

FCC TEST REPORT (15.407)

REPORT NO.: RF960524H05A

MODEL NO.: U98H038

RECEIVED: June 06, 2007

TESTED: June 16 to 27, 2007

ISSUED: June 28, 2007

APPLICANT: Hon Hai PRECISION IND.CO.,LTD

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ISSUED BY: Advance Data Technology Corporation

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

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No. 2177-01

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1. CERTIFICATION

PRODUCT: Wireless LAN 802.11a/b/g/n Device
BRAND NAME: Foxconn
MODEL NO.: U98H038
TEST SAMPLE: R&D SAMPLE
TESTED: June 16 to 27, 2007
APPLICANT: Hon Hai PRECISION IND.CO.,LTD
STANDARDS: FCC Part 15, Subpart E (Section 15.407)
ANSI C63.4-2003

The above equipment (Model: U98H038) has been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY :  , **DATE:** June 28, 2007
(Midoli Peng, Specialist)

TECHNICAL ACCEPTANCE :  , **DATE:** June 28, 2007
Responsible for RF (Hank Chung, Deputy Manager)

APPROVED BY :  , **DATE:** June 28, 2007
(May Chen, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart E (Section 15.407)			
Standard Section	Test Type	Result	Remark
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 -5.41dB at 6986.60MHz
15.407(a/1/2/3)	Peak Transmit Power	PASS	Meet the requirement of limit.

NOTE:

1. The EUT was operating in 2.412 ~ 2.462GHz, 5.15~5.25GHz and 5.725~5.850GHz frequencies band. This report was recorded the RF parameters including 5.15~5.25GHz. For the 2.412 ~ 2.462GHz and 5.725 ~ 5.850GHz RF parameters was recorded in another test report.
2. This report is prepared for FCC class II permissive change. Only radiated emission, Maximum Peak Output Power and Band Edge Measurement were presented in this 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	2.41 dB
Radiated emissions (30MHz-1GHz)	3.89 dB
Radiated emissions (1GHz -18GHz)	2.21 dB
Radiated emissions (18GHz -40GHz)	1.88 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless LAN 802.11a/b/g/n Device
MODEL NO.	U98H038
FCC ID	MCLU98H038
POWER SUPPLY	DC 3.3V from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	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
FREQUENCY RANGE	For 15.407 802.11a: 5.18 ~ 5.24GHz
	For 15.247 802.11b & 802.11g: 2412 ~ 2462MHz 802.11a: 5.745 ~ 5.825GHz
NUMBER OF CHANNEL	For 15.407 4 for 802.11a (5.18 ~ 5.24GHz) , draft 802.11n (20MHz) 3 for draft 802.11n (40MHz)
	For 15.247(2.4GHz) 11 for 802.11b, 802.11g, draft 802.11n (20MHz) 7 for draft 802.11n (40MHz) For 15.247(5GHz) 5 for 802.11a(5.725~5.825GHz), draft 802.11n (20MHz) 3 for draft 802.11n (40MHz)

MAXIMUM OUTPUT POWER	For 15.407 802.11a: 23.823mW draft 802.11n (20MHz): 27.081mW draft 802.11n (40MHz): 50.761mW For 15.247(2.4GHz) 802.11b: 83.368mW 802.11g: 133.045mW draft 802.11n (20MHz): 175.338mW draft 802.11n (40MHz): 55.404mW For 15.247(5GHz) 802.11a: 97.724mW draft 802.11n (20MHz): 167.943mW draft 802.11n (40MHz): 197.724mW
ANTENNA TYPE	Please see note 1
DATA CABLE	NA
I/O PORTS	NA

NOTE:

1. This report is prepared for FCC class II permissive change. The difference compared with the Report No.:RF960524H05 design is as the following:

◆ Change the antenna from external to Internal as below:

Original					
Transmitter Circuit	Antenna Type	Antenna Connector	Gain(dBi)		
			2412~2462 (MHz)	5150~5250 (MHz)	5725~5850 (MHz)
Chain(0)	Printed	Reverse SMA	1.5	0.5	-0.86
Chain(1)			-2.5	-11.4	-7.31
Chain(2)			1.28	1.09	-0.43
Newly					
Transmitter Circuit	Antenna Type	Antenna Connector	Gain(dBi)		
			2412~2462 (MHz)	5150~5250 (MHz)	5725~5850 (MHz)
Chain(0)	Printed	UFL	2.4	3.12	1.91
Chain(1)			0.46	3.72	2.32
Chain(2)			3.67	1.86	1.44

2. The EUT incorporates a MIMO function with 802.11a, 802.11b, 802.11g, draft 802.11n. Physically, the card provides two completed transmit and three completed receivers.
3. The EUT is 2 * 3 spatial MIMO (2Tx & 3Rx) without beam forming function. The antenna configurations are two transmitter antennas and three receiver antennas, as there are 3 printed antennas. Spatial multiplexing modes for simultaneous transmission using 2 antennas, and for simultaneous receiver using 3 antennas.
4. 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.
5. The EUT complies with draft 802.11n standards and backwards compatible with 802.11a, 802.11b, 802.11g products.
6. For radiated test (Below 1 GHz) the EUT was pre-tested under following test mode, and the test data was recorded in this report:

Pre-test Mode	Description
Mode A	802.11a
Mode B	Draft 802.11n (20MHz)
Mode C	Draft 802.11n (40MHz)

The worst emission level was found in Mode B. The final test was executed under test mode with highest emission and recorded in this report individually.

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 5150 ~ 5250MHz band:

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

CHANNEL	FREQUENCY
1	5180 MHz
2	5200 MHz
3	5220 MHz
4	5240 MHz

Three channels are provided for 802.11a, draft 802.11n (40MHz):

CHANNEL	FREQUENCY
1	5190 MHz
2	5210 MHz
3	5230 MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

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

Where **PLC**: Power Line Conducted Emission

RE < 1G: Radiated Emission below 1GHz

RE ≥ 1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

COMBINATION MODE:

COMBINATION MODE	OPERATION MODE	TX CHAIN(0)	TX CHAIN(1)	TX CHAIN(2)
A	802.11 a	√		
B	802.11 a			√
C	DRAFT 802.11n(20MHz)	√		√
D	DRAFT 802.11n(40MHz)	√		√

COMBINATION MODE	OPERATION MODE	RX CHAIN(0)	RX CHAIN(1)	RX CHAIN(2)
E	802.11 a	√		
F	802.11 a			√
G	802.11 a		√	
H	DRAFT 802.11n(20MHz)	√	√	√
I	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. From above mode, the different modes were chosen for pretest.
3. Mode A, C & D the worst modes, was selected as representative mode for the report.

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
For 5 GHz Draft 802.11n (20MHz)	1 to 4	4	OFDM	BPSK	6.5	C

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 4	1,4	OFDM	BPSK	6	A
For 5 GHz Draft 802.11n (20MHz)	1 to 4	1, 4	OFDM	BPSK	6.5	C
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	13.5	D

Bandedge 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 4	1,4	OFDM	BPSK	6	A
For 5 GHz Draft 802.11n (20MHz)	1 to 4	1, 4	OFDM	BPSK	6.5	C
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	13.5	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 4	1, 4	OFDM	BPSK	6	A
For 5 GHz Draft 802.11n (20MHz)	1 to 4	1, 4	OFDM	BPSK	6.5	C
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	13.5	D

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless LAN 802.11a/b/g/n Device. 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.

3.4 DESCRIPTION OF SUPPORT UNITS

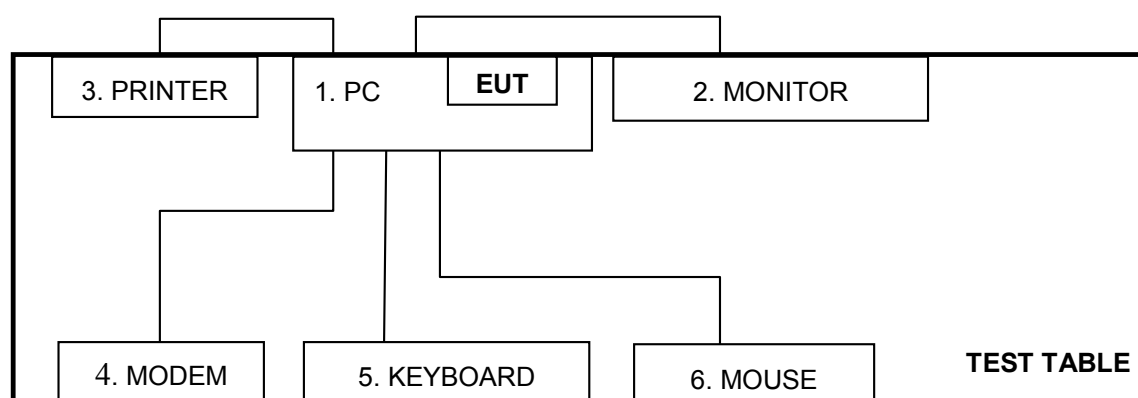
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	PC	Lenovo	8010	NA	FCC DoC
2	MONITOR	ADI	G1000	240058T00100081	NA
3	PRINTER	EPSON	LQ-300+	DCGY046777	FCC DoC
4	MODEM	ACEEX	1414	0206026775	IFAXDM1414
5	Keyboard	DELL	SK-8115	CN-OJ4635-71616-62I-01M9	NA
6	Mouse	DELL	M056UOA	FOROOSWW	FCC DoC

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.8 m braid shielded wire, terminated with VGA connector via metallic frame, w/o cores
3	1.8m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core.
4	1.2 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.
5	1.8m foil shielded wire, terminated with PS/2 connector via metallic frame, w/o core.
6	1.8m foil shielded wire, terminated with PS/2 connector via drain wire, w/o core.

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

3.5 CONFIGURATION OF SYSTEM UNDER TEST



4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 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.

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/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

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

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ADVANTEST Spectrum Analyzer	R3271A	85060311	July 03, 2007
HP Pre_Amplifier	8449B	3008A01922	Sep. 18, 2007
ROHDE & SCHWARZ Test Receiver	ESCS30	100375	Sep. 20, 2007
CHASE Broadband Antenna	VULB 9168	138	July 17, 2007
Schwarzbeck Horn_Antenna	BBHA9120	D124	Jan. 01, 2008
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 05, 2008
SCHWARZBECK Biconical Antenna	VHBA9123	459	Jun. 08, 2009
SCHWARZBECK Periodic Antenna	UPA6108	1148	Jun. 08, 2009
RF Switches (ARNITSU)	CS-201	1565157	NA
RF CABLE (Chaintek)	SF102	22054-2	Nov. 14, 2007
RF Cable(RICHTEC)	9913-30M N-N Cable	STCCAB-30M-1 GHz	Jul. 15, 2007
Software	ADT_Radiated_V 7.6.15.7	NA	NA
CHANCE MOST Antenna Tower	AT-100	0203	NA
CHANCE MOST Turn Table	TT-100	0203	NA

- Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Biconical and Periodic Antenna) 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 ADT 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 4824A-3.

4.1.4 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.

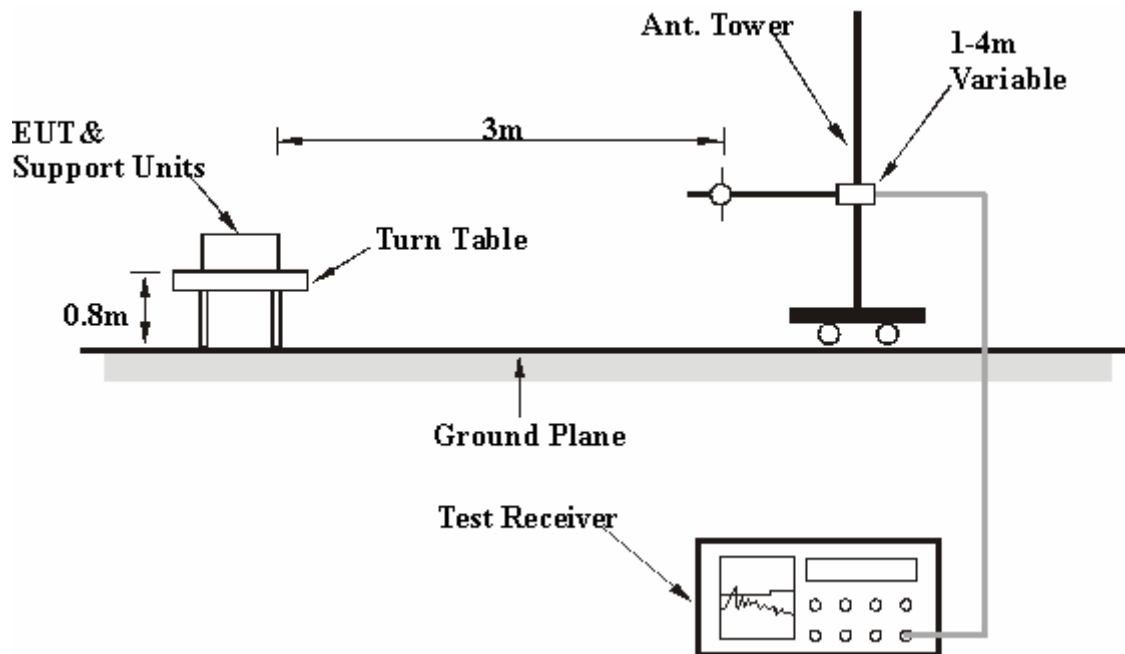
NOTE:

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.

4.1.5 DEVIATION FROM TEST STANDARD

No deviation

4.1.6 TEST SETUP



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

4.1.7 EUT OPERATING CONDITION

- Plug the EUT into the support unit 1 (Personal computer) which placed on a testing table.
- The support unit 1 (Personal computer) ran a test program “ART V0_5_B6_01_ALL” to enable EUT under transmission condition continuously

Below 1GHz Test Data

4.1.8 TEST RESULTS

802.11n (20MHz) OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	BPSK for draft 802.11n (20MHz)	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	31deg. C, 59%RH, 971hPa	TESTED BY	Rex Huang

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	48.77	21.46 QP	40.00	-18.54	1.43 H	217	6.48	14.98
2	266.72	25.83 QP	46.00	-20.17	1.24 H	281	10.94	14.89
3	399.83	30.04 QP	46.00	-15.96	1.03 H	237	11.03	19.01
4	499.93	37.03 QP	46.00	-8.97	1.18 H	194	15.27	21.76
5	528.00	30.55 QP	46.00	-15.45	1.17 H	242	7.96	22.59
6	666.68	33.53 QP	46.00	-12.47	1.46 H	235	8.24	25.29
7	800.01	35.38 QP	46.00	-10.62	1.20 H	302	7.82	27.56

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	48.76	23.12 QP	40.00	-16.88	1.00 V	97	8.14	14.98
2	266.67	25.76 QP	46.00	-20.24	1.00 V	294	10.87	14.89
3	400.03	28.35 QP	46.00	-17.65	1.00 V	148	9.33	19.02
4	500.02	32.74 QP	46.00	-13.26	1.00 V	341	10.98	21.76
5	527.96	37.84 QP	46.00	-8.16	1.05 V	284	15.25	22.59
6	666.69	33.47 QP	46.00	-12.53	1.51 V	275	8.18	25.29
7	799.93	34.27 QP	46.00	-11.73	1.24 V	239	6.71	27.56

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

4.1.9 TEST RESULTS

802.11a OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 62%RH, 971hPa	TESTED BY	Wen Yu

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	#5090.00	55.34 PK	74.00	-18.66	1.95 H	301	19.17	36.17
2	#5090.00	42.45 AV	54.00	-11.55	1.95 H	301	6.28	36.17
3	*5180.00	103.33 PK			1.08 H	348	67.05	36.28
4	*5180.00	92.18 AV			1.08 H	348	55.90	36.28
5	6906.60	57.58 PK	88.30	-30.72	1.16 H	92	16.46	41.12
6	6906.60	51.49 AV	68.30	-16.81	1.16 H	92	10.37	41.12
7	10360.00	57.18 PK	88.30	-31.12	1.08 H	12	11.28	45.90
8	10360.00	44.16 AV	68.30	-24.14	1.08 H	12	-1.74	45.90

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	#5090.00	57.03 PK	74.00	-16.97	1.04 V	1	20.83	36.20
2	#5090.00	42.91 AV	54.00	-11.09	1.04 V	1	6.71	36.20
3	*5180.00	106.35 PK			1.20 V	350	70.07	36.28
4	*5180.00	95.63 AV			1.20 V	350	59.35	36.28
5	6906.60	61.61 PK	88.30	-26.69	1.13 V	2	20.49	41.12
6	6906.60	58.34 AV	68.30	-9.96	1.13 V	2	17.22	41.12
7	10360.00	59.42 PK	88.30	-28.88	1.46 V	359	13.52	45.90
8	10360.00	44.87 AV	68.30	-23.43	1.46 V	359	-1.03	45.90

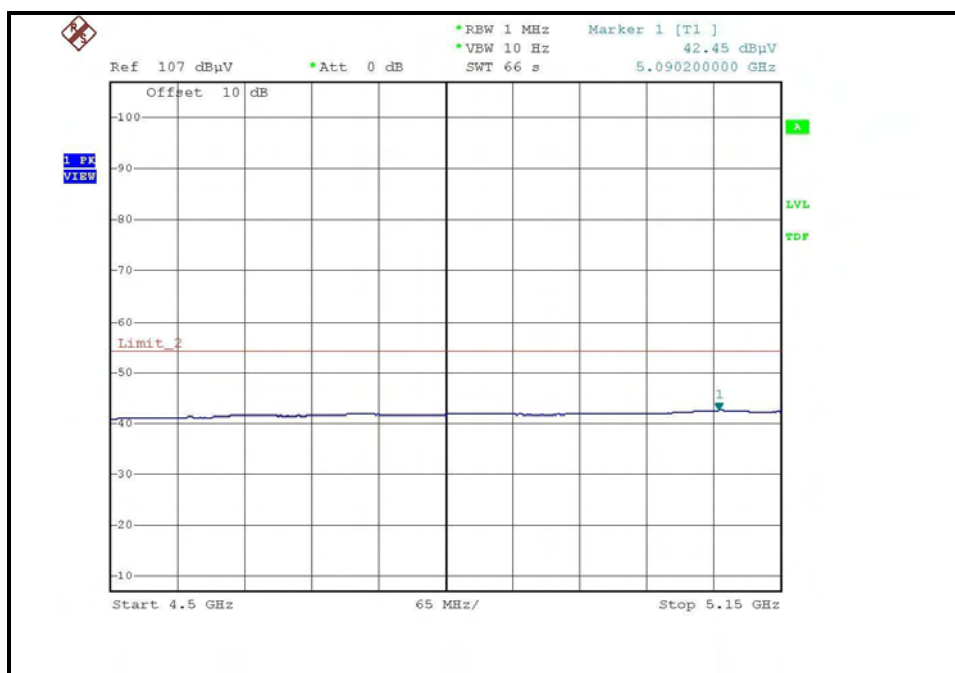
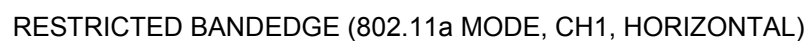
- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. "*" : Fundamental frequency
 6. "#"The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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 62%RH, 971hPa	TESTED BY	Wen Yu

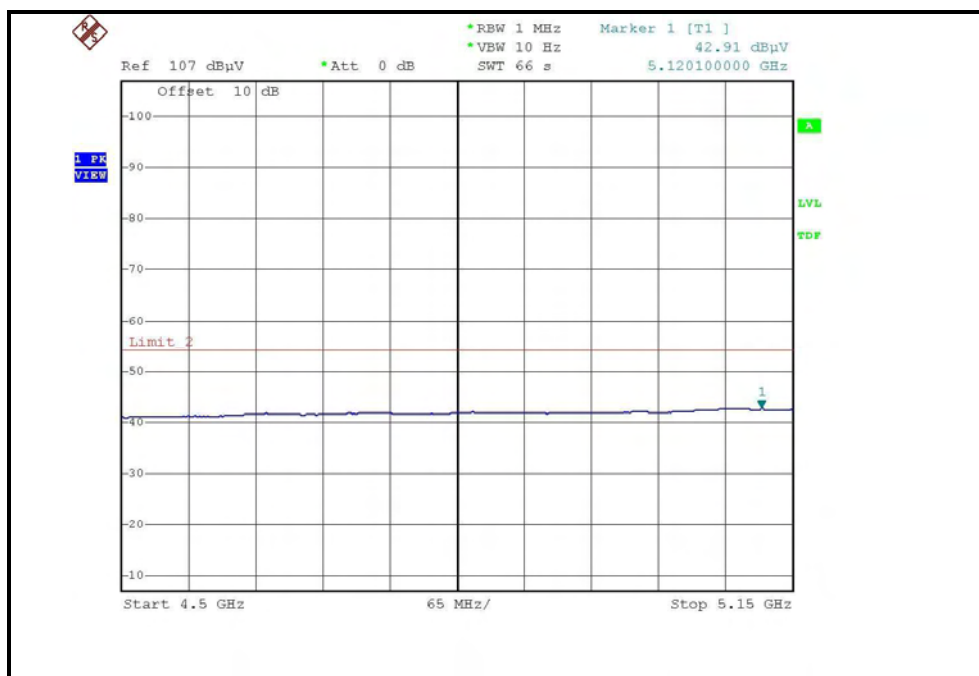
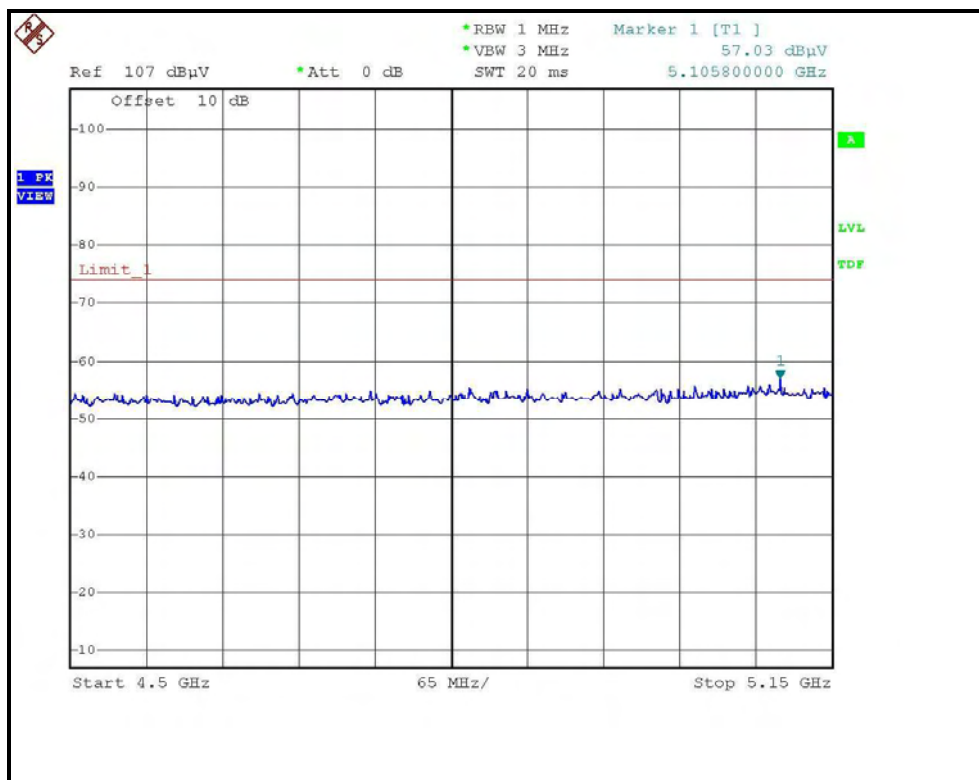
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	107.51 PK			1.02 H	346	71.16	36.35
2	*5240.00	96.36 AV			1.02 H	346	60.01	36.35
3	#5350.00	57.38 PK	74.00	-16.62	1.03 H	347	20.90	36.48
4	#5350.00	42.46 AV	54.00	-11.54	1.03 H	347	5.98	36.48
5	6986.60	60.12 PK	88.30	-28.18	1.12 H	93	18.79	41.33
6	6986.60	56.21 AV	68.30	-12.09	1.12 H	93	14.88	41.33
7	10480.00	57.25 PK	88.30	-31.05	1.06 H	47	11.14	46.11
8	10480.00	44.23 AV	68.30	-24.07	1.06 H	47	-1.88	46.11

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	*5240.00	110.87 PK			1.21 V	352	74.52	36.35
2	*5240.00	99.76 AV			1.21 V	352	63.41	36.35
3	#5350.00	54.34 PK	74.00	-19.66	1.14 V	0	17.86	36.48
4	#5350.00	43.78 AV	54.00	-10.22	1.14 V	0	7.30	36.48
5	6986.60	64.94 PK	88.30	-23.36	1.24 V	340	23.61	41.33
6	6986.60	62.89 AV	68.30	-5.41	1.24 V	340	21.56	41.33
7	10480.00	59.45 PK	88.30	-28.85	1.44 V	351	13.34	46.11
8	10480.00	44.78 AV	68.30	-23.52	1.44 V	351	-1.33	46.11

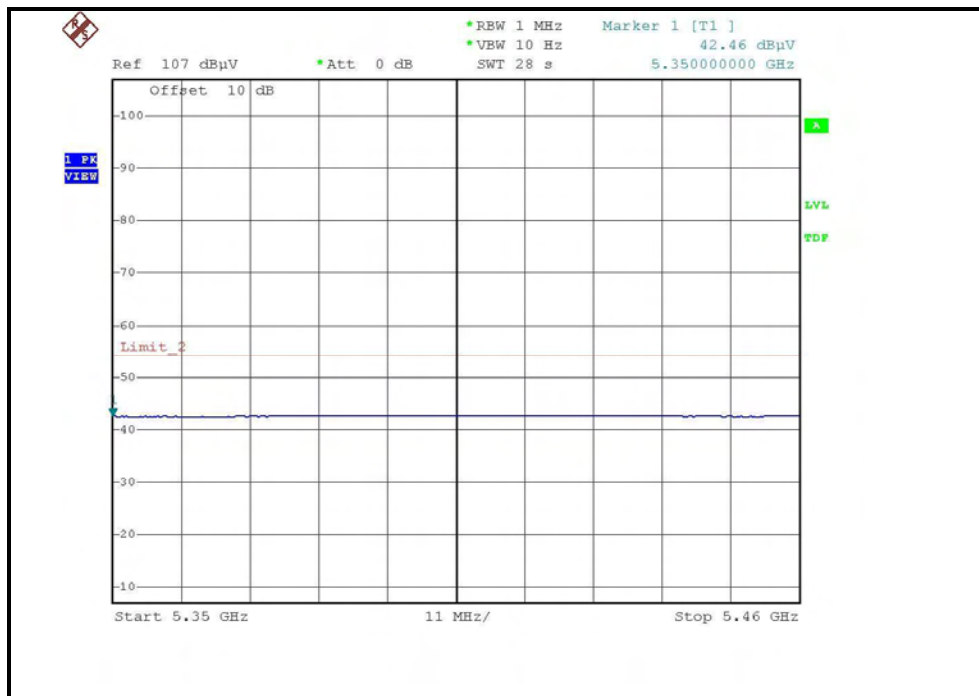
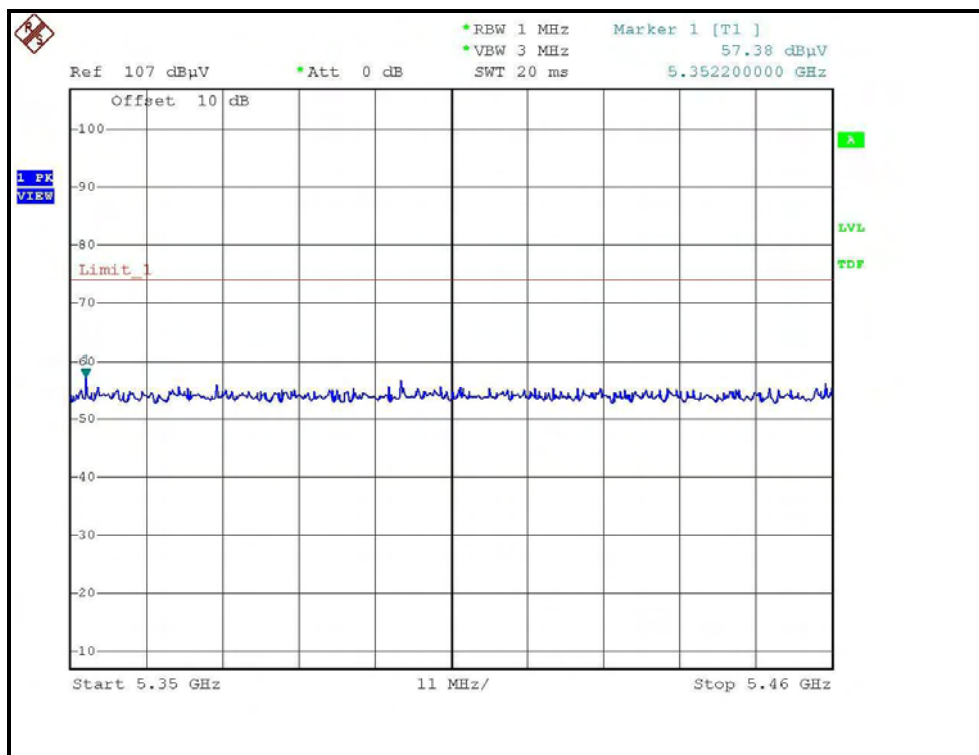
- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. "*" : Fundamental frequency
 6. "#"The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

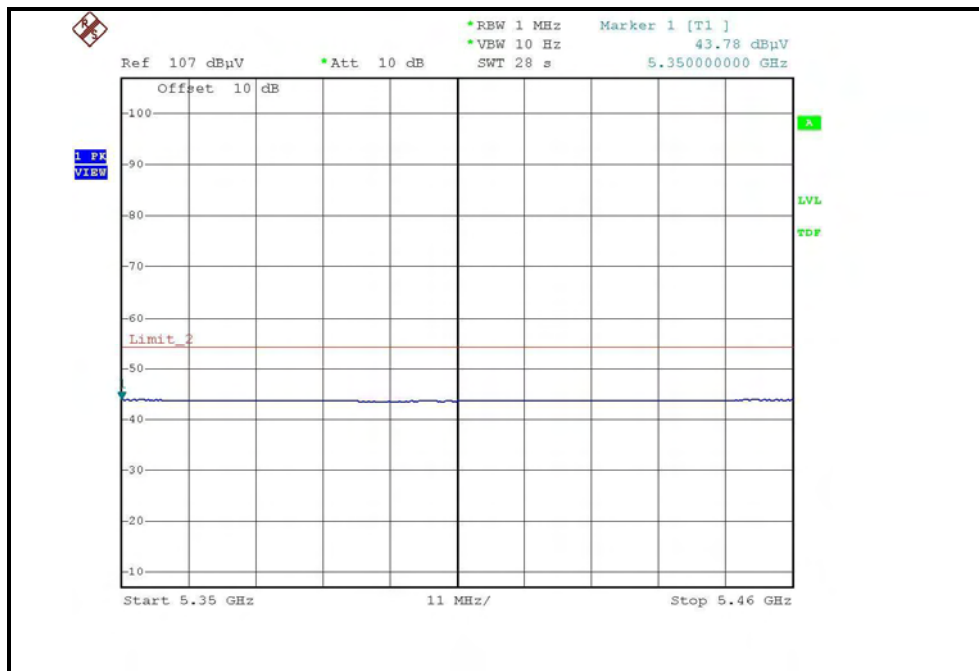
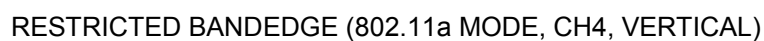


RESTRICTED BANDEDGE (802.11a MODE, CH1, VERTICAL)



RESTRICTED BANDEDGE (802.11a MODE, CH4, HORIZONTAL)





DRAFT 802.11n (20MHz) OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 62%RH, 971hPa	TESTED BY	Wen Yu

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	#4800.00	57.26 PK	74.00	-16.74	1.20 H	347	21.62	35.64
2	#4800.00	48.90 AV	54.00	-5.10	1.20 H	347	13.26	35.64
3	#5150.00	56.08 PK	74.00	-17.92	1.20 H	349	19.84	36.24
4	#5150.00	44.21 AV	54.00	-9.79	1.20 H	349	7.97	36.24
5	*5180.00	110.34 PK			1.06 H	349	74.06	36.28
6	*5180.00	99.58 AV			1.06 H	349	63.30	36.28
7	6906.60	56.25 PK	88.30	-32.05	1.09 H	319	15.13	41.12
8	6906.60	50.81 AV	68.30	-17.49	1.09 H	319	9.69	41.12
9	10360.00	59.17 PK	88.30	-29.13	1.58 H	346	13.27	45.90
10	10360.00	44.92 AV	68.30	-23.38	1.58 H	346	-0.98	45.90

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	#4960.00	56.42 PK	74.00	-17.58	1.00 V	160	20.44	35.98
2	#4960.00	46.84 AV	54.00	-7.16	1.00 V	160	10.86	35.98
3	#5150.00	56.41 PK	74.00	-17.59	1.00 V	160	20.17	36.24
4	#5150.00	43.96 AV	54.00	-10.04	1.00 V	160	7.72	36.24
5	*5180.00	111.42 PK			1.25 V	349	75.14	36.28
6	*5180.00	100.53 AV			1.25 V	349	64.25	36.28
7	6906.60	60.89 PK	88.30	-27.41	1.18 V	339	19.77	41.12
8	6906.60	57.79 AV	68.30	-10.51	1.18 V	339	16.67	41.12
9	10360.00	57.82 PK	88.30	-30.48	1.23 V	345	11.92	45.90
10	10360.00	44.67 AV	68.30	-23.63	1.23 V	345	-1.23	45.90

- NOTE:**
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 falling in the restricted band.

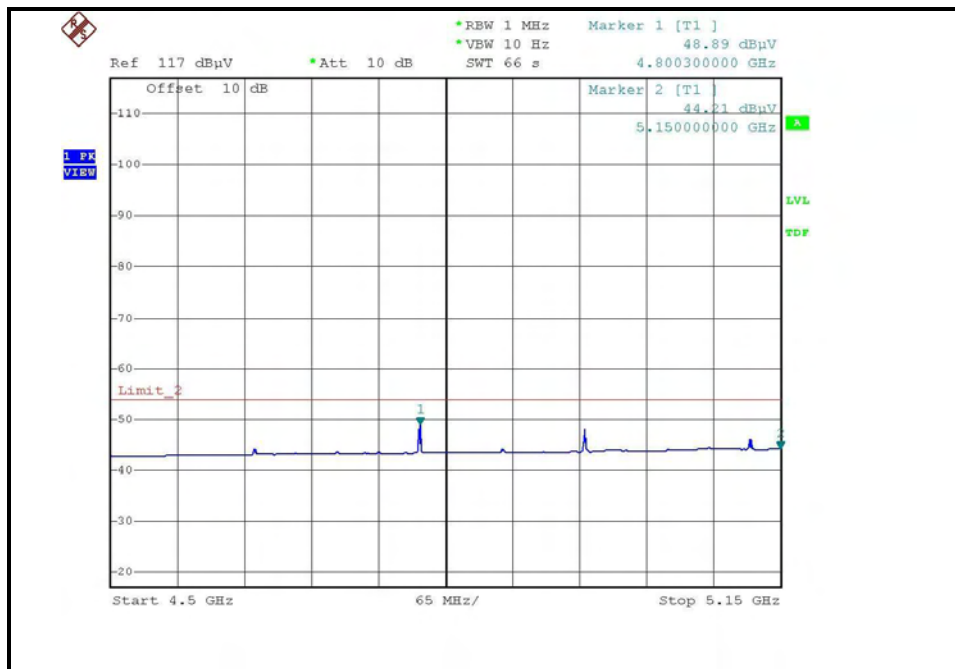
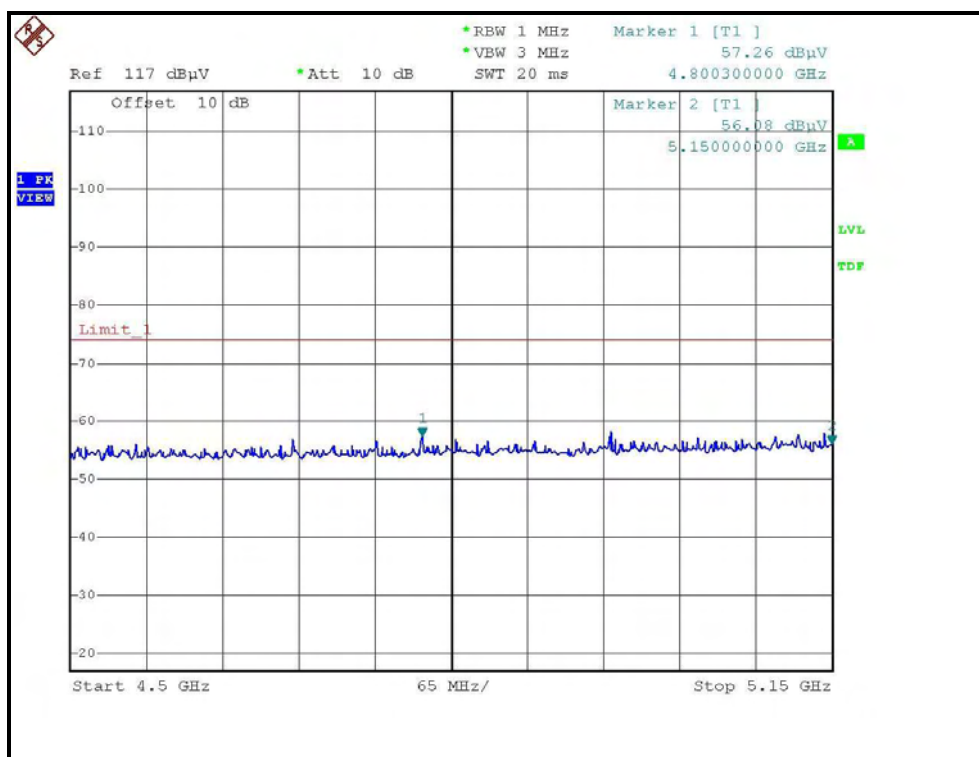
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 62%RH, 971hPa	TESTED BY	Wen Yu

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	*5240.00	110.19 PK			1.17 H	350	73.84	36.35
2	*5240.00	98.87 AV			1.17 H	350	62.52	36.35
3	#5350.00	56.61 PK	74.00	-17.39	1.18 H	349	20.13	36.48
4	#5350.00	44.13 AV	54.00	-9.87	1.18 H	349	7.65	36.48
5	6986.60	58.25 PK	88.30	-30.05	1.37 H	358	16.92	41.33
6	6986.60	53.30 AV	68.30	-15.00	1.37 H	358	11.97	41.33
7	10480.00	59.00 PK	88.30	-29.30	1.61 H	351	12.89	46.11
8	10480.00	44.89 AV	68.30	-23.41	1.61 H	351	-1.22	46.11

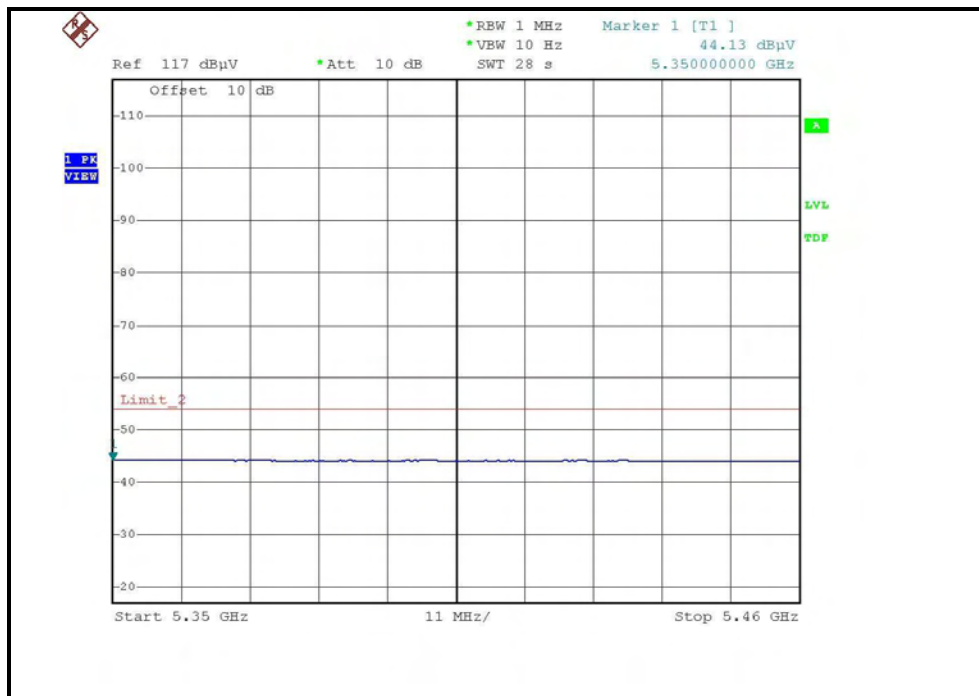
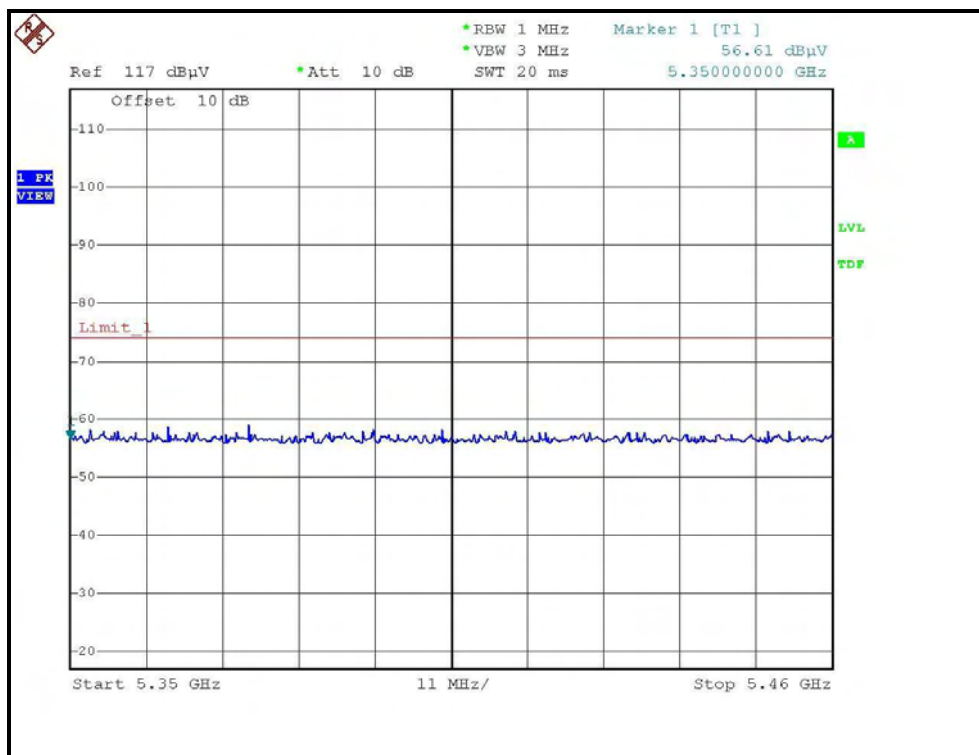
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	110.58 PK			1.24 V	323	74.23	36.35
2	*5240.00	99.18 AV			1.24 V	323	62.83	36.35
3	#5350.00	56.10 PK	74.00	-17.90	1.20 V	320	19.62	36.48
4	#5350.00	44.22 AV	54.00	-9.78	1.20 V	320	7.74	36.48
5	6986.60	64.32 PK	88.30	-23.98	1.25 V	340	22.99	41.33
6	6986.60	62.17 AV	68.30	-6.13	1.25 V	340	20.84	41.33
7	10480.00	57.61 PK	88.30	-30.69	1.19 V	319	11.50	46.11
8	10480.00	44.58 AV	68.30	-23.72	1.19 V	319	-1.53	46.11

- NOTE:**
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 falling in the restricted band.

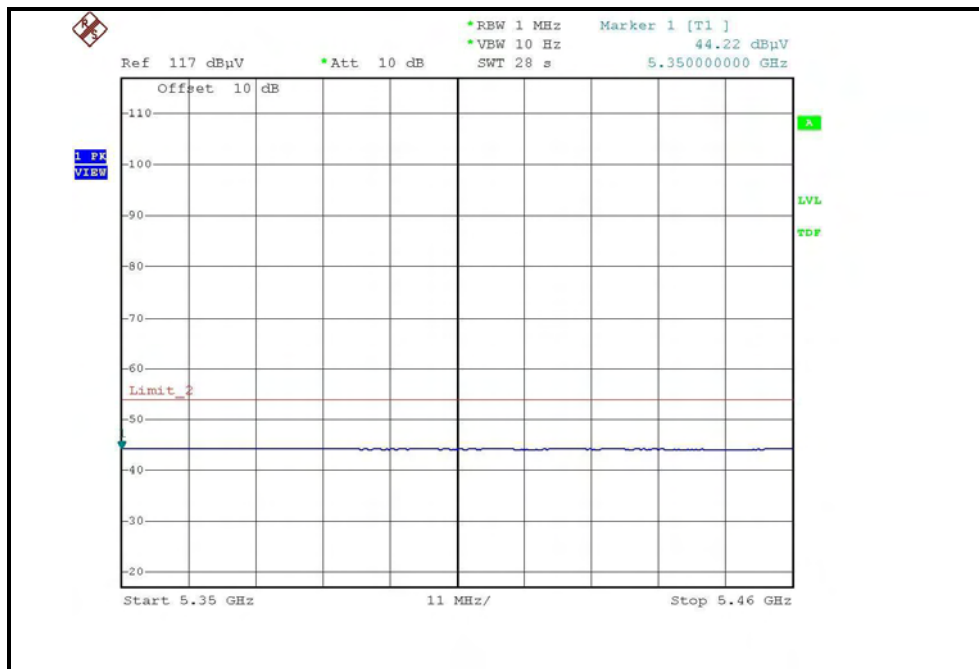
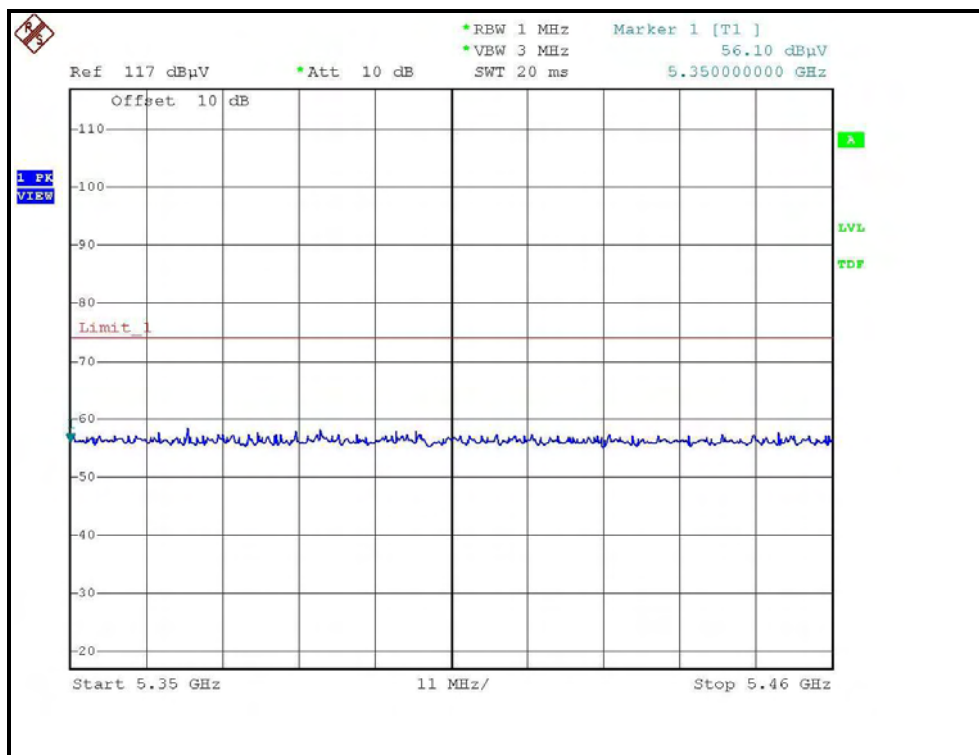
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH1, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH4, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH4, VERTICAL)



DRAFT 802.11n (40MHz) OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 62%RH, 971hPa	TESTED BY	Wen Yu

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	#4960.00	58.03 PK	74.00	-15.97	1.01 H	349	22.05	35.98
2	#4960.00	49.13 AV	54.00	-4.87	1.01 H	349	13.15	35.98
3	#5150.00	65.33 PK	74.00	-8.67	1.01 H	349	29.09	36.24
4	#5150.00	47.77 AV	54.00	-6.23	1.01 H	349	11.53	36.24
5	*5190.00	106.45 PK			1.07 H	349	70.16	36.29
6	*5190.00	95.26 AV			1.07 H	349	58.97	36.29
7	6920.00	58.07 PK	88.30	-30.23	1.04 H	96	16.91	41.16
8	6920.00	52.53 AV	68.30	-15.77	1.04 H	96	11.37	41.16
9	10380.00	58.43 PK	88.30	-29.87	1.22 H	328	12.50	45.93
10	10380.00	45.15 AV	68.30	-23.15	1.22 H	328	-0.78	45.93

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	#4960.00	59.93 PK	74.00	-14.07	1.13 V	159	23.95	35.98
2	#4960.00	47.49 AV	54.00	-6.51	1.13 V	159	11.51	35.98
3	#5150.00	65.46 PK	74.00	-8.54	1.27 V	353	29.22	36.24
4	#5150.00	47.93 AV	54.00	-6.07	1.27 V	353	11.69	36.24
5	*5190.00	106.71 PK			1.18 V	358	70.42	36.29
6	*5190.00	95.80 AV			1.18 V	358	59.51	36.29
7	6920.00	61.99 PK	88.30	-26.31	1.18 V	340	20.83	41.16
8	6920.00	59.14 AV	68.30	-9.16	1.18 V	340	17.98	41.16
9	10380.00	58.37 PK	88.30	-29.93	1.17 V	21	12.44	45.93
10	10380.00	45.23 AV	68.30	-23.07	1.17 V	21	-0.70	45.93

- NOTE:**
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 falling in the restricted band.

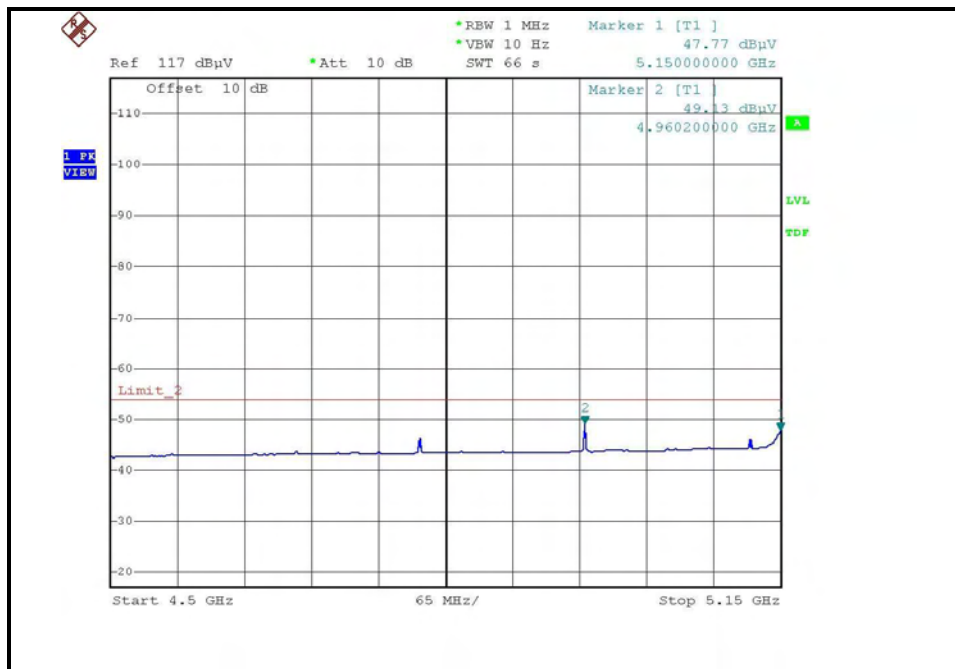
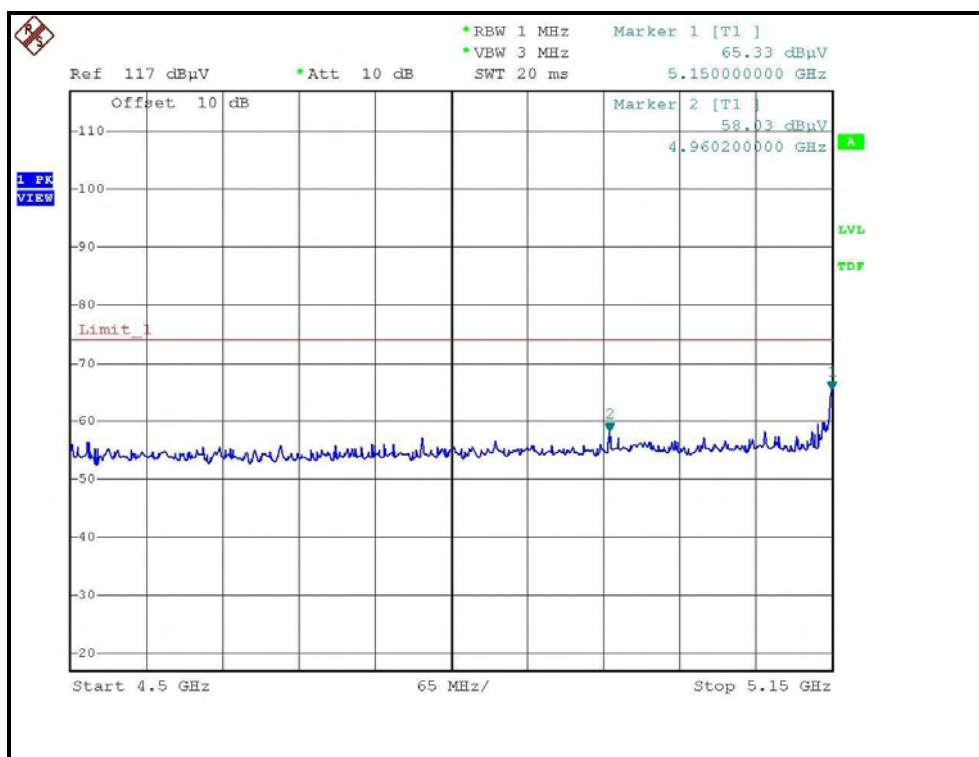
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 62%RH, 971hPa	TESTED BY	Wen Yu

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	*5230.00	108.25 PK			1.09 H	237	71.91	36.34
2	*5230.00	97.45 AV			1.09 H	237	61.11	36.34
3	#5350.00	55.69 PK	74.00	-18.31	1.04 H	347	19.21	36.48
4	#5350.00	44.74 AV	54.00	-9.26	1.04 H	347	8.26	36.48
5	5373.00	58.93 PK	74.00	-15.07	1.04 H	347	22.42	36.51
6	5373.00	45.61 AV	54.00	-8.39	1.04 H	347	9.10	36.51
7	6973.30	64.17 PK	88.30	-24.13	1.07 H	89	22.88	41.29
8	6973.30	61.70 AV	68.30	-6.60	1.07 H	89	20.41	41.29
9	10460.00	58.73 PK	88.30	-29.57	1.20 H	318	12.65	46.08
10	10460.00	45.63 AV	68.30	-22.67	1.20 H	318	-0.45	46.08

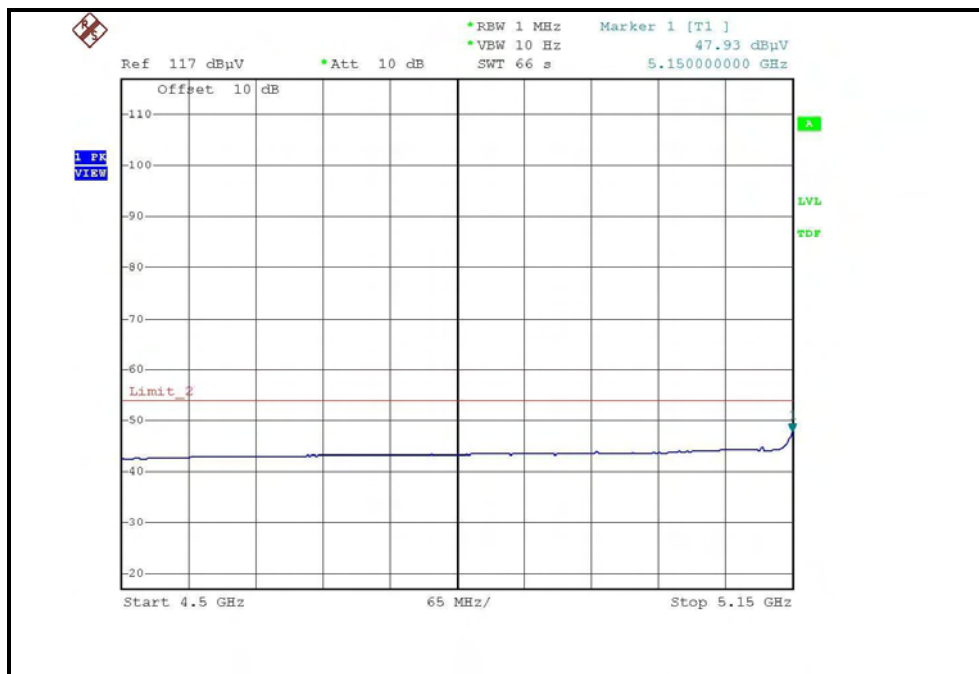
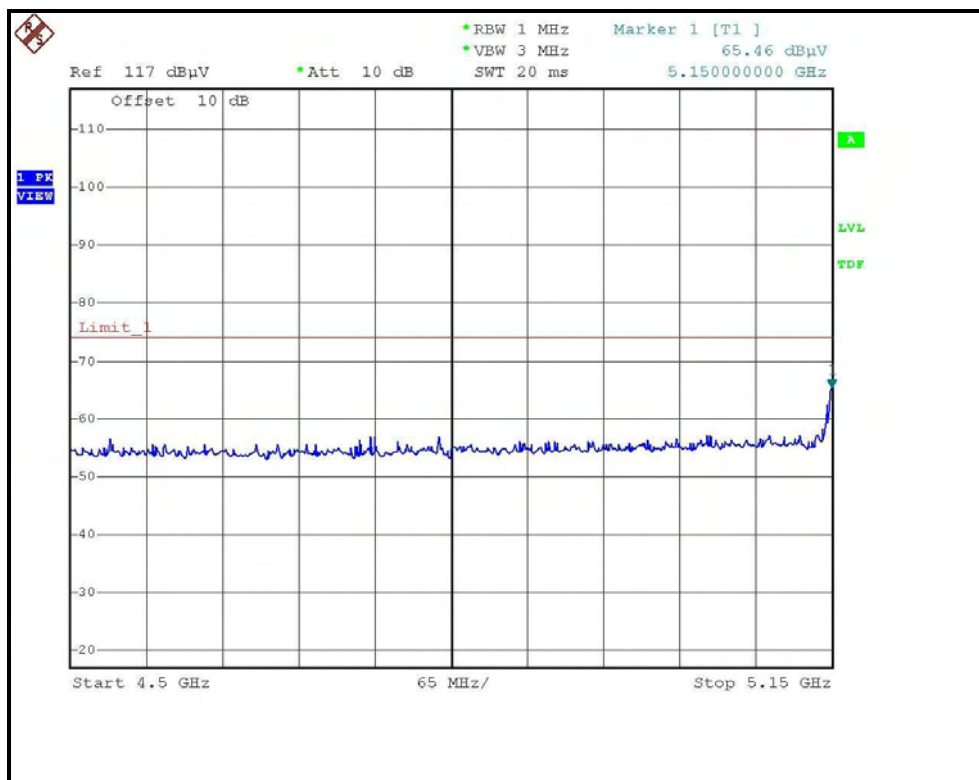
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	109.73 PK			1.04 V	2	73.39	36.34
2	*5230.00	98.88 AV			1.04 V	2	62.54	36.34
3	#5350.00	57.72 PK	74.00	-16.28	1.04 V	358	21.24	36.48
4	#5350.00	45.30 AV	54.00	-8.70	1.04 V	358	8.82	36.48
5	5373.00	57.85 PK	74.00	-16.15	1.04 V	358	21.34	36.51
6	5373.00	45.62 AV	54.00	-8.38	1.04 V	358	9.11	36.51
7	6973.30	68.55 PK	88.30	-19.75	1.08 V	340	27.26	41.29
8	6973.30	67.09 AV	68.30	-1.21	1.08 V	340	25.80	41.29
9	10460.00	58.94 PK	88.30	-29.36	1.09 V	35	12.86	46.08
10	10460.00	45.78 AV	68.30	-22.52	1.09 V	35	-0.30	46.08

- NOTE:**
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 falling in the restricted band.

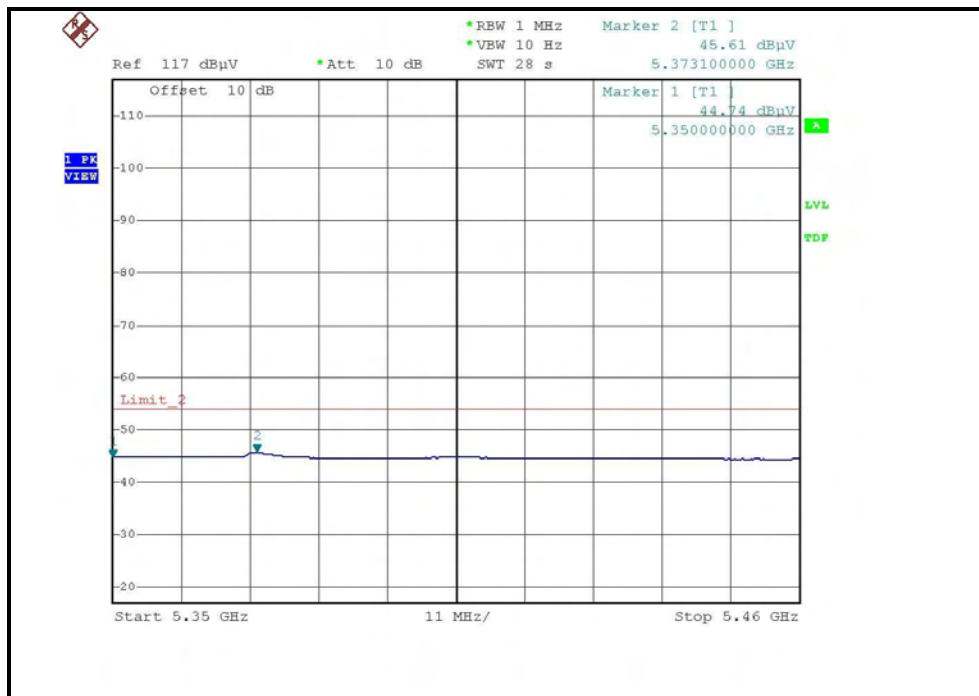
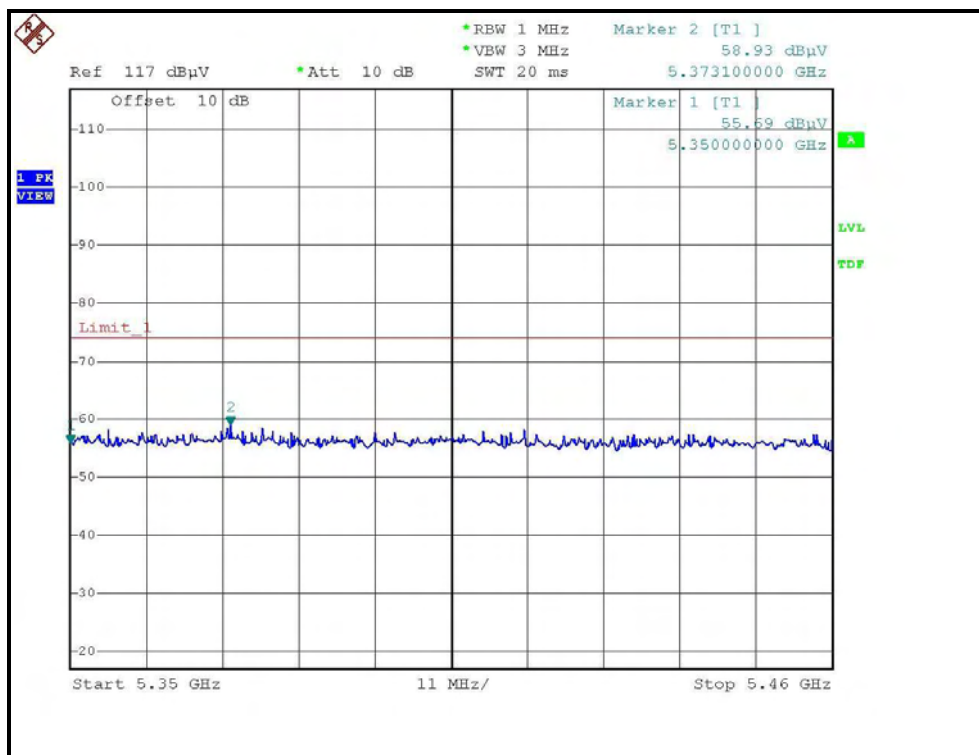
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH1, HORIZONTAL)



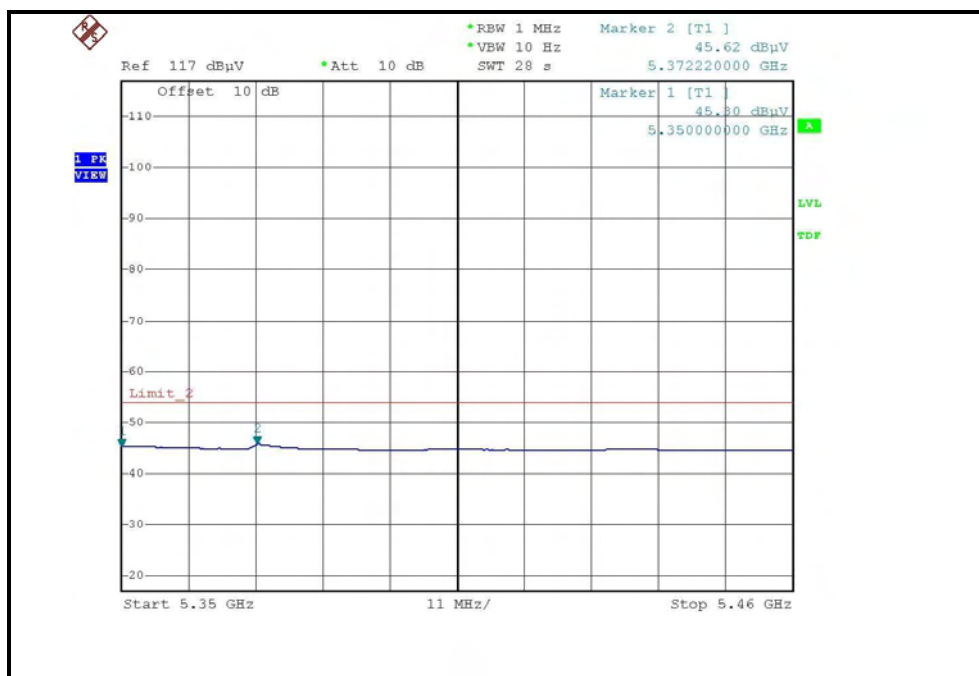
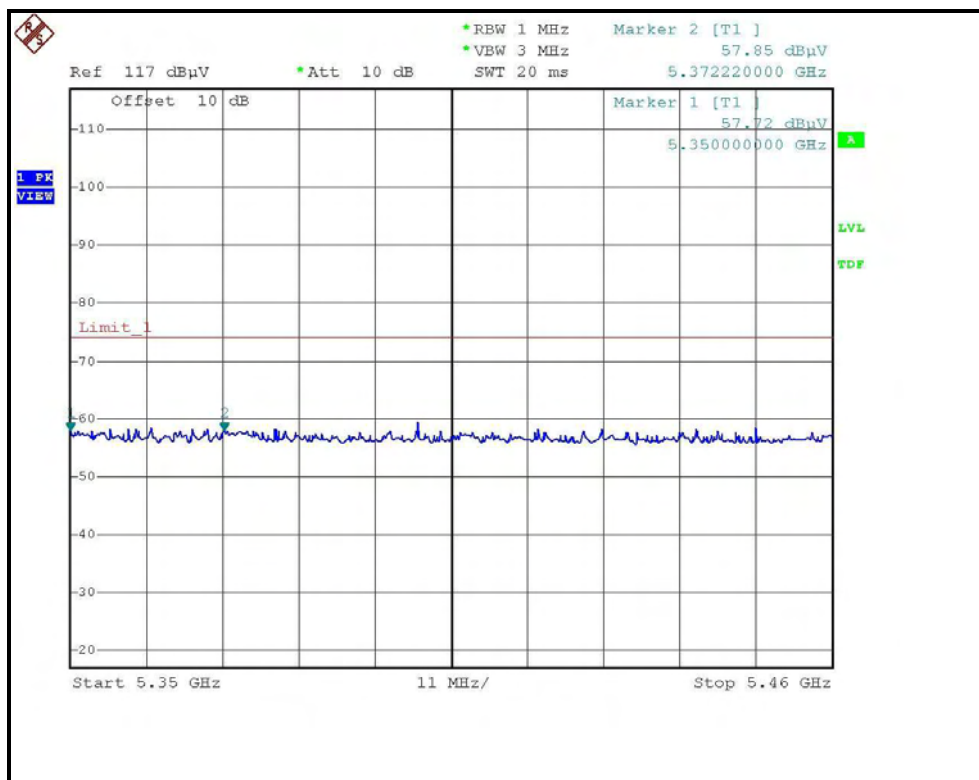
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, VERTICAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH3, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH3, VERTICAL)



4.2 PEAK TRANSMIT POWER MEASUREMENT

4.2.1 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.

4.2.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ADVANTEST SPECTRUM ANALYZER	U3772	160100280	April. 10.2008

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.

4.2.3 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:

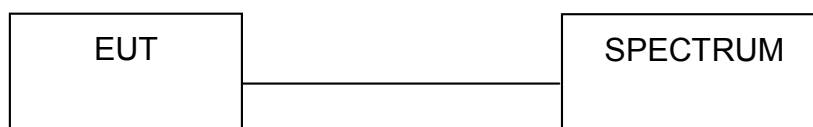
The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002.

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



4.2.6 EUT OPERATING CONDITIONS

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

4.2.7 TEST RESULTS

802.11a OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	22deg.C, 68%RH, 972hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER OUTPUT (mW)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	8.54	7.145	17	23.34	PASS
4	5240	13.77	23.823	17	24.75	PASS

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

Peak Power Output: CH1



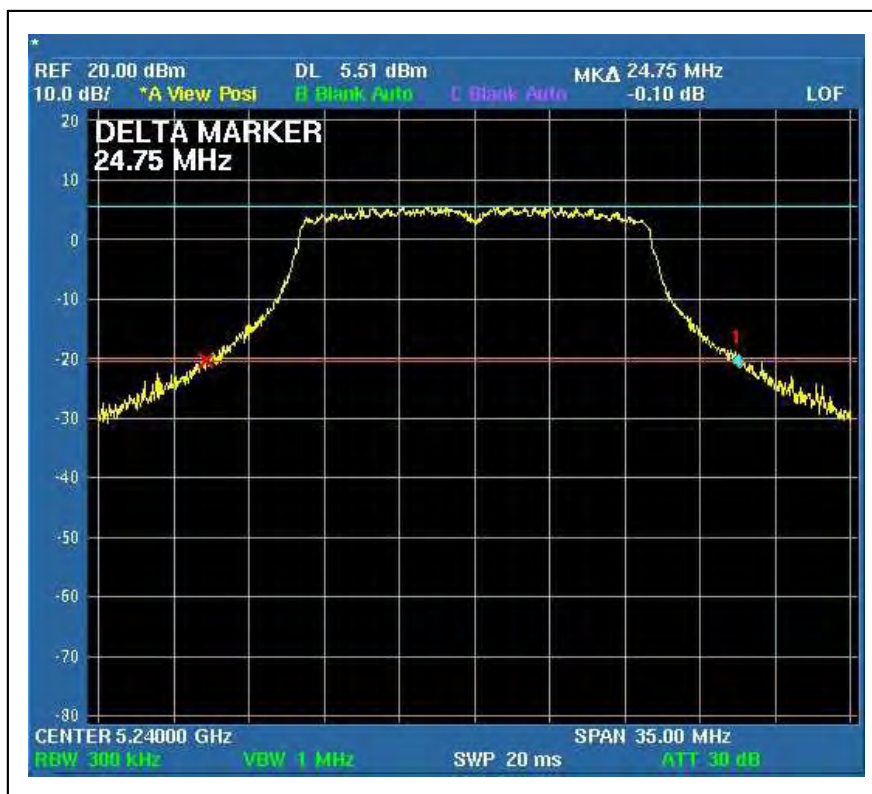
CH4



26dB Occupied Bandwidth:
CH1



CH4



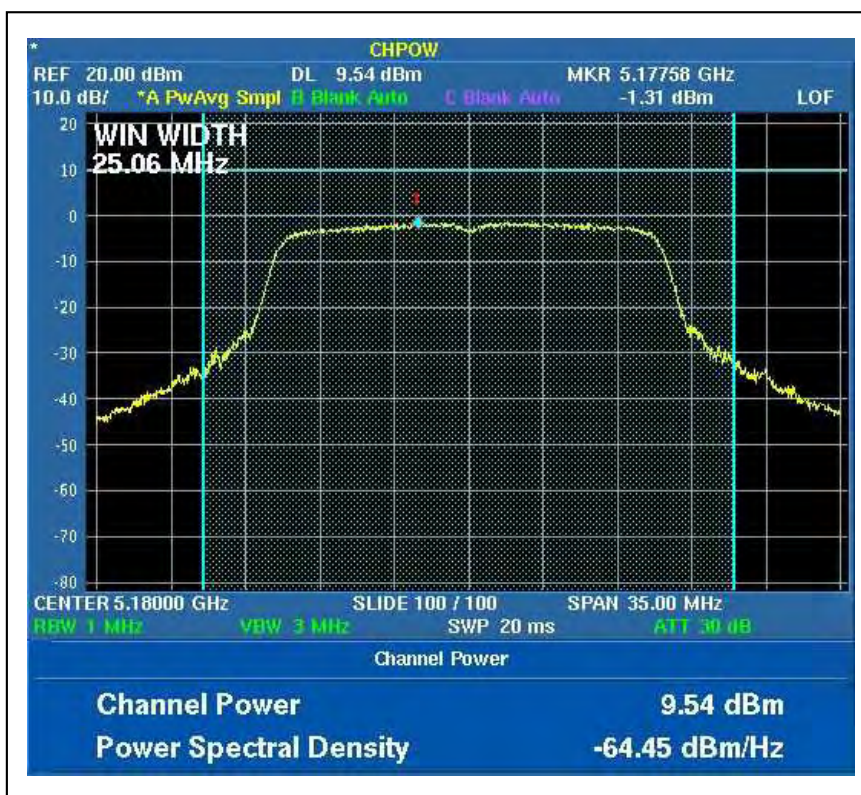
DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	22deg.C, 65%RH, 972hPa
TESTED BY	Wen Yu		

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 2	Chain 0	Chain 2				Chain 0	Chain 2	
1	5180	9.54	9.630	8.99	9.18	12.6	18.178	17.00	25.06	25.90	PASS
4	5240	11.62	10.990	14.52	12.56	14.3	27.081	17.00	24.85	25.73	PASS

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

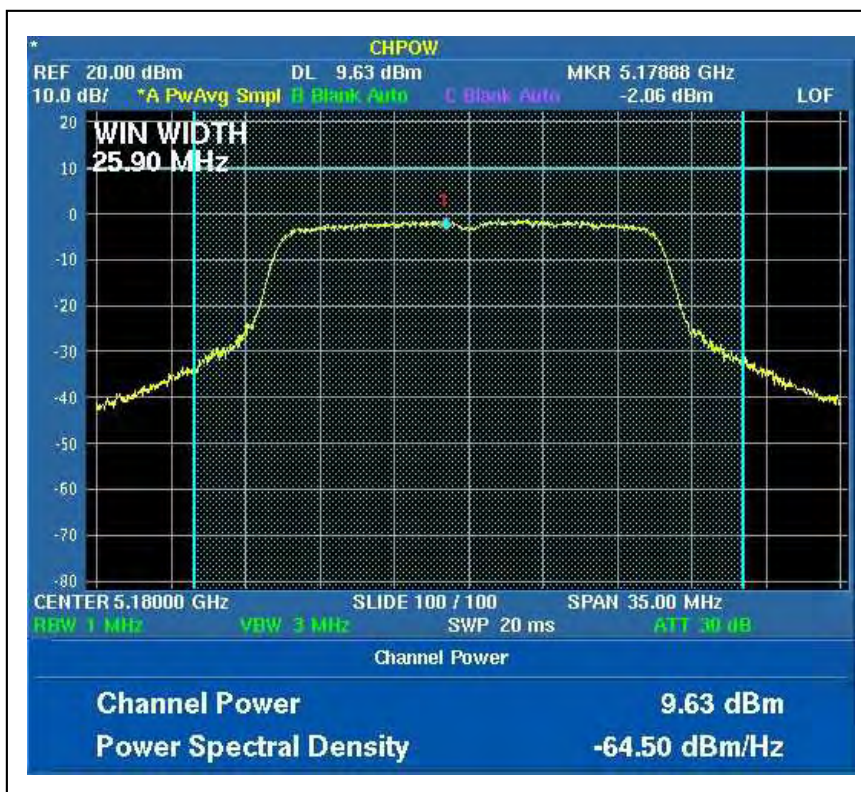
Peak Power Output:
For Chain (0) :CH1



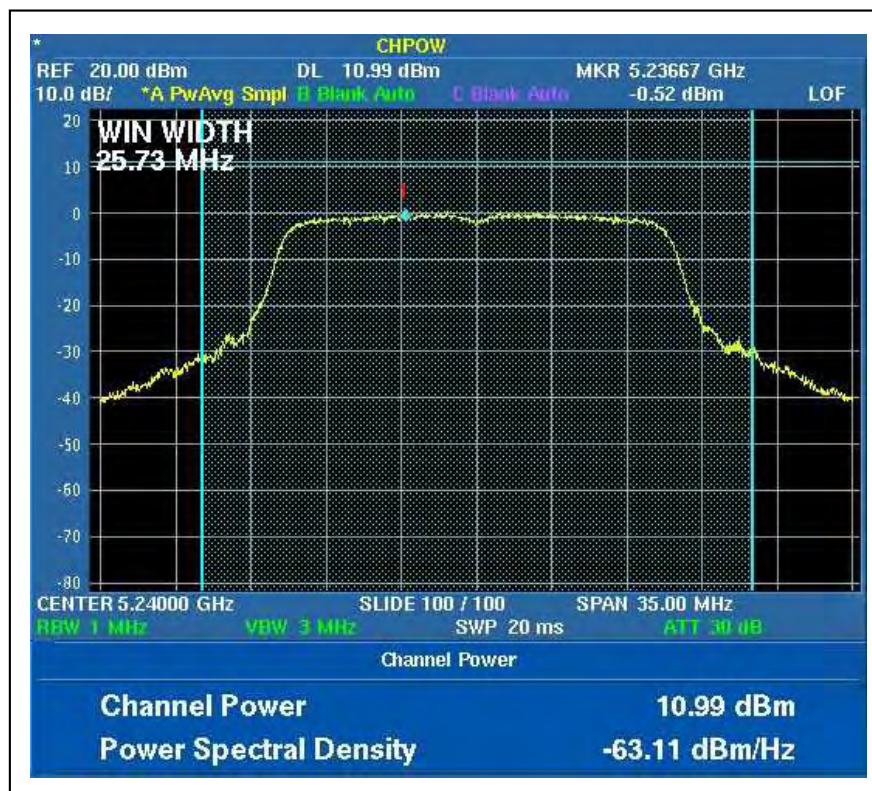
CH4



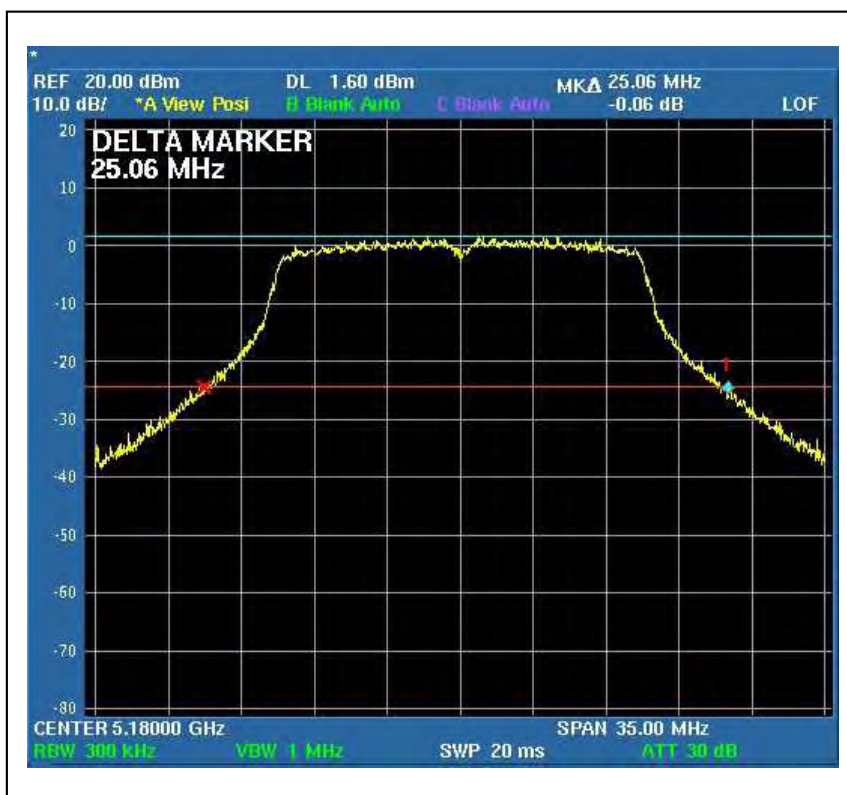
For Chain (2) :CH1



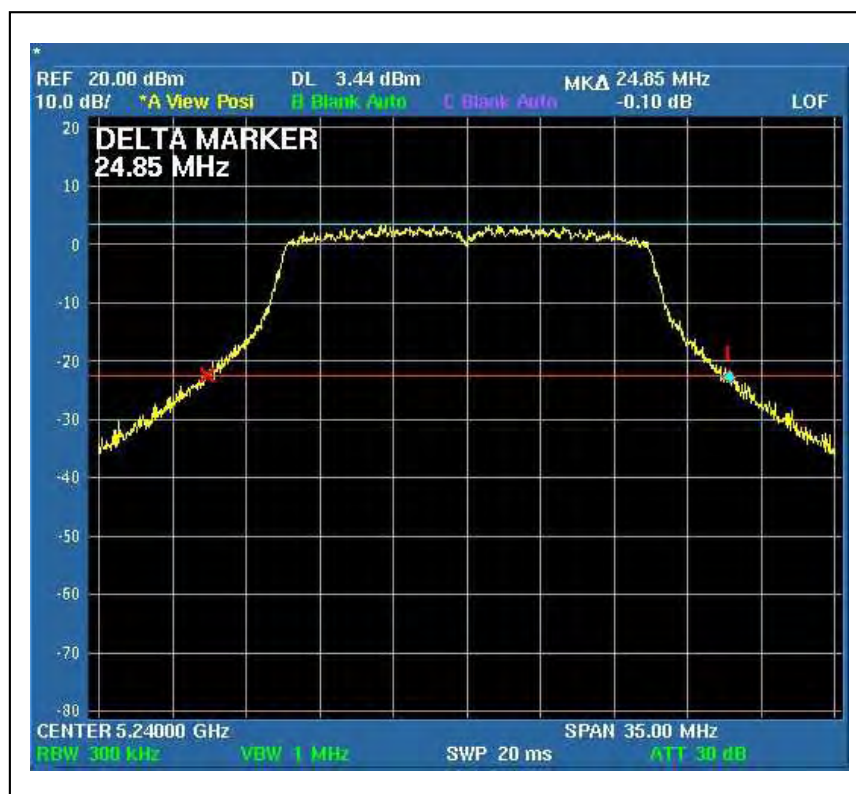
CH4



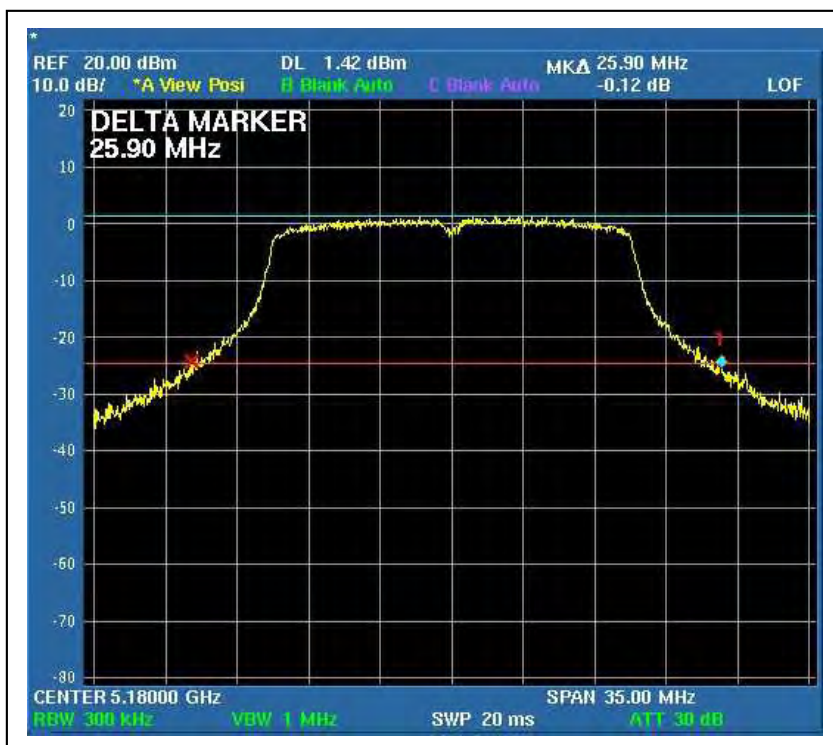
26dB Occupied Bandwidth:
For Chain (0) :CH1



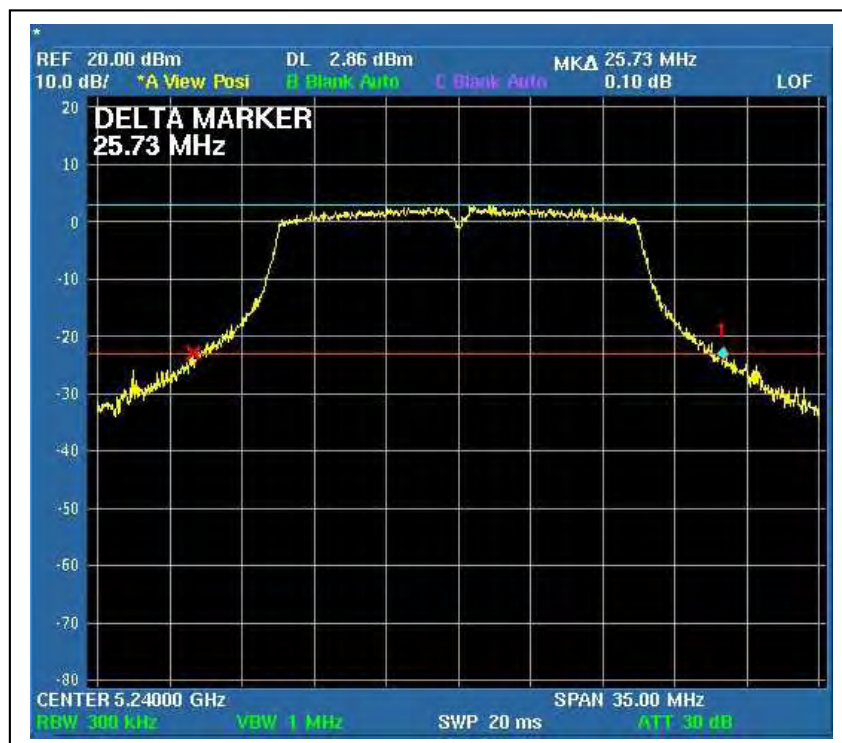
CH4



For Chain (2) :CH1



CH4



DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	22deg.C, 65%RH, 972hPa
TESTED BY	Wen Yu		

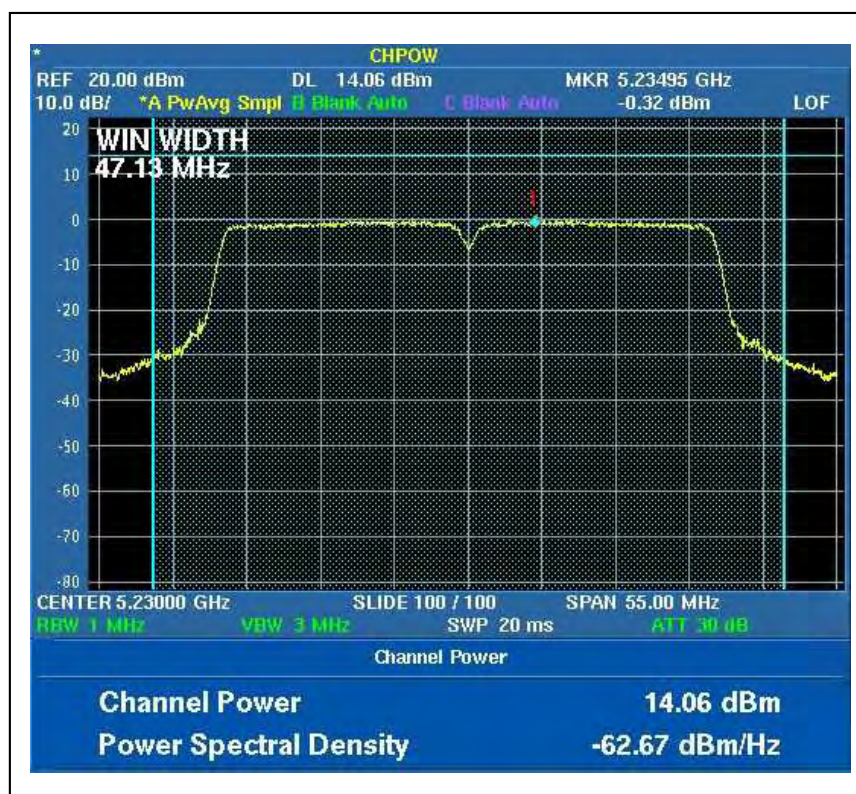
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)		PEAK POWER OUTPUT (mW)		TOTAL PEAK POWER (dBm)	TOTAL PEAK POWER (mW)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)		PASS/FAIL
		Chain 0	Chain 2	Chain 0	Chain 2				Chain 0	Chain 2	
1	5190	9.67	9.240	9.27	8.39	12.5	17.663	17.00	45.87	46.59	PASS
3	5230	14.06	14.030	25.47	25.29	17.1	50.761	17.00	47.13	49.61	PASS

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

Peak Power Output:
For Chain (0) :CH1



CH3



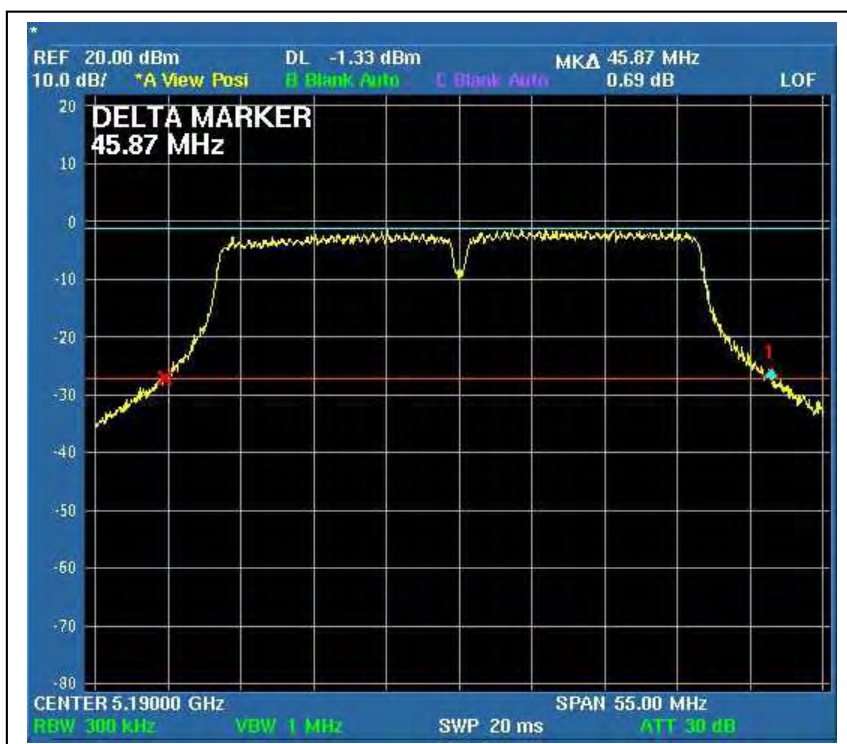
For Chain (2) :CH1



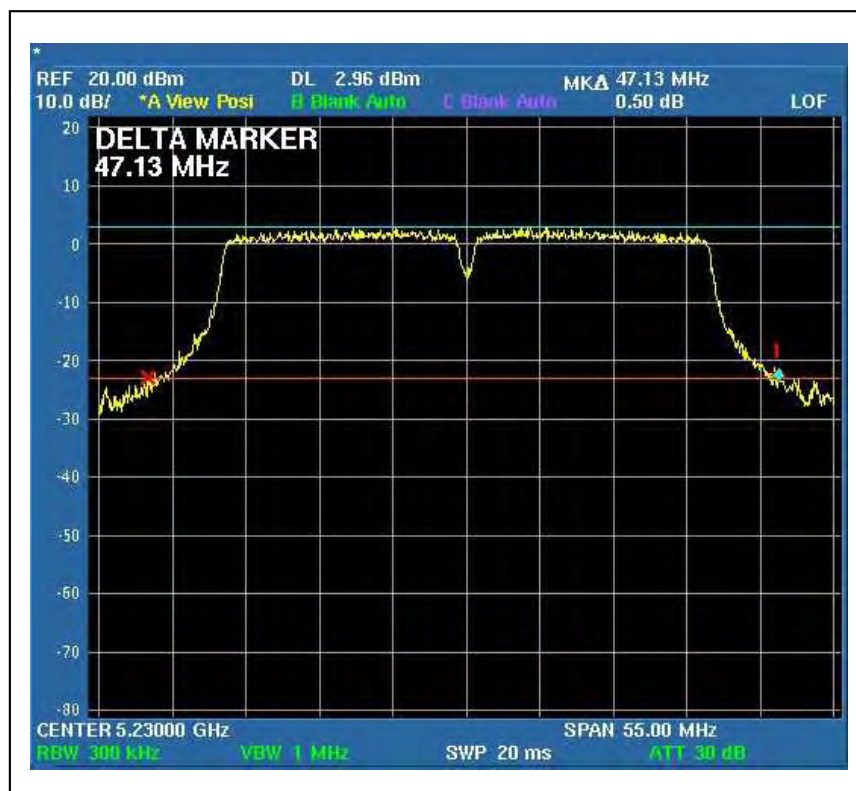
CH3



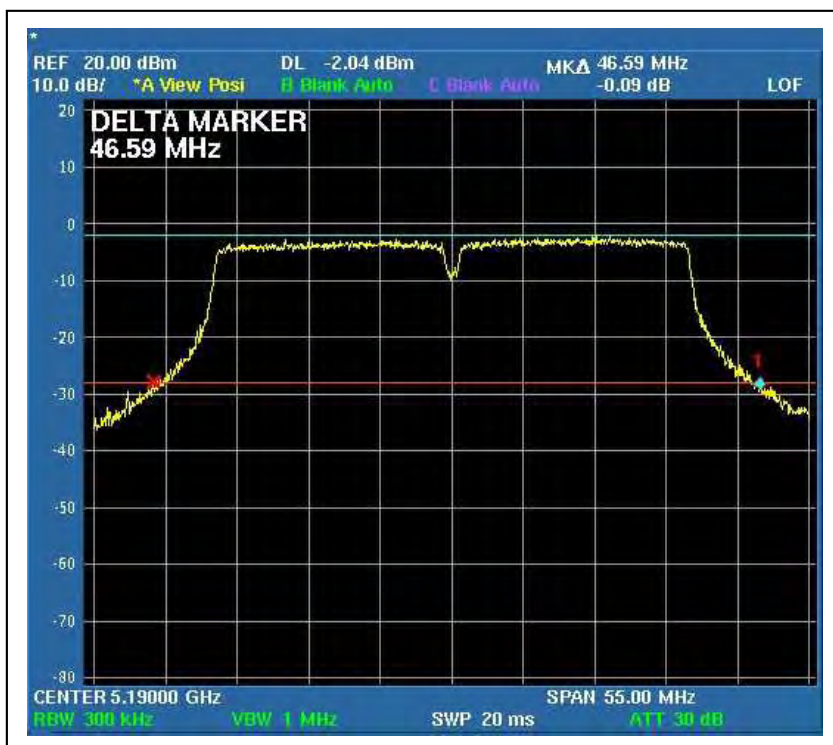
26dB Occupied Bandwidth:
For Chain (0) :CH1



CH3



For Chain (2) :CH1



CH3

