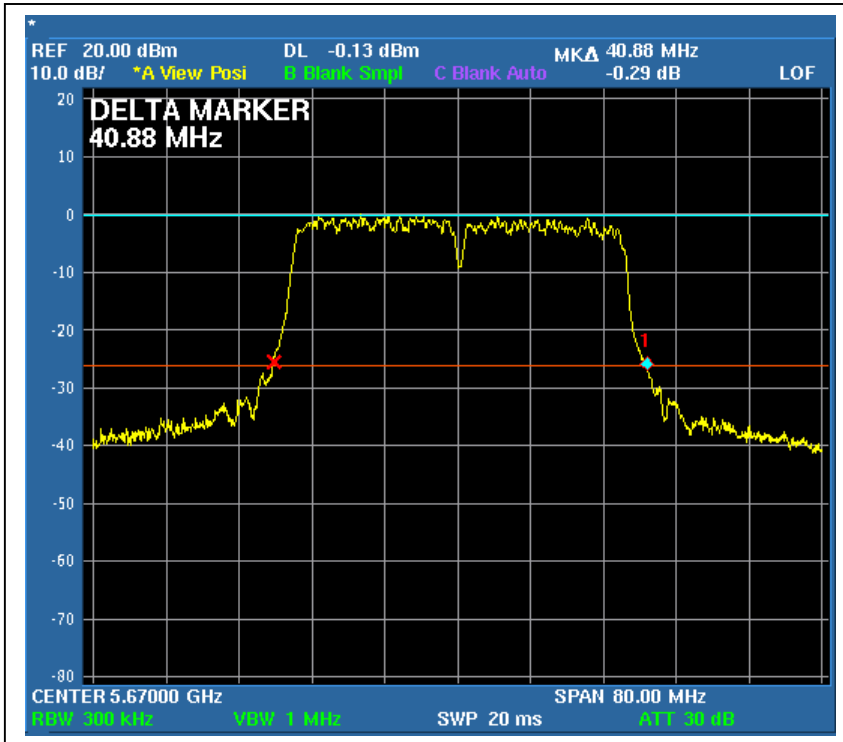
### CH7



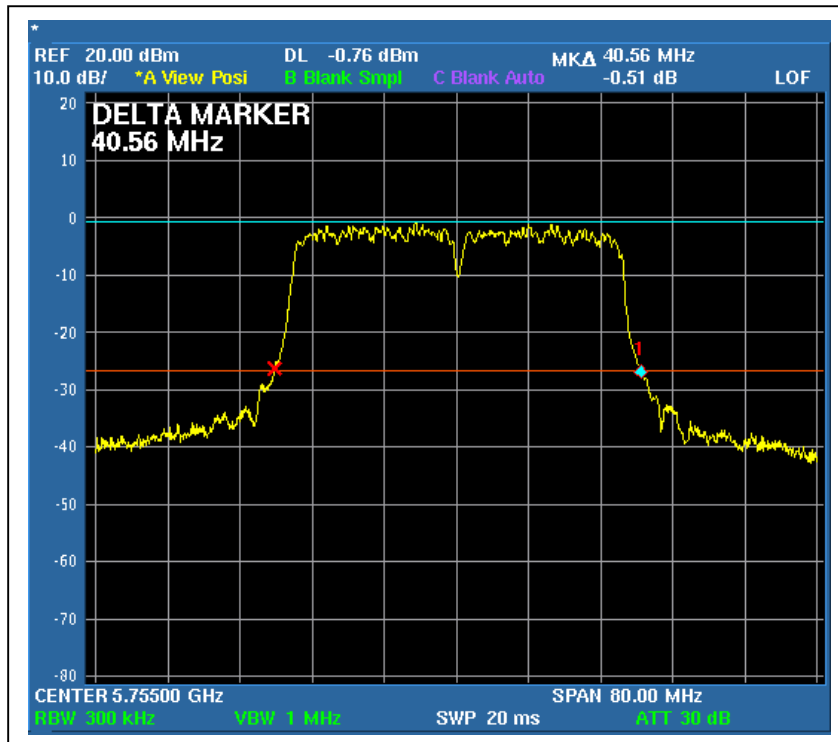


A D T

### CH9



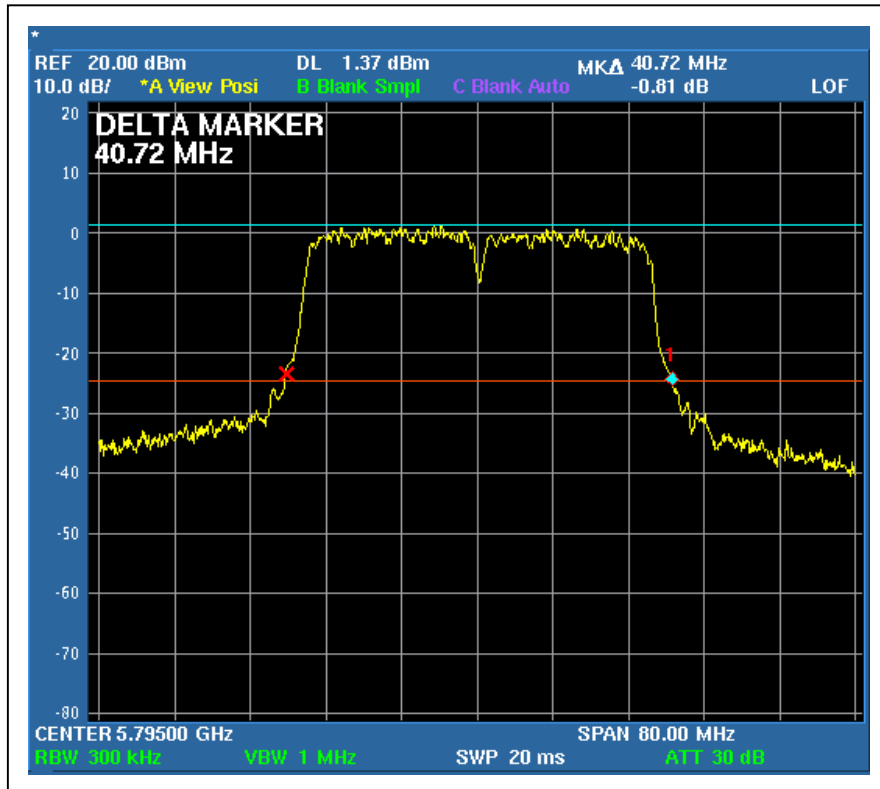
### CH10





A D T

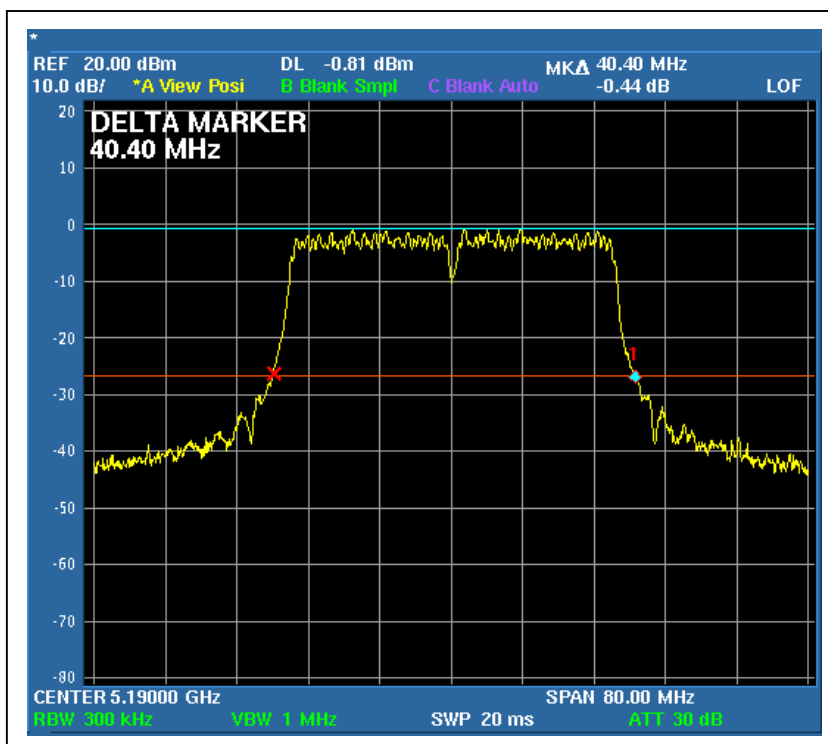
CH11



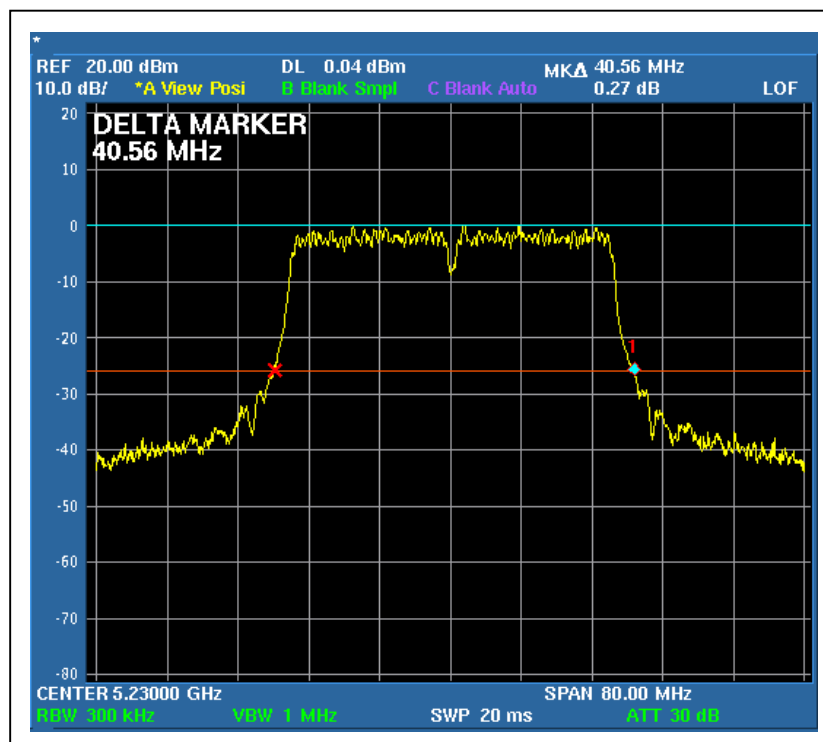


A D T

For Chain (1) :CH1



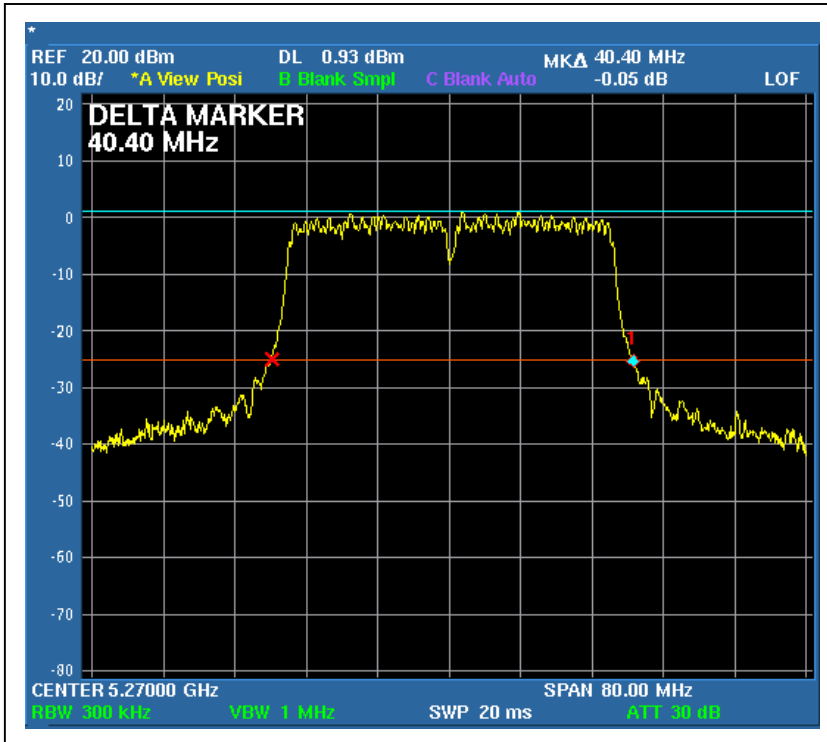
CH2



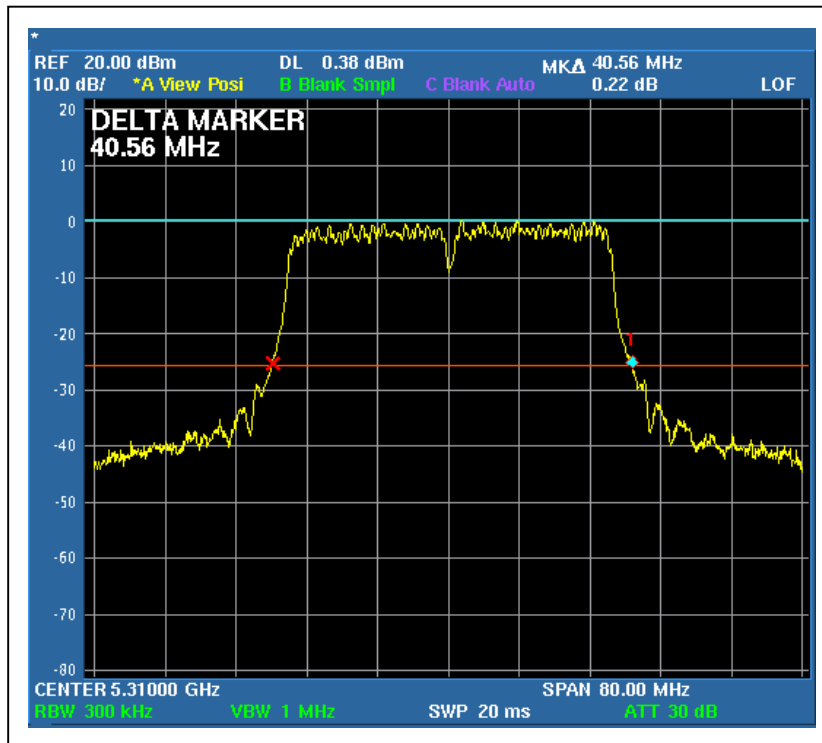


A D T

### CH3



### CH4

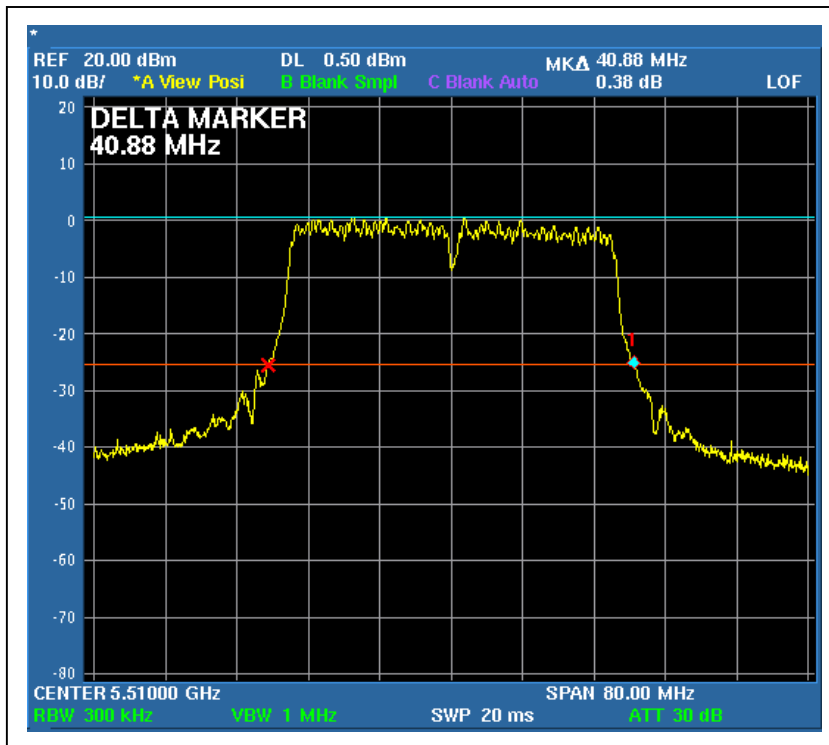




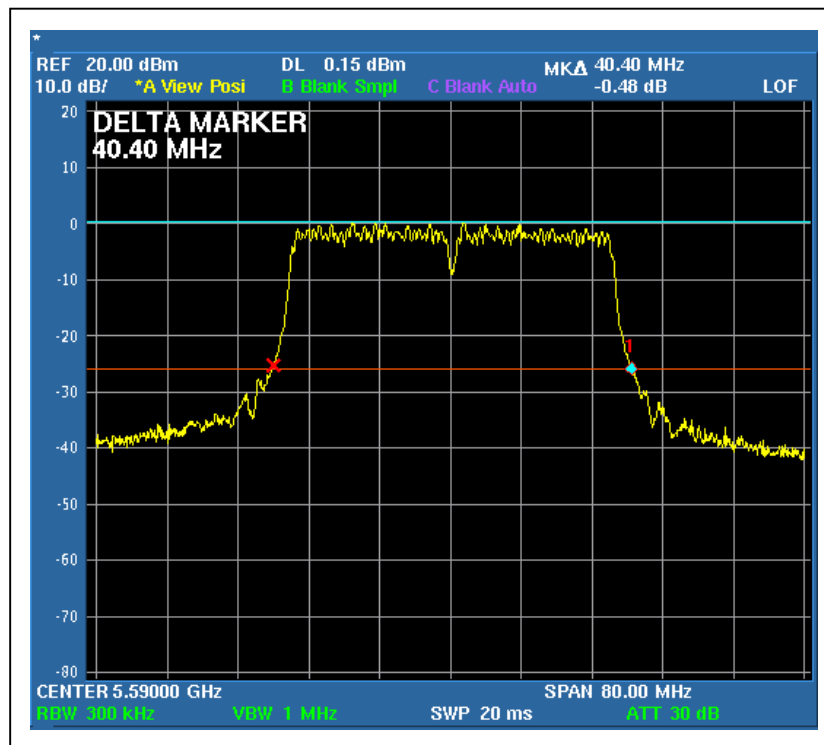


A D T

### CH5



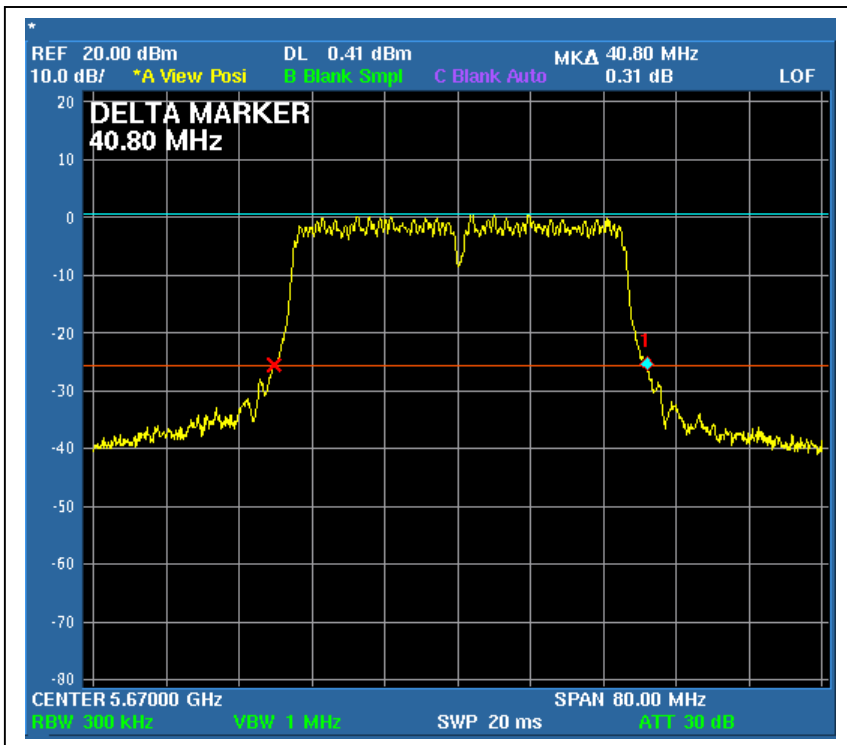
### CH7



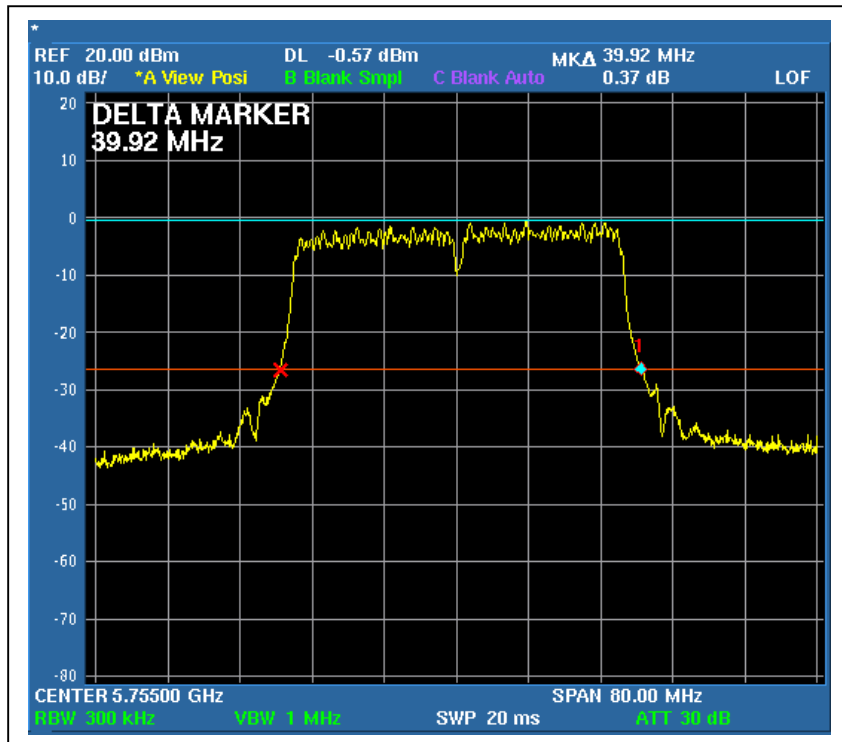


A D T

### CH9



### CH10





A D T

CH11

