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FCC TEST REPORT (15.247)

REPORT NO.: RF990114L03-2

MODEL NO.: RFS-4011

FCC ID: UZ7RFS4011

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ISSUED: Nov. 10, 2010

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1. CERTIFICATION

PRODUCT: RF Switch

MODEL NO.: RFS-4011

BRAND: Motorola

APPLICANT: Motorola, Inc.

TEST SAMPLE: ENGINEERING SAMPLE

TESTED: Feb. 05 ~ Oct. 29, 2010

STANDARDS: FCC Part 15, Subpart C (Section 15.247)

ANSI C63.4-2003

The above equipment (Model: RFS-4011) 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 : Polly Chien , **DATE** : Nov. 10, 2010
Polly Chien / Specialist

TECHNICAL ACCEPTANCE : Long Chen , **DATE** : Nov. 10, 2010
Responsible for RF Long Chen / Senior Engineer

APPROVED BY : Gary Chang , **DATE** : Nov. 10, 2010
Gary Chang / Assistant Manager

REVISED VERSION	REVISED DATE	DESCRIPTION
Ver. 1	Aug. 05, 2010	Modified for adding test frequency
Ver. 2	Sep. 01, 2010	Updated antenna gain and Tx power limit of antenna 2 (Model: ML-2452-PTA3M3-036)
Ver. 3	Nov. 10, 2010	Reduced 802.11b/g/a power

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 -9.61dB at 1.906MHz.
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 -1.0dB at 2386.00MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connectors are RSMA, RP-SMA-Male, and type N-Male. (The device is professionally installed)

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	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.34 dB
	200MHz ~1000MHz	3.35 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	RF Switch
MODEL NO.	RFS-4011
FCC ID	UZ7RFS4011
NOMINAL VOLTAGE	+54Vdc (adapter)
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	For 2.4GHz band: 2412.0 ~ 2462.0MHz For 5.0GHz band: 5745.0 ~ 5825.0MHz
NUMBER OF CHANNEL	For 2.4GHz band: 11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz) For 5.0GHz band: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	916.3mW for 2412.0 ~ 2462.0MHz 906.6mW for 5745.0 ~ 5825.0MHz
ANTENNA TYPE	Refer to note for more details
ANTENNA CONNECTER	Refer to note for more details
DATA CABLE	1.5m non-shielded RS232 cable without core
I/O PORTS	Refer to users' manual
ACCESSORY DEVICES	Adapter

NOTE:

1. This report is issued as a supplementary report to the original BV ADT report no.: RF990114L03.
2. This report is prepared for FCC class II permissive change. Difference compared with the original report is reducing output power of 802.11 a/b/g by software, therefore, test items for antenna port conducted and radiated emission tests had been re-tested.

3. The EUT is an RF Switch. 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)	RF990114L03-2
WLAN 802.11a, 802.11n (5745~5825 MHz)		
WLAN 802.11a, 802.11n (5180~ 5240MHz)	FCC Part 15, Subpart E (Section 15.407)	RF990114L03-3

4. The antennas used in this EUT are listed as below table:

NO.	ANTENNA MODEL	TYPE	2.4G GAIN	5.0G GAIN	CONNECTOR TYPE
1	ML-2452-PTA4M3X3-1	PIFA	2.1dBi	3.95dBi	RSMA
2	ML-2452-PTA3M3-036	Ceiling mounted patch	3.5dBi	5.0dBi	RP-SMA-Male x 3
3	ML-2452-HPA5-036	Dipole	3.1dBi	4.6dBi	RP-SMA-Male
4	ML-2452-PNA7-01R	Panel	7.5dBi	6.3dBi for 4900-5250MHz 10.0dBi for 5250~5900MHz	Type N-Male

5. 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)	√	√	√

6. The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and three receivers.

MODULATION MODE	TX FUNCTION
802.11b	3TX
802.11g	3TX
802.11a	3TX
802.11n (20MHz)	3TX
802.11n (40MHz)	3TX

7. The EUT uses following adapter.

BRAND	Emerson / MOTOROLA
MODEL NO	MOTO175-9578 / 86-120786-01
INPUT POWER	100-240Vac, 2.2A Max, 50/60Hz
OUTPUT POWER	+54Vdc, 150W max.
POWER LINE	DC: 1.5m non-shielded cable with 2 cores

8. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 DESCRIPTION OF TEST MODES

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):

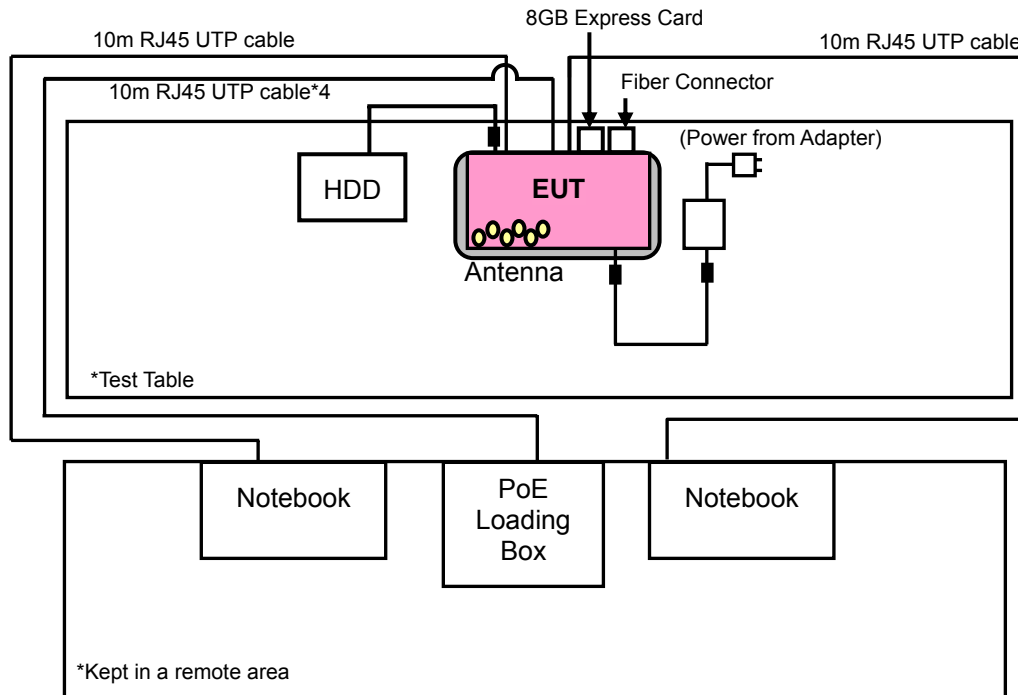
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

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

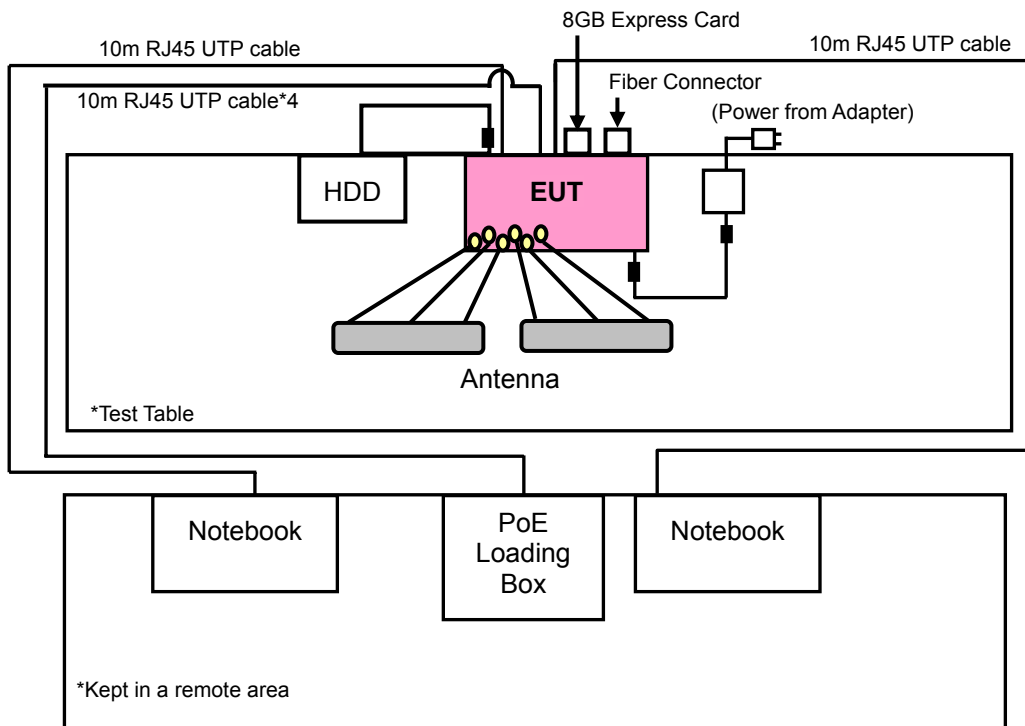
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

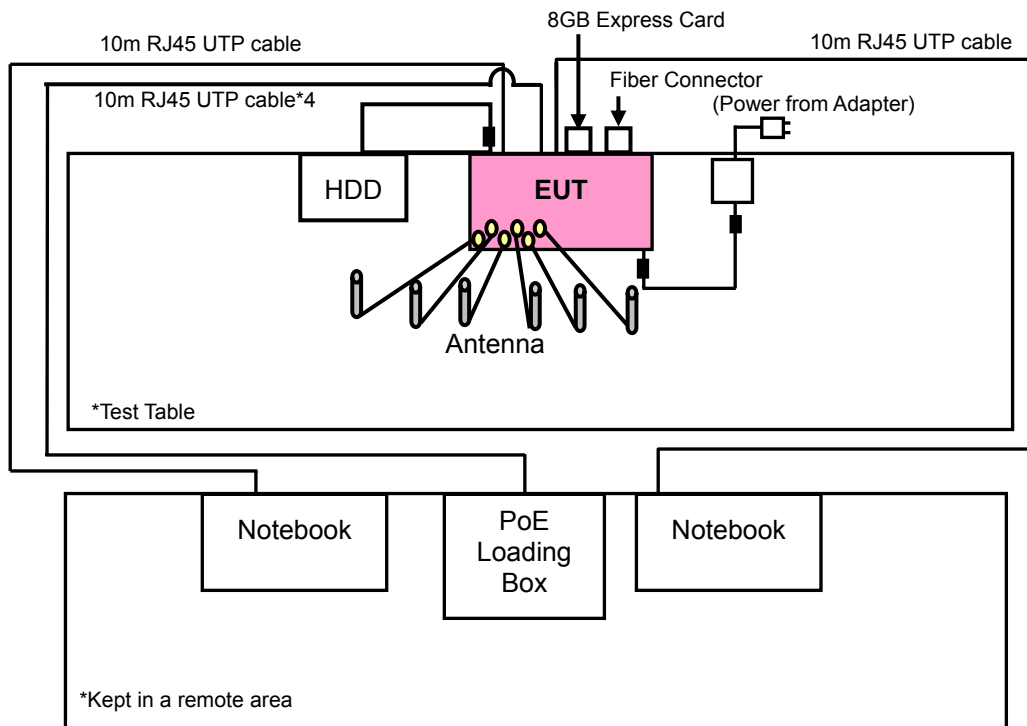
TEST MODE A



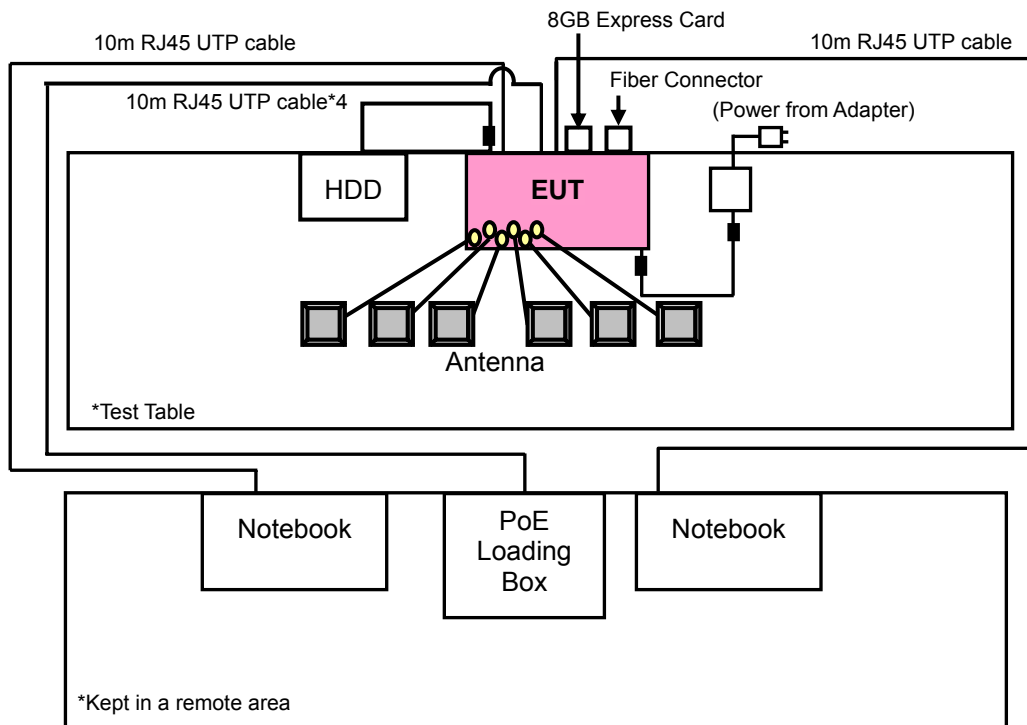
TEST MODE B



TEST MODE C



TEST MODE D



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

FOR 2.400 ~ 2.4835GHz:

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	Antenna 1
B	√	√	√	√	Antenna 2
C	√	√	√	√	Antenna 3
D	√	√	√	√	Antenna 4

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

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)	ANT. AXIS
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	X
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	
	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	
	802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15.0	
B	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	Y
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	
	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	
	802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15.0	
C	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	Z
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	
	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	
	802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15.0	
D	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	Y
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	
	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	
	802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15.0	

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)	ANT. AXIS
A	802.11g	1 to 11	1	OFDM	BPSK	6.0	X
B	802.11g	1 to 11	1	OFDM	BPSK	6.0	Y
C	802.11b	1 to 11	6	DSSS	DBPSK	1.0	Z
D	802.11n (20MHz)	1 to 11	6	OFDM	BPSK	7.2	Y

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)
A	802.11g	1 to 11	1	OFDM	BPSK	6.0
B	802.11g	1 to 11	1	OFDM	BPSK	6.0
C	802.11b	1 to 11	6	DSSS	DBPSK	1.0
D	802.11n (20MHz)	1 to 11	6	OFDM	BPSK	7.2

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)
A, B, C, D	802.11b	1 to 11	1, 11	DSSS	DBPSK	1.0
A, B, C, D	802.11g	1 to 11	1, 11	OFDM	BPSK	6.0
A, B, C, D	802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	7.2
A, B, C, D	802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	15.0

**A D T****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)
A, B, C, D	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A, B, C, D	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A, B, C, D	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2
A, B, C, D	802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE \geq 1G	23deg. C, 65%RH, 1016hPa	120Vac, 60Hz	Lori Chiu
RE<1G	25deg. C, 65%RH, 1020hPa	120Vac, 60Hz	Brad Wu
PLC	24deg. C, 64%RH, 1008hPa	120Vac, 60Hz	Brad Wu
APCM	23deg. C, 65%RH, 1020hPa	120Vac, 60Hz	Brad Wu

FOR 5.745 ~ 5.850GHz:

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	Antenna 1
B	√	√	√	√	Antenna 2
C	√	√	√	√	Antenna 3
D	√	√	√	√	Antenna 4

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

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)	ANT. AXIS
A	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0	X
	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2	
	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0	
B	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0	Y
	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2	
	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0	
C	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0	Z
	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2	
	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0	
D	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0	Y
	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2	
	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0	

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)	ANT. AXIS
A	802.11a	149 to 165	149	OFDM	BPSK	6.0	X
B	802.11n (20MHz)	149 to 165	149	OFDM	BPSK	7.2	Y
C	802.11n (20MHz)	149 to 165	149	OFDM	BPSK	7.2	Z
D	802.11a	149 to 165	149	OFDM	BPSK	6.0	Y

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)
A	802.11a	149 to 165	149	OFDM	BPSK	6.0
B	802.11n (20MHz)	149 to 165	149	OFDM	BPSK	7.2
C	802.11n (20MHz)	149 to 165	149	OFDM	BPSK	7.2
D	802.11a	149 to 165	149	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)
A, B, C, D	802.11a	149 to 165	149, 165	OFDM	BPSK	6.0
A, B, C, D	802.11n (20MHz)	149 to 165	149, 165	OFDM	BPSK	7.2
A, B, C, D	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0

**A D T****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)
A, B, C, D	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
A, B, C, D	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2
A, B, C, D	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE \geq 1G	23deg. C, 65%RH, 1016hPa	120Vac, 60Hz	Lori Chiu, Brad Wu
RE $<$ 1G	25deg. C, 65%RH, 1020hPa	120Vac, 60Hz	Brad Wu
PLC	24deg. C, 64%RH, 1008hPa	120Vac, 60Hz	Brad Wu
APCM	23deg. C, 65%RH, 1020hPa	120Vac, 60Hz	Brad Wu

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

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	EXTERNAL HARD DISK	DELL	RD1000	HK-0XM763-72953-77Q-001E	NA
2	NOTEBOOK	DELL	PP05L	12130898320	E2K24CLNS
3	NOTEBOOK	DELL	PP05L	25191592336	E2K24CLNS
4	POE LOADING BOX	WNC	RLLL-M1	NA	NA
5	FIBER CONNECTOR	Apacoe	LM28-C3S-TC-N	NA	NA
6	8GB EXPRESS CARD	Transcend	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	2 m shielded cable, terminated with USB connector, with one core.
2	10 m UTP RJ45 cable.
3	10 m UTP RJ45 cable.
4	10 m UTP RJ45 cable*4.
5	NA
6	NA

NOTE:

1. All power cords of the above support units are non-shielded (1.8 m).
2. Items 2-4 acted as communication partners to transfer data.
3. Items 4-6 were provided by the 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. 29, 2009	Dec. 28, 2010
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Dec. 31, 2009	Dec. 30, 2010
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 27, 2010	Apr. 26, 2011
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-405	Feb. 03, 2010	Feb. 02, 2011
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 25, 2009	Dec. 24, 2010
Preamplifier Agilent	8447D	2944A10633	Nov. 10, 2009	Nov. 09, 2010
Preamplifier Agilent	8449B	3008A01964	Nov. 09, 2009	Nov. 08, 2010
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	238141/4	May 14, 2010	May 13, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	12738/6	May 14, 2010	May 13, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100.	TT93021703	NA	NA
Turn Table Controller ADT.	SC100.	SC93021703	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 3.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 988962.
5. The IC Site Registration No. is IC 7450F-3.

4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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.

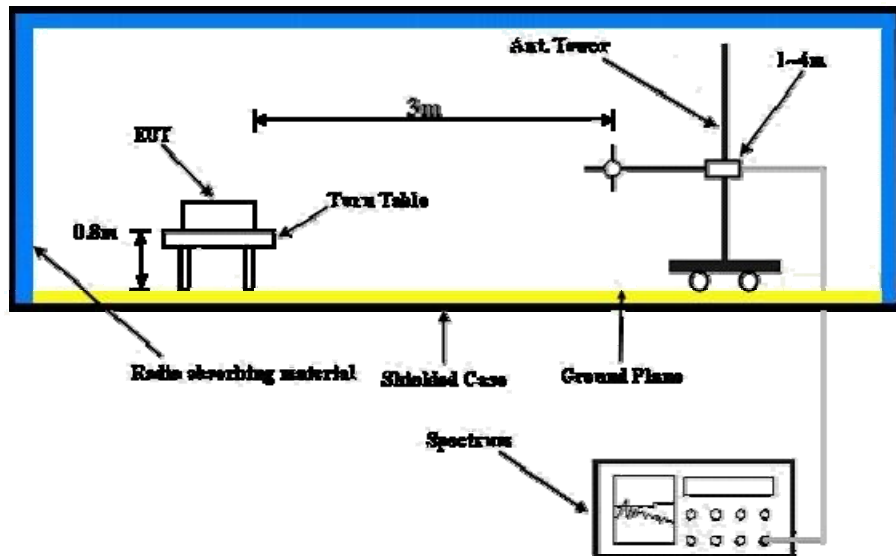
NOTE:

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

- Placed the EUT on the testing table.
- The notebook communicated data with the external floppy via the EUT.
- Prepared notebook systems to act as communication partners and placed them outside of testing area.
- The communication partners connected with EUT via a UTP cable and run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
- The communication partners sent data to EUT by command "PING".



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4.1.7 TEST RESULTS

802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2386.00	57.5 PK	74.0	-16.5	1.29 H	121	27.00	30.50
2	2386.00	46.8 AV	54.0	-7.2	1.29 H	121	16.30	30.50
3	*2412.00	109.0 PK			1.29 H	121	78.40	30.60
4	*2412.00	103.3 AV			1.29 H	121	72.70	30.60
5	4824.00	45.0 PK	74.0	-29.0	1.61 H	5	8.90	36.10
6	4824.00	34.4 AV	54.0	-19.6	1.61 H	5	-1.70	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2386.00	62.9 PK	74.0	-11.1	1.16 V	145	32.40	30.50
2	2386.00	53.0 AV	54.0	-1.0	1.16 V	145	22.50	30.50
3	*2412.00	115.0 PK			1.14 V	168	84.40	30.60
4	*2412.00	109.3 AV			1.14 V	168	78.70	30.60
5	4824.00	45.6 PK	74.0	-28.4	1.16 V	7	9.50	36.10
6	4824.00	37.8 AV	54.0	-16.2	1.16 V	7	1.70	36.10

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	112.0 PK			1.27 H	133	81.40	30.60
2	*2437.00	106.7 AV			1.27 H	133	76.10	30.60
3	4874.00	46.2 PK	74.0	-27.8	1.00 H	218	10.00	36.20
4	4874.00	36.7 AV	54.0	-17.3	1.00 H	218	0.50	36.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	117.6 PK			1.07 V	20	87.00	30.60
2	*2437.00	112.5 AV			1.07 V	20	81.90	30.60
3	4874.00	47.4 PK	74.0	-26.6	1.09 V	323	11.20	36.20
4	4874.00	40.4 AV	54.0	-13.6	1.09 V	323	4.20	36.20

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	110.9 PK			1.30 H	125	80.20	30.70
2	*2462.00	105.5 AV			1.30 H	125	74.80	30.70
3	2487.00	57.8 PK	74.0	-16.2	1.30 H	125	27.00	30.80
4	2487.00	46.8 AV	54.0	-7.2	1.30 H	125	16.00	30.80
5	4924.00	45.0 PK	74.0	-29.0	1.00 H	197	8.70	36.30
6	4924.00	34.5 AV	54.0	-19.5	1.00 H	197	-1.80	36.30
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	*2462.00	115.9 PK			1.13 V	6	85.20	30.70
2	*2462.00	111.3 AV			1.13 V	6	80.60	30.70
3	2487.00	63.3 PK	74.0	-10.7	1.36 V	194	32.50	30.80
4	2487.00	52.3 AV	54.0	-1.7	1.36 V	194	21.50	30.80
5	4924.00	46.0 PK	74.0	-28.0	1.40 V	111	9.70	36.30
6	4924.00	38.5 AV	54.0	-15.5	1.40 V	111	2.20	36.30

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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2386.00	64.7 PK	74.0	-9.3	1.00 H	231	34.20	30.50
2	2386.00	53.0 AV	54.0	-1.0	1.00 H	231	22.50	30.50
3	*2412.00	120.5 PK			1.00 H	227	89.90	30.60
4	*2412.00	114.4 AV			1.00 H	227	83.80	30.60
5	4824.00	45.4 PK	74.0	-28.6	1.38 H	139	9.30	36.10
6	4824.00	36.3 AV	54.0	-17.7	1.38 H	139	0.20	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2386.00	60.5 PK	74.0	-13.5	1.01 V	58	30.00	30.50
2	2386.00	46.8 AV	54.0	-7.2	1.01 V	58	16.30	30.50
3	*2412.00	112.3 PK			1.01 V	58	81.70	30.60
4	*2412.00	105.7 AV			1.01 V	58	75.10	30.60
5	4824.00	44.9 PK	74.0	-29.1	1.01 V	269	8.80	36.10
6	4824.00	33.1 AV	54.0	-20.9	1.01 V	269	-3.00	36.10

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.8 PK	74.0	-13.2	1.18 H	245	30.30	30.50
2	2390.00	49.3 AV	54.0	-4.7	1.18 H	245	18.80	30.50
3	*2437.00	121.6 PK			1.18 H	245	91.00	30.60
4	*2437.00	116.0 AV			1.18 H	245	85.40	30.60
5	2483.50	60.2 PK	74.0	-13.8	1.07 H	210	29.40	30.80
6	2483.50	49.9 AV	54.0	-4.1	1.07 H	210	19.10	30.80
7	4874.00	45.1 PK	74.0	-28.9	1.14 H	91	8.90	36.20
8	4874.00	38.1 AV	54.0	-15.9	1.14 H	91	1.90	36.20
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	58.1 PK	74.0	-15.9	1.09 V	64	27.60	30.50
2	2390.00	44.4 AV	54.0	-9.6	1.09 V	64	13.90	30.50
3	*2437.00	114.1 PK			1.09 V	64	83.50	30.60
4	*2437.00	107.1 AV			1.09 V	64	76.50	30.60
5	2483.50	59.1 PK	74.0	-14.9	1.22 V	45	28.30	30.80
6	2483.50	44.3 AV	54.0	-9.7	1.22 V	45	13.50	30.80
7	4874.00	44.3 PK	74.0	-29.7	1.10 V	144	8.10	36.20
8	4874.00	37.9 AV	54.0	-16.1	1.10 V	144	1.70	36.20

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	120.6 PK			1.00 H	225	89.90	30.70
2	*2462.00	114.5 AV			1.00 H	225	83.80	30.70
3	2483.50	63.7 PK	74.0	-10.3	1.00 H	222	32.90	30.80
4	2483.50	52.1 AV	54.0	-1.9	1.00 H	222	21.30	30.80
5	4924.00	46.3 PK	74.0	-27.7	1.33 H	288	10.00	36.30
6	4924.00	36.9 AV	54.0	-17.1	1.33 H	288	0.60	36.30
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	*2462.00	112.5 PK			1.01 V	77	81.80	30.70
2	*2462.00	105.7 AV			1.01 V	77	75.00	30.70
3	2483.50	60.8 PK	74.0	-13.2	1.01 V	77	30.00	30.80
4	2483.50	46.8 AV	54.0	-7.2	1.01 V	77	16.00	30.80
5	4924.00	45.2 PK	74.0	-28.8	1.21 V	144	8.90	36.30
6	4924.00	33.8 AV	54.0	-20.2	1.21 V	144	-2.50	36.30

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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	2386.00	58.7 PK	74.0	-15.3	1.00 H	197	28.20	30.50
2	2386.00	46.6 AV	54.0	-7.4	1.00 H	197	16.10	30.50
3	*2412.00	104.1 PK			1.00 H	197	73.50	30.60
4	*2412.00	98.2 AV			1.00 H	197	67.60	30.60
5	4824.00	46.3 PK	74.0	-27.7	1.08 H	26	10.20	36.10
6	4824.00	36.1 AV	54.0	-17.9	1.08 H	26	0.00	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2386.00	63.7 PK	74.0	-10.3	1.00 V	194	33.20	30.50
2	2386.00	52.9 AV	54.0	-1.1	1.00 V	194	22.40	30.50
3	*2412.00	116.8 PK			1.00 V	194	86.20	30.60
4	*2412.00	110.6 AV			1.00 V	194	80.00	30.60
5	4824.00	46.6 PK	74.0	-27.4	1.11 V	31	10.50	36.10
6	4824.00	36.4 AV	54.0	-17.6	1.11 V	31	0.30	36.10

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	56.9 PK	74.0	-17.1	1.15 H	55	26.40	30.50
2	2390.00	44.8 AV	54.0	-9.2	1.15 H	55	14.30	30.50
3	*2437.00	106.8 PK			1.15 H	55	76.20	30.60
4	*2437.00	100.9 AV			1.15 H	55	70.30	30.60
5	2483.50	56.7 PK	74.0	-17.3	1.19 H	60	25.90	30.80
6	2483.50	43.8 AV	54.0	-10.2	1.19 H	60	13.00	30.80
7	4874.00	45.7 PK	74.0	-28.3	1.20 H	66	9.50	36.20
8	4874.00	35.4 AV	54.0	-18.6	1.20 H	66	-0.80	36.20
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	62.4 PK	74.0	-11.6	1.31 V	163	31.90	30.50
2	2390.00	51.0 AV	54.0	-3.0	1.31 V	163	20.50	30.50
3	*2437.00	119.9 PK			1.31 V	163	89.30	30.60
4	*2437.00	114.0 AV			1.31 V	163	83.40	30.60
5	2483.50	61.1 PK	74.0	-12.9	1.20 V	144	30.30	30.80
6	2483.50	50.0 AV	54.0	-4.0	1.20 V	144	19.20	30.80
7	4874.00	47.2 PK	74.0	-26.8	1.19 V	263	11.00	36.20
8	4874.00	36.9 AV	54.0	-17.1	1.19 V	263	0.70	36.20

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	105.0 PK			1.02 H	199	74.30	30.70
2	*2462.00	99.1 AV			1.02 H	199	68.40	30.70
3	2488.00	58.5 PK	74.0	-15.5	1.02 H	199	27.70	30.80
4	2488.00	46.3 AV	54.0	-7.7	1.02 H	199	15.50	30.80
5	4924.00	46.1 PK	74.0	-27.9	1.06 H	238	9.80	36.30
6	4924.00	35.8 AV	54.0	-18.2	1.06 H	238	-0.50	36.30
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	*2462.00	117.8 PK			1.02 V	14	87.10	30.70
2	*2462.00	112.0 AV			1.02 V	14	81.30	30.70
3	2488.00	65.0 PK	74.0	-9.0	1.02 V	14	34.20	30.80
4	2488.00	52.8 AV	54.0	-1.2	1.02 V	14	22.00	30.80
5	4924.00	46.9 PK	74.0	-27.1	1.02 V	159	10.60	36.30
6	4924.00	36.6 AV	54.0	-17.4	1.02 V	159	0.30	36.30

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.8 PK	74.0	-11.2	1.09 H	24	32.30	30.50
2	2390.00	50.6 AV	54.0	-3.4	1.09 H	24	20.10	30.50
3	*2412.00	121.1 PK			1.09 H	24	90.50	30.60
4	*2412.00	116.5 AV			1.09 H	24	85.90	30.60
5	4824.00	46.4 PK	74.0	-27.6	1.27 H	73	10.30	36.10
6	4824.00	37.3 AV	54.0	-16.7	1.27 H	73	1.20	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	56.8 PK	74.0	-17.2	1.45 V	61	26.30	30.50
2	2390.00	45.3 AV	54.0	-8.7	1.45 V	61	14.80	30.50
3	*2412.00	105.6 PK			1.45 V	63	75.00	30.60
4	*2412.00	100.7 AV			1.45 V	63	70.10	30.60
5	4824.00	47.4 PK	74.0	-26.6	1.28 V	37	11.30	36.10
6	4824.00	32.7 AV	54.0	-21.3	1.28 V	37	-3.40	36.10

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	1.27 H	256	28.90	30.50
2	2390.00	47.7 AV	54.0	-6.3	1.27 H	256	17.20	30.50
3	*2437.00	120.5 PK			1.24 H	67	89.90	30.60
4	*2437.00	115.7 AV			1.24 H	67	85.10	30.60
5	2483.50	62.7 PK	74.0	-11.3	1.22 H	93	31.90	30.80
6	2483.50	51.0 AV	54.0	-3.0	1.22 H	93	20.20	30.80
7	4874.00	47.2 PK	74.0	-26.8	1.03 H	88	11.00	36.20
8	4874.00	42.6 AV	54.0	-11.4	1.03 H	88	6.40	36.20
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	53.6 PK	74.0	-20.4	1.24 V	144	23.10	30.50
2	2390.00	42.0 AV	54.0	-12.0	1.24 V	144	11.50	30.50
3	*2437.00	105.0 PK			1.22 V	144	74.40	30.60
4	*2437.00	99.9 AV			1.22 V	144	69.30	30.60
5	2483.50	56.6 PK	74.0	-17.4	1.25 V	67	25.80	30.80
6	2483.50	45.1 AV	54.0	-8.9	1.25 V	67	14.30	30.80
7	4874.00	47.9 PK	74.0	-26.1	1.15 V	210	11.70	36.20
8	4874.00	33.6 AV	54.0	-20.4	1.15 V	310	-2.60	36.20

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	120.4 PK			1.13 H	66	89.70	30.70
2	*2462.00	115.8 AV			1.13 H	66	85.10	30.70
3	2488.00	64.3 PK	74.0	-9.7	1.13 H	66	33.50	30.80
4	2488.00	51.9 AV	54.0	-2.1	1.13 H	66	21.10	30.80
5	4924.00	47.5 PK	74.0	-26.5	1.08 H	43	11.20	36.30
6	4924.00	38.7 AV	54.0	-15.3	1.08 H	43	2.40	36.30
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	*2462.00	105.0 PK			1.47 V	93	74.30	30.70
2	*2462.00	100.2 AV			1.47 V	93	69.50	30.70
3	2483.50	57.6 PK	74.0	-16.4	1.47 V	93	26.80	30.80
4	2483.50	46.1 AV	54.0	-7.9	1.47 V	93	15.30	30.80
5	4924.00	48.0 PK	74.0	-26.0	1.04 V	73	11.70	36.30
6	4924.00	33.2 AV	54.0	-20.8	1.04 V	73	-3.10	36.30

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.



A D T

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.3 PK	74.0	-13.7	1.08 H	27	29.80	30.50
2	2390.00	45.5 AV	54.0	-8.5	1.08 H	27	15.00	30.50
3	*2412.00	105.0 PK			1.08 H	27	74.40	30.60
4	*2412.00	91.5 AV			1.08 H	27	60.90	30.60
5	4824.00	45.1 PK	74.0	-28.9	1.10 H	39	9.00	36.10
6	4824.00	32.2 AV	54.0	-21.8	1.10 H	39	-3.90	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	70.3 PK	74.0	-3.7	1.11 V	310	39.80	30.50
2	2390.00	51.2 AV	54.0	-2.8	1.11 V	310	20.70	30.50
3	*2412.00	112.2 PK			1.11 V	310	81.60	30.60
4	*2412.00	99.1 AV			1.11 V	310	68.50	30.60
5	4824.00	45.9 PK	74.0	-28.1	1.07 V	77	9.80	36.10
6	4824.00	32.1 AV	54.0	-21.9	1.07 V	77	-4.00	36.10

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	105.4 PK			1.09 H	144	74.80	30.60
2	*2437.00	91.9 AV			1.09 H	144	61.30	30.60
3	4874.00	47.6 PK	74.0	-26.4	1.24 H	210	11.40	36.20
4	4874.00	34.3 AV	54.0	-19.7	1.24 H	210	-1.90	36.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	112.8 PK			1.11 V	283	82.20	30.60
2	*2437.00	99.2 AV			1.11 V	283	68.60	30.60
3	4874.00	45.9 PK	74.0	-28.1	1.16 V	257	9.70	36.20
4	4874.00	32.7 AV	54.0	-21.3	1.16 V	257	-3.50	36.20

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	105.2 PK			1.09 H	67	74.50	30.70
2	*2462.00	91.9 AV			1.09 H	67	61.20	30.70
3	2483.50	60.7 PK	74.0	-13.3	1.09 H	67	29.90	30.80
4	2483.50	45.8 AV	54.0	-8.2	1.09 H	67	15.00	30.80
5	4924.00	45.7 PK	74.0	-28.3	1.12 H	81	9.40	36.30
6	4924.00	32.7 AV	54.0	-21.3	1.12 H	81	-3.60	36.30
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	*2462.00	112.5 PK			1.13 V	250	81.80	30.70
2	*2462.00	99.1 AV			1.13 V	250	68.40	30.70
3	2483.50	67.3 PK	74.0	-6.7	1.13 V	250	36.50	30.80
4	2483.50	51.7 AV	54.0	-2.3	1.13 V	250	20.90	30.80
5	4924.00	45.7 PK	74.0	-28.3	1.07 V	55	9.40	36.30
6	4924.00	32.6 AV	54.0	-21.4	1.07 V	55	-3.70	36.30

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.2 PK	74.0	-7.8	1.17 H	83	35.70	30.50
2	2390.00	49.7 AV	54.0	-4.3	1.17 H	83	19.20	30.50
3	*2412.00	116.8 PK			1.17 H	83	86.20	30.60
4	*2412.00	103.1 AV			1.17 H	83	72.50	30.60
5	4824.00	43.5 PK	74.0	-30.5	1.20 H	93	7.40	36.10
6	4824.00	31.1 AV	54.0	-22.9	1.20 H	93	-5.00	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.4 PK	74.0	-12.6	1.07 V	95	30.90	30.50
2	2390.00	46.2 AV	54.0	-7.8	1.07 V	95	15.70	30.50
3	*2412.00	108.9 PK			1.07 V	95	78.30	30.60
4	*2412.00	96.2 AV			1.07 V	95	65.60	30.60
5	4824.00	42.7 PK	74.0	-31.3	1.11 V	75	6.60	36.10
6	4824.00	30.2 AV	54.0	-23.8	1.11 V	75	-5.90	36.10

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.9 PK	74.0	-13.1	1.14 H	210	30.40	30.50
2	2390.00	48.5 AV	54.0	-5.5	1.14 H	210	18.00	30.50
3	*2437.00	117.3 PK			1.14 H	210	86.70	30.60
4	*2437.00	103.5 AV			1.14 H	210	72.90	30.60
5	4874.00	44.7 PK	74.0	-29.3	1.19 H	255	8.50	36.20
6	4874.00	31.3 AV	54.0	-22.7	1.19 H	255	-4.90	36.20
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	58.2 PK	74.0	-15.8	1.14 V	73	27.70	30.50
2	2390.00	46.7 AV	54.0	-7.3	1.14 V	73	16.20	30.50
3	*2437.00	109.3 PK			1.14 V	73	78.70	30.60
4	*2437.00	96.5 AV			1.14 V	73	65.90	30.60
5	4874.00	44.6 PK	74.0	-29.4	1.17 V	143	8.40	36.20
6	4874.00	31.4 AV	54.0	-22.6	1.17 V	143	-4.80	36.20

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	116.3 PK			1.17 H	57	85.60	30.70
2	*2462.00	102.9 AV			1.17 H	57	72.20	30.70
3	2483.50	68.3 PK	74.0	-5.7	1.17 H	57	37.50	30.80
4	2483.50	50.5 AV	54.0	-3.5	1.17 H	57	19.70	30.80
5	4924.00	44.1 PK	74.0	-29.9	1.07 H	63	7.80	36.30
6	4924.00	31.4 AV	54.0	-22.6	1.07 H	63	-4.90	36.30
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	*2462.00	108.6 PK			1.27 V	63	77.90	30.70
2	*2462.00	95.8 AV			1.27 V	63	65.10	30.70
3	2483.50	62.1 PK	74.0	-11.9	1.27 V	63	31.30	30.80
4	2483.50	46.7 AV	54.0	-7.3	1.27 V	63	15.90	30.80
5	4924.00	43.2 PK	74.0	-30.8	1.44 V	25	6.90	36.30
6	4924.00	31.0 AV	54.0	-23.0	1.44 V	25	-5.30	36.30

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	56.2 PK	74.0	-17.8	1.04 H	15	25.70	30.50
2	2390.00	45.1 AV	54.0	-8.9	1.04 H	15	14.60	30.50
3	*2412.00	102.1 PK			1.04 H	15	71.50	30.60
4	*2412.00	87.3 AV			1.04 H	15	56.70	30.60
5	4824.00	46.3 PK	74.0	-27.7	1.08 H	231	10.20	36.10
6	4824.00	32.8 AV	54.0	-21.2	1.08 H	231	-3.30	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	72.1 PK	74.0	-1.9	1.03 V	214	41.60	30.50
2	2390.00	52.3 AV	54.0	-1.7	1.03 V	214	21.80	30.50
3	*2412.00	115.8 PK			1.03 V	214	85.20	30.60
4	*2412.00	101.9 AV			1.03 V	214	71.30	30.60
5	4824.00	46.9 PK	74.0	-27.1	1.35 V	91	10.80	36.10
6	4824.00	33.6 AV	54.0	-20.4	1.35 V	91	-2.50	36.10

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	103.1 PK			1.34 H	93	72.50	30.60
2	*2437.00	88.3 AV			1.34 H	93	57.70	30.60
3	4874.00	45.0 PK	74.0	-29.0	1.22 H	57	8.80	36.20
4	4874.00	32.1 AV	54.0	-21.9	1.22 H	57	-4.10	36.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	116.9 PK			1.08 V	63	86.30	30.60
2	*2437.00	103.0 AV			1.08 V	63	72.40	30.60
3	4874.00	45.1 PK	74.0	-28.9	1.14 V	42	8.90	36.20
4	4874.00	32.2 AV	54.0	-21.8	1.14 V	42	-4.00	36.20

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	102.3 PK			1.04 H	16	71.60	30.70
2	*2462.00	87.6 AV			1.04 H	16	56.90	30.70
3	2483.50	56.5 PK	74.0	-17.5	1.04 H	16	25.70	30.80
4	2483.50	45.2 AV	54.0	-8.8	1.04 H	16	14.40	30.80
5	4924.00	46.8 PK	74.0	-27.2	1.09 H	55	10.50	36.30
6	4924.00	33.2 AV	54.0	-20.8	1.09 H	55	-3.10	36.30
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	*2462.00	116.1 PK			1.16 V	31	85.40	30.70
2	*2462.00	102.2 AV			1.16 V	31	71.50	30.70
3	2483.50	71.0 PK	74.0	-3.0	1.16 V	31	40.20	30.80
4	2483.50	52.5 AV	54.0	-1.5	1.16 V	31	21.70	30.80
5	4924.00	46.6 PK	74.0	-27.4	1.04 V	22	10.30	36.30
6	4924.00	33.4 AV	54.0	-20.6	1.04 V	22	-2.90	36.30

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	70.2 PK	74.0	-3.8	1.10 H	279	39.70	30.50
2	2390.00	50.8 AV	54.0	-3.2	1.10 H	279	20.30	30.50
3	*2412.00	116.7 PK			1.10 H	279	86.10	30.60
4	*2412.00	103.6 AV			1.10 H	279	73.00	30.60
5	4824.00	46.2 PK	74.0	-27.8	1.06 H	93	10.10	36.10
6	4824.00	33.6 AV	54.0	-20.4	1.06 H	93	-2.50	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.7 PK	74.0	-15.3	1.17 V	21	28.20	30.50
2	2390.00	45.7 AV	54.0	-8.3	1.17 V	21	15.20	30.50
3	*2412.00	102.3 PK			1.17 V	21	71.70	30.60
4	*2412.00	89.0 AV			1.17 V	21	58.40	30.60
5	4824.00	46.7 PK	74.0	-27.3	1.13 V	36	10.60	36.10
6	4824.00	34.3 AV	54.0	-19.7	1.13 V	36	-1.80	36.10

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.7 PK	74.0	-12.3	1.13 H	36	31.20	30.50
2	2390.00	48.3 AV	54.0	-5.7	1.13 H	36	17.80	30.50
3	*2437.00	117.2 PK			1.13 H	36	86.60	30.60
4	*2437.00	104.0 AV			1.13 H	36	73.40	30.60
5	2483.50	60.1 PK	74.0	-13.9	1.15 H	53	29.30	30.80
6	2483.50	47.0 AV	54.0	-7.0	1.15 H	53	16.20	30.80
7	4874.00	45.1 PK	74.0	-28.9	1.22 H	45	8.90	36.20
8	4874.00	32.3 AV	54.0	-21.7	1.22 H	45	-3.90	36.20
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	54.9 PK	74.0	-19.1	1.08 V	34	24.40	30.50
2	2390.00	42.0 AV	54.0	-12.0	1.08 V	34	11.50	30.50
3	*2437.00	102.8 PK			1.08 V	34	72.20	30.60
4	*2437.00	89.5 AV			1.08 V	34	58.90	30.60
5	2483.50	53.8 PK	74.0	-20.2	1.04 V	22	23.00	30.80
6	2483.50	40.6 AV	54.0	-13.4	1.04 V	22	9.80	30.80
7	4874.00	44.7 PK	74.0	-29.3	1.44 V	28	8.50	36.20
8	4874.00	32.1 AV	54.0	-21.9	1.44 V	28	-4.10	36.20

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	116.3 PK			1.40 H	28	85.60	30.70
2	*2462.00	102.9 AV			1.40 H	28	72.20	30.70
3	2483.50	66.3 PK	74.0	-7.7	1.40 H	28	35.50	30.80
4	2483.50	50.8 AV	54.0	-3.2	1.40 H	28	20.00	30.80
5	4924.00	46.1 PK	74.0	-27.9	1.33 H	67	9.80	36.30
6	4924.00	33.3 AV	54.0	-20.7	1.33 H	67	-3.00	36.30
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	*2462.00	101.6 PK			1.27 V	45	70.90	30.70
2	*2462.00	88.5 AV			1.27 V	45	57.80	30.70
3	2483.50	58.3 PK	74.0	-15.7	1.27 V	45	27.50	30.80
4	2483.50	45.7 AV	54.0	-8.3	1.27 V	45	14.90	30.80
5	4924.00	47.2 PK	74.0	-26.8	1.17 V	33	10.90	36.30
6	4924.00	34.1 AV	54.0	-19.9	1.17 V	33	-2.20	36.30

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.



A D T

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.5 PK	74.0	-12.5	1.00 H	174	31.00	30.50
2	2390.00	46.8 AV	54.0	-7.2	1.00 H	174	16.30	30.50
3	*2412.00	106.2 PK			1.00 H	174	75.60	30.60
4	*2412.00	92.8 AV			1.00 H	174	62.20	30.60
5	4824.00	46.9 PK	74.0	-27.1	1.00 H	126	10.80	36.10
6	4824.00	33.5 AV	54.0	-20.5	1.00 H	126	-2.60	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	71.0 PK	74.0	-3.0	1.14 V	324	40.50	30.50
2	2390.00	52.0 AV	54.0	-2.0	1.14 V	324	21.50	30.50
3	*2412.00	113.5 PK			1.14 V	324	82.90	30.60
4	*2412.00	100.3 AV			1.14 V	324	69.70	30.60
5	4824.00	46.3 PK	74.0	-27.7	1.41 V	29	10.20	36.10
6	4824.00	33.2 AV	54.0	-20.8	1.41 V	29	-2.90	36.10

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	106.6 PK			1.00 H	176	76.00	30.60
2	*2437.00	93.1 AV			1.00 H	176	62.50	30.60
3	4874.00	47.3 PK	74.0	-26.7	1.06 H	224	11.10	36.20
4	4874.00	34.1 AV	54.0	-19.9	1.06 H	224	-2.10	36.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	114.1 PK			1.13 V	335	83.50	30.60
2	*2437.00	100.6 AV			1.13 V	335	70.00	30.60
3	4874.00	46.6 PK	74.0	-27.4	1.03 V	256	10.40	36.20
4	4874.00	33.5 AV	54.0	-20.5	1.03 V	256	-2.70	36.20

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	105.9 PK			1.01 H	175	75.20	30.70
2	*2462.00	92.5 AV			1.01 H	175	61.80	30.70
3	2483.50	61.4 PK	74.0	-12.6	1.01 H	175	30.60	30.80
4	2483.50	46.5 AV	54.0	-7.5	1.01 H	175	15.70	30.80
5	4924.00	46.6 PK	74.0	-27.4	1.06 H	258	10.30	36.30
6	4924.00	33.3 AV	54.0	-20.7	1.06 H	258	-3.00	36.30
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	*2462.00	113.3 PK			1.10 V	327	82.60	30.70
2	*2462.00	99.8 AV			1.10 V	327	69.10	30.70
3	2483.50	67.9 PK	74.0	-6.1	1.10 V	327	37.10	30.80
4	2483.50	52.4 AV	54.0	-1.6	1.10 V	327	21.60	30.80
5	4924.00	46.1 PK	74.0	-27.9	1.01 V	88	9.80	36.30
6	4924.00	32.8 AV	54.0	-21.2	1.01 V	88	-3.50	36.30

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	71.5 PK	74.0	-2.5	1.00 H	230	41.00	30.50
2	2390.00	52.8 AV	54.0	-1.2	1.00 H	230	22.30	30.50
3	*2412.00	117.8 PK			1.00 H	221	87.20	30.60
4	*2412.00	103.4 AV			1.00 H	221	72.80	30.60
5	4824.00	45.9 PK	74.0	-28.1	1.37 H	264	9.80	36.10
6	4824.00	32.9 AV	54.0	-21.1	1.37 H	264	-3.20	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	63.7 PK	74.0	-10.3	1.03 V	78	33.20	30.50
2	2390.00	48.9 AV	54.0	-5.1	1.03 V	78	18.40	30.50
3	*2412.00	109.3 PK			1.03 V	78	78.70	30.60
4	*2412.00	96.7 AV			1.03 V	78	66.10	30.60
5	4824.00	44.7 PK	74.0	-29.3	1.23 V	269	8.60	36.10
6	4824.00	32.1 AV	54.0	-21.9	1.23 V	269	-4.00	36.10

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.7 PK	74.0	-11.3	1.00 H	222	32.20	30.50
2	2390.00	50.4 AV	54.0	-3.6	1.00 H	222	19.90	30.50
3	*2437.00	119.8 PK			1.00 H	222	89.20	30.60
4	*2437.00	105.5 AV			1.00 H	222	74.90	30.60
5	4874.00	45.8 PK	74.0	-28.2	1.20 H	344	9.60	36.20
6	4874.00	32.7 AV	54.0	-21.3	1.20 H	344	-3.50	36.20
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	60.7 PK	74.0	-13.3	1.03 V	80	30.20	30.50
2	2390.00	48.3 AV	54.0	-5.7	1.03 V	80	17.80	30.50
3	*2437.00	111.2 PK			1.03 V	80	80.60	30.60
4	*2437.00	98.2 AV			1.03 V	80	67.60	30.60
5	4874.00	44.9 PK	74.0	-29.1	1.28 V	266	8.70	36.20
6	4874.00	32.0 AV	54.0	-22.0	1.28 V	266	-4.20	36.20

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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	117.3 PK			1.00 H	224	86.60	30.70
2	*2462.00	102.5 AV			1.00 H	224	71.80	30.70
3	2483.50	71.5 PK	74.0	-2.5	1.00 H	218	40.70	30.80
4	2483.50	52.2 AV	54.0	-1.8	1.00 H	218	21.40	30.80
5	4924.00	45.5 PK	74.0	-28.5	1.01 H	324	9.20	36.30
6	4924.00	33.1 AV	54.0	-20.9	1.01 H	324	-3.20	36.30
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	*2462.00	108.8 PK			1.04 V	76	78.10	30.70
2	*2462.00	96.2 AV			1.04 V	76	65.50	30.70
3	2483.50	64.3 PK	74.0	-9.7	1.04 V	76	33.50	30.80
4	2483.50	48.7 AV	54.0	-5.3	1.04 V	76	17.90	30.80
5	4924.00	44.8 PK	74.0	-29.2	1.33 V	260	8.50	36.30
6	4924.00	32.5 AV	54.0	-21.5	1.33 V	260	-3.80	36.30

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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	56.4 PK	74.0	-17.6	1.02 H	13	25.90	30.50
2	2390.00	45.3 AV	54.0	-8.7	1.02 H	13	14.80	30.50
3	*2412.00	102.3 PK			1.02 H	13	71.70	30.60
4	*2412.00	87.5 AV			1.02 H	13	56.90	30.60
5	4824.00	46.5 PK	74.0	-27.5	1.05 H	29	10.40	36.10
6	4824.00	33.1 AV	54.0	-20.9	1.05 H	29	-3.00	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	71.9 PK	74.0	-2.1	1.20 V	22	41.40	30.50
2	2390.00	52.1 AV	54.0	-1.9	1.20 V	22	21.60	30.50
3	*2412.00	116.0 PK			1.20 V	22	85.40	30.60
4	*2412.00	102.1 AV			1.20 V	22	71.50	30.60
5	4824.00	46.8 PK	74.0	-27.2	1.40 V	86	10.70	36.10
6	4824.00	33.5 AV	54.0	-20.5	1.40 V	86	-2.60	36.10

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	103.9 PK			1.04 H	16	73.30	30.60
2	*2437.00	89.1 AV			1.04 H	16	58.50	30.60
3	4874.00	46.3 PK	74.0	-27.7	1.04 H	56	10.10	36.20
4	4874.00	33.2 AV	54.0	-20.8	1.04 H	56	-3.00	36.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	117.6 PK			1.20 V	23	87.00	30.60
2	*2437.00	103.8 AV			1.20 V	23	73.20	30.60
3	4874.00	46.6 PK	74.0	-27.4	1.01 V	329	10.40	36.20
4	4874.00	33.4 AV	54.0	-20.6	1.01 V	329	-2.80	36.20

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	102.6 PK			1.03 H	15	71.90	30.70
2	*2462.00	87.8 AV			1.03 H	15	57.10	30.70
3	2483.50	56.8 PK	74.0	-17.2	1.03 H	15	26.00	30.80
4	2483.50	45.6 AV	54.0	-8.4	1.03 H	15	14.80	30.80
5	4924.00	46.4 PK	74.0	-27.6	1.02 H	51	10.10	36.30
6	4924.00	33.0 AV	54.0	-21.0	1.02 H	51	-3.30	36.30
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	*2462.00	116.3 PK			1.15 V	29	85.60	30.70
2	*2462.00	102.4 AV			1.15 V	29	71.70	30.70
3	2483.50	71.1 PK	74.0	-2.9	1.15 V	29	40.30	30.80
4	2483.50	52.7 AV	54.0	-1.3	1.15 V	29	21.90	30.80
5	4924.00	46.3 PK	74.0	-27.7	1.03 V	285	10.00	36.30
6	4924.00	33.1 AV	54.0	-20.9	1.03 V	285	-3.20	36.30

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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	71.9 PK	74.0	-2.1	1.03 H	359	41.40	30.50
2	2390.00	52.5 AV	54.0	-1.5	1.03 H	359	22.00	30.50
3	*2412.00	118.5 PK			1.03 H	359	87.90	30.60
4	*2412.00	105.3 AV			1.03 H	359	74.70	30.60
5	4824.00	48.2 PK	74.0	-25.8	1.03 H	225	12.10	36.10
6	4824.00	35.1 AV	54.0	-18.9	1.03 H	225	-1.00	36.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.4 PK	74.0	-13.6	1.02 V	87	29.90	30.50
2	2390.00	47.6 AV	54.0	-6.4	1.02 V	87	17.10	30.50
3	*2412.00	104.0 PK			1.02 V	87	73.40	30.60
4	*2412.00	90.8 AV			1.02 V	87	60.20	30.60
5	4824.00	47.6 PK	74.0	-26.4	1.09 V	224	11.50	36.10
6	4824.00	34.8 AV	54.0	-19.2	1.09 V	224	-1.30	36.10

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	66.5 PK	74.0	-7.5	1.04 H	1	36.00	30.50
2	2390.00	52.9 AV	54.0	-1.1	1.04 H	1	22.40	30.50
3	*2437.00	121.9 PK			1.02 H	355	91.30	30.60
4	*2437.00	108.8 AV			1.02 H	355	78.20	30.60
5	2483.50	65.7 PK	74.0	-8.3	1.02 H	355	34.90	30.80
6	2483.50	52.8 AV	54.0	-1.2	1.02 H	355	22.00	30.80
7	4874.00	46.6 PK	74.0	-27.4	1.03 H	245	10.40	36.20
8	4874.00	34.1 AV	54.0	-19.9	1.03 H	245	-2.10	36.20
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	59.6 PK	74.0	-14.4	1.03 V	90	29.10	30.50
2	2390.00	46.8 AV	54.0	-7.2	1.03 V	90	16.30	30.50
3	*2437.00	107.5 PK			1.03 V	90	76.90	30.60
4	*2437.00	94.2 AV			1.03 V	90	63.60	30.60
5	2483.50	59.4 PK	74.0	-14.6	1.03 V	90	28.60	30.80
6	2483.50	46.4 AV	54.0	-7.6	1.03 V	90	15.60	30.80
7	4874.00	46.2 PK	74.0	-27.8	1.08 V	65	10.00	36.20
8	4874.00	33.8 AV	54.0	-20.2	1.08 V	65	-2.40	36.20

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2462 MHz (Channel 11)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	117.9 PK			1.00 H	359	87.20	30.70
2	*2462.00	104.6 AV			1.00 H	359	73.90	30.70
3	2483.50	67.9 PK	74.0	-6.1	1.00 H	359	37.10	30.80
4	2483.50	52.5 AV	54.0	-1.5	1.00 H	359	21.70	30.80
5	4924.00	47.6 PK	74.0	-26.4	1.05 H	96	11.30	36.30
6	4924.00	34.2 AV	54.0	-19.8	1.05 H	96	-2.10	36.30
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	*2462.00	103.3 PK			1.00 V	88	72.60	30.70
2	*2462.00	90.2 AV			1.00 V	88	59.50	30.70
3	2483.50	60.1 PK	74.0	-13.9	1.00 V	88	29.30	30.80
4	2483.50	47.4 AV	54.0	-6.6	1.00 V	88	16.60	30.80
5	4924.00	47.9 PK	74.0	-26.1	1.02 V	36	11.60	36.30
6	4924.00	35.1 AV	54.0	-18.9	1.02 V	36	-1.20	36.30

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.



A D T

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2422 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.8 PK	74.0	-12.2	1.01 H	176	31.30	30.50
2	2390.00	47.1 AV	54.0	-6.9	1.01 H	176	16.60	30.50
3	*2422.00	100.1 PK			1.01 H	176	69.50	30.60
4	*2422.00	86.5 AV			1.01 H	176	55.90	30.60
5	4844.00	46.6 PK	74.0	-27.4	1.01 H	59	10.40	36.20
6	4844.00	33.2 AV	54.0	-20.8	1.01 H	59	-3.00	36.20
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	1.16 V	326	40.20	30.50
2	2390.00	52.1 AV	54.0	-1.9	1.16 V	326	21.60	30.50
3	*2422.00	107.1 PK			1.16 V	326	76.50	30.60
4	*2422.00	93.8 AV			1.16 V	326	63.20	30.60
5	4844.00	46.2 PK	74.0	-27.8	1.09 V	221	10.00	36.20
6	4844.00	33.0 AV	54.0	-21.0	1.09 V	221	-3.20	36.20

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 4)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.6 PK	74.0	-12.4	1.03 H	179	31.10	30.50
2	2390.00	46.8 AV	54.0	-7.2	1.03 H	179	16.30	30.50
3	*2437.00	102.8 PK			1.03 H	179	72.20	30.60
4	*2437.00	89.2 AV			1.03 H	179	58.60	30.60
5	2483.50	61.4 PK	74.0	-12.6	1.03 H	179	30.60	30.80
6	2483.50	46.5 AV	54.0	-7.5	1.03 H	179	15.70	30.80
7	4874.00	46.9 PK	74.0	-27.1	1.01 H	225	10.70	36.20
8	4874.00	33.5 AV	54.0	-20.5	1.01 H	225	-2.70	36.20
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	64.7 PK	74.0	-9.3	1.16 V	328	34.20	30.50
2	2390.00	51.5 AV	54.0	-2.5	1.16 V	328	21.00	30.50
3	*2437.00	109.7 PK			1.16 V	328	79.10	30.60
4	*2437.00	96.5 AV			1.16 V	328	65.90	30.60
5	2483.50	61.9 PK	74.0	-12.1	1.16 V	328	31.10	30.80
6	2483.50	51.1 AV	54.0	-2.9	1.16 V	328	20.30	30.80
7	4874.00	46.8 PK	74.0	-27.2	1.01 V	244	10.60	36.20
8	4874.00	33.6 AV	54.0	-20.4	1.01 V	244	-2.60	36.20

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2452 MHz (Channel 7)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	100.3 PK			1.02 H	178	69.60	30.70
2	*2452.00	86.8 AV			1.02 H	178	56.10	30.70
3	2483.50	62.1 PK	74.0	-11.9	1.02 H	178	31.30	30.80
4	2483.50	47.5 AV	54.0	-6.5	1.02 H	178	16.70	30.80
5	4904.00	46.8 PK	74.0	-27.2	1.01 H	224	10.60	36.20
6	4904.00	33.6 AV	54.0	-20.4	1.01 H	224	-2.60	36.20
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	*2452.00	107.5 PK			1.12 V	331	76.80	30.70
2	*2452.00	93.9 AV			1.12 V	331	63.20	30.70
3	2483.50	67.7 PK	74.0	-6.3	1.12 V	331	36.90	30.80
4	2483.50	52.2 AV	54.0	-1.8	1.12 V	331	21.40	30.80
5	4904.00	46.5 PK	74.0	-27.5	1.01 V	88	10.30	36.20
6	4904.00	33.2 AV	54.0	-20.8	1.01 V	88	-3.00	36.20

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2422 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2422.00	112.5 PK			1.24 H	232	81.90	30.60
2	*2422.00	98.6 AV			1.24 H	232	68.00	30.60
3	2483.50	72.3 PK	74.0	-1.7	1.00 H	227	41.50	30.80
4	2483.50	52.9 AV	54.0	-1.1	1.00 H	227	22.10	30.80
5	4844.00	45.0 PK	74.0	-29.0	1.22 H	169	8.80	36.20
6	4844.00	31.4 AV	54.0	-22.6	1.22 H	169	-4.80	36.20
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	66.0 PK	74.0	-8.0	1.02 V	76	35.50	30.50
2	2390.00	48.4 AV	54.0	-5.6	1.02 V	76	17.90	30.50
3	*2422.00	103.6 PK			1.02 V	76	73.00	30.60
4	*2422.00	90.2 AV			1.02 V	76	59.60	30.60
5	4844.00	44.6 PK	74.0	-29.4	1.00 V	197	8.40	36.20
6	4844.00	30.8 AV	54.0	-23.2	1.00 V	197	-5.40	36.20

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 4)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.1 PK	74.0	-7.9	1.00 H	229	35.60	30.50
2	2390.00	52.3 AV	54.0	-1.7	1.00 H	229	21.80	30.50
3	*2437.00	115.4 PK			1.00 H	221	84.80	30.60
4	*2437.00	101.3 AV			1.00 H	221	70.70	30.60
5	2483.50	64.6 PK	74.0	-9.4	1.00 H	224	33.80	30.80
6	2483.50	51.6 AV	54.0	-2.4	1.00 H	224	20.80	30.80
7	4874.00	45.7 PK	74.0	-28.3	1.02 H	100	9.50	36.20
8	4874.00	32.6 AV	54.0	-21.4	1.02 H	100	-3.60	36.20
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	65.9 PK	74.0	-8.1	1.05 V	73	35.40	30.50
2	2390.00	48.9 AV	54.0	-5.1	1.05 V	73	18.40	30.50
3	*2437.00	107.5 PK			1.05 V	73	76.90	30.60
4	*2437.00	93.8 AV			1.05 V	73	63.20	30.60
5	2483.50	64.2 PK	74.0	-9.8	1.05 V	73	33.40	30.80
6	2483.50	47.1 AV	54.0	-6.9	1.05 V	73	16.30	30.80
7	4874.00	44.5 PK	74.0	-29.5	1.00 V	360	8.30	36.20
8	4874.00	31.9 AV	54.0	-22.1	1.00 V	360	-4.30	36.20

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2452 MHz (Channel 7)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	111.7 PK			1.00 H	221	81.00	30.70
2	*2452.00	98.0 AV			1.00 H	221	67.30	30.70
3	2483.50	71.2 PK	74.0	-2.8	1.00 H	222	40.40	30.80
4	2483.50	52.3 AV	54.0	-1.7	1.00 H	222	21.50	30.80
5	4904.00	45.8 PK	74.0	-28.2	1.00 H	197	9.60	36.20
6	4904.00	32.6 AV	54.0	-21.4	1.00 H	197	-3.60	36.20
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	*2452.00	103.8 PK			1.04 V	77	73.10	30.70
2	*2452.00	90.7 AV			1.04 V	77	60.00	30.70
3	2483.50	65.8 PK	74.0	-8.2	1.04 V	77	35.00	30.80
4	2483.50	48.2 AV	54.0	-5.8	1.04 V	77	17.40	30.80
5	4904.00	44.6 PK	74.0	-29.4	1.00 V	199	8.40	36.20
6	4904.00	31.9 AV	54.0	-22.1	1.00 V	199	-4.30	36.20

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2422 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	57.3 PK	74.0	-16.7	1.01 H	9	26.80	30.50
2	2390.00	47.1 AV	54.0	-6.9	1.01 H	9	16.60	30.50
3	*2422.00	94.9 PK			1.01 H	9	64.30	30.60
4	*2422.00	80.1 AV			1.01 H	9	49.50	30.60
5	4844.00	46.6 PK	74.0	-27.4	1.01 H	245	10.40	36.20
6	4844.00	33.1 AV	54.0	-20.9	1.01 H	245	-3.10	36.20
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	72.8 PK	74.0	-1.2	1.20 V	22	42.30	30.50
2	2390.00	52.4 AV	54.0	-1.6	1.20 V	22	21.90	30.50
3	*2422.00	109.9 PK			1.20 V	22	79.30	30.60
4	*2422.00	95.3 AV			1.20 V	22	64.70	30.60
5	4844.00	46.9 PK	74.0	-27.1	1.03 V	221	10.70	36.20
6	4844.00	33.3 AV	54.0	-20.7	1.03 V	221	-2.90	36.20

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 4)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	57.1 PK	74.0	-16.9	1.02 H	11	26.60	30.50
2	2390.00	46.8 AV	54.0	-7.2	1.02 H	11	16.30	30.50
3	*2437.00	98.4 PK			1.02 H	11	67.80	30.60
4	*2437.00	83.6 AV			1.02 H	11	53.00	30.60
5	2483.50	56.6 PK	74.0	-17.4	1.02 H	11	25.80	30.80
6	2483.50	46.2 AV	54.0	-7.8	1.02 H	11	15.40	30.80
7	4874.00	46.4 PK	74.0	-27.6	1.01 H	56	10.20	36.20
8	4874.00	32.9 AV	54.0	-21.1	1.01 H	56	-3.30	36.20
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	67.1 PK	74.0	-6.9	1.20 V	29	36.60	30.50
2	2390.00	52.6 AV	54.0	-1.4	1.20 V	29	22.10	30.50
3	*2437.00	113.9 PK			1.20 V	29	83.30	30.60
4	*2437.00	99.5 AV			1.20 V	29	68.90	30.60
5	2483.50	64.6 PK	74.0	-9.4	1.20 V	29	33.80	30.80
6	2483.50	51.1 AV	54.0	-2.9	1.20 V	29	20.30	30.80
7	4874.00	48.1 PK	74.0	-25.9	1.01 V	25	11.90	36.20
8	4874.00	34.6 AV	54.0	-19.4	1.01 V	25	-1.60	36.20

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2452 MHz (Channel 7)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	96.0 PK			1.03 H	16	65.30	30.70
2	*2452.00	81.2 AV			1.03 H	16	50.50	30.70
3	2483.50	56.8 PK	74.0	-17.2	1.03 H	16	26.00	30.80
4	2483.50	46.5 AV	54.0	-7.5	1.03 H	16	15.70	30.80
5	4904.00	46.9 PK	74.0	-27.1	1.04 H	221	10.70	36.20
6	4904.00	33.4 AV	54.0	-20.6	1.04 H	221	-2.80	36.20
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	*2452.00	112.0 PK			1.15 V	27	81.30	30.70
2	*2452.00	96.5 AV			1.15 V	27	65.80	30.70
3	2483.50	71.4 PK	74.0	-2.6	1.15 V	27	40.60	30.80
4	2483.50	52.9 AV	54.0	-1.1	1.15 V	27	22.10	30.80
5	4904.00	47.8 PK	74.0	-26.2	1.03 V	29	11.60	36.20
6	4904.00	34.2 AV	54.0	-19.8	1.03 V	29	-2.00	36.20

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2422 MHz (Channel 1)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	72.9 PK	74.0	-1.1	1.05 H	356	42.40	30.50
2	2390.00	52.8 AV	54.0	-1.2	1.05 H	356	22.30	30.50
3	*2422.00	111.1 PK			1.05 H	356	80.50	30.60
4	*2422.00	97.7 AV			1.05 H	356	67.10	30.60
5	4844.00	47.1 PK	74.0	-26.9	1.05 H	16	10.90	36.20
6	4844.00	34.0 AV	54.0	-20.0	1.05 H	16	-2.20	36.20
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	60.7 PK	74.0	-13.3	1.00 V	83	30.20	30.50
2	2390.00	47.6 AV	54.0	-6.4	1.00 V	83	17.10	30.50
3	*2422.00	98.0 PK			1.00 V	83	67.40	30.60
4	*2422.00	84.1 AV			1.00 V	83	53.50	30.60
5	4844.00	46.8 PK	74.0	-27.2	1.04 V	213	10.60	36.20
6	4844.00	33.6 AV	54.0	-20.4	1.04 V	213	-2.60	36.20

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 4)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	66.3 PK	74.0	-7.7	1.03 H	1	35.80	30.50
2	2390.00	52.9 AV	54.0	-1.1	1.03 H	1	22.40	30.50
3	*2437.00	114.4 PK			1.03 H	1	83.80	30.60
4	*2437.00	101.2 AV			1.03 H	1	70.60	30.60
5	2483.50	65.6 PK	74.0	-8.4	1.03 H	1	34.80	30.80
6	2483.50	52.4 AV	54.0	-1.6	1.03 H	1	21.60	30.80
7	4874.00	47.8 PK	74.0	-26.2	1.03 H	216	11.60	36.20
8	4874.00	34.5 AV	54.0	-19.5	1.03 H	216	-1.70	36.20
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	62.1 PK	74.0	-11.9	1.02 V	85	31.60	30.50
2	2390.00	48.6 AV	54.0	-5.4	1.02 V	85	18.10	30.50
3	*2437.00	101.4 PK			1.02 V	85	70.80	30.60
4	*2437.00	87.5 AV			1.02 V	85	56.90	30.60
5	2483.50	61.3 PK	74.0	-12.7	1.02 V	85	30.50	30.80
6	2483.50	48.1 AV	54.0	-5.9	1.02 V	85	17.30	30.80
7	4874.00	46.9 PK	74.0	-27.1	1.03 V	225	10.70	36.20
8	4874.00	33.8 AV	54.0	-20.2	1.03 V	225	-2.40	36.20

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2452 MHz (Channel 7)	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	111.0 PK			1.01 H	9	80.30	30.70
2	*2452.00	97.6 AV			1.01 H	9	66.90	30.70
3	2483.50	71.3 PK	74.0	-2.7	1.01 H	9	40.50	30.80
4	2483.50	52.4 AV	54.0	-1.6	1.01 H	9	21.60	30.80
5	4904.00	47.6 PK	74.0	-26.4	1.12 H	35	11.40	36.20
6	4904.00	34.5 AV	54.0	-19.5	1.12 H	35	-1.70	36.20
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	*2452.00	97.8 PK			1.01 V	85	67.10	30.70
2	*2452.00	83.9 AV			1.01 V	85	53.20	30.70
3	2483.50	60.4 PK	74.0	-13.6	1.01 V	85	29.60	30.80
4	2483.50	47.2 AV	54.0	-6.8	1.01 V	85	16.40	30.80
5	4904.00	46.6 PK	74.0	-27.4	1.01 V	34	10.40	36.20
6	4904.00	33.2 AV	54.0	-20.8	1.01 V	34	-3.00	36.20

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.



A D T

BELOW 1GHz WORST-CASE DATA :**802.11g**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1020 hPa	TESTED BY	Lori Chiu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	467.36	38.7 QP	46.0	-7.3	1.00 H	286	19.00	19.70
2	500.42	41.3 QP	46.0	-4.7	2.00 H	292	20.80	20.50
3	599.58	41.9 QP	46.0	-4.1	1.50 H	343	19.50	22.40
4	624.85	42.5 QP	46.0	-3.5	1.50 H	4	19.40	23.10
5	700.68	40.3 QP	46.0	-5.7	1.00 H	310	15.20	25.10
6	875.67	41.0 QP	46.0	-5.0	1.50 H	118	13.50	27.50
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	59.83	36.2 QP	40.0	-3.8	1.00 V	101	23.30	12.90
2	467.36	42.8 QP	46.0	-3.2	1.00 V	151	23.10	19.70
3	599.58	38.9 QP	46.0	-7.1	1.00 V	277	16.50	22.40
4	751.23	38.4 QP	46.0	-7.6	1.50 V	13	12.80	25.60
5	875.67	39.6 QP	46.0	-6.4	1.00 V	10	12.10	27.50
6	1000.00	44.0 QP	54.0	-10.0	1.50 V	343	15.20	28.80

- 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.



A D T

802.11g

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2412 MHz (Channel 1)	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1020 hPa	TESTED BY	Lori Chiu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	162.11	37.1 QP	43.5	-6.4	1.00 H	283	22.90	14.20
2	467.36	39.8 QP	46.0	-6.2	2.00 H	316	20.10	19.70
3	500.42	41.3 QP	46.0	-4.7	2.00 H	340	20.80	20.50
4	624.85	40.0 QP	46.0	-6.0	2.00 H	343	16.90	23.10
5	733.73	40.0 QP	46.0	-6.0	1.00 H	310	14.60	25.40
6	875.67	40.3 QP	46.0	-5.7	1.50 H	34	12.80	27.50
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	36.3 QP	40.0	-3.7	1.00 V	301	23.30	13.00
2	375.98	34.6 QP	46.0	-11.4	1.50 V	22	17.50	17.10
3	467.36	42.3 QP	46.0	-3.7	1.00 V	10	22.60	19.70
4	500.42	41.3 QP	46.0	-4.7	1.00 V	304	20.80	20.50
5	599.58	39.6 QP	46.0	-6.4	1.50 V	325	17.20	22.40
6	1000.00	44.1 QP	54.0	-9.9	2.00 V	10	15.30	28.80

- 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.



A D T

802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1020 hPa	TESTED BY	Lori Chiu
TEST MODE	C		

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	160.17	35.5 QP	43.5	-8.0	1.00 H	259	21.10	14.40
2	304.04	35.7 QP	46.0	-10.3	1.00 H	163	21.70	14.00
3	500.42	41.9 QP	46.0	-4.1	2.00 H	250	21.40	20.50
4	599.58	42.7 QP	46.0	-3.3	1.50 H	10	20.30	22.40
5	624.85	41.2 QP	46.0	-4.8	1.50 H	349	18.10	23.10
6	875.67	40.0 QP	46.0	-6.0	2.00 H	7	12.50	27.50
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	36.9 QP	40.0	-3.1	1.00 V	124	23.90	13.00
2	304.04	38.7 QP	46.0	-7.3	1.50 V	331	24.70	14.00
3	466.65	42.9 QP	46.0	-3.1	1.00 V	150	23.20	19.70
4	751.23	39.8 QP	46.0	-6.2	1.50 V	325	14.20	25.60
5	875.67	39.6 QP	46.0	-6.4	1.00 V	10	12.10	27.50
6	1000.00	44.2 QP	54.0	-9.8	1.50 V	10	15.40	28.80

- 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.



A D T

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	2437 MHz (Channel 6)	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1020 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	40.3 QP	46.0	-5.7	1.50 H	70	20.60	19.70
2	500.42	40.9 QP	46.0	-5.1	2.00 H	277	20.40	20.50
3	599.58	41.4 QP	46.0	-4.6	1.50 H	346	19.00	22.40
4	624.85	41.3 QP	46.0	-4.7	1.50 H	31	18.20	23.10
5	751.23	40.1 QP	46.0	-5.9	1.00 H	307	14.50	25.60
6	875.67	40.2 QP	46.0	-5.8	1.50 H	277	12.70	27.50
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	36.7 QP	40.0	-3.3	1.00 V	310	23.70	13.00
2	467.36	42.7 QP	46.0	-3.3	1.00 V	163	23.00	19.70
3	500.42	40.3 QP	46.0	-5.7	2.00 V	13	19.80	20.50
4	599.58	40.5 QP	46.0	-5.5	1.50 V	19	18.10	22.40
5	751.23	39.1 QP	46.0	-6.9	1.00 V	10	13.50	25.60
6	875.67	41.0 QP	46.0	-5.0	1.50 V	349	13.50	27.50

- 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 (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Sep. 24, 2009	Sep. 23, 2010
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 31, 2009	Dec. 30, 2010
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Aug. 24, 2009	Aug. 23, 2010
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jul. 29, 2009	Jul. 28, 2010
Software ADT	ADT_Conc_ 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 2.
3. The VCCI Site Registration No. is C-2047.

4.2.3 TEST PROCEDURES

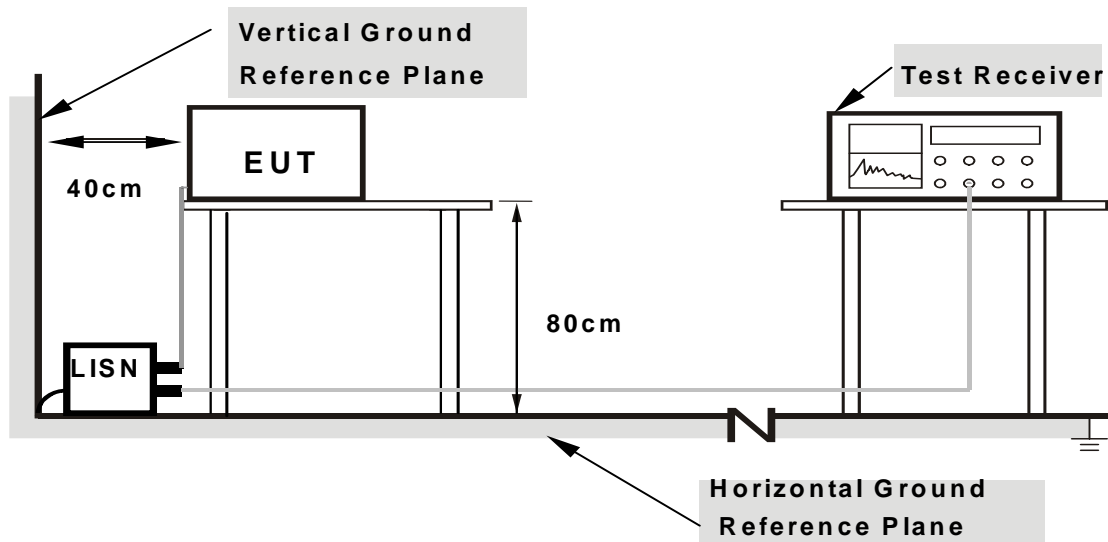
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

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

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

4.2.7 TEST RESULTS

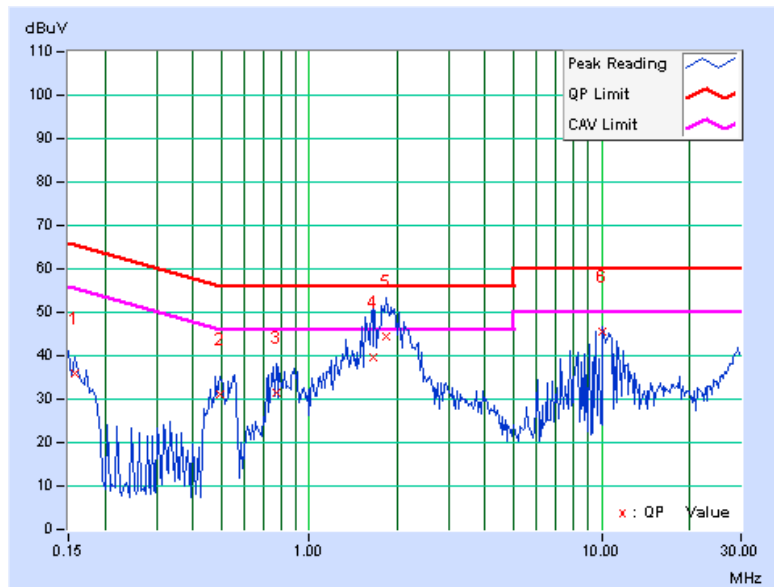
CONDUCTED WORST-CASE DATA :

802.11g

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.16	35.82	-	35.98	-	65.58	55.58	-29.60	-
2	0.494	0.19	31.07	-	31.26	-	56.10	46.10	-24.85	-
3	0.771	0.21	31.39	-	31.60	-	56.00	46.00	-24.40	-
4	1.648	0.28	39.42	-	39.70	-	56.00	46.00	-16.30	-
5	1.824	0.30	43.97	-	44.27	-	56.00	46.00	-11.73	-
6	10.035	0.35	45.23	-	45.58	-	60.00	50.00	-14.42	-

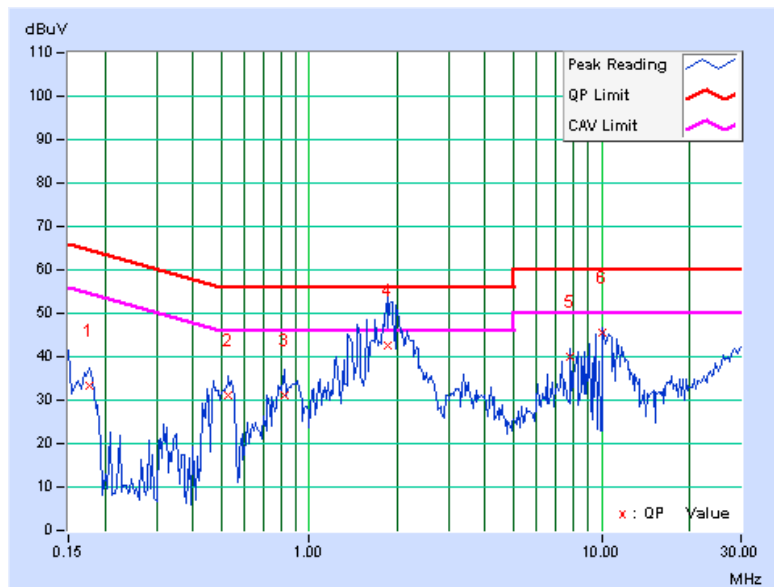
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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	A		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.13	33.28	-	33.41	-	64.61	54.61	-31.20	-
2	0.529	0.17	31.08	-	31.25	-	56.00	46.00	-24.75	-
3	0.826	0.20	30.76	-	30.96	-	56.00	46.00	-25.04	-
4	1.852	0.29	42.43	-	42.72	-	56.00	46.00	-13.28	-
5	7.777	0.41	39.55	-	39.96	-	60.00	50.00	-20.04	-
6	10.035	0.44	44.97	-	45.41	-	60.00	50.00	-14.59	-

- 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.

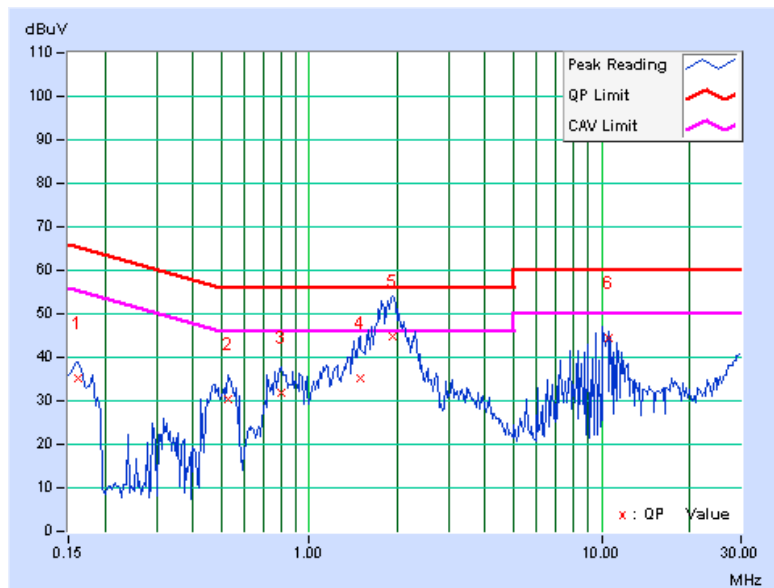


802.11g

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.16	35.13	-	35.29	-	65.38	55.38	-30.09	-
2	0.529	0.19	30.34	-	30.53	-	56.00	46.00	-25.47	-
3	0.798	0.21	31.70	-	31.91	-	56.00	46.00	-24.09	-
4	1.488	0.27	35.10	-	35.37	-	56.00	46.00	-20.63	-
5	1.926	0.30	44.53	-	44.83	-	56.00	46.00	-11.17	-
6	10.527	0.37	44.06	-	44.43	-	60.00	50.00	-15.57	-

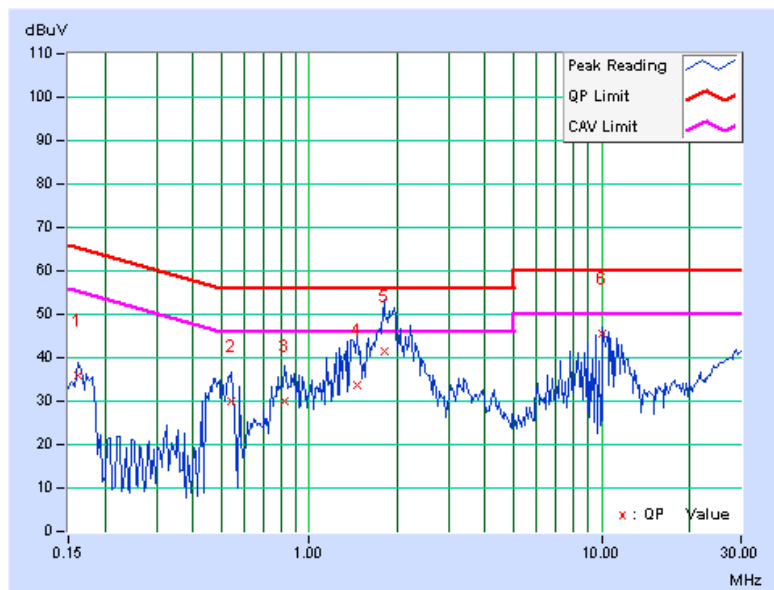
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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	B		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.13	35.80	-	35.93	-	65.38	55.38	-29.45	-
2	0.545	0.17	29.94	-	30.11	-	56.00	46.00	-25.89	-
3	0.826	0.20	29.82	-	30.02	-	56.00	46.00	-25.98	-
4	1.461	0.26	33.58	-	33.84	-	56.00	46.00	-22.16	-
5	1.809	0.28	41.25	-	41.53	-	56.00	46.00	-14.47	-
6	10.027	0.44	45.09	-	45.53	-	60.00	50.00	-14.47	-

- 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.

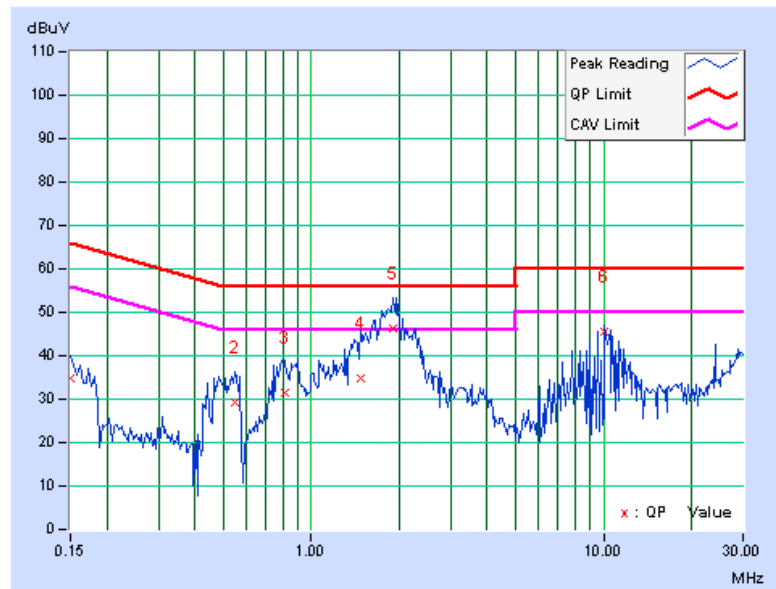


802.11b

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	C		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.16	34.83	-	34.99	-	66.00	56.00	-31.01	-
2	0.548	0.19	29.25	-	29.44	-	56.00	46.00	-26.56	-
3	0.814	0.21	31.38	-	31.59	-	56.00	46.00	-24.41	-
4	1.480	0.27	34.52	-	34.79	-	56.00	46.00	-21.21	-
5	1.898	0.30	45.94	29.89	46.24	30.19	56.00	46.00	-9.76	-15.81
6	10.027	0.35	45.34	-	45.69	-	60.00	50.00	-14.31	-

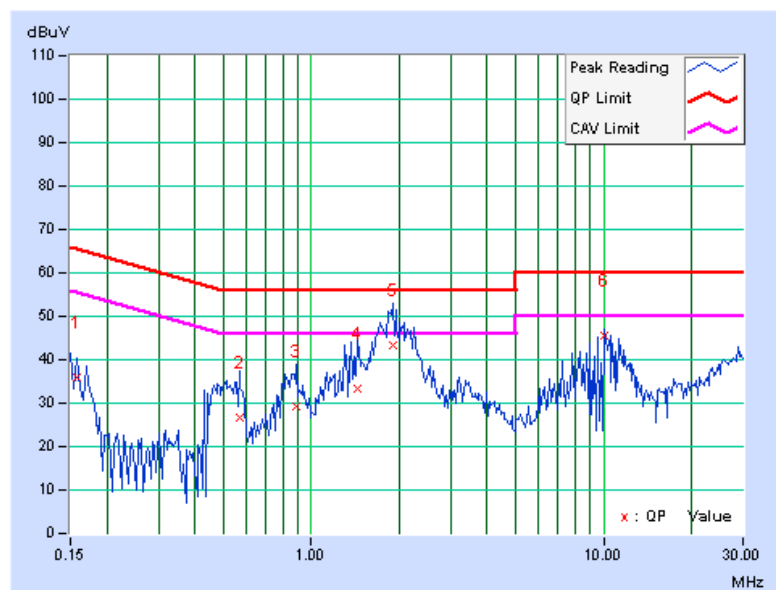
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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	C		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.13	35.80	-	35.93	-	65.58	55.58	-29.65	-
2	0.568	0.18	26.49	-	26.67	-	56.00	46.00	-29.33	-
3	0.892	0.21	29.18	-	29.39	-	56.00	46.00	-26.61	-
4	1.445	0.26	32.90	-	33.16	-	56.00	46.00	-22.84	-
5	1.906	0.29	43.20	-	43.49	-	56.00	46.00	-12.51	-
6	10.027	0.44	45.15	-	45.59	-	60.00	50.00	-14.41	-

- 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.

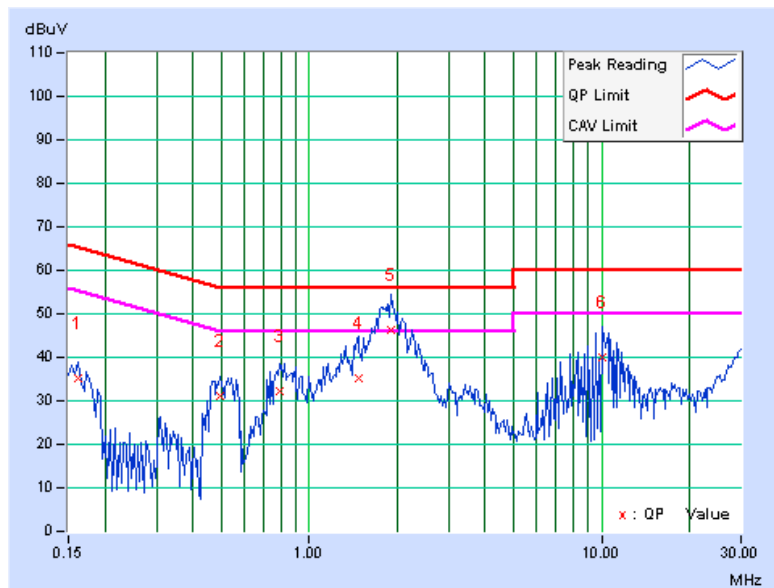


802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	D		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.16	35.00	-	35.16	-	65.38	55.38	-30.22	-
2	0.498	0.19	30.97	-	31.16	-	56.04	46.04	-24.88	-
3	0.795	0.21	31.96	-	32.17	-	56.00	46.00	-23.83	-
4	1.480	0.27	34.74	-	35.01	-	56.00	46.00	-20.99	-
5	1.906	0.30	46.09	29.64	46.39	29.94	56.00	46.00	-9.61	-16.06
6	10.027	0.35	39.76	-	40.11	-	60.00	50.00	-19.89	-

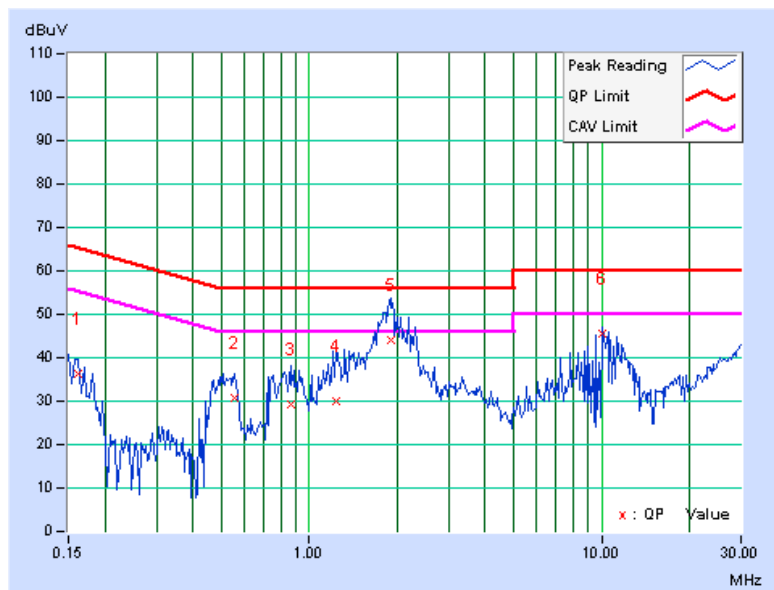
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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	D		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.13	36.06	-	36.19	-	65.38	55.38	-29.19	-
2	0.552	0.18	30.74	-	30.92	-	56.00	46.00	-25.08	-
3	0.861	0.21	29.20	-	29.41	-	56.00	46.00	-26.59	-
4	1.242	0.24	29.84	-	30.08	-	56.00	46.00	-25.92	-
5	1.914	0.29	43.72	-	44.01	-	56.00	46.00	-11.99	-
6	10.027	0.44	45.11	-	45.55	-	60.00	50.00	-14.45	-

- 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.



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	FSP40	100039	Jan. 11, 2010	Jan. 10, 2011

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

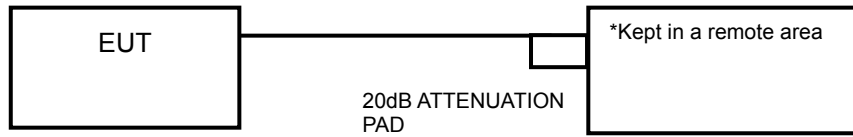
4.3.3 TEST PROCEDURE

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.

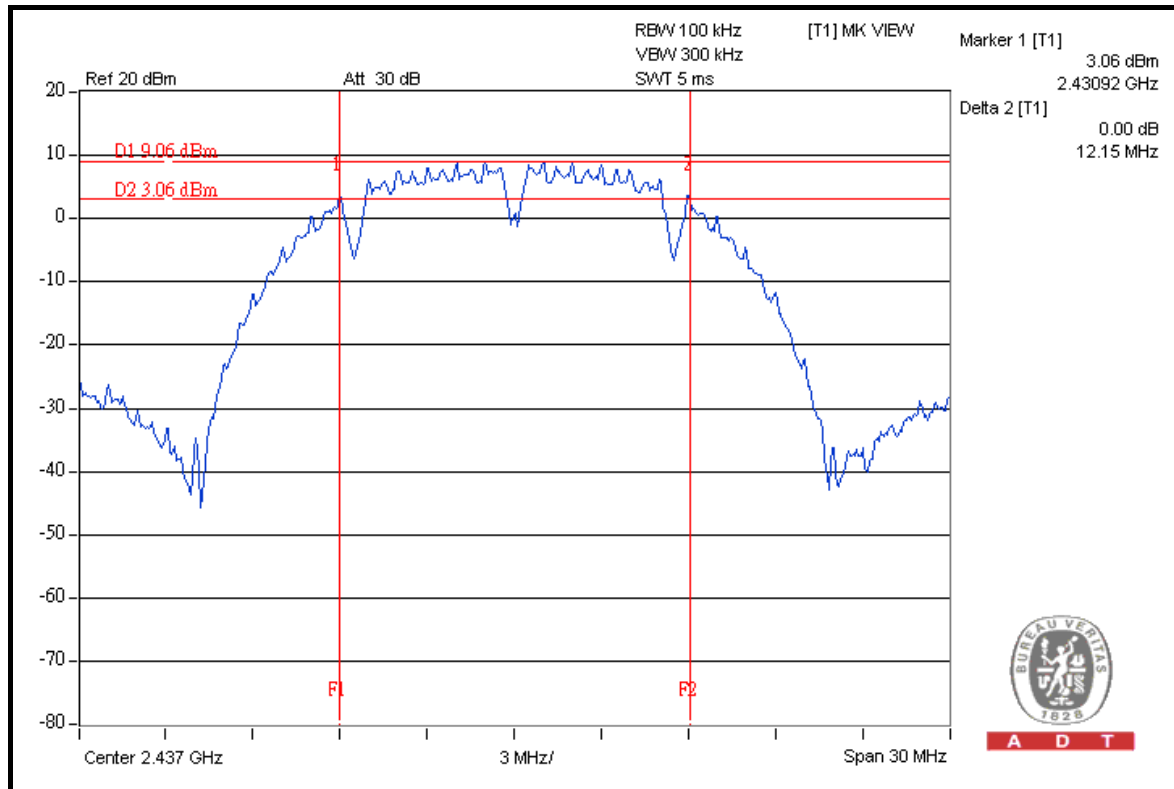
4.3.7 TEST RESULTS

TEST MODE A

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	12.09	10.13	12.09	0.5	PASS
6	2437	12.15	12.12	12.15	0.5	PASS
11	2462	12.11	11.15	12.13	0.5	PASS

FOR CHAIN 2: CH 6



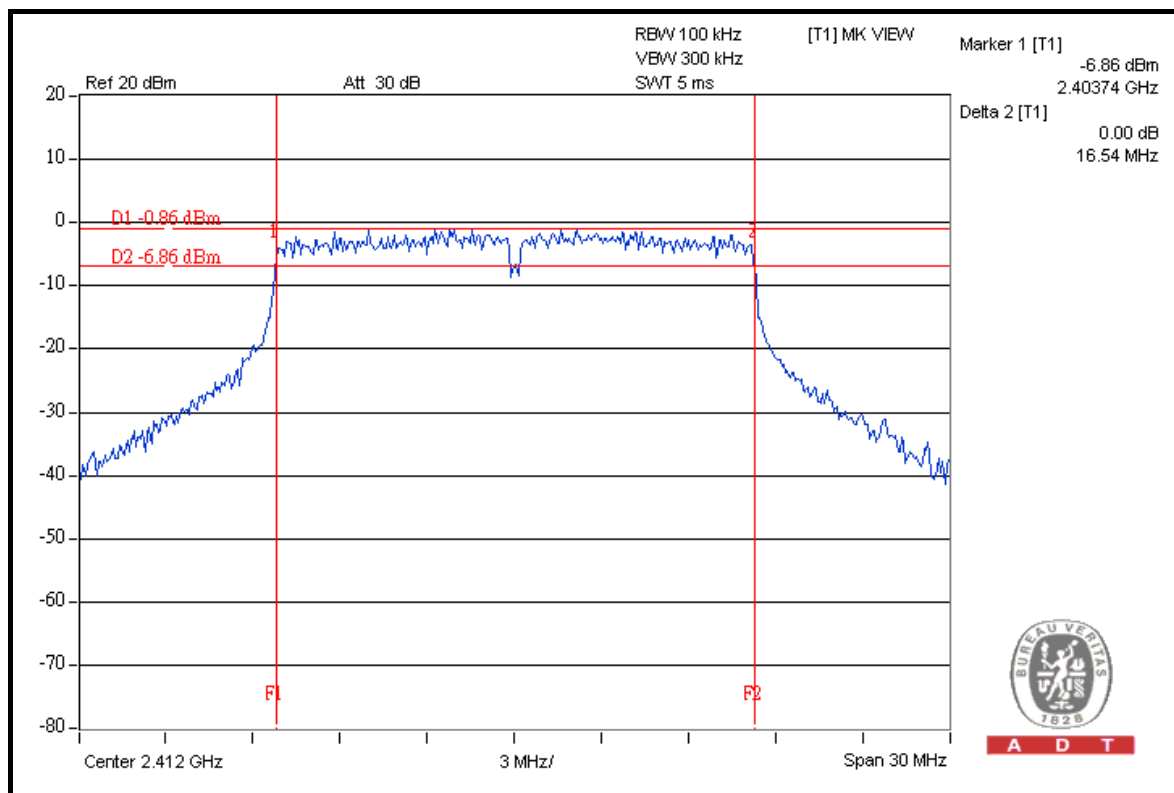


A D T

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	16.42	16.31	16.54	0.5	PASS
6	2437	16.39	16.41	16.43	0.5	PASS
11	2462	16.47	16.45	16.43	0.5	PASS

FOR CHAIN 2: CH 1

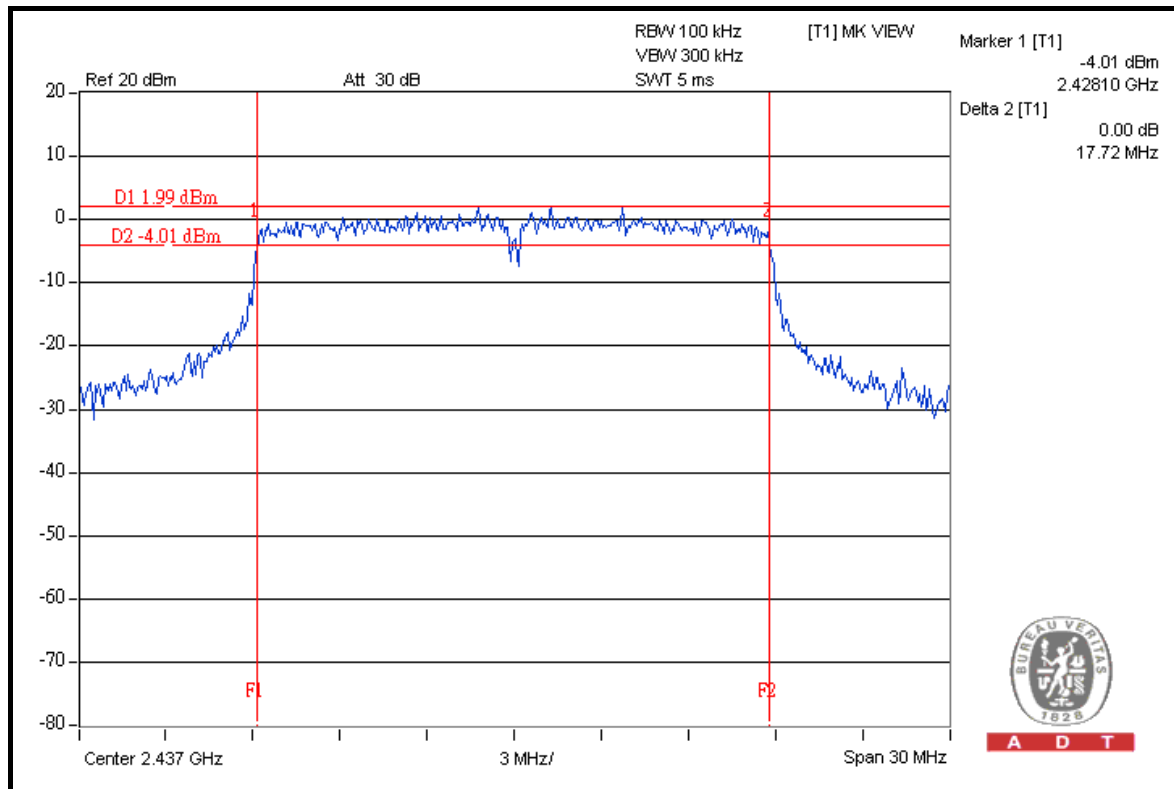


A D T

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	16.44	16.40	16.44	0.5	PASS
6	2437	17.63	17.72	17.61	0.5	PASS
11	2462	16.45	16.41	16.40	0.5	PASS

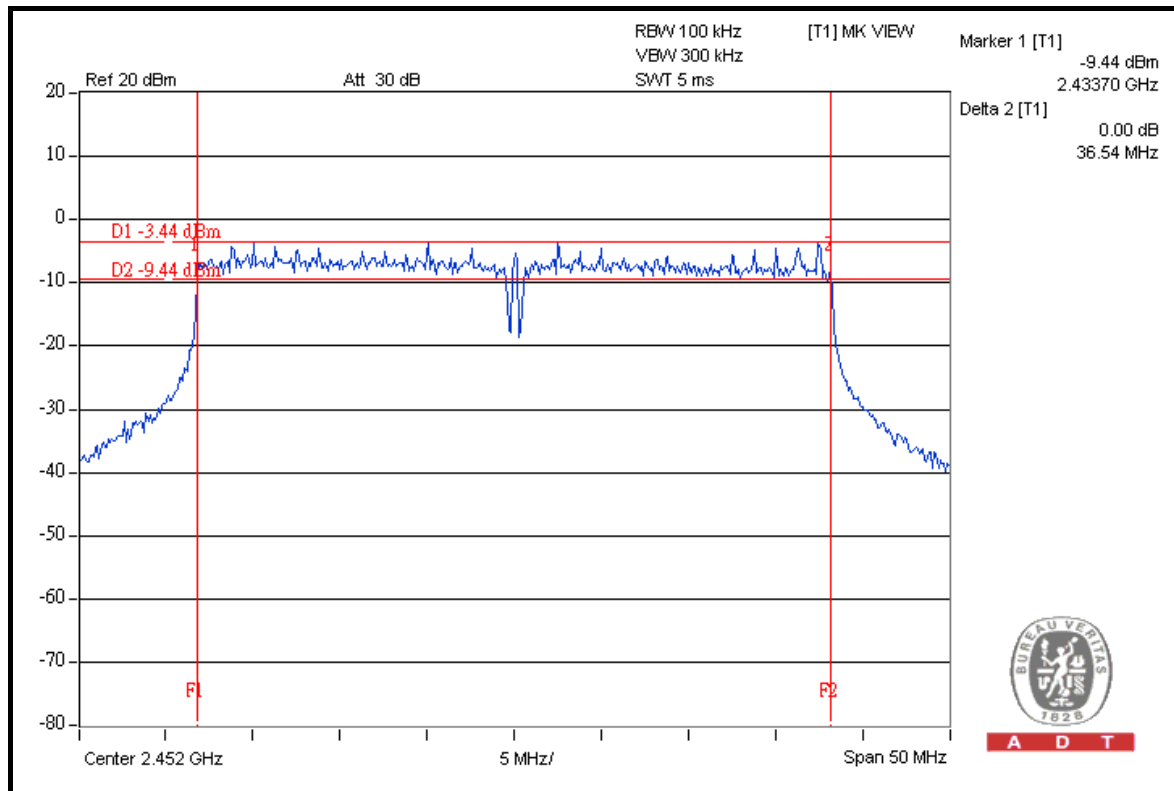
FOR CHAIN 1: CH 6



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2422	36.44	36.52	36.48	0.5	PASS
4	2437	36.49	36.52	36.51	0.5	PASS
7	2452	36.51	36.52	36.54	0.5	PASS

FOR CHAIN 2: CH 7





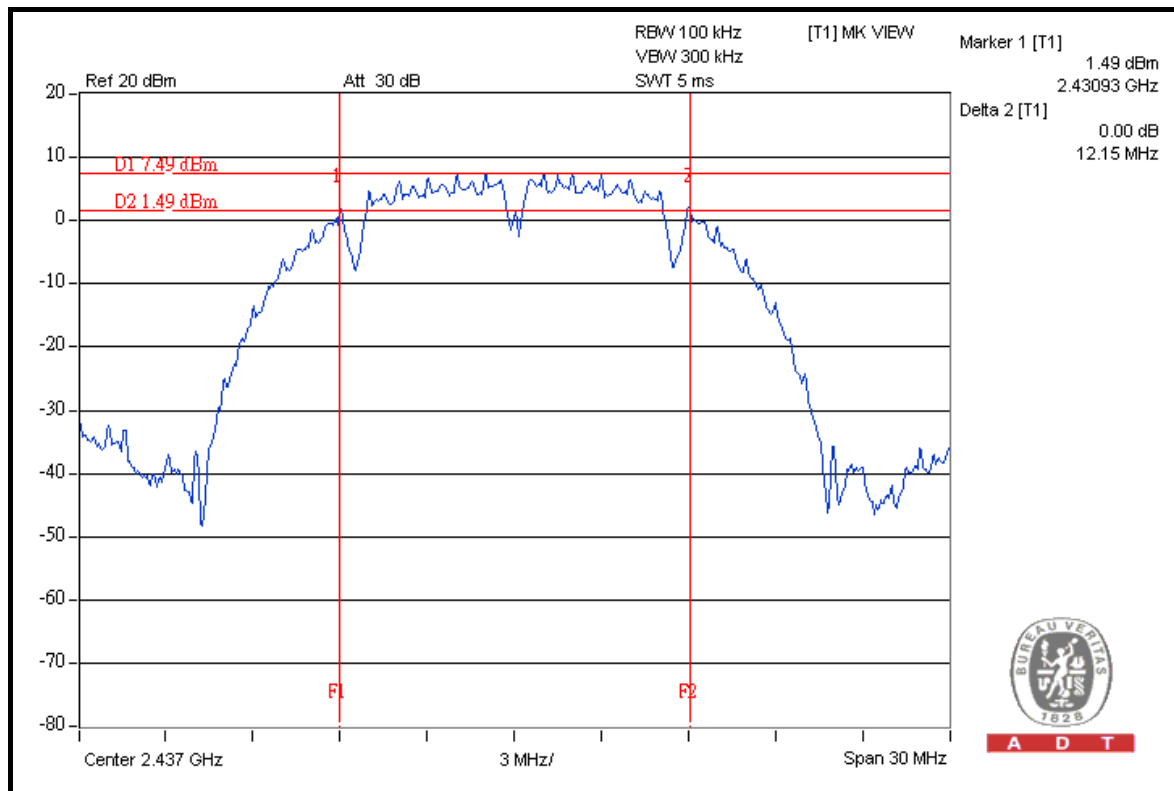
A D T

TEST MODE B

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	11.15	12.12	12.13	0.5	PASS
6	2437	12.14	10.14	12.15	0.5	PASS
11	2462	12.11	11.15	12.13	0.5	PASS

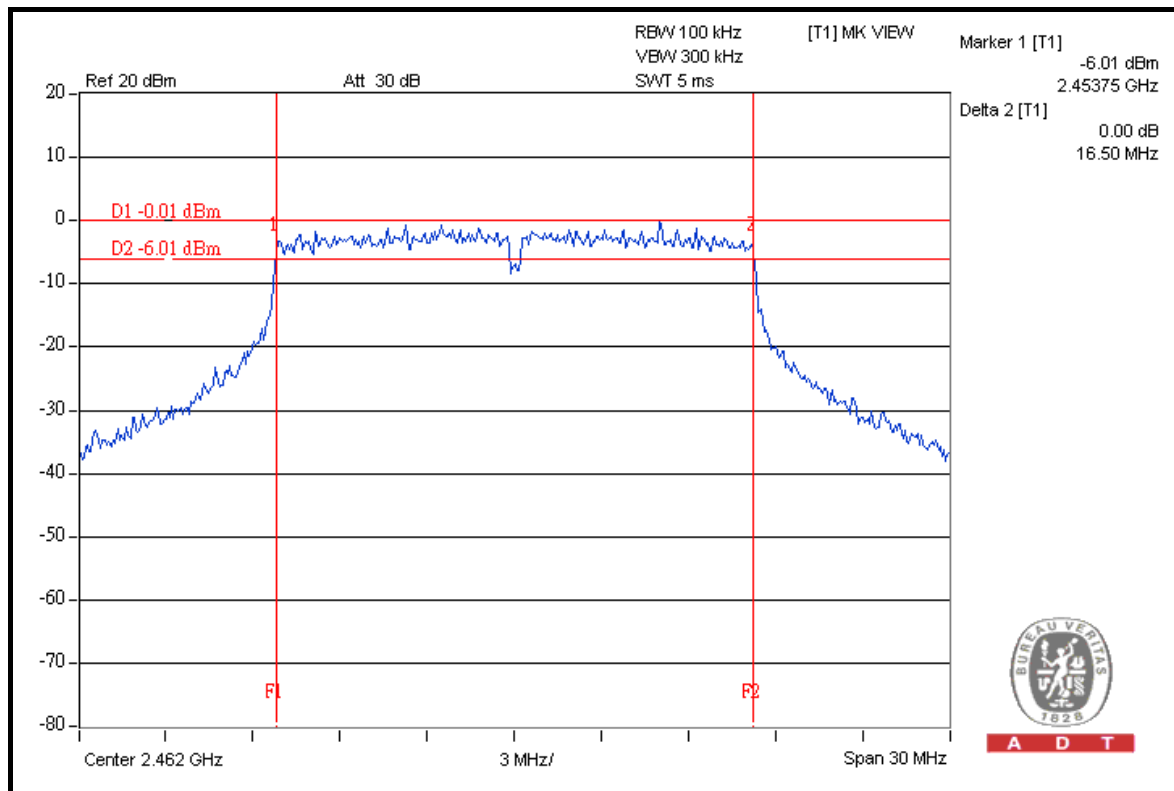
FOR CHAIN 2: CH 6



802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	16.42	16.46	16.40	0.5	PASS
6	2437	16.44	16.45	16.44	0.5	PASS
11	2462	16.44	16.50	16.48	0.5	PASS

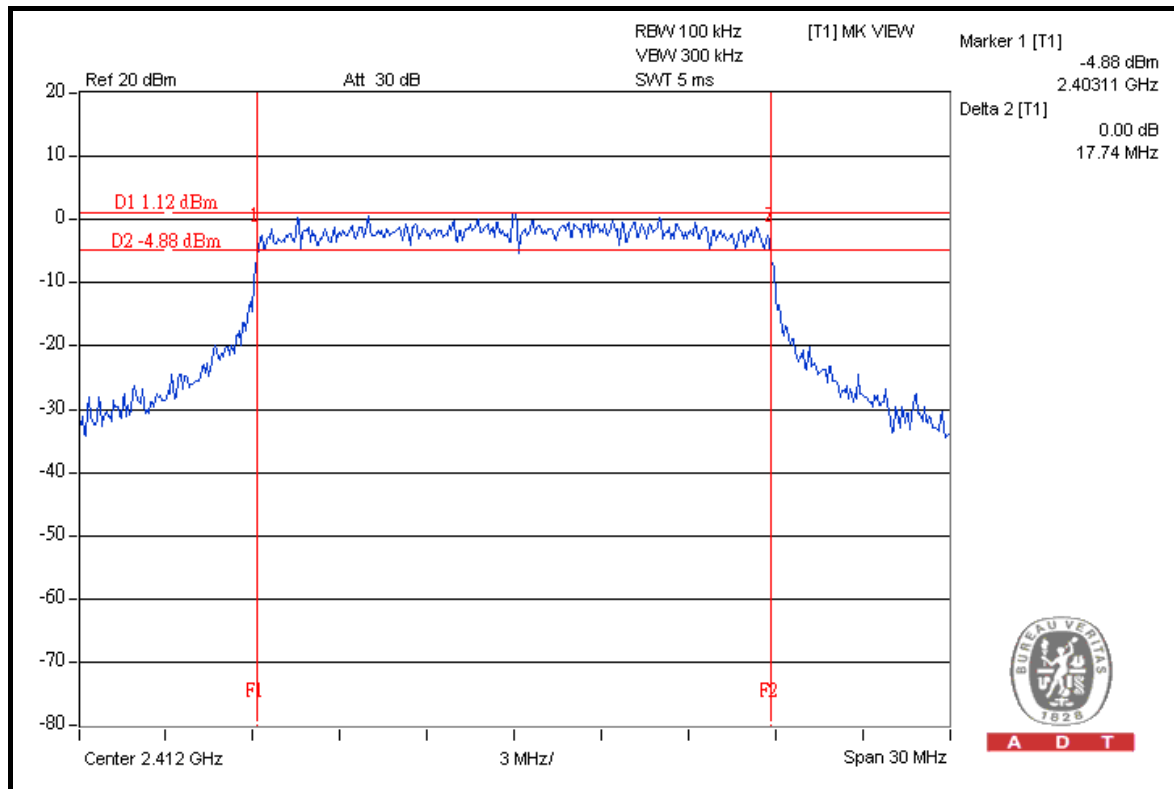
FOR CHAIN 1: CH 11



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	17.65	17.72	17.74	0.5	PASS
6	2437	17.63	17.72	17.61	0.5	PASS
11	2462	17.68	17.72	17.65	0.5	PASS

FOR CHAIN 2: CH 1



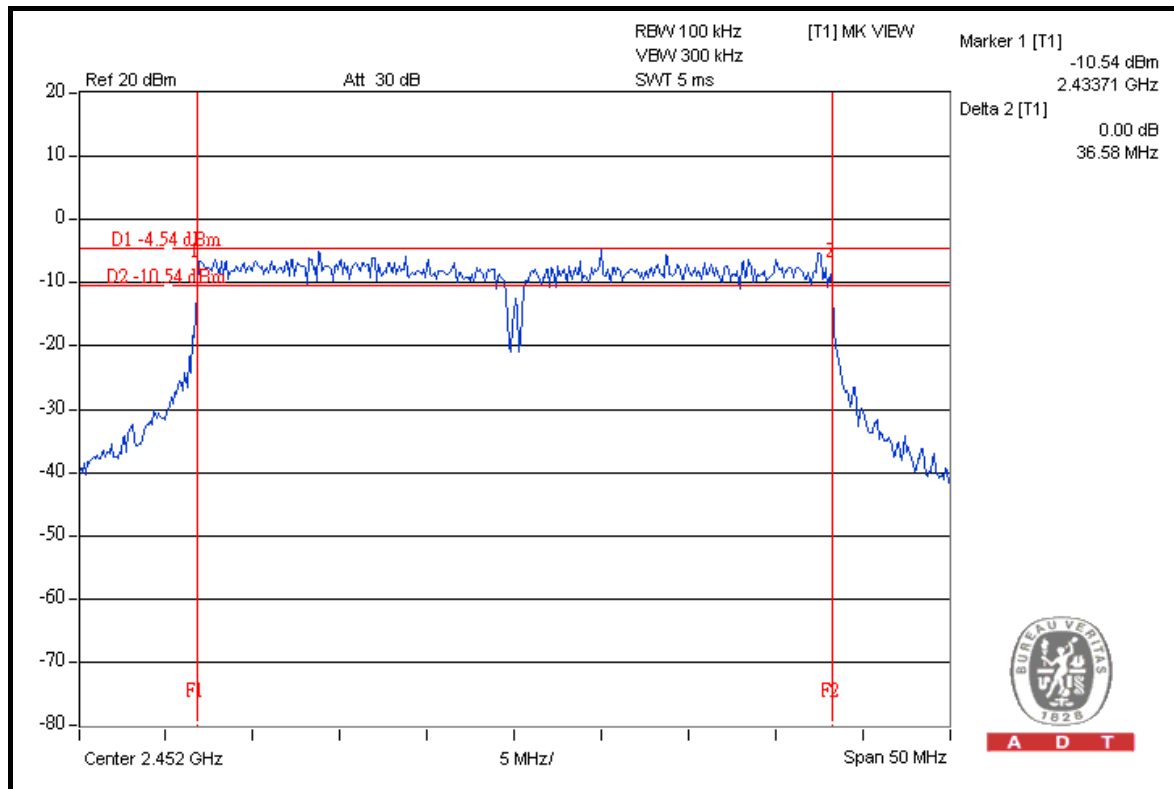


A D T

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2422	36.43	36.54	36.57	0.5	PASS
4	2437	36.49	36.52	36.51	0.5	PASS
7	2452	36.50	36.58	36.53	0.5	PASS

FOR CHAIN 1: CH 7





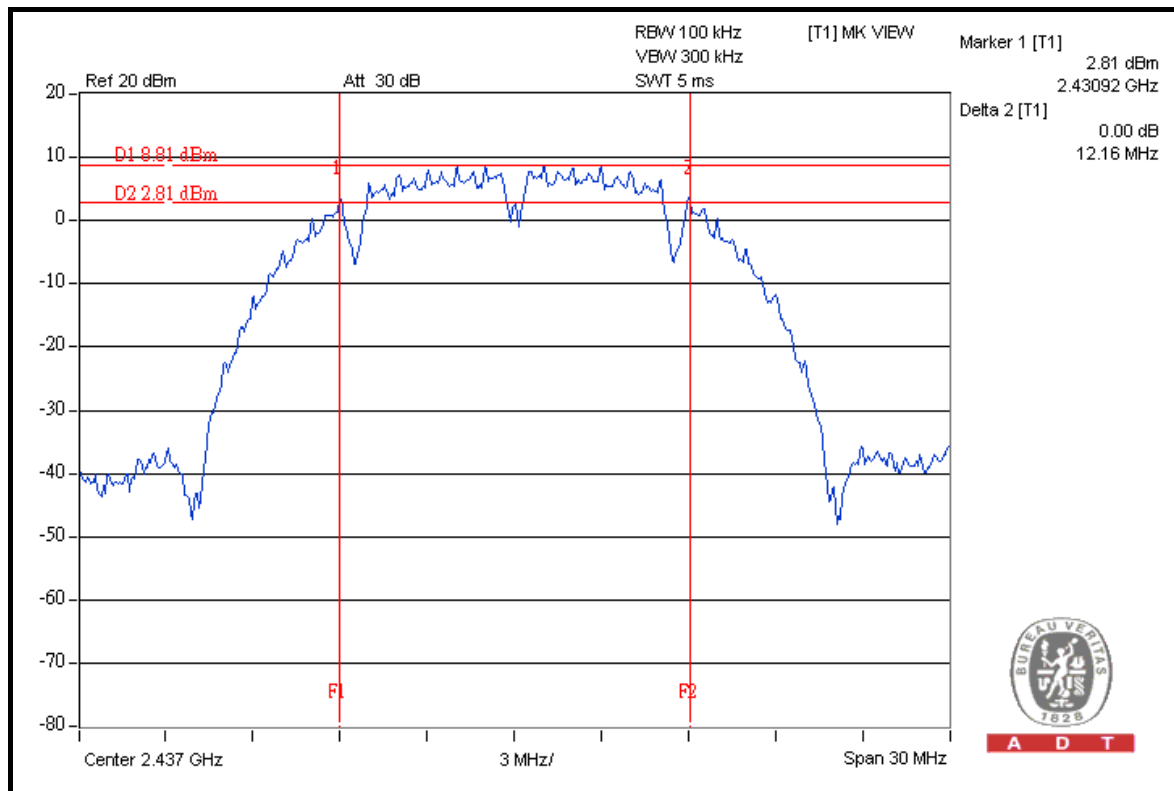
A D T

TEST MODE C

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	12.09	12.14	12.15	0.5	PASS
6	2437	12.16	12.16	12.13	0.5	PASS
11	2462	12.10	12.13	12.11	0.5	PASS

FOR CHAIN 1: CH 6

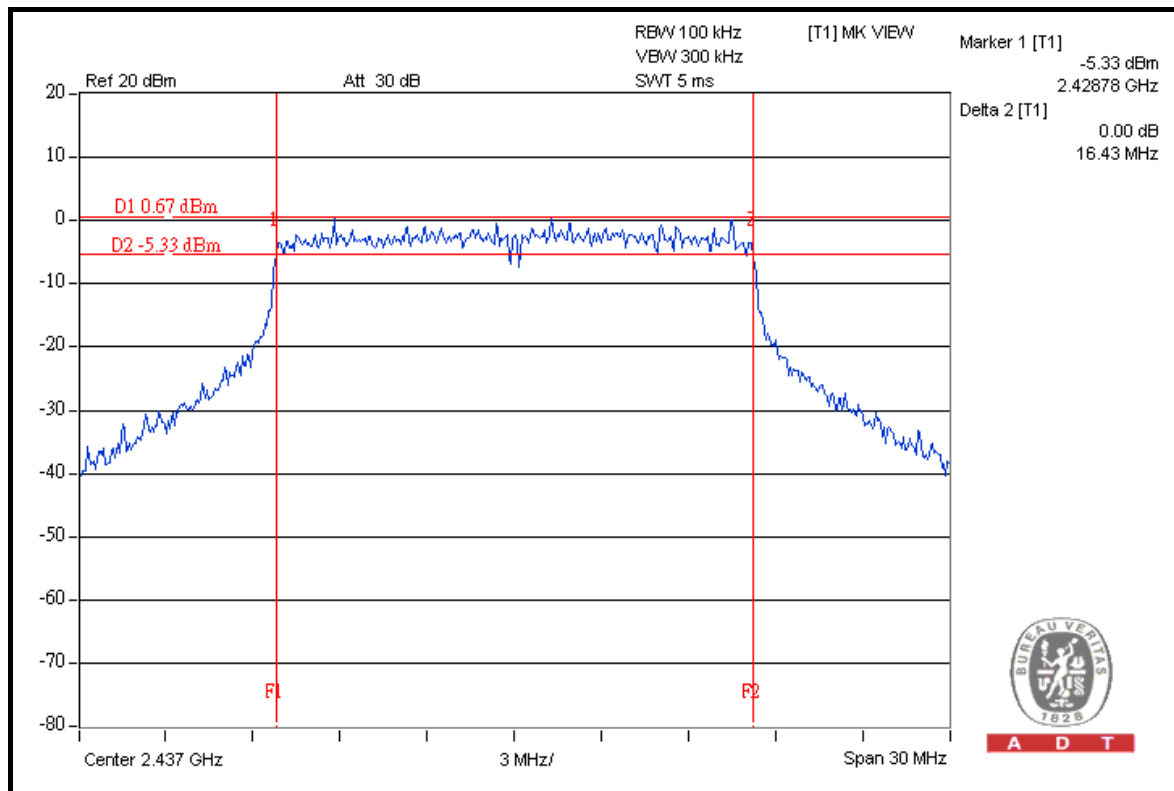


A D T

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	16.43	16.42	16.38	0.5	PASS
6	2437	16.40	16.38	16.43	0.5	PASS
11	2462	16.42	16.41	16.38	0.5	PASS

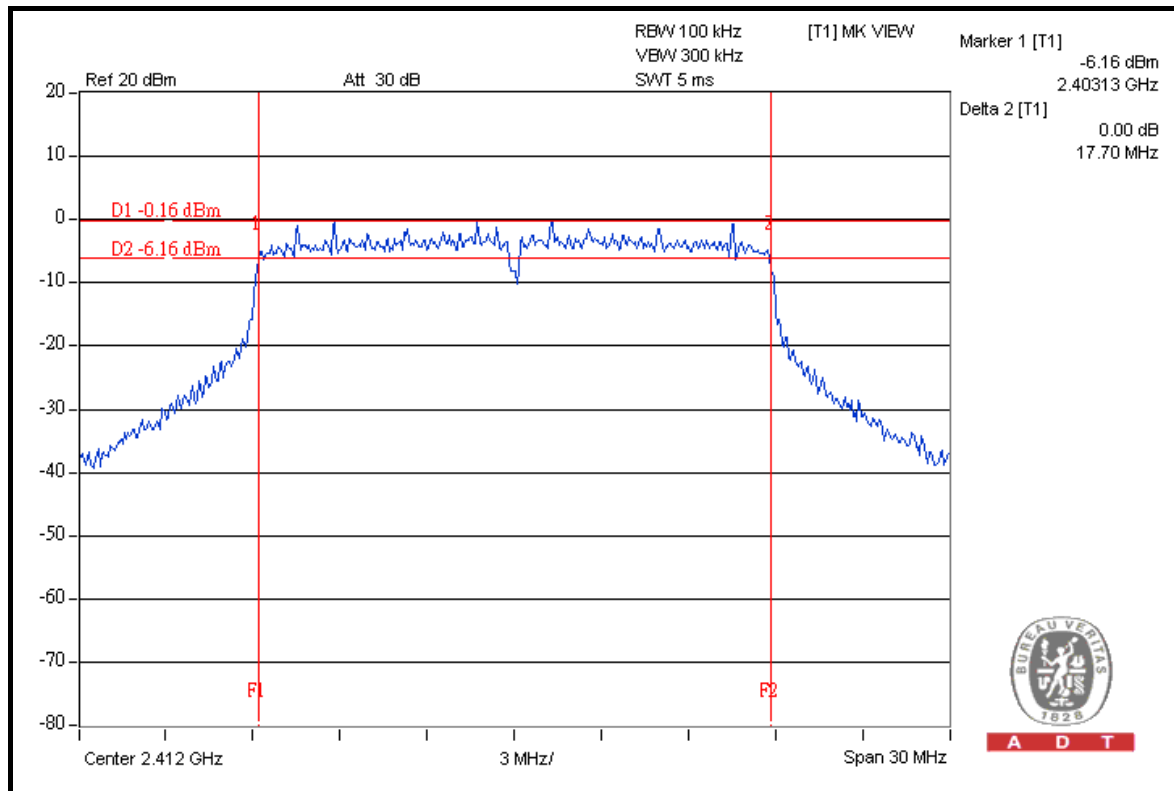
FOR CHAIN 2: CH 6



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	17.70	17.63	16.96	0.5	PASS
6	2437	16.46	16.43	16.44	0.5	PASS
11	2462	17.68	17.28	17.65	0.5	PASS

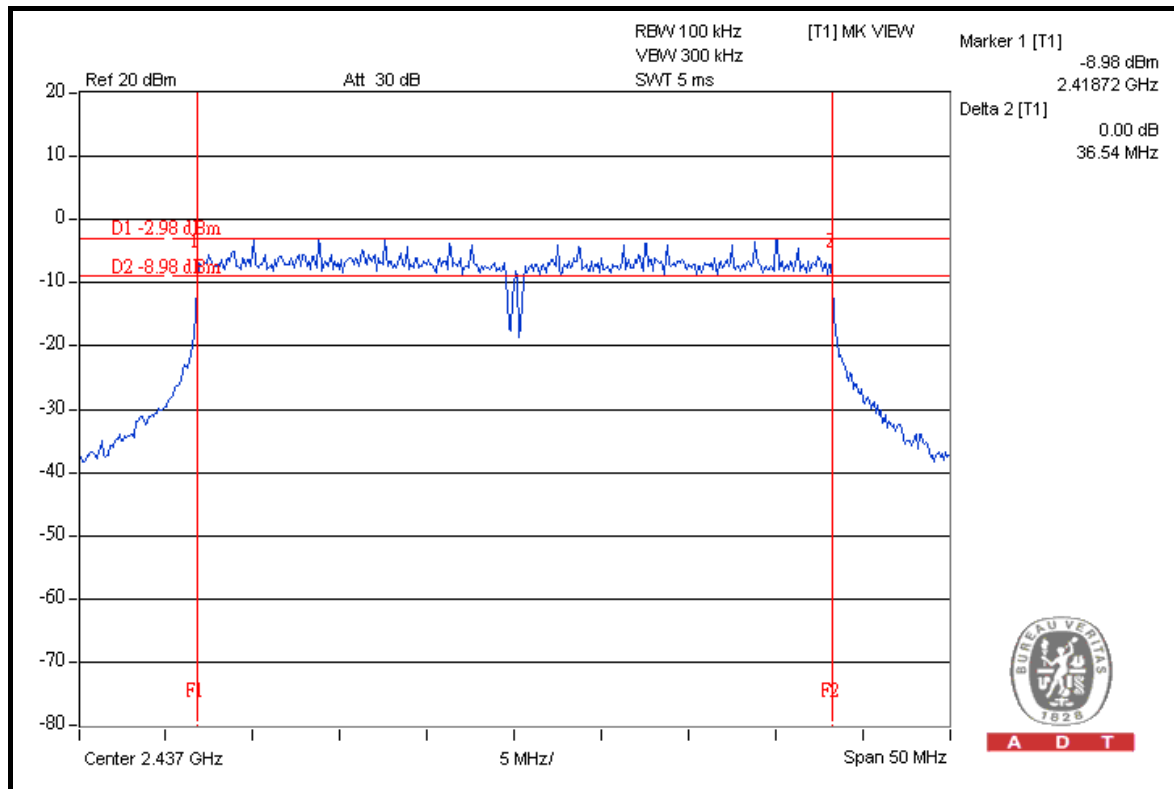
FOR CHAIN 0: CH 1



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2422	36.52	36.47	36.49	0.5	PASS
4	2437	36.54	36.52	36.50	0.5	PASS
7	2452	36.46	36.54	36.52	0.5	PASS

FOR CHAIN 0: CH 4





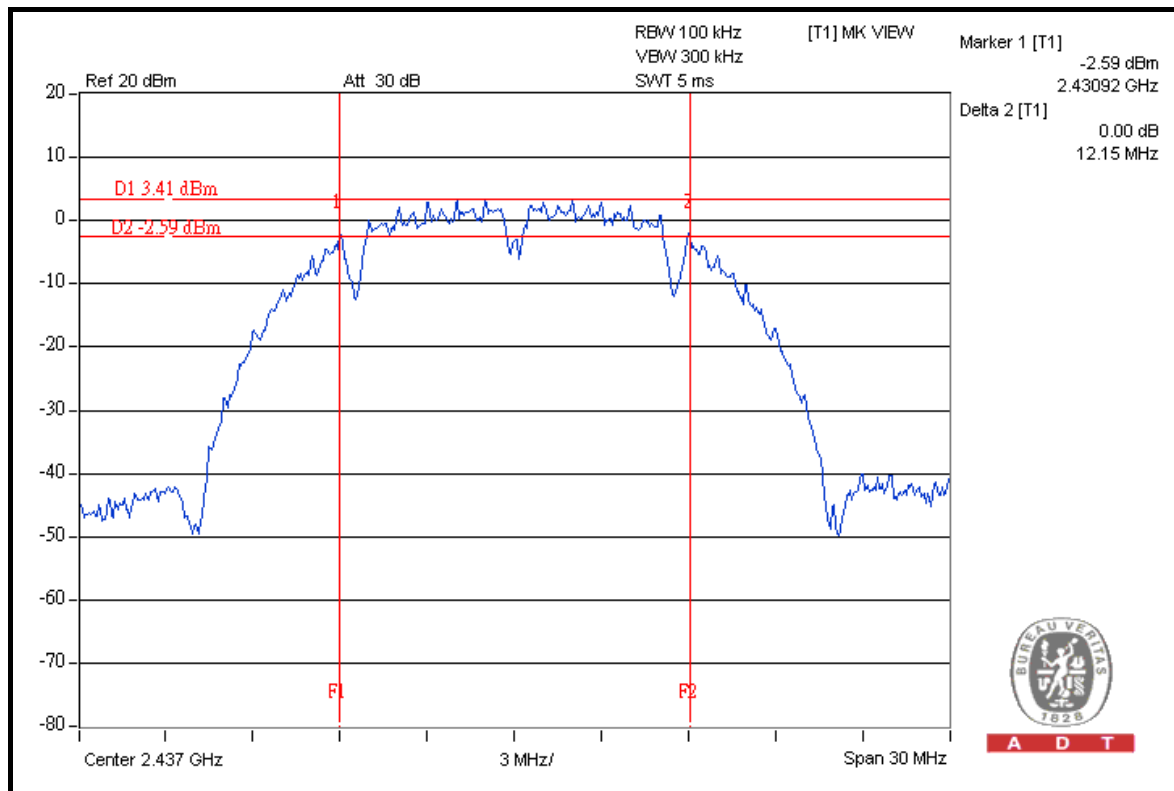
A D T

TEST MODE D

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	12.08	12.13	10.15	0.5	PASS
6	2437	12.14	12.15	10.16	0.5	PASS
11	2462	12.13	12.13	10.17	0.5	PASS

FOR CHAIN 1: CH 6



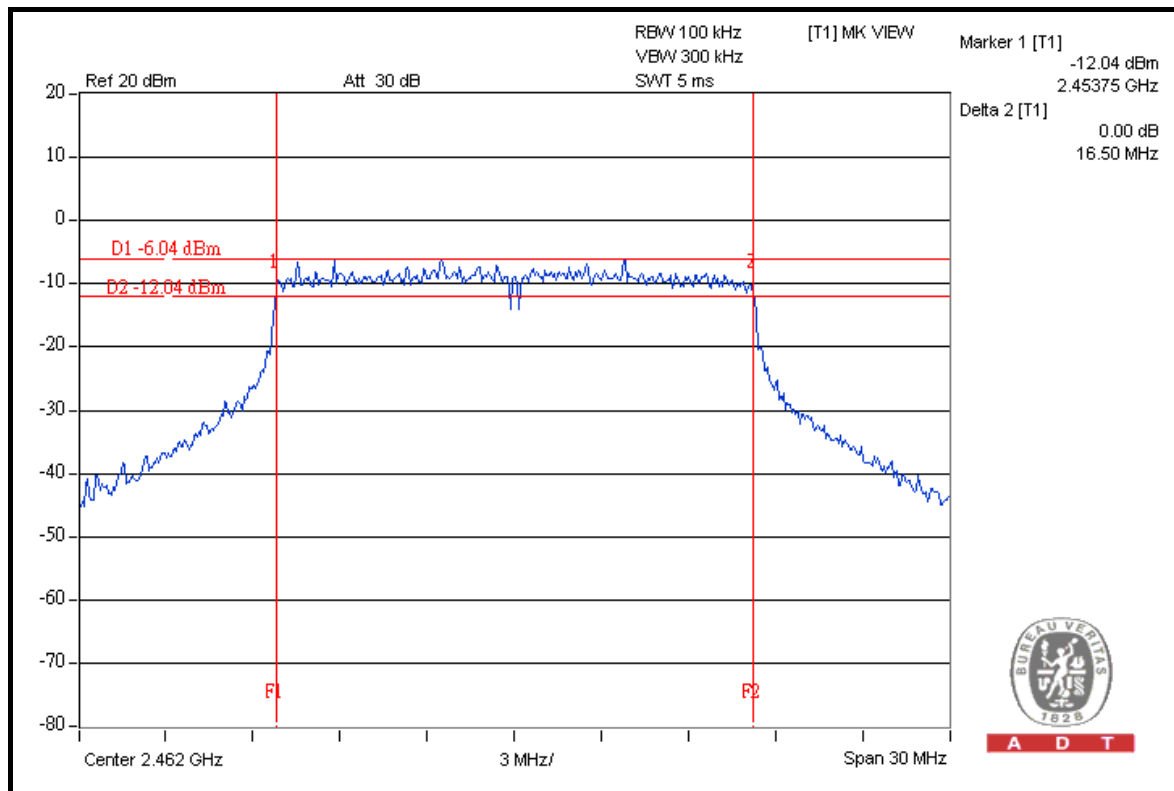


A D T

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	16.42	16.43	16.39	0.5	PASS
6	2437	16.49	16.43	16.43	0.5	PASS
11	2462	16.50	16.45	16.47	0.5	PASS

FOR CHAIN 0: CH 11



A D T

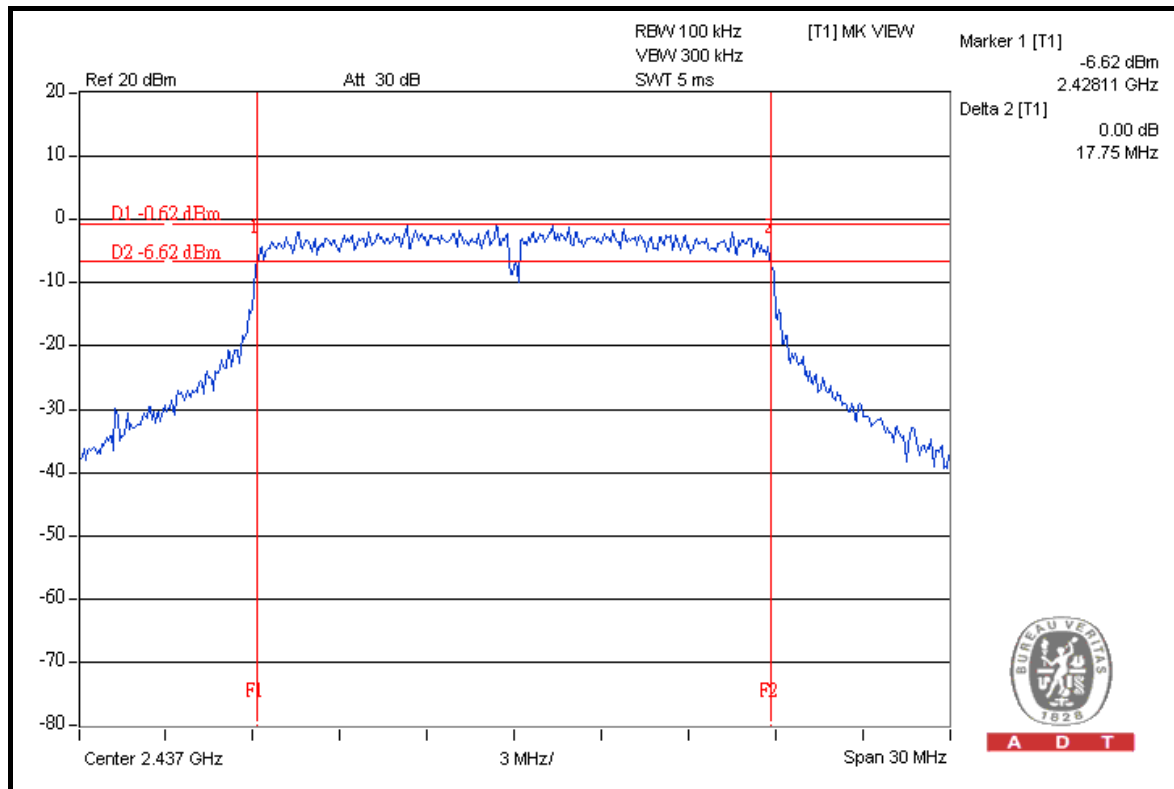


A D T

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	17.69	17.75	17.67	0.5	PASS
6	2437	17.66	17.75	17.73	0.5	PASS
11	2462	17.68	17.69	17.64	0.5	PASS

FOR CHAIN 1: CH 6



A D T

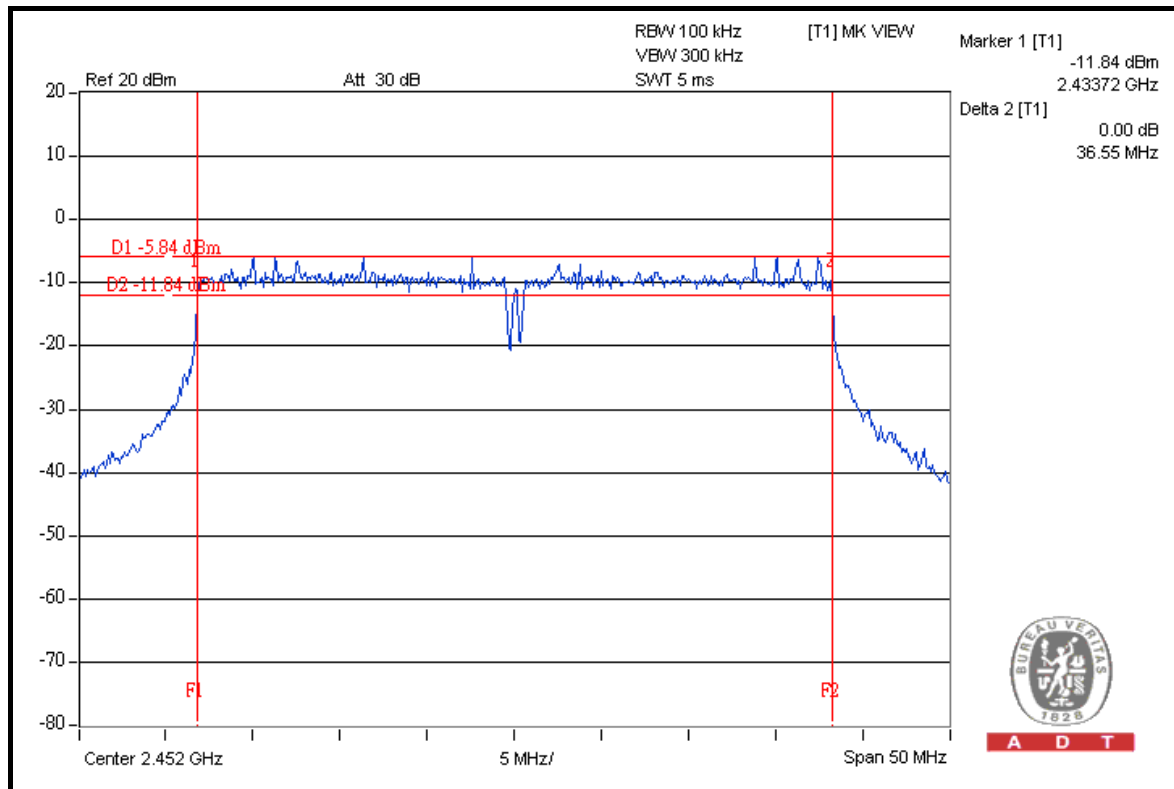


A D T

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2422	36.50	36.54	36.47	0.5	PASS
4	2437	36.50	36.49	36.53	0.5	PASS
7	2452	36.52	36.53	36.55	0.5	PASS

FOR CHAIN 2: CH 7



**A D T**

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
High Speed Peak Power Meter	ML2495A	0842014	Apr. 21, 2010	Apr. 20, 2011
Power Sensor	MA2411B	0738404	Apr. 21, 2010	Apr. 20, 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. Measurement Bandwidth of ML2495A is 65MHz greater than 6dB bandwidth of emission.

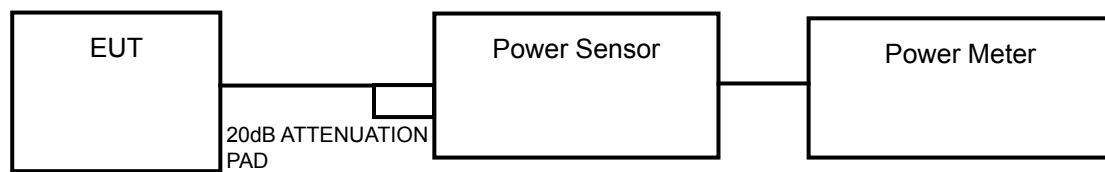
4.4.3 TEST PROCEDURES

A power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. 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

TEST MODE A

802.11b

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	20.5	22.7	21.3	433.3	26.4	29.1	PASS
6	2437	23.5	24.8	24.5	807.7	29.1	29.1	PASS
11	2462	22.7	23.6	23.4	634.1	28.0	29.1	PASS

NOTE: Directional gain = 2.1dBi + 10log(3)=6.9dBi > 6dBi , so the conducted power limit shall be reduced to 30-(6.9-6)=29.1dBm.

802.11g

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	23.1	25.3	23.5	766.9	28.8	29.1	PASS
6	2437	23.1	24.6	23.8	732.5	28.6	29.1	PASS
11	2462	23.4	24.4	24.1	751.2	28.8	29.1	PASS

NOTE: Directional gain = 2.1dBi + 10log(3)=6.9dBi > 6dBi , so the conducted power limit shall be reduced to 30-(6.9-6)=29.1dBm.

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	CHAIN 2				
1	2412	23.7	24.4	23.6	738.9	28.7	30	PASS
6	2437	24.0	25.6	24.8	916.3	29.6	30	PASS
11	2462	23.2	24.3	23.8	718.0	28.6	30	PASS

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	CHAIN 2				
1	2422	21.8	23.1	22.0	514.0	27.1	30	PASS
4	2437	22.4	23.8	23.6	642.8	28.1	30	PASS
7	2452	21.1	22.7	22.0	473.5	26.8	30	PASS

TEST MODE B

802.11b

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	20.5	22.7	21.3	433.3	26.4	27.7	PASS
6	2437	22.0	23.3	23.0	571.8	27.6	27.7	PASS
11	2462	21.1	22.2	22.2	460.7	26.6	27.7	PASS

NOTE: Directional gain = $3.5\text{dBi} + 10\log(3) = 8.3\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (8.3 - 6) = 27.7\text{dBm}$.

802.11g

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	21.6	23.8	22.0	542.9	27.3	27.7	PASS
6	2437	22.1	23.6	22.8	581.8	27.6	27.7	PASS
11	2462	21.9	22.9	22.6	531.8	27.3	27.7	PASS

NOTE: Directional gain = $3.5\text{dBi} + 10\log(3) = 8.3\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (8.3 - 6) = 27.7\text{dBm}$.

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	CHAIN 2				
1	2412	22.9	24.6	23.1	687.6	28.4	30	PASS
6	2437	24.0	25.6	24.8	916.3	29.6	30	PASS
11	2462	22.8	24.0	23.2	650.7	28.1	30	PASS

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	CHAIN 2				
1	2422	20.7	22.1	21.0	405.6	26.1	30	PASS
4	2437	22.4	23.8	23.6	642.8	28.1	30	PASS
7	2452	20.2	21.6	21.1	378.1	25.8	30	PASS

TEST MODE C

802.11b

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	21.0	22.9	22.0	479.4	26.8	28.1	PASS
6	2437	22.4	23.4	23.3	606.4	27.8	28.1	PASS
11	2462	20.5	21.8	21.4	401.6	26.0	28.1	PASS

NOTE: Directional gain = $3.1\text{dBi} + 10\log(3) = 7.9\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (7.9 - 6) = 28.1\text{dBm}$.

802.11g

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	22.5	24.0	23.1	633.2	28.0	28.1	PASS
6	2437	22.5	23.7	23.3	626.0	28.0	28.1	PASS
11	2462	21.8	23.0	22.8	541.4	27.3	28.1	PASS

NOTE: Directional gain = $3.1\text{dBi} + 10\log(3) = 7.9\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (7.9 - 6) = 28.1\text{dBm}$.

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	CHAIN 2				
1	2412	22.6	24.0	23.1	637.3	28.0	30	PASS
6	2437	23.0	24.3	23.8	708.6	28.5	30	PASS
11	2462	21.8	23.1	22.8	546.1	27.4	30	PASS

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	CHAIN 2				
1	2422	20.1	21.6	21.5	388.1	25.9	30	PASS
4	2437	22.1	23.5	23.4	604.8	27.8	30	PASS
7	2452	19.8	21.1	20.6	339.1	25.3	30	PASS

TEST MODE D

802.11b

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	17.5	19.5	18.2	211.4	23.3	23.7	PASS
6	2437	17.8	18.9	18.9	215.5	23.3	23.7	PASS
11	2462	18.0	19.1	19.0	223.8	23.5	23.7	PASS

NOTE: Directional gain = $7.5\text{dBi} + 10\log(3) = 12.3\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (12.3 - 6) = 23.7\text{dBm}$.

802.11g

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	17.7	19.4	18.6	218.4	23.4	23.7	PASS
6	2437	18.0	19.2	19.0	225.7	23.5	23.7	PASS
11	2462	17.7	19.4	19.3	231.1	23.6	23.7	PASS

NOTE: Directional gain = $7.5\text{dBi} + 10\log(3) = 12.3\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (12.3 - 6) = 23.7\text{dBm}$.

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	CHAIN 2				
1	2412	19.1	20.9	20.2	309.0	24.9	28.5	PASS
6	2437	22.5	23.7	23.6	641.3	28.1	28.5	PASS
11	2462	19.3	21.1	20.8	334.2	25.2	28.5	PASS

NOTE: According to 15.247 (b) (4), the maximum antenna gain 7.5dBi is higher than 6dBi, so the limit of peak power shall be reduced by 1.5dB.

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	CHAIN 2				
1	2422	16.2	17.8	16.9	150.9	21.8	28.5	PASS
4	2437	20.6	21.5	20.8	376.3	25.8	28.5	PASS
7	2452	17.3	18.6	18.1	190.7	22.8	28.5	PASS

NOTE: According to 15.247 (b) (4), the maximum antenna gain 7.5dBi is higher than 6dBi, so the limit of peak power shall be reduced by 1.5dB.

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	FSP40	100039	Jan. 11, 2010	Jan. 10, 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

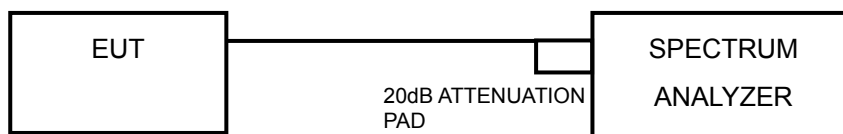
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

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

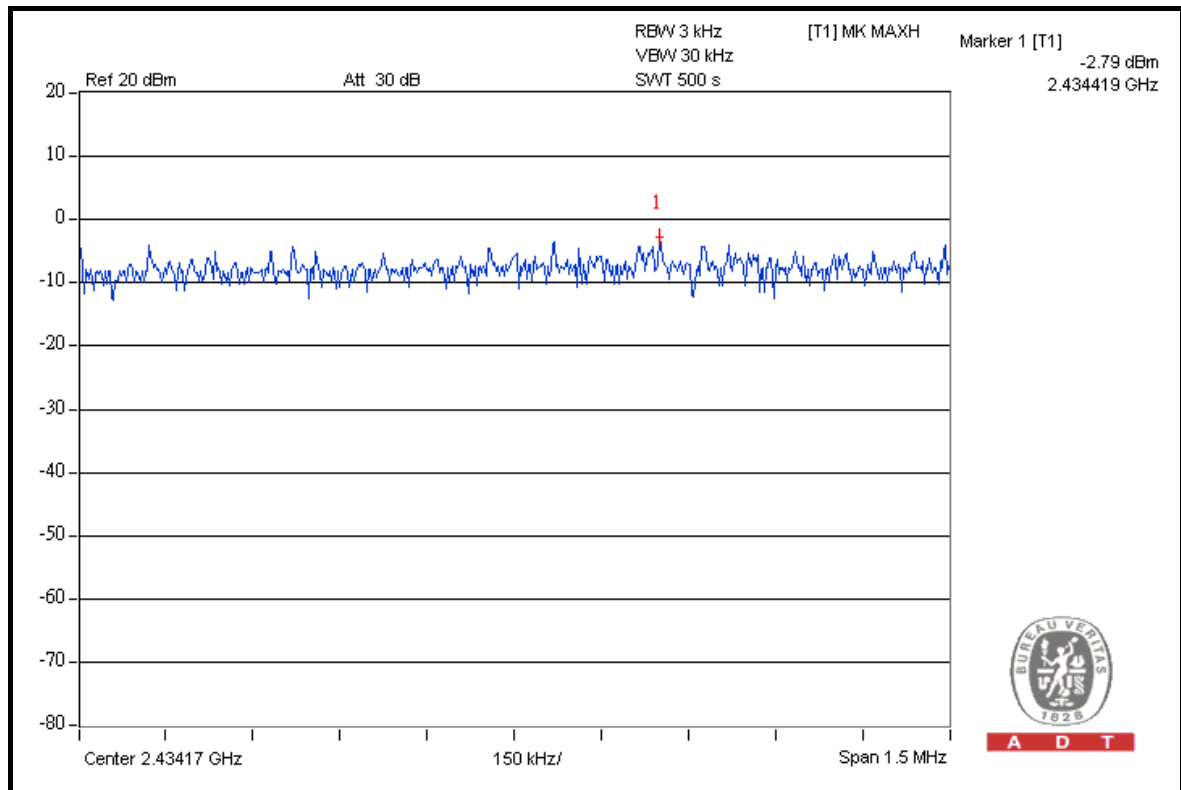
TEST MODE A

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	CHAIN 2			
1	2412	-8.65	-5.31	-9.99	-2.75	7.1	PASS
6	2437	-5.42	-2.79	-6.12	0.24	7.1	PASS
11	2462	-7.82	-5.28	-8.16	-2.12	7.1	PASS

NOTE: Directional gain = $2.1\text{dBi} + 10\log(3) = 6.9\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (6.9 - 6) = 7.1\text{dBm}$.

FOR CHAIN 1: CH 6

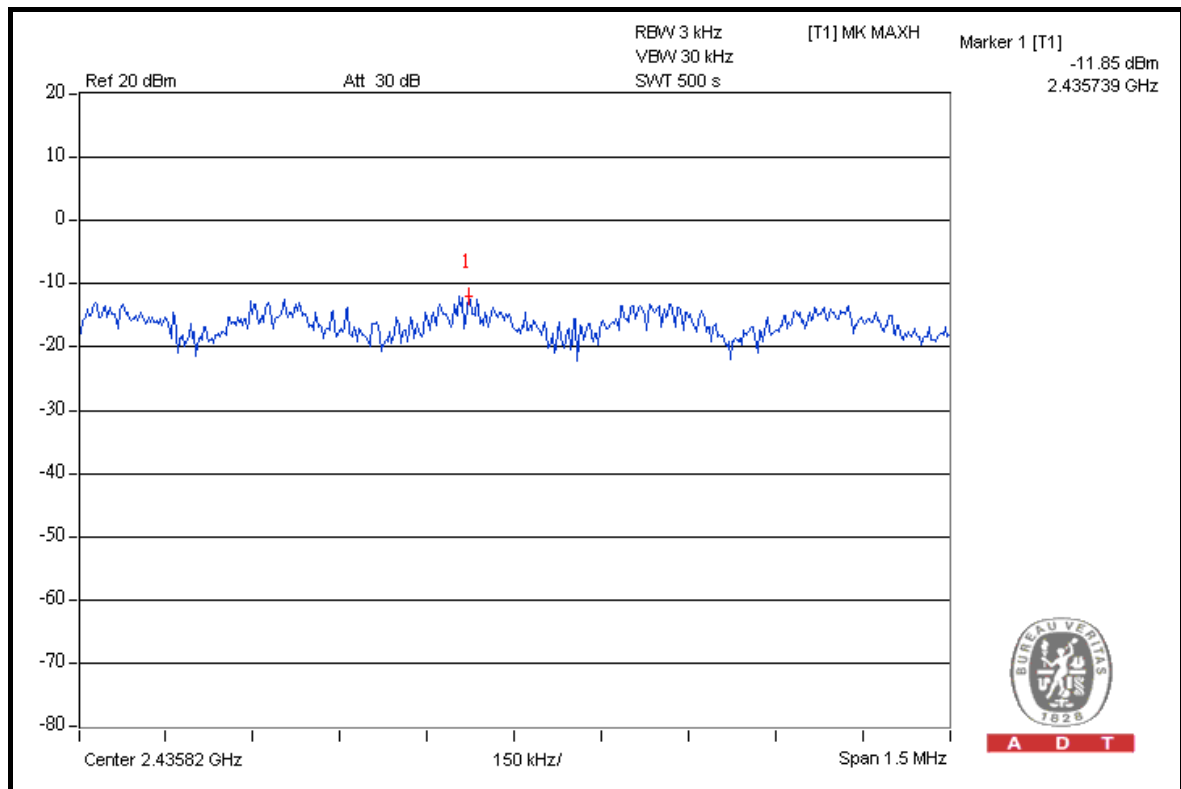


802.11g

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
1	2412	-14.34	-12.43	-14.28	-8.8	7.1	PASS
6	2437	-14.36	-11.85	-13.90	-8.5	7.1	PASS
11	2462	-14.36	-12.45	-13.50	-8.6	7.1	PASS

NOTE: Directional gain = $2.1\text{dBi} + 10\log(3) = 6.9\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (6.9 - 6) = 7.1\text{dBm}$.

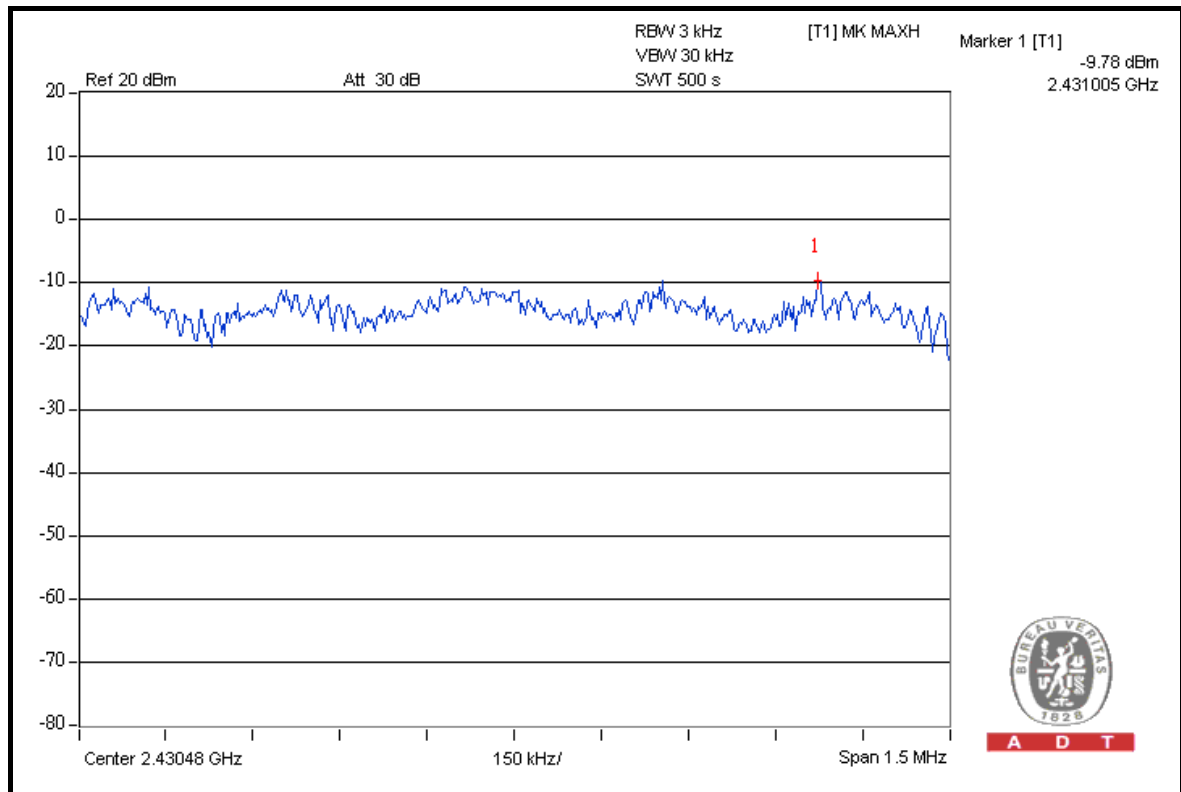
FOR CHAIN 1: CH 6



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	CHAIN 2			
1	2412	-11.43	-11.18	-11.18	-6.50	8	PASS
6	2437	-10.92	-9.99	-9.78	-5.44	8	PASS
11	2462	-11.73	-11.42	-10.32	-6.35	8	PASS

FOR CHAIN 2: CH 6



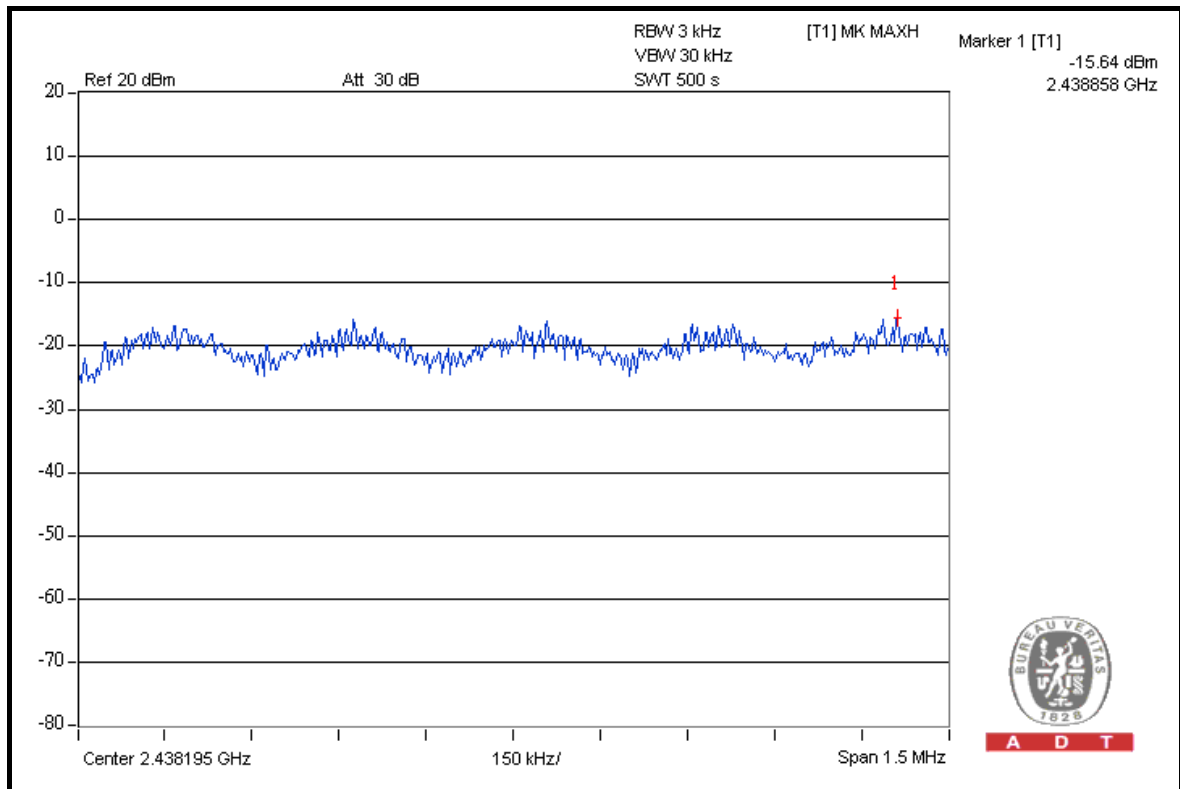


A D T

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	CHAIN 2			
1	2422	-18.12	-16.55	-17.94	-12.68	8	PASS
4	2437	-17.56	-15.64	-16.10	-11.61	8	PASS
7	2452	-17.96	-16.76	-17.78	-12.68	8	PASS

FOR CHAIN 1: CH 4





A D T

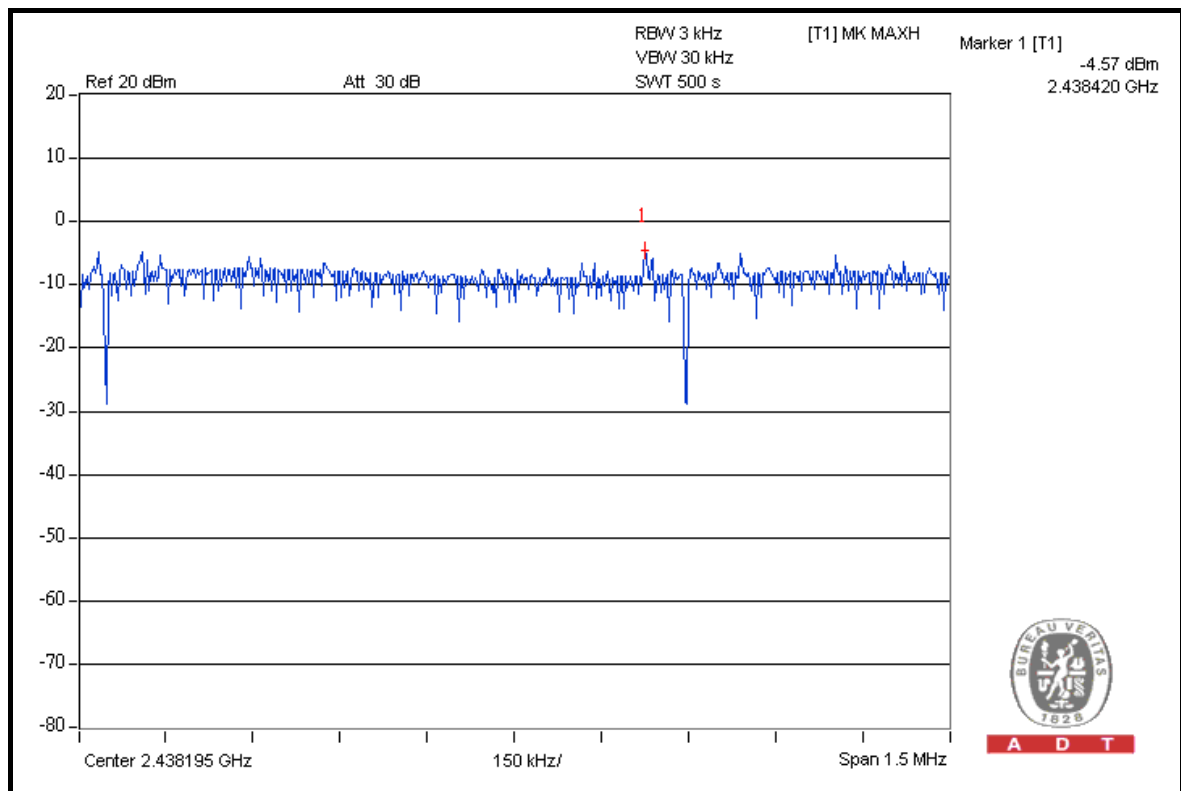
TEST MODE B

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	CHAIN 2			
1	2412	-8.48	-4.90	-9.26	-2.34	5.7	PASS
6	2437	-6.98	-4.57	-7.65	-1.42	5.7	PASS
11	2462	-7.82	-5.28	-8.16	-2.12	5.7	PASS

NOTE: Directional gain = $3.5\text{dBi} + 10\log(3) = 8.3\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (8.3 - 6) = 5.7\text{dBm}$.

FOR CHAIN 1: CH 6



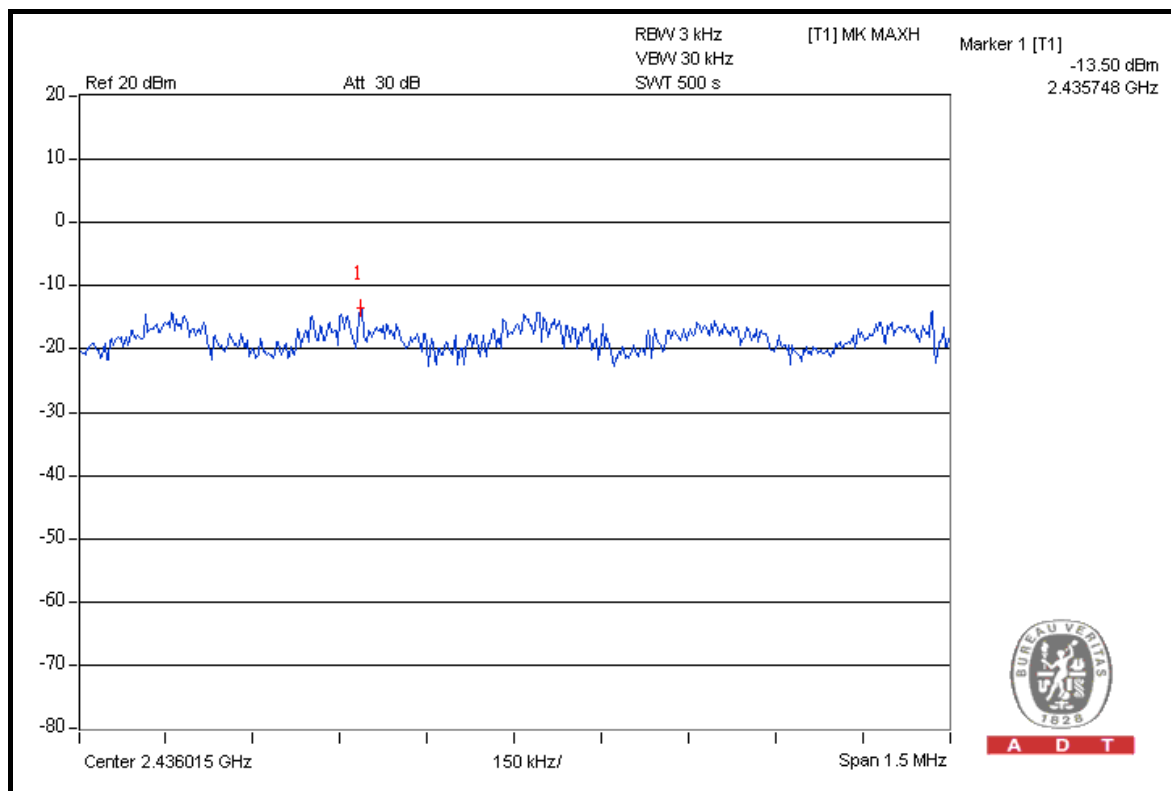
A D T

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	CHAIN 2			
1	2412	-15.76	-14.36	-15.60	-10.41	5.7	PASS
6	2437	-15.30	-13.50	-14.80	-9.71	5.7	PASS
11	2462	-15.54	-14.23	-14.98	-10.13	5.7	PASS

NOTE: Directional gain = $3.5\text{dBi} + 10\log(3) = 8.3\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (8.3 - 6) = 5.7\text{dBm}$.

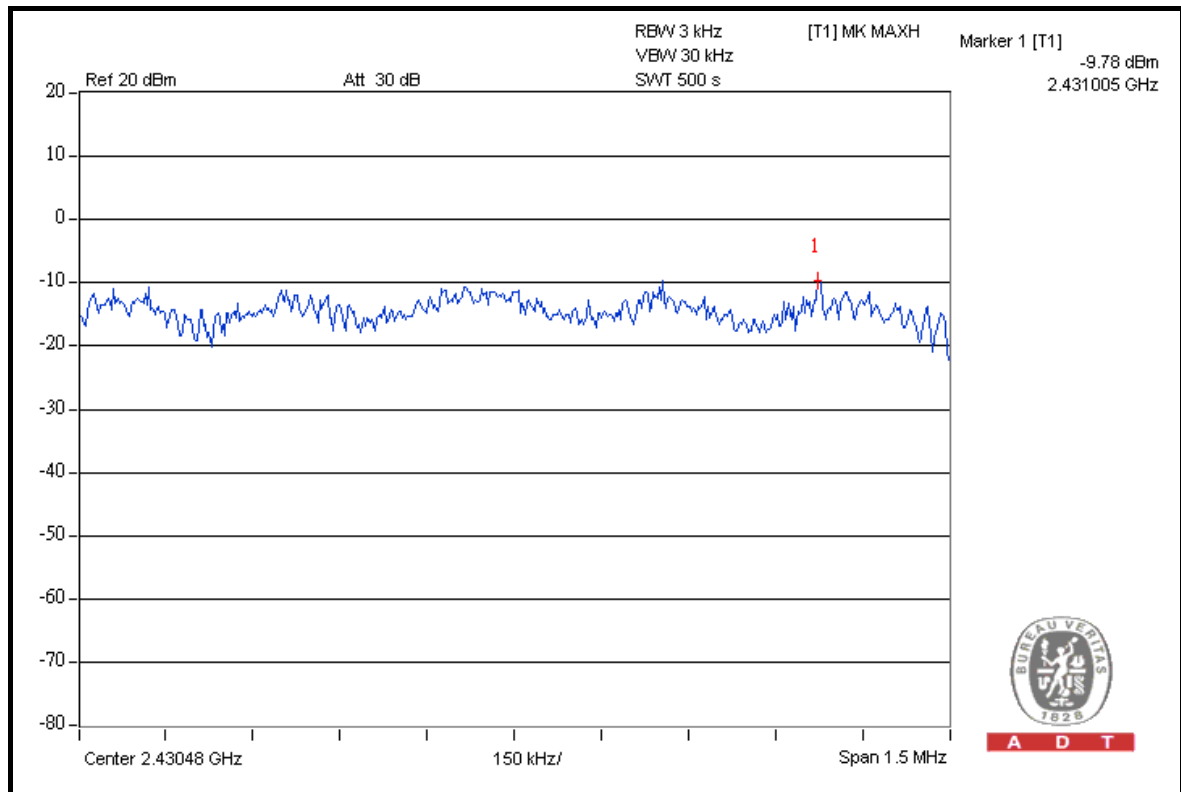
FOR CHAIN 1: CH 6



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	CHAIN 2			
1	2412	-12.18	-11.11	-11.55	-6.82	8	PASS
6	2437	-10.92	-9.99	-9.78	-5.44	8	PASS
11	2462	-12.16	-11.50	-11.35	-6.88	8	PASS

FOR CHAIN 2: CH 6



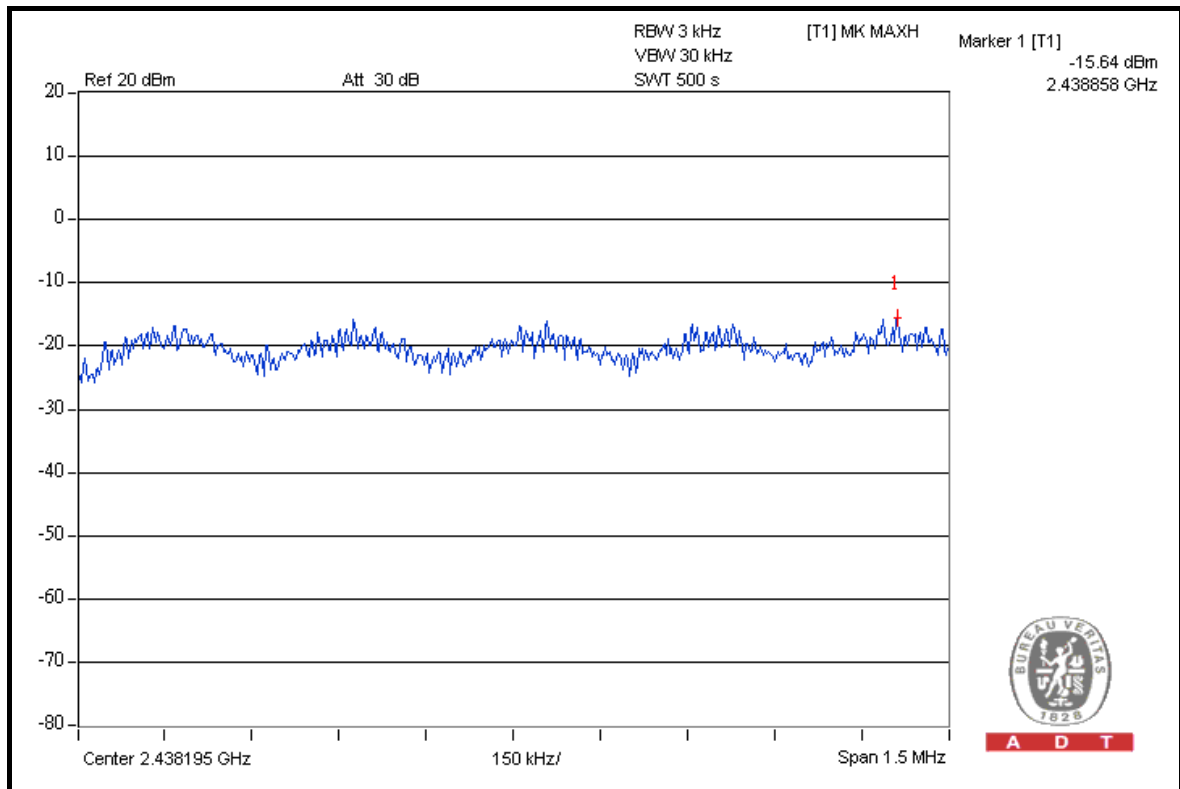


A D T

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	CHAIN 2			
1	2422	-19.28	-17.63	-19.20	-13.87	8	PASS
4	2437	-17.56	-15.64	-16.10	-11.61	8	PASS
7	2452	-19.62	-17.94	-18.96	-13.98	8	PASS

FOR CHAIN 1: CH 4



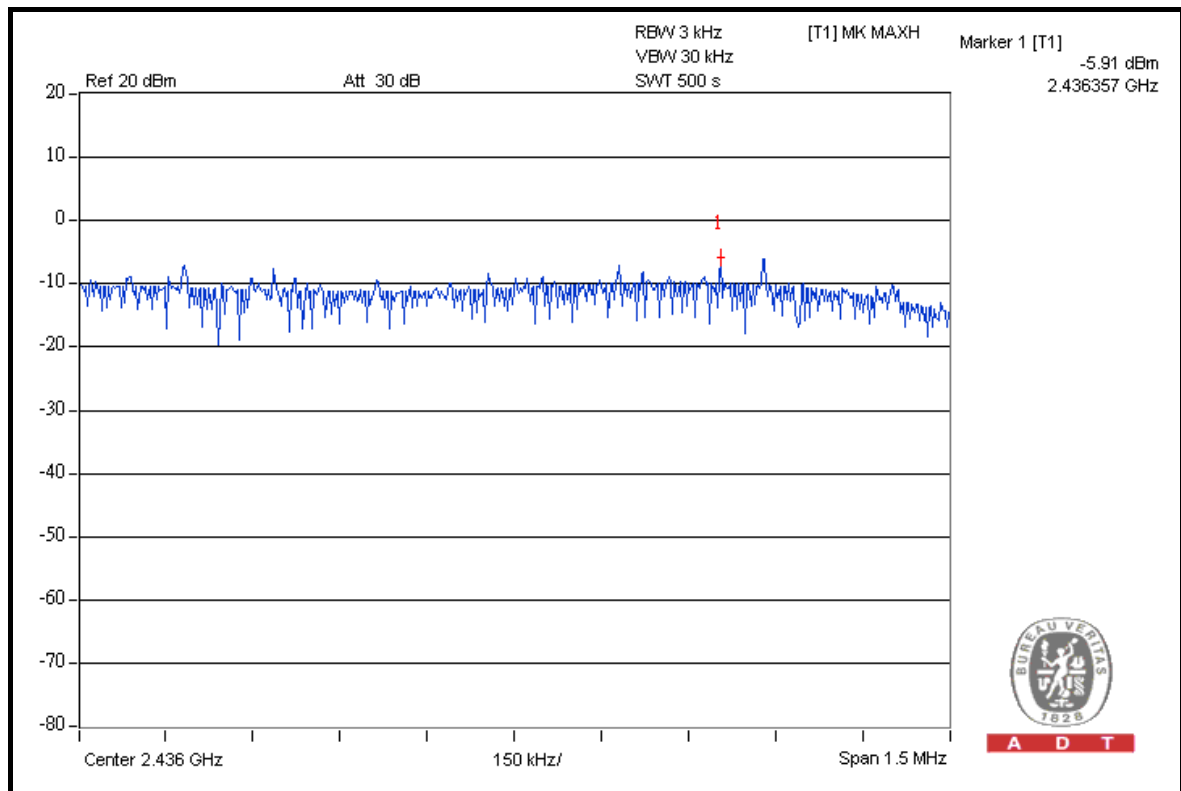
TEST MODE C

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	CHAIN 2			
1	2412	-8.26	-6.75	-8.26	-2.92	6.1	PASS
6	2437	-6.88	-5.91	-6.85	-1.75	6.1	PASS
11	2462	-8.56	-7.99	-8.45	-3.56	6.1	PASS

NOTE: Directional gain = $3.1\text{dBi} + 10\log(3) = 7.9\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (7.9 - 6) = 6.1\text{dBm}$.

FOR CHAIN 1: CH 6





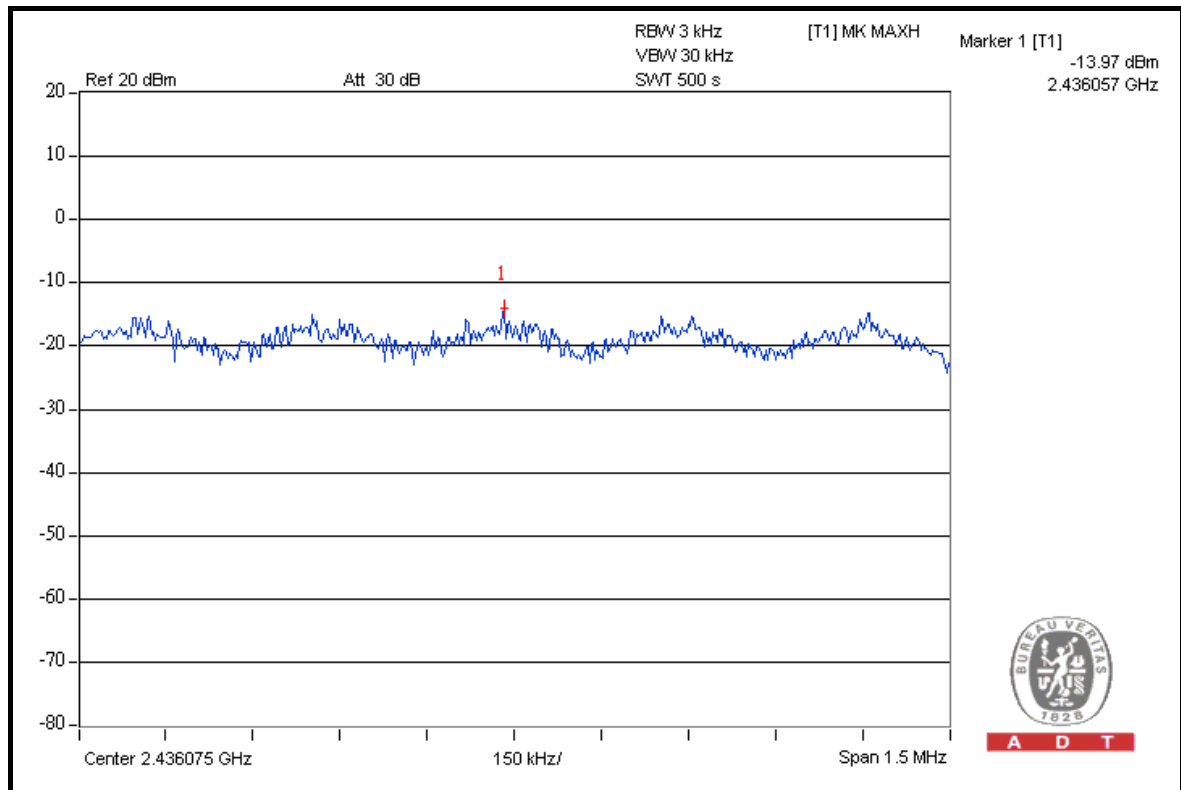
A D T

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	CHAIN 2			
1	2412	-15.52	-14.59	-14.74	-10.18	6.1	PASS
6	2437	-15.09	-14.21	-13.97	-9.63	6.1	PASS
11	2462	-16.32	-15.29	-14.36	-10.46	6.1	PASS

NOTE: Directional gain = $3.1\text{dBi} + 10\log(3) = 7.9\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (7.9 - 6) = 6.1\text{dBm}$.

FOR CHAIN 2: CH 6

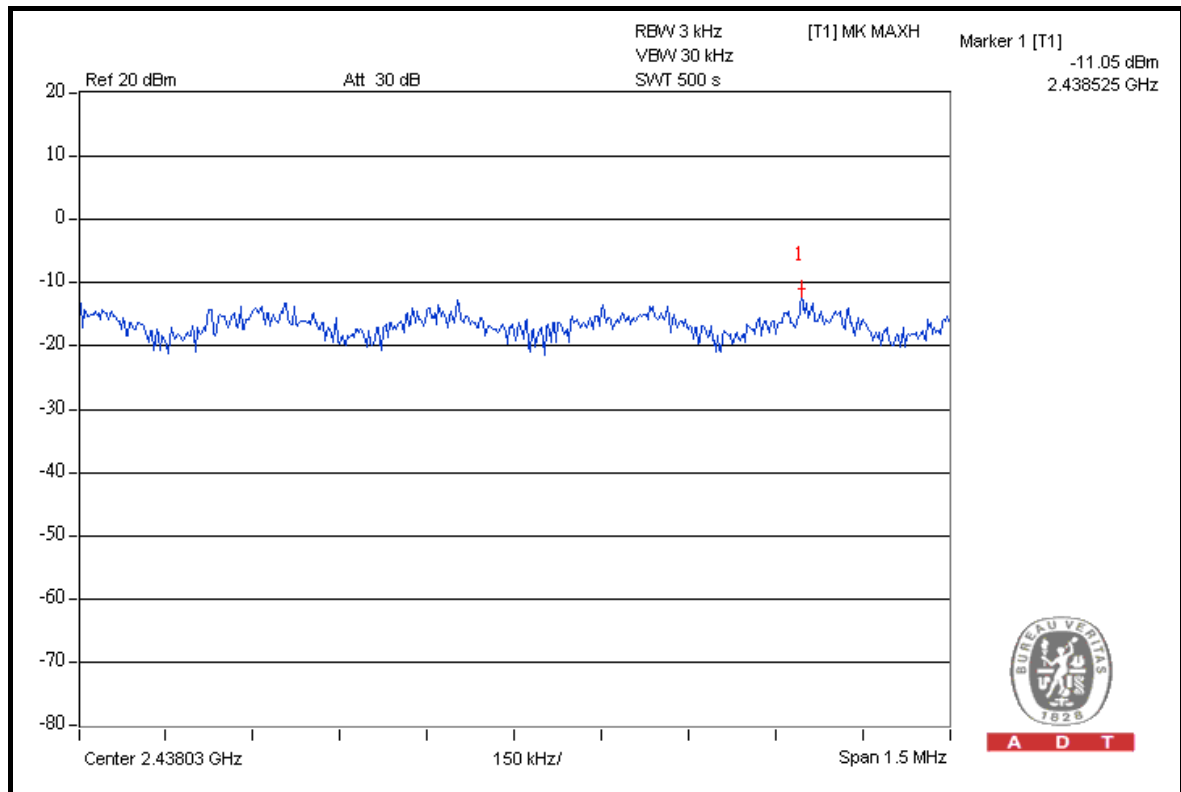


A D T

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	CHAIN 2			
1	2412	-15.13	-13.18	-14.38	-9.39	8	PASS
6	2437	-11.98	-11.13	-11.05	-6.60	8	PASS
11	2462	-15.79	-14.04	-13.85	-9.71	8	PASS

FOR CHAIN 2: CH 6



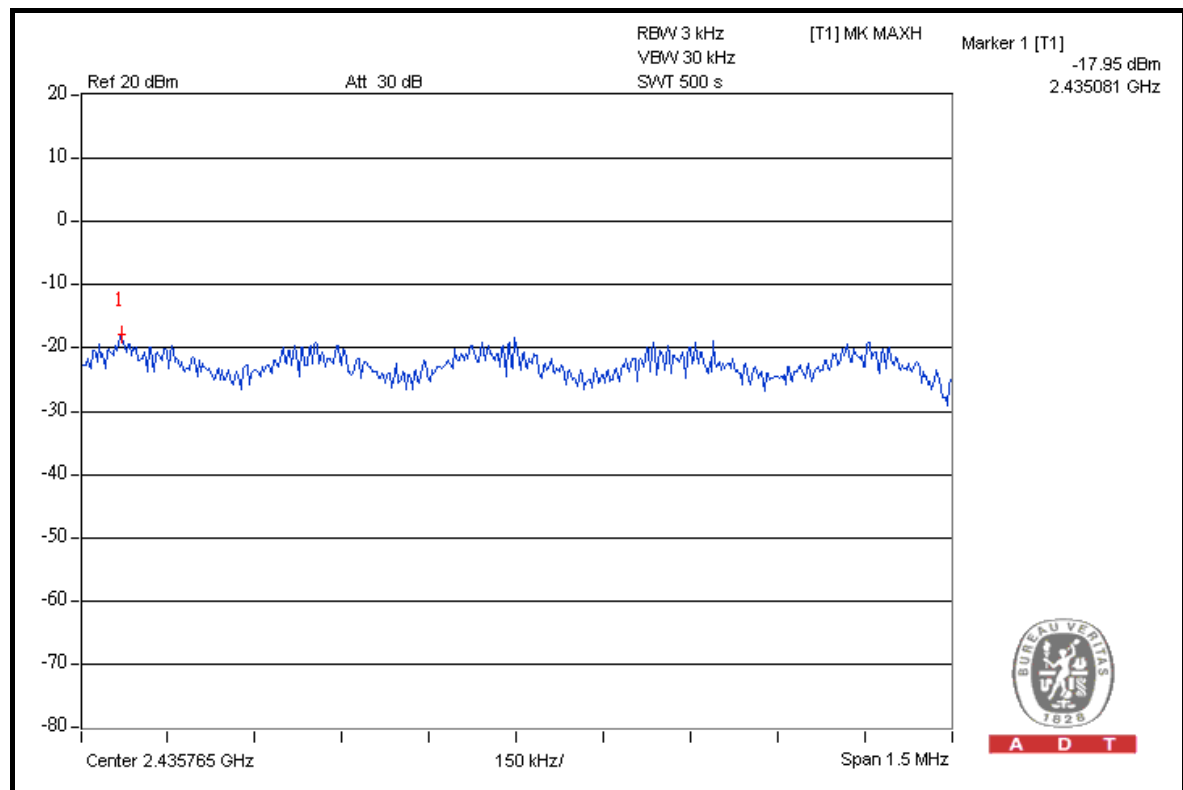


A D T

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	CHAIN 2			
1	2422	-20.08	-20.44	-19.93	-15.38	8	PASS
4	2437	-18.10	-18.63	-17.95	-13.47	8	PASS
7	2452	-20.22	-20.75	-20.73	-15.85	8	PASS

FOR CHAIN 2: CH 4



A D T

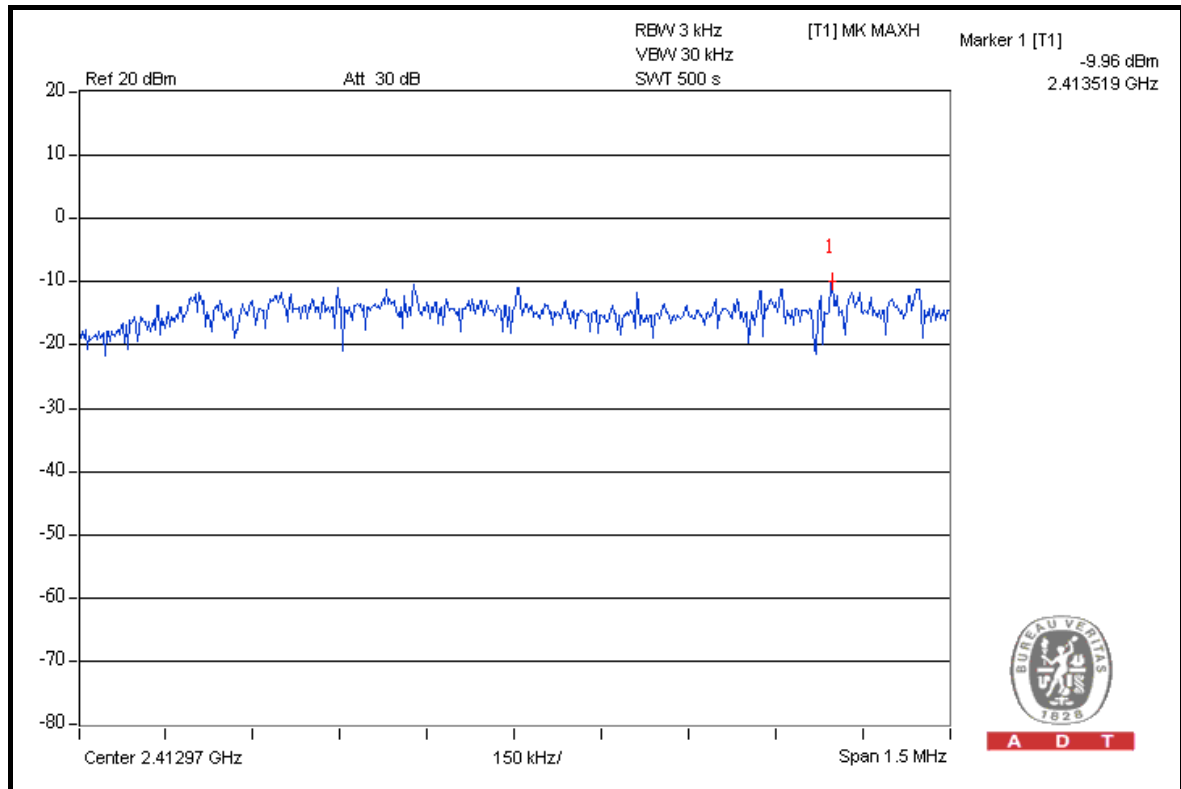
TEST MODE D

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	CHAIN 2			
1	2412	-12.40	-9.96	-12.76	-6.76	1.7	PASS
6	2437	-11.97	-10.55	-11.81	-6.62	1.7	PASS
11	2462	-12.13	-10.23	-12.09	-6.62	1.7	PASS

NOTE: Directional gain = $7.5\text{dBi} + 10\log(3) = 12.3\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (12.3 - 6) = 1.7\text{dBm}$.

FOR CHAIN 1: CH 1





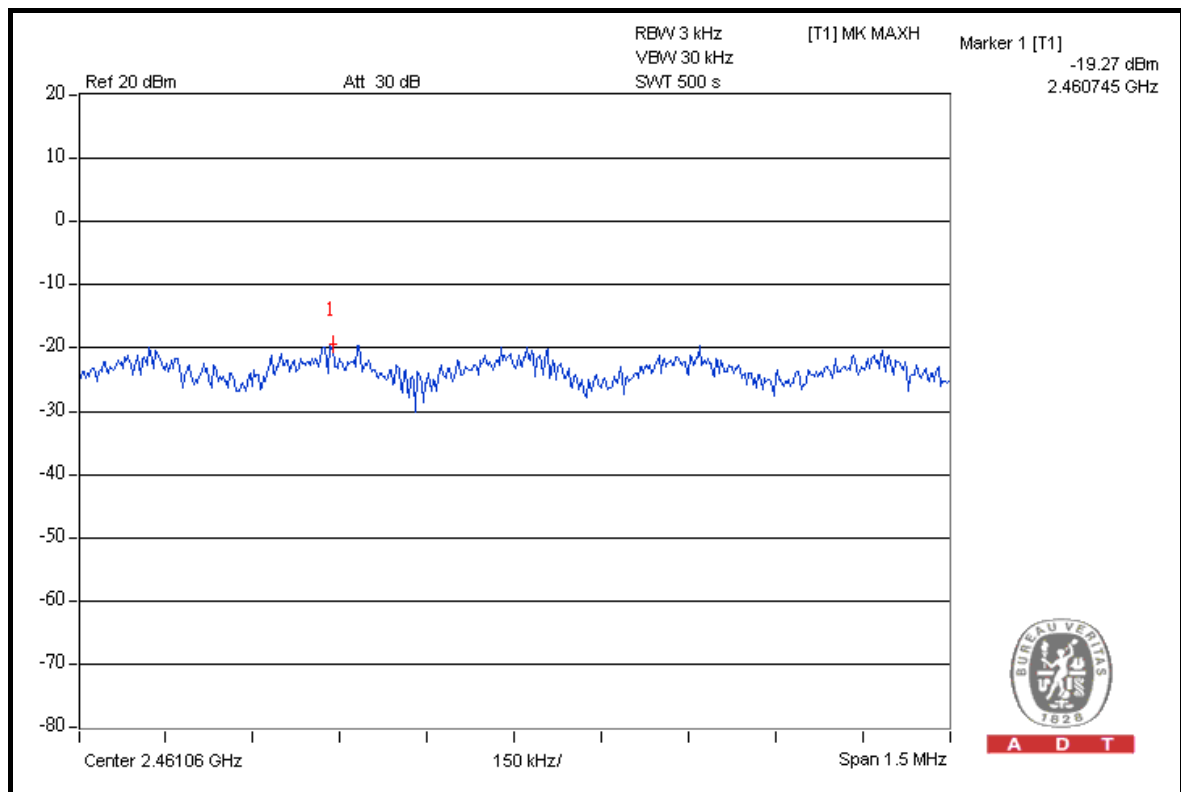
A D T

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	CHAIN 2			
1	2412	-19.84	-19.51	-20.10	-15.09	1.7	PASS
6	2437	-19.38	-19.62	-19.48	-14.69	1.7	PASS
11	2462	-19.70	-19.37	-19.27	-14.69	1.7	PASS

NOTE: Directional gain = $7.5\text{dBi} + 10\log(3) = 12.3\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (12.3 - 6) = 1.7\text{dBm}$.

FOR CHAIN 2: CH 11



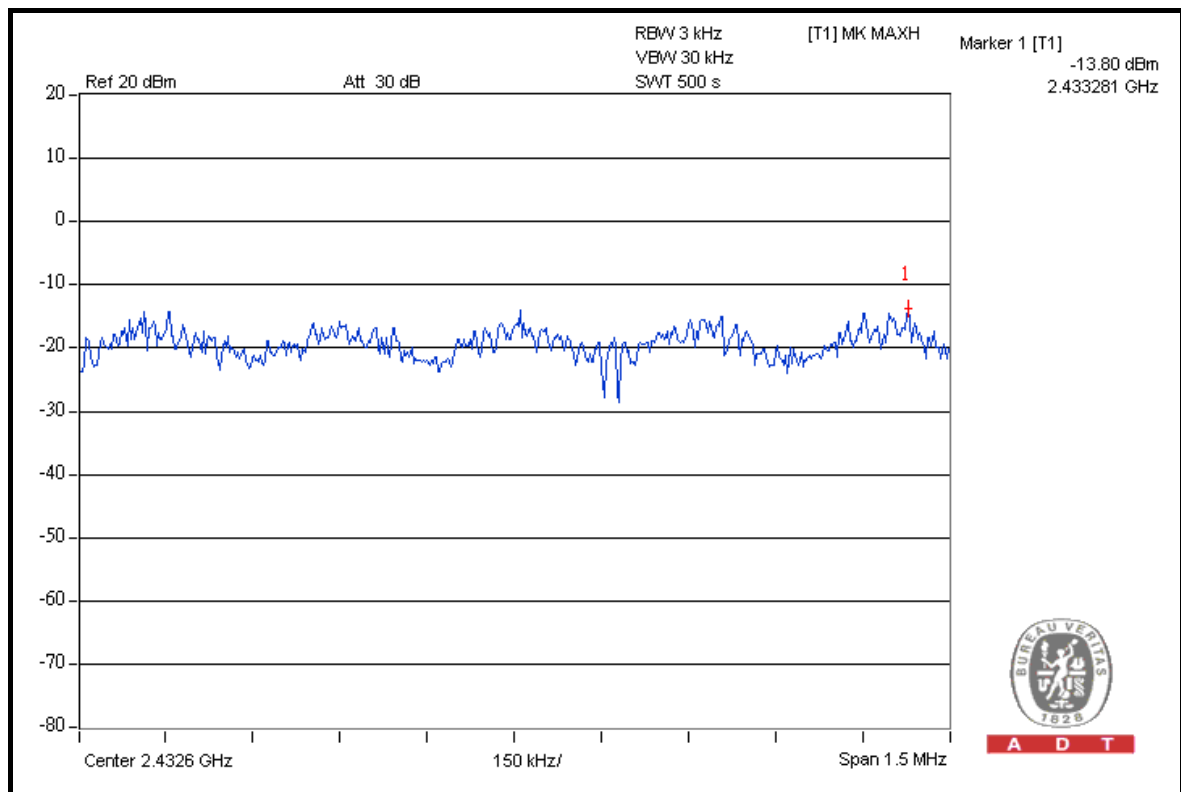
A D T

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	CHAIN 2			
1	2412	-18.49	-17.15	-16.91	-12.68	6.5	PASS
6	2437	-15.34	-14.23	-13.80	-9.63	6.5	PASS
11	2462	-18.14	-16.90	-16.62	-12.37	6.5	PASS

NOTE: According to 15.247 (b) (4), the maximum antenna gain 7.5dBi is higher than 6dBi, so the limit of peak power shall be reduced by 1.5dB.

FOR CHAIN 2: CH 6

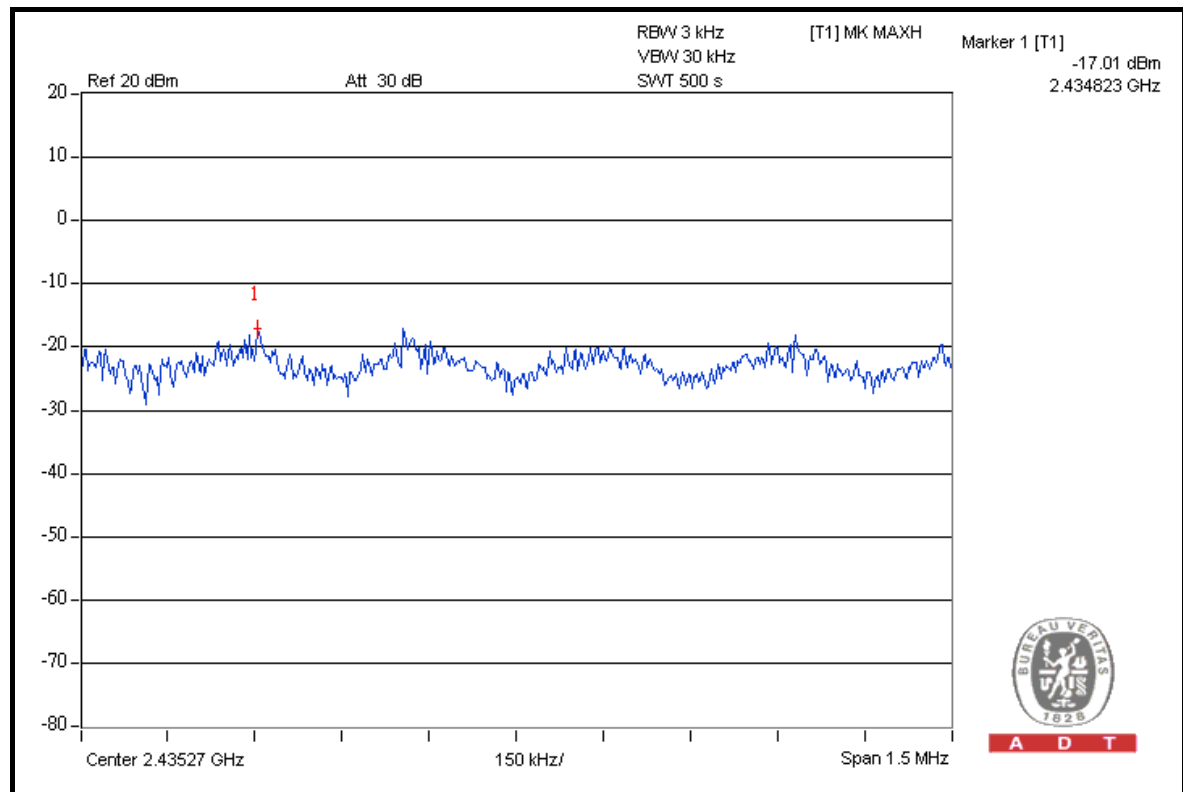


802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
1	2422	-22.97	-20.85	-21.93	-16.99	6.5	PASS
4	2437	-18.46	-17.01	-17.86	-12.92	6.5	PASS
7	2452	-21.78	-19.93	-20.80	-16.02	6.5	PASS

NOTE: According to 15.247 (b) (4), the maximum antenna gain 7.5dBi is higher than 6dBi, so the limit of peak power shall be reduced by 1.5dB.

FOR CHAIN 1: CH 4



4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB 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	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Dec. 29, 2009	Dec. 28, 2010
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Dec. 31, 2009	Dec. 30, 2010
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 27, 2010	Apr. 26, 2011
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-405	Feb. 03, 2010	Feb. 02, 2011
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 25, 2009	Dec. 24, 2010
Preamplifier Agilent	8447D	2944A10633	Nov. 10, 2009	Nov. 09, 2010
Preamplifier Agilent	8449B	3008A01964	Nov. 09, 2009	Nov. 08, 2010
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	238141/4	May 14, 2010	May 13, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	12738/6	May 14, 2010	May 13, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100.	TT93021703	NA	NA
Turn Table Controller ADT.	SC100.	SC93021703	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 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

TEST MODE A

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)	115.0	57.42	57.58	74.00
2412.00 (AV)	109.3	61.76	47.54	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)	115.9	53.22	62.68	74.00
2462.00 (AV)	111.3	60.00	51.30	54.00

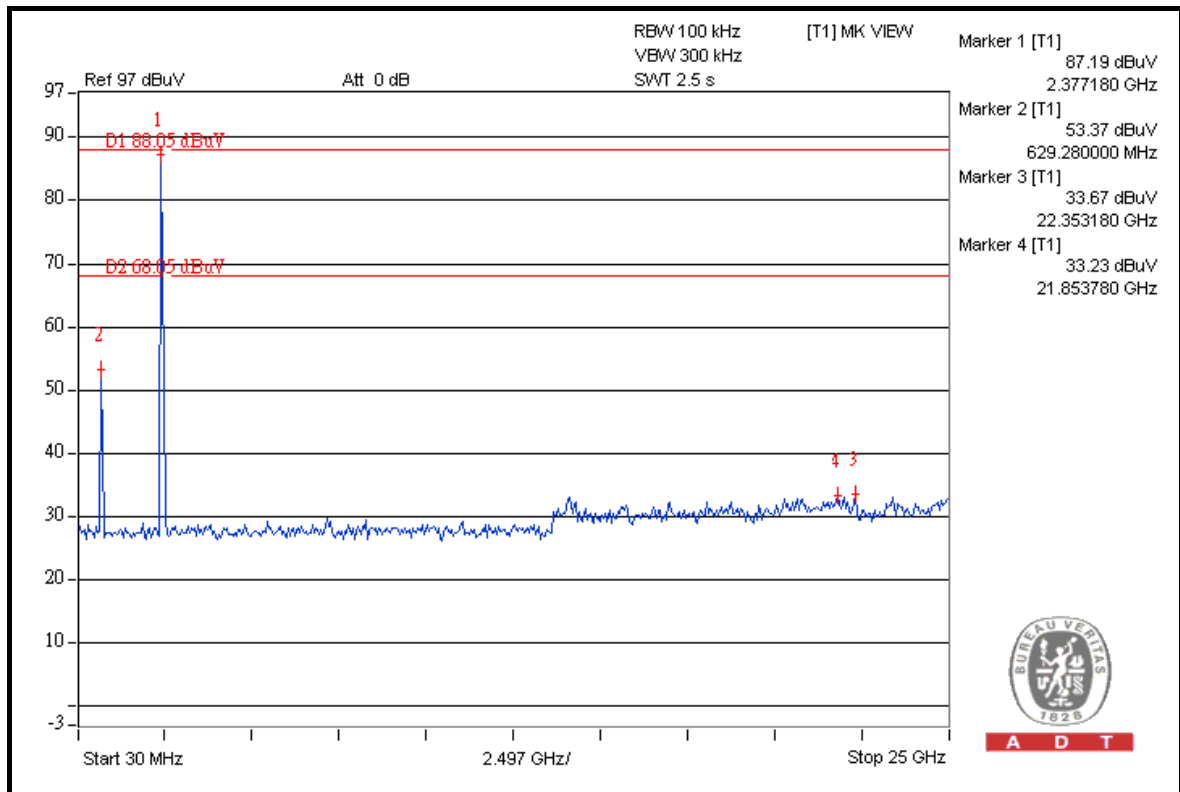
NOTE:

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

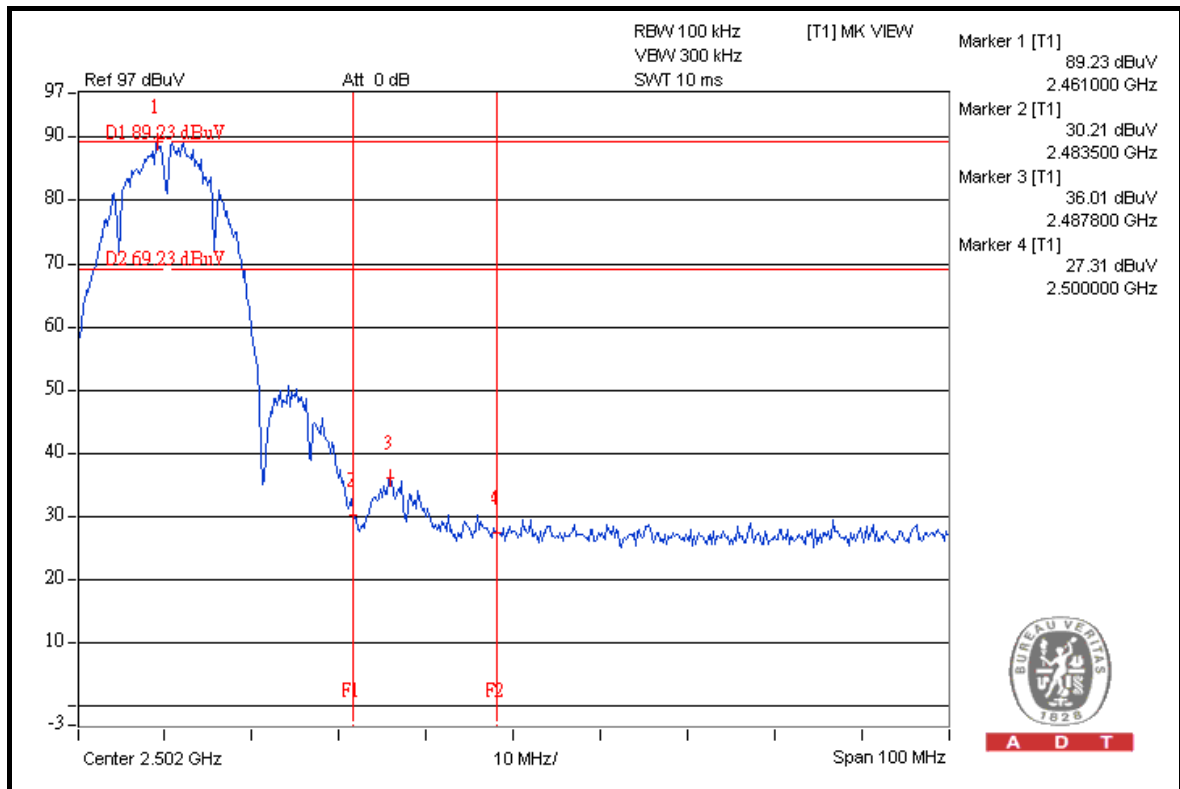




A D T



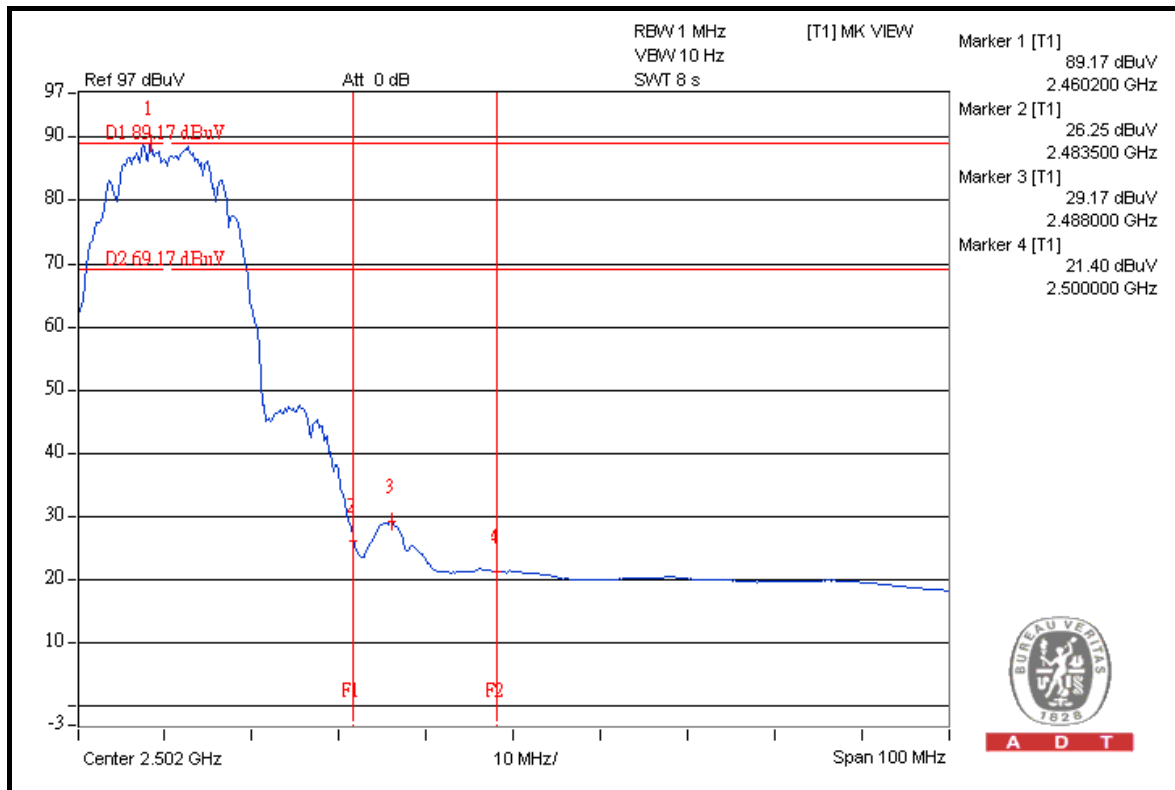
A D T



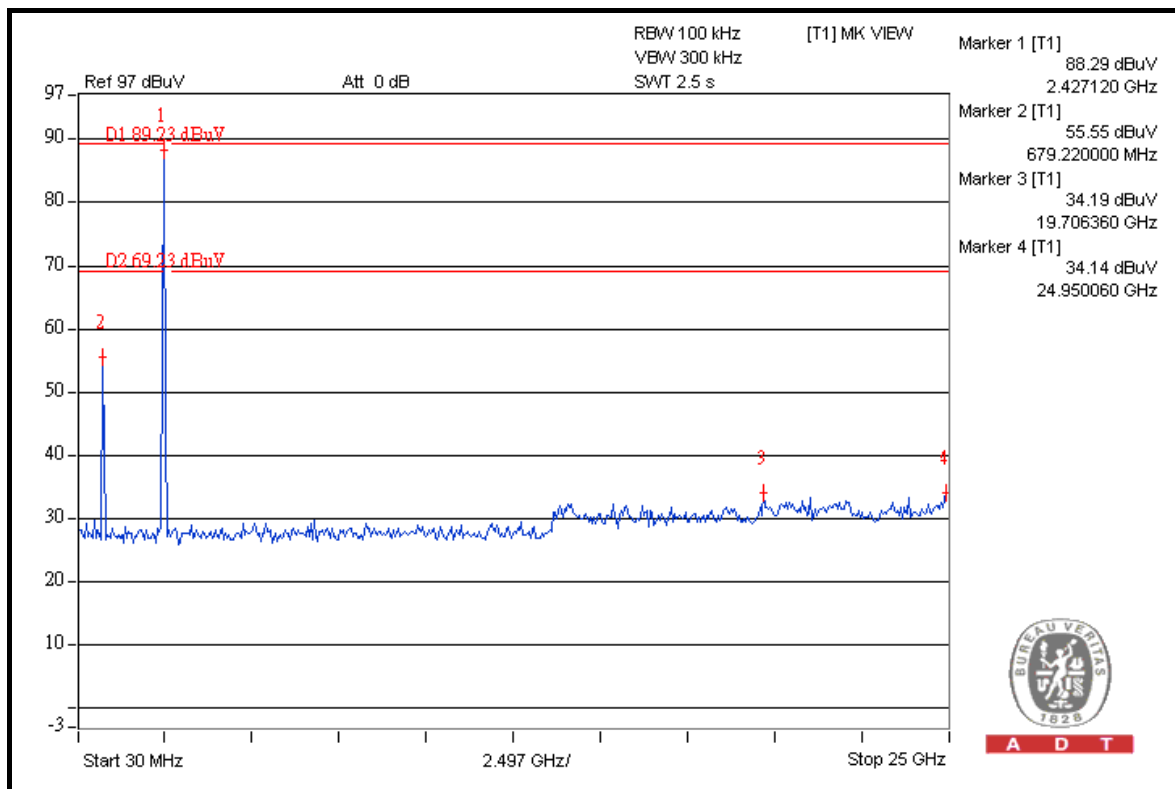
A D T



A D T



A D T



A D T

**A D T****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)	112.2	43.44	68.76	74.00
2412.00 (AV)	99.1	46.86	52.24	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

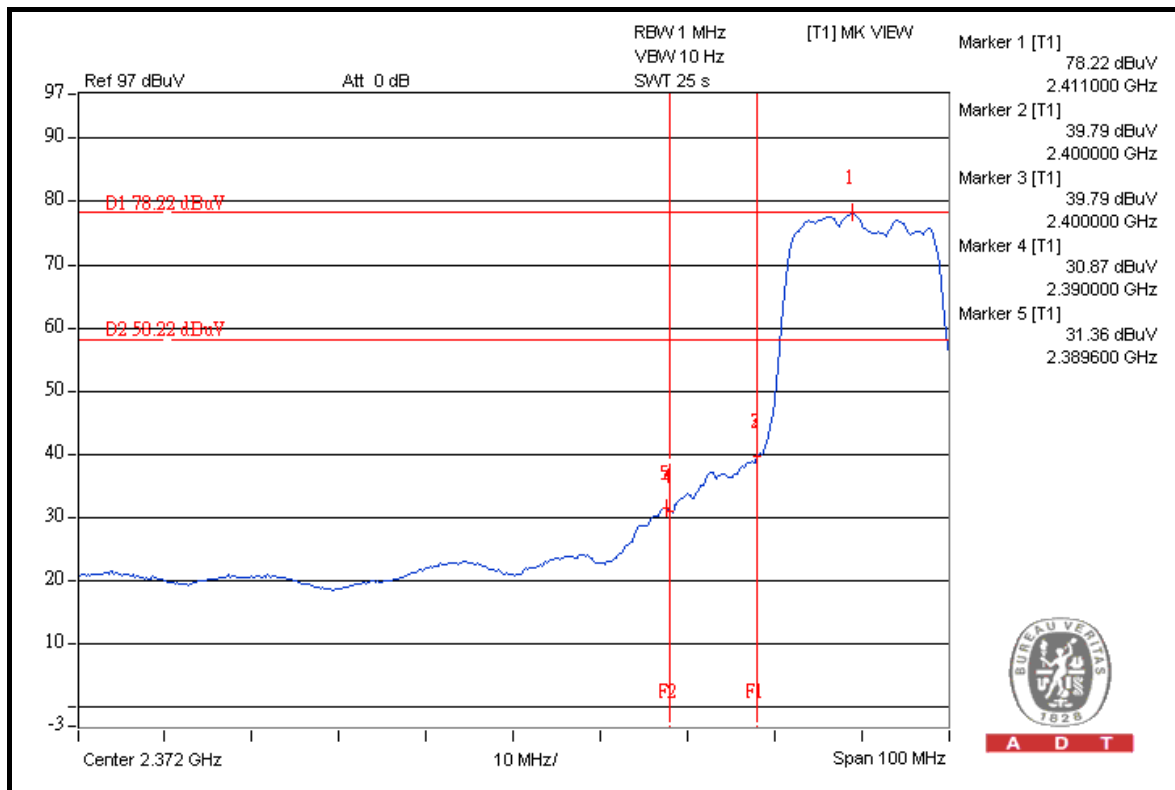
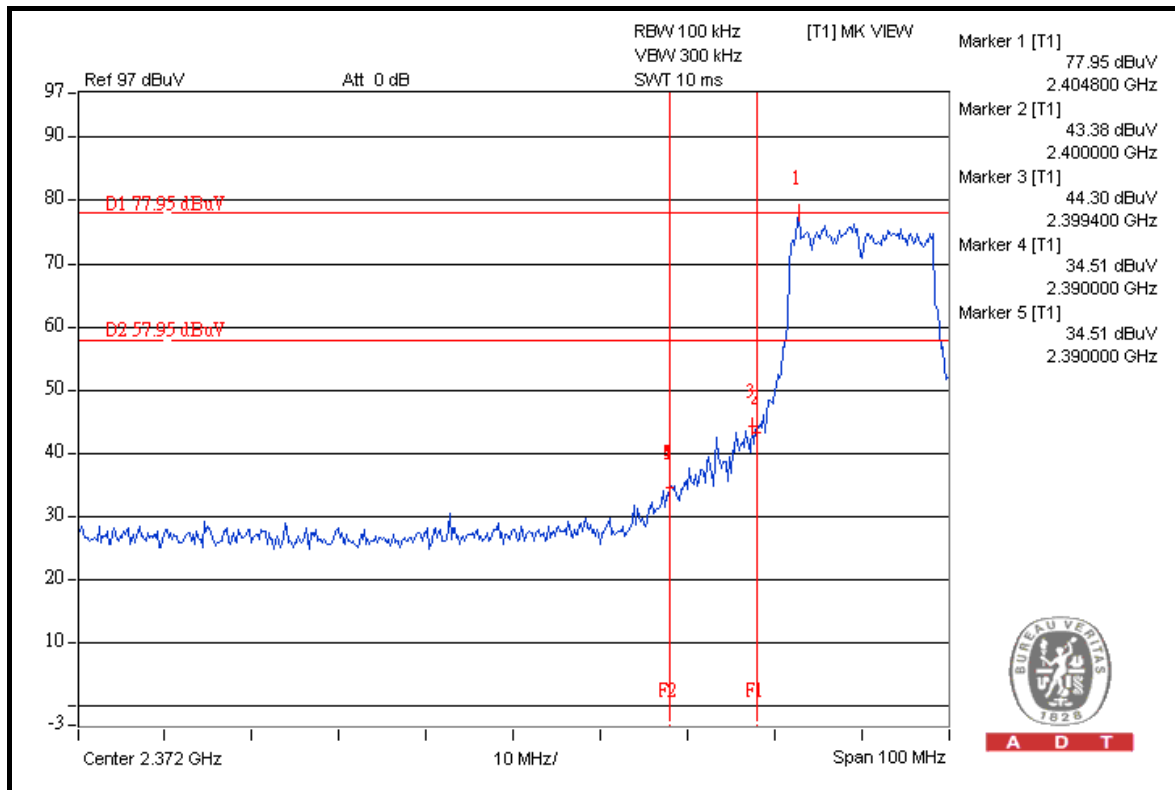
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	112.5	44.23	68.27	74.00
2462.00 (AV)	99.1	48.28	50.82	54.00

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.

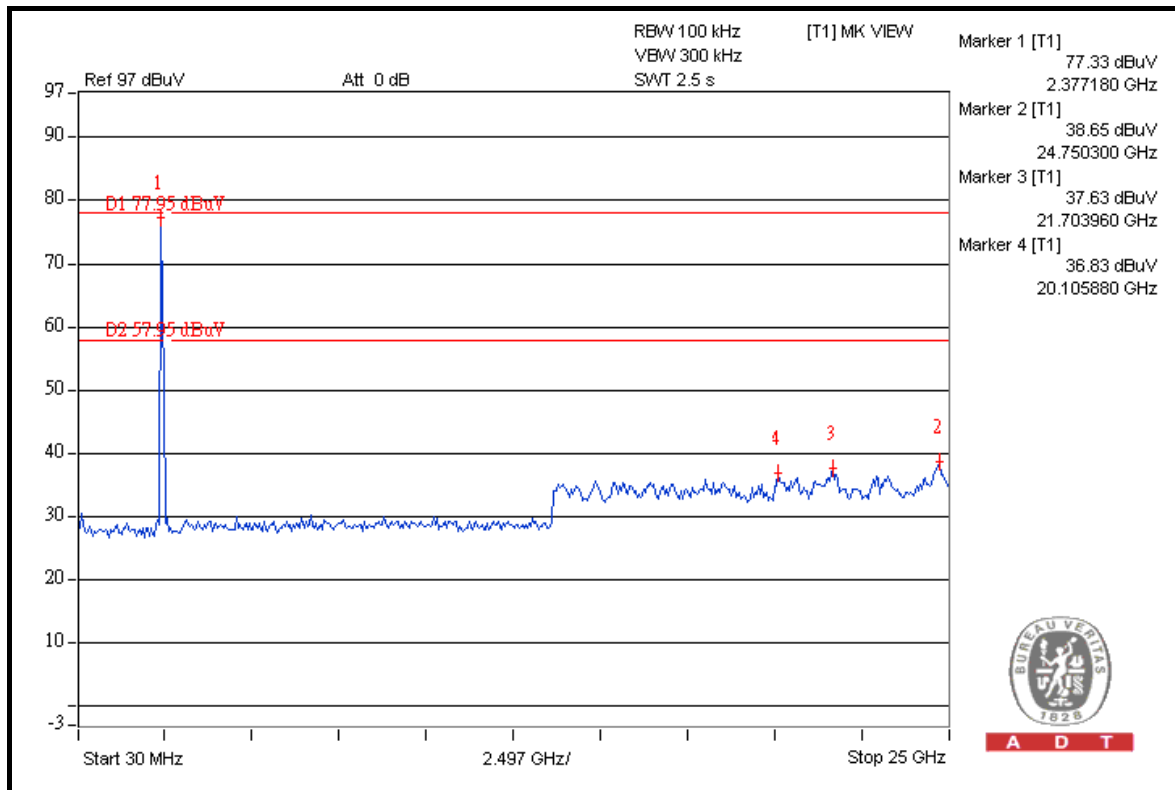


A D T

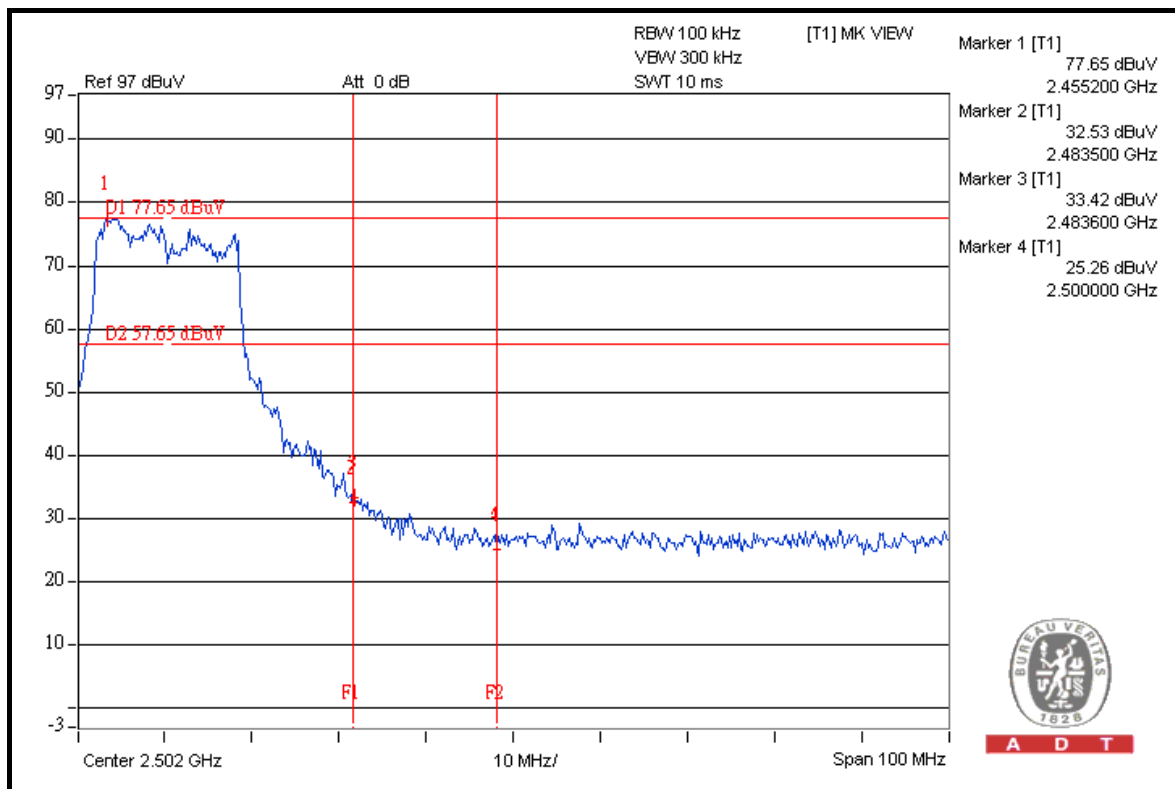




A D T



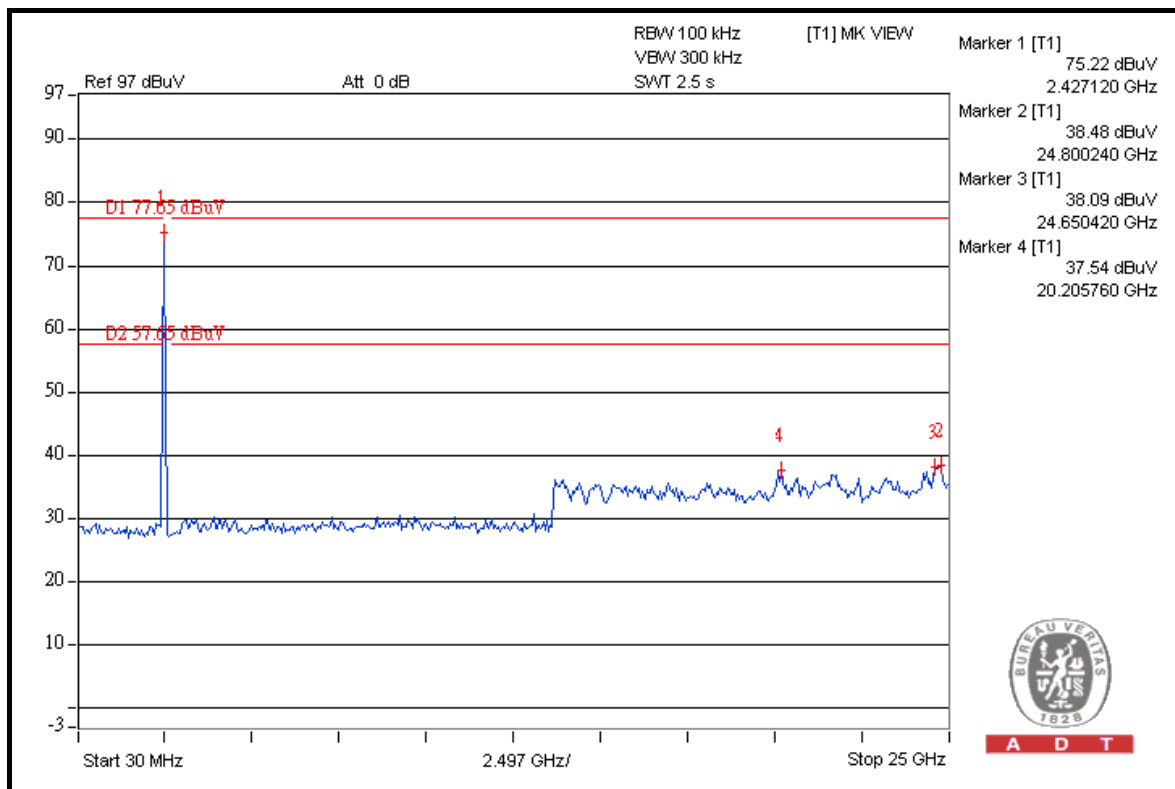
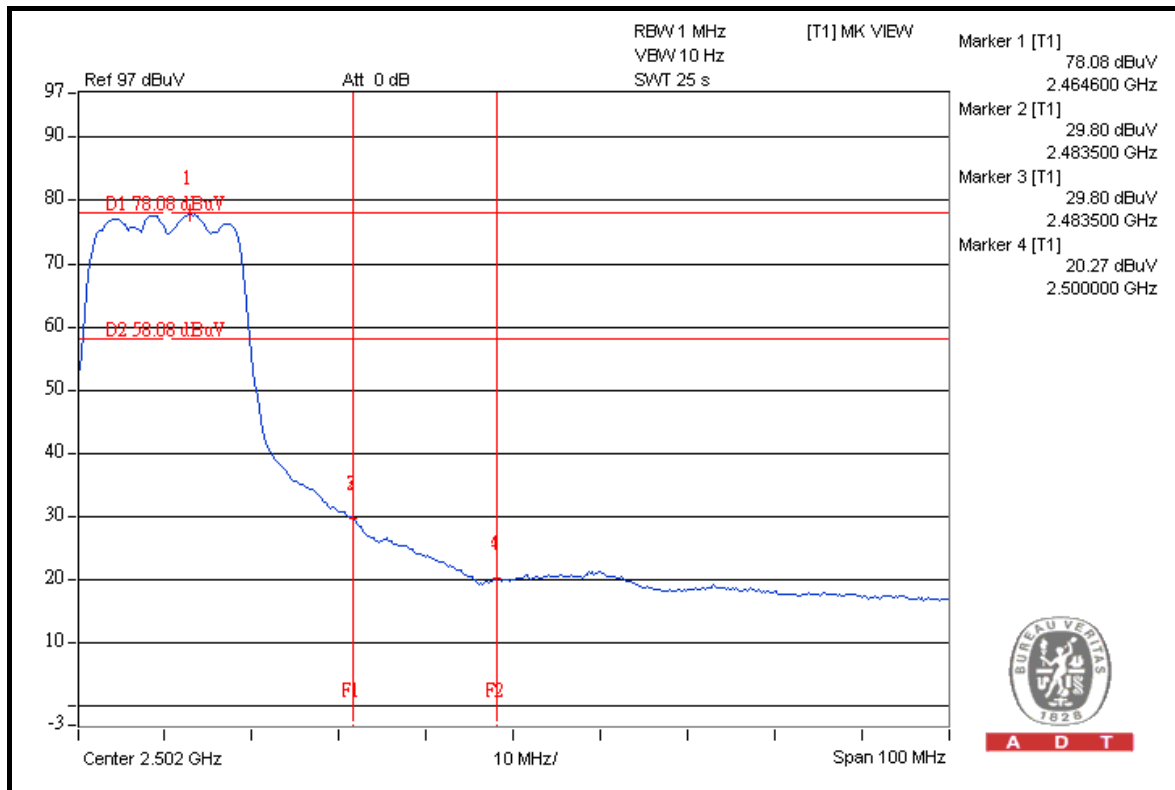
A D T



A D T



A D T



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)	113.5	48.59	64.91	74.00
2412.00 (AV)	100.3	51.68	48.62	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

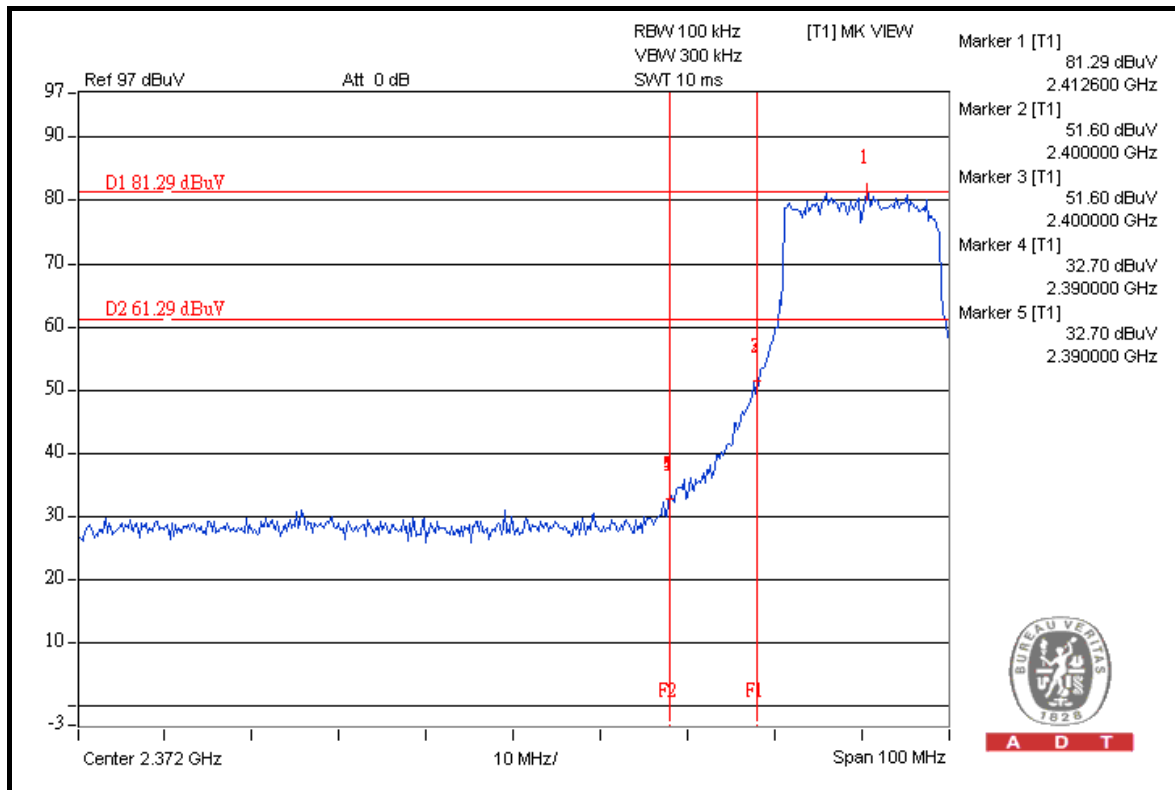
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	113.3	50.25	63.05	74.00
2462.00 (AV)	99.8	52.01	47.79	54.00

NOTE:

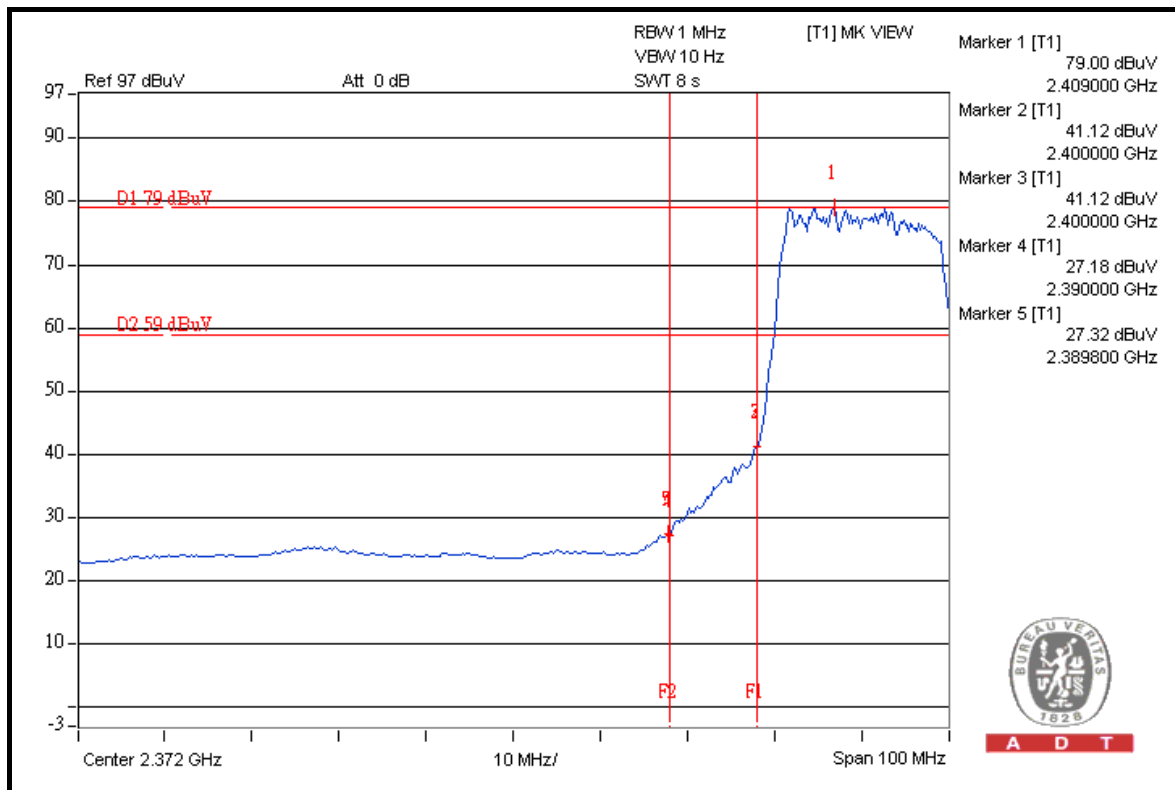
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission.
Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



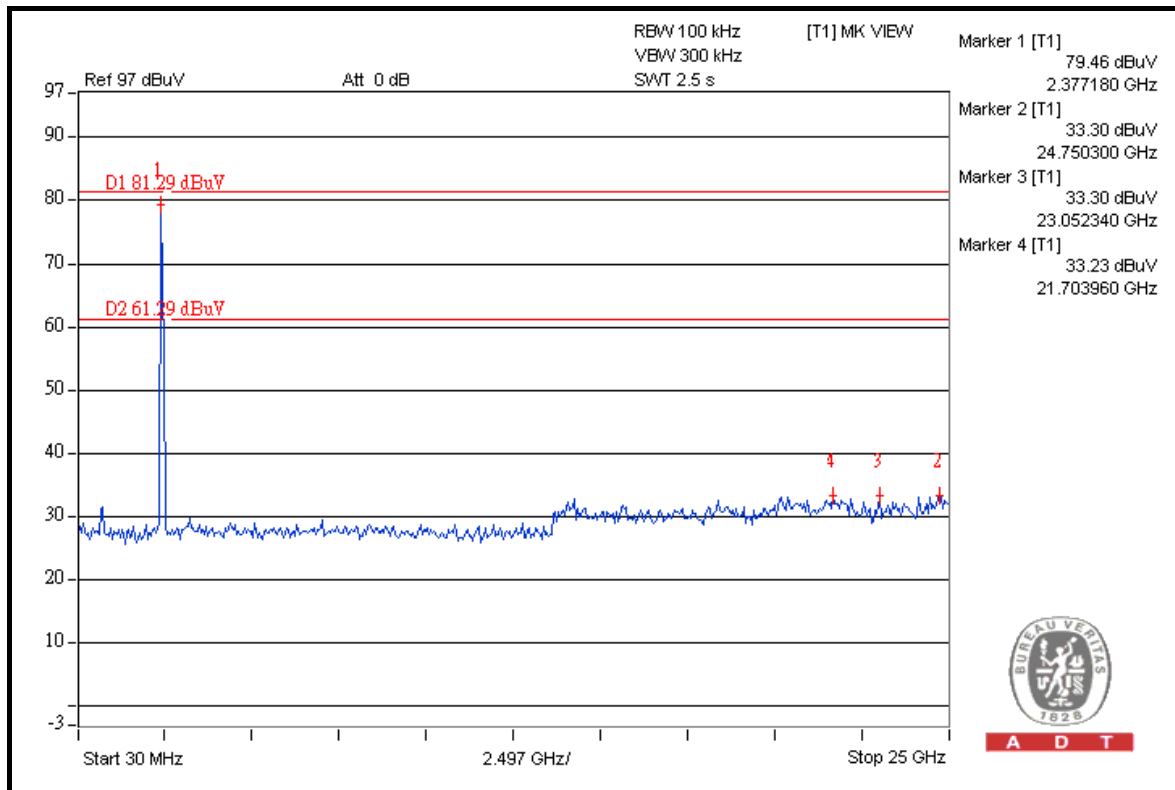
A D T



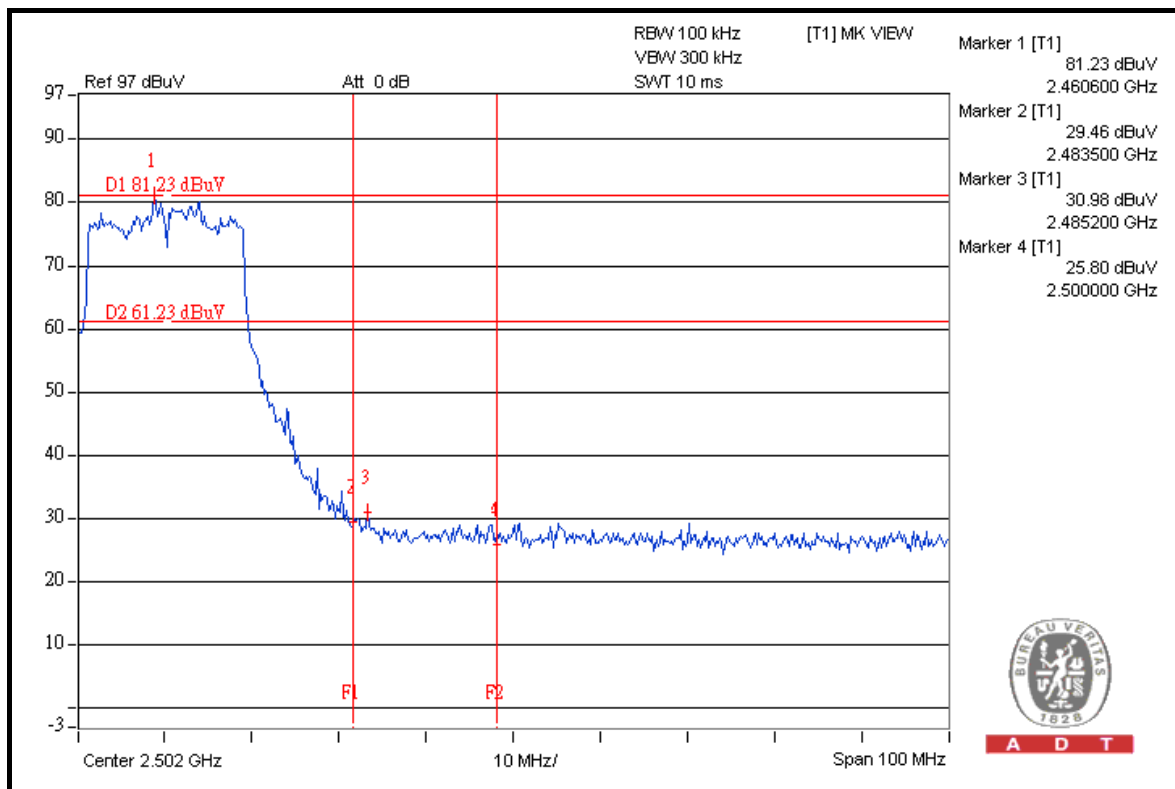
A D T



A D T



A D T



A D T



802.11n (40MHz)

RESTRICT BAND (2310 ~ 2390 MHz)

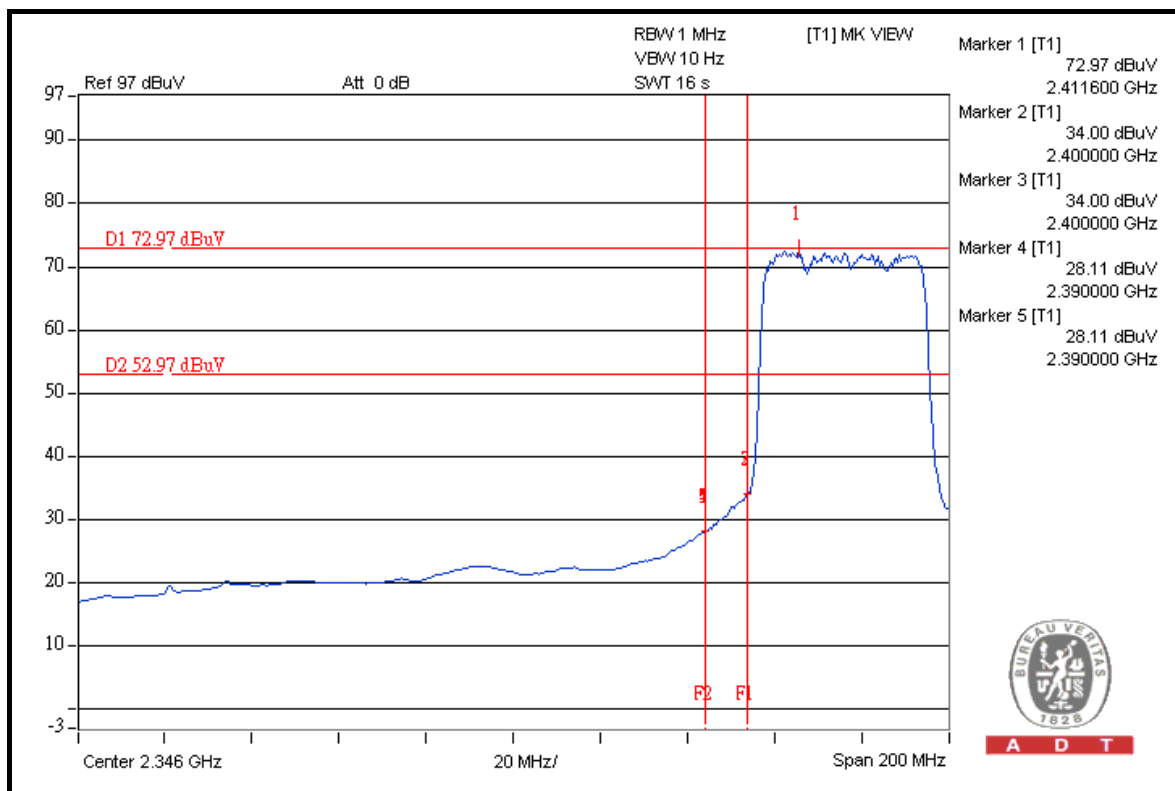
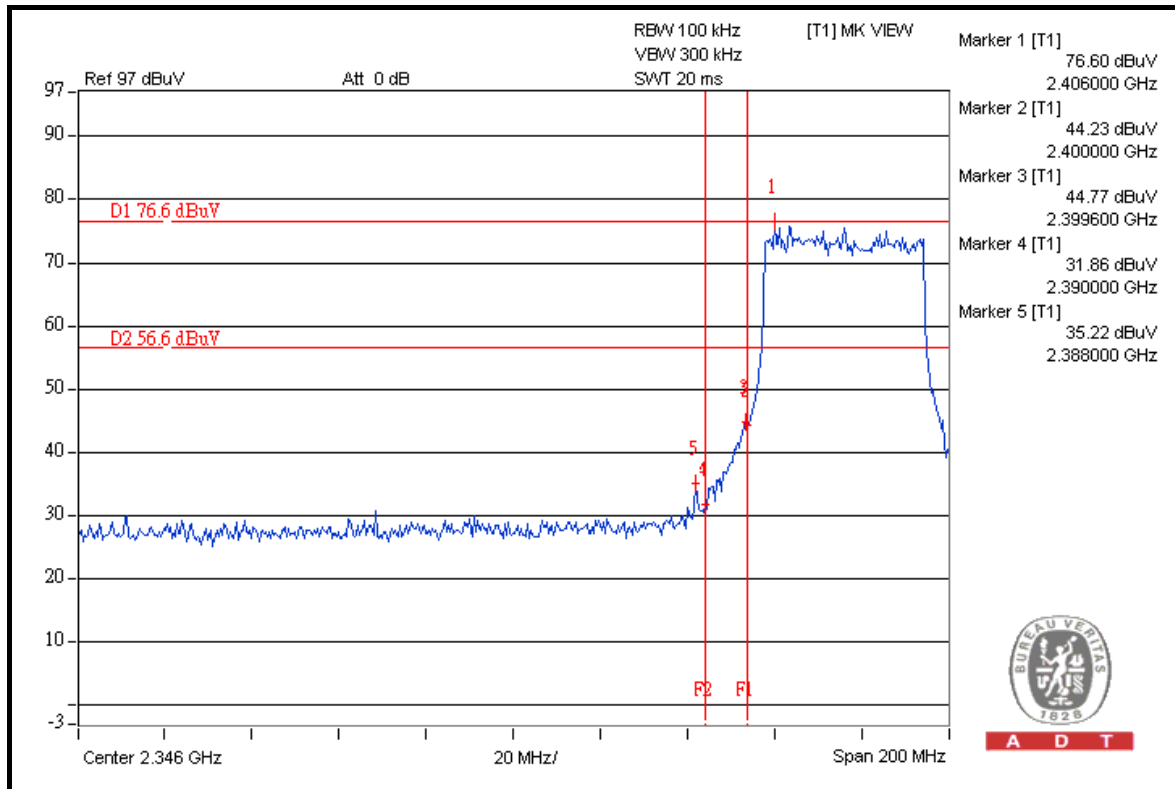
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2422.00 (PK)	107.1	41.38	65.72	74.00
2422.00 (AV)	93.8	44.86	48.94	54.00

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)	107.5	46.23	61.27	74.00
2452.00 (AV)	93.9	46.03	47.87	54.00

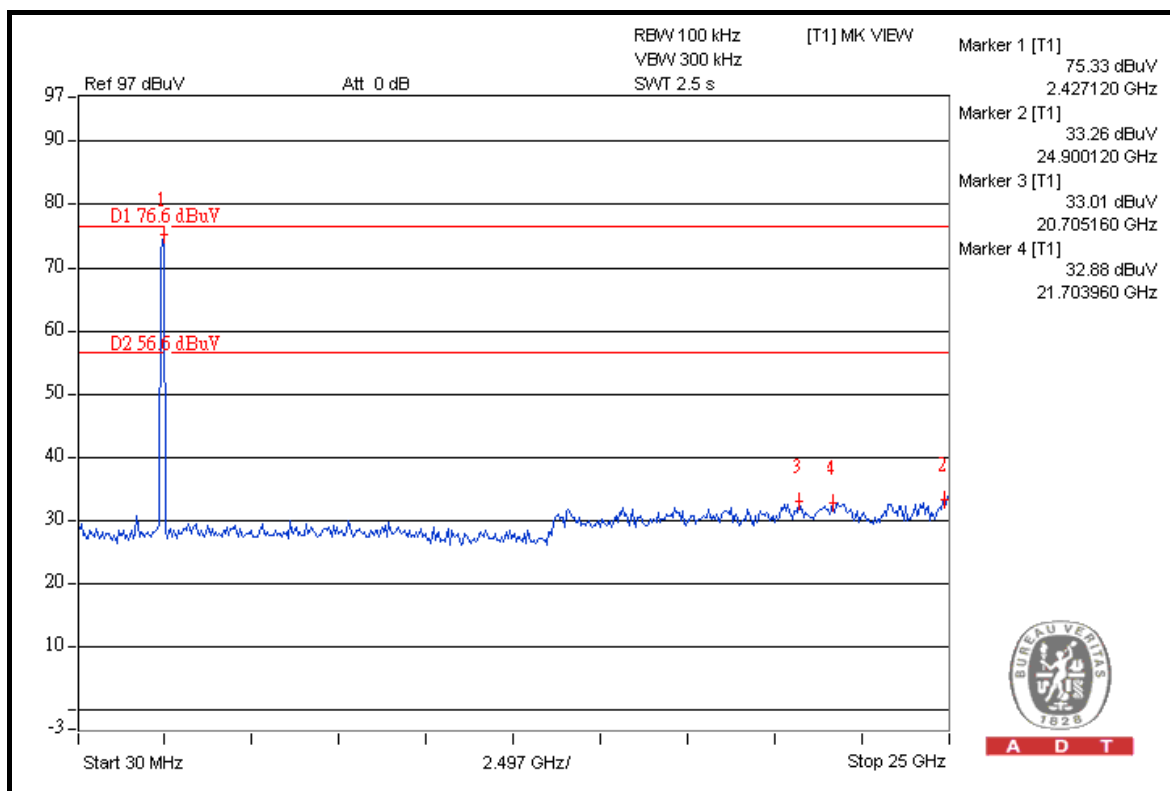
NOTE:

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

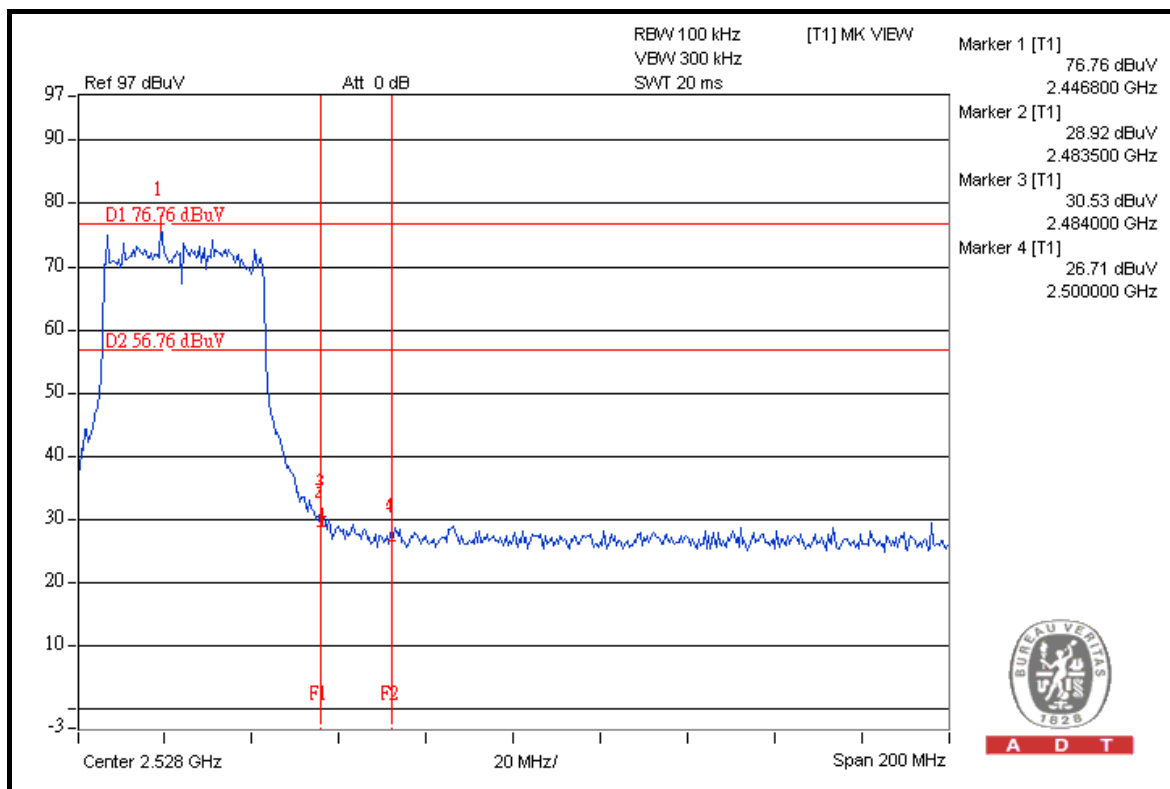




A D T



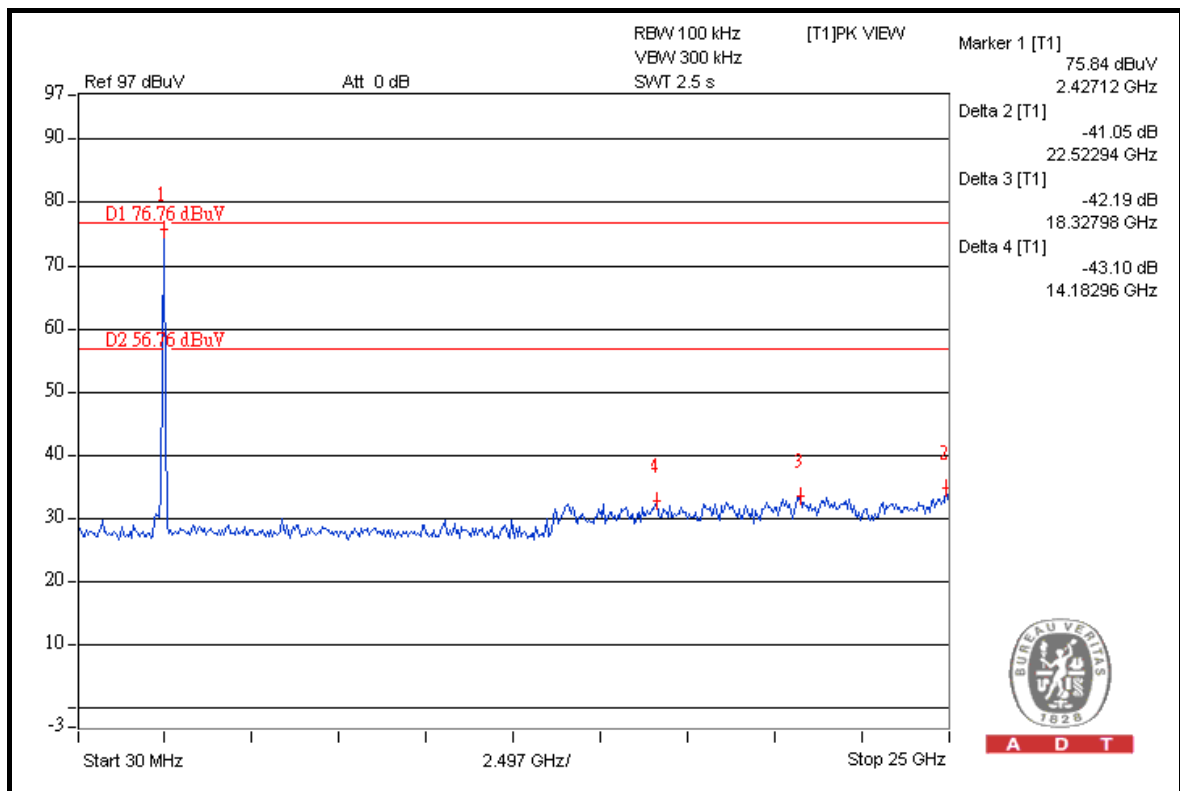
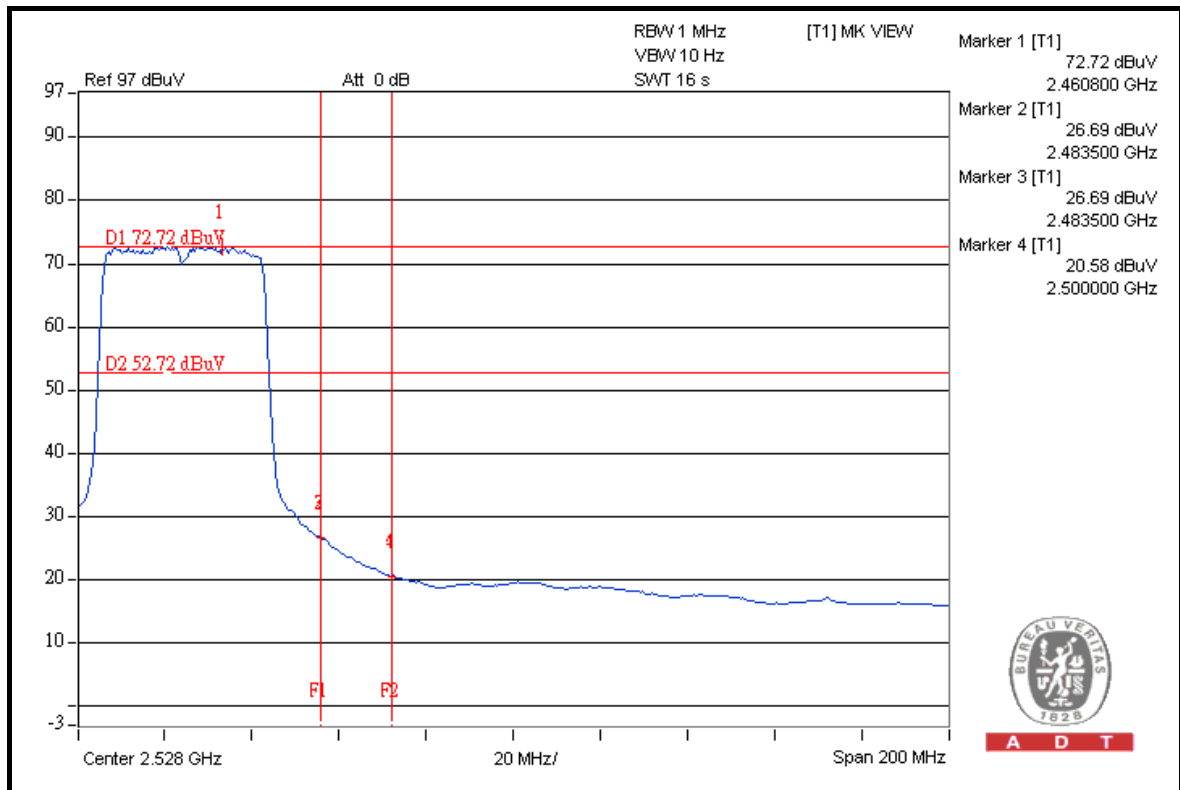
A D T



A D T



A D T



**A D T****TEST MODE B****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)	120.5	52.94	67.56	74.00
2412.00 (AV)	114.4	61.56	52.84	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

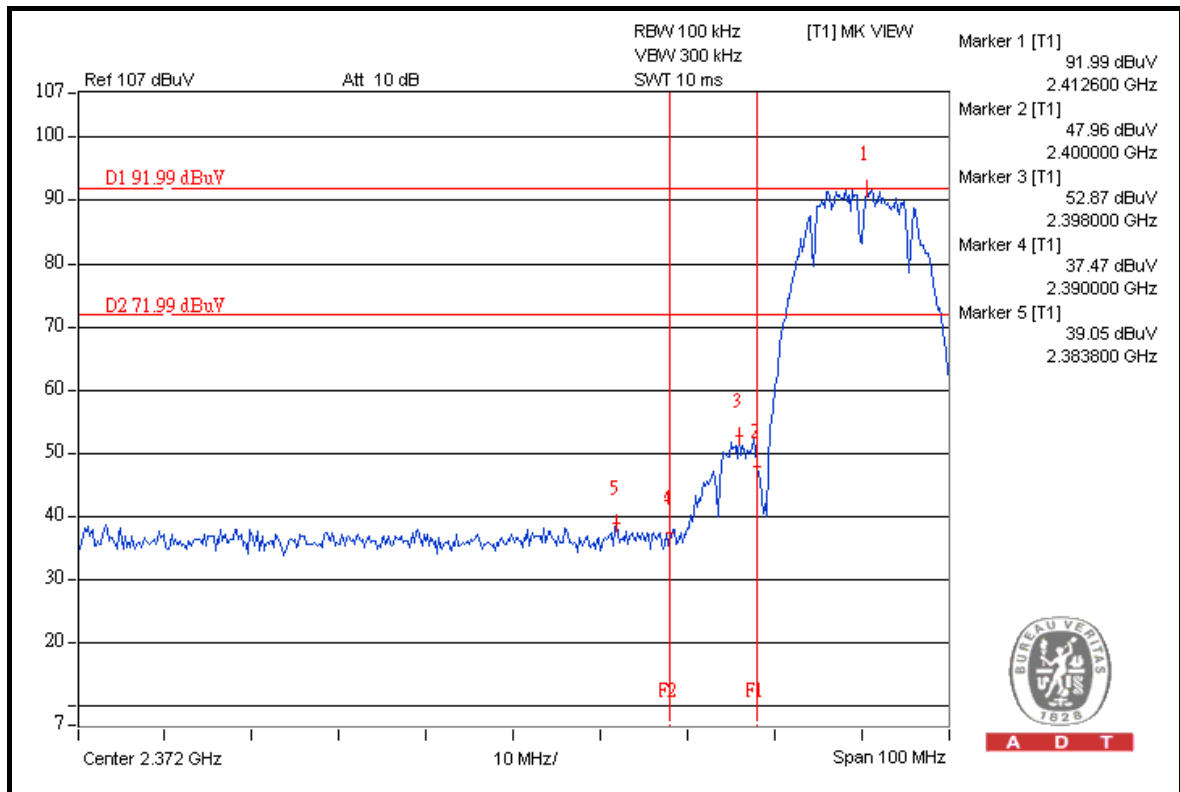
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	120.6	53.50	67.10	74.00
2462.00 (AV)	114.5	62.84	51.66	54.00

NOTE:

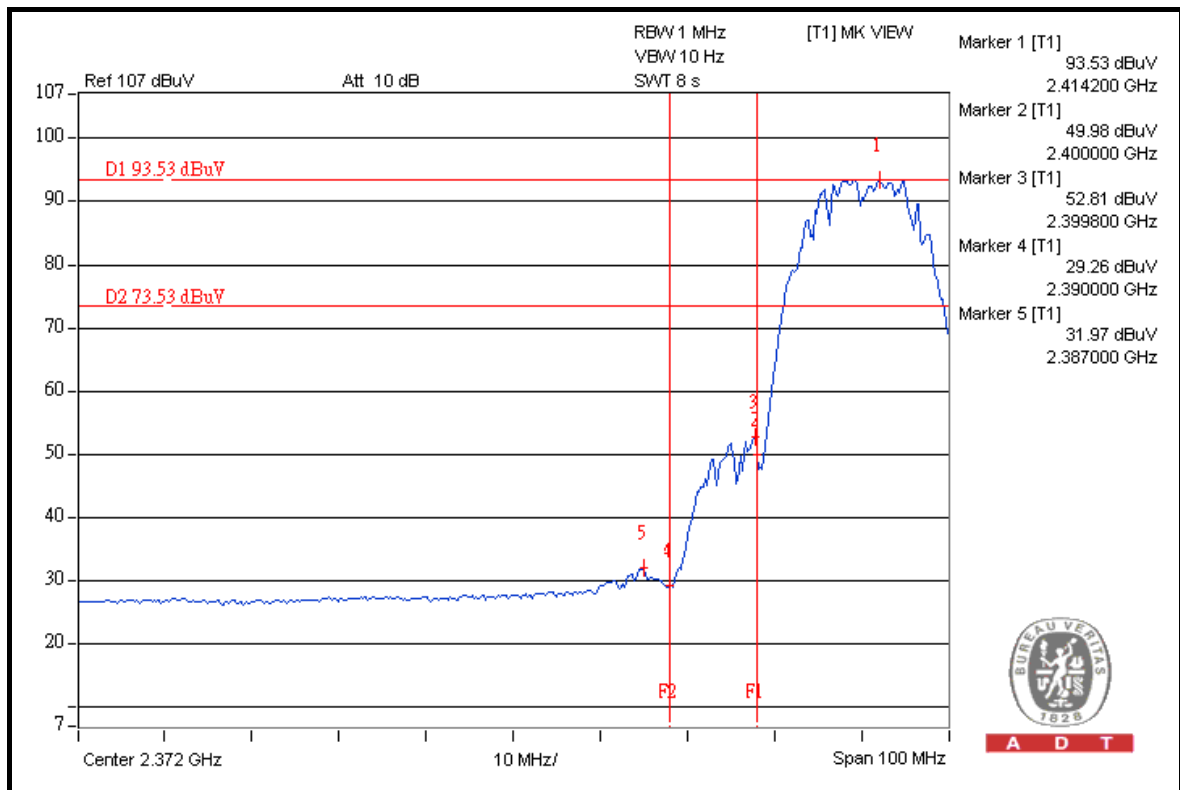
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission.
Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



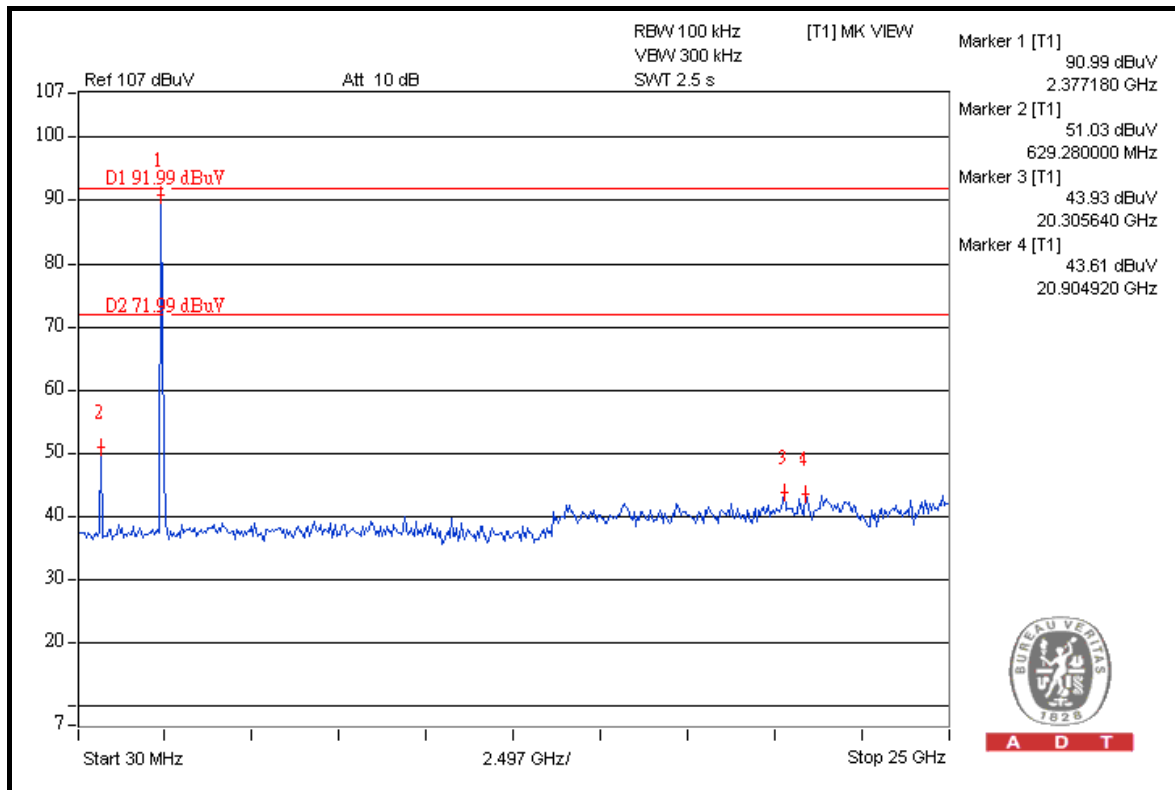
A D T



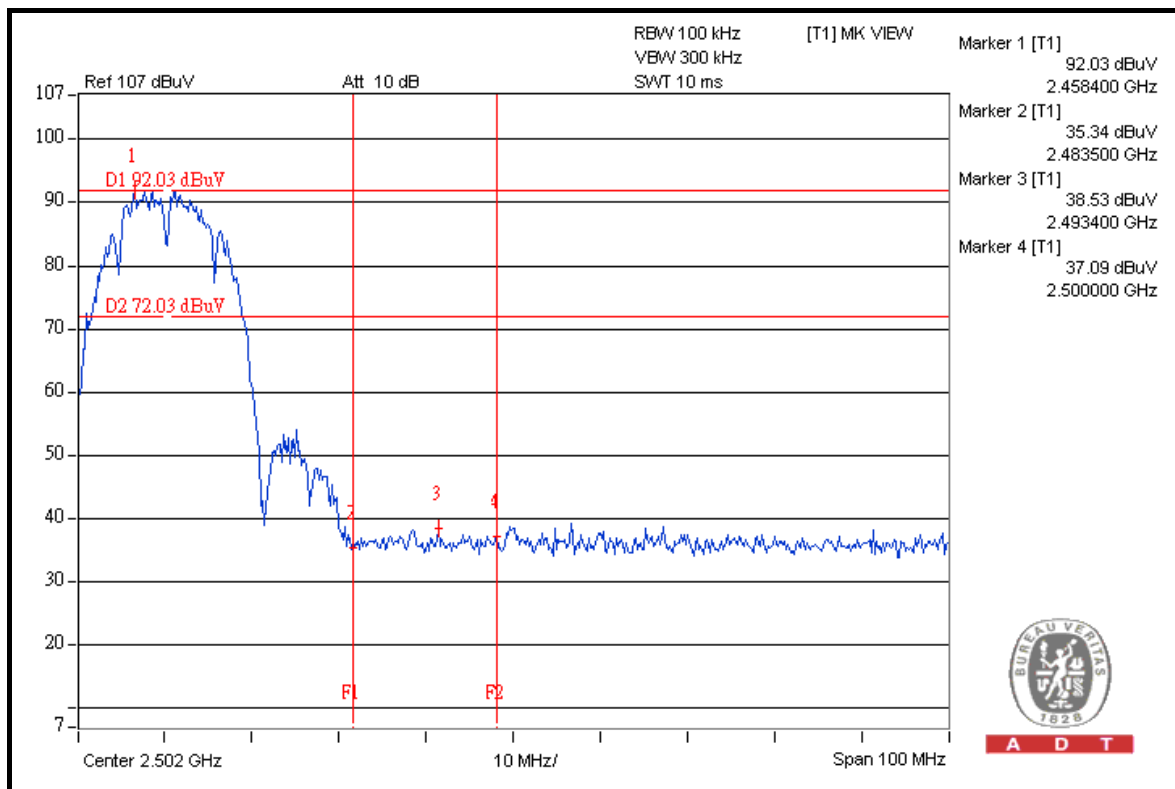
A D T



A D T



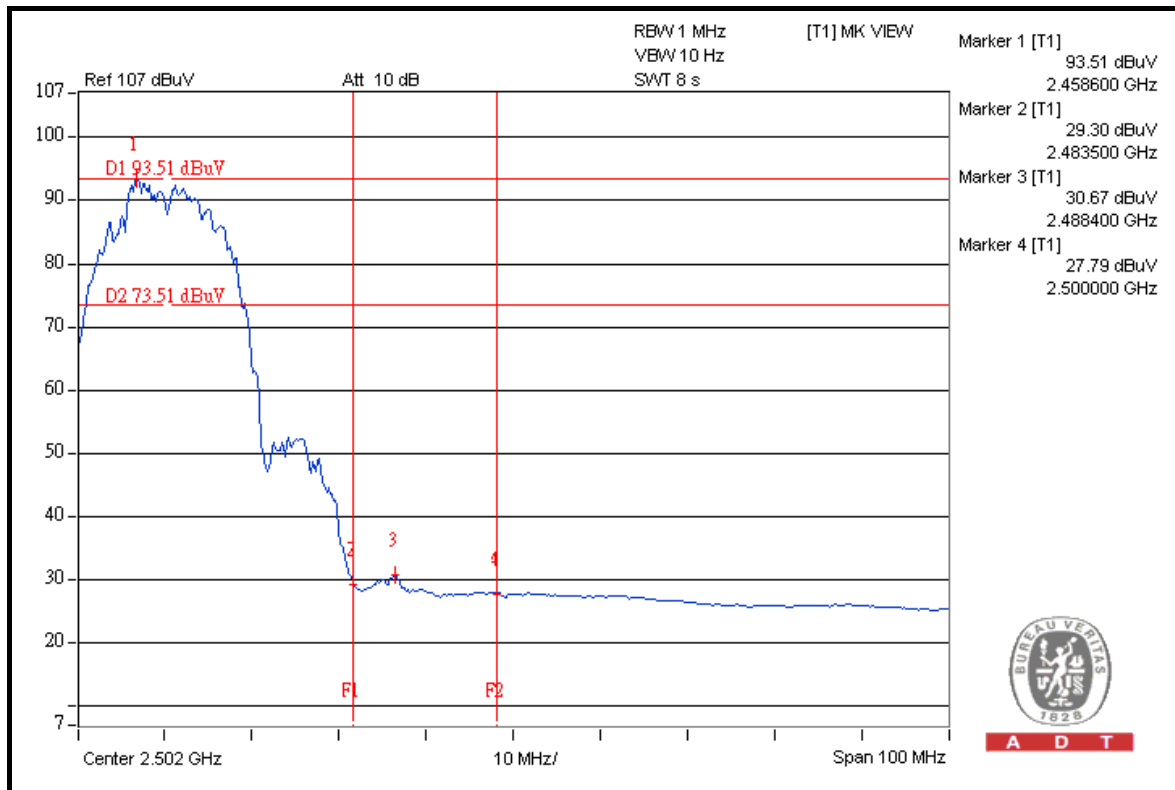
A D T



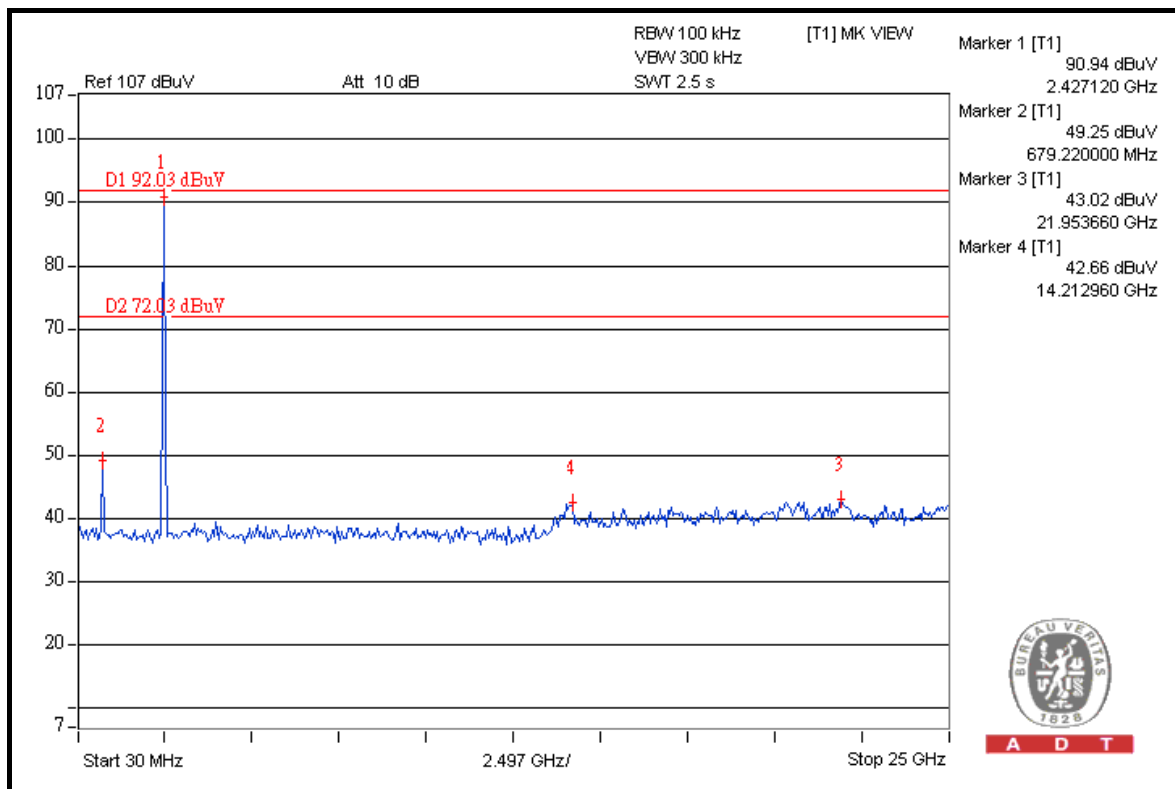
A D T



A D T



A D T



A D T

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)	116.8	50.30	66.50	74.00
2412.00 (AV)	103.1	56.75	46.35	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

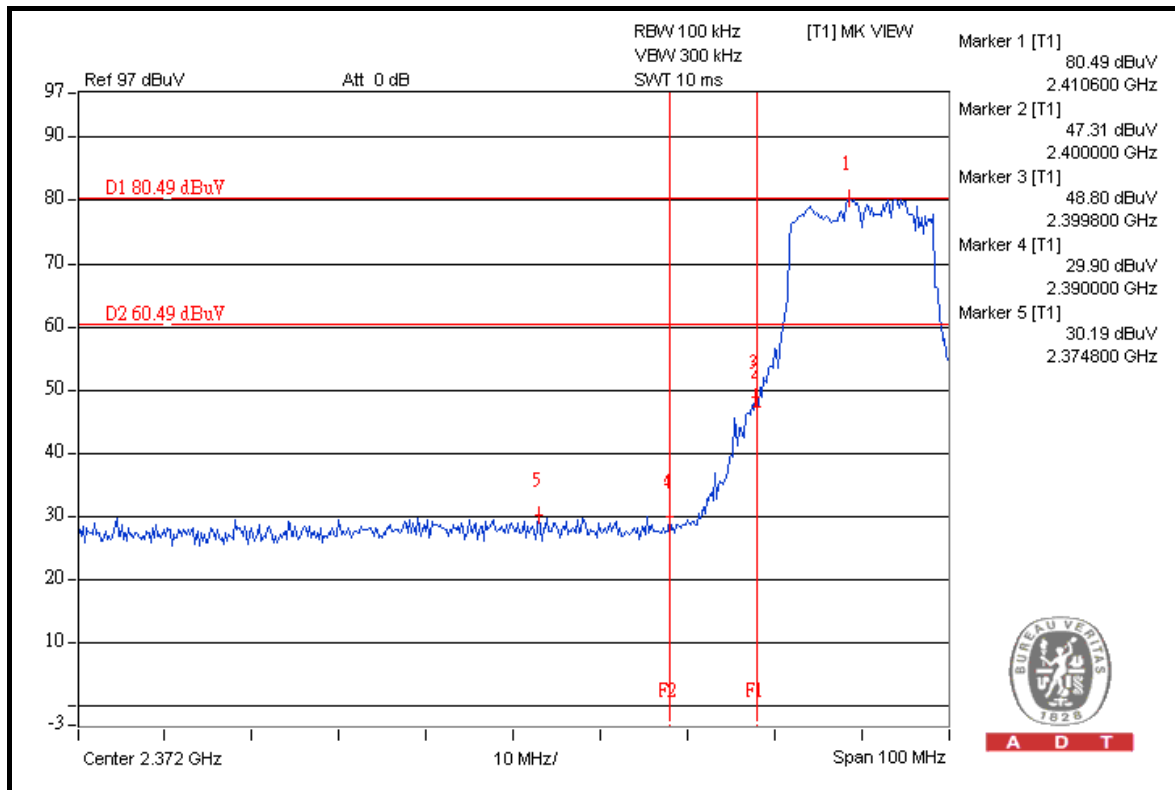
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	116.3	48.08	68.22	74.00
2462.00 (AV)	102.9	53.10	49.80	54.00

NOTE:

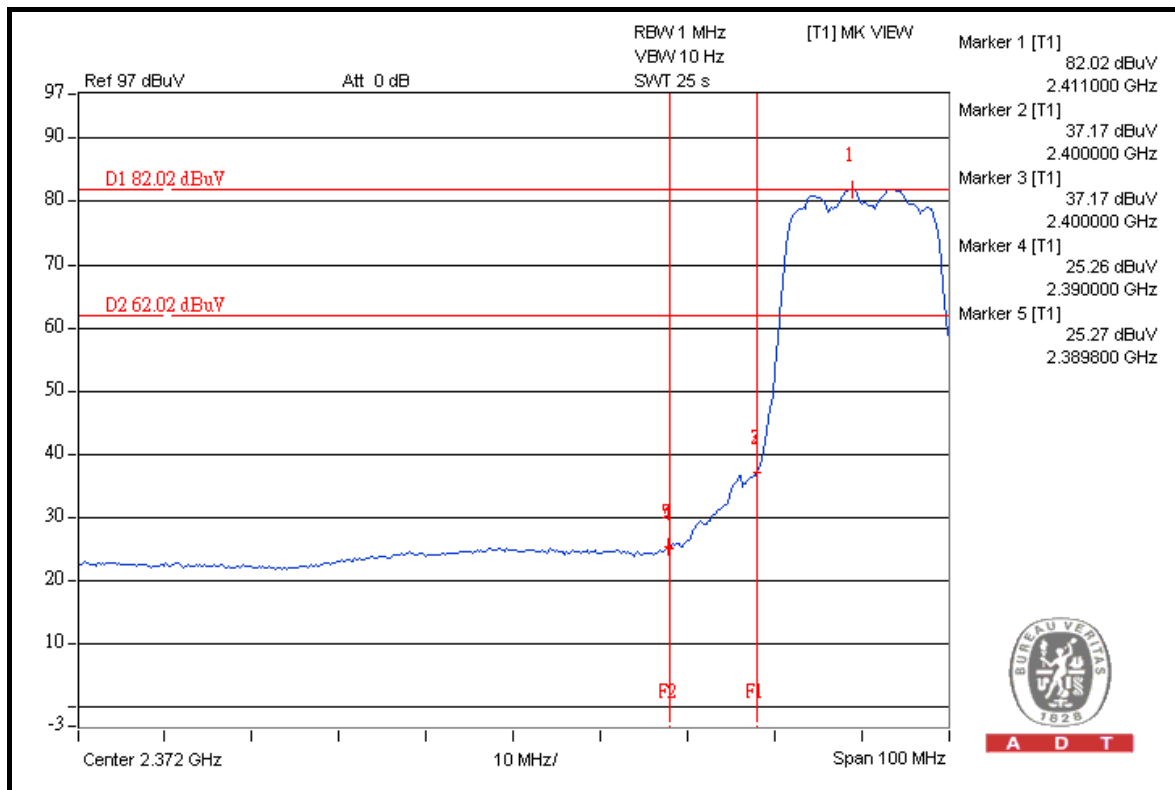
- Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
- Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



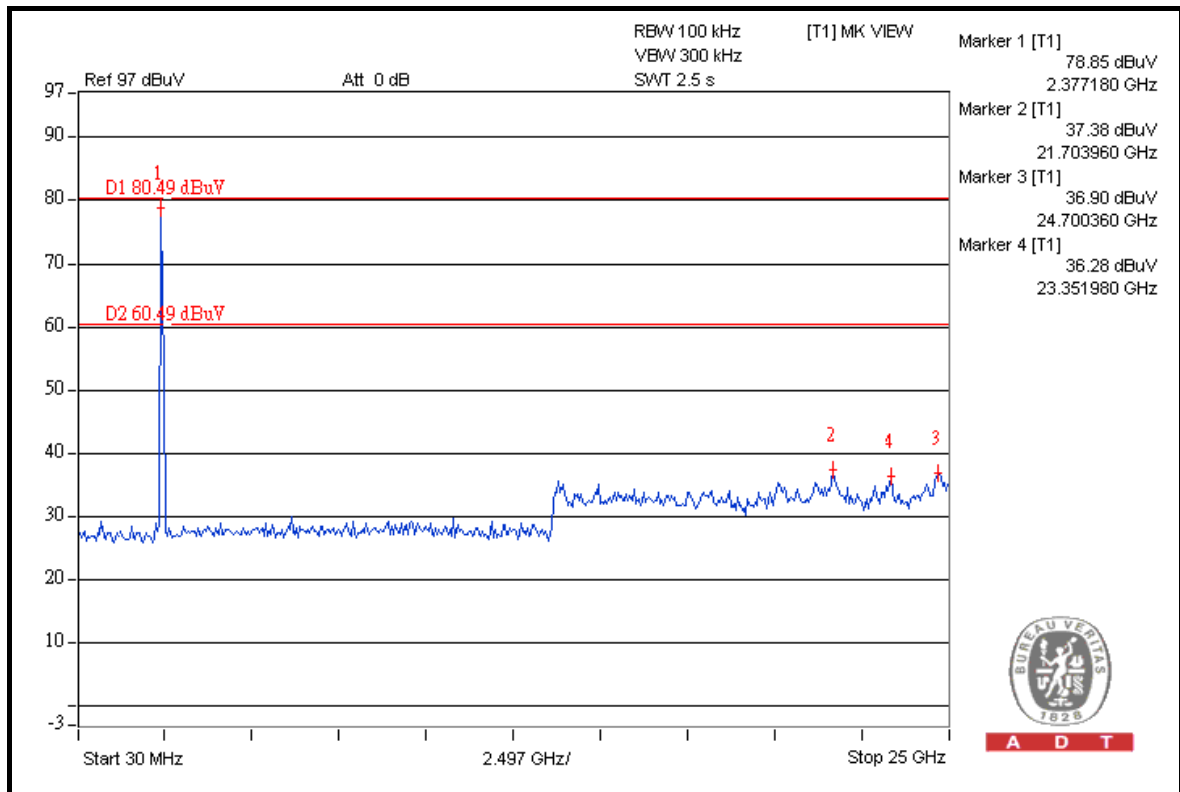
A D T



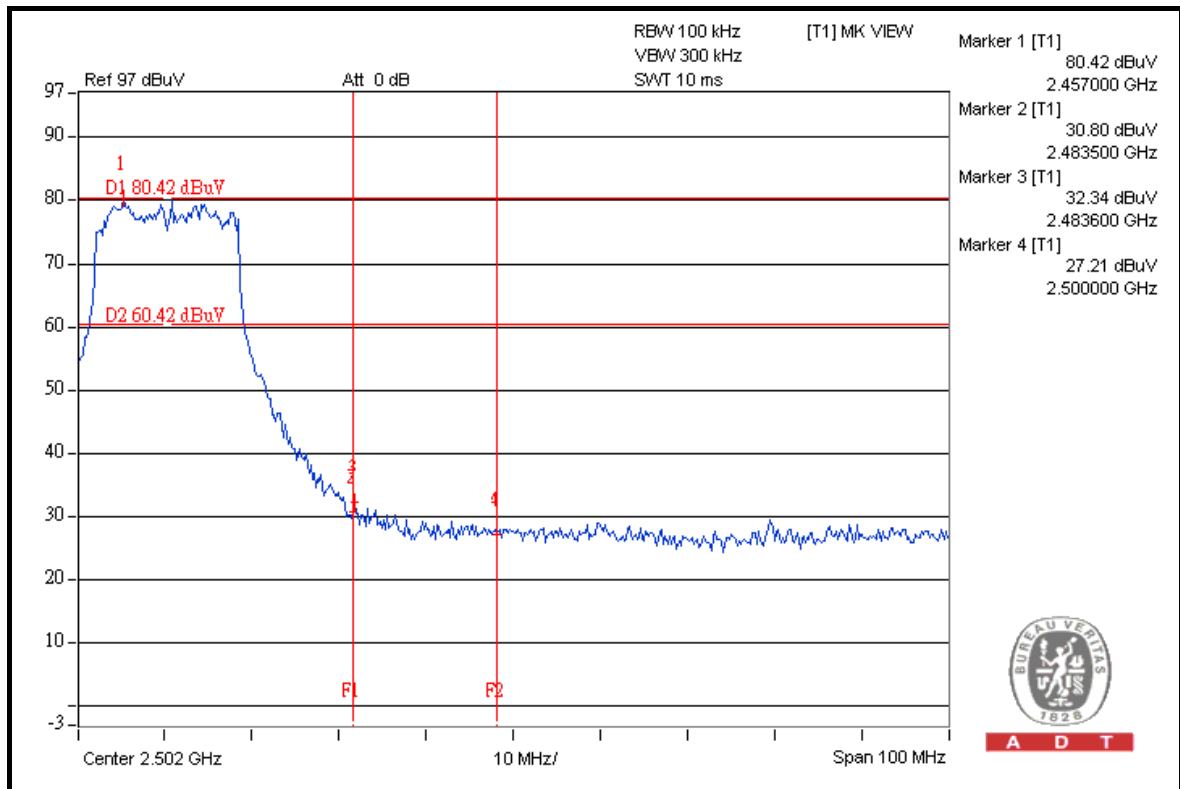
A D T



A D T



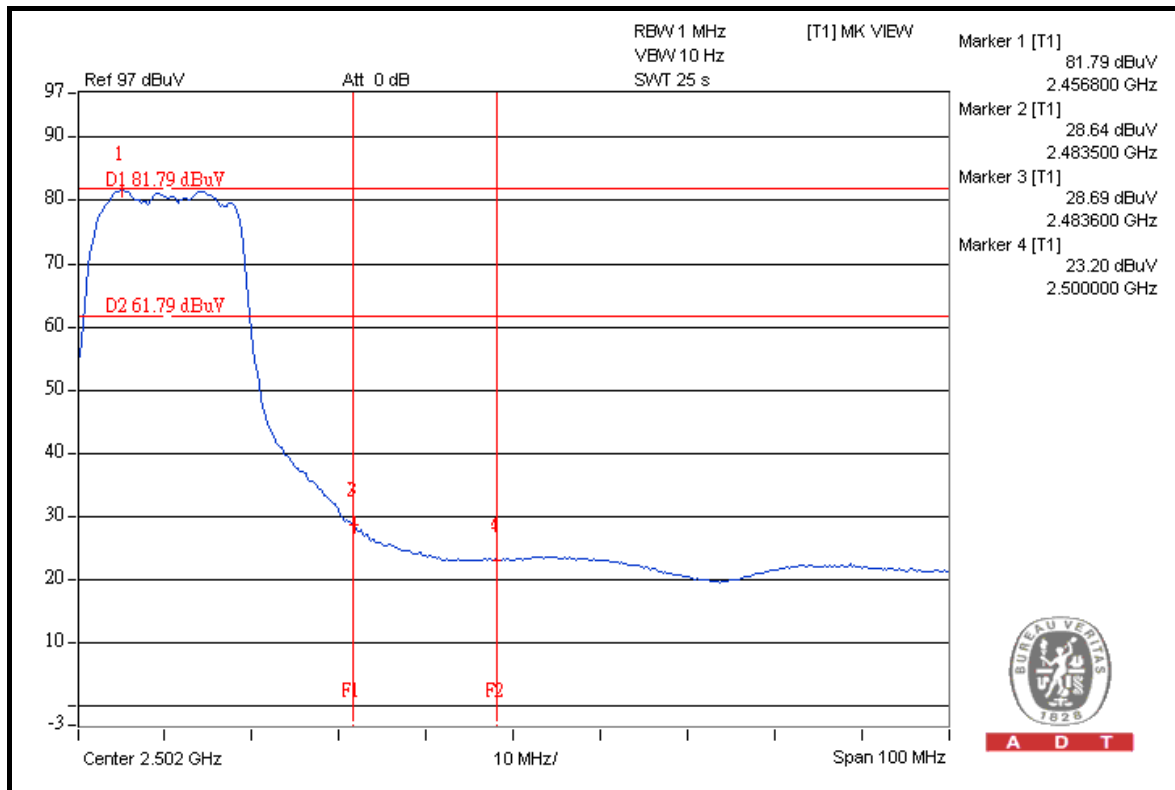
A D T



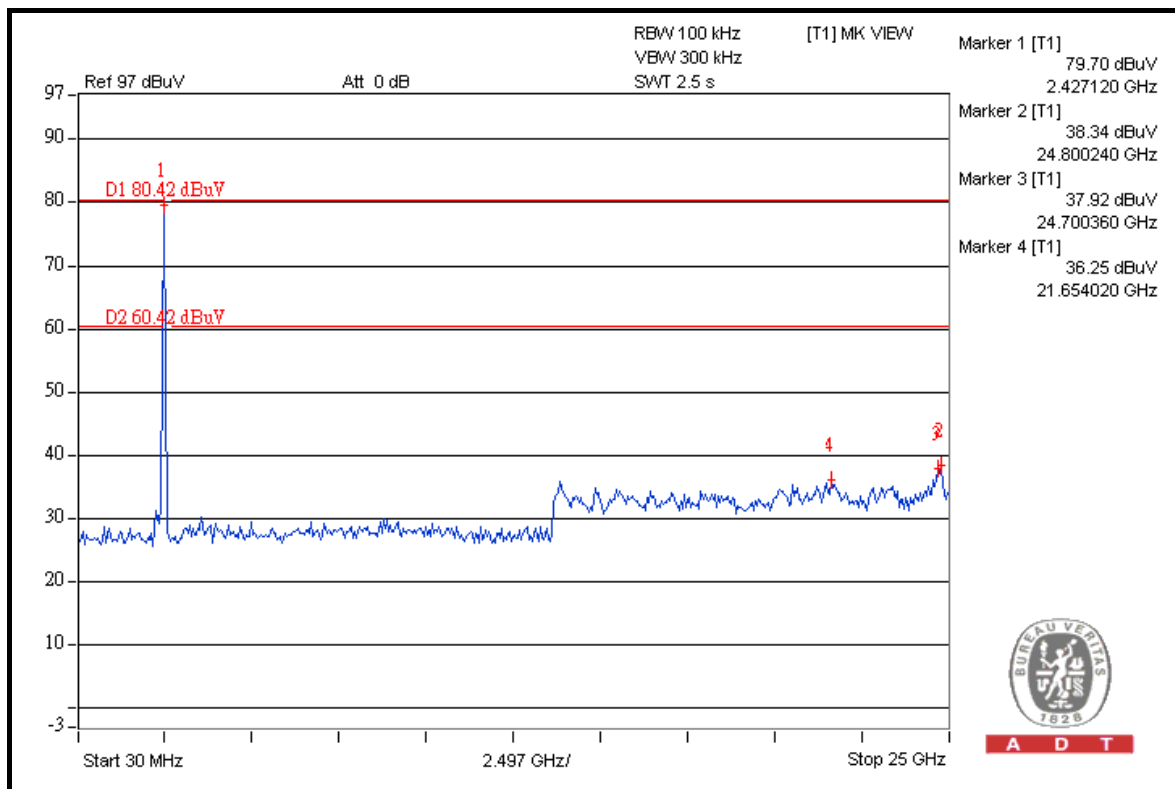
A D T



A D T



A D T



A D T

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)	117.8	46.83	70.97	74.00
2412.00 (AV)	103.4	50.73	52.67	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

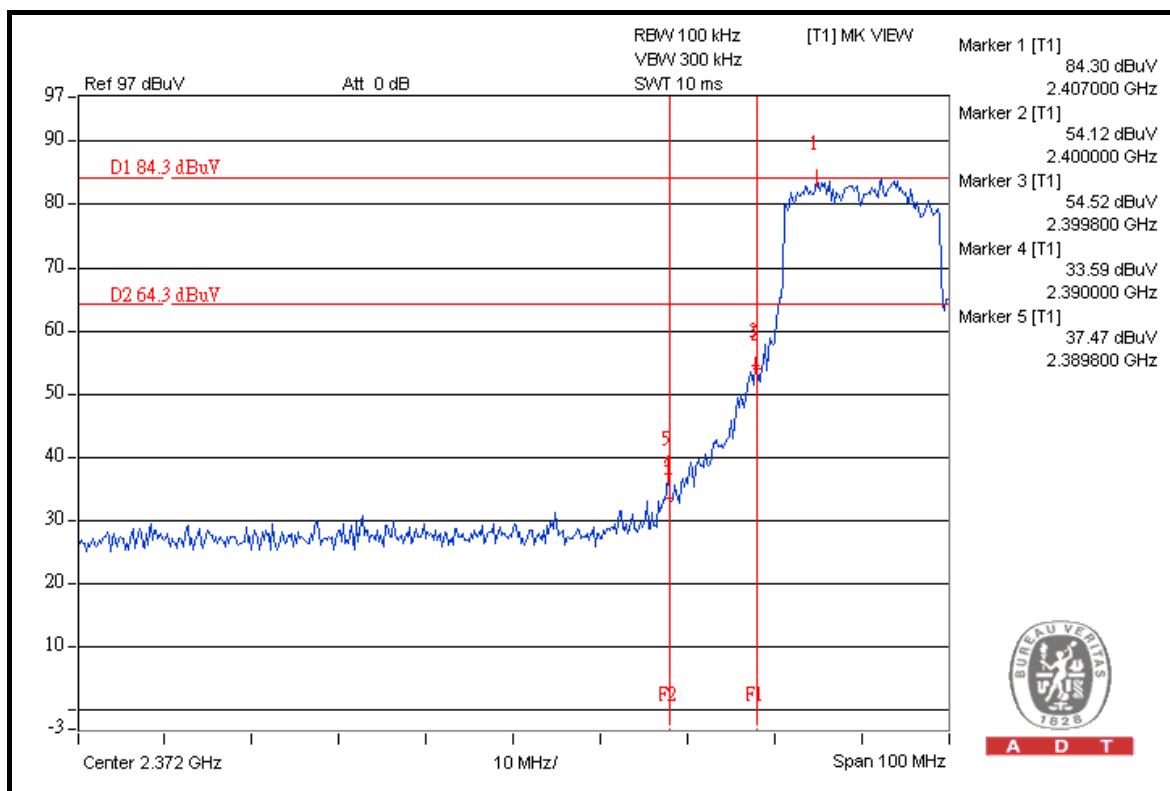
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	117.3	50.46	66.84	74.00
2462.00 (AV)	102.5	51.30	51.20	54.00

NOTE:

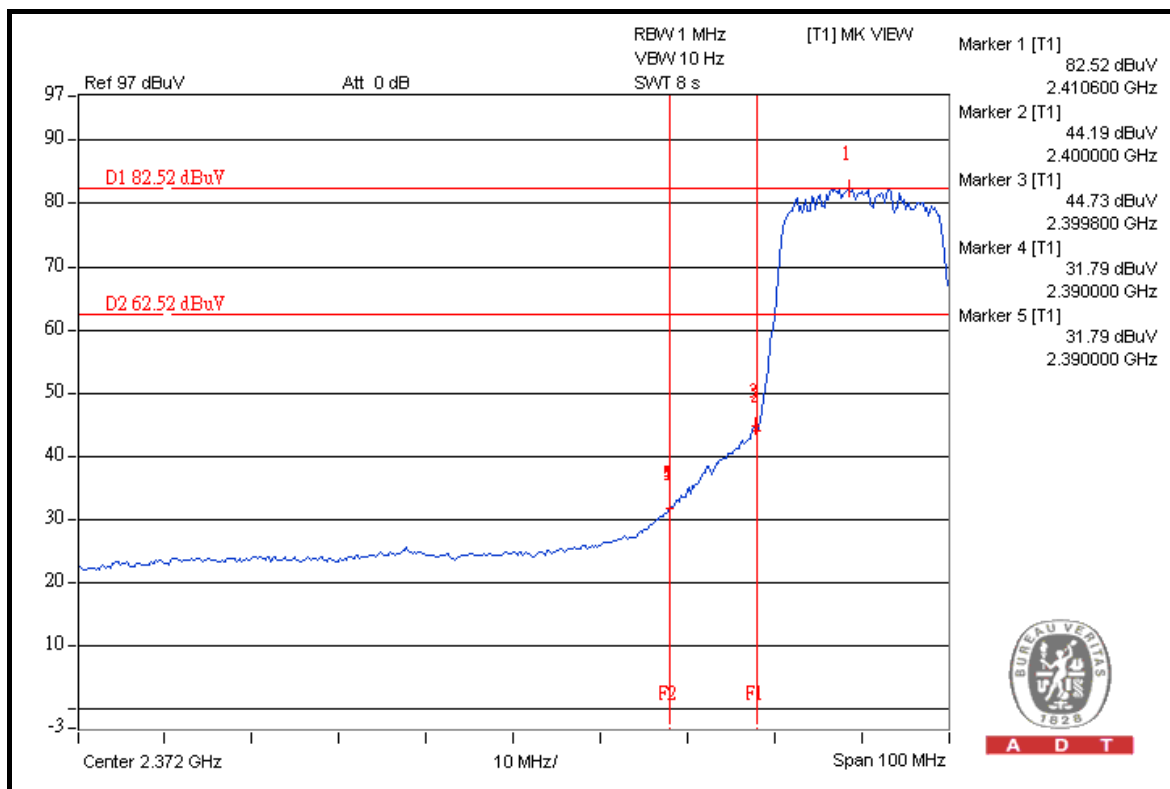
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission.
Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



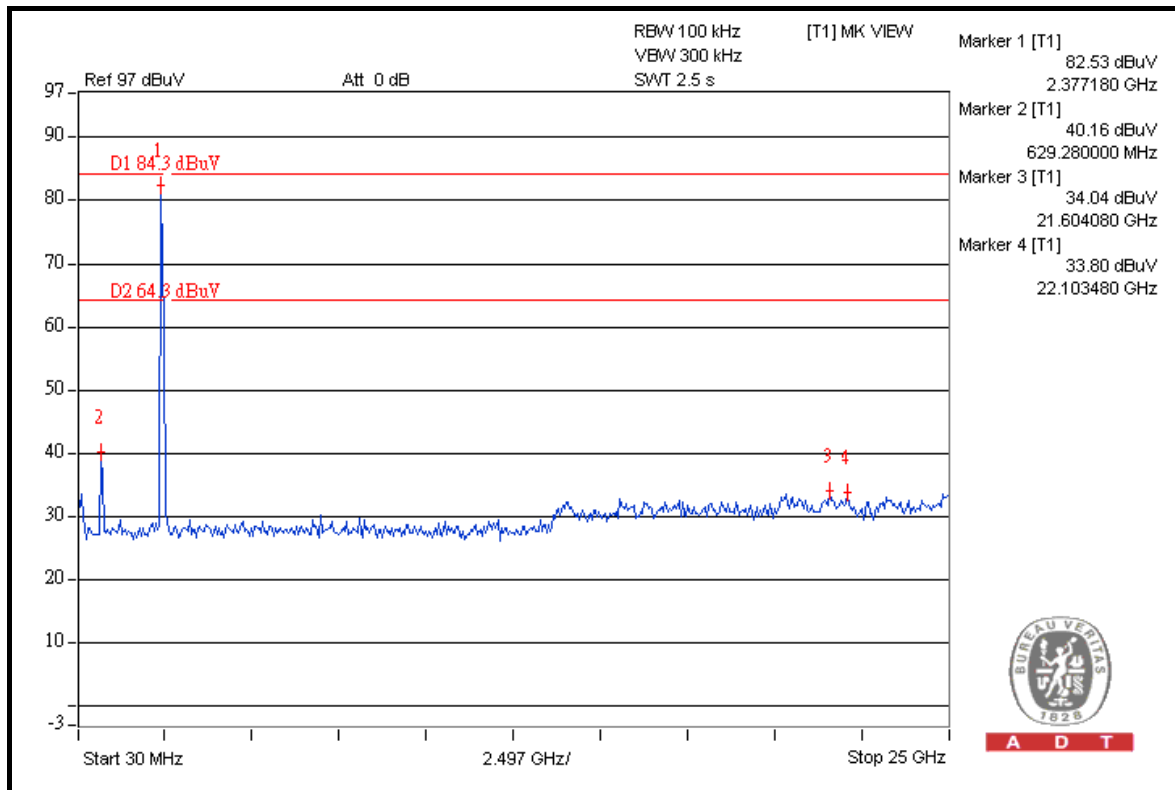
A D T



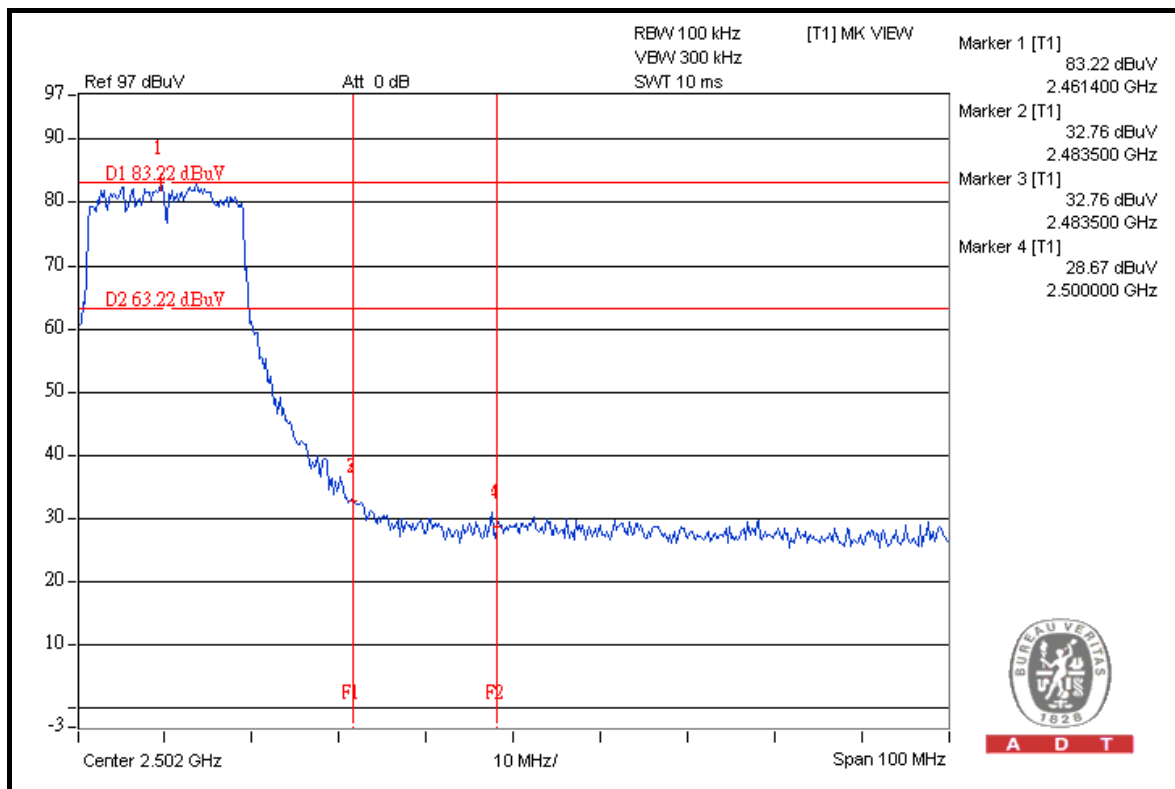
A D T



A D T



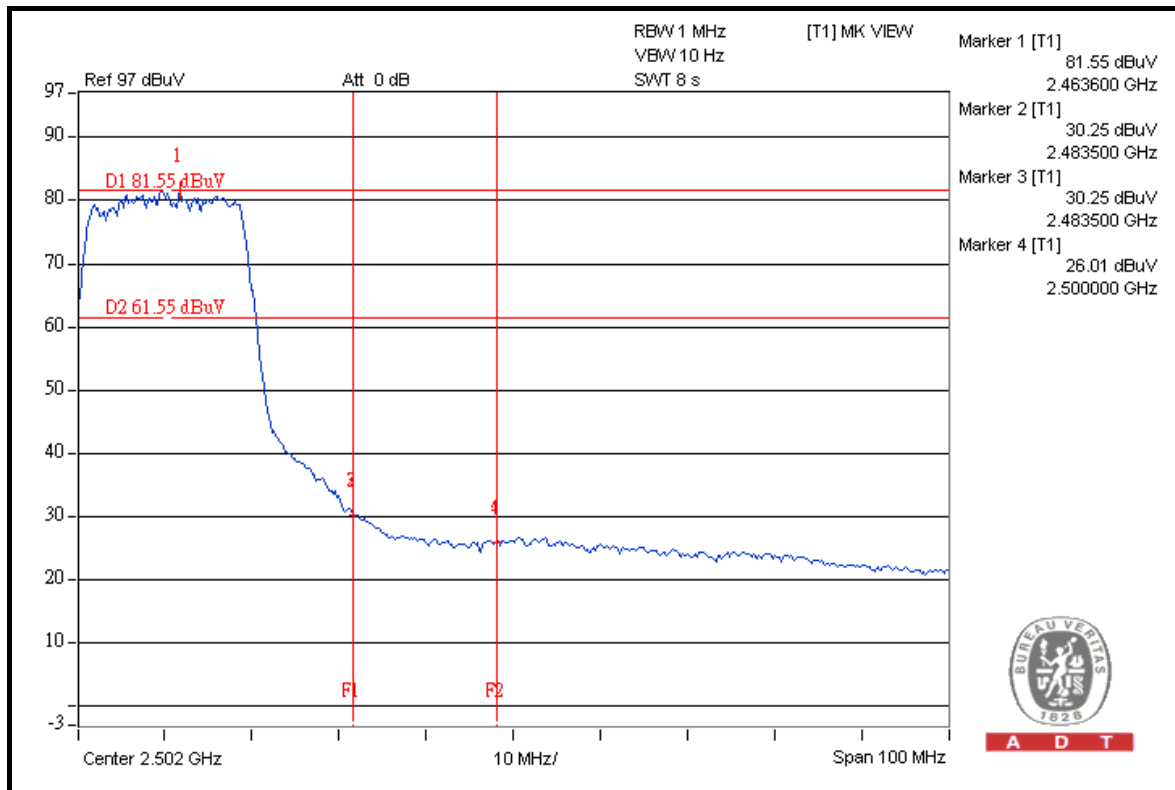
A D T



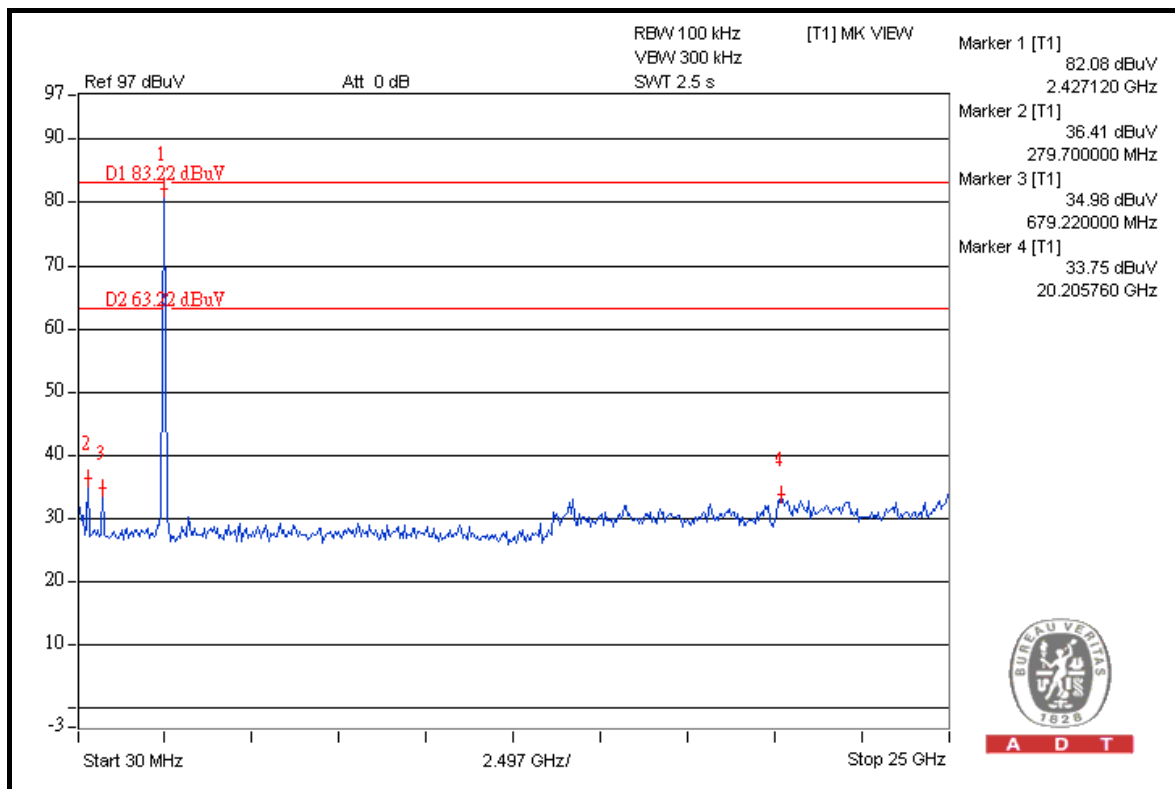
A D T



A D T



A D T



A D T

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)	112.5	45.06	67.44	74.00
2422.00 (AV)	98.6	46.29	52.31	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

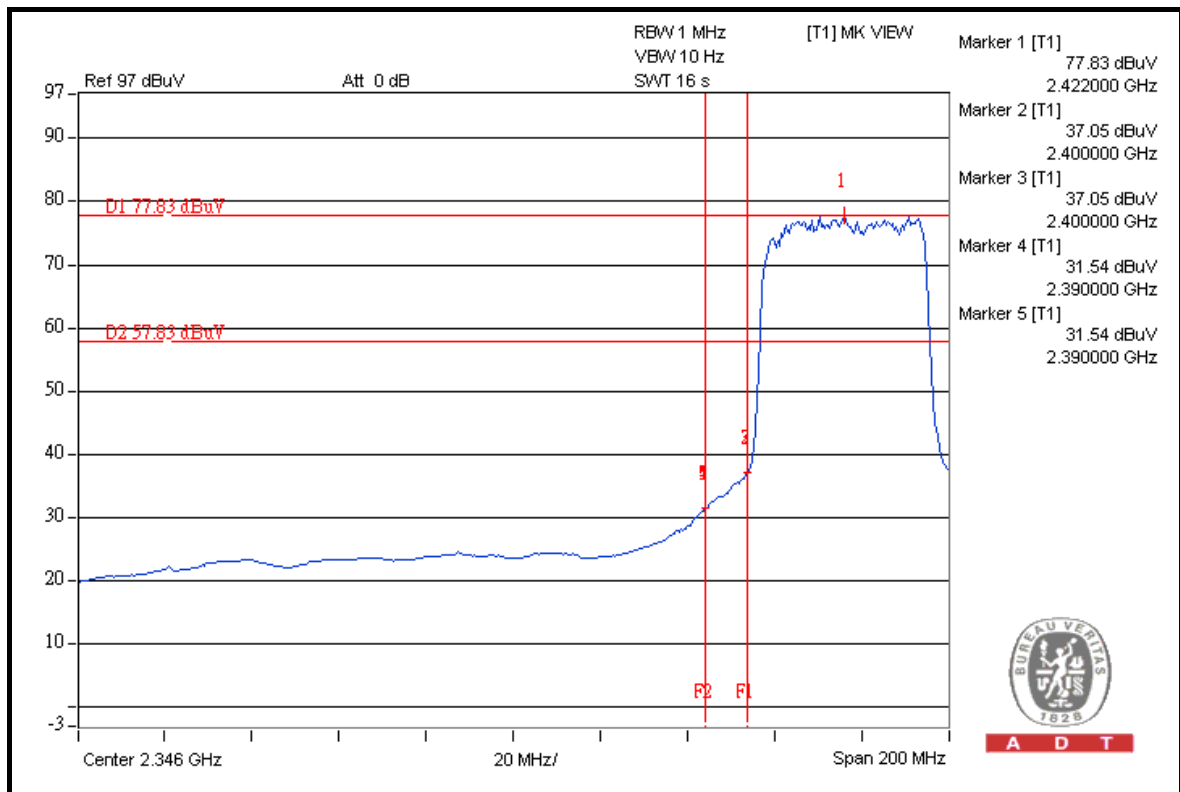
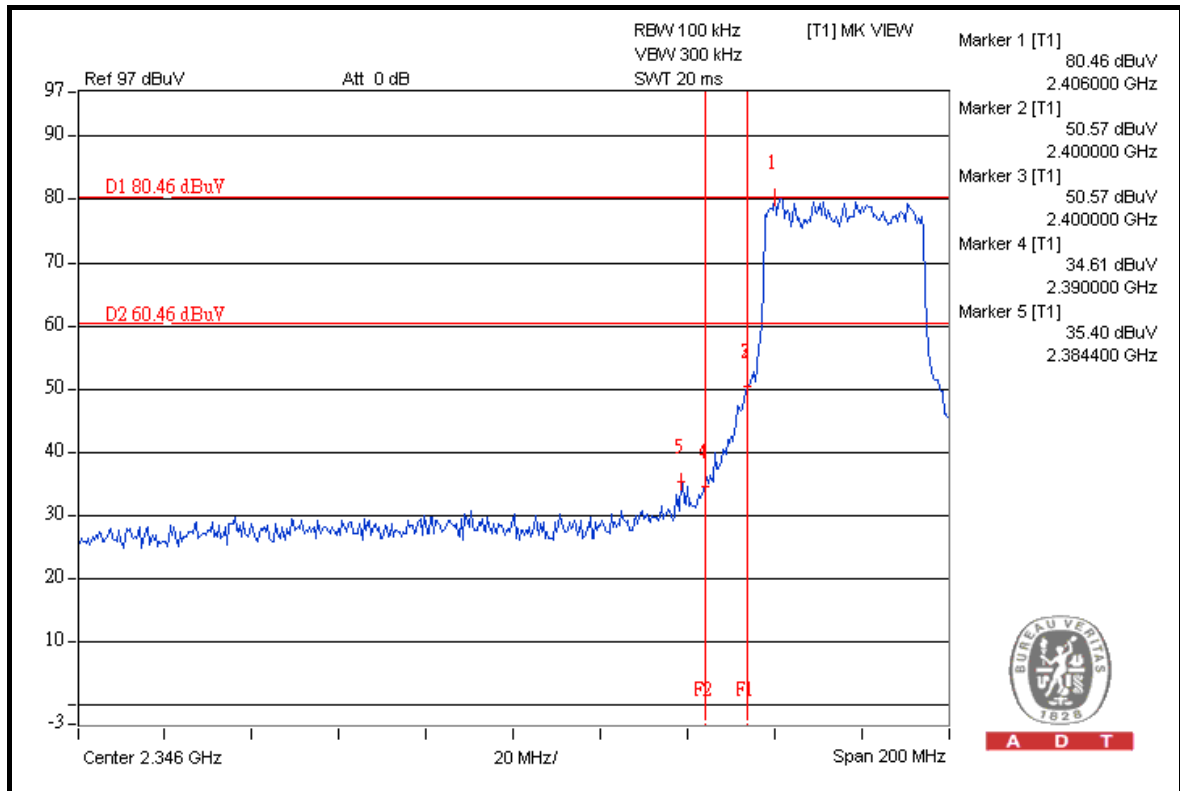
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2452.00 (PK)	111.7	43.58	68.12	74.00
2452.00 (AV)	98.0	44.43	53.57	54.00

NOTE:

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

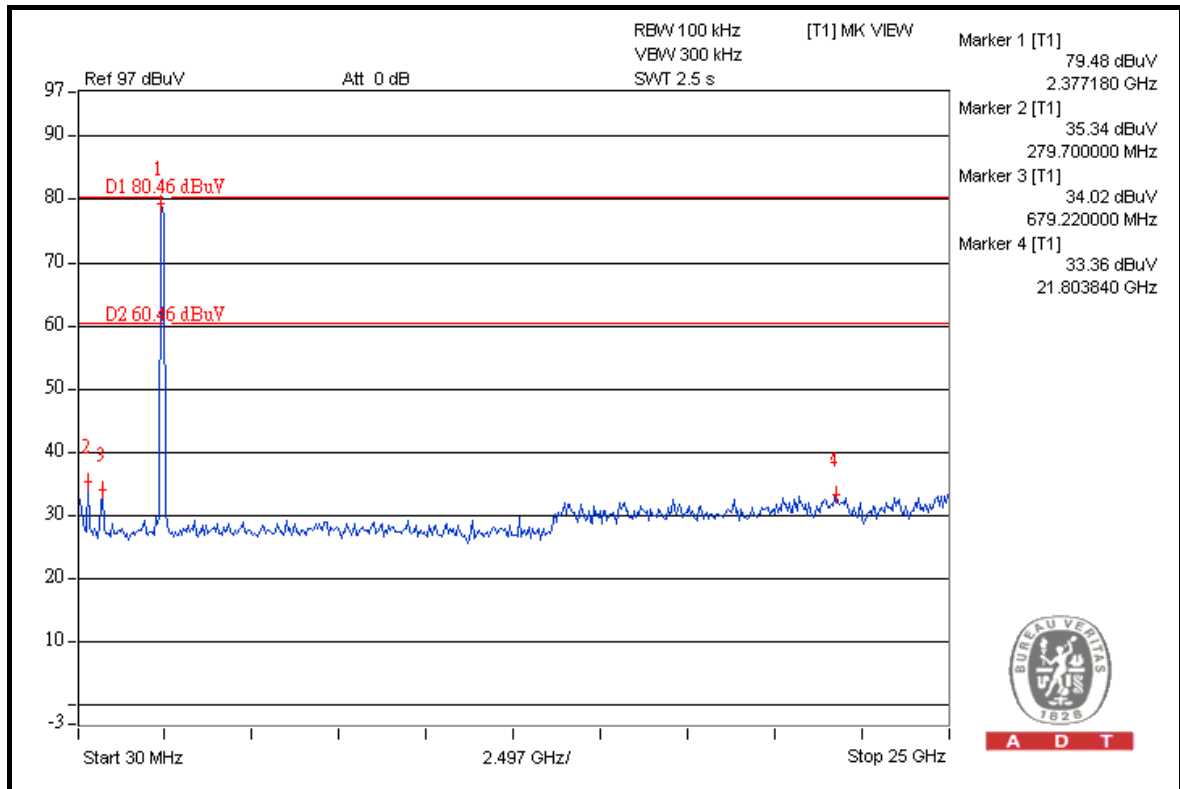


A D T

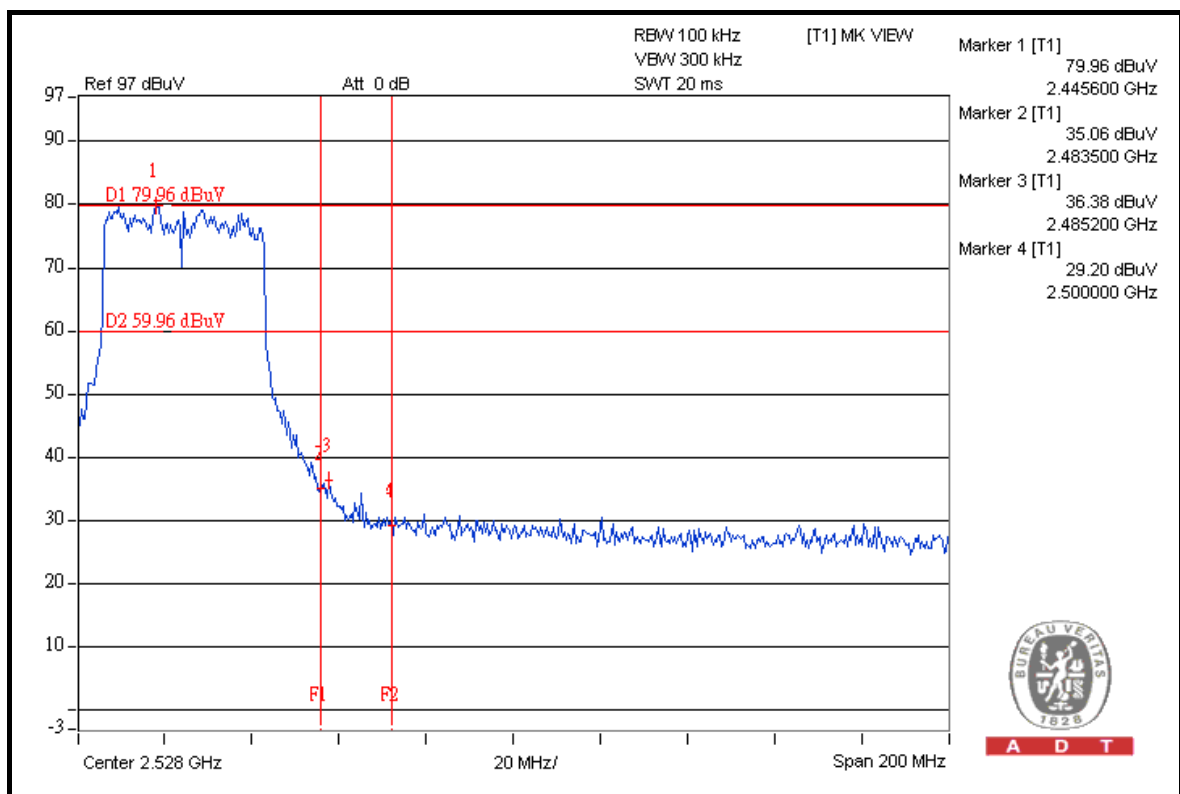




A D T



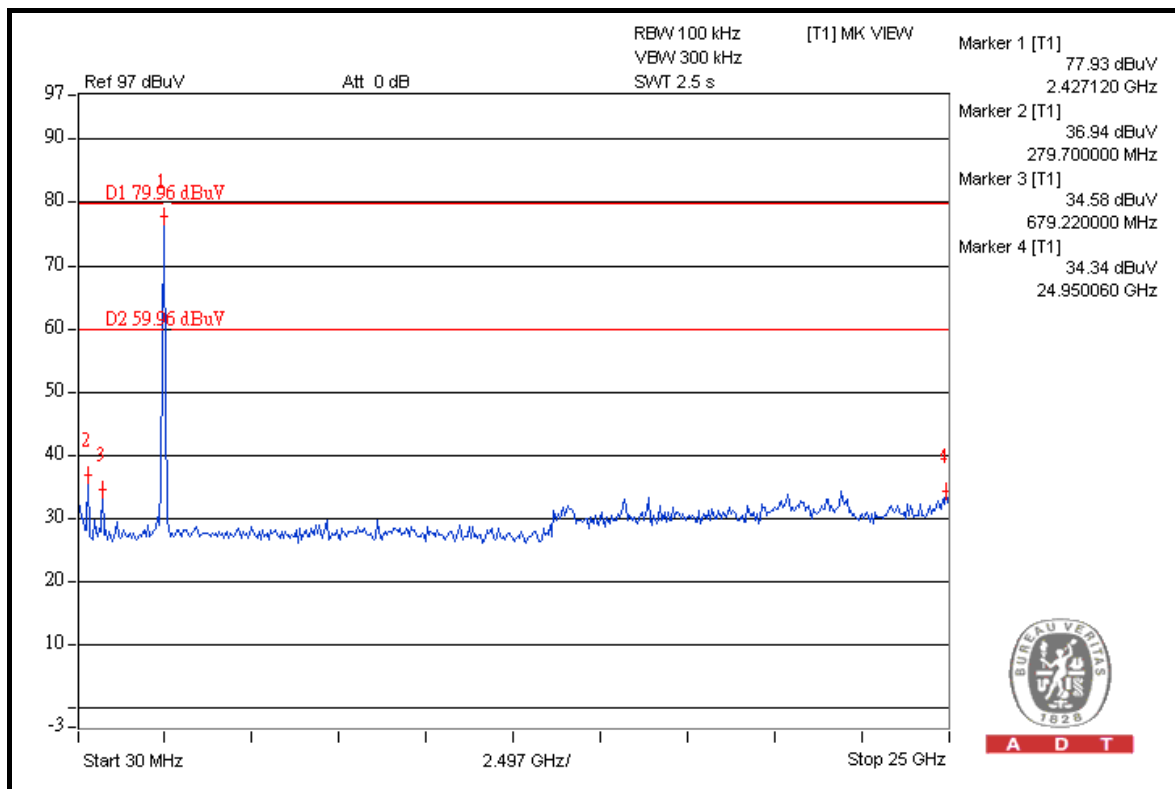
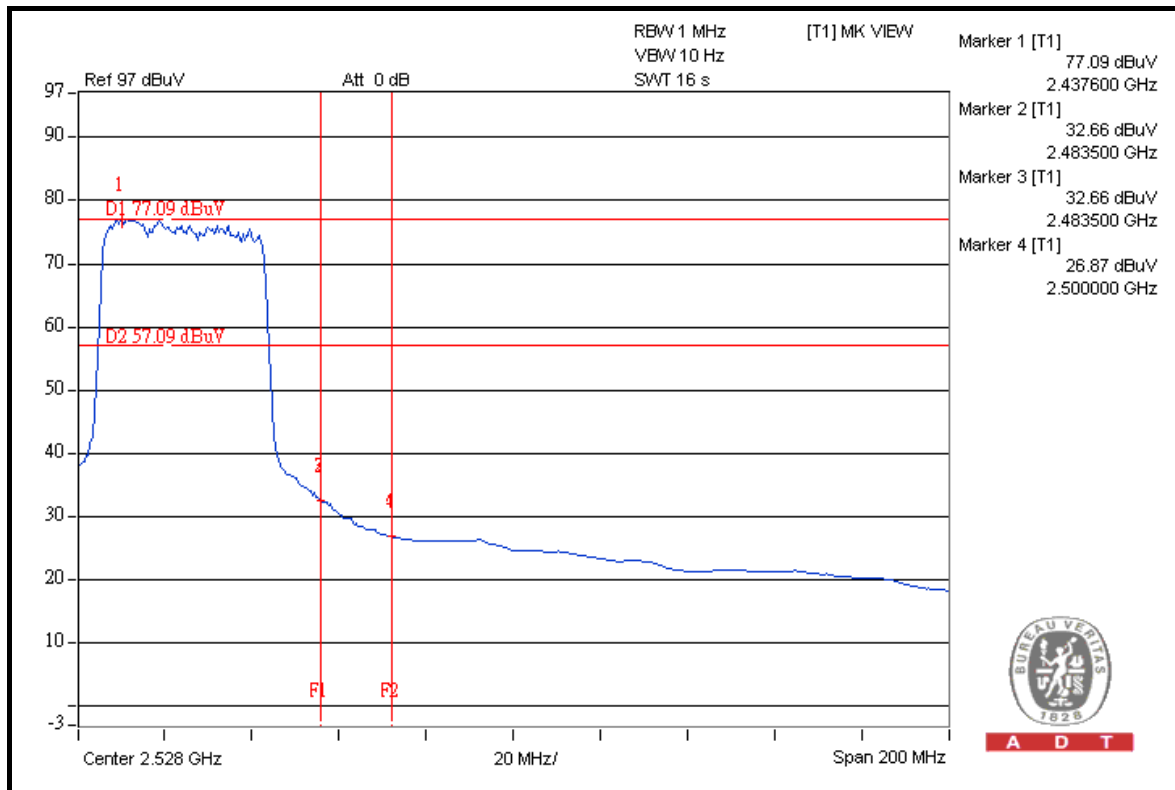
A D T



A D T



A D T



TEST MODE C

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)	116.8	56.32	60.48	74.00
2412.00 (AV)	110.6	62.26	48.34	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)	117.8	56.68	61.12	74.00
2462.00 (AV)	112.0	59.66	52.34	54.00

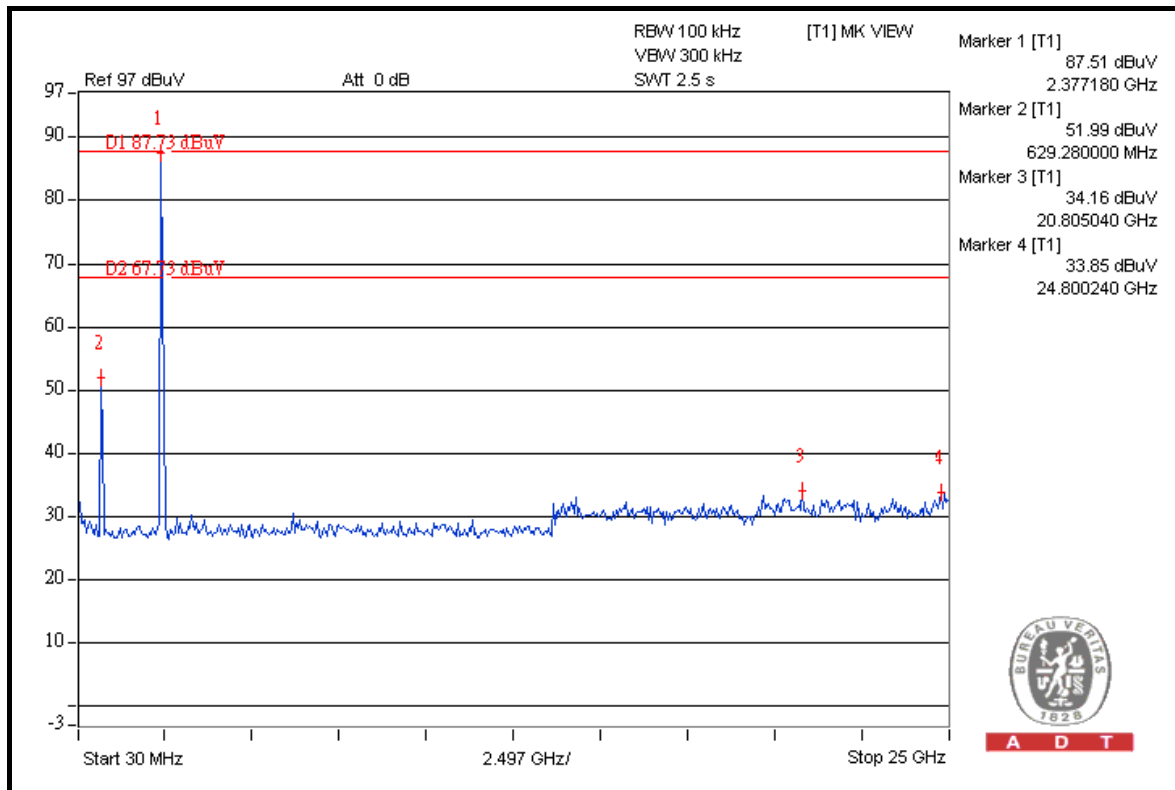
NOTE:

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.

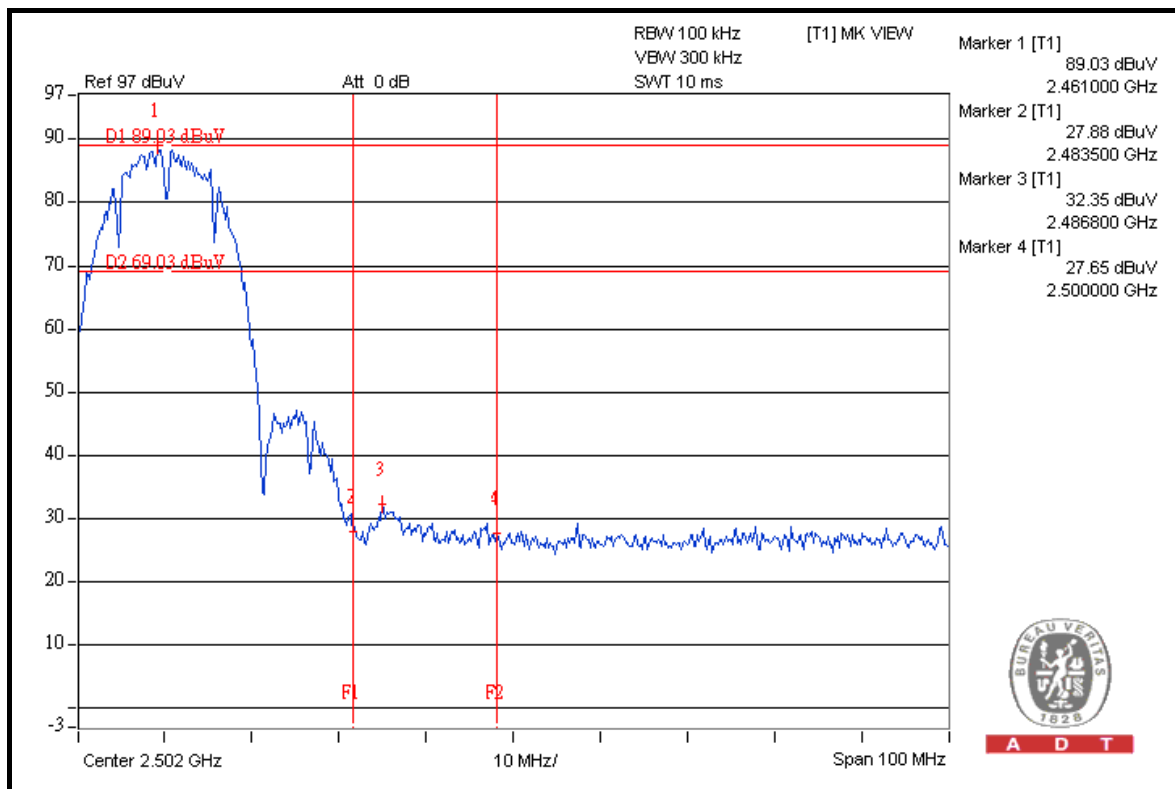




A D T



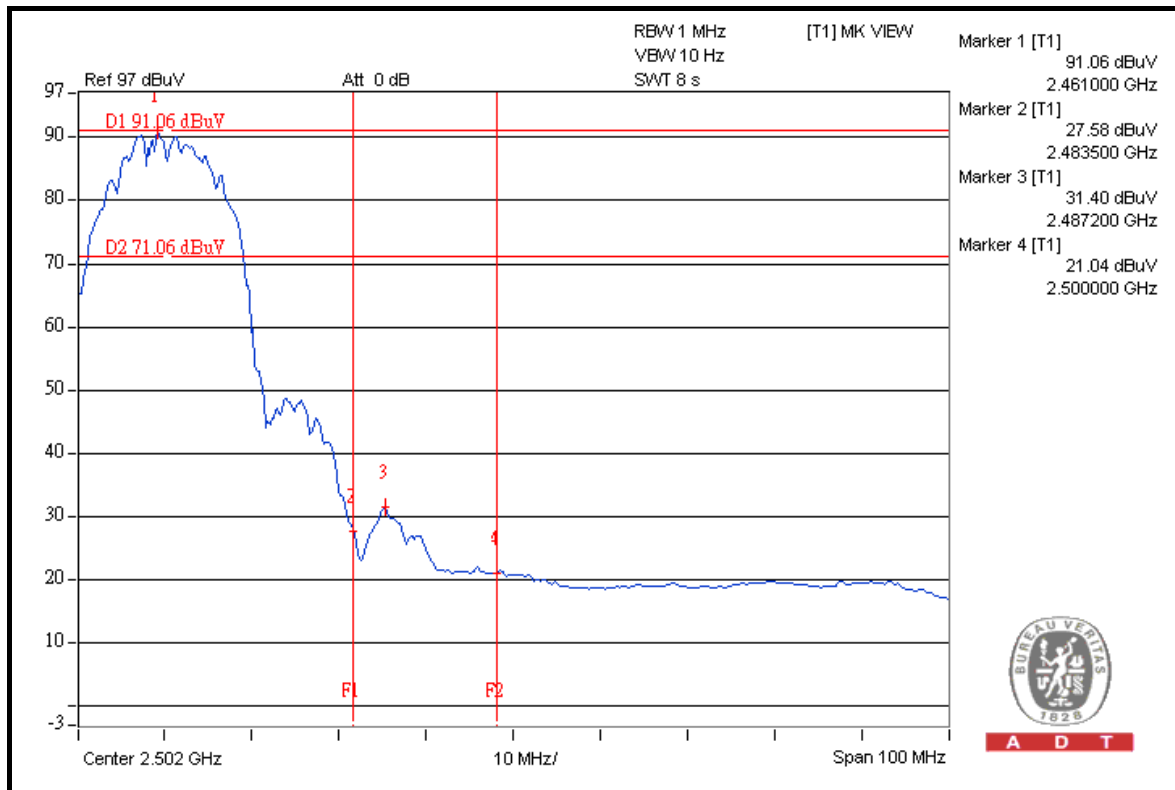
A D T



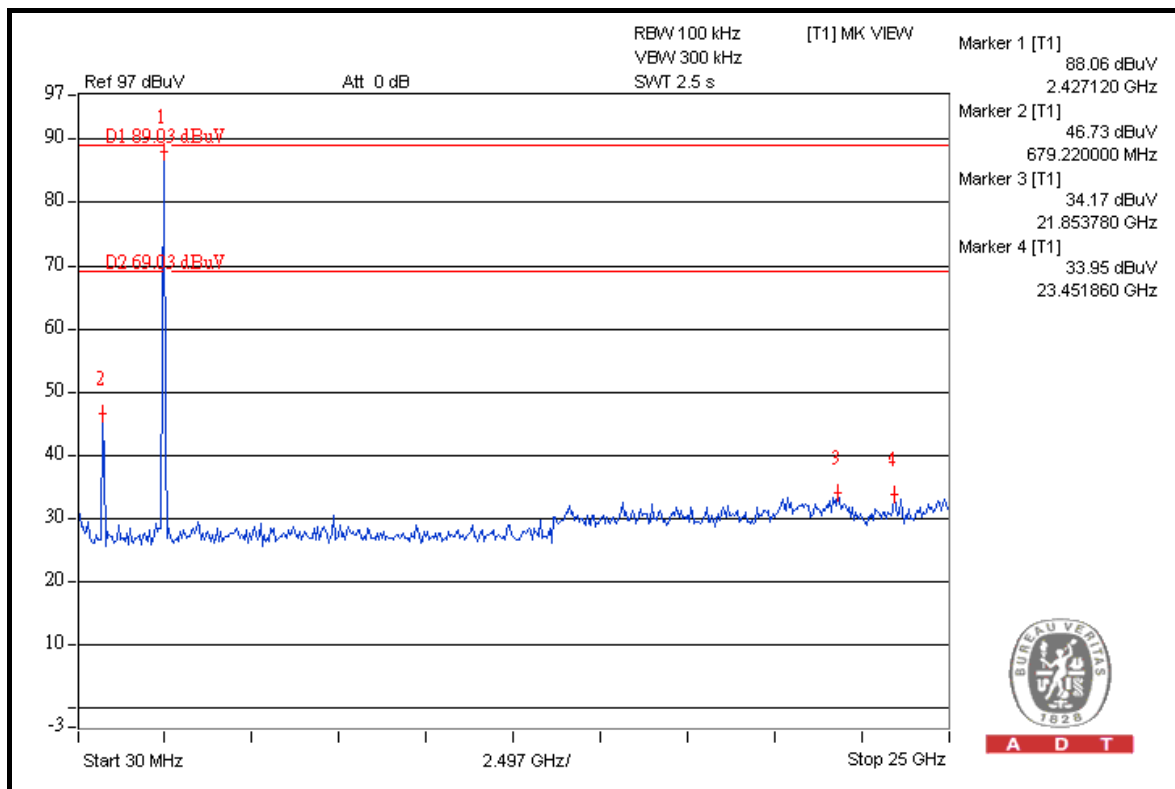
A D T



A D T



A D T



A D T

**A D T****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)	115.8	50.10	65.70	74.00
2412.00 (AV)	101.9	53.17	48.73	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

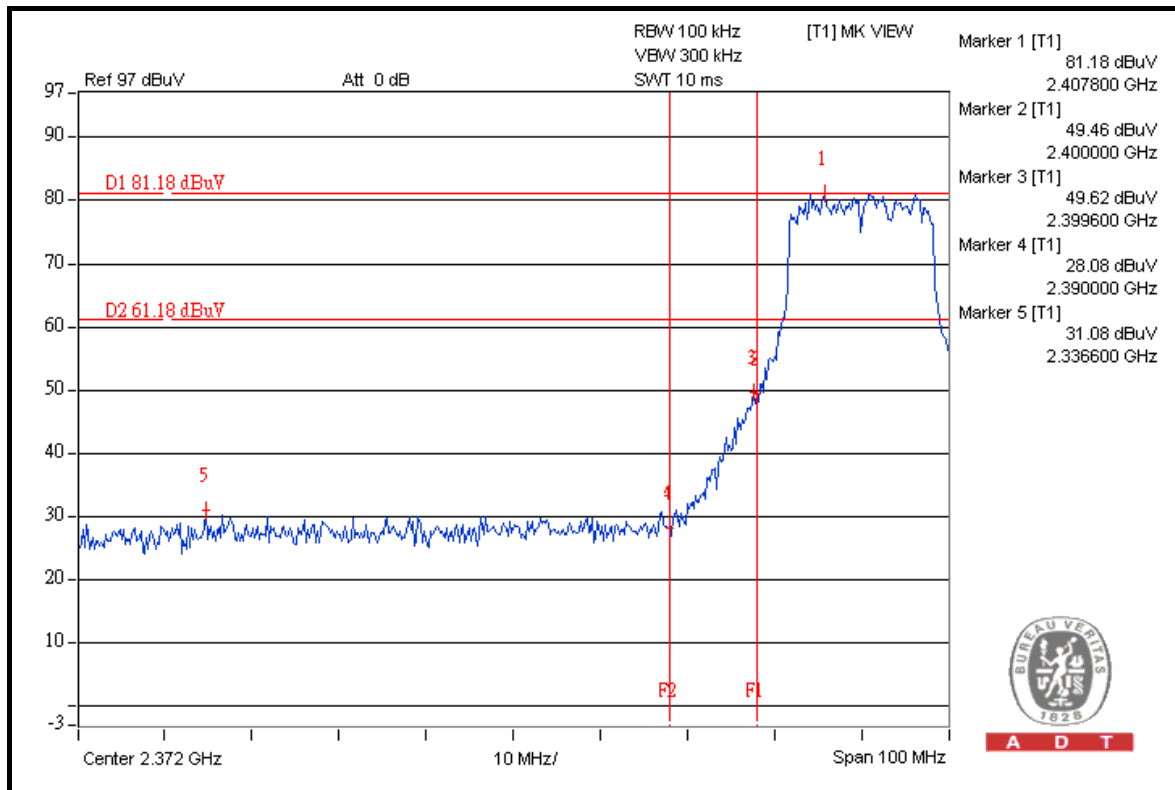
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	116.1	51.40	64.70	74.00
2462.00 (AV)	102.2	54.23	47.97	54.00

NOTE:

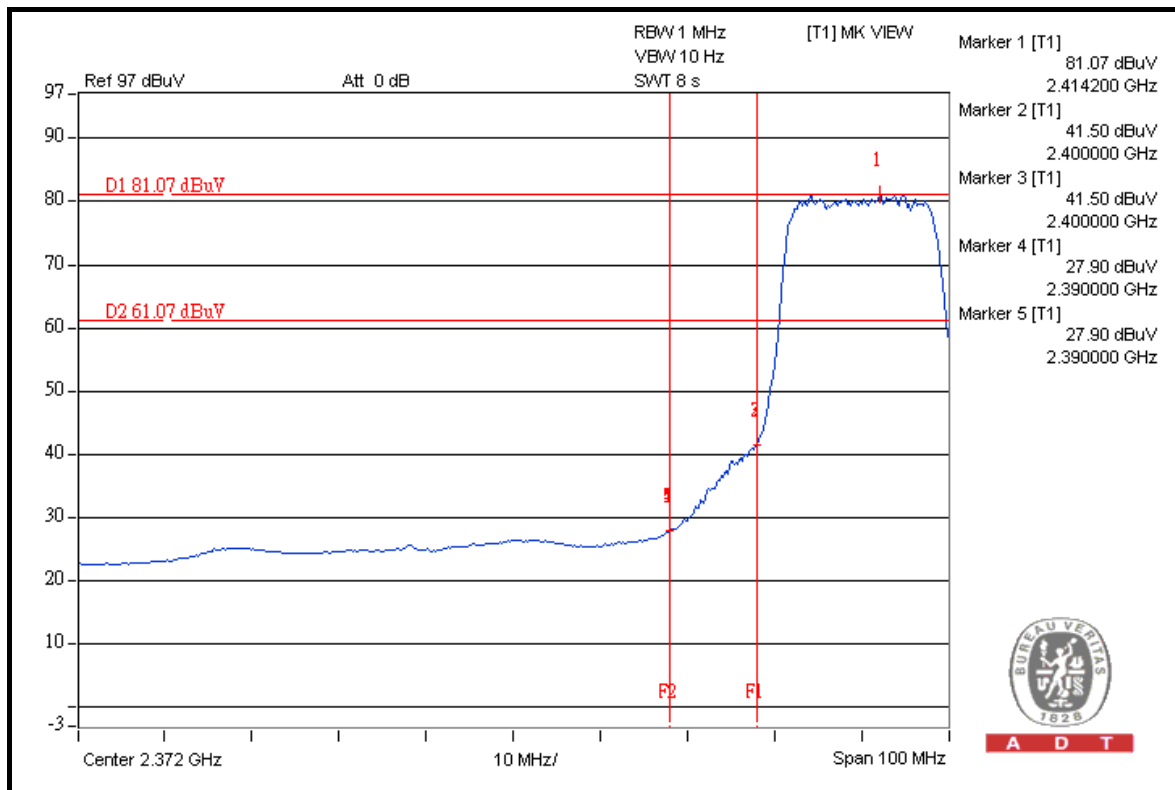
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission.
Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



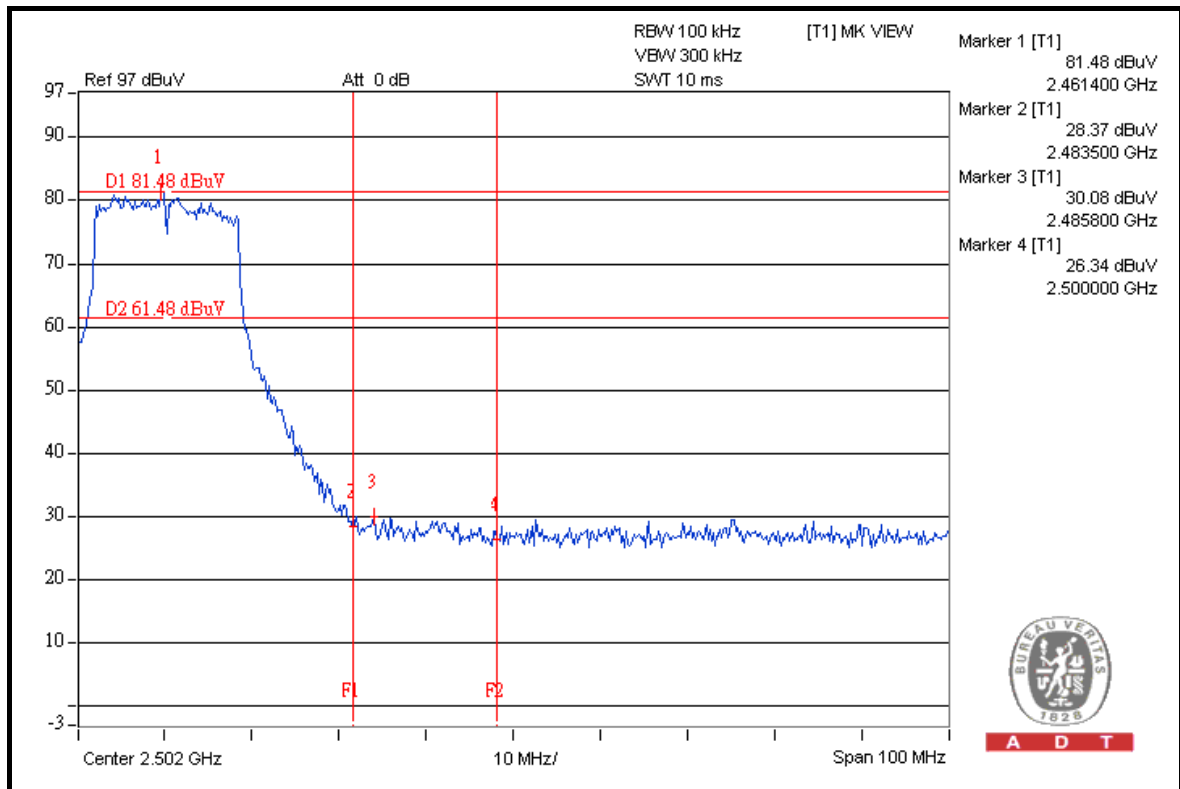
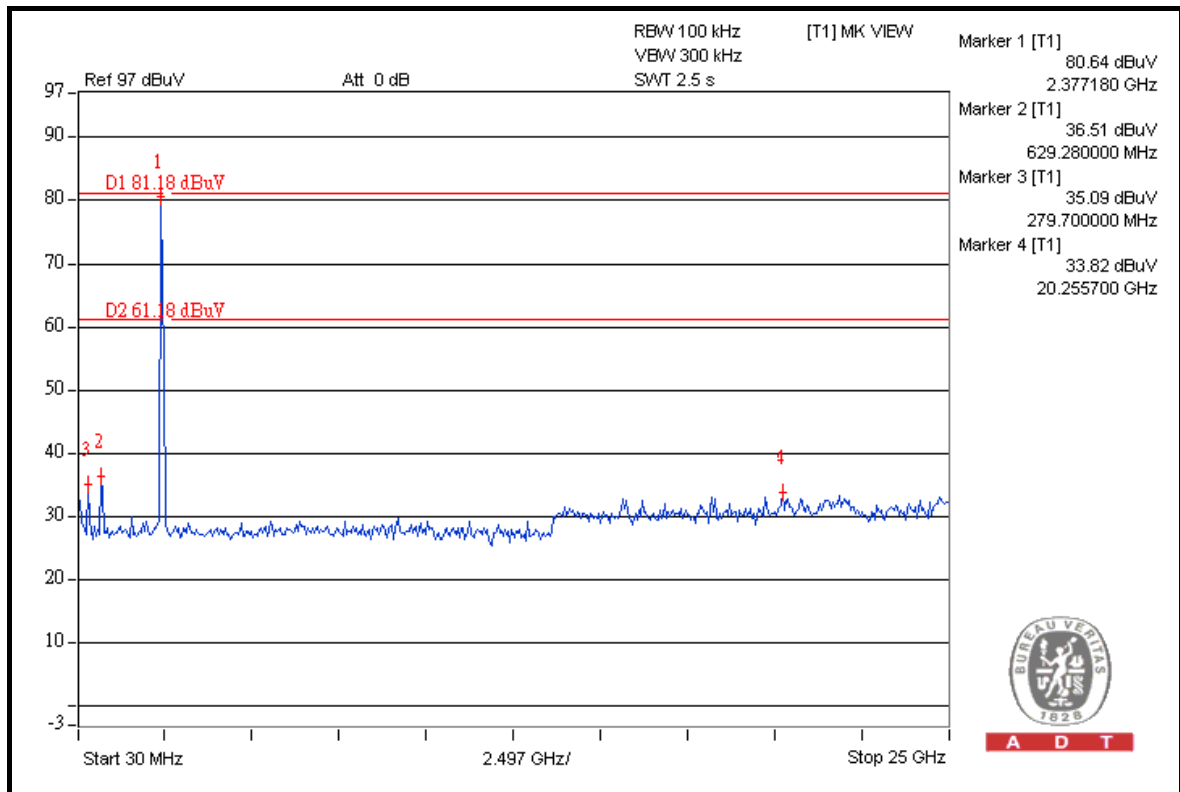
A D T



A D T

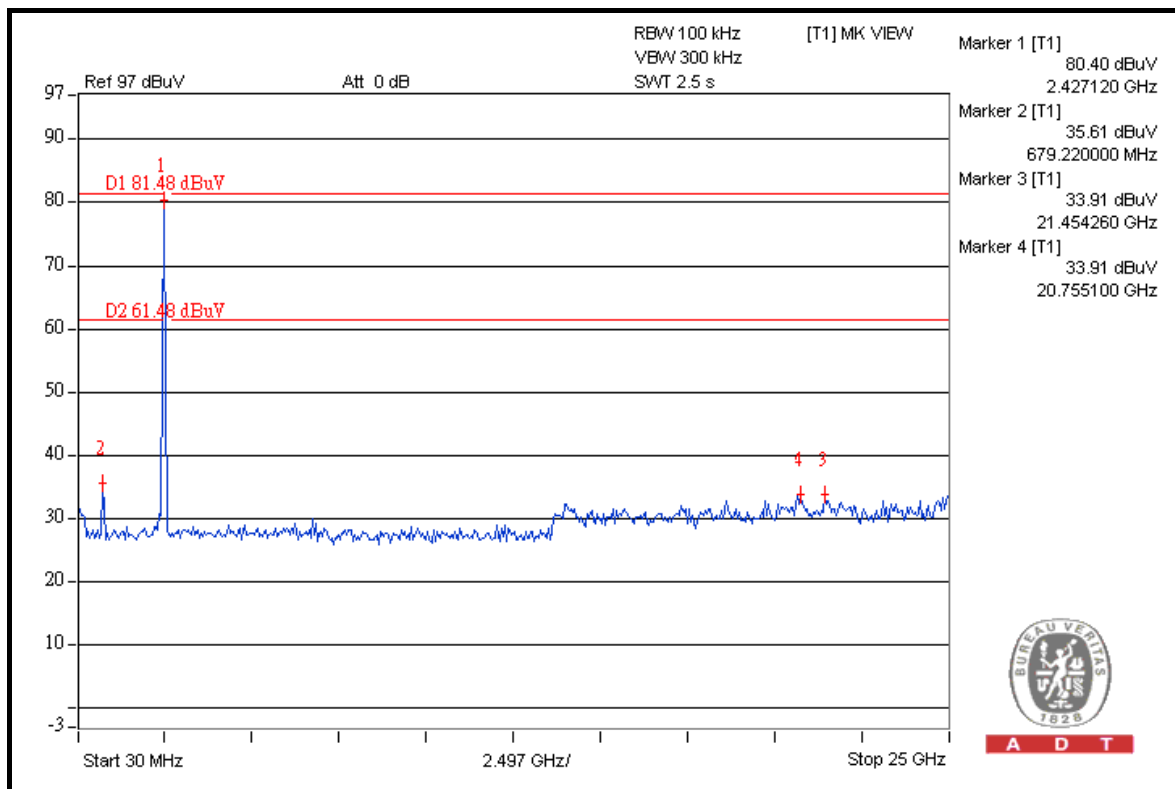
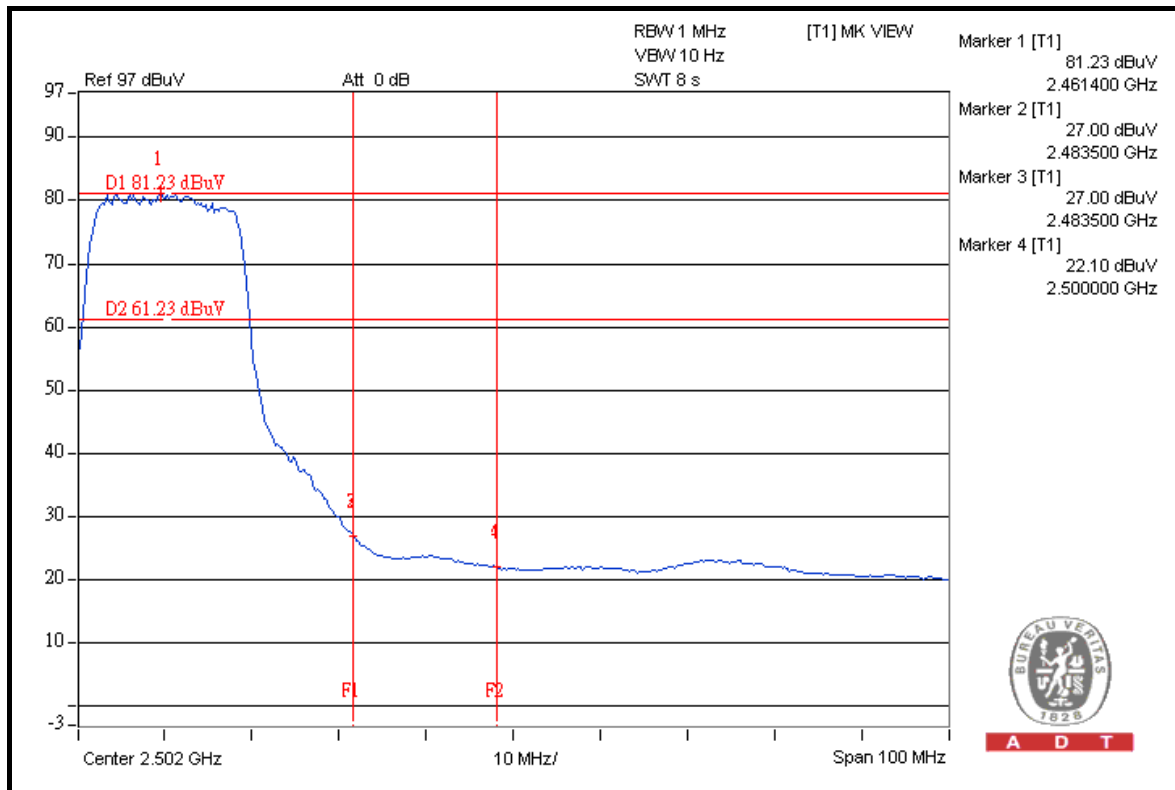


A D T





A D T



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)	116.0	49.55	66.45	74.00
2412.00 (AV)	102.1	51.78	50.32	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

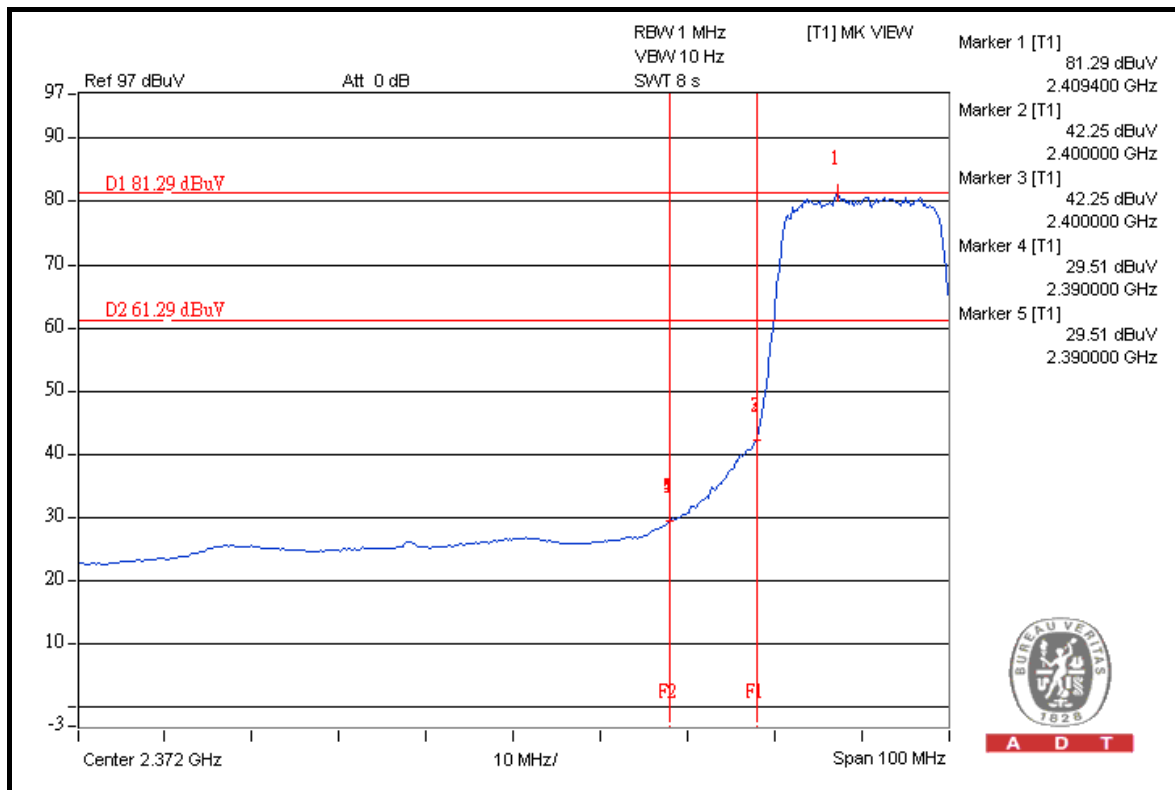
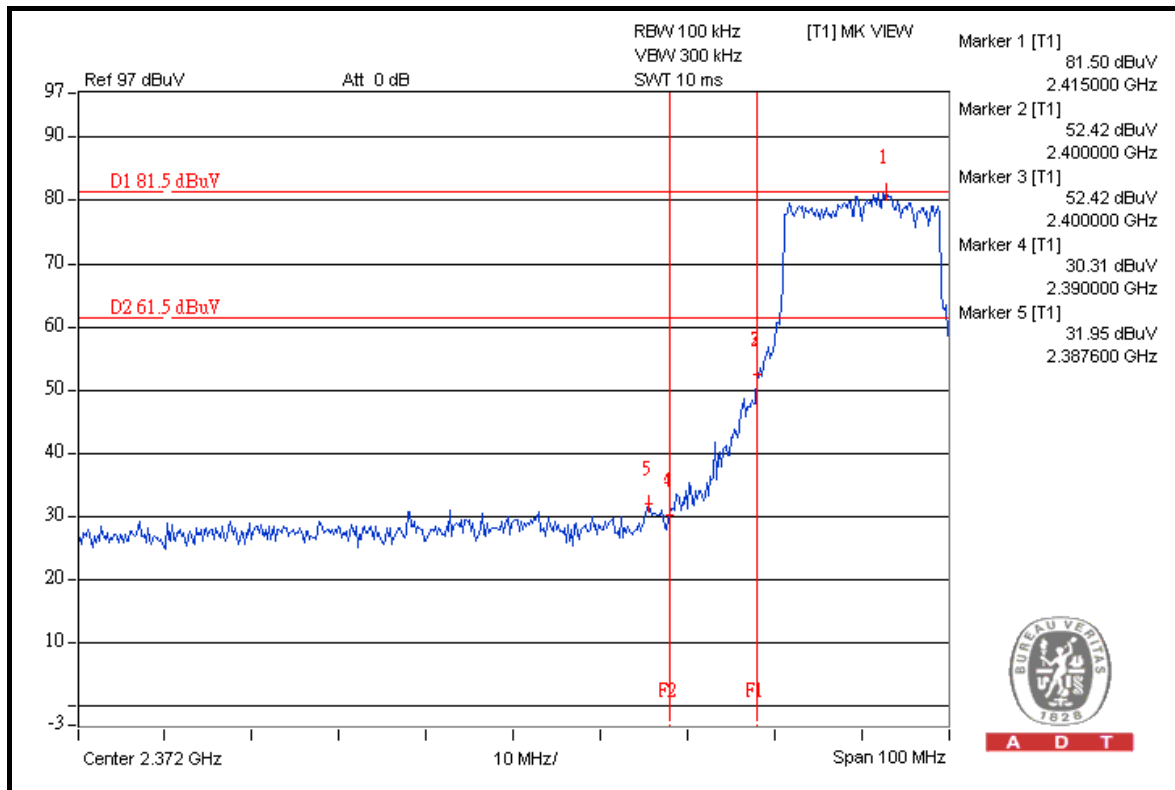
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	116.3	50.62	65.68	74.00
2462.00 (AV)	102.4	52.37	50.03	54.00

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.

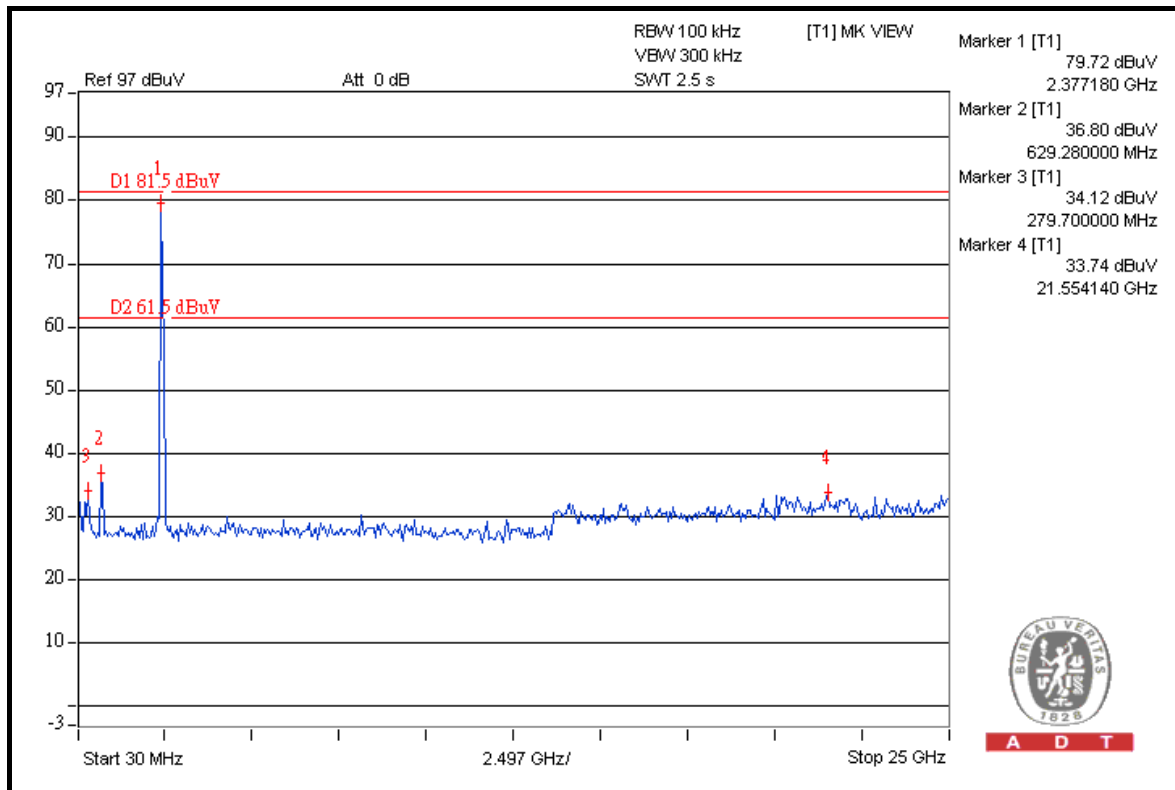


A D T

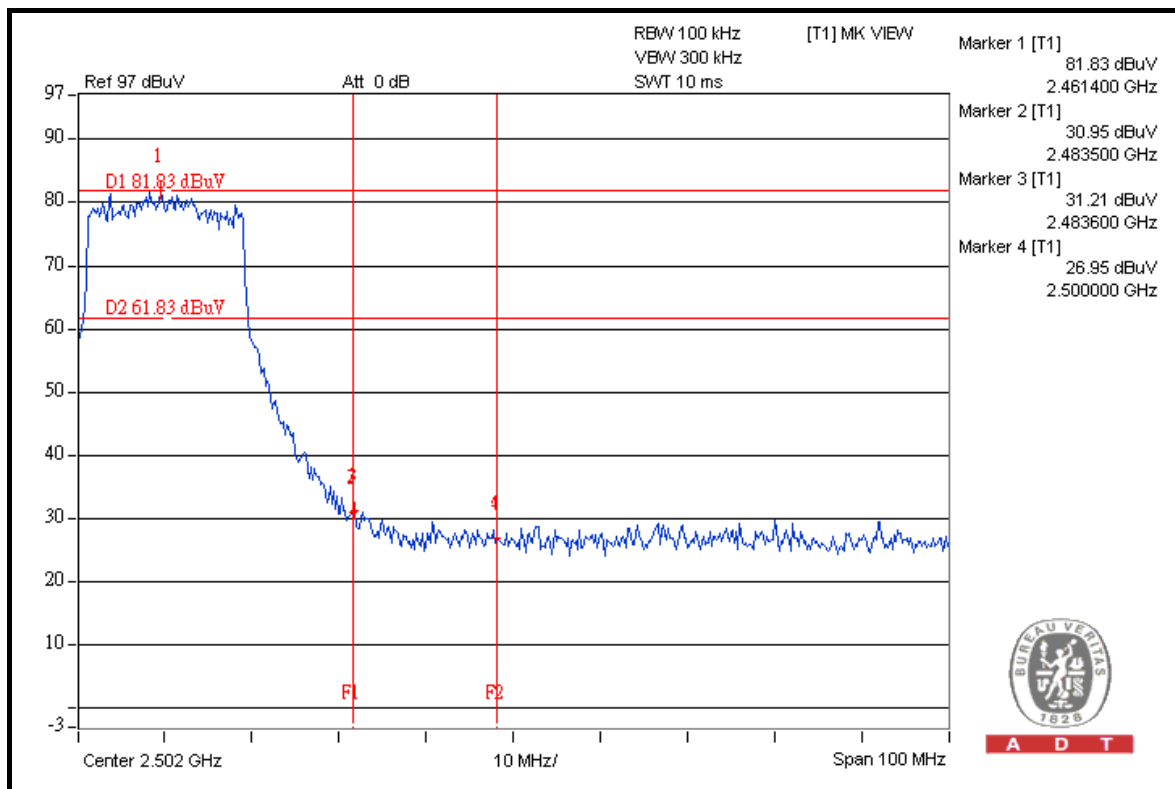




A D T



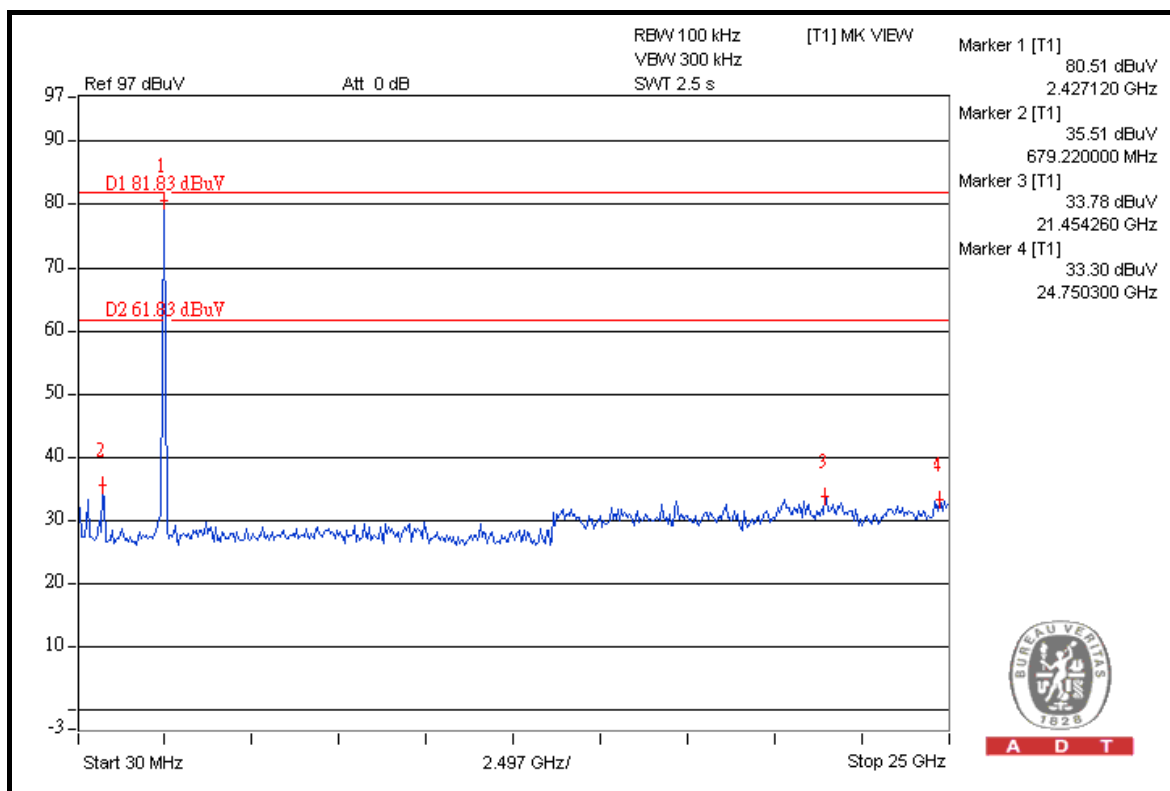
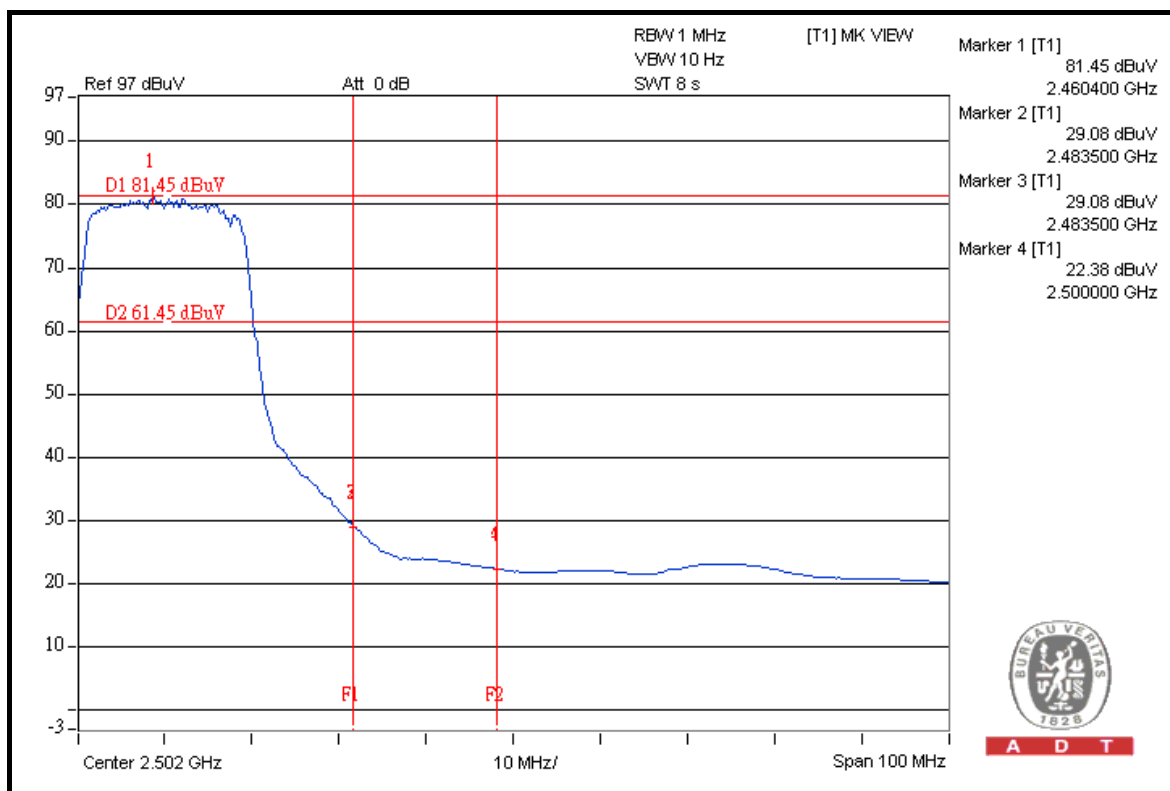
A D T



A D T



A D T



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)	109.9	41.27	68.63	74.00
2422.00 (AV)	95.3	43.79	51.51	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

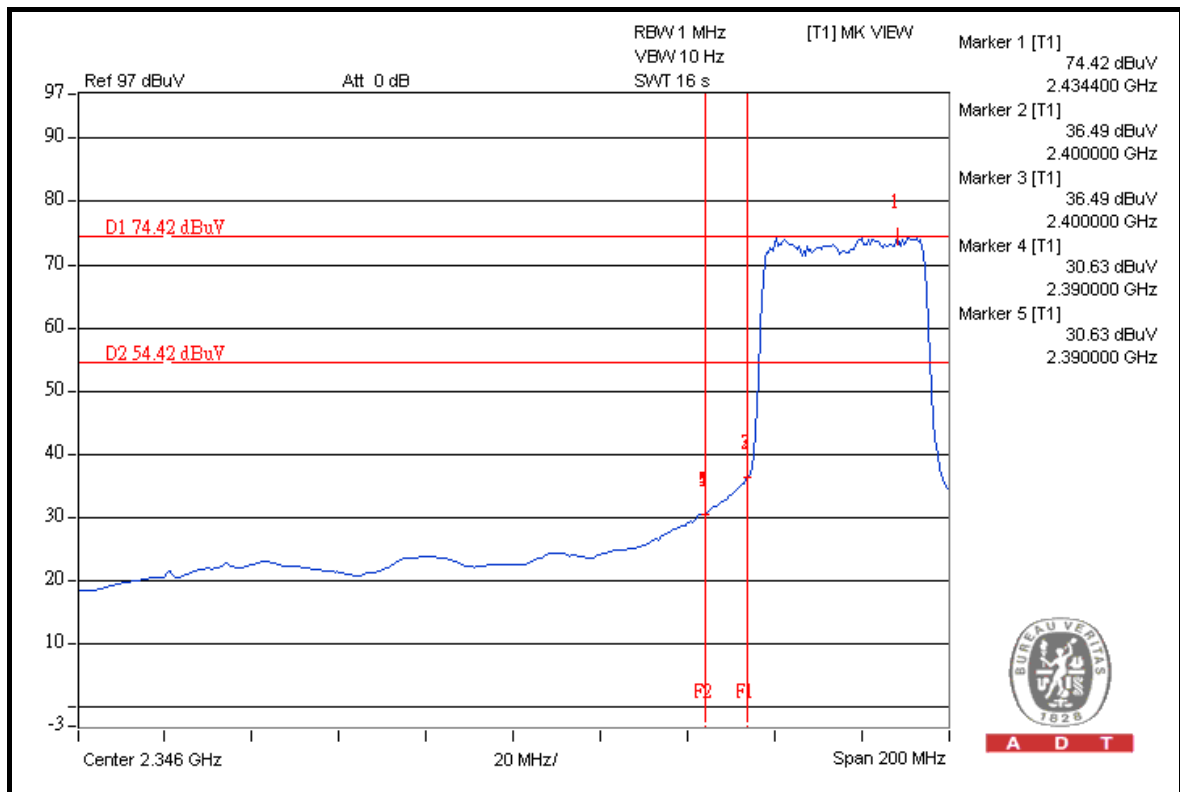
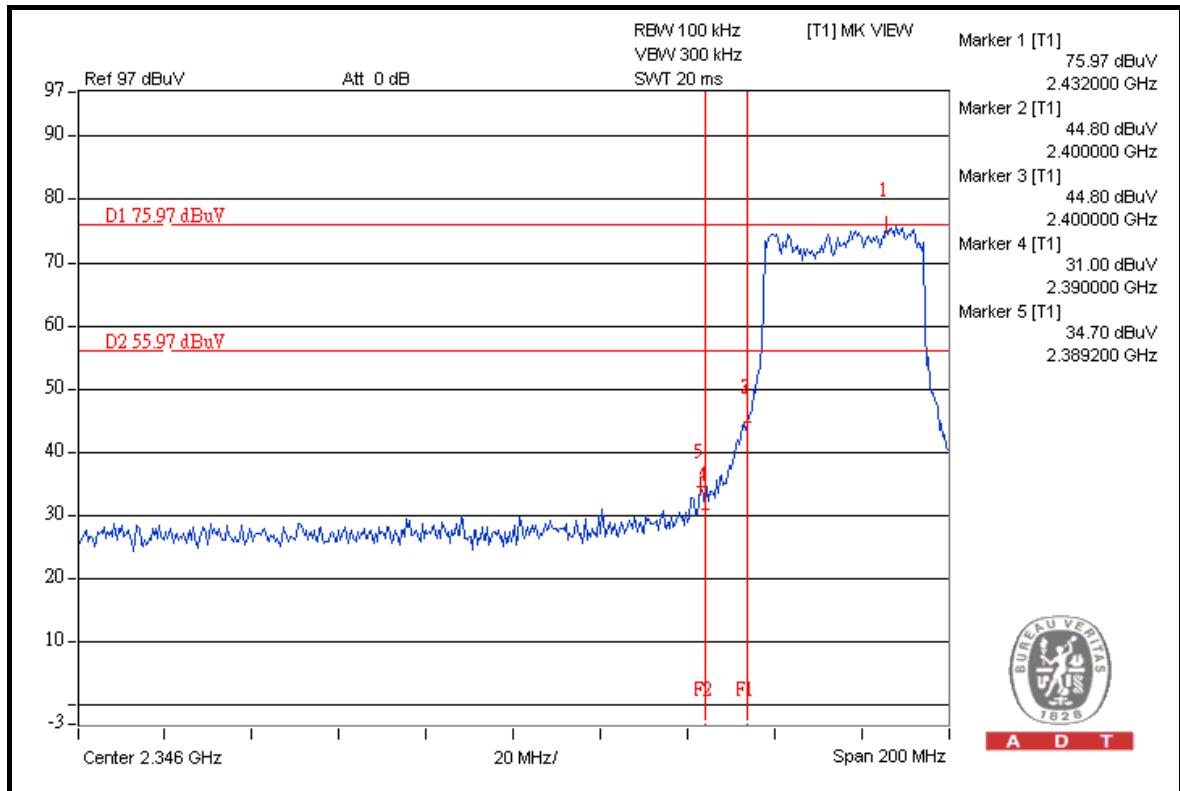
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2452.00 (PK)	112.0	44.39	67.61	74.00
2452.00 (AV)	96.5	45.78	50.72	54.00

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.

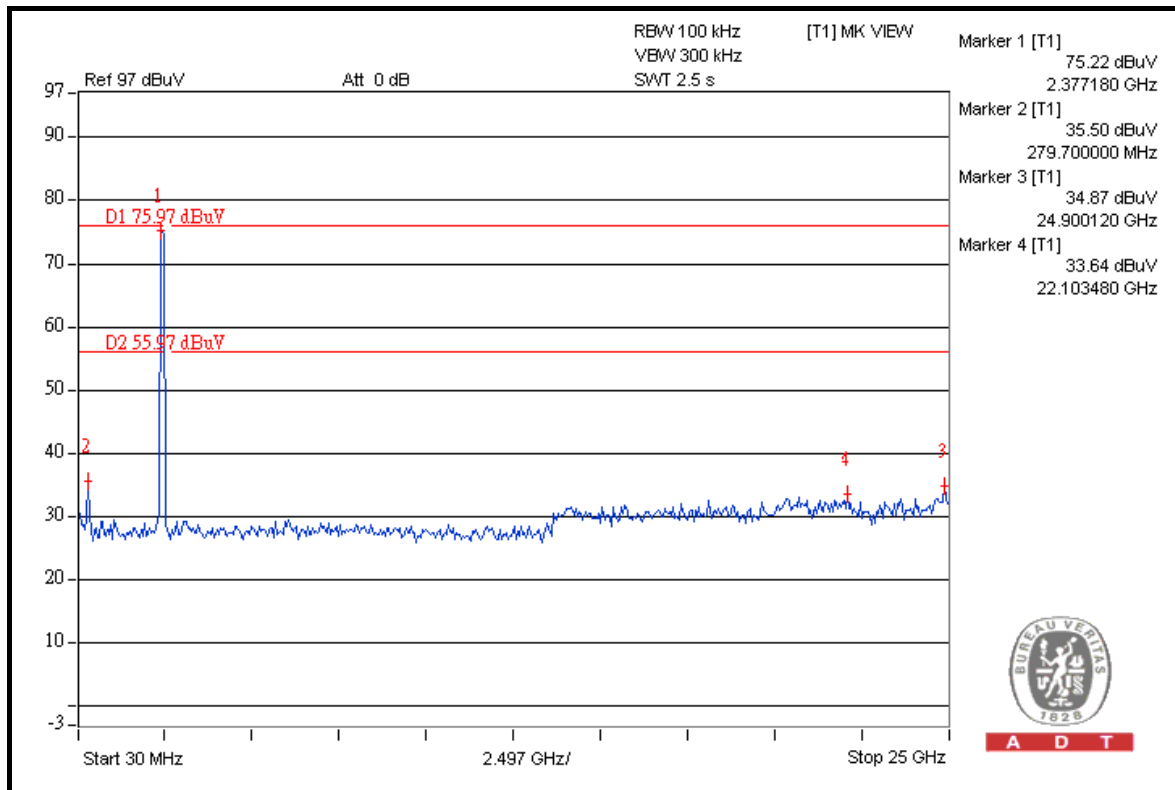


A D T

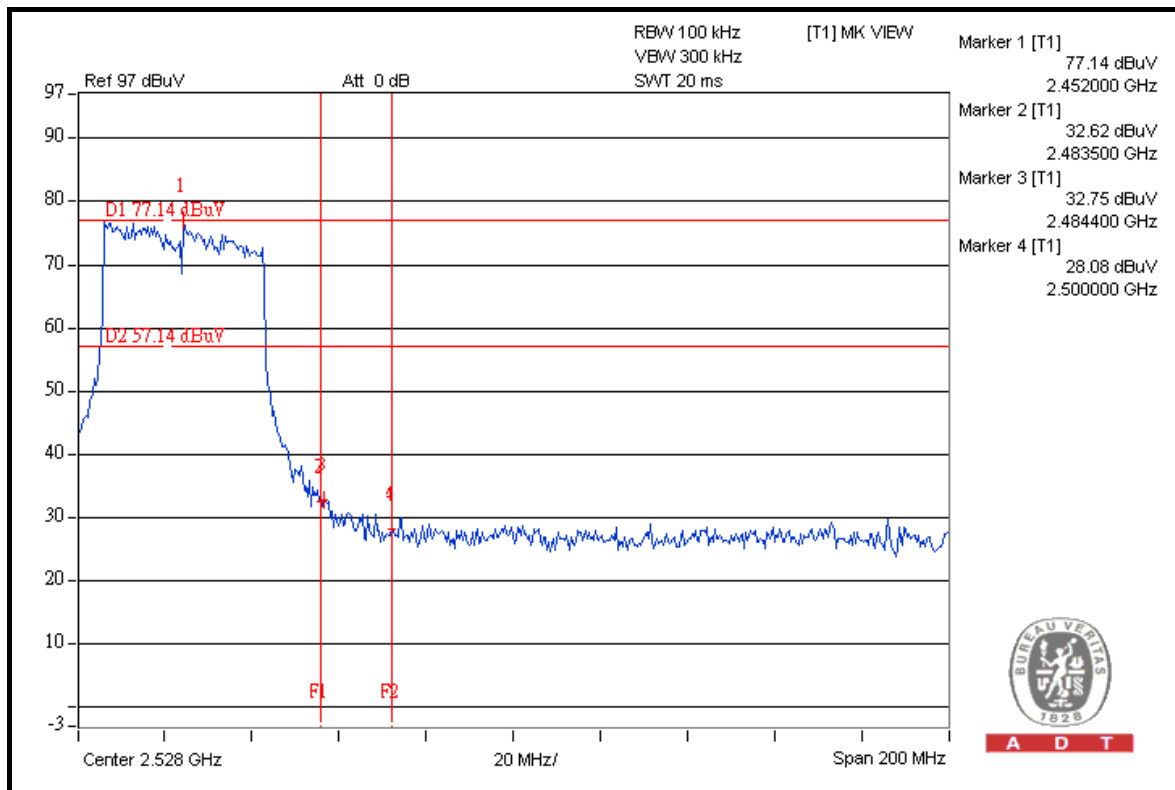




A D T



A D T



A D T





A D T

TEST MODE D**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)	121.1	61.89	59.21	74.00
2412.00 (AV)	116.5	64.77	51.73	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

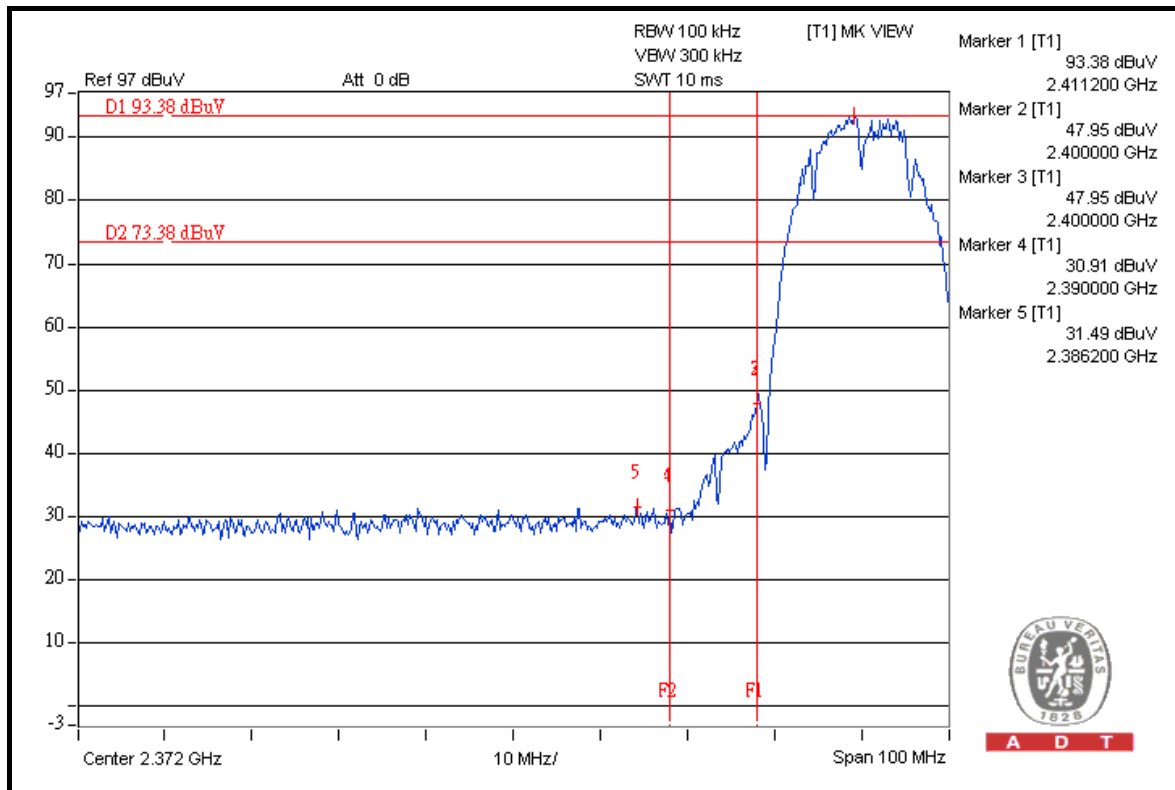
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	120.4	61.17	59.23	74.00
2462.00 (AV)	115.8	62.97	52.83	54.00

NOTE:

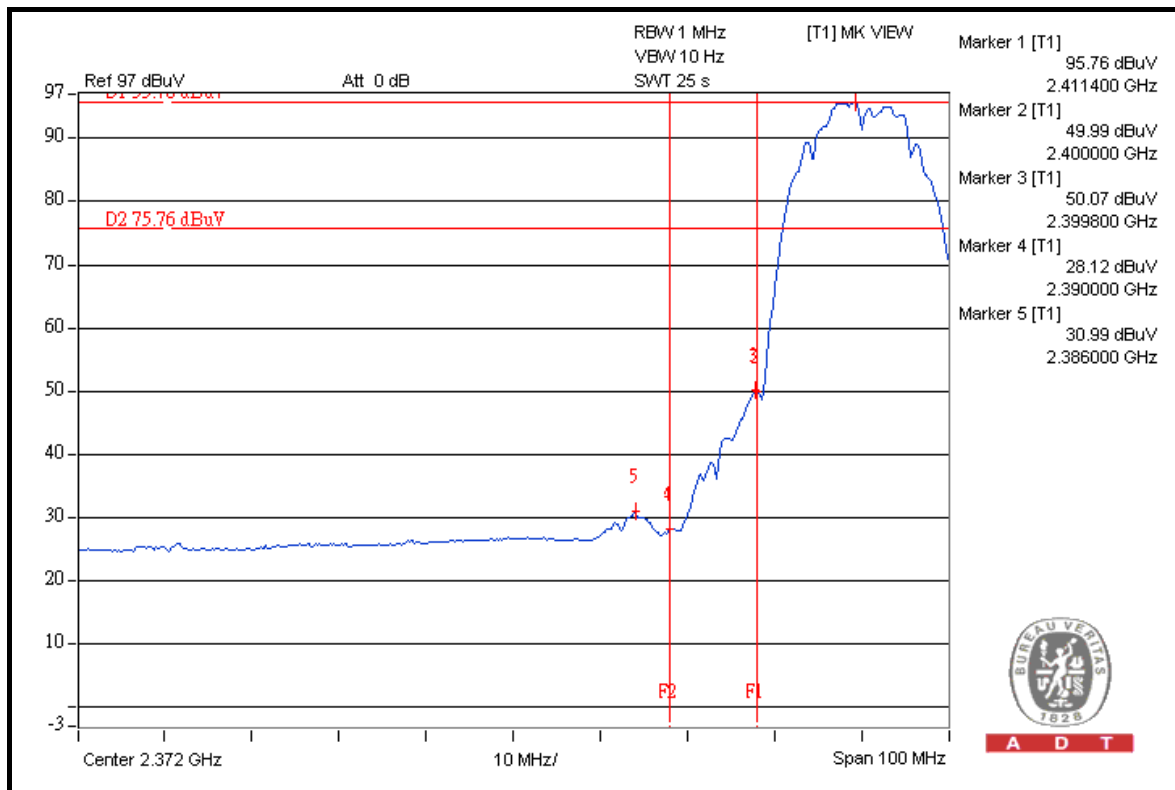
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission.
Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



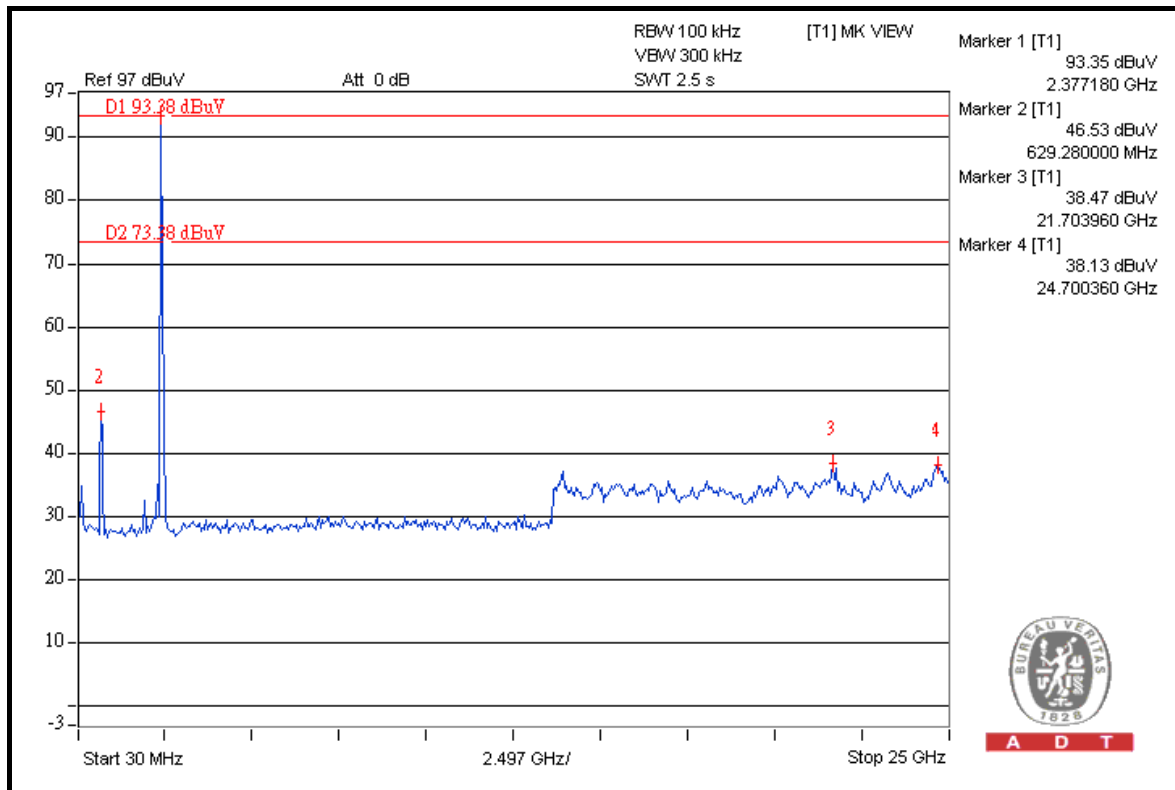
A D T



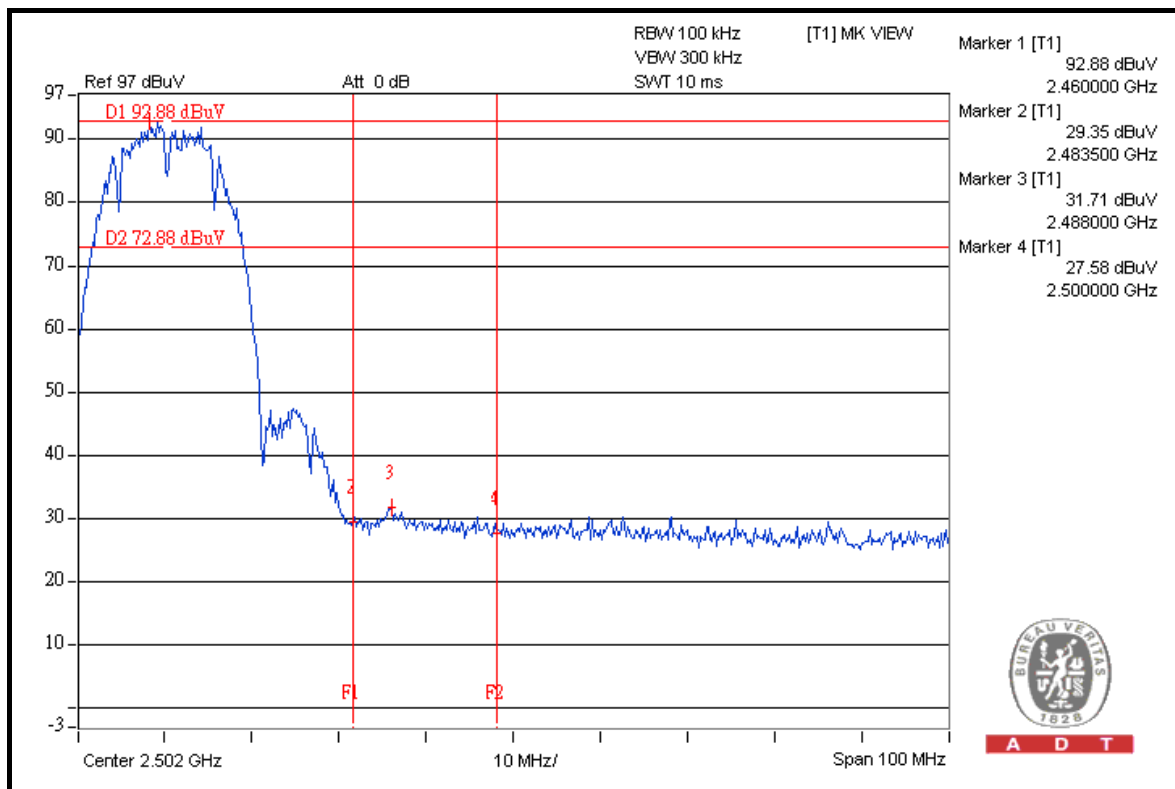
A D T



A D T



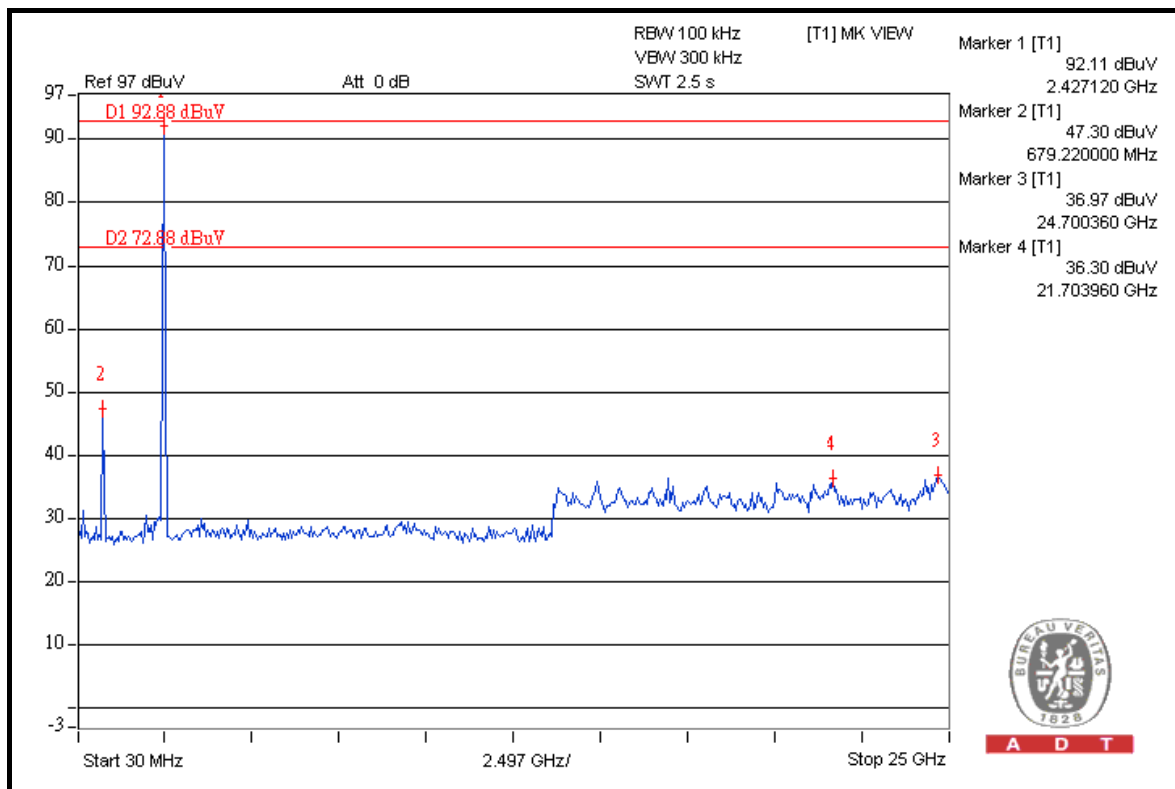
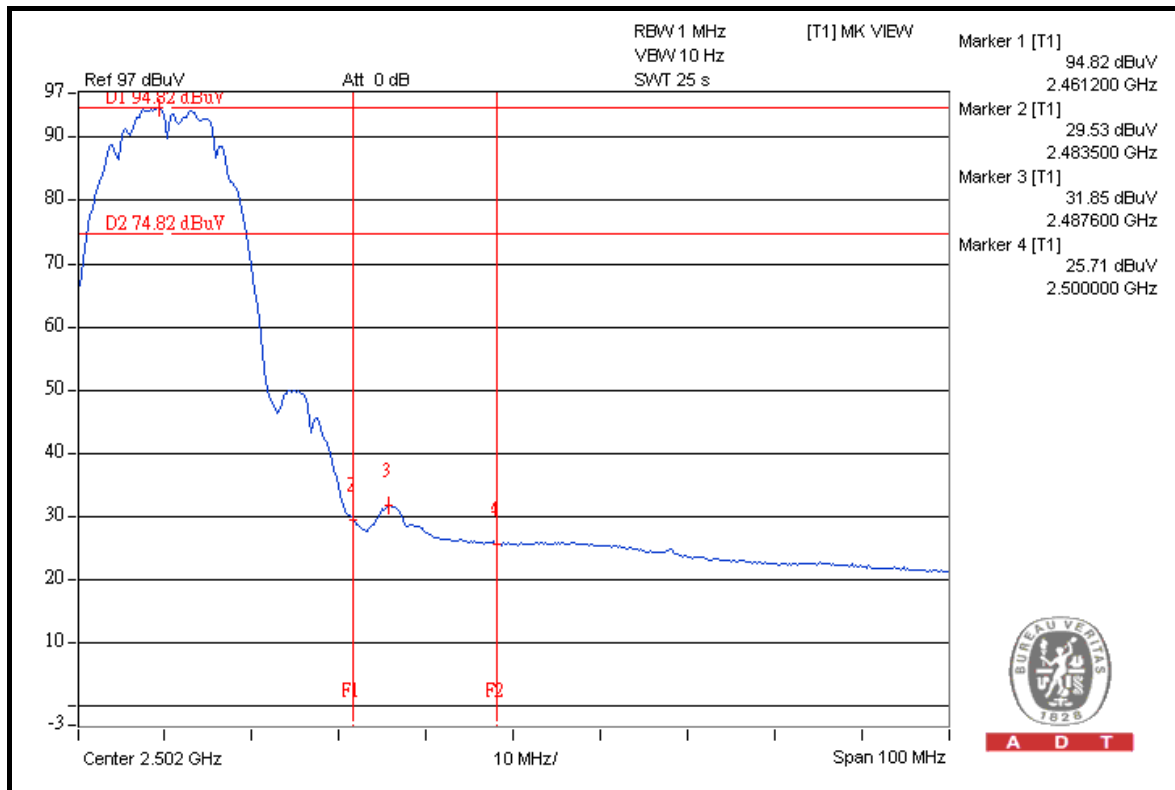
A D T



A D T



A D T



**A D T****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)	116.7	50.45	66.25	74.00
2412.00 (AV)	103.6	54.38	49.22	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

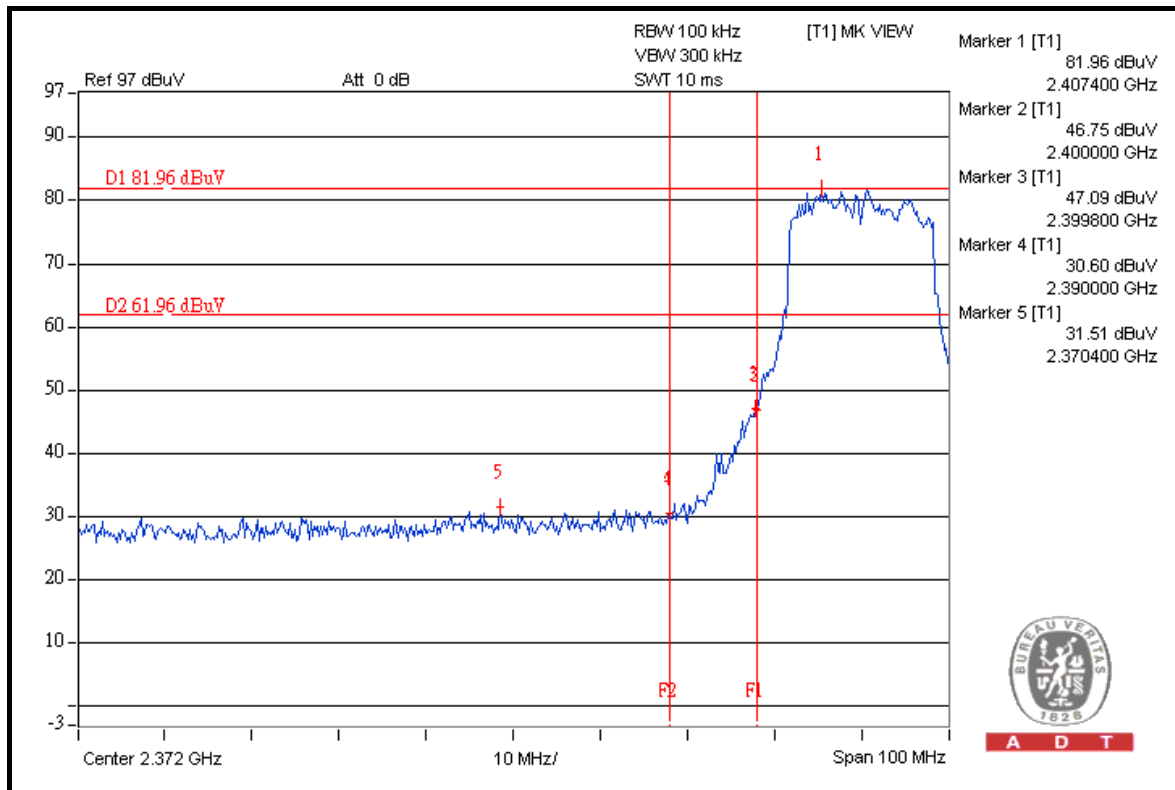
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	116.3	48.03	68.27	74.00
2462.00 (AV)	102.9	53.98	48.92	54.00

NOTE:

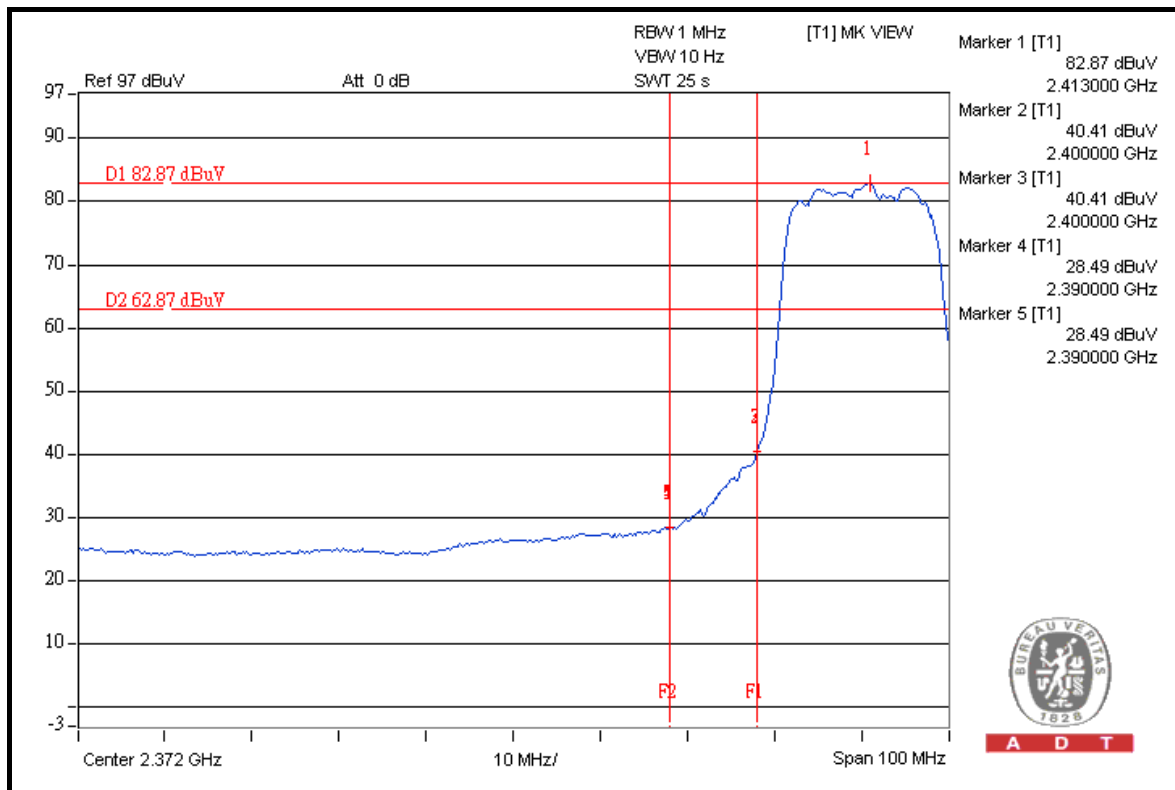
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission.
Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



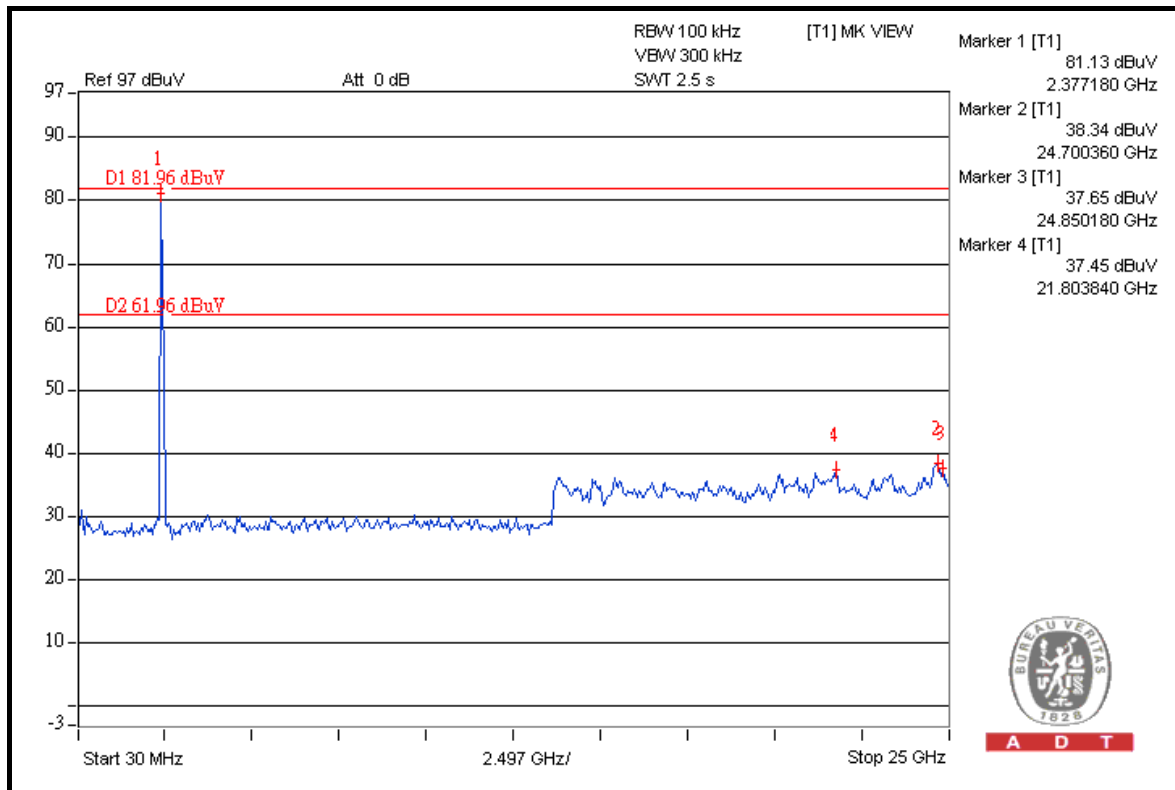
A D T



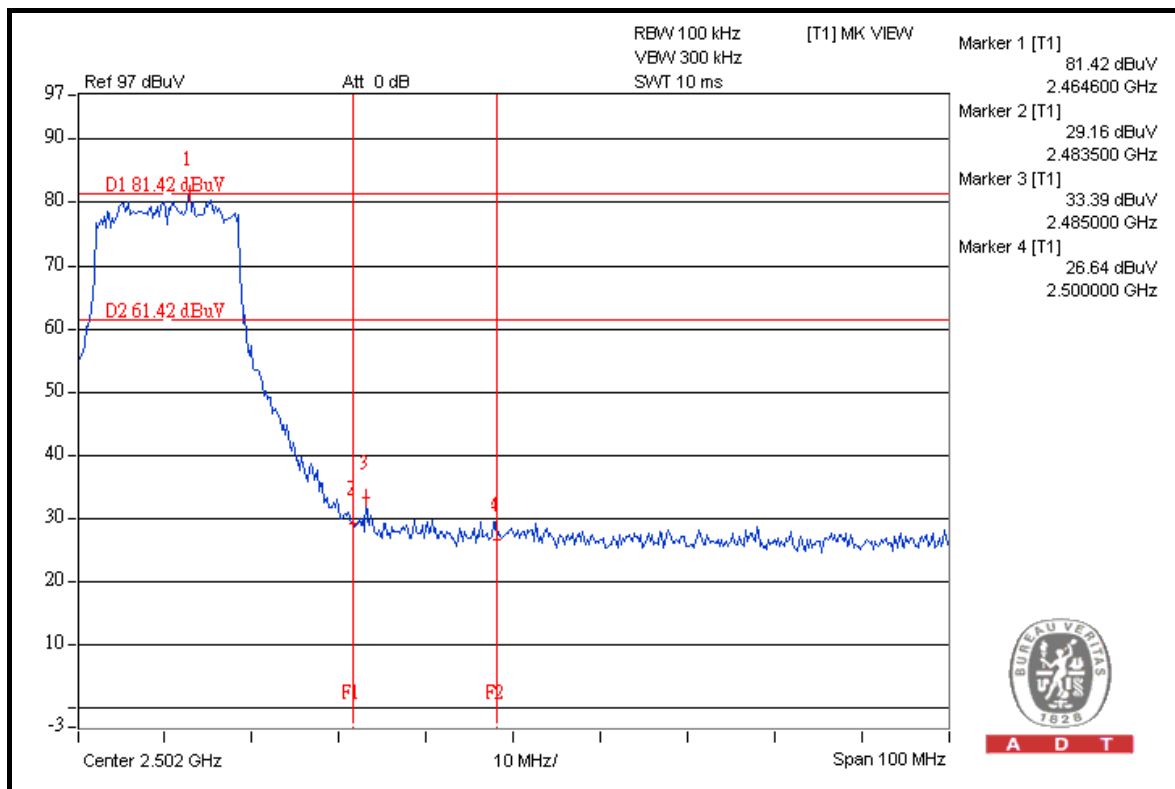
A D T



A D T



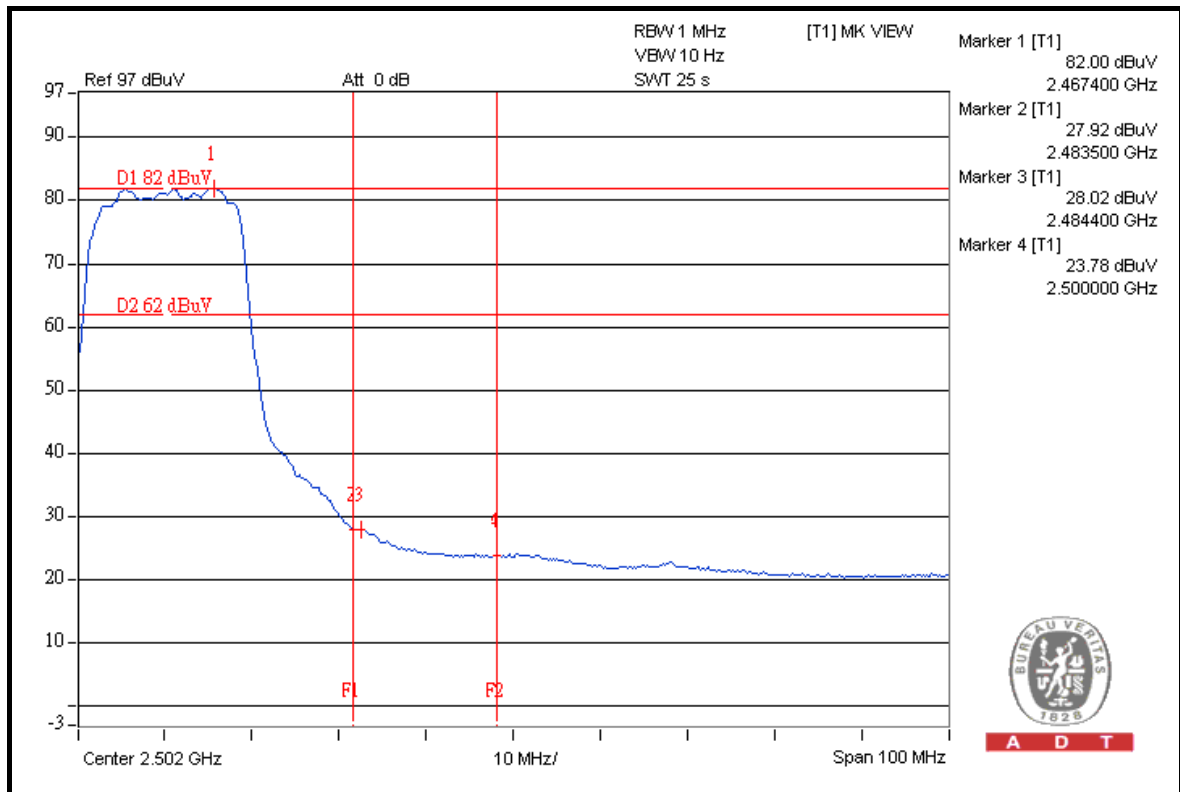
A D T



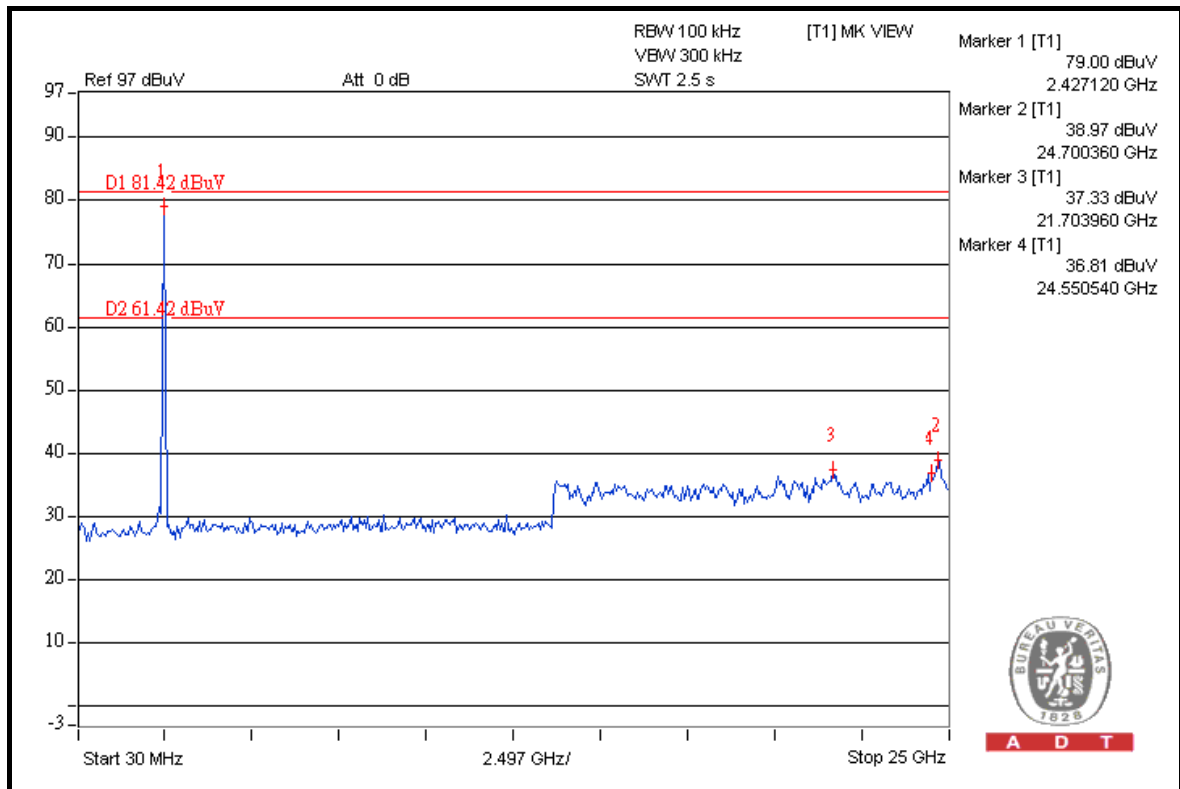
A D T



A D T



A D T



A D T

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)	118.5	50.78	67.72	74.00
2412.00 (AV)	105.3	52.81	52.49	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

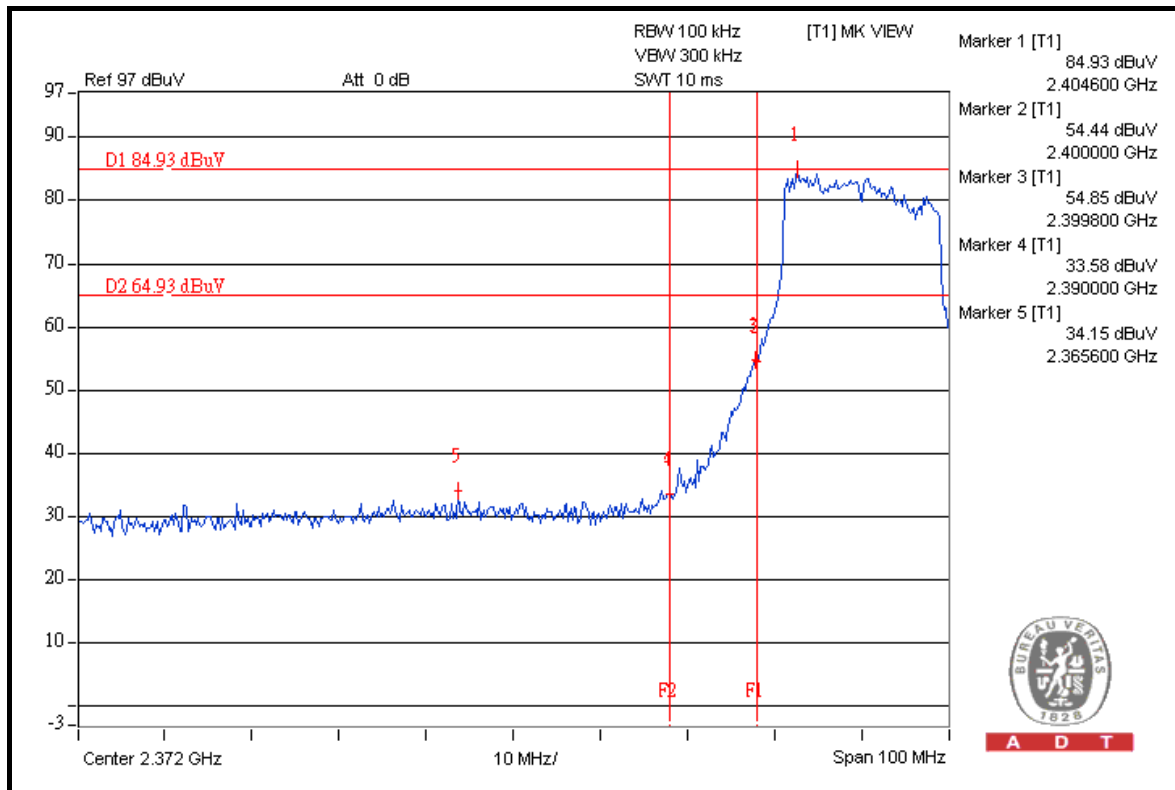
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2462.00 (PK)	117.9	49.88	68.02	74.00
2462.00 (AV)	104.6	52.42	52.18	54.00

NOTE:

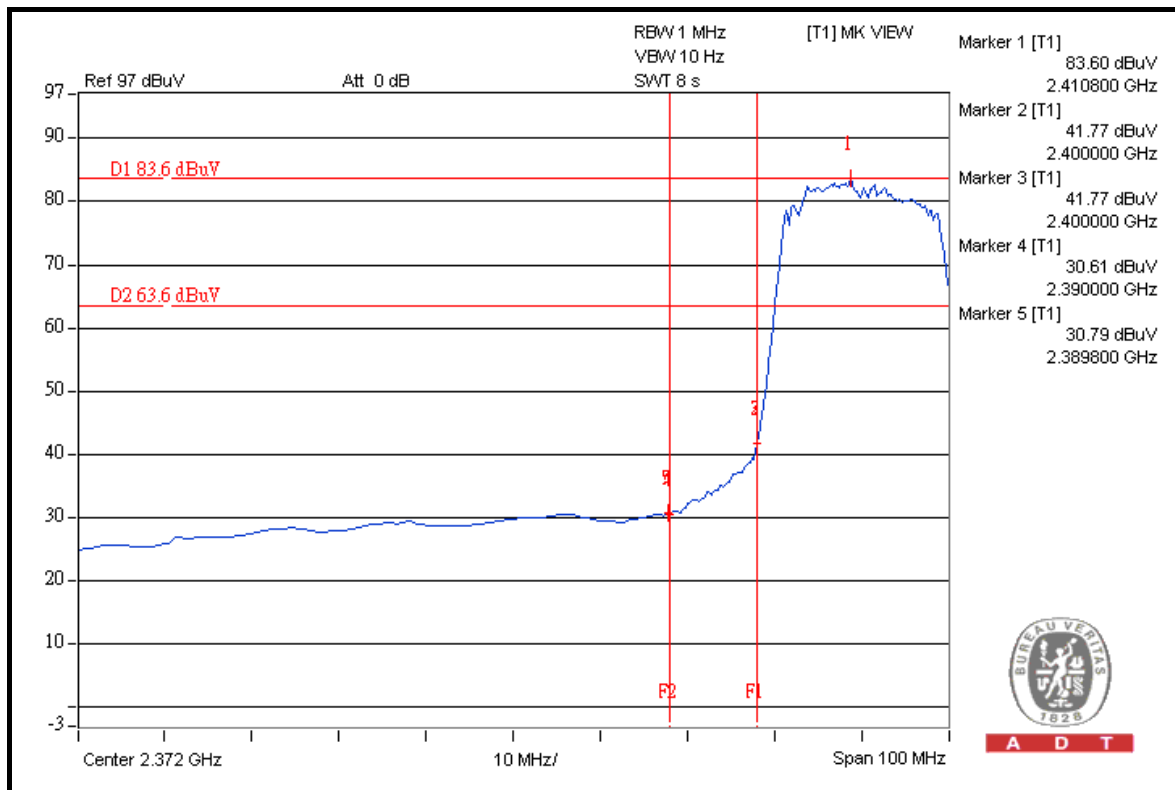
- Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission.
Please check following 3 pages.
- Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



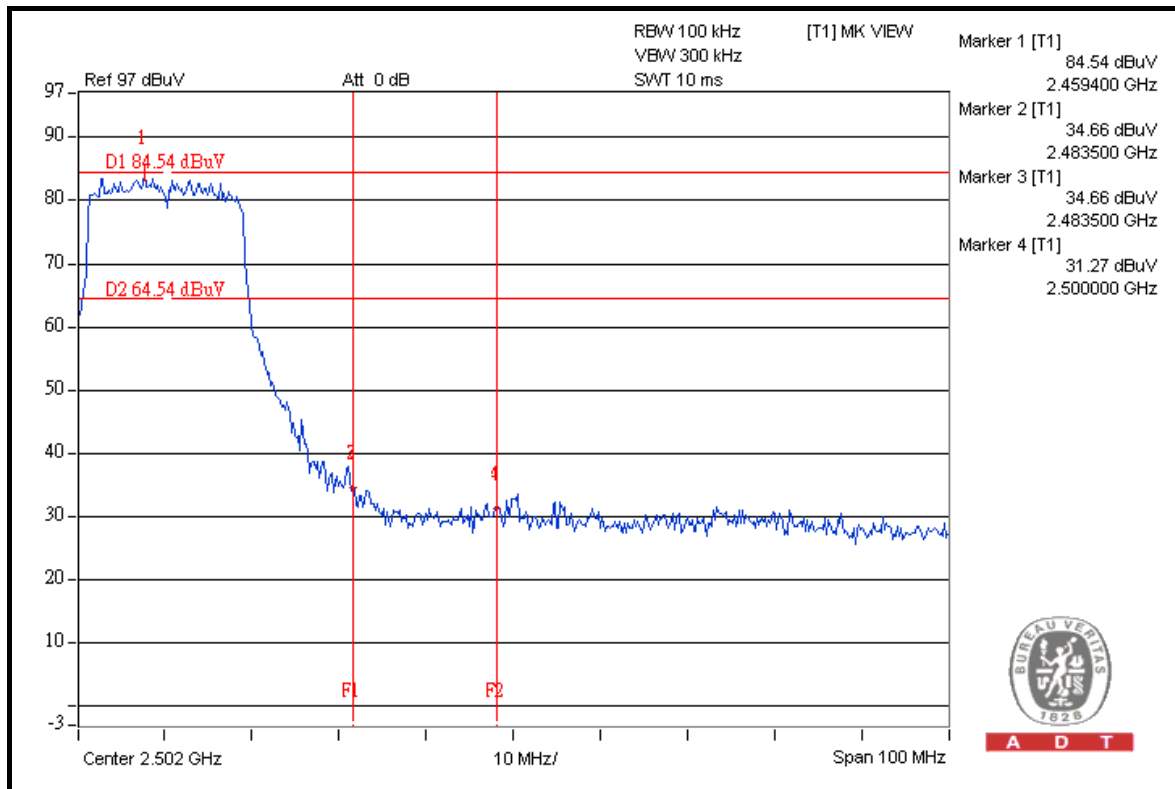
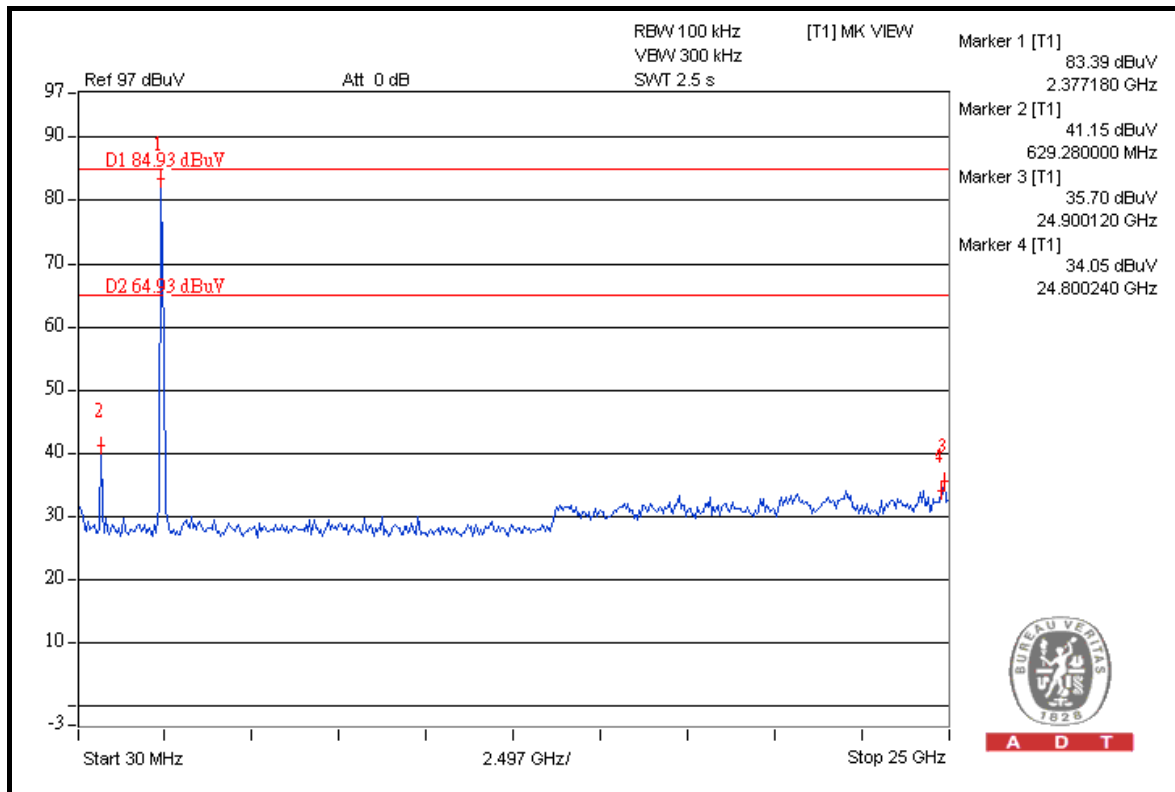
A D T



A D T



A D T





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)	111.1	44.70	66.40	74.00
2422.00 (AV)	97.7	45.27	52.43	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

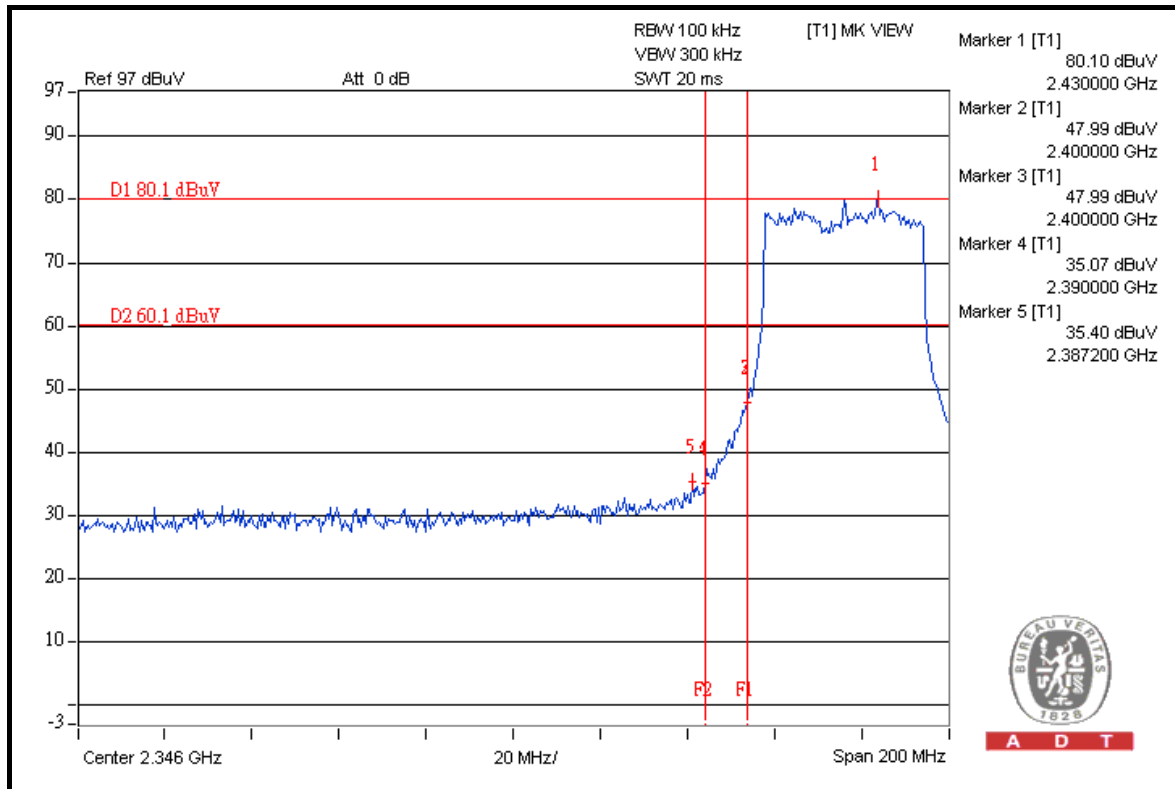
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2452.00 (PK)	111.0	46.05	64.95	74.00
2452.00 (AV)	97.6	46.87	50.73	54.00

NOTE:

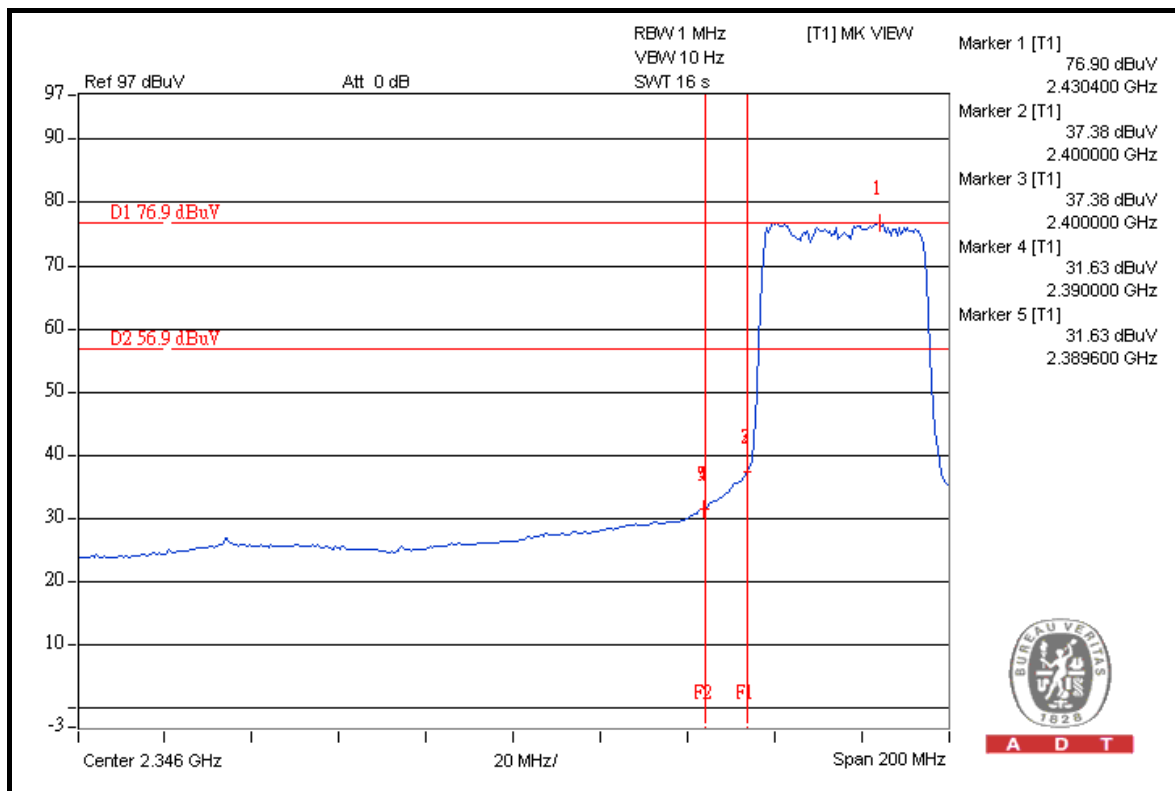
- Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission.
Please check following 3 pages.
- Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



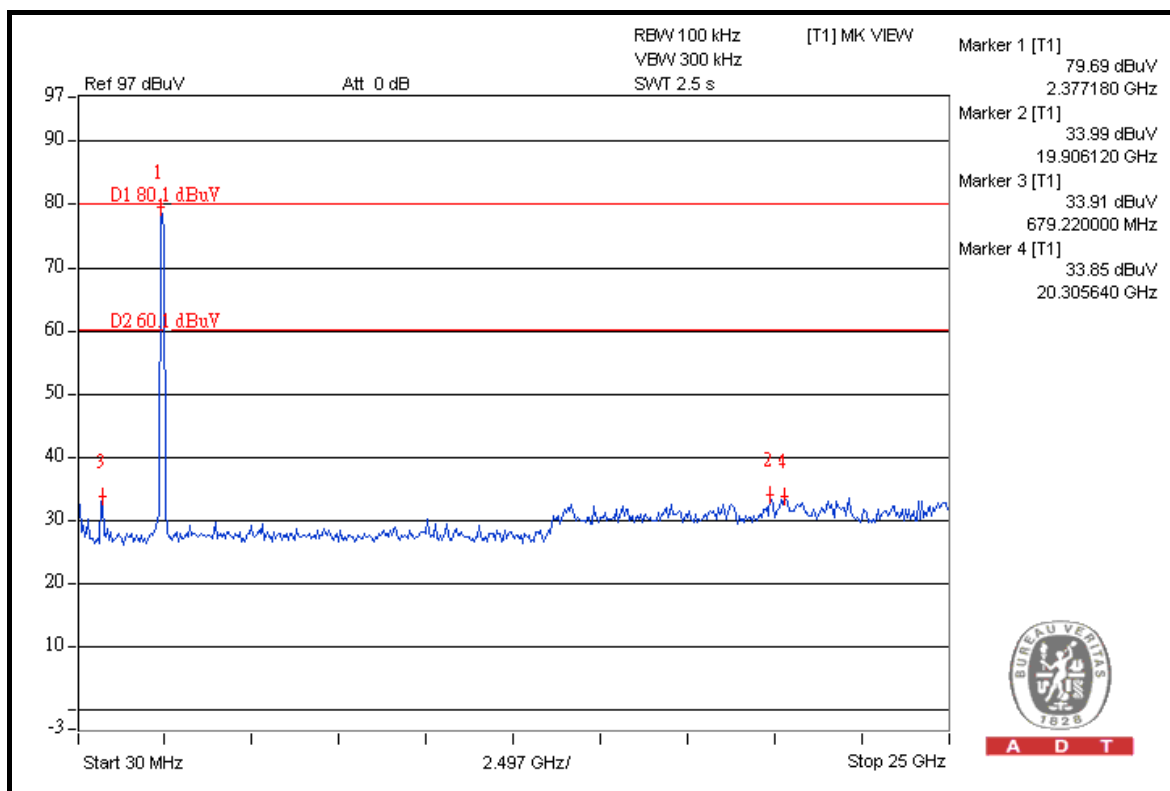
A D T



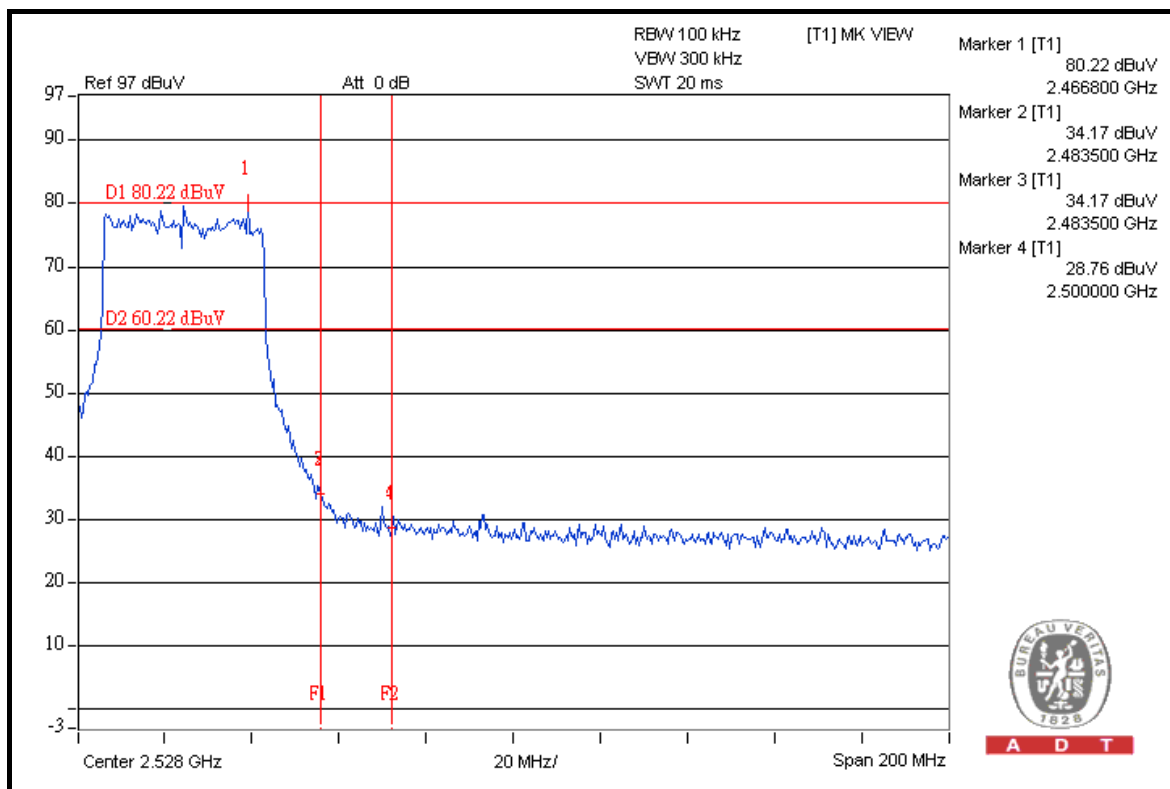
A D T



A D T



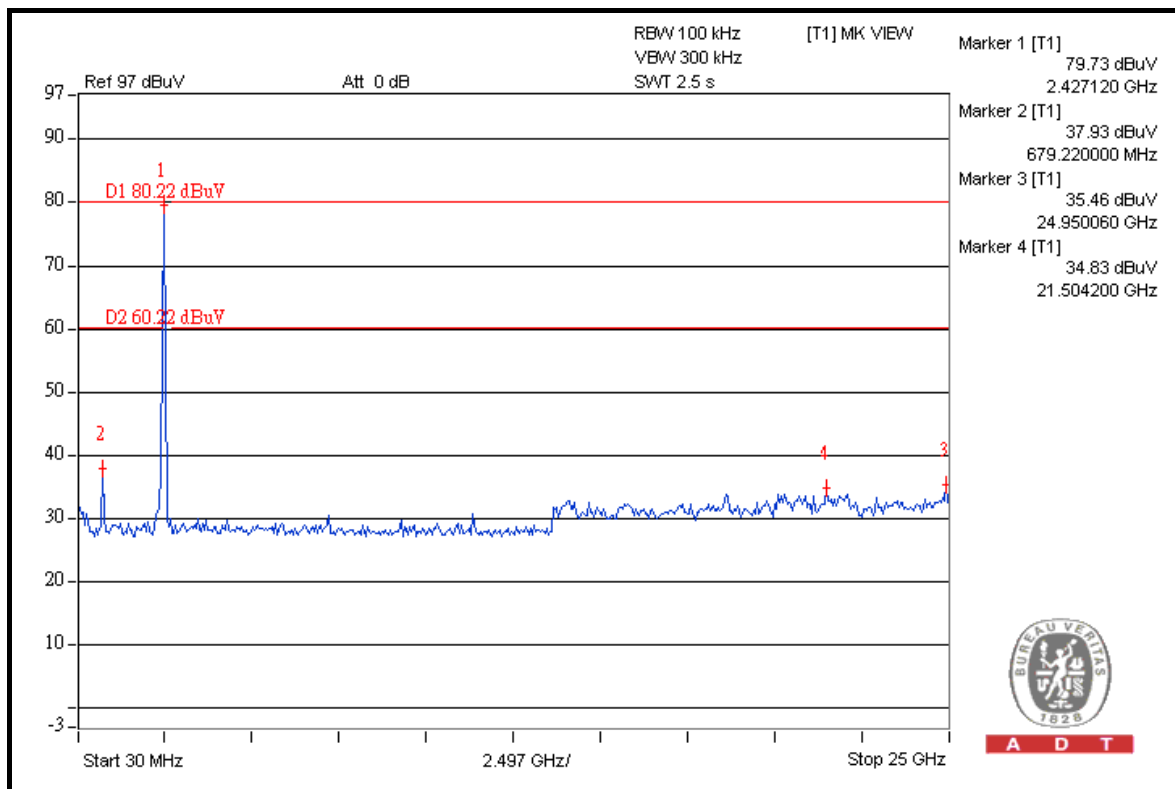
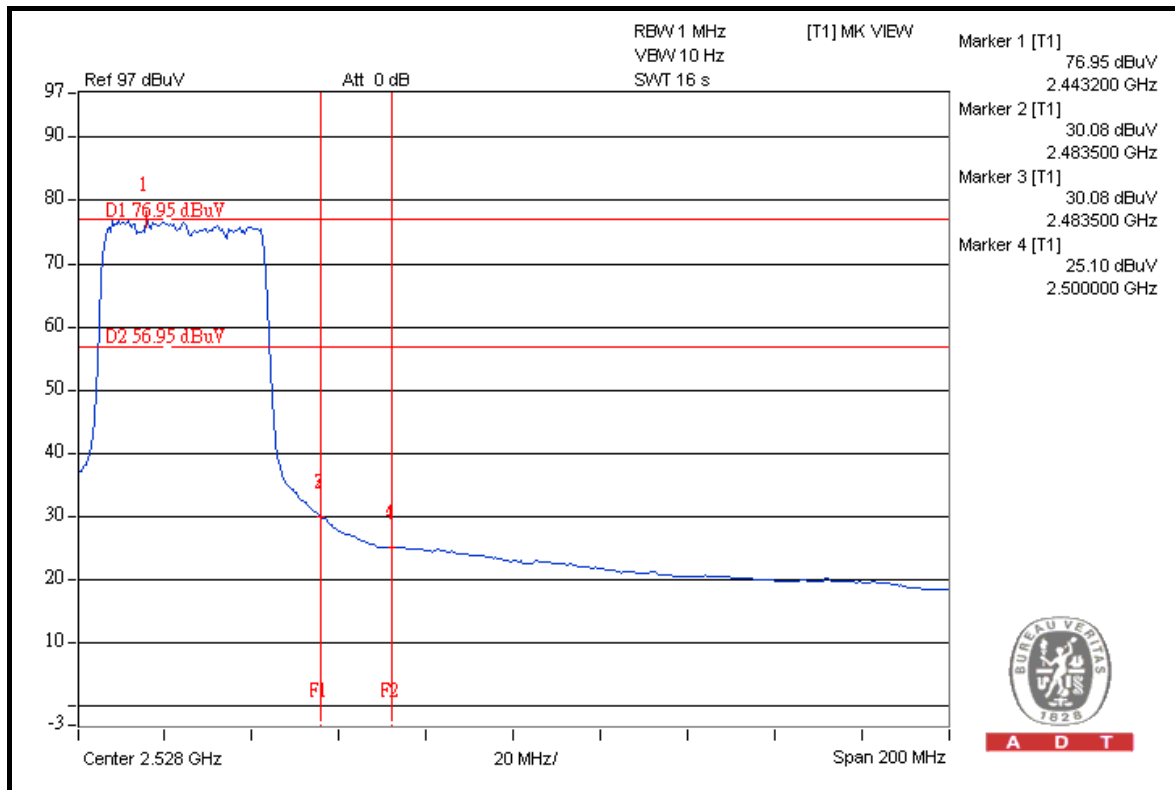
A D T



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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.

**A D T**

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. 29, 2009	Dec. 28, 2010
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Dec. 31, 2009	Dec. 30, 2010
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 27, 2010	Apr. 26, 2011
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-405	Feb. 03, 2010	Feb. 02, 2011
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 25, 2009	Dec. 24, 2010
Preamplifier Agilent	8447D	2944A10633	Nov. 10, 2009	Nov. 09, 2010
Preamplifier Agilent	8449B	3008A01964	Nov. 09, 2009	Nov. 08, 2010
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	238141/4	May 14, 2010	May 13, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	12738/6	May 14, 2010	May 13, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100.	TT93021703	NA	NA
Turn Table Controller ADT.	SC100.	SC93021703	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 3.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 988962.
5. The IC Site Registration No. is IC 7450F-3.

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.

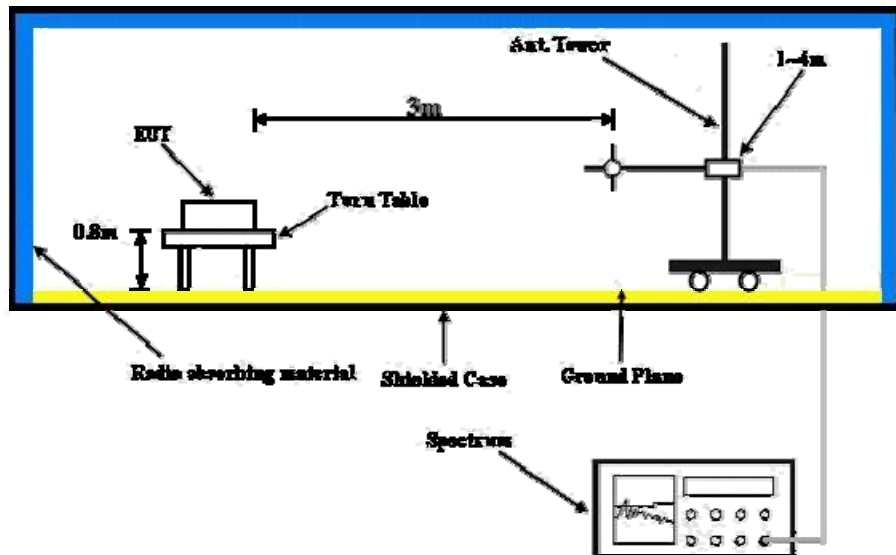
NOTE:

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



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5.1.7 TEST RESULTS

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	74.7 PK	89.5	-14.8	1.09 H	291	36.70	38.00
2	#5725.00	55.1 AV	76.8	-21.7	1.09 H	291	17.10	38.00
3	*5745.00	109.5 PK			1.09 H	291	71.50	38.00
4	*5745.00	96.8 AV			1.09 H	291	58.80	38.00
5	11490.00	57.6 PK	74.0	-16.4	1.10 H	251	9.60	48.00
6	11490.00	45.0 AV	54.0	-9.0	1.10 H	251	-3.00	48.00
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	79.9 PK	94.7	-14.8	1.13 V	215	41.90	38.00
2	#5725.00	60.4 AV	81.3	-20.9	1.13 V	215	22.40	38.00
3	*5745.00	114.7 PK			1.13 V	215	76.70	38.00
4	*5745.00	101.3 AV			1.13 V	215	63.30	38.00
5	11490.00	59.1 PK	74.0	-14.9	1.20 V	66	11.10	48.00
6	11490.00	47.1 AV	54.0	-6.9	1.20 V	66	-0.90	48.00

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5785MHz (Channel 157)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	110.2 PK			1.01 H	225	72.20	38.00
2	*5785.00	97.5 AV			1.01 H	225	59.50	38.00
3	11570.00	58.1 PK	74.0	-15.9	1.09 H	67	10.20	47.90
4	11570.00	45.1 AV	54.0	-8.9	1.09 H	67	-2.80	47.90
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	*5785.00	115.5 PK			1.06 V	333	77.50	38.00
2	*5785.00	102.2 AV			1.06 V	333	64.20	38.00
3	11570.00	59.3 PK	74.0	-14.7	1.07 V	21	11.40	47.90
4	11570.00	47.8 AV	54.0	-6.2	1.09 V	21	-0.10	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5825MHz (Channel 165)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	109.7 PK			1.15 H	251	71.60	38.10
2	*5825.00	97.0 AV			1.15 H	251	58.90	38.10
3	#5850.00	59.5 PK	89.7	-30.2	1.15 H	251	21.30	38.20
4	#5850.00	44.1 AV	77.0	-32.9	1.15 H	251	5.90	38.20
5	11650.00	58.0 PK	74.0	-16.0	1.09 H	81	10.30	47.70
6	11650.00	46.4 AV	54.0	-7.6	1.09 H	81	-1.30	47.70
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	115.0 PK			1.12 V	154	76.90	38.10
2	*5825.00	101.7 AV			1.12 V	154	63.60	38.10
3	#5850.00	65.0 PK	95.0	-30.0	1.12 V	154	26.80	38.20
4	#5850.00	49.7 AV	81.7	-32.0	1.12 V	154	11.50	38.20
5	11650.00	58.4 PK	74.0	-15.6	1.08 V	63	10.70	47.70
6	11650.00	46.8 AV	54.0	-7.2	1.08 V	63	-0.90	47.70

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	77.3 PK	94.7	-17.4	1.05 H	210	39.30	38.00
2	#5725.00	56.6 AV	81.4	-24.8	1.05 H	210	18.60	38.00
3	*5745.00	114.7 PK			1.05 H	210	76.70	38.00
4	*5745.00	101.4 AV			1.05 H	210	63.40	38.00
5	11490.00	59.2 PK	74.0	-14.8	1.06 H	37	11.20	48.00
6	11490.00	47.2 AV	54.0	-6.8	1.06 H	37	-0.80	48.00
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	67.1 PK	84.7	-17.6	1.22 V	73	29.10	38.00
2	#5725.00	46.3 AV	71.1	-24.8	1.22 V	73	8.30	38.00
3	*5745.00	104.7 PK			1.22 V	73	66.70	38.00
4	*5745.00	91.1 AV			1.22 V	73	53.10	38.00
5	11490.00	59.1 PK	74.0	-14.9	1.10 V	67	11.10	48.00
6	11490.00	47.1 AV	54.0	-6.9	1.10 V	67	-0.90	48.00

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5785MHz (Channel 157)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	115.4 PK			1.22 H	210	77.40	38.00
2	*5785.00	102.1 AV			1.22 H	210	64.10	38.00
3	11570.00	59.1 PK	74.0	-14.9	1.04 H	63	11.20	47.90
4	11570.00	47.1 AV	54.0	-6.9	1.04 H	63	-0.80	47.90
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	*5785.00	105.4 PK			1.08 V	66	67.40	38.00
2	*5785.00	91.8 AV			1.08 V	66	53.80	38.00
3	11570.00	58.8 PK	74.0	-15.2	1.33 V	73	10.90	47.90
4	11570.00	46.1 AV	54.0	-7.9	1.33 V	73	-1.80	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5825MHz (Channel 165)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	115.8 PK			1.33 H	18	77.70	38.10
2	*5825.00	102.5 AV			1.33 H	18	64.40	38.10
3	#5850.00	58.8 PK	95.8	-37.0	1.33 H	18	20.60	38.20
4	#5850.00	42.5 AV	82.5	-40.0	1.33 H	18	4.30	38.20
5	11650.00	59.2 PK	74.0	-14.8	1.22 H	36	11.50	47.70
6	11650.00	47.1 AV	54.0	-6.9	1.22 H	36	-0.60	47.70
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	105.6 PK			1.22 V	45	67.50	38.10
2	*5825.00	92.0 AV			1.22 V	45	53.90	38.10
3	#5850.00	48.4 PK	85.6	-37.2	1.22 V	45	10.20	38.20
4	#5850.00	32.1 AV	72.0	-39.9	1.22 V	45	-6.10	38.20
5	11650.00	58.7 PK	74.0	-15.3	1.08 V	57	11.00	47.70
6	11650.00	47.1 AV	54.0	-6.9	1.08 V	57	-0.60	47.70

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	65.2 PK	82.1	-16.9	1.07 H	37	27.20	38.00
2	#5725.00	43.9 AV	68.8	-24.9	1.07 H	37	5.90	38.00
3	*5745.00	102.1 PK			1.07 H	37	64.10	38.00
4	*5745.00	88.8 AV			1.07 H	37	50.80	38.00
5	11490.00	57.6 PK	74.0	-16.4	1.03 H	25	9.60	48.00
6	11490.00	46.1 AV	54.0	-7.9	1.03 H	25	-1.90	48.00
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	78.1 PK	95.8	-17.7	1.22 V	69	40.10	38.00
2	#5725.00	57.4 AV	82.3	-24.9	1.22 V	69	19.40	38.00
3	*5745.00	115.8 PK			1.22 V	69	77.80	38.00
4	*5745.00	102.3 AV			1.22 V	69	64.30	38.00
5	11490.00	57.8 PK	74.0	-16.2	1.07 V	63	9.80	48.00
6	11490.00	45.1 AV	54.0	-8.9	1.07 V	63	-2.90	48.00

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5785MHz (Channel 157)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	102.8 PK			1.24 H	76	64.80	38.00
2	*5785.00	89.5 AV			1.24 H	76	51.50	38.00
3	11570.00	57.3 PK	74.0	-16.7	1.29 H	163	9.40	47.90
4	11570.00	44.4 AV	54.0	-9.6	1.29 H	163	-3.50	47.90
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	*5785.00	116.6 PK			1.14 V	69	78.60	38.00
2	*5785.00	103.0 AV			1.14 V	69	65.00	38.00
3	11570.00	58.2 PK	74.0	-15.8	1.24 V	71	10.30	47.90
4	11570.00	45.2 AV	54.0	-8.8	1.24 V	71	-2.70	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5825MHz (Channel 165)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	102.9 PK			1.07 H	63	64.80	38.10
2	*5825.00	89.6 AV			1.07 H	63	51.50	38.10
3	#5850.00	47.8 PK	82.9	-35.1	1.07 H	63	9.60	38.20
4	#5850.00	32.0 AV	69.6	-37.6	1.07 H	63	-6.20	38.20
5	11650.00	58.4 PK	74.0	-15.6	1.21 H	77	10.70	47.70
6	11650.00	46.0 AV	54.0	-8.0	1.21 H	77	-1.70	47.70
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	116.8 PK			1.04 V	57	78.70	38.10
2	*5825.00	103.1 AV			1.04 V	57	65.00	38.10
3	#5850.00	60.0 PK	96.8	-36.8	1.04 V	57	21.80	38.20
4	#5850.00	43.7 AV	83.1	-39.4	1.04 V	57	5.50	38.20
5	11650.00	58.3 PK	74.0	-15.7	1.20 V	99	10.60	47.70
6	11650.00	45.3 AV	54.0	-8.7	1.20 V	99	-2.40	47.70

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	76.2 PK	96.3	-20.1	1.17 H	78	38.20	38.00
2	#5725.00	57.3 AV	82.8	-25.5	1.17 H	78	19.30	38.00
3	*5745.00	116.3 PK			1.17 H	78	78.30	38.00
4	*5745.00	102.8 AV			1.17 H	78	64.80	38.00
5	11490.00	55.3 PK	74.0	-18.7	1.07 H	68	7.30	48.00
6	11490.00	43.4 AV	54.0	-10.6	1.07 H	68	-4.60	48.00
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	60.0 PK	80.7	-20.7	1.08 V	291	22.00	38.00
2	#5725.00	40.9 AV	68.7	-27.8	1.08 V	291	2.90	38.00
3	*5745.00	100.7 PK			1.08 V	291	62.70	38.00
4	*5745.00	88.7 AV			1.08 V	291	50.70	38.00
5	11490.00	54.3 PK	74.0	-19.7	1.34 V	188	6.30	48.00
6	11490.00	43.1 AV	54.0	-10.9	1.34 V	188	-4.90	48.00

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5785MHz (Channel 157)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	116.3 PK			1.08 H	67	78.30	38.00
2	*5785.00	103.6 AV			1.08 H	67	65.60	38.00
3	11570.00	55.3 PK	74.0	-18.7	1.10 H	156	7.40	47.90
4	11570.00	43.8 AV	54.0	-10.2	1.10 H	156	-4.10	47.90
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	*5785.00	101.5 PK			1.19 V	18	63.50	38.00
2	*5785.00	89.7 AV			1.19 V	18	51.70	38.00
3	11570.00	54.1 PK	74.0	-19.9	1.07 V	212	6.20	47.90
4	11570.00	42.6 AV	54.0	-11.4	1.07 V	212	-5.30	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5825MHz (Channel 165)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	116.2 PK			1.10 H	25	78.10	38.10
2	*5825.00	102.7 AV			1.10 H	25	64.60	38.10
3	#5850.00	57.9 PK	96.2	-38.3	1.10 H	25	19.70	38.20
4	#5850.00	41.0 AV	82.7	-41.7	1.10 H	25	2.80	38.20
5	11650.00	55.4 PK	74.0	-18.6	1.18 H	231	7.70	47.70
6	11650.00	44.1 AV	54.0	-9.9	1.18 H	231	-3.60	47.70
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	101.4 PK			1.14 V	256	63.30	38.10
2	*5825.00	89.5 AV			1.14 V	256	51.40	38.10
3	#5850.00	43.1 PK	81.4	-38.3	1.14 V	256	4.90	38.20
4	#5850.00	31.0 AV	69.5	-38.5	1.14 V	256	-7.20	38.20
5	11650.00	54.9 PK	74.0	-19.1	1.11 V	144	7.20	47.70
6	11650.00	44.1 AV	54.0	-9.9	1.11 V	144	-3.60	47.70

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.



A D T

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	75.6 PK	90.5	-14.9	1.06 H	338	37.60	38.00
2	#5725.00	55.9 AV	77.8	-21.9	1.06 H	338	17.90	38.00
3	*5745.00	110.5 PK			1.06 H	338	72.50	38.00
4	*5745.00	97.8 AV			1.06 H	338	59.80	38.00
5	11490.00	58.6 PK	74.0	-15.4	1.05 H	211	10.60	48.00
6	11490.00	45.9 AV	54.0	-8.1	1.05 H	211	-2.10	48.00
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	80.9 PK	95.8	-14.9	1.10 V	234	42.90	38.00
2	#5725.00	61.3 AV	82.4	-21.1	1.10 V	234	23.30	38.00
3	*5745.00	115.8 PK			1.10 V	234	77.80	38.00
4	*5745.00	102.4 AV			1.10 V	234	64.40	38.00
5	11490.00	60.1 PK	74.0	-13.9	1.18 V	32	12.10	48.00
6	11490.00	47.7 AV	54.0	-6.3	1.18 V	32	-0.30	48.00

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5785MHz (Channel 157)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	110.8 PK			1.05 H	331	72.80	38.00
2	*5785.00	98.1 AV			1.05 H	331	60.10	38.00
3	11570.00	58.9 PK	74.0	-15.1	1.06 H	228	11.00	47.90
4	11570.00	46.2 AV	54.0	-7.8	1.06 H	228	-1.70	47.90
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	*5785.00	116.1 PK			1.09 V	236	78.10	38.00
2	*5785.00	102.8 AV			1.09 V	236	64.80	38.00
3	11570.00	60.1 PK	74.0	-13.9	1.11 V	35	12.20	47.90
4	11570.00	47.6 AV	54.0	-6.4	1.11 V	35	-0.30	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5825MHz (Channel 165)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	110.4 PK			1.05 H	332	72.30	38.10
2	*5825.00	97.8 AV			1.05 H	332	59.70	38.10
3	#5850.00	60.1 PK	90.4	-30.3	1.05 H	332	21.90	38.20
4	#5850.00	44.7 AV	77.8	-33.1	1.05 H	332	6.50	38.20
5	11650.00	59.3 PK	74.0	-14.7	1.08 H	59	11.60	47.70
6	11650.00	46.6 AV	54.0	-7.4	1.08 H	59	-1.10	47.70
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	115.8 PK			1.10 V	234	77.70	38.10
2	*5825.00	102.5 AV			1.10 V	234	64.40	38.10
3	#5850.00	65.6 PK	95.8	-30.2	1.10 V	234	27.40	38.20
4	#5850.00	50.2 AV	82.5	-32.3	1.10 V	234	12.00	38.20
5	11650.00	60.4 PK	74.0	-13.6	1.12 V	59	12.70	47.70
6	11650.00	48.0 AV	54.0	-6.0	1.12 V	59	0.30	47.70

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	79.6 PK	97.0	-17.4	1.09 H	216	41.60	38.00
2	#5725.00	58.9 AV	83.6	-24.7	1.09 H	216	20.90	38.00
3	*5745.00	117.0 PK			1.09 H	216	79.00	38.00
4	*5745.00	103.6 AV			1.09 H	216	65.60	38.00
5	11490.00	60.6 PK	74.0	-13.4	1.09 H	52	12.60	48.00
6	11490.00	48.1 AV	54.0	-5.9	1.09 H	52	0.10	48.00
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	69.4 PK	86.9	-17.5	1.28 V	52	31.40	38.00
2	#5725.00	48.5 AV	73.4	-24.9	1.28 V	52	10.50	38.00
3	*5745.00	106.9 PK			1.28 V	52	68.90	38.00
4	*5745.00	93.4 AV			1.28 V	52	55.40	38.00
5	11490.00	60.1 PK	74.0	-13.9	1.10 V	42	12.10	48.00
6	11490.00	47.6 AV	54.0	-6.4	1.10 V	42	-0.40	48.00

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5785MHz (Channel 157)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	117.1 PK			1.09 H	220	79.10	38.00
2	*5785.00	103.8 AV			1.09 H	220	65.80	38.00
3	11570.00	60.5 PK	74.0	-13.5	1.01 H	254	12.60	47.90
4	11570.00	48.0 AV	54.0	-6.0	1.01 H	254	0.10	47.90
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	*5785.00	107.2 PK			1.25 V	56	69.20	38.00
2	*5785.00	93.6 AV			1.25 V	56	55.60	38.00
3	11570.00	60.3 PK	74.0	-13.7	1.08 V	51	12.40	47.90
4	11570.00	47.8 AV	54.0	-6.2	1.08 V	51	-0.10	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5825MHz (Channel 165)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	117.5 PK			1.08 H	221	79.40	38.10
2	*5825.00	104.2 AV			1.08 H	221	66.10	38.10
3	#5850.00	60.6 PK	97.5	-36.9	1.08 H	221	22.40	38.20
4	#5850.00	44.3 AV	84.2	-39.9	1.08 H	221	6.10	38.20
5	11650.00	61.4 PK	74.0	-12.6	1.05 H	88	13.70	47.70
6	11650.00	49.1 AV	54.0	-4.9	1.05 H	88	1.40	47.70
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	107.4 PK			1.25 V	48	69.30	38.10
2	*5825.00	93.8 AV			1.25 V	48	55.70	38.10
3	#5850.00	50.0 PK	87.4	-37.4	1.25 V	48	11.80	38.20
4	#5850.00	33.8 AV	73.8	-40.0	1.25 V	48	-4.40	38.20
5	11650.00	60.5 PK	74.0	-13.5	1.08 V	34	12.80	47.70
6	11650.00	48.1 AV	54.0	-5.9	1.08 V	34	0.40	47.70

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	67.8 PK	84.8	-17.0	1.15 H	56	29.80	38.00
2	#5725.00	46.5 AV	71.5	-25.0	1.15 H	56	8.50	38.00
3	*5745.00	104.8 PK			1.15 H	56	66.80	38.00
4	*5745.00	91.5 AV			1.15 H	56	53.50	38.00
5	11490.00	58.5 PK	74.0	-15.5	1.03 H	96	10.50	48.00
6	11490.00	45.9 AV	54.0	-8.1	1.03 H	96	-2.10	48.00
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	80.8 PK	98.6	-17.8	1.29 V	35	42.80	38.00
2	#5725.00	60.1 AV	85.1	-25.0	1.29 V	35	22.10	38.00
3	*5745.00	118.6 PK			1.29 V	35	80.60	38.00
4	*5745.00	105.1 AV			1.29 V	35	67.10	38.00
5	11490.00	58.8 PK	74.0	-15.2	1.09 V	82	10.80	48.00
6	11490.00	46.0 AV	54.0	-8.0	1.09 V	82	-2.00	48.00

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5785MHz (Channel 157)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	105.0 PK			1.13 H	61	67.00	38.00
2	*5785.00	91.8 AV			1.13 H	61	53.80	38.00
3	11570.00	58.5 PK	74.0	-15.5	1.14 H	102	10.60	47.90
4	11570.00	45.7 AV	54.0	-8.3	1.14 H	102	-2.20	47.90
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	*5785.00	119.0 PK			1.25 V	35	81.00	38.00
2	*5785.00	105.4 AV			1.25 V	35	67.40	38.00
3	11570.00	59.8 PK	74.0	-14.2	1.10 V	34	11.90	47.90
4	11570.00	46.9 AV	54.0	-7.1	1.10 V	34	-1.00	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5825MHz (Channel 165)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	105.1 PK			1.14 H	62	67.00	38.10
2	*5825.00	91.9 AV			1.14 H	62	53.80	38.10
3	#5850.00	50.0 PK	85.1	-35.1	1.14 H	62	11.80	38.20
4	#5850.00	34.1 AV	71.9	-37.8	1.14 H	62	-4.10	38.20
5	11650.00	60.1 PK	74.0	-13.9	1.14 H	22	12.40	47.70
6	11650.00	47.4 AV	54.0	-6.6	1.14 H	22	-0.30	47.70
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	119.2 PK			1.21 V	40	81.10	38.10
2	*5825.00	105.6 AV			1.21 V	40	67.50	38.10
3	#5850.00	62.1 PK	99.2	-37.1	1.21 V	40	23.90	38.20
4	#5850.00	45.8 AV	85.6	-39.8	1.21 V	40	7.60	38.20
5	11650.00	59.8 PK	74.0	-14.2	1.14 V	22	12.10	47.70
6	11650.00	47.1 AV	54.0	-6.9	1.14 V	22	-0.60	47.70

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	80.2 PK	100.1	-19.9	1.01 H	11	42.20	38.00
2	#5725.00	61.0 AV	86.9	-25.9	1.01 H	11	23.00	38.00
3	*5745.00	120.1 PK			1.01 H	11	82.10	38.00
4	*5745.00	106.9 AV			1.01 H	11	68.90	38.00
5	11490.00	55.7 PK	74.0	-18.3	1.21 H	219	7.70	48.00
6	11490.00	44.6 AV	54.0	-9.4	1.21 H	219	-3.40	48.00
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	64.9 PK	85.3	-20.4	1.16 V	333	26.90	38.00
2	#5725.00	45.7 AV	73.5	-27.8	1.16 V	333	7.70	38.00
3	*5745.00	105.3 PK			1.16 V	333	67.30	38.00
4	*5745.00	93.5 AV			1.16 V	333	55.50	38.00
5	11490.00	55.8 PK	74.0	-18.2	1.01 V	247	7.80	48.00
6	11490.00	44.6 AV	54.0	-9.4	1.01 V	247	-3.40	48.00

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5785MHz (Channel 157)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	120.1 PK			1.02 H	10	82.10	38.00
2	*5785.00	107.5 AV			1.02 H	10	69.50	38.00
3	11570.00	57.2 PK	74.0	-16.8	1.00 H	158	9.30	47.90
4	11570.00	46.3 AV	54.0	-7.7	1.00 H	158	-1.60	47.90
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	*5785.00	105.3 PK			1.11 V	285	67.30	38.00
2	*5785.00	93.0 AV			1.11 V	285	55.00	38.00
3	11570.00	56.1 PK	74.0	-17.9	1.00 V	27	8.20	47.90
4	11570.00	43.3 AV	54.0	-10.7	1.00 V	27	-4.60	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5825MHz (Channel 165)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	120.3 PK			1.01 H	3	82.20	38.10
2	*5825.00	106.9 AV			1.01 H	3	68.80	38.10
3	#5850.00	62.2 PK	100.3	-38.1	1.01 H	3	24.00	38.20
4	#5850.00	45.3 AV	86.9	-41.6	1.01 H	3	7.10	38.20
5	11650.00	56.8 PK	74.0	-17.2	1.27 H	159	9.10	47.70
6	11650.00	45.6 AV	54.0	-8.4	1.27 H	159	-2.10	47.70
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	105.2 PK			1.22 V	150	67.10	38.10
2	*5825.00	93.1 AV			1.22 V	150	55.00	38.10
3	#5850.00	47.8 PK	85.2	-37.4	1.22 V	150	9.60	38.20
4	#5850.00	35.3 AV	73.1	-37.8	1.22 V	150	-2.90	38.20
5	11650.00	55.8 PK	74.0	-18.2	1.11 V	179	8.10	47.70
6	11650.00	45.7 AV	54.0	-8.3	1.11 V	179	-2.00	47.70

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.



A D T

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5755MHz (Channel 151)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	73.2 PK	85.0	-11.8	1.09 H	344	35.20	38.00
2	#5725.00	56.8 AV	72.5	-15.7	1.09 H	344	18.80	38.00
3	*5755.00	105.0 PK			1.09 H	344	67.00	38.00
4	*5755.00	92.5 AV			1.09 H	344	54.50	38.00
5	11510.00	59.2 PK	74.0	-14.8	1.02 H	58	11.20	48.00
6	11510.00	46.2 AV	54.0	-7.8	1.02 H	58	-1.80	48.00
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	78.5 PK	90.2	-11.7	1.14 V	232	40.50	38.00
2	#5725.00	62.0 AV	76.3	-14.3	1.14 V	232	24.00	38.00
3	*5755.00	110.2 PK			1.14 V	232	72.20	38.00
4	*5755.00	96.3 AV			1.14 V	232	58.30	38.00
5	11510.00	60.2 PK	74.0	-13.8	1.14 V	26	12.20	48.00
6	11510.00	47.3 AV	54.0	-6.7	1.14 V	26	-0.70	48.00

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5795MHz (Channel 159)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	105.3 PK			1.10 H	346	67.20	38.10
2	*5795.00	92.8 AV			1.10 H	346	54.70	38.10
3	#5850.00	58.6 PK	85.3	-26.7	1.10 H	346	20.40	38.20
4	#5850.00	40.8 AV	72.8	-32.0	1.10 H	346	2.60	38.20
5	11590.00	59.4 PK	74.0	-14.6	1.10 H	83	11.50	47.90
6	11590.00	46.6 AV	54.0	-7.4	1.10 H	83	-1.30	47.90
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	*5795.00	110.5 PK			1.15 V	234	72.40	38.10
2	*5795.00	96.6 AV			1.15 V	234	58.50	38.10
3	#5850.00	63.8 PK	90.5	-26.7	1.15 V	234	25.60	38.20
4	#5850.00	46.0 AV	76.6	-30.6	1.15 V	234	7.80	38.20
5	11590.00	59.9 PK	74.0	-14.1	1.10 V	29	12.00	47.90
6	11590.00	47.1 AV	54.0	-6.9	1.10 V	29	-0.80	47.90

- 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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5755MHz (Channel 151)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	82.7 PK	94.0	-11.3	1.14 H	215	44.70	38.00
2	#5725.00	66.2 AV	80.5	-14.3	1.14 H	215	28.20	38.00
3	*5755.00	114.0 PK			1.14 H	215	76.00	38.00
4	*5755.00	100.5 AV			1.14 H	215	62.50	38.00
5	11510.00	60.4 PK	74.0	-13.6	1.13 H	259	12.40	48.00
6	11510.00	47.8 AV	54.0	-6.2	1.13 H	259	-0.20	48.00
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	73.4 PK	84.2	-10.8	1.38 V	41	35.40	38.00
2	#5725.00	56.8 AV	70.8	-14.0	1.38 V	41	18.80	38.00
3	*5755.00	104.2 PK			1.38 V	41	66.20	38.00
4	*5755.00	90.8 AV			1.38 V	41	52.80	38.00
5	11510.00	60.6 PK	74.0	-13.4	1.09 V	262	12.60	48.00
6	11510.00	48.0 AV	54.0	-6.0	1.09 V	262	0.00	48.00

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5795MHz (Channel 159)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	114.4 PK			1.13 H	216	76.30	38.10
2	*5795.00	100.9 AV			1.13 H	216	62.80	38.10
3	#5850.00	68.1 PK	94.4	-26.3	1.13 H	216	29.90	38.20
4	#5850.00	50.3 AV	80.9	-30.6	1.13 H	216	12.10	38.20
5	11590.00	60.9 PK	74.0	-13.1	1.10 H	29	13.00	47.90
6	11590.00	48.3 AV	54.0	-5.7	1.10 H	29	0.40	47.90
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	*5795.00	104.6 PK			1.36 V	45	66.50	38.10
2	*5795.00	91.2 AV			1.36 V	45	53.10	38.10
3	#5850.00	58.3 PK	84.6	-26.3	1.36 V	45	20.10	38.20
4	#5850.00	40.6 AV	71.2	-30.6	1.36 V	45	2.40	38.20
5	11590.00	60.5 PK	74.0	-13.5	1.15 V	203	12.60	47.90
6	11590.00	47.9 AV	54.0	-6.1	1.15 V	203	0.00	47.90

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5755MHz (Channel 151)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	68.1 PK	81.9	-13.8	1.19 H	220	30.10	38.00
2	#5725.00	50.9 AV	67.0	-16.1	1.19 H	220	12.90	38.00
3	*5755.00	101.9 PK			1.19 H	220	63.90	38.00
4	*5755.00	87.0 AV			1.19 H	220	49.00	38.00
5	11510.00	59.6 PK	74.0	-14.4	1.04 H	25	11.60	48.00
6	11510.00	46.8 AV	54.0	-7.2	1.04 H	25	-1.20	48.00
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	82.5 PK	94.9	-12.4	1.35 V	32	44.50	38.00
2	#5725.00	65.5 AV	81.1	-15.6	1.35 V	32	27.50	38.00
3	*5755.00	114.9 PK			1.35 V	32	76.90	38.00
4	*5755.00	101.1 AV			1.35 V	32	63.10	38.00
5	11510.00	60.1 PK	74.0	-13.9	1.29 V	35	12.10	48.00
6	11510.00	47.3 AV	54.0	-6.7	1.29 V	35	-0.70	48.00

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5795MHz (Channel 159)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	102.2 PK			1.20 H	225	64.10	38.10
2	*5795.00	87.2 AV			1.20 H	225	49.10	38.10
3	#5850.00	55.8 PK	82.2	-26.4	1.20 H	225	17.60	38.20
4	#5850.00	38.2 AV	67.2	-29.0	1.20 H	225	0.00	38.20
5	11590.00	60.2 PK	74.0	-13.8	1.13 H	254	12.30	47.90
6	11590.00	47.5 AV	54.0	-6.5	1.13 H	254	-0.40	47.90
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	*5795.00	115.1 PK			1.31 V	29	77.00	38.10
2	*5795.00	101.3 AV			1.31 V	29	63.20	38.10
3	#5850.00	69.2 PK	95.1	-25.9	1.31 V	29	31.00	38.20
4	#5850.00	51.6 AV	81.3	-29.7	1.31 V	29	13.40	38.20
5	11590.00	60.5 PK	74.0	-13.5	1.08 V	46	12.60	47.90
6	11590.00	47.8 AV	54.0	-6.2	1.08 V	46	-0.10	47.90

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5755MHz (Channel 151)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	79.9 PK	97.3	-17.4	1.02 H	1	41.90	38.00
2	#5725.00	63.1 AV	83.6	-20.5	1.02 H	1	25.10	38.00
3	*5755.00	117.3 PK			1.02 H	1	79.30	38.00
4	*5755.00	103.6 AV			1.02 H	1	65.60	38.00
5	11510.00	56.9 PK	74.0	-17.1	1.11 H	310	8.90	48.00
6	11510.00	45.2 AV	54.0	-8.8	1.11 H	310	-2.80	48.00
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	65.8 PK	83.6	-17.8	1.30 V	296	27.80	38.00
2	#5725.00	49.7 AV	69.7	-20.0	1.30 V	296	11.70	38.00
3	*5755.00	103.6 PK			1.30 V	296	65.60	38.00
4	*5755.00	89.7 AV			1.30 V	296	51.70	38.00
5	11510.00	55.8 PK	74.0	-18.2	1.01 V	22	7.80	48.00
6	11510.00	45.0 AV	54.0	-9.0	1.01 V	22	-3.00	48.00

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.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5795MHz (Channel 159)	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH 1016 hPa	TESTED BY	Lori Chiu
TEST MODE	D		

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	117.6 PK			1.00 H	350	79.50	38.10
2	*5795.00	103.7 AV			1.00 H	350	65.60	38.10
3	#5850.00	59.7 PK	97.6	-37.9	1.00 H	350	21.50	38.20
4	#5850.00	42.8 AV	83.7	-40.9	1.00 H	350	4.60	38.20
5	11590.00	57.2 PK	74.0	-16.8	1.01 H	199	9.30	47.90
6	11590.00	45.9 AV	54.0	-8.1	1.01 H	199	-2.00	47.90
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	*5795.00	103.8 PK			1.33 V	200	65.70	38.10
2	*5795.00	89.8 AV			1.33 V	200	51.70	38.10
3	#5850.00	53.3 PK	83.8	-30.5	1.33 V	200	15.10	38.20
4	#5850.00	35.8 AV	69.8	-34.0	1.33 V	200	-2.40	38.20
5	11590.00	56.4 PK	74.0	-17.6	1.00 V	170	8.50	47.90
6	11590.00	45.1 AV	54.0	-8.9	1.00 V	170	-2.80	47.90

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.



A D T

BELOW 1GHz WORST-CASE DATA :

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1020 hPa	TESTED BY	Brad Wu
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	500.42	41.1 QP	46.0	-4.9	2.00 H	292	20.60	20.50
2	599.58	42.0 QP	46.0	-4.0	1.50 H	289	19.60	22.40
3	624.85	41.3 QP	46.0	-4.7	1.50 H	10	18.20	23.10
4	667.63	39.3 QP	46.0	-6.7	1.50 H	343	15.00	24.30
5	700.68	39.5 QP	46.0	-6.5	1.00 H	319	14.40	25.10
6	875.67	41.0 QP	46.0	-5.0	2.00 H	130	13.50	27.50
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	57.12	36.5 QP	40.0	-3.5	1.00 V	310	23.50	13.00
2	64.90	35.5 QP	40.0	-4.5	1.00 V	196	22.40	13.10
3	467.36	42.6 QP	46.0	-3.4	1.00 V	142	22.90	19.70
4	500.42	40.6 QP	46.0	-5.4	2.00 V	307	20.10	20.50
5	751.23	40.1 QP	46.0	-5.9	1.50 V	325	14.50	25.60
6	875.67	39.9 QP	46.0	-6.1	1.00 V	355	12.40	27.50

- 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.



A D T

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1020 hPa	TESTED BY	Brad Wu
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	160.17	36.0 QP	43.5	-7.5	2.00 H	259	21.60	14.40
2	467.36	39.9 QP	46.0	-6.1	2.00 H	319	20.20	19.70
3	500.42	41.3 QP	46.0	-4.7	2.00 H	340	20.80	20.50
4	624.85	40.1 QP	46.0	-5.9	2.00 H	10	17.00	23.10
5	733.73	39.9 QP	46.0	-6.1	1.00 H	307	14.50	25.40
6	875.67	40.8 QP	46.0	-5.2	1.50 H	328	13.30	27.50
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	59.06	36.2 QP	40.0	-3.8	1.00 V	106	23.30	12.90
2	467.36	41.7 QP	46.0	-4.3	1.00 V	10	22.00	19.70
3	500.42	40.4 QP	46.0	-5.6	1.00 V	289	19.90	20.50
4	599.58	38.9 QP	46.0	-7.1	1.50 V	322	16.50	22.40
5	733.73	37.6 QP	46.0	-8.4	1.00 V	331	12.20	25.40
6	1000.00	44.3 QP	54.0	-9.7	2.00 V	25	15.50	28.80

- 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.



A D T

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1020 hPa	TESTED BY	Brad Wu
TEST MODE	C		

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	500.42	41.2 QP	46.0	-4.8	2.00 H	250	20.70	20.50
2	599.58	42.9 QP	46.0	-3.1	1.50 H	331	20.50	22.40
3	624.85	41.0 QP	46.0	-5.0	1.50 H	10	17.90	23.10
4	667.63	40.0 QP	46.0	-6.0	1.50 H	343	15.70	24.30
5	733.73	39.5 QP	46.0	-6.5	1.00 H	301	14.10	25.40
6	875.67	40.2 QP	46.0	-5.8	2.00 H	16	12.70	27.50
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	59.06	36.8 QP	40.0	-3.2	1.00 V	304	23.90	12.90
2	62.95	36.4 QP	40.0	-3.6	1.00 V	130	23.40	13.00
3	467.36	42.7 QP	46.0	-3.3	1.00 V	154	23.00	19.70
4	500.42	39.4 QP	46.0	-6.6	2.00 V	313	18.90	20.50
5	599.58	38.9 QP	46.0	-7.1	1.50 V	322	16.50	22.40
6	875.67	39.9 QP	46.0	-6.1	1.00 V	10	12.40	27.50

- 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.



A D T

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5745 MHz (Channel 149)	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1020 hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	61.01	34.5 QP	40.0	-5.5	1.50 H	172	21.50	13.00
2	467.36	40.1 QP	46.0	-5.9	1.50 H	73	20.40	19.70
3	599.58	41.9 QP	46.0	-4.1	1.50 H	349	19.50	22.40
4	624.85	41.5 QP	46.0	-4.5	1.50 H	10	18.40	23.10
5	733.73	40.1 QP	46.0	-5.9	1.00 H	304	14.70	25.40
6	875.67	40.5 QP	46.0	-5.5	1.50 H	52	13.00	27.50
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	36.4 QP	40.0	-3.6	1.00 V	328	23.40	13.00
2	467.36	42.7 QP	46.0	-3.3	1.00 V	169	23.00	19.70
3	500.42	39.6 QP	46.0	-6.4	2.00 V	4	19.10	20.50
4	599.58	38.9 QP	46.0	-7.1	1.00 V	295	16.50	22.40
5	624.85	38.2 QP	46.0	-7.8	1.50 V	325	15.10	23.10
6	875.67	41.2 QP	46.0	-4.8	1.50 V	1	13.70	27.50

- 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 (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:** 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
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 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Sep. 24, 2009	Sep. 23, 2010
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 31, 2009	Dec. 30, 2010
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Aug. 24, 2009	Aug. 23, 2010
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jul. 29, 2009	Jul. 28, 2010
Software ADT	ADT_Conc_ 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 2.
3. The VCCI Site Registration No. is C-2047.

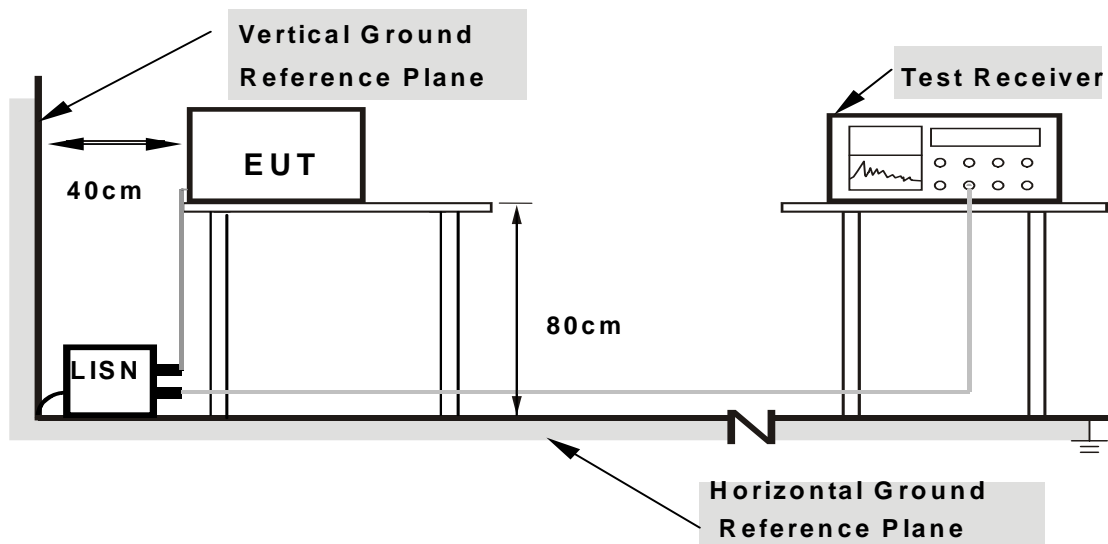
5.2.3 TEST PROCEDURES

- 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.

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

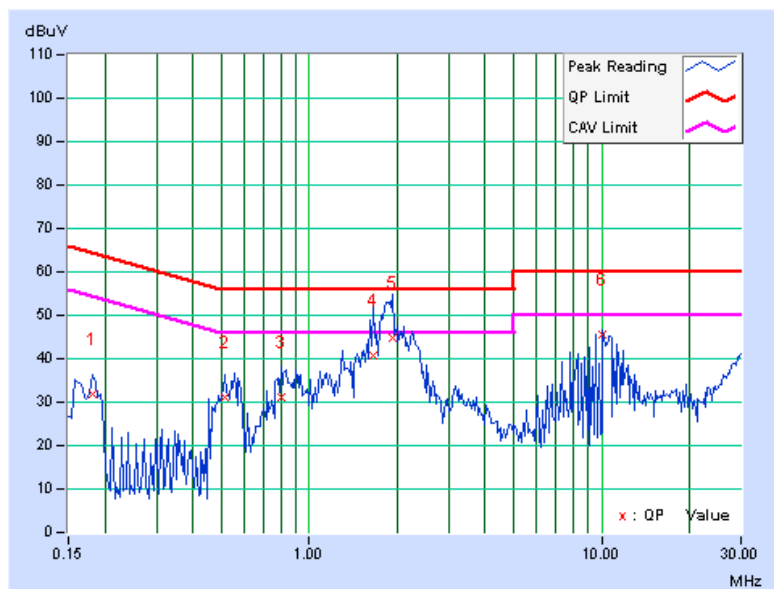
CONDUCTED WORST-CASE DATA :

802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.16	31.75	-	31.91	-	64.43	54.43	-32.52	-
2	0.517	0.19	30.90	-	31.09	-	56.00	46.00	-24.91	-
3	0.802	0.21	31.08	-	31.29	-	56.00	46.00	-24.71	-
4	1.664	0.28	40.52	-	40.80	-	56.00	46.00	-15.20	-
5	1.922	0.30	44.43	-	44.73	-	56.00	46.00	-11.27	-
6	10.035	0.35	45.07	-	45.42	-	60.00	50.00	-14.58	-

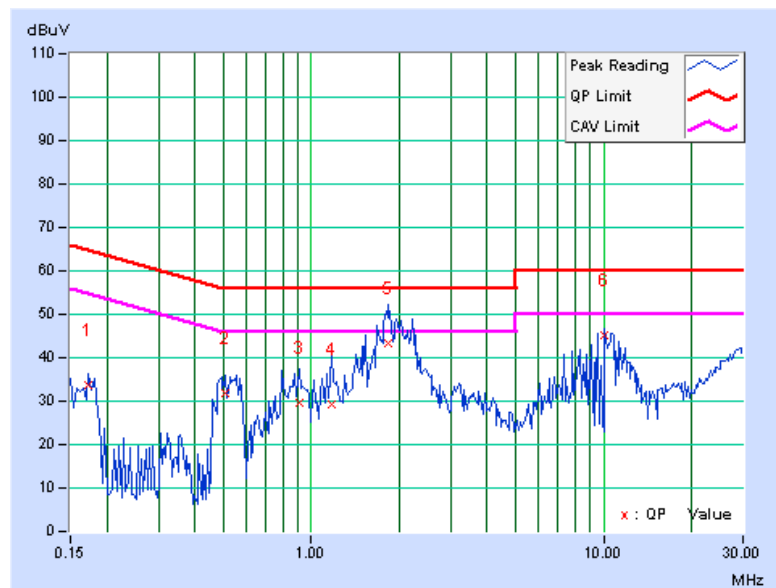
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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	A		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.13	33.75	-	33.88	-	64.79	54.79	-30.92	-
2	0.509	0.17	31.53	-	31.70	-	56.00	46.00	-24.30	-
3	0.912	0.21	29.46	-	29.67	-	56.00	46.00	-26.33	-
4	1.172	0.23	29.06	-	29.29	-	56.00	46.00	-26.71	-
5	1.836	0.29	42.88	-	43.17	-	56.00	46.00	-12.83	-
6	10.035	0.44	44.91	-	45.35	-	60.00	50.00	-14.65	-

- 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.

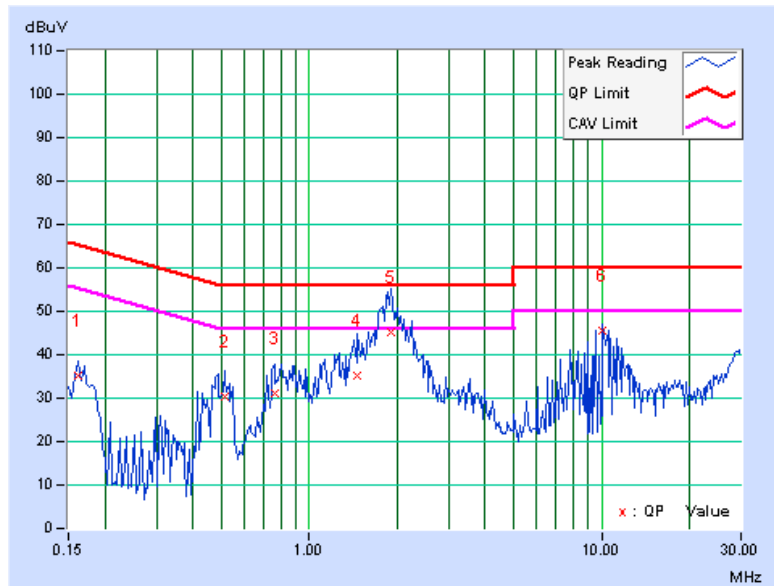


802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.16	35.00	-	35.16	-	65.38	55.38	-30.22	-
2	0.513	0.19	30.28	-	30.47	-	56.00	46.00	-25.53	-
3	0.763	0.21	30.86	-	31.07	-	56.00	46.00	-24.93	-
4	1.465	0.27	34.96	-	35.23	-	56.00	46.00	-20.77	-
5	1.902	0.30	44.93	-	45.23	-	56.00	46.00	-10.77	-
6	10.023	0.35	45.25	-	45.60	-	60.00	50.00	-14.40	-

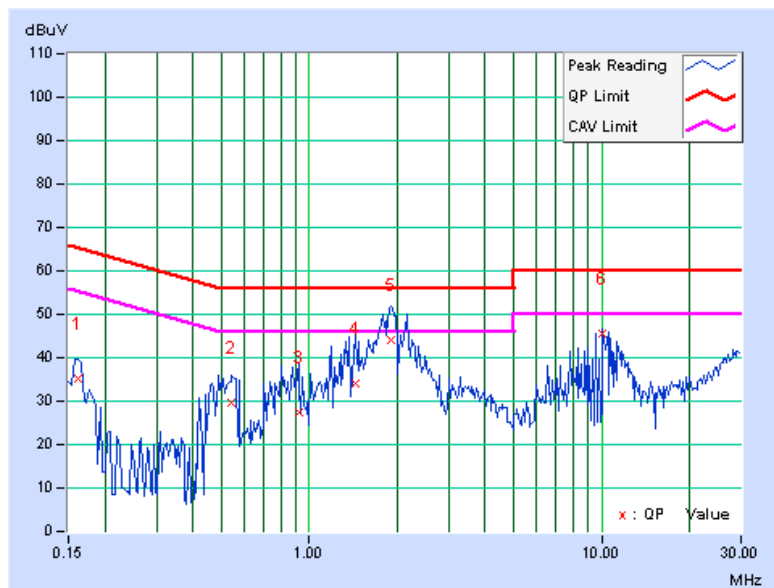
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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	B		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.13	35.20	-	35.33	-	65.38	55.38	-30.05	-
2	0.545	0.17	29.29	-	29.46	-	56.00	46.00	-26.54	-
3	0.920	0.21	27.20	-	27.41	-	56.00	46.00	-28.59	-
4	1.438	0.25	33.68	-	33.93	-	56.00	46.00	-22.07	-
5	1.906	0.29	43.70	-	43.99	-	56.00	46.00	-12.01	-
6	10.023	0.44	44.95	-	45.39	-	60.00	50.00	-14.61	-

- 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.

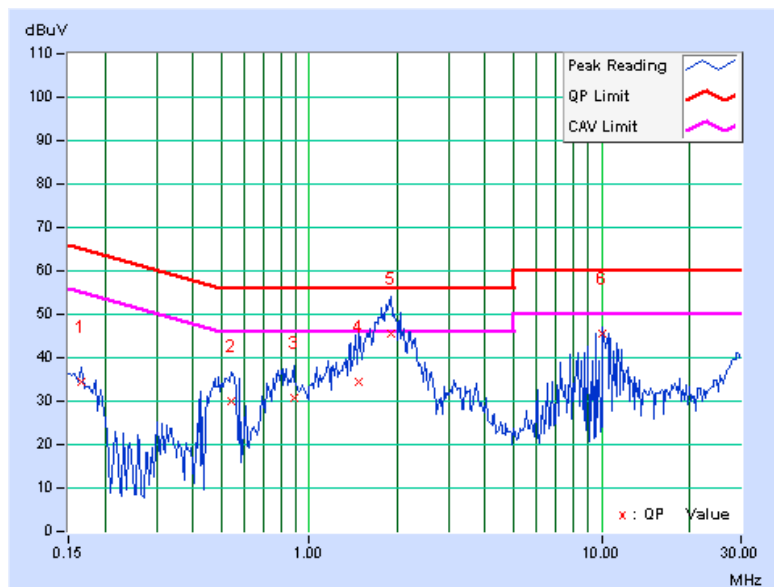


802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	C		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.166	0.16	34.23	-	34.39	-	65.18	55.18	-30.79	-
2	0.541	0.19	29.76	-	29.95	-	56.00	46.00	-26.05	-
3	0.884	0.22	30.43	-	30.65	-	56.00	46.00	-25.35	-
4	1.484	0.27	34.34	-	34.61	-	56.00	46.00	-21.39	-
5	1.895	0.30	45.39	-	45.69	-	56.00	46.00	-10.31	-
6	10.027	0.35	45.38	-	45.73	-	60.00	50.00	-14.27	-

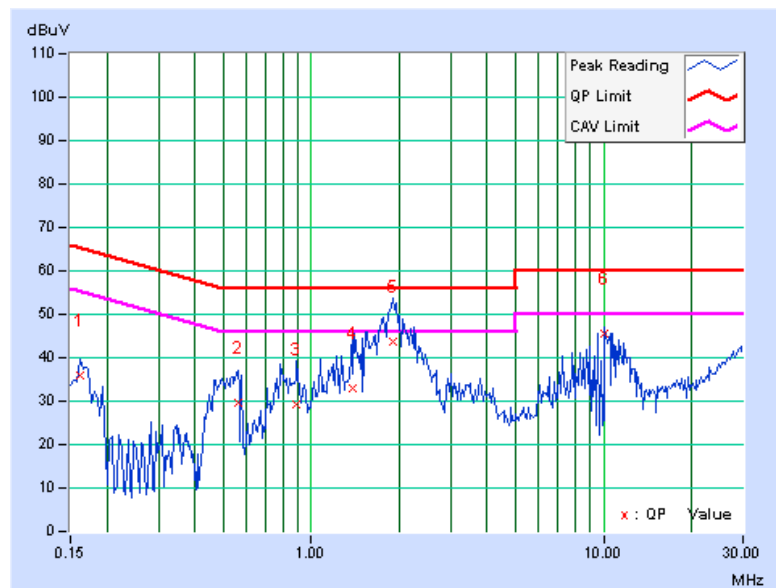
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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	C		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.13	35.86	-	35.99	-	65.38	55.38	-29.39	-
2	0.560	0.18	29.32	-	29.50	-	56.00	46.00	-26.50	-
3	0.892	0.21	29.10	-	29.31	-	56.00	46.00	-26.69	-
4	1.387	0.25	32.58	-	32.83	-	56.00	46.00	-23.17	-
5	1.906	0.29	43.32	-	43.61	-	56.00	46.00	-12.39	-
6	10.027	0.44	45.19	-	45.63	-	60.00	50.00	-14.37	-

- 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.

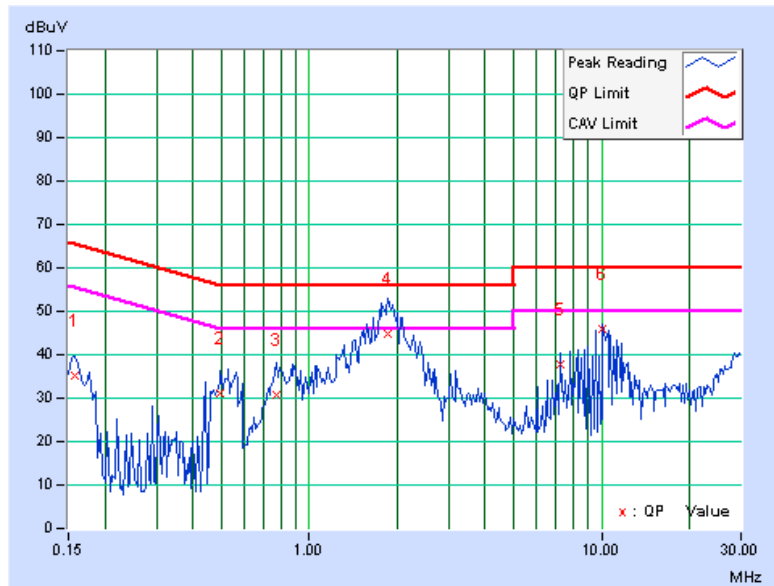


802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	D		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.16	35.17	-	35.33	-	65.58	55.58	-30.25	-
2	0.498	0.19	30.89	-	31.08	-	56.04	46.04	-24.96	-
3	0.775	0.21	30.58	-	30.79	-	56.00	46.00	-25.21	-
4	1.867	0.30	44.66	-	44.96	-	56.00	46.00	-11.04	-
5	7.270	0.35	37.26	-	37.61	-	60.00	50.00	-22.39	-
6	10.027	0.35	45.40	-	45.75	-	60.00	50.00	-14.25	-

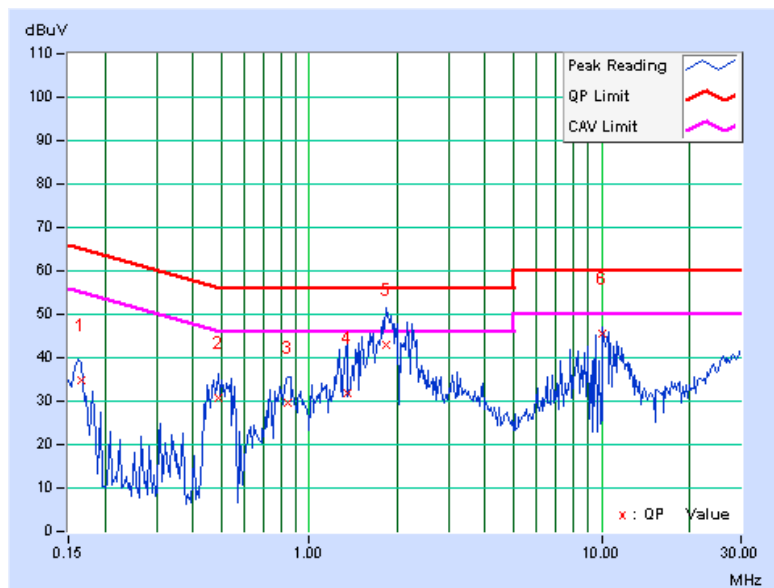
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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	D		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.166	0.13	34.70	-	34.83	-	65.18	55.18	-30.35	-
2	0.490	0.17	30.73	-	30.90	-	56.17	46.17	-25.27	-
3	0.845	0.20	29.50	-	29.70	-	56.00	46.00	-26.30	-
4	1.348	0.25	31.75	-	32.00	-	56.00	46.00	-24.00	-
5	1.836	0.29	42.67	-	42.96	-	56.00	46.00	-13.04	-
6	10.027	0.44	45.25	-	45.69	-	60.00	50.00	-14.31	-

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





A D T

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	FSP40	100039	Jan. 11, 2010	Jan. 10, 2011

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

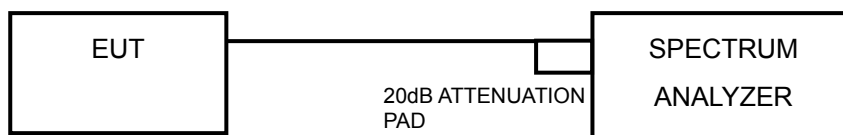
5.3.3 TEST PROCEDURE

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.

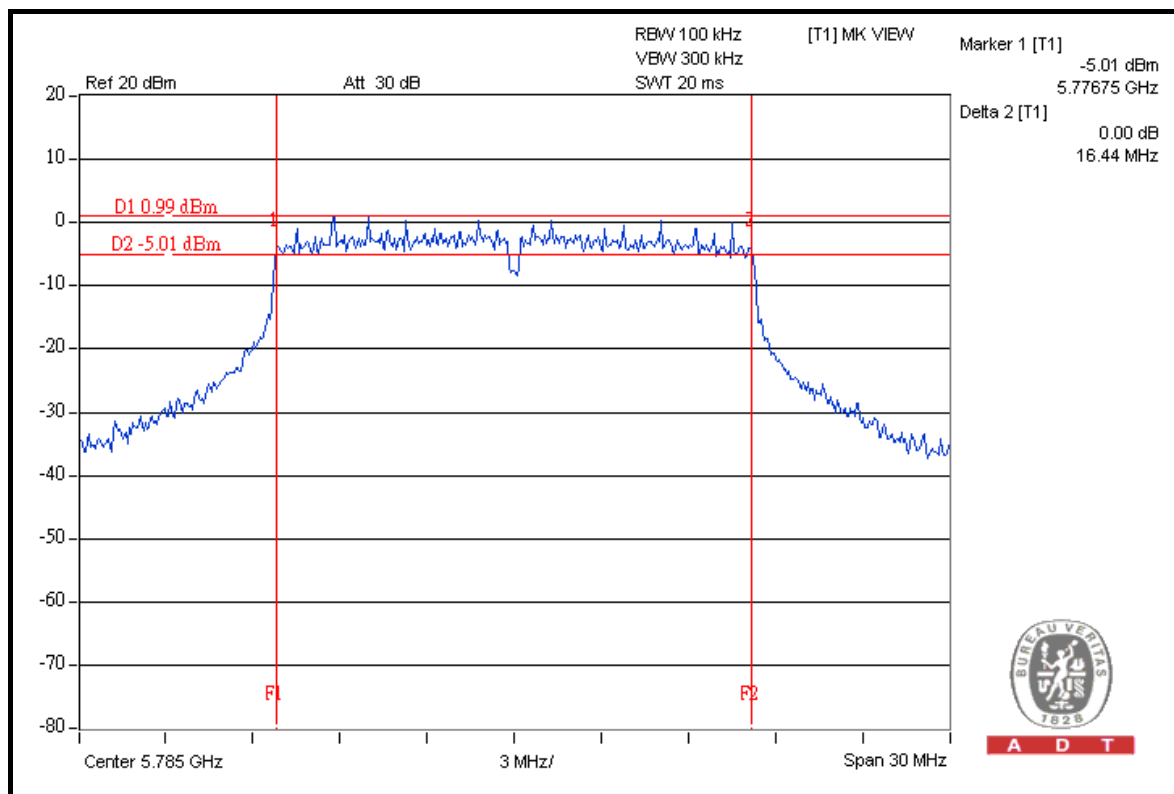
5.3.7 TEST RESULTS

TEST MODE A

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	16.37	16.38	16.41	0.5	PASS
157	5785	16.40	16.41	16.44	0.5	PASS
165	5825	16.39	16.43	16.41	0.5	PASS

FOR CHAIN 2: CH 157



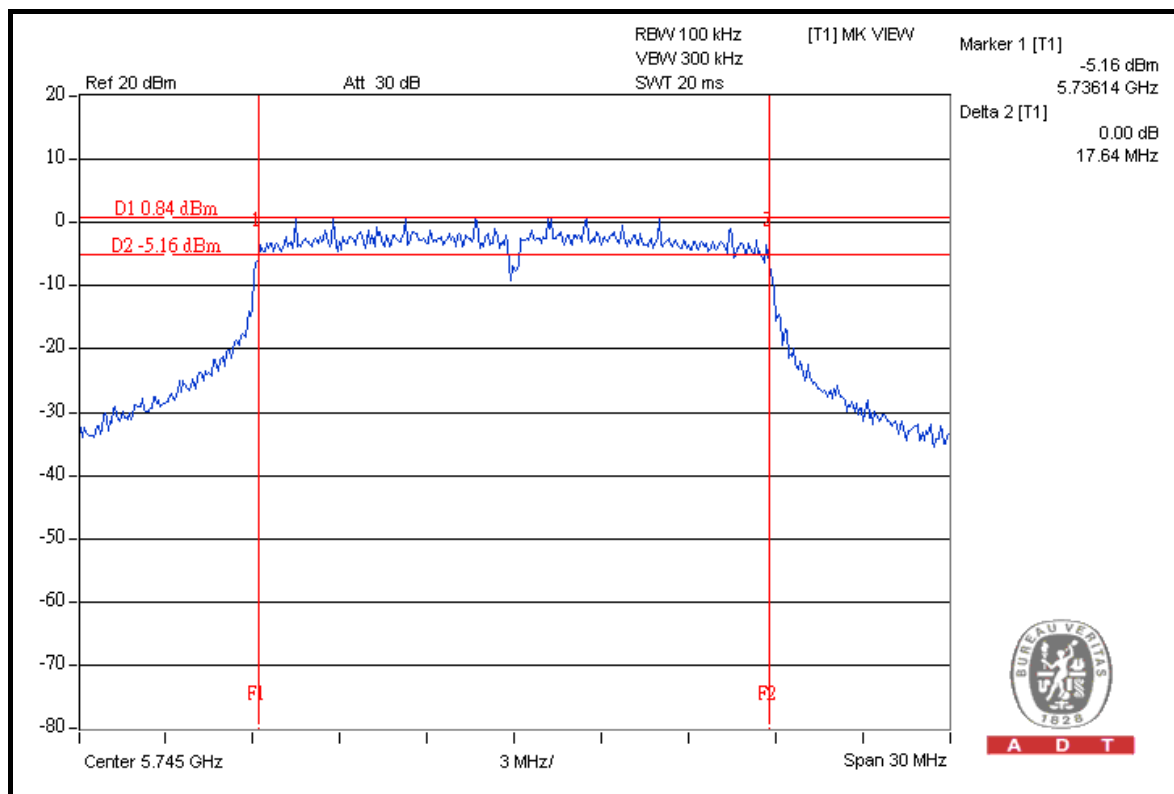


A D T

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	17.24	17.44	17.64	0.5	PASS
157	5785	17.23	17.25	17.25	0.5	PASS
165	5825	17.38	17.22	17.23	0.5	PASS

FOR CHAIN 2: CH 149



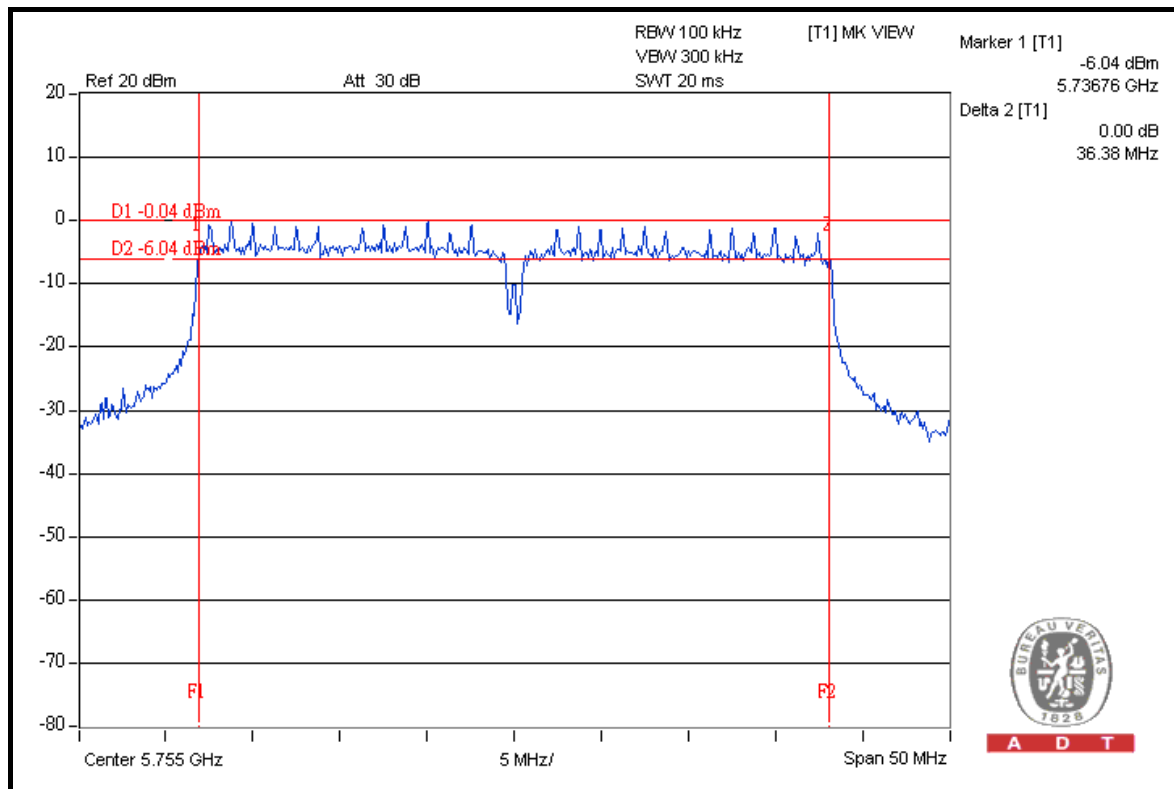


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802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
151	5755	36.19	36.38	35.81	0.5	PASS
159	5795	35.80	35.83	35.81	0.5	PASS

FOR CHAIN 1: CH 151





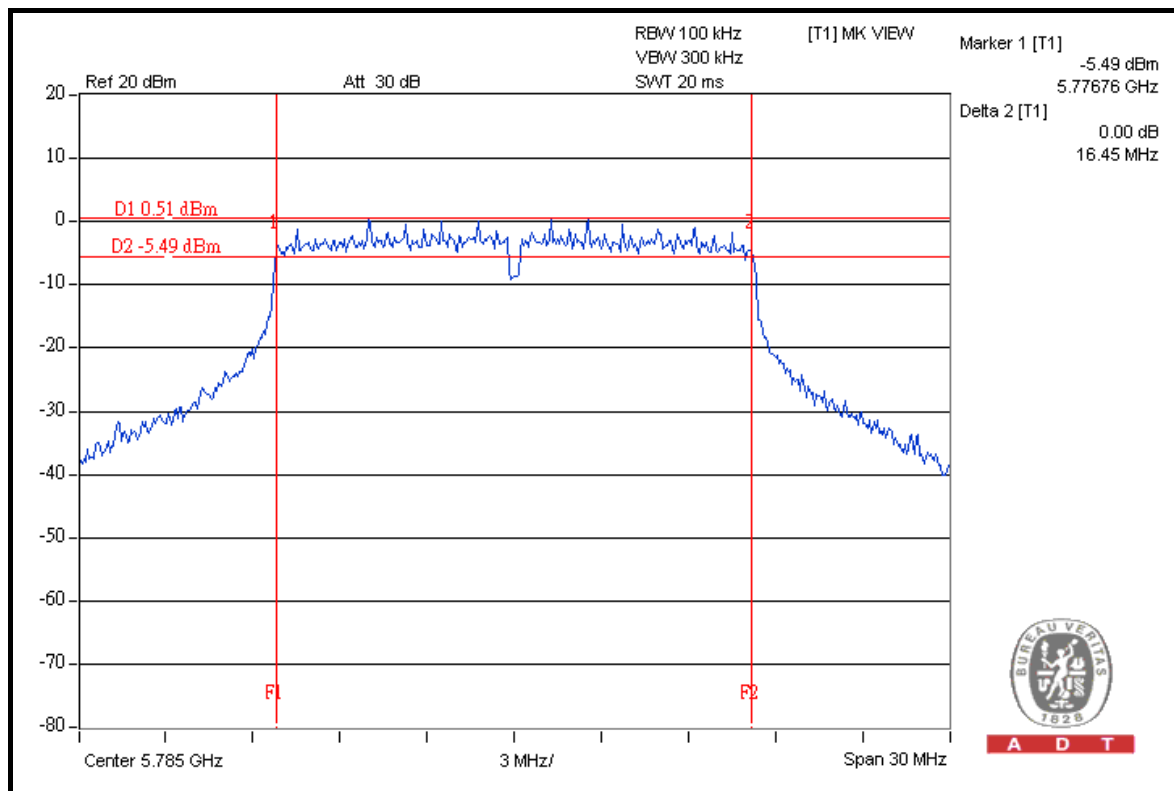
A D T

TEST MODE B

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	16.39	16.41	16.42	0.5	PASS
157	5785	16.44	16.44	16.45	0.5	PASS
165	5825	16.42	16.43	16.41	0.5	PASS

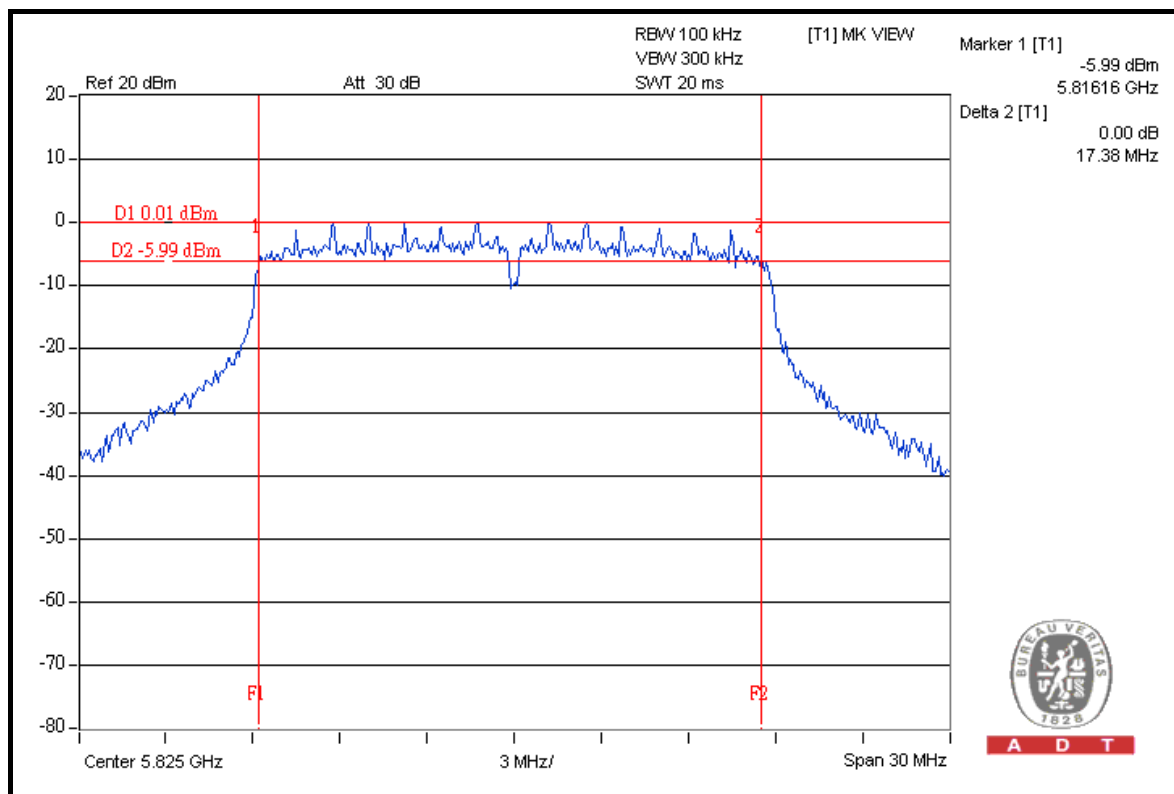
FOR CHAIN 2: CH 157



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	16.96	17.24	17.23	0.5	PASS
157	5785	16.94	17.25	17.04	0.5	PASS
165	5825	17.00	17.37	17.38	0.5	PASS

FOR CHAIN 2: CH 165



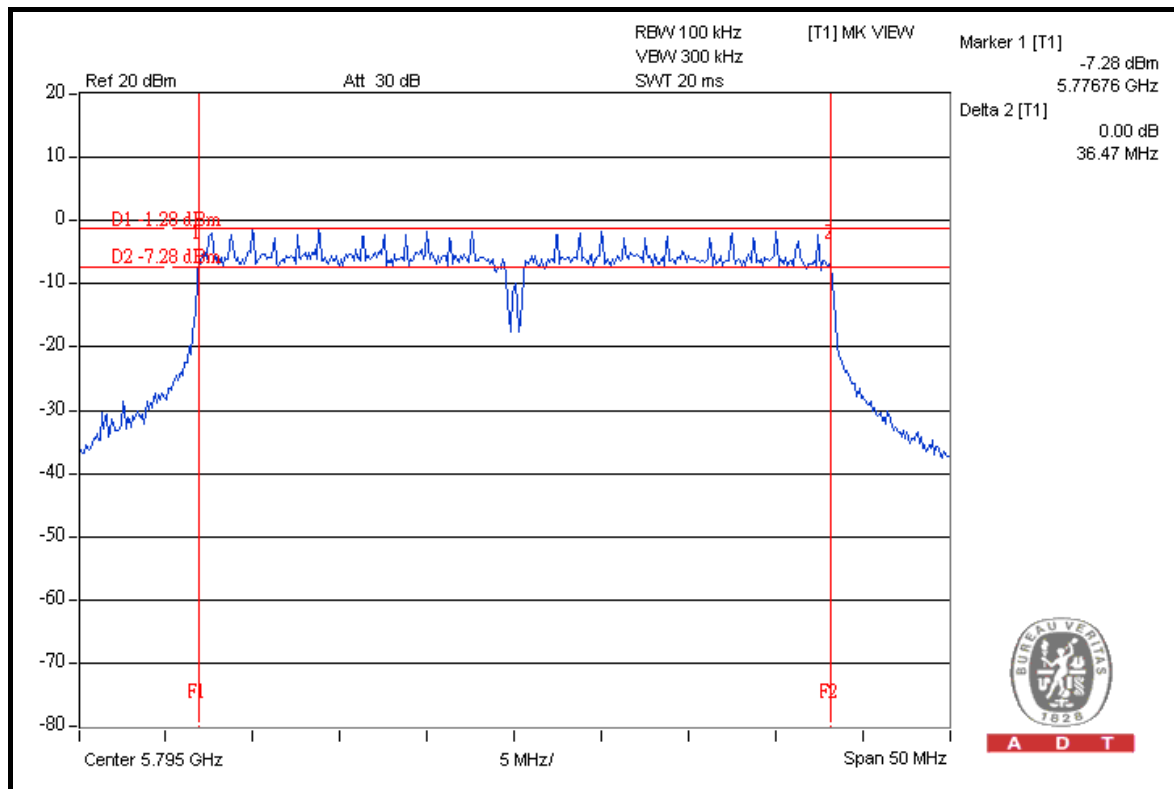


A D T

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
151	5755	36.18	35.92	35.90	0.5	PASS
159	5795	36.16	36.47	35.81	0.5	PASS

FOR CHAIN 1: CH 159

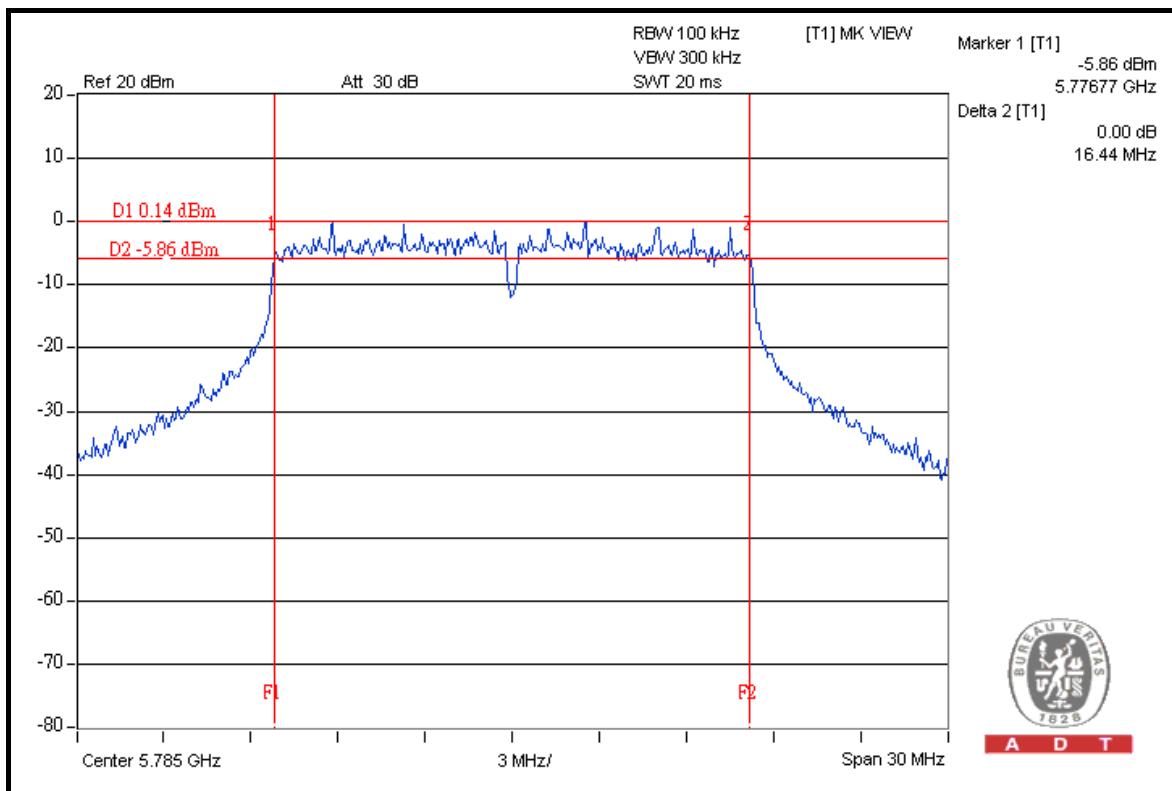


TEST MODE C

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	16.39	16.41	16.39	0.5	PASS
157	5785	16.43	16.43	16.44	0.5	PASS
165	5825	16.42	16.38	16.41	0.5	PASS

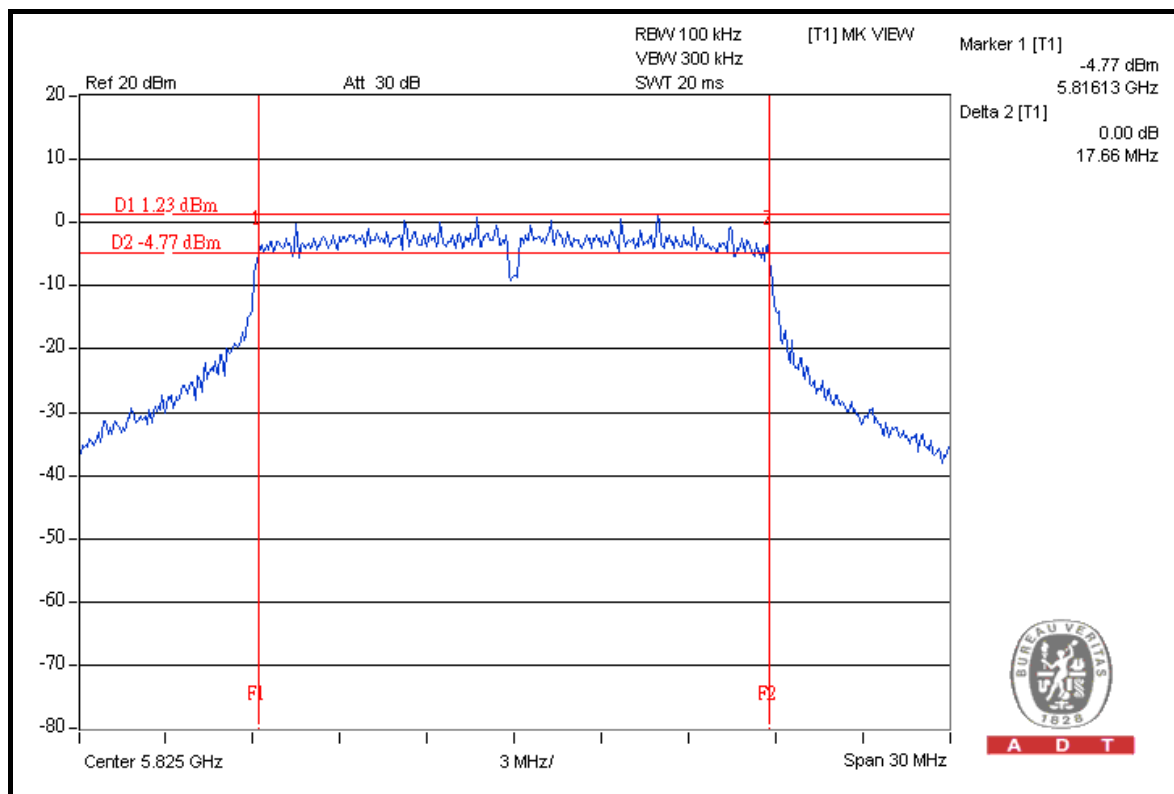
FOR CHAIN 2: CH 157



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	17.59	17.55	17.60	0.5	PASS
157	5785	17.31	17.59	17.18	0.5	PASS
165	5825	17.22	17.58	17.66	0.5	PASS

FOR CHAIN 2: CH 165



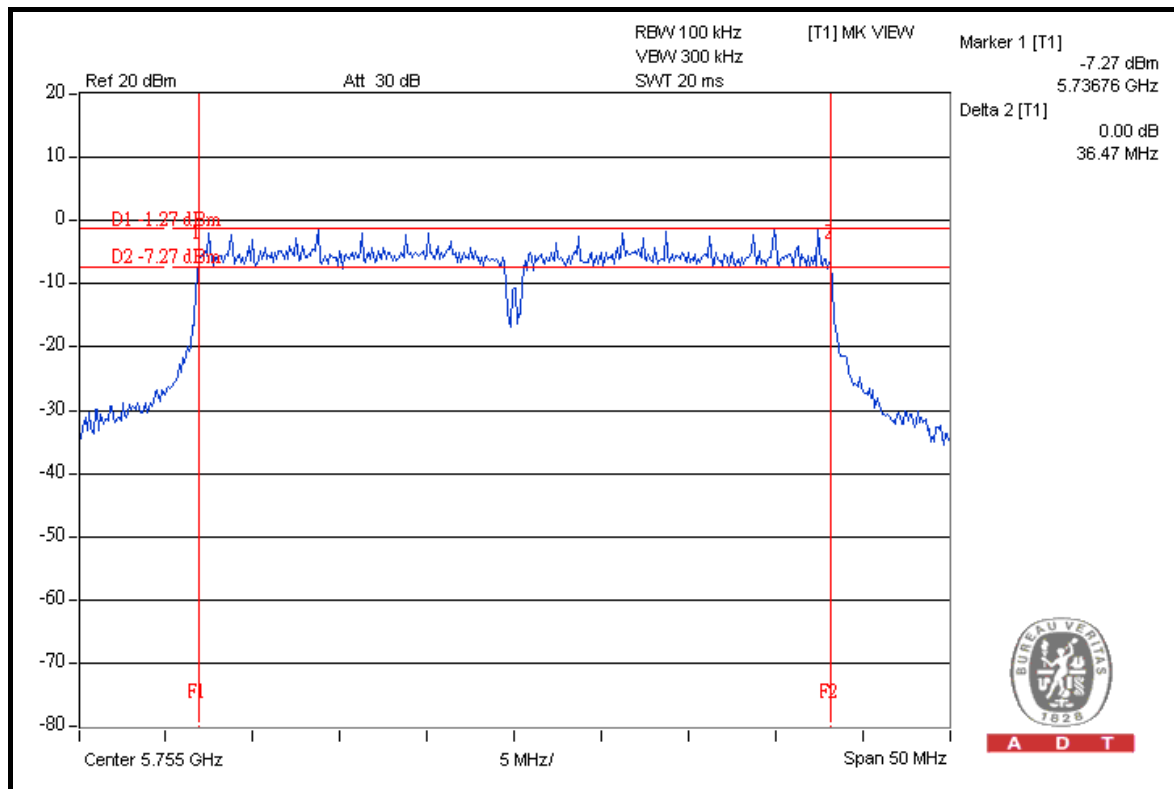


A D T

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
151	5755	36.47	36.45	36.38	0.5	PASS
159	5795	36.47	36.17	35.80	0.5	PASS

FOR CHAIN 0: CH 151

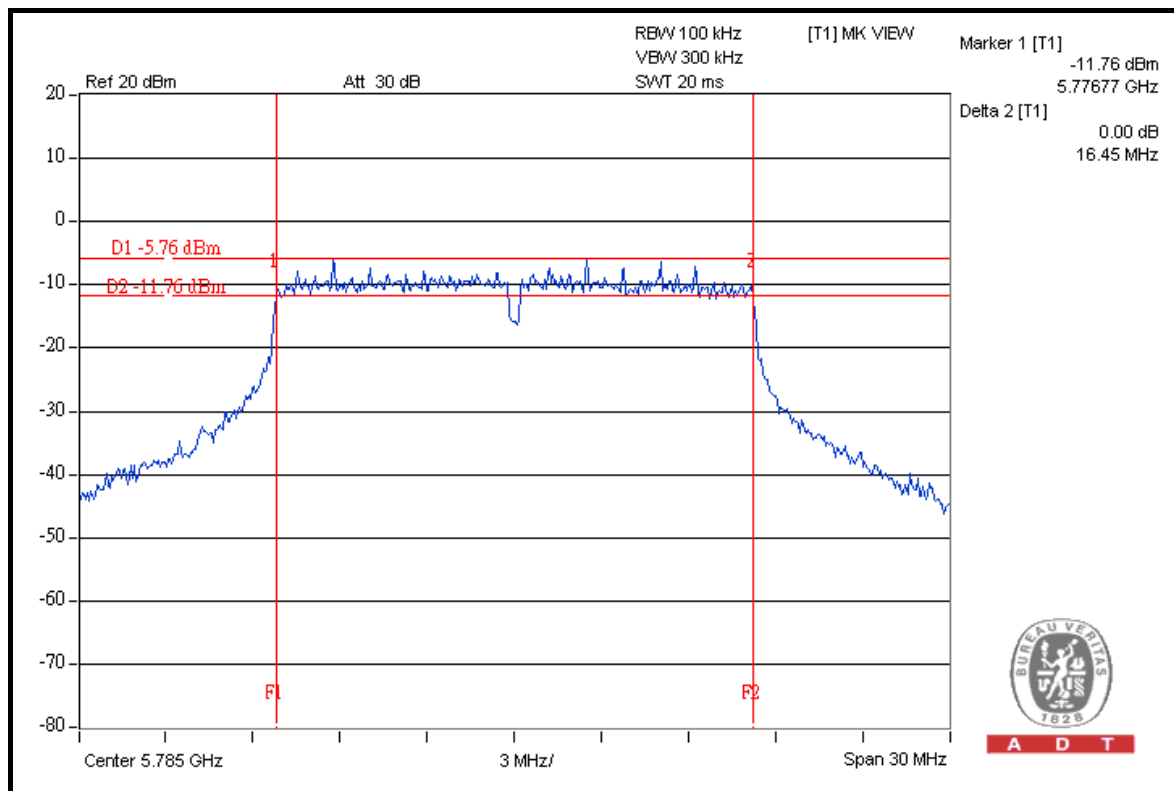


TEST MODE D

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	16.40	16.40	16.37	0.5	PASS
157	5785	16.45	16.39	16.35	0.5	PASS
165	5825	16.40	16.39	16.42	0.5	PASS

FOR CHAIN 0: CH 157



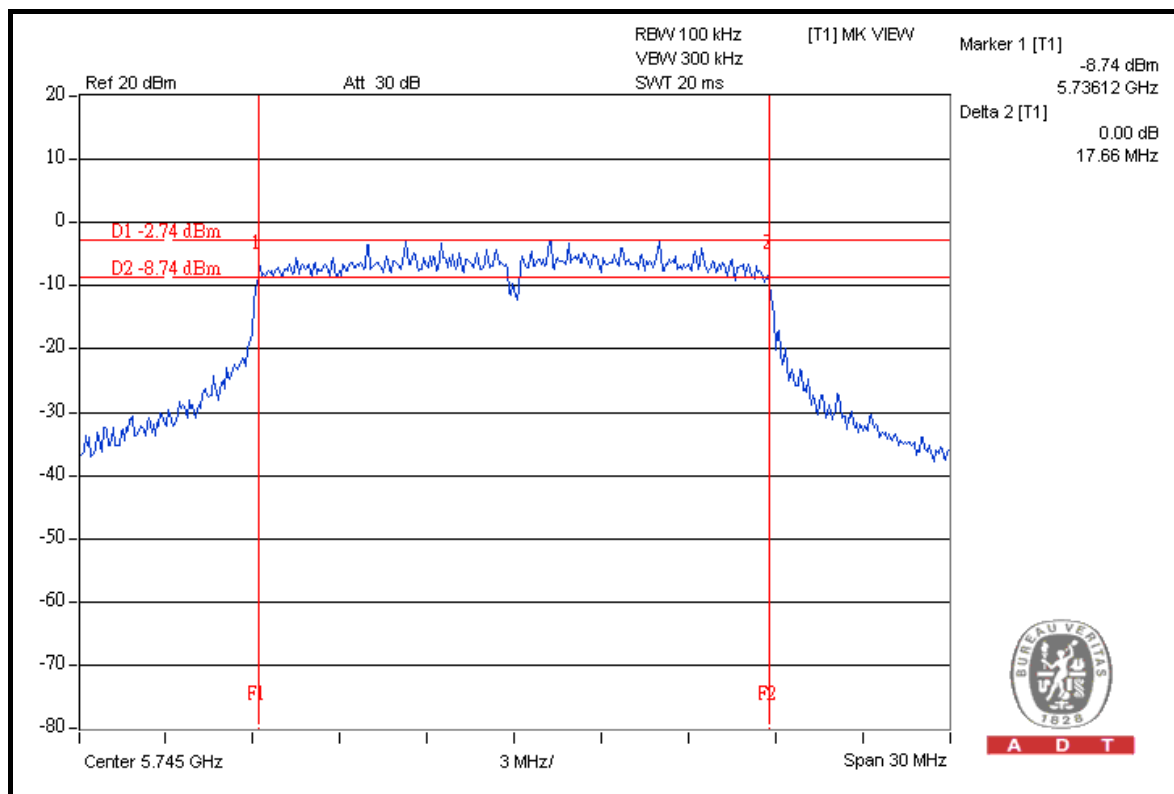


A D T

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	17.60	17.59	17.66	0.5	PASS
157	5785	17.19	17.60	17.65	0.5	PASS
165	5825	17.59	17.64	17.62	0.5	PASS

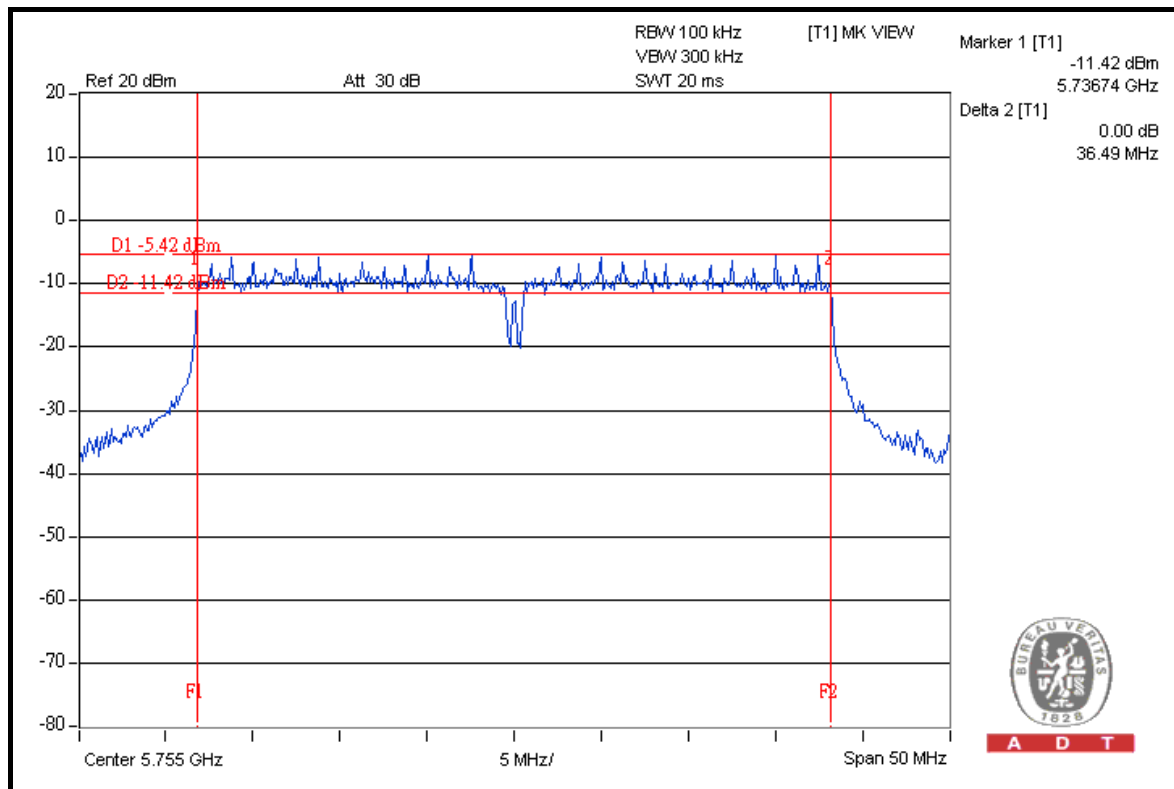
FOR CHAIN 2: CH 149



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
151	5755	36.49	36.48	36.49	0.5	PASS
159	5795	36.43	36.44	36.45	0.5	PASS

FOR CHAIN 2: CH 151



5.4 MAXIMUM OUTPUT POWER

5.4.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT

The Maximum Output Power Measurement is 30dBm.

5.4.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
High Speed Peak Power Meter	ML2495A	0842014	Apr. 21, 2010	Apr. 20, 2011
Power Sensor	MA2411B	0738404	Apr. 21, 2010	Apr. 20, 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. Measurement Bandwidth of ML2495A is 65MHz greater than 6dB bandwidth of emission.

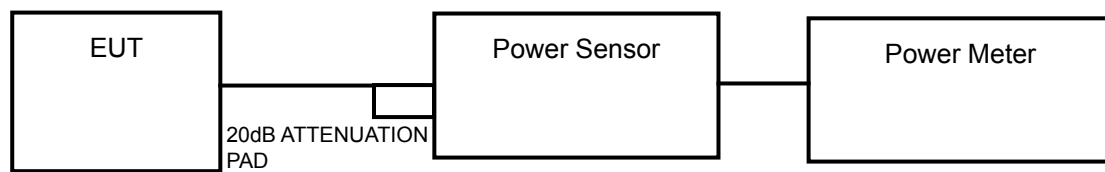
5.4.3 TEST PROCEDURES

A power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. 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

TEST MODE A

802.11a

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
149	5745	21.6	22.4	22.2	484.3	26.9	27.3	PASS
157	5785	22.1	22.4	22.6	517.9	27.1	27.3	PASS
165	5825	22.1	22.2	22.5	506.0	27.0	27.3	PASS

NOTE: Directional gain = $3.95\text{dBi} + 10\log(3) = 8.7\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (8.7 - 6) = 27.3\text{dBm}$.

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	CHAIN 2				
149	5745	23.2	23.9	23.6	683.5	28.3	30	PASS
157	5785	23.0	23.4	23.7	652.7	28.1	30	PASS
165	5825	22.9	23.2	23.5	627.8	28.0	30	PASS

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	CHAIN 2				
151	5755	22.8	23.7	23.7	659.4	28.2	30	PASS
159	5795	22.8	23.6	23.2	628.6	28.0	30	PASS

TEST MODE B

802.11a

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
149	5745	20.8	21.2	21.1	380.9	25.8	26.2	PASS
157	5785	21.2	21.1	21.4	398.7	26.0	26.2	PASS
165	5825	21.1	21.3	21.6	408.3	26.1	26.2	PASS

NOTE: Directional gain = $5\text{dBi} + 10\log(3) = 9.8\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (9.8 - 6) = 26.2\text{dBm}$.

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	CHAIN 2				
149	5745	23.7	23.9	23.6	709.0	28.5	30	PASS
157	5785	23.1	23.2	23.4	631.9	28.0	30	PASS
165	5825	22.9	23.5	23.2	627.8	28.0	30	PASS

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	CHAIN 2				
151	5755	22.9	23.1	23.2	608.1	27.8	30	PASS
159	5795	22.6	23.5	23.1	610.0	27.9	30	PASS

TEST MODE C

802.11a

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
149	5745	21.4	21.9	21.8	444.3	26.5	26.6	PASS
157	5785	21.6	21.7	22.0	450.9	26.5	26.6	PASS
165	5825	21.5	21.7	21.9	444.0	26.5	26.6	PASS

NOTE: Directional gain = $4.6\text{dBi} + 10\log(3) = 9.4\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (9.4 - 6) = 26.6\text{dBm}$.

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	CHAIN 2				
149	5745	24.6	25.0	24.8	906.6	29.6	30	PASS
157	5785	24.2	24.4	24.7	833.6	29.2	30	PASS
165	5825	24.0	24.3	24.3	789.5	29.0	30	PASS

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	CHAIN 2				
151	5755	23.9	24.2	24.5	790.3	29.0	30	PASS
159	5795	23.8	24.6	24.1	785.3	29.0	30	PASS

TEST MODE D

802.11a

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
149	5745	15.9	16.5	16.4	127.2	21.0	21.2	PASS
157	5785	16.0	16.0	17.0	129.7	21.1	21.2	PASS
165	5825	16.0	16.3	16.6	128.2	21.1	21.2	PASS

NOTE: Directional gain = $10\text{dBi} + 10\log(3) = 14.8\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $30 - (14.8 - 6) = 21.2\text{dBm}$.

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	CHAIN 2				
149	5745	20.3	21.2	20.8	359.2	25.6	26	PASS
157	5785	20.2	20.6	21.0	345.4	25.4	26	PASS
165	5825	20.1	20.4	20.5	324.2	25.1	26	PASS

NOTE: According to 15.247 (b) (4), the maximum antenna gain 10dBi is higher than 6dBi, so the limit of peak power shall be reduced by 4dB.

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	CHAIN 2				
151	5755	20.1	20.9	20.4	335.0	25.3	26	PASS
159	5795	20.0	20.6	20.1	317.1	25.0	26	PASS

NOTE: According to 15.247 (b) (4), the maximum antenna gain 10dBi is higher than 6dBi, so the limit of peak power shall be reduced by 4dB.

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	FSP40	100039	Jan. 11, 2010	Jan. 10, 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

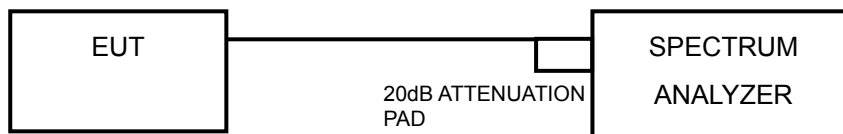
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

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

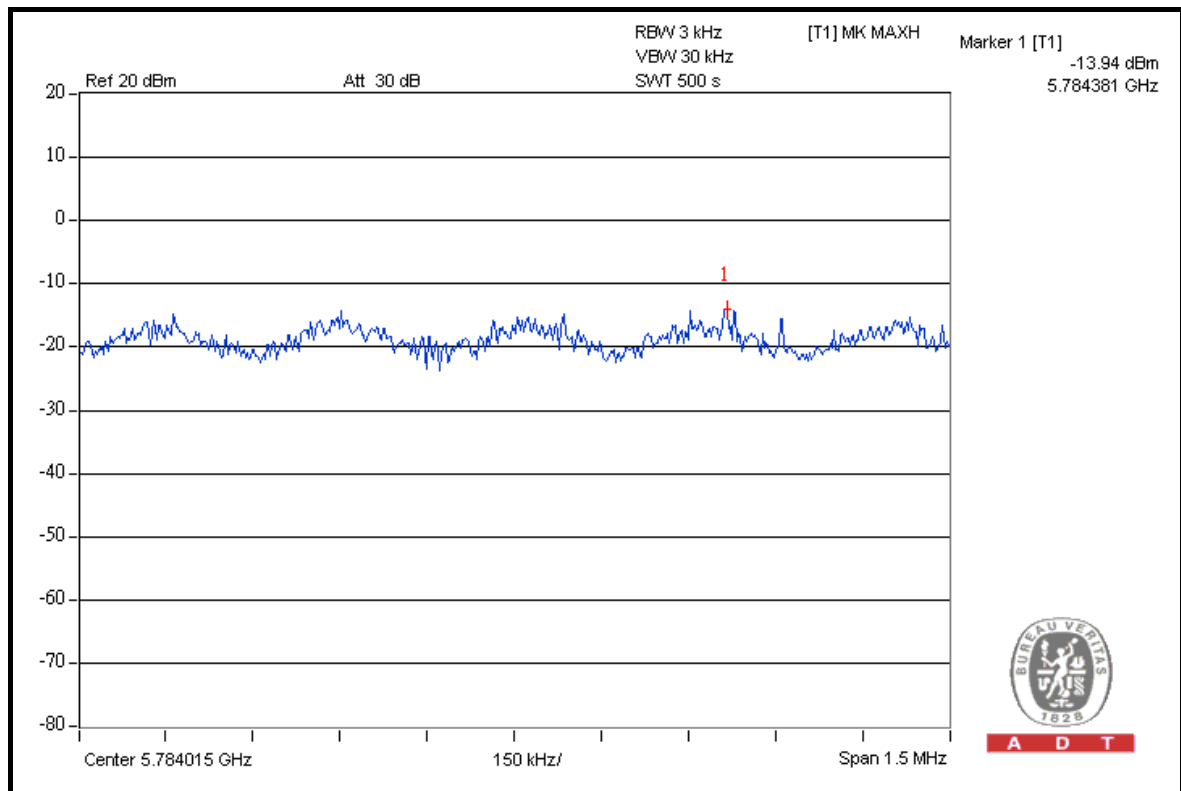
TEST MODE A

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	CHAIN 2			
149	5745	-15.57	-14.15	-15.65	-10.32	5.3	PASS
157	5785	-15.38	-13.94	-15.23	-10.04	5.3	PASS
165	5825	-15.69	-14.20	-15.25	-10.22	5.3	PASS

NOTE: Directional gain = $3.95\text{dBi} + 10\log(3) = 8.7\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (8.7 - 6) = 5.3\text{dBm}$.

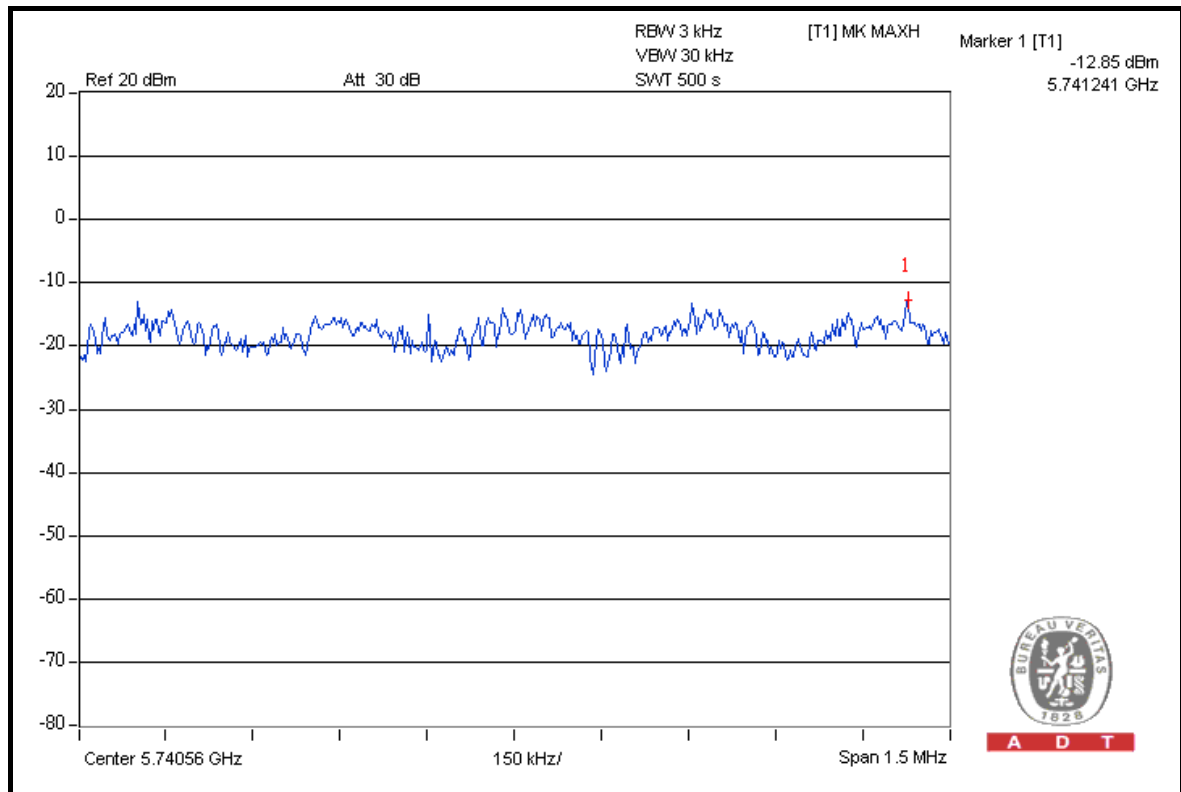
FOR CHAIN 1: CH 157



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	CHAIN 2			
149	5745	-13.70	-12.85	-14.80	-8.93	8	PASS
157	5785	-14.06	-13.42	-14.74	-9.28	8	PASS
165	5825	-14.19	-13.71	-14.75	-9.43	8	PASS

FOR CHAIN 1: CH 149



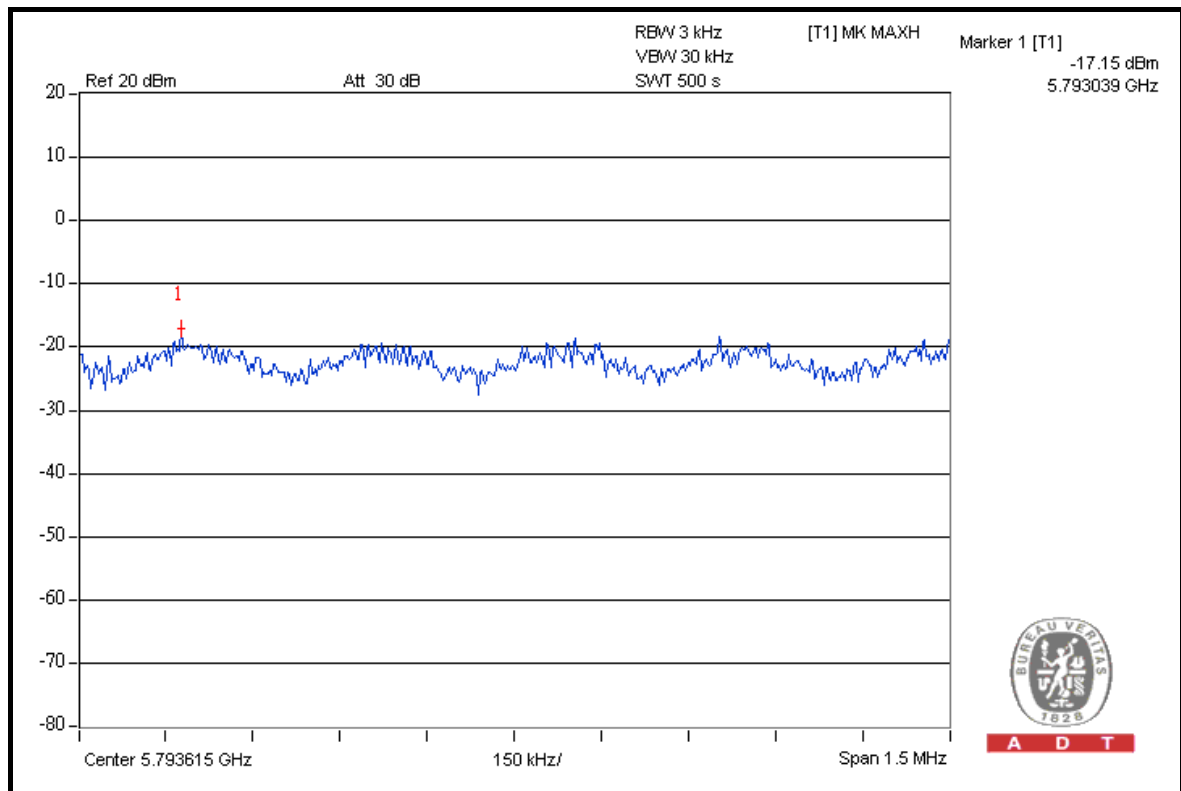


A D T

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	CHAIN 2			
151	5755	-18.29	-17.21	-18.57	-13.19	8	PASS
159	5795	-18.36	-17.15	-18.92	-13.28	8	PASS

FOR CHAIN 1: CH 159



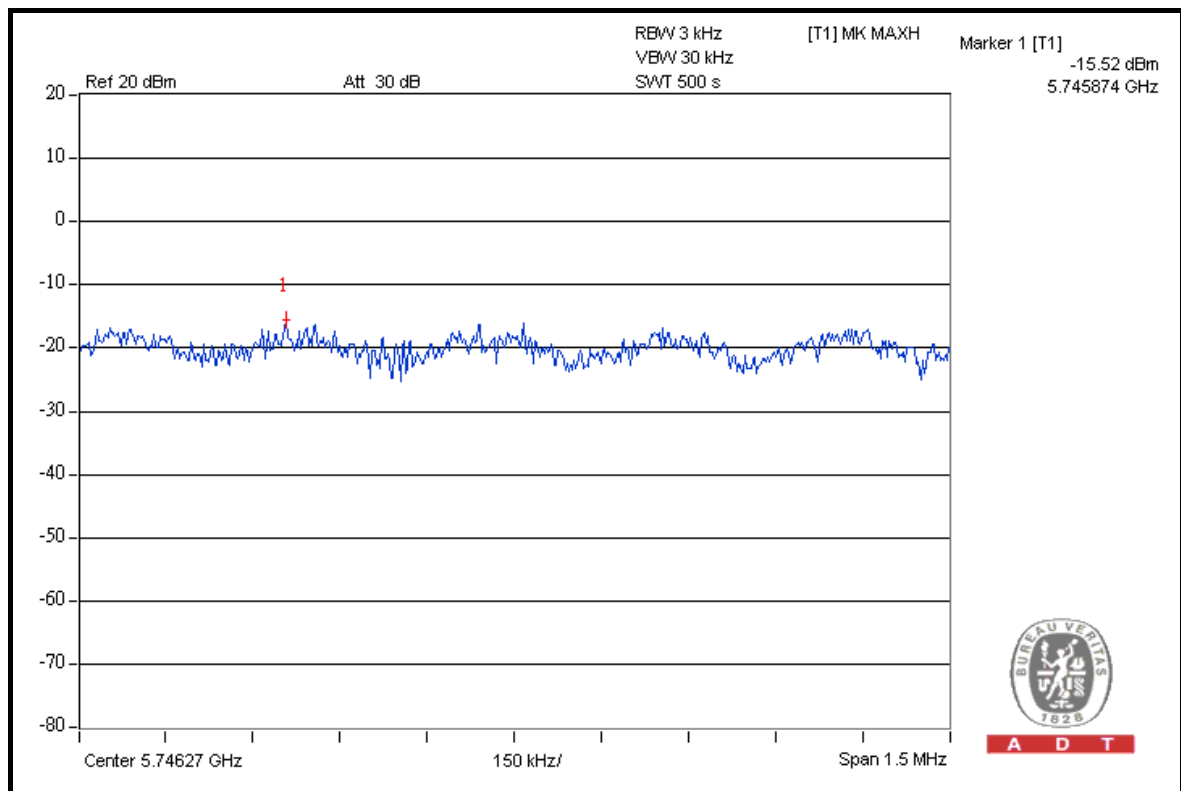
TEST MODE B

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	CHAIN 2			
149	5745	-16.25	-15.52	-16.66	-11.37	4.2	PASS
157	5785	-16.17	-15.96	-16.24	-11.37	4.2	PASS
165	5825	-16.34	-16.49	-16.84	-11.80	4.2	PASS

NOTE: Directional gain = 5dBi + 10log(3)=9.8dBi > 6dBi , so the power density limit shall be reduced to 8-(9.8-6)=4.2dBm.

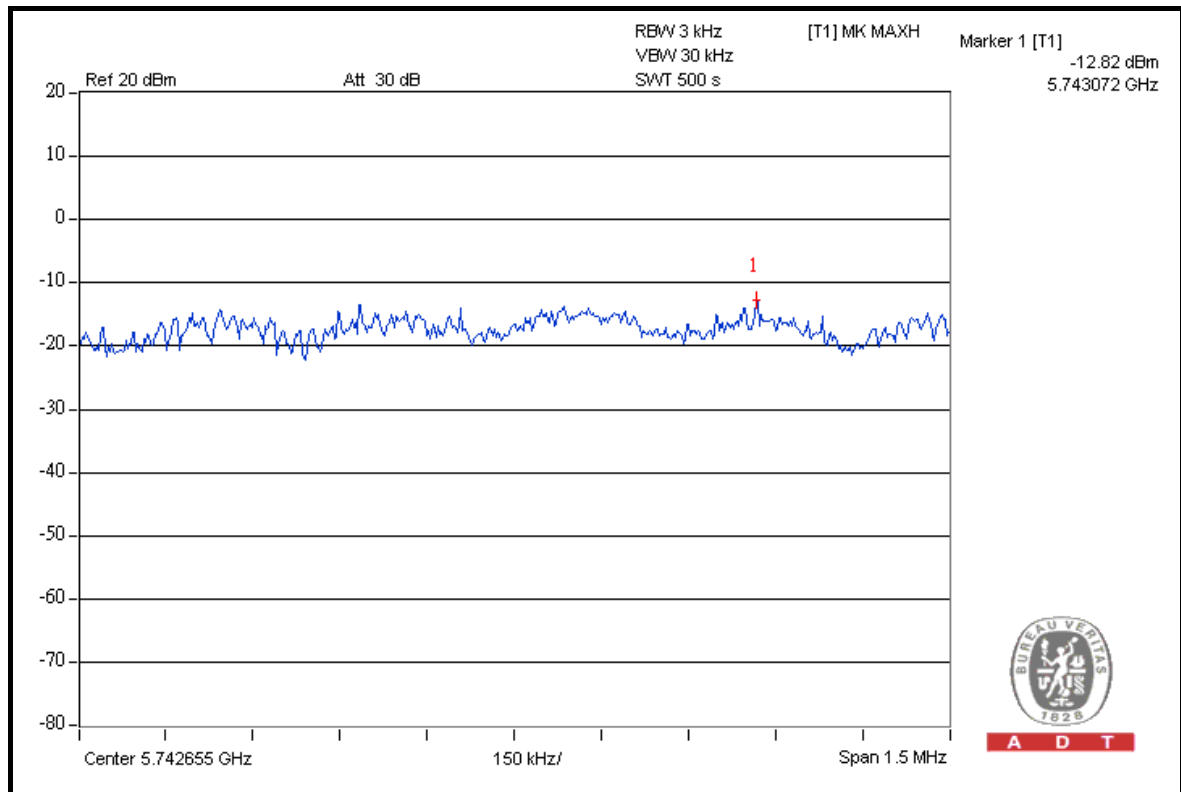
FOR CHAIN 1: CH 149



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	CHAIN 2			
149	5745	-13.93	-12.82	-14.76	-9.00	8	PASS
157	5785	-13.93	-13.31	-14.52	-9.14	8	PASS
165	5825	-14.19	-13.38	-15.34	-9.47	8	PASS

FOR CHAIN 1: CH 149



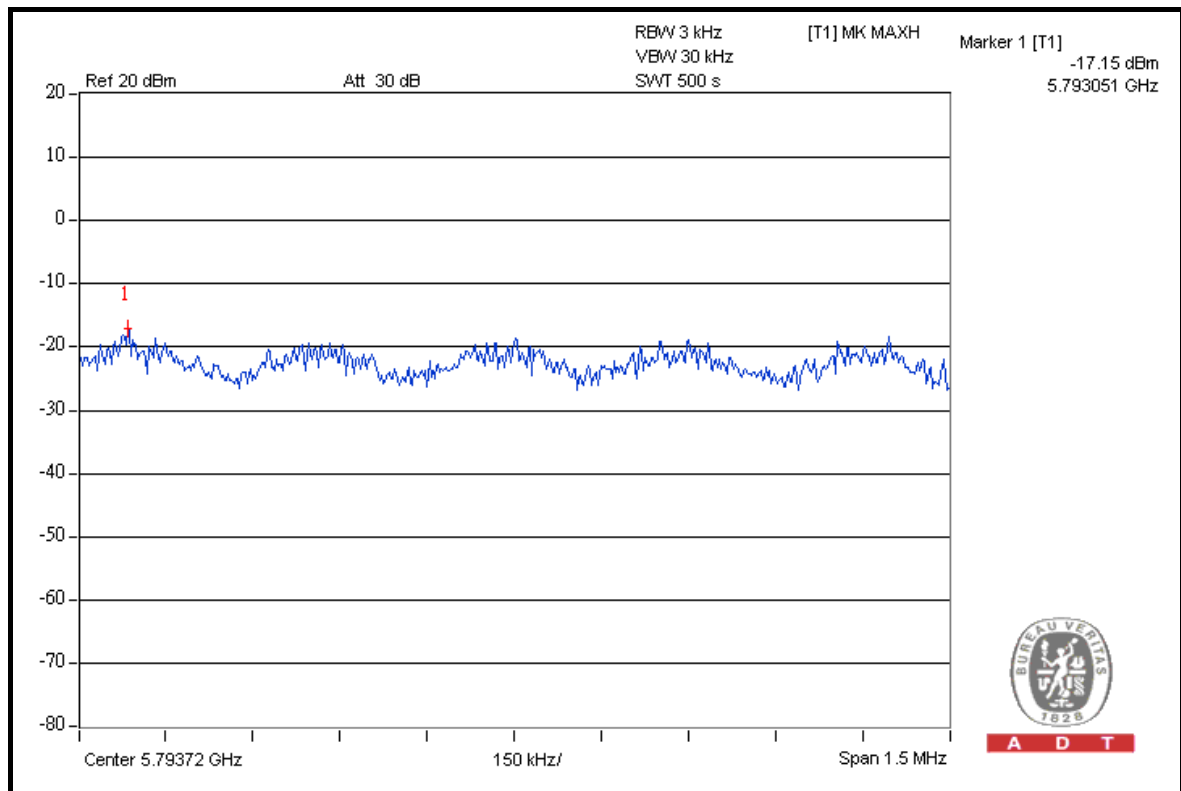


A D T

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	CHAIN 2			
151	5755	-18.41	-17.81	-18.84	-13.57	8	PASS
159	5795	-18.15	-17.15	-19.21	-13.28	8	PASS

FOR CHAIN 1: CH 159





A D T

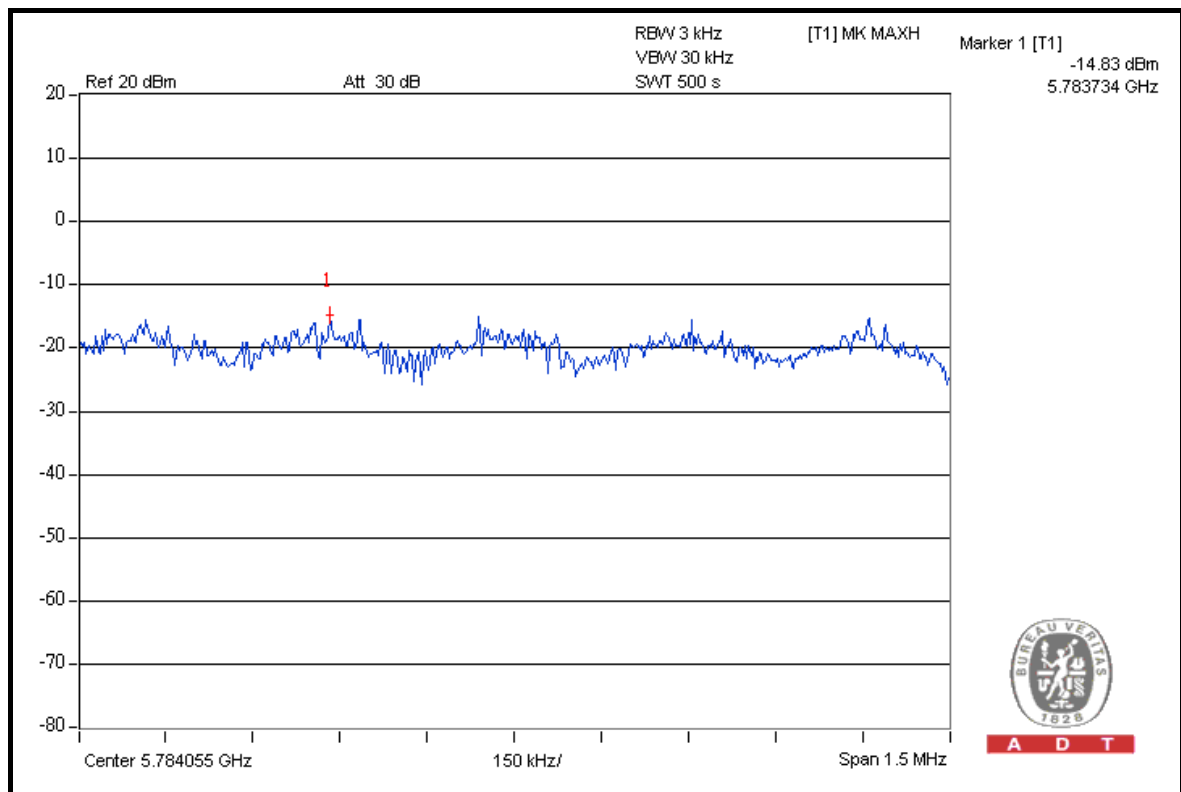
TEST MODE C

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	CHAIN 2			
149	5745	-15.89	-14.95	-16.07	-10.86	4.6	PASS
157	5785	-15.45	-14.83	-15.67	-10.56	4.6	PASS
165	5825	-15.66	-15.32	-15.74	-10.81	4.6	PASS

NOTE: Directional gain = $4.6\text{dBi} + 10\log(3) = 9.4\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (9.4 - 6) = 4.6\text{dBm}$.

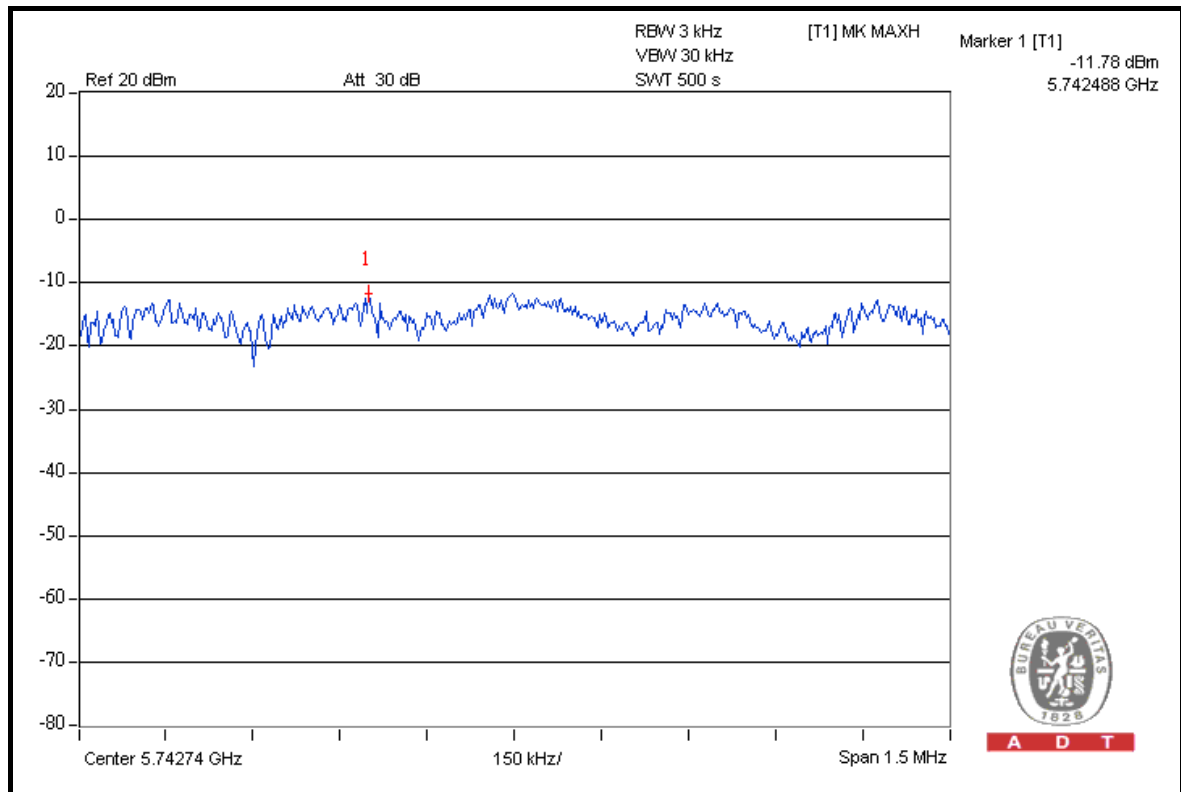
FOR CHAIN 1: CH 157



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	CHAIN 2			
149	5745	-12.71	-11.78	-13.61	-7.85	8	PASS
157	5785	-12.87	-12.24	-13.54	-8.07	8	PASS
165	5825	-13.07	-12.30	-14.31	-8.39	8	PASS

FOR CHAIN 1: CH 149



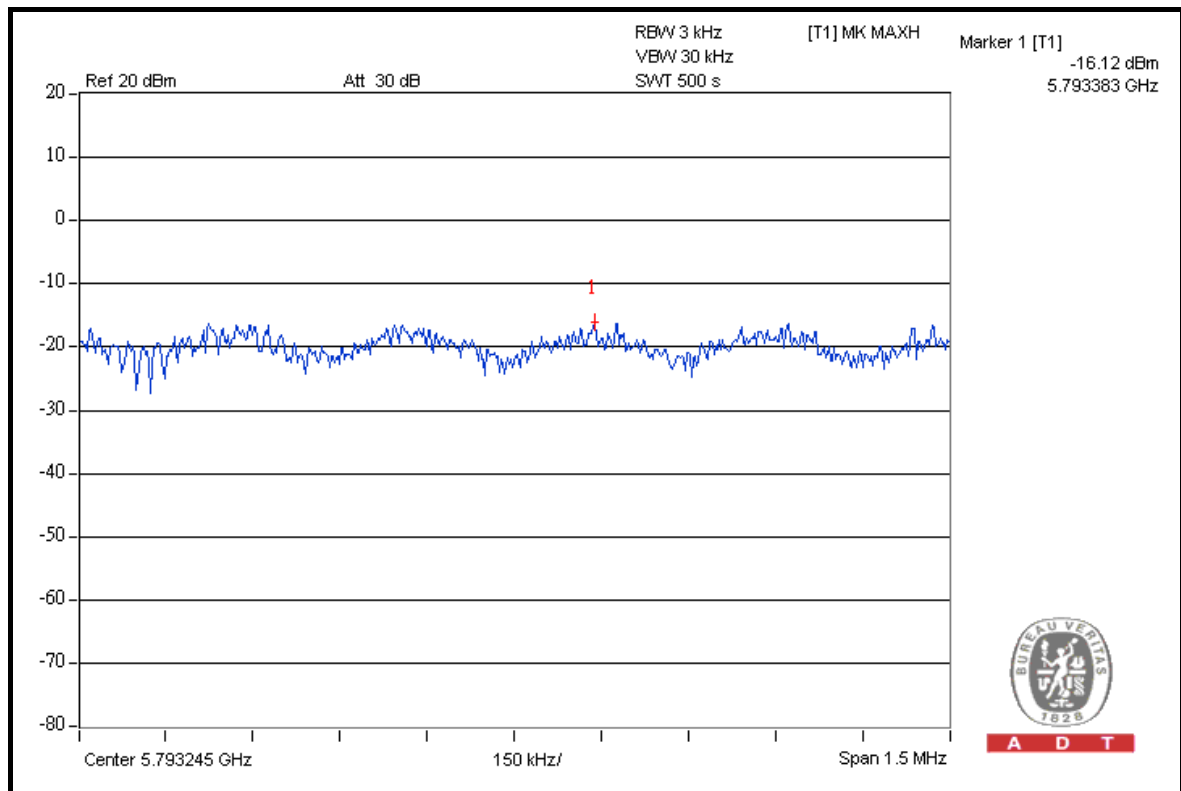


A D T

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	CHAIN 2			
151	5755	-17.21	-16.70	-17.72	-12.44	8	PASS
159	5795	-17.17	-16.12	-17.99	-12.22	8	PASS

FOR CHAIN 1: CH 159



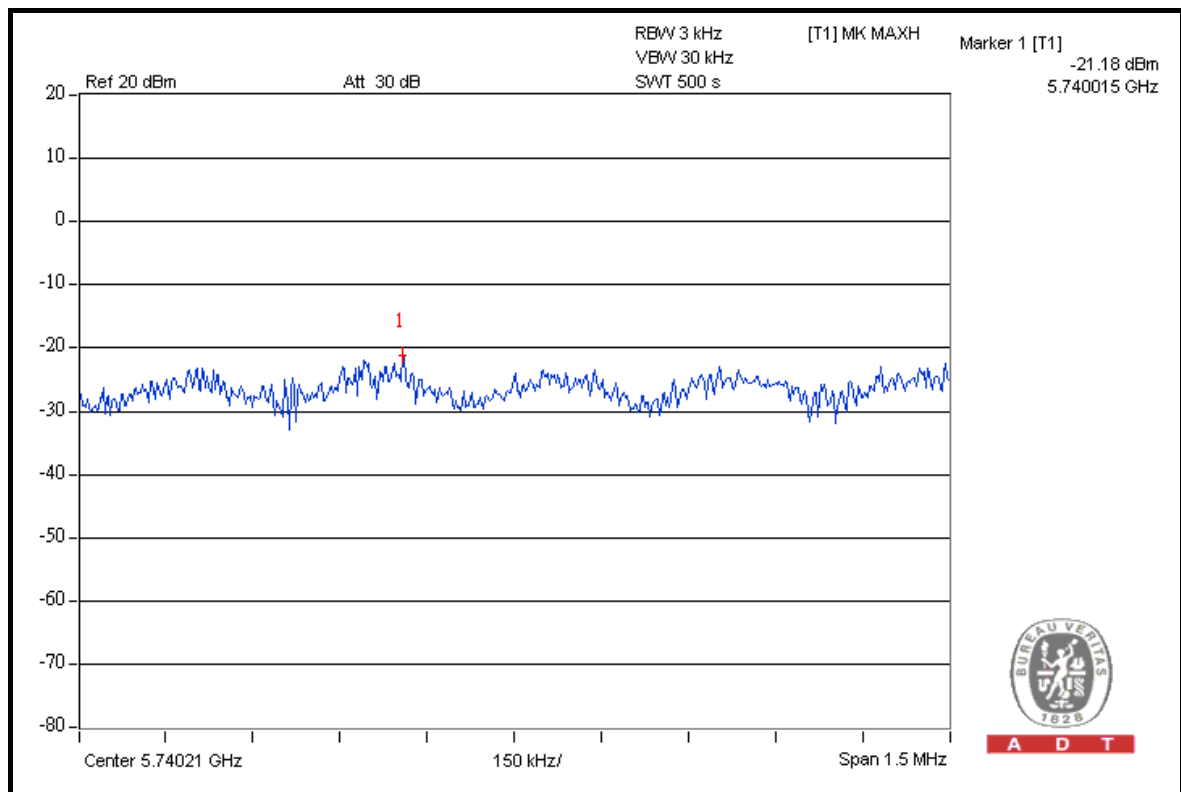
TEST MODE D

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	CHAIN 2			
149	5745	-21.99	-21.18	-22.70	-17.21	-0.8	PASS
157	5785	-21.70	-22.13	-22.01	-17.21	-0.8	PASS
165	5825	-22.06	-21.75	-22.26	-17.21	-0.8	PASS

NOTE: Directional gain = $10\text{dBi} + 10\log(3) = 14.8\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (14.8 - 6) = -0.8\text{dBm}$.

FOR CHAIN 1: CH 149

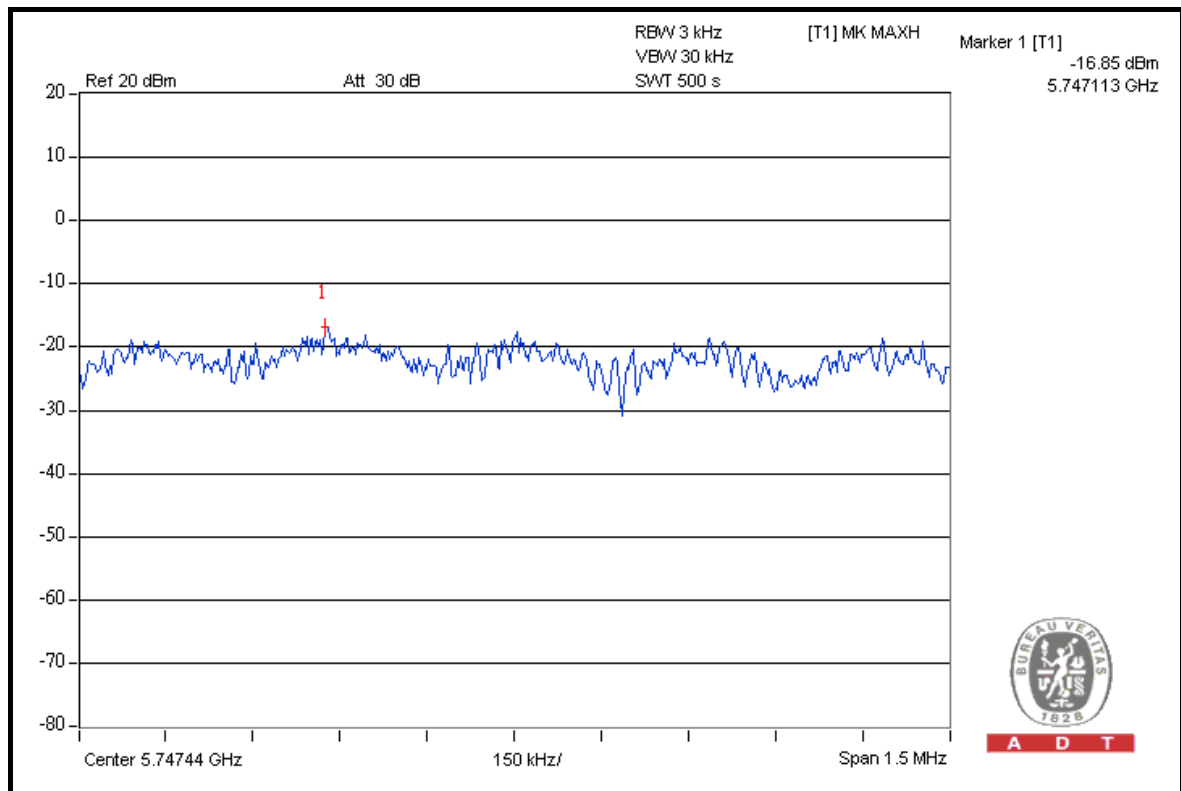


802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
149	5745	-16.85	-18.27	-17.45	-12.68	4	PASS
157	5785	-17.10	-18.87	-17.32	-12.92	4	PASS
165	5825	-17.17	-18.99	-17.73	-13.10	4	PASS

NOTE: According to 15.247 (b) (4), the maximum antenna gain 10dBi is higher than 6dBi, so the limit of peak power shall be reduced by 4dB.

FOR CHAIN 0: CH 149

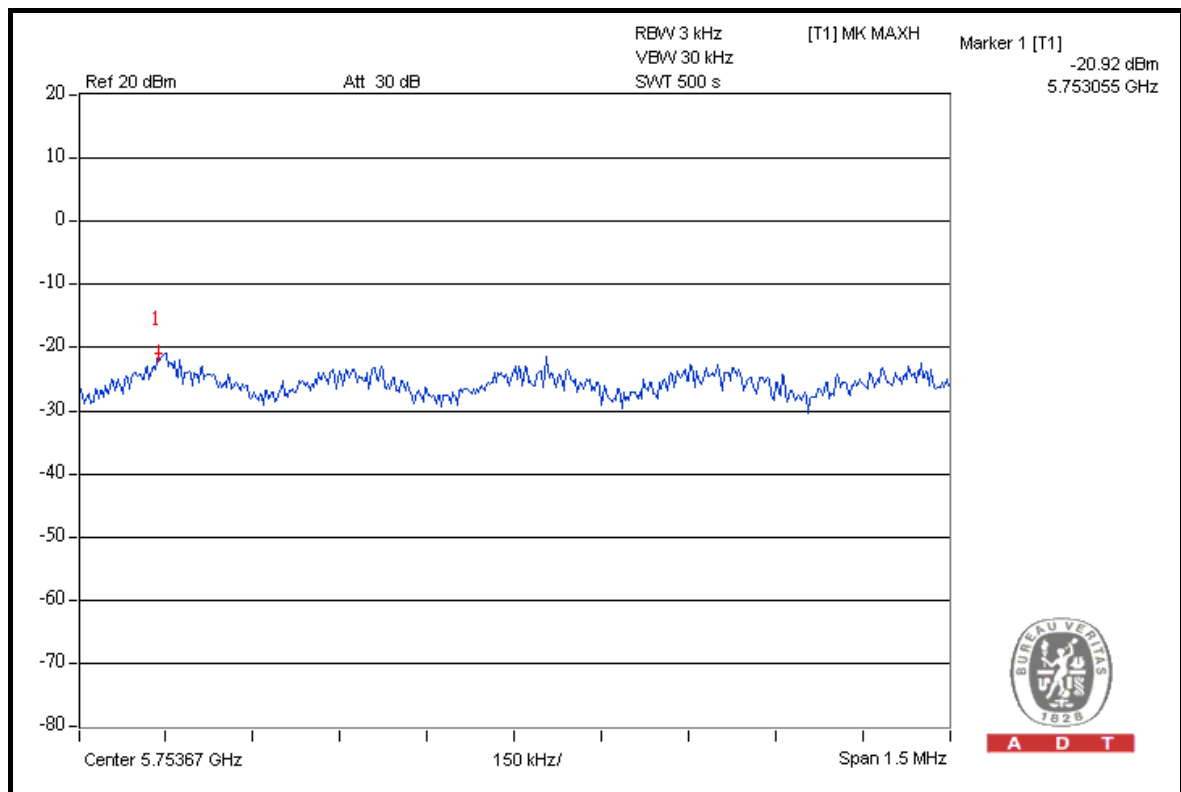


802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
151	5755	-22.69	-20.92	-21.85	-16.99	4	PASS
159	5795	-22.66	-21.14	-21.99	-17.21	4	PASS

NOTE: According to 15.247 (b) (4), the maximum antenna gain 10dBi is higher than 6dBi, so the limit of peak power shall be reduced by 4dB.

FOR CHAIN 1: CH 151



5.6 BAND EDGES MEASUREMENT

5.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB 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. 29, 2009	Dec. 28, 2010
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Dec. 31, 2009	Dec. 30, 2010
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 27, 2010	Apr. 26, 2011
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-405	Feb. 03, 2010	Feb. 02, 2011
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 25, 2009	Dec. 24, 2010
Preamplifier Agilent	8447D	2944A10633	Nov. 10, 2009	Nov. 09, 2010
Preamplifier Agilent	8449B	3008A01964	Nov. 09, 2009	Nov. 08, 2010
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	238141/4	May 14, 2010	May 13, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	12738/6	May 14, 2010	May 13, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100.	TT93021703	NA	NA
Turn Table Controller ADT.	SC100.	SC93021703	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.



A D T

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

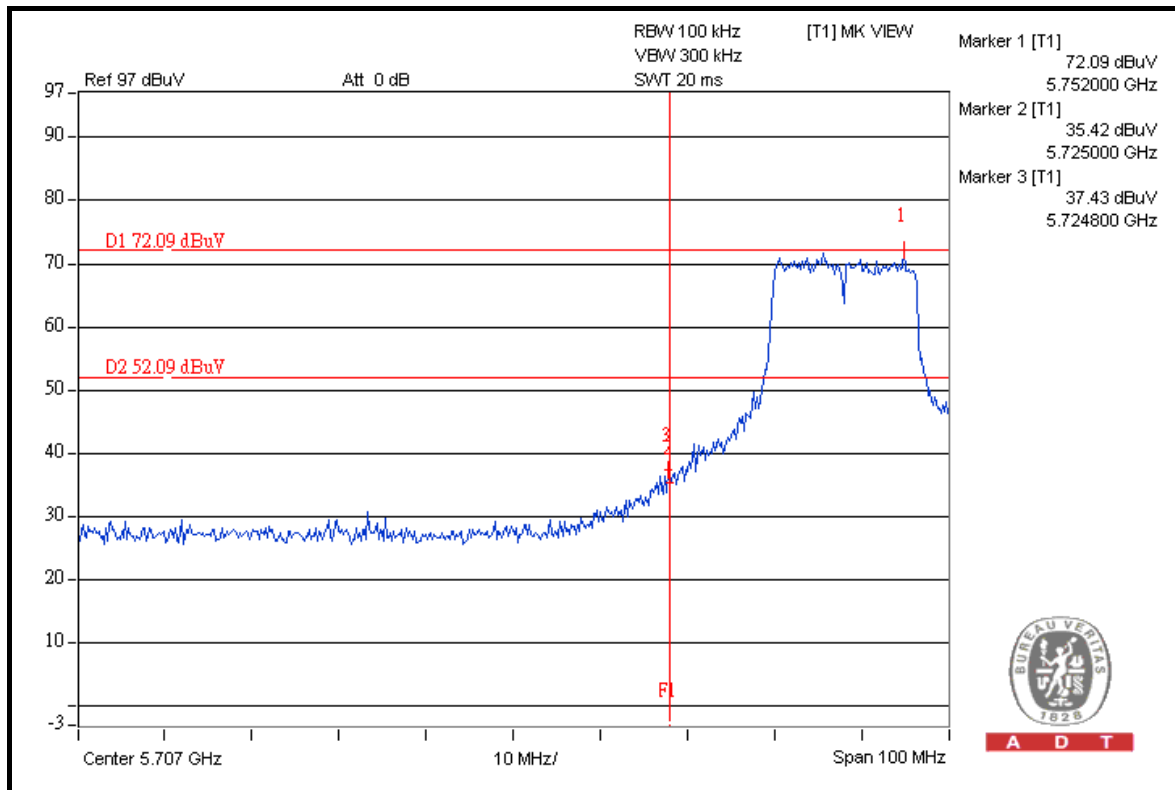
The spectrum plots are attached on the following pages. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).



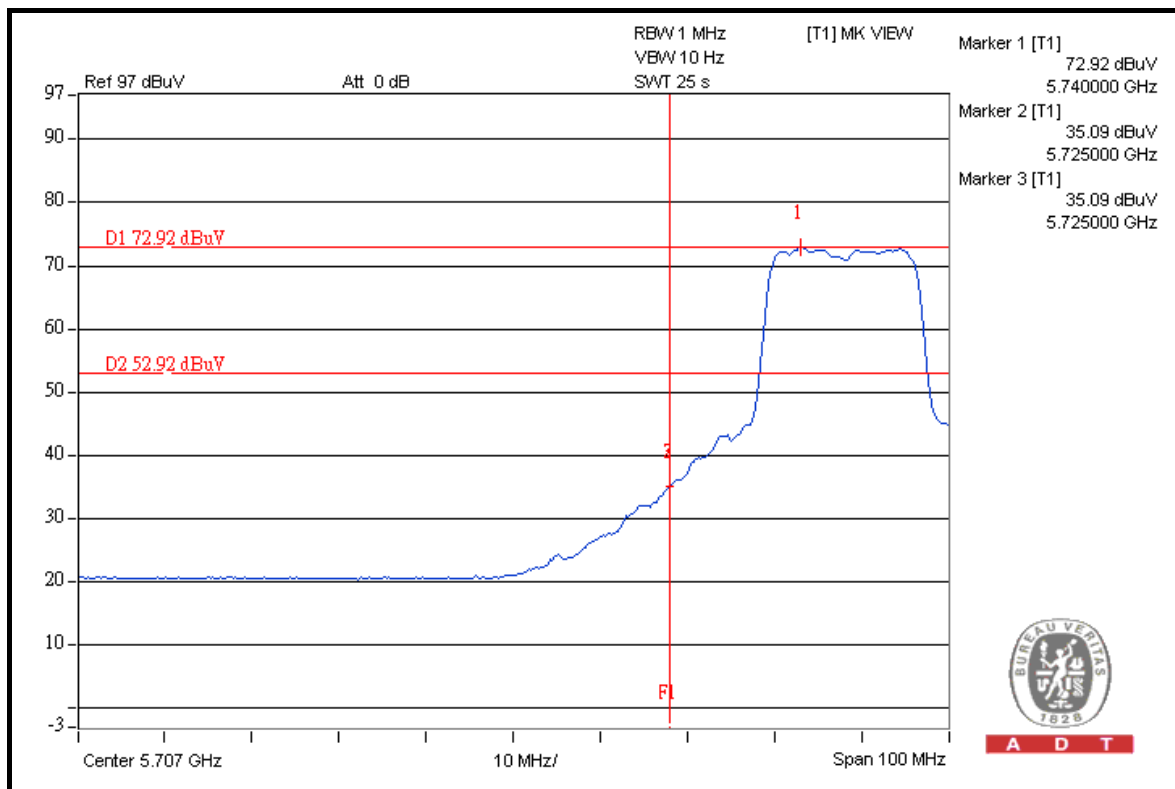
A D T

TEST MODE A

802.11a



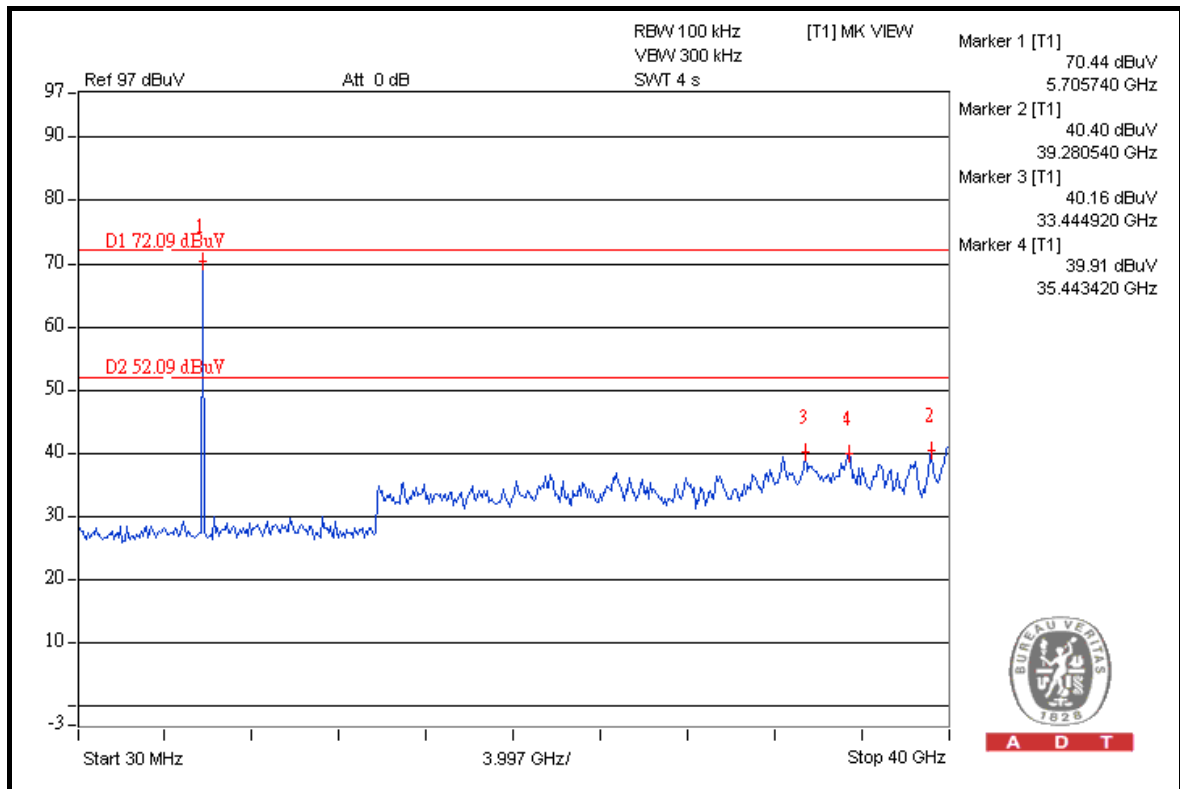
A D T



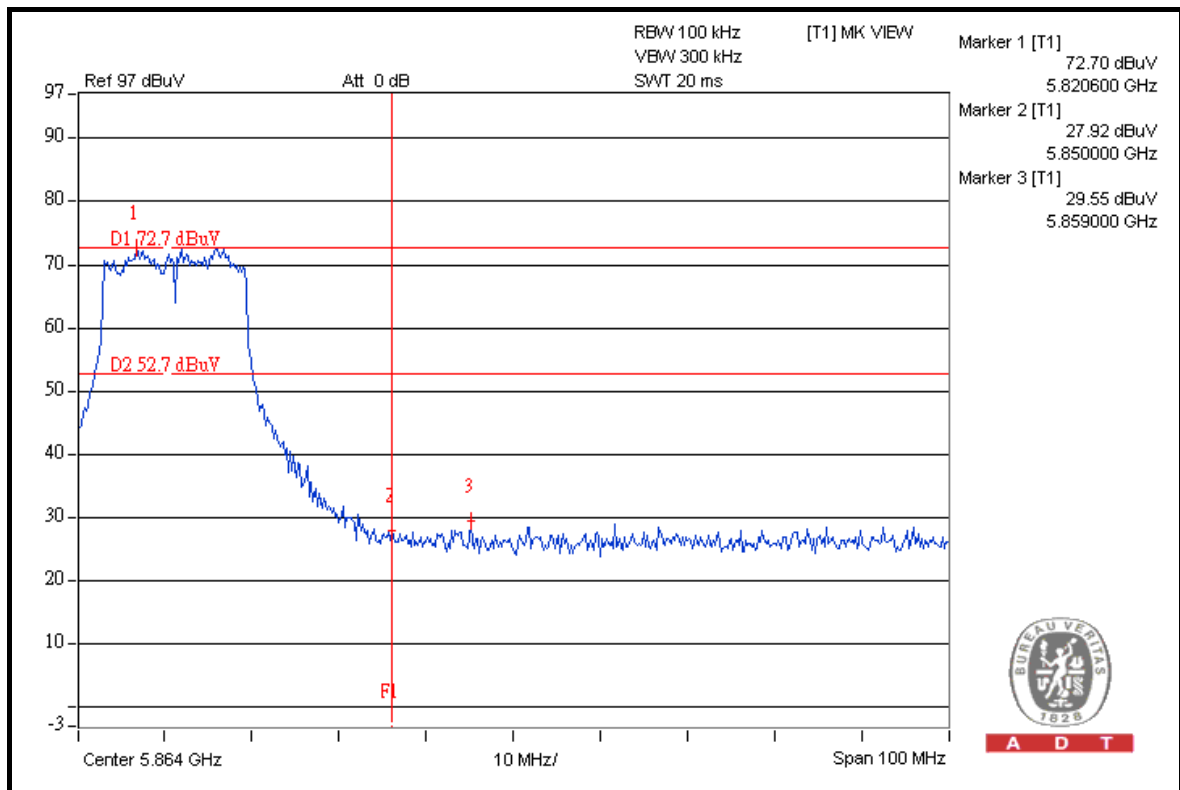
A D T



A D T



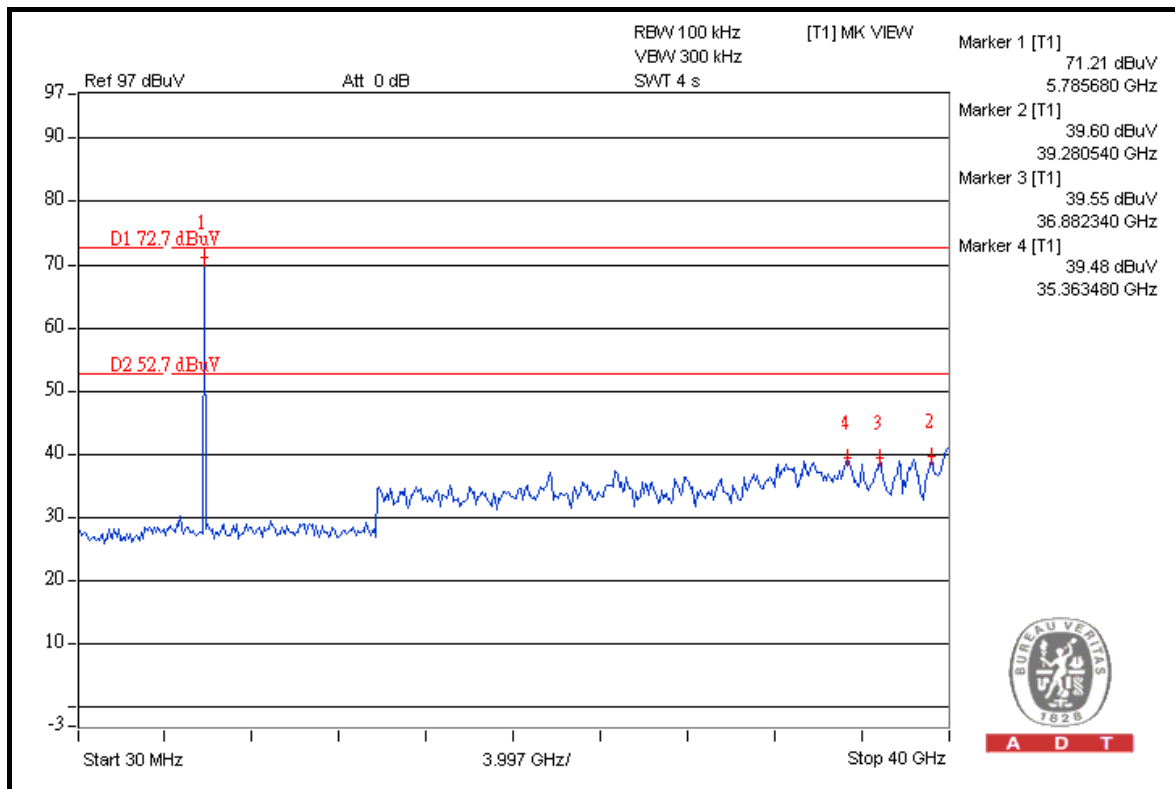
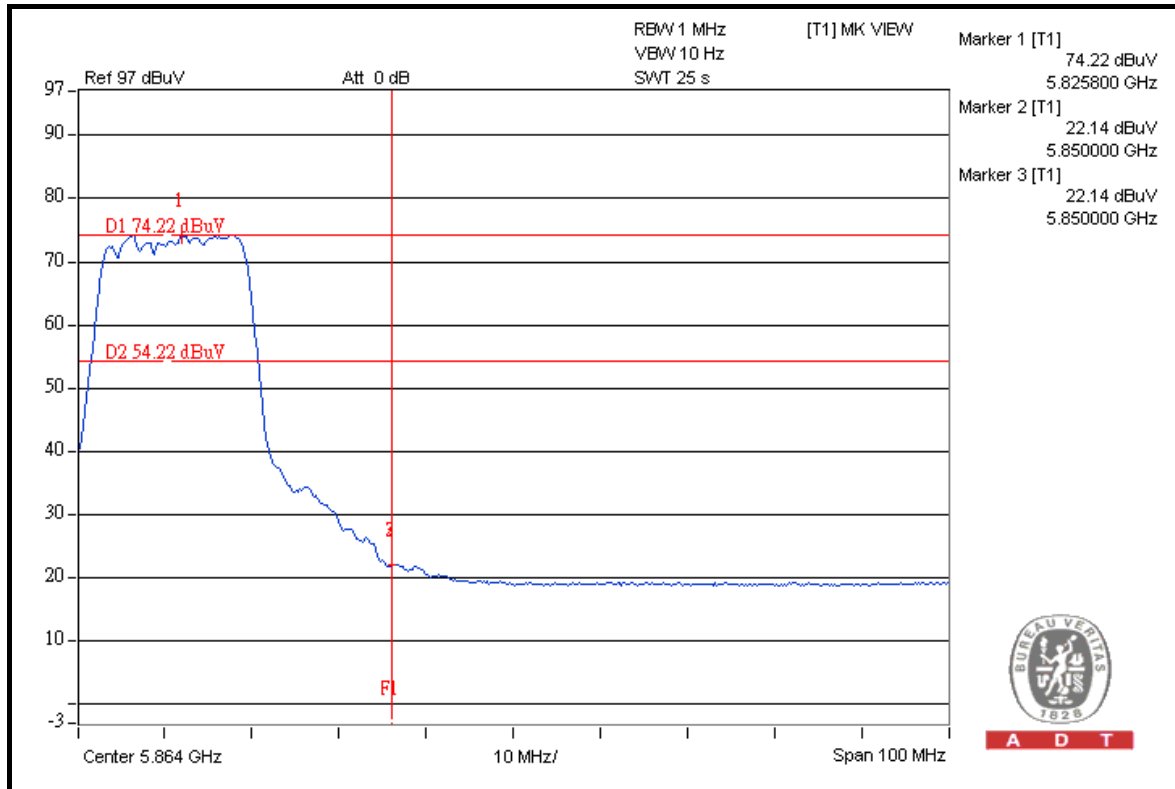
A D T



A D T



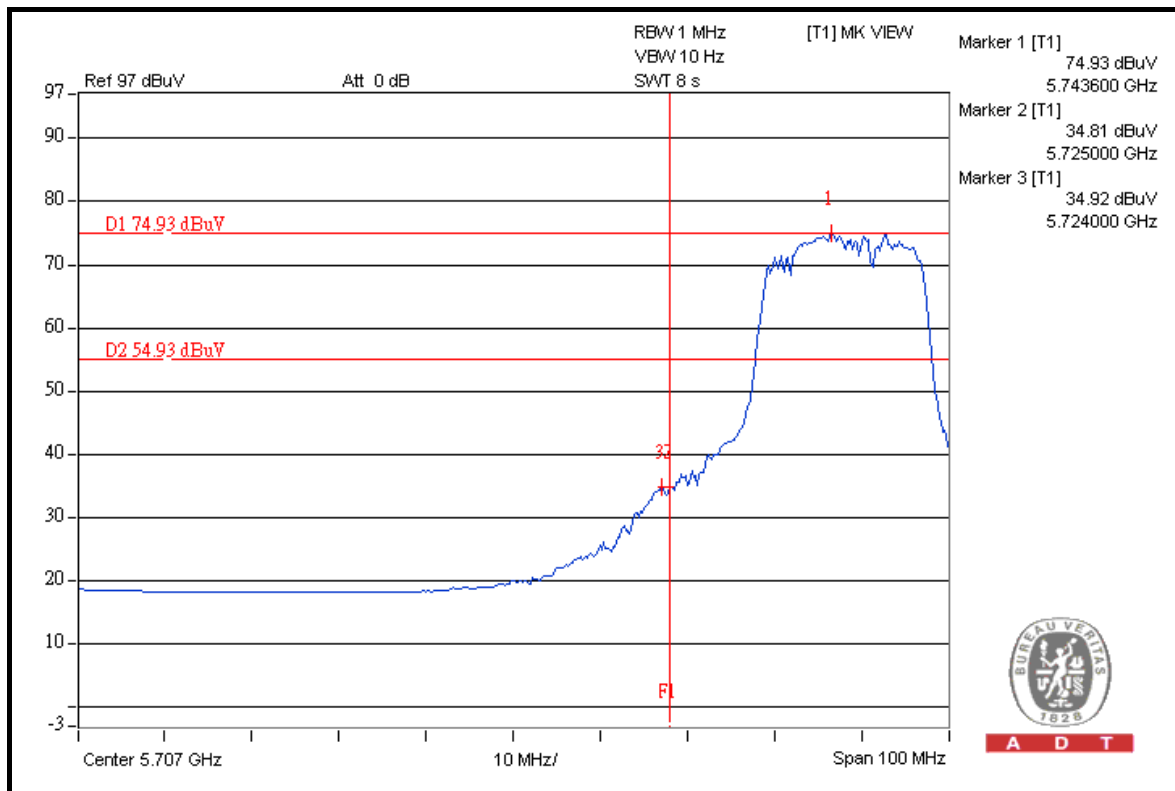
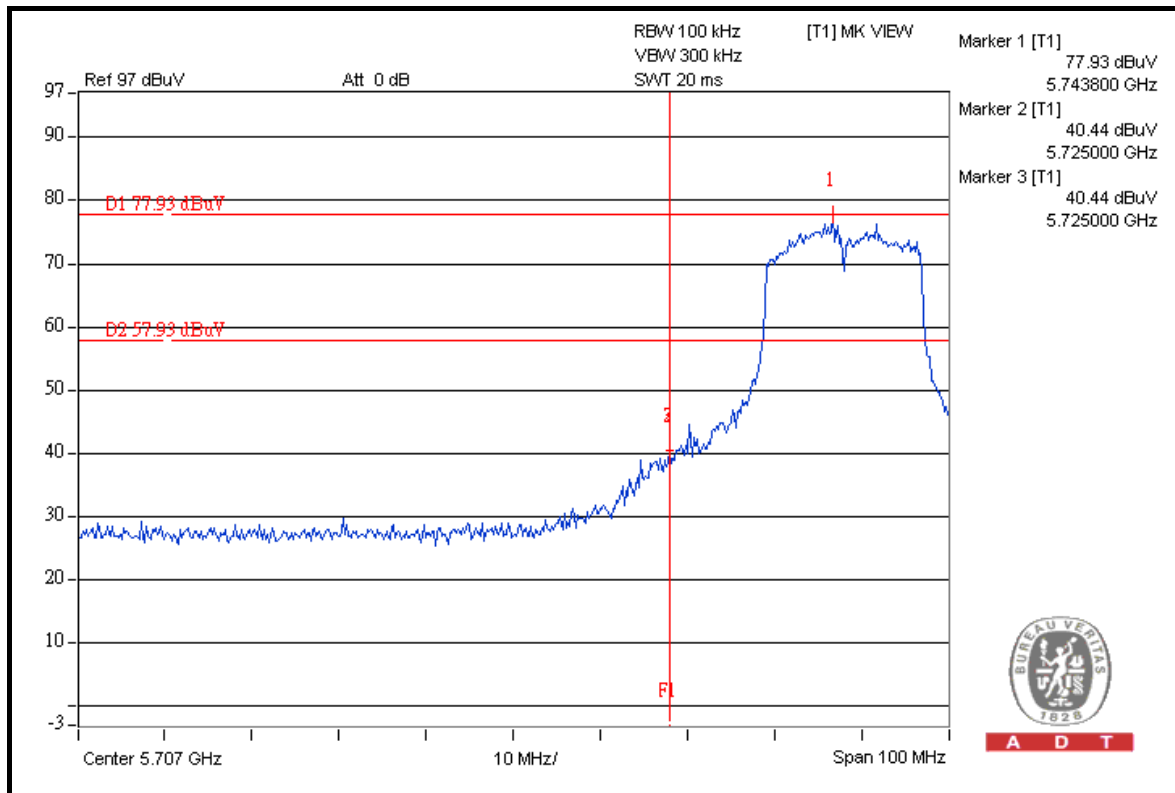
A D T





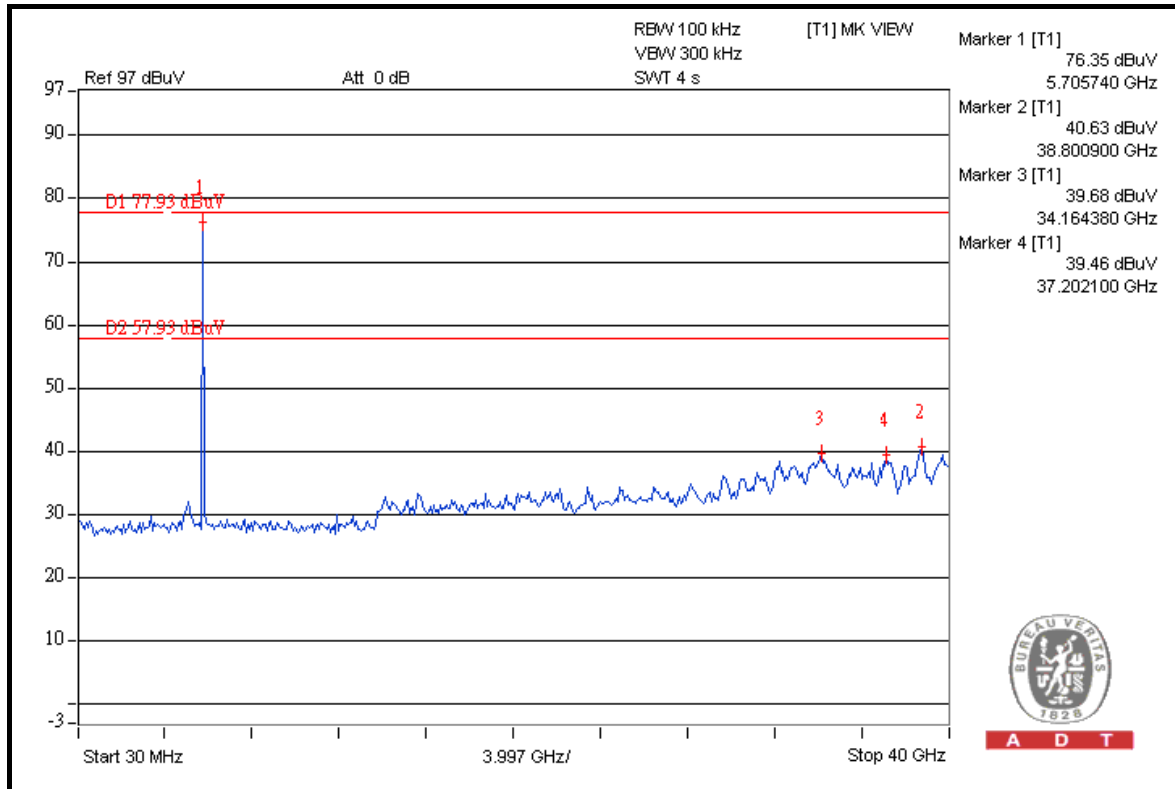
A D T

802.11n (20MHz)

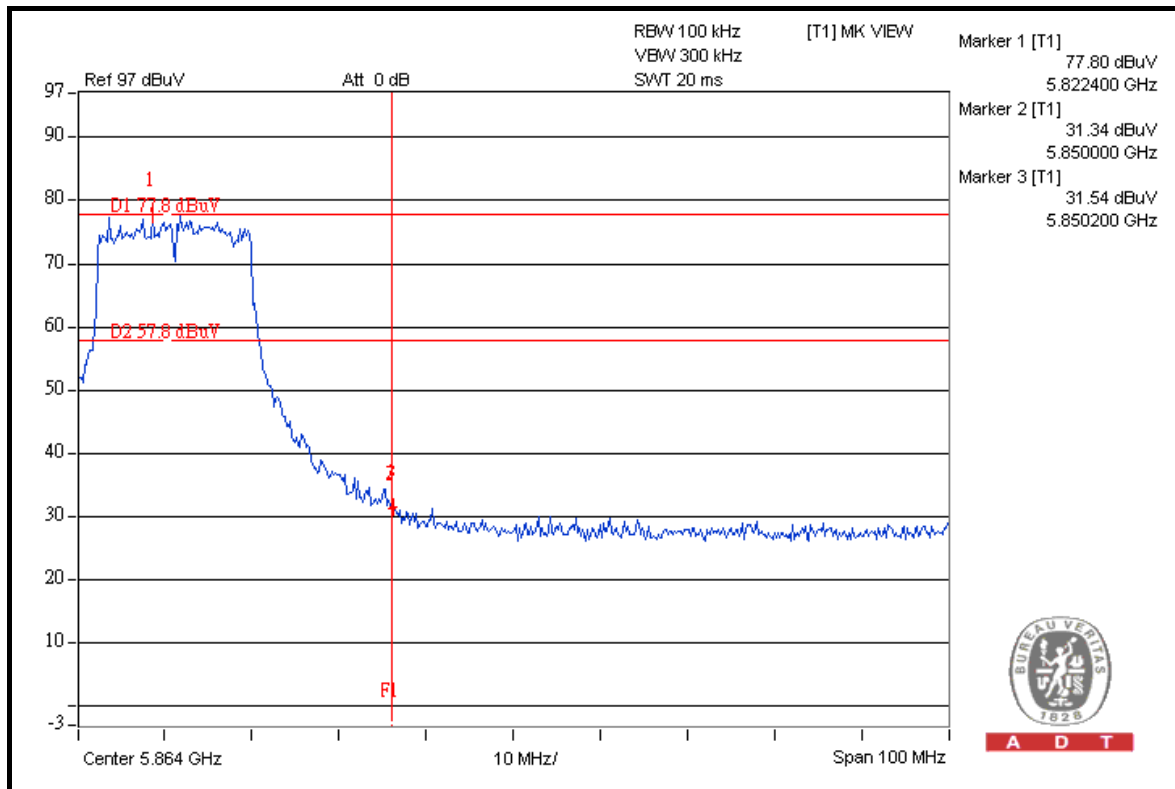




A D T



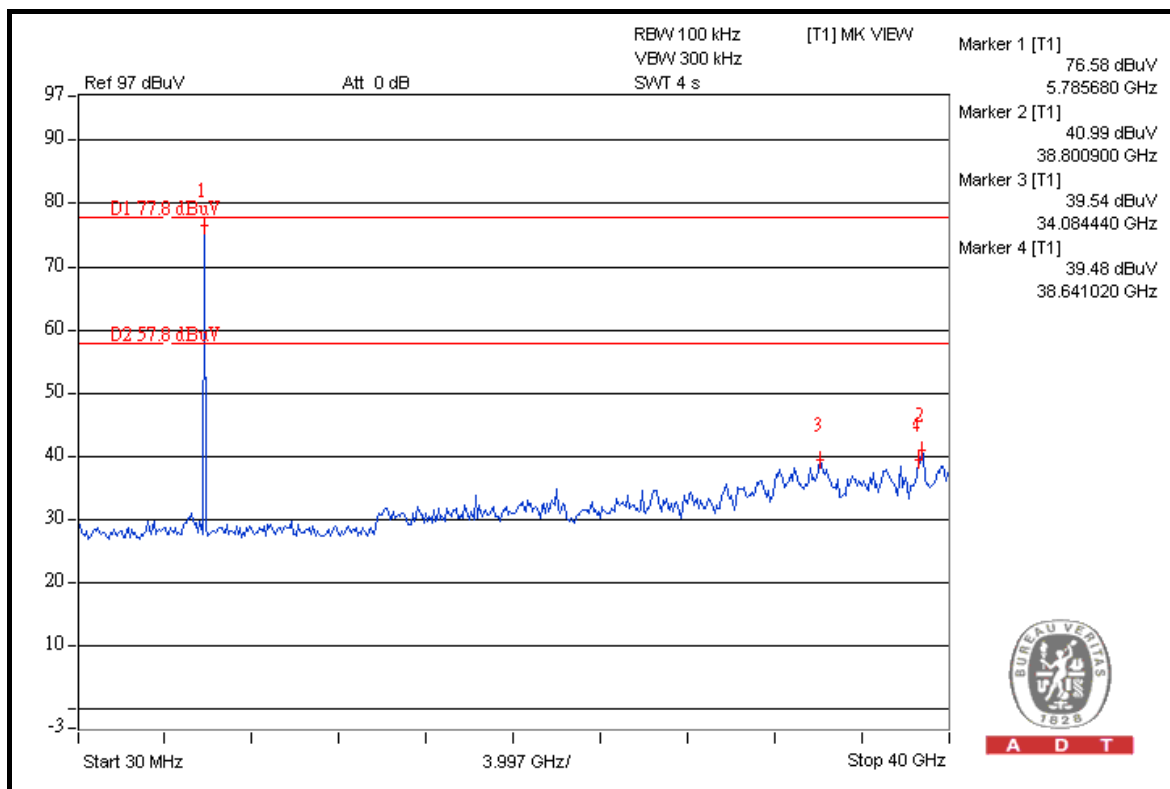
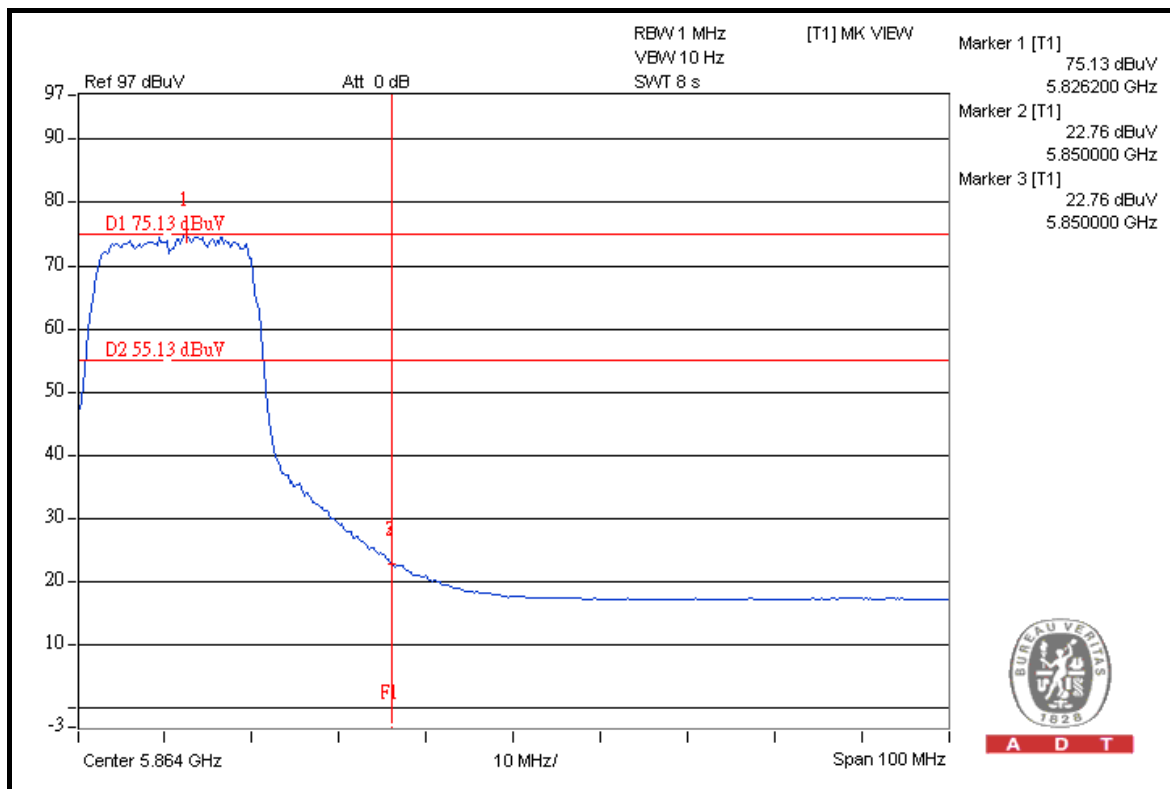
A D T



A D T



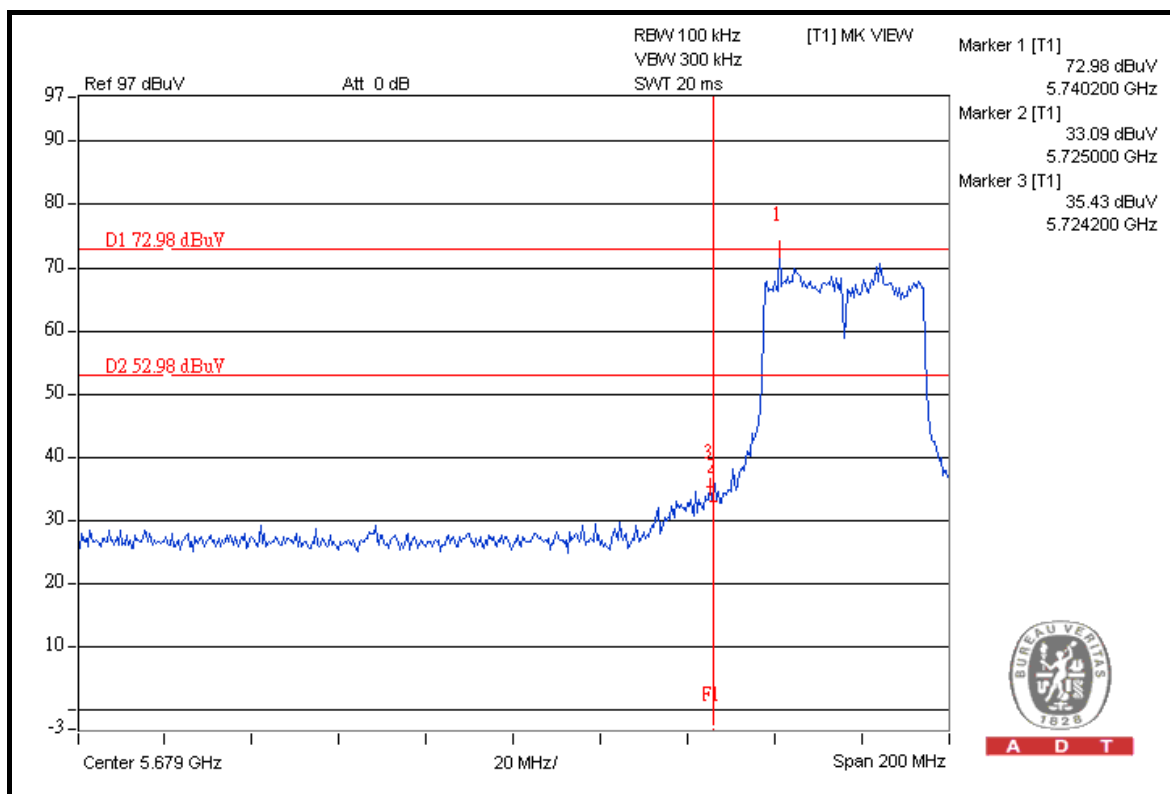
A D T



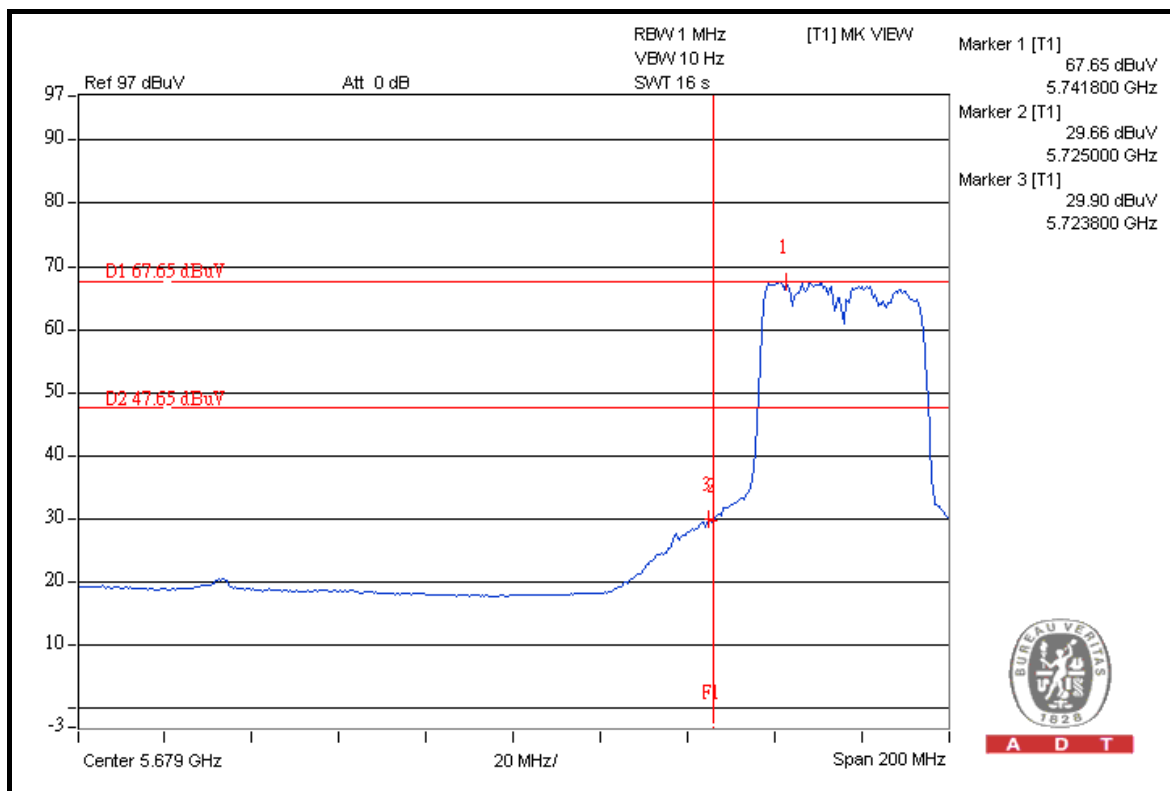


A D T

802.11n (40MHz)



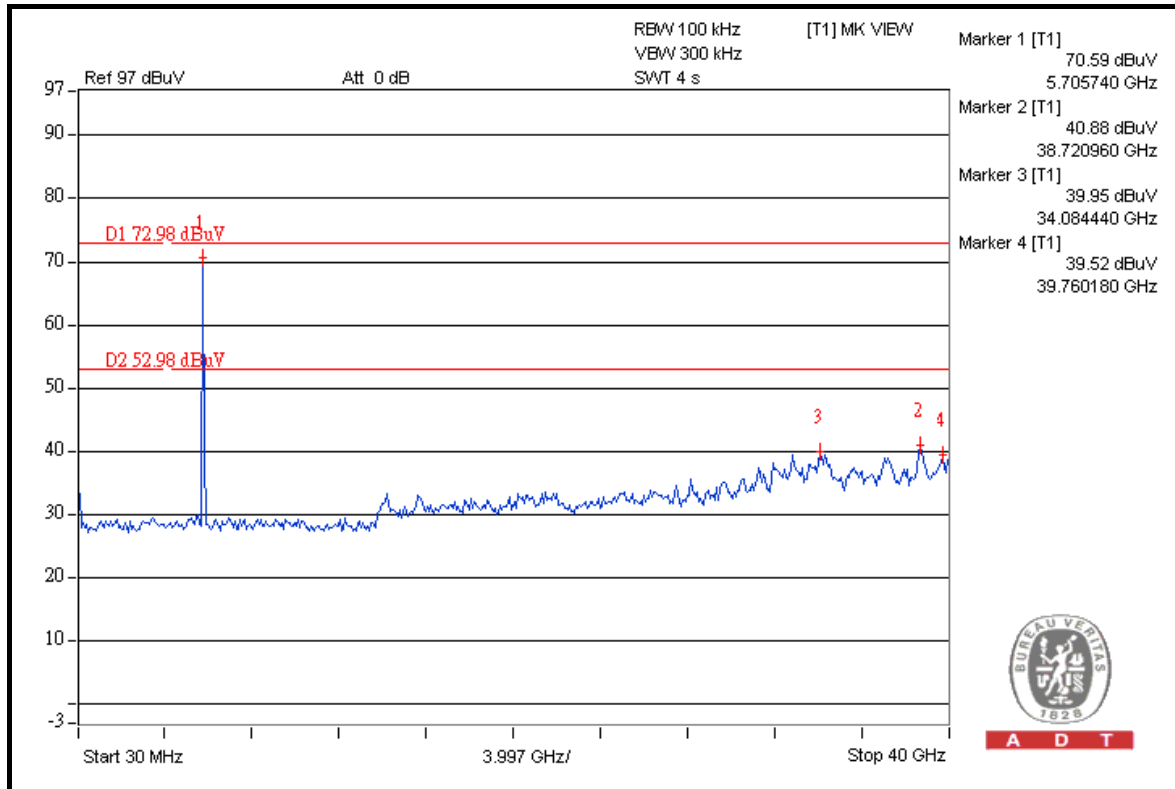
A D T



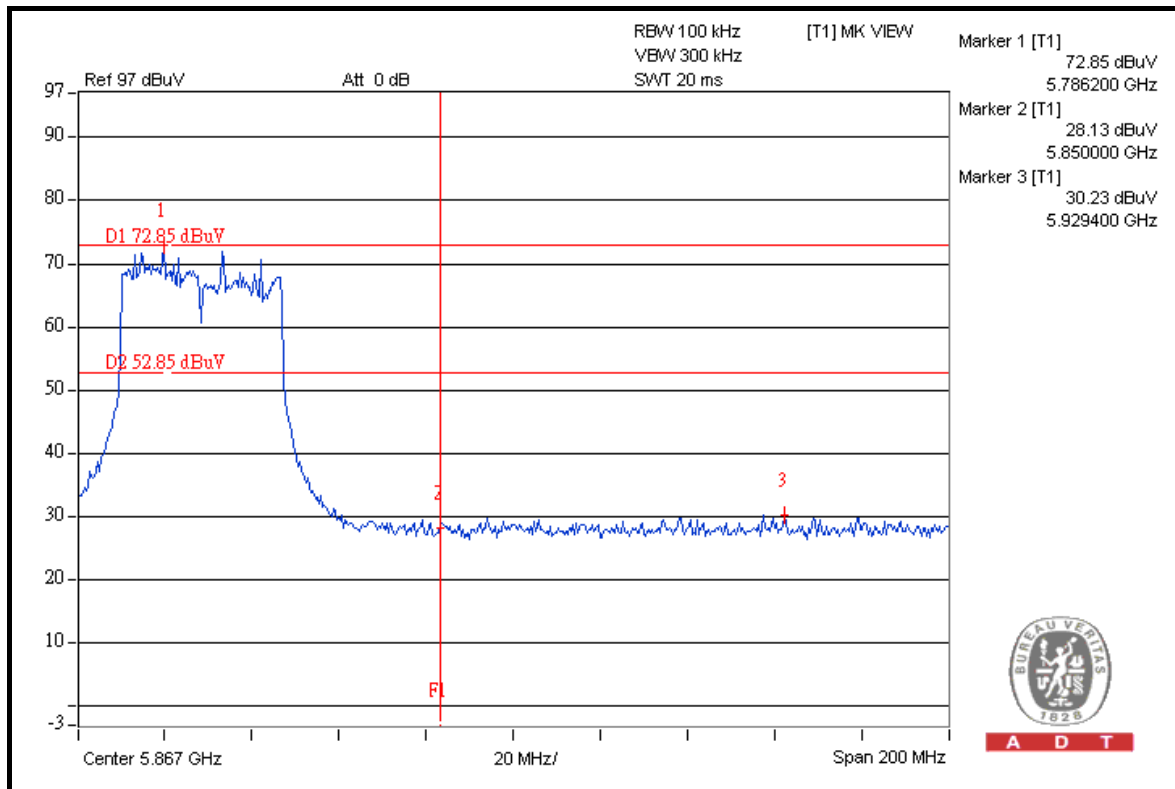
A D T



A D T



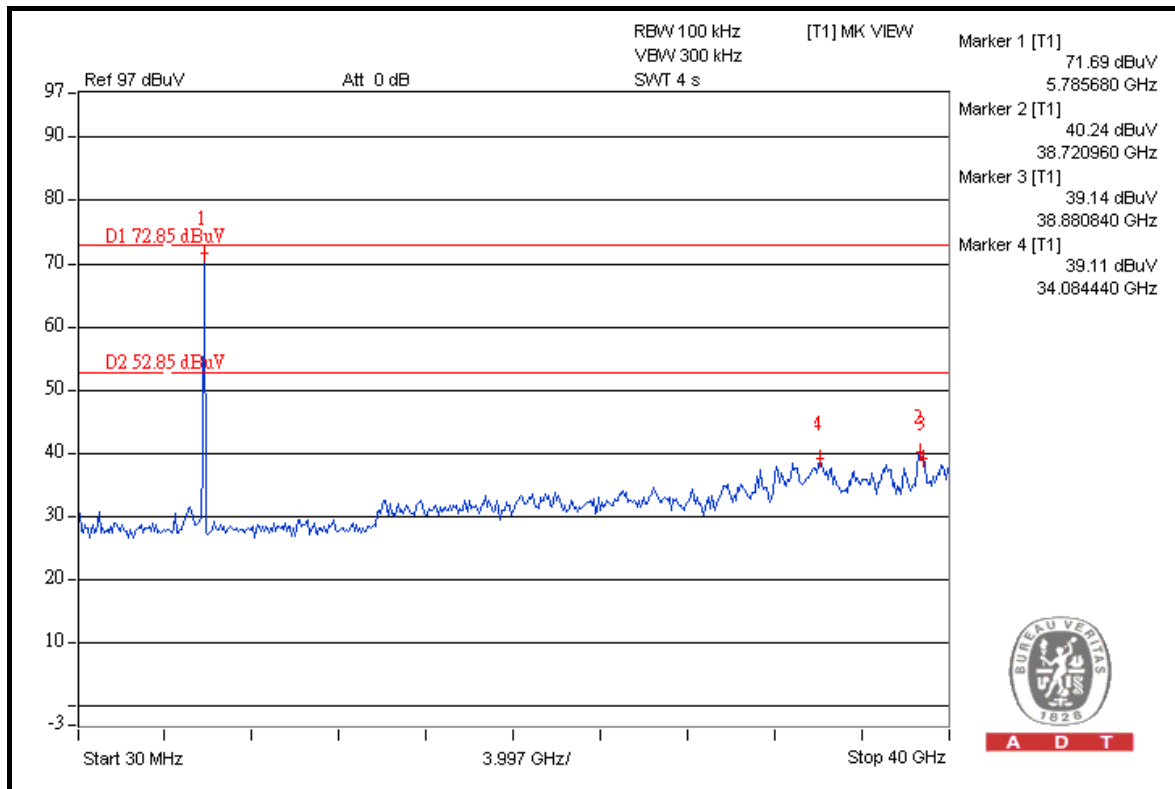
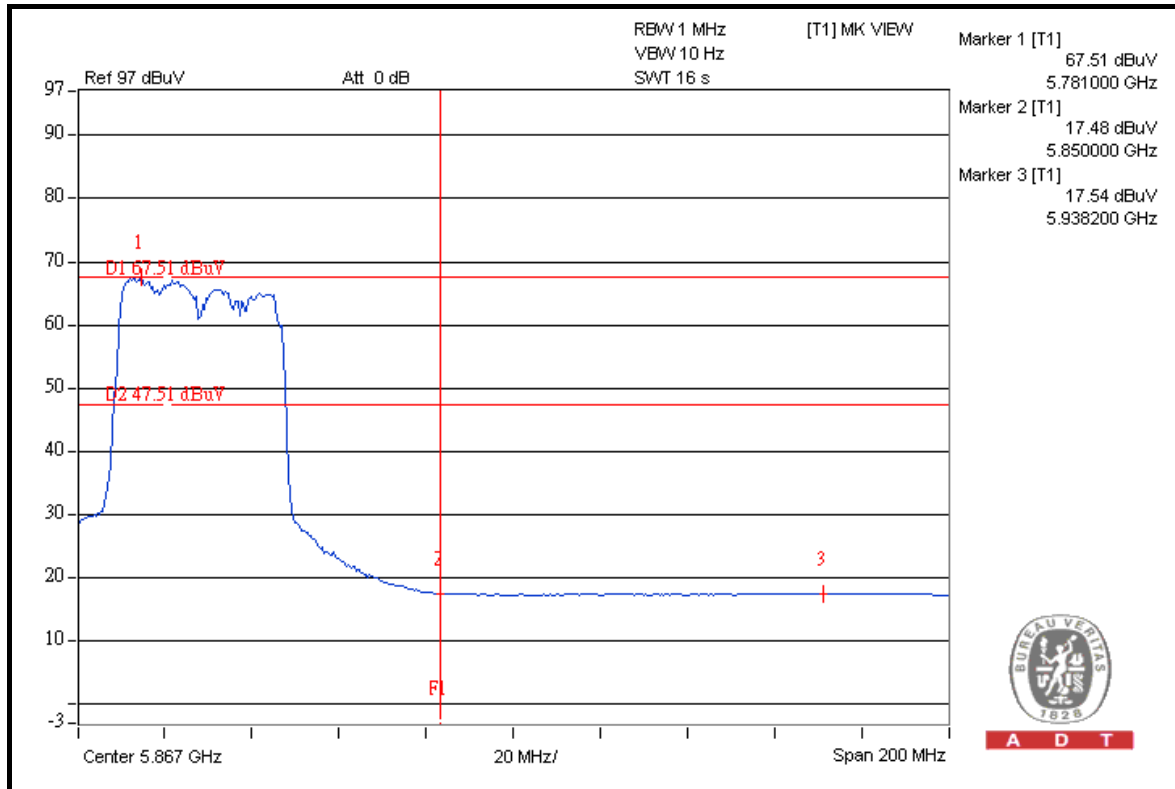
A D T



A D T



A D T

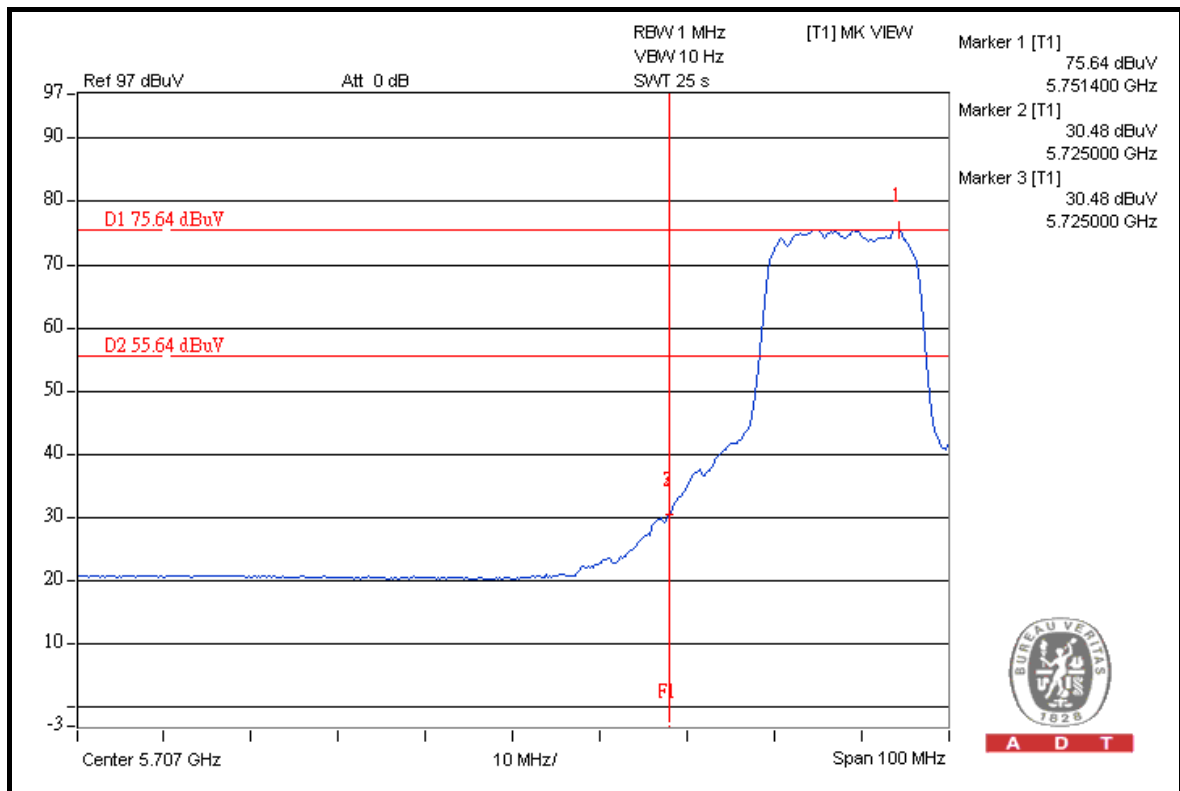
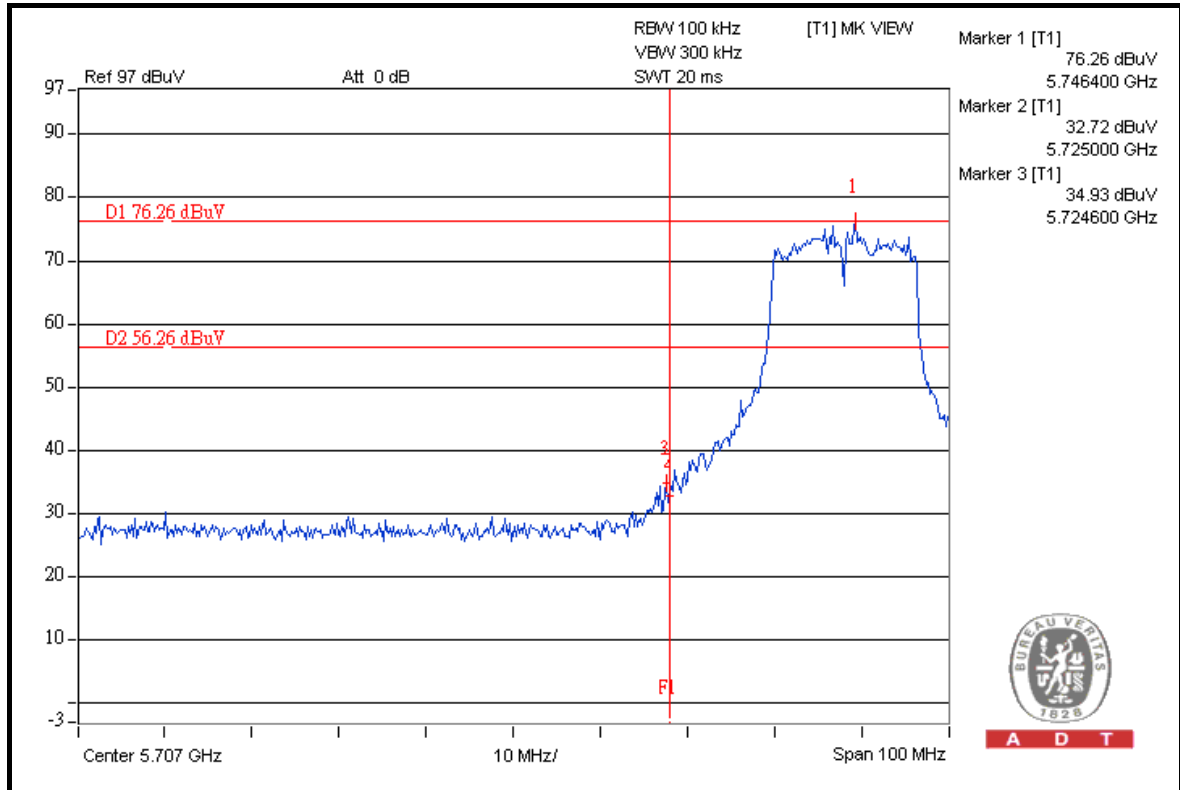




A D T

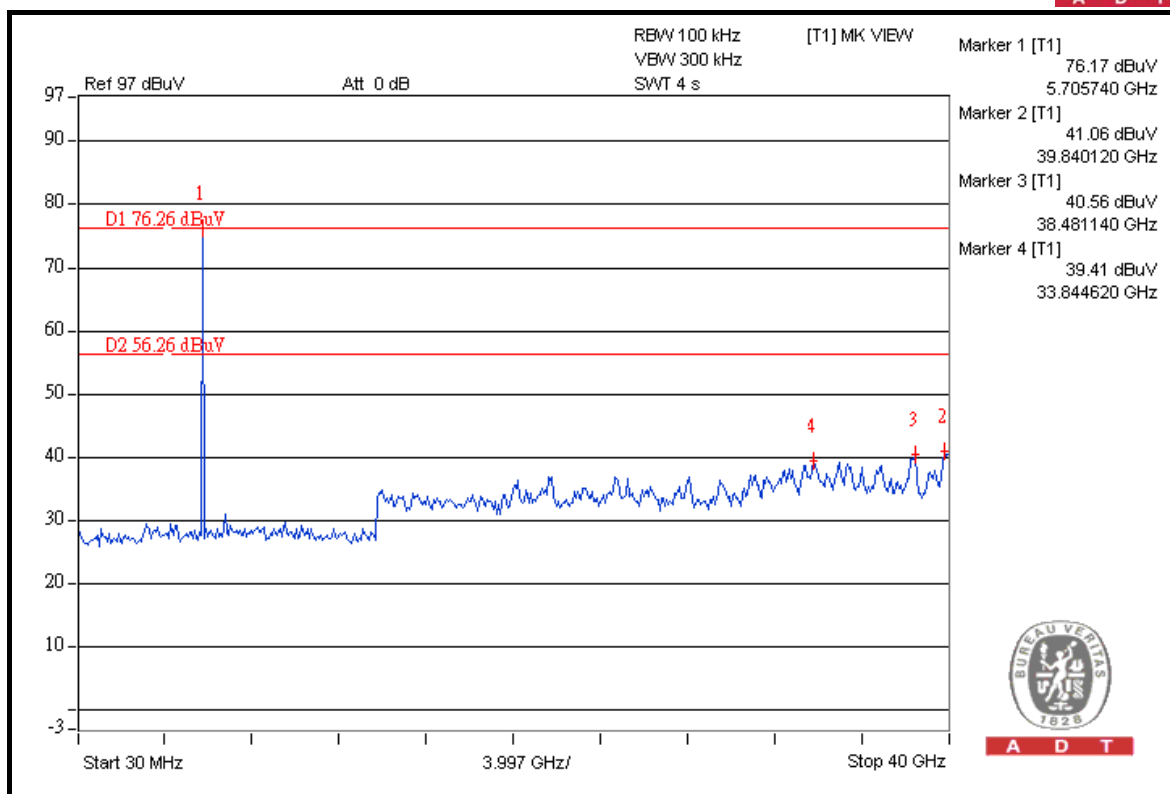
TEST MODE B

802.11a

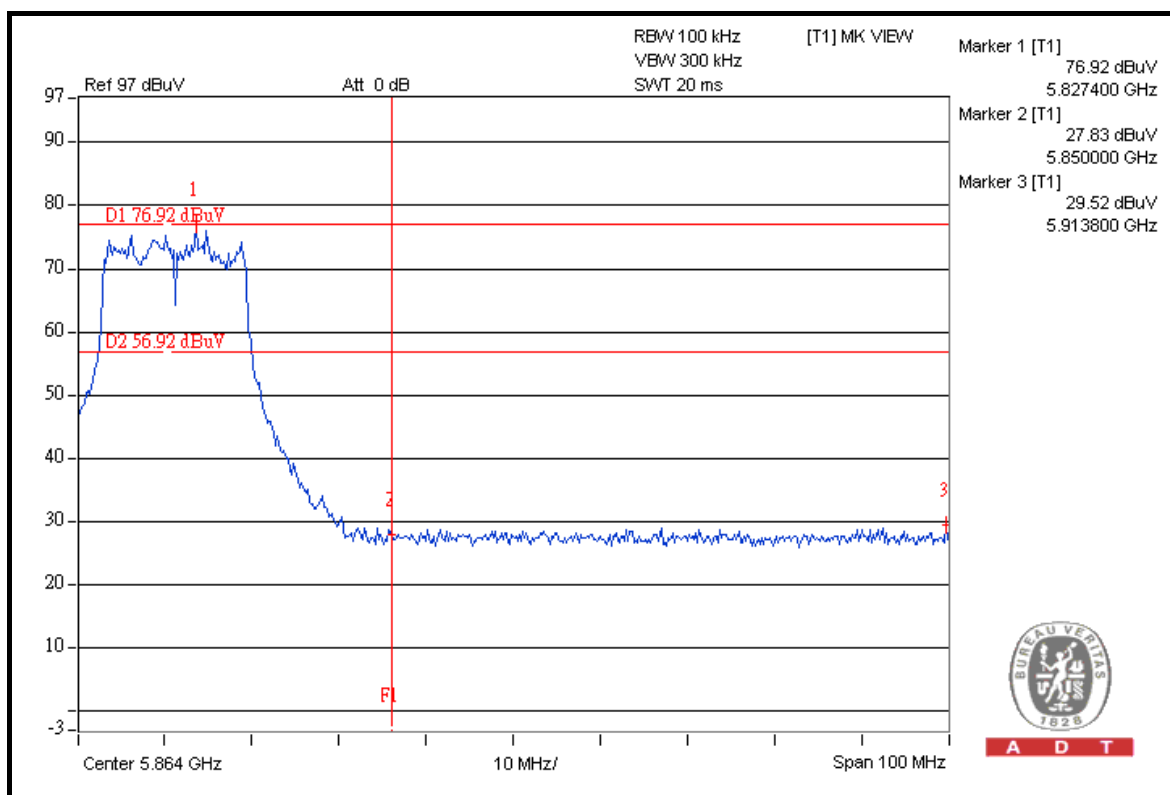




A D T



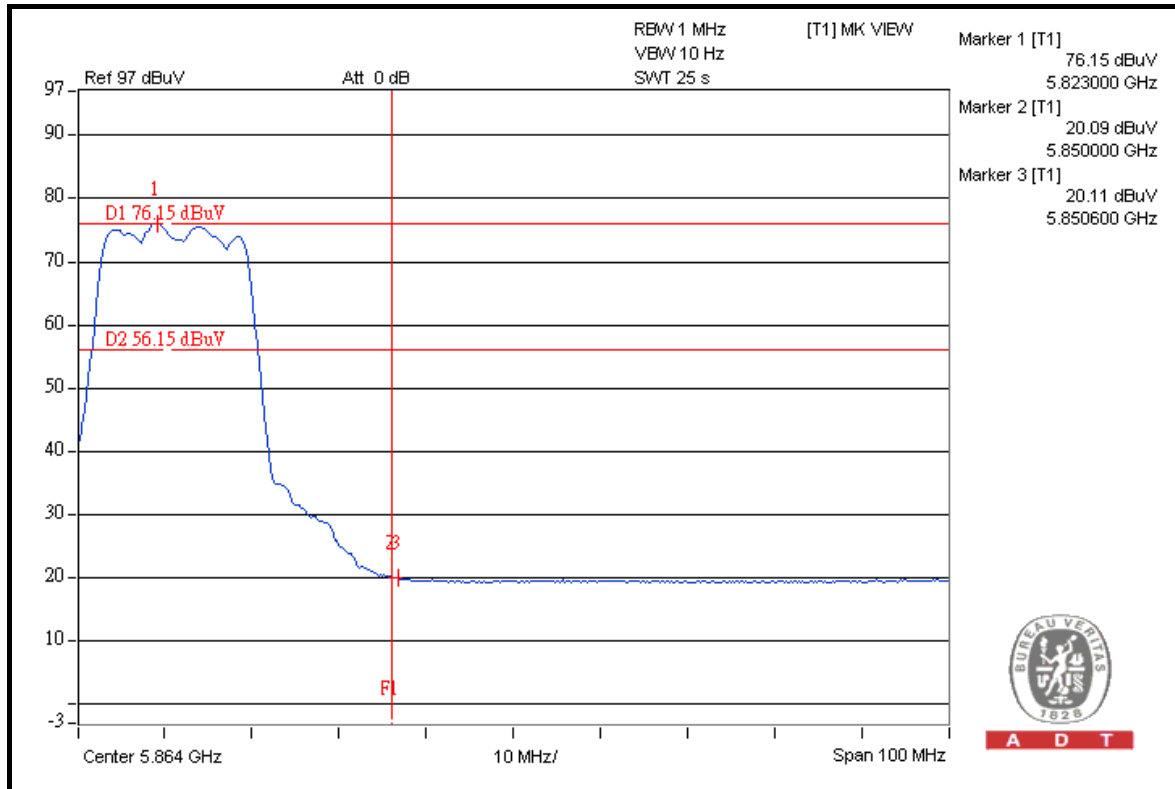
A D T



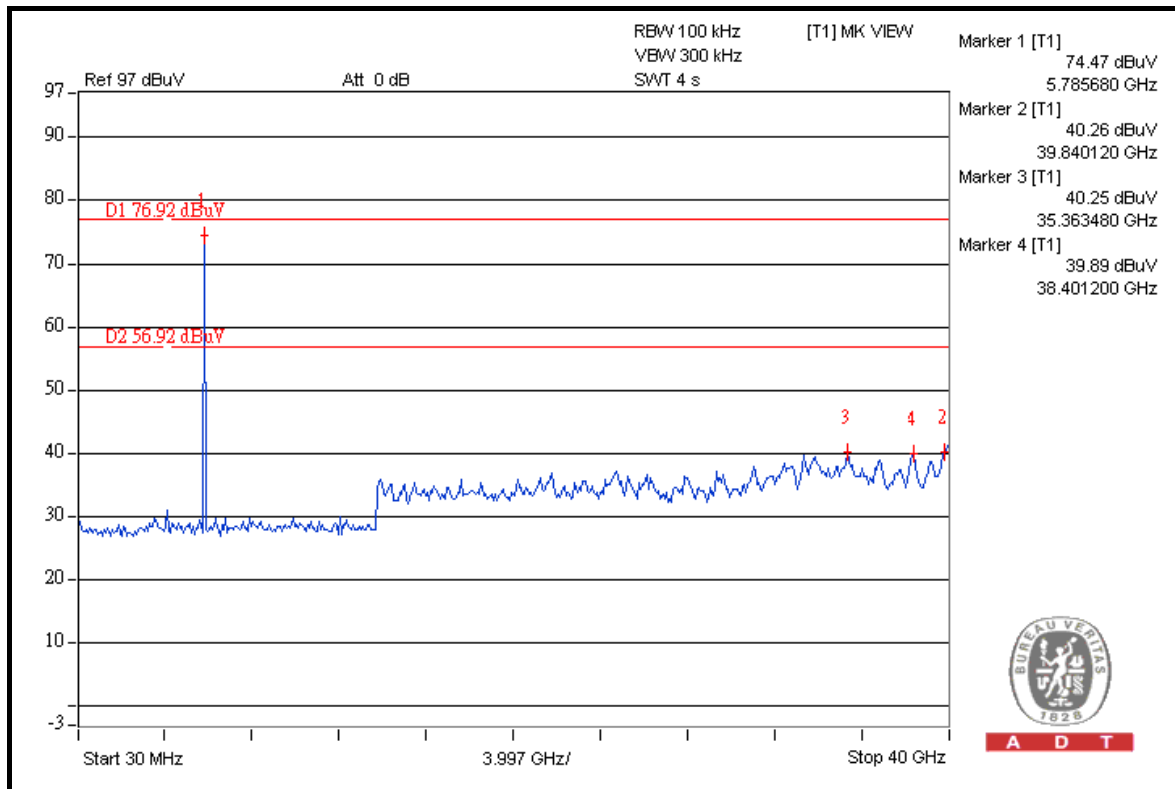
A D T



A D T



A D T

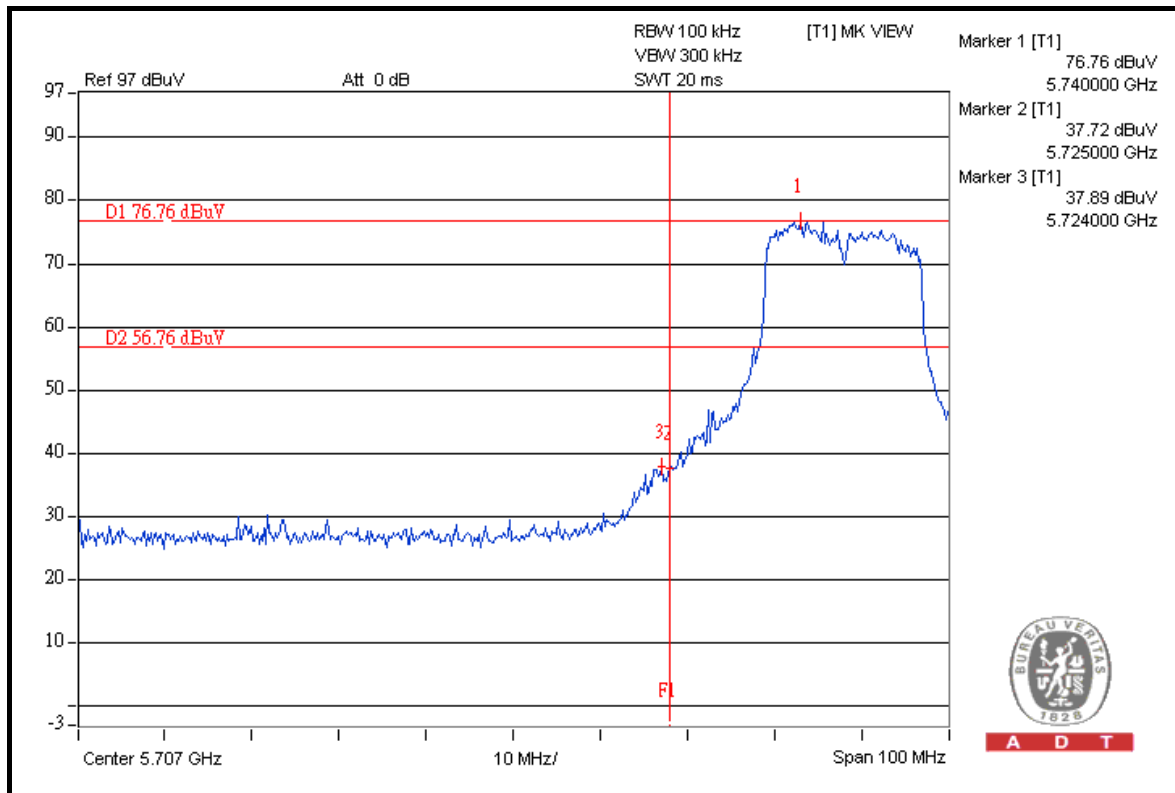


A D T

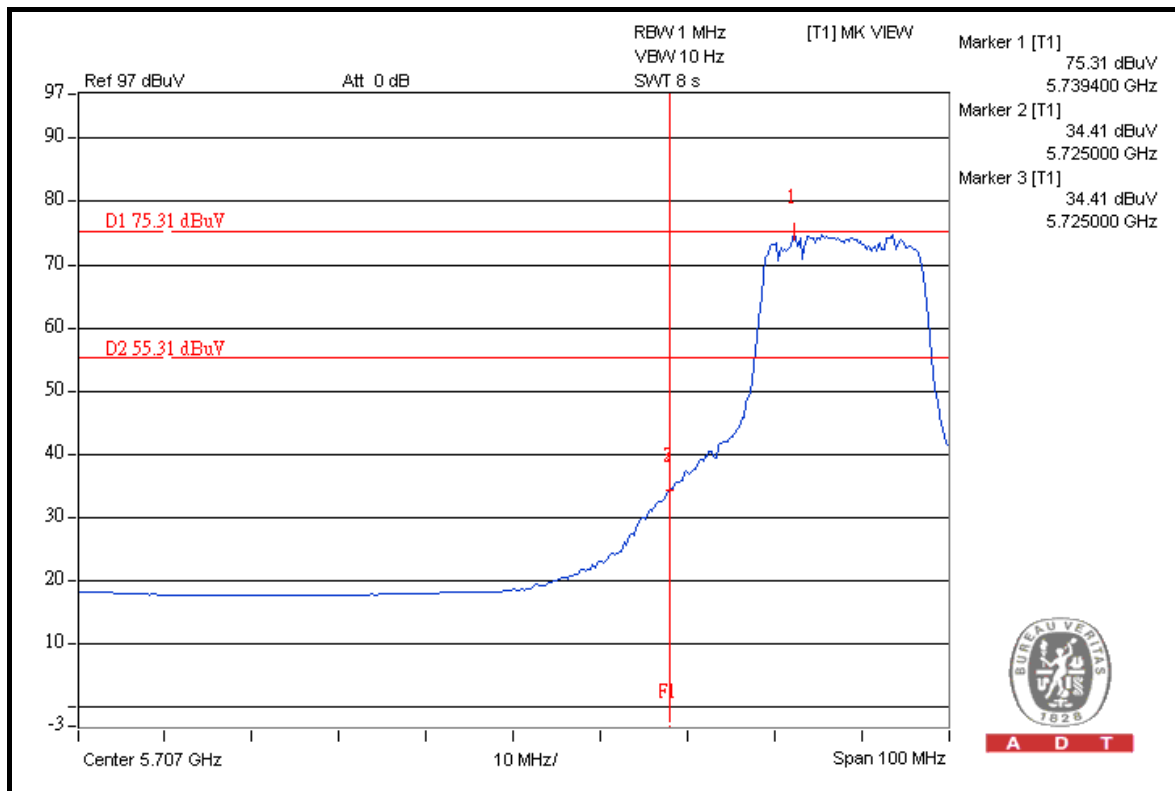


A D T

802.11n (20MHz)



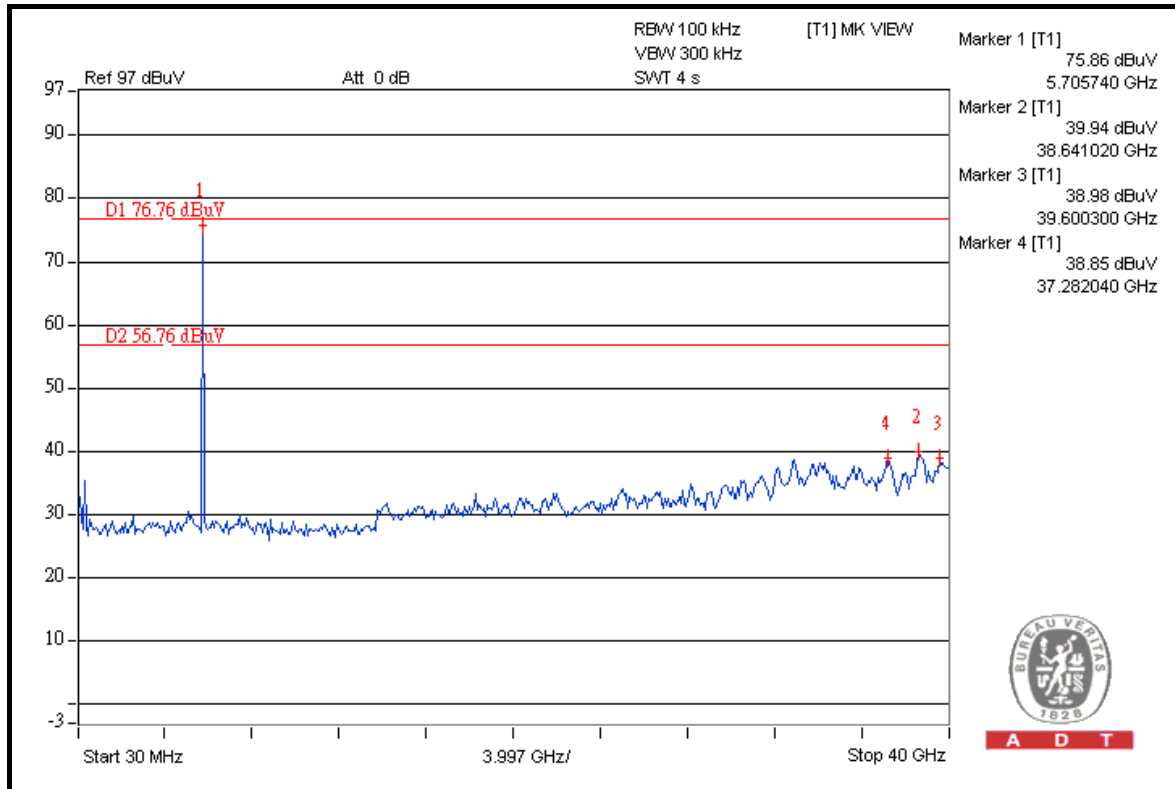
A D T



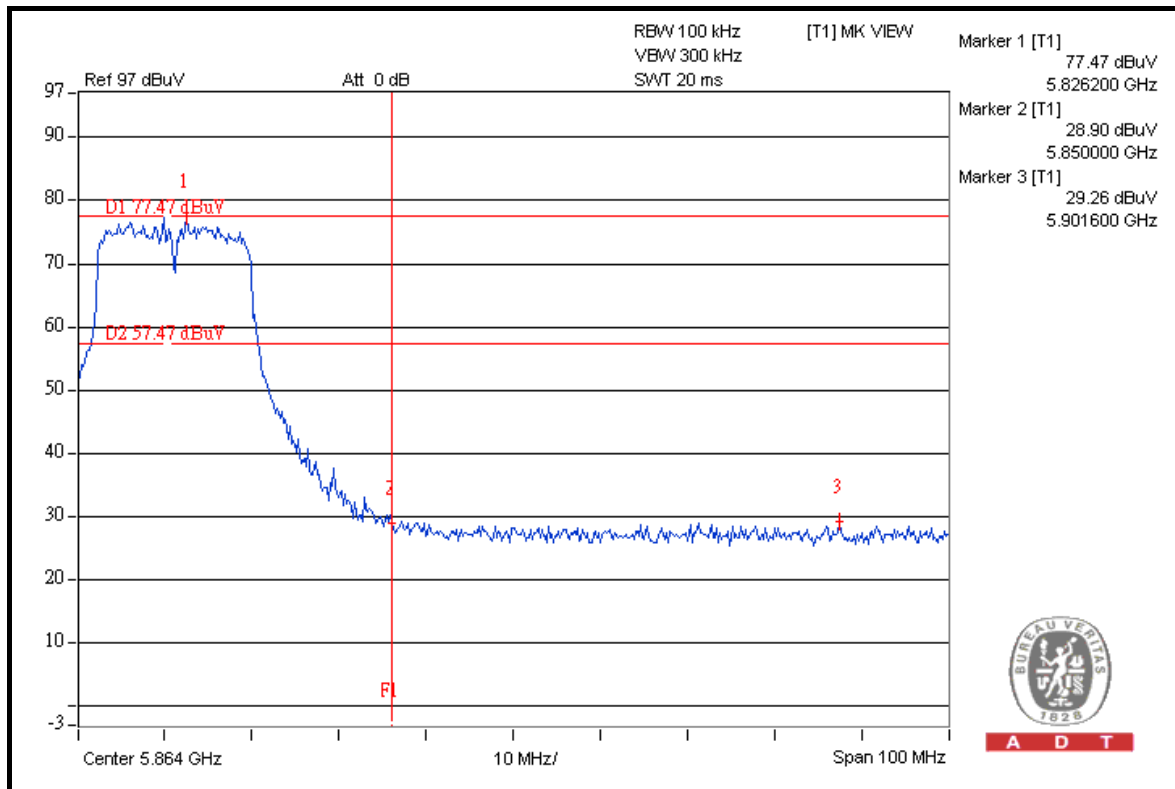
A D T



A D T



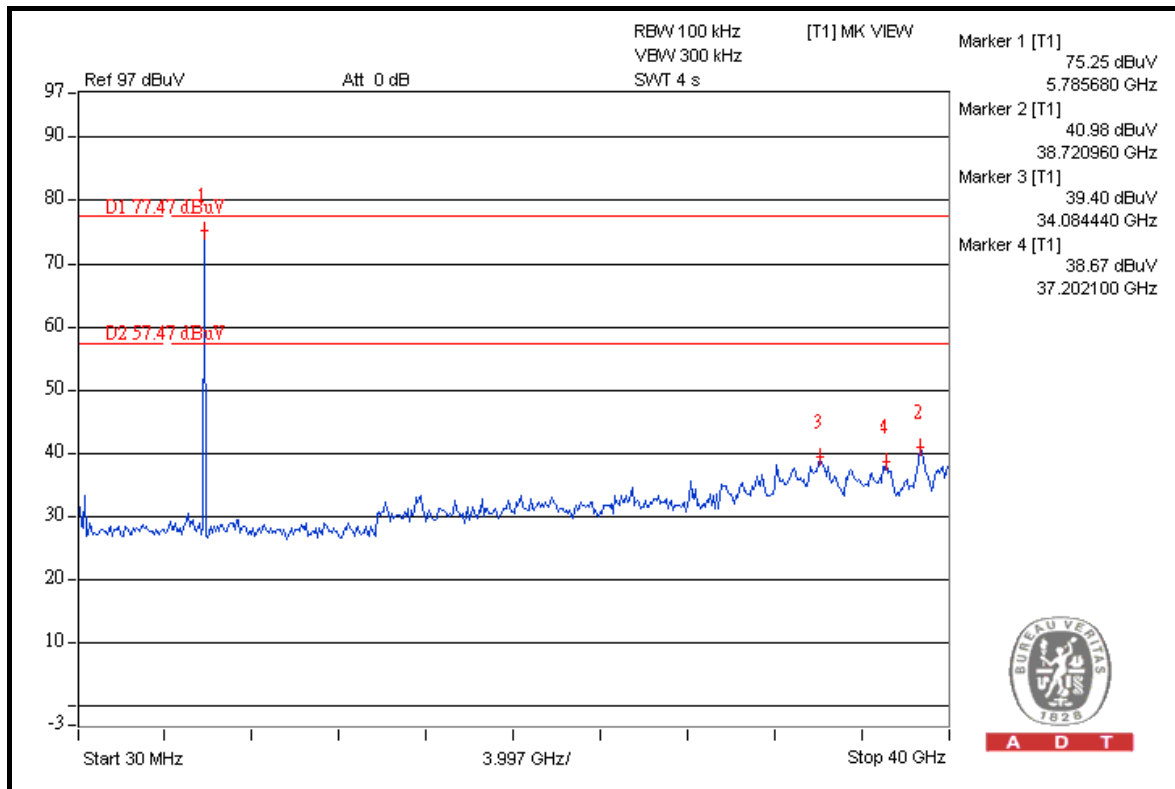
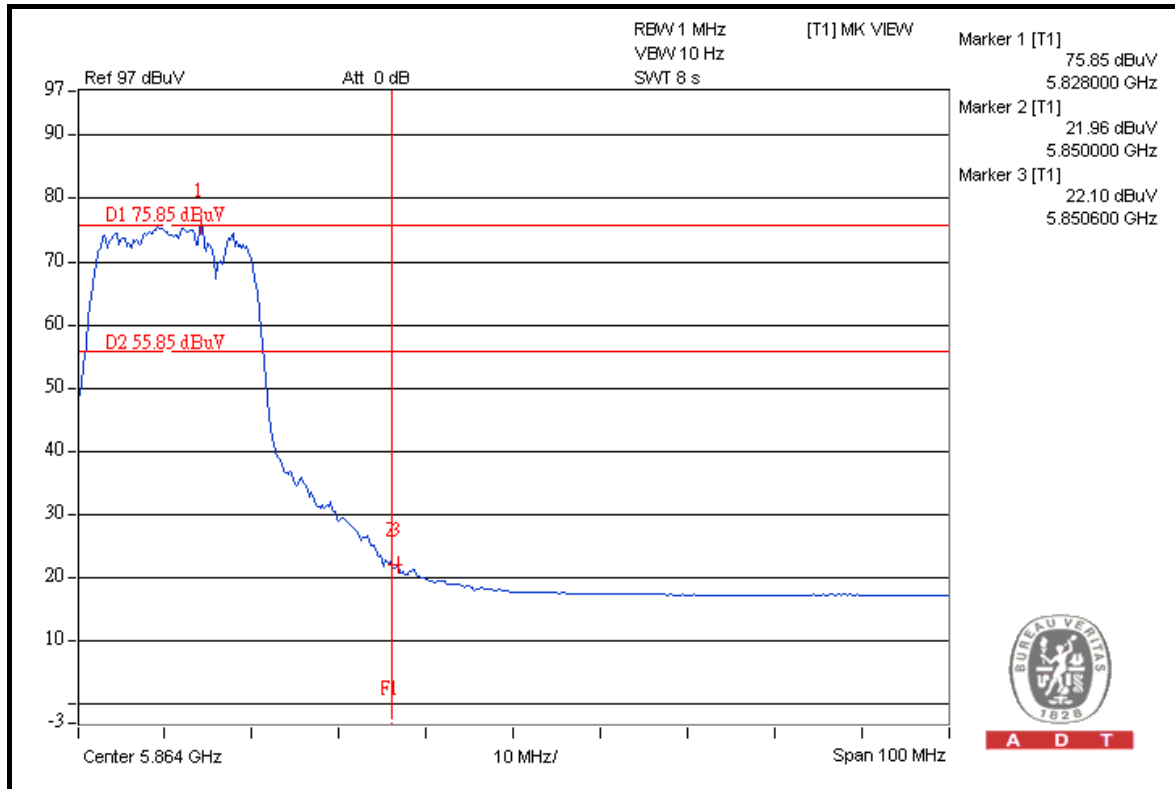
A D T



A D T



A D T





Ref 97 dBuV Att 0 dB RBW 100 kHz VBW 300 kHz SVWT 20 ms [T1] MK VIEW

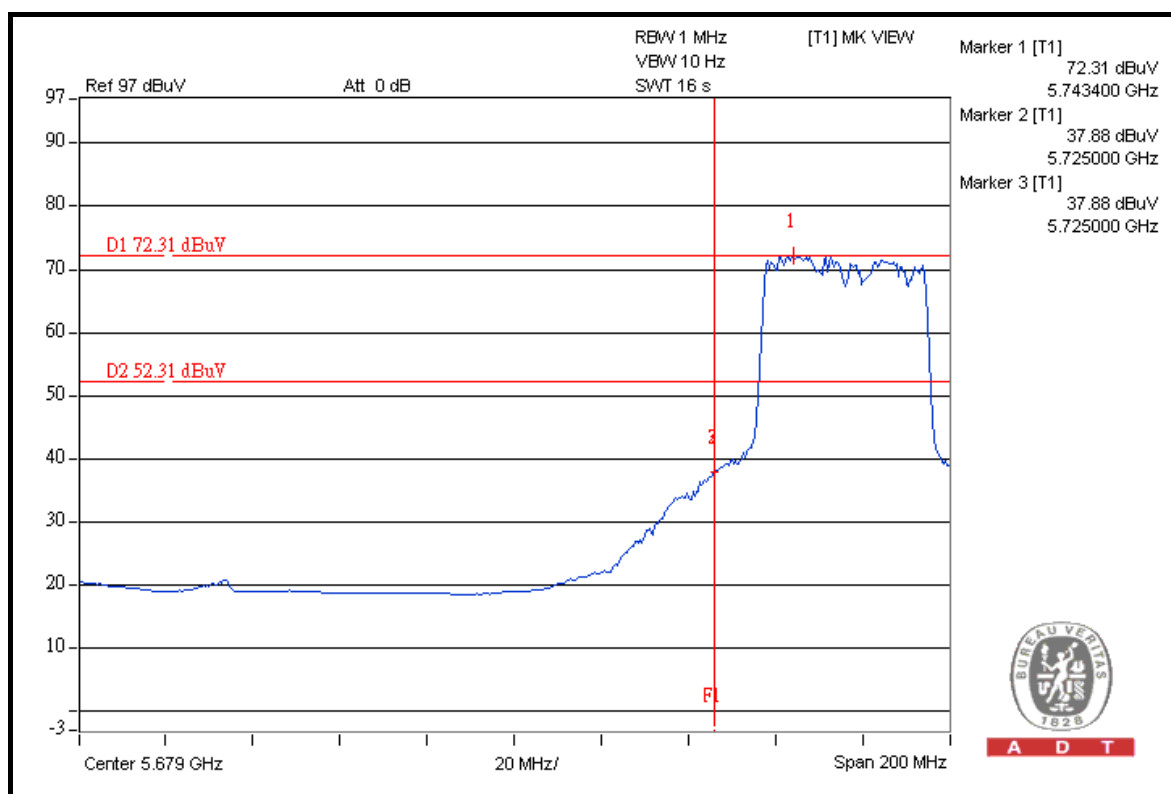
D1 74.44 dBuV
D2 54.44 dBuV

Marker 1 [T1]
74.44 dBuV
5.750200 GHz

Marker 2 [T1]
39.74 dBuV
5.725000 GHz

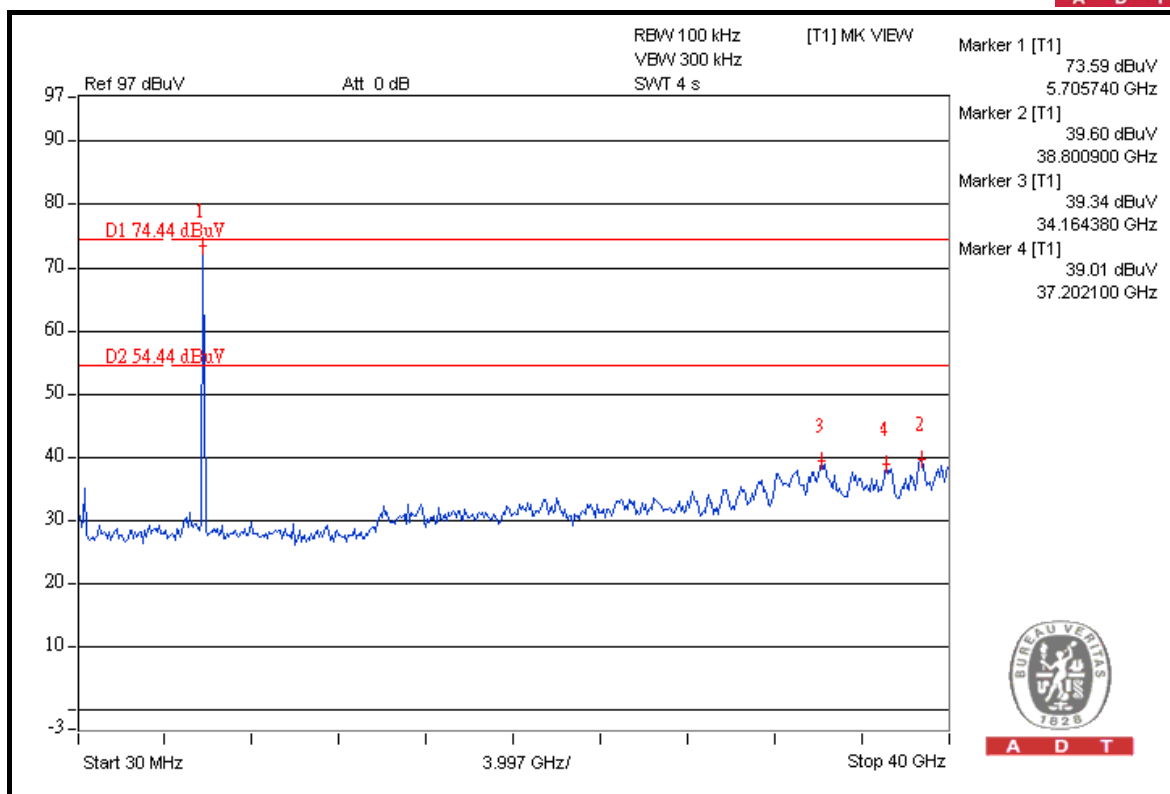
Marker 3 [T1]
42.60 dBuV
5.722600 GHz

BUREAU VERITAS
ADT

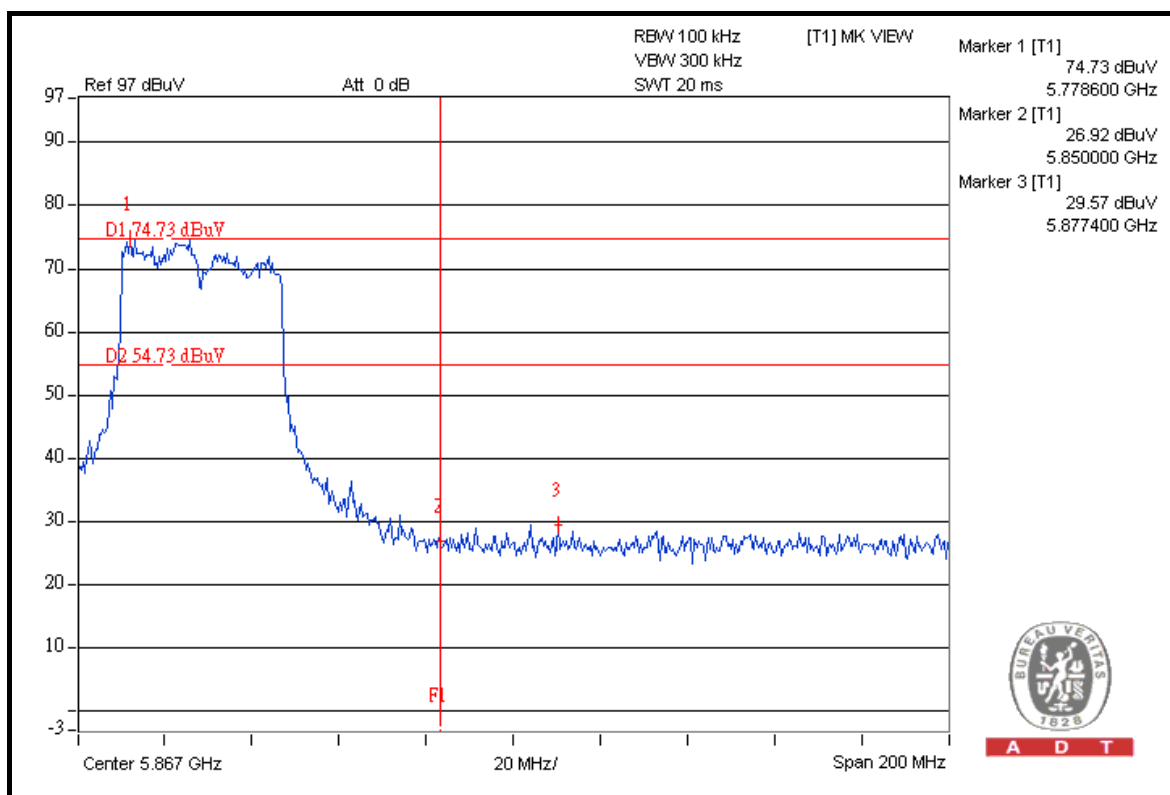




A D T



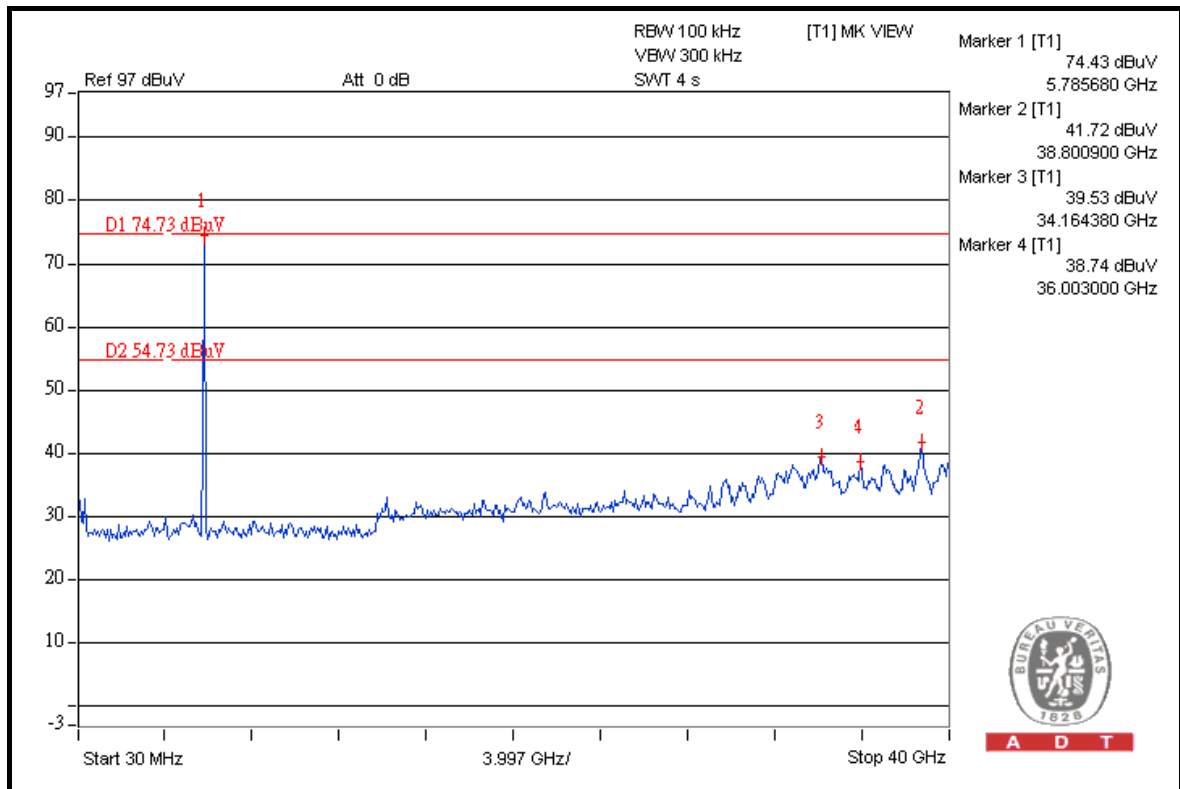
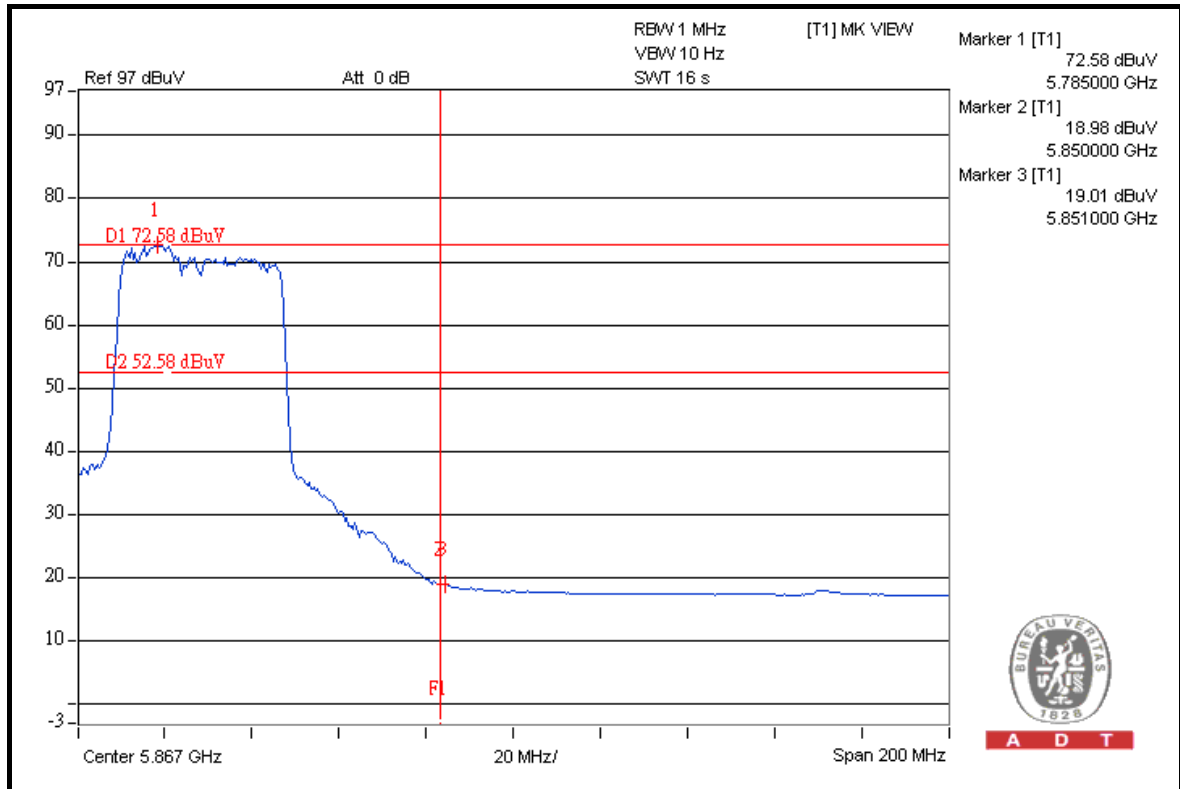
A D T



A D T



A D T

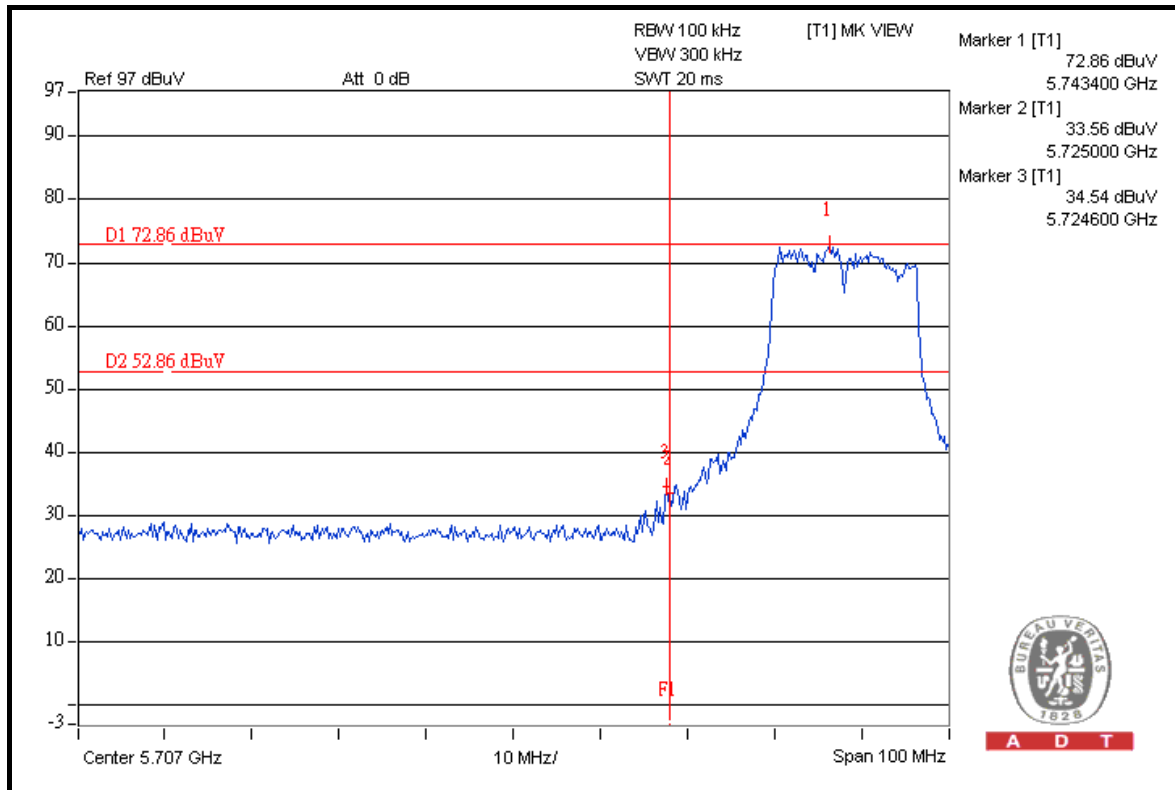




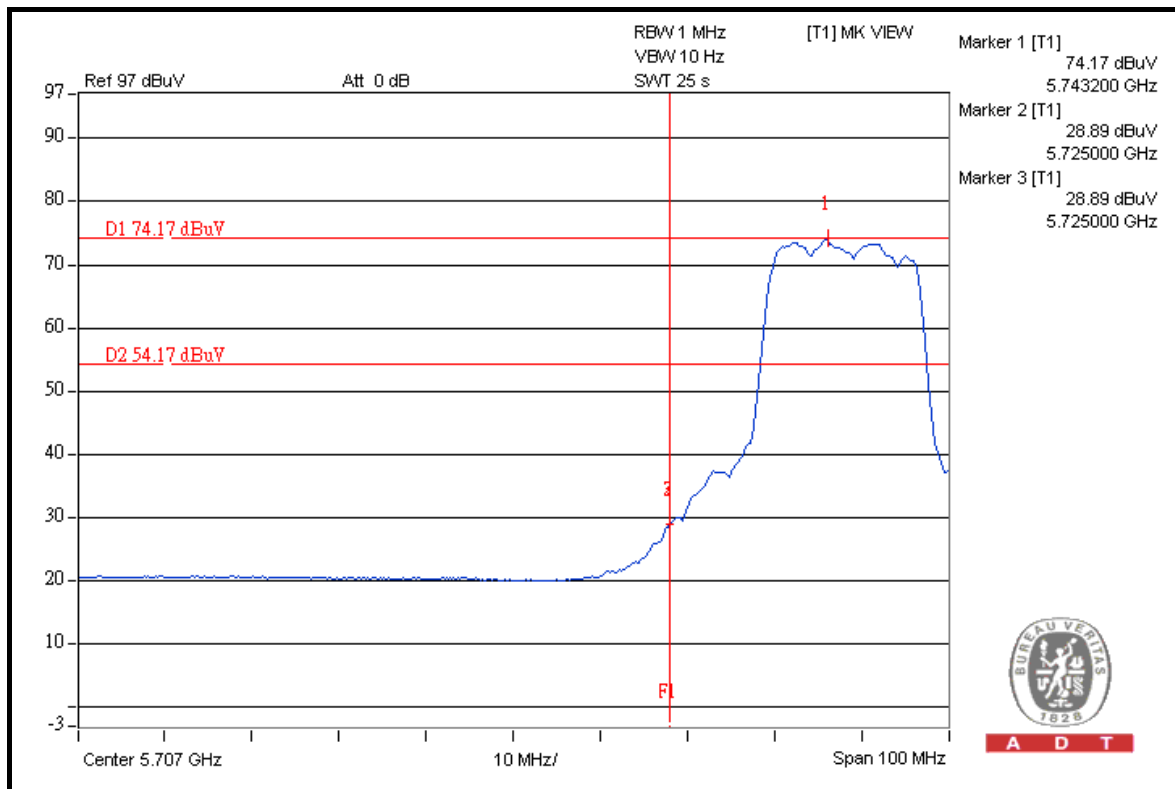
A D T

TEST MODE C

802.11a



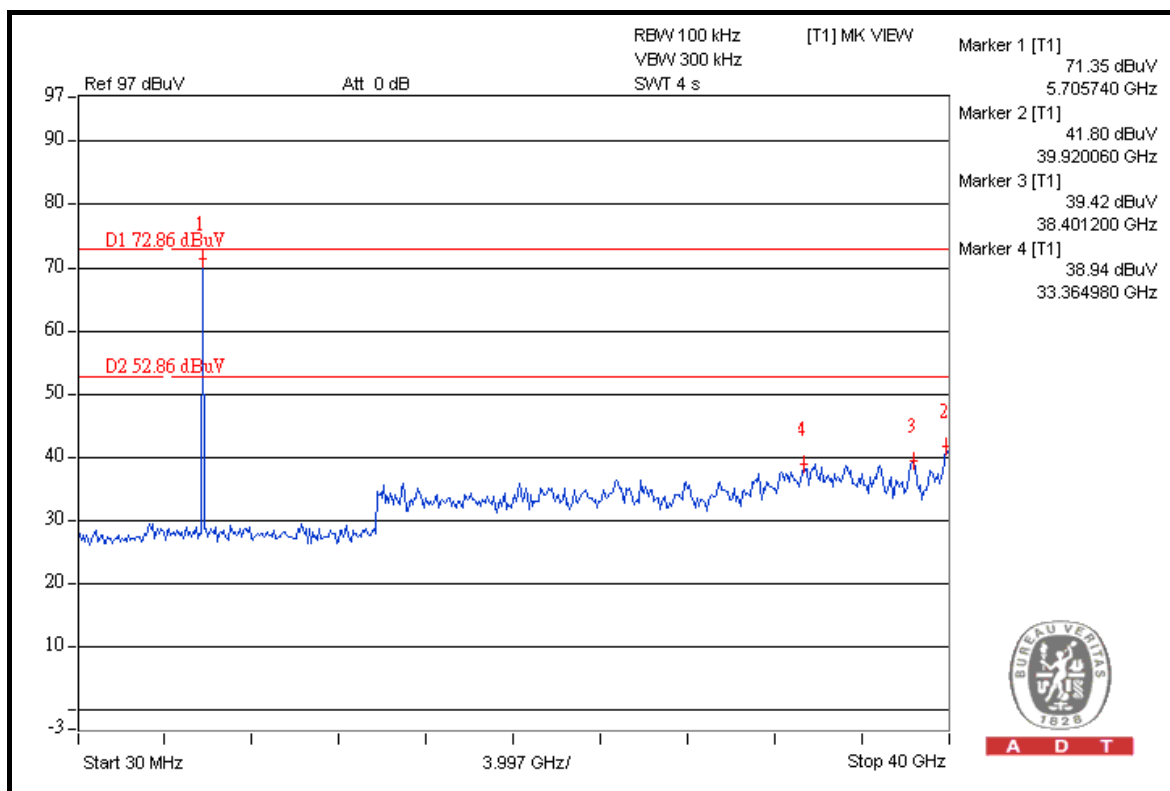
A D T



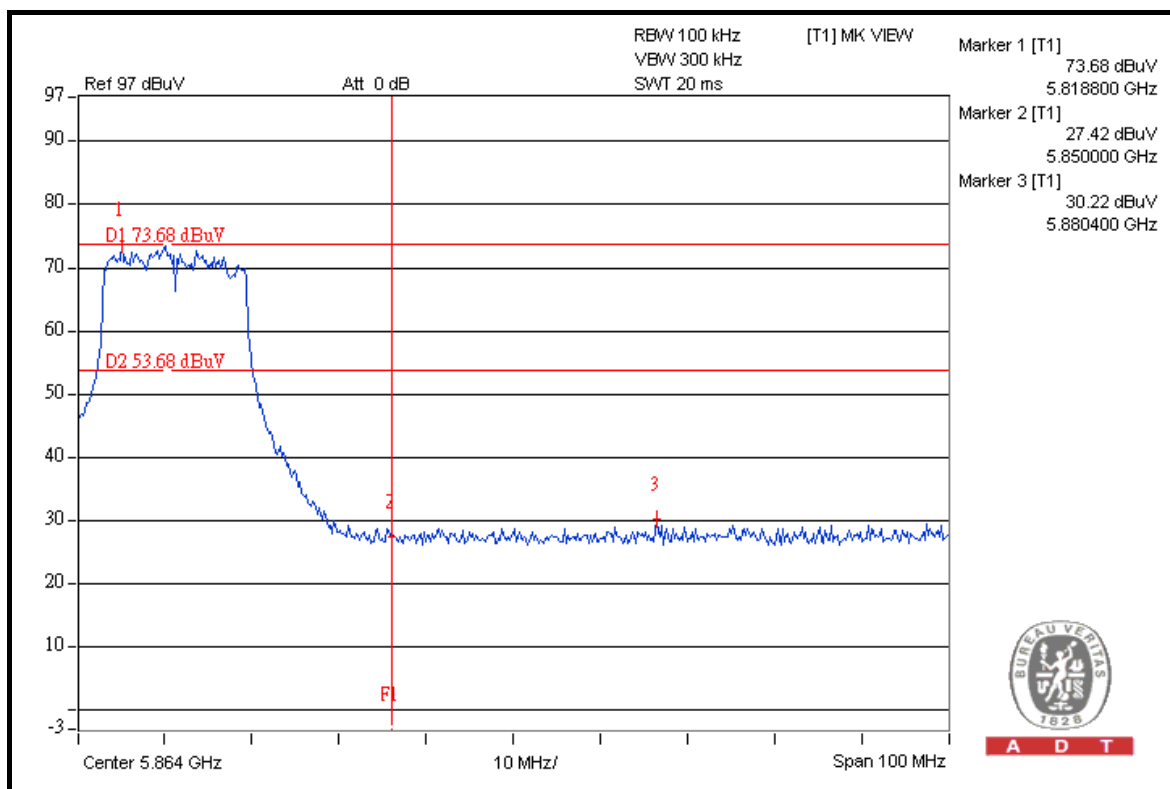
A D T



A D T



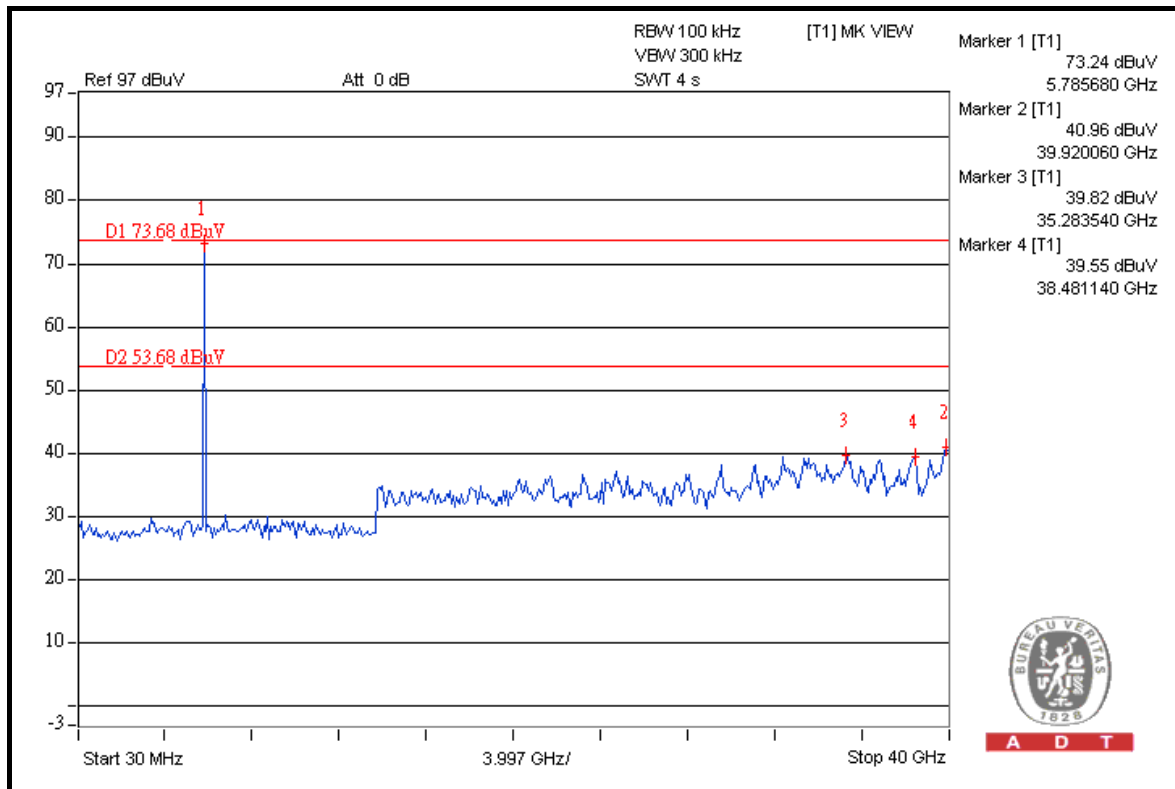
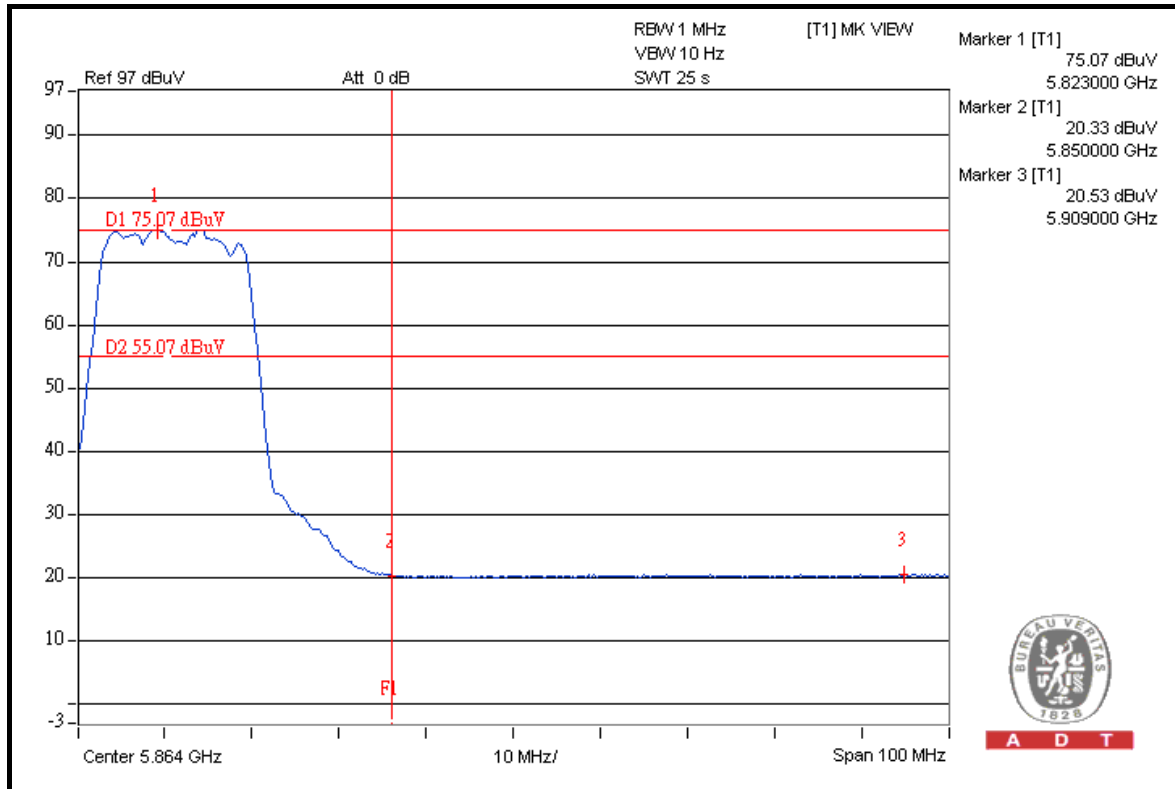
A D T



A D T



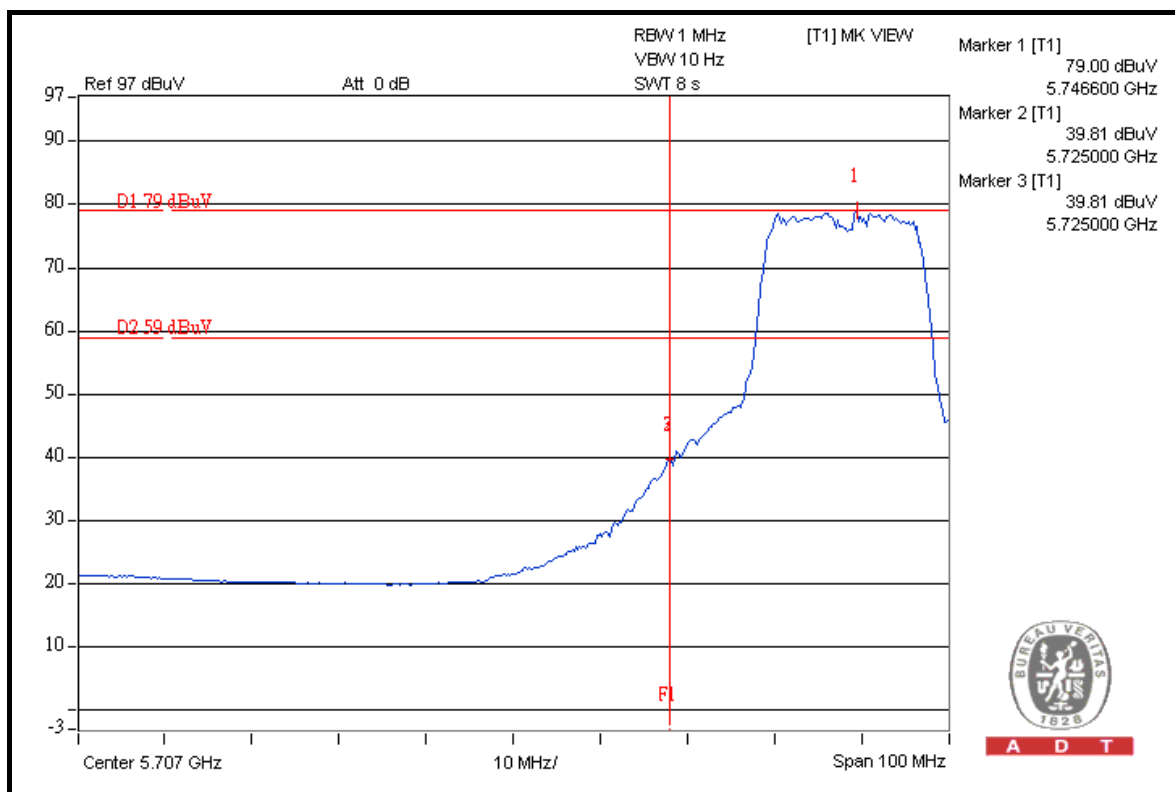
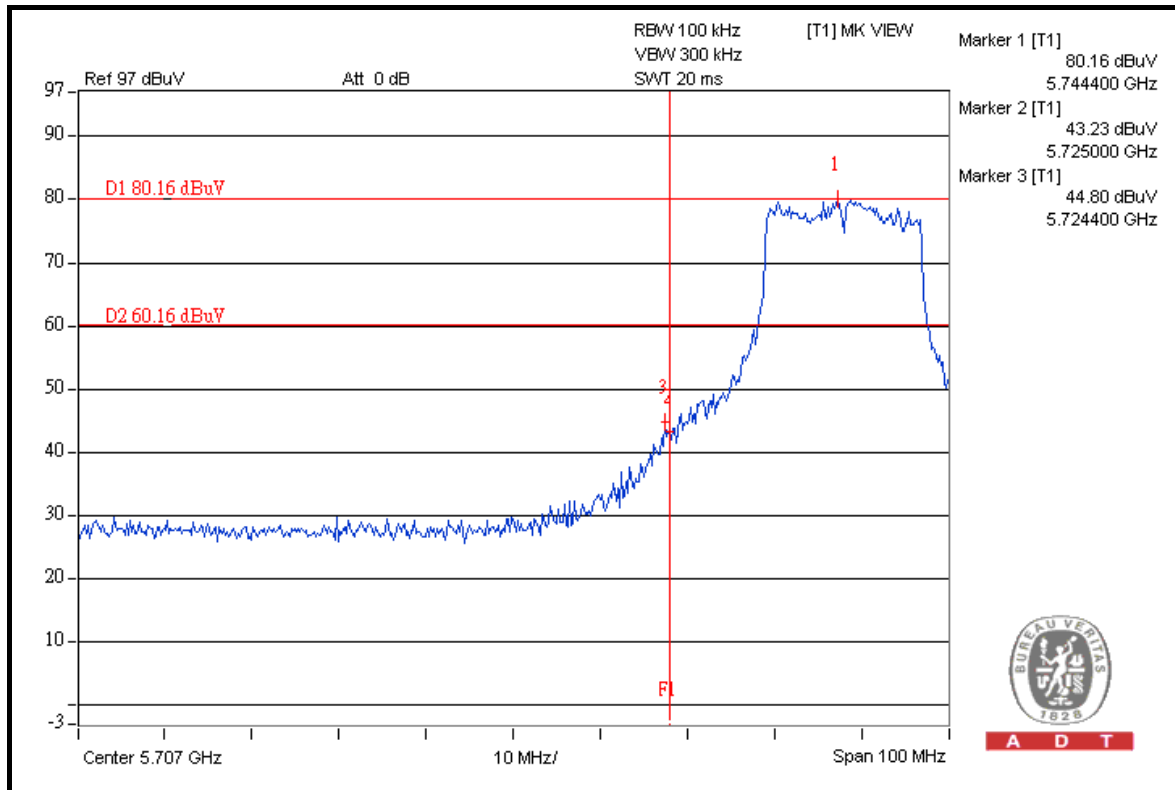
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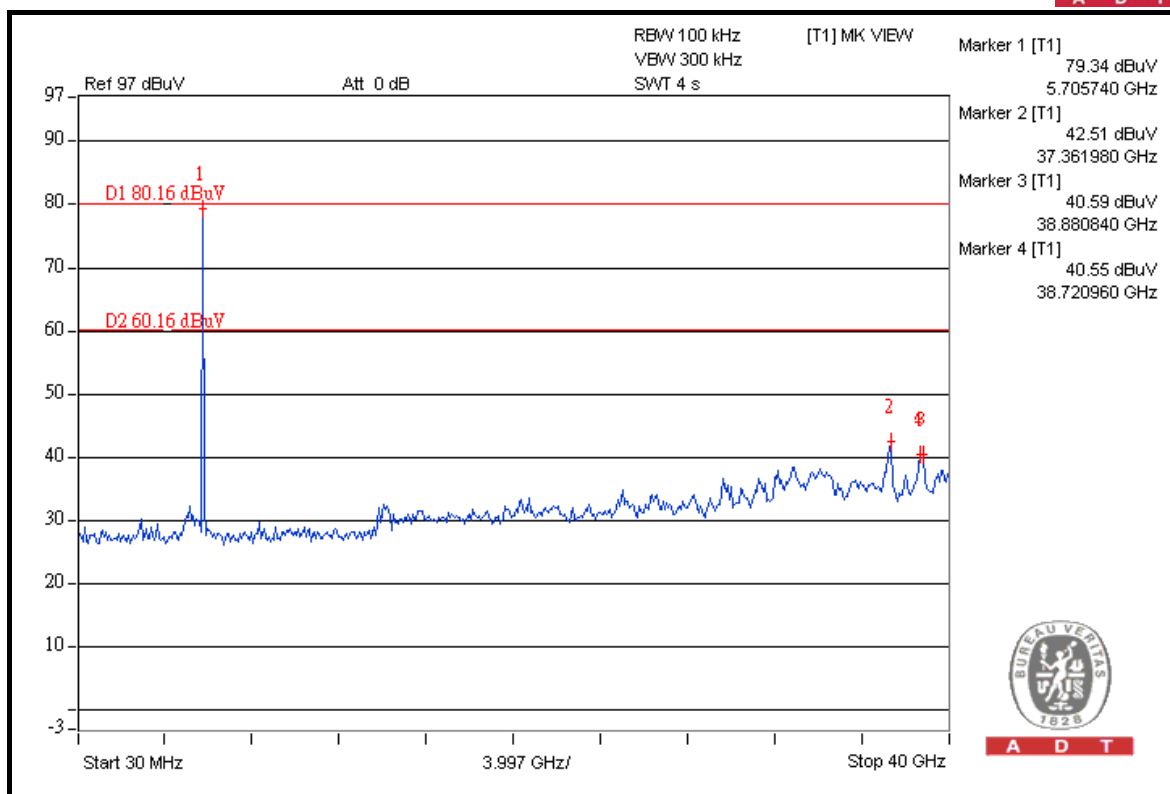
A D T

802.11n (20MHz)

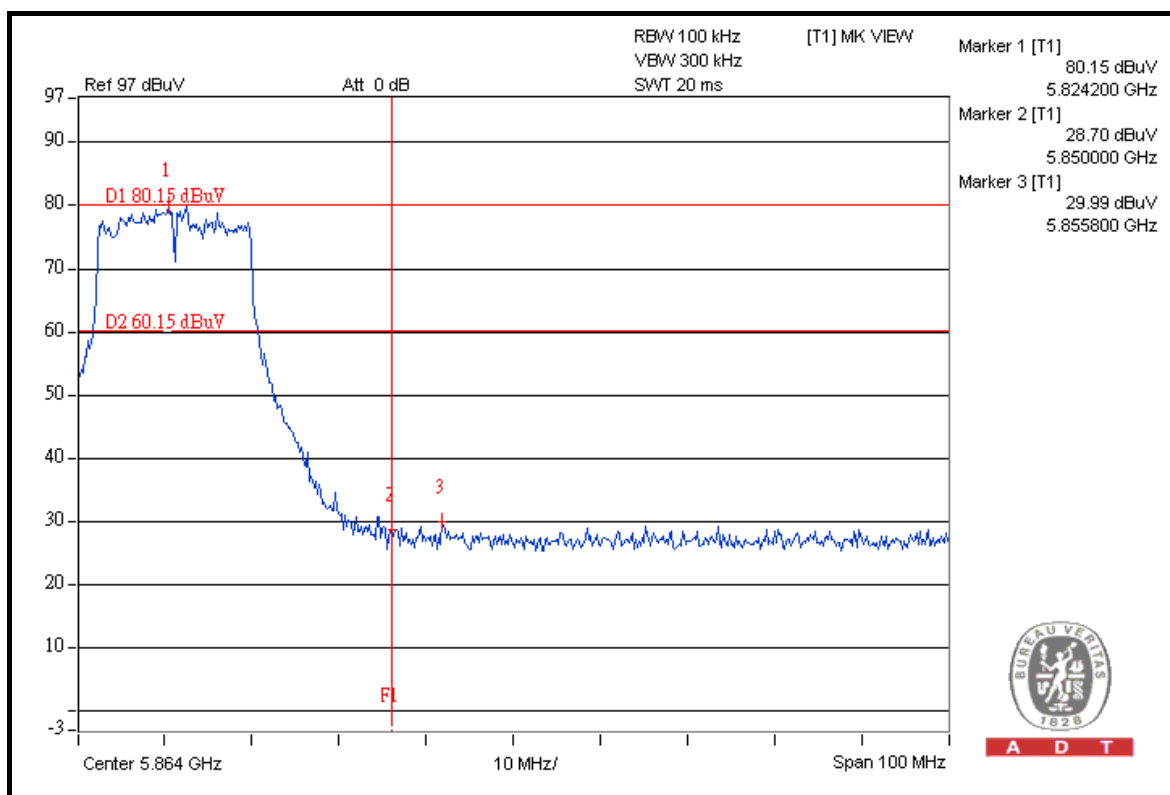




A D T



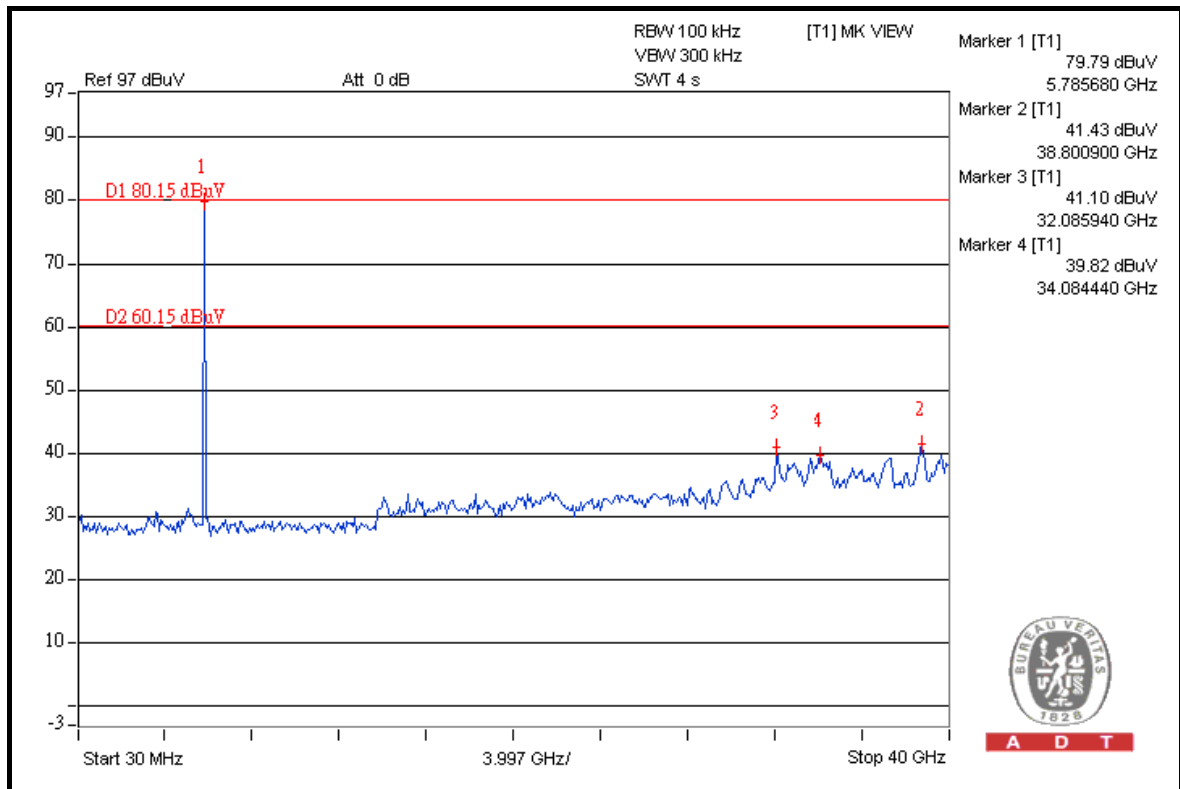
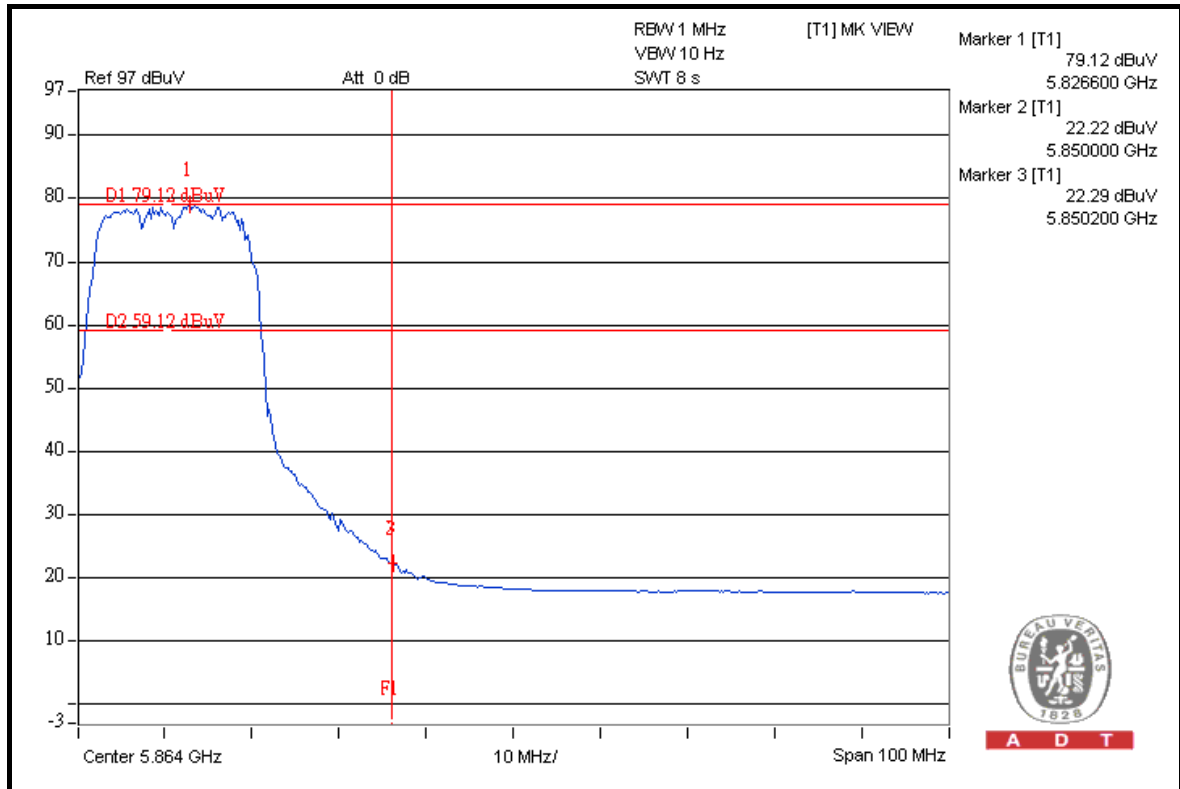
A D T



A D T



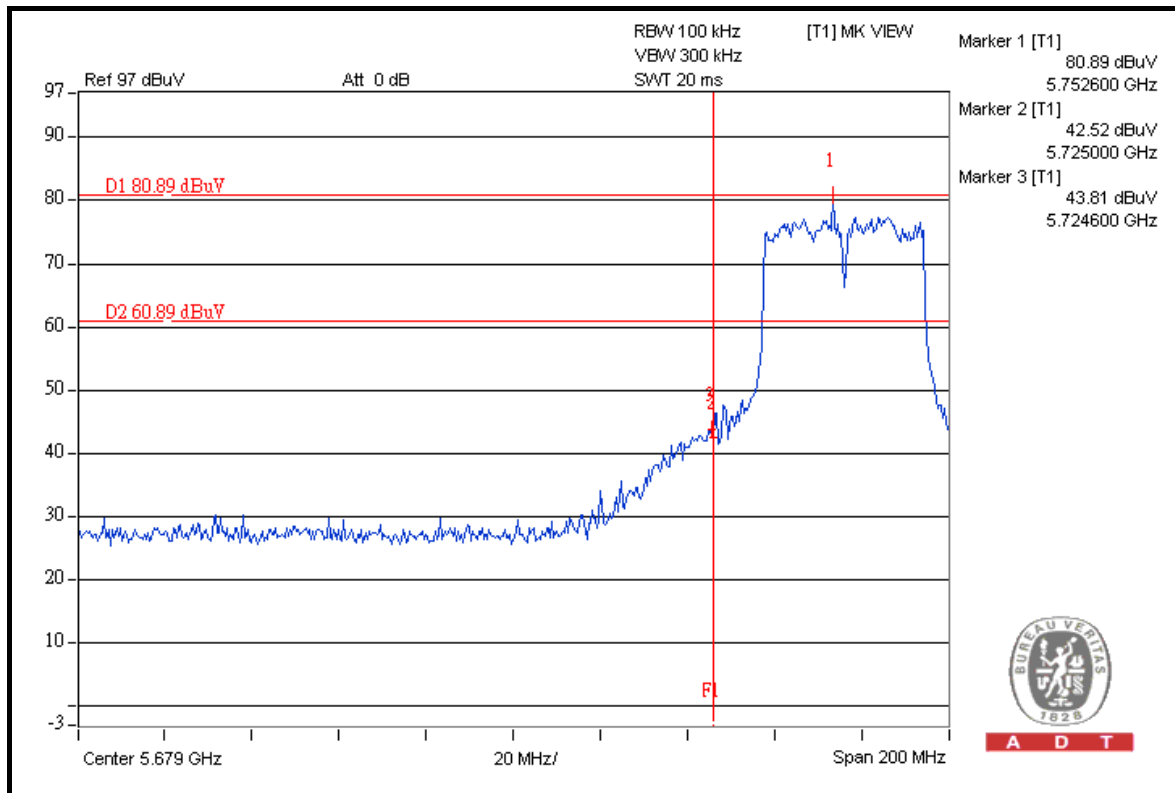
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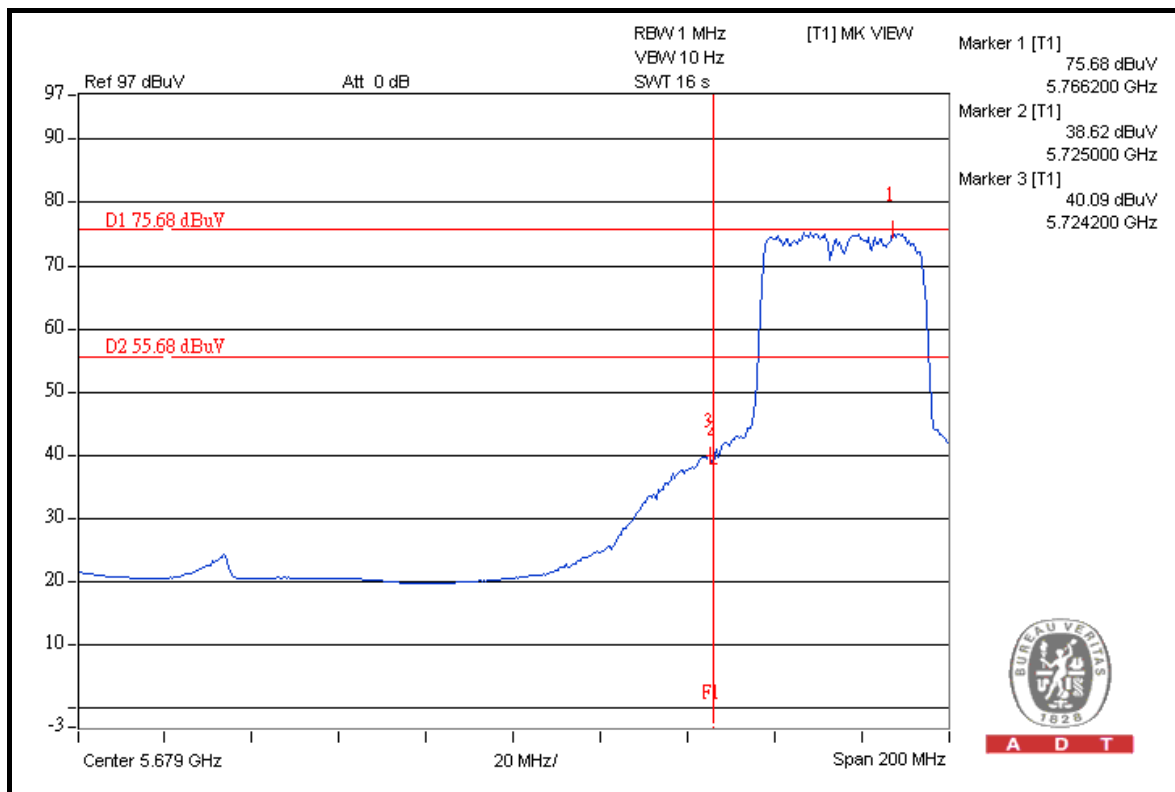


A D T

802.11n (40MHz)



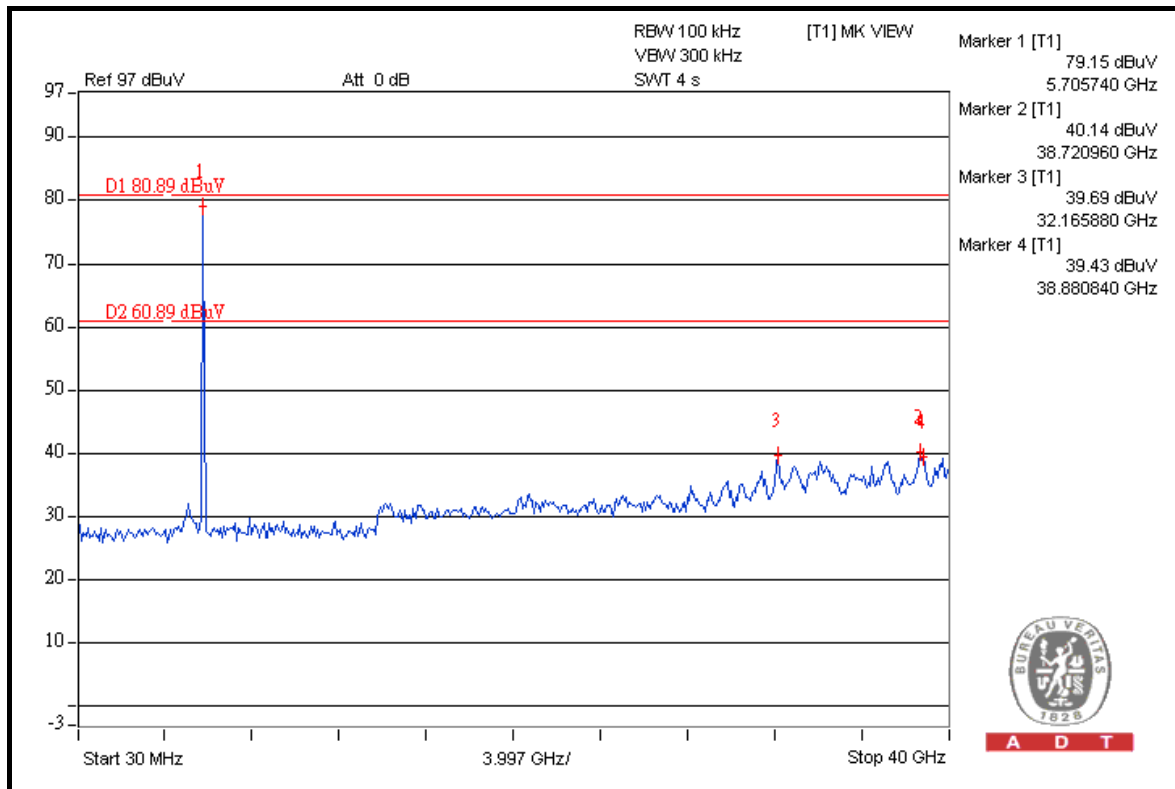
A D T



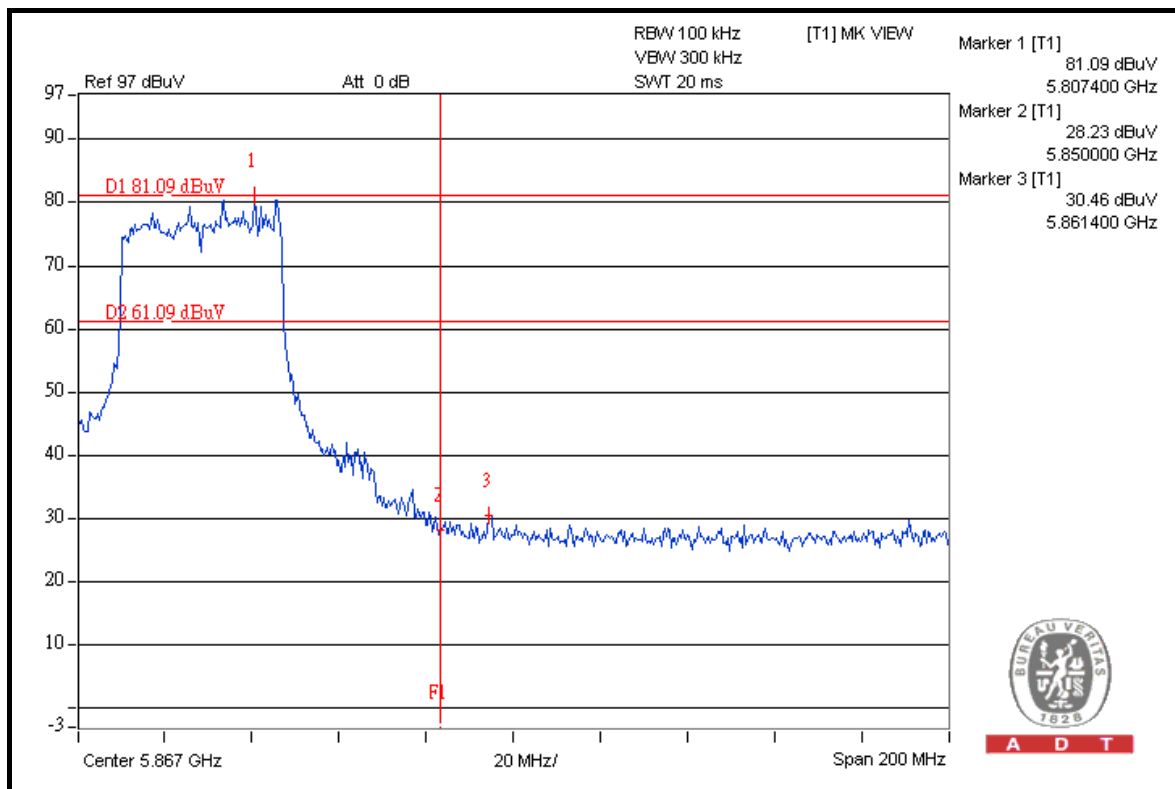
A D T



A D T



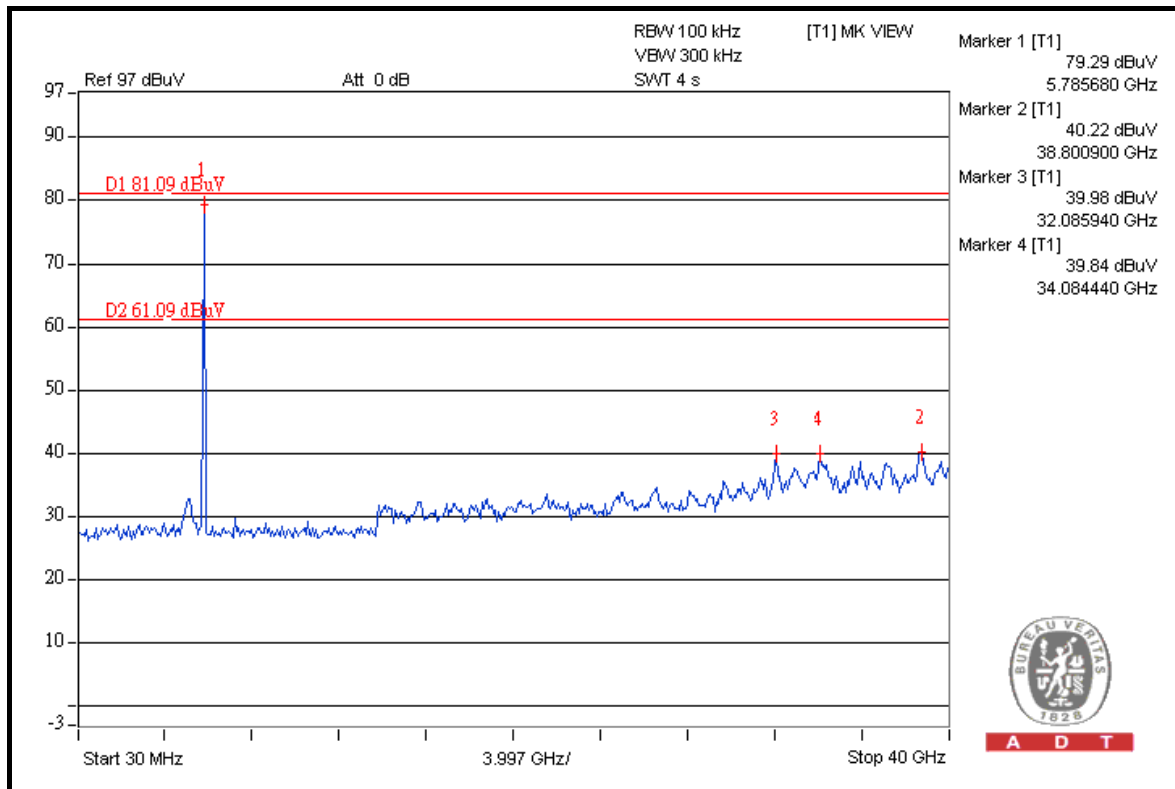
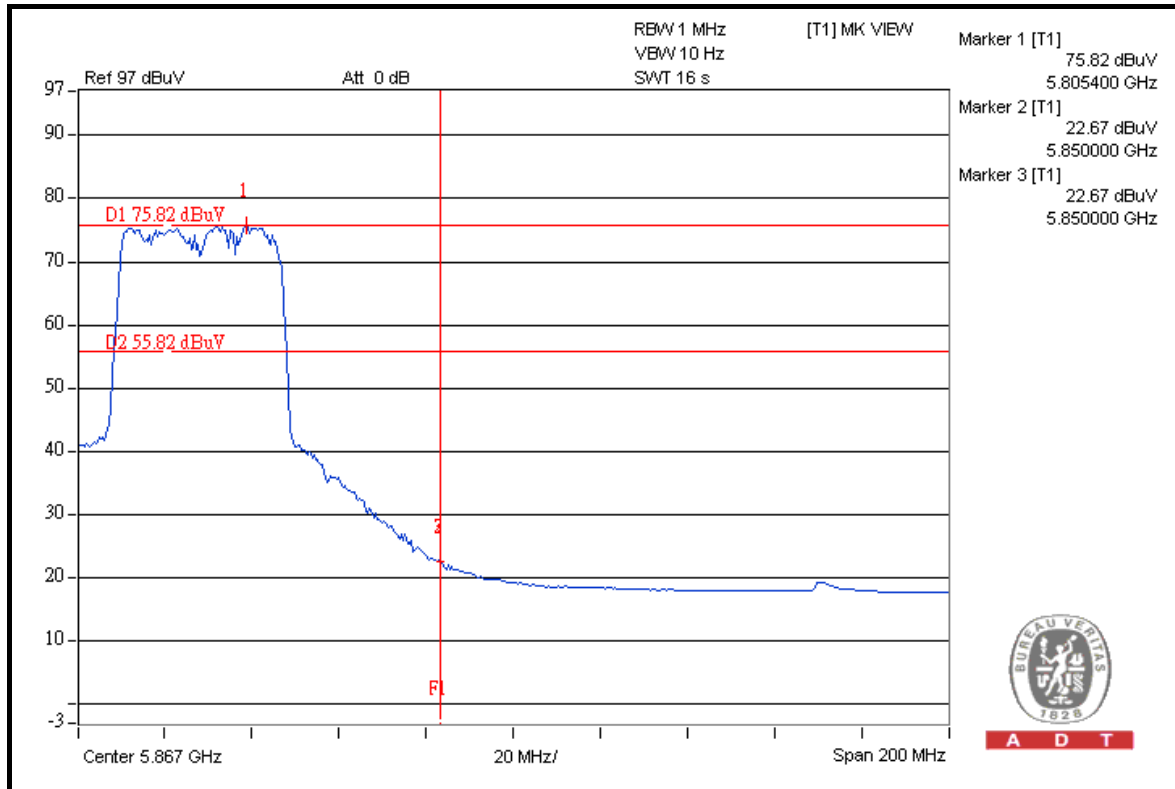
A D T



A D T



A D T

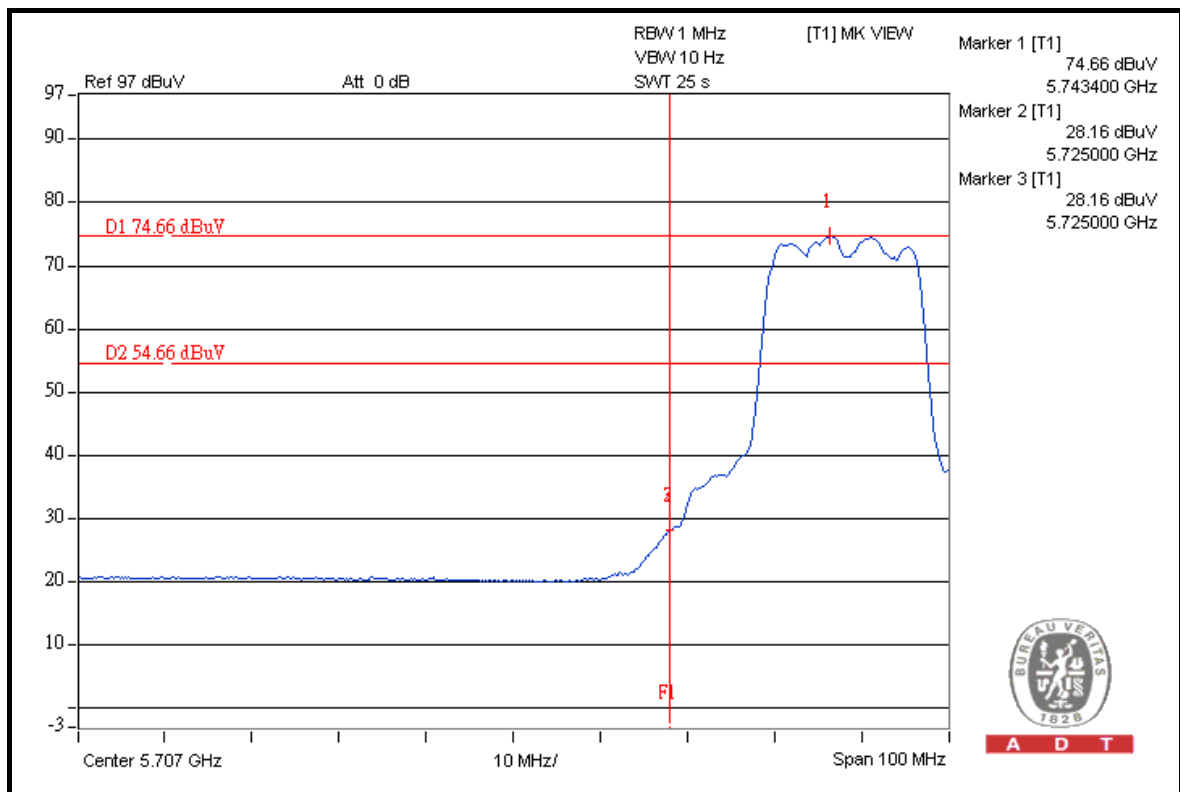
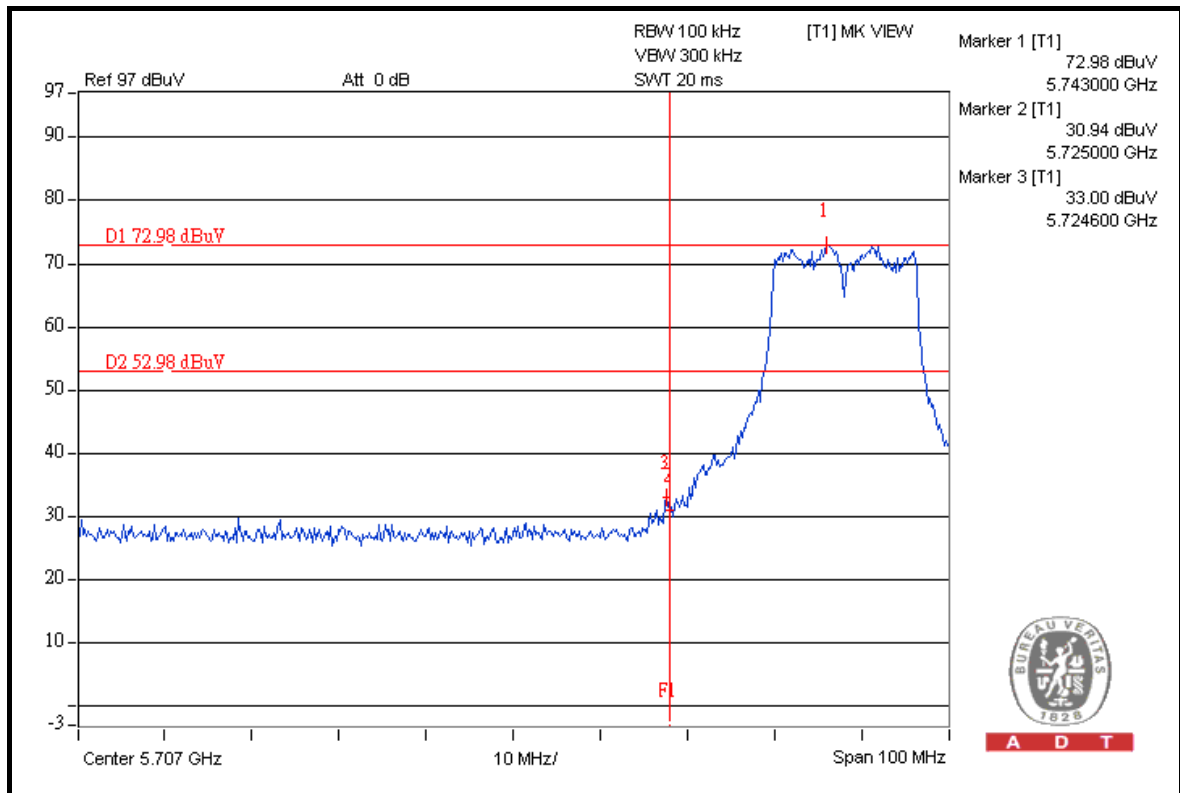




A D T

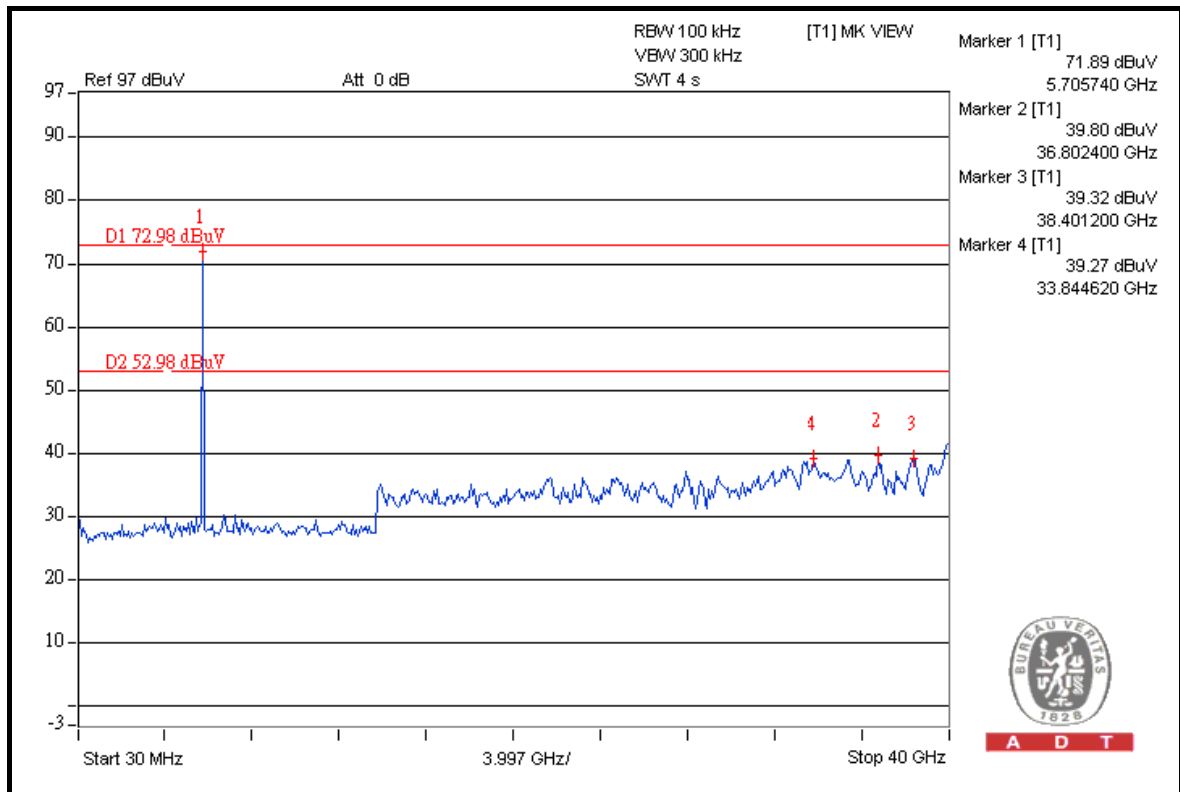
TEST MODE D

802.11a

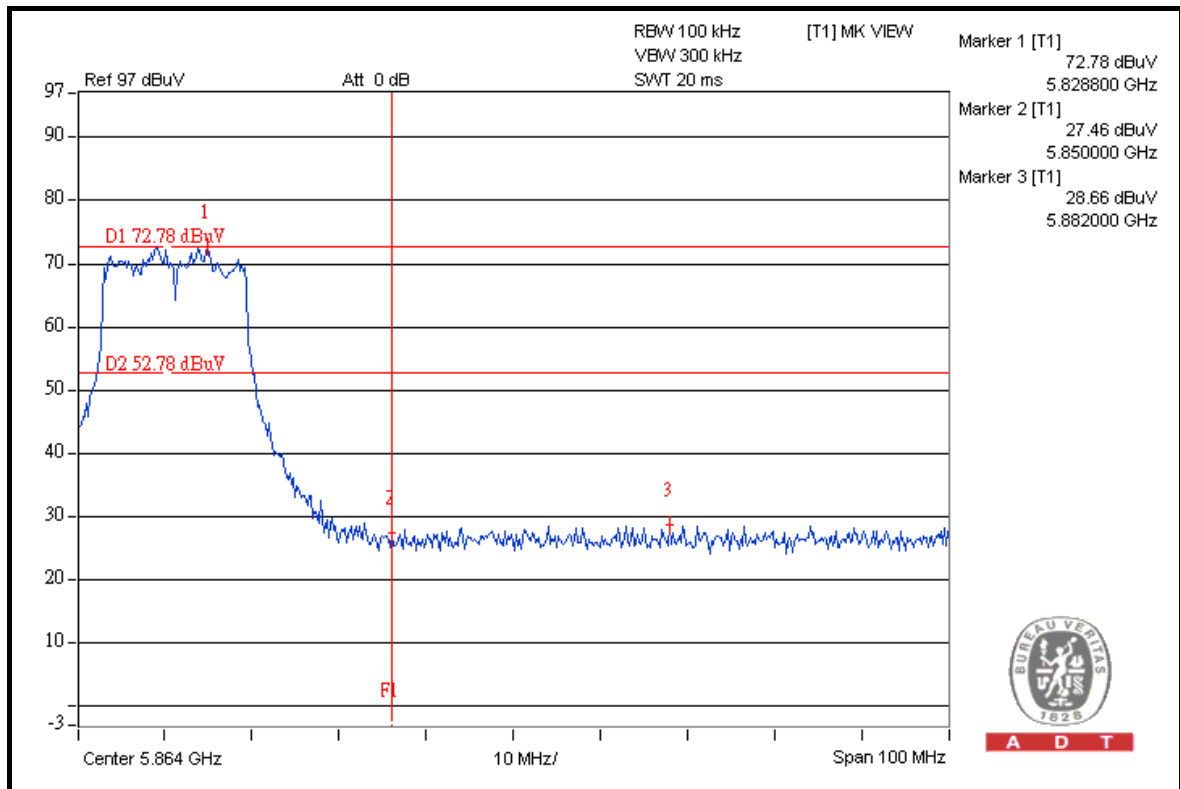




A D T



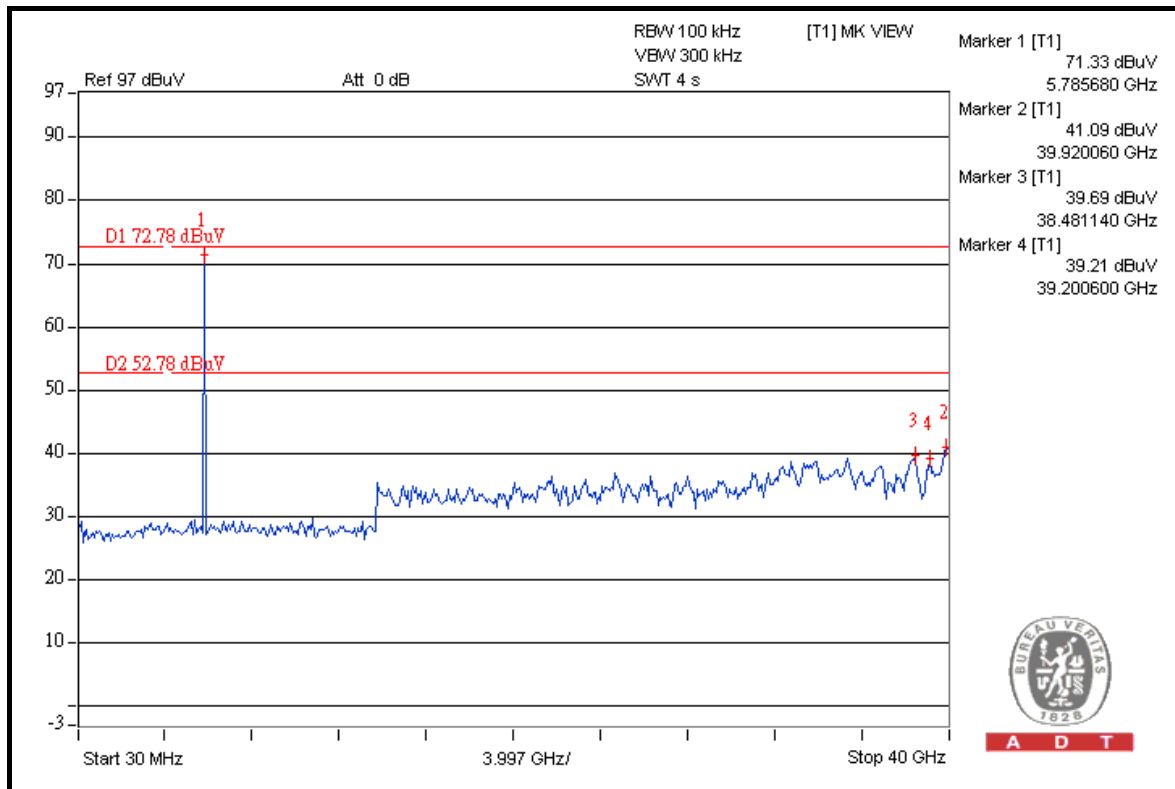
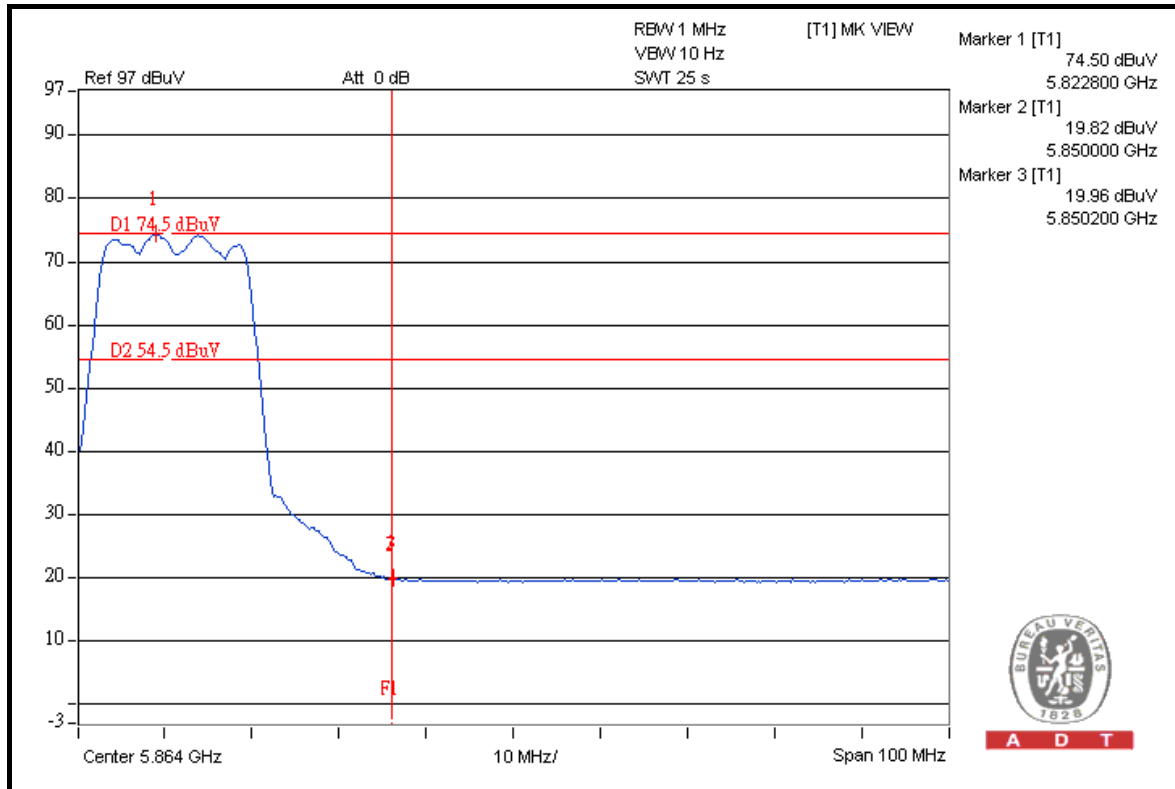
A D T



A D T



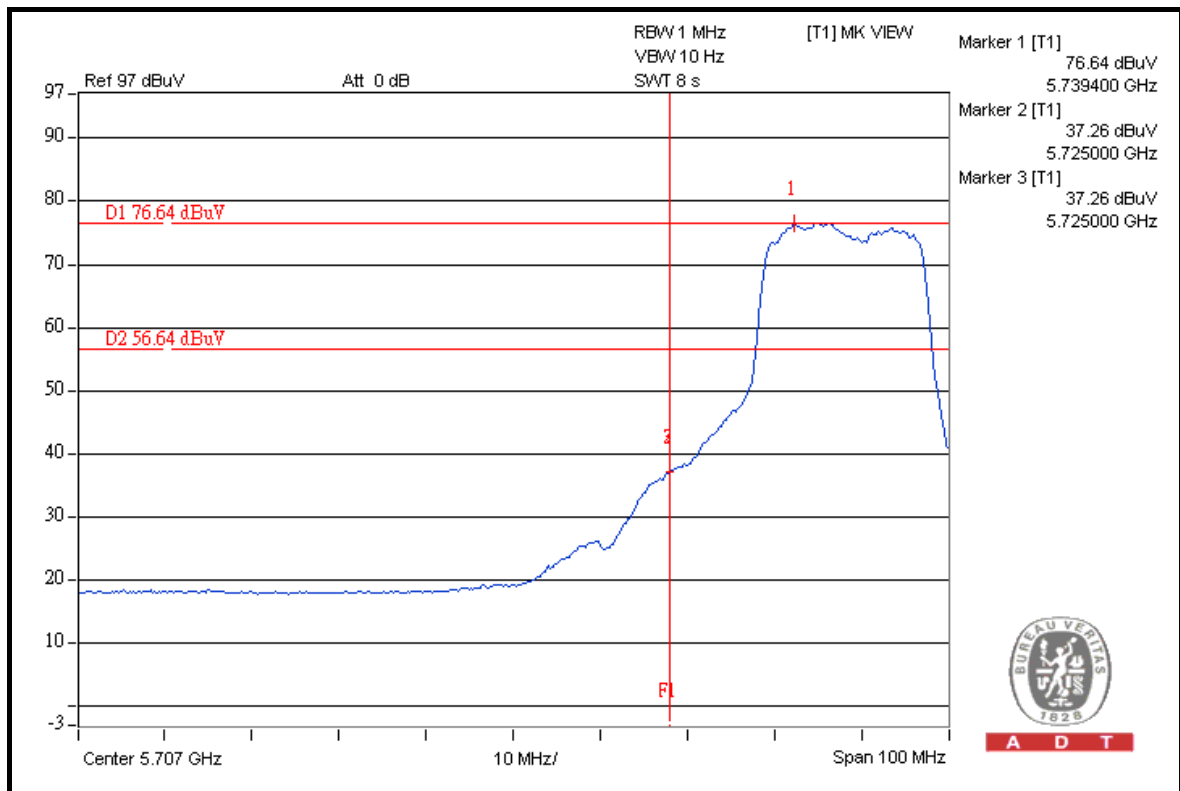
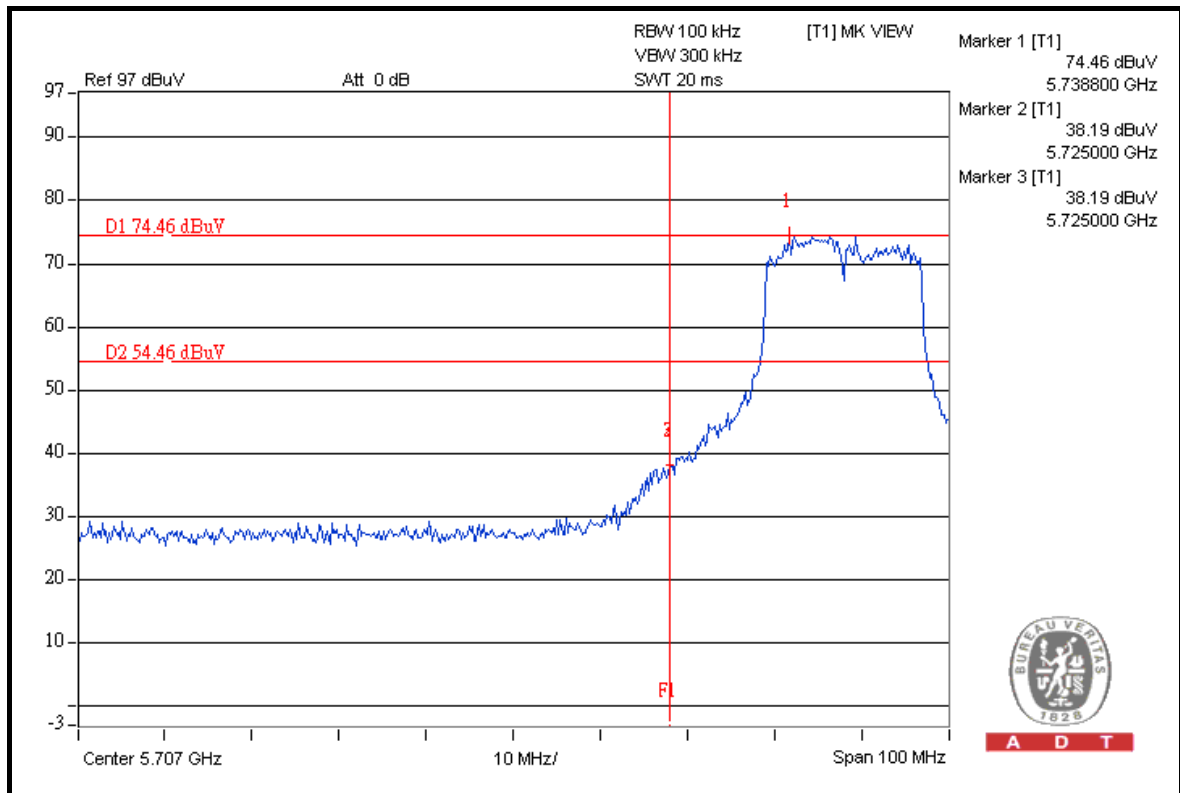
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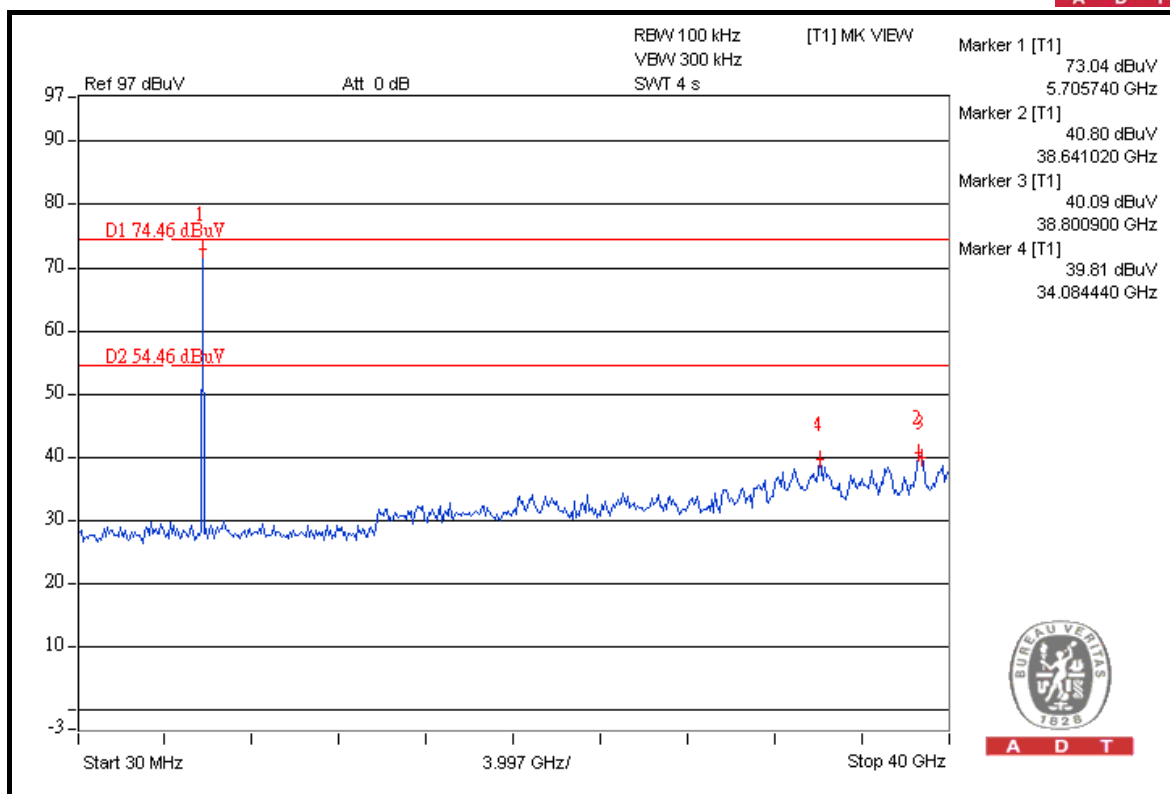
A D T

802.11n (20MHz)

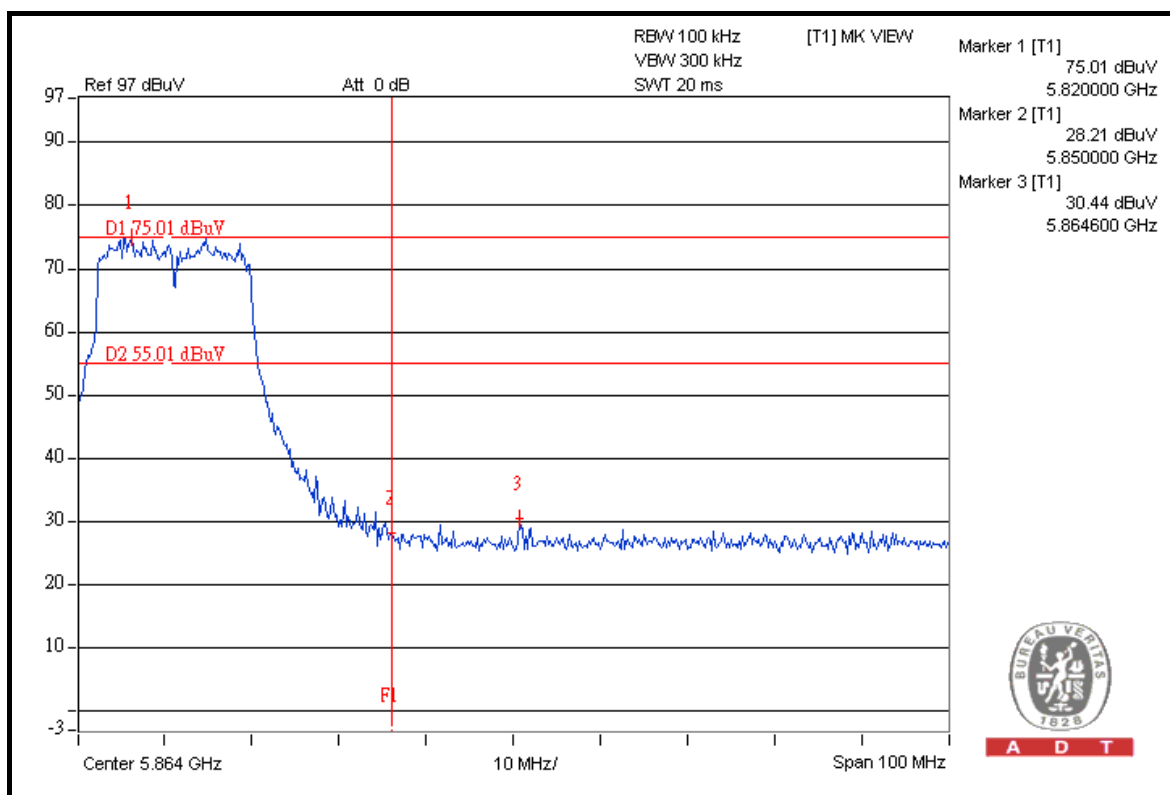




A D T



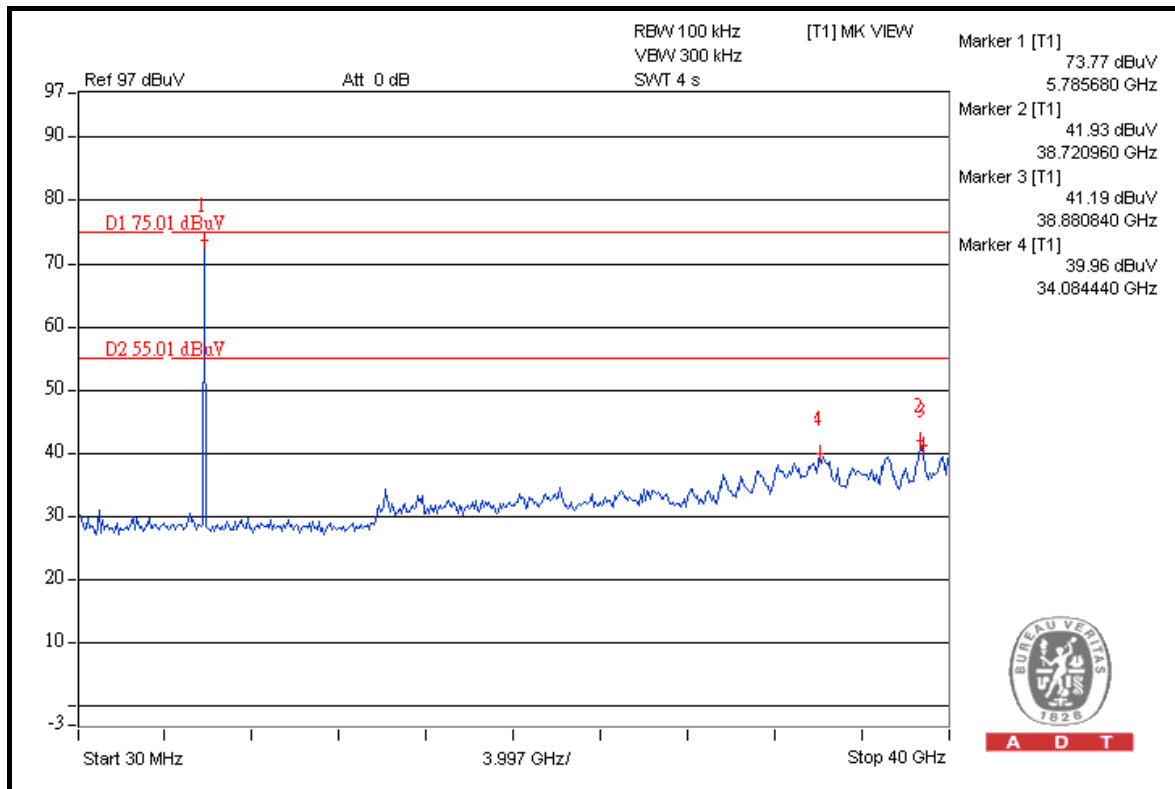
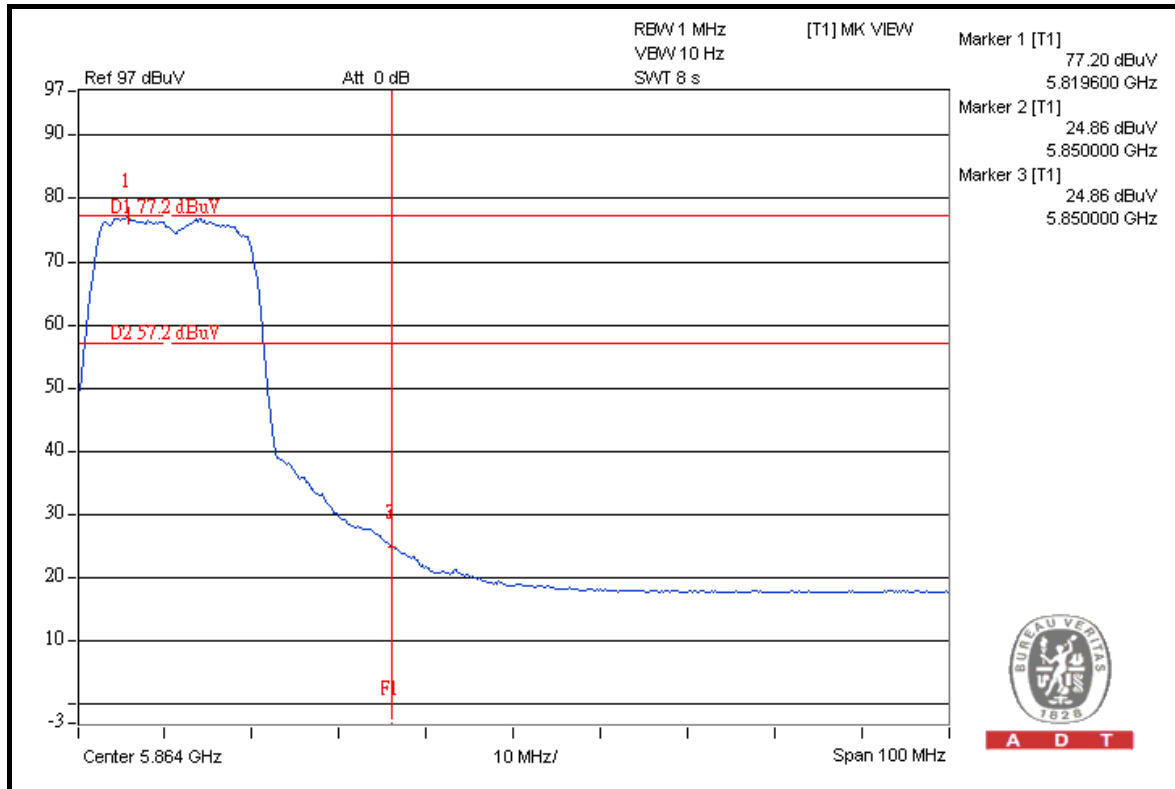
A D T



A D T



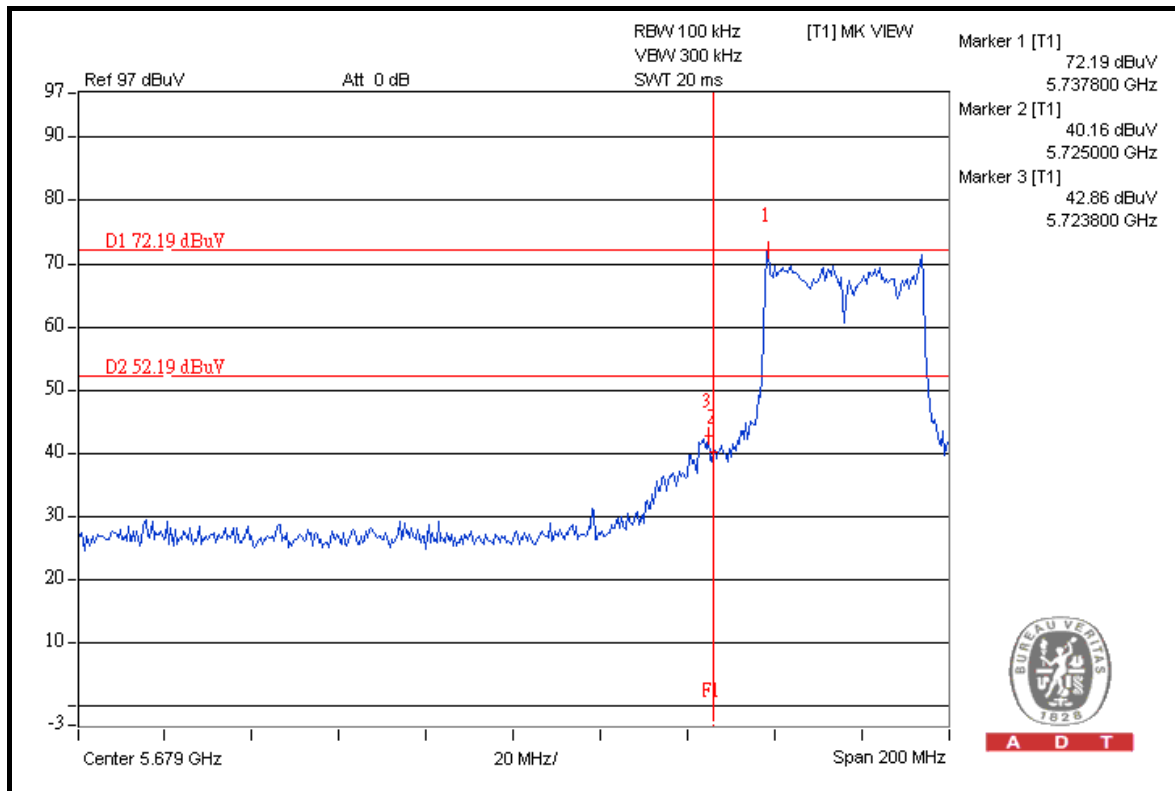
A D T



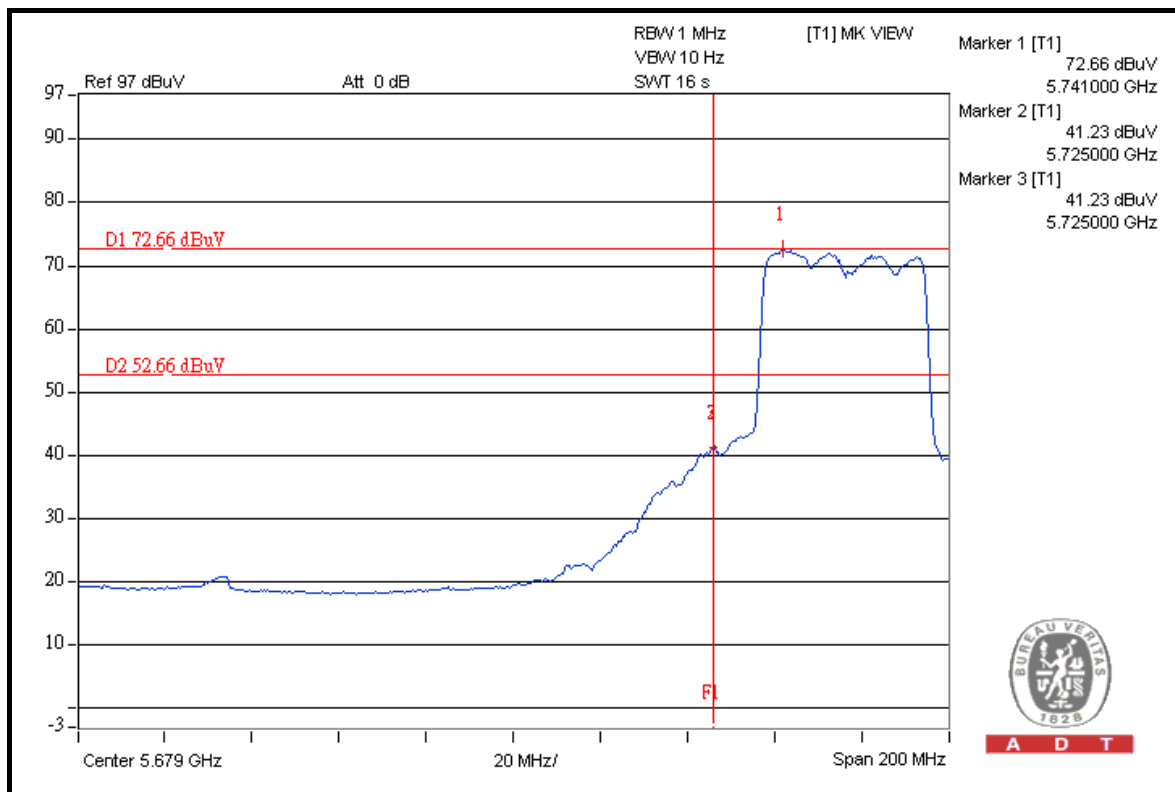


A D T

802.11n (40MHz)



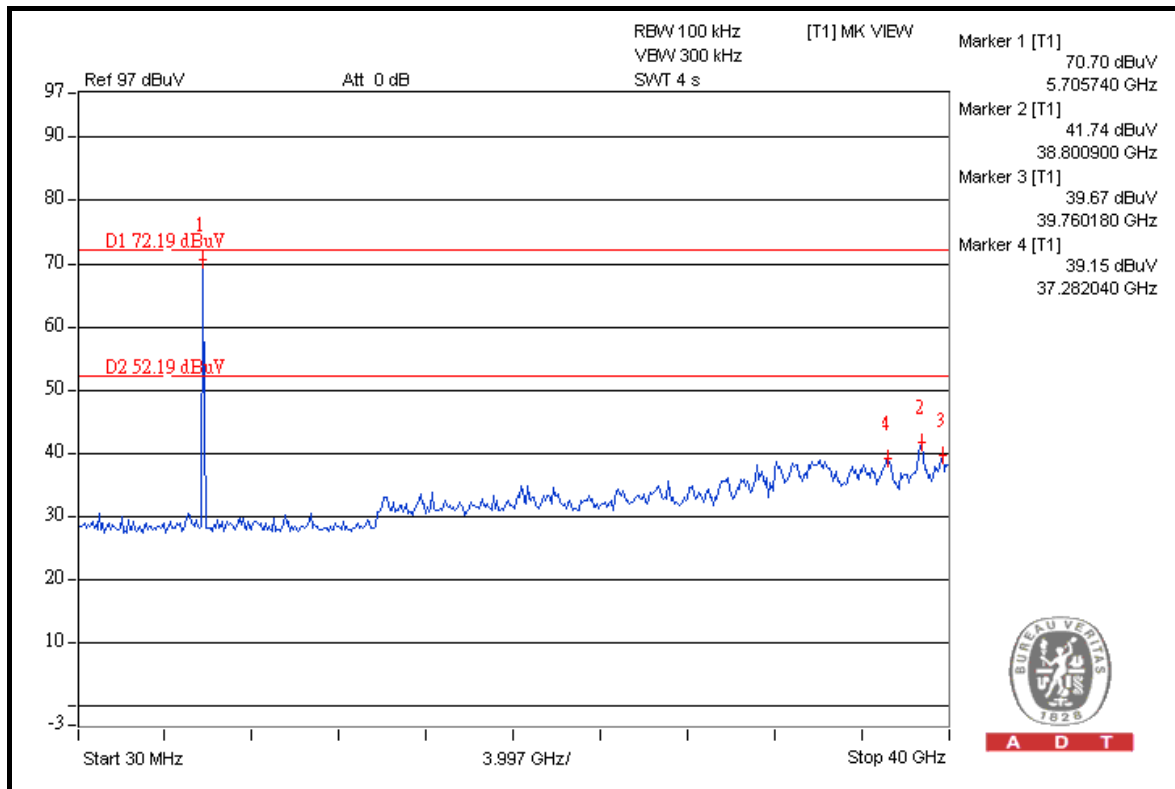
A D T



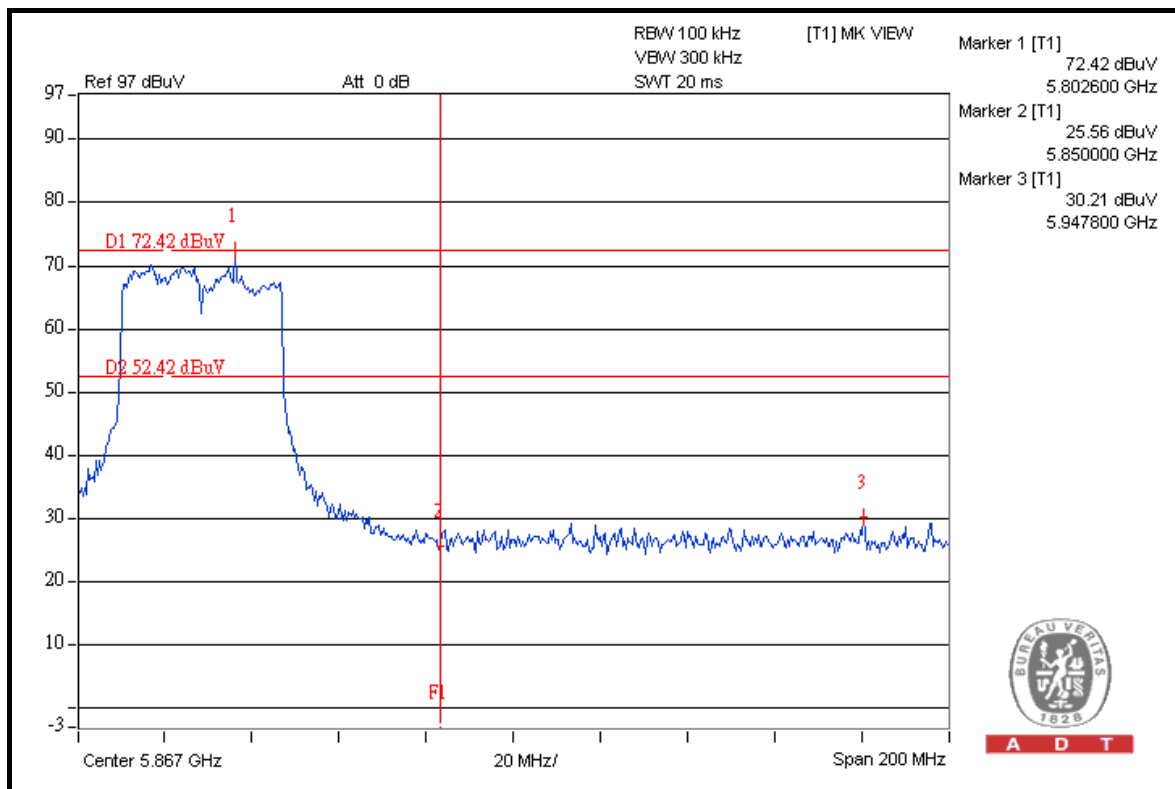
A D T



A D T



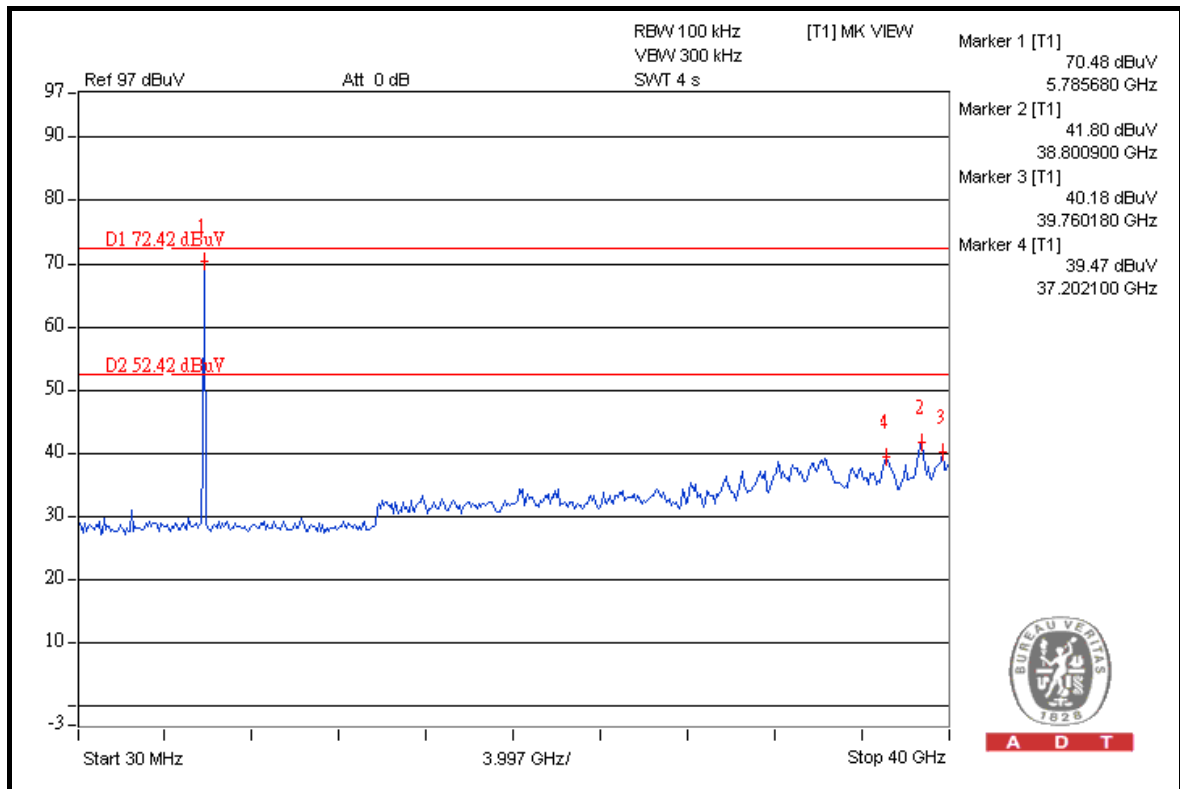
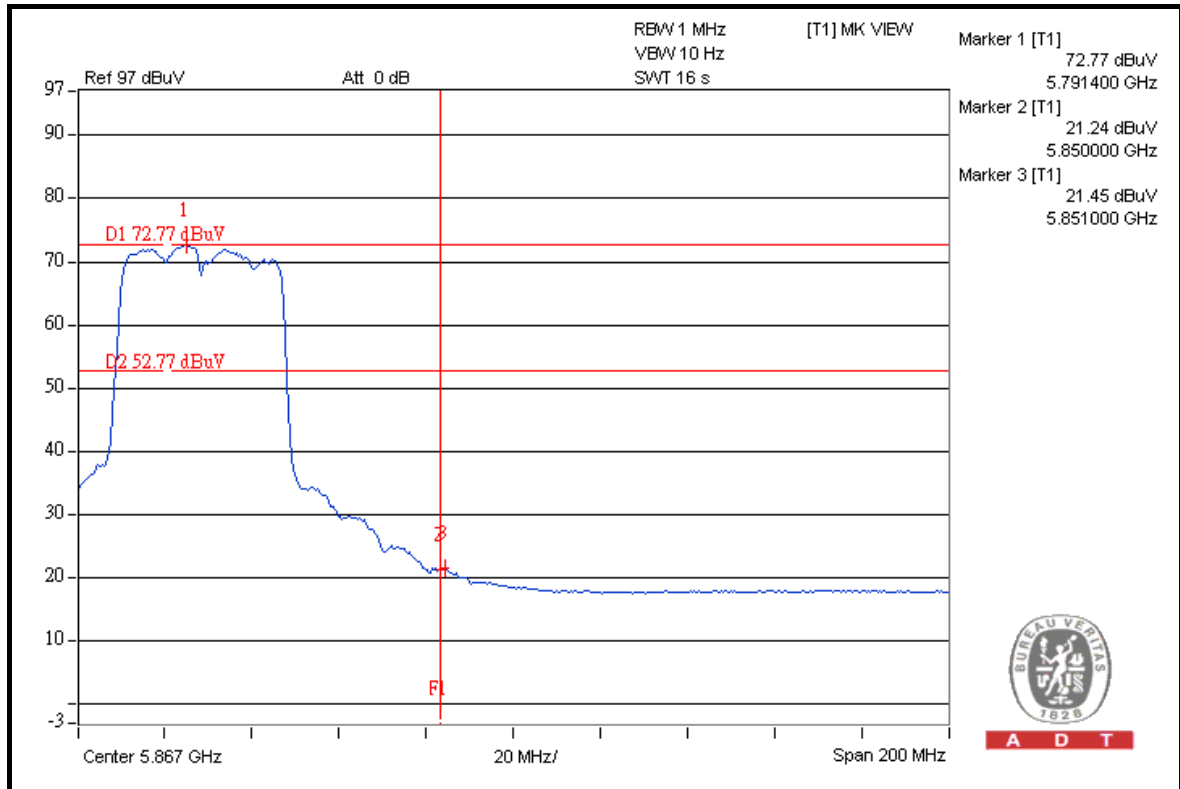
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6. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



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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.



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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---