FCC TEST REPORT (15.247)

REPORT NO.:	RF110304C12
MODEL NO.:	WNDAP360
FCC ID:	PY311100154
RECEIVED:	Mar. 04, 2011
TESTED:	Mar. 07 ~ Mar. 31, 2011
ISSUED:	Apr. 12, 2011

APPLICANT:	NETGEAR, INC.
ADDRESS:	350 East Plumeria Drive San Jose, CA 95134

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
LAB ADDRESS:	No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang, Taipei Hsien 244, 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.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
Original release	N/A	Apr. 12, 2011

1. CERTIFICATION

PRODUCT:	ProSafe Dual Band Wireless-N Access Point
MODEL NO.:	WNDAP360
BRAND:	NETGEAR
APPLICANT:	NETGEAR, INC.
TEST SAMPLE:	ENGINEERING SAMPLE
TESTED:	Mar. 07 ~ Mar. 31, 2011
STANDARDS:	**FCC Part 15, Subpart C (Section 15.247)**
	ANSI C63.4-2003
	ANSI C63.10-2009

The above equipment (Model: WNDAP360) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch,** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____ , DATE : Apr. 12, 2011
Joanna Wang / Senior Specialist

APPROVED BY : _____ , DATE : Apr. 12, 2011
Gary Chang / Assistant 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 AND LIMIT**	**RESULT**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -3.06dB at 4.781MHz.
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -0.1dB at 5725.00MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 30dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Internal Antenna: Antenna connector is UFL not a standard connector. External Antenna: Antenna connector is R-SMA 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	9kHz~30MHz	2.44dB
Radiated emissions	30MHz ~ 200MHz	3.19dB
	200MHz ~1000MHz	3.21dB
	1GHz ~ 18GHz	2.26dB
	18GHz ~ 40GHz	1.94dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	ProSafe Dual Band Wireless-N Access Point
MODEL NO.	WNDAP360
FCC ID	PY311100154
NOMINAL VOLTAGE	12Vdc (Adapter) 48Vdc (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 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps
OPERATING FREQUENCY	**2.4GHz:** 2412.0 ~ 2462.0MHz **5.0GHz:** 5745.0 ~ 5825.0MHz
NUMBER OF CHANNEL	**2.4GHz:** 11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz) **5.0GHz:** 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	419.7mW for 2412.0 ~ 2462.0MHz 352.3mW for 5745.0 ~ 5825.0MHz
ANTENNA TYPE	Refer to NOTE as below
ANTENNA CONNECTER	Refer to NOTE as below
DATA CABLE	NA
I/O PORTS	RJ45
ACCESSORY DEVICES	Adapter

NOTE:

1. The EUT is a ProSafe Dual Band Wireless-N Access Point. The test data are separated into following test reports.

	TEST STANDARD	REFERENCE REPORT
WLAN 802.11b/g, 802.11n	FCC Part 15, Subpart C (Section 15.247)	RF110304C12
WLAN 802.11a, 802.11n (5745~5825 MHz)		
WLAN 802.11a, 802.11n (5180~ 5240MHz)	FCC Part 15, Subpart E (Section 15.407)	RF110304C12-1

2. The frequency bands used in this EUT are listed as follows:

FREQUENCY BAND (MHz)	2412~2462	5180~5240	5745~5825
802.11b	√		
802.11g	√		
802.11a		√	√
802.11n (20MHz)	√	√	√
802.11n (40MHz)	√	√	√

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

MODULATION MODE	TX FUNCTION
802.11b	2TX
802.11g	2TX
802.11a	2TX
802.11n (20MHz)	2TX
802.11n (40MHz)	2TX

4. The EUT was powered by the following adapters:

ADAPTER 1	
BRAND:	NETGEAR
MODEL:	T012LF1209 16100-2LF
P/N:	332-10166-01
INPUT:	100-120Vac, 50/60Hz, 0.5A
OUTPUT:	12Vdc, 1A
POWER LINE:	1.8m non-shielded cable without core

ADAPTER 2	
BRAND:	NETGEAR
MODEL:	MT12-Y120100-A1
P/N:	332-10190-01
INPUT:	100-120Vac, 60Hz, 0.3A
OUTPUT:	12Vdc, 1.0A
POWER LINE:	1.8m non-shielded cable without core

5. There are two antennas provided to this EUT. The information about those antennas as below table:

NO.	ANTENNA TYPE	GAIN (dBi)		ANTENNA CONNECTOR
		2.4GHz	5GHz	
1. Internal	Monopole	5.59	6.29	UFL
2. External	Omni	5	-	R-SMA

* External antenna is for option.

6. 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

FOR 2.4GHz:

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		

7 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2422MHz	5	2442MHz
2	2427MHz	6	2447MHz
3	2432MHz	7	2452MHz
4	2437MHz		

FOR 5.0GHz (5745 ~ 5825MHz):

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

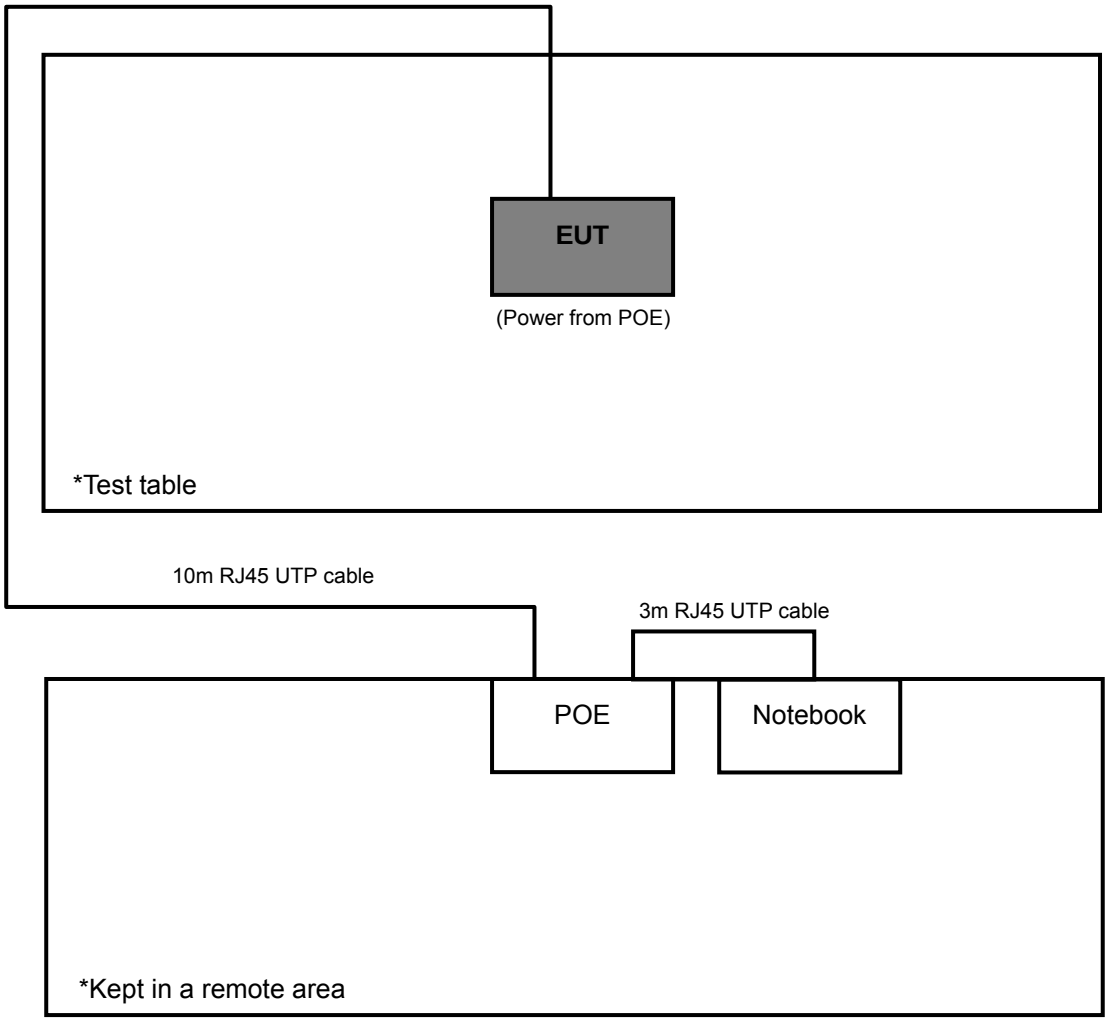
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

2 channels are provided for 802.11n (40MHz):

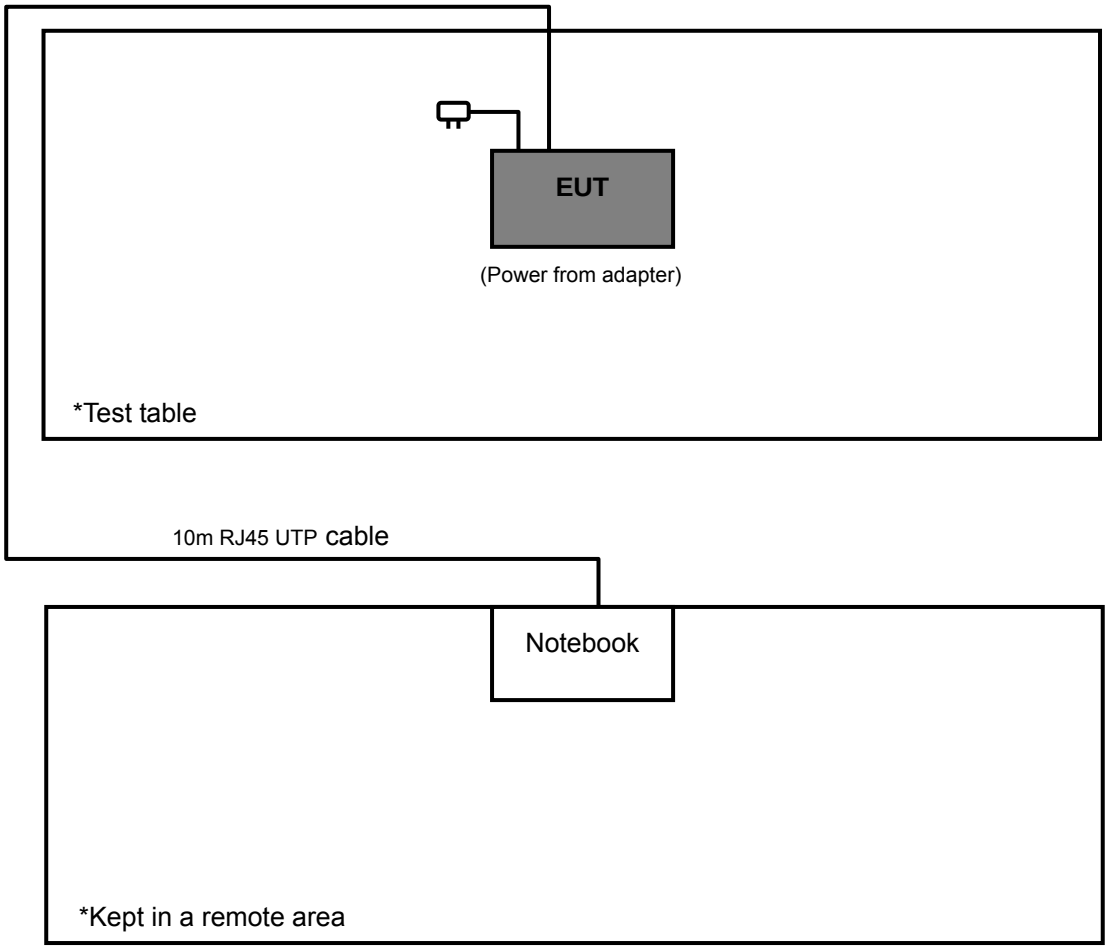
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

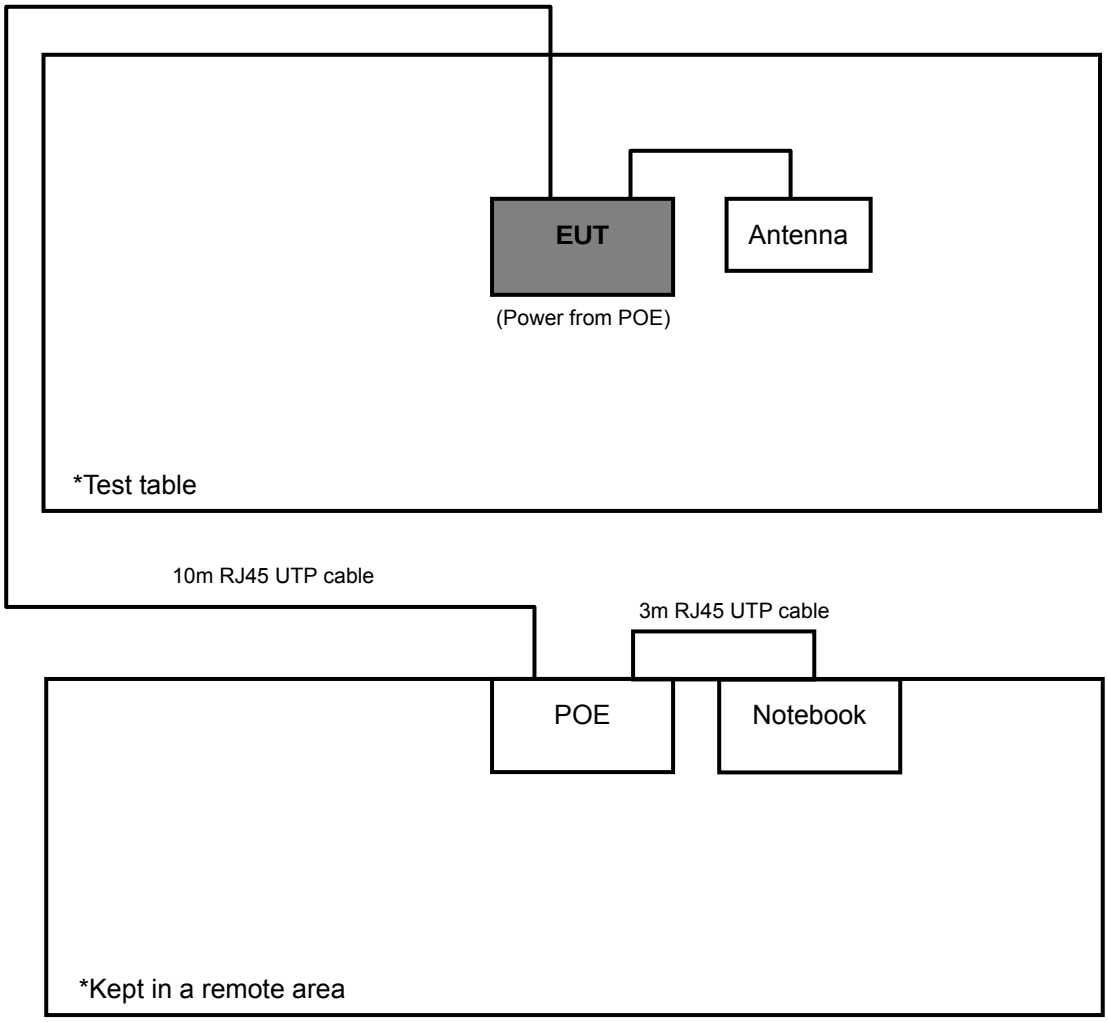
Test Mode A1



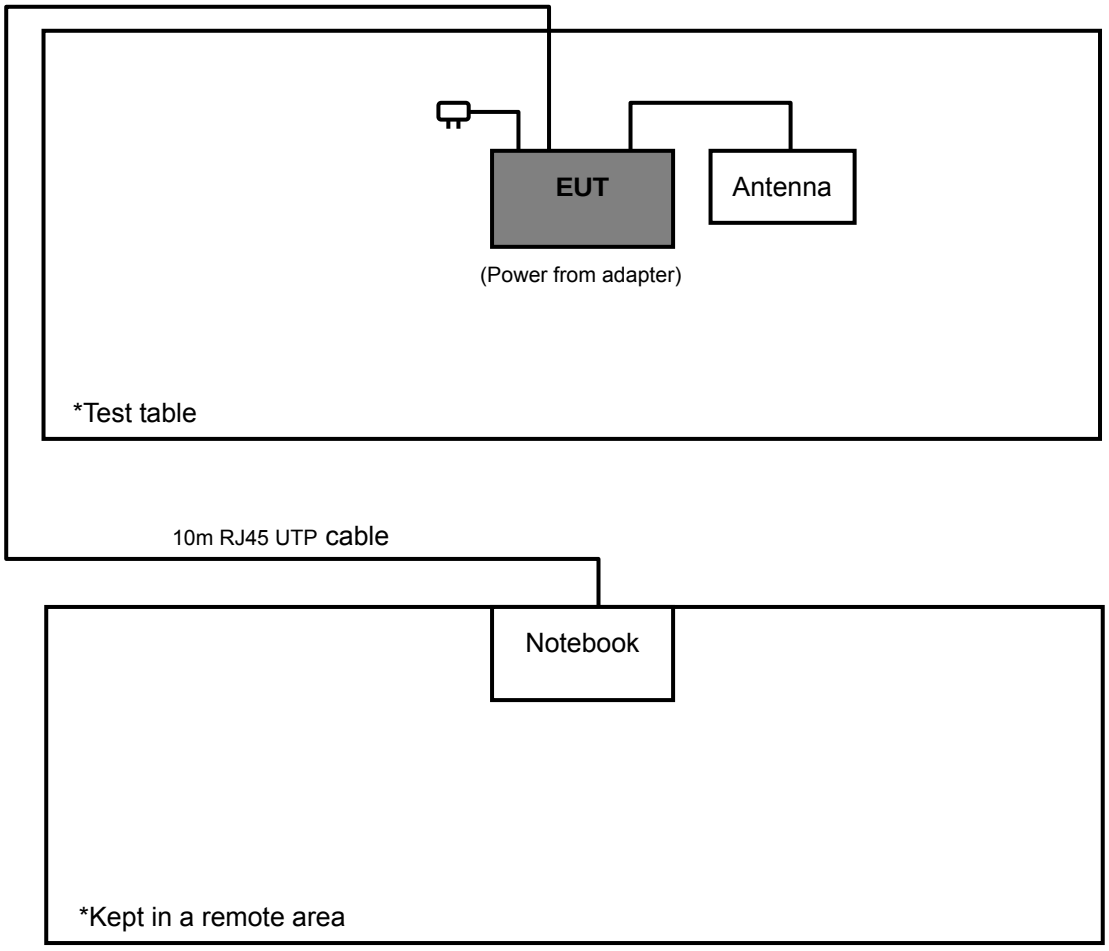
Test Mode A2, A3



Test Mode B1


EUT
Antenna
(Power from POE)
*Test table
10m RJ45 UTP cable
3m RJ45 UTP cable
POE
Notebook
*Kept in a remote area

Test Mode B2, B3



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

FOR 2.4GHz:

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION	
	RE≥1G	RE<1G	PLC	APCM	ANTENNA	POWER SUPPLY
A1	√	√	√	√	Internal	POE
A2	-	√	√	-		Adapter 1: T012LF1209 16100-2LF
A3	-	√	√	-		Adapter 2: MT12-Y120100-A1
B1	√	√	√	-	External	POE
B2	-	√	√	-		Adapter 1: T012LF1209 16100-2LF
B3	-	√	√	-		Adapter 2: MT12-Y120100-A1

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

NOTE: "-" 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, XYZ Axis 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)	AXIS
A1, B1	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	Z
A1, B1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	Z
A1, B1	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	Z
A1, B1	802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15.0	Z

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, XYZ Axis 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)	AXIS
A1, A2, A3, B1, B2, B3	802.11g	1 to 11	6	OFDM	BPSK	6.0	Z

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)
A1, A2, A3, B1, B2, B3	802.11g	1 to 11	6	OFDM	BPSK	6.0

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)
A1, B1	802.11b	1 to 11	1, 11	DSSS	DBPSK	1.0
A1, B1	802.11g	1 to 11	1, 11	OFDM	BPSK	6.0
A1, B1	802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	7.2
A1, B1	802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	15.0

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)
A1	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A1	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2
A1	802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH, 1019 hPa	120Vac, 60Hz	David Huang
RE<1G	23deg. C, 63%RH, 1024 hPa	120Vac, 60Hz	David Huang
PLC	22deg. C, 62%RH, 1024 hPa	120Vac, 60Hz	Frank Wang
APCM	23deg. C, 62%RH, 1019 hPa	120Vac, 60Hz	David Huang

FOR 5.745 ~ 5.825GHz:

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION	
	RE≥1G	RE<1G	PLC	APCM	ANTENNA	POWER SUPPLY
A1	√	√	√	√	Internal	POE
A2	-	√	√	-		Adapter 1: T012LF1209 16100-2LF
A3	-	√	√	-		Adapter 2: MT12-Y120100-A1

Where **RE≥1G:** Radiated Emission above 1GHz **RE<1G:** Radiated Emission below 1GHz

PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

NOTE: "-" 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, XYZ Axis 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)	AXIS
A1	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0	Z
A1	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2	Z
A1	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0	Z

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, XYZ Axis 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)	AXIS
A1, A2, A3	802.11a	149 to 165	157	OFDM	BPSK	6.0	Z

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)
A1, A2, A3	802.11a	149 to 165	157	OFDM	BPSK	6.0

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)
A1	802.11a	149 to 165	149, 165	OFDM	BPSK	6.0
A1	802.11n (20MHz)	149 to 165	149, 165	OFDM	BPSK	7.2
A1	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0

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)
A1	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
A1	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2
A1	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	23deg. C, 62%RH, 1022 hPa	120Vac, 60Hz	Frank Wang
RE<1G	23deg. C, 63%RH, 1024 hPa	120Vac, 60Hz	David Huang
PLC	22deg. C, 62%RH, 1024 hPa	120Vac, 60Hz	Frank Wang
APCM	23deg. C, 62%RH, 1019 hPa	120Vac, 60Hz	David Huang

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C (15.247)
ANSI C63.4-2003
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.

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	D531	CN-0XM006-48643 -81U-2610	QDS-BRCM1020
2	POE	CISCO	DPSN-35FBA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	3m RJ45 UTP cable. (for test mode A1, B1) 10m RJ45 UTP cable. (for test mode A2, A3, B2, B3)
2	10m RJ45 UTP cable.

NOTE:
1. All power cords of the above support units are non-shielded (1.8m).
2. Item 1~2 acted communication partners to transfer data.
3. Item 2 was provided by client.

4. TEST TYPES AND RESULTS (FOR 2.4GHz BAND)

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Dec. 27, 2010	Dec. 26, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Aug. 02, 2010	Aug. 01, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 28, 2010	Apr. 27, 2011
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 06, 2011	Jan. 05, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8449B	3008A01961	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8447D	2944A10738	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	274041/4	Aug. 21, 2010	Aug. 20, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Aug. 21, 2010	Aug. 20, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	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 Chamber 4.

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 IC7450F-4.

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. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 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.

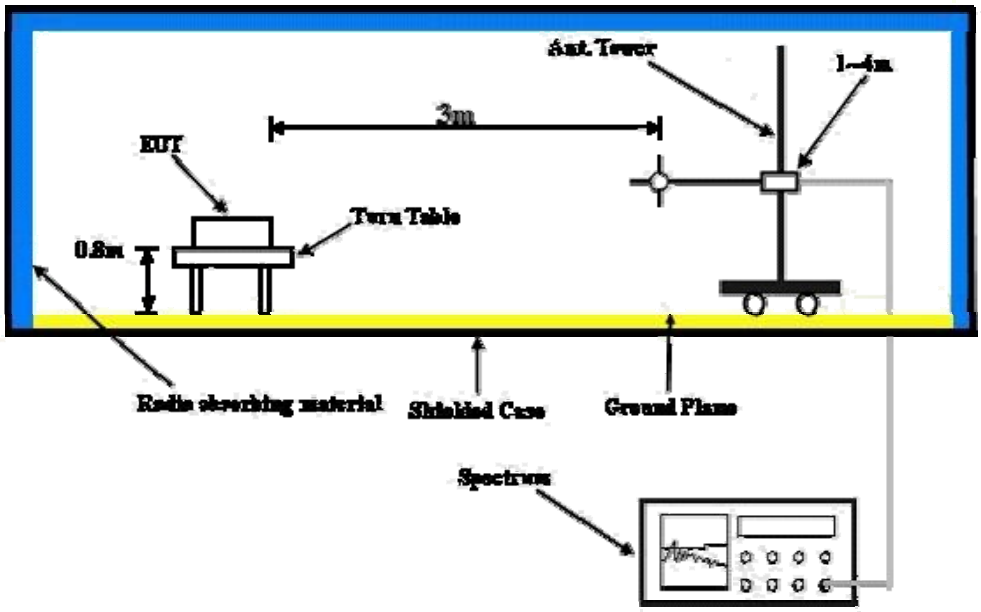
NOTE:

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 100kHz and video bandwidth is 300kHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz 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



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 notebook 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 WORST-CASE DATA：802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	2386.30	61.6 PK	74.0	-12.4	1.72 H	70	30.50	31.10
2	2386.30	53.0 AV	54.0	-1.0	1.72 H	70	21.90	31.10
3	*2412.00	116.6 PK			1.72 H	70	85.40	31.20
4	*2412.00	112.1 AV			1.72 H	70	80.90	31.20
5	4824.00	53.1 PK	74.0	-20.9	1.06 H	13	15.90	37.20
6	4824.00	48.5 AV	54.0	-5.5	1.06 H	13	11.30	37.20
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	2386.30	60.1 PK	74.0	-13.9	1.76 V	2	29.00	31.10
2	2386.30	51.1 AV	54.0	-2.9	1.76 V	2	20.00	31.10
3	*2412.00	111.3 PK			1.76 V	2	80.10	31.20
4	*2412.00	107.0 AV			1.76 V	2	75.80	31.20
5	4824.00	49.8 PK	74.0	-24.2	1.25 V	349	12.60	37.20
6	4824.00	41.0 AV	54.0	-13.0	1.25 V	349	3.80	37.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	118.9 PK			1.71 H	66	87.70	31.20
2	*2437.00	115.2 AV			1.71 H	66	84.00	31.20
3	2483.50	60.2 PK	74.0	-13.8	1.71 H	66	28.80	31.40
4	2483.50	48.1 AV	54.0	-5.9	1.71 H	66	16.70	31.40
5	4874.00	54.8 PK	74.0	-19.2	1.05 H	12	17.50	37.30
6	4874.00	49.5 AV	54.0	-4.5	1.05 H	12	12.20	37.30
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	*2437.00	114.2 PK			1.73 V	0	83.00	31.20
2	*2437.00	110.3 AV			1.73 V	0	79.10	31.20
3	2483.50	60.5 PK	74.0	-13.5	1.73 V	0	29.10	31.40
4	2483.50	46.4 AV	54.0	-7.6	1.73 V	0	15.00	31.40
5	4874.00	52.6 PK	74.0	-21.4	1.03 V	156	15.30	37.30
6	4874.00	46.7 AV	54.0	-7.3	1.03 V	156	9.40	37.30

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).

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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	115.5 PK			1.69 H	66	84.20	31.30
2	*2462.00	111.5 AV			1.69 H	66	80.20	31.30
3	2487.80	62.5 PK	74.0	-11.5	1.69 H	66	31.10	31.40
4	2487.80	53.0 AV	54.0	-1.0	1.69 H	66	21.60	31.40
5	4924.00	50.7 PK	74.0	-23.3	1.04 H	14	13.30	37.40
6	4924.00	45.1 AV	54.0	-8.9	1.04 H	14	7.70	37.40
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	109.9 PK			1.73 V	0	78.60	31.30
2	*2462.00	105.7 AV			1.73 V	0	74.40	31.30
3	2487.80	59.6 PK	74.0	-14.4	1.73 V	0	28.20	31.40
4	2487.80	51.7 AV	54.0	-2.3	1.73 V	0	20.30	31.40
5	4924.00	50.2 PK	74.0	-23.8	1.02 V	154	12.80	37.40
6	4924.00	43.8 AV	54.0	-10.2	1.02 V	154	6.40	37.40

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).

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 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	2386.30	54.0 PK	74.0	-20.0	1.04 H	346	22.90	31.10
2	2386.30	43.7 AV	54.0	-10.3	1.04 H	346	12.60	31.10
3	*2412.00	102.9 PK			1.04 H	346	71.70	31.20
4	*2412.00	98.5 AV			1.04 H	346	67.30	31.20
5	4824.00	49.1 PK	74.0	-24.9	1.20 H	224	11.90	37.20
6	4824.00	40.4 AV	54.0	-13.6	1.20 H	224	3.20	37.20
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	2386.30	59.4 PK	74.0	-14.6	1.14 V	350	28.30	31.10
2	2386.30	52.6 AV	54.0	-1.4	1.14 V	350	21.50	31.10
3	*2412.00	112.2 PK			1.14 V	350	81.00	31.20
4	*2412.00	108.2 AV			1.14 V	350	77.00	31.20
5	4824.00	52.5 PK	74.0	-21.5	1.10 V	142	15.30	37.20
6	4824.00	47.2 AV	54.0	-6.8	1.10 V	142	10.00	37.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	107.1 PK			1.05 H	345	75.90	31.20
2	*2437.00	102.8 AV			1.05 H	345	71.60	31.20
3	2484.00	55.6 PK	74.0	-18.4	1.05 H	345	24.20	31.40
4	2484.00	47.2 AV	54.0	-6.8	1.05 H	345	15.80	31.40
5	4874.00	47.4 PK	74.0	-26.6	1.00 H	159	10.10	37.30
6	4874.00	41.6 AV	54.0	-12.4	1.00 H	159	4.30	37.30
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	*2437.00	117.2 PK			1.11 V	306	86.00	31.20
2	*2437.00	112.7 AV			1.11 V	306	81.50	31.20
3	2484.00	59.6 PK	74.0	-14.4	1.11 V	306	28.20	31.40
4	2484.00	50.9 AV	54.0	-3.1	1.11 V	306	19.50	31.40
5	4874.00	48.3 PK	74.0	-25.7	1.00 V	157	11.00	37.30
6	4874.00	42.5 AV	54.0	-11.5	1.00 V	157	5.20	37.30

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).

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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	101.4 PK			1.07 H	346	70.10	31.30
2	*2462.00	97.5 AV			1.07 H	346	66.20	31.30
3	2487.80	55.9 PK	74.0	-18.1	1.07 H	346	24.50	31.40
4	2487.80	47.4 AV	54.0	-6.6	1.07 H	346	16.00	31.40
5	4924.00	48.6 PK	74.0	-25.4	1.00 H	196	11.20	37.40
6	4924.00	43.2 AV	54.0	-10.8	1.00 H	196	5.80	37.40
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	111.6 PK			1.12 V	339	80.30	31.30
2	*2462.00	107.3 AV			1.12 V	339	76.00	31.30
3	2487.80	61.0 PK	74.0	-13.0	1.10 V	359	29.60	31.40
4	2487.80	52.9 AV	54.0	-1.1	1.10 V	359	21.50	31.40
5	4924.00	49.2 PK	74.0	-24.8	1.00 V	147	11.80	37.40
6	4924.00	44.3 AV	54.0	-9.7	1.00 V	147	6.90	37.40

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).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. " * ": Fundamental frequency.

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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	70.7 PK	74.0	-3.3	1.75 H	64	39.60	31.10
2	2390.00	52.7 AV	54.0	-1.3	1.75 H	64	21.60	31.10
3	*2412.00	111.0 PK			1.75 H	64	79.80	31.20
4	*2412.00	100.4 AV			1.75 H	64	69.20	31.20
5	4824.00	47.6 PK	74.0	-26.4	1.00 H	154	10.40	37.20
6	4824.00	36.3 AV	54.0	-17.7	1.00 H	154	-0.90	37.20
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	2390.00	69.9 PK	74.0	-4.1	1.74 V	0	38.80	31.10
2	2390.00	50.6 AV	54.0	-3.4	1.74 V	0	19.50	31.10
3	*2412.00	109.5 PK			1.74 V	0	78.30	31.20
4	*2412.00	97.8 AV			1.74 V	0	66.60	31.20
5	4824.00	45.0 PK	74.0	-29.0	1.00 V	162	7.80	37.20
6	4824.00	34.8 AV	54.0	-19.2	1.00 V	162	-2.40	37.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	118.2 PK			1.00 H	55	87.00	31.20
2	*2437.00	107.4 AV			1.00 H	55	76.20	31.20
3	2483.50	65.5 PK	74.0	-8.5	1.00 H	55	34.10	31.40
4	2483.50	50.9 AV	54.0	-3.1	1.00 H	55	19.50	31.40
5	4874.00	56.7 PK	74.0	-17.3	1.05 H	13	19.40	37.30
6	4874.00	42.0 AV	54.0	-12.0	1.05 H	13	4.70	37.30
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	*2437.00	116.0 PK			1.42 V	345	84.80	31.20
2	*2437.00	104.5 AV			1.42 V	345	73.30	31.20
3	2483.50	65.3 PK	74.0	-8.7	1.42 V	345	33.90	31.40
4	2483.50	49.6 AV	54.0	-4.4	1.42 V	345	18.20	31.40
5	4874.00	56.2 PK	74.0	-17.8	1.01 V	144	18.90	37.30
6	4874.00	40.4 AV	54.0	-13.6	1.01 V	144	3.10	37.30

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).

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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	111.0 PK			1.74 H	66	79.70	31.30
2	*2462.00	100.3 AV			1.74 H	66	69.00	31.30
3	2483.50	72.2 PK	74.0	-1.8	1.67 H	62	40.80	31.40
4	2483.50	52.3 AV	54.0	-1.7	1.67 H	62	20.90	31.40
5	4924.00	47.6 PK	74.0	-26.4	1.00 H	162	10.20	37.40
6	4924.00	33.1 AV	54.0	-20.9	1.00 H	162	-4.30	37.40
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	110.0 PK			1.71 V	0	78.70	31.30
2	*2462.00	98.6 AV			1.71 V	0	67.30	31.30
3	2483.50	70.3 PK	74.0	-3.7	1.71 V	0	38.90	31.40
4	2483.50	51.4 AV	54.0	-2.6	1.71 V	0	20.00	31.40
5	4924.00	46.3 PK	74.0	-27.7	1.00 V	193	8.90	37.40
6	4924.00	31.8 AV	54.0	-22.2	1.00 V	193	-5.60	37.40

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).

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 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	57.7 PK	74.0	-16.3	1.07 H	345	26.60	31.10
2	2390.00	43.7 AV	54.0	-10.3	1.07 H	345	12.60	31.10
3	*2412.00	102.6 PK			1.07 H	345	71.40	31.20
4	*2412.00	90.9 AV			1.07 H	345	59.70	31.20
5	4824.00	45.9 PK	74.0	-28.1	1.00 H	198	8.70	37.20
6	4824.00	34.9 AV	54.0	-19.1	1.00 H	198	-2.30	37.20
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	2390.00	70.7 PK	74.0	-3.3	1.10 V	306	39.60	31.10
2	2390.00	52.7 AV	54.0	-1.3	1.10 V	306	21.60	31.10
3	*2412.00	112.4 PK			1.12 V	305	81.20	31.20
4	*2412.00	100.3 AV			1.12 V	305	69.10	31.20
5	4824.00	48.0 PK	74.0	-26.0	1.00 V	154	10.80	37.20
6	4824.00	35.5 AV	54.0	-18.5	1.00 V	154	-1.70	37.20

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	108.5 PK			1.07 H	346	77.30	31.20
2	*2437.00	97.1 AV			1.07 H	346	65.90	31.20
3	2483.50	61.6 PK	74.0	-12.4	1.07 H	346	30.20	31.40
4	2483.50	45.9 AV	54.0	-8.1	1.07 H	346	14.50	31.40
5	4874.00	46.0 PK	74.0	-28.0	1.10 H	332	8.70	37.30
6	4874.00	35.1 AV	54.0	-18.9	1.10 H	332	-2.20	37.30
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	*2437.00	119.6 PK			1.10 V	306	88.40	31.20
2	*2437.00	107.5 AV			1.10 V	306	76.30	31.20
3	2483.50	67.7 PK	74.0	-6.3	1.10 V	306	36.30	31.40
4	2483.50	51.3 AV	54.0	-2.7	1.10 V	306	19.90	31.40
5	4874.00	49.5 PK	74.0	-24.5	1.00 V	224	12.20	37.30
6	4874.00	36.8 AV	54.0	-17.2	1.00 V	224	-0.50	37.30

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).

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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	102.1 PK			1.07 H	346	70.80	31.30
2	*2462.00	90.1 AV			1.07 H	346	58.80	31.30
3	2483.50	58.4 PK	74.0	-15.6	1.07 H	308	27.00	31.40
4	2483.50	45.6 AV	54.0	-8.4	1.07 H	308	14.20	31.40
5	4924.00	44.4 PK	74.0	-29.6	1.00 H	157	7.00	37.40
6	4924.00	34.0 AV	54.0	-20.0	1.00 H	157	-3.40	37.40
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	111.8 PK			1.10 V	308	80.50	31.30
2	*2462.00	99.8 AV			1.10 V	308	68.50	31.30
3	2483.50	71.7 PK	74.0	-2.3	1.10 V	308	40.30	31.40
4	2483.50	52.1 AV	54.0	-1.9	1.10 V	308	20.70	31.40
5	4924.00	49.4 PK	74.0	-24.6	1.00 V	134	12.00	37.40
6	4924.00	36.5 AV	54.0	-17.5	1.00 V	134	-0.90	37.40

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).

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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	71.5 PK	74.0	-2.5	1.72 H	67	40.40	31.10
2	2390.00	52.6 AV	54.0	-1.4	1.72 H	67	21.50	31.10
3	*2412.00	110.3 PK			1.72 H	67	79.10	31.20
4	*2412.00	99.1 AV			1.72 H	67	67.90	31.20
5	4824.00	47.3 PK	74.0	-26.7	1.00 H	301	10.10	37.20
6	4824.00	36.2 AV	54.0	-17.8	1.00 H	301	-1.00	37.20
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	2390.00	65.6 PK	74.0	-8.4	1.75 V	8	34.50	31.10
2	2390.00	48.7 AV	54.0	-5.3	1.75 V	8	17.60	31.10
3	*2412.00	108.3 PK			1.75 V	8	77.10	31.20
4	*2412.00	96.6 AV			1.75 V	8	65.40	31.20
5	4824.00	45.7 PK	74.0	-28.3	1.00 V	221	8.50	37.20
6	4824.00	34.3 AV	54.0	-19.7	1.00 V	221	-2.90	37.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	118.0 PK			1.00 H	55	86.80	31.20
2	*2437.00	107.1 AV			1.00 H	55	75.90	31.20
3	2483.50	70.1 PK	74.0	-3.9	1.00 H	55	38.70	31.40
4	2483.50	51.1 AV	54.0	-2.9	1.00 H	55	19.70	31.40
5	4874.00	56.4 PK	74.0	-17.6	1.00 H	126	19.10	37.30
6	4874.00	42.5 AV	54.0	-11.5	1.00 H	126	5.20	37.30
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	*2437.00	116.3 PK			1.44 V	344	85.10	31.20
2	*2437.00	104.5 AV			1.44 V	344	73.30	31.20
3	2483.50	67.7 PK	74.0	-6.3	1.44 V	344	36.30	31.40
4	2483.50	50.7 AV	54.0	-3.3	1.44 V	344	19.30	31.40
5	4874.00	58.9 PK	74.0	-15.1	1.13 V	146	21.60	37.30
6	4874.00	41.0 AV	54.0	-13.0	1.13 V	146	3.70	37.30

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).

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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	112.1 PK			1.68 H	66	80.80	31.30
2	*2462.00	100.7 AV			1.68 H	66	69.40	31.30
3	2483.50	71.9 PK	74.0	-2.1	1.68 H	66	40.50	31.40
4	2483.50	53.0 AV	54.0	-1.0	1.68 H	66	21.60	31.40
5	4924.00	47.5 PK	74.0	-26.5	1.00 H	112	10.10	37.40
6	4924.00	36.4 AV	54.0	-17.6	1.00 H	112	-1.00	37.40
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	108.8 PK			1.69 V	0	77.50	31.30
2	*2462.00	97.1 AV			1.69 V	0	65.80	31.30
3	2483.50	68.2 PK	74.0	-5.8	1.69 V	0	36.80	31.40
4	2483.50	51.3 AV	54.0	-2.7	1.69 V	0	19.90	31.40
5	4924.00	44.0 PK	74.0	-30.0	1.00 V	198	6.60	37.40
6	4924.00	33.9 AV	54.0	-20.1	1.00 V	198	-3.50	37.40

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).

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 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	67.6 PK	74.0	-6.4	1.10 H	307	36.50	31.10
2	2390.00	50.0 AV	54.0	-4.0	1.10 H	307	18.90	31.10
3	*2412.00	101.4 PK			1.10 H	309	70.20	31.20
4	*2412.00	89.4 AV			1.10 H	309	58.20	31.20
5	4824.00	48.3 PK	74.0	-25.7	1.00 H	163	11.10	37.20
6	4824.00	35.9 AV	54.0	-18.1	1.00 H	163	-1.30	37.20
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	2390.00	71.0 PK	74.0	-3.0	1.10 V	305	39.90	31.10
2	2390.00	52.2 AV	54.0	-1.8	1.10 V	305	21.10	31.10
3	*2412.00	111.4 PK			1.10 V	305	80.20	31.20
4	*2412.00	99.3 AV			1.10 V	305	68.10	31.20
5	4824.00	48.4 PK	74.0	-25.6	1.00 V	298	11.20	37.20
6	4824.00	37.3 AV	54.0	-16.7	1.00 V	298	0.10	37.20

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	109.3 PK			1.07 H	344	78.10	31.20
2	*2437.00	97.3 AV			1.07 H	344	66.10	31.20
3	2483.50	66.7 PK	74.0	-7.3	1.07 H	344	35.30	31.40
4	2483.50	48.4 AV	54.0	-5.6	1.07 H	344	17.00	31.40
5	4874.00	46.4 PK	74.0	-27.6	1.00 H	155	9.10	37.30
6	4874.00	35.5 AV	54.0	-18.5	1.00 H	155	-1.80	37.30
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	*2437.00	119.4 PK			1.13 V	317	88.20	31.20
2	*2437.00	107.2 AV			1.13 V	317	76.00	31.20
3	2483.50	68.4 PK	74.0	-5.6	1.13 V	317	37.00	31.40
4	2483.50	50.2 AV	54.0	-3.8	1.13 V	317	18.80	31.40
5	4874.00	47.5 PK	74.0	-26.5	1.00 V	148	10.20	37.30
6	4874.00	36.8 AV	54.0	-17.2	1.00 V	148	-0.50	37.30

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).

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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	102.2 PK			1.07 H	343	70.90	31.30
2	*2462.00	90.2 AV			1.07 H	343	58.90	31.30
3	2483.50	58.9 PK	74.0	-15.1	1.07 H	343	27.50	31.40
4	2483.50	46.3 AV	54.0	-7.7	1.07 H	343	14.90	31.40
5	4924.00	45.6 PK	74.0	-28.4	1.00 H	218	8.20	37.40
6	4924.00	35.4 AV	54.0	-18.6	1.00 H	218	-2.00	37.40
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	112.3 PK			1.10 V	308	81.00	31.30
2	*2462.00	100.1 AV			1.10 V	308	68.80	31.30
3	2483.50	72.4 PK	74.0	-1.6	1.10 V	308	41.00	31.40
4	2483.50	52.3 AV	54.0	-1.7	1.10 V	308	20.90	31.40
5	4924.00	47.5 PK	74.0	-26.5	1.00 V	241	10.10	37.40
6	4924.00	37.1 AV	54.0	-16.9	1.00 V	241	-0.30	37.40

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).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. " * ": Fundamental frequency.

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	64.4 PK	74.0	-9.6	1.71 H	65	33.30	31.10
2	2390.00	52.5 AV	54.0	-1.5	1.71 H	65	21.40	31.10
3	*2422.00	106.6 PK			1.71 H	65	75.40	31.20
4	*2422.00	93.9 AV			1.71 H	65	62.70	31.20
5	4844.00	47.5 PK	74.0	-26.5	1.00 H	178	10.30	37.20
6	4844.00	35.9 AV	54.0	-18.1	1.00 H	178	-1.30	37.20
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	2390.00	67.9 PK	74.0	-6.1	1.75 V	0	36.80	31.10
2	2390.00	50.2 AV	54.0	-3.8	1.75 V	0	19.10	31.10
3	*2422.00	104.0 PK			1.75 V	0	72.80	31.20
4	*2422.00	91.3 AV			1.75 V	0	60.10	31.20
5	4844.00	44.0 PK	74.0	-30.0	1.00 V	119	6.80	37.20
6	4844.00	33.7 AV	54.0	-20.3	1.00 V	119	-3.50	37.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	66.4 PK	74.0	-7.6	1.00 H	57	35.30	31.10
2	2390.00	52.9 AV	54.0	-1.1	1.00 H	57	21.80	31.10
3	*2437.00	108.3 PK			1.00 H	57	77.10	31.20
4	*2437.00	97.0 AV			1.00 H	57	65.80	31.20
5	2483.50	62.0 PK	74.0	-12.0	1.00 H	57	30.60	31.40
6	2483.50	52.0 AV	54.0	-2.0	1.00 H	57	20.60	31.40
7	4874.00	49.1 PK	74.0	-24.9	1.00 H	197	11.80	37.30
8	4874.00	36.5 AV	54.0	-17.5	1.00 H	197	-0.80	37.30
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	2390.00	64.5 PK	74.0	-9.5	1.44 V	348	33.40	31.10
2	2390.00	50.2 AV	54.0	-3.8	1.44 V	348	19.10	31.10
3	*2437.00	107.4 PK			1.44 V	348	76.20	31.20
4	*2437.00	94.1 AV			1.44 V	348	62.90	31.20
5	2483.50	64.6 PK	74.0	-9.4	1.44 V	348	33.20	31.40
6	2483.50	50.0 AV	54.0	-4.0	1.44 V	348	18.60	31.40
7	4924.00	46.1 PK	74.0	-27.9	1.10 V	169	8.70	37.40
8	4924.00	34.4 AV	54.0	-19.6	1.10 V	169	-3.00	37.40

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).
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 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	*2452.00	106.0 PK			1.69 H	67	74.70	31.30
2	*2452.00	94.0 AV			1.69 H	67	62.70	31.30
3	2483.50	69.9 PK	74.0	-4.1	1.69 H	67	38.50	31.40
4	2483.50	53.0 AV	54.0	-1.0	1.69 H	67	21.60	31.40
5	4904.00	47.5 PK	74.0	-26.5	1.00 H	148	10.20	37.30
6	4904.00	34.1 AV	54.0	-19.9	1.00 H	148	-3.20	37.30
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	*2452.00	103.9 PK			1.71 V	0	72.60	31.30
2	*2452.00	90.8 AV			1.71 V	0	59.50	31.30
3	2483.50	68.3 PK	74.0	-5.7	1.71 V	0	36.90	31.40
4	2483.50	51.4 AV	54.0	-2.6	1.71 V	0	20.00	31.40
5	4904.00	44.1 PK	74.0	-29.9	1.00 V	182	6.80	37.30
6	4904.00	32.5 AV	54.0	-21.5	1.00 V	182	-4.80	37.30

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).

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 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	1.06 H	343	28.30	31.10
2	2390.00	44.0 AV	54.0	-10.0	1.06 H	343	12.90	31.10
3	*2422.00	97.5 PK			1.06 H	343	66.30	31.20
4	*2422.00	84.3 AV			1.06 H	343	53.10	31.20
5	4844.00	45.0 PK	74.0	-29.0	1.00 H	169	7.80	37.20
6	4844.00	34.5 AV	54.0	-19.5	1.00 H	169	-2.70	37.20
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	2390.00	64.4 PK	74.0	-9.6	1.11 V	305	33.30	31.10
2	2390.00	52.2 AV	54.0	-1.8	1.11 V	305	21.10	31.10
3	*2422.00	106.4 PK			1.11 V	305	75.20	31.20
4	*2422.00	93.9 AV			1.11 V	305	62.70	31.20
5	4844.00	47.0 PK	74.0	-27.0	1.00 V	188	9.80	37.20
6	4844.00	35.3 AV	54.0	-18.7	1.00 V	188	-1.90	37.20

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	55.4 PK	74.0	-18.6	1.05 H	342	24.30	31.10
2	2390.00	43.9 AV	54.0	-10.1	1.05 H	342	12.80	31.10
3	*2437.00	101.2 PK			1.05 H	342	70.00	31.20
4	*2437.00	88.2 AV			1.05 H	342	57.00	31.20
5	2483.50	58.8 PK	74.0	-15.2	1.05 H	342	27.40	31.40
6	2483.50	46.2 AV	54.0	-7.8	1.05 H	342	14.80	31.40
7	4874.00	46.0 PK	74.0	-28.0	1.00 H	237	8.70	37.30
8	4874.00	36.5 AV	54.0	-17.5	1.00 H	237	-0.80	37.30
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	2390.00	65.7 PK	74.0	-8.3	1.08 V	305	34.60	31.10
2	2390.00	52.1 AV	54.0	-1.9	1.08 V	305	21.00	31.10
3	*2437.00	110.7 PK			1.08 V	305	79.50	31.20
4	*2437.00	98.2 AV			1.08 V	305	67.00	31.20
5	2483.50	64.3 PK	74.0	-9.7	1.08 V	305	32.90	31.40
6	2483.50	51.7 AV	54.0	-2.3	1.08 V	305	20.30	31.40
7	4874.00	48.4 PK	74.0	-25.6	1.00 V	186	11.10	37.30
8	4874.00	37.1 AV	54.0	-16.9	1.00 V	186	-0.20	37.30

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).
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 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1019 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	*2452.00	98.9 PK			1.08 H	331	67.60	31.30
2	*2452.00	84.7 AV			1.08 H	331	53.40	31.30
3	2483.50	58.8 PK	74.0	-15.2	1.08 H	331	27.40	31.40
4	2483.50	44.8 AV	54.0	-9.2	1.08 H	331	13.40	31.40
5	4924.00	45.5 PK	74.0	-28.5	1.00 H	175	8.10	37.40
6	4924.00	34.8 AV	54.0	-19.2	1.00 H	175	-2.60	37.40
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	*2452.00	105.8 PK			1.08 V	307	74.50	31.30
2	*2452.00	93.2 AV			1.08 V	307	61.90	31.30
3	2483.50	69.2 PK	74.0	-4.8	1.08 V	307	37.80	31.40
4	2483.50	52.4 AV	54.0	-1.6	1.08 V	307	21.00	31.40
5	4924.00	47.2 PK	74.0	-26.8	1.00 V	117	9.80	37.40
6	4924.00	36.9 AV	54.0	-17.1	1.00 V	117	-0.50	37.40

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).

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：802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	401.26	40.7 QP	46.0	-5.3	1.00 H	211	22.00	18.70
2	467.36	42.1 QP	46.0	-3.9	1.50 H	181	21.60	20.50
3	533.47	43.8 QP	46.0	-2.2	1.25 H	223	21.60	22.20
4	599.58	44.2 QP	46.0	-1.8	1.25 H	199	20.50	23.70
5	733.32	44.5 QP	46.0	-1.5	1.08 H	193	18.70	25.80
6	799.84	44.1 QP	46.0	-1.9	1.00 H	178	16.70	27.40
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	31.84	38.4 QP	40.0	-1.6	1.00 V	343	25.50	12.90
2	533.47	41.6 QP	46.0	-4.4	1.00 V	10	19.40	22.20
3	599.58	40.7 QP	46.0	-5.3	1.00 V	268	17.00	23.70
4	667.63	39.9 QP	46.0	-6.1	1.50 V	214	15.30	24.60
5	733.73	40.0 QP	46.0	-6.0	1.50 V	196	14.20	25.80
6	949.55	38.5 QP	46.0	-7.5	1.00 V	130	9.30	29.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	A2		

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	401.26	40.0 QP	46.0	-6.0	2.20 H	199	21.30	18.70
2	467.36	42.4 QP	46.0	-3.6	1.50 H	196	21.90	20.50
3	533.47	43.1 QP	46.0	-2.9	1.50 H	208	20.90	22.20
4	599.58	40.4 QP	46.0	-5.6	1.50 H	148	16.70	23.70
5	733.73	43.5 QP	46.0	-2.5	1.00 H	130	17.70	25.80
6	799.84	43.2 QP	46.0	-2.8	1.00 H	208	15.80	27.40
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	61.01	36.0 QP	40.0	-4.0	1.00 V	295	21.90	14.10
2	500.42	38.7 QP	46.0	-7.3	1.00 V	22	17.30	21.40
3	599.58	40.1 QP	46.0	-5.9	1.00 V	250	16.40	23.70
4	733.73	39.5 QP	46.0	-6.5	1.50 V	67	13.70	25.80
5	799.84	41.0 QP	46.0	-5.0	1.50 V	355	13.60	27.40
6	867.89	37.4 QP	46.0	-8.6	1.50 V	94	9.10	28.30

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).
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 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	A3		

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	201.00	38.5 QP	43.5	-5.0	1.25 H	124	26.30	12.20
2	401.26	41.1 QP	46.0	-4.9	2.00 H	181	22.40	18.70
3	467.36	43.0 QP	46.0	-3.0	1.75 H	193	22.50	20.50
4	599.58	43.4 QP	46.0	-2.6	1.25 H	169	19.70	23.70
5	733.32	44.5 QP	46.0	-1.5	1.00 H	194	18.70	25.80
6	799.84	44.0 QP	46.0	-2.0	1.00 H	178	16.60	27.40
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	62.95	37.3 QP	40.0	-2.7	1.00 V	211	23.60	13.70
2	500.42	42.4 QP	46.0	-3.6	1.25 V	358	21.00	21.40
3	533.47	40.4 QP	46.0	-5.6	1.25 V	268	18.20	22.20
4	599.58	40.2 QP	46.0	-5.8	1.00 V	274	16.50	23.70
5	667.63	40.7 QP	46.0	-5.3	1.00 V	250	16.10	24.60
6	799.84	39.5 QP	46.0	-6.5	1.75 V	184	12.10	27.40

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).
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 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	B1		

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	201.00	41.0 QP	43.5	-2.5	1.00 H	121	28.80	12.20
2	467.36	42.4 QP	46.0	-3.6	1.75 H	205	21.90	20.50
3	533.47	44.0 QP	46.0	-2.0	1.50 H	193	21.80	22.20
4	733.73	44.5 QP	46.0	-1.5	1.00 H	175	18.70	25.80
5	799.84	44.0 QP	46.0	-2.0	1.00 H	175	16.60	27.40
6	867.89	42.5 QP	46.0	-3.5	1.50 H	235	14.20	28.30
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	31.84	38.4 QP	40.0	-1.6	1.00 V	127	25.50	12.90
2	62.95	34.3 QP	40.0	-5.7	1.00 V	10	20.60	13.70
3	533.47	43.1 QP	46.0	-2.9	1.00 V	4	20.90	22.20
4	667.63	41.2 QP	46.0	-4.8	1.50 V	175	16.60	24.60
5	733.73	41.6 QP	46.0	-4.4	1.25 V	181	15.80	25.80
6	799.84	40.5 QP	46.0	-5.5	1.25 V	181	13.10	27.40

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).
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 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	B2		

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	467.36	42.8 QP	46.0	-3.2	1.50 H	187	22.30	20.50
2	500.42	43.3 QP	46.0	-2.7	1.50 H	190	21.90	21.40
3	533.47	43.7 QP	46.0	-2.3	1.50 H	178	21.50	22.20
4	599.58	41.3 QP	46.0	-4.7	1.25 H	196	17.60	23.70
5	733.73	44.2 QP	46.0	-1.8	1.00 H	193	18.40	25.80
6	799.84	44.0 QP	46.0	-2.0	1.00 H	193	16.60	27.40
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	61.01	37.3 QP	40.0	-2.7	1.00 V	211	23.20	14.10
2	500.42	43.1 QP	46.0	-2.9	1.00 V	10	21.70	21.40
3	533.47	41.1 QP	46.0	-4.9	1.00 V	358	18.90	22.20
4	599.58	38.6 QP	46.0	-7.4	1.00 V	304	14.90	23.70
5	733.73	40.7 QP	46.0	-5.3	1.25 V	133	14.90	25.80
6	867.89	41.0 QP	46.0	-5.0	1.25 V	319	12.70	28.30

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).
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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	B3		

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	401.26	40.6 QP	46.0	-5.4	1.00 H	334	21.90	18.70
2	467.36	40.9 QP	46.0	-5.1	1.00 H	358	20.40	20.50
3	667.63	42.4 QP	46.0	-3.6	1.00 H	82	17.80	24.60
4	733.73	42.9 QP	46.0	-3.1	1.25 H	73	17.10	25.80
5	799.84	44.0 QP	46.0	-2.0	1.00 H	28	16.60	27.40
6	875.67	40.1 QP	46.0	-5.9	1.00 H	208	11.70	28.40
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	31.84	37.5 QP	40.0	-2.5	1.00 V	250	24.60	12.90
2	62.95	36.8 QP	40.0	-3.2	1.00 V	214	23.10	13.70
3	500.42	42.5 QP	46.0	-3.5	1.00 V	10	21.10	21.40
4	533.47	40.3 QP	46.0	-5.7	1.00 V	13	18.10	22.20
5	667.63	41.1 QP	46.0	-4.9	1.50 V	181	16.50	24.60
6	733.73	40.2 QP	46.0	-5.8	1.25 V	121	14.40	25.80

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

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	100291	Nov. 30, 2010	Nov. 29, 2011
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 30, 2010	Dec. 29, 2011
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Jun. 28, 2010	Jun. 27, 2011
V-LISN SCHWARZBECK	NNBL 8226-2	8226-142	Jul. 12, 2010	Jul. 11, 2011
LISN ROHDE & SCHWARZ	ENV216	100072	Jun. 11, 2010	Jun. 10, 2011
Software ADT	ADT_Cond_ V7.3.7	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 1.
3. The VCCI Site Registration No. is C-2040.

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.

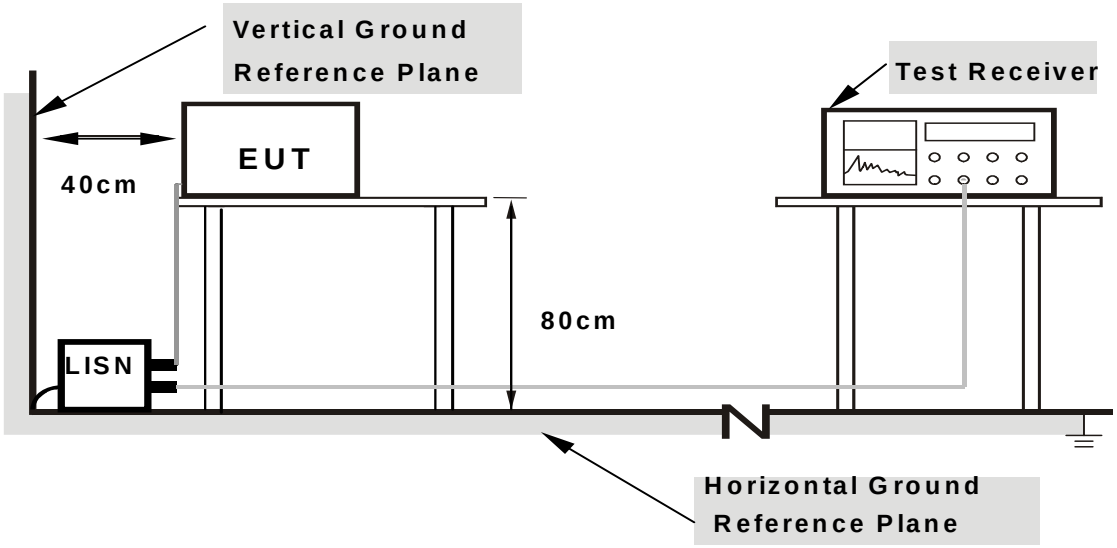
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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.

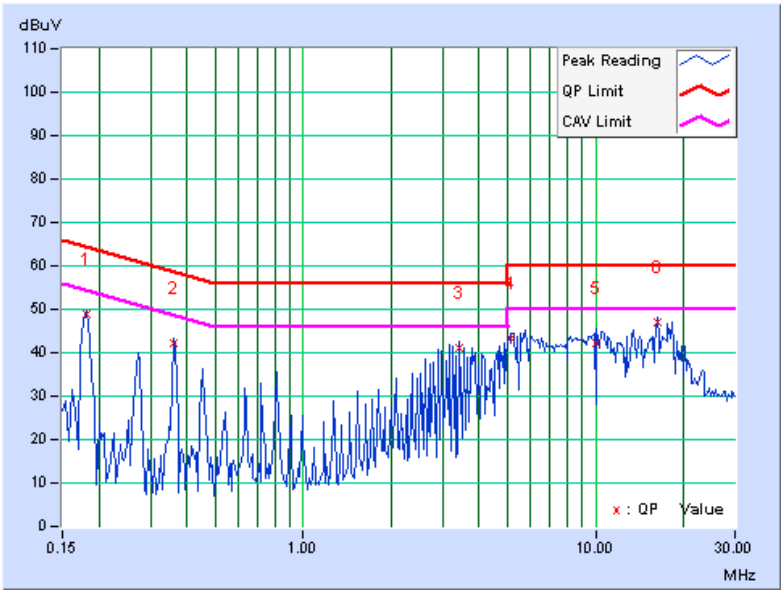
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA：802.11g

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A1		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.14	48.60	-	48.74	-	64.43	54.43	-15.69	-
2	0.361	0.15	41.92	-	42.07	-	58.71	48.71	-16.64	-
3	3.438	0.32	40.76	-	41.08	-	56.00	46.00	-14.92	-
4	5.156	0.44	42.89	-	43.33	-	60.00	50.00	-16.67	-
5	10.039	0.80	41.57	-	42.37	-	60.00	50.00	-17.63	-
6	16.227	1.22	45.93	-	47.15	-	60.00	50.00	-12.85	-

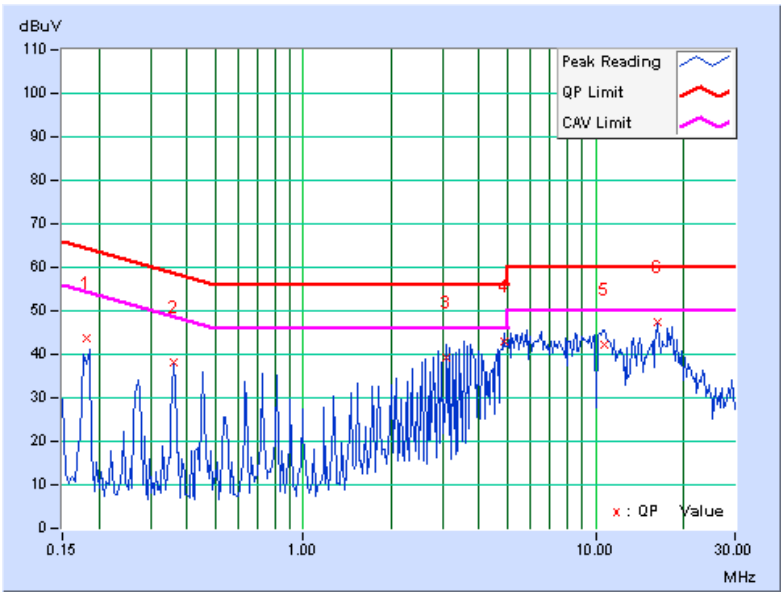
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A1		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.13	43.47	-	43.60	-	64.45	54.45	-20.85	-
2	0.361	0.14	37.84	-	37.98	-	58.71	48.71	-20.73	-
3	3.078	0.27	38.83	-	39.10	-	56.00	46.00	-16.90	-
4	4.887	0.39	42.73	-	43.12	-	56.00	46.00	-12.88	-
5	10.770	0.76	41.43	-	42.19	-	60.00	50.00	-17.81	-
6	16.227	1.08	46.23	-	47.31	-	60.00	50.00	-12.69	-

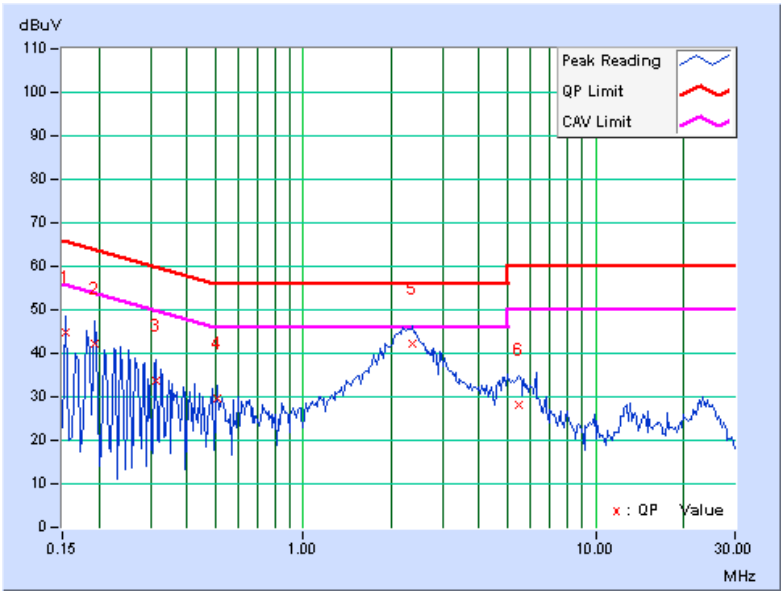
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A2		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.154	0.14	44.69	-	44.83	-	65.79	55.79	-20.95	-
2	0.193	0.14	42.00	-	42.14	-	63.91	53.91	-21.77	-
3	0.314	0.15	33.42	-	33.57	-	59.86	49.86	-26.30	-
4	0.505	0.16	29.37	-	29.53	-	56.00	46.00	-26.47	-
5	2.371	0.25	41.93	-	42.18	-	56.00	46.00	-13.82	-
6	5.449	0.47	27.70	-	28.17	-	60.00	50.00	-31.83	-

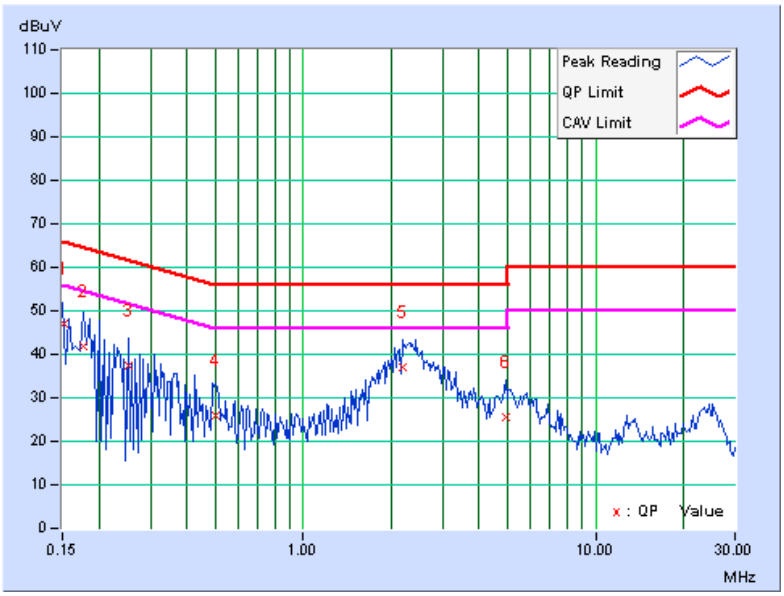
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A2		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.151	0.13	46.90	-	47.03	-	65.93	55.93	-18.90	-
2	0.177	0.13	41.54	-	41.67	-	64.61	54.61	-22.94	-
3	0.252	0.13	37.41	-	37.54	-	61.71	51.71	-24.16	-
4	0.502	0.15	25.75	-	25.90	-	56.00	46.00	-30.10	-
5	2.191	0.22	36.99	-	37.21	-	56.00	46.00	-18.79	-
6	4.910	0.39	25.16	-	25.55	-	56.00	46.00	-30.45	-

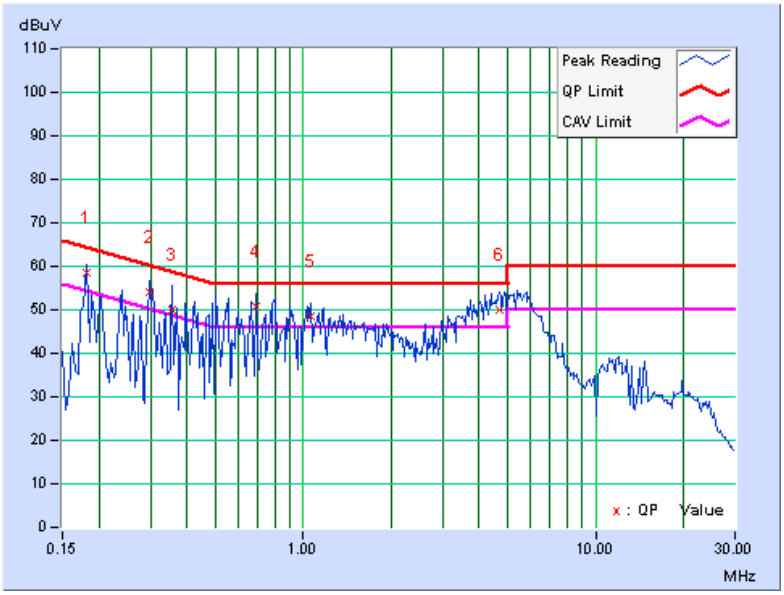
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A3		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.14	58.48	45.63	58.62	45.77	64.43	54.43	-5.81	-8.66
2	0.298	0.14	53.80	39.66	53.94	39.80	60.29	50.29	-6.34	-10.48
3	0.357	0.15	49.72	37.38	49.87	37.53	58.80	48.80	-8.93	-11.27
4	0.685	0.17	50.47	34.58	50.64	34.75	56.00	46.00	-5.36	-11.25
5	1.055	0.19	48.37	33.29	48.56	33.48	56.00	46.00	-7.44	-12.52
6	4.688	0.41	49.55	35.07	49.96	35.48	56.00	46.00	-6.04	-10.52

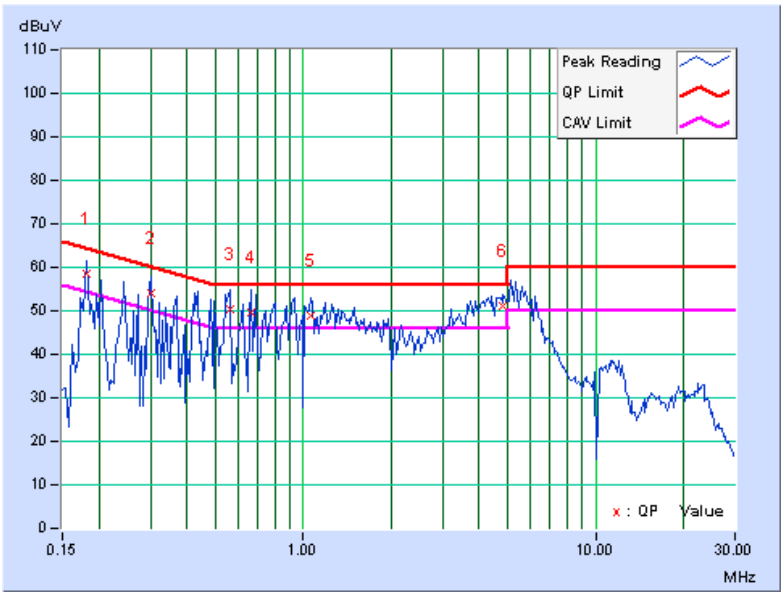
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A3		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.13	58.50	44.24	58.63	44.37	64.43	54.43	-5.80	-10.06
2	0.302	0.14	53.88	40.39	54.02	40.53	60.18	50.18	-6.16	-9.65
3	0.564	0.15	50.37	31.82	50.52	31.97	56.00	46.00	-5.48	-14.03
4	0.662	0.16	49.35	34.60	49.51	34.76	56.00	46.00	-6.49	-11.24
5	1.063	0.18	48.87	28.79	49.05	28.97	56.00	46.00	-6.95	-17.03
6	4.832	0.38	50.67	36.48	51.05	36.86	56.00	46.00	-4.95	-9.14

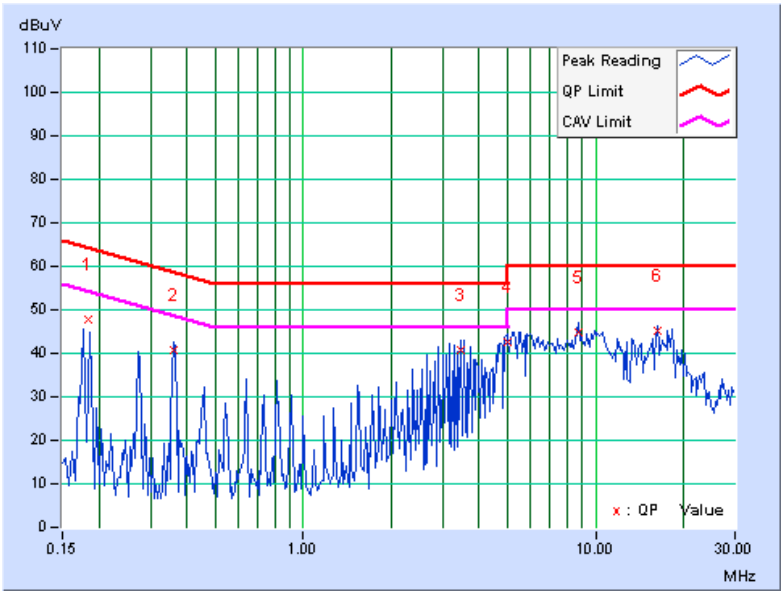
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B1		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.183	0.14	47.61	-	47.75	-	64.34	54.34	-16.59	-
2	0.361	0.15	40.62	-	40.77	-	58.71	48.71	-17.94	-
3	3.449	0.32	40.43	-	40.75	-	56.00	46.00	-15.25	-
4	4.999	0.43	42.34	-	42.77	-	56.00	46.00	-13.23	-
5	8.719	0.71	44.26	-	44.97	-	60.00	50.00	-15.03	-
6	16.227	1.22	44.15	-	45.37	-	60.00	50.00	-14.63	-

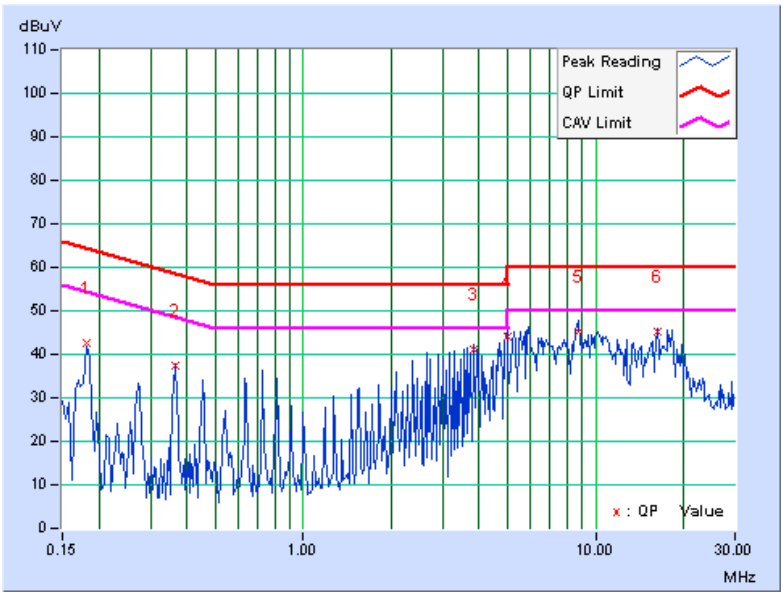
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B1		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.13	42.34	-	42.47	-	64.43	54.43	-21.96	-
2	0.365	0.14	37.24	-	37.38	-	58.62	48.62	-21.24	-
3	3.813	0.32	40.90	-	41.22	-	56.00	46.00	-14.78	-
4	4.996	0.39	43.67	-	44.06	-	56.00	46.00	-11.94	-
5	8.719	0.64	44.53	-	45.17	-	60.00	50.00	-14.83	-
6	16.227	1.08	44.12	-	45.20	-	60.00	50.00	-14.80	-

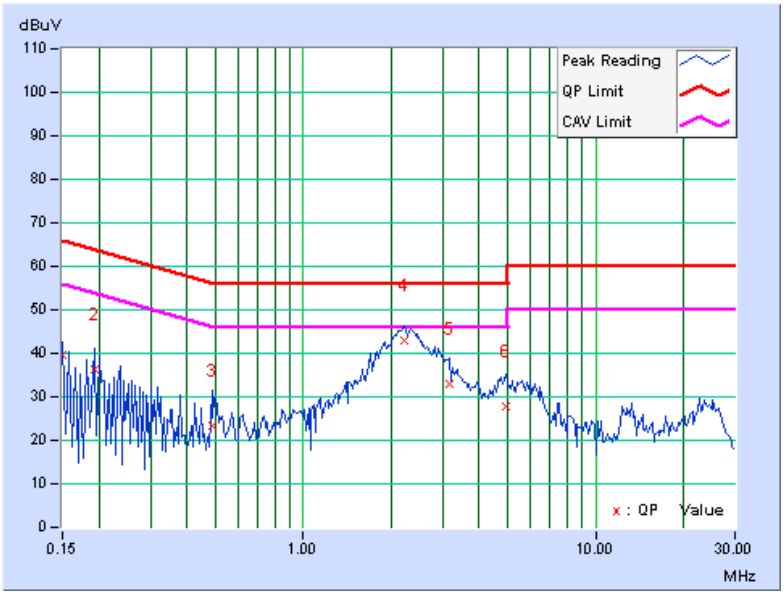
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B2		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.15	39.50	-	39.65	-	66.00	56.00	-26.35	-
2	0.193	0.14	36.06	-	36.20	-	63.91	53.91	-27.71	-
3	0.486	0.16	23.12	-	23.28	-	56.24	46.24	-32.96	-
4	2.207	0.23	42.69	-	42.92	-	56.00	46.00	-13.08	-
5	3.160	0.30	32.78	-	33.08	-	56.00	46.00	-22.92	-
6	4.930	0.43	27.39	-	27.82	-	56.00	46.00	-28.18	-

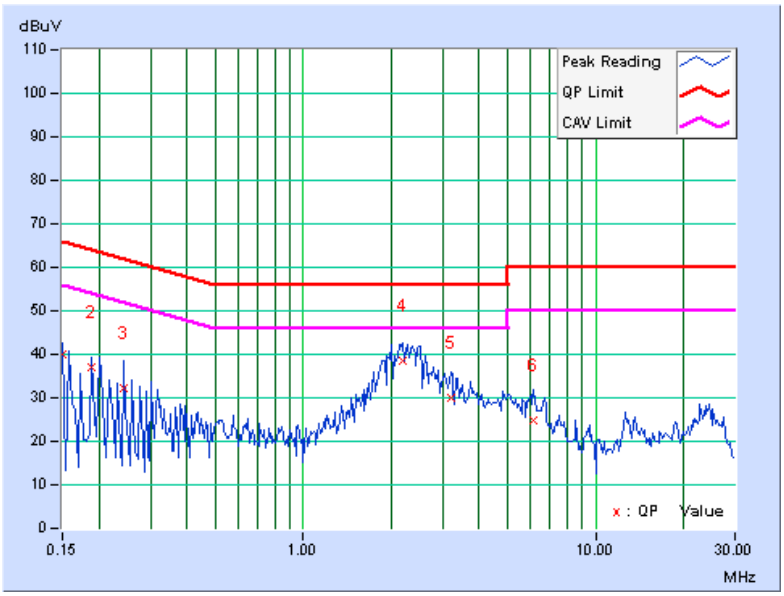
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B2		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.12	40.04	-	40.16	-	66.00	56.00	-25.84	-
2	0.189	0.13	36.81	-	36.94	-	64.08	54.08	-27.14	-
3	0.244	0.13	31.95	-	32.08	-	61.97	51.97	-29.89	-
4	2.199	0.22	38.18	-	38.40	-	56.00	46.00	-17.60	-
5	3.191	0.28	29.73	-	30.01	-	56.00	46.00	-25.99	-
6	6.126	0.47	24.45	-	24.92	-	60.00	50.00	-35.08	-

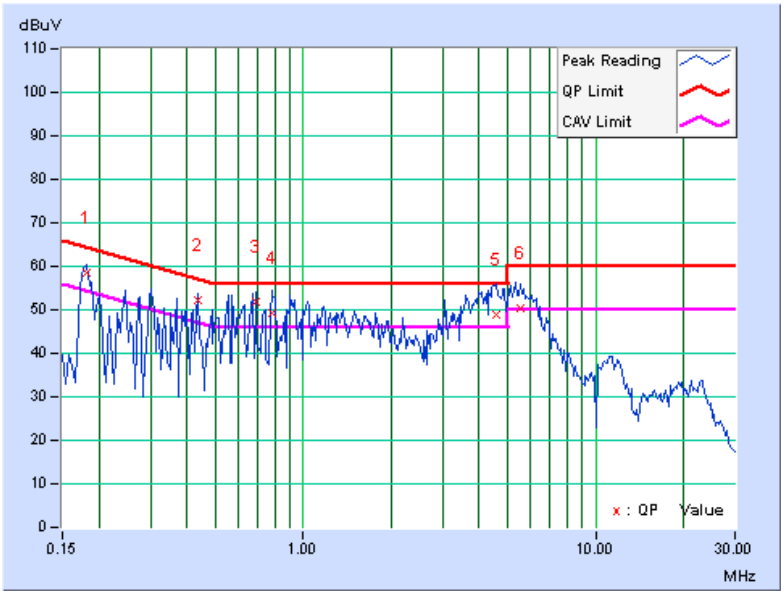
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B3		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.14	58.52	46.81	58.66	46.95	64.43	54.43	-5.77	-7.48
2	0.435	0.15	52.03	39.75	52.18	39.90	57.15	47.15	-4.97	-7.25
3	0.685	0.17	51.70	34.78	51.87	34.95	56.00	46.00	-4.13	-11.05
4	0.783	0.18	49.03	33.62	49.21	33.80	56.00	46.00	-6.79	-12.20
5	4.559	0.40	48.51	32.86	48.91	33.26	56.00	46.00	-7.09	-12.74
6	5.570	0.48	49.92	37.19	50.40	37.67	60.00	50.00	-9.60	-12.33

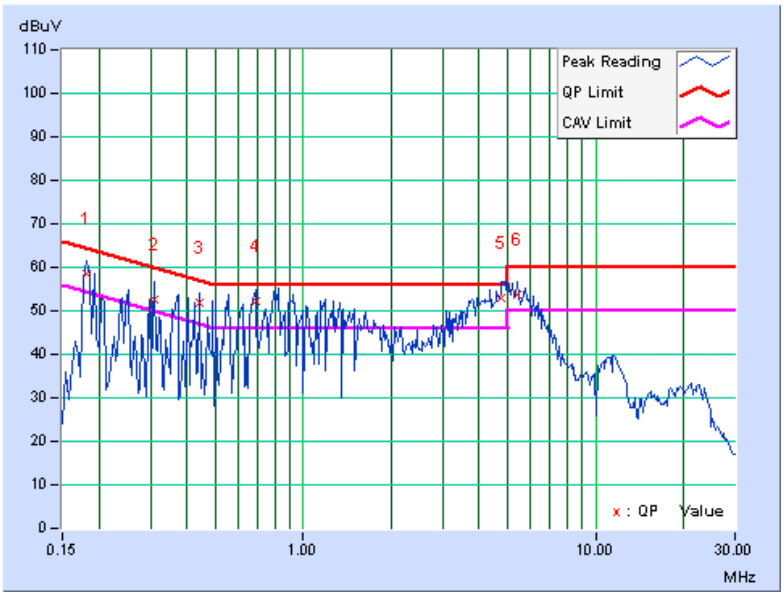
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B3		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.13	58.48	44.98	58.61	45.11	64.43	54.43	-5.82	-9.32
2	0.310	0.14	52.37	39.48	52.51	39.62	59.97	49.97	-7.46	-10.35
3	0.439	0.14	51.73	34.77	51.87	34.91	57.08	47.08	-5.21	-12.17
4	0.685	0.16	52.22	33.58	52.38	33.74	56.00	46.00	-3.62	-12.26
5	**4.781**	**0.38**	**52.56**	**38.17**	**52.94**	**38.55**	**56.00**	**46.00**	**-3.06**	**-7.45**
6	5.402	0.42	53.13	35.98	53.55	36.40	60.00	50.00	-6.45	-13.60

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



4.3 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 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Jul. 17, 2010	Jul. 16, 2011

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

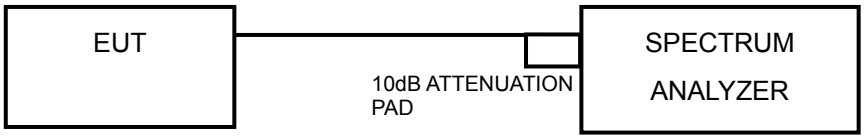
4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation.

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

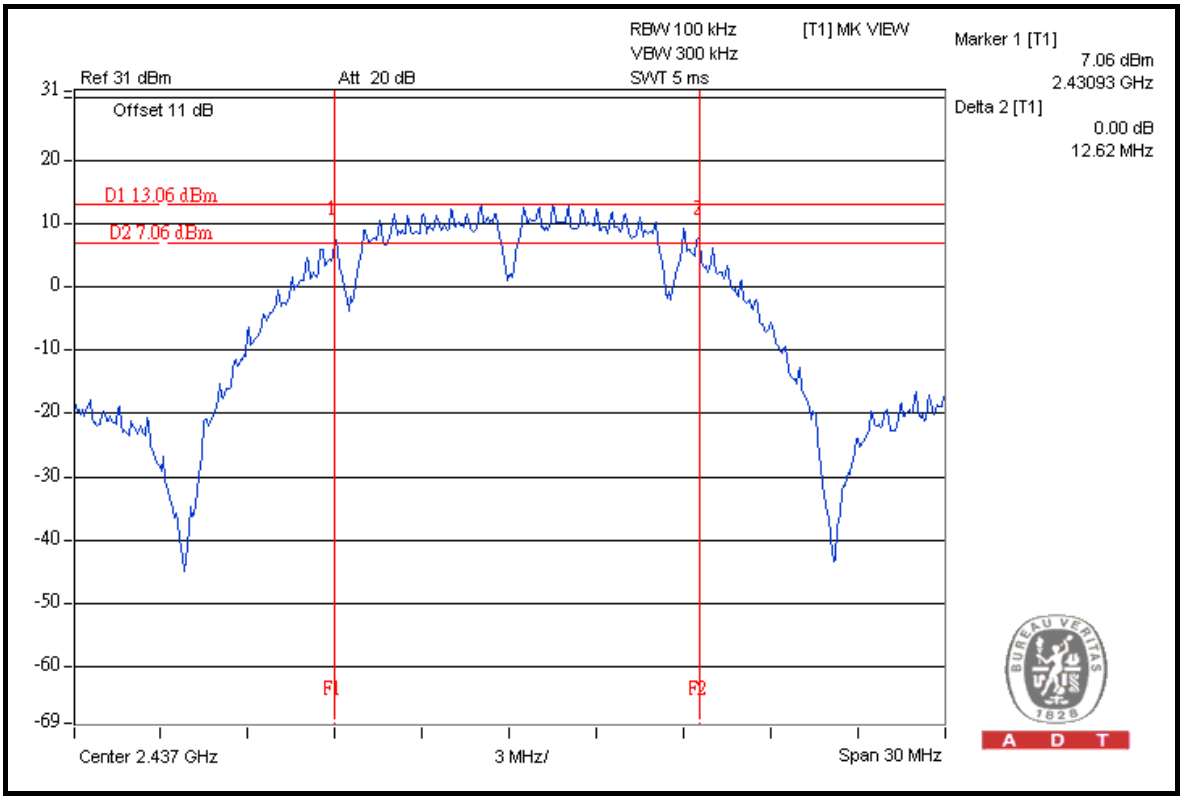
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
1	2412	11.17	12.08	0.5	PASS
6	2437	11.09	12.62	0.5	PASS
11	2462	12.61	12.62	0.5	PASS

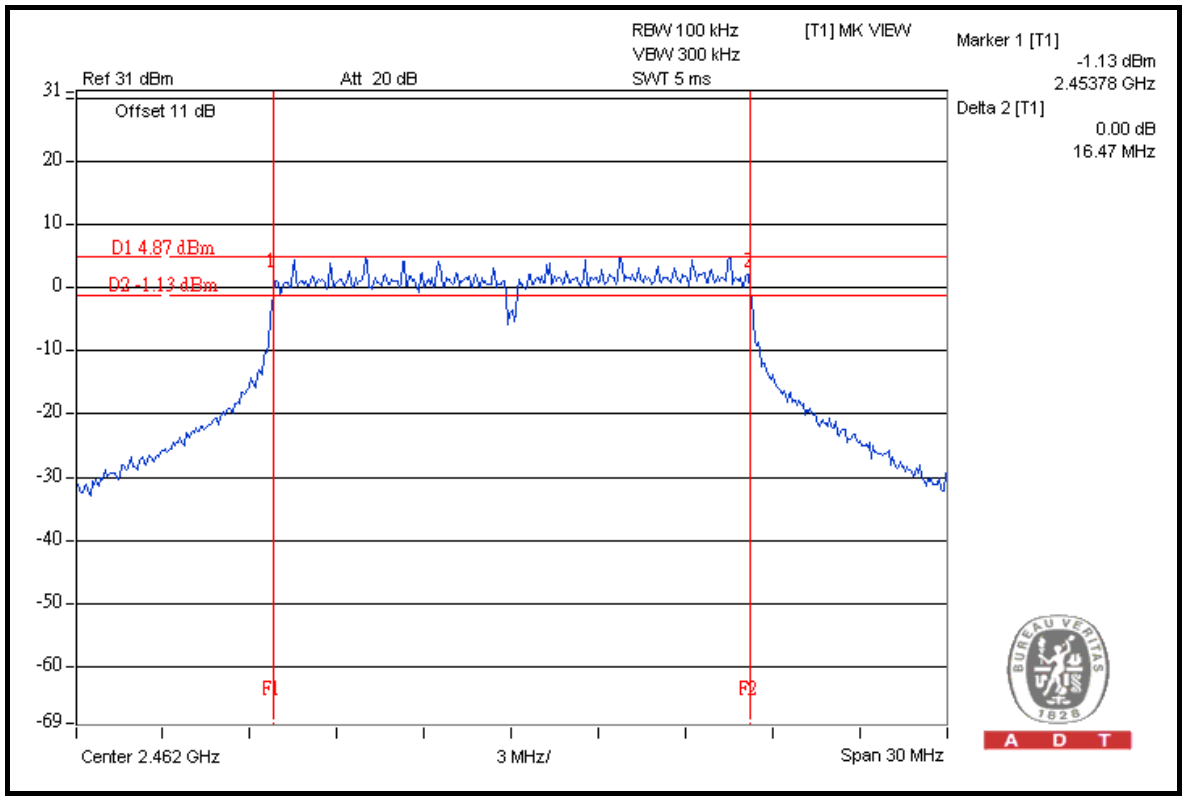
CHAIN 1: CH 6



802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
1	2412	16.42	16.41	0.5	PASS
6	2437	16.41	16.40	0.5	PASS
11	2462	16.44	16.47	0.5	PASS

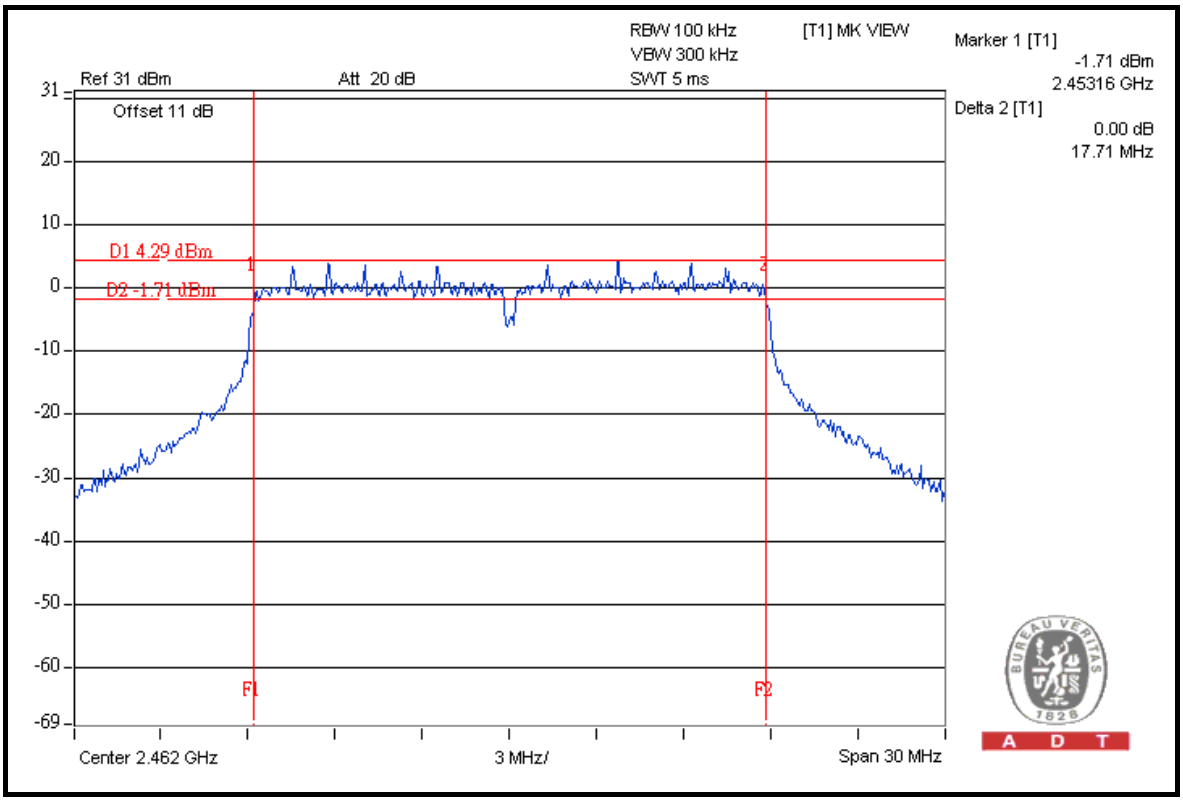
CHAIN 1: CH 11



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
1	2412	17.68	17.71	0.5	PASS
6	2437	17.63	17.68	0.5	PASS
11	2462	17.71	17.71	0.5	PASS

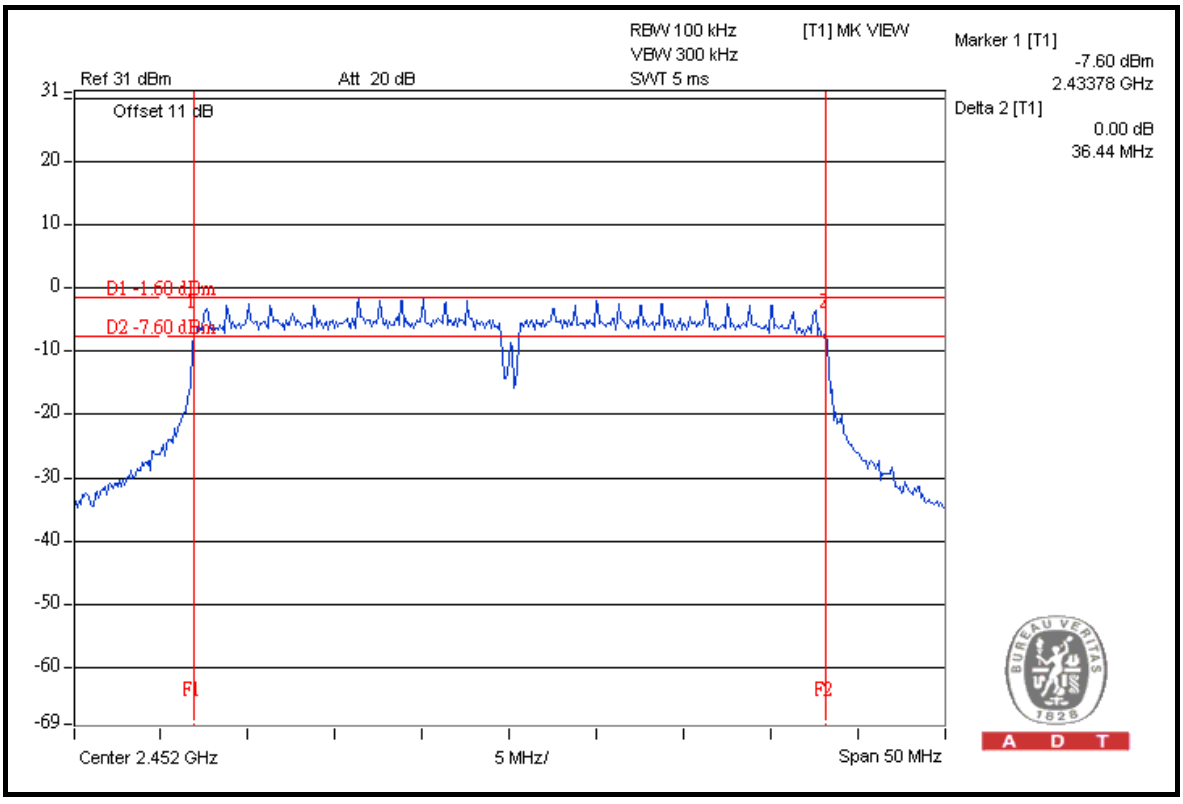
FOR CHAIN 1: CH 11



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
1	2422	35.84	35.85	0.5	PASS
4	2437	36.41	35.79	0.5	PASS
7	2452	36.44	35.90	0.5	PASS

FOR CHAIN 0: CH 7



4.4 MAXIMUM OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT

The Maximum Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Jul. 17, 2010	Jul. 16, 2011

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.4.3 TEST PROCEDURES

1. Follow DTS measurement (Power Output Option 2), the transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer.
2. Set span to encompass the entire emission bandwidth (EBW) of the signal.
3. Set RBW = 1 MHz ;VBW ≧3 MHz.
4. Use sample detector mode and video trigger with the trigger level set to enable triggering only on full power pulses.
5. Trace average 100 traces in power averaging mode.
6. Compute power by integrating the spectrum across the 26 dB EBW of the signal.
7. Record the power level.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation.

4.4.5 TEST SETUP

4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.

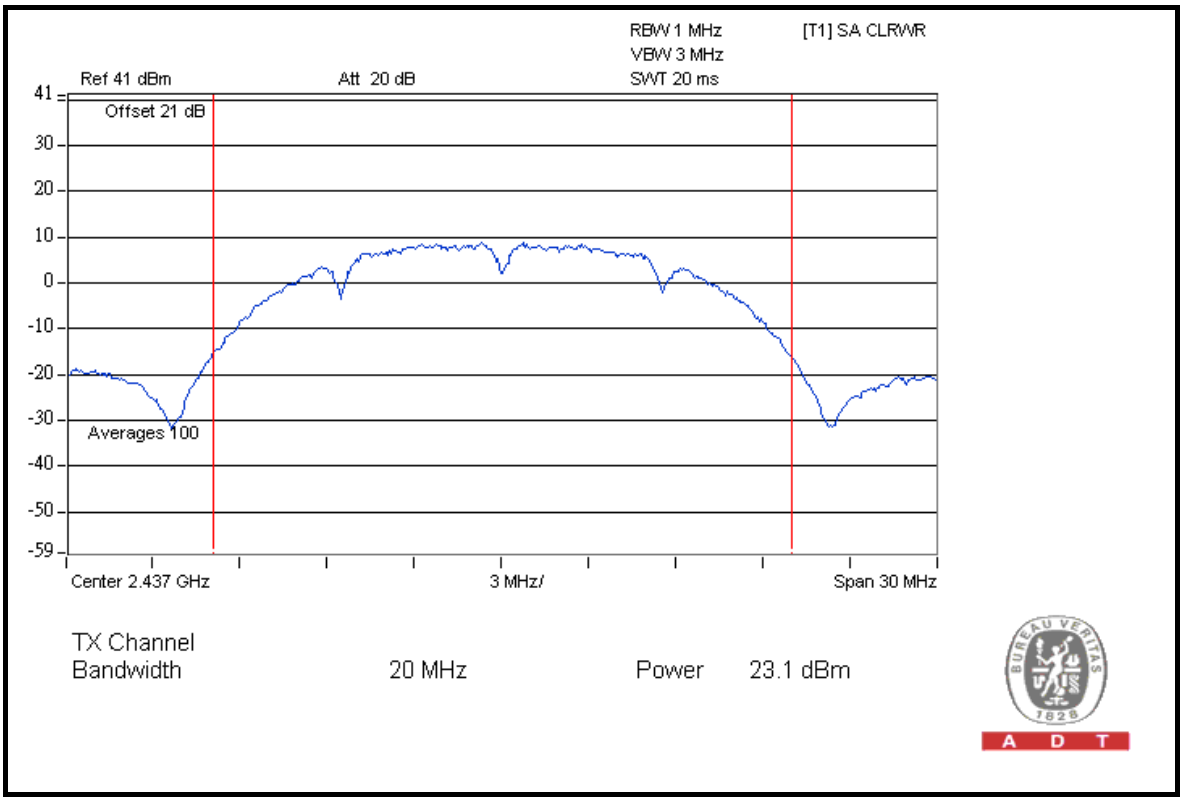
4.4.7 TEST RESULTS

802.11b

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	18.2	18.5	136.5	21.4	27.4	PASS
6	2437	22.5	23.1	380.8	25.8	27.4	PASS
11	2462	17.1	17.2	103.2	20.1	27.4	PASS

NOTE: Directional gain = 5.59dBi + 10log(2) = 8.6dBi > 6dBi , so the conducted power limit shall be reduced to 30-(8.6-6) = 27.4dBm.

FOR CHAIN 1: CH 6

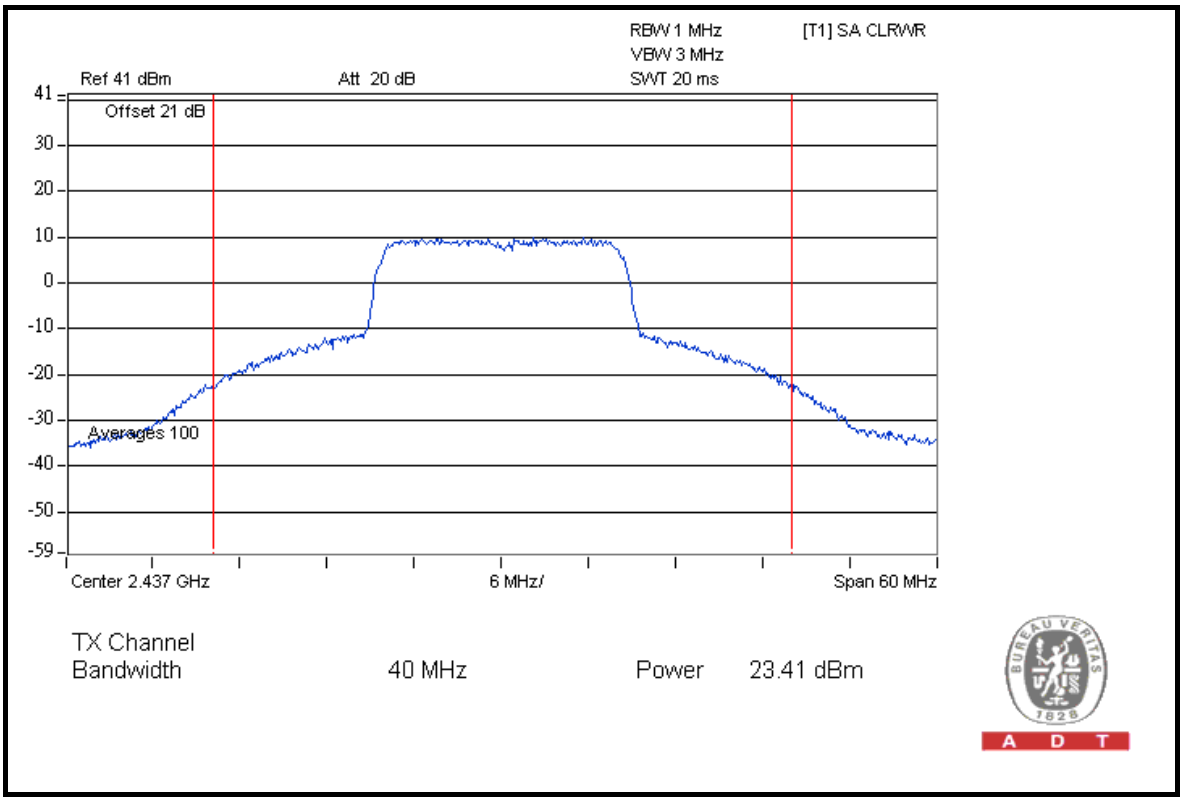


802.11g

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	15.1	15.7	69.1	18.4	27.4	PASS
6	2437	23.0	23.4	**419.7**	26.2	27.4	PASS
11	2462	15.5	15.8	73.2	18.6	27.4	PASS

NOTE: Directional gain = 5.59dBi + 10log(2) = 8.6dBi > 6dBi , so the conducted power limit shall be reduced to 30-(8.6-6) = 27.4dBm.

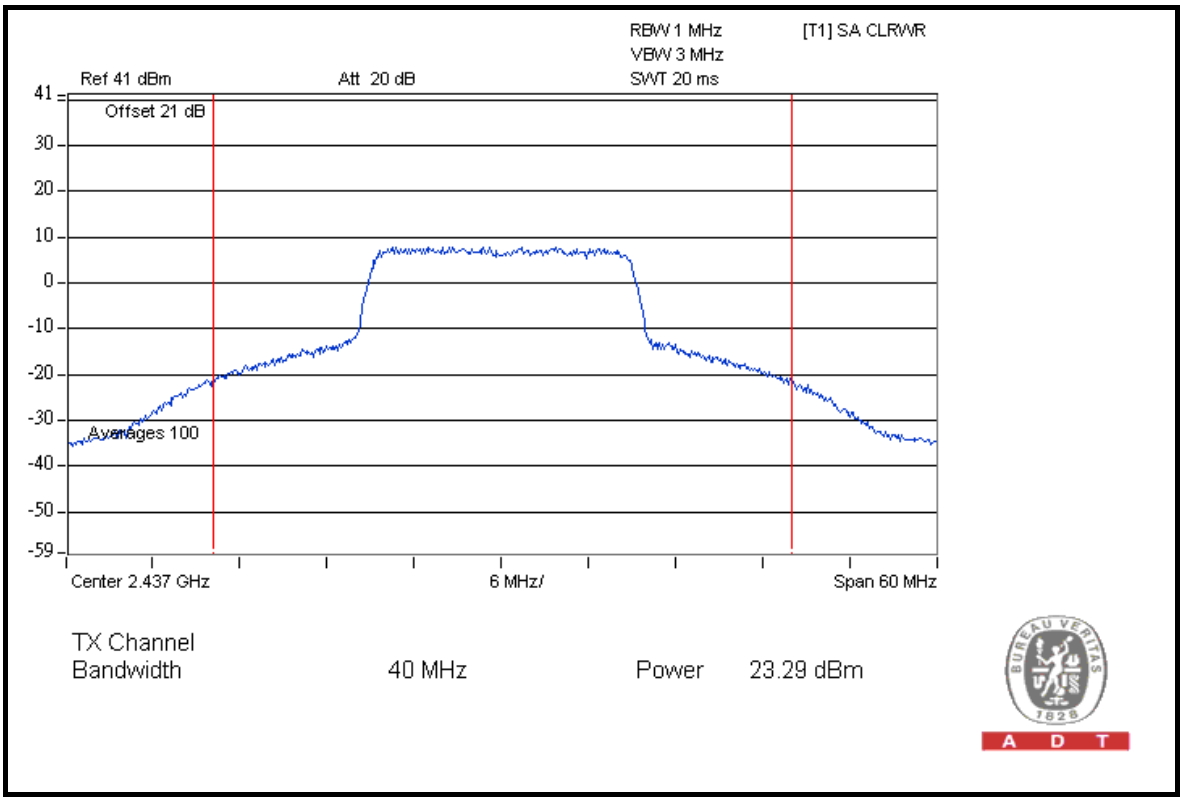
FOR CHAIN 1: CH 6



802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	14.0	14.8	55.2	17.4	30	PASS
6	2437	23.0	23.3	412.4	26.2	30	PASS
11	2462	15.0	15.3	65.8	18.2	30	PASS

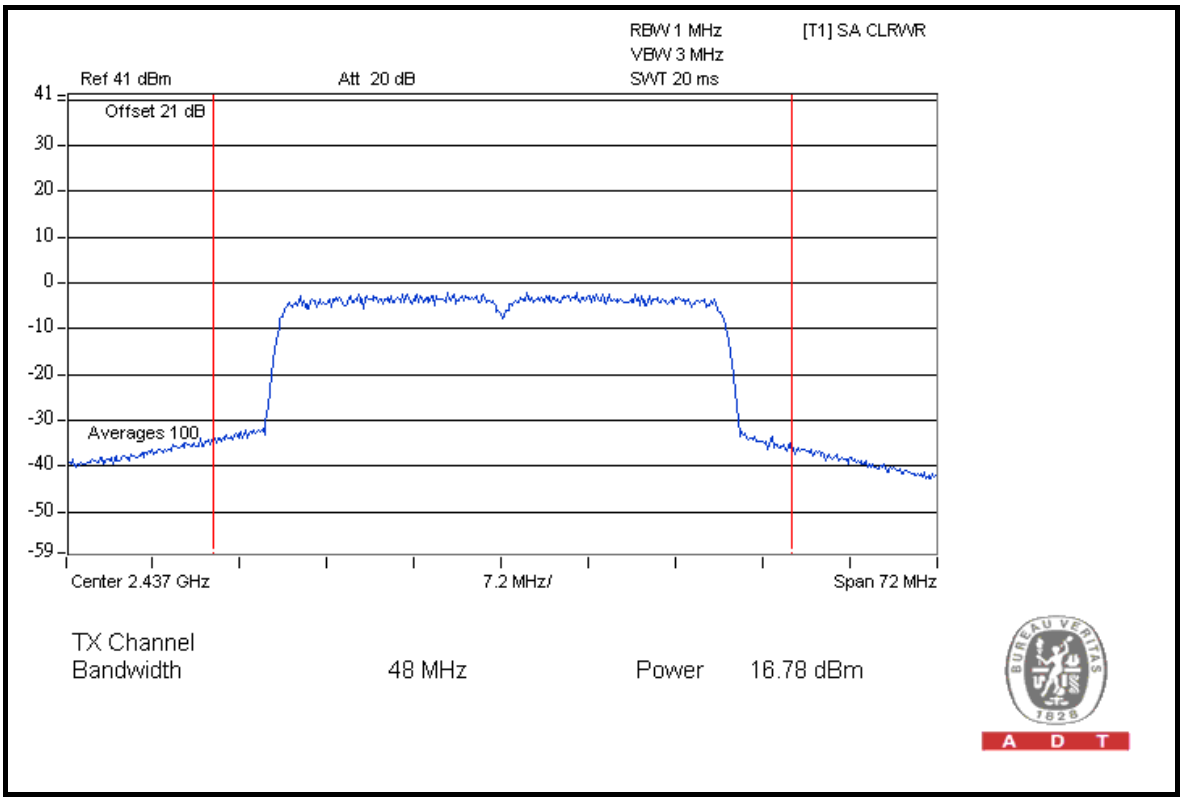
FOR CHAIN 1: CH 6



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2422	12.6	12.9	37.5	15.7	30	PASS
4	2437	16.7	16.8	94.3	19.7	30	PASS
7	2452	12.5	12.7	36.4	15.6	30	PASS

FOR CHAIN 1: CH 4



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 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Jul. 17, 2010	Jul. 16, 2011

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

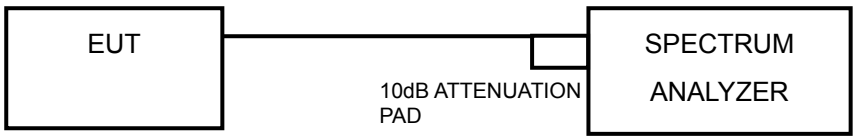
4.5.3 TEST PROCEDURE

1. Follow DTS measurement (PSD Option 2), the transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer. Locate and zoom in on emission peak(s) within the pass band.
2. Set RBW = 3 kHz /VBW > 9 kHz and sweep time to Automatic.
3. Detector use peak mode and a video trigger with the trigger level set to enable triggering only on full power pulses.
4. Trace average 100 traces in power averaging mode. The power spectral density was measured and recorded.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation.

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6

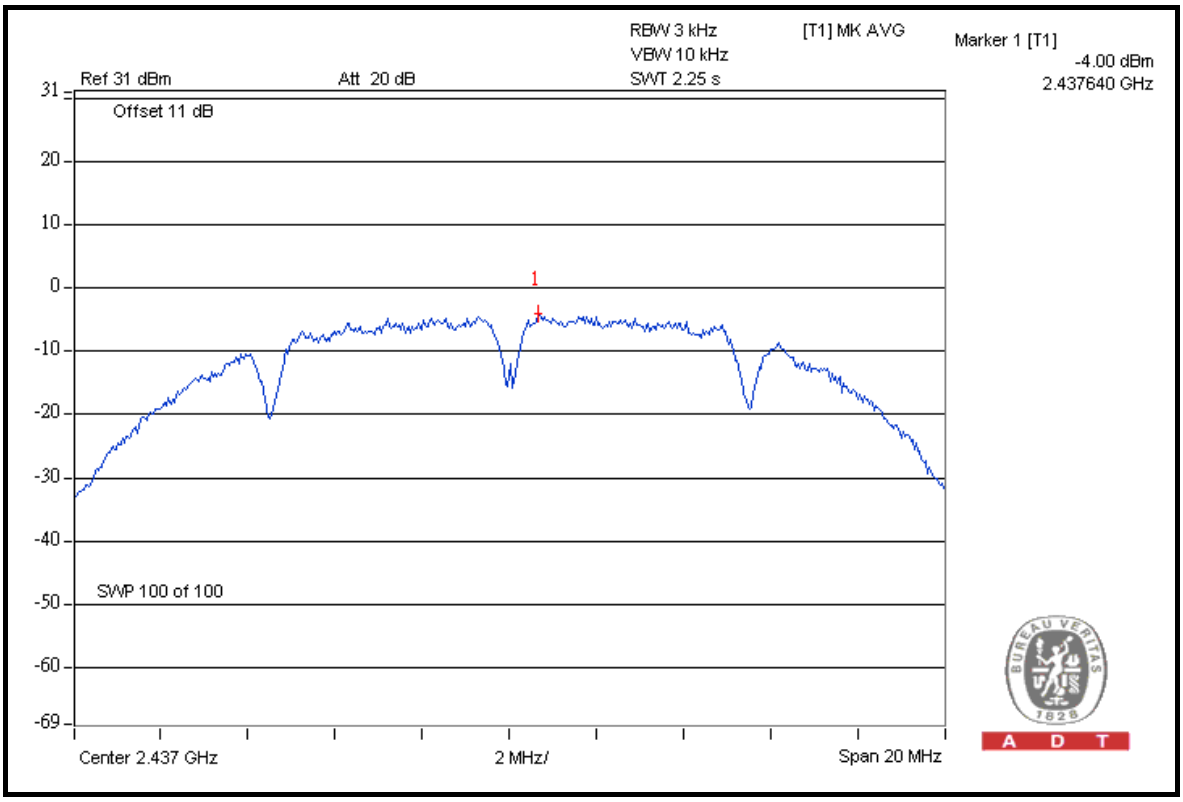
4.5.7 TEST RESULTS

802.11b

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
1	2412	-9.1	-8.8	-5.9	5.4	PASS
6	2437	-4.9	-4.0	-1.4	5.4	PASS
11	2462	-10.1	-9.9	-7.0	5.4	PASS

NOTE: Directional gain = 5.59dBi + 10log(2) = 8.6dBi > 6dBi , so the power density limit shall be reduced to 8-(8.6-6) = 5.4dBm.

FOR CHAIN 1: CH 6

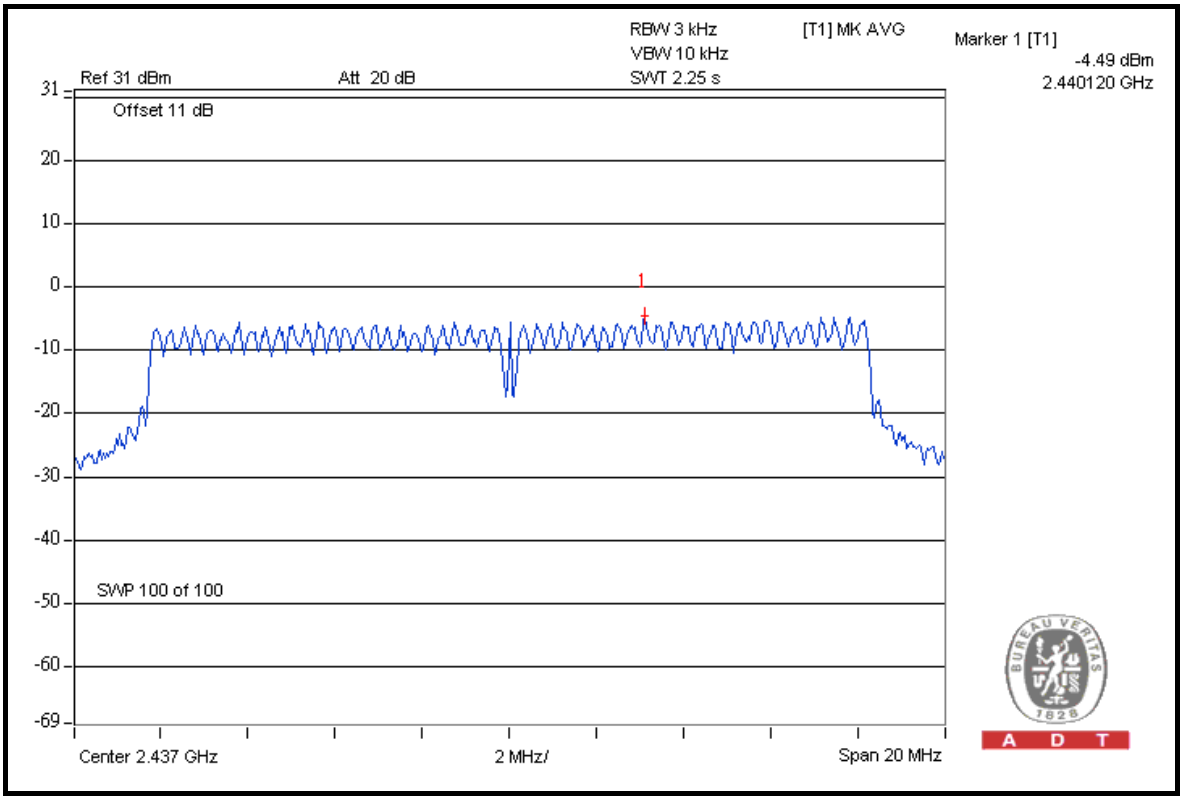


802.11g

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
1	2412	-12.7	-12.1	-9.4	5.4	PASS
6	2437	-5.0	-4.5	-1.7	5.4	PASS
11	2462	-9.7	-12.2	-7.8	5.4	PASS

NOTE: Directional gain = 5.59dBi + 10log(2) = 8.6dBi > 6dBi , so the power density limit shall be reduced to 8-(8.6-6) = 5.4dBm.

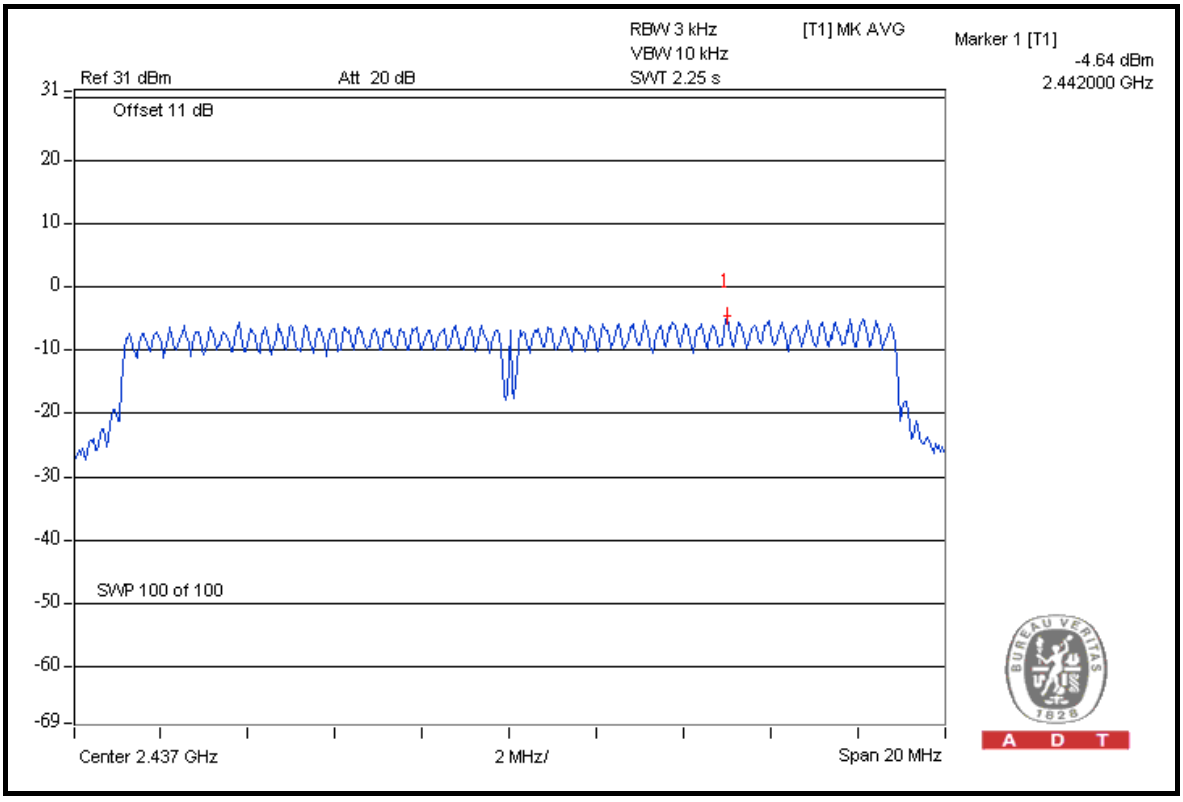
FOR CHAIN 1: CH 6



802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
1	2412	-13.7	-12.9	-10.3	8	PASS
6	2437	-4.8	-4.6	-1.7	8	PASS
11	2462	-10.5	-12.5	-8.4	8	PASS

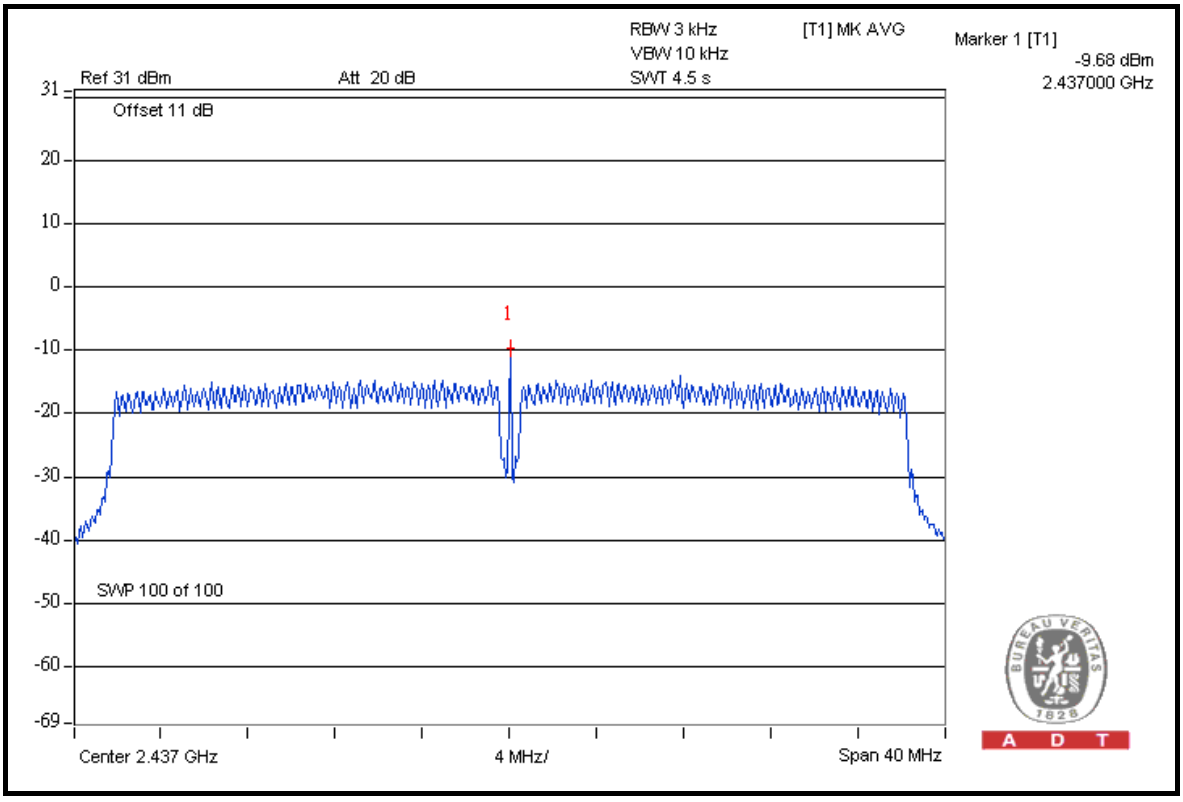
FOR CHAIN 1: CH 6



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
1	2422	-14.0	-16.3	-12.0	8	PASS
4	2437	-9.7	-12.2	-7.8	8	PASS
7	2452	-14.3	-16.7	-12.3	8	PASS

FOR CHAIN 0: CH 4



4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Dec. 27, 2010	Dec. 26, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Aug. 02, 2010	Aug. 01, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 28, 2010	Apr. 27, 2011
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 06, 2011	Jan. 05, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8449B	3008A01961	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8447D	2944A10738	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	274041/4	Aug. 21, 2010	Aug. 20, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Aug. 21, 2010	Aug. 20, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	NA	NA

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.3 TEST PROCEDURE

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. Set both RBW and VBW of spectrum analyzer to 100kHz and 300kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (Peak RBW = 100kHz, VBW = 300kHz) are attached on the following pages.

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation.

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6.

4.6.6 TEST RESULTS

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 in part 15.247(d).

TEST MODE A1

802.11b

RESTRICT BAND (2310 ~ 2390 MHz)

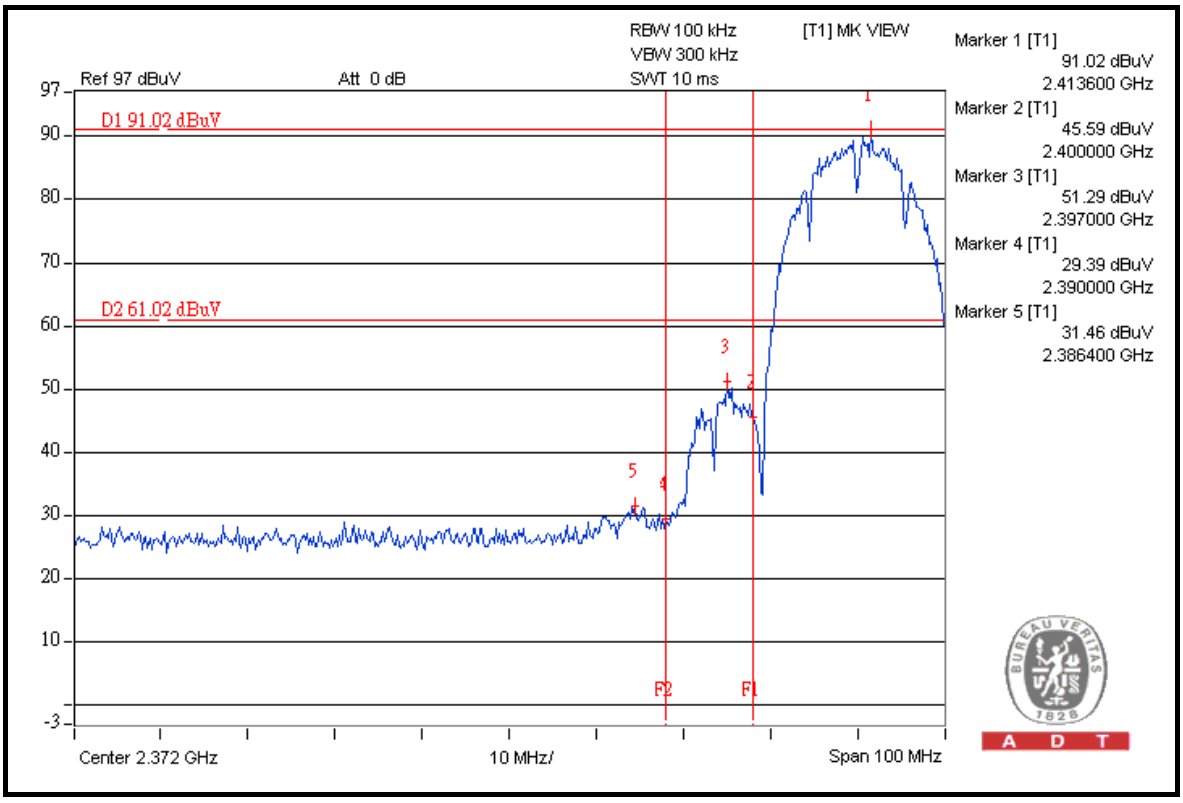
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2412.00 (PK)	116.60	59.56	57.04	74.00
2412.00 (AV)	112.10	60.40	51.70	54.00

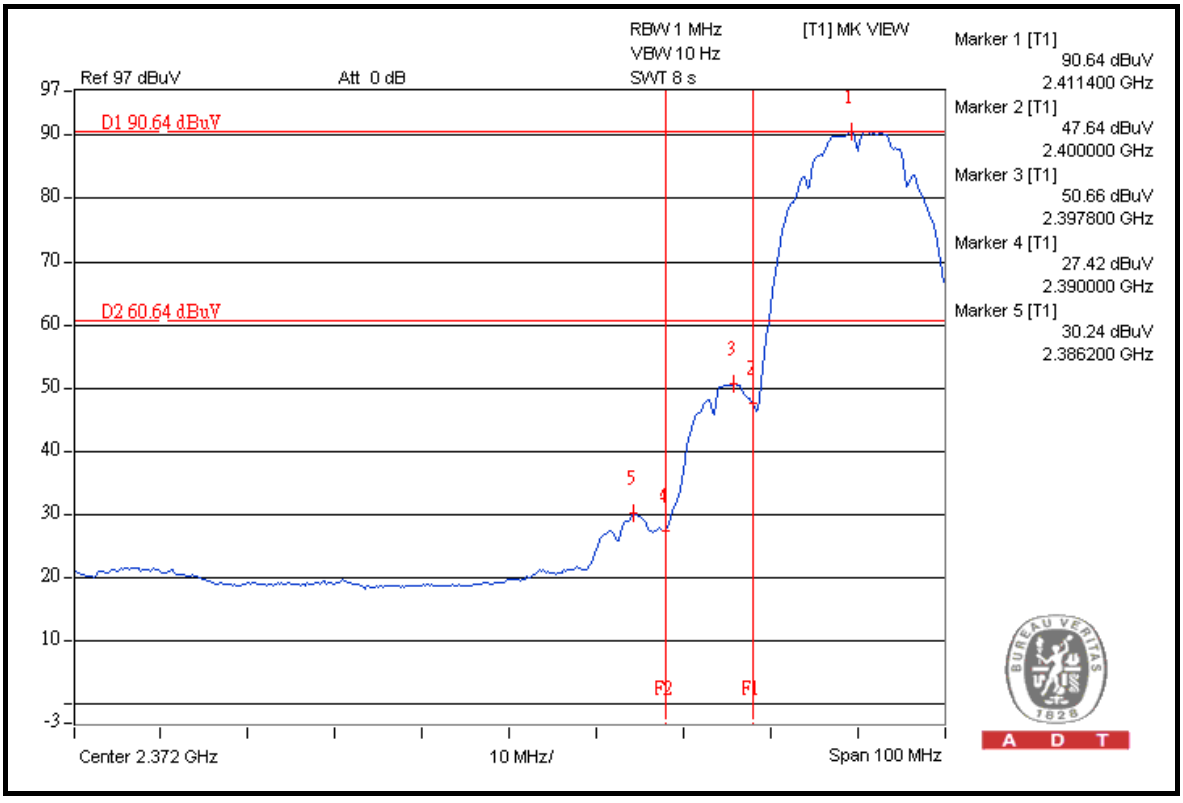
RESTRICT BAND (2483.5 ~ 2500 MHz)

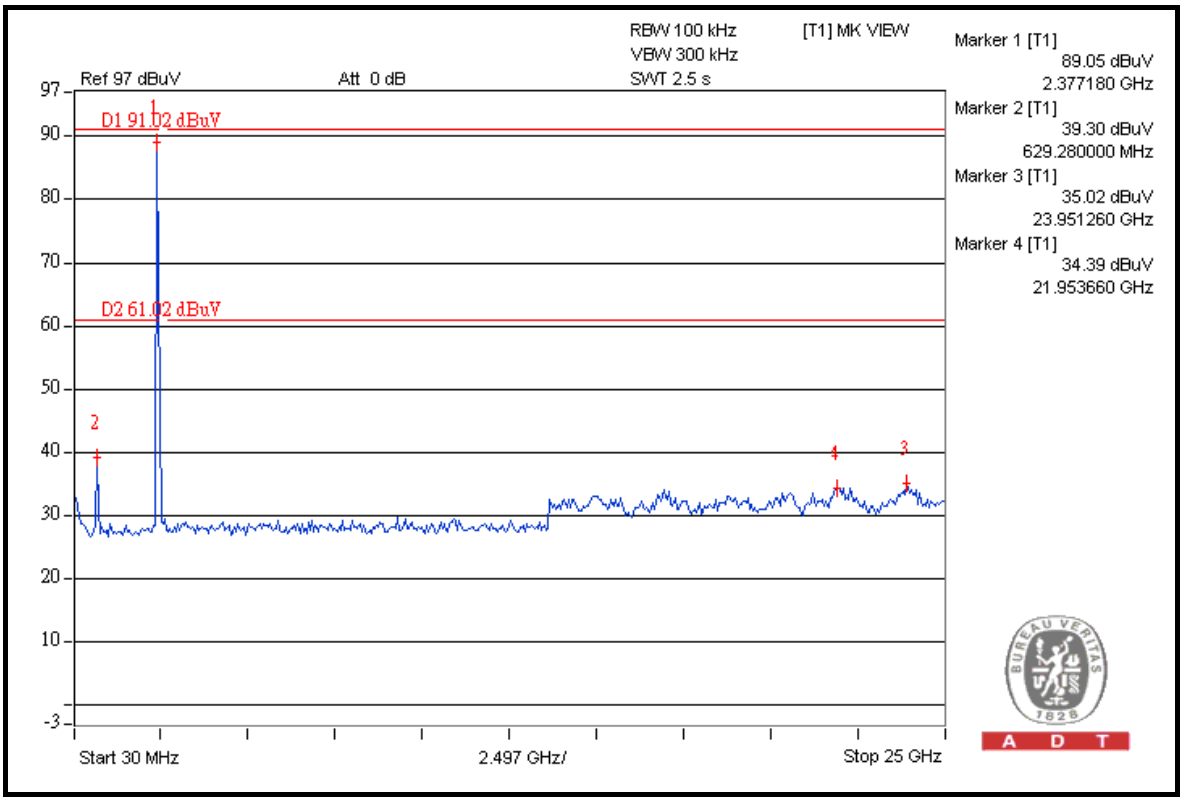
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	115.50	57.75	57.75	74.00
2462.00 (AV)	111.50	59.06	52.44	54.00

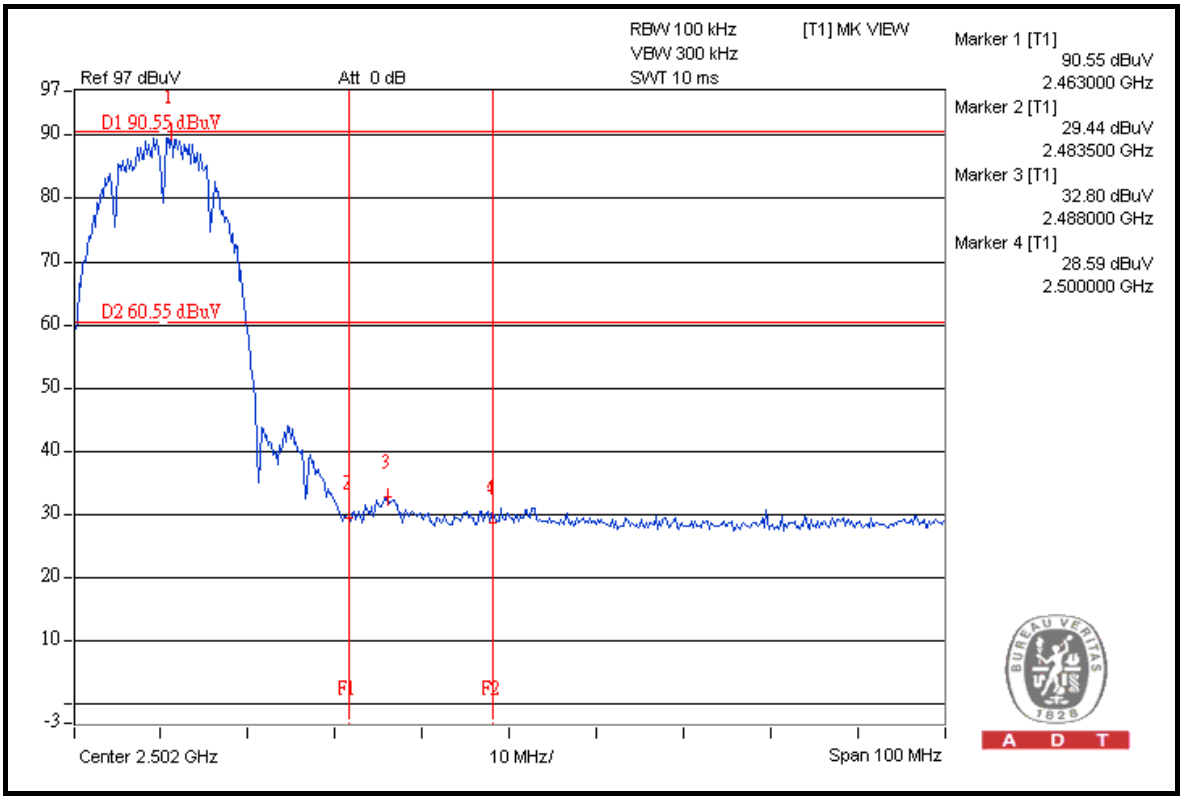
NOTE:

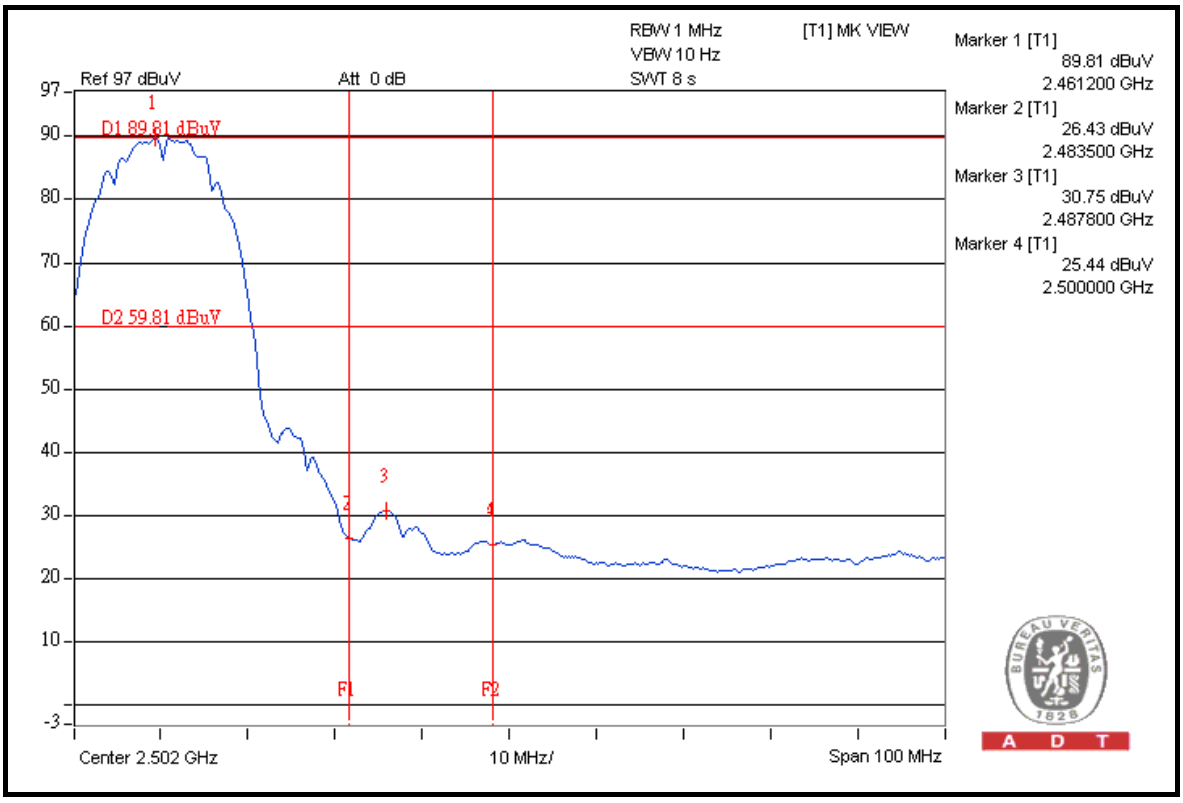
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

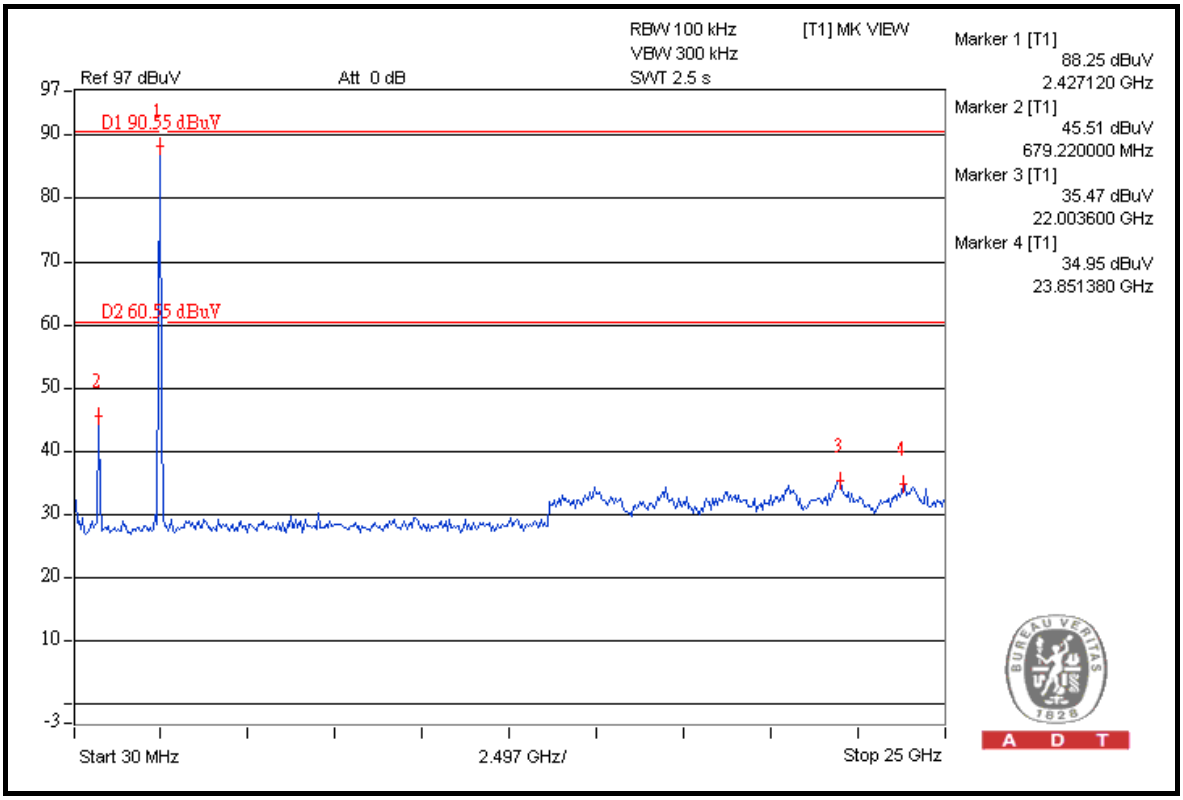

RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 91.02 dBuV
D2 61.02 dBuV
Marker 1 [T1]
91.02 dBuV
2.413600 GHz
Marker 2 [T1]
45.59 dBuV
2.400000 GHz
Marker 3 [T1]
51.29 dBuV
2.397000 GHz
Marker 4 [T1]
29.39 dBuV
2.390000 GHz
Marker 5 [T1]
31.46 dBuV
2.386400 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 90.64 dBuV
D2 60.64 dBuV
Marker 1 [T1]
90.64 dBuV
2.411400 GHz
Marker 2 [T1]
47.64 dBuV
2.400000 GHz
Marker 3 [T1]
50.66 dBuV
2.397800 GHz
Marker 4 [T1]
27.42 dBuV
2.390000 GHz
Marker 5 [T1]
30.24 dBuV
2.386200 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 91.02 dBuV
D2 61.02 dBuV
Marker 1 [T1]
89.05 dBuV
2.377180 GHz
Marker 2 [T1]
39.30 dBuV
629.280000 MHz
Marker 3 [T1]
35.02 dBuV
23.951260 GHz
Marker 4 [T1]
34.39 dBuV
21.953660 GHz
97
90
80
70
60
50
40
30
20
10
-3
Start 30 MHz
2.497 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 90.55 dBuV
D2 60.55 dBuV
Marker 1 [T1]
90.55 dBuV
2.463000 GHz
Marker 2 [T1]
29.44 dBuV
2.483500 GHz
Marker 3 [T1]
32.80 dBuV
2.488000 GHz
Marker 4 [T1]
28.59 dBuV
2.500000 GHz
97
90
80
70
60
50
40
30
20
10
-3
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 89.81 dBuV
D2 59.81 dBuV
Marker 1 [T1]
89.81 dBuV
2.461200 GHz
Marker 2 [T1]
26.43 dBuV
2.483500 GHz
Marker 3 [T1]
30.75 dBuV
2.487800 GHz
Marker 4 [T1]
25.44 dBuV
2.500000 GHz
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 90.55 dBuV
D2 60.55 dBuV
Marker 1 [T1]
88.25 dBuV
2.427120 GHz
Marker 2 [T1]
45.51 dBuV
679.220000 MHz
Marker 3 [T1]
35.47 dBuV
22.003600 GHz
Marker 4 [T1]
34.95 dBuV
23.851380 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g

RESTRICT BAND (2310 ~ 2390 MHz)

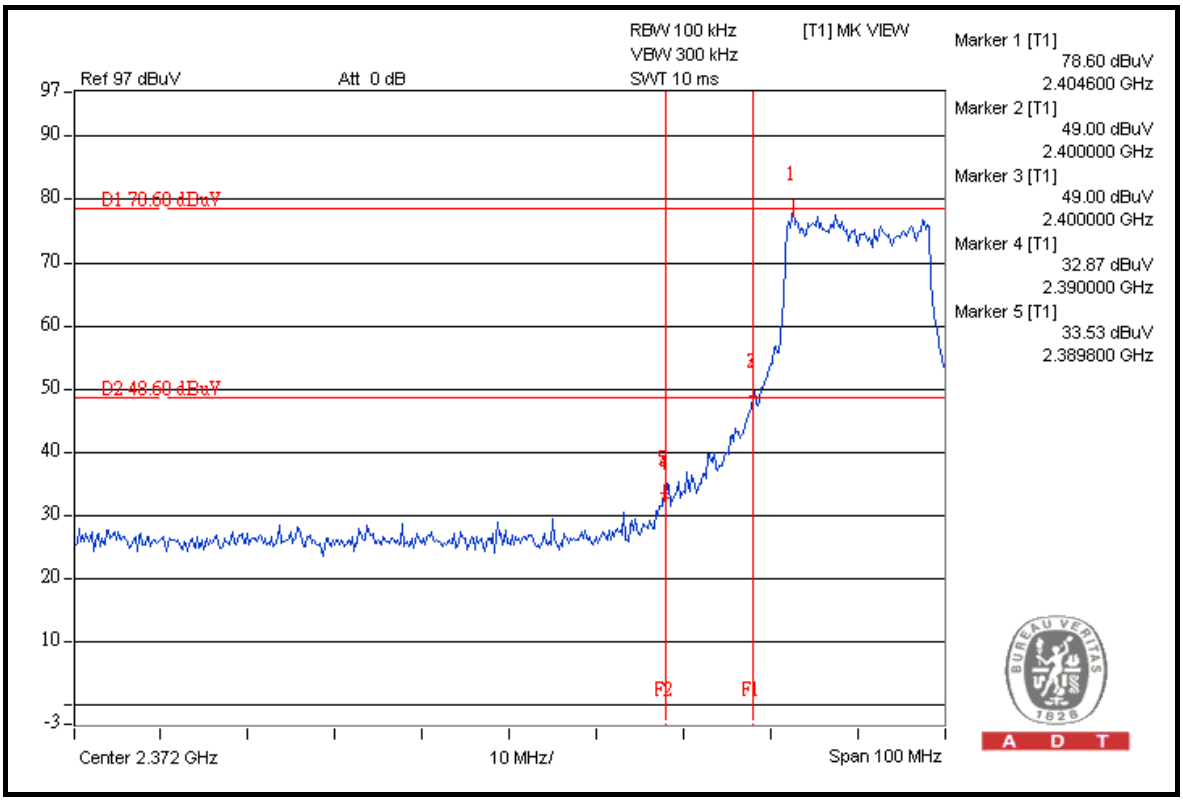
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2412.00 (PK)	111.00	45.07	65.93	74.00
2412.00 (AV)	100.40	48.64	51.76	54.00

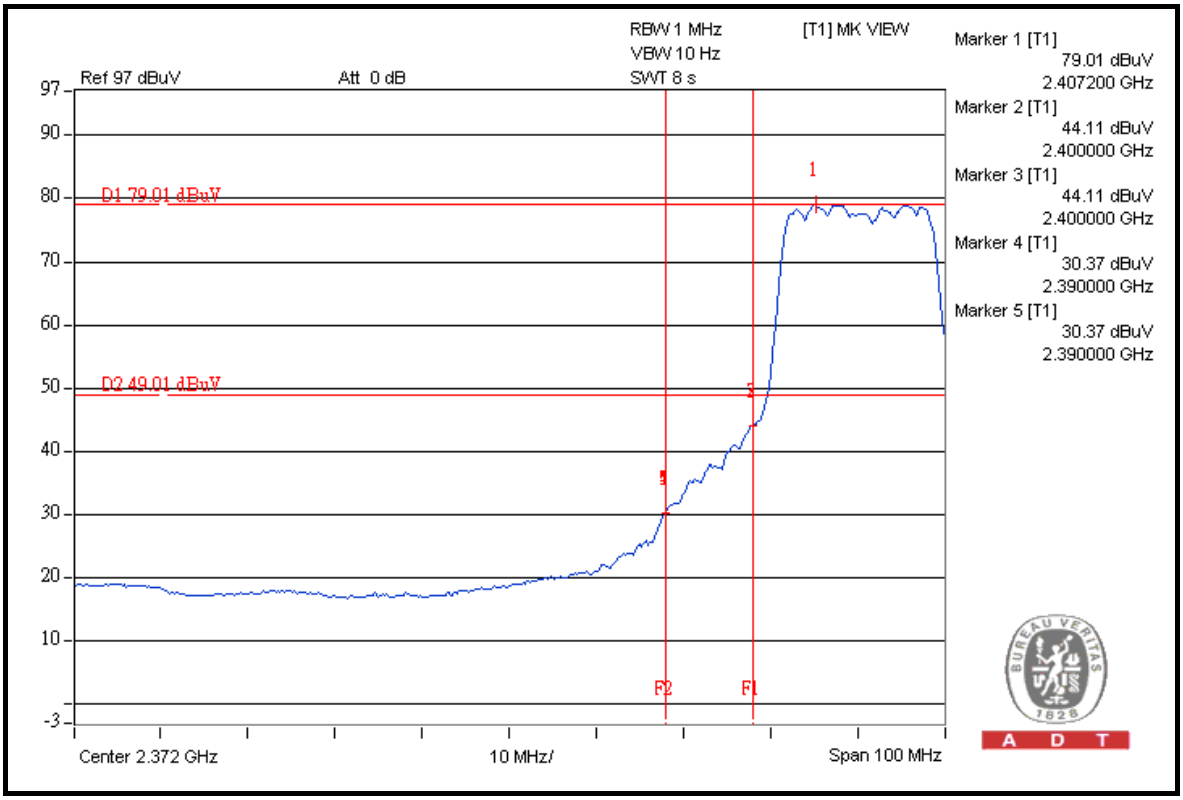
RESTRICT BAND (2483.5 ~ 2500 MHz)

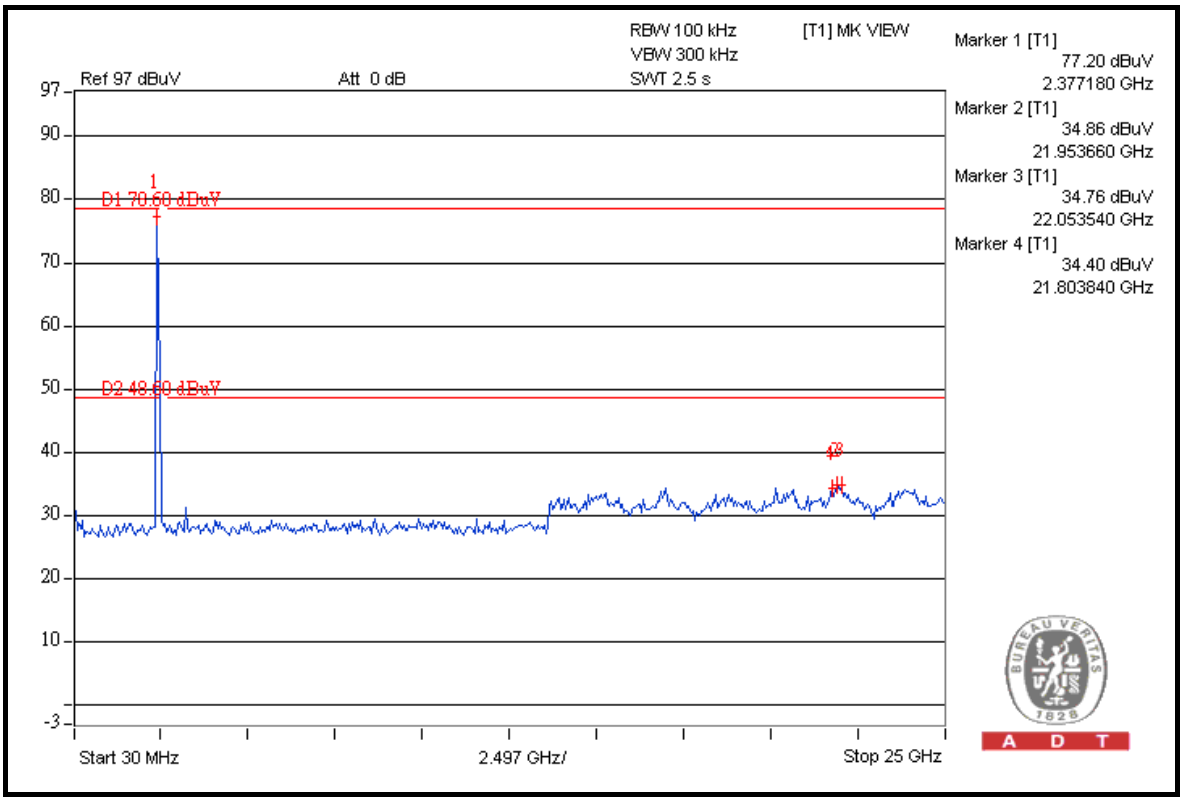
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	111.00	44.81	66.19	74.00
2462.00 (AV)	100.30	49.42	50.88	54.00

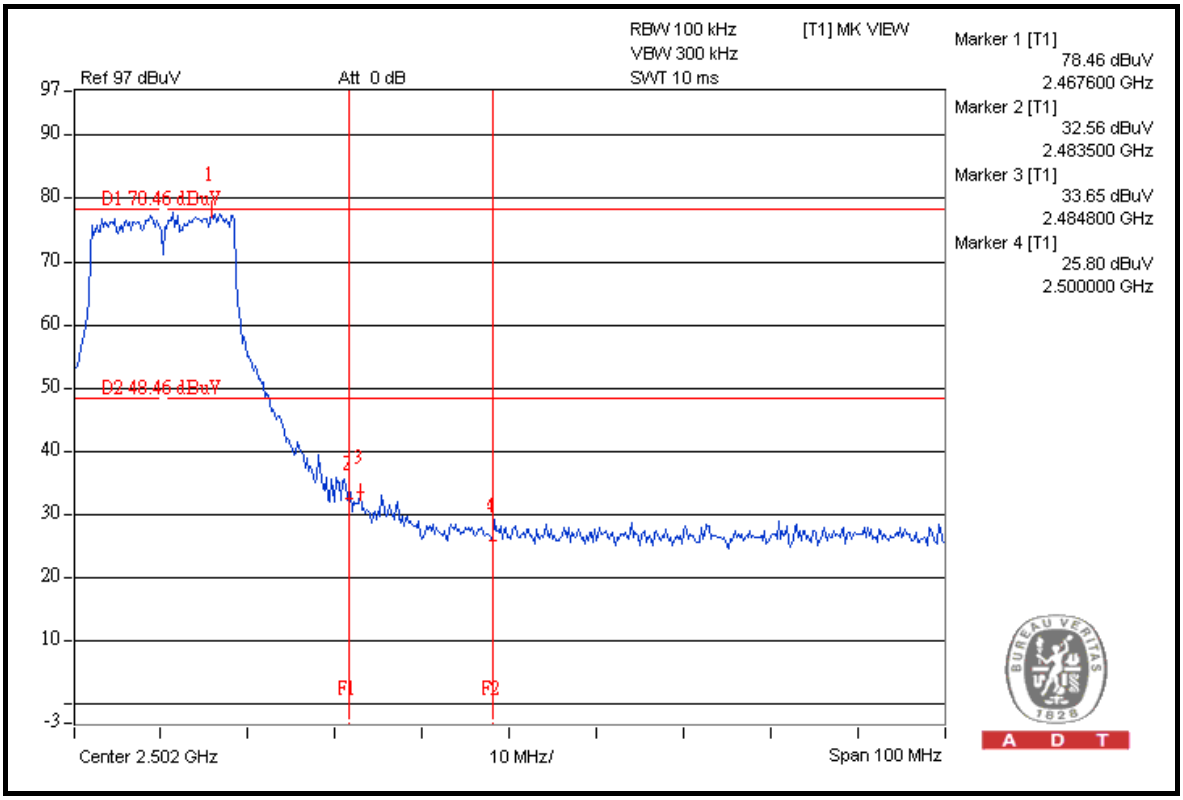
NOTE:

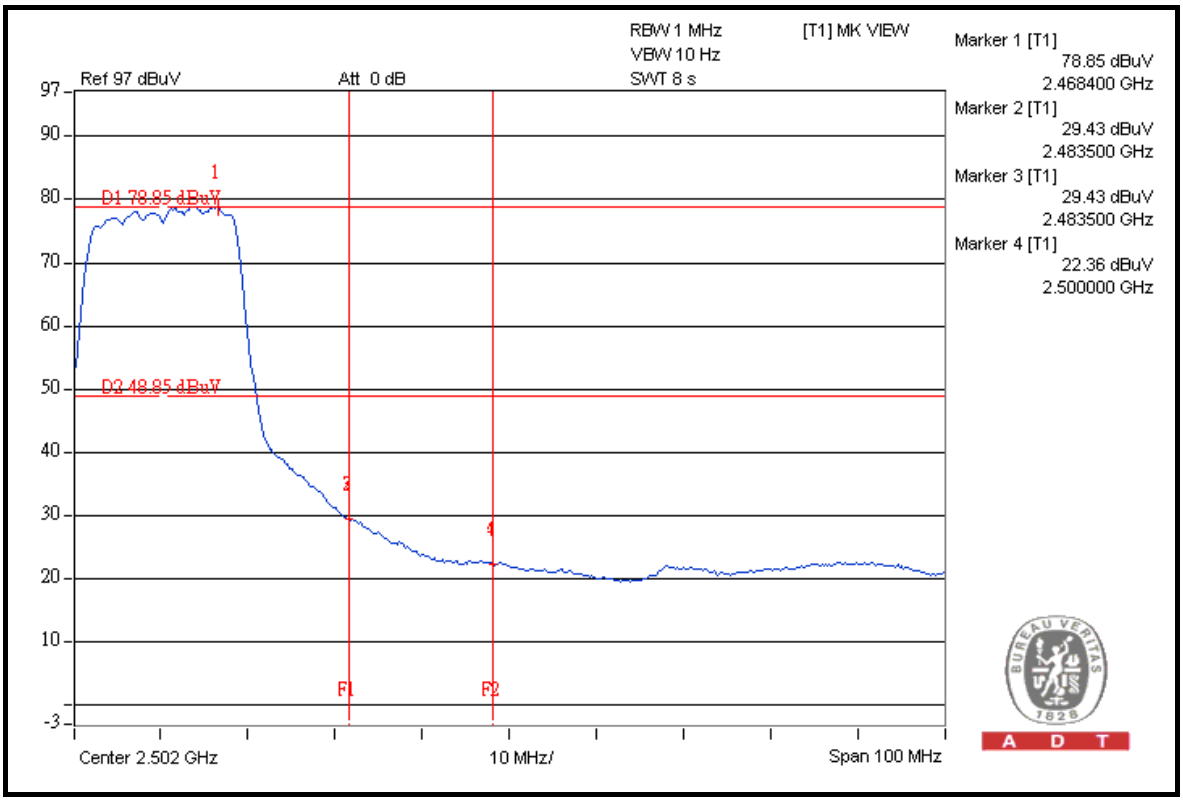
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

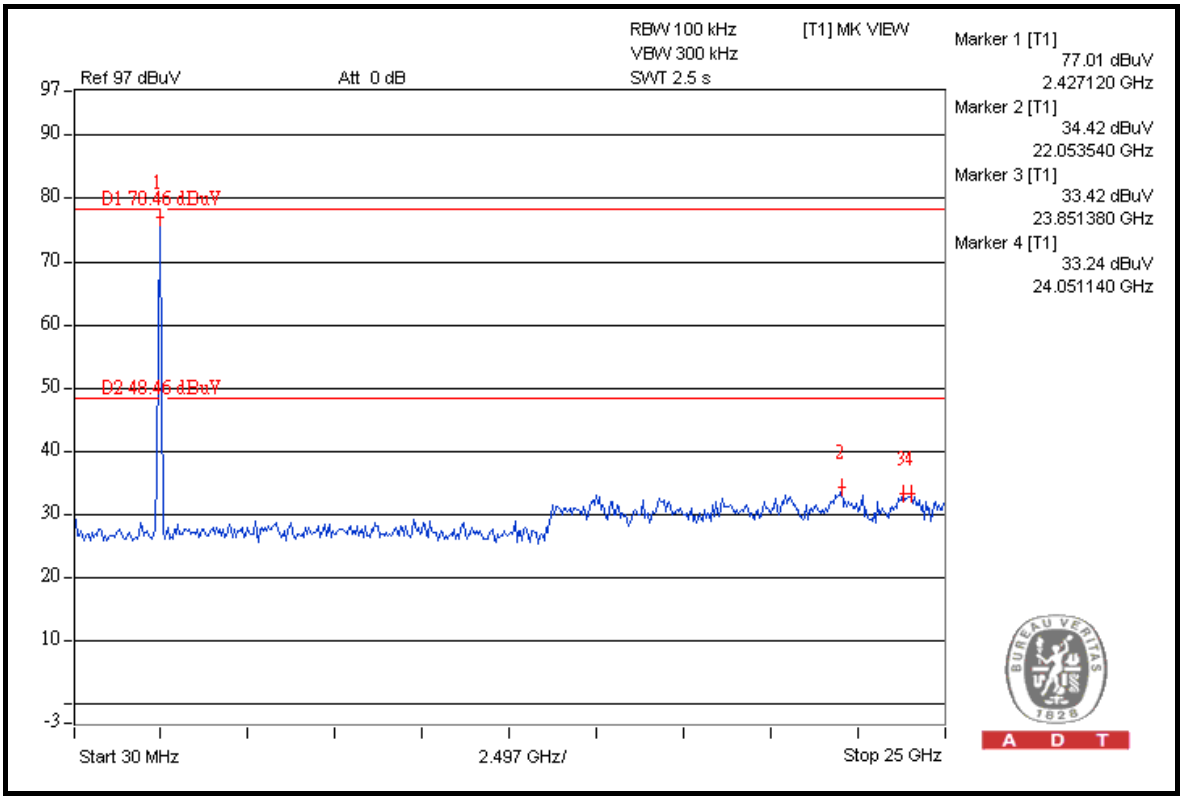

RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 70.60 dBuV
D2 48.60 dBuV
Marker 1 [T1]
78.60 dBuV
2.404600 GHz
Marker 2 [T1]
49.00 dBuV
2.400000 GHz
Marker 3 [T1]
49.00 dBuV
2.400000 GHz
Marker 4 [T1]
32.87 dBuV
2.390000 GHz
Marker 5 [T1]
33.53 dBuV
2.389800 GHz
F2
F1
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 79.01 dBuV
D2 49.01 dBuV
Marker 1 [T1]
79.01 dBuV
2.407200 GHz
Marker 2 [T1]
44.11 dBuV
2.400000 GHz
Marker 3 [T1]
44.11 dBuV
2.400000 GHz
Marker 4 [T1]
30.37 dBuV
2.390000 GHz
Marker 5 [T1]
30.37 dBuV
2.390000 GHz
F2
F1
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 70.60 dBuV
D2 48.60 dBuV
Marker 1 [T1]
77.20 dBuV
2.377180 GHz
Marker 2 [T1]
34.86 dBuV
21.953660 GHz
Marker 3 [T1]
34.76 dBuV
22.053540 GHz
Marker 4 [T1]
34.40 dBuV
21.803840 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 70.46 dBuV
D2 48.46 dBuV
Marker 1 [T1]
78.46 dBuV
2.467600 GHz
Marker 2 [T1]
32.56 dBuV
2.483500 GHz
Marker 3 [T1]
33.65 dBuV
2.484800 GHz
Marker 4 [T1]
25.80 dBuV
2.500000 GHz
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 78.85 dBuV
D2 48.85 dBuV
Marker 1 [T1]
78.85 dBuV
2.468400 GHz
Marker 2 [T1]
29.43 dBuV
2.483500 GHz
Marker 3 [T1]
29.43 dBuV
2.483500 GHz
Marker 4 [T1]
22.36 dBuV
2.500000 GHz
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 70.46 dBuV
D2 48.46 dBuV
Marker 1 [T1]
77.01 dBuV
2.427120 GHz
Marker 2 [T1]
34.42 dBuV
22.053540 GHz
Marker 3 [T1]
33.42 dBuV
23.851380 GHz
Marker 4 [T1]
33.24 dBuV
24.051140 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (20MHz)

RESTRICT BAND (2310 ~ 2390 MHz)

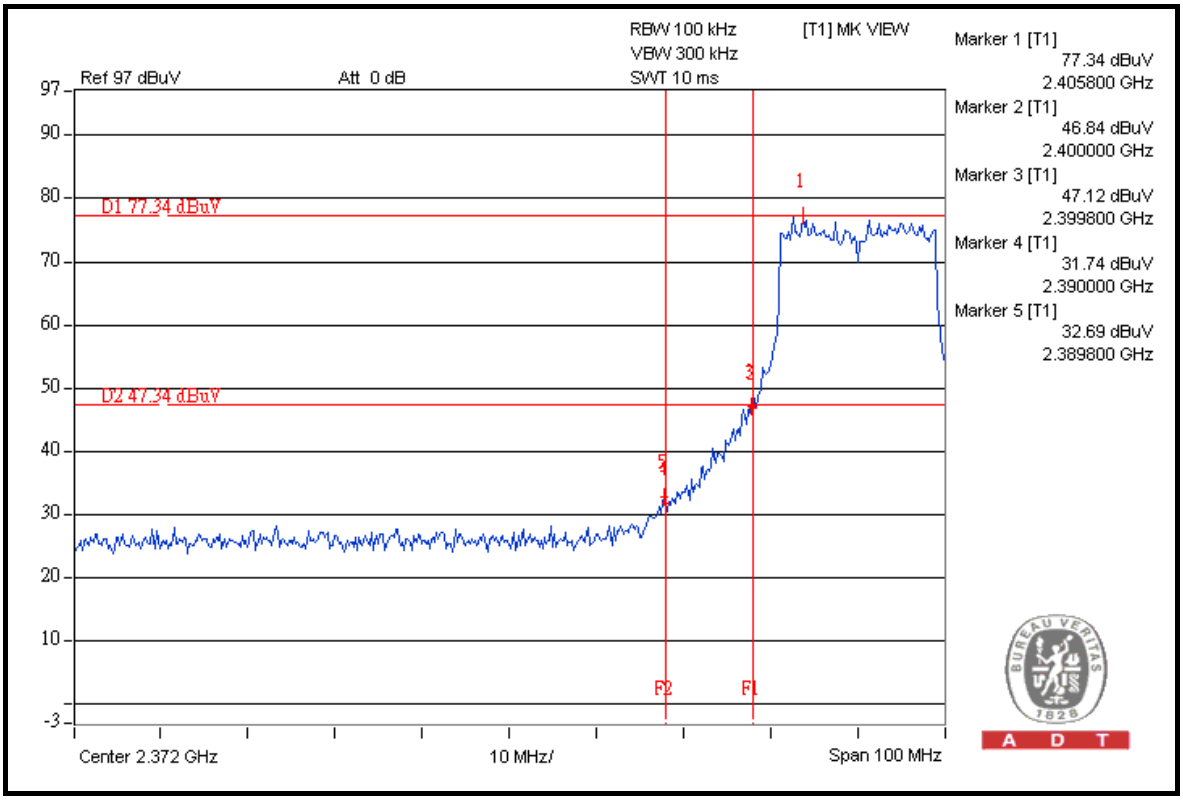
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2412.00 (PK)	110.30	44.65	65.65	74.00
2412.00 (AV)	99.10	46.64	52.46	54.00

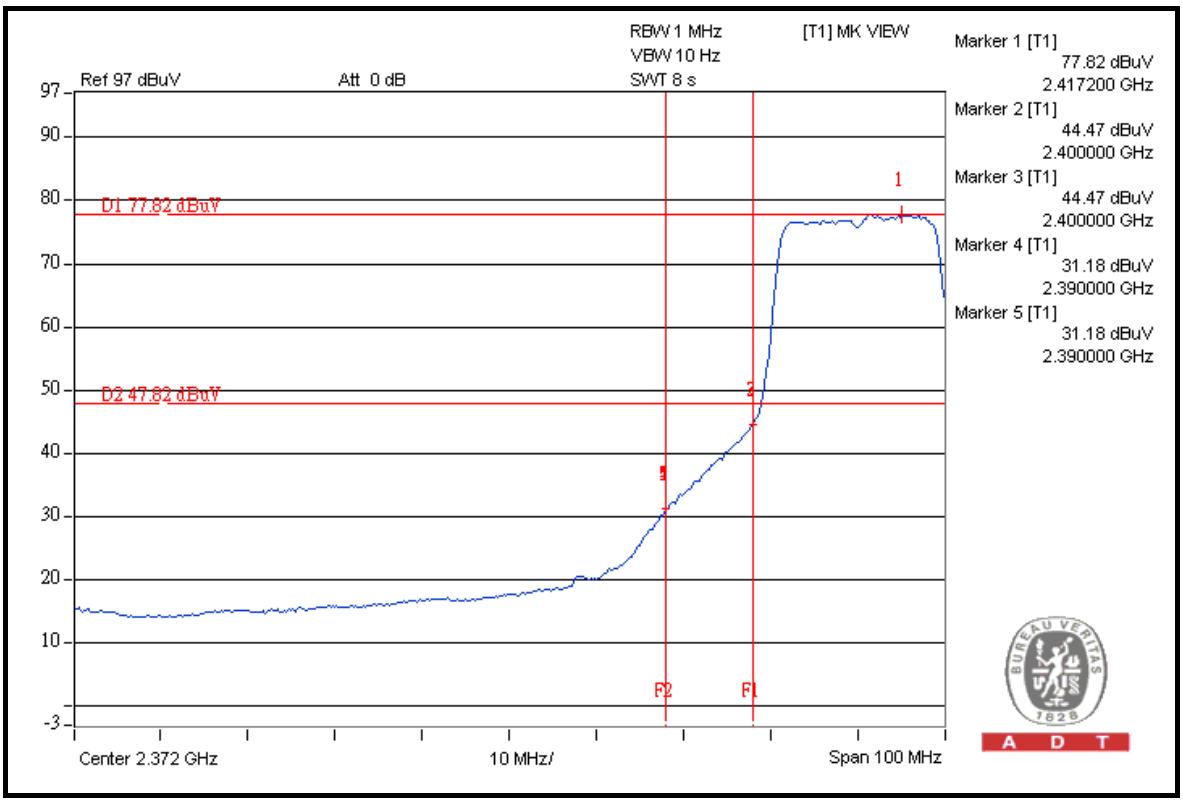
RESTRICT BAND (2483.5 ~ 2500 MHz)

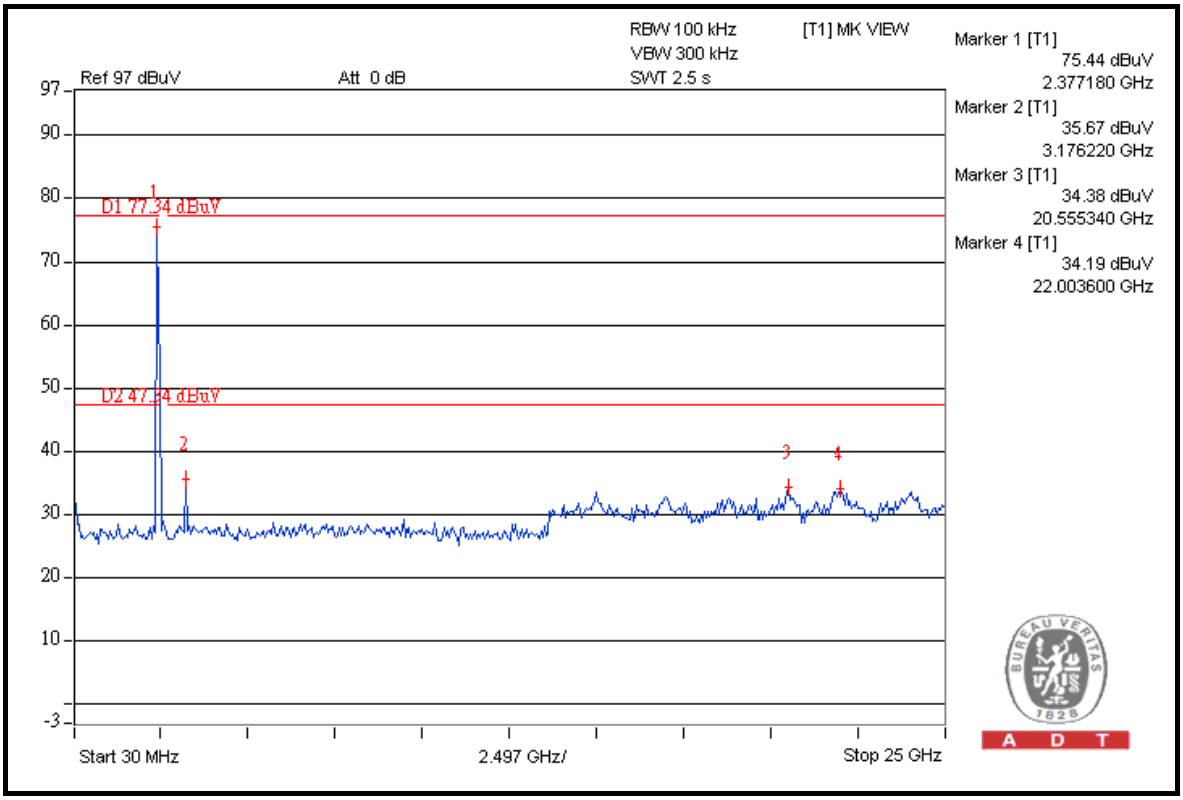
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	112.10	48.55	63.55	74.00
2462.00 (AV)	100.70	49.76	50.94	54.00

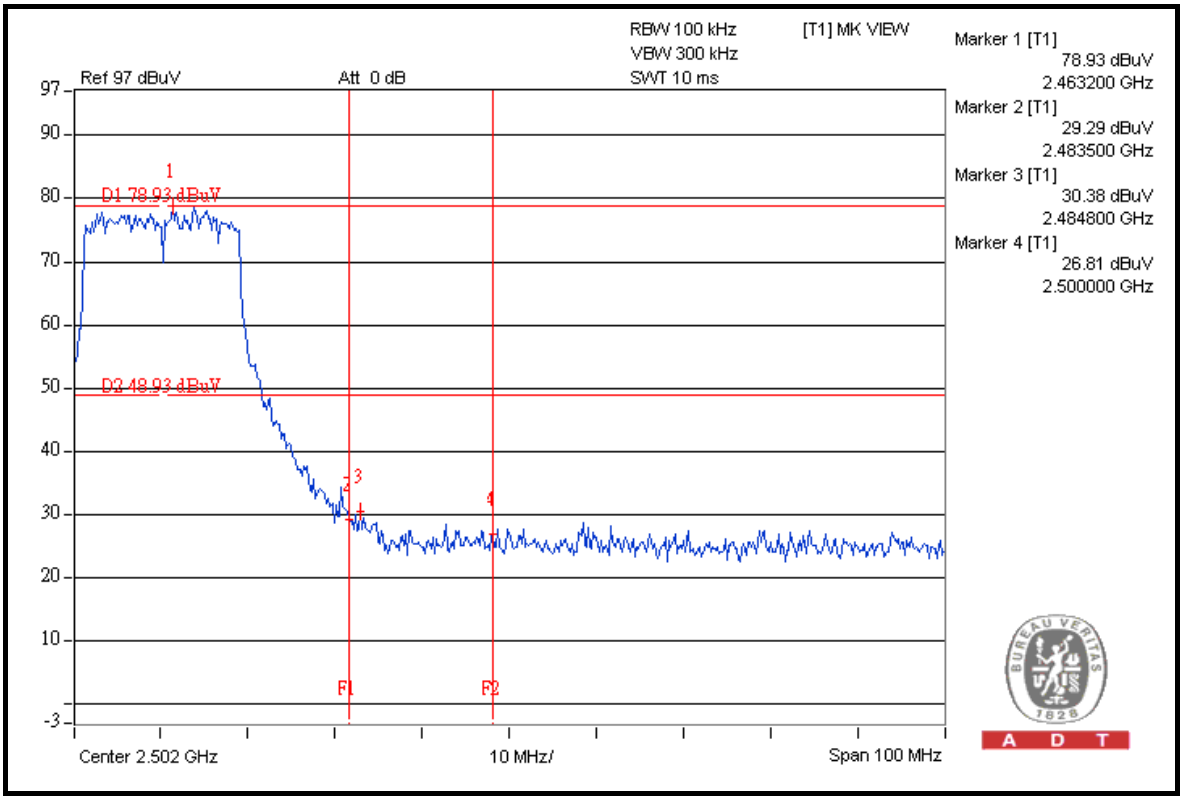
NOTE:

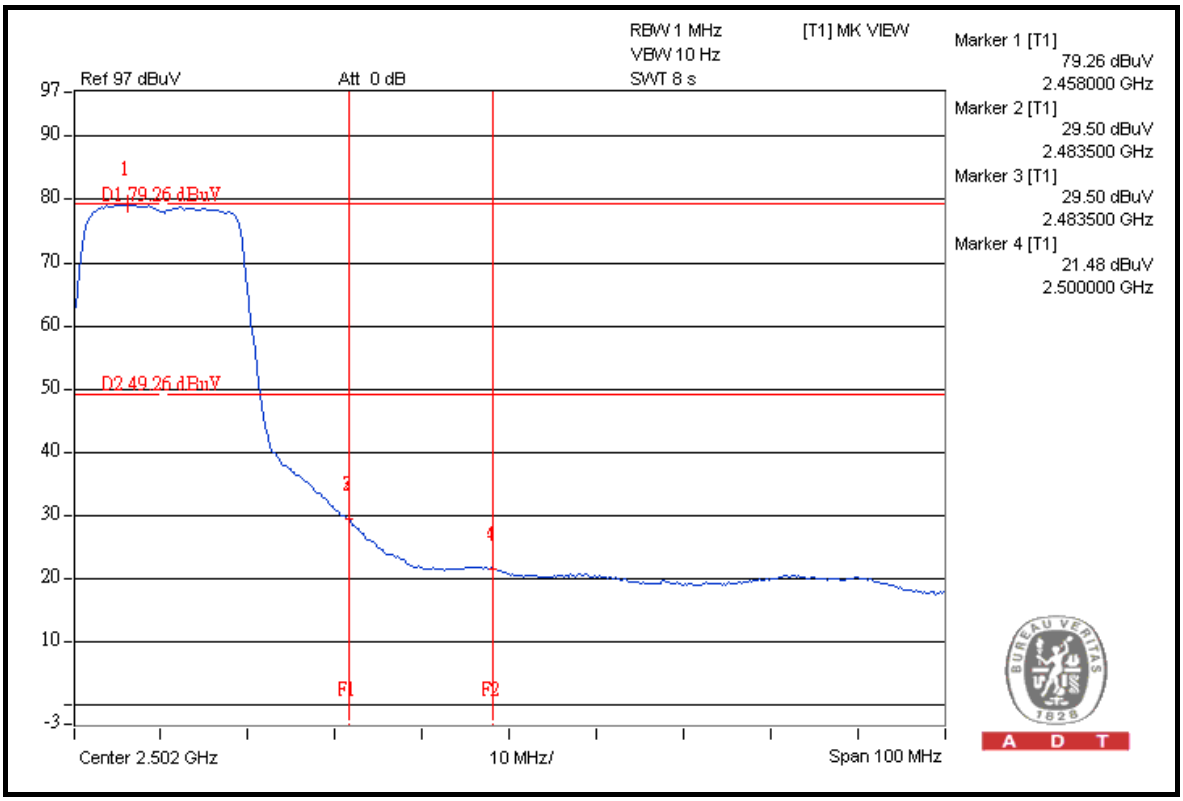
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

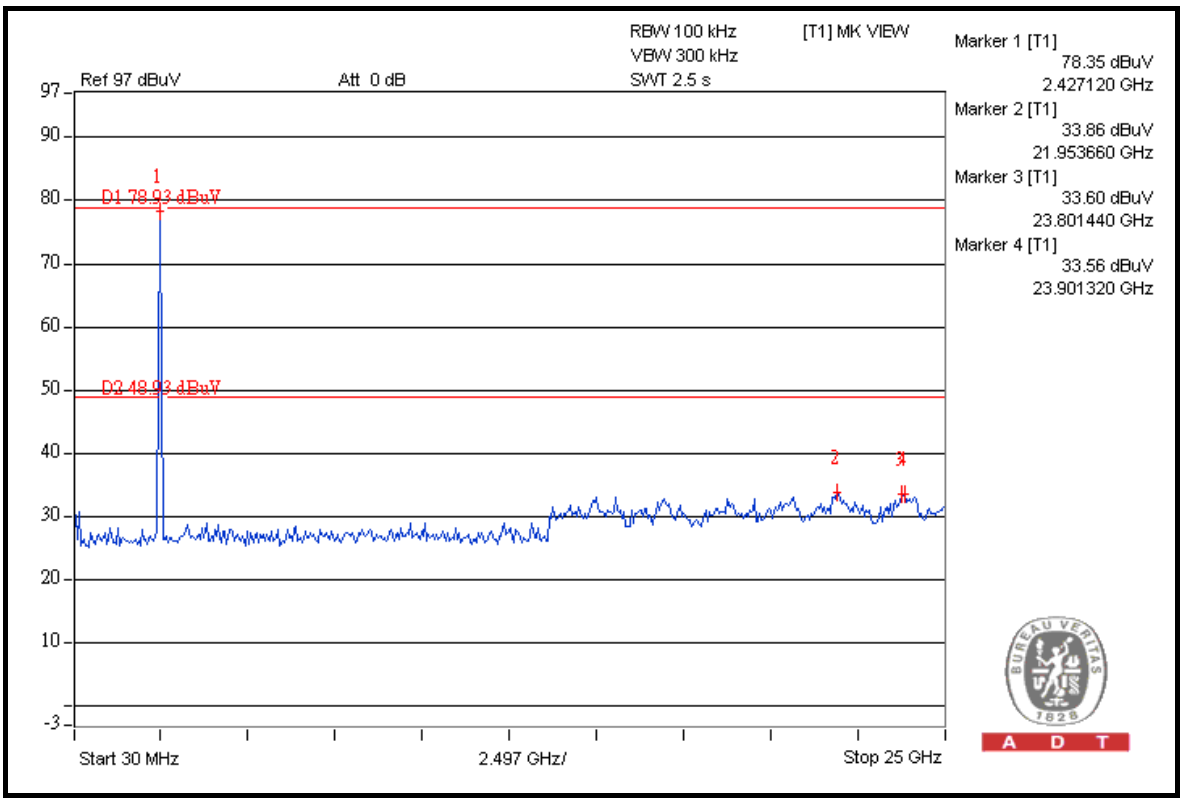

RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 77.34 dBuV
D2 47.34 dBuV
Marker 1 [T1]
77.34 dBuV
2.405800 GHz
Marker 2 [T1]
46.84 dBuV
2.400000 GHz
Marker 3 [T1]
47.12 dBuV
2.399800 GHz
Marker 4 [T1]
31.74 dBuV
2.390000 GHz
Marker 5 [T1]
32.69 dBuV
2.389800 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 77.82 dBuV
D2 47.82 dBuV
Marker 1 [T1]
77.82 dBuV
2.417200 GHz
Marker 2 [T1]
44.47 dBuV
2.400000 GHz
Marker 3 [T1]
44.47 dBuV
2.400000 GHz
Marker 4 [T1]
31.18 dBuV
2.390000 GHz
Marker 5 [T1]
31.18 dBuV
2.390000 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 77.34 dBuV
D2 47.34 dBuV
Marker 1 [T1]
75.44 dBuV
2.377180 GHz
Marker 2 [T1]
35.67 dBuV
3.176220 GHz
Marker 3 [T1]
34.38 dBuV
20.555340 GHz
Marker 4 [T1]
34.19 dBuV
22.003600 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 78.93 dBuV
D2 48.93 dBuV
Marker 1 [T1]
78.93 dBuV
2.463200 GHz
Marker 2 [T1]
29.29 dBuV
2.483500 GHz
Marker 3 [T1]
30.38 dBuV
2.484800 GHz
Marker 4 [T1]
26.81 dBuV
2.500000 GHz
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 79.26 dBuV
D2 49.26 dBuV
Marker 1 [T1]
79.26 dBuV
2.458000 GHz
Marker 2 [T1]
29.50 dBuV
2.483500 GHz
Marker 3 [T1]
29.50 dBuV
2.483500 GHz
Marker 4 [T1]
21.48 dBuV
2.500000 GHz
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 78.93 dBuV
D2 48.93 dBuV
Marker 1 [T1]
78.35 dBuV
2.427120 GHz
Marker 2 [T1]
33.86 dBuV
21.953660 GHz
Marker 3 [T1]
33.60 dBuV
23.801440 GHz
Marker 4 [T1]
33.56 dBuV
23.901320 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (40MHz)

RESTRICT BAND (2310 ~ 2390 MHz)

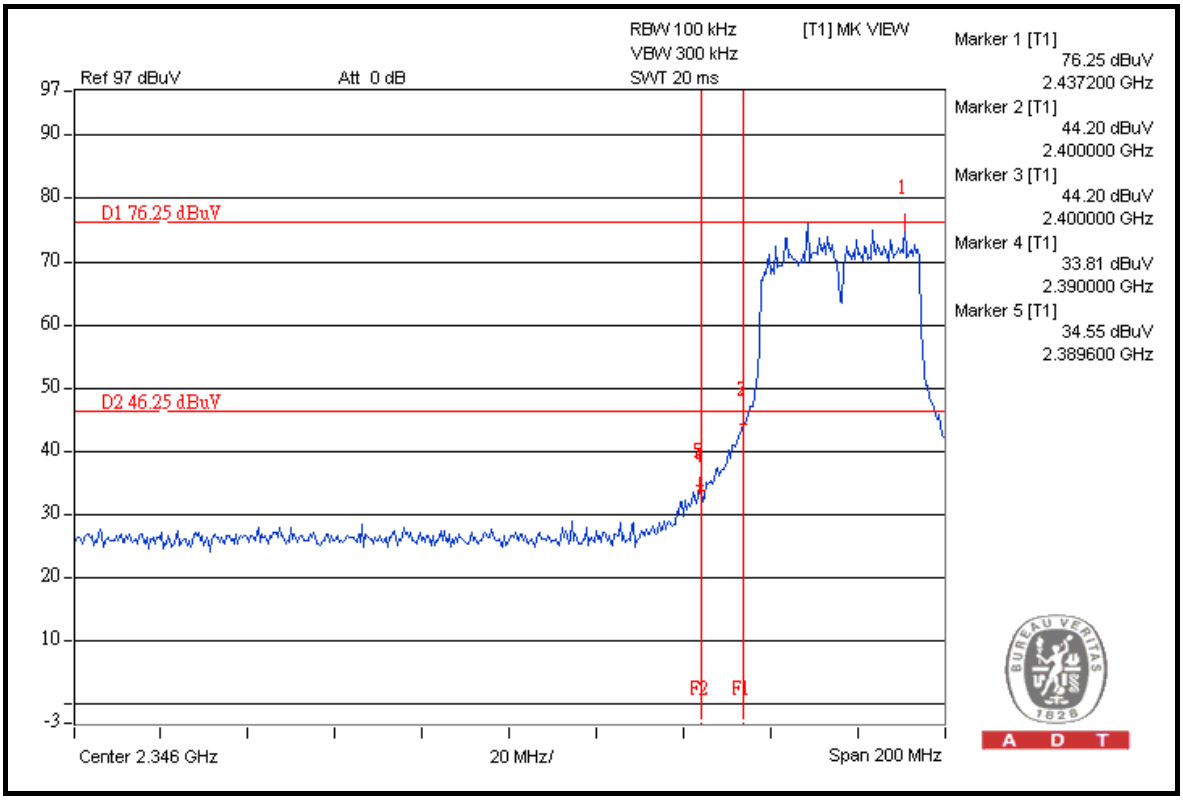
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2422.00 (PK)	106.60	41.70	64.90	74.00
2422.00 (AV)	93.90	41.62	52.28	54.00

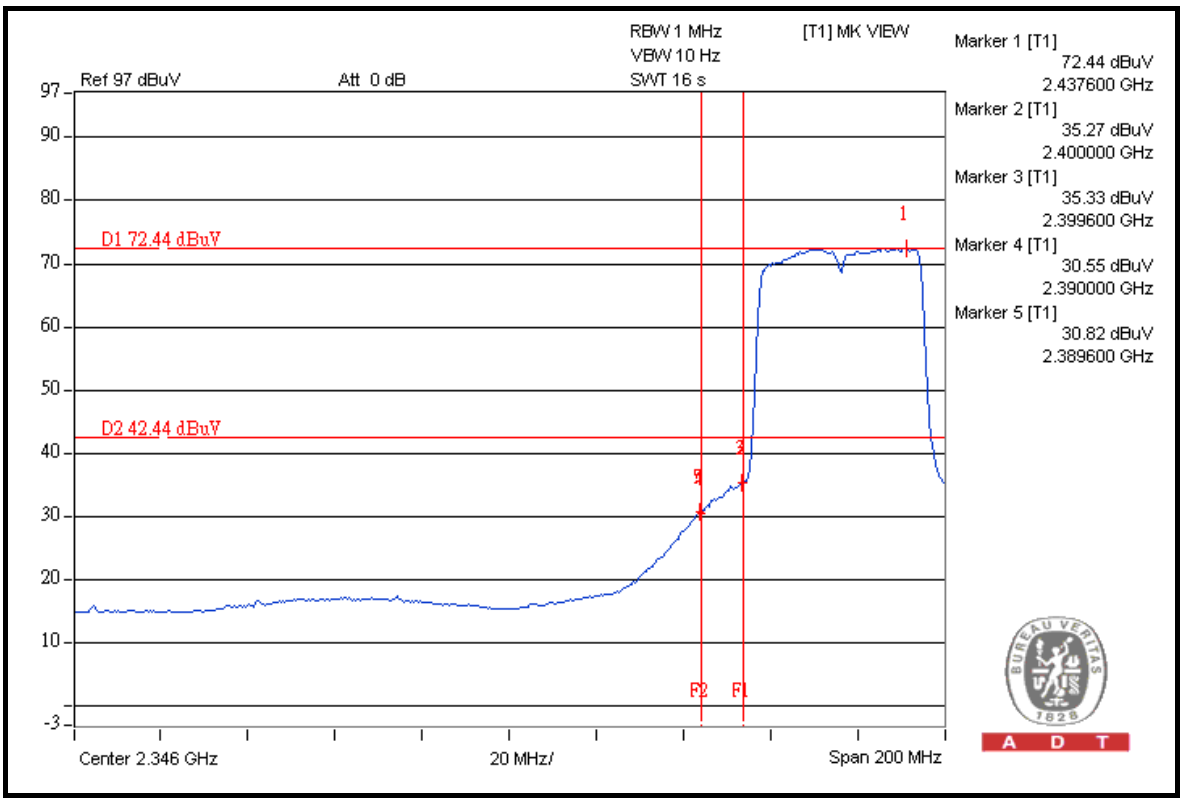
RESTRICT BAND (2483.5 ~ 2500 MHz)

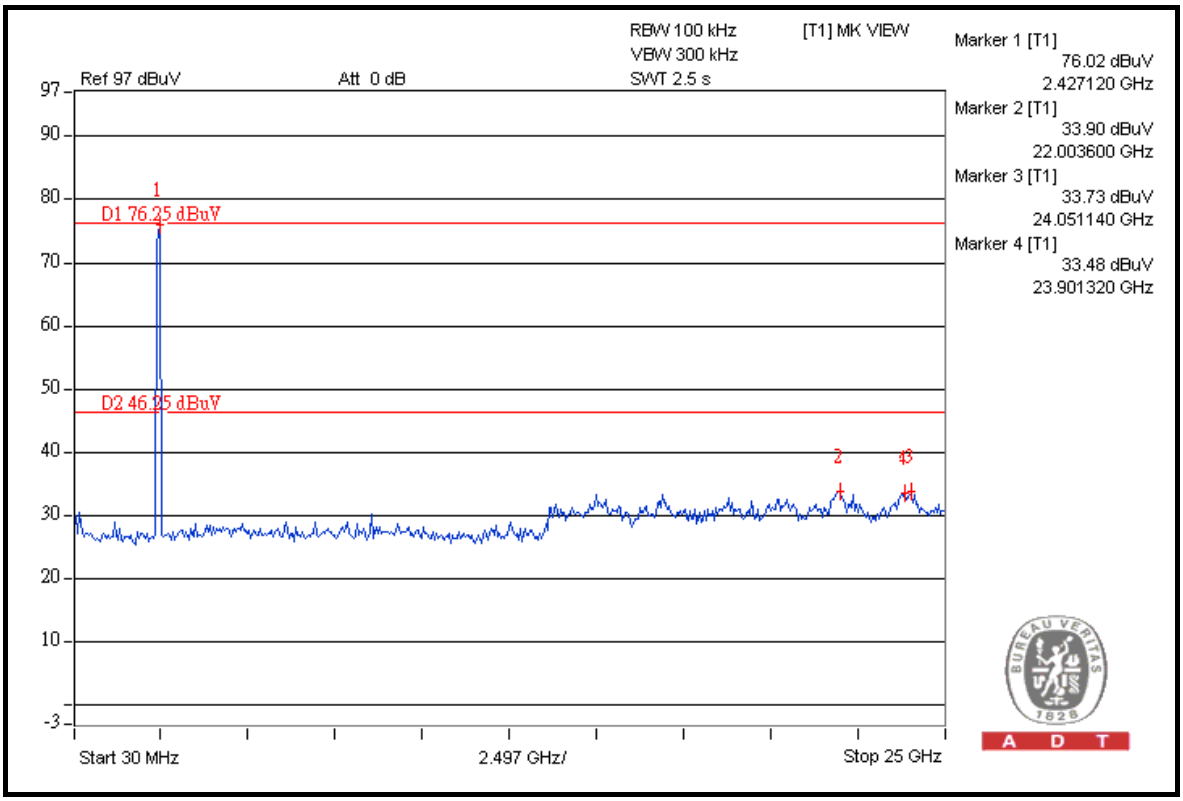
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2452.00 (PK)	106.00	42.55	63.45	74.00
2452.00 (AV)	94.00	42.38	51.62	54.00

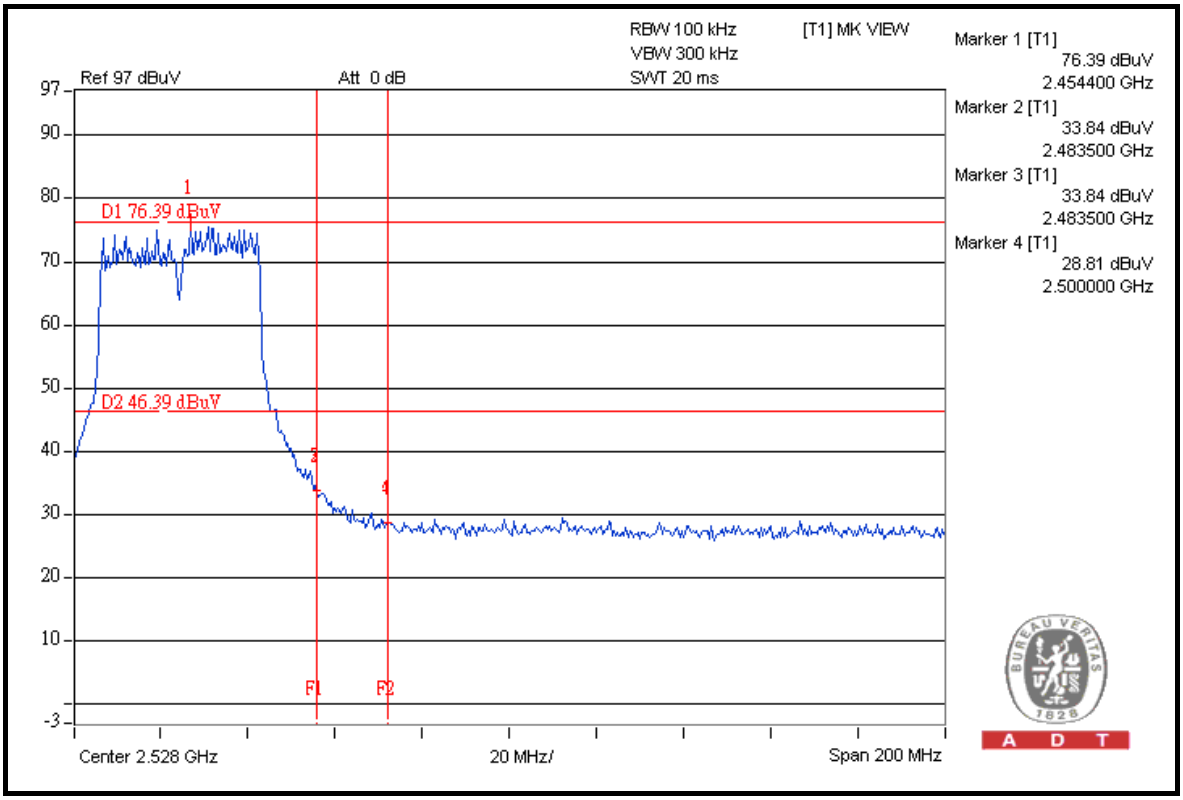
NOTE:

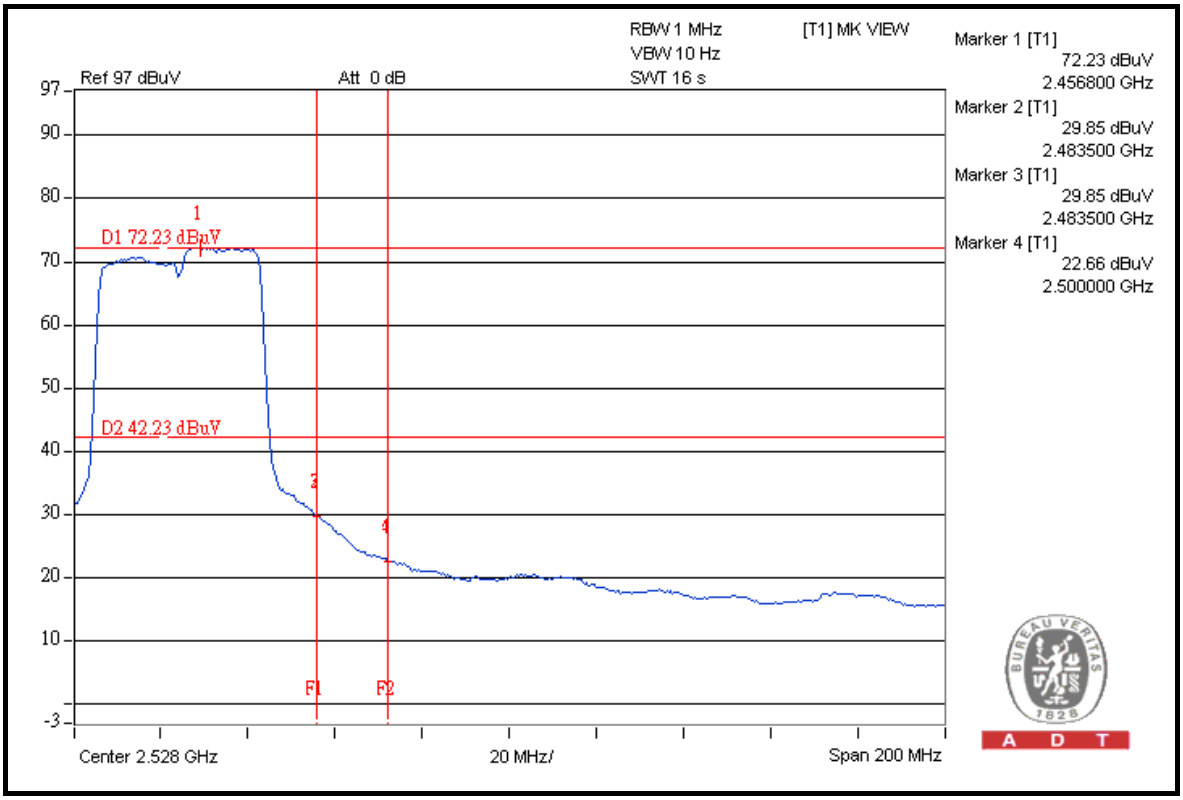
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

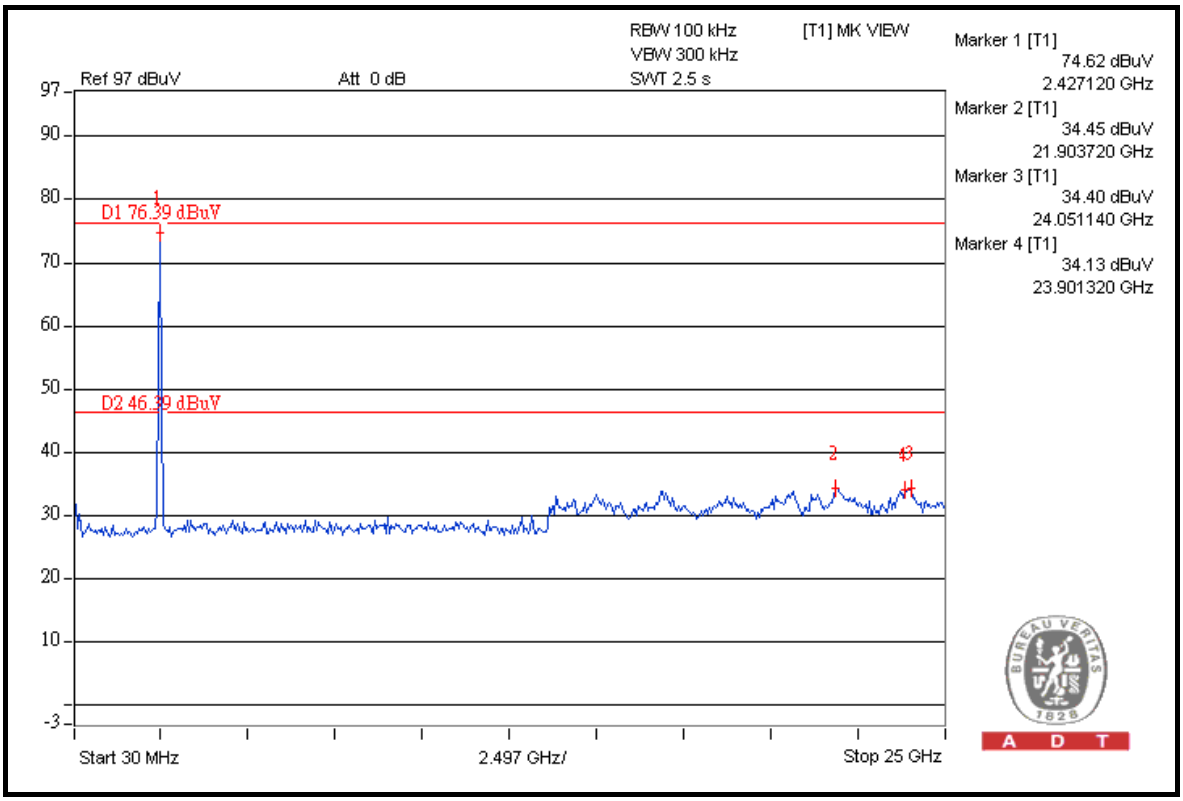

RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 76.25 dBuV
D2 46.25 dBuV
Marker 1 [T1]
76.25 dBuV
2.437200 GHz
Marker 2 [T1]
44.20 dBuV
2.400000 GHz
Marker 3 [T1]
44.20 dBuV
2.400000 GHz
Marker 4 [T1]
33.81 dBuV
2.390000 GHz
Marker 5 [T1]
34.55 dBuV
2.389600 GHz
Center 2.346 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 72.44 dBuV
D2 42.44 dBuV
Marker 1 [T1]
72.44 dBuV
2.437600 GHz
Marker 2 [T1]
35.27 dBuV
2.400000 GHz
Marker 3 [T1]
35.33 dBuV
2.399600 GHz
Marker 4 [T1]
30.55 dBuV
2.390000 GHz
Marker 5 [T1]
30.82 dBuV
2.389600 GHz
Center 2.346 GHz
20 MHz/
Span 200 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 76.25 dBuV
D2 46.25 dBuV
Marker 1 [T1]
76.02 dBuV
2.427120 GHz
Marker 2 [T1]
33.90 dBuV
22.003600 GHz
Marker 3 [T1]
33.73 dBuV
24.051140 GHz
Marker 4 [T1]
33.48 dBuV
23.901320 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 76.39 dBuV
D2 46.39 dBuV
Marker 1 [T1]
76.39 dBuV
2.454400 GHz
Marker 2 [T1]
33.84 dBuV
2.483500 GHz
Marker 3 [T1]
33.84 dBuV
2.483500 GHz
Marker 4 [T1]
28.81 dBuV
2.500000 GHz
F1
F2
Center 2.528 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
72.23 dBuV
2.456800 GHz
Marker 2 [T1]
29.85 dBuV
2.483500 GHz
Marker 3 [T1]
29.85 dBuV
2.483500 GHz
Marker 4 [T1]
22.66 dBuV
2.500000 GHz
D1 72.23 dBuV
D2 42.23 dBuV
F1
F2
Center 2.528 GHz
20 MHz/
Span 200 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
74.62 dBuV
2.427120 GHz
Marker 2 [T1]
34.45 dBuV
21.903720 GHz
Marker 3 [T1]
34.40 dBuV
24.051140 GHz
Marker 4 [T1]
34.13 dBuV
23.901320 GHz
D1 76.39 dBuV
D2 46.39 dBuV
Start 30 MHz
2.497 GHz/
Stop 25 GHz

TEST MODE B1

802.11b

RESTRICT BAND (2310 ~ 2390 MHz)

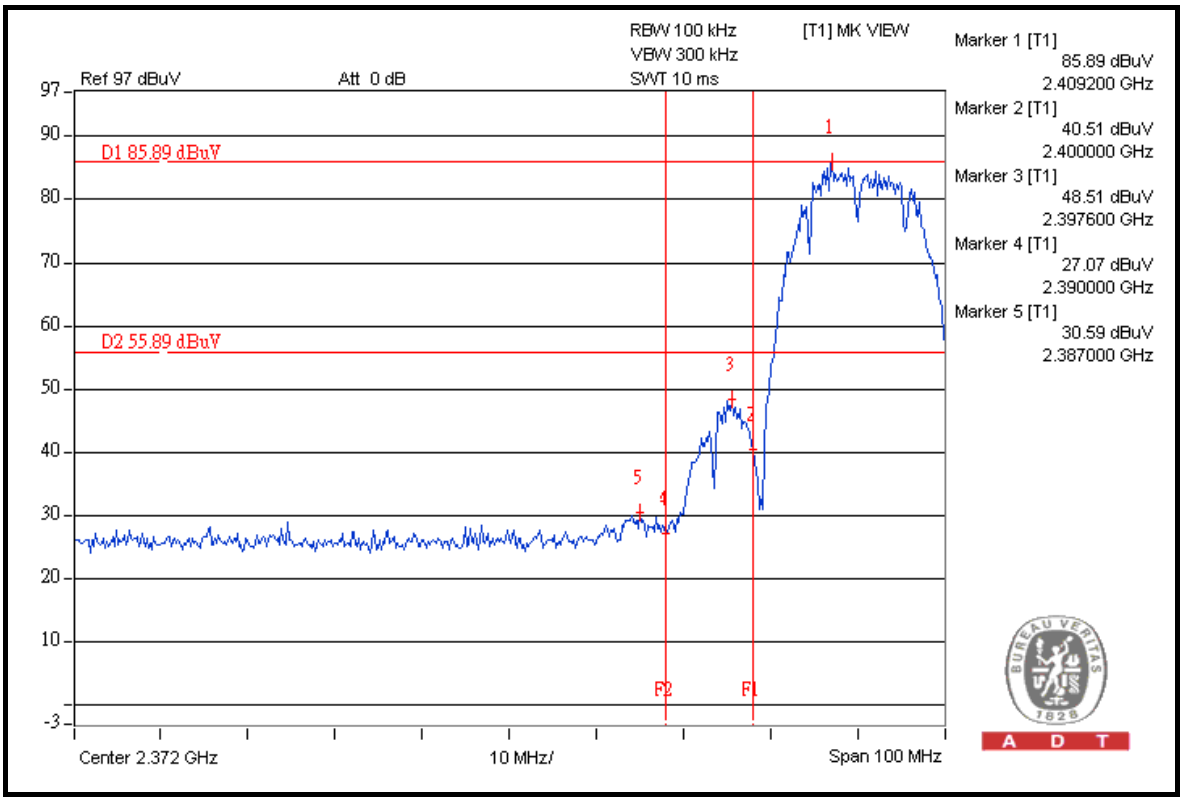
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2412.00 (PK)	112.20	55.30	56.90	74.00
2412.00 (AV)	108.20	56.30	51.90	54.00

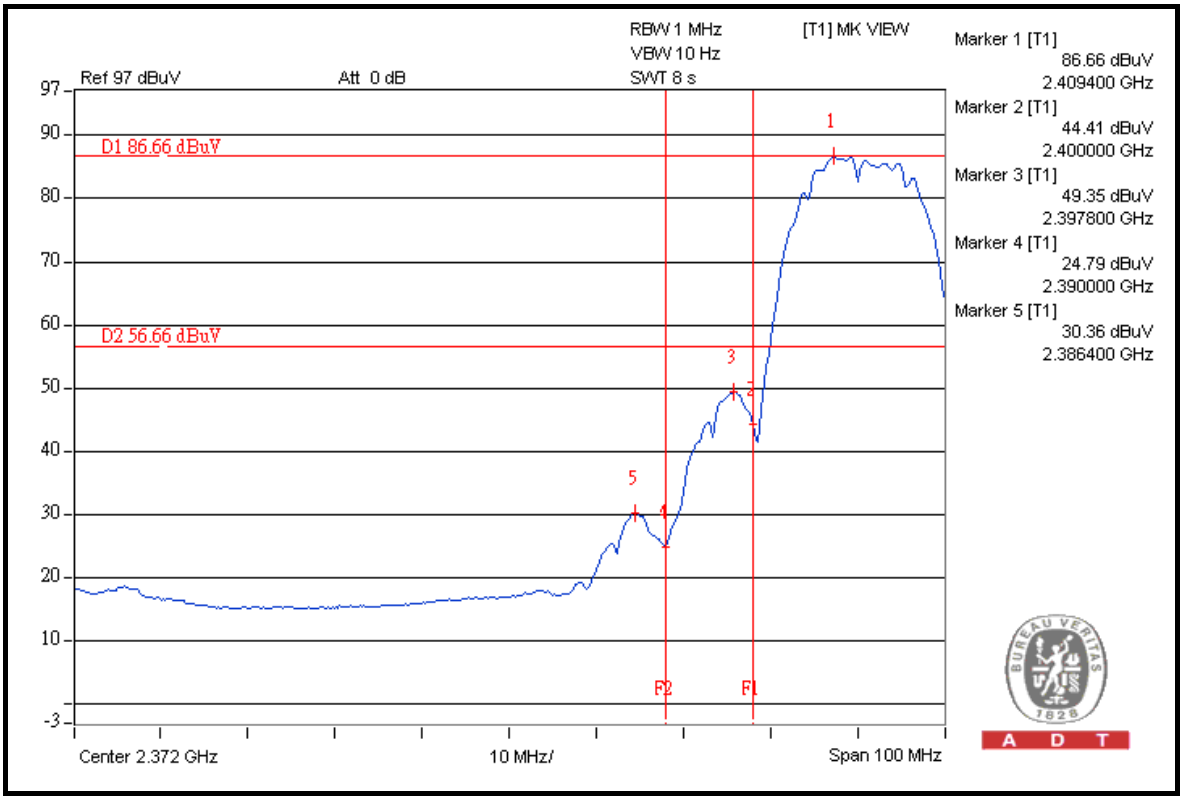
RESTRICT BAND (2483.5 ~ 2500 MHz)

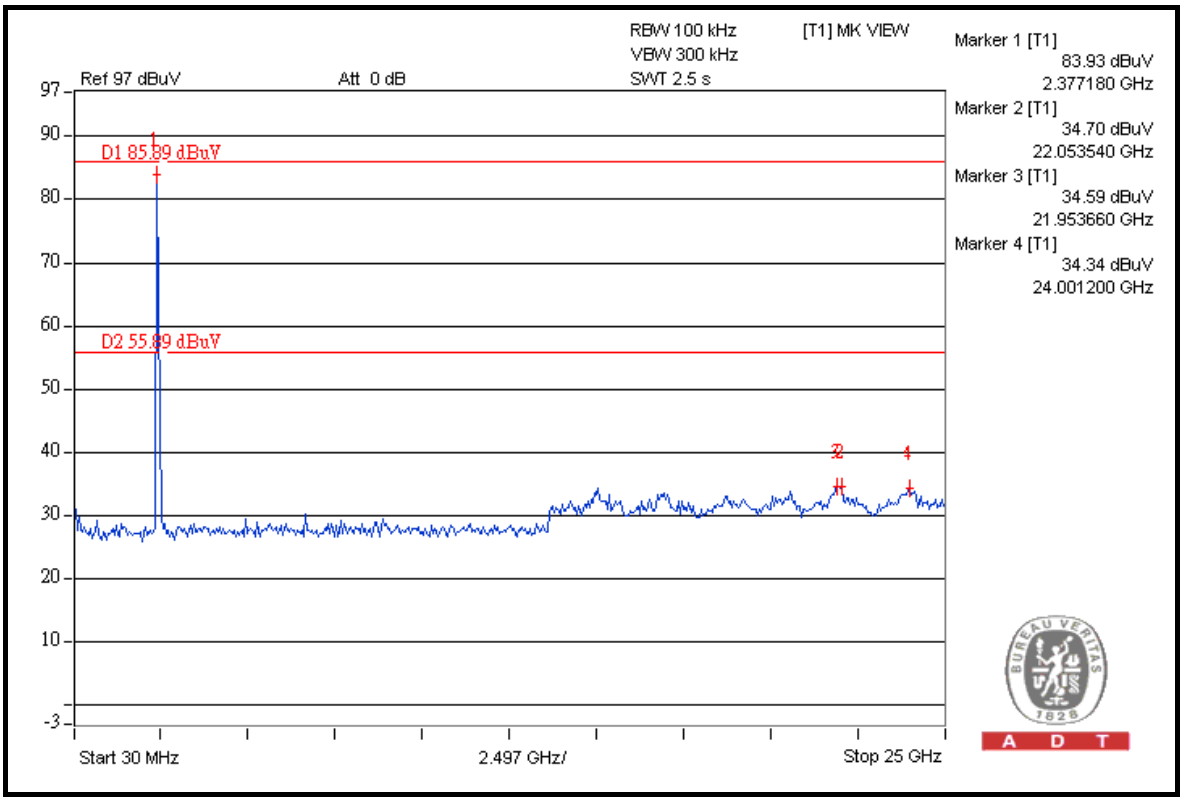
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	111.60	53.01	58.59	74.00
2462.00 (AV)	107.30	55.02	52.28	54.00

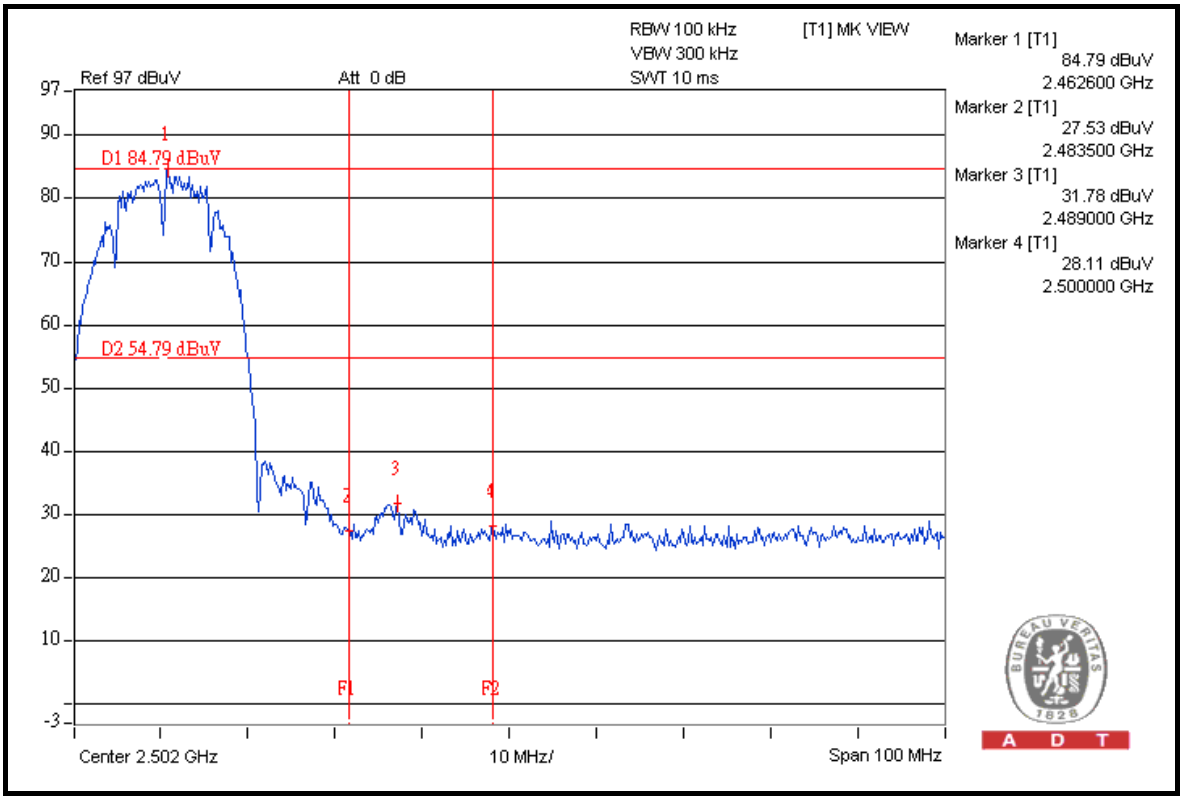
NOTE:

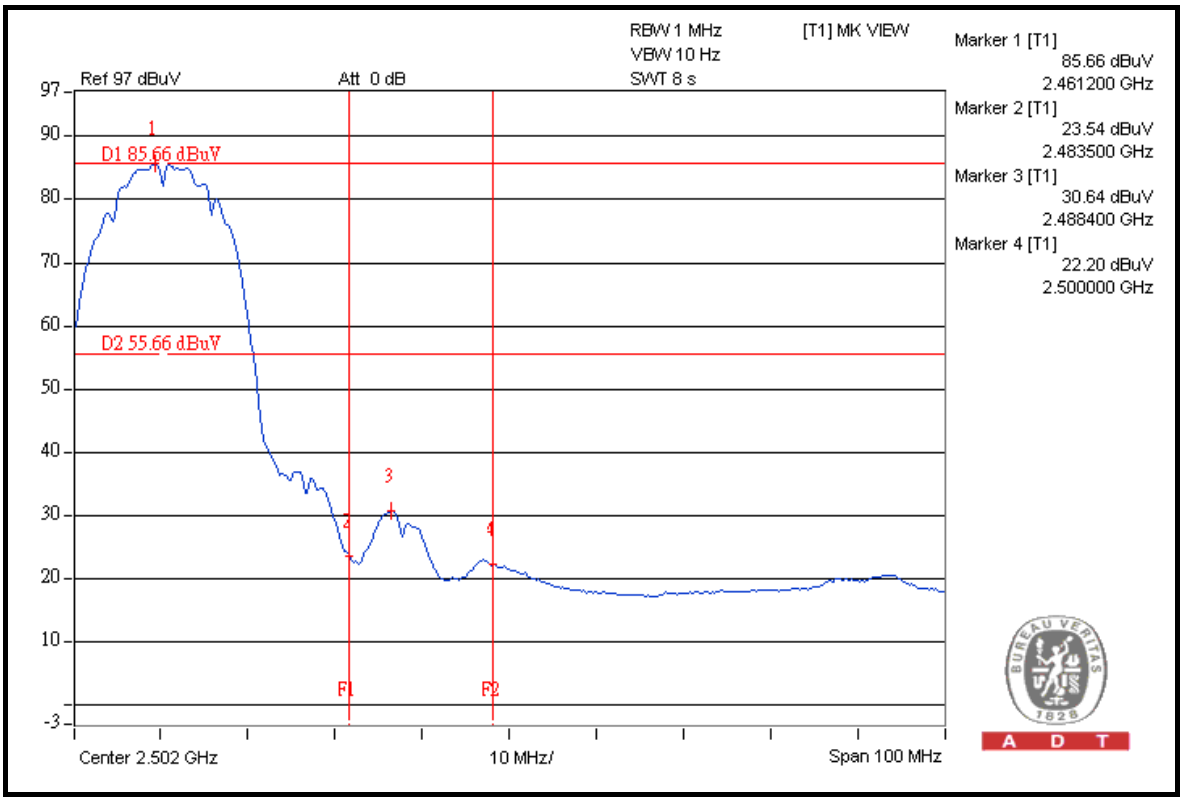
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

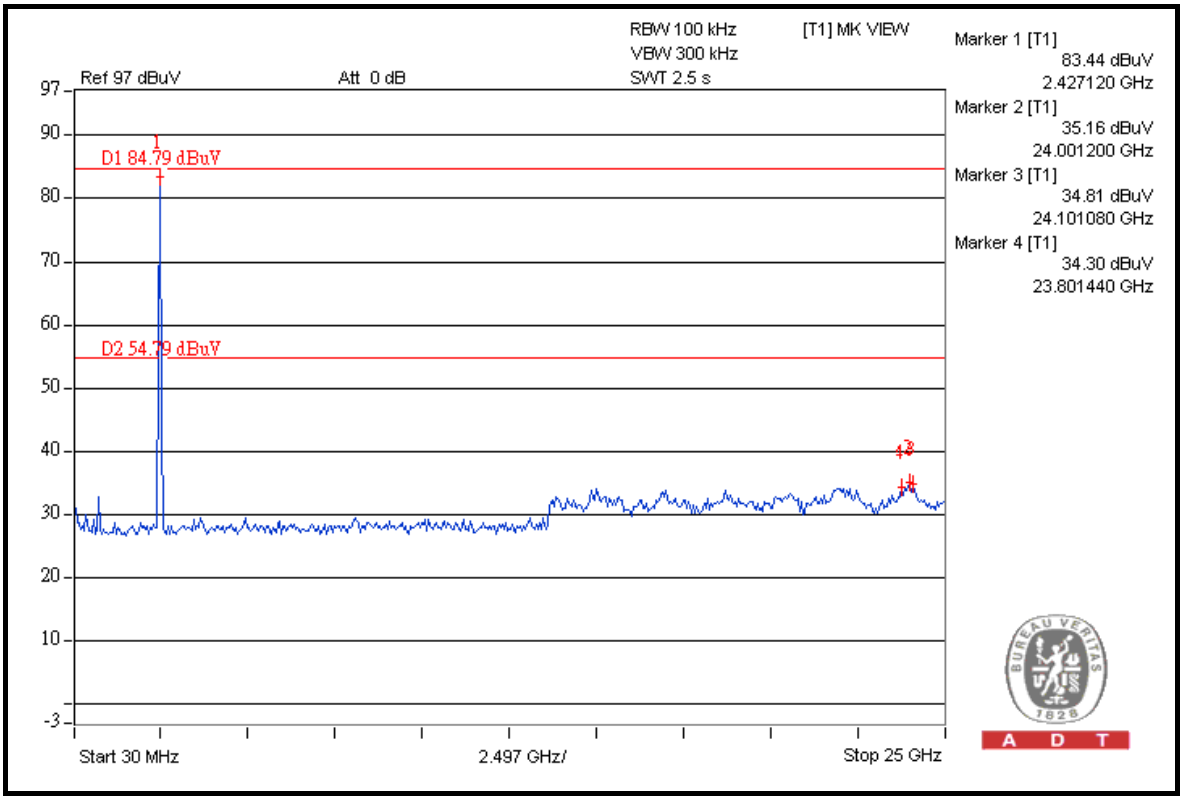

RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 85.89 dBuV
D2 55.89 dBuV
Marker 1 [T1]
85.89 dBuV
2.409200 GHz
Marker 2 [T1]
40.51 dBuV
2.400000 GHz
Marker 3 [T1]
48.51 dBuV
2.397600 GHz
Marker 4 [T1]
27.07 dBuV
2.390000 GHz
Marker 5 [T1]
30.59 dBuV
2.387000 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 86.66 dBuV
D2 56.66 dBuV
Marker 1 [T1]
86.66 dBuV
2.409400 GHz
Marker 2 [T1]
44.41 dBuV
2.400000 GHz
Marker 3 [T1]
49.35 dBuV
2.397800 GHz
Marker 4 [T1]
24.79 dBuV
2.390000 GHz
Marker 5 [T1]
30.36 dBuV
2.386400 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 85.89 dBuV
D2 55.89 dBuV
Marker 1 [T1]
83.93 dBuV
2.377180 GHz
Marker 2 [T1]
34.70 dBuV
22.053540 GHz
Marker 3 [T1]
34.59 dBuV
21.953660 GHz
Marker 4 [T1]
34.34 dBuV
24.001200 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 84.79 dBuV
D2 54.79 dBuV
Marker 1 [T1]
84.79 dBuV
2.462600 GHz
Marker 2 [T1]
27.53 dBuV
2.483500 GHz
Marker 3 [T1]
31.78 dBuV
2.489000 GHz
Marker 4 [T1]
28.11 dBuV
2.500000 GHz
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 85.66 dBuV
D2 55.66 dBuV
Marker 1 [T1]
85.66 dBuV
2.461200 GHz
Marker 2 [T1]
23.54 dBuV
2.483500 GHz
Marker 3 [T1]
30.64 dBuV
2.488400 GHz
Marker 4 [T1]
22.20 dBuV
2.500000 GHz
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 84.79 dBuV
D2 54.79 dBuV
Marker 1 [T1]
83.44 dBuV
2.427120 GHz
Marker 2 [T1]
35.16 dBuV
24.001200 GHz
Marker 3 [T1]
34.81 dBuV
24.101080 GHz
Marker 4 [T1]
34.30 dBuV
23.801440 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g

RESTRICT BAND (2310 ~ 2390 MHz)

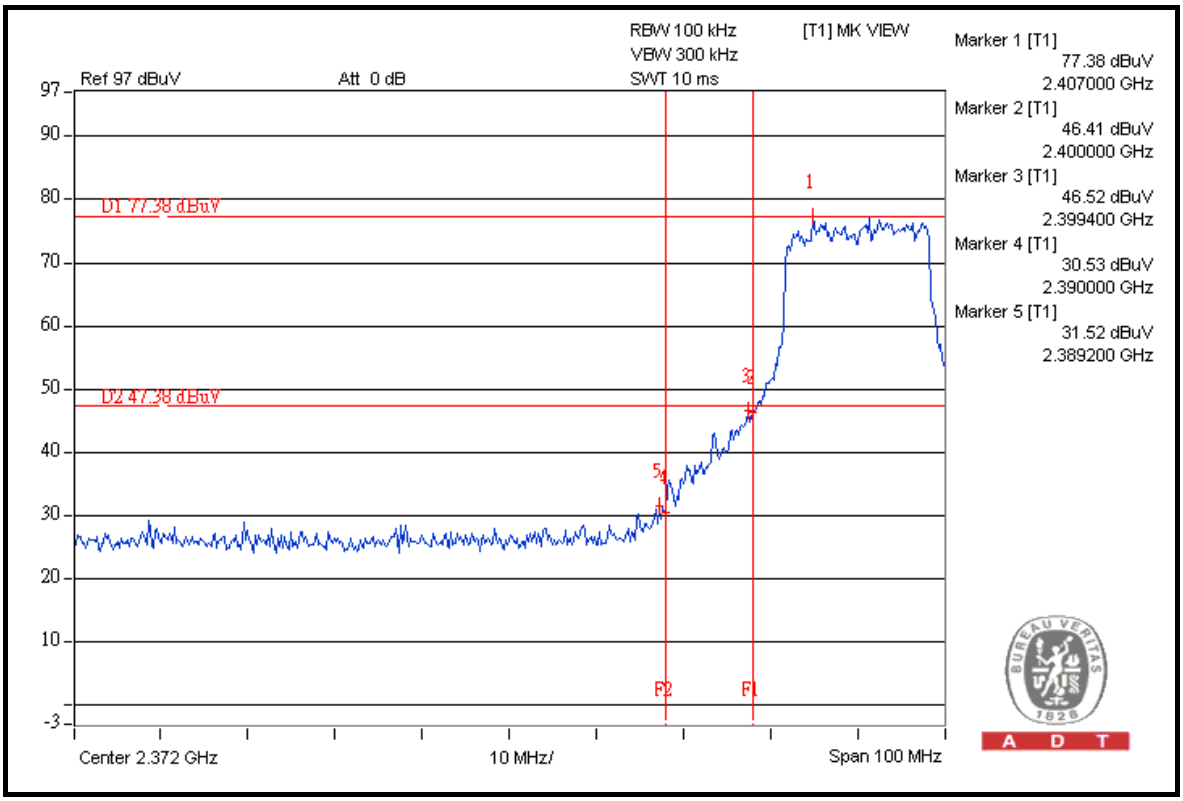
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2412.00 (PK)	112.40	45.86	66.54	74.00
2412.00 (AV)	100.30	47.76	52.54	54.00

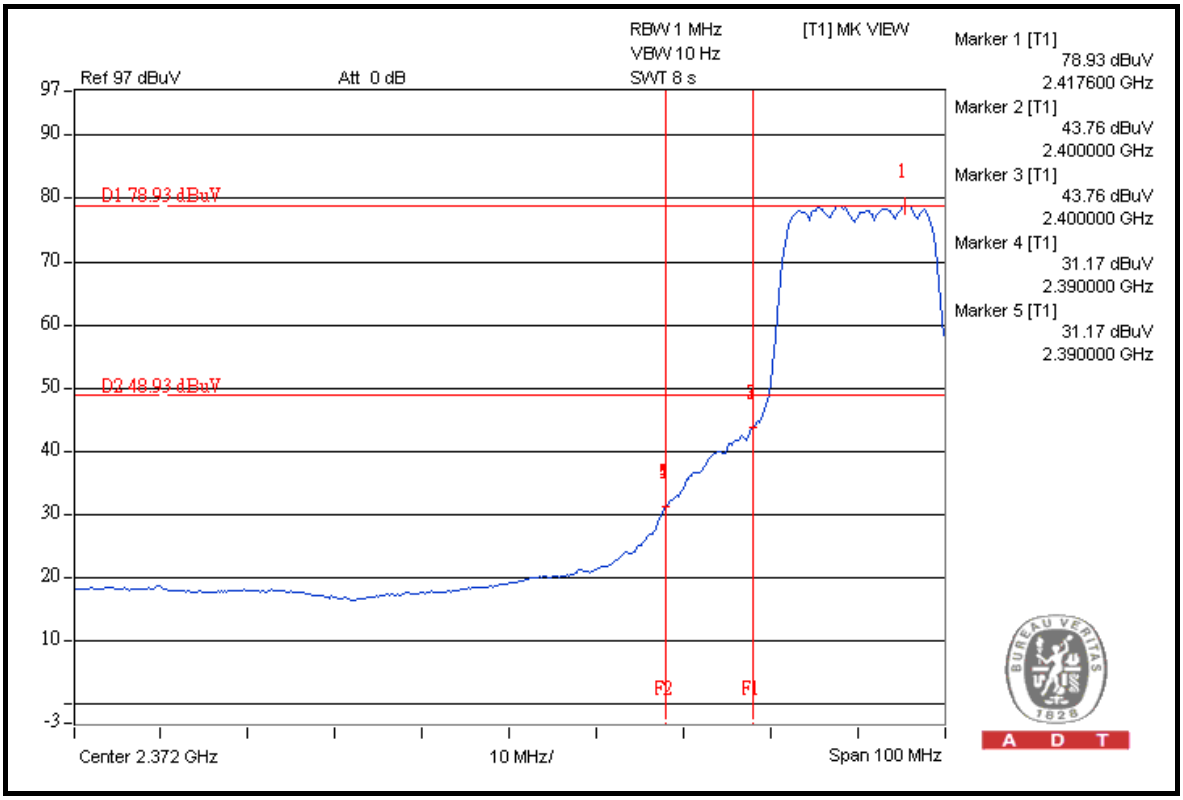
RESTRICT BAND (2483.5 ~ 2500 MHz)

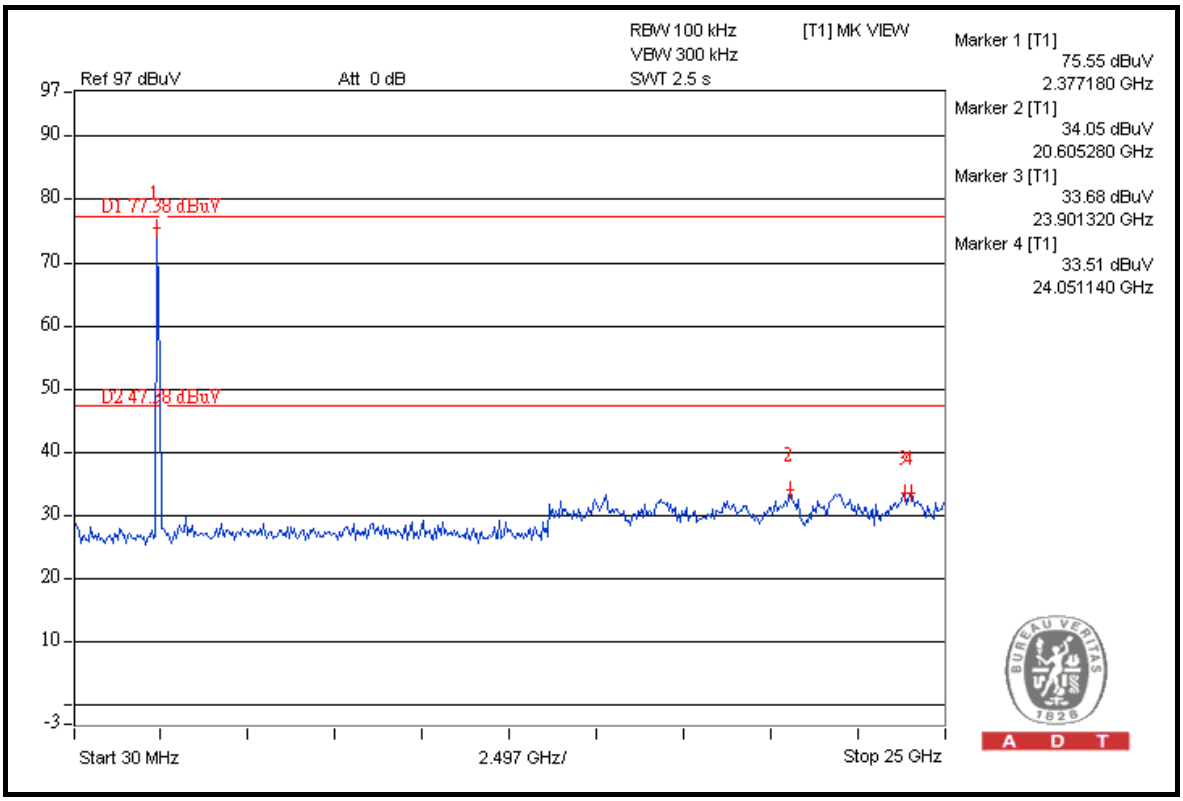
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	111.80	46.69	65.11	74.00
2462.00 (AV)	99.80	48.76	51.04	54.00

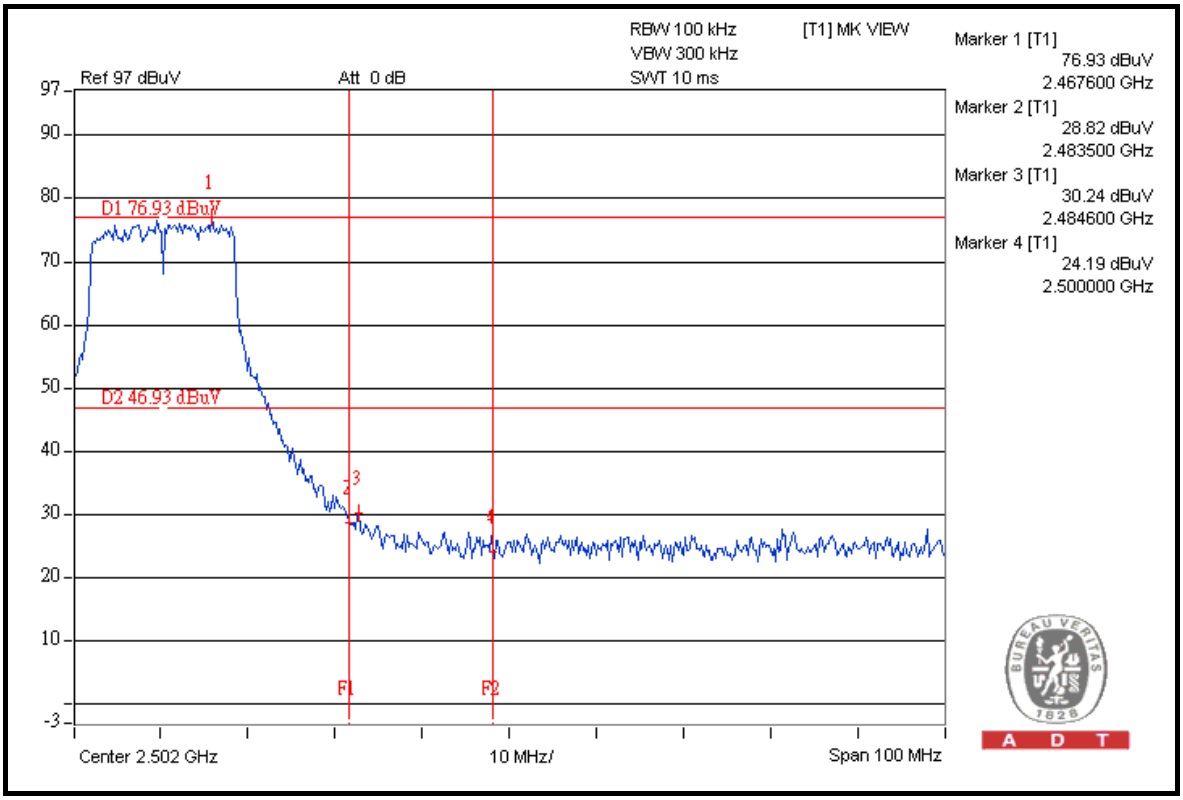
NOTE:

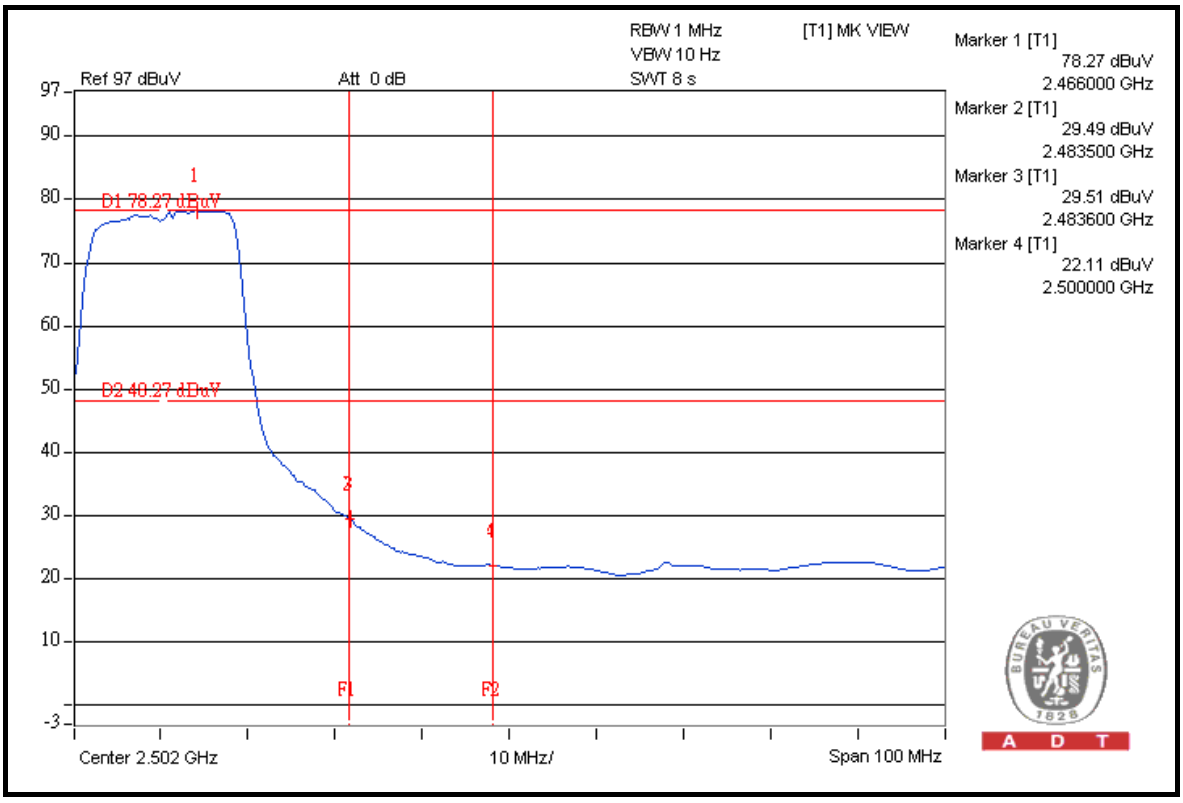
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

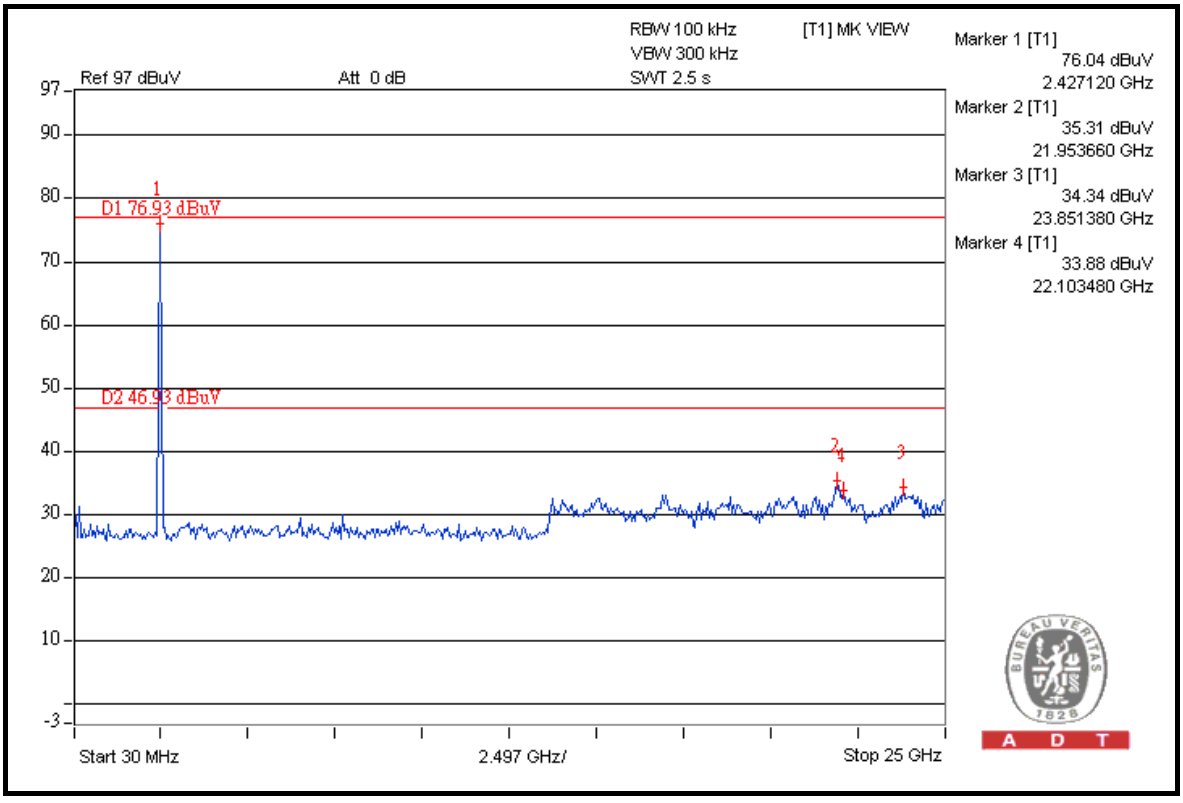

RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 77.38 dBuV
D2 47.38 dBuV
Marker 1 [T1]
77.38 dBuV
2.407000 GHz
Marker 2 [T1]
46.41 dBuV
2.400000 GHz
Marker 3 [T1]
46.52 dBuV
2.399400 GHz
Marker 4 [T1]
30.53 dBuV
2.390000 GHz
Marker 5 [T1]
31.52 dBuV
2.389200 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 78.93 dBuV
D2 48.93 dBuV
Marker 1 [T1]
78.93 dBuV
2.417600 GHz
Marker 2 [T1]
43.76 dBuV
2.400000 GHz
Marker 3 [T1]
43.76 dBuV
2.400000 GHz
Marker 4 [T1]
31.17 dBuV
2.390000 GHz
Marker 5 [T1]
31.17 dBuV
2.390000 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 77.38 dBuV
D2 47.38 dBuV
Marker 1 [T1]
75.55 dBuV
2.377180 GHz
Marker 2 [T1]
34.05 dBuV
20.605280 GHz
Marker 3 [T1]
33.68 dBuV
23.901320 GHz
Marker 4 [T1]
33.51 dBuV
24.051140 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 76.93 dBuV
D2 46.93 dBuV
Marker 1 [T1]
76.93 dBuV
2.467600 GHz
Marker 2 [T1]
28.82 dBuV
2.483500 GHz
Marker 3 [T1]
30.24 dBuV
2.484600 GHz
Marker 4 [T1]
24.19 dBuV
2.500000 GHz
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 78.27 dBuV
D2 40.27 dBuV
Marker 1 [T1]
78.27 dBuV
2.466000 GHz
Marker 2 [T1]
29.49 dBuV
2.483500 GHz
Marker 3 [T1]
29.51 dBuV
2.483600 GHz
Marker 4 [T1]
22.11 dBuV
2.500000 GHz
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 76.93 dBuV
D2 46.93 dBuV
Marker 1 [T1]
76.04 dBuV
2.427120 GHz
Marker 2 [T1]
35.31 dBuV
21.953660 GHz
Marker 3 [T1]
34.34 dBuV
23.851380 GHz
Marker 4 [T1]
33.88 dBuV
22.103480 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (20MHz)

RESTRICT BAND (2310 ~ 2390 MHz)

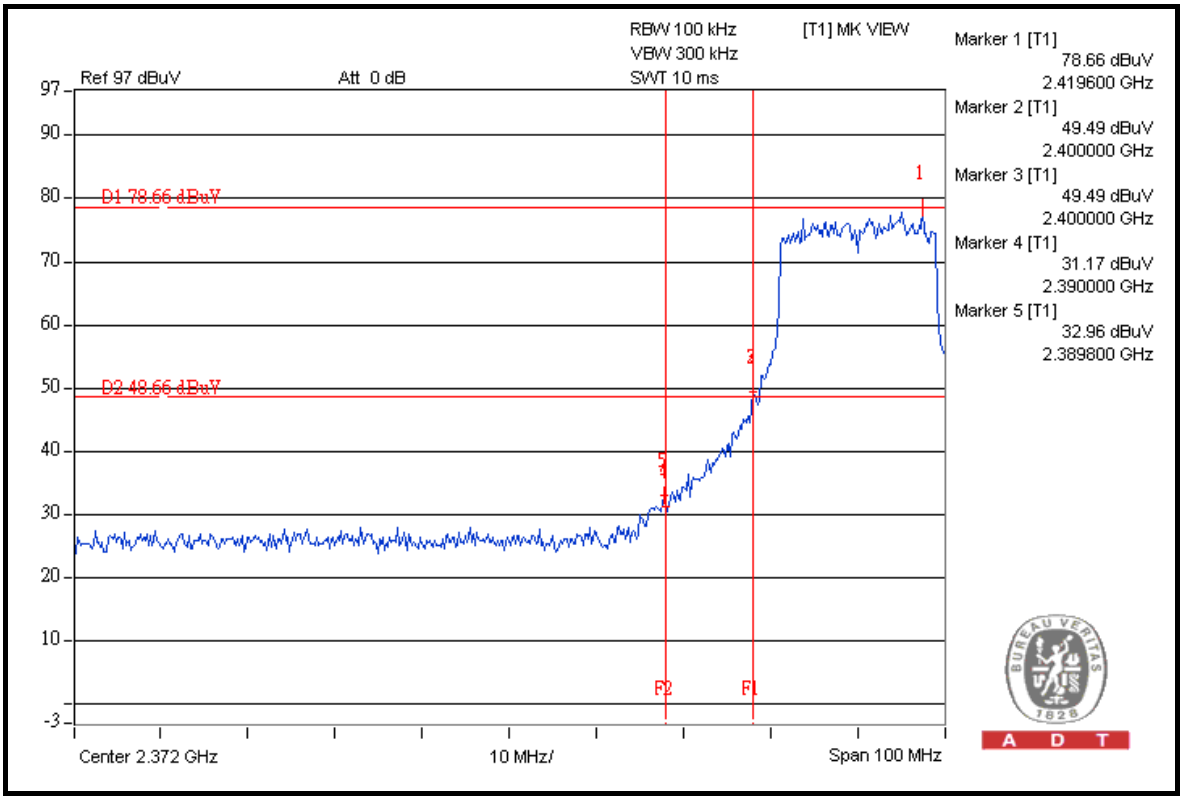
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2412.00 (PK)	111.40	45.70	65.70	74.00
2412.00 (AV)	99.30	49.28	50.02	54.00

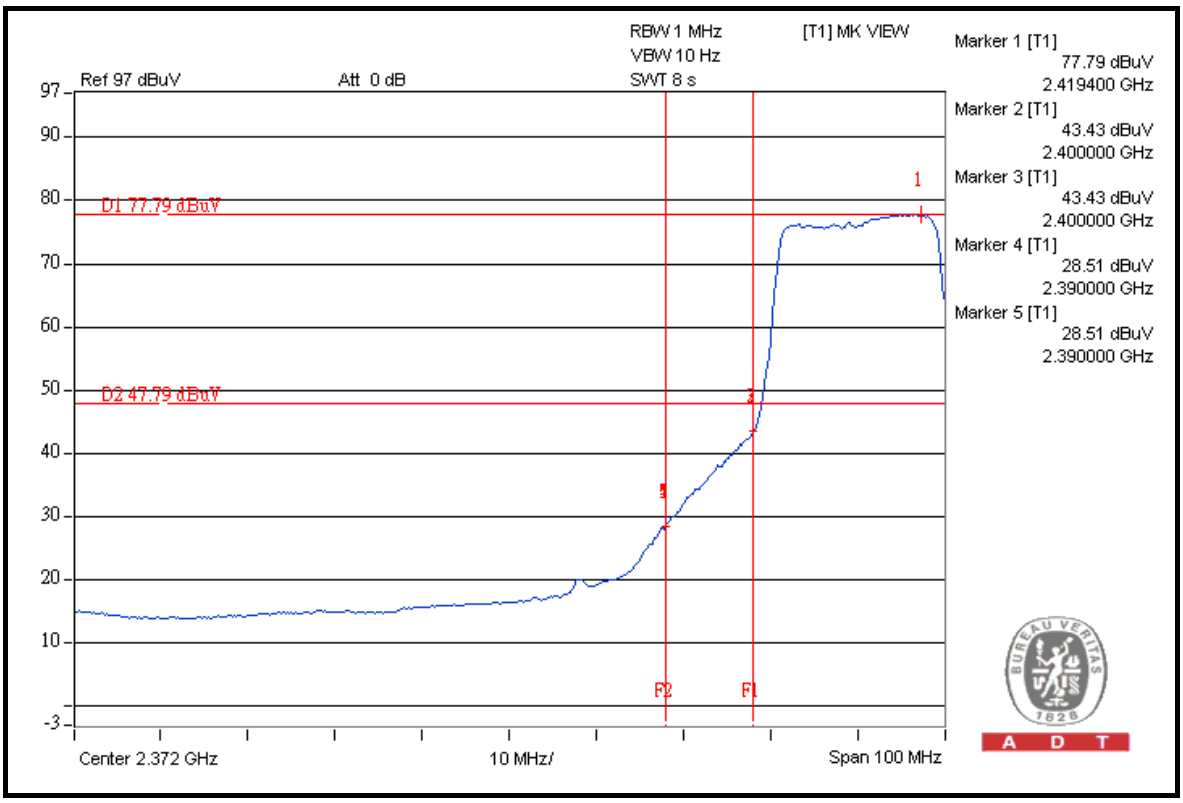
RESTRICT BAND (2483.5 ~ 2500 MHz)

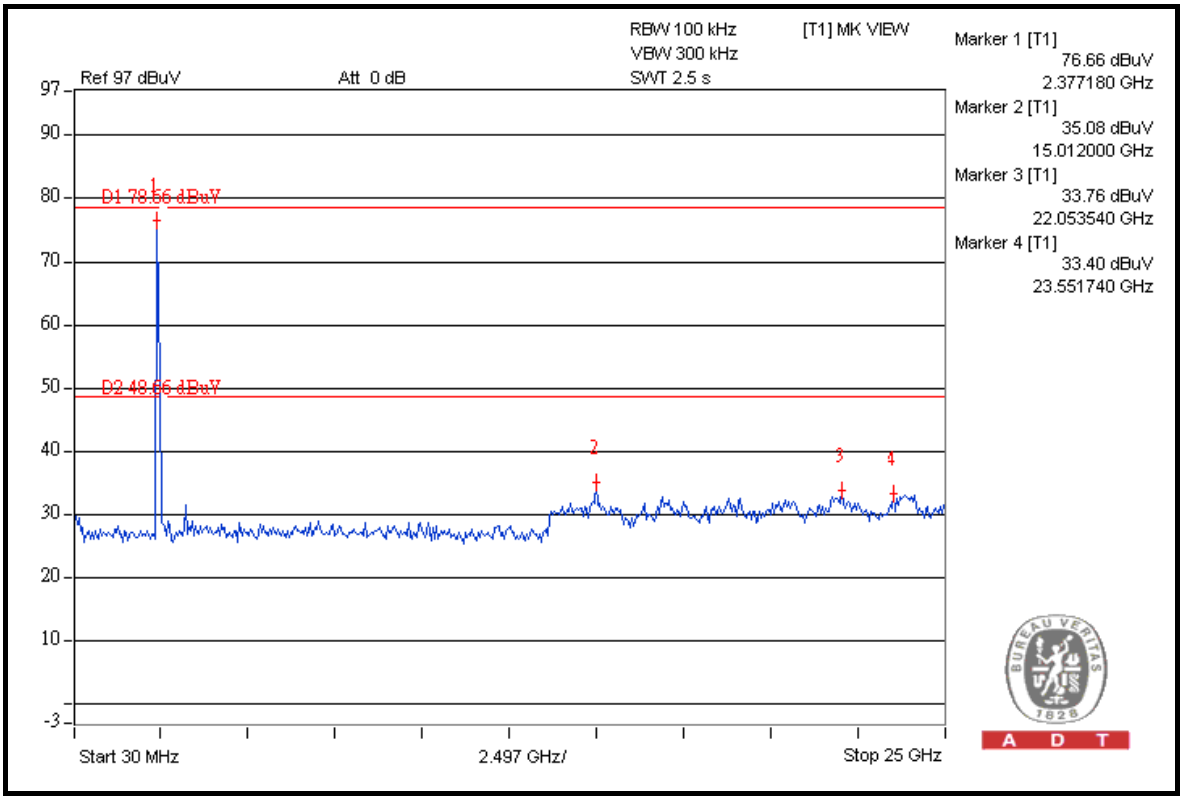
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	112.30	46.15	66.15	74.00
2462.00 (AV)	100.10	48.89	51.21	54.00

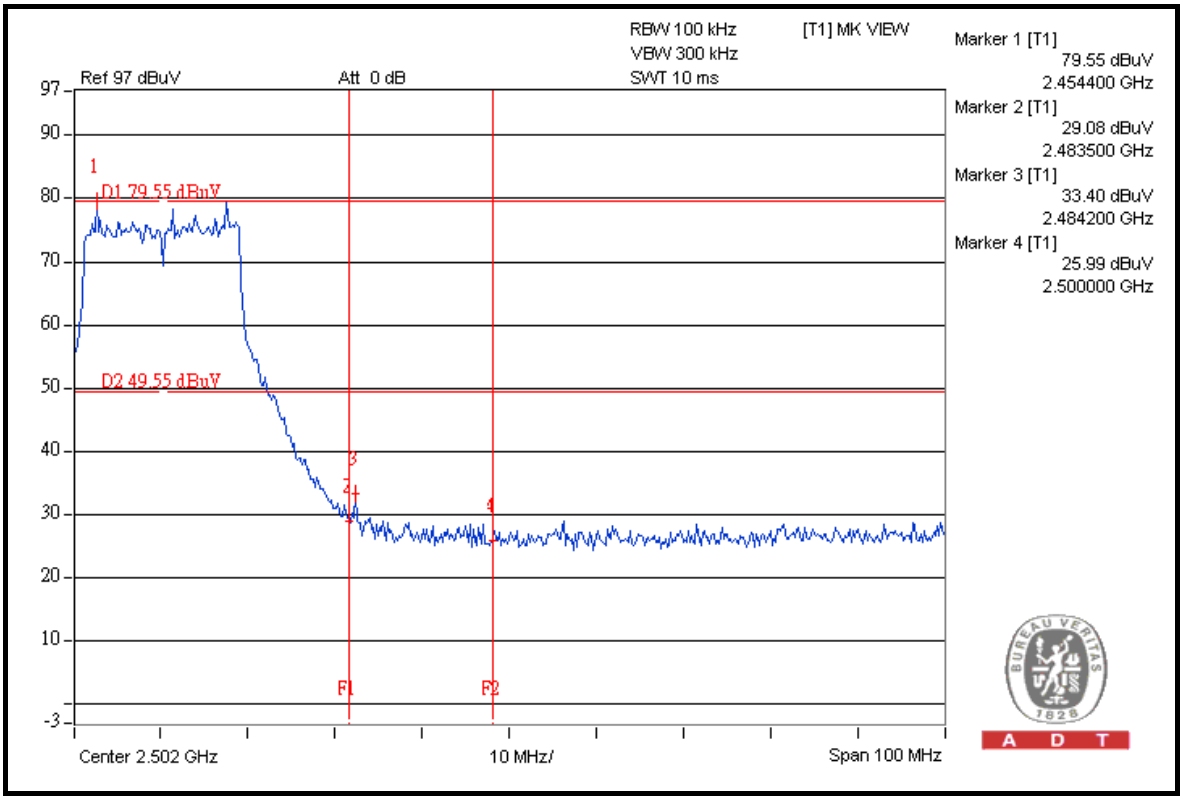
NOTE:

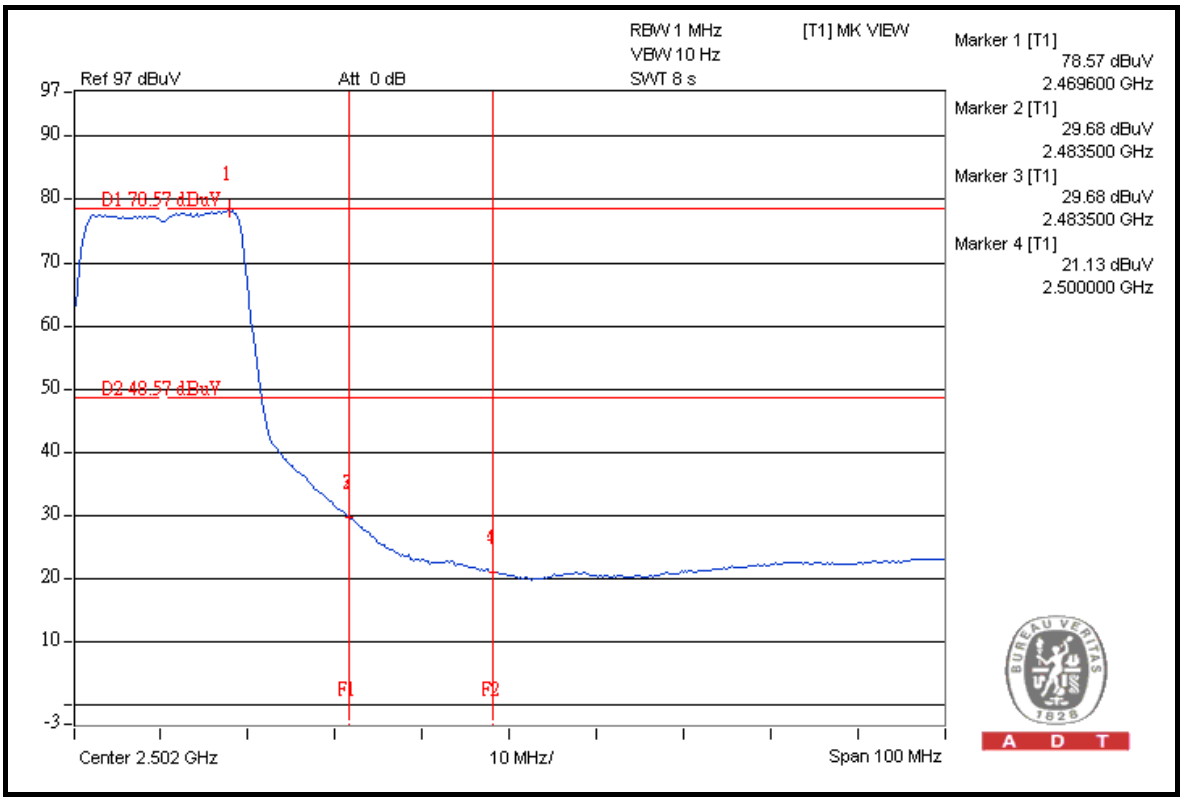
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

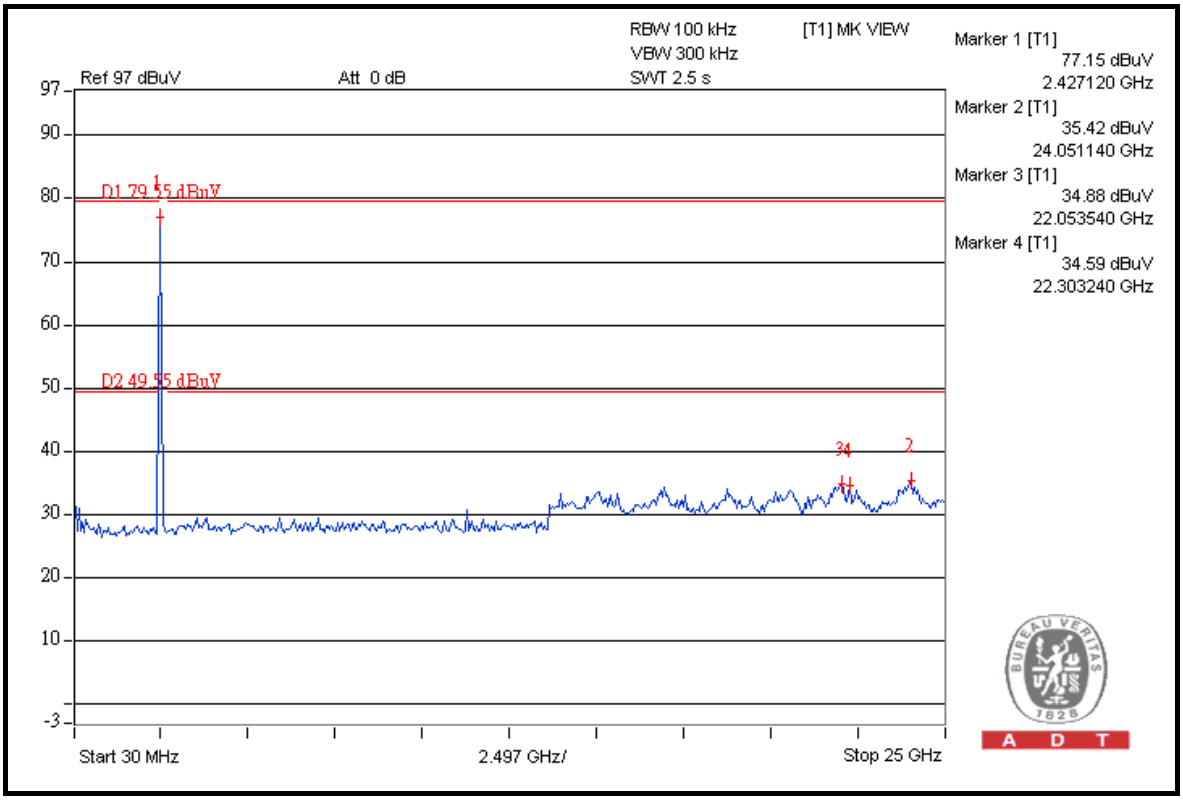

RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 78.66 dBuV
D2 48.66 dBuV
Marker 1 [T1]
78.66 dBuV
2.419600 GHz
Marker 2 [T1]
49.49 dBuV
2.400000 GHz
Marker 3 [T1]
49.49 dBuV
2.400000 GHz
Marker 4 [T1]
31.17 dBuV
2.390000 GHz
Marker 5 [T1]
32.96 dBuV
2.389800 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 77.79 dBuV
D2 47.79 dBuV
Marker 1 [T1]
77.79 dBuV
2.419400 GHz
Marker 2 [T1]
43.43 dBuV
2.400000 GHz
Marker 3 [T1]
43.43 dBuV
2.400000 GHz
Marker 4 [T1]
28.51 dBuV
2.390000 GHz
Marker 5 [T1]
28.51 dBuV
2.390000 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 78.66 dBuV
D2 48.66 dBuV
Marker 1 [T1]
76.66 dBuV
2.377180 GHz
Marker 2 [T1]
35.08 dBuV
15.012000 GHz
Marker 3 [T1]
33.76 dBuV
22.053540 GHz
Marker 4 [T1]
33.40 dBuV
23.551740 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 79.55 dBuV
D2 49.55 dBuV
Marker 1 [T1]
79.55 dBuV
2.454400 GHz
Marker 2 [T1]
29.08 dBuV
2.483500 GHz
Marker 3 [T1]
33.40 dBuV
2.484200 GHz
Marker 4 [T1]
25.99 dBuV
2.500000 GHz
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 70.57 dBuV
D2 48.57 dBuV
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz
Marker 1 [T1]
78.57 dBuV
2.469600 GHz
Marker 2 [T1]
29.68 dBuV
2.483500 GHz
Marker 3 [T1]
29.68 dBuV
2.483500 GHz
Marker 4 [T1]
21.13 dBuV
2.500000 GHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 79.55 dBuV
D2 49.55 dBuV
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Marker 1 [T1]
77.15 dBuV
2.427120 GHz
Marker 2 [T1]
35.42 dBuV
24.051140 GHz
Marker 3 [T1]
34.88 dBuV
22.053540 GHz
Marker 4 [T1]
34.59 dBuV
22.303240 GHz

802.11n (40MHz)

RESTRICT BAND (2310 ~ 2390 MHz)

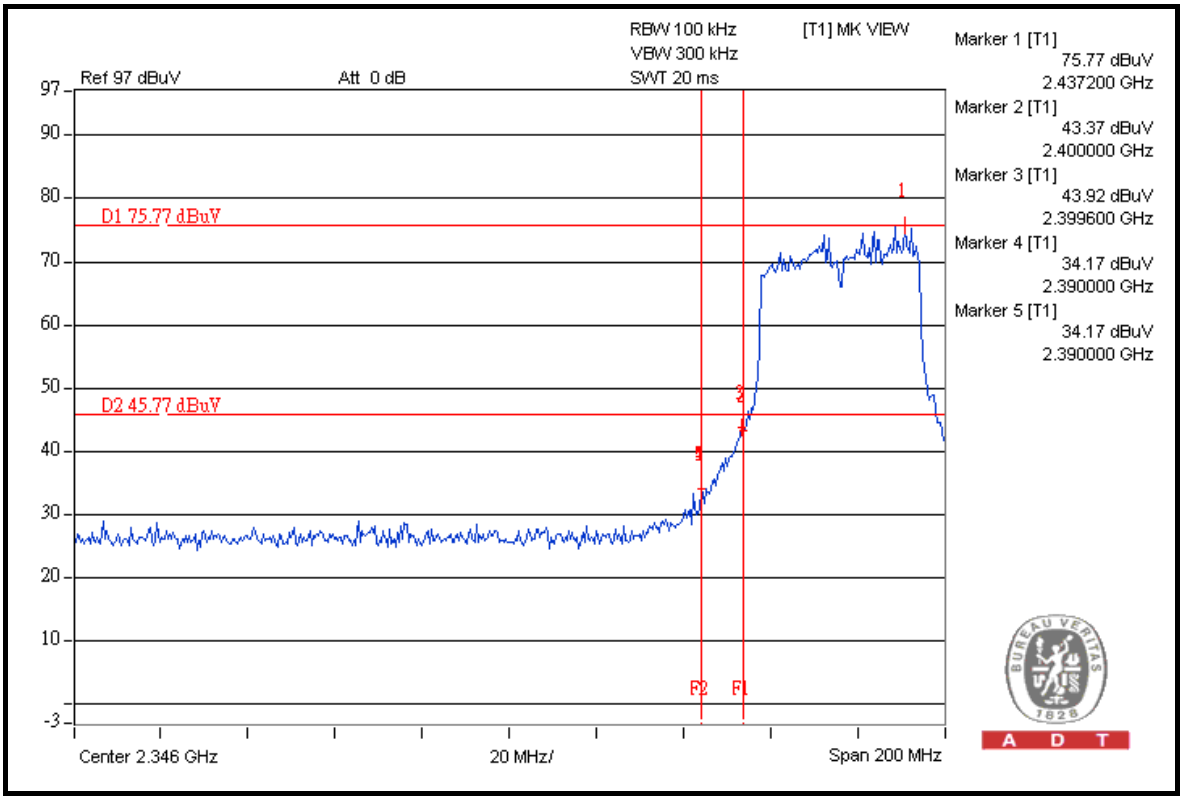
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2422.00 (PK)	106.40	41.60	64.80	74.00
2422.00 (AV)	93.90	42.59	51.31	54.00

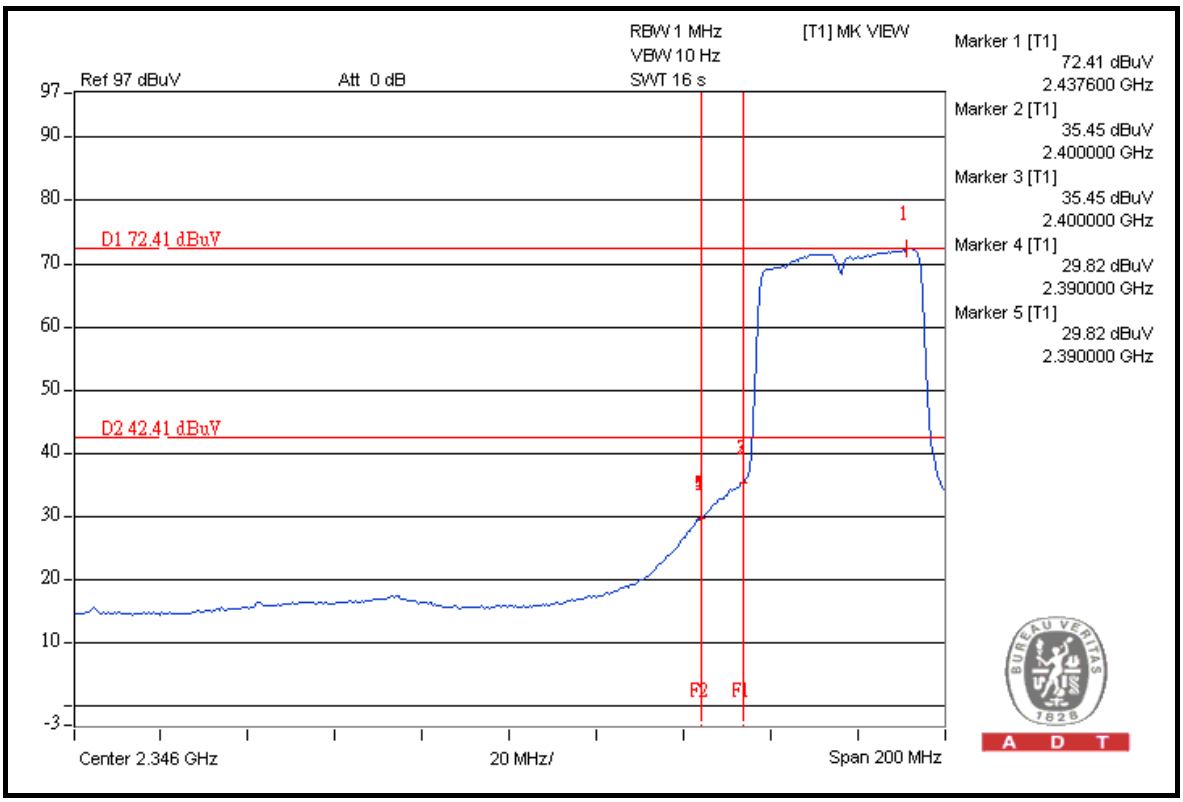
RESTRICT BAND (2483.5 ~ 2500 MHz)

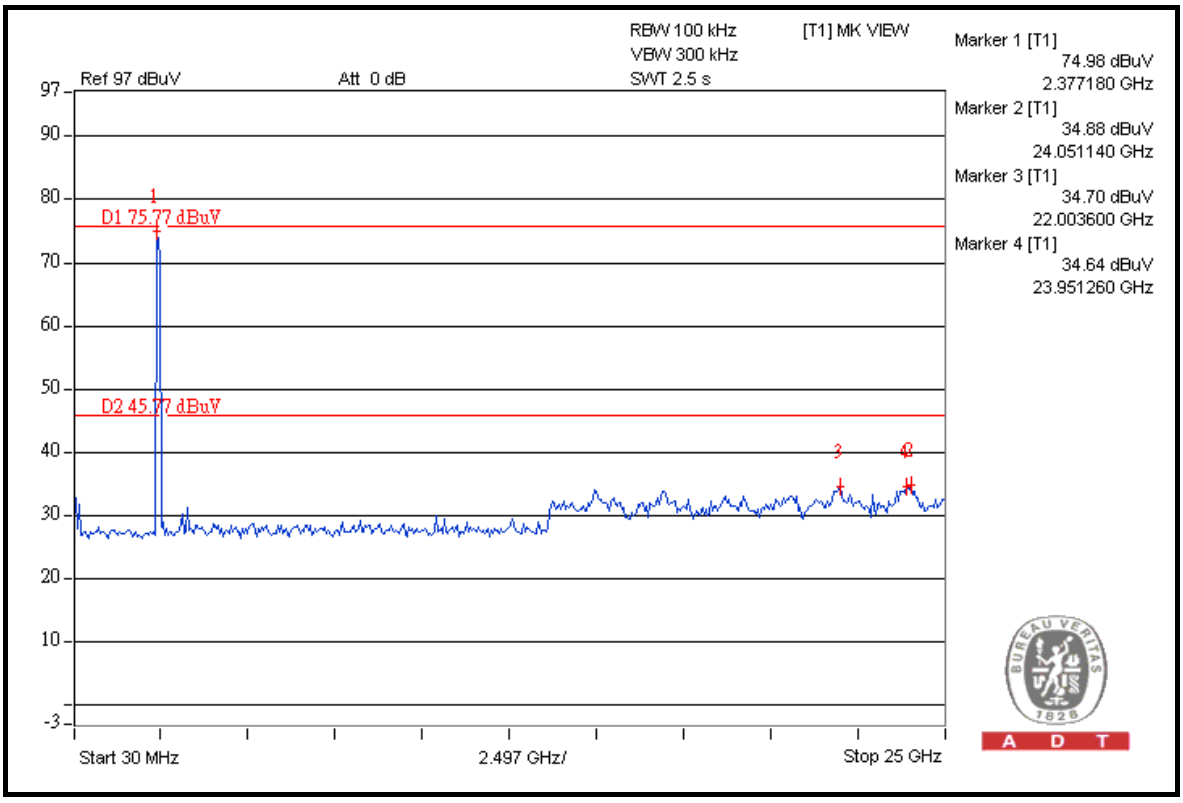
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2452.00 (PK)	105.80	42.12	63.68	74.00
2452.00 (AV)	93.20	41.94	51.26	54.00

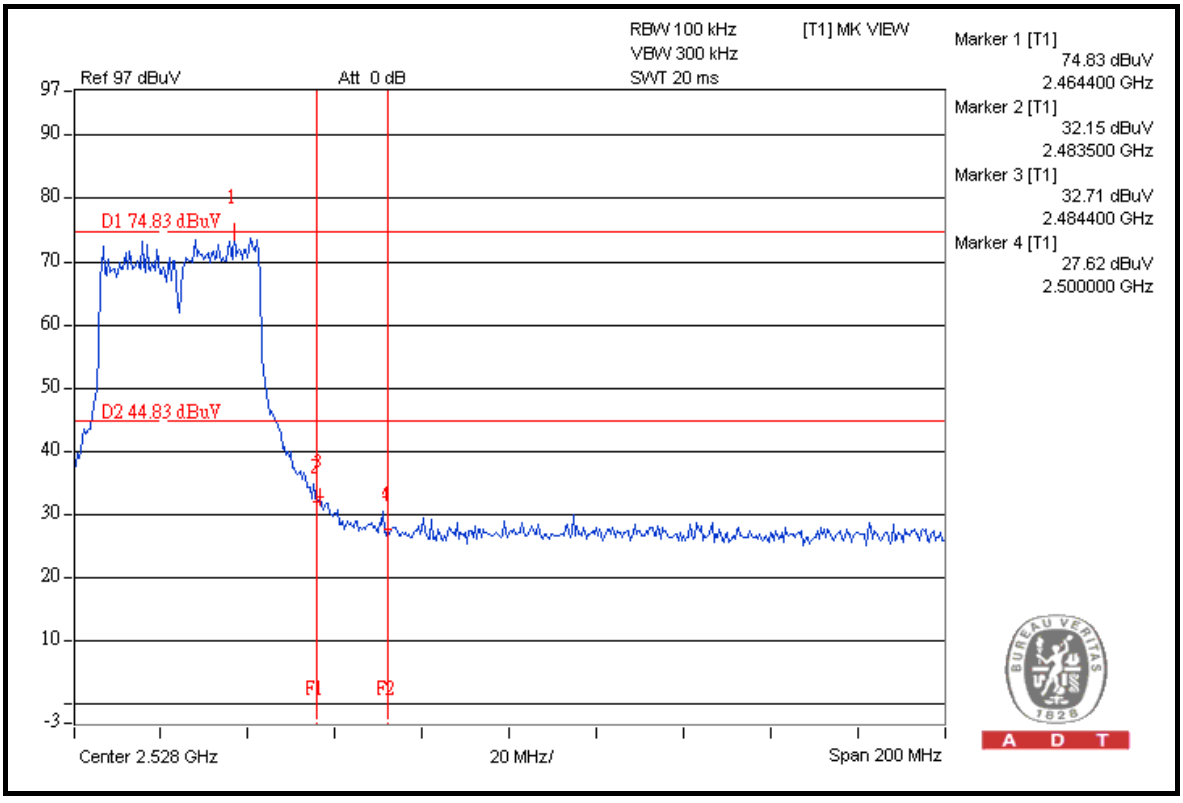
NOTE:

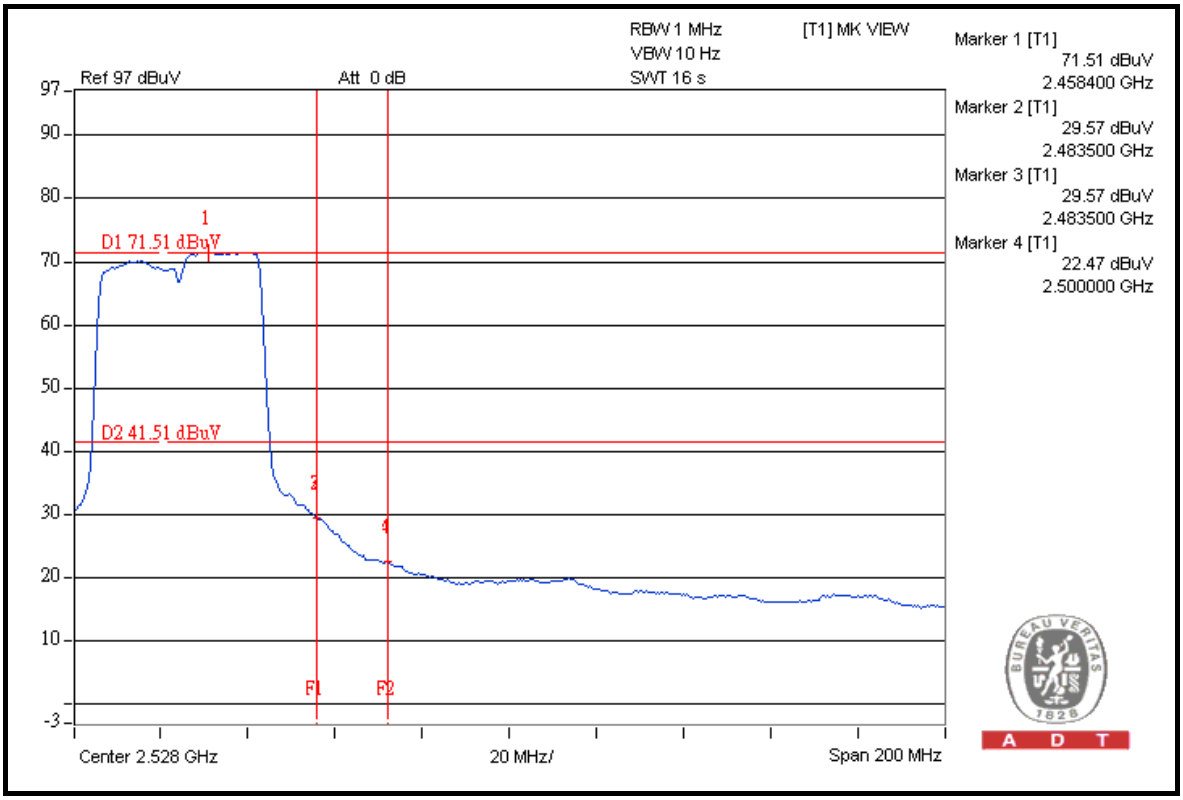
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

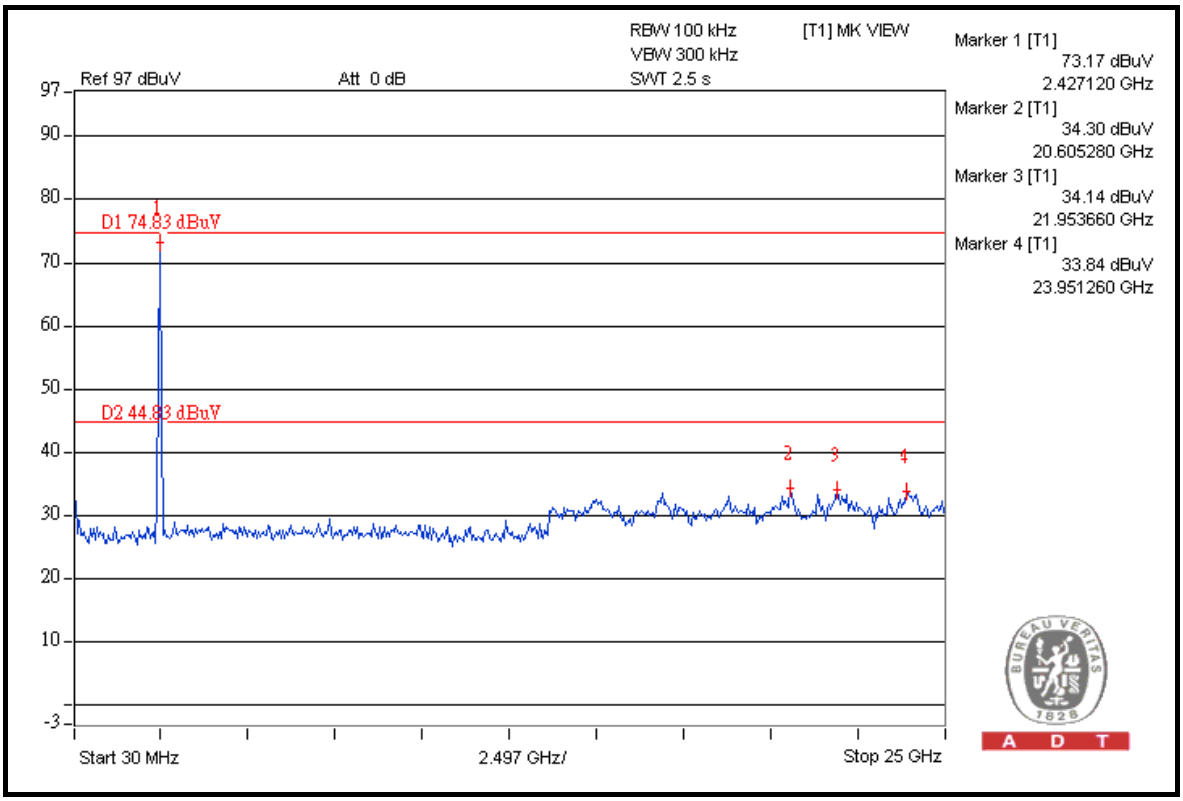

RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 75.77 dBuV
D2 45.77 dBuV
Marker 1 [T1]
75.77 dBuV
2.437200 GHz
Marker 2 [T1]
43.37 dBuV
2.400000 GHz
Marker 3 [T1]
43.92 dBuV
2.399600 GHz
Marker 4 [T1]
34.17 dBuV
2.390000 GHz
Marker 5 [T1]
34.17 dBuV
2.390000 GHz
Center 2.346 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 72.41 dBuV
D2 42.41 dBuV
Marker 1 [T1]
72.41 dBuV
2.437600 GHz
Marker 2 [T1]
35.45 dBuV
2.400000 GHz
Marker 3 [T1]
35.45 dBuV
2.400000 GHz
Marker 4 [T1]
29.82 dBuV
2.390000 GHz
Marker 5 [T1]
29.82 dBuV
2.390000 GHz
Center 2.346 GHz
20 MHz/
Span 200 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
74.98 dBuV
2.377180 GHz
Marker 2 [T1]
34.88 dBuV
24.051140 GHz
Marker 3 [T1]
34.70 dBuV
22.003600 GHz
Marker 4 [T1]
34.64 dBuV
23.951260 GHz
D1 75.77 dBuV
D2 45.77 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Start 30 MHz
2.497 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
74.83 dBuV
2.464400 GHz
Marker 2 [T1]
32.15 dBuV
2.483500 GHz
Marker 3 [T1]
32.71 dBuV
2.484400 GHz
Marker 4 [T1]
27.62 dBuV
2.500000 GHz
D1 74.83 dBuV
D2 44.83 dBuV
F1
F2
97
90
80
70
60
50
40
30
20
10
-3
Center 2.528 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
71.51 dBuV
2.458400 GHz
Marker 2 [T1]
29.57 dBuV
2.483500 GHz
Marker 3 [T1]
29.57 dBuV
2.483500 GHz
Marker 4 [T1]
22.47 dBuV
2.500000 GHz
D1 71.51 dBuV
D2 41.51 dBuV
F1
F2
Center 2.528 GHz
20 MHz/
Span 200 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
73.17 dBuV
2.427120 GHz
Marker 2 [T1]
34.30 dBuV
20.605280 GHz
Marker 3 [T1]
34.14 dBuV
21.953660 GHz
Marker 4 [T1]
33.84 dBuV
23.951260 GHz
D1 74.83 dBuV
D2 44.83 dBuV
Start 30 MHz
2.497 GHz/
Stop 25 GHz

5. TEST TYPES AND RESULTS (FOR 5.0GHz BAND)

5.1 RADIATED EMISSION MEASUREMENT

5.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

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

5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Dec. 27, 2010	Dec. 26, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Aug. 02, 2010	Aug. 01, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 28, 2010	Apr. 27, 2011
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 06, 2011	Jan. 05, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8449B	3008A01961	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8447D	2944A10738	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	274041/4	Aug. 21, 2010	Aug. 20, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Aug. 21, 2010	Aug. 20, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	07026401	Aug. 25, 2010	Aug. 24, 2011

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 4.

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 IC7450F-4.

5.1.3 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. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 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.

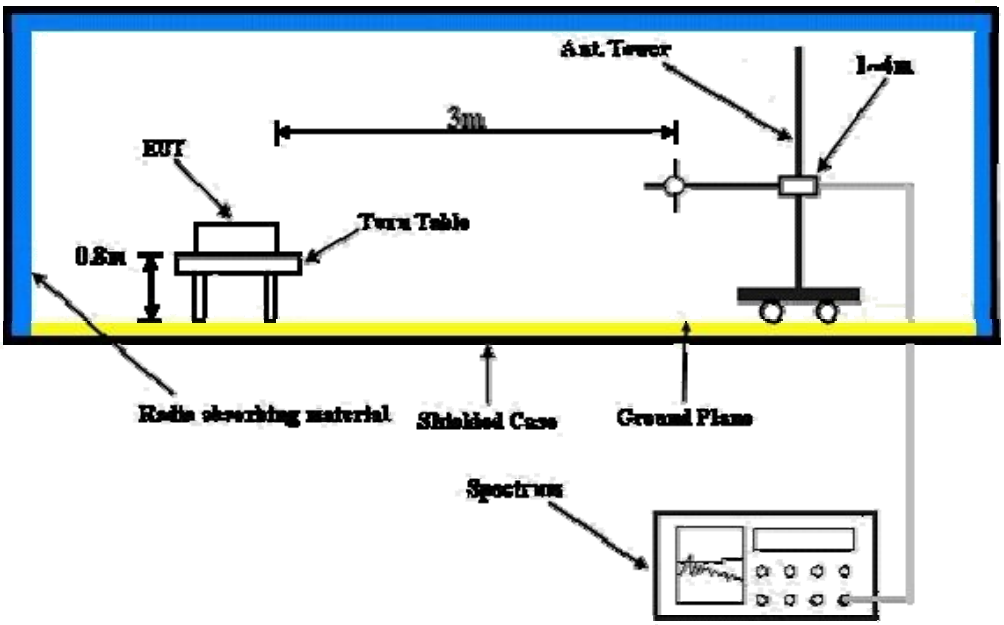
NOTE:

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 100kHz and video bandwidth is 300kHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation.

5.1.5 TEST SETUP



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

5.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6

5.1.7 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA：802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 62%RH 1022 hPa	TESTED BY	Frank Wang

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	#5725.00	90.0 PK	90.2	-0.2	1.20 H	302	51.30	38.70
2	#5725.00	69.3 AV	77.8	-8.5	1.20 H	302	30.60	38.70
3	*5745.00	120.2 PK			1.20 H	302	81.40	38.80
4	*5745.00	107.8 AV			1.20 H	302	69.00	38.80
5	11490.00	60.5 PK	74.0	-13.5	1.12 H	36	10.30	50.20
6	11490.00	47.5 AV	54.0	-6.5	1.12 H	36	-2.70	50.20
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	#5725.00	83.2 PK	86.0	-2.8	1.00 V	18	44.50	38.70
2	#5725.00	64.6 AV	74.1	-9.5	1.00 V	18	25.90	38.70
3	*5745.00	116.0 PK			1.00 V	18	77.20	38.80
4	*5745.00	104.1 AV			1.00 V	18	65.30	38.80
5	11490.00	62.6 PK	74.0	-11.4	1.45 V	207	12.40	50.20
6	11490.00	49.7 AV	54.0	-4.3	1.45 V	207	-0.50	50.20

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 62%RH 1022 hPa	TESTED BY	Frank Wang

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	*5785.00	122.8 PK			1.20 H	304	83.90	38.90
2	*5785.00	110.2 AV			1.20 H	304	71.30	38.90
3	11570.00	60.2 PK	74.0	-13.8	1.22 H	164	10.20	50.00
4	11570.00	47.4 AV	54.0	-6.6	1.22 H	164	-2.60	50.00
5	#17355.00	72.0 PK	92.8	-20.8	1.00 H	220	18.40	53.60
6	#17355.00	58.8 AV	80.2	-21.4	1.00 H	220	5.20	53.60
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	*5785.00	119.4 PK			1.00 V	20	80.50	38.90
2	*5785.00	107.5 AV			1.00 V	20	68.60	38.90
3	11570.00	62.6 PK	74.0	-11.4	1.26 V	200	12.60	50.00
4	11570.00	49.0 AV	54.0	-5.0	1.26 V	200	-1.00	50.00
5	#17355.00	72.9 PK	89.4	-16.5	1.00 V	62	19.30	53.60
6	#17355.00	59.3 AV	77.5	-18.2	1.00 V	62	5.70	53.60

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 62%RH 1022 hPa	TESTED BY	Frank Wang

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	*5825.00	122.1 PK			1.41 H	302	83.20	38.90
2	*5825.00	109.4 AV			1.41 H	302	70.50	38.90
3	#5850.00	87.9 PK	92.1	-4.2	1.41 H	301	48.90	39.00
4	#5850.00	66.4 AV	79.4	-13.0	1.41 H	301	27.40	39.00
5	11650.00	60.8 PK	74.0	-13.2	1.00 H	14	10.90	49.90
6	11650.00	47.0 AV	54.0	-7.0	1.00 H	14	-2.90	49.90
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	*5825.00	119.3 PK			1.00 V	19	80.40	38.90
2	*5825.00	106.8 AV			1.00 V	19	67.90	38.90
3	#5850.00	84.6 PK	89.3	-4.7	1.00 V	19	45.60	39.00
4	#5850.00	62.3 AV	76.8	-14.5	1.00 V	19	23.30	39.00
5	11650.00	60.9 PK	74.0	-13.1	1.48 V	210	11.00	49.90
6	11650.00	47.7 AV	54.0	-6.3	1.48 V	210	-2.20	49.90

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).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 62%RH 1022 hPa	TESTED BY	Frank Wang

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	#5725.00	87.3 PK	88.4	-1.1	1.20 H	303	48.60	38.70
2	#5725.00	65.5 AV	76.7	-11.2	1.20 H	303	26.80	38.70
3	*5745.00	118.4 PK			1.20 H	303	79.60	38.80
4	*5745.00	106.7 AV			1.20 H	303	67.90	38.80
5	11490.00	60.5 PK	74.0	-13.5	1.24 H	34	10.30	50.20
6	11490.00	47.6 AV	54.0	-6.4	1.24 H	34	-2.60	50.20
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	#5725.00	81.3 PK	85.3	-4.0	1.00 V	19	42.60	38.70
2	#5725.00	59.1 AV	72.7	-13.6	1.00 V	19	20.40	38.70
3	*5745.00	115.3 PK			1.00 V	19	76.50	38.80
4	*5745.00	102.7 AV			1.00 V	19	63.90	38.80
5	11490.00	62.8 PK	74.0	-11.2	1.36 V	200	12.60	50.20
6	11490.00	49.5 AV	54.0	-4.5	1.36 V	200	-0.70	50.20

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1022 hPa	TESTED BY	Frank Wang

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	#5725.00	65.7 PK	91.9	-26.2	1.00 H	356	27.00	38.70
2	#5725.00	51.9 AV	79.7	-27.8	1.00 H	356	13.20	38.70
3	*5785.00	121.9 PK			1.00 H	356	83.00	38.90
4	*5785.00	109.7 AV			1.00 H	356	70.80	38.90
5	#5850.00	62.8 PK	91.9	-29.1	1.00 H	356	23.80	39.00
6	#5850.00	48.1 AV	79.7	-31.6	1.00 H	356	9.10	39.00
7	11570.00	61.5 PK	74.0	-12.5	1.00 H	160	11.50	50.00
8	11570.00	49.2 AV	54.0	-4.8	1.00 H	160	-0.80	50.00
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	#5725.00	60.5 PK	87.5	-27.0	1.02 V	360	21.80	38.70
2	#5725.00	48.6 AV	75.7	-27.1	1.02 V	360	9.90	38.70
3	*5785.00	117.5 PK			1.02 V	360	78.60	38.90
4	*5785.00	105.7 AV			1.02 V	360	66.80	38.90
5	#5850.00	57.5 PK	87.5	-30.0	1.02 V	360	18.50	39.00
6	#5850.00	47.3 AV	75.7	-28.4	1.02 V	360	8.30	39.00
7	11570.00	60.4 PK	74.0	-13.6	1.00 V	114	10.40	50.00
8	11570.00	46.6 AV	54.0	-7.4	1.00 V	114	-3.40	50.00

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).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1022 hPa	TESTED BY	Frank Wang

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	*5825.00	121.6 PK			1.35 H	327	82.70	38.90
2	*5825.00	109.4 AV			1.35 H	327	70.50	38.90
3	#5850.00	88.7 PK	91.6	-2.9	1.35 H	327	49.70	39.00
4	#5850.00	67.9 AV	79.4	-11.5	1.35 H	327	28.90	39.00
5	11650.00	61.5 PK	74.0	-12.5	1.00 H	113	11.60	49.90
6	11650.00	48.6 AV	54.0	-5.4	1.00 H	113	-1.30	49.90
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	*5825.00	118.3 PK			1.00 V	357	79.40	38.90
2	*5825.00	105.9 AV			1.00 V	357	67.00	38.90
3	#5850.00	65.4 PK	88.3	-22.9	1.00 V	359	26.40	39.00
4	#5850.00	51.2 AV	75.9	-24.7	1.00 V	359	12.20	39.00
5	11650.00	56.3 PK	74.0	-17.7	1.00 V	124	6.40	49.90
6	11650.00	45.2 AV	54.0	-8.8	1.00 V	124	-4.70	49.90

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).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1022 hPa	TESTED BY	Frank Wang

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	**#5725.00**	**82.0 PK**	**82.1**	**-0.1**	**1.18 H**	**305**	**43.30**	**38.70**
2	#5725.00	65.4 AV	70.2	-4.8	1.18 H	305	26.70	38.70
3	*5755.00	112.1 PK			1.18 H	305	73.30	38.80
4	*5755.00	100.2 AV			1.18 H	305	61.40	38.80
5	11510.00	62.0 PK	74.0	-12.0	1.00 H	196	11.80	50.20
6	11510.00	49.5 AV	54.0	-4.5	1.00 H	196	-0.70	50.20
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	#5725.00	75.7 PK	80.2	-4.5	1.02 V	13	37.00	38.70
2	#5725.00	56.3 AV	68.1	-11.8	1.02 V	13	17.60	38.70
3	*5755.00	110.2 PK			1.02 V	13	71.40	38.80
4	*5755.00	98.1 AV			1.02 V	13	59.30	38.80
5	11510.00	56.9 PK	74.0	-17.1	1.00 V	47	6.70	50.20
6	11510.00	46.9 AV	54.0	-7.1	1.00 V	47	-3.30	50.20

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 159	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1022 hPa	TESTED BY	Frank Wang

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	*5795.00	116.9 PK			1.16 H	305	78.00	38.90
2	*5795.00	104.6 AV			1.16 H	305	65.70	38.90
3	#5850.00	84.8 PK	86.9	-2.1	1.16 H	305	45.80	39.00
4	#5850.00	67.3 AV	74.6	-7.3	1.16 H	305	28.30	39.00
5	11590.00	60.3 PK	74.0	-13.7	1.00 H	147	10.30	50.00
6	11590.00	48.7 AV	54.0	-5.3	1.00 H	147	-1.30	50.00
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	*5795.00	115.0 PK			1.00 V	12	76.10	38.90
2	*5795.00	103.2 AV			1.00 V	12	64.30	38.90
3	#5850.00	78.7 PK	85.0	-6.3	1.00 V	12	39.70	39.00
4	#5850.00	61.1 AV	73.2	-12.1	1.00 V	12	22.10	39.00
5	11590.00	56.7 PK	74.0	-17.3	1.00 V	321	6.70	50.00
6	11590.00	46.8 AV	54.0	-7.2	1.00 V	321	-3.20	50.00

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).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

BELOW 1GHz WORST-CASE DATA：802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	A1		

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	467.36	39.1 QP	46.0	-6.9	1.00 H	322	18.60	20.50
2	533.47	42.5 QP	46.0	-3.5	1.50 H	337	20.30	22.20
3	599.58	41.6 QP	46.0	-4.4	1.50 H	277	17.90	23.70
4	667.63	41.6 QP	46.0	-4.4	1.50 H	271	17.00	24.60
5	733.73	44.5 QP	46.0	-1.5	1.25 H	355	18.70	25.80
6	799.84	42.5 QP	46.0	-3.5	1.00 H	229	15.10	27.40
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	33.06	38.3 QP	40.0	-1.7	1.00 V	84	25.30	13.00
2	428.48	38.5 QP	46.0	-7.5	1.50 V	184	19.10	19.40
3	533.47	42.1 QP	46.0	-3.9	1.25 V	283	19.90	22.20
4	667.63	39.2 QP	46.0	-6.8	1.50 V	265	14.60	24.60
5	799.84	39.5 QP	46.0	-6.5	1.50 V	313	12.10	27.40
6	867.89	37.0 QP	46.0	-9.0	1.25 V	253	8.70	28.30

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).
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 157	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	A2		

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	267.10	34.7 QP	46.0	-11.3	1.00 H	226	20.60	14.10
2	424.59	43.9 QP	46.0	-2.1	1.50 H	280	24.60	19.30
3	467.36	40.4 QP	46.0	-5.6	1.50 H	37	19.90	20.50
4	533.47	41.0 QP	46.0	-5.0	1.50 H	190	18.80	22.20
5	733.70	44.4 QP	46.0	-1.6	1.20 H	217	18.60	25.80
6	799.84	40.2 QP	46.0	-5.8	1.00 H	181	12.80	27.40
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	66.84	36.4 QP	40.0	-3.6	1.00 V	55	23.30	13.10
2	500.42	39.1 QP	46.0	-6.9	1.00 V	22	17.70	21.40
3	599.58	37.4 QP	46.0	-8.6	1.00 V	250	13.70	23.70
4	665.68	38.4 QP	46.0	-7.6	1.00 V	118	13.80	24.60
5	751.23	37.6 QP	46.0	-8.4	1.50 V	136	11.40	26.20
6	799.84	38.9 QP	46.0	-7.1	1.50 V	292	11.50	27.40

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).
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 157	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 63%RH 1024 hPa	TESTED BY	David Huang
TEST MODE	A3		

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	199.05	38.2 QP	43.5	-5.3	2.00 H	115	26.00	12.20
2	467.36	41.4 QP	46.0	-4.6	1.75 H	217	20.90	20.50
3	533.47	43.0 QP	46.0	-3.0	1.50 H	205	20.80	22.20
4	599.58	42.5 QP	46.0	-3.5	1.25 H	169	18.80	23.70
5	733.73	44.5 QP	46.0	-1.5	1.00 H	202	18.70	25.80
6	799.84	44.2 QP	46.0	-1.8	1.00 H	172	16.80	27.40
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	31.84	37.8 QP	40.0	-2.2	1.00 V	319	24.90	12.90
2	62.95	37.7 QP	40.0	-2.3	1.00 V	271	24.00	13.70
3	500.42	42.8 QP	46.0	-3.2	1.50 V	10	21.40	21.40
4	533.47	40.4 QP	46.0	-5.6	1.50 V	10	18.20	22.20
5	667.63	40.0 QP	46.0	-6.0	1.00 V	166	15.40	24.60
6	788.17	42.7 QP	46.0	-3.3	1.00 V	10	15.60	27.10

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5.2 CONDUCTED EMISSION MEASUREMENT

5.2.1 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.

5.2.2 T EST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 30, 2010	Nov. 29, 2011
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 30, 2010	Dec. 29, 2011
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Jun. 28, 2010	Jun. 27, 2011
V-LISN SCHWARZBECK	NNBL 8226-2	8226-142	Jul. 12, 2010	Jul. 11, 2011
LISN ROHDE & SCHWARZ	ENV216	100072	Jun. 11, 2010	Jun. 10, 2011
Software ADT	ADT_Cond_ V7.3.7	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 1.

3. The VCCI Site Registration No. is C-2040.

5.2.3 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.

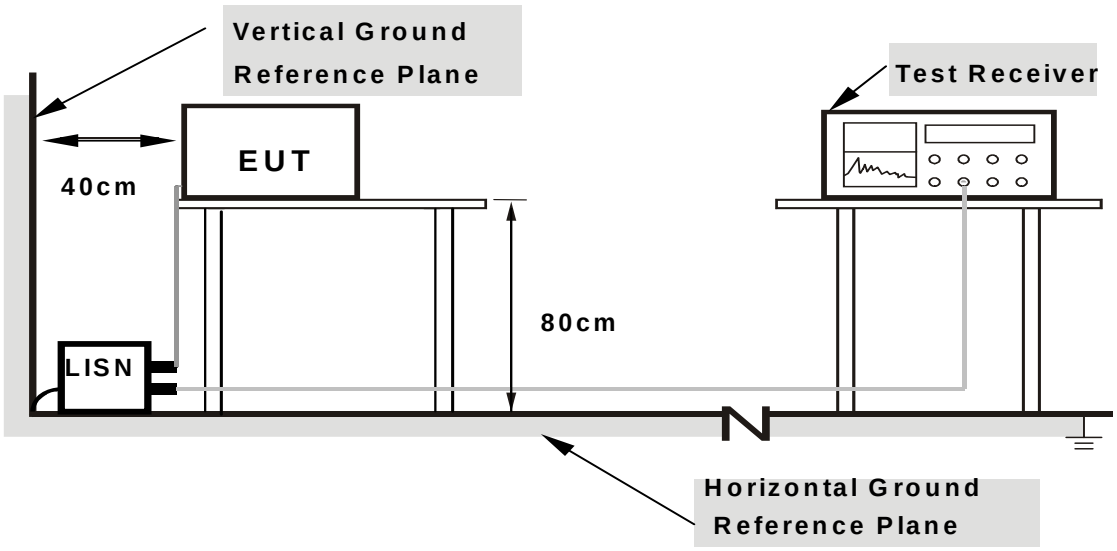
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

5.2.4 DEVIATION FROM TEST STANDARD

No deviation.

5.2.5 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).

5.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

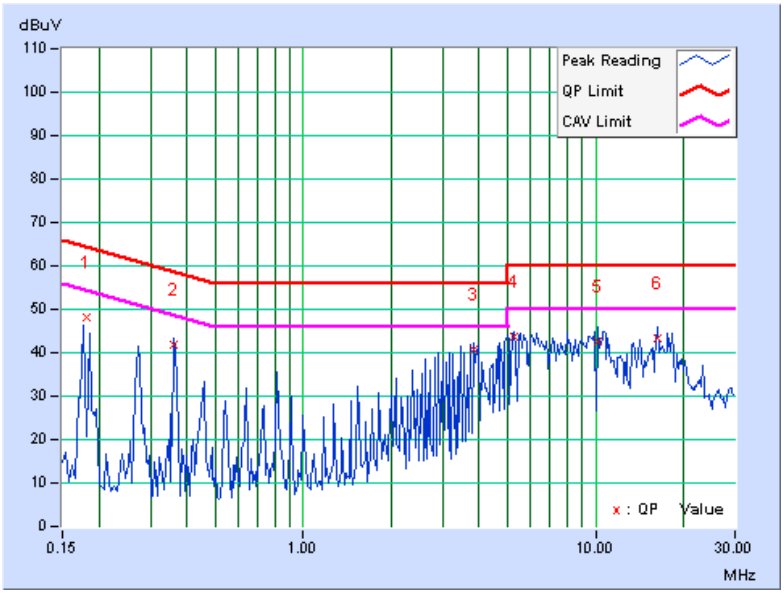
5.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA：802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A1		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.182	0.14	48.05	-	48.19	-	64.37	54.37	-16.18	-
2	0.361	0.15	41.60	-	41.75	-	58.71	48.71	-16.96	-
3	3.809	0.35	40.44	-	40.79	-	56.00	46.00	-15.21	-
4	5.262	0.45	43.29	-	43.74	-	60.00	50.00	-16.26	-
5	10.246	0.82	41.89	-	42.71	-	60.00	50.00	-17.29	-
6	16.230	1.22	42.11	-	43.33	-	60.00	50.00	-16.67	-

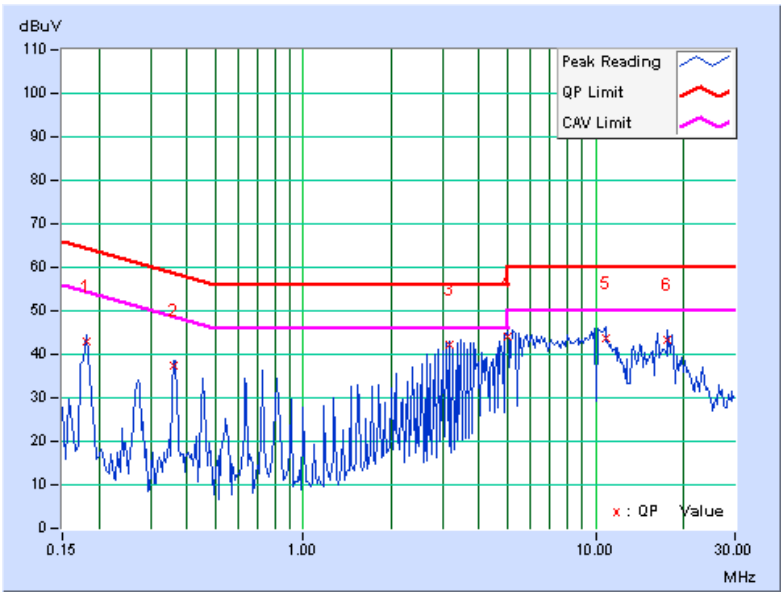
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A1		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.13	42.66	-	42.79	-	64.43	54.43	-21.64	-
2	0.361	0.14	37.24	-	37.38	-	58.71	48.71	-21.33	-
3	3.176	0.28	41.78	-	42.06	-	56.00	46.00	-13.94	-
4	4.990	0.39	43.53	-	43.92	-	56.00	46.00	-12.08	-
5	10.797	0.76	42.77	-	43.53	-	60.00	50.00	-16.47	-
6	17.691	1.17	42.22	-	43.39	-	60.00	50.00	-16.61	-

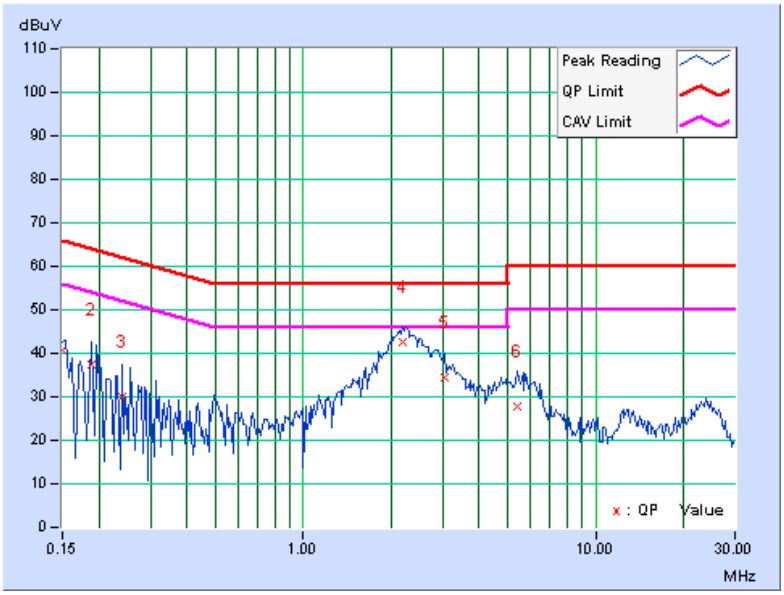
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A2		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.15	40.52	-	40.67	-	66.00	56.00	-25.33	-
2	0.189	0.14	37.18	-	37.32	-	64.08	54.08	-26.76	-
3	0.240	0.14	30.02	-	30.16	-	62.10	52.10	-31.94	-
4	2.199	0.23	42.35	-	42.58	-	56.00	46.00	-13.42	-
5	3.035	0.29	34.22	-	34.51	-	56.00	46.00	-21.49	-
6	5.398	0.46	27.16	-	27.62	-	60.00	50.00	-32.38	-

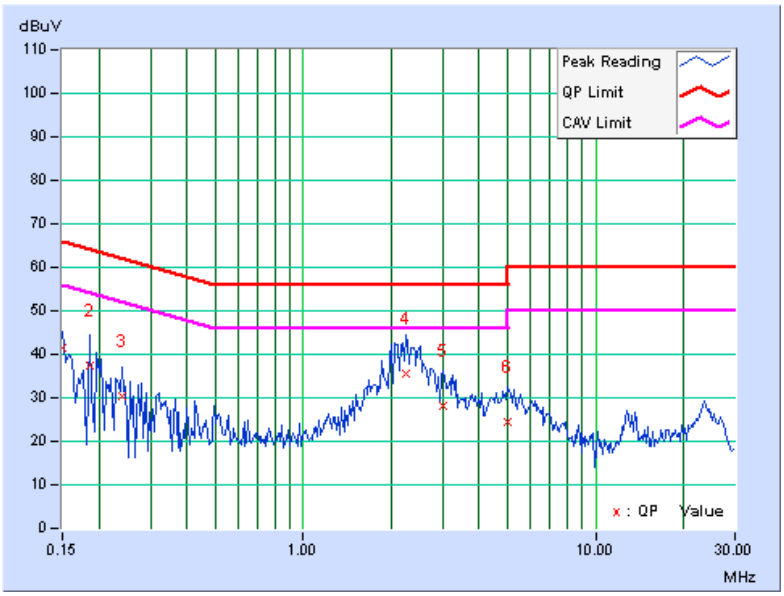
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A2		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.12	41.30	-	41.42	-	66.00	56.00	-24.58	-
2	0.185	0.13	37.44	-	37.57	-	64.25	54.25	-26.68	-
3	0.240	0.13	30.38	-	30.51	-	62.10	52.10	-31.59	-
4	2.246	0.22	35.31	-	35.53	-	56.00	46.00	-20.47	-
5	3.008	0.27	28.03	-	28.30	-	56.00	46.00	-27.70	-
6	5.027	0.40	24.15	-	24.55	-	60.00	50.00	-35.45	-

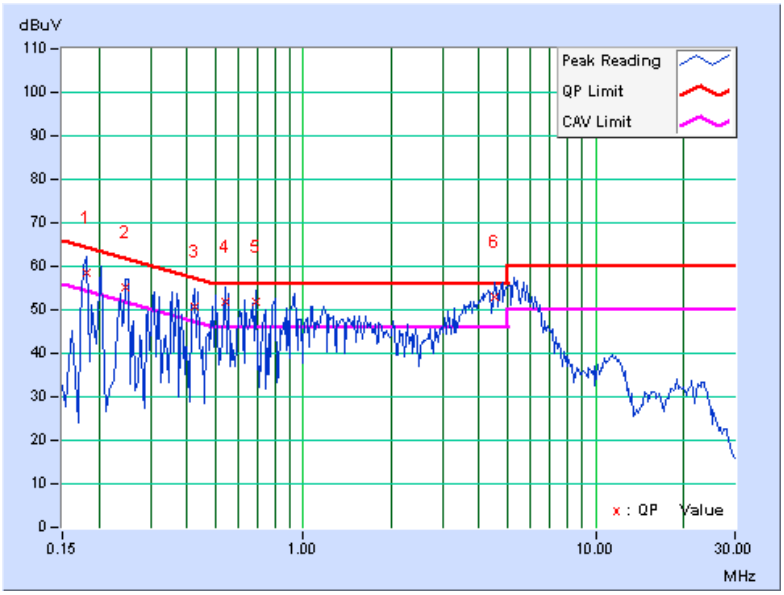
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A3		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.14	58.56	46.85	58.70	46.99	64.43	54.43	-5.73	-7.44
2	0.248	0.14	54.93	43.00	55.07	43.14	61.84	51.84	-6.76	-8.69
3	0.423	0.15	50.66	39.57	50.81	39.72	57.38	47.38	-6.57	-7.66
4	0.541	0.16	51.52	39.03	51.68	39.19	56.00	46.00	-4.32	-6.81
5	0.685	0.17	51.72	34.92	51.89	35.09	56.00	46.00	-4.11	-10.91
6	4.543	0.40	52.63	37.43	53.03	37.83	56.00	46.00	-2.97	-8.17

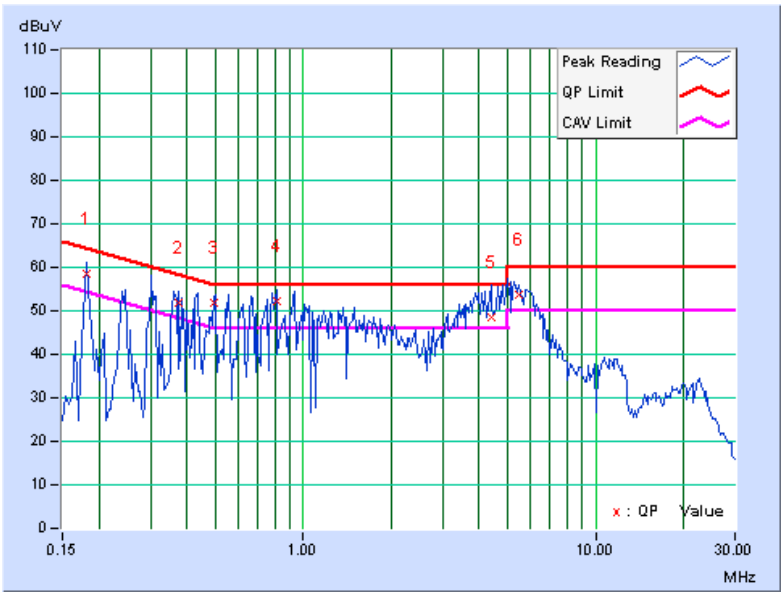
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A3		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.13	58.52	44.96	58.65	45.09	64.43	54.43	-5.78	-9.34
2	0.377	0.14	51.68	33.08	51.82	33.22	58.35	48.35	-6.54	-15.14
3	0.498	0.15	51.60	34.27	51.75	34.42	56.04	46.04	-4.29	-11.62
4	0.810	0.17	52.00	33.00	52.17	33.17	56.00	46.00	-3.83	-12.83
5	4.379	0.35	48.03	34.06	48.38	34.41	56.00	46.00	-7.62	-11.59
6	5.477	0.43	53.16	35.83	53.59	36.26	60.00	50.00	-6.41	-13.74

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



5.3 6dB BANDWIDTH MEASUREMENT

5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

5.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Jul. 17, 2010	Jul. 16, 2011

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

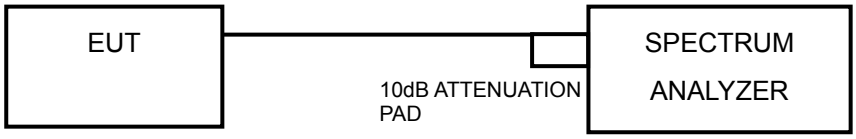
5.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

5.3.4 DEVIATION FROM TEST STANDARD

No deviation.

5.3.5 TEST SETUP



5.3.6 EUT OPERATING CONDITIONS

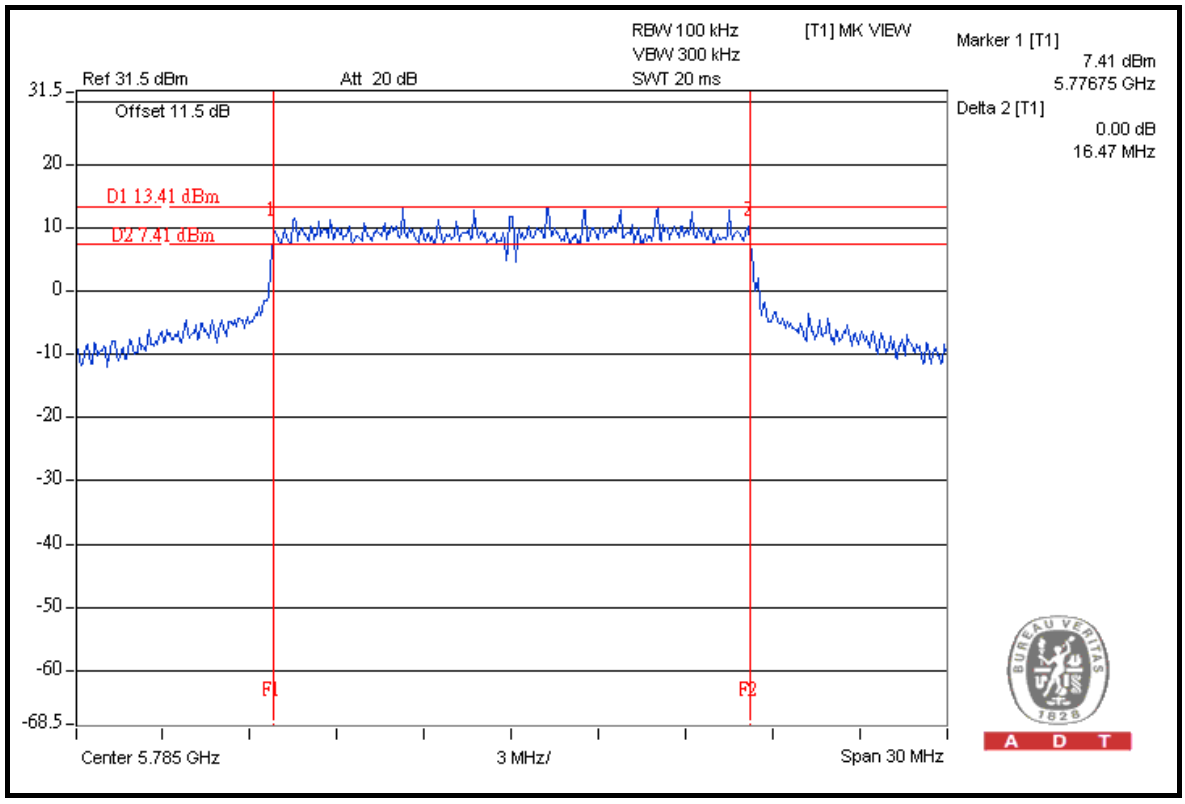
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

5.3.7 TEST RESULTS

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
149	5745	16.44	16.42	0.5	PASS
157	5785	16.41	16.47	0.5	PASS
165	5825	16.41	16.42	0.5	PASS

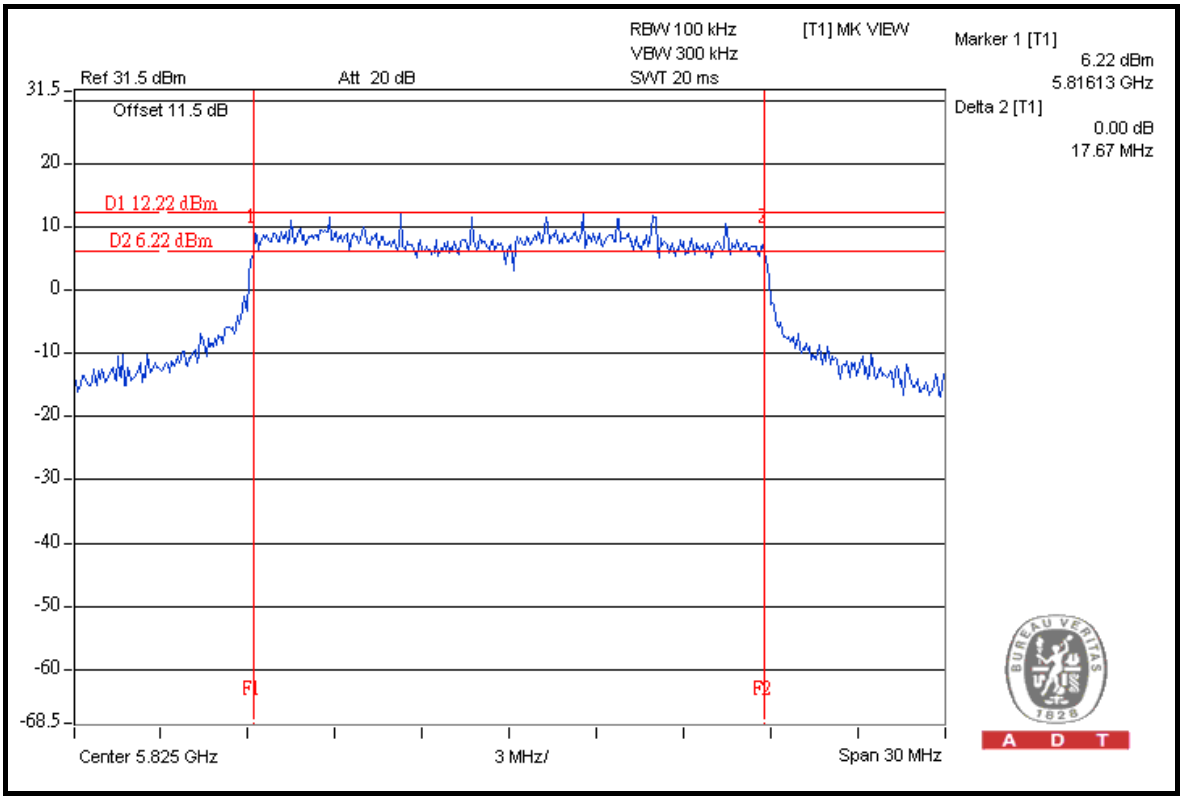
CHAIN 1: CH 157



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
149	5745	17.66	17.64	0.5	PASS
157	5785	17.67	17.62	0.5	PASS
165	5825	17.64	17.67	0.5	PASS

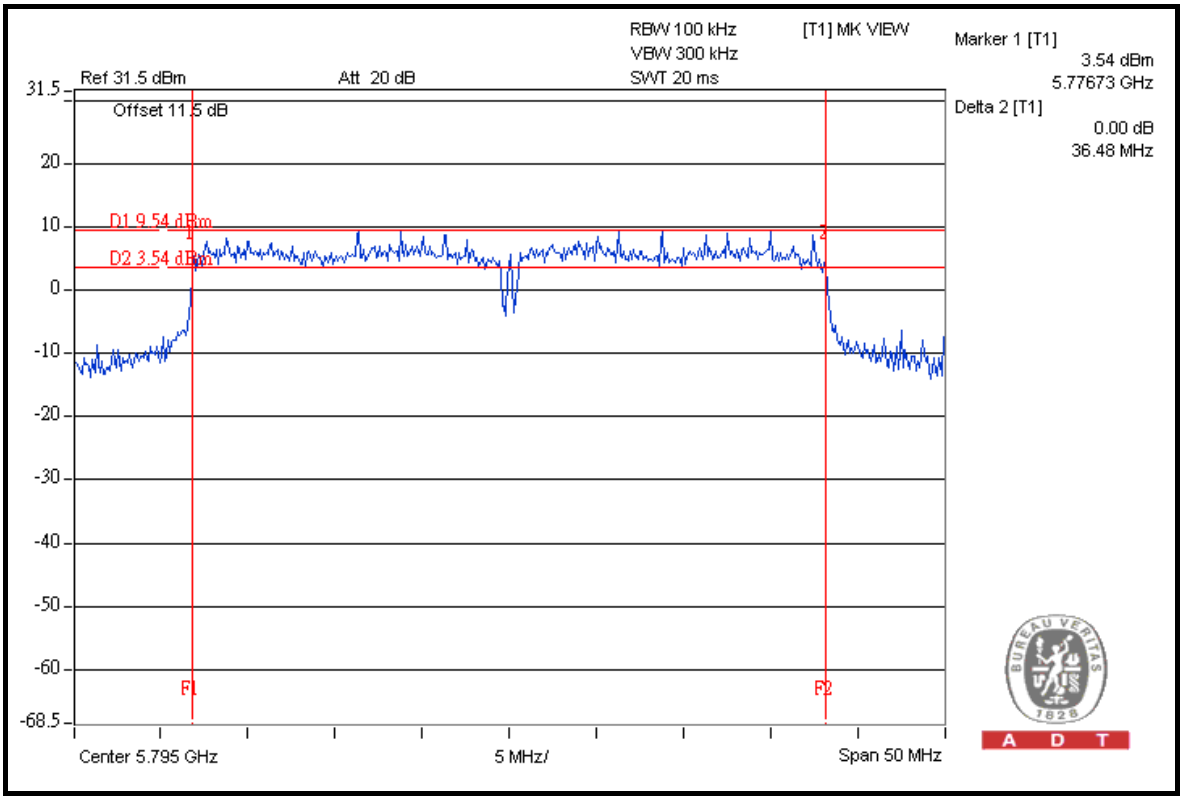
FOR CHAIN 1: CH 165



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
151	5755	36.41	36.31	0.5	PASS
159	5795	36.15	36.48	0.5	PASS

FOR CHAIN 1: CH 159



5.4 MAXIMUM OUTPUT POWER

5.4.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

5.4.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Jul. 17, 2010	Jul. 16, 2011

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

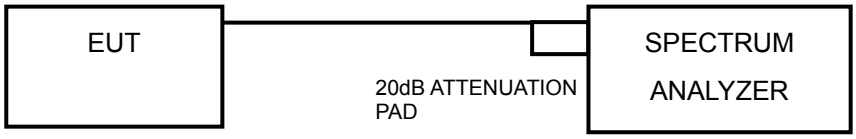
5.4.3 TEST PROCEDURES

1. Follow DTS measurement (Power Output Option 2), the transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer.
2. Set span to encompass the entire emission bandwidth (EBW) of the signal.
3. Set RBW = 1 MHz ;VBW ≧3 MHz.
4. Use sample detector mode and video trigger with the trigger level set to enable triggering only on full power pulses.
5. Trace average 100 traces in power averaging mode.
6. Compute power by integrating the spectrum across the 26 dB EBW of the signal.
7. Record the power level.

5.4.4 DEVIATION FROM TEST STANDARD

No deviation.

5.4.5 TEST SETUP



5.4.6 EUT OPERATING CONDITIONS

Same as Item 5.3.6.

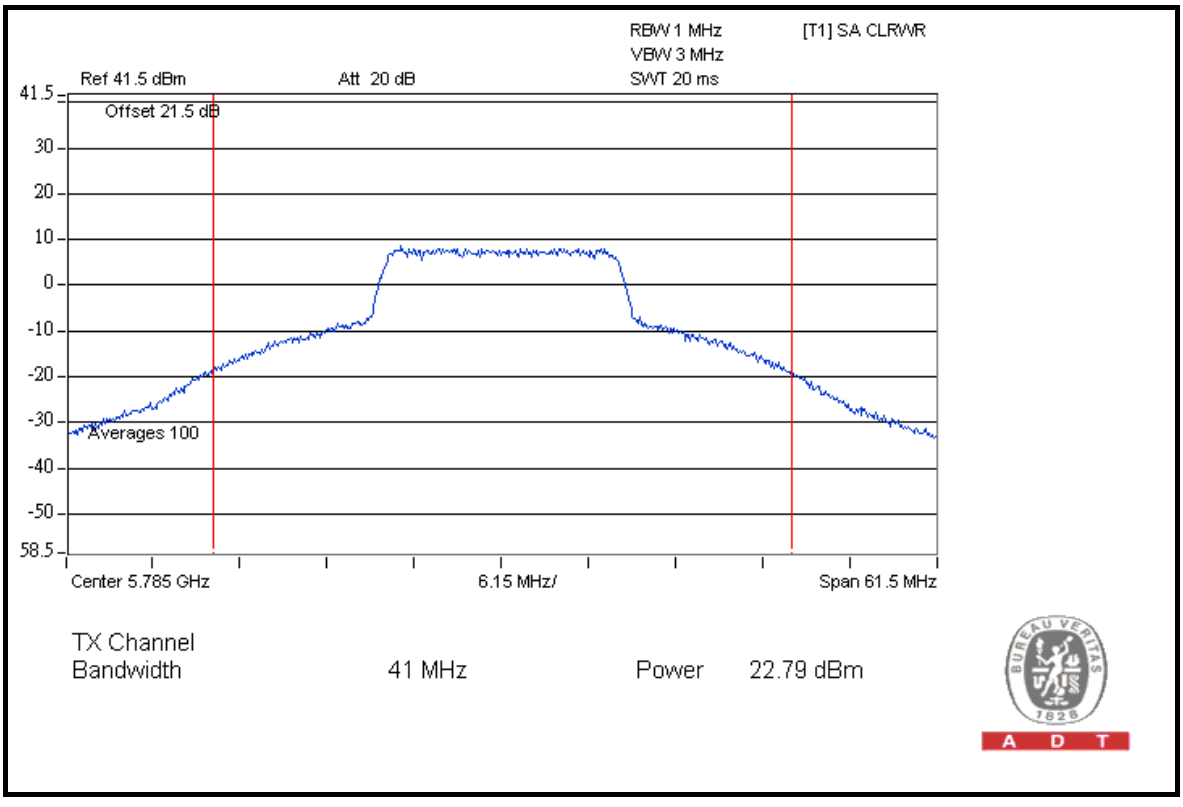
5.4.7 TEST RESULTS

802.11a

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
149	5745	19.5	19.7	182.2	22.6	26.7	PASS
157	5785	22.1	22.8	**352.3**	25.5	26.7	PASS
165	5825	22.0	22.5	334.9	25.2	26.7	PASS

NOTE: Directional gain = 6.29dBi + 10log(2) = 9.3dBi > 6dBi , so the conducted power limit shall be reduced to 30-(9.3-6) = 26.7dBm.

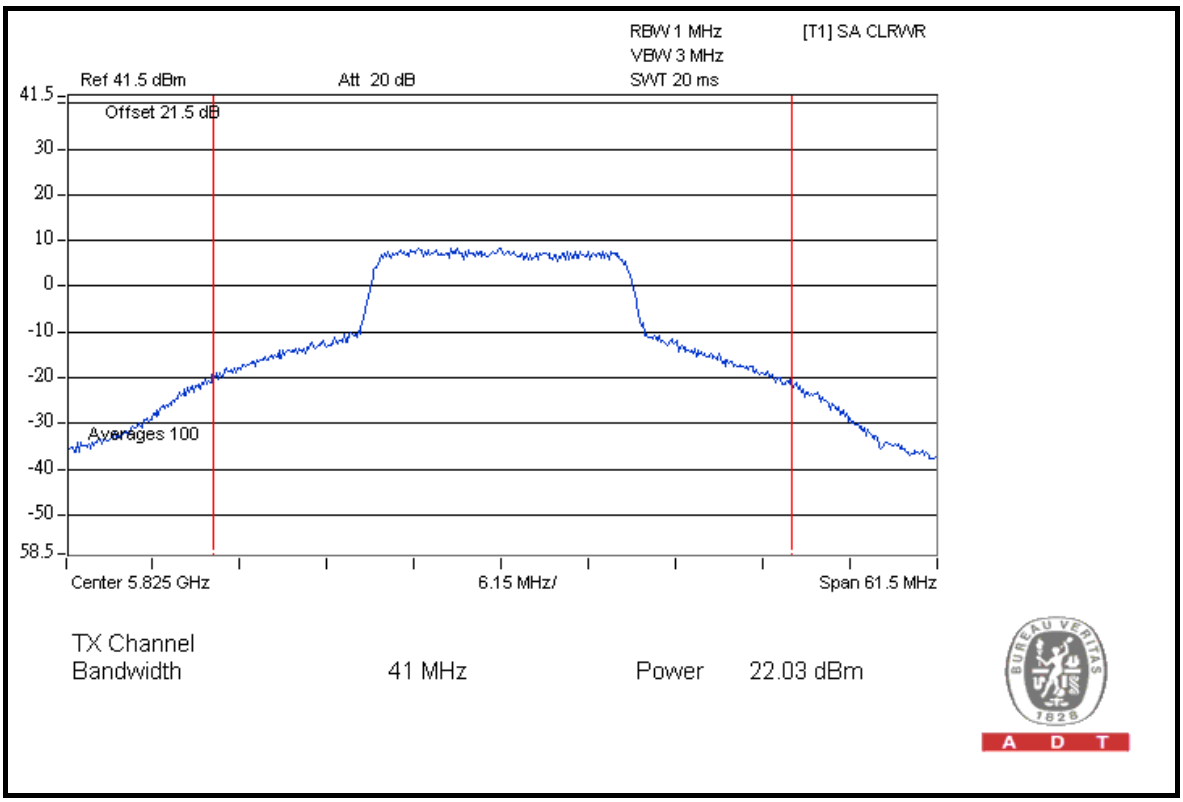
FOR CHAIN 1: CH 157



802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
149	5745	17.7	18.5	130.1	21.1	30.0	PASS
157	5785	21.1	21.7	276.4	24.4	30.0	PASS
165	5825	21.0	22.0	286.1	24.6	30.0	PASS

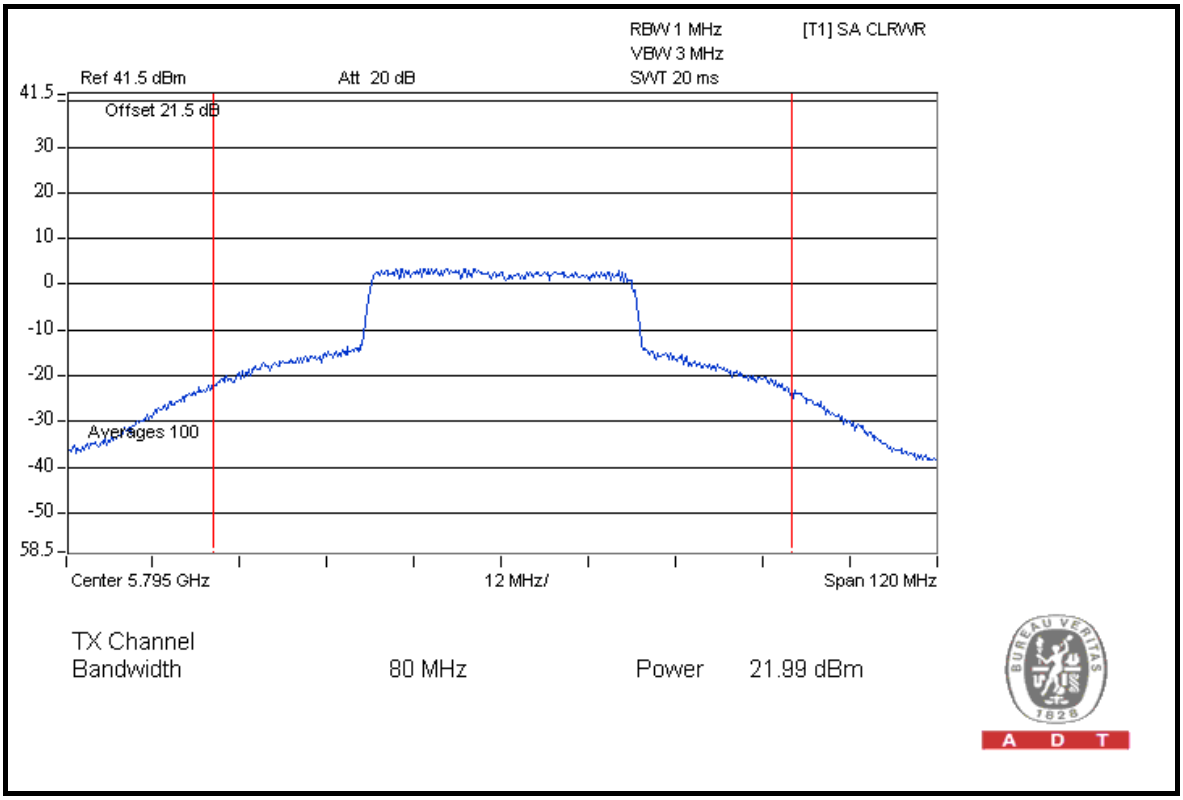
FOR CHAIN 1: CH 165



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
151	5755	16.0	17.3	93.1	19.7	30.0	PASS
159	5795	21.0	22.0	284.3	24.5	30.0	PASS

FOR CHAIN 1: CH 159



5.5 POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

5.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Jul. 17, 2010	Jul. 16, 2011

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

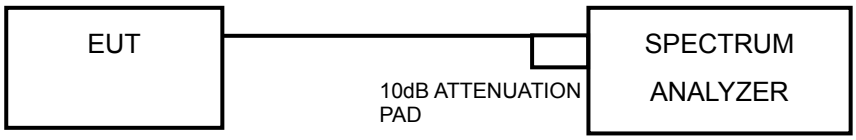
5.5.3 TEST PROCEDURE

1. Follow DTS measurement (PSD Option 2), the transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer. Locate and zoom in on emission peak(s) within the pass band.
2. Set RBW = 3 kHz /VBW > 9 kHz and sweep time to Automatic.
3. Detector use peak mode and a video trigger with the trigger level set to enable triggering only on full power pulses.
4. Trace average 100 traces in power averaging mode. The power spectral density was measured and recorded.

5.5.4 DEVIATION FROM TEST STANDARD

No deviation.

5.5.5 TEST SETUP



5.5.6 EUT OPERATING CONDITION

Same as Item 5.3.6.

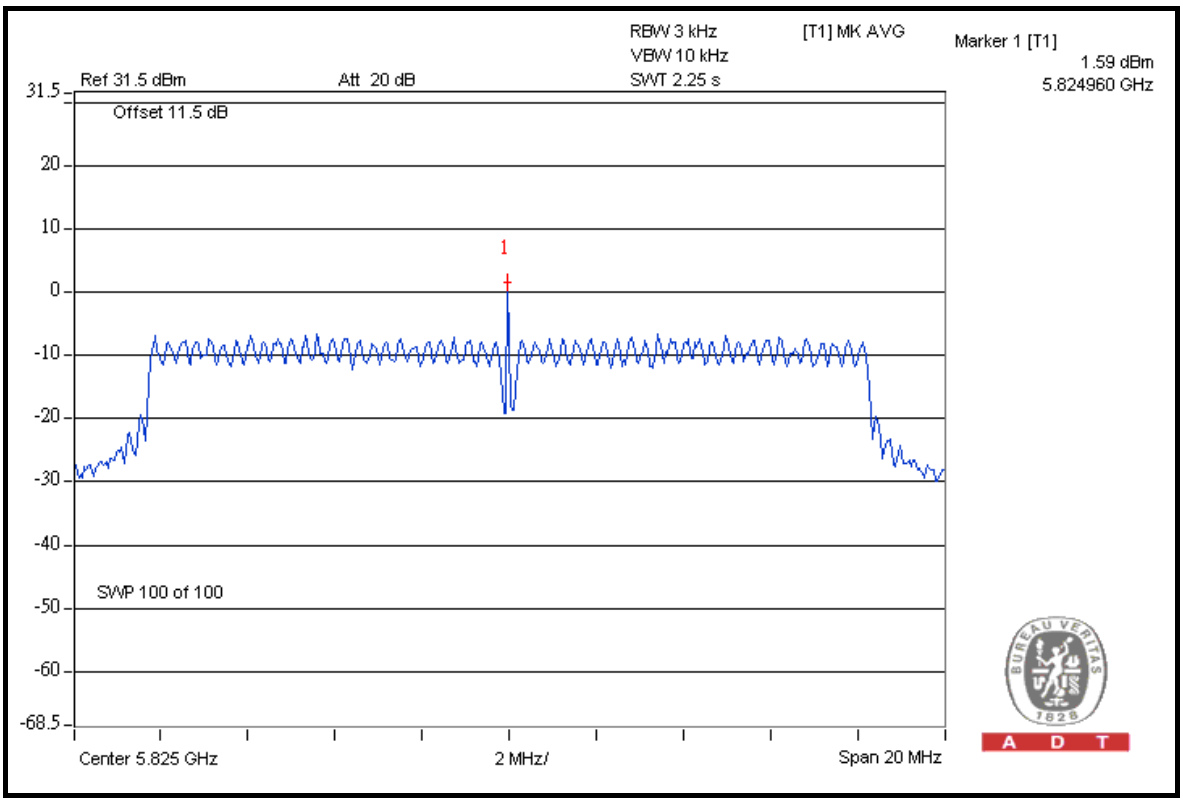
5.5.7 TEST RESULTS

802.11a

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
149	5745	-4.7	-3.3	-0.9	4.7	PASS
157	5785	-0.6	-3.6	1.2	4.7	PASS
165	5825	1.6	1.5	4.6	4.7	PASS

NOTE: Directional gain = 6.29dBi + 10log(2) = 9.3dBi > 6dBi , so the power density limit shall be reduced to 8-(9.3-6) = 4.7dBm.

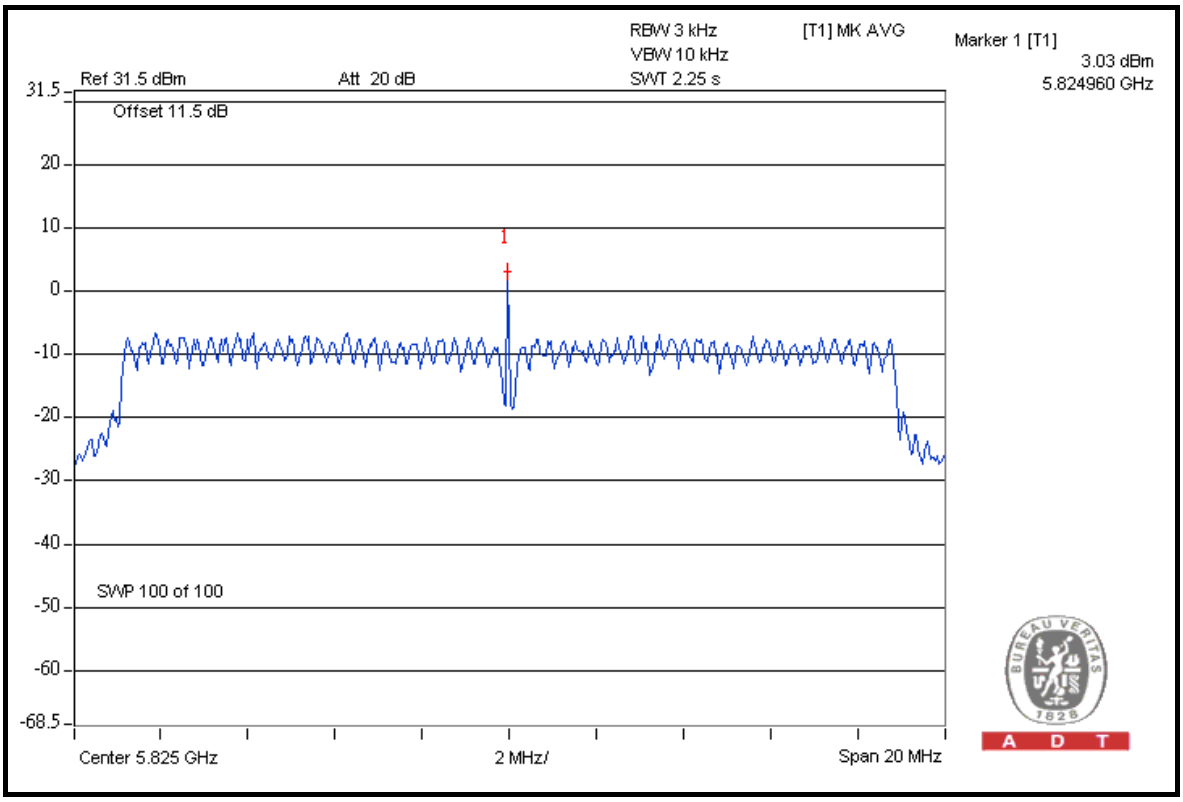
FOR CHAIN 1: CH 165



802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
149	5745	0.7	-9.2	1.1	8	PASS
157	5785	-6.7	2.2	2.7	8	PASS
165	5825	-0.1	3.0	4.7	8	PASS

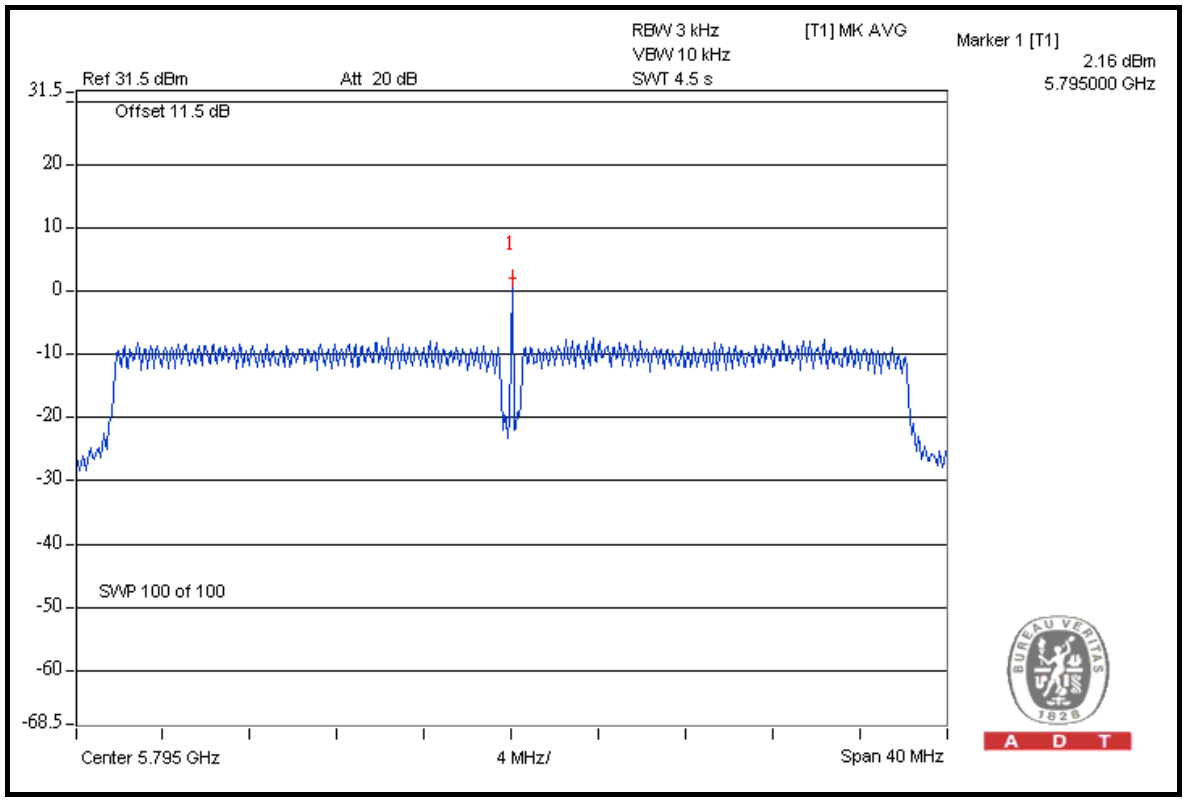
FOR CHAIN 1: CH 165



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
151	5755	-9.4	-2.8	-1.9	8	PASS
159	5795	-3.1	2.2	3.3	8	PASS

FOR CHAIN 1: CH 159



5.6 BAND EDGES MEASUREMENT

5.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

5.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Dec. 27, 2010	Dec. 26, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Aug. 02, 2010	Aug. 01, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 28, 2010	Apr. 27, 2011
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 06, 2011	Jan. 05, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8449B	3008A01961	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8447D	2944A10738	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	274041/4	Aug. 21, 2010	Aug. 20, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Aug. 21, 2010	Aug. 20, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	07026401	Aug. 25, 2010	Aug. 24, 2011

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

5.6.3 TEST PROCEDURE

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. Set both RBW and VBW of spectrum analyzer to 100kHz and 300kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.

5.6.4 DEVIATION FROM TEST STANDARD

No deviation.

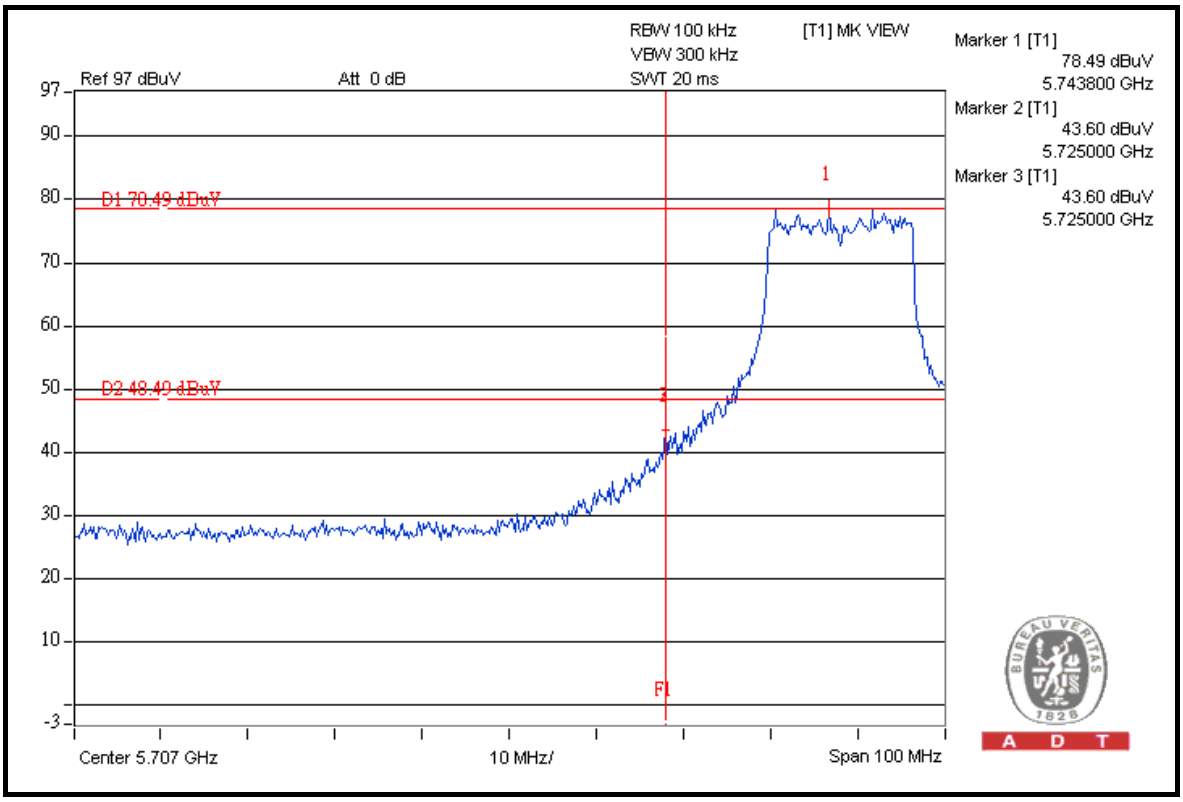
5.6.5 EUT OPERATING CONDITION

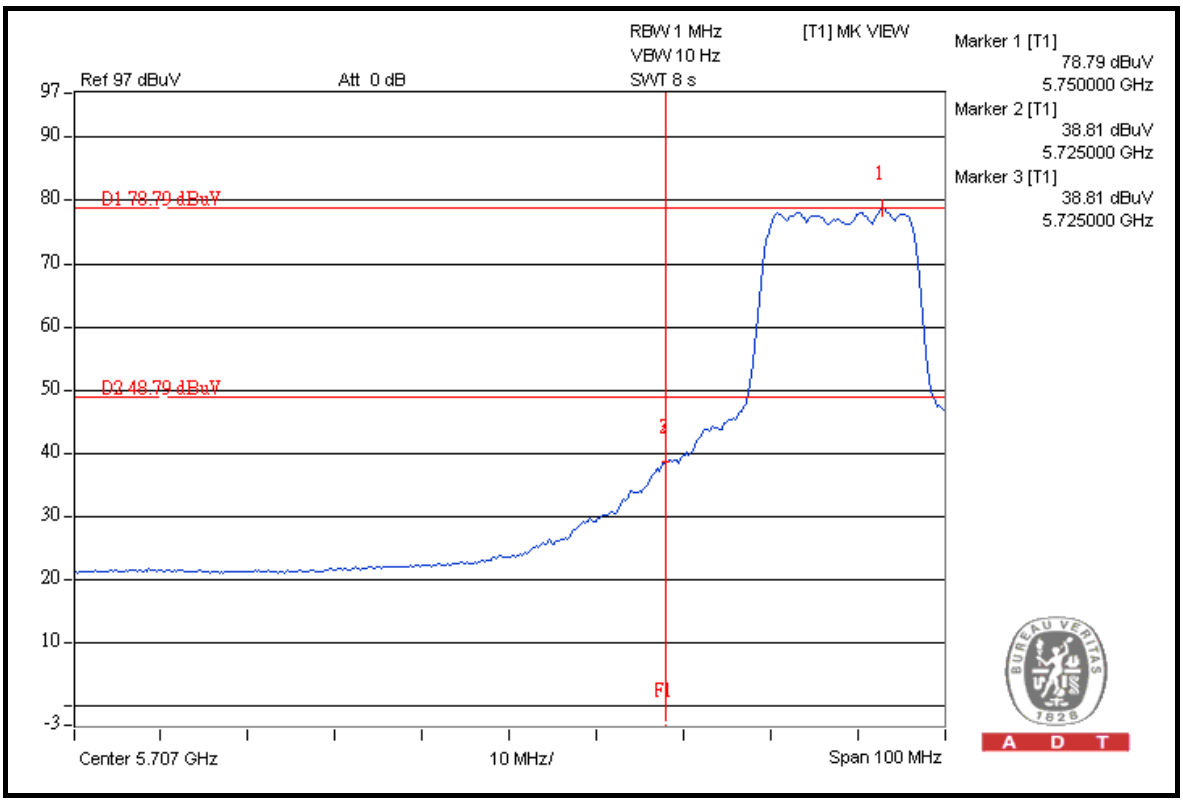
Same as Item 5.3.6.

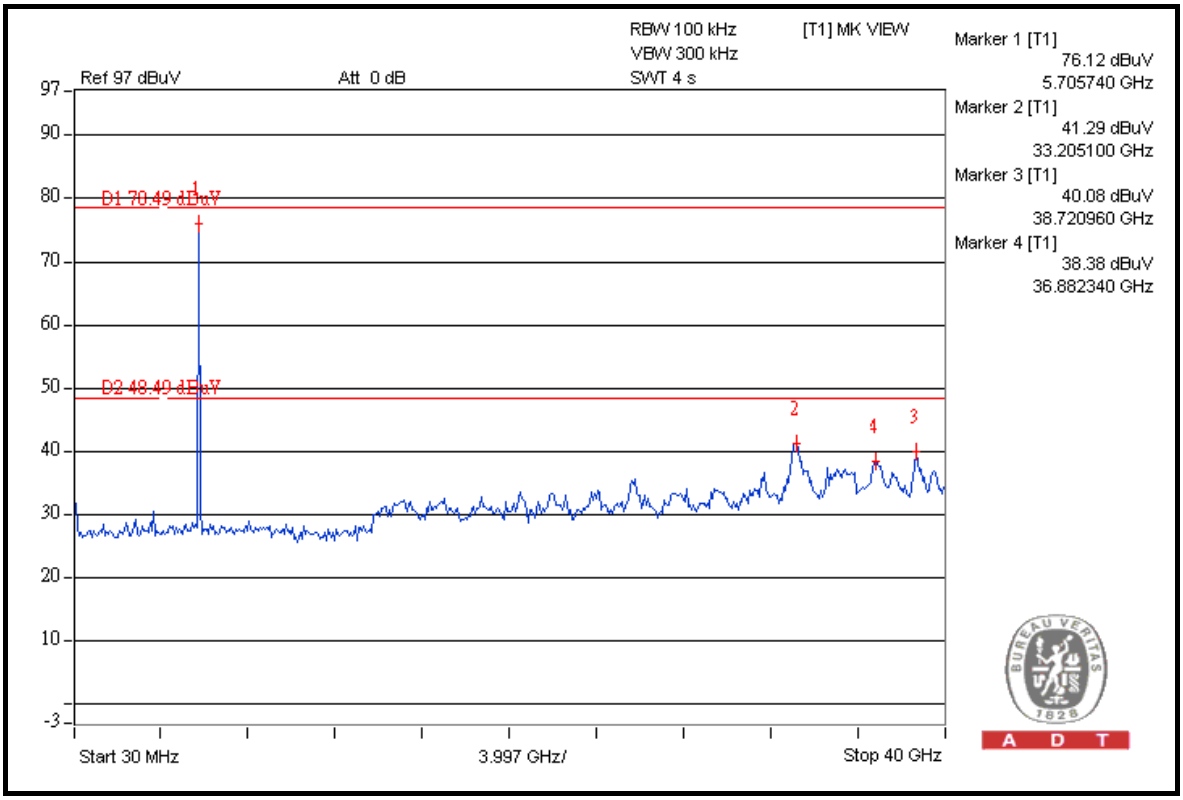
5.6.6 TEST RESULTS

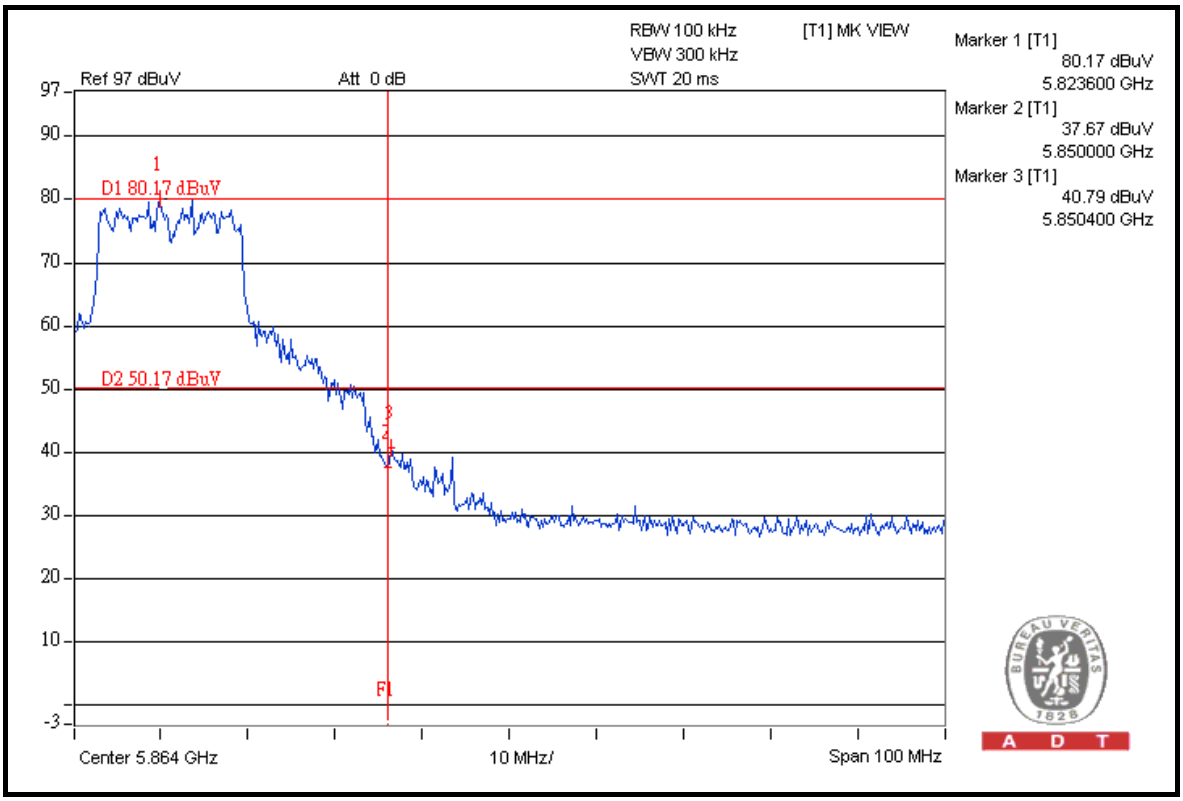
The spectrum plots are attached on the following pages. D1 line indicates the highest level, D2 line indicates the 30dB offset below D1. It shows compliance with the requirement in part 15.247(d).

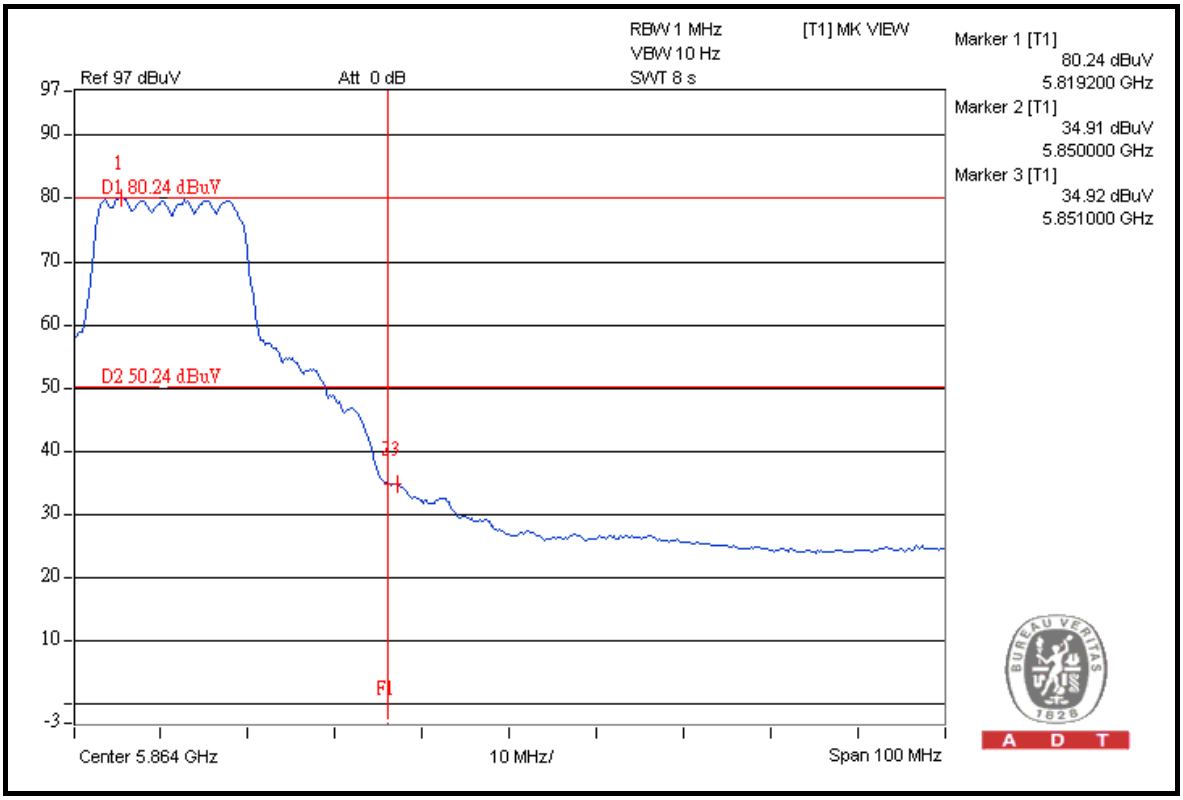
802.11a

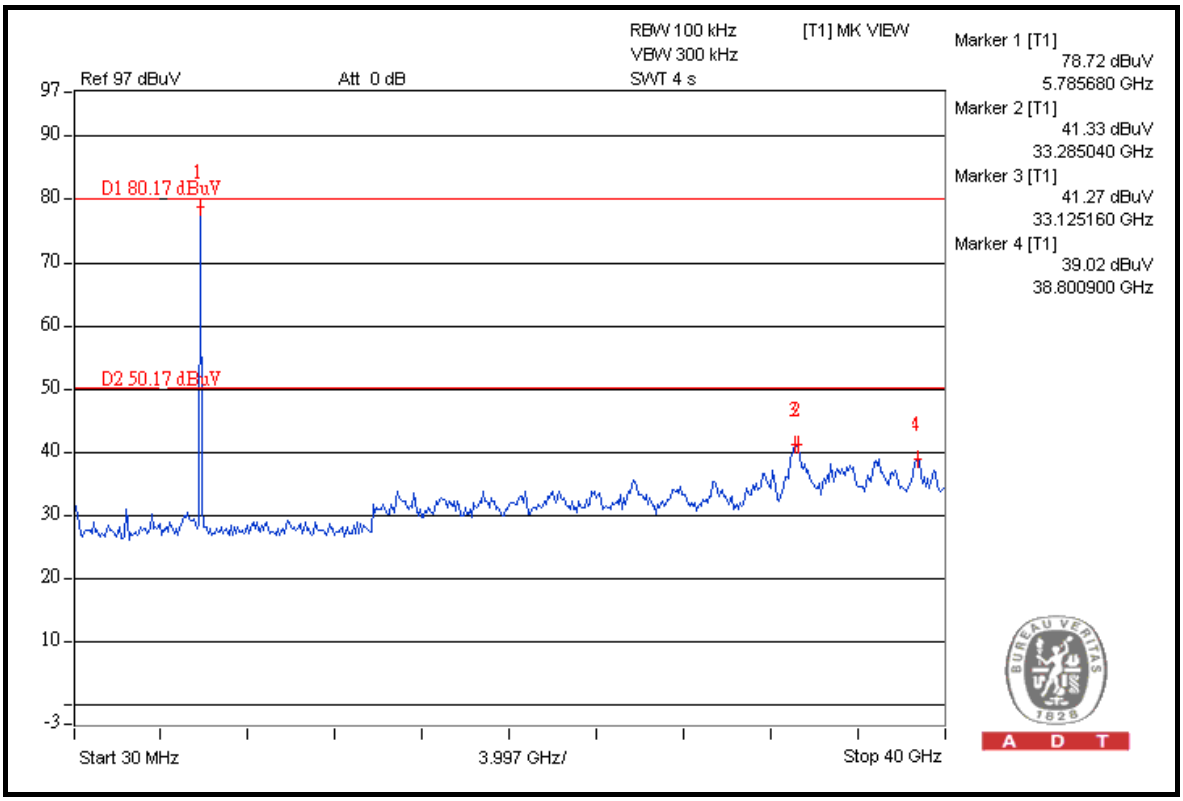

RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
78.49 dBuV
5.743800 GHz
Marker 2 [T1]
43.60 dBuV
5.725000 GHz
Marker 3 [T1]
43.60 dBuV
5.725000 GHz
D1 70.49 dBuV
D2 48.49 dBuV
Center 5.707 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
78.79 dBuV
5.750000 GHz
Marker 2 [T1]
38.81 dBuV
5.725000 GHz
Marker 3 [T1]
38.81 dBuV
5.725000 GHz
D1 78.79 dBuV
D2 48.79 dBuV
Center 5.707 GHz
10 MHz/
Span 100 MHz

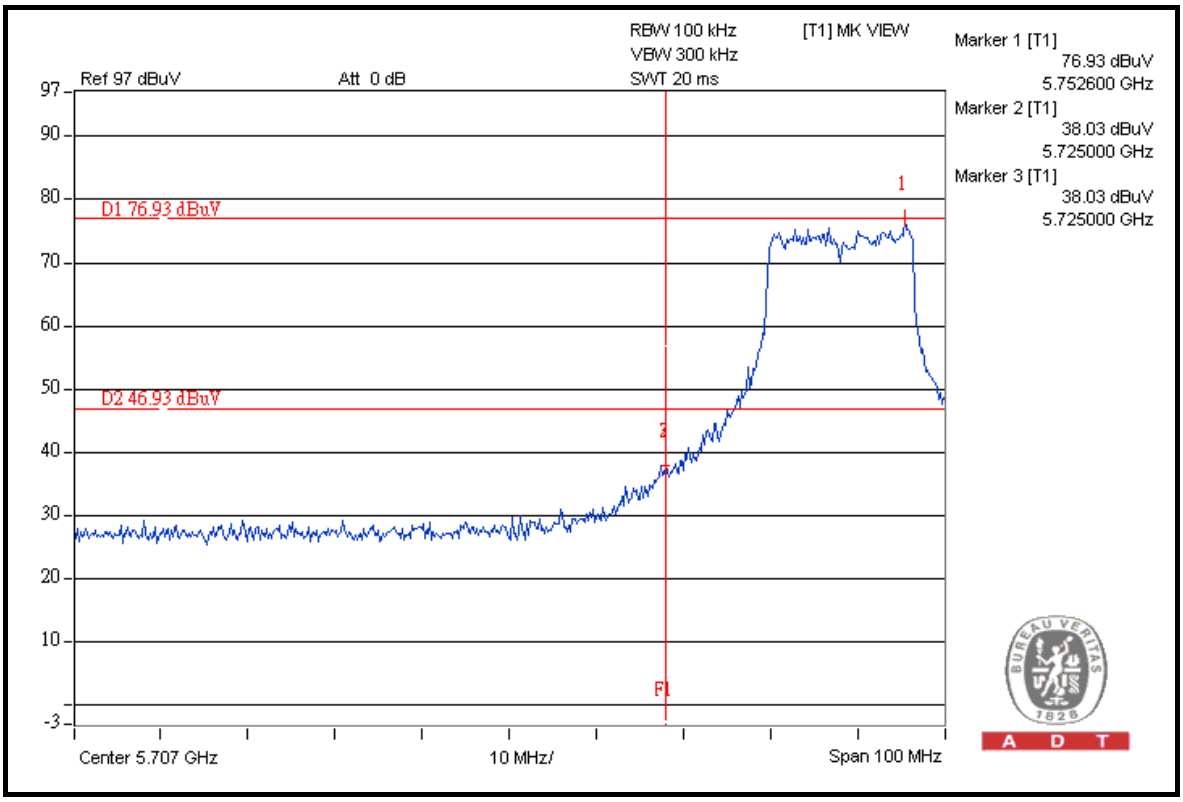

RBW 100 kHz
VBW 300 kHz
SWT 4 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
76.12 dBuV
5.705740 GHz
Marker 2 [T1]
41.29 dBuV
33.205100 GHz
Marker 3 [T1]
40.08 dBuV
38.720960 GHz
Marker 4 [T1]
38.38 dBuV
36.882340 GHz
D1 70.49 dBuV
D2 48.49 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Start 30 MHz
3.997 GHz/
Stop 40 GHz

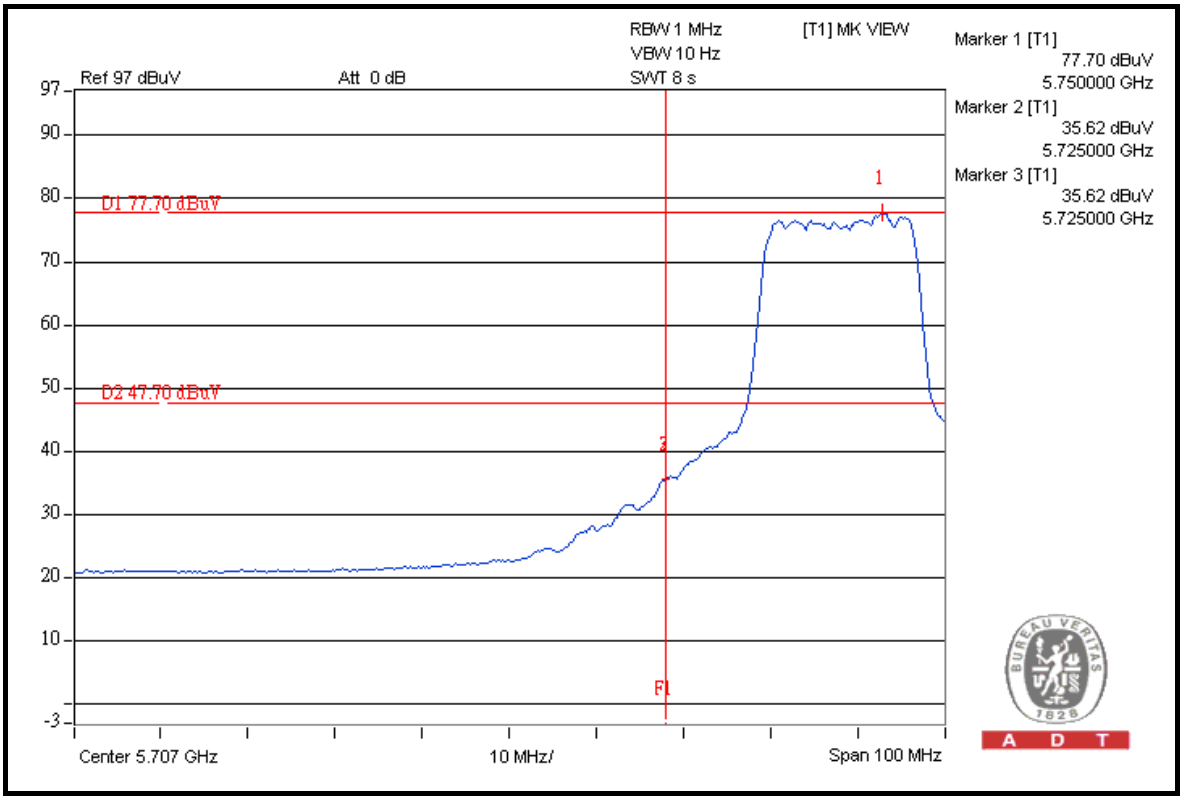

RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
80.17 dBuV
5.823600 GHz
Marker 2 [T1]
37.67 dBuV
5.850000 GHz
Marker 3 [T1]
40.79 dBuV
5.850400 GHz
D1 80.17 dBuV
D2 50.17 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Center 5.864 GHz
10 MHz/
Span 100 MHz

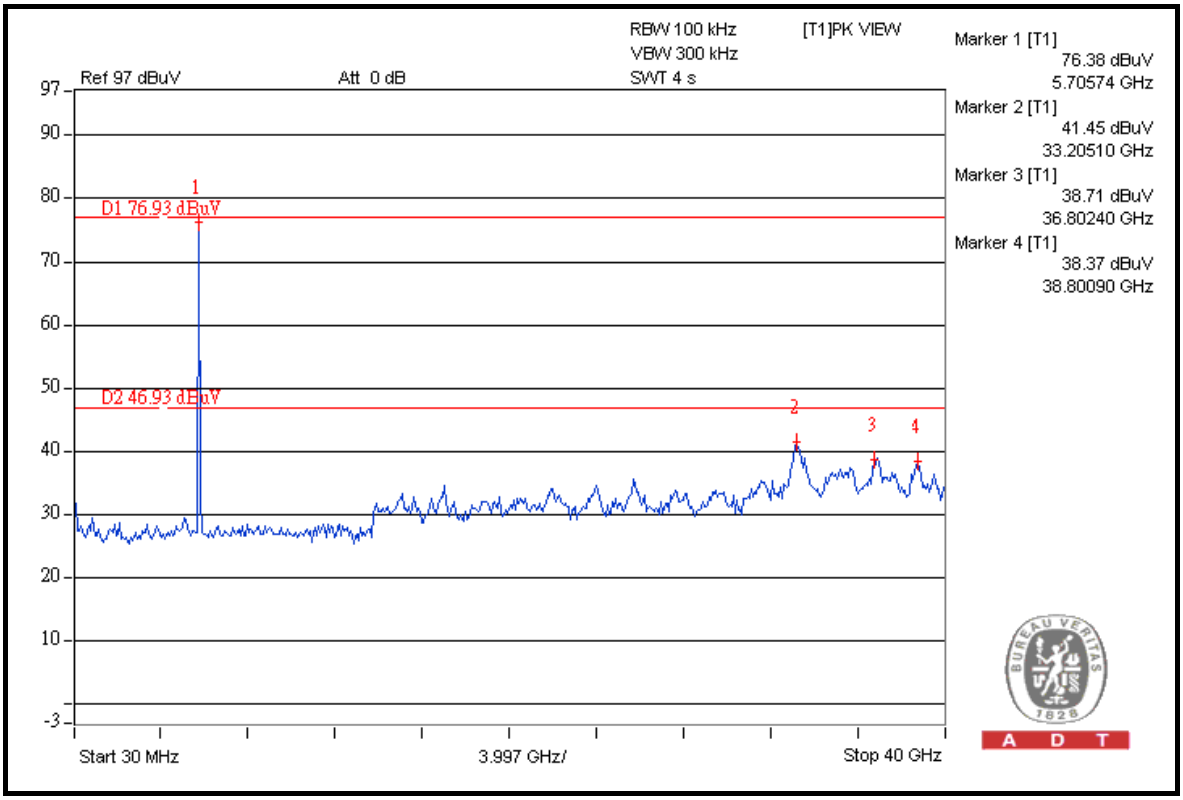

RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
80.24 dBuV
5.819200 GHz
Marker 2 [T1]
34.91 dBuV
5.850000 GHz
Marker 3 [T1]
34.92 dBuV
5.851000 GHz
D1 80.24 dBuV
D2 50.24 dBuV
Center 5.864 GHz
10 MHz/
Span 100 MHz

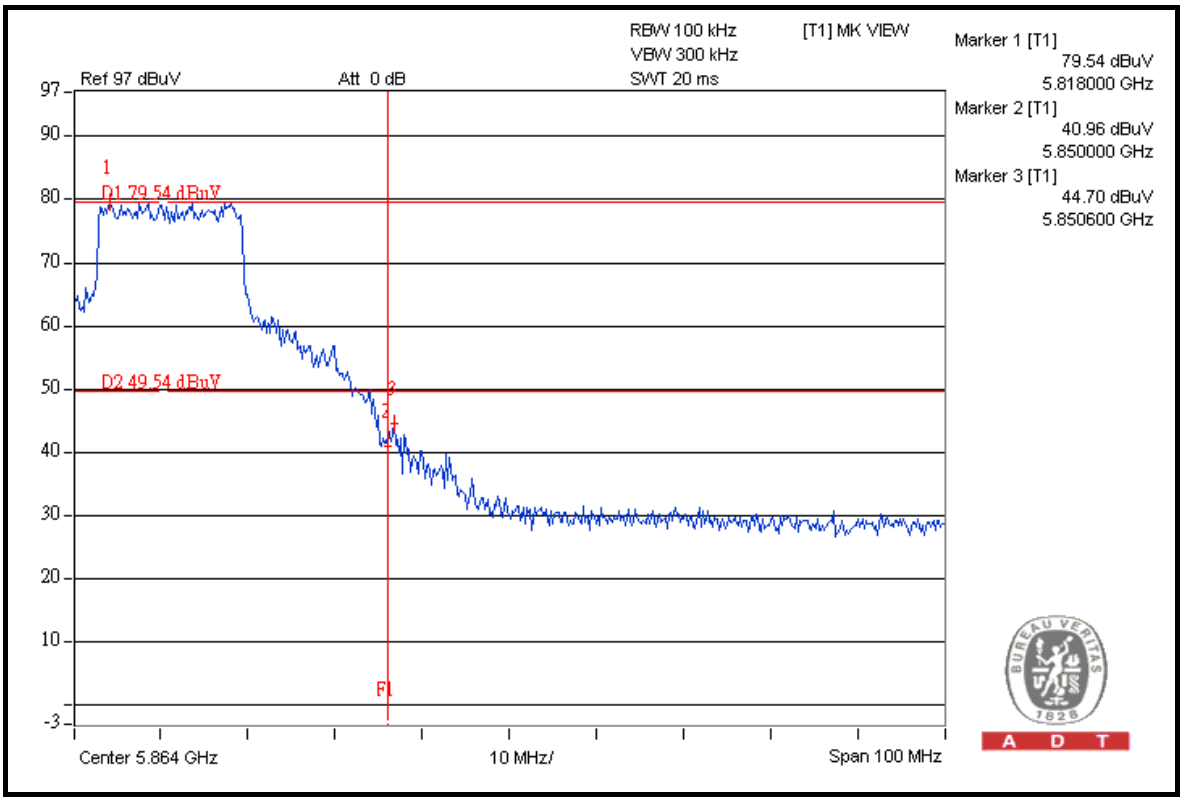

RBW 100 kHz
VBW 300 kHz
SWT 4 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
78.72 dBuV
5.785680 GHz
Marker 2 [T1]
41.33 dBuV
33.285040 GHz
Marker 3 [T1]
41.27 dBuV
33.125160 GHz
Marker 4 [T1]
39.02 dBuV
38.800900 GHz
D1 80.17 dBuV
D2 50.17 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

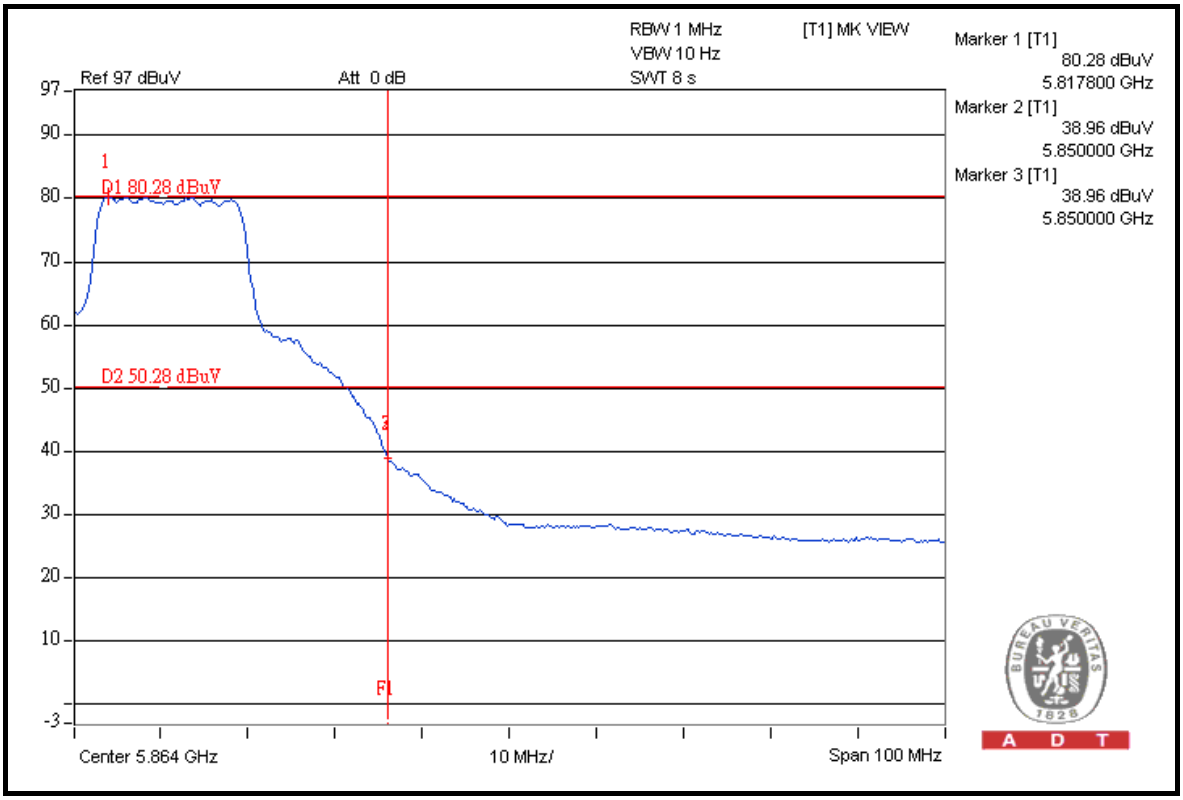
802.11n (20MHz)

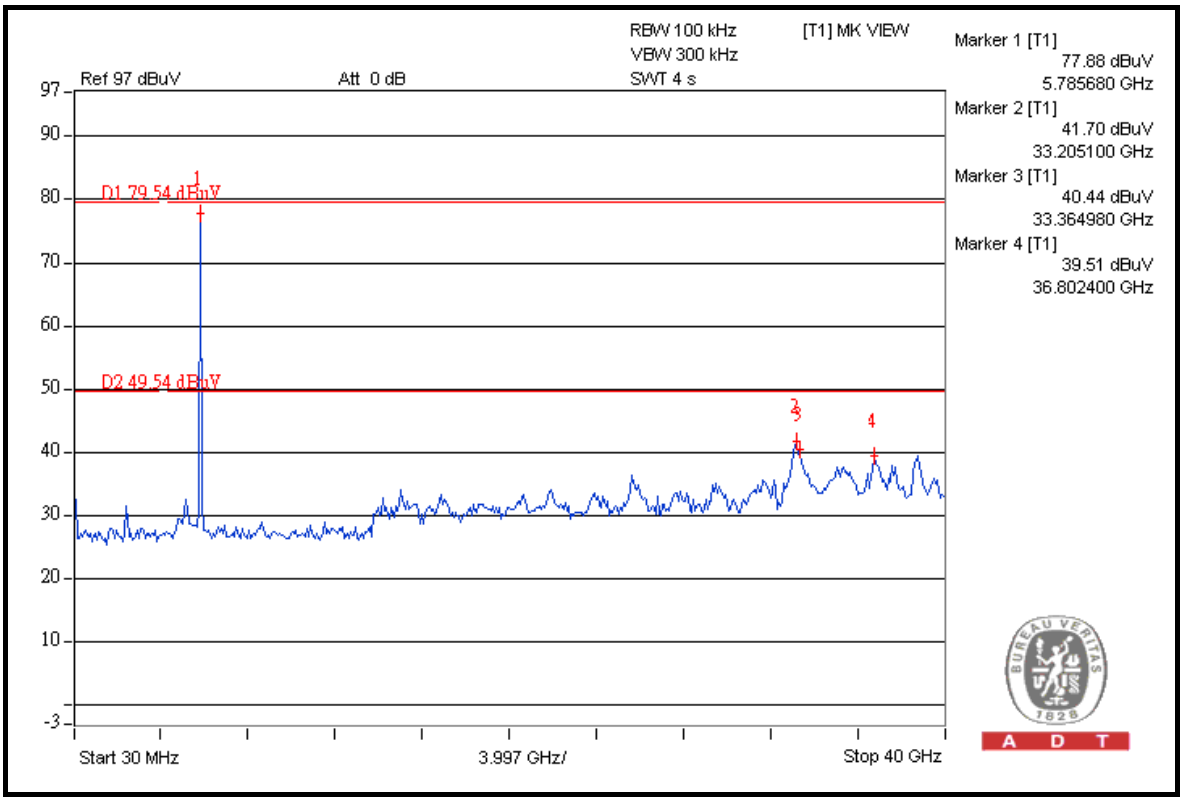




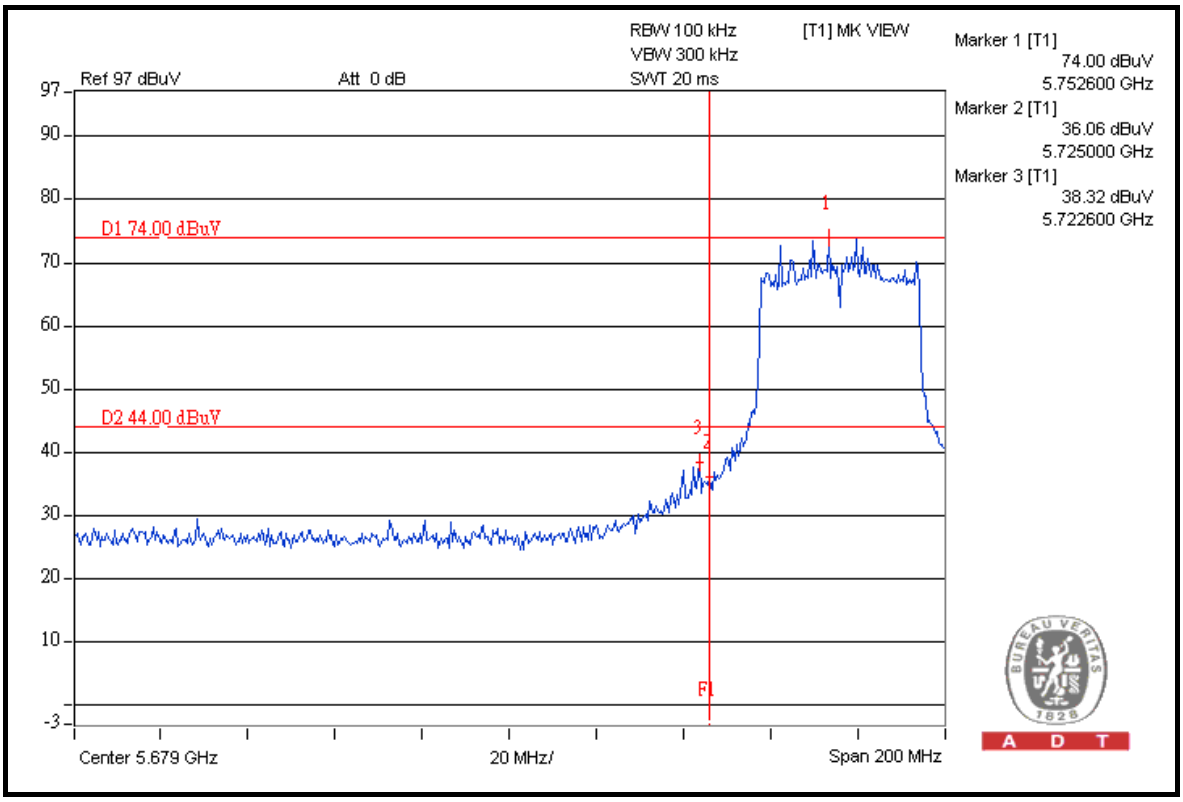

RBW 100 kHz
VBW 300 kHz
SWT 4 s
[T1]PK VIEW
Ref 97 dBuV
Att 0 dB
D1 76.93 dBuV
D2 46.93 dBuV
Marker 1 [T1]
76.38 dBuV
5.70574 GHz
Marker 2 [T1]
41.45 dBuV
33.20510 GHz
Marker 3 [T1]
38.71 dBuV
36.80240 GHz
Marker 4 [T1]
38.37 dBuV
38.80090 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

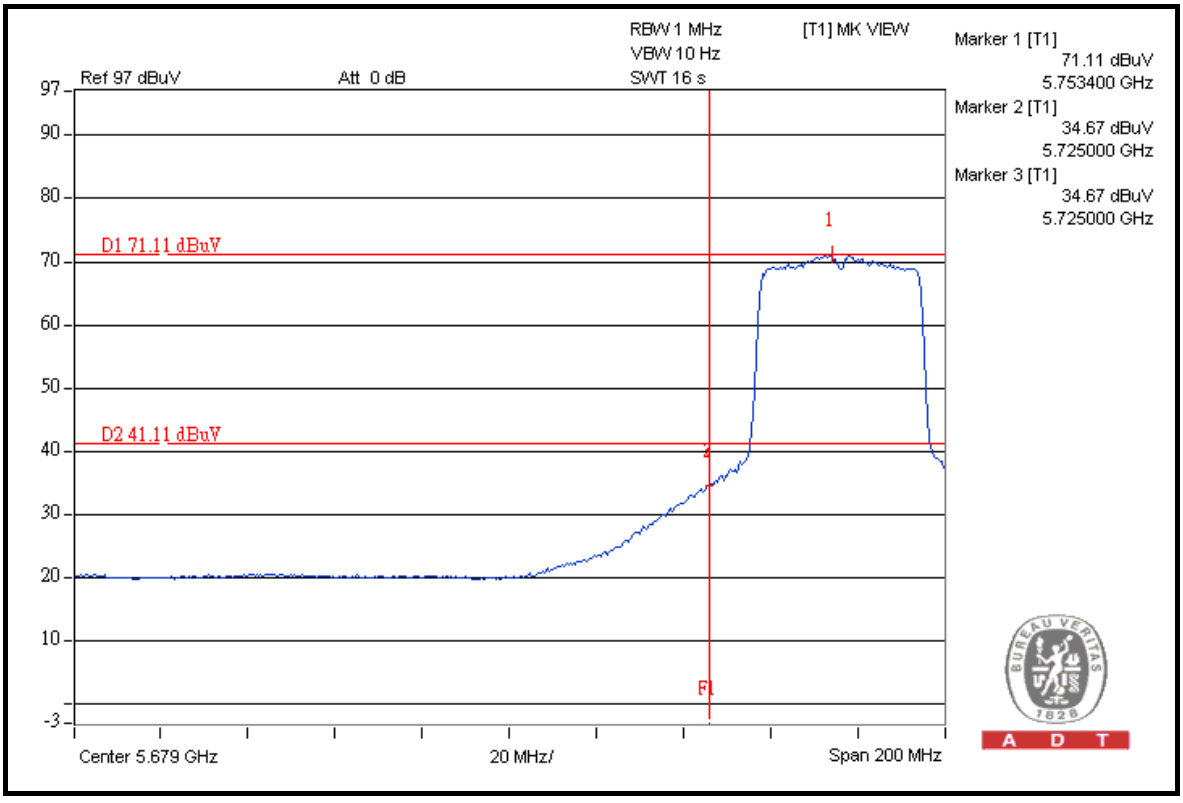

RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 79.54 dBuV
D2 49.54 dBuV
Marker 1 [T1]
79.54 dBuV
5.818000 GHz
Marker 2 [T1]
40.96 dBuV
5.850000 GHz
Marker 3 [T1]
44.70 dBuV
5.850600 GHz
Center 5.864 GHz
10 MHz/
Span 100 MHz

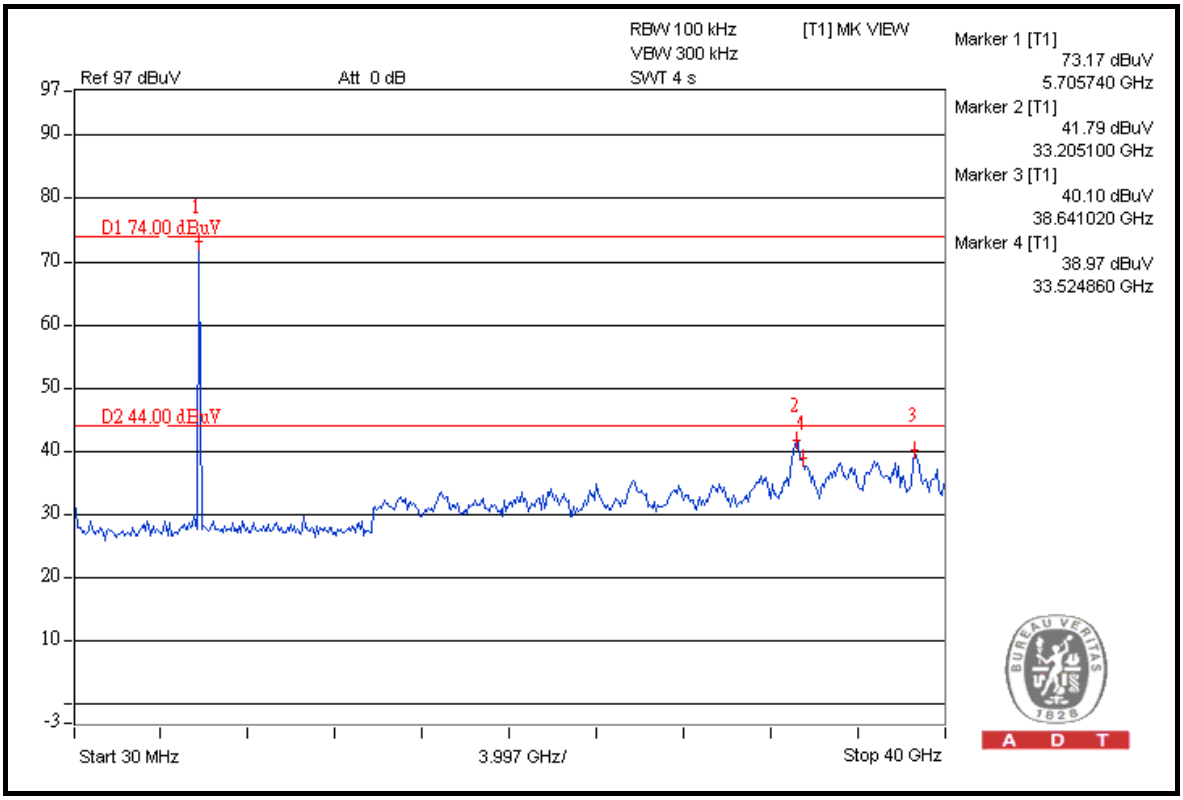

RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
80.28 dBuV
5.817800 GHz
Marker 2 [T1]
38.96 dBuV
5.850000 GHz
Marker 3 [T1]
38.96 dBuV
5.850000 GHz
D1 80.28 dBuV
D2 50.28 dBuV
Center 5.864 GHz
10 MHz/
Span 100 MHz

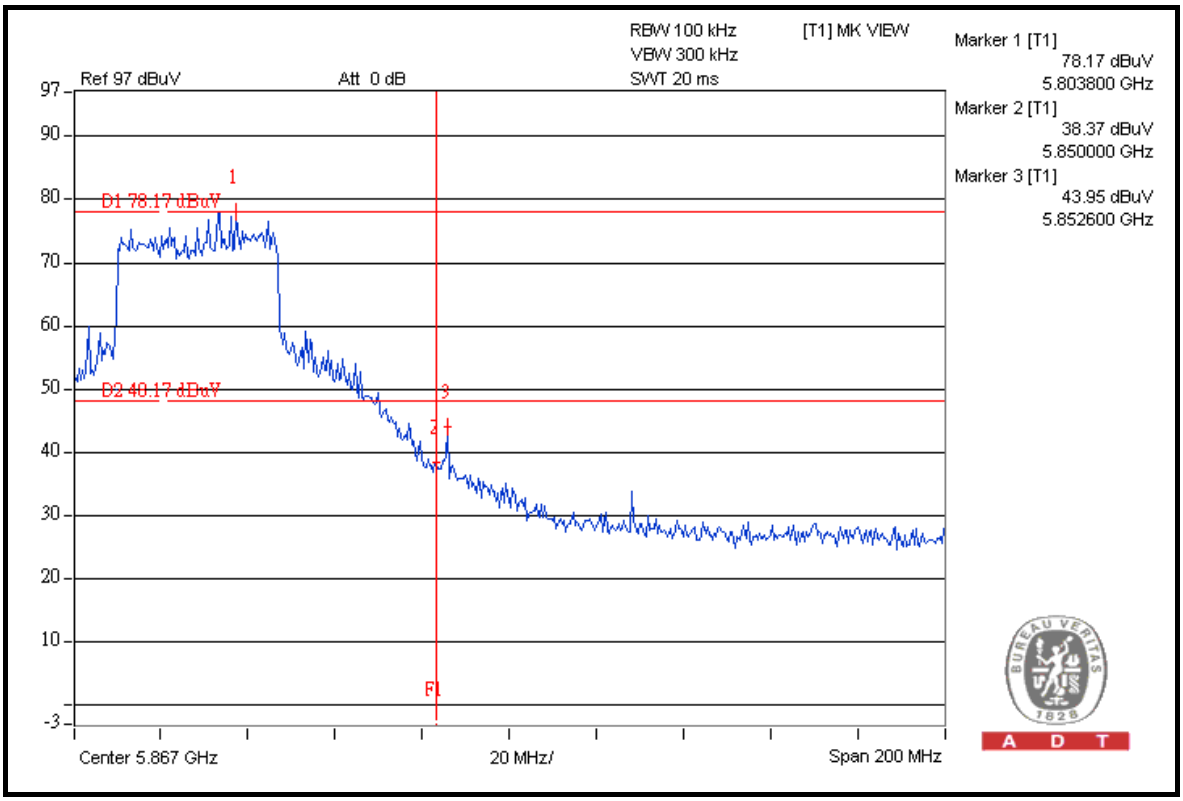

RBW 100 kHz
VBW 300 kHz
SWT 4 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
77.88 dBuV
5.785680 GHz
Marker 2 [T1]
41.70 dBuV
33.205100 GHz
Marker 3 [T1]
40.44 dBuV
33.364980 GHz
Marker 4 [T1]
39.51 dBuV
36.802400 GHz
D1 79.54 dBuV
D2 49.54 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

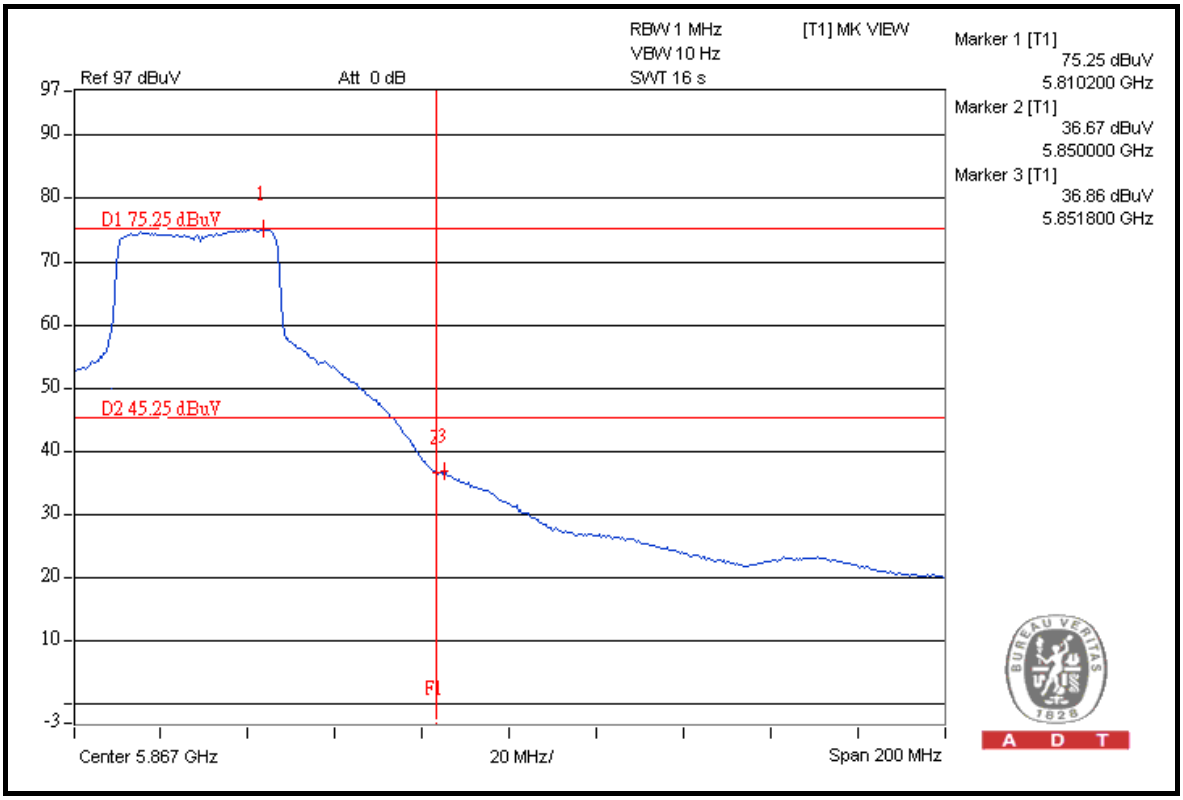
802.11n (40MHz)

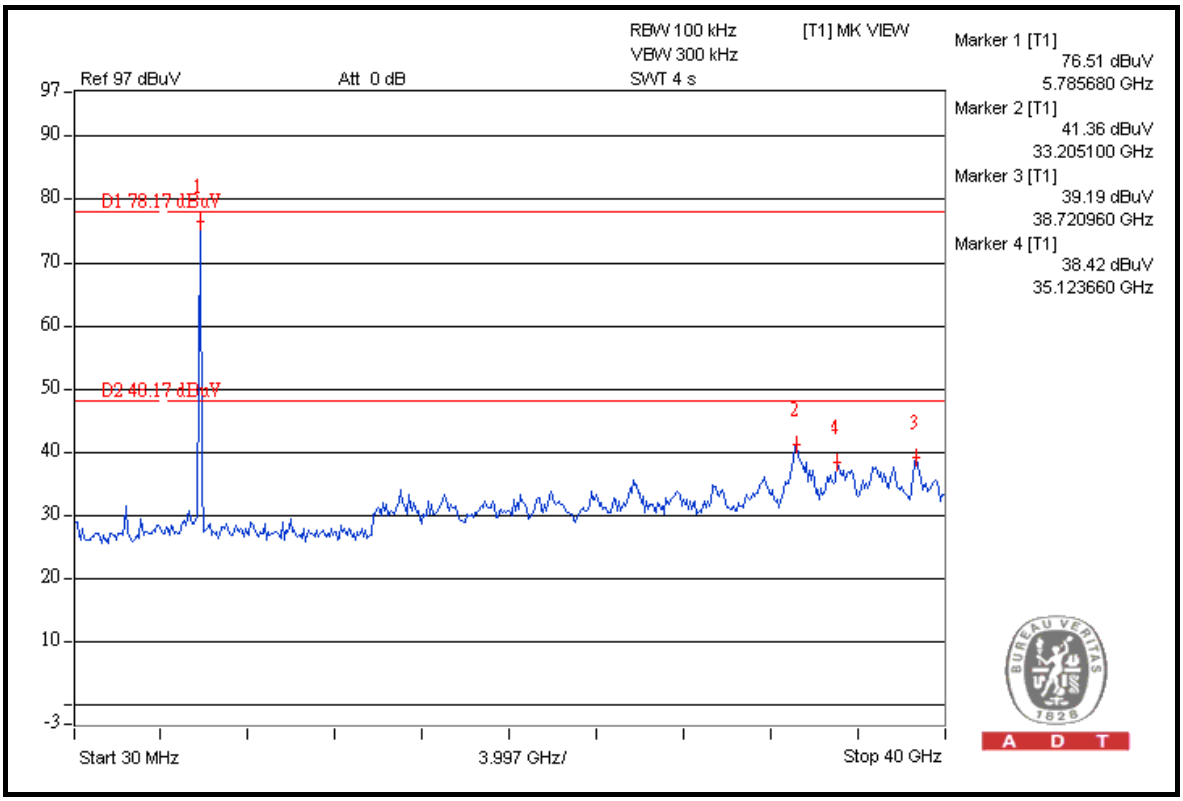





RBW 100 kHz
VBW 300 kHz
SWT 4 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
73.17 dBuV
5.705740 GHz
Marker 2 [T1]
41.79 dBuV
33.205100 GHz
Marker 3 [T1]
40.10 dBuV
38.641020 GHz
Marker 4 [T1]
38.97 dBuV
33.524860 GHz
D1 74.00 dBuV
D2 44.00 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
78.17 dBuV
5.803800 GHz
Marker 2 [T1]
38.37 dBuV
5.850000 GHz
Marker 3 [T1]
43.95 dBuV
5.852600 GHz
D1 78.17 dBuV
D2 40.17 dBuV
Center 5.867 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
75.25 dBuV
5.810200 GHz
Marker 2 [T1]
36.67 dBuV
5.850000 GHz
Marker 3 [T1]
36.86 dBuV
5.851800 GHz
D1 75.25 dBuV
D2 45.25 dBuV
Center 5.867 GHz
20 MHz/
Span 200 MHz


RBW 100 kHz
VBW 300 kHz
SWT 4 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
76.51 dBuV
5.785680 GHz
Marker 2 [T1]
41.36 dBuV
33.205100 GHz
Marker 3 [T1]
39.19 dBuV
38.720960 GHz
Marker 4 [T1]
38.42 dBuV
35.123660 GHz
D1 78.17 dBuV
D2 40.17 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

7. 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.

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5.phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:
Tel: 886-3-3183232
Fax: 886-3-3185050

Web Site: www.adt.com.tw

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

8. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

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

---END---