FCC TEST REPORT

REPORT NO.: RF140820C01

MODEL NO.: MR32-HW

FCC ID: UDX-60031010

RECEIVED: Aug. 04, 2014

TESTED: Aug. 07 ~ Sep. 16, 2014

ISSUED: Sep. 17, 2014

APPLICANT: Cisco Systems, Inc.

ADDRESS: 170 West Tasman Drive, San Jose, CA 95134

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

LAB ADDRESS: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140820C01	Original release	Sep. 17, 2014

1. CERTIFICATION

PRODUCT:	Wireless 802.11 abgn/ac AP
MODEL NO.:	MR32-HW
BRAND:	Cisco
APPLICANT:	Cisco Systems, Inc.
TESTED:	Aug. 07 ~ Sep. 16, 2014
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 15, Subpart C (Section 15.247)**
	ANSI C63.10-2009

The above equipment (model: MR32-HW) 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 : Celine Chou , **DATE :** Sep. 17, 2014

Celine Chou / Specialist

APPROVED BY : Ken Liu , **DATE :** Sep. 17, 2014

Ken Liu / Senior Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	**TEST TYPE**	**RESULT**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -6.11dB at 0.15391MHz.
15.205 & 209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -0.4dB at 2390.00MHz.
15.247(d)	Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 2483.50MHz.
15.247(d)	Antenna Port Emission	PASS	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	PASS	Meet the requirement of limit.
15.247(b)	Conducted power	PASS	Meet the requirement of limit.
15.247(e)	Power Spectral Density	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.86 dB
	200MHz ~1000MHz	3.87 dB
	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Wireless 802.11 abgn/ac AP
MODEL NO.	MR32-HW
POWER SUPPLY	12Vdc (Adapter) 55Vdc (POE)
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b:11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps
OPERATING FREQUENCY	2412 ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	1TX (Radio 1): 422.669mW 2TX (Radio 1): 860.953mW 1TX (Radio 3): 133.660mW
ANTENNA TYPE	Refer to note
ANTENNA CONNECTOR	Refer to note
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	NA

NOTE:

1. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers.

BAND	MODULATION MODE	TX FUNCTION	REMARK
2.4GHz	**802.11b**	1TX	Radio 3
		1TX / 2TX	Radio 1
	802.11g	1TX	Radio 3
		1TX / 2TX	Radio 1
	802.11n (20MHz)	1TX	Radio 3
		1TX / 2TX	Radio 1
5GHz	**802.11a**	1TX	Radio 3
		1TX / 2TX	Radio 2
	802.11n (HT20)	1TX	Radio 3
		1TX / 2TX	Radio 2
	802.11n (HT40)	1TX	Radio 3
		1TX / 2TX	Radio 2
	802.11ac (VHT80)	1TX / 2TX	Radio 2

2. There are 6 antennas for the EUT.

NO.	TYPE	GAIN(dBi)			CONNECTOR	REMARK
		2.4GHz	5GHz BAND 1	5GHz BAND 4		
1	PIFA	5.05	-	-	IPEX	WLAN (Radio 1)
2	PIFA	4.50	-	-	IPEX	
3	PIFA	-	5.31	5.60	IPEX	WLAN (Radio 2)
4	PIFA	-	5.07	5.12	IPEX	
5	PIFA	2.38	4.22	3.22	IPEX	WLAN (Radio 3)
6	PIFA	0.67	-	-	IPEX	BT (Radio 4)

3. The EUT consumes power from the following adapter and POE. (for supply unit only)

ADAPTER	
BRAND	Powertron Electronics Corp.
MODEL	PA1024-120HEB200
INPUT POWER	100-240Vac, 50-60Hz, 0.6A
OUTPUT POWER	12Vdc, 2A, 24W Max
POWER LINE	1.5m cable with one core attached on adapter

POE	
BRAND	CISCO
MODEL	PD-9001GR/AT/AC
INPUT POWER	100-240Vac, 50/60Hz, 0.67A
OUTPUT POWER	55Vdc, 0.6A

4. The above EUT information is 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

11 channels are provided for 802.11b, 802.11g and 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412MHz	7	2442MHz
2	2417MHz	8	2447MHz
3	2422MHz	9	2452MHz
4	2427MHz	10	2457MHz
5	2432MHz	11	2462MHz
6	2437MHz		

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	Powered by adapter
B	-	√	√	-	Powered by POE

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

NOTE:
1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane.**
2. "-"means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

☒ 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	REMARK
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	1TX / 2TX (Radio 1)
		1 to 11	1, 6, 11	DSSS	DBPSK	1.0	1TX (Radio 3)
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	1TX / 2TX (Radio 1)
		1 to 11	1, 6, 11	OFDM	BPSK	6.0	1TX (Radio 3)
	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	1TX (Radio 1)
		1 to 11	1, 6, 11	OFDM	BPSK	14.4	2TX (Radio 1)
		1 to 11	1, 6, 11	OFDM	BPSK	7.2	1TX (Radio 3)

RADIATED EMISSION TEST (BELOW 1GHz):

☒ 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	REMARK
A, B	802.11b	1 to 11	1	DSSS	DBPSK	1.0	1TX / 2TX (Radio 1)
		1 to 11	1	DSSS	DBPSK	1.0	1TX (Radio 3)

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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	REMARK
A, B	802.11b	1 to 11	1	DSSS	DBPSK	1.0	1TX / 2TX (Radio 1)
		1 to 11	1	DSSS	DBPSK	1.0	1TX (Radio 3)

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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	REMARK
A	802.11b	1 to 11	1, 11	DSSS	DBPSK	1.0	1TX / 2TX (Radio 1)
		1 to 11	1, 11	DSSS	DBPSK	1.0	1TX (Radio 3)
	802.11g	1 to 11	1, 11	OFDM	BPSK	6.0	1TX / 2TX (Radio 1)
		1 to 11	1, 11	OFDM	BPSK	6.0	1TX (Radio 3)
	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	1TX (Radio 1)
		1 to 11	1, 6, 11	OFDM	BPSK	14.4	2TX (Radio 1)
		1 to 11	1, 11	OFDM	BPSK	7.2	1TX (Radio 3)

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ 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.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	REMARK
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	1TX / 2TX (Radio 1)
		1 to 11	1, 6, 11	DSSS	DBPSK	1.0	1TX (Radio 3)
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	1TX / 2TX (Radio 1)
		1 to 11	1, 6, 11	OFDM	BPSK	6.0	1TX (Radio 3)
	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	1TX (Radio 1)
		1 to 11	1, 6, 11	OFDM	BPSK	14.4	2TX (Radio 1)
		1 to 11	1, 6, 11	OFDM	BPSK	7.2	1TX (Radio 3)

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	24deg. C, 69%RH 22deg. C, 71%RH	120Vac, 60Hz	Nick Hsu
RE<1G	21deg. C, 71%RH 23deg. C, 72%RH 21deg. C, 73%RH	120Vac, 60Hz 55Vdc	Nick Hsu
PLC	22deg. C, 72%RH	120Vac, 60Hz 55Vdc	Nick Hsu
APCM	25deg. C, 60%RH	120Vac, 60Hz	Nick Hsu

3.3 DUTY CYCLE OF TEST SIGNAL

1TX (Radio 1)

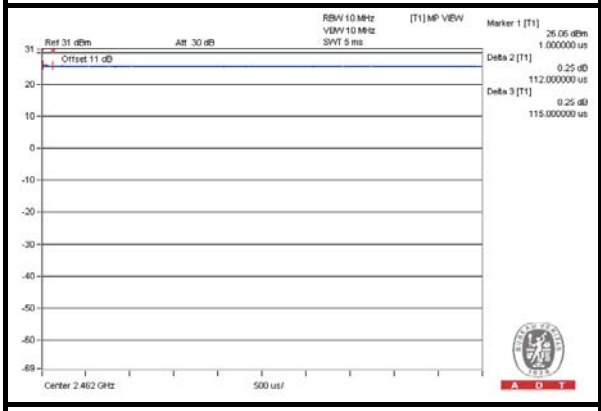
802.11b: Duty cycle of test signal is 100 %, duty factor is not required.

802.11g, 802.11n (20MHz): Duty cycle is < 98%, duty factor shall be considered.

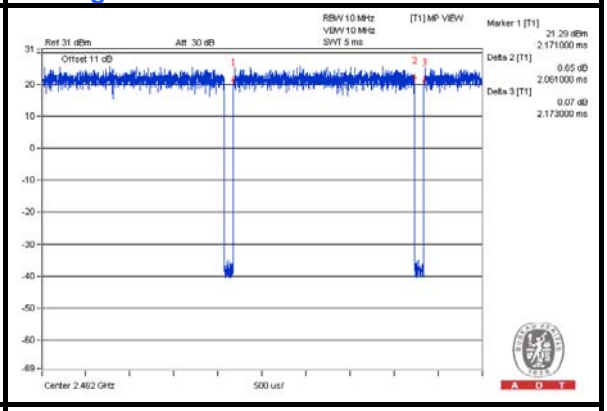
802.11g: Duty cycle = 2.061/2.173 = 0.948, Duty factor = 10 * log(1/0.948) = 0.23

802.11n (20MHz): Duty cycle = 1.917/2.020 = 0.949, Duty factor = 10 * log(1/0.949) = 0.23

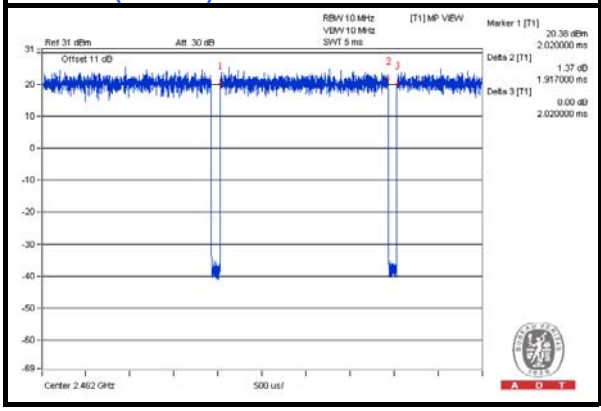
802.11b



802.11g



802.11n (20MHz)



2TX (Radio 1)

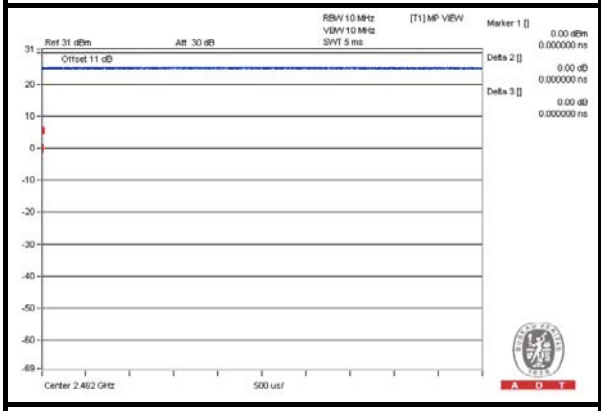
802.11b: Duty cycle of test signal is 100 %, duty factor is not required.

802.11g, 802.11n (20MHz): Duty cycle is < 98%, duty factor shall be considered.

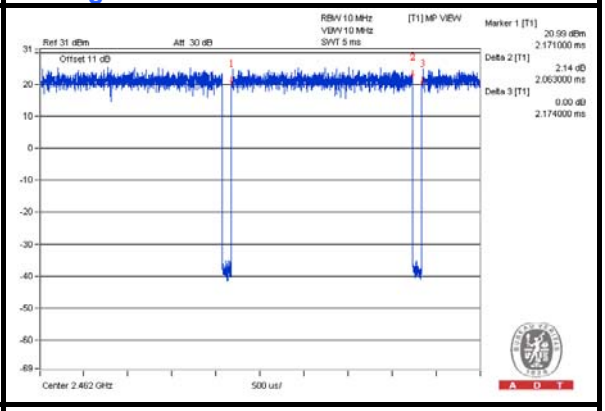
802.11g: Duty cycle = 2.063/2.174 = 0.949, Duty factor = 10 * log(1/0.949) = 0.23

802.11n (20MHz): Duty cycle = 1.916/2.020 = 0.949, Duty factor = 10 * log(1/0.949) = 0.23

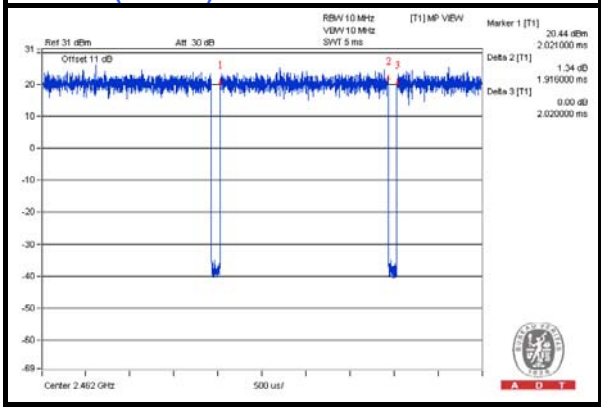
802.11b



802.11g



802.11n (20MHz)



1TX (Radio 3)

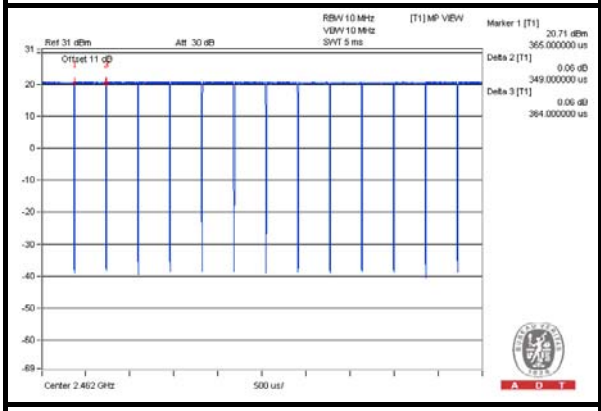
802.11b, 802.11g, 802.11n (20MHz): Duty cycle is < 98%, duty factor shall be considered.

802.11b: Duty cycle = 0.349/0.364 = 0.959, Duty factor = 10 * log(1/0.959) = 0.18

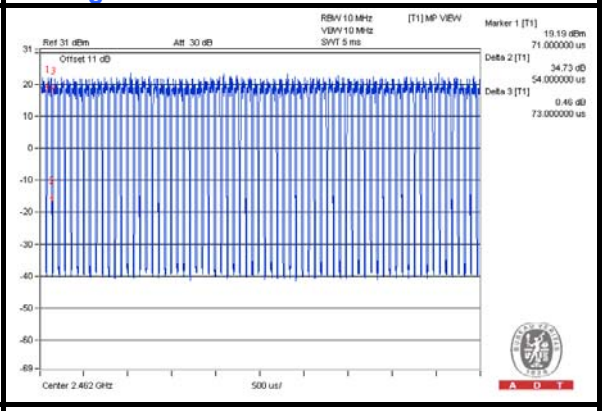
802.11g: Duty cycle = 0.054/0.073 = 0.740, Duty factor = 10 * log(1/0.740) = 1.31

802.11n (20MHz): Duty cycle = 0.052/0.072 = 0.722, Duty factor = 10 * log(1/0.722) = 1.41

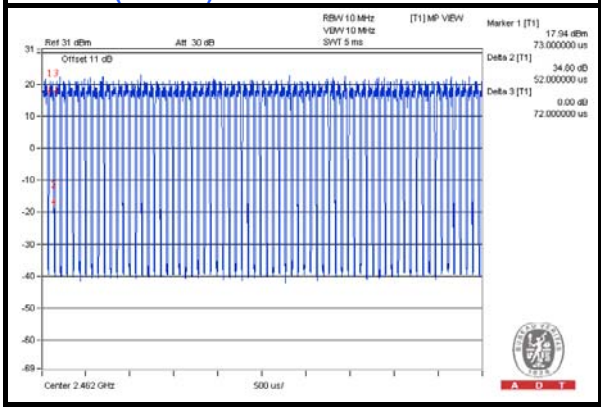
802.11b



802.11g



802.11n (20MHz)



3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	E5410	1HC2XM1	FCC Doc Approved
2	POE	CISCO	PD-9001GR/AT/AC	NA	NA
3	ADAPTER	Powertron Electronics Corp.	PA1024-120HEB200	NA	NA

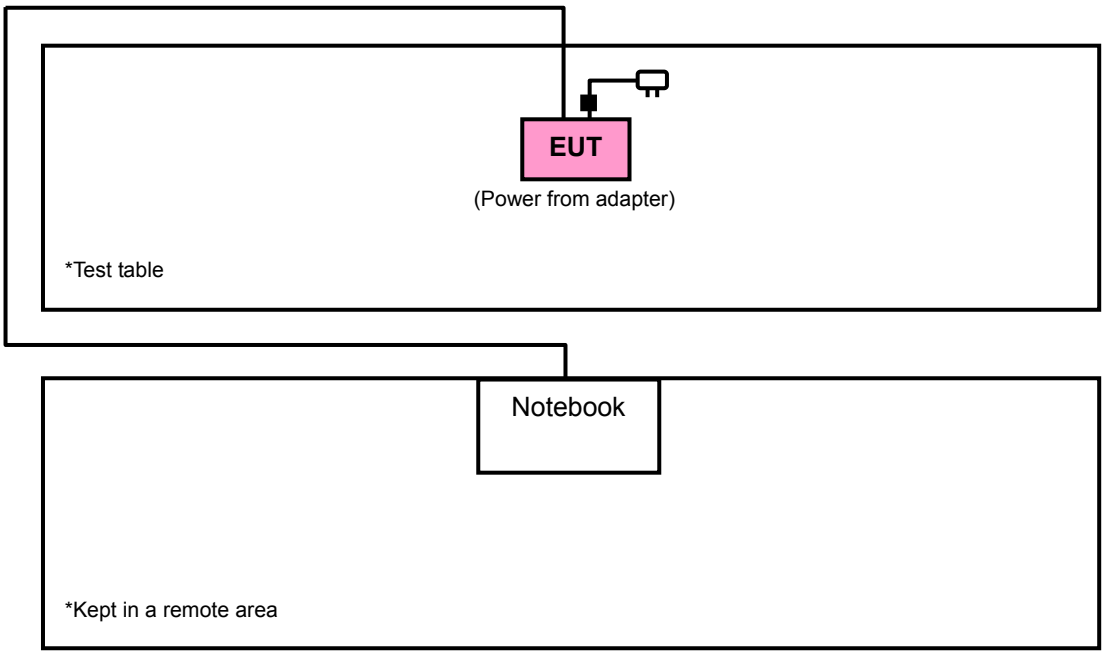
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m LAN cable for test mode A, 1.8m LAN cable for test mode B
2	10m LAN cable
3	NA

NOTE:

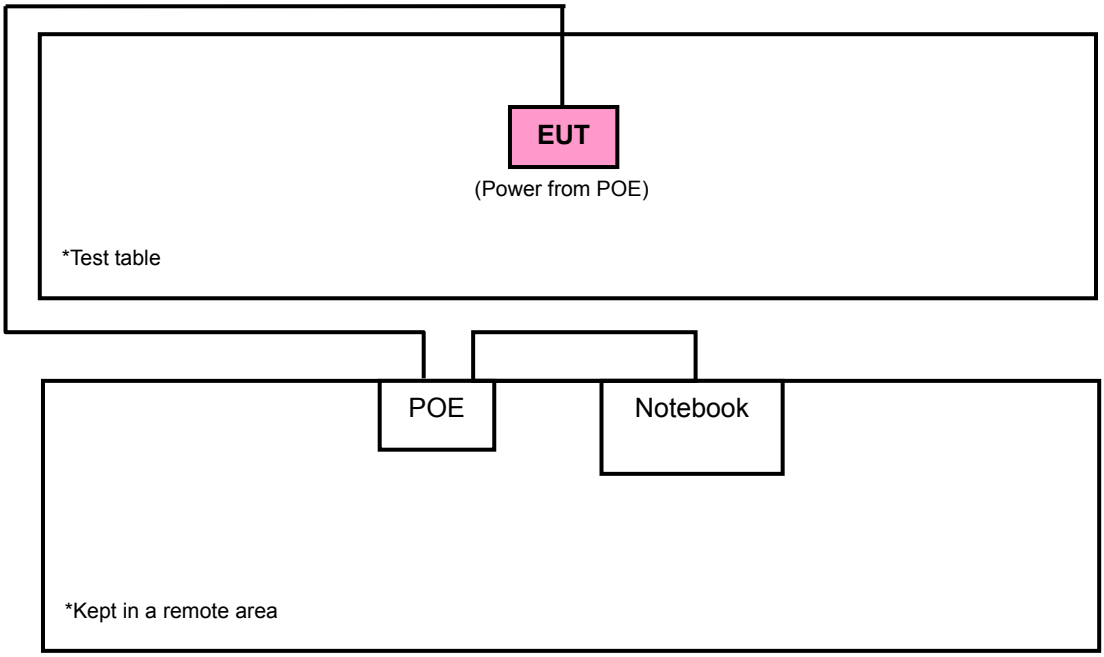
1. All power cords of the above support units are non-shielded (1.8 m).
2. Item 1 acted as a communication partner to transfer data.
3. Items 2-3 were provided by the manufacturer.

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST

TEST MODE A



TEST MODE B



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C (15.247)
558074 D01 DTS Meas Guidance v03r02
662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2009

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.

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 30dB below the highest level of the desired power:

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. 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 30dB under any condition of modulation.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	Jan. 02, 2014	Jan. 01, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Mar. 03, 2014	Mar. 02, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Feb. 26, 2014	Feb. 25, 2015
HORN Antenna SCHWARZBECK	9120D	209	Sep. 12, 2013	Sep. 11, 2014
			Sep. 12, 2014	Sep. 11, 2015
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 17, 2014	Feb. 16, 2015
Preamplifier Agilent	8447D	2944A10633	Oct. 07, 2013	Oct. 06, 2014
Preamplifier Agilent	8449B	3008A01964	Aug. 26, 2013	Aug. 25, 2014
			Aug. 26, 2014	Aug. 25, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	214378/4	Aug. 26, 2013	Aug. 25, 2014
			Aug. 26, 2014	Aug. 25, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 106	12738/6 +309224/4	Aug. 26, 2013	Aug. 25, 2014
			Aug. 26, 2014	Aug. 25, 2015
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
High Speed Peak Power Meter	ML2495A	0824011	Jul. 26, 2014	Jul. 25, 2015
Power Sensor	MA2411B	0738171	Jul. 26, 2014	Jul. 25, 2015

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 HwaYa Chamber 3.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 988962.

5. The IC Site Registration No. is IC 7450F-3.

4.1.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters 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. Height of receiving antenna 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 lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

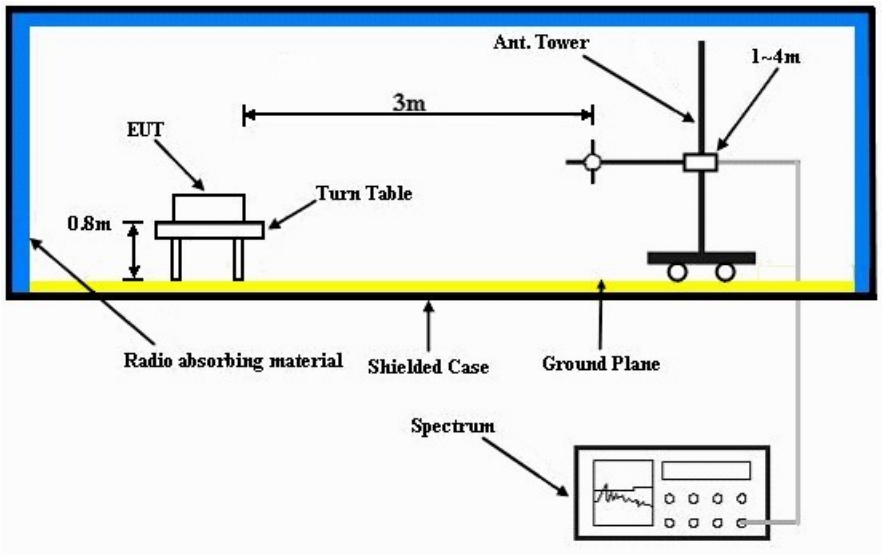
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz(Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

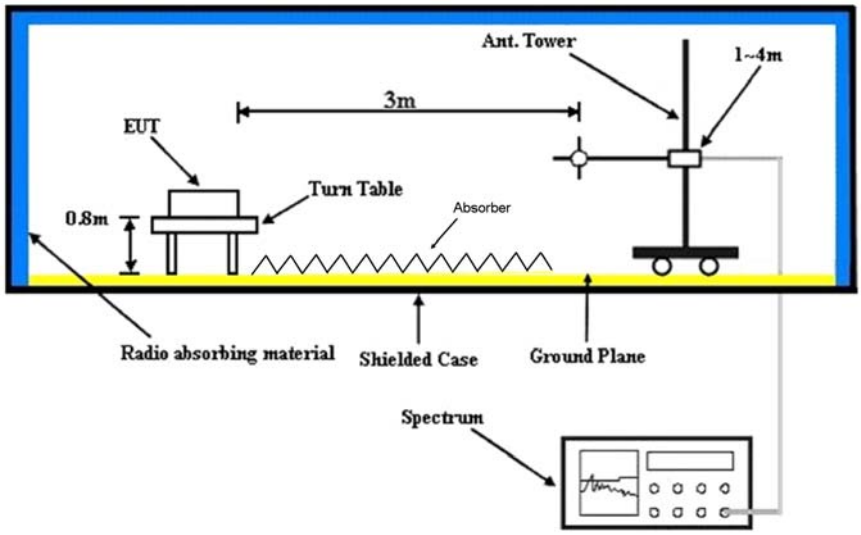
No deviation.

4.1.5 TEST SETUP

Frequency range 30MHz~1GHz



Frequency range above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

a. Placed the EUT on the testing table.
b. Prepared notebooks to act as communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
d. The communication partner sent data to EUT by command "PING".

4.1.7 TEST RESULTS

ABOVE 1GHz DATA：

1TX (Radio 1)

802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	2390.00	61.4 PK	74.0	-12.6	1.15 H	334	30.40	31.00
2	2390.00	52.3 AV	54.0	-1.7	1.15 H	334	21.30	31.00
3	*2412.00	116.3 PK			1.12 H	322	85.20	31.10
4	*2412.00	112.4 AV			1.12 H	322	81.30	31.10
5	4824.00	46.2 PK	74.0	-27.8	1.27 H	346	41.30	4.90
6	4824.00	33.6 AV	54.0	-20.4	1.27 H	346	28.70	4.90
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	2390.00	55.2 PK	74.0	-18.8	1.21 V	200	24.20	31.00
2	2390.00	44.5 AV	54.0	-9.5	1.21 V	200	13.50	31.00
3	*2412.00	106.7 PK			1.94 V	0	75.60	31.10
4	*2412.00	102.7 AV			1.94 V	0	71.60	31.10
5	4824.00	46.6 PK	74.0	-27.4	1.85 V	27	41.70	4.90
6	4824.00	33.4 AV	54.0	-20.6	1.85 V	27	28.50	4.90

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	2390.00	59.4 PK	74.0	-14.6	1.35 H	292	28.40	31.00
2	2390.00	49.2 AV	54.0	-4.8	1.35 H	292	18.20	31.00
3	*2437.00	120.4 PK			1.31 H	310	89.20	31.20
4	*2437.00	116.3 AV			1.31 H	310	85.10	31.20
5	2483.50	64.2 PK	74.0	-9.8	1.31 H	309	32.80	31.40
6	2483.50	52.4 AV	54.0	-1.6	1.31 H	309	21.00	31.40
7	4874.00	47.1 PK	74.0	-26.9	1.10 H	264	42.10	5.00
8	4874.00	35.3 AV	54.0	-18.7	1.10 H	264	30.30	5.00
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	2390.00	54.7 PK	74.0	-19.3	2.07 V	11	23.70	31.00
2	2390.00	44.2 AV	54.0	-9.8	2.07 V	11	13.20	31.00
3	*2437.00	111.0 PK			2.23 V	337	79.80	31.20
4	*2437.00	107.0 AV			2.23 V	337	75.80	31.20
5	2483.50	56.6 PK	74.0	-17.4	2.16 V	355	25.20	31.40
6	2483.50	45.9 AV	54.0	-8.1	2.16 V	355	14.50	31.40
7	4874.00	46.4 PK	74.0	-27.6	2.04 V	349	41.40	5.00
8	4874.00	33.4 AV	54.0	-20.6	2.04 V	349	28.40	5.00

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	*2462.00	117.2 PK			1.29 H	302	85.90	31.30
2	*2462.00	112.9 AV			1.29 H	302	81.60	31.30
3	2483.50	62.2 PK	74.0	-11.8	1.30 H	306	30.80	31.40
4	2483.50	53.0 AV	54.0	-1.0	1.30 H	306	21.60	31.40
5	4924.00	47.0 PK	74.0	-27.0	1.18 H	264	41.80	5.20
6	4924.00	34.4 AV	54.0	-19.6	1.18 H	264	29.20	5.20
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	*2462.00	107.9 PK			1.85 V	330	76.60	31.30
2	*2462.00	104.0 AV			1.85 V	330	72.70	31.30
3	2483.50	56.9 PK	74.0	-17.1	1.82 V	319	25.50	31.40
4	2483.50	46.1 AV	54.0	-7.9	1.82 V	319	14.70	31.40
5	4924.00	46.5 PK	74.0	-27.5	1.72 V	352	41.30	5.20
6	4924.00	33.8 AV	54.0	-20.2	1.72 V	352	28.60	5.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	2390.00	72.4 PK	74.0	-1.6	1.15 H	331	41.40	31.00
2	2390.00	53.4 AV	54.0	-0.6	1.15 H	331	22.40	31.00
3	*2412.00	113.1 PK			1.14 H	322	82.00	31.10
4	*2412.00	102.4 AV			1.14 H	322	71.30	31.10
5	4824.00	46.0 PK	74.0	-28.0	1.04 H	336	41.10	4.90
6	4824.00	32.9 AV	54.0	-21.1	1.04 H	336	28.00	4.90
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	2390.00	59.9 PK	74.0	-14.1	1.91 V	328	28.90	31.00
2	2390.00	46.7 AV	54.0	-7.3	1.91 V	328	15.70	31.00
3	*2412.00	104.2 PK			1.91 V	337	73.10	31.10
4	*2412.00	93.4 AV			1.91 V	337	62.30	31.10
5	4824.00	46.3 PK	74.0	-27.7	1.01 V	97	41.40	4.90
6	4824.00	33.1 AV	54.0	-20.9	1.01 V	97	28.20	4.90

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	2390.00	68.9 PK	74.0	-5.1	1.32 H	280	37.90	31.00
2	2390.00	50.1 AV	54.0	-3.9	1.32 H	280	19.10	31.00
3	*2437.00	119.7 PK			1.32 H	308	88.50	31.20
4	*2437.00	108.9 AV			1.32 H	308	77.70	31.20
5	2483.50	69.4 PK	74.0	-4.6	1.52 H	290	38.00	31.40
6	2483.50	52.3 AV	54.0	-1.7	1.52 H	290	20.90	31.40
7	4874.00	46.1 PK	74.0	-27.9	1.19 H	323	41.10	5.00
8	4874.00	33.1 AV	54.0	-20.9	1.19 H	323	28.10	5.00
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	2390.00	61.2 PK	74.0	-12.8	2.20 V	346	30.20	31.00
2	2390.00	46.5 AV	54.0	-7.5	2.20 V	346	15.50	31.00
3	*2437.00	110.0 PK			2.49 V	336	78.80	31.20
4	*2437.00	99.0 AV			2.49 V	336	67.80	31.20
5	2483.50	63.4 PK	74.0	-10.6	1.83 V	350	32.00	31.40
6	2483.50	47.5 AV	54.0	-6.5	1.83 V	350	16.10	31.40
7	4874.00	47.3 PK	74.0	-26.7	1.91 V	349	42.30	5.00
8	4874.00	33.6 AV	54.0	-20.4	1.91 V	349	28.60	5.00

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	*2462.00	113.3 PK			1.31 H	290	82.00	31.30
2	*2462.00	102.8 AV			1.31 H	290	71.50	31.30
3	2483.50	71.9 PK	74.0	-2.1	1.06 H	282	40.50	31.40
4	2483.50	52.4 AV	54.0	-1.6	1.06 H	282	21.00	31.40
5	4924.00	46.1 PK	74.0	-27.9	1.17 H	310	40.90	5.20
6	4924.00	33.5 AV	54.0	-20.5	1.17 H	310	28.30	5.20
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	*2462.00	106.1 PK			2.15 V	338	74.80	31.30
2	*2462.00	95.5 AV			2.15 V	338	64.20	31.30
3	2483.50	65.3 PK	74.0	-8.7	1.82 V	343	33.90	31.40
4	2483.50	48.3 AV	54.0	-5.7	1.82 V	343	16.90	31.40
5	4924.00	46.7 PK	74.0	-27.3	2.00 V	349	41.50	5.20
6	4924.00	33.7 AV	54.0	-20.3	2.00 V	349	28.50	5.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	2390.00	71.4 PK	74.0	-2.6	1.34 H	296	40.40	31.00
2	2390.00	53.5 AV	54.0	-0.5	1.34 H	296	22.50	31.00
3	*2412.00	113.4 PK			1.35 H	309	82.30	31.10
4	*2412.00	102.2 AV			1.35 H	309	71.10	31.10
5	4824.00	46.7 PK	74.0	-27.3	1.20 H	286	41.80	4.90
6	4824.00	33.3 AV	54.0	-20.7	1.20 H	286	28.40	4.90
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	2390.00	60.7 PK	74.0	-13.3	1.49 V	19	29.70	31.00
2	2390.00	46.2 AV	54.0	-7.8	1.49 V	19	15.20	31.00
3	*2412.00	103.8 PK			1.69 V	90	72.70	31.10
4	*2412.00	93.0 AV			1.69 V	90	61.90	31.10
5	4824.00	46.9 PK	74.0	-27.1	1.14 V	109	42.00	4.90
6	4824.00	33.4 AV	54.0	-20.6	1.14 V	109	28.50	4.90

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	2390.00	66.8 PK	74.0	-7.2	1.34 H	295	35.80	31.00
2	2390.00	50.6 AV	54.0	-3.4	1.34 H	295	19.60	31.00
3	*2437.00	118.9 PK			1.33 H	309	87.70	31.20
4	*2437.00	107.9 AV			1.33 H	309	76.70	31.20
5	2483.50	70.0 PK	74.0	-4.0	1.29 H	307	38.60	31.40
6	2483.50	52.9 AV	54.0	-1.1	1.29 H	307	21.50	31.40
7	4874.00	45.6 PK	74.0	-28.4	1.20 H	325	40.60	5.00
8	4874.00	32.8 AV	54.0	-21.2	1.20 H	325	27.80	5.00
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	2390.00	57.3 PK	74.0	-16.7	1.38 V	334	26.30	31.00
2	2390.00	45.6 AV	54.0	-8.4	1.38 V	334	14.60	31.00
3	*2437.00	109.4 PK			2.23 V	335	78.20	31.20
4	*2437.00	98.1 AV			2.23 V	335	66.90	31.20
5	2483.50	59.0 PK	74.0	-15.0	1.34 V	3	27.60	31.40
6	2483.50	46.5 AV	54.0	-7.5	1.34 V	3	15.10	31.40
7	4874.00	46.0 PK	74.0	-28.0	2.04 V	349	41.00	5.00
8	4874.00	33.6 AV	54.0	-20.4	2.04 V	349	28.60	5.00

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Nick Hsu

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	*2462.00	112.0 PK			1.10 H	329	80.70	31.30
2	*2462.00	101.2 AV			1.10 H	329	69.90	31.30
3	2483.50	72.2 PK	74.0	-1.8	1.11 H	319	40.80	31.40
4	2483.50	51.6 AV	54.0	-2.4	1.11 H	319	20.20	31.40
5	4924.00	46.5 PK	74.0	-27.5	1.00 H	343	41.30	5.20
6	4924.00	33.8 AV	54.0	-20.2	1.00 H	343	28.60	5.20
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	*2462.00	105.3 PK			2.11 V	330	74.00	31.30
2	*2462.00	93.9 AV			2.11 V	330	62.60	31.30
3	2483.50	62.2 PK	74.0	-11.8	1.81 V	330	30.80	31.40
4	2483.50	47.1 AV	54.0	-6.9	1.81 V	330	15.70	31.40
5	4924.00	46.8 PK	74.0	-27.2	1.91 V	300	41.60	5.20
6	4924.00	33.8 AV	54.0	-20.2	1.91 V	300	28.60	5.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

2TX (Radio 1)

802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	61.2 PK	74.0	-12.8	1.19 H	343	30.20	31.00
2	2390.00	52.3 AV	54.0	-1.7	1.19 H	343	21.30	31.00
3	*2412.00	117.3 PK			1.18 H	1	86.20	31.10
4	*2412.00	113.3 AV			1.18 H	1	82.20	31.10
5	4824.00	49.2 PK	74.0	-24.8	1.15 H	316	44.30	4.90
6	4824.00	42.4 AV	54.0	-11.6	1.15 H	316	37.50	4.90
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	2390.00	21.8 PK	74.0	-52.2	1.00 V	19	24.20	-2.40
2	2390.00	11.0 AV	54.0	-43.0	1.00 V	19	13.40	-2.40
3	*2412.00	105.5 PK			1.00 V	150	74.40	31.10
4	*2412.00	101.5 AV			1.00 V	150	70.40	31.10
5	4824.00	50.9 PK	74.0	-23.1	1.13 V	163	46.00	4.90
6	4824.00	44.5 AV	54.0	-9.5	1.13 V	163	39.60	4.90

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	60.5 PK	74.0	-13.5	1.19 H	0	29.50	31.00
2	2390.00	49.2 AV	54.0	-4.8	1.19 H	0	18.20	31.00
3	*2437.00	119.1 PK			1.43 H	6	87.90	31.20
4	*2437.00	115.0 AV			1.43 H	6	83.80	31.20
5	4874.00	51.2 PK	74.0	-22.8	1.02 H	301	46.20	5.00
6	4874.00	45.3 AV	54.0	-8.7	1.02 H	301	40.30	5.00
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	2390.00	54.4 PK	74.0	-19.6	1.00 V	4	23.40	31.00
2	2390.00	43.9 AV	54.0	-10.1	1.00 V	4	12.90	31.00
3	*2437.00	109.4 PK			1.00 V	150	78.20	31.20
4	*2437.00	105.4 AV			1.00 V	150	74.20	31.20
5	4874.00	53.5 PK	74.0	-20.5	1.12 V	3	48.50	5.00
6	4874.00	48.8 AV	54.0	-5.2	1.12 V	3	43.80	5.00

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2462.00	114.3 PK			1.42 H	22	83.00	31.30
2	*2462.00	110.0 AV			1.42 H	22	78.70	31.30
3	2483.50	61.3 PK	74.0	-12.7	1.07 H	285	29.90	31.40
4	2483.50	53.0 AV	54.0	-1.0	1.07 H	285	21.60	31.40
5	4924.00	49.5 PK	74.0	-24.5	1.38 H	324	44.30	5.20
6	4924.00	41.0 AV	54.0	-13.0	1.38 H	324	35.80	5.20
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	*2462.00	109.6 PK			1.98 V	6	78.30	31.30
2	*2462.00	105.5 AV			1.98 V	6	74.20	31.30
3	2483.50	55.4 PK	74.0	-18.6	1.27 V	101	24.00	31.40
4	2483.50	44.3 AV	54.0	-9.7	1.27 V	101	12.90	31.40
5	4924.00	49.9 PK	74.0	-24.1	1.93 V	35	44.70	5.20
6	4924.00	41.4 AV	54.0	-12.6	1.93 V	35	36.20	5.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	73.4 PK	74.0	-0.6	1.17 H	342	42.40	31.00
2	2390.00	52.7 AV	54.0	-1.3	1.17 H	342	21.70	31.00
3	*2412.00	116.1 PK			1.18 H	352	85.00	31.10
4	*2412.00	105.1 AV			1.18 H	352	74.00	31.10
5	4824.00	46.6 PK	74.0	-27.4	1.14 H	316	41.70	4.90
6	4824.00	33.1 AV	54.0	-20.9	1.14 H	316	28.20	4.90
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	2390.00	59.7 PK	74.0	-14.3	1.34 V	311	28.70	31.00
2	2390.00	45.7 AV	54.0	-8.3	1.34 V	311	14.70	31.00
3	*2412.00	102.4 PK			1.32 V	324	71.30	31.10
4	*2412.00	92.2 AV			1.32 V	324	61.10	31.10
5	4824.00	45.7 PK	74.0	-28.3	1.09 V	256	40.80	4.90
6	4824.00	33.5 AV	54.0	-20.5	1.09 V	256	28.60	4.90

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	71.4 PK	74.0	-2.6	1.17 H	346	40.40	31.00
2	2390.00	52.5 AV	54.0	-1.5	1.17 H	346	21.50	31.00
3	*2437.00	118.9 PK			1.43 H	20	87.70	31.20
4	*2437.00	108.2 AV			1.43 H	20	77.00	31.20
5	4874.00	46.5 PK	74.0	-27.5	1.36 H	85	41.50	5.00
6	4874.00	33.7 AV	54.0	-20.3	1.36 H	85	28.70	5.00
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	2390.00	55.5 PK	74.0	-18.5	1.58 V	41	24.50	31.00
2	2390.00	44.7 AV	54.0	-9.3	1.58 V	41	13.70	31.00
3	*2437.00	110.1 PK			1.34 V	189	78.90	31.20
4	*2437.00	99.8 AV			1.34 V	189	68.60	31.20
5	4874.00	46.4 PK	74.0	-27.6	1.37 V	134	41.40	5.00
6	4874.00	33.6 AV	54.0	-20.4	1.37 V	134	28.60	5.00

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2462.00	114.9 PK			1.36 H	307	83.60	31.30
2	*2462.00	104.3 AV			1.36 H	307	73.00	31.30
3	2483.50	71.5 PK	74.0	-2.5	1.35 H	37	40.10	31.40
4	2483.50	52.3 AV	54.0	-1.7	1.35 H	37	20.90	31.40
5	4924.00	47.6 PK	74.0	-26.4	1.28 H	300	42.40	5.20
6	4924.00	33.9 AV	54.0	-20.1	1.28 H	300	28.70	5.20
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	*2462.00	103.2 PK			1.00 V	193	71.90	31.30
2	*2462.00	92.8 AV			1.00 V	193	61.50	31.30
3	2483.50	61.0 PK	74.0	-13.0	1.32 V	105	29.60	31.40
4	2483.50	46.0 AV	54.0	-8.0	1.32 V	105	14.60	31.40
5	4924.00	46.4 PK	74.0	-27.6	1.12 V	129	41.20	5.20
6	4924.00	33.8 AV	54.0	-20.2	1.12 V	129	28.60	5.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	72.6 PK	74.0	-1.4	1.38 H	308	41.60	31.00
2	**2390.00**	**53.6 AV**	**54.0**	**-0.4**	**1.38 H**	**308**	**22.60**	**31.00**
3	*2412.00	112.4 PK			1.35 H	307	81.30	31.10
4	*2412.00	102.2 AV			1.35 H	307	71.10	31.10
5	4824.00	46.2 PK	74.0	-27.8	1.06 H	354	41.30	4.90
6	4824.00	33.2 AV	54.0	-20.8	1.06 H	354	28.30	4.90
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	2390.00	58.2 PK	74.0	-15.8	1.22 V	219	27.20	31.00
2	2390.00	45.3 AV	54.0	-8.7	1.22 V	219	14.30	31.00
3	*2412.00	103.7 PK			1.64 V	335	72.60	31.10
4	*2412.00	93.6 AV			1.64 V	335	62.50	31.10
5	4824.00	46.5 PK	74.0	-27.5	1.05 V	312	41.60	4.90
6	4824.00	33.6 AV	54.0	-20.4	1.05 V	312	28.70	4.90

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	68.9 PK	74.0	-5.1	1.19 H	3	37.90	31.00
2	2390.00	52.9 AV	54.0	-1.1	1.19 H	3	21.90	31.00
3	*2437.00	118.6 PK			1.15 H	351	87.40	31.20
4	*2437.00	108.0 AV			1.15 H	351	76.80	31.20
5	4874.00	46.6 PK	74.0	-27.4	1.21 H	303	41.60	5.00
6	4874.00	33.6 AV	54.0	-20.4	1.21 H	303	28.60	5.00
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	2390.00	56.9 PK	74.0	-17.1	1.97 V	9	25.90	31.00
2	2390.00	44.7 AV	54.0	-9.3	1.97 V	9	13.70	31.00
3	*2437.00	110.9 PK			1.96 V	348	79.70	31.20
4	*2437.00	100.3 AV			1.96 V	348	69.10	31.20
5	4874.00	46.2 PK	74.0	-27.8	1.84 V	303	41.20	5.00
6	4874.00	33.7 AV	54.0	-20.3	1.84 V	303	28.70	5.00

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2462.00	114.3 PK			1.38 H	18	83.00	31.30
2	*2462.00	102.3 AV			1.38 H	18	71.00	31.30
3	2483.50	72.7 PK	74.0	-1.3	1.06 H	288	41.30	31.40
4	2483.50	52.6 AV	54.0	-1.4	1.06 H	288	21.20	31.40
5	4924.00	46.6 PK	74.0	-27.4	1.10 H	294	41.40	5.20
6	4924.00	33.9 AV	54.0	-20.1	1.10 H	294	28.70	5.20
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	*2462.00	102.5 PK			1.45 V	191	71.20	31.30
2	*2462.00	92.1 AV			1.45 V	191	60.80	31.30
3	2483.50	63.0 PK	74.0	-11.0	1.42 V	202	31.60	31.40
4	2483.50	46.0 AV	54.0	-8.0	1.42 V	202	14.60	31.40
5	4924.00	46.3 PK	74.0	-27.7	1.31 V	122	41.10	5.20
6	4924.00	33.9 AV	54.0	-20.1	1.31 V	122	28.70	5.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

1TX (Radio 3)

802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	62.0 PK	74.0	-12.0	1.05 H	209	31.00	31.00
2	2390.00	52.8 AV	54.0	-1.2	1.05 H	209	21.80	31.00
3	*2412.00	109.2 PK			1.37 H	83	78.10	31.10
4	*2412.00	103.9 AV			1.37 H	83	72.80	31.10
5	4824.00	48.5 PK	74.0	-25.5	1.05 H	120	43.60	4.90
6	4824.00	40.8 AV	54.0	-13.2	1.05 H	120	35.90	4.90
7	#7236.00	56.7 PK	79.2	-22.5	1.77 H	211	45.80	10.90
8	#7236.00	48.7 AV	73.9	-25.2	1.77 H	211	37.80	10.90
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	2390.00	57.7 PK	74.0	-16.3	1.00 V	124	26.70	31.00
2	2390.00	49.1 AV	54.0	-4.9	1.00 V	124	18.10	31.00
3	*2412.00	104.9 PK			1.20 V	139	73.80	31.10
4	*2412.00	99.6 AV			1.20 V	139	68.50	31.10
5	4824.00	48.4 PK	74.0	-25.6	1.44 V	150	43.50	4.90
6	4824.00	39.6 AV	54.0	-14.4	1.44 V	150	34.70	4.90
7	#7236.00	57.9 PK	74.9	-17.0	1.62 V	289	47.00	10.90
8	#7236.00	50.5 AV	69.6	-19.1	1.62 V	289	39.60	10.90

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) – Pre-Amplifier 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 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2437.00	110.4 PK			1.34 H	43	79.20	31.20
2	*2437.00	104.9 AV			1.34 H	43	73.70	31.20
3	4874.00	51.5 PK	74.0	-22.5	1.45 H	21	46.50	5.00
4	4874.00	44.2 AV	54.0	-9.8	1.45 H	21	39.20	5.00
5	7311.00	59.7 PK	74.0	-14.3	1.06 H	198	48.50	11.20
6	7311.00	52.3 AV	54.0	-1.7	1.06 H	198	41.10	11.20
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	*2437.00	107.0 PK			1.19 V	321	75.80	31.20
2	*2437.00	101.5 AV			1.19 V	321	70.30	31.20
3	4874.00	51.3 PK	74.0	-22.7	1.23 V	2	46.30	5.00
4	4874.00	45.7 AV	54.0	-8.3	1.23 V	2	40.70	5.00
5	7311.00	58.6 PK	74.0	-15.4	1.24 V	222	47.40	11.20
6	7311.00	51.2 AV	54.0	-2.8	1.24 V	222	40.00	11.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2462.00	107.5 PK			1.32 H	283	76.20	31.30
2	*2462.00	102.0 AV			1.32 H	283	70.70	31.30
3	2483.50	62.5 PK	74.0	-11.5	1.28 H	82	31.10	31.40
4	2483.50	52.7 AV	54.0	-1.3	1.28 H	82	21.30	31.40
5	4924.00	51.8 PK	74.0	-22.2	1.30 H	256	46.60	5.20
6	4924.00	46.9 AV	54.0	-7.1	1.30 H	256	41.70	5.20
7	7386.00	57.1 PK	74.0	-16.9	1.31 H	201	45.70	11.40
8	7386.00	48.6 AV	54.0	-5.4	1.31 H	201	37.20	11.40
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	*2462.00	103.8 PK			1.16 V	319	72.50	31.30
2	*2462.00	98.5 AV			1.16 V	319	67.20	31.30
3	2483.50	58.1 PK	74.0	-15.9	1.20 V	127	26.70	31.40
4	2483.50	49.3 AV	54.0	-4.7	1.20 V	127	17.90	31.40
5	4924.00	53.4 PK	74.0	-20.6	1.38 V	345	48.20	5.20
6	4924.00	48.0 AV	54.0	-6.0	1.38 V	345	42.80	5.20
7	7386.00	58.7 PK	74.0	-15.3	1.88 V	178	47.30	11.40
8	7386.00	51.1 AV	54.0	-2.9	1.88 V	178	39.70	11.40

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	71.1 PK	74.0	-2.9	1.30 H	212	40.10	31.00
2	2390.00	52.2 AV	54.0	-1.8	1.30 H	212	21.20	31.00
3	*2412.00	109.5 PK			1.37 H	83	78.40	31.10
4	*2412.00	88.1 AV			1.37 H	83	57.00	31.10
5	4824.00	47.0 PK	74.0	-27.0	1.25 H	119	42.10	4.90
6	4824.00	33.9 AV	54.0	-20.1	1.25 H	119	29.00	4.90
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	2390.00	68.2 PK	74.0	-5.8	1.20 V	307	37.20	31.00
2	2390.00	50.6 AV	54.0	-3.4	1.20 V	307	19.60	31.00
3	*2412.00	106.1 PK			1.20 V	307	75.00	31.10
4	*2412.00	85.5 AV			1.20 V	307	54.40	31.10
5	4824.00	46.7 PK	74.0	-27.3	1.13 V	263	41.80	4.90
6	4824.00	33.5 AV	54.0	-20.5	1.13 V	263	28.60	4.90

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2437.00	112.9 PK			1.30 H	79	81.70	31.20
2	*2437.00	91.9 AV			1.30 H	79	60.70	31.20
3	2483.50	68.1 PK	74.0	-5.9	1.30 H	84	36.70	31.40
4	2483.50	52.2 AV	54.0	-1.8	1.30 H	84	20.80	31.40
5	4874.00	46.2 PK	74.0	-27.8	1.37 H	142	41.20	5.00
6	4874.00	37.1 AV	54.0	-16.9	1.37 H	142	32.10	5.00
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	2390.00	62.2 PK	74.0	-11.8	1.25 V	126	31.20	31.00
2	2390.00	47.7 AV	54.0	-6.3	1.25 V	126	16.70	31.00
3	*2437.00	108.5 PK			1.00 V	125	77.30	31.20
4	*2437.00	87.8 AV			1.00 V	125	56.60	31.20
5	2483.50	62.2 PK	74.0	-11.8	1.24 V	133	30.80	31.40
6	2483.50	48.4 AV	54.0	-5.6	1.24 V	133	17.00	31.40
7	4874.00	50.4 PK	74.0	-23.6	1.49 V	42	45.40	5.00
8	4874.00	36.8 AV	54.0	-17.2	1.49 V	42	31.80	5.00

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2462.00	108.2 PK			1.26 H	83	76.90	31.30
2	*2462.00	87.3 AV			1.26 H	83	56.00	31.30
3	2483.50	71.5 PK	74.0	-2.5	1.93 H	83	40.10	31.40
4	2483.50	53.0 AV	54.0	-1.0	1.93 H	83	21.60	31.40
5	4924.00	46.9 PK	74.0	-27.1	1.15 H	26	41.70	5.20
6	4924.00	34.0 AV	54.0	-20.0	1.15 H	26	28.80	5.20
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	*2462.00	104.3 PK			1.50 V	150	73.00	31.30
2	*2462.00	84.2 AV			1.50 V	150	52.90	31.30
3	2483.50	65.7 PK	74.0	-8.3	1.52 V	127	34.30	31.40
4	2483.50	49.4 AV	54.0	-4.6	1.52 V	127	18.00	31.40
5	4924.00	48.7 PK	74.0	-25.3	1.38 V	30	43.50	5.20
6	4924.00	34.3 AV	54.0	-19.7	1.38 V	30	29.10	5.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	2390.00	69.9 PK	74.0	-4.1	1.31 H	207	38.90	31.00
2	2390.00	52.6 AV	54.0	-1.4	1.31 H	207	21.60	31.00
3	*2412.00	107.8 PK			1.05 H	212	76.70	31.10
4	*2412.00	91.0 AV			1.05 H	212	59.90	31.10
5	4824.00	46.3 PK	74.0	-27.7	1.15 H	72	41.40	4.90
6	4824.00	33.7 AV	54.0	-20.3	1.15 H	72	28.80	4.90
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	2390.00	66.0 PK	74.0	-8.0	1.21 V	303	35.00	31.00
2	2390.00	50.4 AV	54.0	-3.6	1.21 V	303	19.40	31.00
3	*2412.00	105.5 PK			1.16 V	18	74.40	31.10
4	*2412.00	88.7 AV			1.16 V	18	57.60	31.10
5	4824.00	46.4 PK	74.0	-27.6	1.24 V	71	41.50	4.90
6	4824.00	33.4 AV	54.0	-20.6	1.24 V	71	28.50	4.90

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2437.00	112.1 PK			1.28 H	84	80.90	31.20
2	*2437.00	94.8 AV			1.28 H	84	63.60	31.20
3	2483.50	66.4 PK	74.0	-7.6	1.29 H	79	35.00	31.40
4	2483.50	51.7 AV	54.0	-2.3	1.29 H	79	20.30	31.40
5	4874.00	46.2 PK	74.0	-27.8	1.12 H	208	41.20	5.00
6	4874.00	34.5 AV	54.0	-19.5	1.12 H	208	29.50	5.00
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	*2437.00	107.0 PK			1.52 V	125	75.80	31.20
2	*2437.00	87.0 AV			1.52 V	125	55.80	31.20
3	2483.50	63.6 PK	74.0	-10.4	1.25 V	123	32.20	31.40
4	2483.50	48.6 AV	54.0	-5.4	1.25 V	123	17.20	31.40
5	4874.00	47.1 PK	74.0	-26.9	1.35 V	23	42.10	5.00
6	4874.00	37.9 AV	54.0	-16.1	1.35 V	23	32.90	5.00

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 71%RH	TESTED BY	Nick Hsu

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	*2462.00	107.7 PK			1.27 H	82	76.40	31.30
2	*2462.00	90.7 AV			1.27 H	82	59.40	31.30
3	2483.50	67.7 PK	74.0	-6.3	1.25 H	81	36.30	31.40
4	2483.50	53.0 AV	54.0	-1.0	1.25 H	81	21.60	31.40
5	4924.00	46.8 PK	74.0	-27.2	1.34 H	189	41.60	5.20
6	4924.00	34.3 AV	54.0	-19.7	1.34 H	189	29.10	5.20
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	*2462.00	102.2 PK			1.19 V	189	70.90	31.30
2	*2462.00	86.6 AV			1.19 V	189	55.30	31.30
3	2483.50	62.8 PK	74.0	-11.2	1.21 V	215	31.40	31.40
4	2483.50	49.2 AV	54.0	-4.8	1.21 V	215	17.80	31.40
5	4924.00	47.5 PK	74.0	-26.5	1.26 V	150	42.30	5.20
6	4924.00	34.9 AV	54.0	-19.1	1.26 V	150	29.70	5.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

BELOW 1GHz WORST-CASE DATA：802.11b

1TX (Radio 1)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 71%RH	TESTED BY	Nick Hsu
TEST MODE	A		

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	57.12	32.8 QP	40.0	-7.2	1.99 H	143	47.40	-14.60
2	150.45	34.8 QP	43.5	-8.7	1.96 H	95	48.60	-13.80
3	210.72	33.9 QP	43.5	-9.6	1.00 H	83	50.20	-16.30
4	401.26	35.5 QP	46.0	-10.5	1.00 H	60	45.80	-10.30
5	500.42	39.5 QP	46.0	-6.5	1.99 H	209	47.80	-8.30
6	799.84	39.2 QP	46.0	-6.8	1.00 H	133	41.30	-2.10
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	45.45	37.4 QP	40.0	-2.6	1.00 V	259	52.10	-14.70
2	68.79	36.5 QP	40.0	-3.5	1.99 V	111	52.40	-15.90
3	150.45	38.9 QP	43.5	-4.6	1.99 V	164	52.70	-13.80
4	399.31	34.9 QP	46.0	-11.1	1.50 V	198	45.30	-10.40
5	500.42	42.1 QP	46.0	-3.9	1.00 V	195	50.40	-8.30
6	799.84	35.3 QP	46.0	-10.7	1.00 V	154	37.40	-2.10

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) – Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	55Vdc	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 72%RH	TESTED BY	Nick Hsu
TEST MODE	B		

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	47.40	32.3 QP	40.0	-7.7	1.51 H	64	46.90	-14.60
2	97.95	33.7 QP	43.5	-9.8	2.00 H	248	52.70	-19.00
3	171.83	36.0 QP	43.5	-7.5	1.51 H	252	50.20	-14.20
4	241.83	43.7 QP	46.0	-2.3	1.01 H	10	58.30	-14.60
5	405.15	37.6 QP	46.0	-8.4	1.51 H	7	48.00	-10.40
6	500.42	30.4 QP	46.0	-15.6	1.51 H	195	38.70	-8.30
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	51.29	30.4 QP	40.0	-9.6	1.99 V	60	44.90	-14.50
2	158.22	34.9 QP	43.5	-8.6	1.00 V	334	48.60	-13.70
3	210.72	38.4 QP	43.5	-5.1	1.00 V	11	54.70	-16.30
4	245.72	36.0 QP	46.0	-10.0	1.49 V	132	50.40	-14.40
5	354.60	34.4 QP	46.0	-11.6	1.00 V	11	45.70	-11.30
6	416.81	32.6 QP	46.0	-13.4	1.49 V	170	42.60	-10.00

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) – Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

2TX (Radio 1)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 73%RH	TESTED BY	Nick Hsu
TEST MODE	A		

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	55.18	34.0 QP	40.0	-6.0	2.00 H	240	48.50	-14.50
2	99.89	28.6 QP	43.5	-14.9	2.00 H	63	47.40	-18.80
3	173.78	39.1 QP	43.5	-4.4	2.00 H	72	53.40	-14.30
4	239.88	36.7 QP	46.0	-9.3	1.01 H	203	51.40	-14.70
5	399.31	34.1 QP	46.0	-11.9	1.01 H	163	44.50	-10.40
6	799.84	37.3 QP	46.0	-8.7	1.01 H	198	39.40	-2.10
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	43.51	35.6 QP	40.0	-4.4	1.00 V	359	50.30	-14.70
2	150.45	35.7 QP	43.5	-7.8	1.49 V	16	49.50	-13.80
3	399.31	34.6 QP	46.0	-11.4	1.00 V	126	45.00	-10.40
4	500.42	34.2 QP	46.0	-11.8	1.00 V	268	42.50	-8.30
5	657.91	32.1 QP	46.0	-13.9	1.00 V	80	37.20	-5.10
6	799.84	33.5 QP	46.0	-12.5	2.00 V	149	35.60	-2.10

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) – Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	55Vdc	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 72%RH	TESTED BY	Nick Hsu
TEST MODE	B		

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	57.12	32.3 QP	40.0	-7.7	2.00 H	36	46.90	-14.60
2	107.67	31.9 QP	43.5	-11.6	1.49 H	234	49.40	-17.50
3	173.78	36.3 QP	43.5	-7.2	1.49 H	239	50.60	-14.30
4	241.83	43.4 QP	46.0	-2.6	1.49 H	15	58.00	-14.60
5	407.09	37.7 QP	46.0	-8.3	2.00 H	161	47.90	-10.20
6	500.42	29.6 QP	46.0	-16.4	1.49 H	199	37.90	-8.30
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	47.16	35.7 QP	40.0	-4.3	1.03 V	242	50.30	-14.60
2	156.28	37.0 QP	43.5	-6.5	1.50 V	285	50.70	-13.70
3	241.83	35.3 QP	46.0	-10.7	2.00 V	136	49.90	-14.60
4	407.09	38.1 QP	46.0	-7.9	1.01 V	189	48.30	-10.20
5	500.42	32.8 QP	46.0	-13.2	1.01 V	130	41.10	-8.30
6	799.84	32.3 QP	46.0	-13.7	1.01 V	155	34.40	-2.10

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) – Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

1TX (Radio 3)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 71%RH	TESTED BY	Nick Hsu
TEST MODE	A		

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	57.12	33.0 QP	40.0	-7.0	2.00 H	6	47.60	-14.60
2	148.50	40.7 QP	43.5	-2.8	1.94 H	91	54.60	-13.90
3	210.72	33.2 QP	43.5	-10.3	1.00 H	81	49.50	-16.30
4	401.26	35.5 QP	46.0	-10.5	1.00 H	222	45.80	-10.30
5	500.42	38.9 QP	46.0	-7.1	2.00 H	216	47.20	-8.30
6	799.84	38.7 QP	46.0	-7.3	1.00 H	131	40.80	-2.10
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	49.34	34.7 QP	40.0	-5.3	1.00 V	288	49.20	-14.50
2	150.45	38.0 QP	43.5	-5.5	1.00 V	328	51.80	-13.80
3	208.77	30.3 QP	43.5	-13.2	1.00 V	6	46.80	-16.50
4	401.26	34.9 QP	46.0	-11.1	1.00 V	193	45.20	-10.30
5	500.42	41.2 QP	46.0	-4.8	1.00 V	198	49.50	-8.30
6	799.84	34.5 QP	46.0	-11.5	1.00 V	146	36.60	-2.10

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) – Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	55Vdc	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 72%RH	TESTED BY	Nick Hsu
TEST MODE	B		

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	78.51	31.7 QP	40.0	-8.3	1.99 H	239	50.00	-18.30
2	96.01	32.4 QP	43.5	-11.1	1.99 H	256	51.70	-19.30
3	129.06	32.8 QP	43.5	-10.7	1.49 H	216	48.10	-15.30
4	162.11	34.0 QP	43.5	-9.5	1.49 H	112	47.80	-13.80
5	208.77	38.2 QP	43.5	-5.3	1.49 H	101	54.70	-16.50
6	331.26	32.1 QP	46.0	-13.9	1.00 H	118	43.70	-11.60
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	33.79	37.4 QP	40.0	-2.6	1.01 V	329	53.10	-15.70
2	51.29	37.3 QP	40.0	-2.7	1.01 V	190	51.80	-14.50
3	70.73	38.1 QP	40.0	-1.9	1.50 V	165	54.30	-16.20
4	127.11	31.1 QP	43.5	-12.4	1.50 V	14	46.70	-15.60
5	210.72	34.6 QP	43.5	-8.9	1.01 V	315	50.90	-16.30
6	500.42	31.0 QP	46.0	-15.0	1.01 V	119	39.30	-8.30

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) – Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	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 0.50MHz.

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.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Apr. 24, 2014	Apr. 23, 2015
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 23, 2013	Dec. 22, 2014
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 10, 2014	Jul. 09, 2015
Software ADT	BV ADT_Cond_V7.3.7.3	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 HwaYa Shielded Room 2.

3. The VCCI Site Registration No. is C-2047.

4.2.3 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 provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

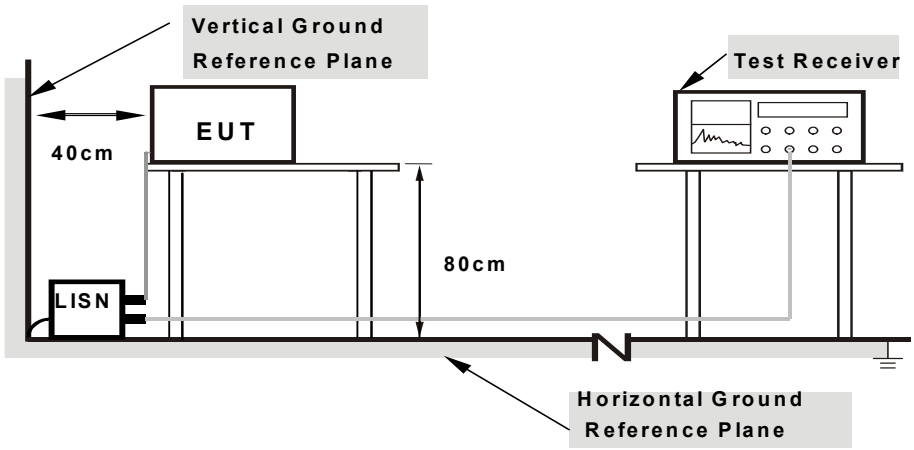
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 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 attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA：802.11b

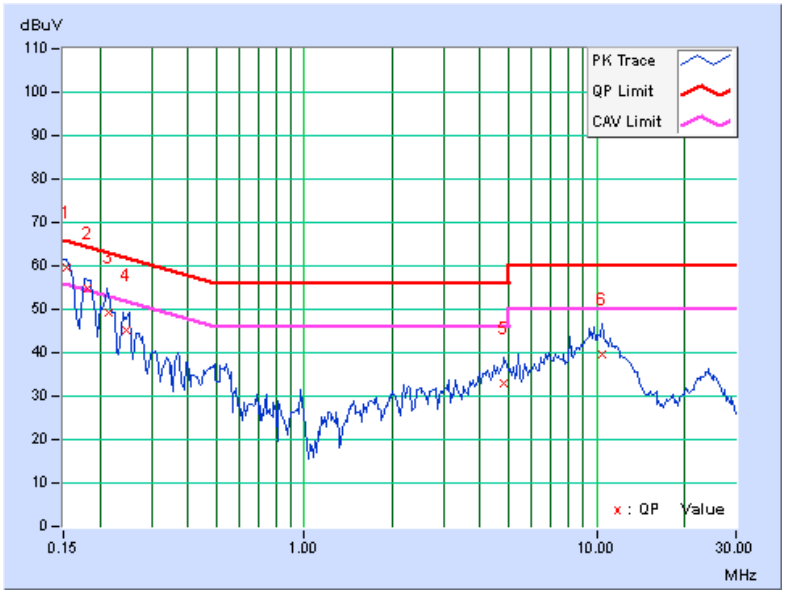
1TX (Radio 1)

PHASE	Line 1	**6dB BANDWIDTH**	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.15391**	**0.22**	**59.46**	**48.69**	**59.68**	**48.91**	**65.79**	**55.79**	**-6.11**	**-6.88**
2	0.18260	0.23	54.56	43.41	54.79	43.64	64.37	54.37	-9.58	-10.73
3	0.21378	0.24	49.17	38.93	49.41	39.17	63.06	53.06	-13.65	-13.89
4	0.24488	0.24	44.90	34.99	45.14	35.23	61.93	51.93	-16.79	-16.70
5	4.82813	0.45	32.50	24.56	32.95	25.01	56.00	46.00	-23.05	-20.99
6	10.42188	0.52	39.28	33.91	39.80	34.43	60.00	50.00	-20.20	-15.57

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

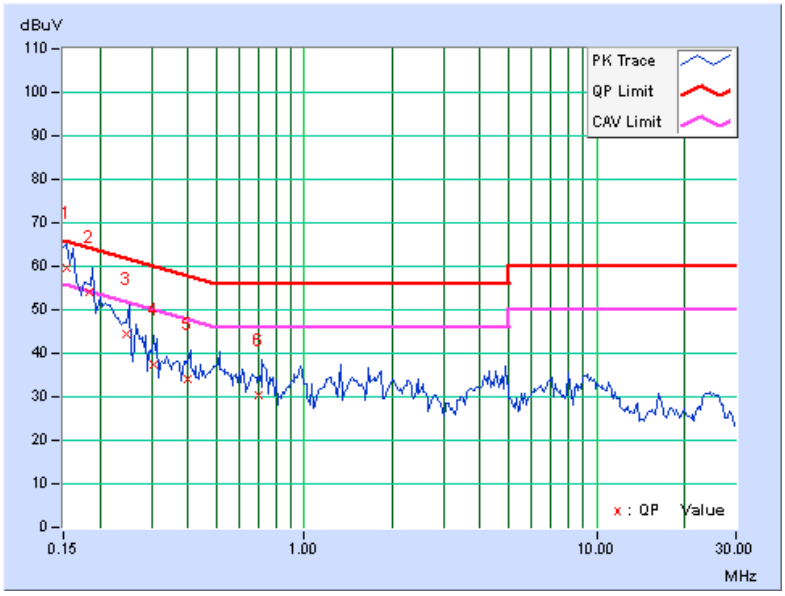


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.23	59.36	48.18	59.59	48.41	65.79	55.79	-6.20	-7.38
2	0.18388	0.24	53.65	42.75	53.89	42.99	64.31	54.31	-10.42	-11.32
3	0.24603	0.25	44.20	32.33	44.45	32.58	61.89	51.89	-17.44	-19.31
4	0.30625	0.27	37.04	29.07	37.31	29.34	60.07	50.07	-22.76	-20.73
5	0.40145	0.30	33.82	26.44	34.12	26.74	57.82	47.82	-23.70	-21.08
6	0.69503	0.30	29.91	23.45	30.21	23.75	56.00	46.00	-25.79	-22.25

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

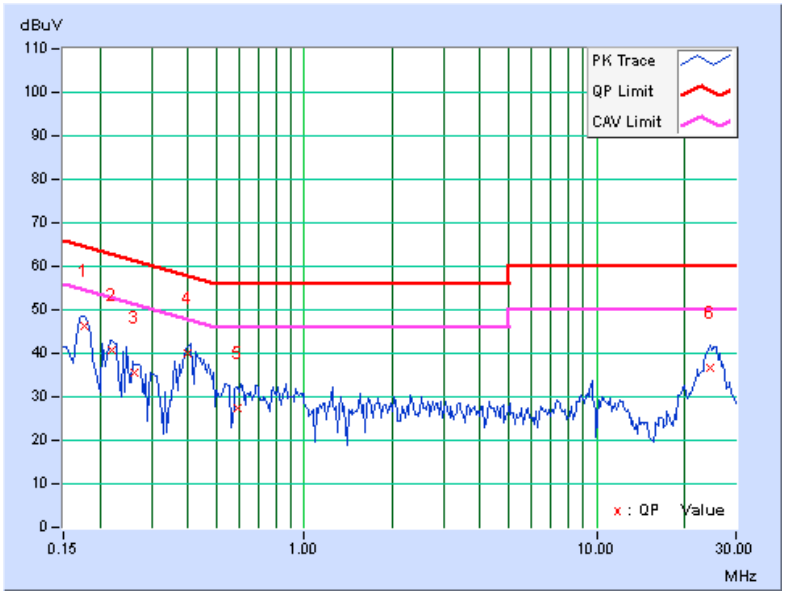


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17606	0.27	46.20	37.54	46.47	37.81	64.67	54.67	-18.20	-16.86
2	0.22031	0.28	40.33	33.09	40.61	33.37	62.81	52.81	-22.20	-19.44
3	0.26193	0.29	35.33	27.35	35.62	27.64	61.37	51.37	-25.75	-23.73
4	0.40119	0.30	39.81	32.59	40.11	32.89	57.83	47.83	-17.72	-14.94
5	0.59025	0.31	27.13	10.03	27.44	10.34	56.00	46.00	-28.56	-35.66
6	24.51563	0.54	36.03	30.52	36.57	31.06	60.00	50.00	-23.43	-18.94

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

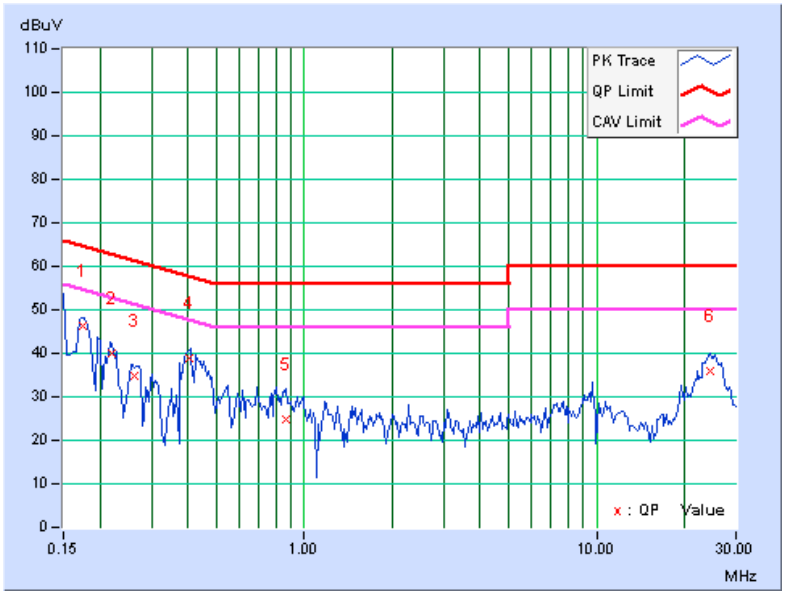


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17479	0.27	45.94	37.10	46.21	37.37	64.73	54.73	-18.52	-17.36
2	0.21896	0.28	39.81	32.59	40.09	32.87	62.86	52.86	-22.77	-19.99
3	0.26320	0.29	34.62	26.25	34.91	26.54	61.33	51.33	-26.42	-24.79
4	0.40181	0.30	38.73	31.12	39.03	31.42	57.82	47.82	-18.79	-16.40
5	0.86875	0.33	24.58	15.12	24.91	15.45	56.00	46.00	-31.09	-30.55
6	24.41406	0.57	35.18	29.89	35.75	30.46	60.00	50.00	-24.25	-19.54

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



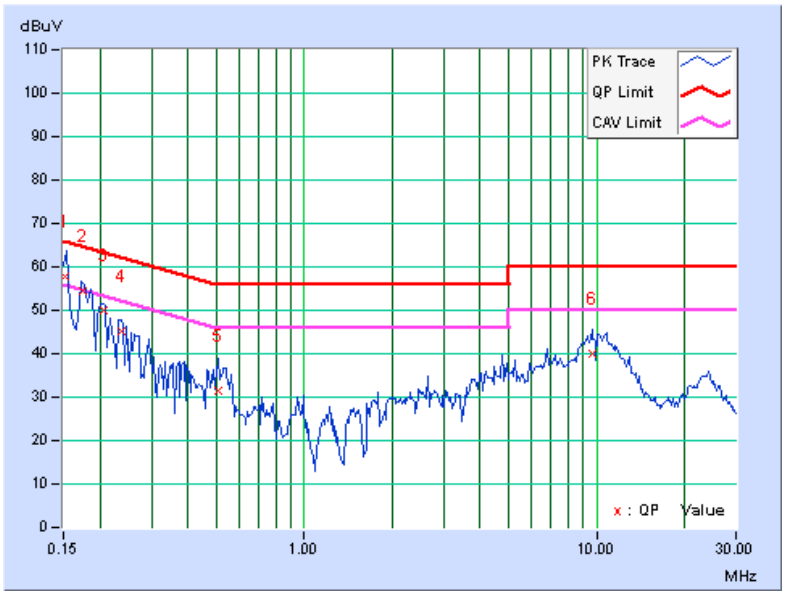
2TX (Radio 1)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15136	0.22	57.65	45.17	57.87	45.39	65.93	55.93	-8.06	-10.54
2	0.17472	0.23	54.15	42.86	54.38	43.09	64.73	54.73	-10.36	-11.65
3	0.20597	0.24	49.73	38.55	49.97	38.79	63.37	53.37	-13.40	-14.58
4	0.23594	0.24	44.97	34.94	45.21	35.18	62.24	52.24	-17.03	-17.06
5	0.50938	0.23	31.18	23.09	31.41	23.32	56.00	46.00	-24.59	-22.68
6	9.71484	0.51	39.49	34.01	40.00	34.52	60.00	50.00	-20.00	-15.48

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

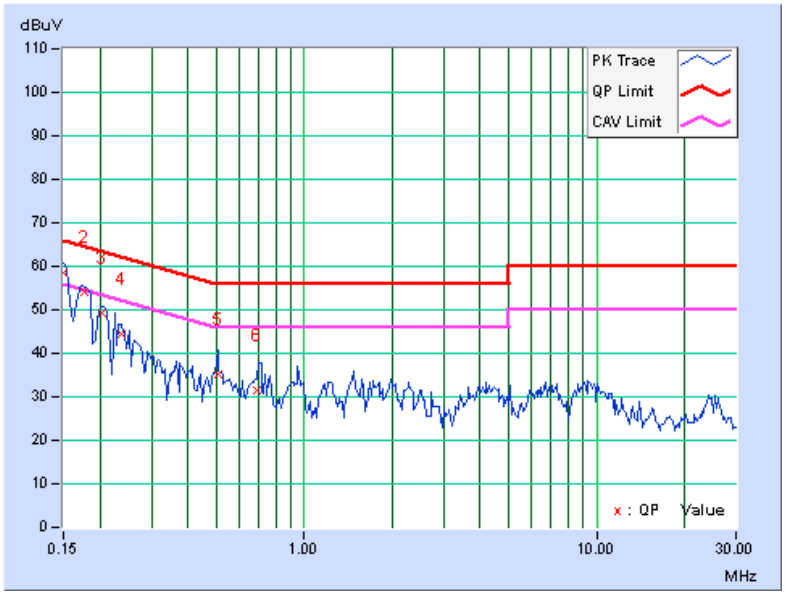


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.23	58.25	46.43	58.48	46.66	66.00	56.00	-7.52	-9.34
2	0.17599	0.23	53.74	42.70	53.97	42.93	64.67	54.67	-10.70	-11.74
3	0.20469	0.24	49.16	37.35	49.40	37.59	63.42	53.42	-14.02	-15.83
4	0.23594	0.25	44.35	33.14	44.60	33.39	62.24	52.24	-17.64	-18.85
5	0.50547	0.30	34.90	28.03	35.20	28.33	56.00	46.00	-20.80	-17.67
6	0.68912	0.30	31.08	22.41	31.38	22.71	56.00	46.00	-24.62	-23.29

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

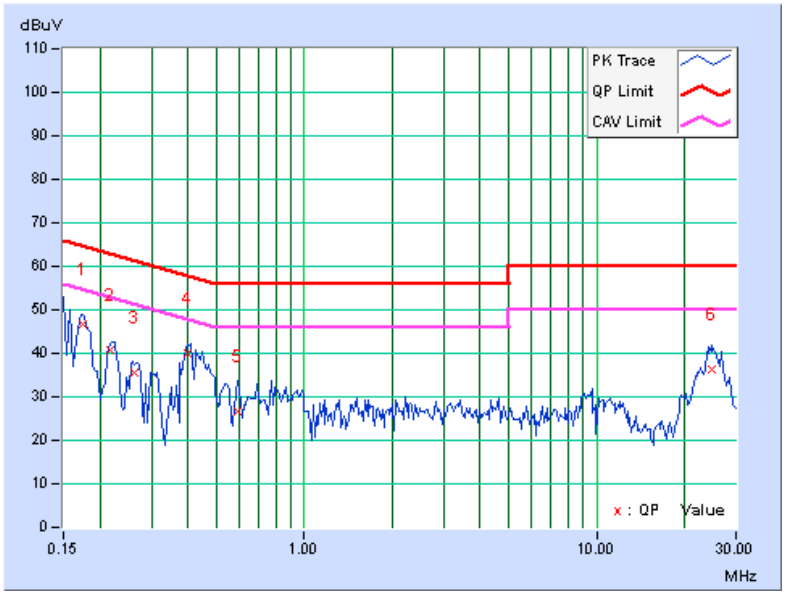


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17479	0.27	46.34	37.55	46.61	37.82	64.73	54.73	-18.12	-16.91
2	0.21786	0.28	40.47	33.24	40.75	33.52	62.90	52.90	-22.15	-19.38
3	0.26320	0.29	35.23	27.23	35.52	27.52	61.33	51.33	-25.81	-23.81
4	0.40044	0.30	39.77	33.13	40.07	33.43	57.84	47.84	-17.77	-14.41
5	0.59144	0.31	26.21	9.93	26.52	10.24	56.00	46.00	-29.48	-35.76
6	24.92969	0.54	35.81	30.53	36.35	31.07	60.00	50.00	-23.65	-18.93

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

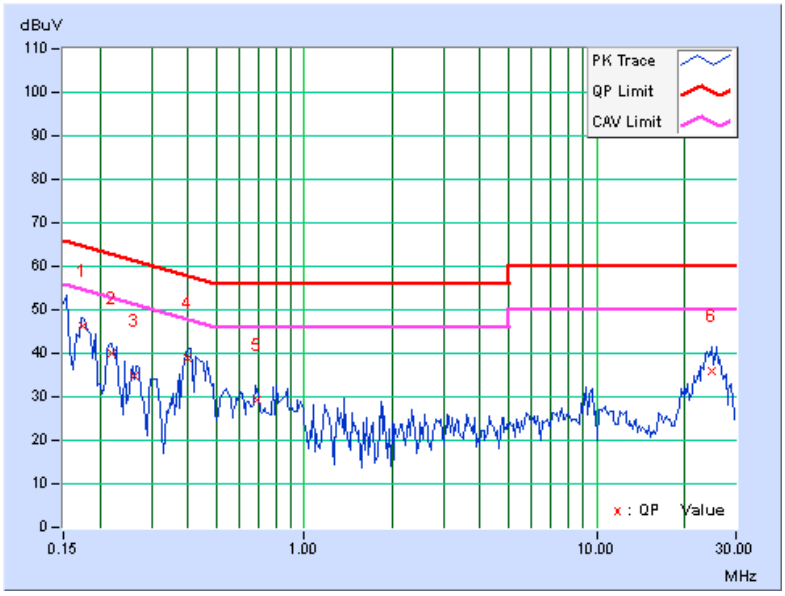


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17472	0.27	45.98	37.02	46.25	37.29	64.73	54.73	-18.48	-17.44
2	0.22031	0.28	39.81	32.26	40.09	32.54	62.81	52.81	-22.72	-20.27
3	0.26337	0.29	34.70	26.21	34.99	26.50	61.32	51.32	-26.34	-24.83
4	0.40044	0.30	38.65	32.06	38.95	32.36	57.84	47.84	-18.89	-15.48
5	0.68812	0.32	29.01	18.70	29.33	19.02	56.00	46.00	-26.67	-26.98
6	24.77734	0.57	35.35	29.86	35.92	30.43	60.00	50.00	-24.08	-19.57

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



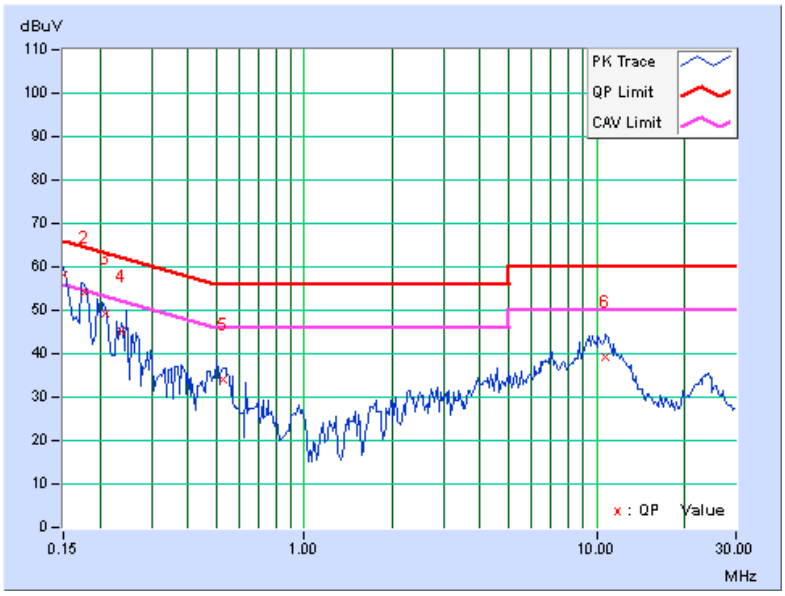
1TX (Radio 3)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.21	57.93	46.82	58.14	47.03	66.00	56.00	-7.86	-8.97
2	0.17734	0.23	53.66	43.20	53.89	43.43	64.61	54.61	-10.72	-11.18
3	0.20832	0.24	48.88	37.60	49.12	37.84	63.27	53.27	-14.15	-15.43
4	0.23701	0.24	44.79	34.46	45.03	34.70	62.20	52.20	-17.17	-17.50
5	0.52519	0.24	33.68	25.03	33.92	25.27	56.00	46.00	-22.08	-20.73
6	10.76953	0.52	38.70	32.82	39.22	33.34	60.00	50.00	-20.78	-16.66

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

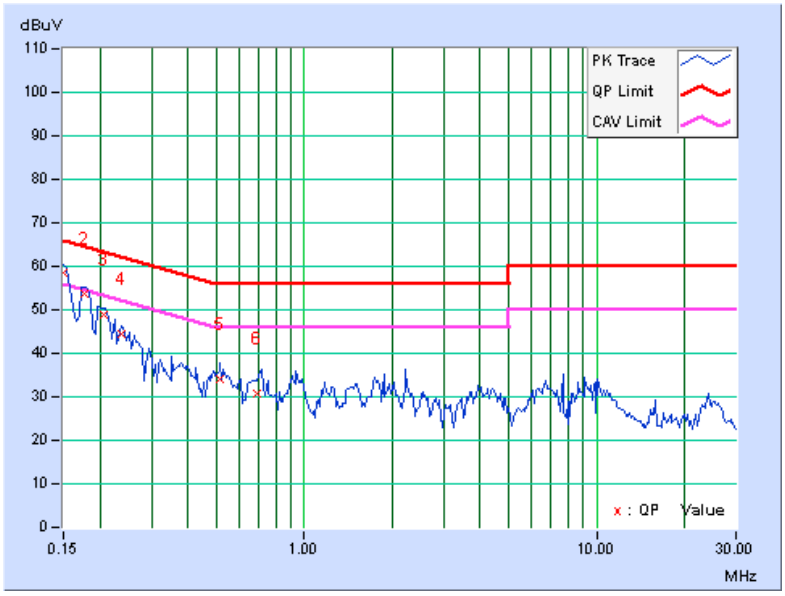


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.23	58.27	47.38	58.50	47.61	66.00	56.00	-7.50	-8.39
2	0.17734	0.23	53.32	42.35	53.55	42.58	64.61	54.61	-11.06	-12.03
3	0.20731	0.24	48.52	36.76	48.76	37.00	63.31	53.31	-14.55	-16.31
4	0.23594	0.25	44.13	32.34	44.38	32.59	62.24	52.24	-17.86	-19.65
5	0.51406	0.30	33.62	24.51	33.92	24.81	56.00	46.00	-22.08	-21.19
6	0.69050	0.30	30.41	22.83	30.71	23.13	56.00	46.00	-25.29	-22.87

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

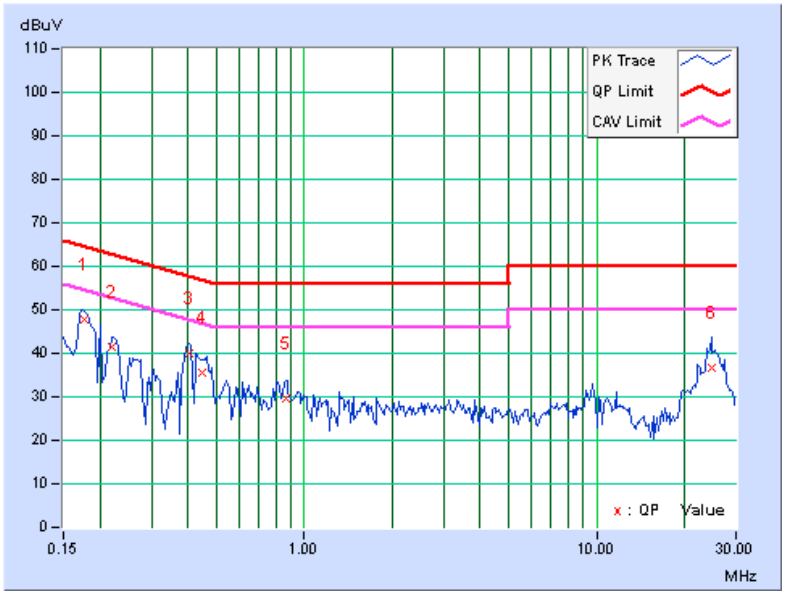


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17599	0.27	47.50	38.34	47.77	38.61	64.67	54.67	-16.90	-16.06
2	0.22031	0.28	41.27	33.52	41.55	33.80	62.81	52.81	-21.26	-19.01
3	0.40391	0.30	39.85	33.20	40.15	33.50	57.77	47.77	-17.62	-14.27
4	0.45000	0.30	35.33	27.37	35.63	27.67	56.88	46.88	-21.24	-19.20
5	0.86366	0.33	29.48	17.47	29.81	17.80	56.00	46.00	-26.19	-28.20
6	24.79688	0.54	36.08	30.93	36.62	31.47	60.00	50.00	-23.38	-18.53

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

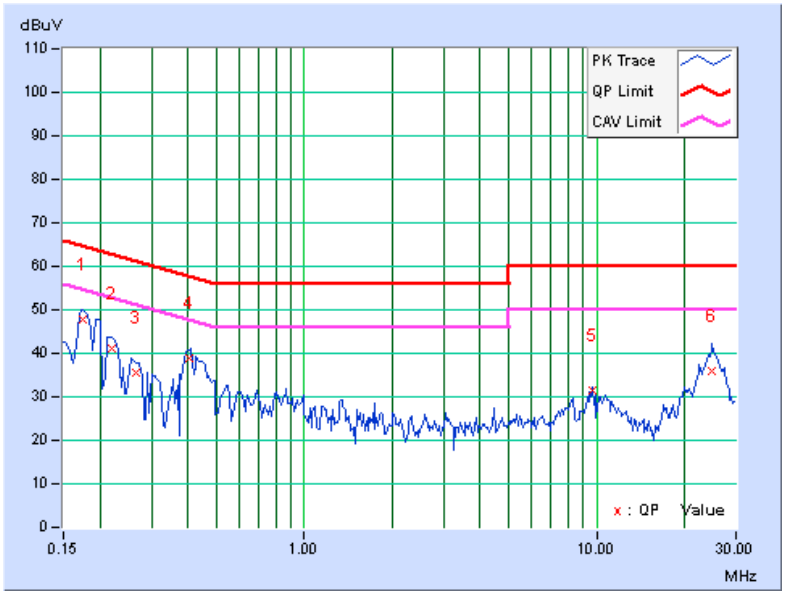


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17472	0.27	47.36	37.46	47.63	37.73	64.73	54.73	-17.10	-17.00
2	0.22031	0.28	40.91	32.83	41.19	33.11	62.81	52.81	-21.62	-19.70
3	0.26564	0.29	35.43	26.15	35.72	26.44	61.25	51.25	-25.54	-24.82
4	0.40409	0.30	38.75	31.87	39.05	32.17	57.77	47.77	-18.72	-15.60
5	9.72394	0.52	30.83	29.58	31.35	30.10	60.00	50.00	-28.65	-19.90
6	24.92969	0.57	35.52	30.14	36.09	30.71	60.00	50.00	-23.91	-19.29

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

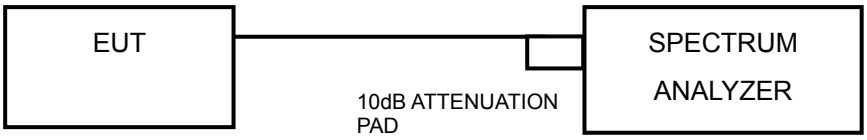


4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST SETUP



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.3.4 TEST PROCEDURE

558074 D01 DTS Meas Guidance v03r02 section 8.1

a. Set resolution bandwidth (RBW) = 100kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

1TX (Radio 1)

802.11b

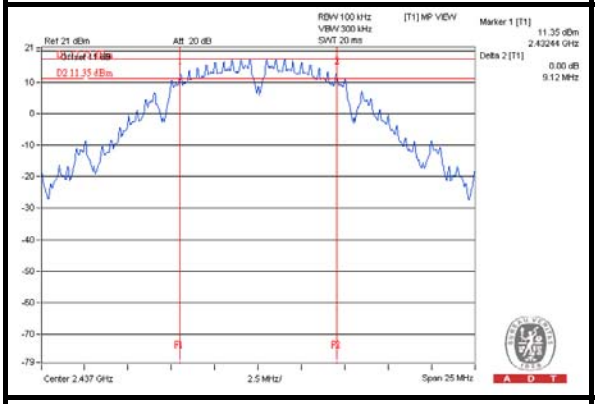
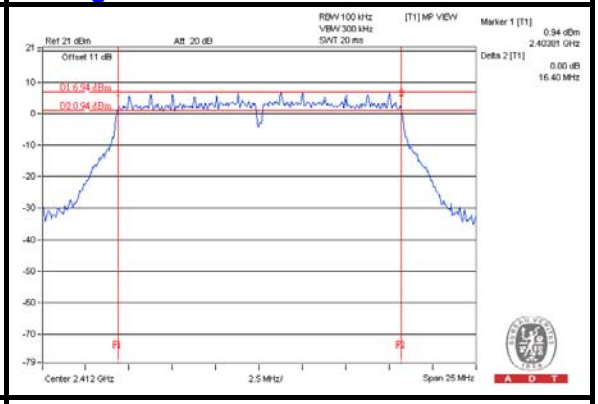
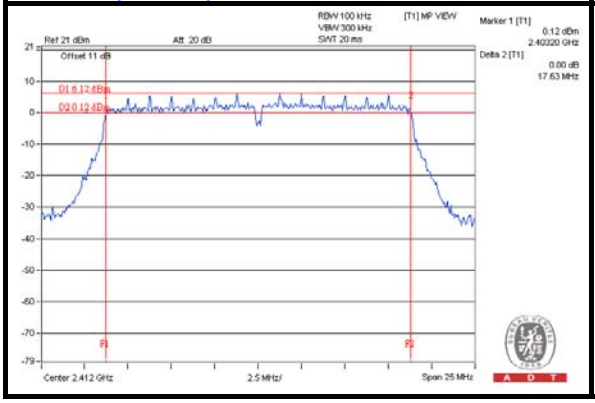
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	8.62	0.5	PASS
6	2437	9.12	0.5	PASS
11	2462	8.58	0.5	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.40	0.5	PASS
6	2437	16.37	0.5	PASS
11	2462	16.39	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.63	0.5	PASS
6	2437	17.62	0.5	PASS
11	2462	17.61	0.5	PASS

SPECTRUM PLOT OF WORST VALUE	
802.11b	802.11g
	
802.11n (20MHz)	
	

2TX (Radio 1)

802.11b

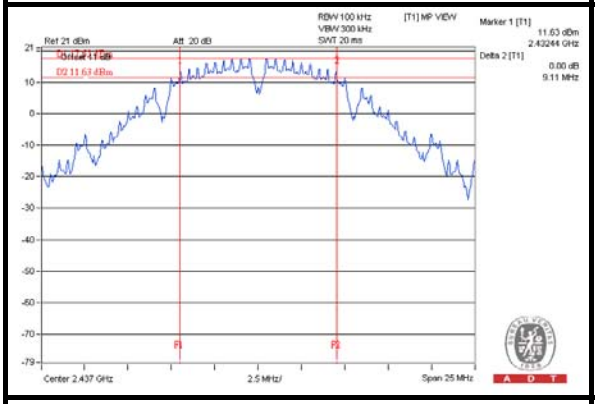
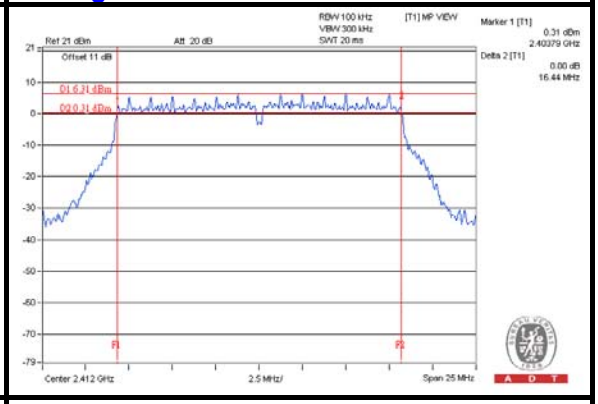
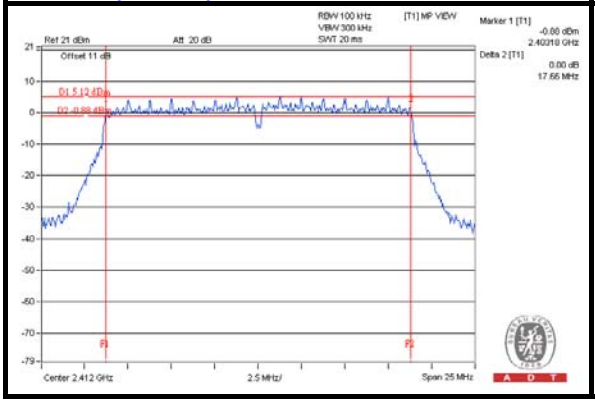
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
1	2412	8.58	8.60	0.5	PASS
6	2437	9.11	9.10	0.5	PASS
11	2462	8.60	8.58	0.5	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
1	2412	16.41	16.44	0.5	PASS
6	2437	16.37	16.39	0.5	PASS
11	2462	16.39	16.41	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
1	2412	17.64	17.66	0.5	PASS
6	2437	17.62	17.66	0.5	PASS
11	2462	17.58	17.64	0.5	PASS

SPECTRUM PLOT OF WORST VALUE	
802.11b	802.11g
	
802.11n (20MHz)	
	

1TX (Radio 3)

802.11b

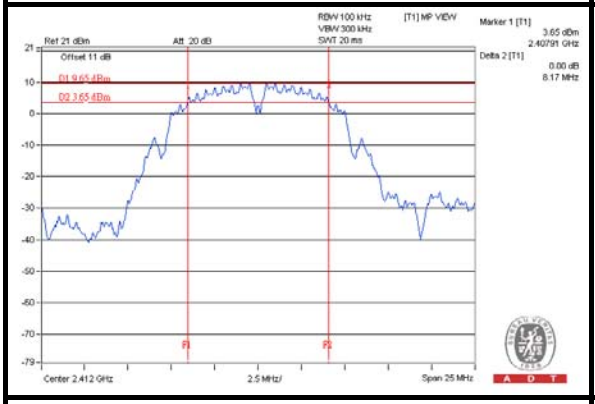
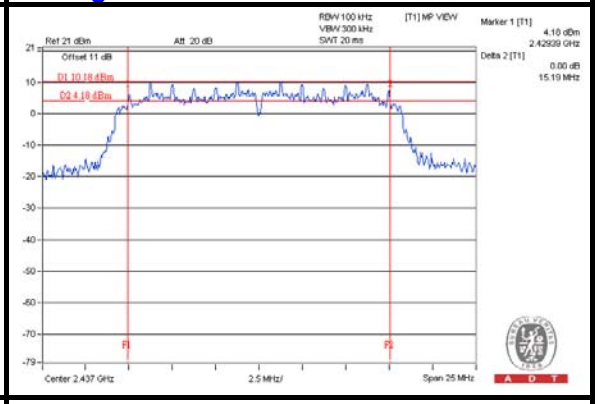
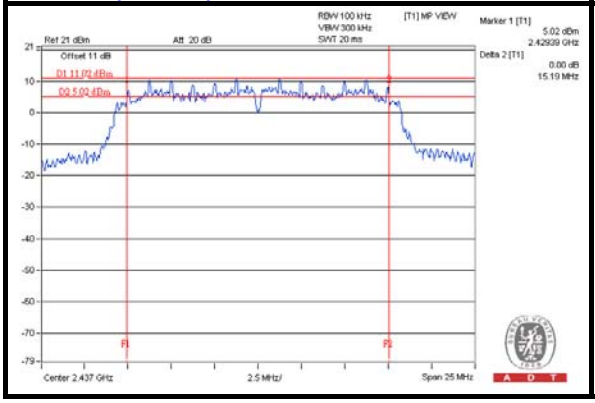
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	8.17	0.5	PASS
6	2437	8.16	0.5	PASS
11	2462	8.17	0.5	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	15.17	0.5	PASS
6	2437	15.19	0.5	PASS
11	2462	15.16	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	15.19	0.5	PASS
6	2437	15.19	0.5	PASS
11	2462	15.17	0.5	PASS

SPECTRUM PLOT OF WORST VALUE	
802.11b	802.11g
	
802.11n (20MHz)	
	

4.4 CONDUCTED OUTPUT POWER

4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

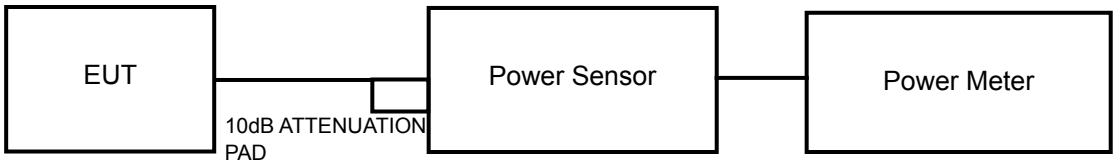
For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

Per KDB 662911 D01 Multiple Transmitter Output v02r01 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;
Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.

For power measurements on all other devices: Array Gain = 10 log(NANT/NSS) dB.

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.4.4 TEST PROCEDURES

558074 D01 DTS Meas Guidance v03r02 section 9.2.3.2
An average power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power sensor. Record the power level.

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.

4.4.7 TEST RESULTS

1TX (Radio 1)

802.11b

CHANNEL	FREQUENCY (MHz)	AVG. POWER (mW)	AVG. POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	207.014	23.16	30	PASS
6	2437	**422.669**	26.26	30	PASS
11	2462	202.302	23.06	30	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	AVG. POWER (mW)	AVG. POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	69.024	18.39	30	PASS
6	2437	273.527	24.37	30	PASS
11	2462	81.096	19.09	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	AVG. POWER (mW)	AVG. POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	60.674	17.83	30	PASS
6	2437	240.436	23.81	30	PASS
11	2462	63.973	18.06	30	PASS

2TX (Radio 1)

802.11b

CHAN.	FREQ. (MHz)	AVG. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	22.55	22.46	356.085	25.52	30	PASS
6	2437	26.68	25.97	**860.953**	29.35	30	PASS
11	2462	22.44	22.28	344.432	25.37	30	PASS

802.11g

CHAN.	FREQ. (MHz)	AVG. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	18.21	18.02	129.609	21.13	30	PASS
6	2437	23.89	23.39	463.179	26.66	30	PASS
11	2462	18.86	18.34	145.147	21.62	30	PASS

802.11n (20MHz)

CHAN.	FREQ. (MHz)	AVG. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	16.80	16.62	93.783	19.72	30	PASS
6	2437	23.22	22.83	401.761	26.04	30	PASS
11	2462	18.17	17.89	127.133	21.04	30	PASS

1TX (Radio 3)

802.11b

CHANNEL	FREQUENCY (MHz)	AVG. POWER (mW)	AVG. POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	96.383	19.84	30	PASS
6	2437	95.940	19.82	30	PASS
11	2462	59.020	17.71	30	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	AVG. POWER (mW)	AVG. POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	66.527	18.23	30	PASS
6	2437	118.304	20.73	30	PASS
11	2462	49.774	16.97	30	PASS

802.11n (20MHz)

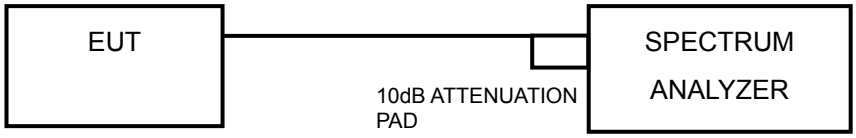
CHANNEL	FREQUENCY (MHz)	AVG. POWER (mW)	AVG. POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	63.241	18.01	30	PASS
6	2437	**133.660**	21.26	30	PASS
11	2462	39.994	16.02	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.5.4 TEST PROCEDURE

558074 D01 DTS Meas Guidance v03r02 section 10.3

a) Set instrument center frequency to DTS channel center frequency.
b) Set span to at least 1.5 times the OBW.
c) Set RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
d) Set VBW ≥3 x RBW.
e) Detector = power averaging (RMS) or sample detector (when RMS not available).
f) Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW.
g) Sweep time = auto couple.
h) Employ trace averaging (RMS) mode over a minimum of 100 traces.
i) Use the peak marker function to determine the maximum amplitude level.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6

4.5.7 TEST RESULTS

1TX (Radio 1)

802.11b

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	LIMIT (dBm)	PASS /FAIL
1	2412	-4.85	8	PASS
6	2437	-2.15	8	PASS
11	2462	-4.86	8	PASS

802.11g

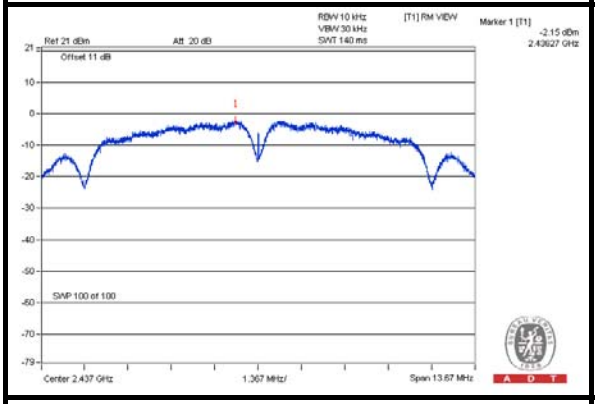
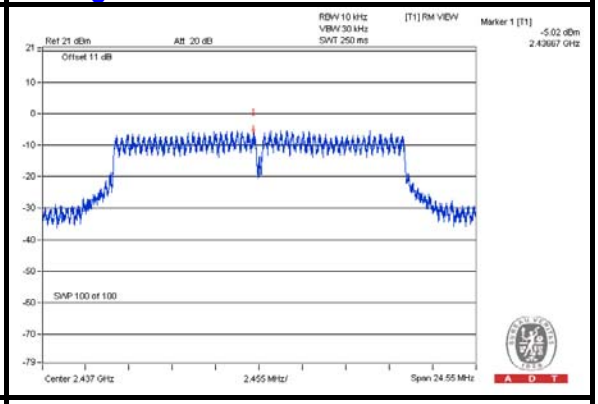
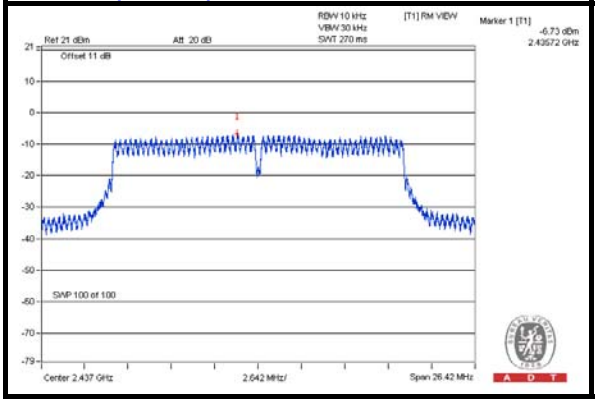
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-10.95	0.23	-10.72	8	PASS
6	2437	-5.02	0.23	-4.79	8	PASS
11	2462	-10.45	0.23	-10.22	8	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-12.95	0.23	-12.72	8	PASS
6	2437	-6.73	0.23	-6.50	8	PASS
11	2462	-12.16	0.23	-11.93	8	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE	
802.11b	802.11g
	
802.11n (20MHz)	
	

2TX (Radio 1)

802.11b

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Total PSD (dBm)	Limit (dBm)	PASS /FAIL
0	1	2412	-6.27	3.01	-3.26	6.21	PASS
	6	2437	-3.01	3.01	0.00	6.21	PASS
	11	2462	-6.24	3.01	-3.23	6.21	PASS
1	1	2412	-6.76	3.01	-3.75	6.21	PASS
	6	2437	-3.94	3.01	-0.93	6.21	PASS
	11	2462	-7.20	3.01	-4.19	6.21	PASS

NOTE: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2$ /N_{ANT}]= 7.79 > 6dBi, so the power density limit shall be reduced to 8-(7.79-6) = 6.21dBm.

802.11g

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Duty Factor	Total PSD with duty factor (dBm)	Limit (dBm)	PASS /FAIL
0	1	2412	-11.47	3.01	0.23	-8.23	6.21	PASS
	6	2437	-5.41	3.01	0.23	-2.17	6.21	PASS
	11	2462	-10.41	3.01	0.23	-7.17	6.21	PASS
1	1	2412	-12.07	3.01	0.23	-8.83	6.21	PASS
	6	2437	-5.71	3.01	0.23	-2.47	6.21	PASS
	11	2462	-10.25	3.01	0.23	-7.01	6.21	PASS

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2$ /N_{ANT}]= 7.79 > 6dBi, so the power density limit shall be reduced to 8-(7.79-6) = 6.21dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (20MHz)

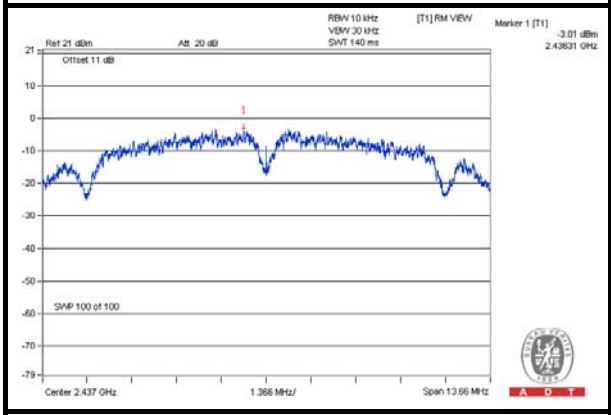
TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Duty Factor	Total PSD with duty factor (dBm)	Limit (dBm)	PASS /FAIL
0	1	2412	-13.94	3.01	0.23	-10.70	6.21	PASS
	6	2437	-6.98	3.01	0.23	-3.74	6.21	PASS
	11	2462	-12.13	3.01	0.23	-8.89	6.21	PASS
1	1	2412	-14.00	3.01	0.23	-10.76	6.21	PASS
	6	2437	-7.72	3.01	0.23	-4.48	6.21	PASS
	11	2462	-12.52	3.01	0.23	-9.28	6.21	PASS

NOTE:

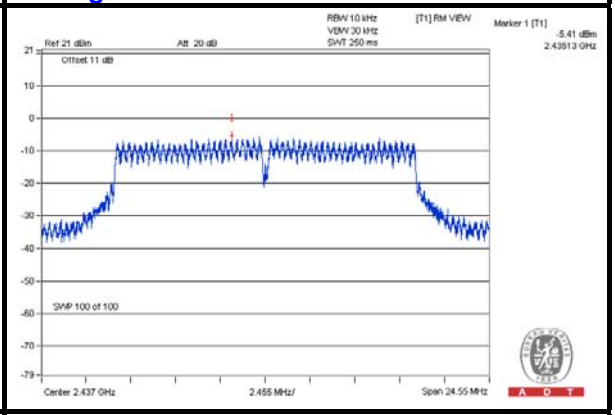
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 7.79 > 6dBi, so the power density limit shall be reduced to 8-(7.79-6) = 6.21dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE

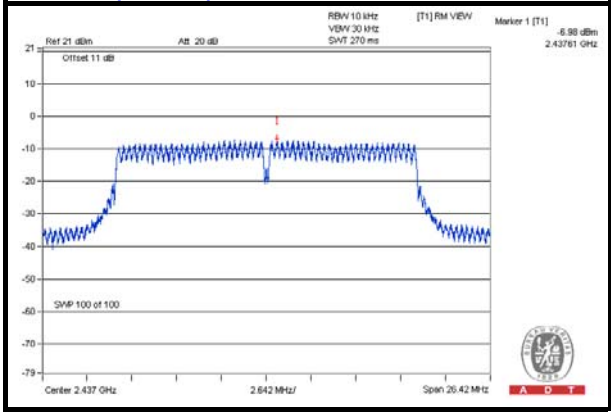
802.11b



802.11g



802.11n (20MHz)



1TX (Radio 3)

802.11b

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-5.65	0.18	-5.47	8	PASS
6	2437	-5.97	0.18	-5.79	8	PASS
11	2462	-7.69	0.18	-7.51	8	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

802.11g

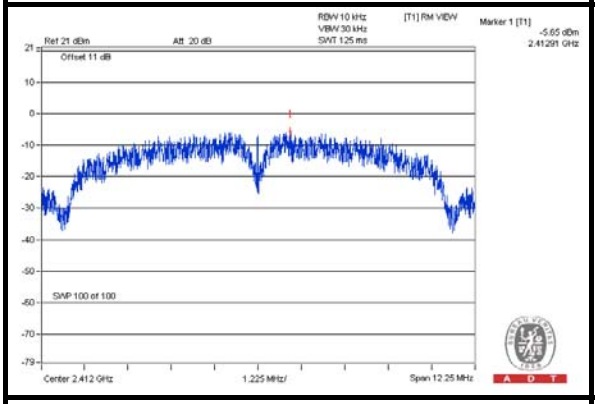
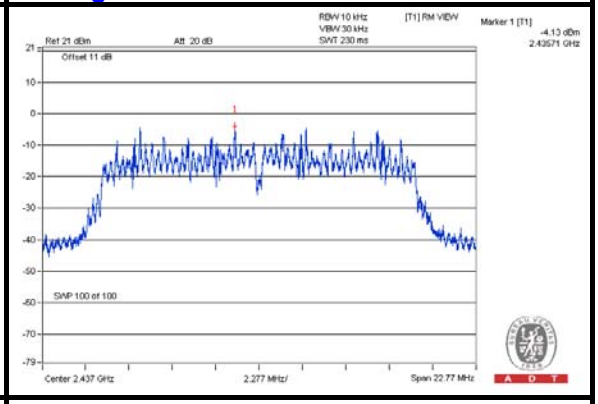
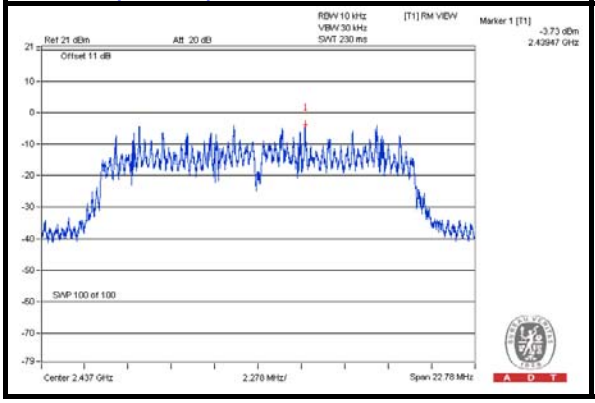
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.17	1.31	-5.86	8	PASS
6	2437	-4.13	1.31	-2.82	8	PASS
11	2462	-8.21	1.31	-6.90	8	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.11	1.41	-5.70	8	PASS
6	2437	-3.73	1.41	-2.32	8	PASS
11	2462	-9.53	1.41	-8.12	8	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

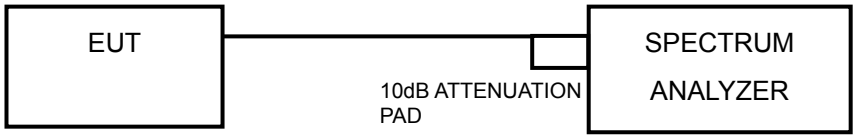
SPECTRUM PLOT OF WORST VALUE	
802.11b	802.11g
	
802.11n (20MHz)	
	

4.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT

Below –30dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

558074 D01 DTS Meas Guidance v03r02 section 11.2

1. Set the RBW = 100 kHz.
2. Set the VBW ≥ 300 kHz.
3. Detector = average.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

558074 D01 DTS Meas Guidance v03r02 section 11.3

1. Set RBW = 100 kHz.
2. Set VBW ≥ 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITION

Same as Item 4.3.6

4.6.7 TEST RESULTS

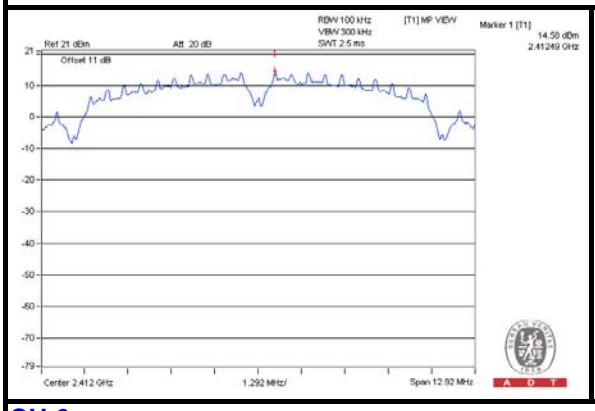
The conducted emission test is performed on each TX port of operating mode without summing or adding 10log (N) since the limit is relative emission limit. Only worst data of each operating mode is presented.

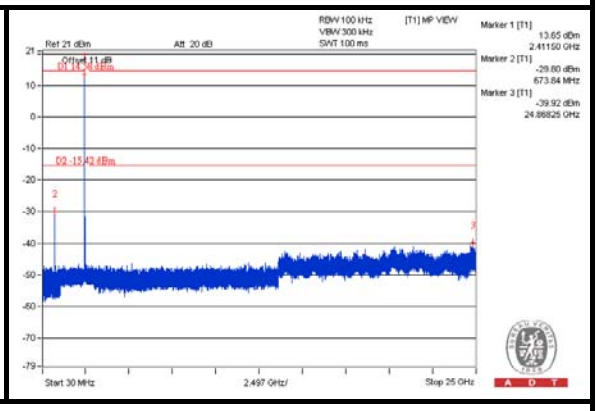
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 30dB offset below D1. It shows compliance with the requirement.

1TX (Radio 1)

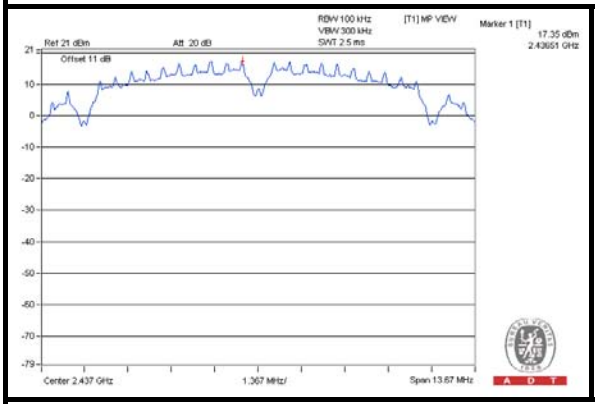
802.11b

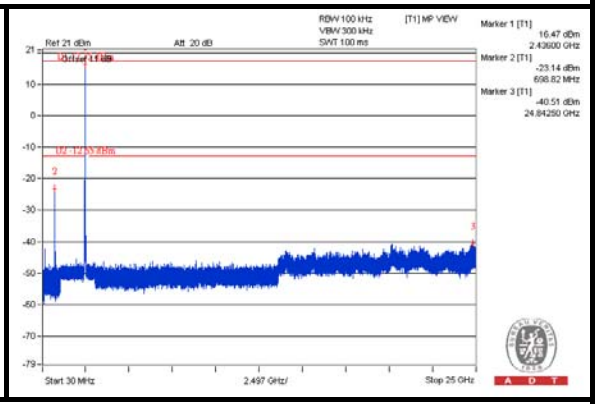
CH 1



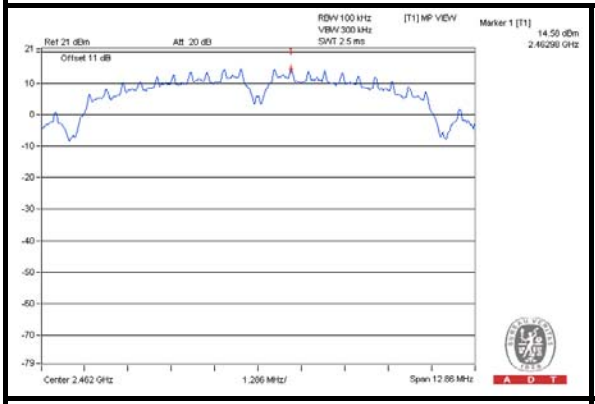


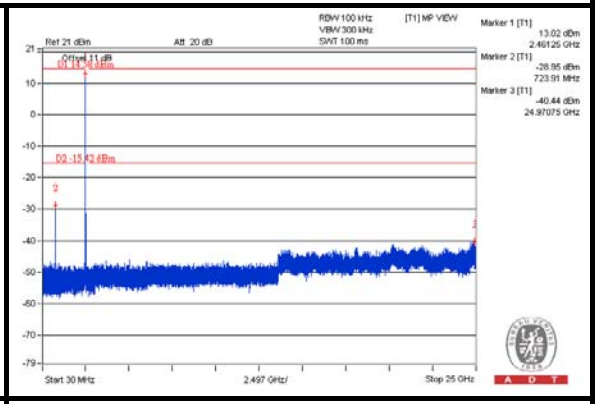
CH 6



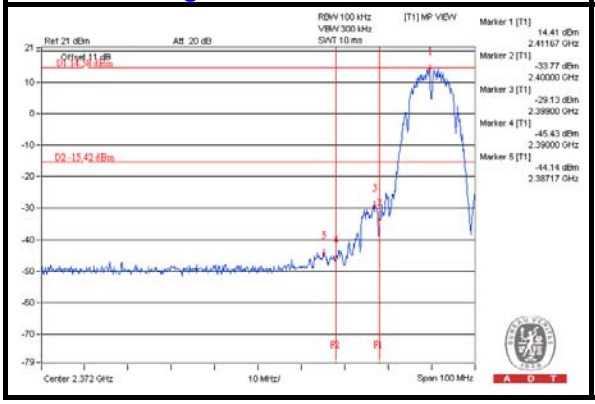


CH 11

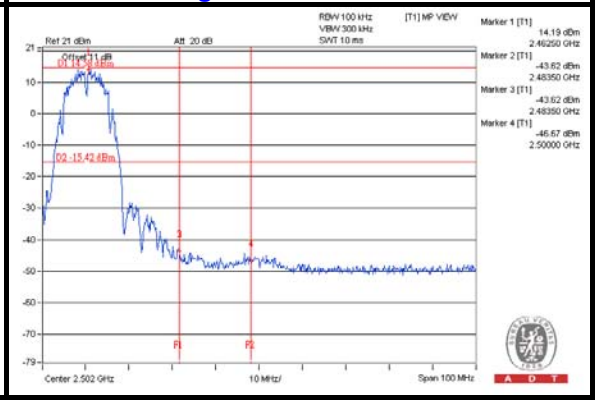




CH 1 Band edge

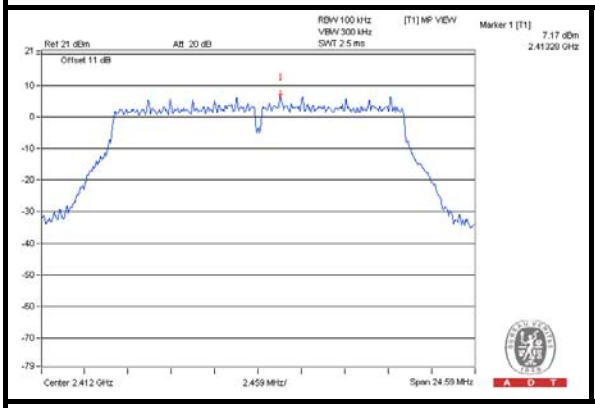


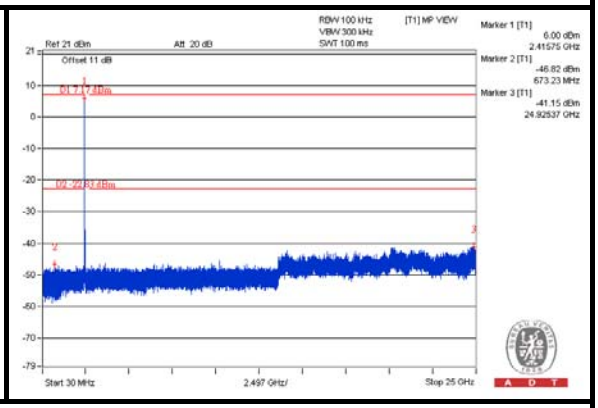
CH 11 Band edge



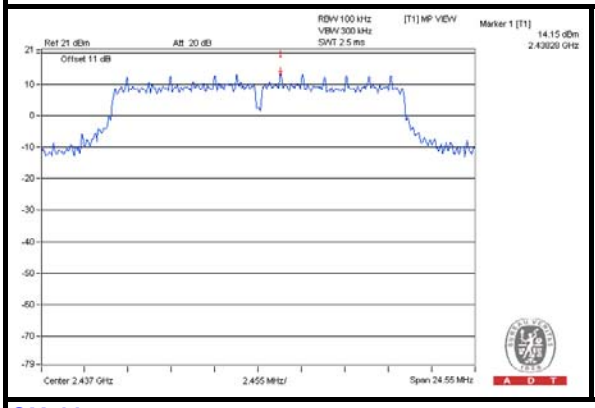
802.11g

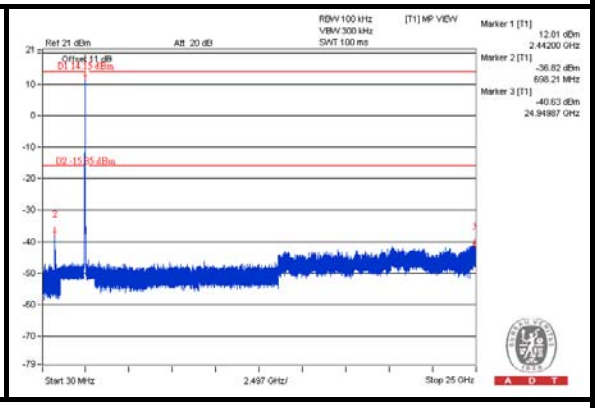
CH 1



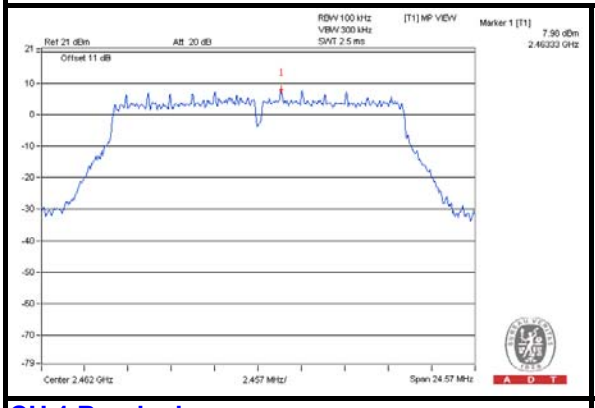


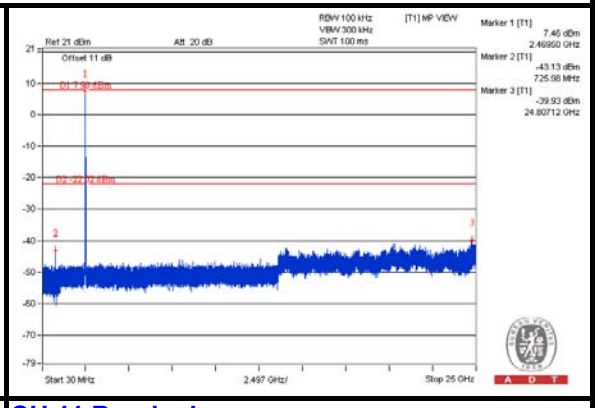
CH 6



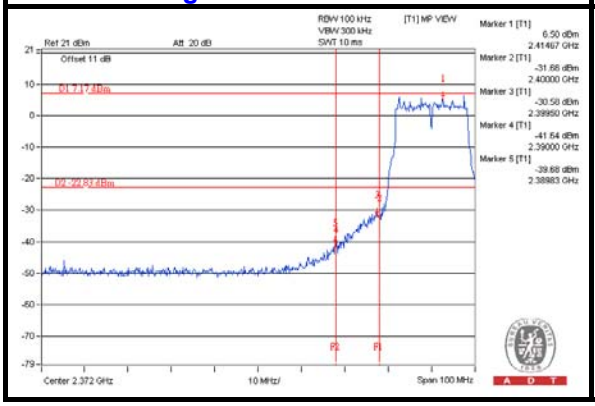


CH 11

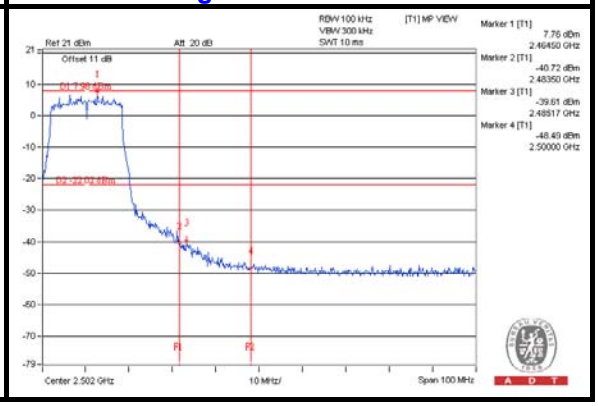




CH 1 Band edge

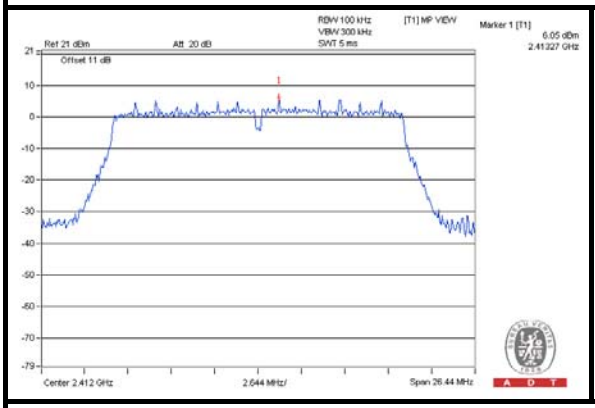


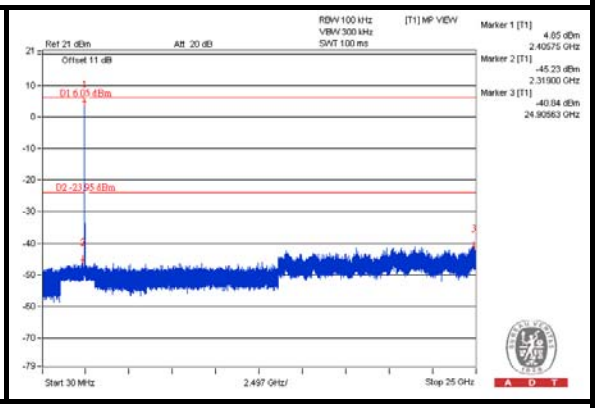
CH 11 Band edge



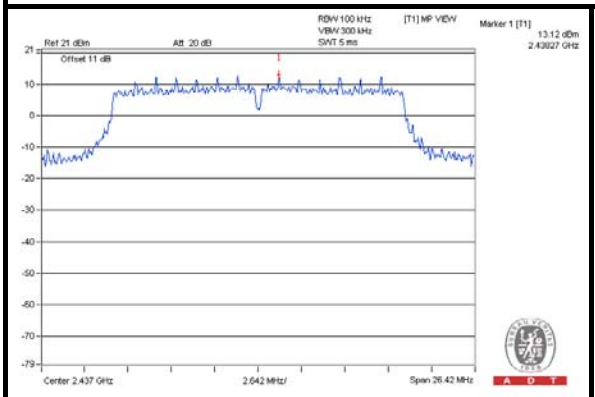
802.11n (20MHz)

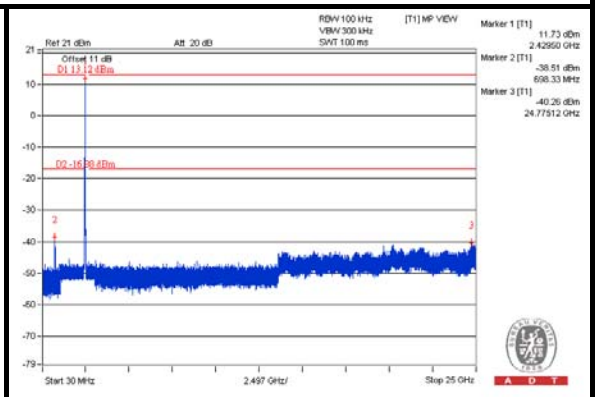
CH 1



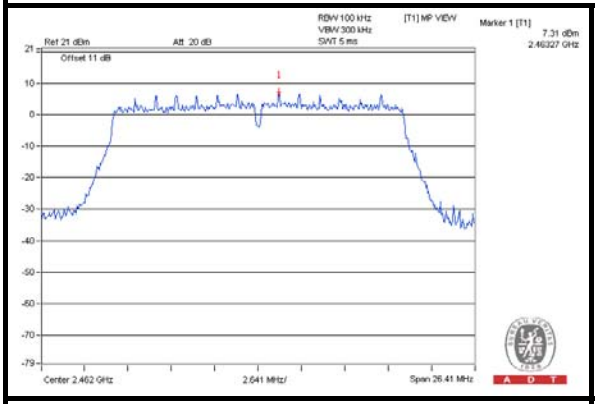


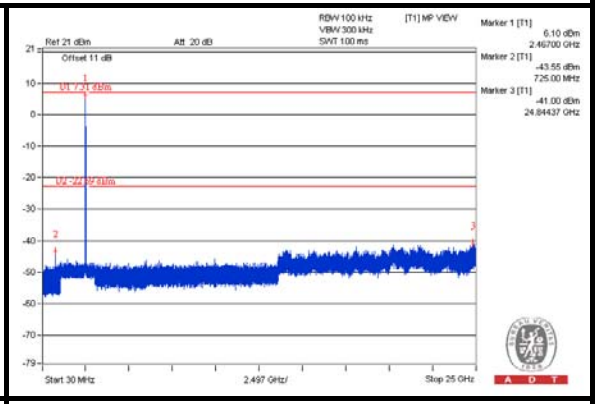
CH 6



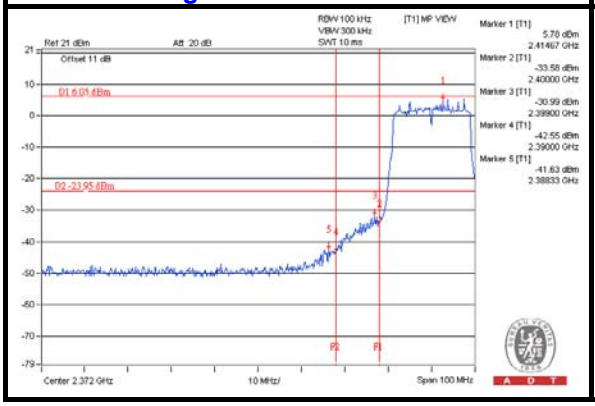


CH 11

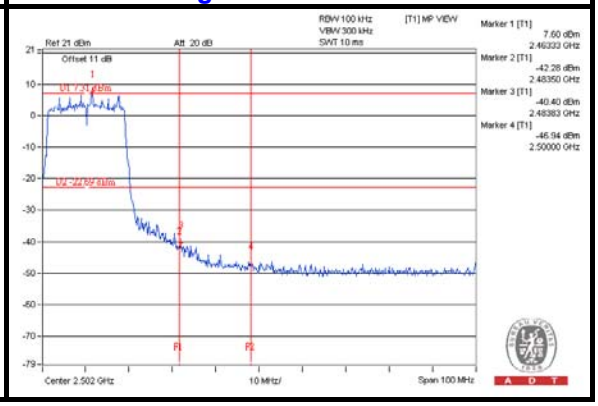




CH 1 Band edge



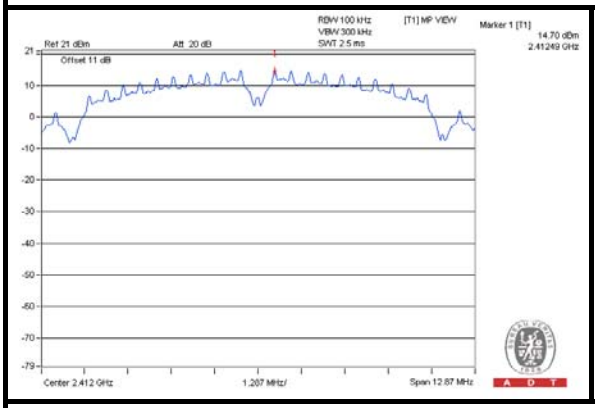
CH 11 Band edge

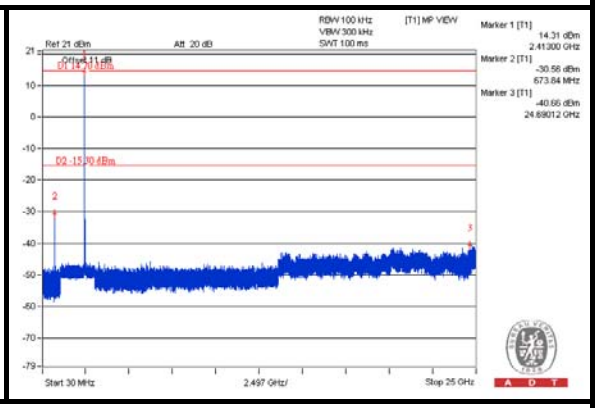


2TX (Radio 1)

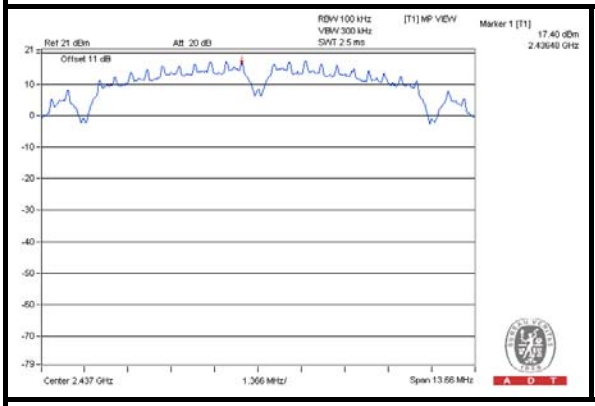
802.11b / CHAIN 0

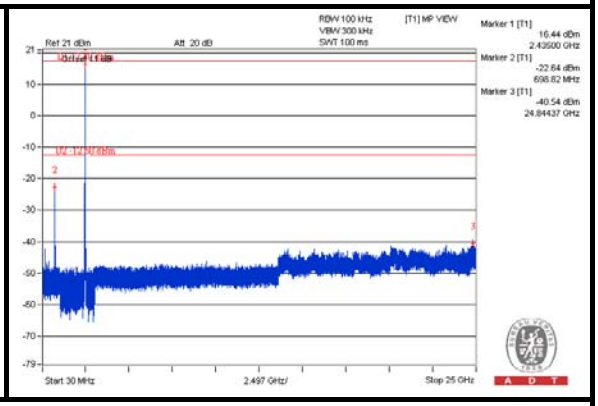
CH 1





CH 6





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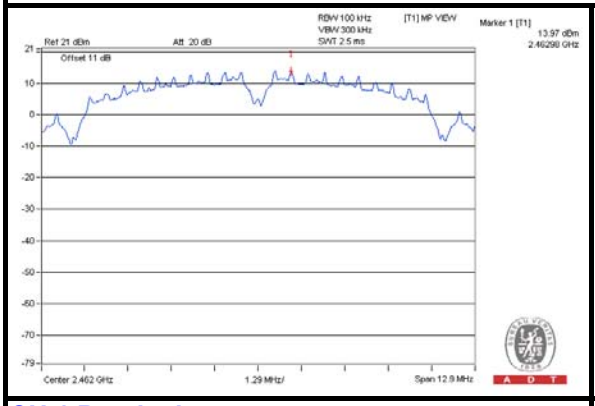

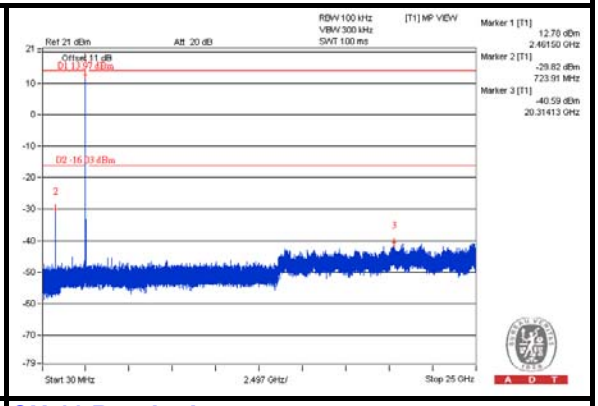

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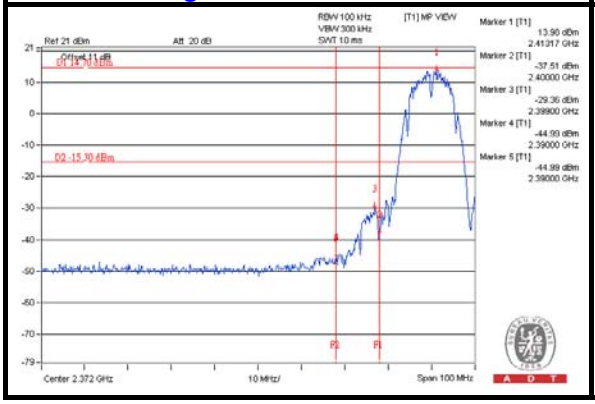

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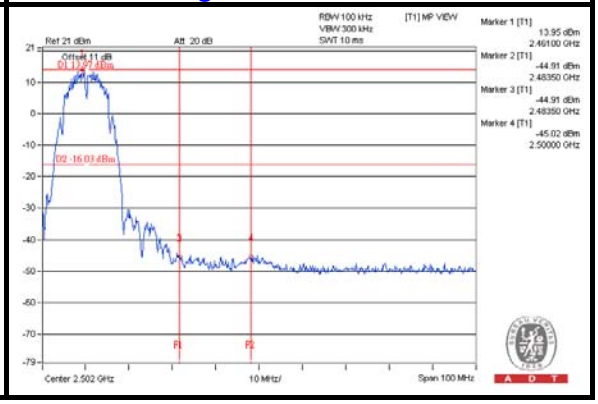

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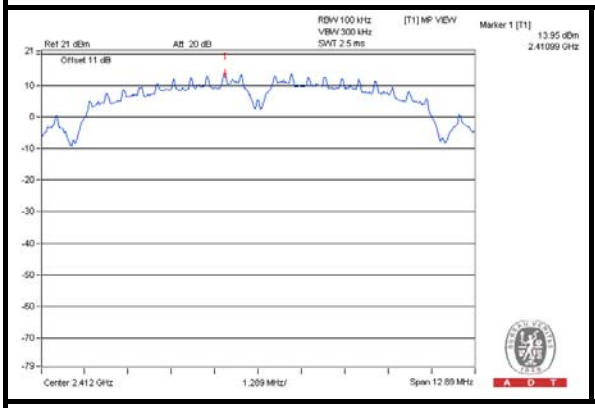

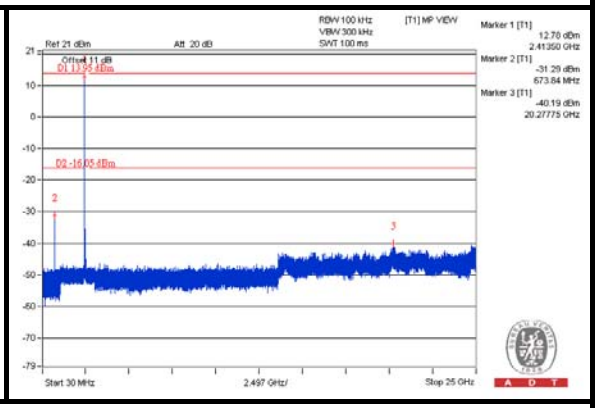

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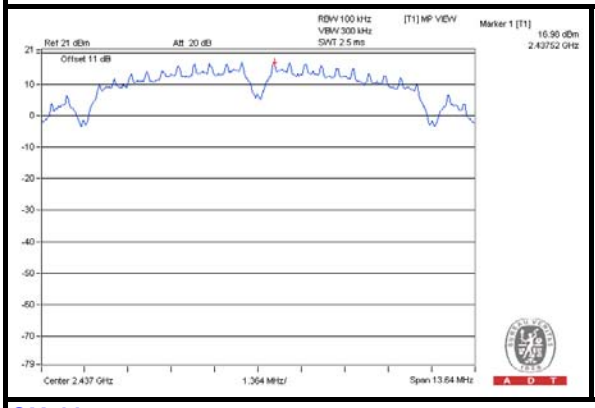

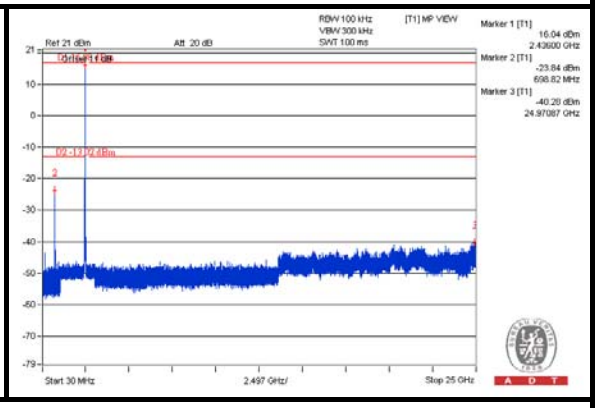

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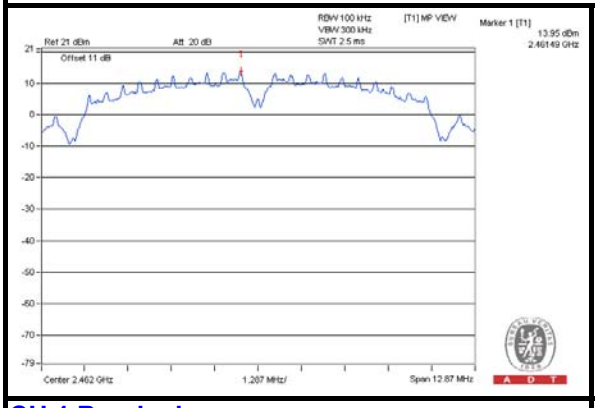

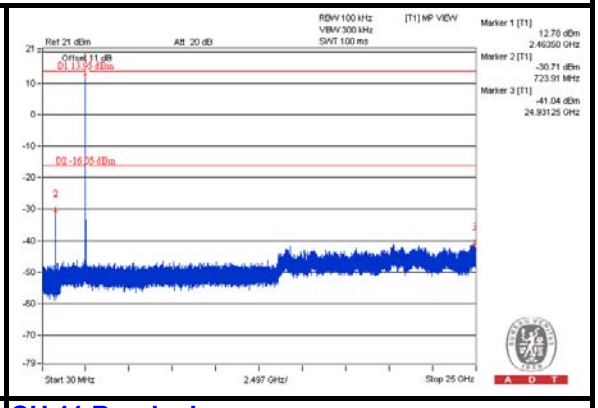

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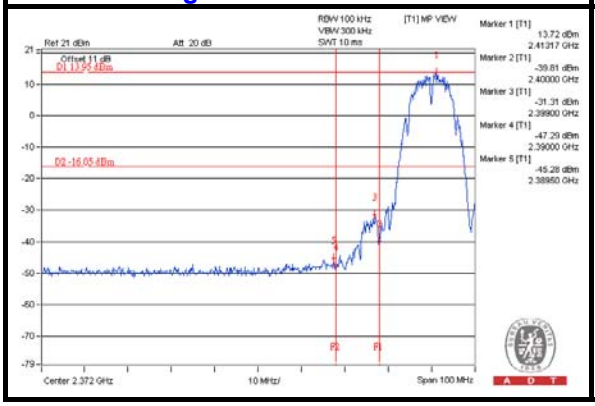

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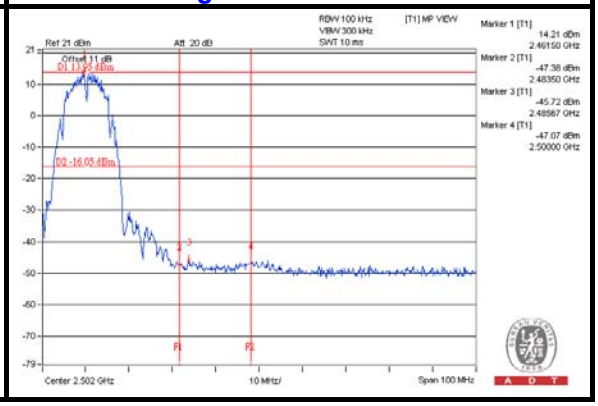

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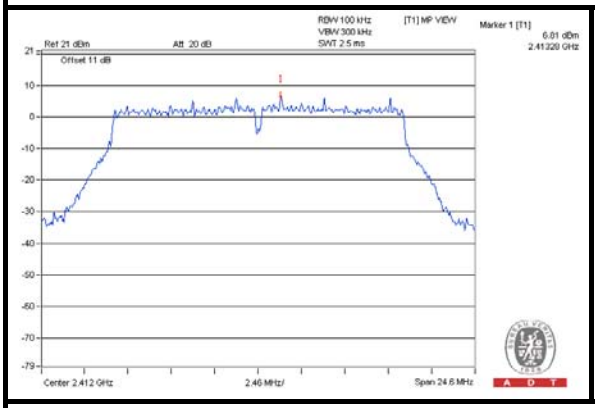

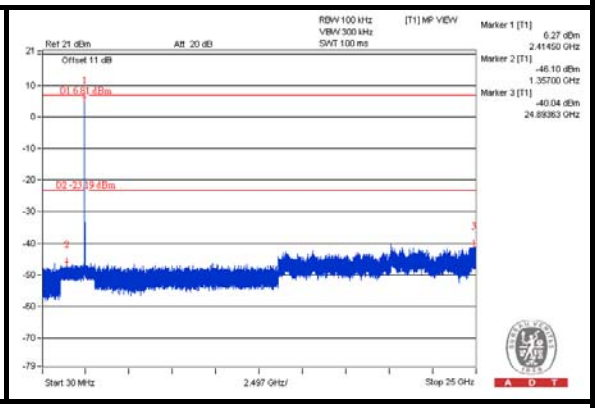

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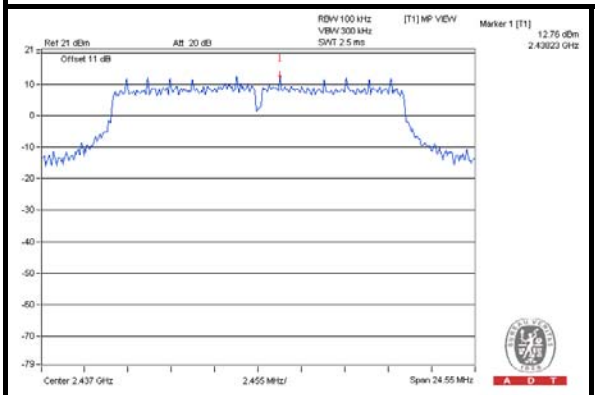

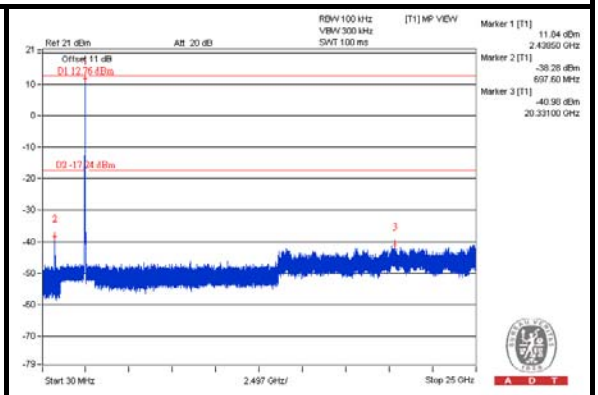

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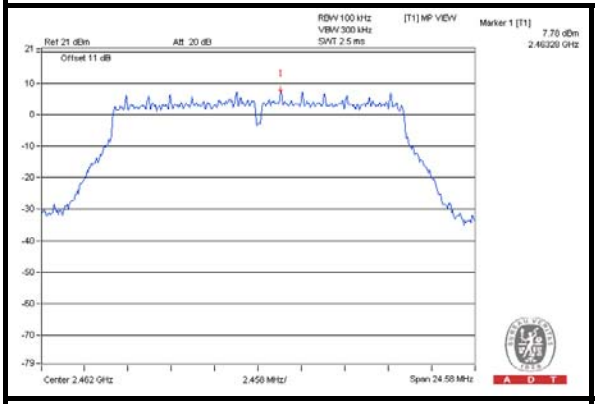

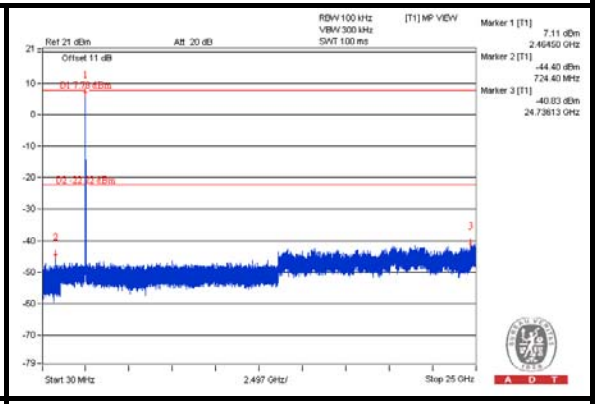

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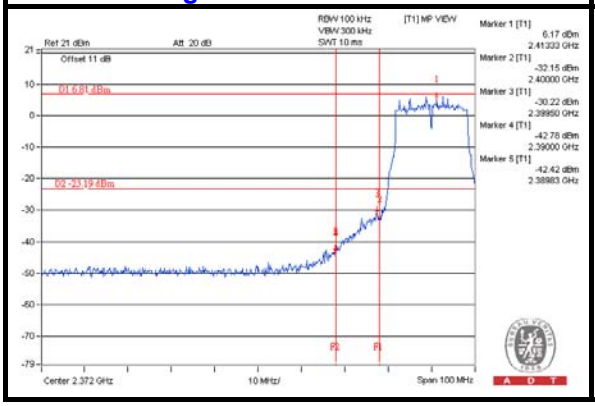

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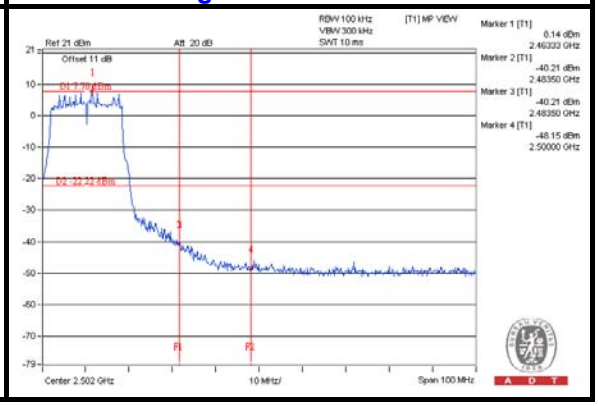

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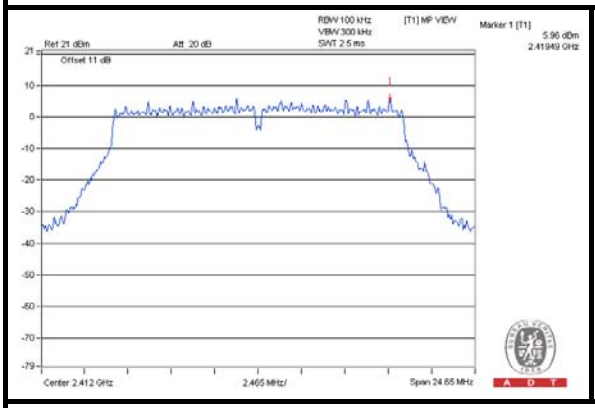

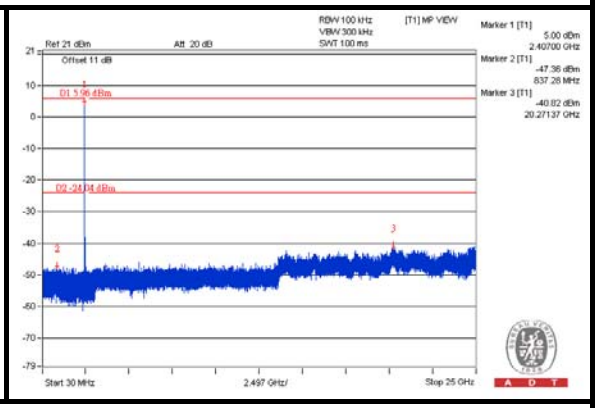

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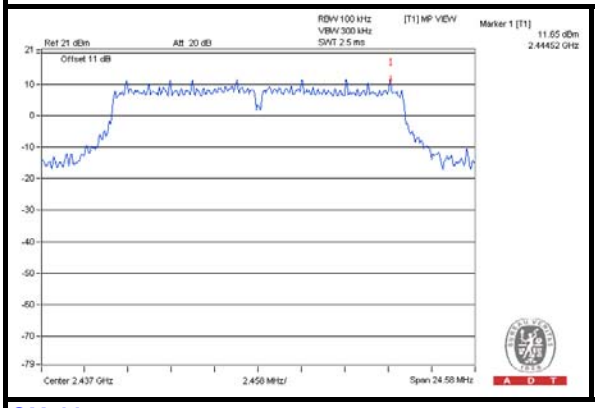

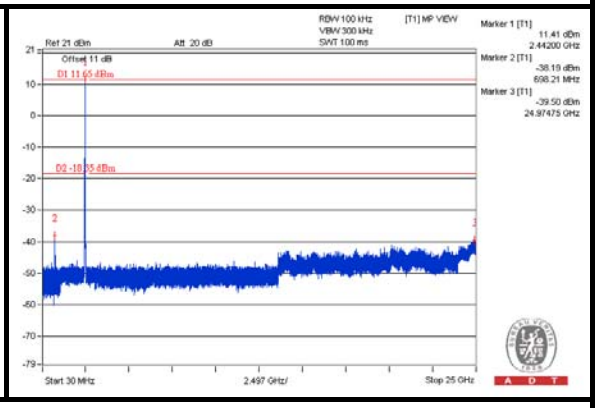

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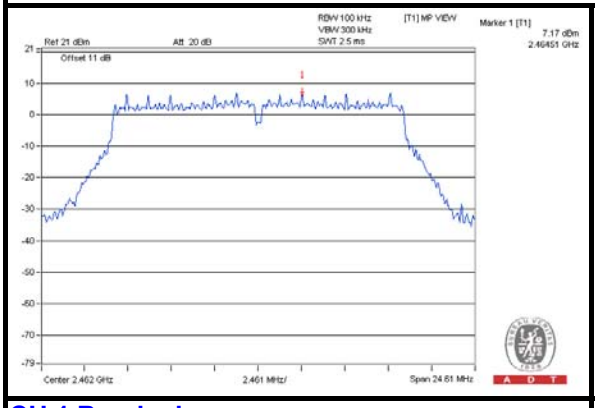

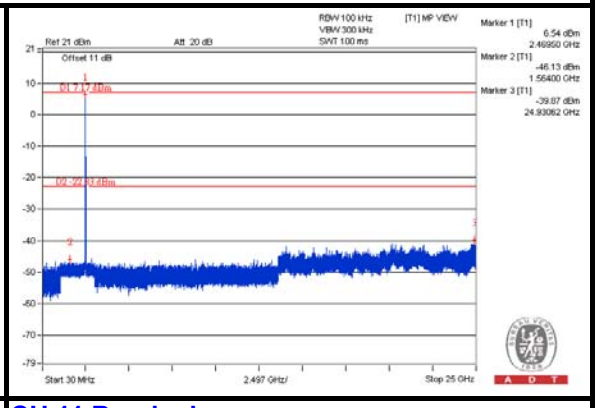

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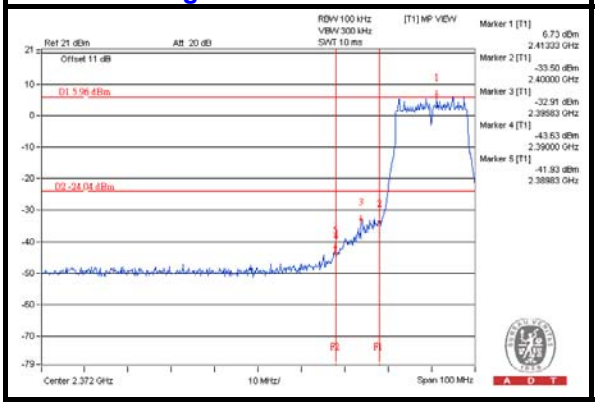

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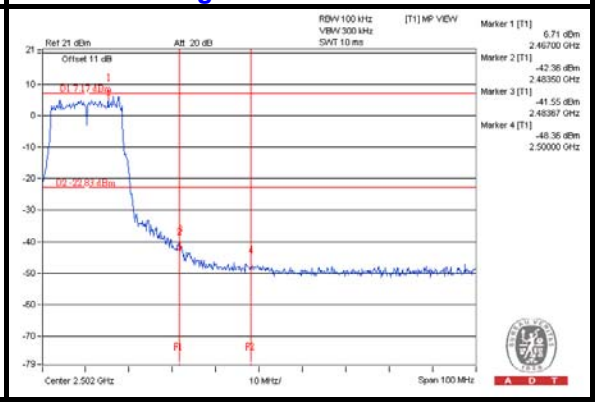

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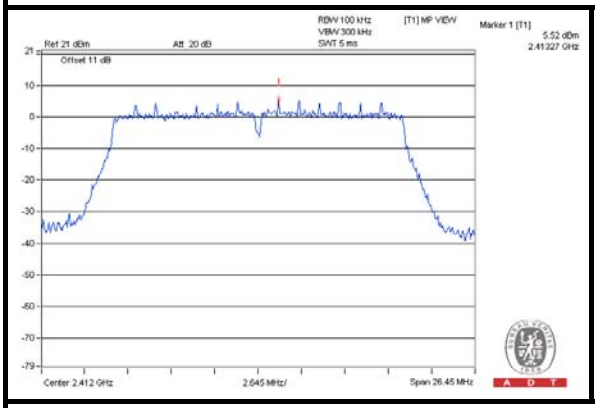

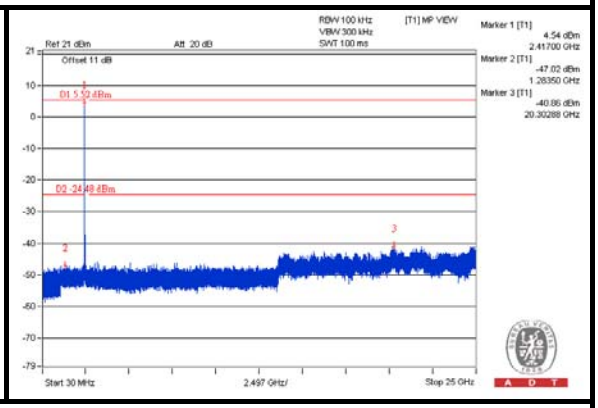

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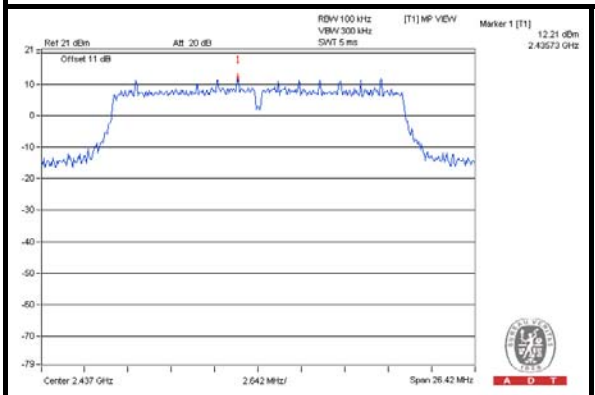

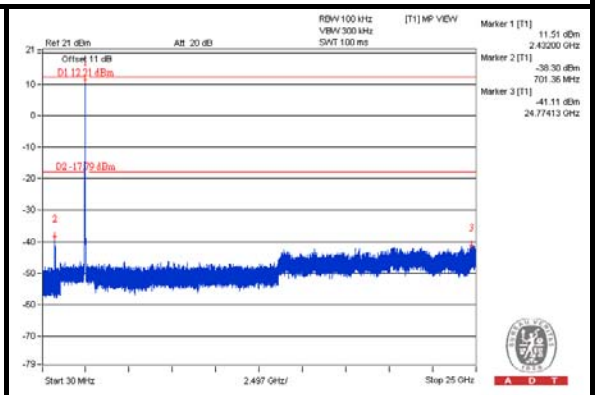

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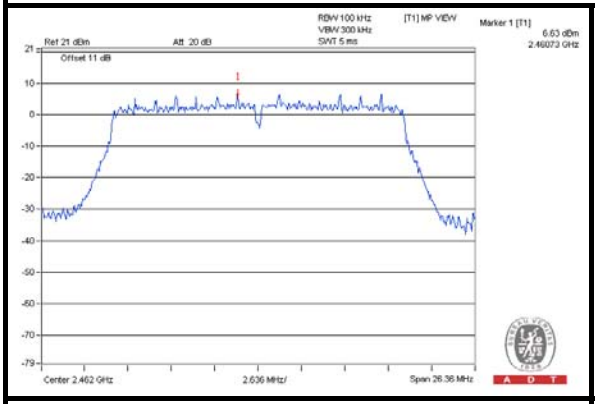

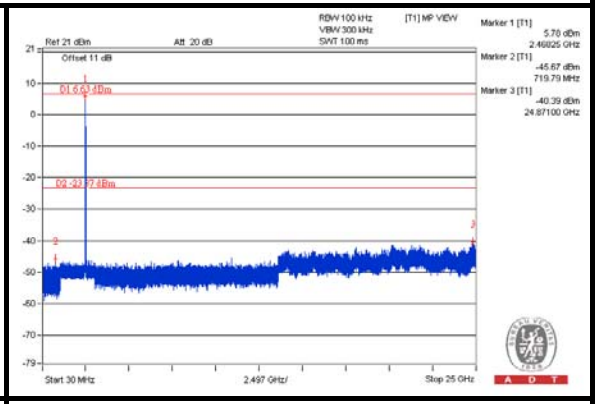

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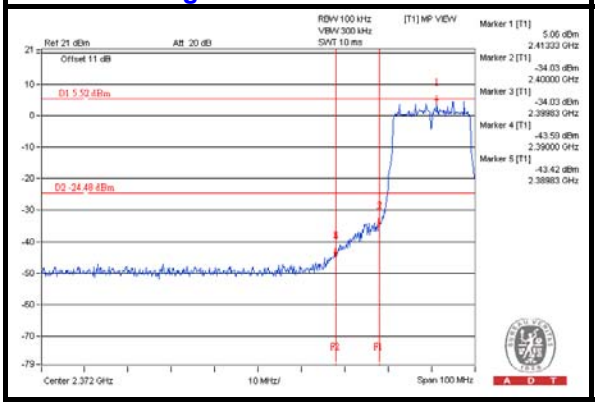

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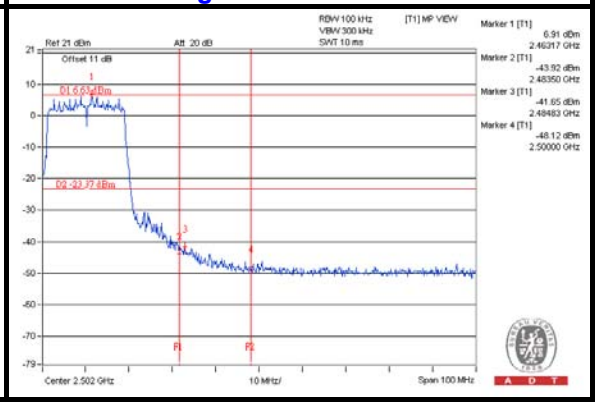

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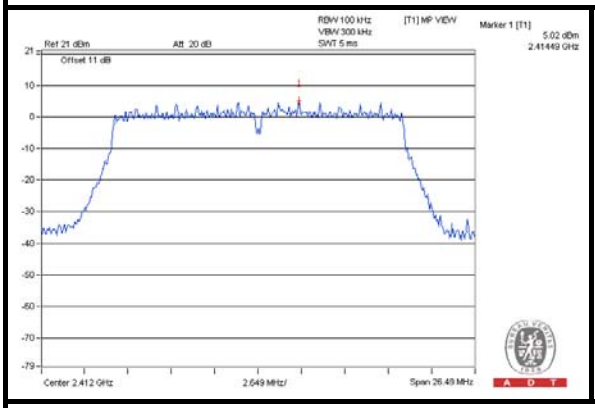

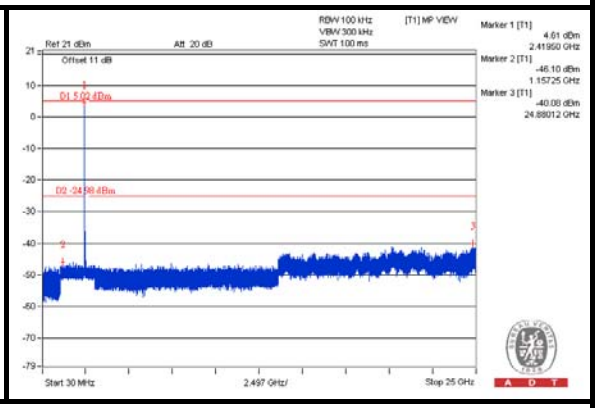

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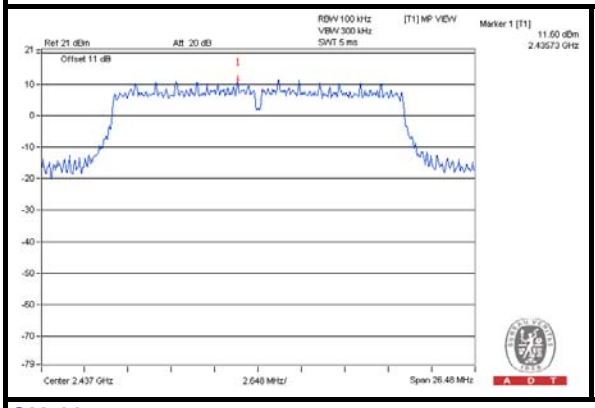

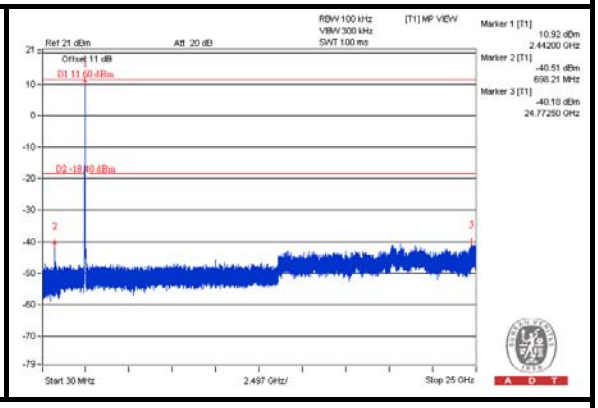

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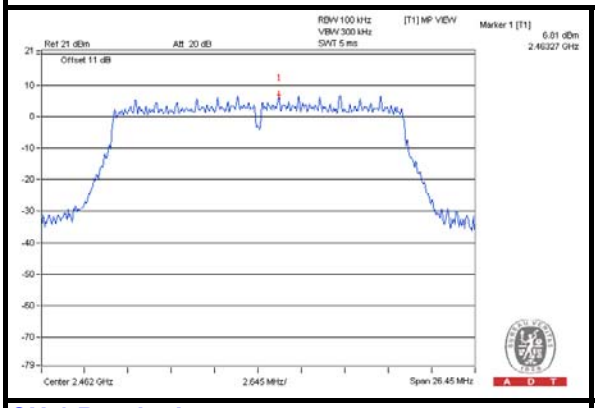

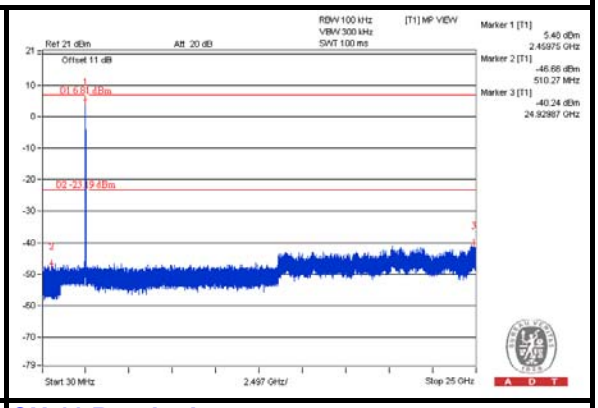

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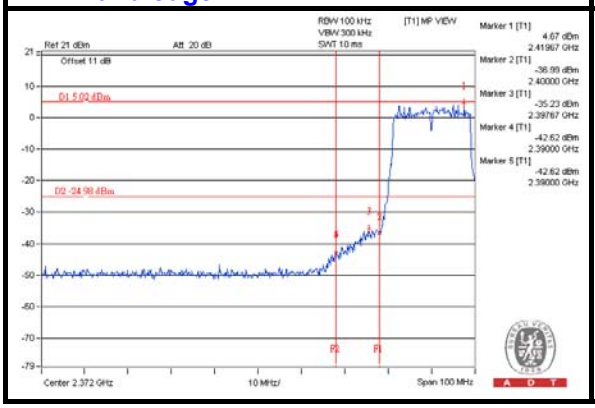

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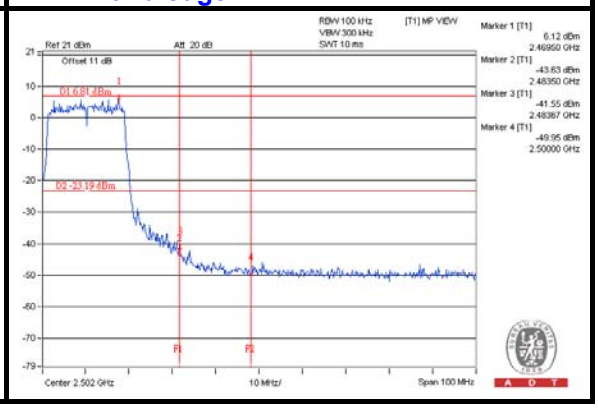

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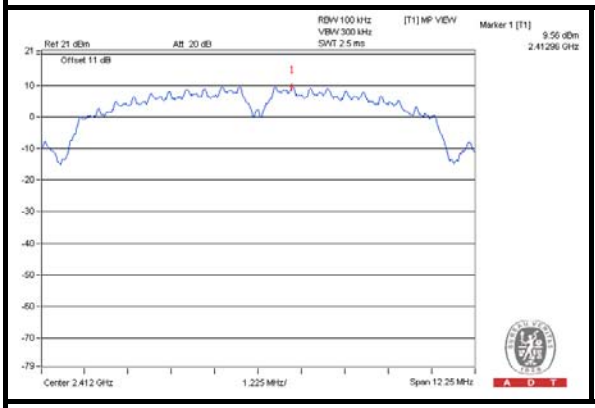

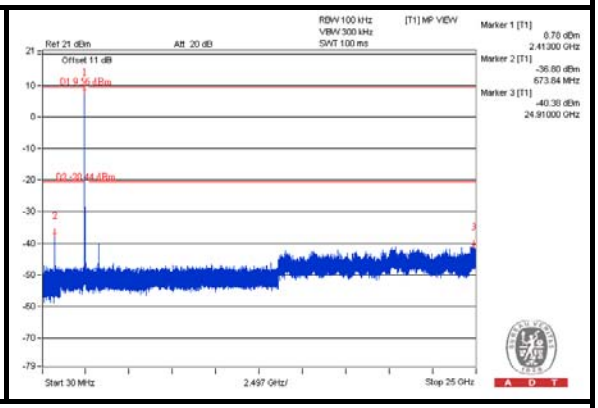

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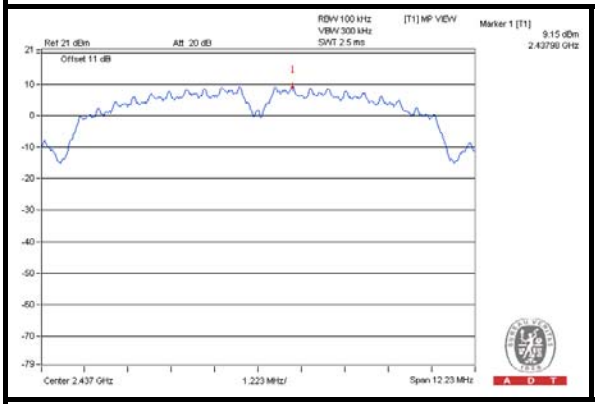

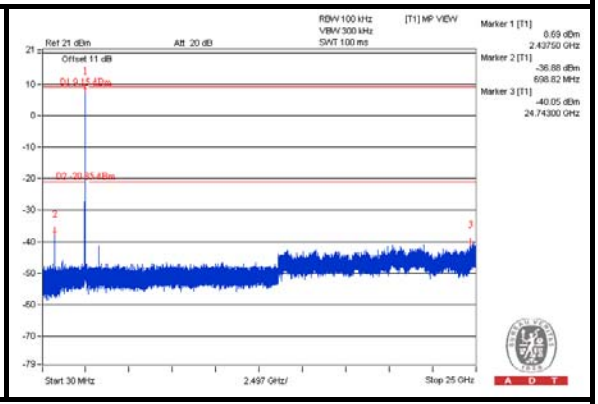

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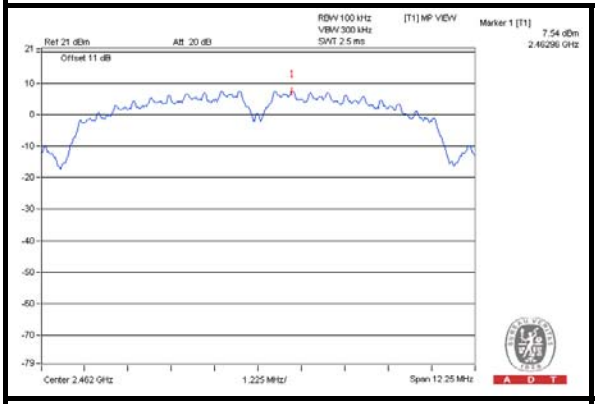

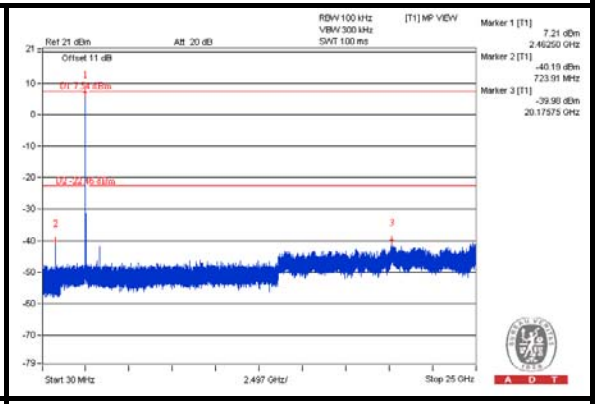

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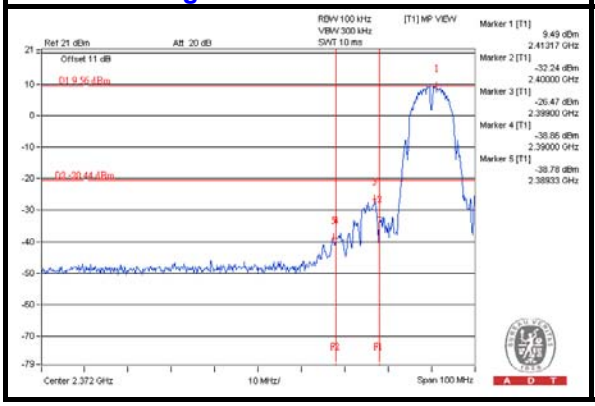

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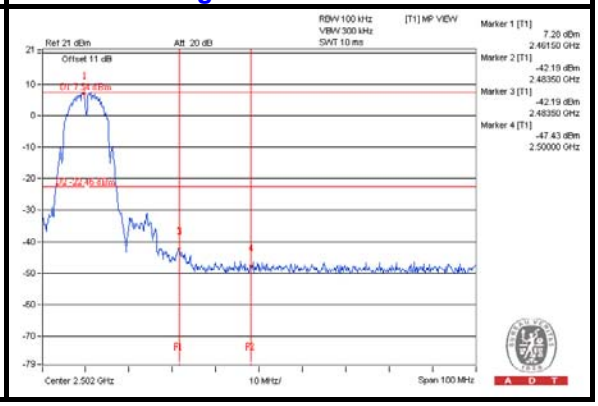

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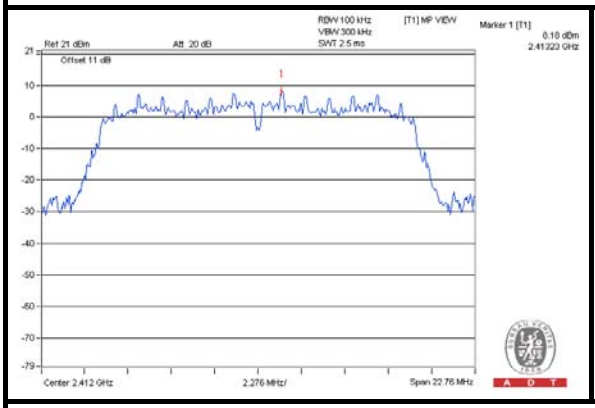

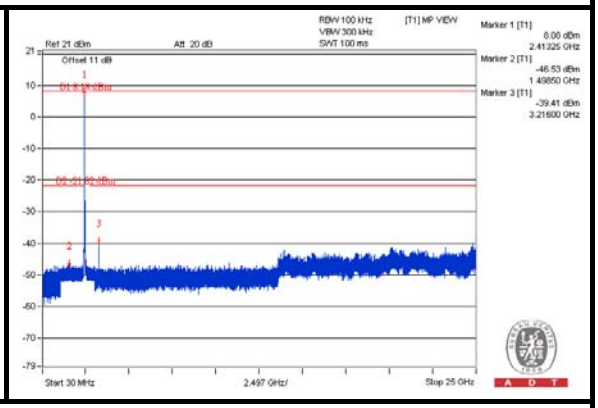

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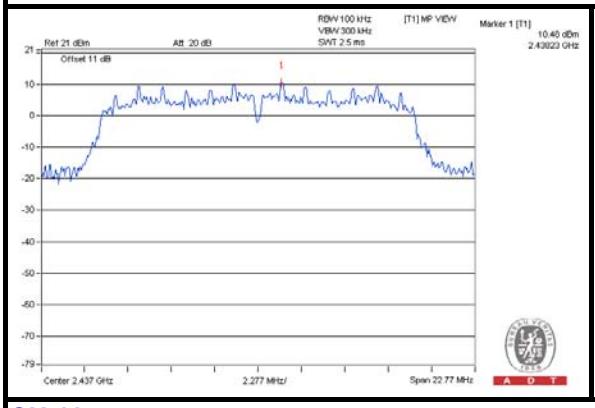

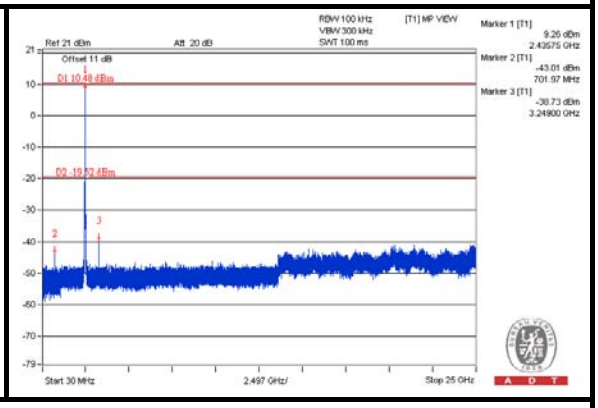

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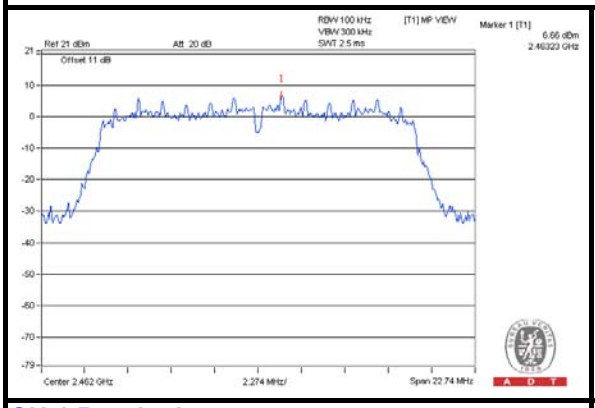
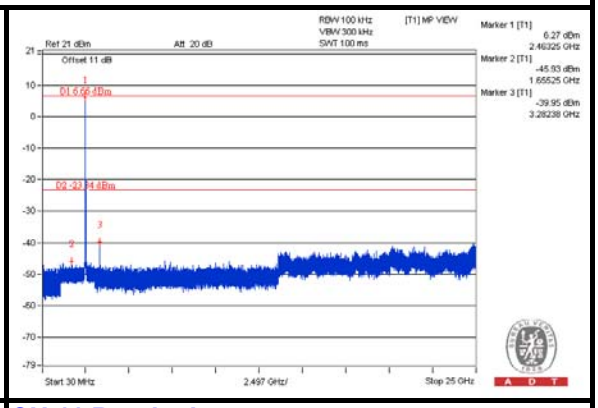
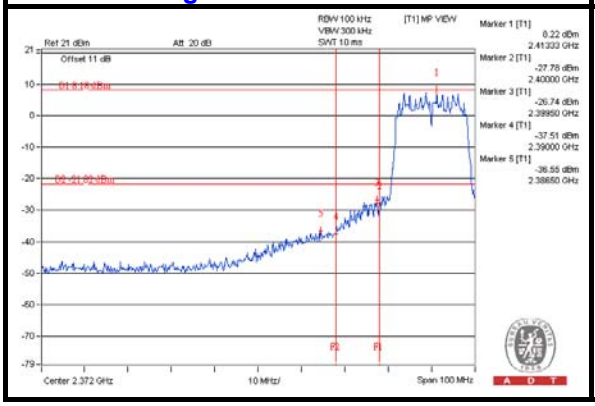




CH 1 Band edge



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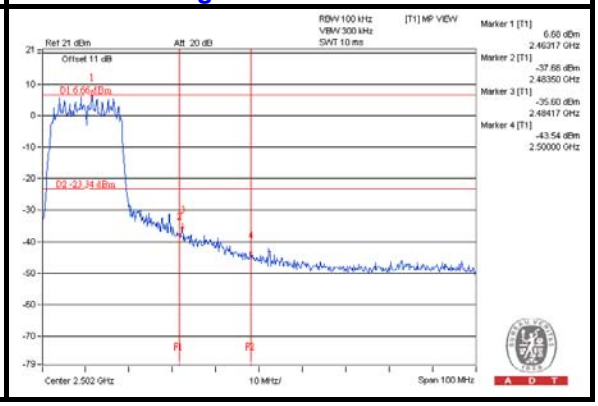
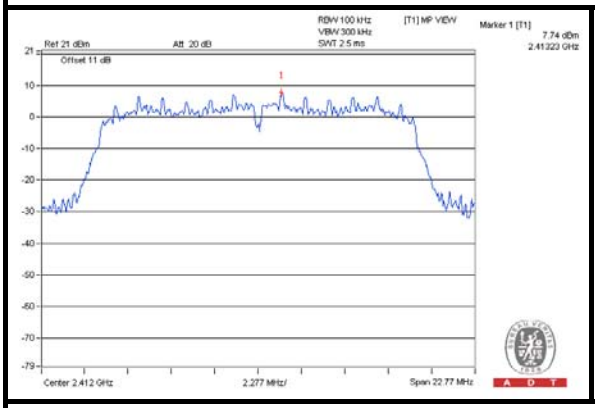
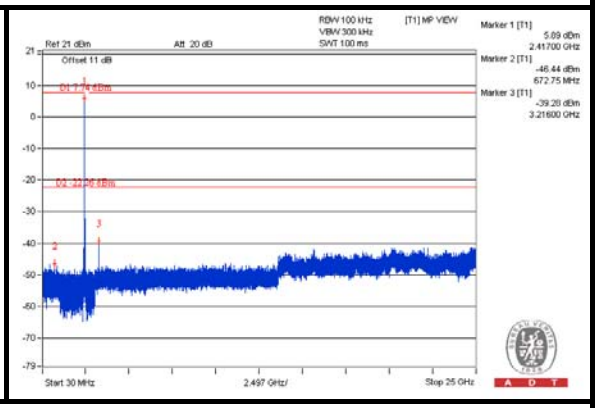


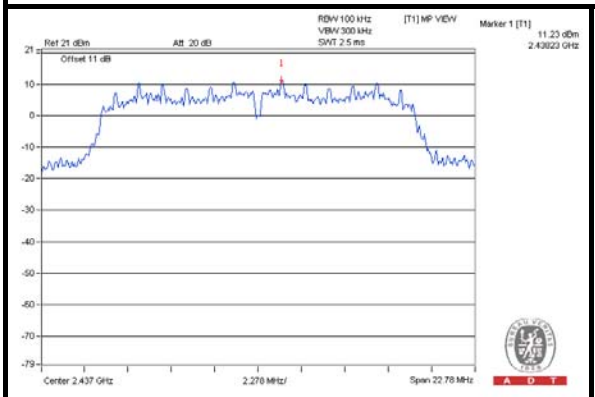
802.11n (20MHz)

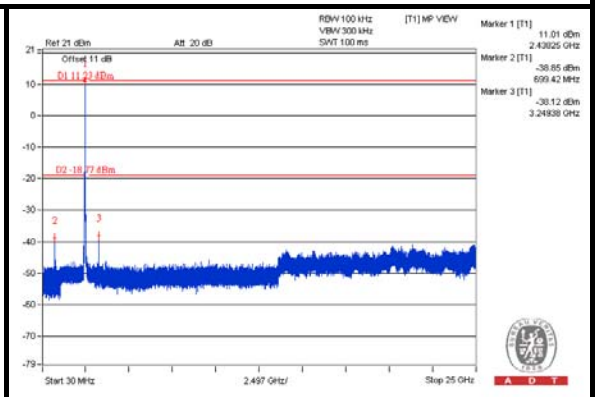
CH 1



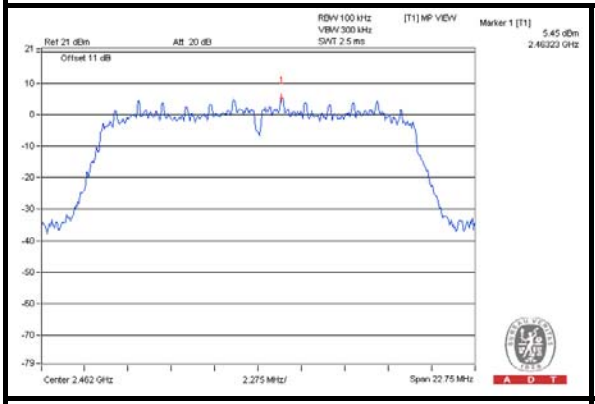


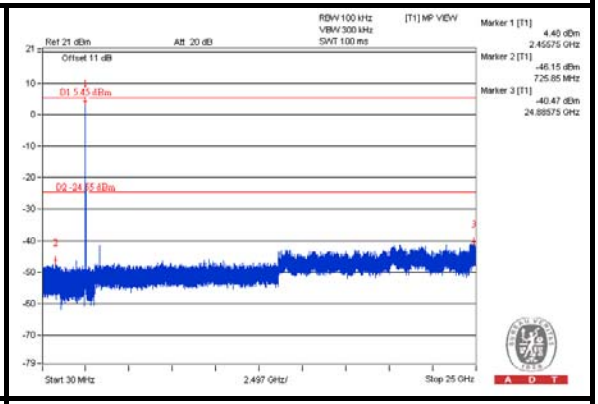
CH 6



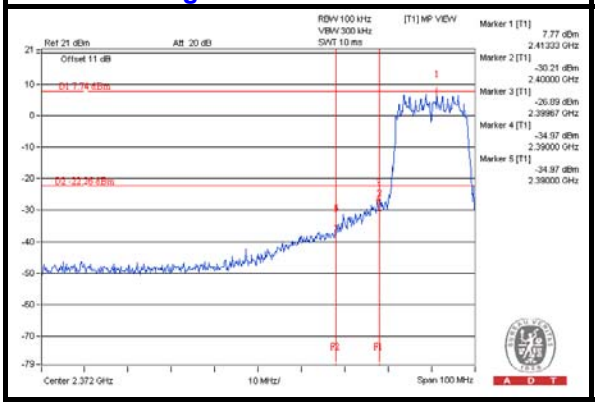


CH 11

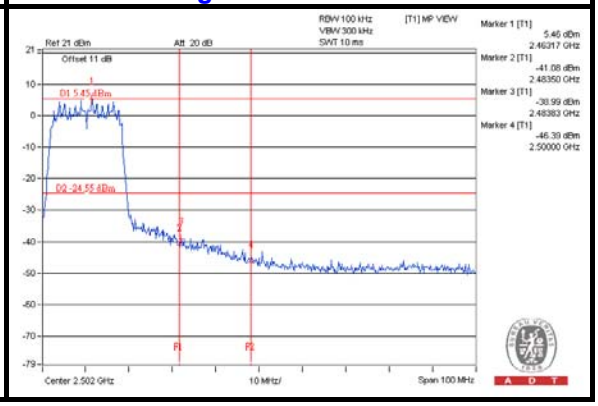




CH 1 Band edge



CH 11 Band edge



5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

6. INFORMATION ON THE TESTING LABORATORIES

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

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

Linko EMC/RF Lab:
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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

7. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications were made to the EUT by the lab during the test.

---END---