FCC TEST REPORT (15.407)

REPORT NO.: RF990114L03-1

MODEL NO.: RFS-4011

FCC ID: UZ7RFS4011

RECEIVED: Jan. 14, 2010

TESTED: Feb. 05 ~ Jun. 07, 2010

ISSUED: Aug. 05, 2010

APPLICANT: Motorola, Inc.

ADDRESS: One Motorola Plaza Holtsville NY 11742-1300 USA

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

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang, Taipei Hsien 244, Taiwan, R.O.C.

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

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1. CERTIFICATION

PRODUCT: RF Switch

MODEL NO.: RFS-4011

BRAND: Motorola

APPLICANT: Motorola, Inc.

TEST SAMPLE: ENGINEERING SAMPLE

TESTED: Feb. 05 ~ Jun. 07, 2010

STANDARDS: **FCC Part 15, Subpart E (Section 15.407)**
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 :** Aug. 05, 2010
Polly Chien / Specialist

TECHNICAL ACCEPTANCE : Long Chen **, DATE :** Aug. 05, 2010
Responsible for RF
Long Chen / Senior Engineer

APPROVED BY : Gary Chang **, DATE :** Aug. 05, 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)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -9.81dB at 1.879MHz.
15.407(b/1/2/3) (b)(5)	Electric Field Strength Spurious Emissions, 30MHz ~ 40000MHz	PASS	Meet the requirement of limit. Minimum passing margin is -3.0dB at 5150.00MHz.
15.407(a/1/2/3)	Peak Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a/1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connectors are RSMA, RP-SMA-Male, and type N–Male. (The device is professionally installed)
2.1091	Radiofrequency Radiation Exposure Evaluation	PASS	Meet the requirement of limit.

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	64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	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	5180.0 ~ 5240.0MHz
NUMBER OF CHANNEL	4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	46.3mW
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. 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
WLAN 802.11a, 802.11n (5745~5825 MHz)		
124WLAN 802.11a, 802.11n (5180~ 5240MHz)	FCC Part 15, Subpart E (Section 15.407)	RF990114L03-1

2. 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

3. 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)	√	√	√

4. 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

5. 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

6. 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

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

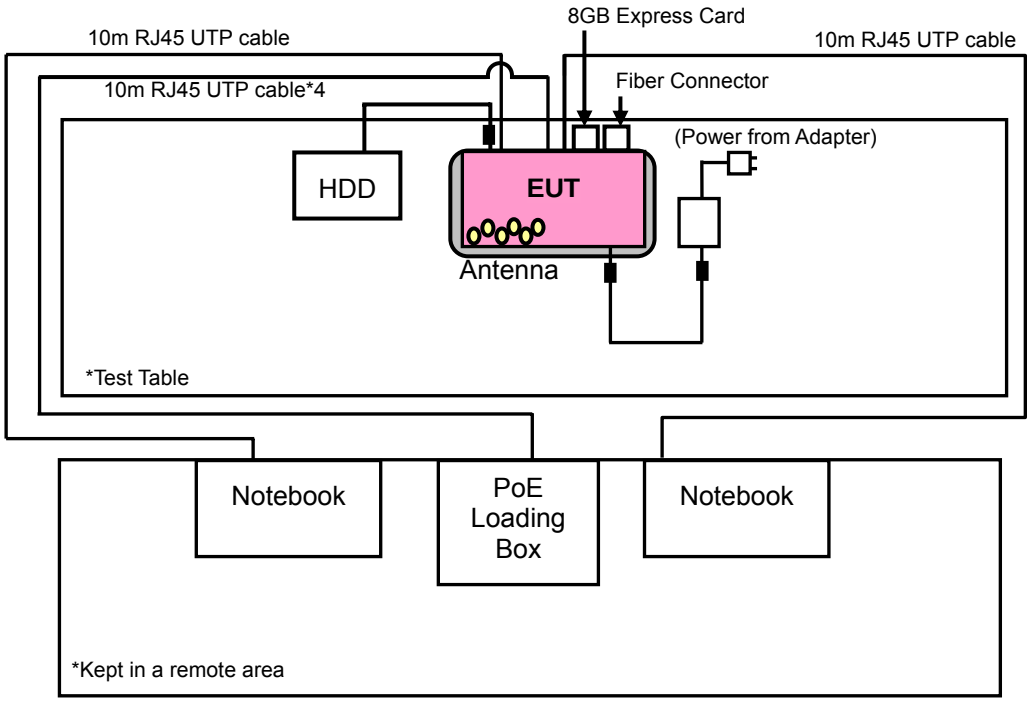
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180MHz	44	5220MHz
40	5200MHz	48	5240MHz

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

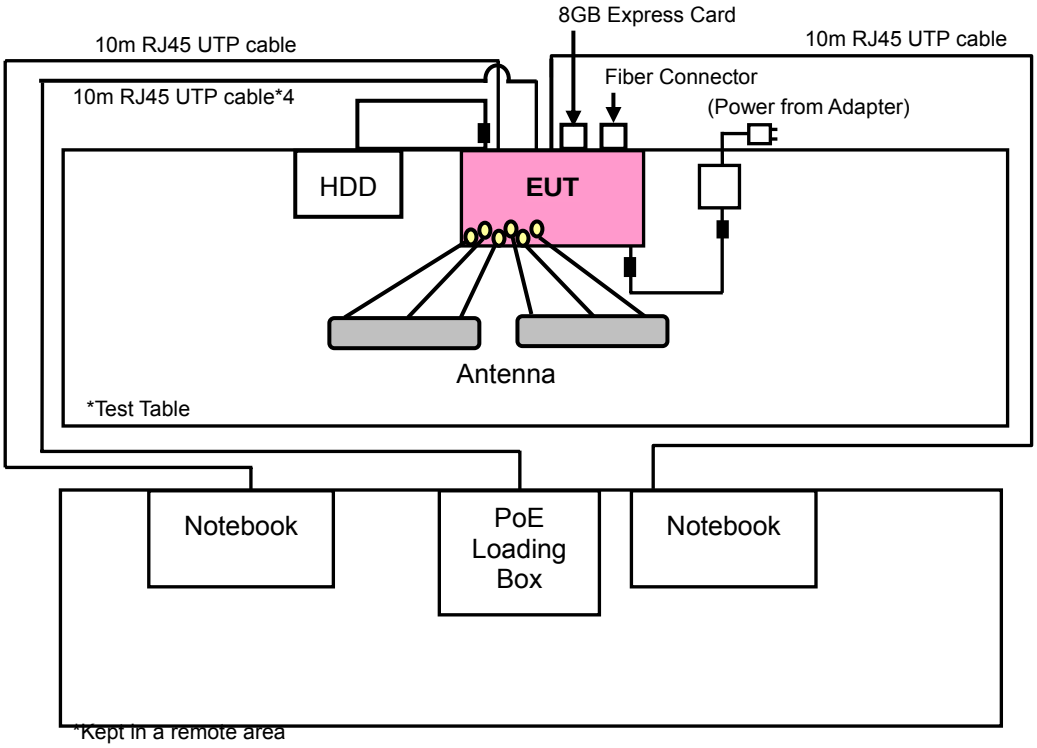
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190MHz	46	5230MHz

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

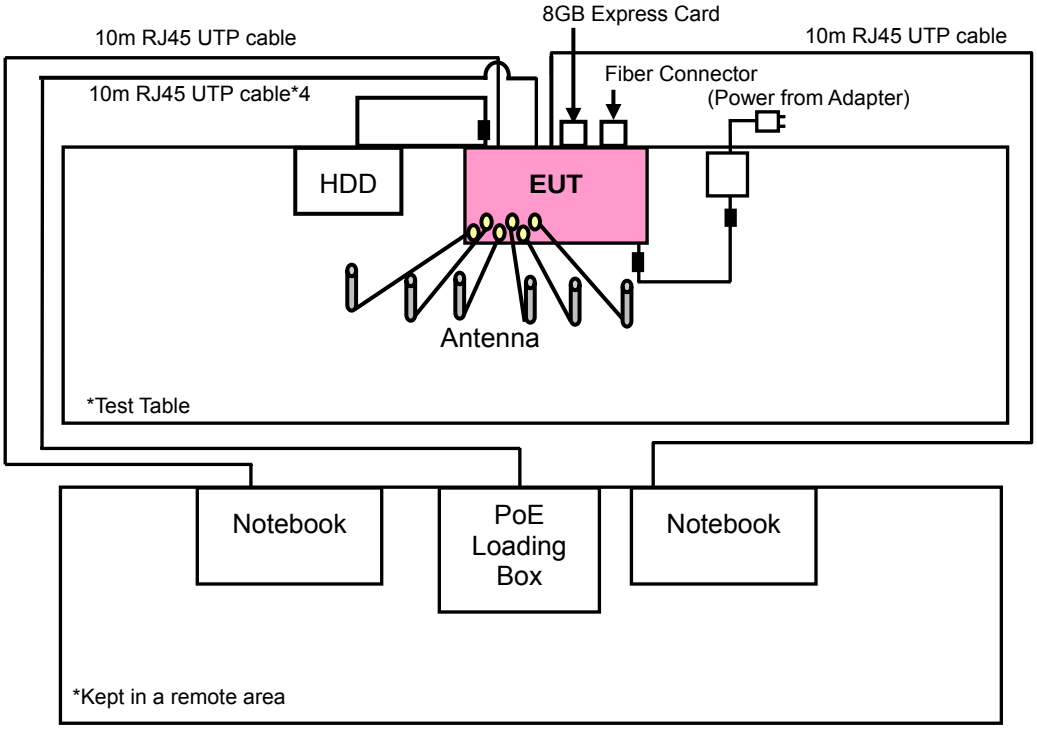
TEST MODE A



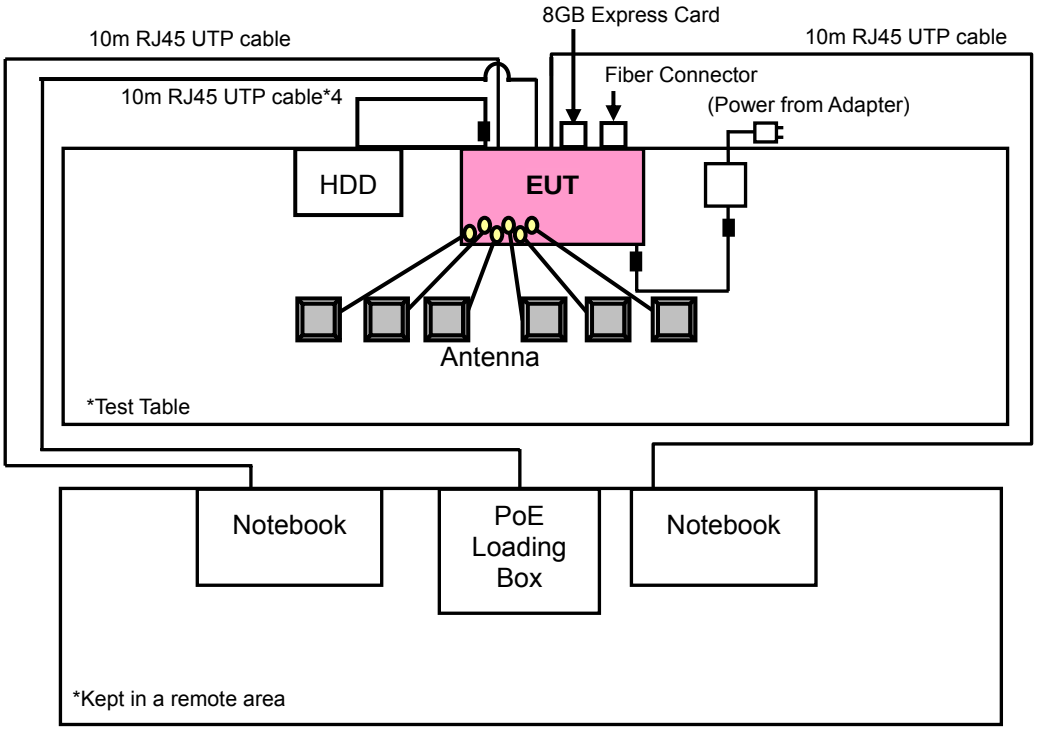
TEST MODE B



TEST MODE C



TEST MODE D



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

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	36 to 48	36, 40, 48	OFDM	BPSK	6.0	X
	802.11n (20MHz)	36 to 48	36, 40, 48	OFDM	BPSK	7.2	
	802.11n (40MHz)	38 to 46	38, 46	OFDM	BPSK	15.0	
B	802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6.0	Y
	802.11n (20MHz)	36 to 48	36, 40, 48	OFDM	BPSK	7.2	
	802.11n (40MHz)	38 to 46	38, 46	OFDM	BPSK	15.0	
C	802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6.0	Z
	802.11n (20MHz)	36 to 48	36, 40, 48	OFDM	BPSK	7.2	
	802.11n (40MHz)	38 to 46	38, 46	OFDM	BPSK	15.0	
D	802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6.0	Y
	802.11n (20MHz)	36 to 48	36, 40, 48	OFDM	BPSK	7.2	
	802.11n (40MHz)	38 to 46	38, 46	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	802.11n (20MHz)	36 to 48	40	OFDM	BPSK	7.2	X
B	802.11n (20MHz)	36 to 48	36	OFDM	BPSK	7.2	Y
C	802.11n (20MHz)	36 to 48	36	OFDM	BPSK	7.2	Z
D	802.11a	36 to 48	36	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	802.11n (20MHz)	36 to 48	40	OFDM	BPSK	7.2
B	802.11n (20MHz)	36 to 48	36	OFDM	BPSK	7.2
C	802.11n (20MHz)	36 to 48	36	OFDM	BPSK	7.2
D	802.11a	36 to 48	36	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	36 to 48	36, 48	OFDM	BPSK	1.0
A, B, C, D	802.11n (20MHz)	36 to 48	36, 48	OFDM	BPSK	6.0
A, B, C, D	802.11n (40MHz)	38 to 46	38, 46	OFDM	BPSK	7.2

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	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A, B, C, D	802.11n (20MHz)	36 to 48	36, 40, 48	OFDM	BPSK	7.2
A, B, C, D	802.11n (40MHz)	38 to 46	38, 46	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE≥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 E (15.407)
ANSI C63.4-2003

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

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	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

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

FREQUENCIES (MHz)	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH AT 3m (dBμV/m) *NOTE 3
	PK	PK
5150 ~ 5250	-27	68.3

NOTE: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

4.1.3 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. 27, 2009	Aug. 26, 2010

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.

4.1.4 TEST PROCEDURES

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

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

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

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

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

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

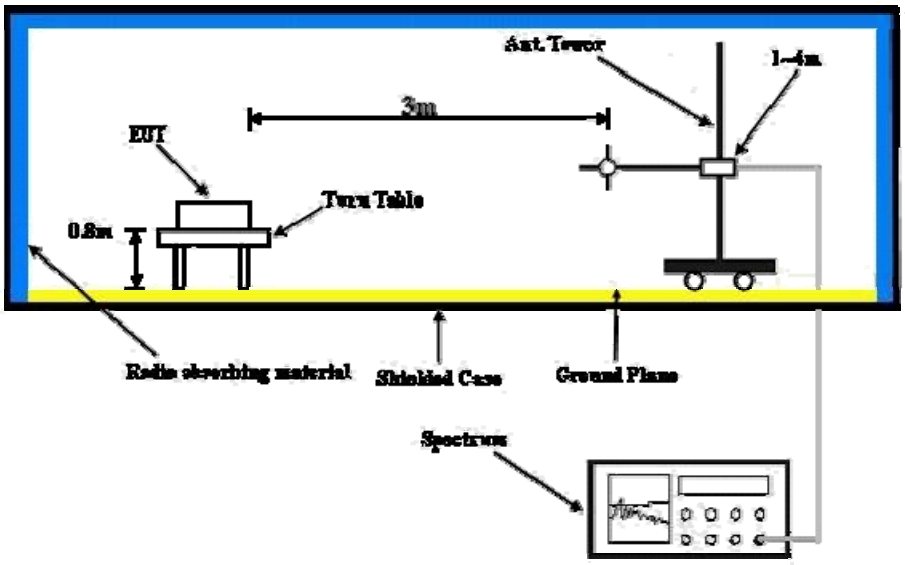
NOTE:

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

4.1.5 DEVIATION FROM TEST STANDARD

No deviation

4.1.6 TEST SETUP



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

4.1.7 EUT OPERATING CONDITION

a. Placed the EUT on the testing table.
b. The notebook communicated data with the external floppy via the EUT.
c. Prepared notebook systems to act as communication partners and placed them outside of testing area.
d. 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.
e. The communication partners sent data to EUT by command "PING".

4.1.8 TEST RESULTS

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	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	5150.00	48.3 PK	74.0	-25.7	1.06 H	332	11.60	36.70
2	5150.00	36.9 AV	54.0	-17.1	1.06 H	332	0.20	36.70
3	*5180.00	104.9 PK			1.06 H	332	68.10	36.80
4	*5180.00	92.3 AV			1.06 H	332	55.50	36.80
5	#10360.00	58.1 PK	68.3	-30.2	1.02 H	11	10.20	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	5150.00	52.5 PK	74.0	-21.5	1.01 V	212	15.80	36.70
2	5150.00	41.3 AV	54.0	-12.7	1.01 V	212	4.60	36.70
3	*5180.00	110.2 PK			1.01 V	212	73.40	36.80
4	*5180.00	96.6 AV			1.01 V	212	59.80	36.80
5	#10360.00	58.4 PK	68.3	-29.9	1.01 V	15	10.50	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	*5200.00	105.1 PK			1.05 H	334	68.30	36.80
2	*5200.00	92.5 AV			1.05 H	334	55.70	36.80
3	#10400.00	58.3 PK	68.3	-30.0	1.04 H	29	10.20	48.10
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	*5200.00	110.3 PK			1.00 V	212	73.50	36.80
2	*5200.00	96.8 AV			1.00 V	212	60.00	36.80
3	#10400.00	58.6 PK	68.3	-29.7	1.03 V	16	10.50	48.10

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

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5240 MHz (Channel 48)	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	*5240.00	105.3 PK			1.04 H	329	68.40	36.90
2	*5240.00	92.7 AV			1.04 H	329	55.80	36.90
3	5350.00	56.8 PK	74.0	-17.2	1.04 H	329	19.60	37.20
4	5350.00	40.1 AV	54.0	-13.9	1.04 H	329	2.90	37.20
5	#10480.00	58.5 PK	68.3	-29.8	1.06 H	35	10.20	48.30
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	*5240.00	110.5 PK			1.01 V	213	73.60	36.90
2	*5240.00	97.0 AV			1.01 V	213	60.10	36.90
3	5350.00	60.1 PK	74.0	-13.9	1.01 V	213	22.90	37.20
4	5350.00	43.5 AV	54.0	-10.5	1.01 V	213	6.30	37.20
5	#10480.00	58.8 PK	68.3	-29.5	1.04 V	25	10.50	48.30

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.
6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	5150.00	55.2 PK	74.0	-18.8	1.08 H	220	18.50	36.70
2	5150.00	40.5 AV	54.0	-13.5	1.08 H	220	3.80	36.70
3	*5180.00	113.6 PK			1.08 H	220	76.80	36.80
4	*5180.00	99.5 AV			1.08 H	220	62.70	36.80
5	#10360.00	59.6 PK	68.3	-28.7	1.00 H	29	11.70	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	5150.00	45.1 PK	74.0	-28.9	1.40 V	38	8.40	36.70
2	5150.00	30.2 AV	54.0	-23.8	1.40 V	38	-6.50	36.70
3	*5180.00	103.2 PK			1.40 V	38	66.40	36.80
4	*5180.00	89.3 AV			1.40 V	38	52.50	36.80
5	#10360.00	59.5 PK	68.3	-28.8	1.14 V	238	11.60	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	*5200.00	113.4 PK			1.10 H	221	76.60	36.80
2	*5200.00	99.3 AV			1.10 H	221	62.50	36.80
3	#10400.00	59.8 PK	68.3	-28.5	1.01 H	238	11.70	48.10
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	*5200.00	103.0 PK			1.09 V	235	66.20	36.80
2	*5200.00	89.1 AV			1.09 V	235	52.30	36.80
3	#10400.00	59.4 PK	68.3	-28.9	1.02 V	55	11.30	48.10

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

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5240 MHz (Channel 48)	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	*5240.00	113.8 PK			1.09 H	223	76.90	36.90
2	*5240.00	99.9 AV			1.09 H	223	63.00	36.90
3	5350.00	62.5 PK	74.0	-11.5	1.09 H	223	25.30	37.20
4	5350.00	44.4 AV	54.0	-9.6	1.09 H	223	7.20	37.20
5	#10480.00	60.1 PK	68.3	-28.2	1.03 H	225	11.80	48.30
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	*5240.00	103.5 PK			1.10 V	238	66.60	36.90
2	*5240.00	89.8 AV			1.10 V	238	52.90	36.90
3	5350.00	56.8 PK	74.0	-17.2	1.10 V	238	19.60	37.20
4	5350.00	37.6 AV	54.0	-16.4	1.10 V	238	0.40	37.20
5	#10480.00	59.6 PK	68.3	-28.7	1.04 V	235	11.30	48.30

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.
6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	5150.00	49.3 PK	74.0	-24.7	1.26 H	36	12.60	36.70
2	5150.00	35.2 AV	54.0	-18.8	1.26 H	36	-1.50	36.70
3	*5180.00	101.0 PK			1.26 H	36	64.20	36.80
4	*5180.00	87.6 AV			1.26 H	36	50.80	36.80
5	#10360.00	59.2 PK	68.3	-29.1	1.05 H	42	11.30	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	5150.00	56.0 PK	74.0	-18.0	1.25 V	7	19.30	36.70
2	5150.00	41.2 AV	54.0	-12.8	1.25 V	7	4.50	36.70
3	*5180.00	114.4 PK			1.25 V	7	77.60	36.80
4	*5180.00	101.1 AV			1.25 V	7	64.30	36.80
5	#10360.00	59.3 PK	68.3	-29.0	1.01 V	26	11.40	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	*5200.00	100.8 PK			1.23 H	35	64.00	36.80
2	*5200.00	87.4 AV			1.23 H	35	50.60	36.80
3	#10400.00	59.3 PK	68.3	-29.0	1.03 H	26	11.20	48.10
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	*5200.00	114.2 PK			1.24 V	8	77.40	36.80
2	*5200.00	100.9 AV			1.24 V	8	64.10	36.80
3	#10400.00	59.5 PK	68.3	-28.8	1.00 V	28	11.40	48.10

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

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5240 MHz (Channel 48)	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	*5240.00	101.0 PK			1.21 H	39	64.10	36.90
2	*5240.00	87.6 AV			1.21 H	39	50.70	36.90
3	5350.00	56.5 PK	74.0	-17.5	1.21 H	39	19.30	37.20
4	5350.00	37.4 AV	54.0	-16.6	1.21 H	39	0.20	37.20
5	#10480.00	59.5 PK	68.3	-28.8	1.01 H	34	11.20	48.30
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	*5240.00	114.5 PK			1.26 V	6	77.60	36.90
2	*5240.00	101.3 AV			1.26 V	6	64.40	36.90
3	5350.00	64.1 PK	74.0	-9.9	1.26 V	6	26.90	37.20
4	5350.00	45.8 AV	54.0	-8.2	1.26 V	6	8.60	37.20
5	#10480.00	60.9 PK	68.3	-27.4	1.16 V	145	12.60	48.30

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.
6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	5150.00	65.1 PK	74.0	-8.9	1.00 H	14	28.40	36.70
2	5150.00	44.4 AV	54.0	-9.6	1.00 H	14	7.70	36.70
3	*5180.00	115.6 PK			1.04 H	14	78.80	36.80
4	*5180.00	102.2 AV			1.04 H	14	65.40	36.80
5	#10360.00	56.8 PK	68.3	-31.5	1.10 H	120	8.90	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	5150.00	45.4 PK	74.0	-28.6	1.13 V	349	8.70	36.70
2	5150.00	34.9 AV	54.0	-19.1	1.13 V	349	-1.80	36.70
3	*5180.00	100.7 PK			1.13 V	349	63.90	36.80
4	*5180.00	88.2 AV			1.13 V	349	51.40	36.80
5	#10360.00	55.8 PK	68.3	-32.5	1.22 V	219	7.90	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	*5200.00	116.5 PK			1.00 H	3	79.70	36.80
2	*5200.00	102.8 AV			1.00 H	3	66.00	36.80
3	#10400.00	57.1 PK	68.3	-31.2	1.00 H	20	9.00	48.10
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	*5200.00	101.1 PK			1.11 V	350	64.30	36.80
2	*5200.00	88.8 AV			1.11 V	350	52.00	36.80
3	#10400.00	55.3 PK	68.3	-33.0	1.05 V	341	7.20	48.10

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

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5240 MHz (Channel 48)	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	*5240.00	116.2 PK			1.01 H	5	79.30	36.90
2	*5240.00	102.3 AV			1.01 H	5	65.40	36.90
3	5350.00	60.8 PK	74.0	-13.2	1.01 H	5	23.60	37.20
4	5350.00	43.2 AV	54.0	-10.8	1.01 H	5	6.00	37.20
5	#10480.00	56.9 PK	68.3	-31.4	1.23 H	255	8.60	48.30
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	*5240.00	100.8 PK			1.00 V	346	63.90	36.90
2	*5240.00	88.1 AV			1.00 V	346	51.20	36.90
3	5350.00	48.9 PK	74.0	-25.1	1.00 V	346	11.70	37.20
4	5350.00	33.9 AV	54.0	-20.1	1.00 V	346	-3.30	37.20
5	#10480.00	55.5 PK	68.3	-32.8	1.00 V	192	7.20	48.30

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.
6. "#":The radiated frequency is out the restricted band.

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	5150.00	48.0 PK	74.0	-26.0	1.05 H	334	11.30	36.70
2	5150.00	36.6 AV	54.0	-17.4	1.05 H	334	-0.10	36.70
3	*5180.00	104.6 PK			1.05 H	334	67.80	36.80
4	*5180.00	92.0 AV			1.05 H	334	55.20	36.80
5	#10360.00	57.8 PK	68.3	-30.5	1.02 H	45	9.90	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	5150.00	52.1 PK	74.0	-21.9	1.02 V	215	15.40	36.70
2	5150.00	40.9 AV	54.0	-13.1	1.02 V	215	4.20	36.70
3	*5180.00	110.0 PK			1.02 V	215	73.20	36.80
4	*5180.00	96.4 AV			1.02 V	215	59.60	36.80
5	#10360.00	58.2 PK	68.3	-30.1	1.01 V	62	10.30	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	*5200.00	104.8 PK			1.03 H	335	68.00	36.80
2	*5200.00	92.2 AV			1.03 H	335	55.40	36.80
3	#10400.00	58.1 PK	68.3	-30.2	1.01 H	66	10.00	48.10
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	*5200.00	110.1 PK			1.01 V	215	73.30	36.80
2	*5200.00	96.5 AV			1.01 V	215	59.70	36.80
3	#10400.00	58.2 PK	68.3	-30.1	1.00 V	25	10.10	48.10

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

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5240 MHz (Channel 48)	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	*5240.00	104.9 PK			1.05 H	330	68.00	36.90
2	*5240.00	92.3 AV			1.05 H	330	55.40	36.90
3	5350.00	56.4 PK	74.0	-17.6	1.05 H	330	19.20	37.20
4	5350.00	39.8 AV	54.0	-14.2	1.05 H	330	2.60	37.20
5	#10480.00	58.2 PK	68.3	-30.1	1.10 H	42	9.90	48.30
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	*5240.00	110.1 PK			1.00 V	215	73.20	36.90
2	*5240.00	96.6 AV			1.00 V	215	59.70	36.90
3	5350.00	59.6 PK	74.0	-14.4	1.00 V	215	22.40	37.20
4	5350.00	43.1 AV	54.0	-10.9	1.00 V	215	5.90	37.20
5	#10480.00	58.5 PK	68.3	-29.8	1.06 V	31	10.20	48.30

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.
6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	5150.00	54.9 PK	74.0	-19.1	1.09 H	218	18.20	36.70
2	5150.00	40.1 AV	54.0	-13.9	1.09 H	218	3.40	36.70
3	*5180.00	113.2 PK			1.09 H	218	76.40	36.80
4	*5180.00	99.2 AV			1.09 H	218	62.40	36.80
5	#10360.00	59.2 PK	68.3	-29.1	1.13 H	212	11.30	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	5150.00	44.9 PK	74.0	-29.1	1.38 V	41	8.20	36.70
2	5150.00	29.7 AV	54.0	-24.3	1.38 V	41	-7.00	36.70
3	*5180.00	102.9 PK			1.38 V	41	66.10	36.80
4	*5180.00	89.0 AV			1.38 V	41	52.20	36.80
5	#10360.00	59.1 PK	68.3	-29.2	1.15 V	82	11.20	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	*5200.00	113.1 PK			1.09 H	218	76.30	36.80
2	*5200.00	99.0 AV			1.09 H	218	62.20	36.80
3	#10400.00	60.2 PK	68.3	-28.1	1.04 H	245	12.10	48.10
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	*5200.00	102.8 PK			1.10 V	239	66.00	36.80
2	*5200.00	88.9 AV			1.10 V	239	52.10	36.80
3	#10400.00	59.6 PK	68.3	-28.7	1.01 V	239	11.50	48.10

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5240 MHz (Channel 48)	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	*5240.00	113.5 PK			1.10 H	225	76.60	36.90
2	*5240.00	99.6 AV			1.10 H	225	62.70	36.90
3	5350.00	62.2 PK	74.0	-11.8	1.10 H	225	25.00	37.20
4	5350.00	44.1 AV	54.0	-9.9	1.10 H	225	6.90	37.20
5	#10480.00	60.4 PK	68.3	-27.9	1.09 H	212	12.10	48.30
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	*5240.00	103.1 PK			1.07 V	236	66.20	36.90
2	*5240.00	89.4 AV			1.07 V	236	52.50	36.90
3	5350.00	56.5 PK	74.0	-17.5	1.07 V	236	19.30	37.20
4	5350.00	37.3 AV	54.0	-16.7	1.07 V	236	0.10	37.20
5	#10480.00	59.4 PK	68.3	-28.9	1.01 V	224	11.10	48.30

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.
6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	5150.00	49.0 PK	74.0	-25.0	1.25 H	38	12.30	36.70
2	5150.00	34.9 AV	54.0	-19.1	1.25 H	38	-1.80	36.70
3	*5180.00	100.8 PK			1.25 H	38	64.00	36.80
4	*5180.00	87.4 AV			1.25 H	38	50.60	36.80
5	#10360.00	59.4 PK	68.3	-28.9	1.04 H	22	11.50	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	5150.00	55.8 PK	74.0	-18.2	1.23 V	8	19.10	36.70
2	5150.00	41.0 AV	54.0	-13.0	1.23 V	8	4.30	36.70
3	*5180.00	114.2 PK			1.23 V	8	77.40	36.80
4	*5180.00	100.9 AV			1.23 V	8	64.10	36.80
5	#10360.00	59.4 PK	68.3	-28.9	1.00 V	31	11.50	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	*5200.00	101.1 PK			1.25 H	38	64.30	36.80
2	*5200.00	87.6 AV			1.25 H	38	50.80	36.80
3	#10400.00	59.5 PK	68.3	-28.8	1.08 H	336	11.40	48.10
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	*5200.00	114.5 PK			1.25 V	9	77.70	36.80
2	*5200.00	101.3 AV			1.25 V	9	64.50	36.80
3	#10400.00	59.8 PK	68.3	-28.5	1.04 V	229	11.70	48.10

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5240 MHz (Channel 48)	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	*5240.00	100.7 PK			1.19 H	34	63.80	36.90
2	*5240.00	87.2 AV			1.19 H	34	50.30	36.90
3	5350.00	56.3 PK	74.0	-17.7	1.19 H	34	19.10	37.20
4	5350.00	37.2 AV	54.0	-16.8	1.19 H	34	0.00	37.20
5	#10480.00	59.2 PK	68.3	-29.1	1.04 H	29	10.90	48.30
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	*5240.00	114.1 PK			1.25 V	8	77.20	36.90
2	*5240.00	101.0 AV			1.25 V	8	64.10	36.90
3	5350.00	63.5 PK	74.0	-10.5	1.25 V	8	26.30	37.20
4	5350.00	45.3 AV	54.0	-8.7	1.25 V	8	8.10	37.20
5	#10480.00	60.5 PK	68.3	-27.8	1.13 V	24	12.20	48.30

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.
6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	5150.00	64.5 PK	74.0	-9.5	1.02 H	9	27.80	36.70
2	5150.00	42.9 AV	54.0	-11.1	1.02 H	9	6.20	36.70
3	*5180.00	115.9 PK			1.02 H	9	79.10	36.80
4	*5180.00	101.7 AV			1.02 H	9	64.90	36.80
5	#10360.00	55.9 PK	68.3	-32.4	1.00 H	302	8.00	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	5150.00	46.2 PK	74.0	-27.8	1.20 V	358	9.50	36.70
2	5150.00	35.1 AV	54.0	-18.9	1.20 V	358	-1.60	36.70
3	*5180.00	100.8 PK			1.20 V	358	64.00	36.80
4	*5180.00	88.6 AV			1.20 V	358	51.80	36.80
5	#10360.00	55.2 PK	68.3	-33.1	1.00 V	1	7.30	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	*5200.00	116.3 PK			1.01 H	349	79.50	36.80
2	*5200.00	102.6 AV			1.01 H	349	65.80	36.80
3	#10400.00	56.9 PK	68.3	-31.4	1.02 H	199	8.80	48.10
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	*5200.00	101.5 PK			1.22 V	218	64.70	36.80
2	*5200.00	88.9 AV			1.22 V	218	52.10	36.80
3	#10400.00	55.4 PK	68.3	-32.9	1.23 V	64	7.30	48.10

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

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5240 MHz (Channel 48)	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	*5240.00	116.4 PK			1.03 H	11	79.50	36.90
2	*5240.00	102.6 AV			1.03 H	11	65.70	36.90
3	5350.00	61.3 PK	74.0	-12.7	1.03 H	11	24.10	37.20
4	5350.00	43.6 AV	54.0	-10.4	1.03 H	11	6.40	37.20
5	#10480.00	57.3 PK	68.3	-31.0	1.00 H	196	9.00	48.30
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	*5240.00	101.0 PK			1.02 V	300	64.10	36.90
2	*5240.00	88.3 AV			1.02 V	300	51.40	36.90
3	5350.00	49.3 PK	74.0	-24.7	1.02 V	300	12.10	37.20
4	5350.00	34.2 AV	54.0	-19.8	1.02 V	300	-3.00	37.20
5	#10480.00	56.6 PK	68.3	-31.7	1.00 V	187	8.30	48.30

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.
6. "#":The radiated frequency is out the restricted band.

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5190 MHz (Channel 38)	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	5150.00	60.1 PK	74.0	-13.9	1.05 H	335	23.40	36.70
2	5150.00	40.6 AV	54.0	-13.4	1.05 H	335	3.90	36.70
3	*5190.00	101.6 PK			1.05 H	335	64.80	36.80
4	*5190.00	89.1 AV			1.05 H	335	52.30	36.80
5	#10380.00	58.4 PK	68.3	-29.9	1.09 H	62	10.40	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	5150.00	65.2 PK	74.0	-8.8	1.00 V	232	28.50	36.70
2	5150.00	46.0 AV	54.0	-8.0	1.00 V	232	9.30	36.70
3	*5190.00	106.8 PK			1.00 V	232	70.00	36.80
4	*5190.00	93.1 AV			1.00 V	232	56.30	36.80
5	#10380.00	59.0 PK	68.3	-29.3	1.03 V	24	11.00	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5230 MHz (Channel 46)	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	*5230.00	101.9 PK			1.01 H	331	65.00	36.90
2	*5230.00	89.4 AV			1.01 H	331	52.50	36.90
3	5350.00	61.2 PK	74.0	-12.8	1.01 H	331	24.00	37.20
4	5350.00	42.3 AV	54.0	-11.7	1.01 H	331	5.10	37.20
5	#10460.00	58.2 PK	68.3	-30.1	1.04 H	125	9.90	48.30
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	*5230.00	107.1 PK			1.01 V	228	70.20	36.90
2	*5230.00	93.4 AV			1.01 V	228	56.50	36.90
3	5350.00	66.8 PK	74.0	-7.2	1.01 V	228	29.60	37.20
4	5350.00	47.5 AV	54.0	-6.5	1.01 V	228	10.30	37.20
5	#10460.00	59.2 PK	68.3	-29.1	1.04 V	219	10.90	48.30

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.
6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5190 MHz (Channel 38)	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	**5150.00**	**71.0 PK**	**74.0**	**-3.0**	**1.07 H**	**218**	**34.30**	**36.70**
2	5150.00	50.0 AV	54.0	-4.0	1.07 H	218	13.30	36.70
3	*5190.00	110.4 PK			1.07 H	218	73.60	36.80
4	*5190.00	95.3 AV			1.07 H	218	58.50	36.80
5	#10380.00	59.2 PK	68.3	-29.1	1.06 H	243	11.20	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	5150.00	50.2 PK	74.0	-23.8	1.41 V	45	13.50	36.70
2	5150.00	36.1 AV	54.0	-17.9	1.41 V	45	-0.60	36.70
3	*5190.00	99.6 PK			1.41 V	45	62.80	36.80
4	*5190.00	85.4 AV			1.41 V	45	48.60	36.80
5	#10380.00	58.3 PK	68.3	-30.0	1.03 V	142	10.30	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5230 MHz (Channel 46)	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	*5230.00	110.6 PK			1.08 H	219	73.70	36.90
2	*5230.00	95.5 AV			1.08 H	219	58.60	36.90
3	5350.00	68.2 PK	74.0	-5.8	1.08 H	219	31.00	37.20
4	5350.00	48.6 AV	54.0	-5.4	1.08 H	219	11.40	37.20
5	#10460.00	59.5 PK	68.3	-28.8	1.04 H	251	11.20	48.30
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	*5230.00	99.8 PK			1.40 V	46	62.90	36.90
2	*5230.00	85.6 AV			1.40 V	46	48.70	36.90
3	5350.00	57.2 PK	74.0	-16.8	1.40 V	46	20.00	37.20
4	5350.00	38.5 AV	54.0	-15.5	1.40 V	46	1.30	37.20
5	#10460.00	59.1 PK	68.3	-29.2	1.03 V	225	10.80	48.30

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.
6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5190 MHz (Channel 38)	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	5150.00	55.2 PK	74.0	-18.8	1.20 H	208	18.50	36.70
2	5150.00	40.1 AV	54.0	-13.9	1.20 H	208	3.40	36.70
3	*5190.00	98.1 PK			1.20 H	208	61.30	36.80
4	*5190.00	83.2 AV			1.20 H	208	46.40	36.80
5	#10380.00	58.1 PK	68.3	-30.2	1.01 H	119	10.10	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	5150.00	68.4 PK	74.0	-5.6	1.19 V	28	31.70	36.70
2	5150.00	49.3 AV	54.0	-4.7	1.19 V	28	12.60	36.70
3	*5190.00	111.1 PK			1.19 V	28	74.30	36.80
4	*5190.00	96.9 AV			1.19 V	28	60.10	36.80
5	#10380.00	59.1 PK	68.3	-29.2	1.04 V	213	11.10	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5230 MHz (Channel 46)	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	*5230.00	98.4 PK			1.18 H	210	61.50	36.90
2	*5230.00	83.5 AV			1.18 H	210	46.60	36.90
3	5350.00	56.9 PK	74.0	-17.1	1.18 H	210	19.70	37.20
4	5350.00	38.2 AV	54.0	-15.8	1.18 H	210	1.00	37.20
5	#10460.00	58.9 PK	68.3	-29.4	1.10 H	209	10.60	48.30
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	*5230.00	111.3 PK			1.20 V	31	74.40	36.90
2	*5230.00	97.1 AV			1.20 V	31	60.20	36.90
3	5350.00	68.9 PK	74.0	-5.1	1.20 V	31	31.70	37.20
4	5350.00	49.4 AV	54.0	-4.6	1.20 V	31	12.20	37.20
5	#10460.00	59.4 PK	68.3	-28.9	1.08 V	216	11.10	48.30

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.

6. "#":The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5190 MHz (Channel 38)	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	5150.00	69.7 PK	74.0	-4.3	1.00 H	8	33.00	36.70
2	5150.00	50.8 AV	54.0	-3.2	1.00 H	8	14.10	36.70
3	*5190.00	111.5 PK			1.00 H	8	74.70	36.80
4	*5190.00	97.4 AV			1.00 H	8	60.60	36.80
5	#10380.00	57.1 PK	68.3	-31.2	1.09 H	62	9.10	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	5150.00	58.3 PK	74.0	-15.7	1.69 V	3	21.60	36.70
2	5150.00	44.7 AV	54.0	-9.3	1.69 V	3	8.00	36.70
3	*5190.00	99.8 PK			1.82 V	2	63.00	36.80
4	*5190.00	85.2 AV			1.82 V	2	48.40	36.80
5	#10380.00	57.6 PK	68.3	-30.7	1.23 V	9	9.60	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 radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5230 MHz (Channel 46)	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	*5230.00	111.3 PK			1.11 H	5	74.40	36.90
2	*5230.00	97.6 AV			1.11 H	5	60.70	36.90
3	5350.00	67.8 PK	74.0	-6.2	1.11 H	5	30.60	37.20
4	5350.00	48.9 AV	54.0	-5.1	1.11 H	5	11.70	37.20
5	#10460.00	56.8 PK	68.3	-31.5	1.00 H	289	8.50	48.30
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	*5230.00	99.1 PK			1.33 V	300	62.20	36.90
2	*5230.00	85.0 AV			1.33 V	300	48.10	36.90
3	5350.00	55.9 PK	74.0	-18.1	1.33 V	300	18.70	37.20
4	5350.00	38.3 AV	54.0	-15.7	1.33 V	300	1.10	37.20
5	#10460.00	55.8 PK	68.3	-32.5	1.00 V	196	7.50	48.30

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.
6. "#":The radiated frequency is out the restricted band.

BELOW 1GHz WORST-CASE DATA：

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5200 MHz (Channel 40)	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	249.60	33.5 QP	46.0	-12.5	1.00 H	97	19.60	13.90
2	500.42	41.2 QP	46.0	-4.8	2.00 H	262	20.70	20.50
3	599.58	42.0 QP	46.0	-4.0	1.50 H	13	19.60	22.40
4	624.85	40.9 QP	46.0	-5.1	1.50 H	10	17.80	23.10
5	751.23	39.7 QP	46.0	-6.3	1.00 H	295	14.10	25.60
6	875.67	40.8 QP	46.0	-5.2	2.00 H	31	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	57.82	35.6 QP	40.0	-4.4	1.49 V	178	22.60	13.00
2	467.36	42.6 QP	46.0	-3.4	1.00 V	151	22.90	19.70
3	500.42	41.2 QP	46.0	-4.8	1.00 V	307	20.70	20.50
4	599.58	38.4 QP	46.0	-7.6	1.00 V	283	16.00	22.40
5	751.23	37.6 QP	46.0	-8.4	1.50 V	31	12.00	25.60
6	875.67	40.4 QP	46.0	-5.6	1.00 V	343	12.90	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.

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	467.36	40.3 QP	46.0	-5.7	2.00 H	316	20.60	19.70
2	500.42	41.6 QP	46.0	-4.4	2.00 H	250	21.10	20.50
3	599.58	40.2 QP	46.0	-5.8	1.50 H	325	17.80	22.40
4	624.85	41.4 QP	46.0	-4.6	1.50 H	358	18.30	23.10
5	733.73	39.8 QP	46.0	-6.2	1.00 H	304	14.40	25.40
6	875.67	40.0 QP	46.0	-6.0	2.00 H	25	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	59.06	36.3 QP	40.0	-3.7	1.50 V	124	23.40	12.90
2	72.67	36.1 QP	40.0	-3.9	1.00 V	286	24.20	11.90
3	467.36	41.9 QP	46.0	-4.1	1.50 V	151	22.20	19.70
4	599.58	38.1 QP	46.0	-7.9	2.00 V	334	15.70	22.40
5	751.23	37.8 QP	46.0	-8.2	1.00 V	13	12.20	25.60
6	1000.00	44.0 QP	54.0	-10.0	1.50 V	25	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.

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	40.4 QP	46.0	-5.6	2.00 H	259	19.90	20.50
2	599.58	40.8 QP	46.0	-5.2	1.50 H	343	18.40	22.40
3	624.85	41.1 QP	46.0	-4.9	1.50 H	337	18.00	23.10
4	700.68	39.6 QP	46.0	-6.4	1.00 H	310	14.50	25.10
5	751.23	41.0 QP	46.0	-5.0	1.00 H	298	15.40	25.60
6	875.67	40.9 QP	46.0	-5.1	1.50 H	25	13.40	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	36.7 QP	40.0	-3.3	1.00 V	148	23.80	12.90
2	62.95	36.1 QP	40.0	-3.9	1.00 V	310	23.10	13.00
3	467.36	42.7 QP	46.0	-3.3	1.00 V	151	23.00	19.70
4	599.58	39.7 QP	46.0	-6.3	1.50 V	331	17.30	22.40
5	751.23	39.4 QP	46.0	-6.6	1.50 V	259	13.80	25.60
6	875.67	39.8 QP	46.0	-6.2	1.00 V	10	12.30	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.

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	5180 MHz (Channel 36)	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	59.06	34.2 QP	40.0	-5.8	2.00 H	166	21.30	12.90
2	500.42	41.5 QP	46.0	-4.5	1.50 H	73	21.00	20.50
3	599.58	42.0 QP	46.0	-4.0	1.50 H	349	19.60	22.40
4	624.85	41.7 QP	46.0	-4.3	1.50 H	10	18.60	23.10
5	733.73	40.1 QP	46.0	-5.9	1.00 H	304	14.70	25.40
6	875.67	39.6 QP	46.0	-6.4	1.50 H	52	12.10	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	36.1 QP	40.0	-3.9	1.00 V	292	23.10	13.00
2	467.36	42.6 QP	46.0	-3.4	1.00 V	169	22.90	19.70
3	500.42	39.2 QP	46.0	-6.8	1.00 V	307	18.70	20.50
4	599.58	39.5 QP	46.0	-6.5	1.00 V	301	17.10	22.40
5	733.73	38.5 QP	46.0	-7.5	1.00 V	331	13.10	25.40
6	875.67	40.6 QP	46.0	-5.4	1.50 V	343	13.10	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 (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	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_Cond_ V7.3.7	NA	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Shielded Room 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.

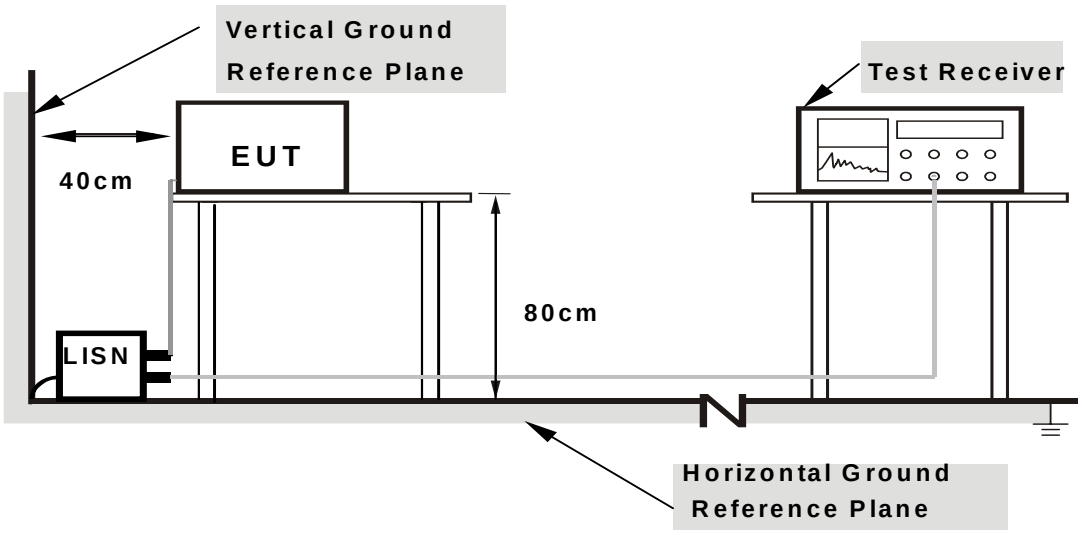
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

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

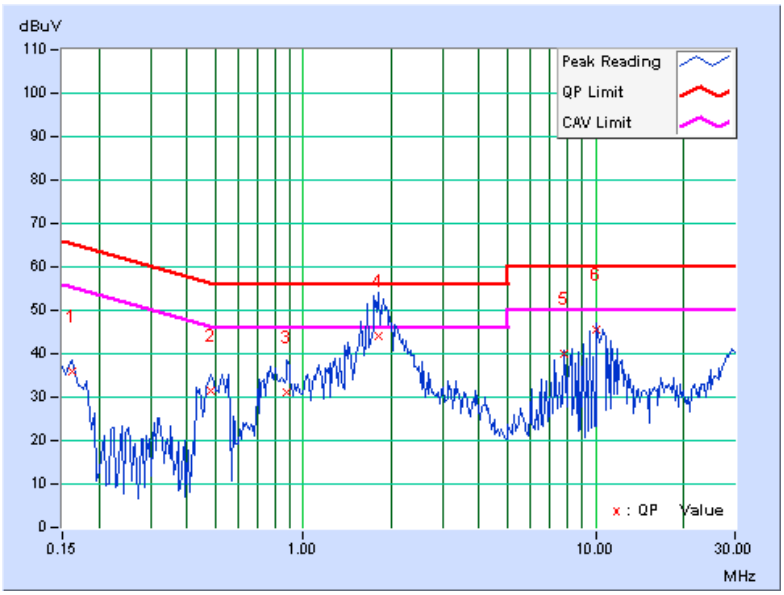
CONDUCTED WORST-CASE DATA :

802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.16	35.64	-	35.80	-	65.38	55.38	-29.58	-
2	0.482	0.19	31.22	-	31.41	-	56.30	46.30	-24.90	-
3	0.877	0.22	31.05	-	31.27	-	56.00	46.00	-24.73	-
4	1.805	0.29	43.77	-	44.06	-	56.00	46.00	-11.94	-
5	7.777	0.35	39.55	-	39.90	-	60.00	50.00	-20.10	-
6	10.035	0.35	45.31	-	45.66	-	60.00	50.00	-14.34	-

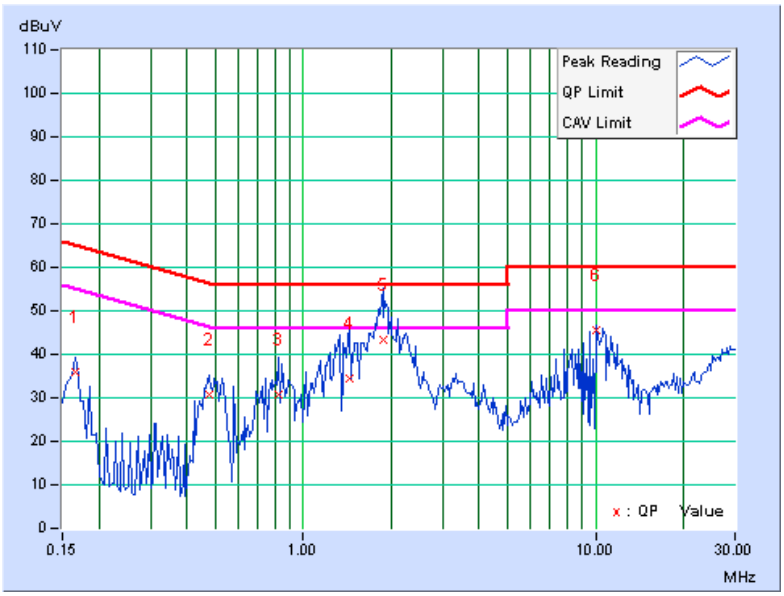
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission 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.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.166	0.13	35.74	-	35.87	-	65.18	55.18	-29.31	-
2	0.474	0.17	30.53	-	30.70	-	56.44	46.44	-25.74	-
3	0.826	0.20	30.42	-	30.62	-	56.00	46.00	-25.38	-
4	1.441	0.26	34.08	-	34.34	-	56.00	46.00	-21.66	-
5	1.879	0.29	43.13	-	43.42	-	56.00	46.00	-12.58	-
6	10.035	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.

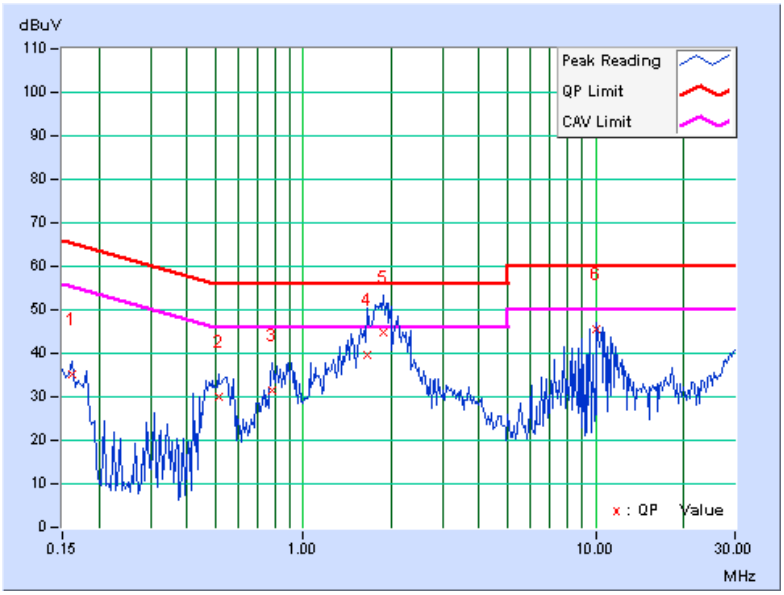


802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(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	0.513	0.19	29.74	-	29.93	-	56.00	46.00	-26.07	-
3	0.783	0.21	31.42	-	31.63	-	56.00	46.00	-24.37	-
4	1.660	0.28	39.38	-	39.66	-	56.00	46.00	-16.34	-
5	1.879	0.30	44.68	-	44.98	-	56.00	46.00	-11.02	-
6	10.027	0.35	45.15	-	45.50	-	60.00	50.00	-14.50	-

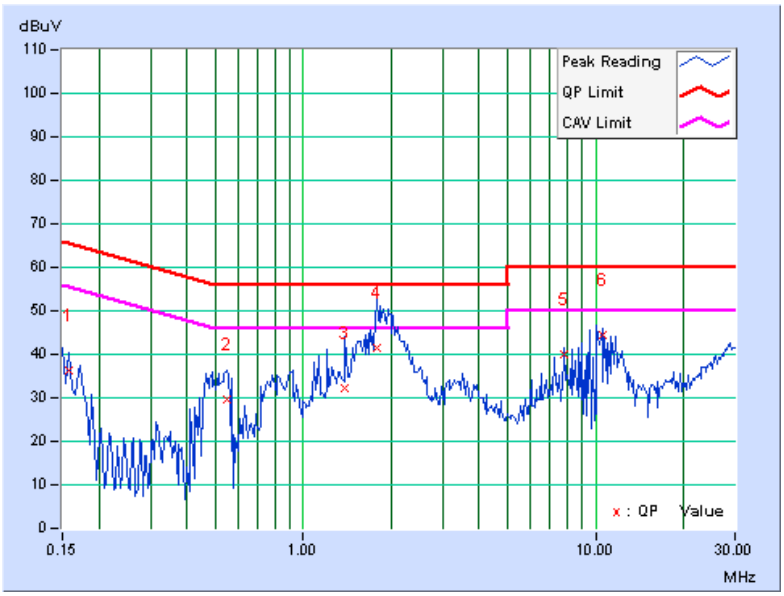
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission 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.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.13	36.31	-	36.44	-	65.58	55.58	-29.14	-
2	0.548	0.17	29.56	-	29.73	-	56.00	46.00	-26.27	-
3	1.391	0.25	31.92	-	32.17	-	56.00	46.00	-23.83	-
4	1.781	0.28	41.34	-	41.62	-	56.00	46.00	-14.38	-
5	7.770	0.41	39.63	-	40.04	-	60.00	50.00	-19.96	-
6	10.527	0.46	43.93	-	44.39	-	60.00	50.00	-15.61	-

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.

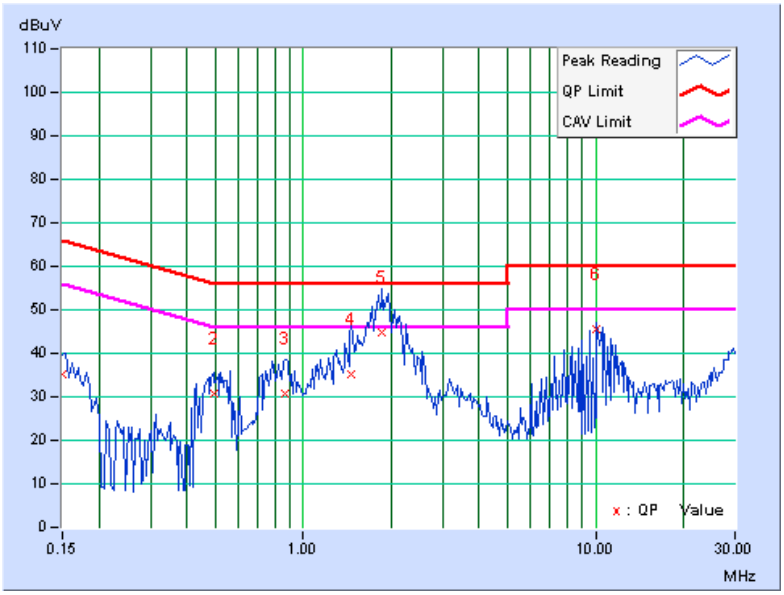


802.11n (20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	C		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.16	35.04	-	35.20	-	66.00	56.00	-30.80	-
2	0.494	0.19	30.61	-	30.80	-	56.10	46.10	-25.31	-
3	0.869	0.22	30.43	-	30.65	-	56.00	46.00	-25.35	-
4	1.465	0.27	34.80	-	35.07	-	56.00	46.00	-20.93	-
5	1.863	0.30	44.59	-	44.89	-	56.00	46.00	-11.11	-
6	10.027	0.35	45.34	-	45.69	-	60.00	50.00	-14.31	-

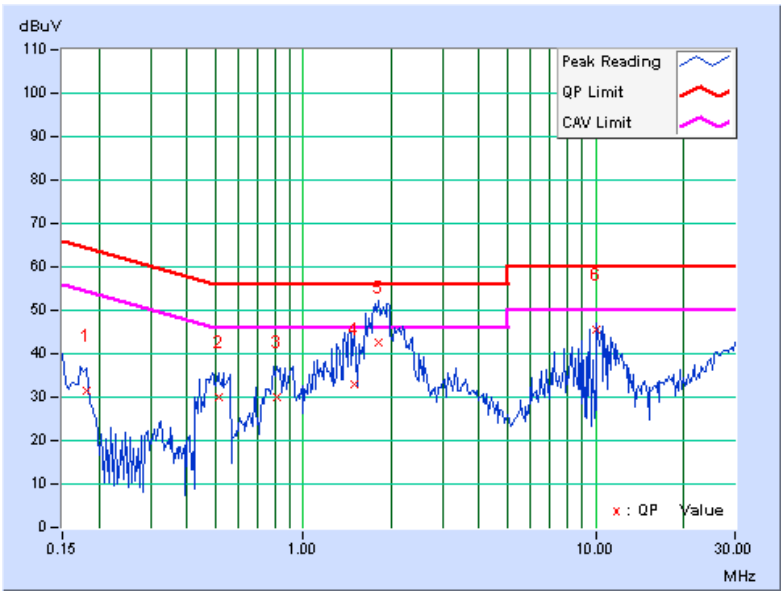
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission 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.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.13	31.35	-	31.48	-	64.43	54.43	-32.95	-
2	0.513	0.17	29.98	-	30.15	-	56.00	46.00	-25.85	-
3	0.810	0.20	29.96	-	30.16	-	56.00	46.00	-25.84	-
4	1.496	0.26	32.88	-	33.14	-	56.00	46.00	-22.86	-
5	1.820	0.29	42.46	-	42.75	-	56.00	46.00	-13.25	-
6	10.027	0.44	45.17	-	45.61	-	60.00	50.00	-14.39	-

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.

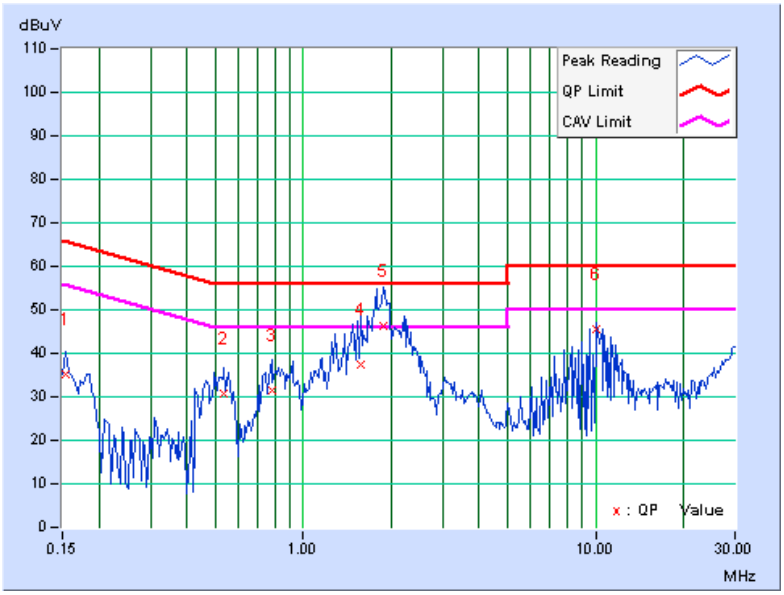


802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	D		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.154	0.16	34.95	-	35.11	-	65.79	55.79	-30.68	-
2	0.537	0.19	30.56	-	30.75	-	56.00	46.00	-25.25	-
3	0.779	0.21	31.10	-	31.31	-	56.00	46.00	-24.69	-
4	1.578	0.28	36.99	-	37.27	-	56.00	46.00	-18.73	-
5	**1.879**	**0.30**	**45.89**	**29.24**	**46.19**	**29.54**	**56.00**	**46.00**	**-9.81**	**-16.46**
6	10.027	0.35	45.38	-	45.73	-	60.00	50.00	-14.27	-

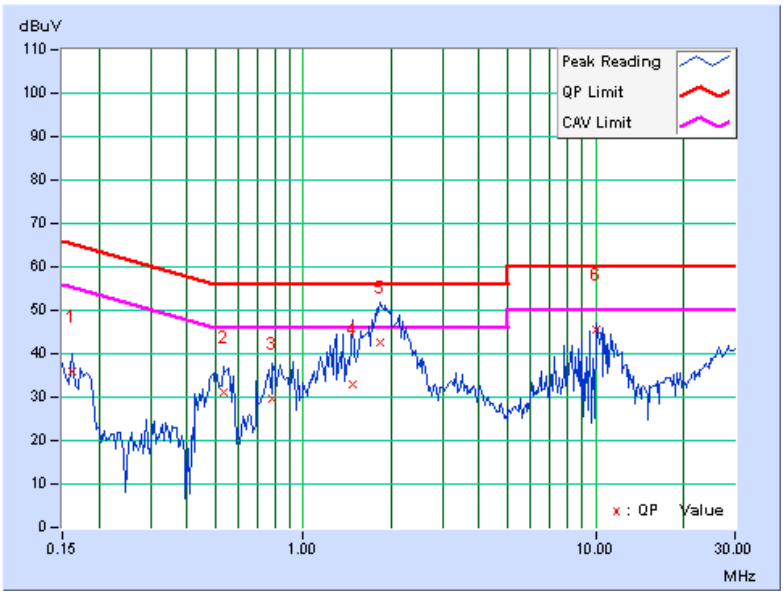
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.13	35.84	-	35.97	-	65.38	55.38	-29.41	-
2	0.533	0.17	31.10	-	31.27	-	56.00	46.00	-24.73	-
3	0.787	0.20	29.54	-	29.74	-	56.00	46.00	-26.26	-
4	1.469	0.26	32.54	-	32.80	-	56.00	46.00	-23.20	-
5	1.836	0.29	42.43	-	42.72	-	56.00	46.00	-13.28	-
6	10.027	0.44	45.21	-	45.65	-	60.00	50.00	-14.35	-

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 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

4.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

FREQUENCY BAND	LIMIT
5.15 ~ 5.25GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB

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

4.3.2 TEST INSTRUMENTS

FOR POWER OUTPUT MEASUREMENT

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	CALIBRATED UNTIL
High Speed Peak Power Meter	ML2495A	0824012	Aug. 10, 2009	Aug. 09, 2010
Power Sensor	MA2411B	0738138	Aug. 10, 2009	Aug. 09, 2010

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 26dB bandwidth of emission.

FOR 26dB OCCUPIED BANDWIDTH

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	CALIBRATED UNTIL
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

FOR POWER OUTPUT MEASUREMENT

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.

FOR 26dB OCCUPIED BANDWIDTH

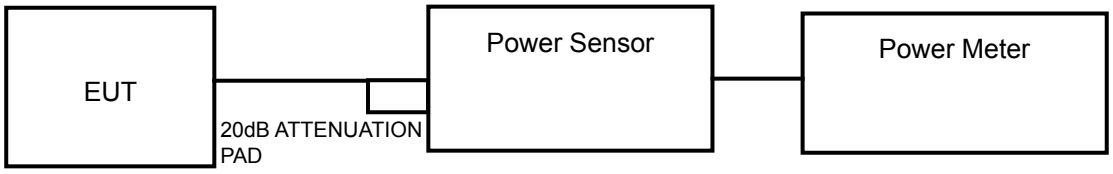
The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 300kHz RBW and 1MHz VBW. The 26dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 26dB.

4.3.4 DEVIATION FROM TEST STANDARD

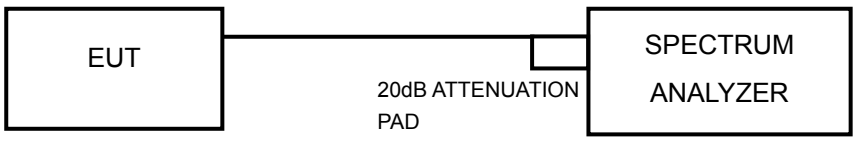
No deviation

4.3.5 TEST SETUP

FOR POWER OUTPUT MEASUREMENT



FOR 26dB OCCUPIED BANDWIDTH



4.3.6 EUT OPERATING CONDITIONS

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

4.3.7 TEST RESULTS

POWER OUTPUT:

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				
36	5180	10.2	10.7	10.9	34.5	15.4	17	PASS
40	5200	10.7	10.8	10.8	35.8	15.5	17	PASS
48	5240	10.5	10.7	10.7	34.7	15.4	17	PASS

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				
36	5180	10.3	10.6	10.9	34.5	15.4	17	PASS
40	5200	10.8	10.9	10.8	36.3	15.6	17	PASS
48	5240	10.6	10.6	10.8	35.0	15.4	17	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				
38	5190	10.1	10.6	10.3	32.4	15.1	17	PASS
46	5230	10.7	10.1	10.2	32.5	15.1	17	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				
36	5180	10.1	11.1	10.8	35.1	15.5	17	PASS
40	5200	10.4	10.8	10.6	34.5	15.4	17	PASS
48	5240	10.5	10.9	10.6	35.0	15.4	17	PASS

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				
36	5180	10.5	11.1	11.2	37.3	15.7	17	PASS
40	5200	10.3	11.2	10.8	35.9	15.6	17	PASS
48	5240	10.4	10.8	11.1	35.9	15.5	17	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				
38	5190	10.1	11.1	10.9	35.4	15.5	17	PASS
46	5230	10.4	10.1	10.5	32.4	15.1	17	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				
36	5180	11.2	12.0	11.9	44.5	16.5	17	PASS
40	5200	11.5	11.9	11.8	44.7	16.5	17	PASS
48	5240	11.4	11.8	11.7	43.7	16.4	17	PASS

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				
36	5180	11.3	12.2	12.1	**46.3**	16.7	17	PASS
40	5200	11.4	12.0	11.9	45.1	16.5	17	PASS
48	5240	11.6	11.9	12.0	45.8	16.6	17	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				
38	5190	11.2	12.0	11.8	44.2	16.5	17	PASS
46	5230	11.3	11.2	11.4	40.5	16.1	17	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				
36	5180	10.5	11.0	11.2	37.0	15.7	16.7	PASS
40	5200	10.8	11.1	11.1	37.8	15.8	16.7	PASS
48	5240	10.7	10.8	10.7	35.5	15.5	16.7	PASS

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				
36	5180	10.5	11.2	11.1	37.3	15.7	16.7	PASS
40	5200	10.8	11.1	11.0	37.5	15.7	16.7	PASS
48	5240	10.7	11.1	10.7	36.4	15.6	16.7	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				
38	5190	10.4	11.0	10.7	35.3	15.5	16.7	PASS
46	5230	11.1	10.4	10.5	35.1	15.4	16.7	PASS

NOTE: According to 15.407 (a) (1) (2) (3), the maximum antenna gain 6.3dBi is higher than 6dBi, so the limit of peak power spectral density shall be reduced by 0.3dB.

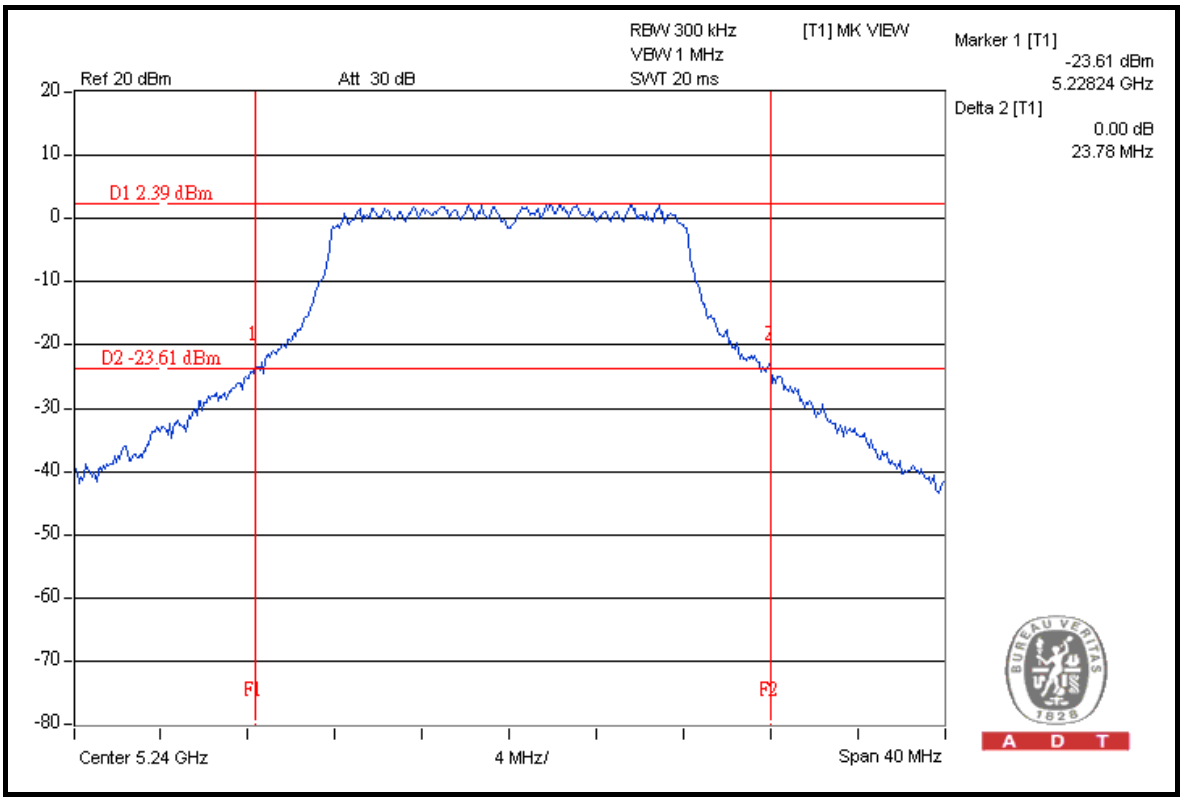
26dB OCCUPIED BANDWIDTH:

TEST MODE A

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
36	5180	23.17	22.94	23.04	PASS
40	5200	22.79	23.40	22.77	PASS
48	5240	22.82	23.78	22.99	PASS

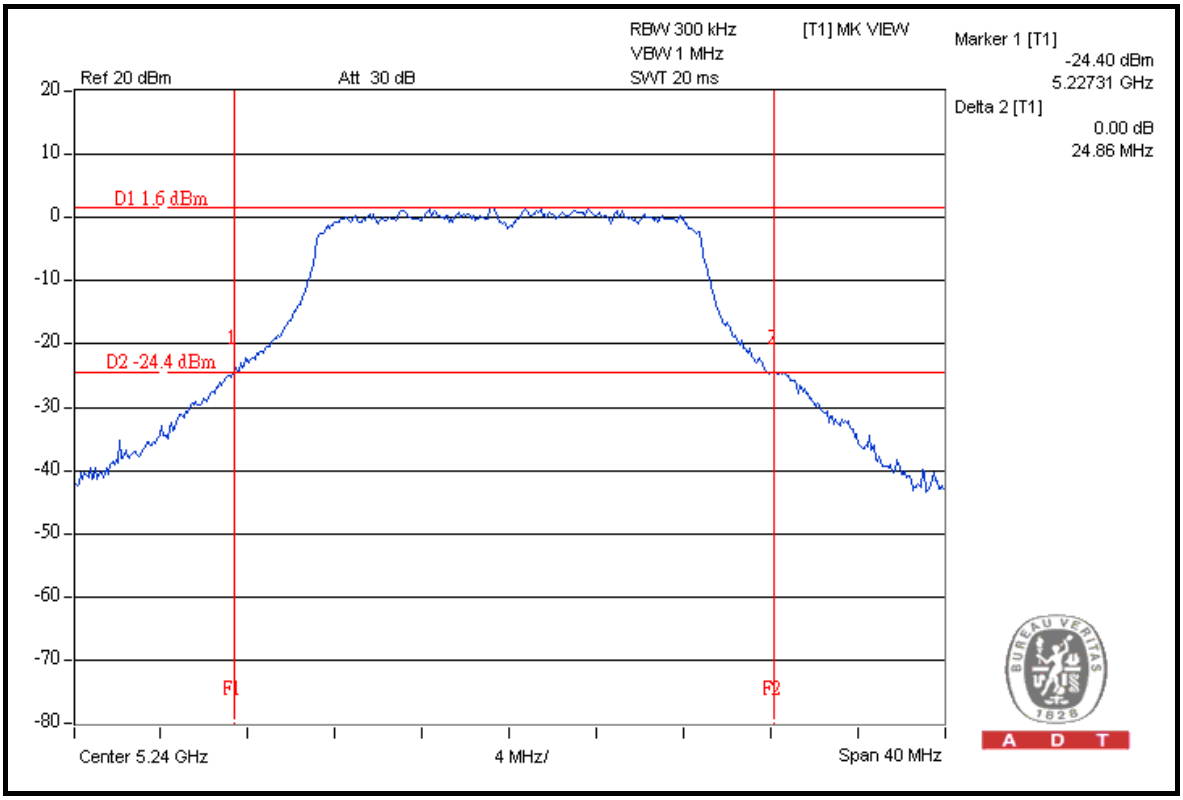
FOR CHAIN 1: CH 48



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
36	5180	24.43	24.29	24.19	PASS
40	5200	24.45	24.40	24.42	PASS
48	5240	24.86	24.81	24.15	PASS

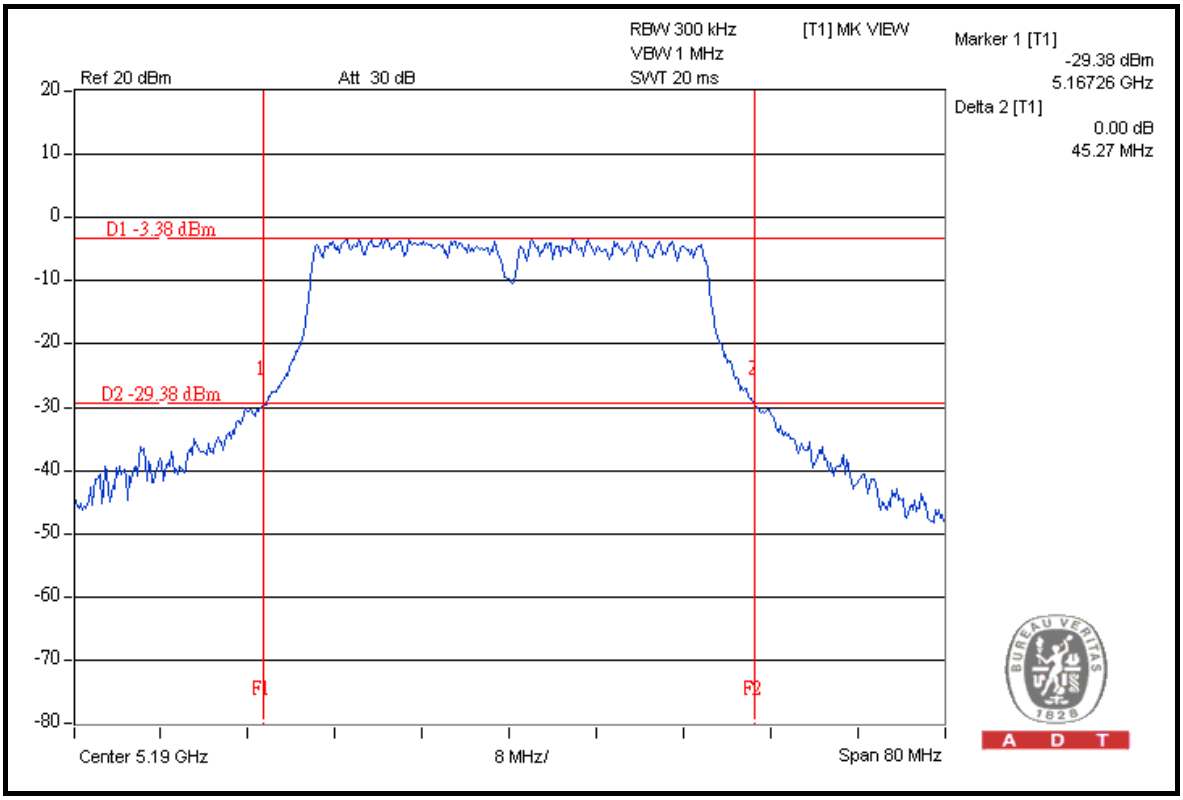
FOR CHAIN 0: CH 48



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
38	5190	44.62	45.27	44.56	PASS
46	5230	44.42	45.12	44.68	PASS

FOR CHAIN 1: CH 38

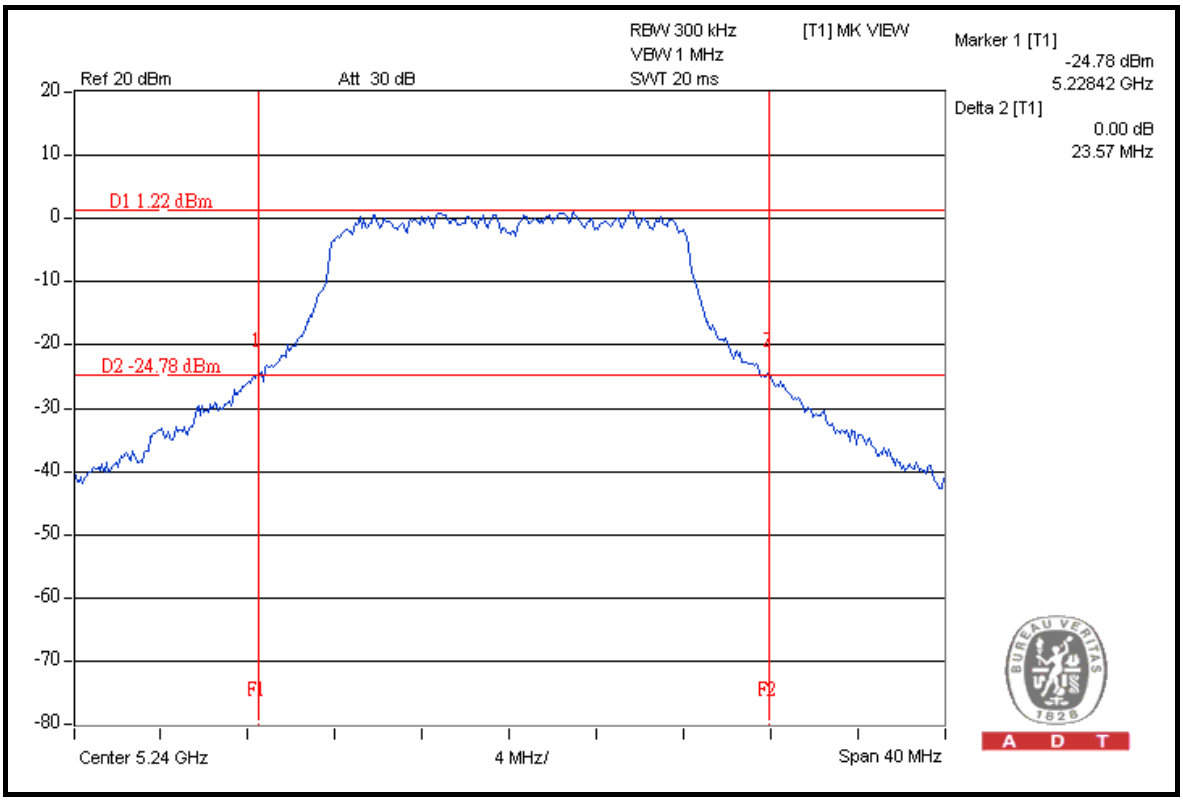


TEST MODE B

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
36	5180	22.98	22.16	22.55	PASS
40	5200	22.99	22.50	23.44	PASS
48	5240	23.57	22.74	23.00	PASS

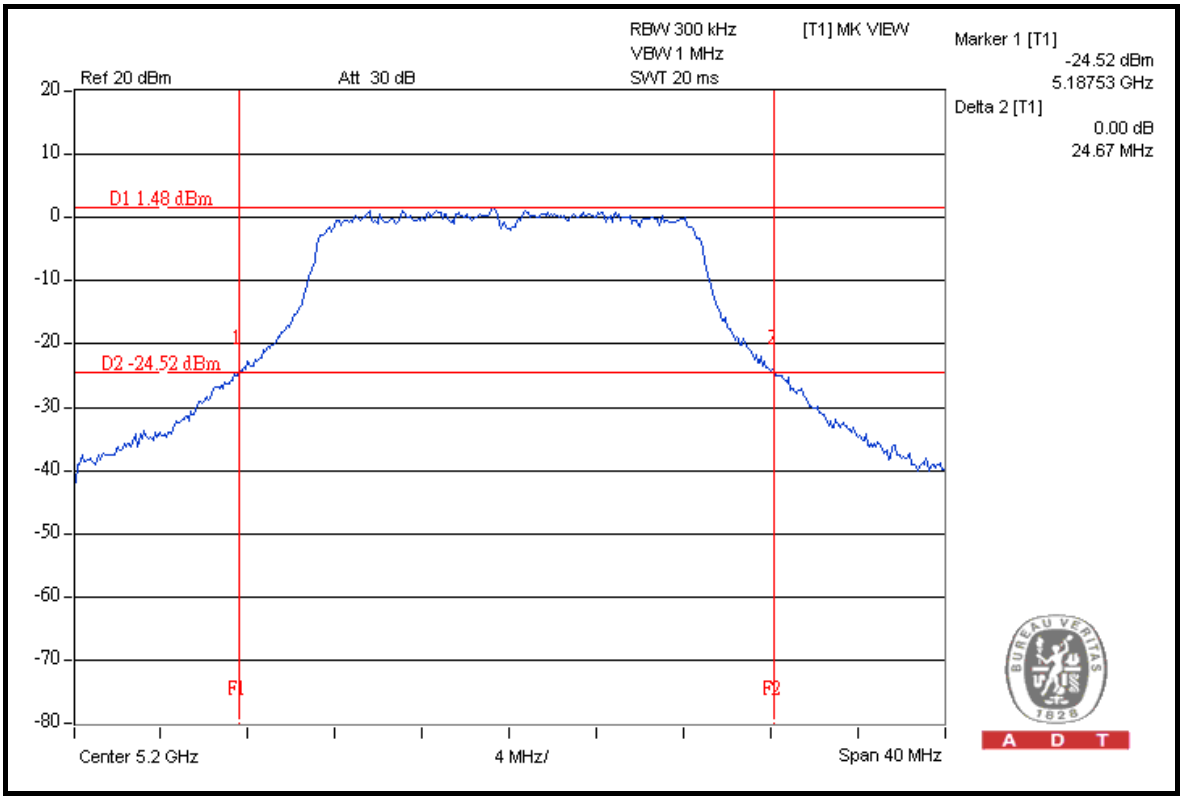
FOR CHAIN 0: CH 48



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
36	5180	24.11	23.86	24.19	PASS
40	5200	24.10	24.67	24.58	PASS
48	5240	24.51	24.27	24.45	PASS

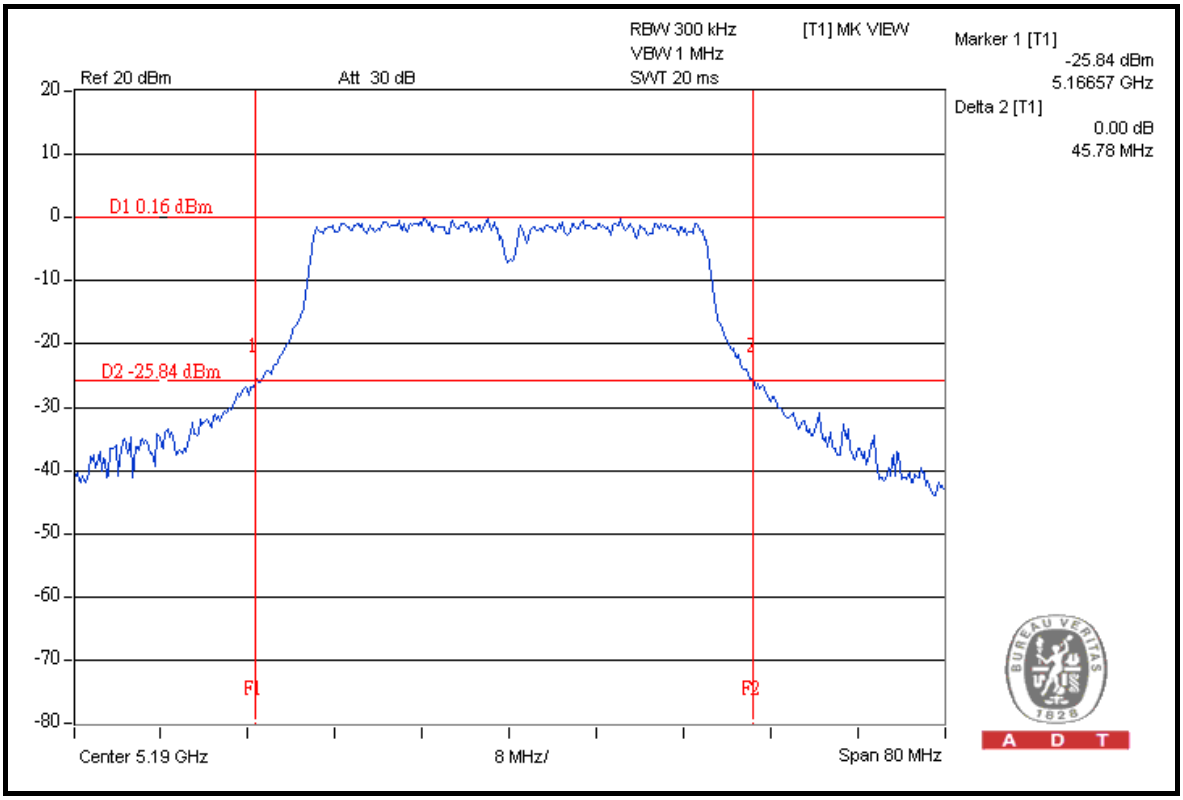
FOR CHAIN 1: CH 40



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
38	5190	45.19	45.06	45.78	PASS
46	5230	44.74	45.01	44.99	PASS

FOR CHAIN 2: CH 38

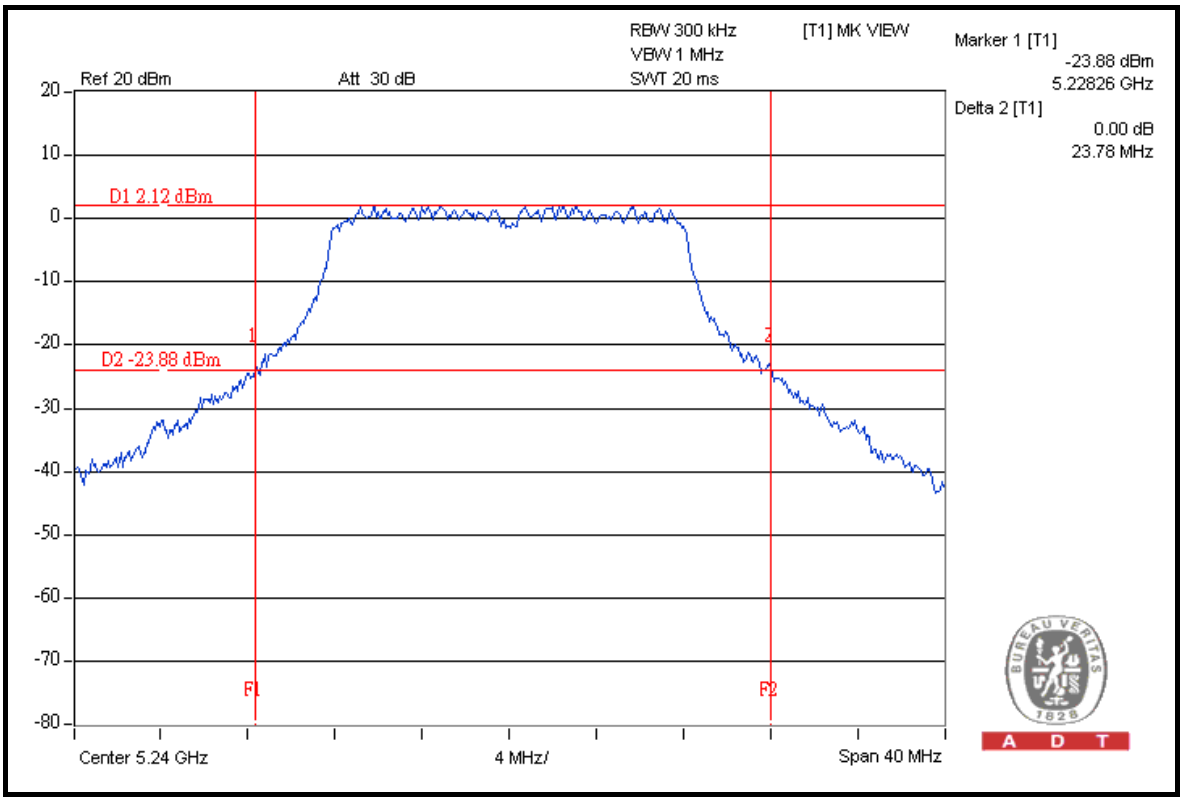


TEST MODE C

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
36	5180	23.59	22.94	23.19	PASS
40	5200	23.19	22.92	22.63	PASS
48	5240	23.78	22.90	23.32	PASS

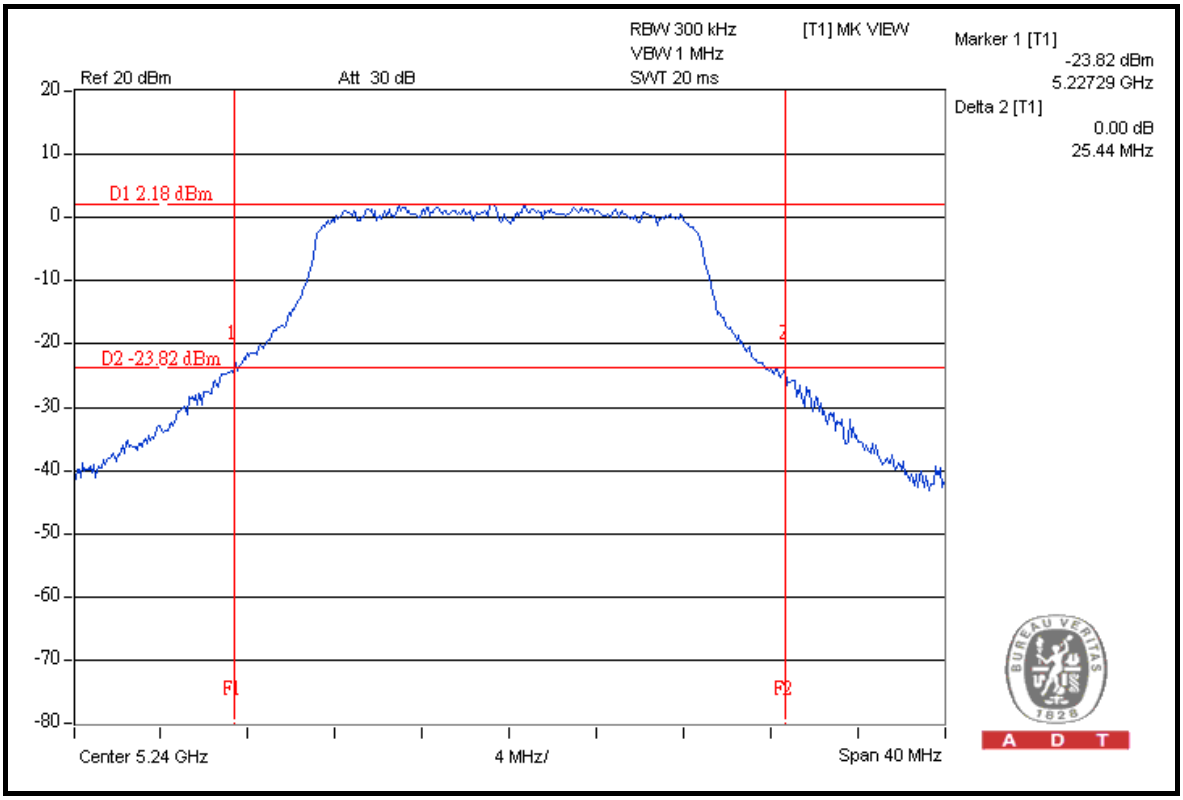
FOR CHAIN 0: CH 48



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
36	5180	24.18	24.47	24.37	PASS
40	5200	24.25	24.78	24.40	PASS
48	5240	24.65	25.44	23.97	PASS

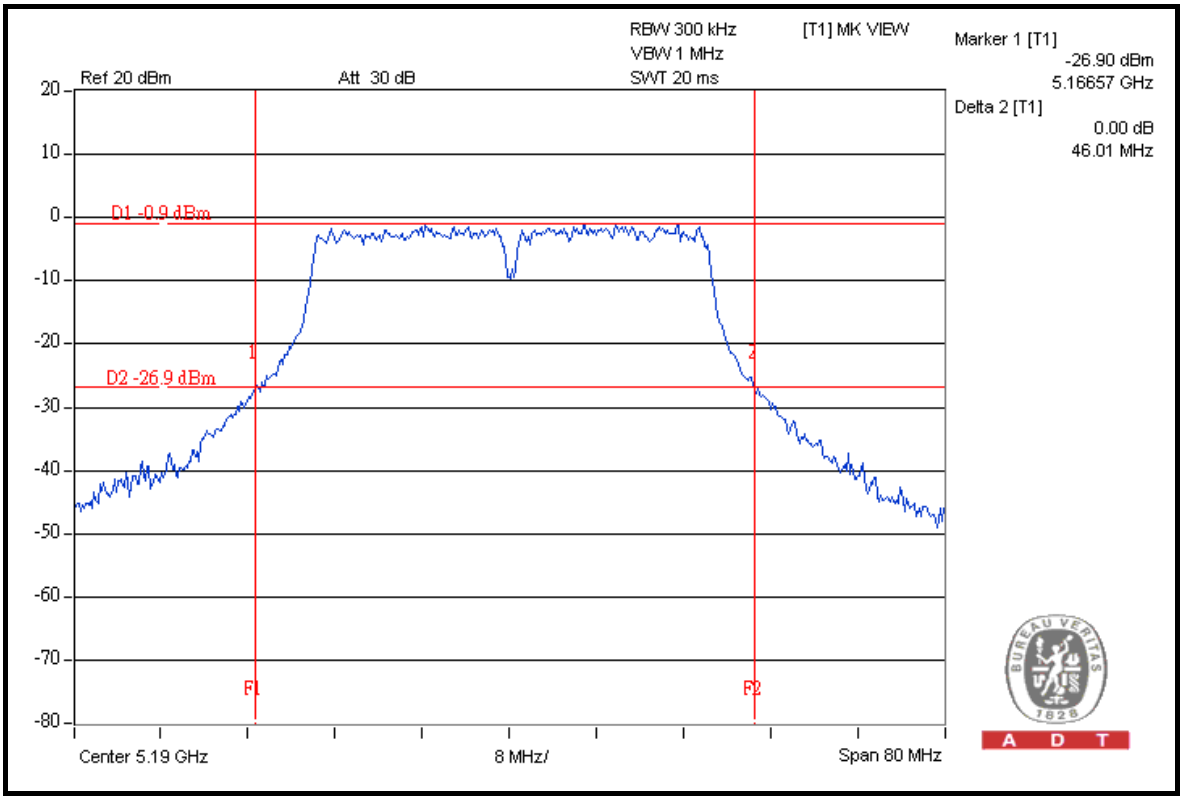
FOR CHAIN 1: CH 48



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
38	5190	44.12	45.08	46.01	PASS
46	5230	45.41	44.82	46.00	PASS

FOR CHAIN 2: CH 38

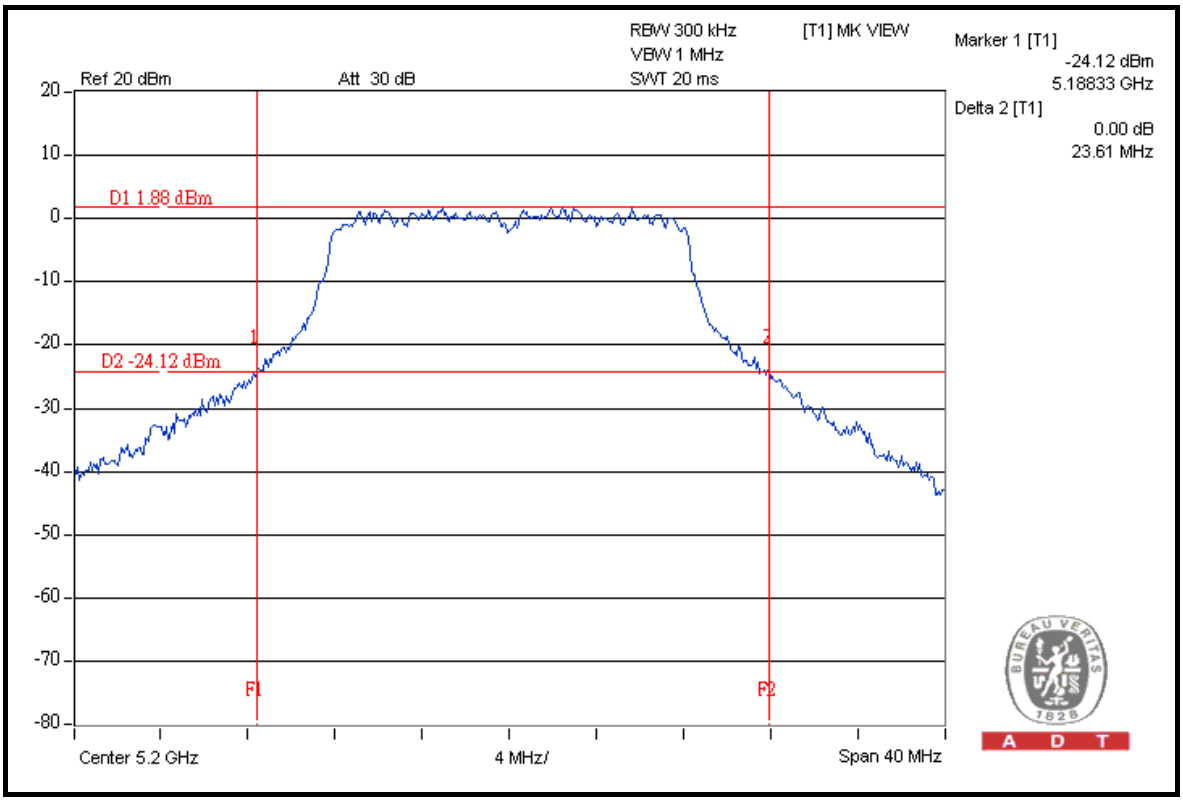


TEST MODE D

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
36	5180	23.51	22.75	23.53	PASS
40	5200	23.61	23.40	23.43	PASS
48	5240	23.36	23.42	23.45	PASS

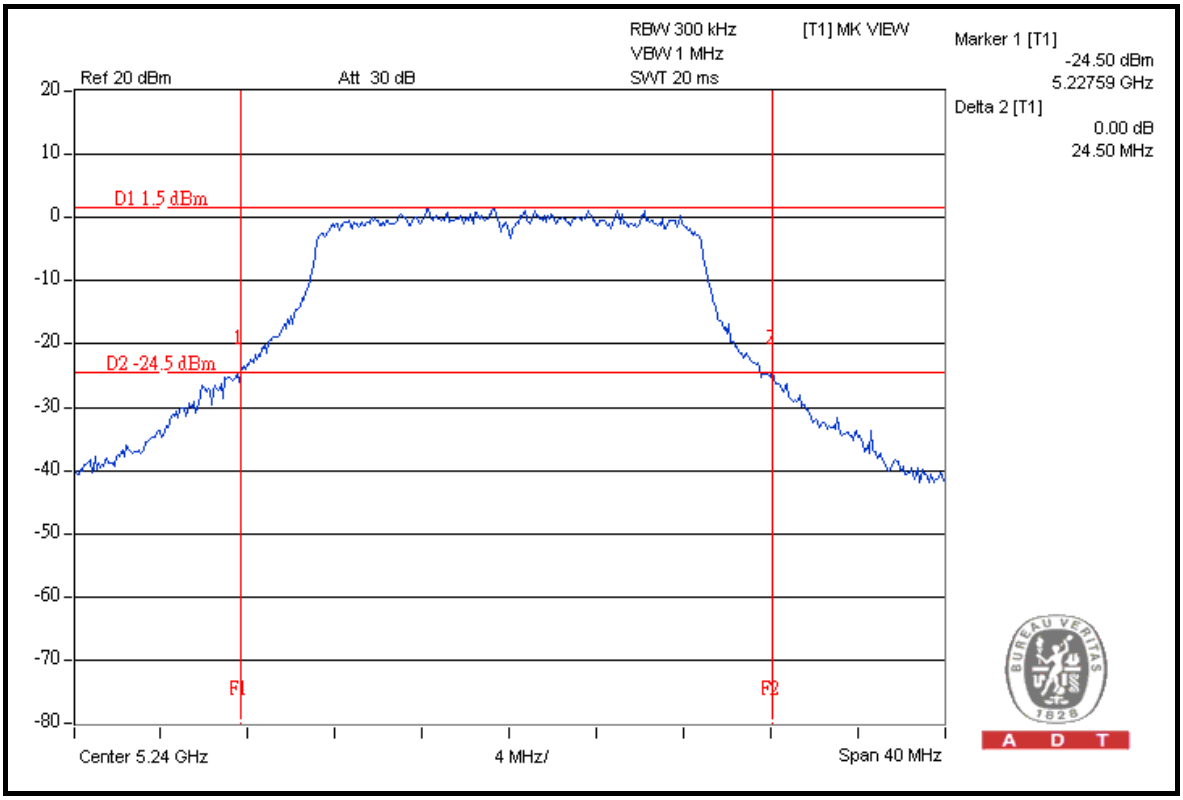
FOR CHAIN 0: CH 40



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
36	5180	24.03	24.09	24.12	PASS
40	5200	24.26	24.41	24.17	PASS
48	5240	24.50	24.10	23.98	PASS

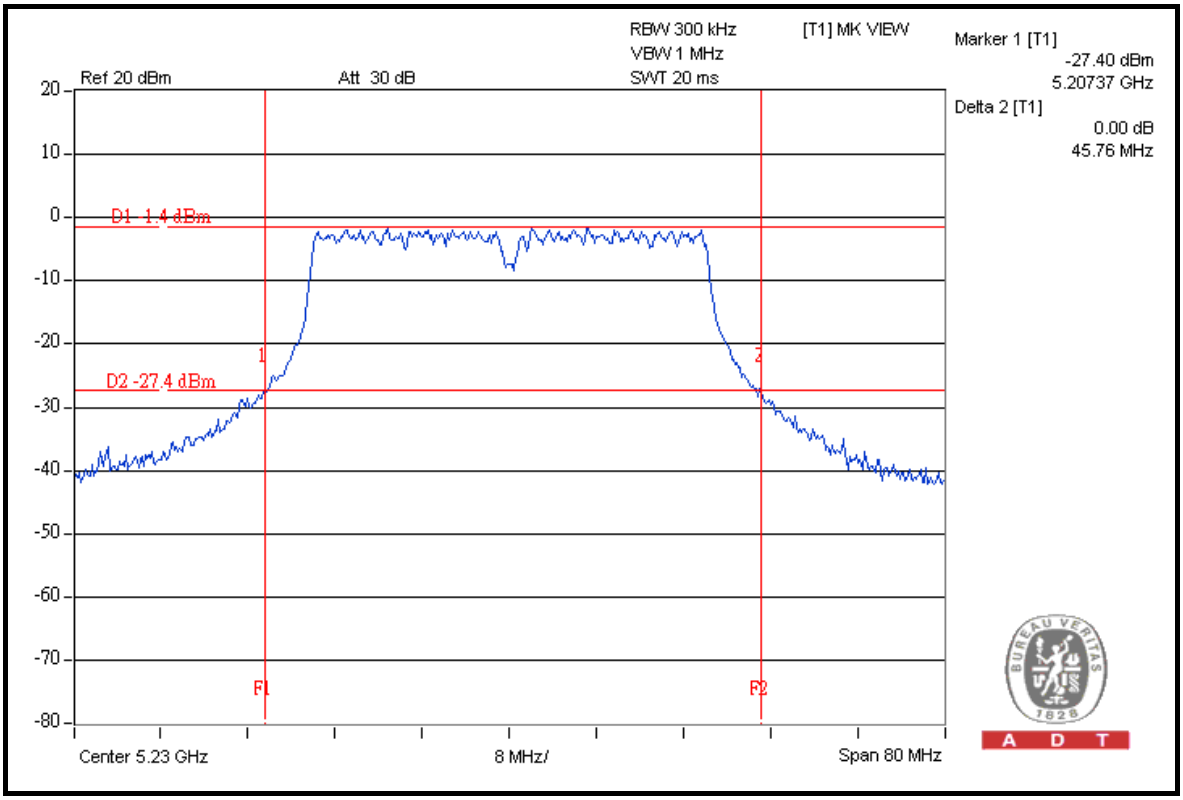
FOR CHAIN 0: CH 48



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)			PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	
38	5190	45.36	44.95	45.12	PASS
46	5230	45.71	45.74	45.76	PASS

FOR CHAIN 2: CH 46



4.4 PEAK POWER EXCURSION MEASUREMENT

4.4.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

FREQUENCY BAND	LIMIT
5.15 ~ 5.25GHz	13dB

4.4.2 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.

4.4.3 TEST PROCEDURE

a. The transmitter output was connected to the spectrum analyzer.

b. Set the spectrum bandwidth span to view the entire spectrum.

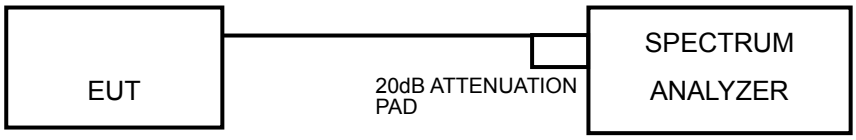
c. Using peak detector and Max-hold function for Trace 1 (RB = 1MHz, VB = 3MHz) and 2 (RB = 1MHz, VB = 300kHz).

d. The differences between Trace1 and Trace 2 in any 1MHz band at f1 to f2 range were recorded and showed to another trace.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

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

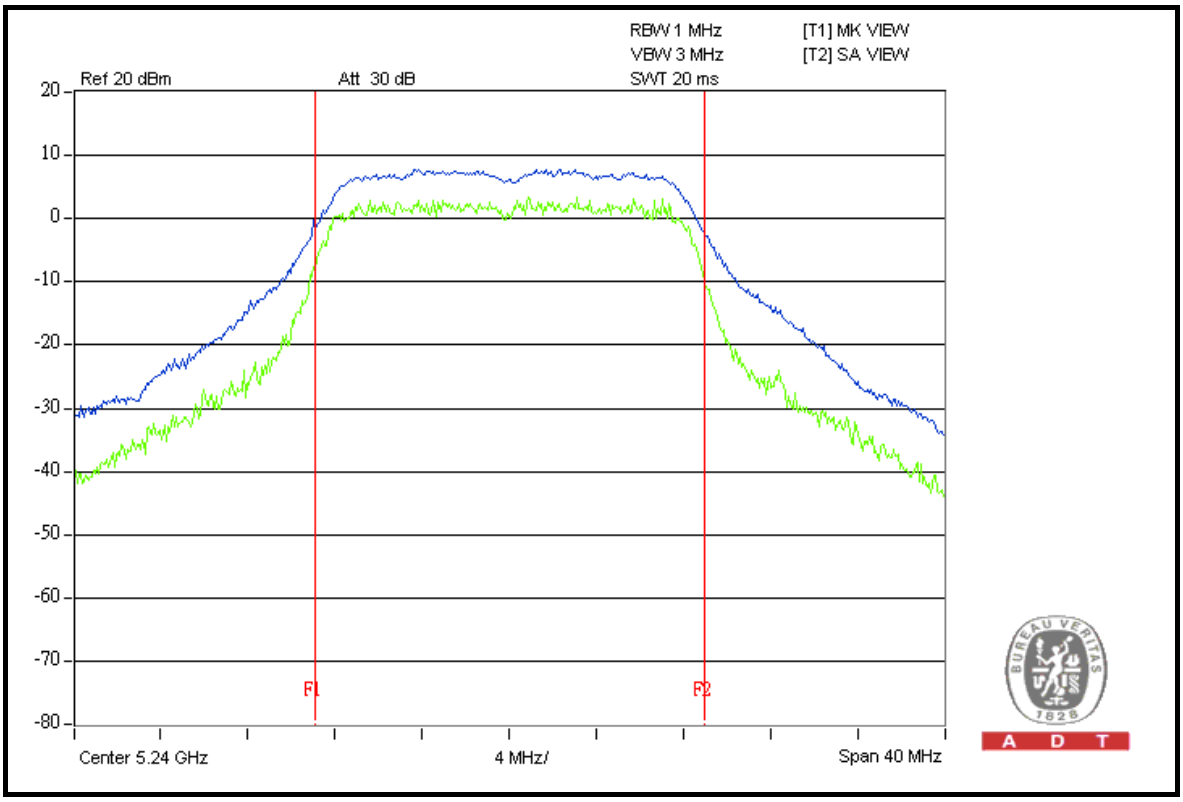
4.4.7 TEST RESULTS

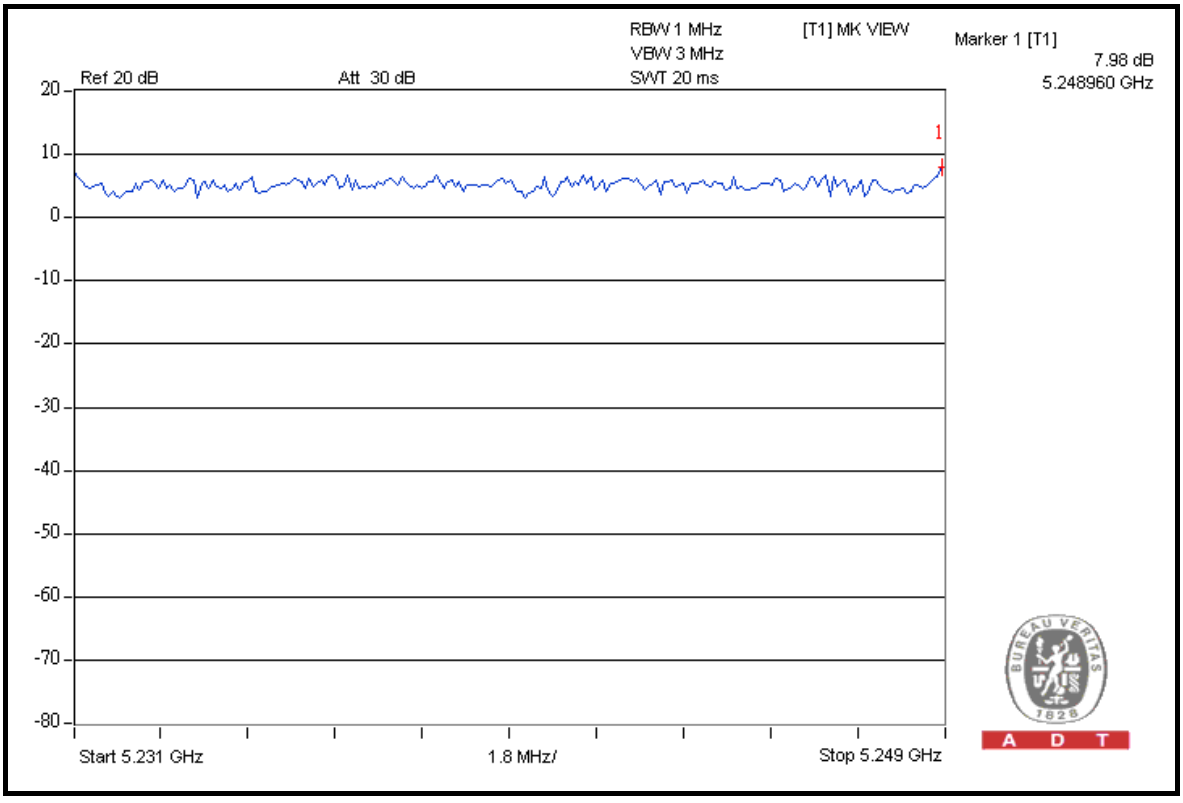
TEST MODE A

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	7.42	7.54	7.62	13	PASS
40	5200	7.39	7.45	7.55	13	PASS
48	5240	7.08	7.98	7.91	13	PASS

FOR CHAIN 1: CH 48

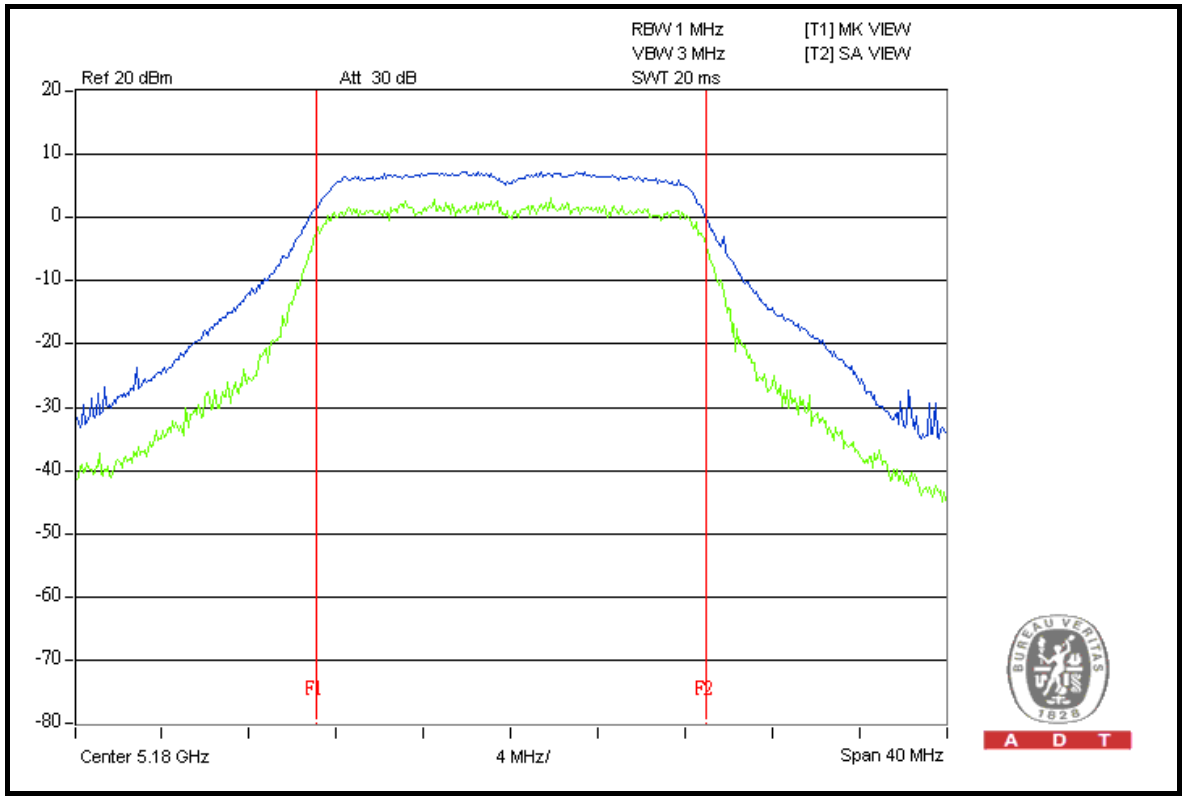


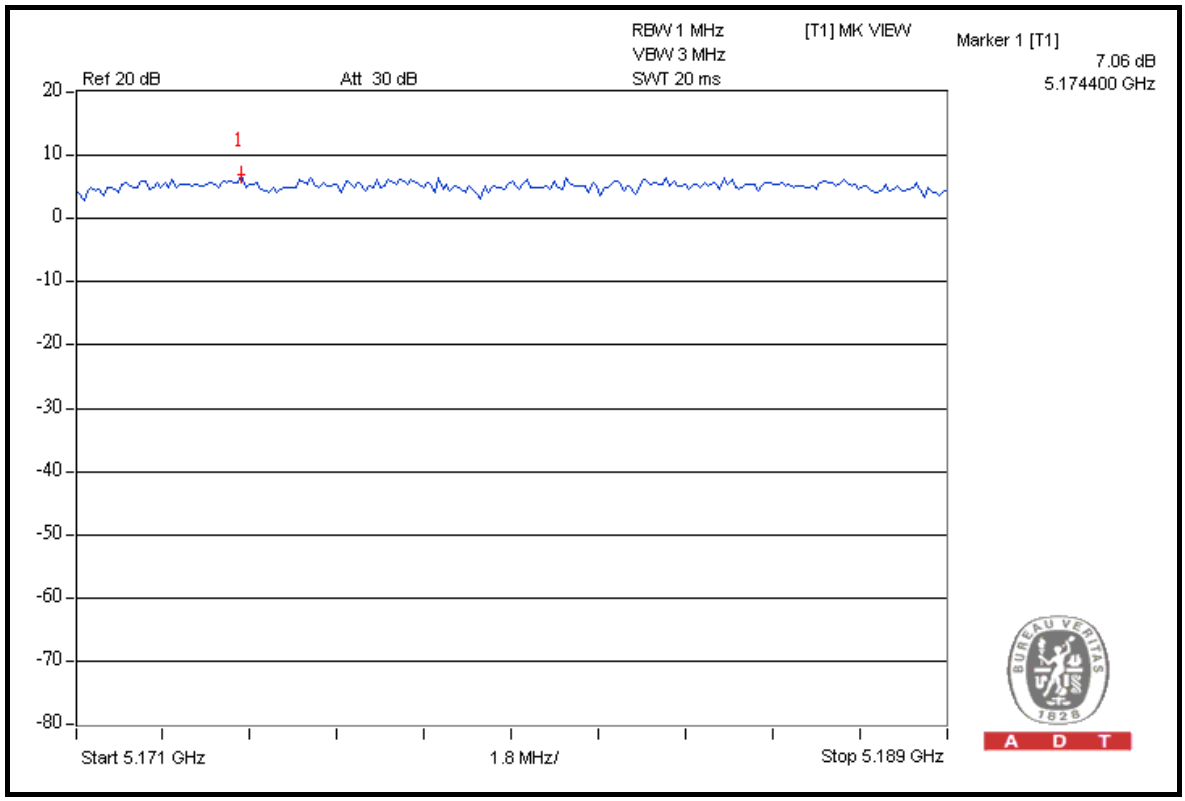


802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	7.06	6.90	6.51	13	PASS
40	5200	6.69	6.87	6.86	13	PASS
48	5240	6.76	6.55	6.65	13	PASS

FOR CHAIN 0: CH 36

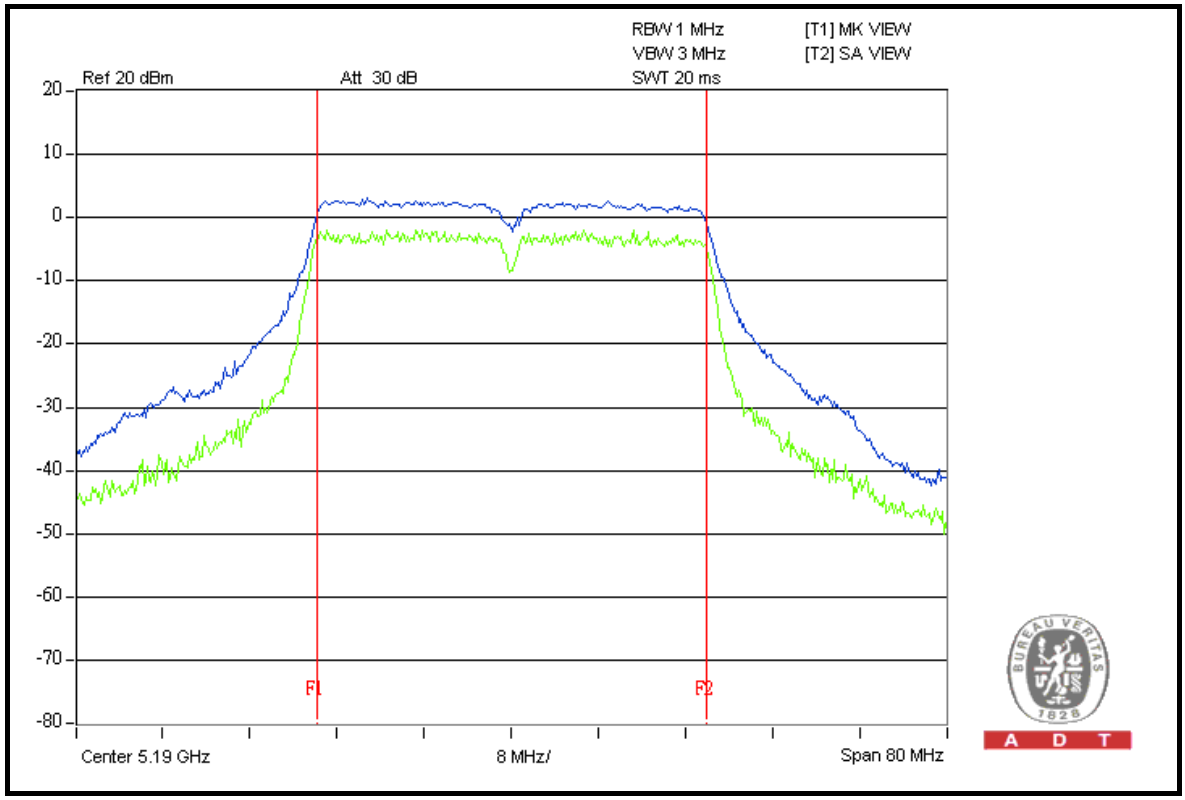


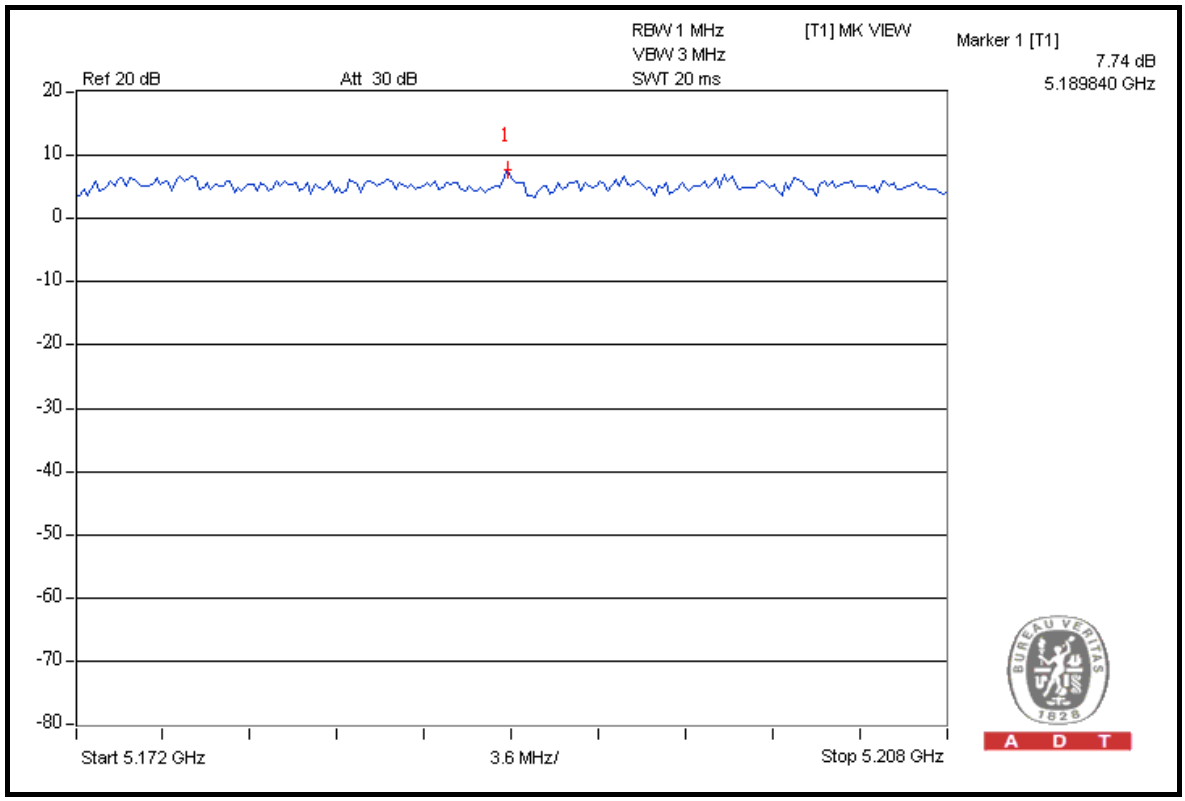


802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
38	5190	6.58	7.09	7.74	13	PASS
46	5230	7.41	6.49	7.34	13	PASS

FOR CHAIN 2: CH 38



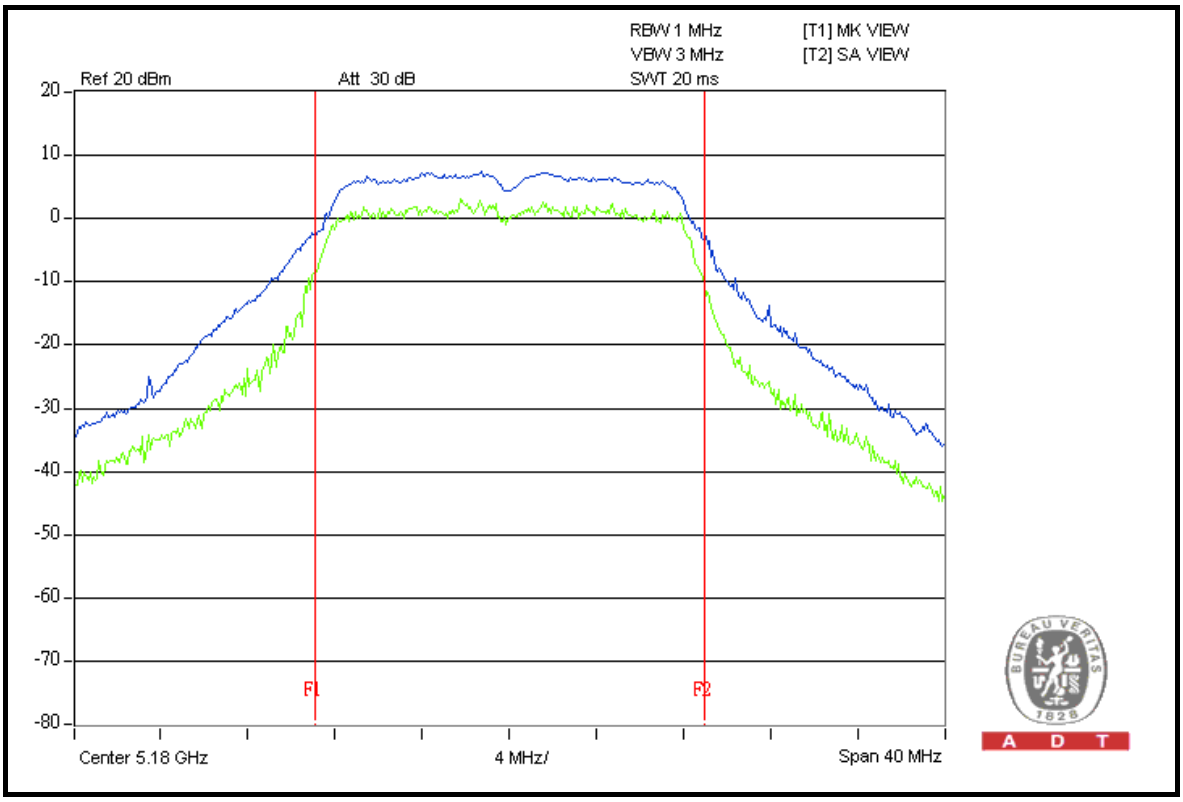


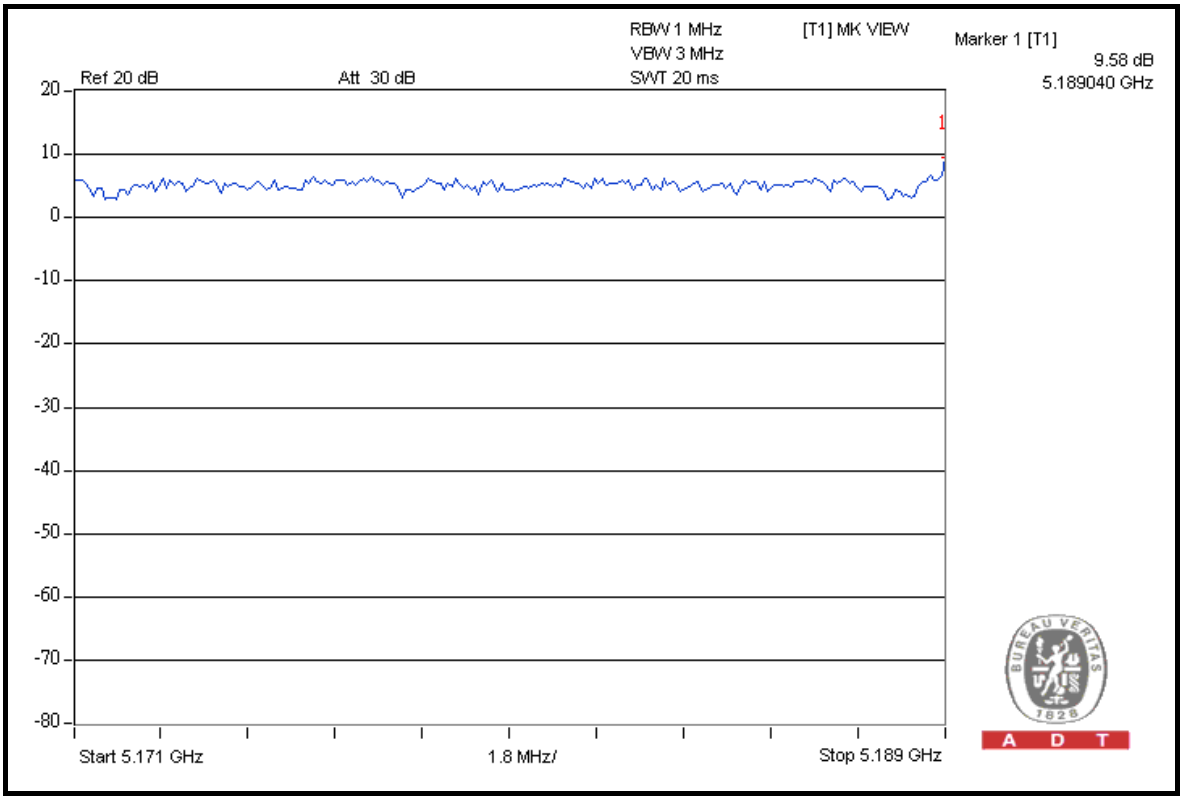
TEST MODE B

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	7.77	7.30	9.58	13	PASS
40	5200	7.50	7.22	8.12	13	PASS
48	5240	7.16	8.42	7.37	13	PASS

FOR CHAIN 2: CH 36

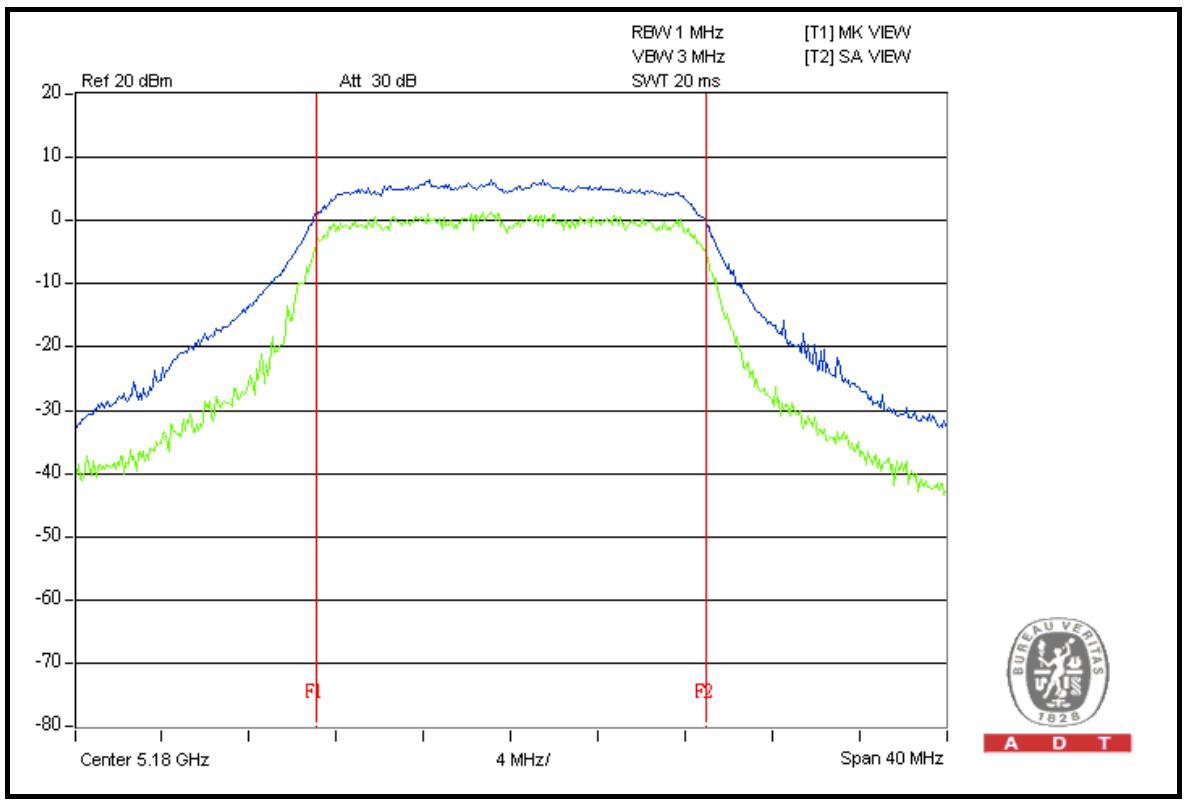


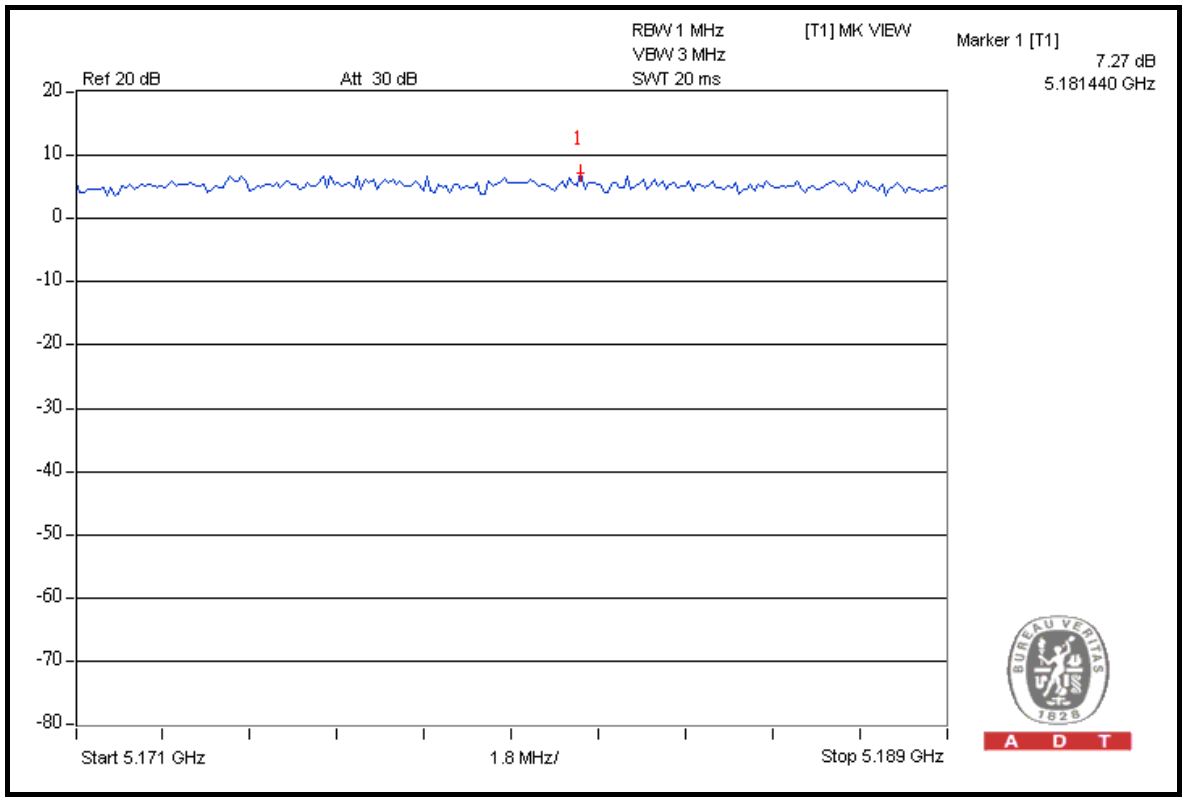


802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	7.27	7.08	7.01	13	PASS
40	5200	6.64	6.39	6.66	13	PASS
48	5240	7.01	6.60	7.00	13	PASS

FOR CHAIN 0: CH 36

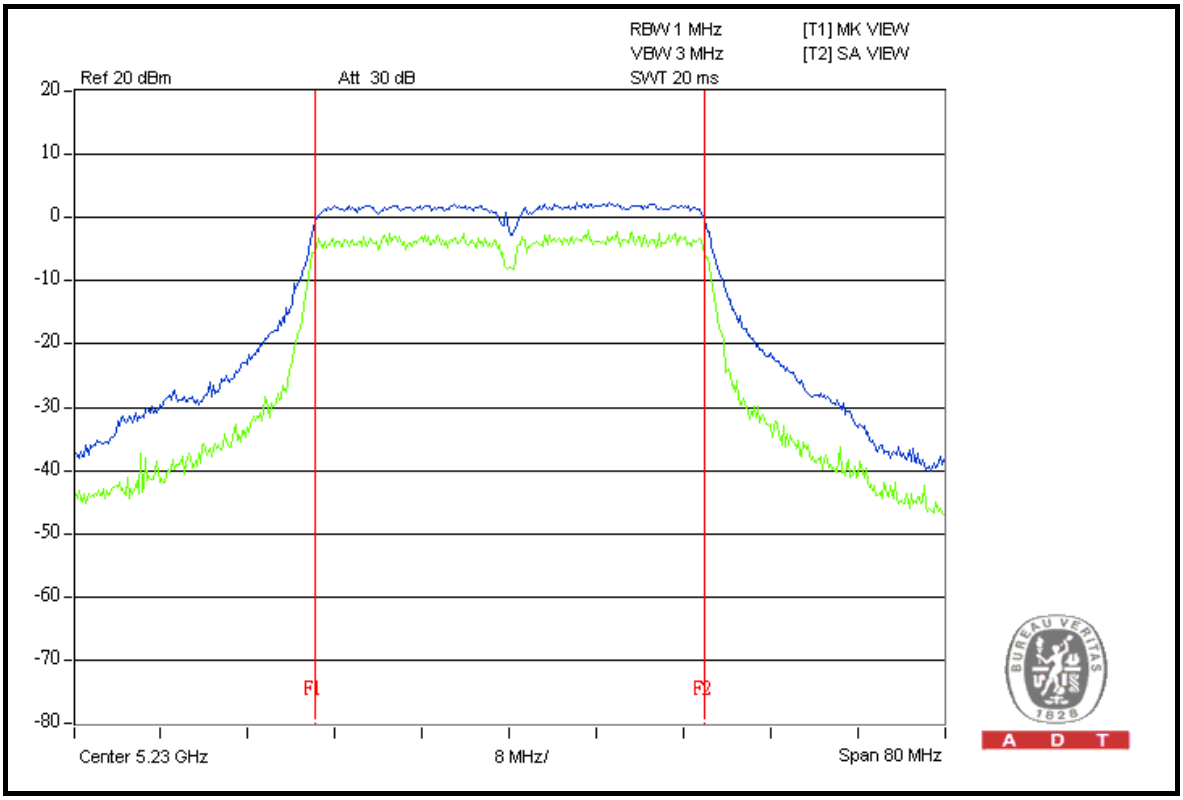


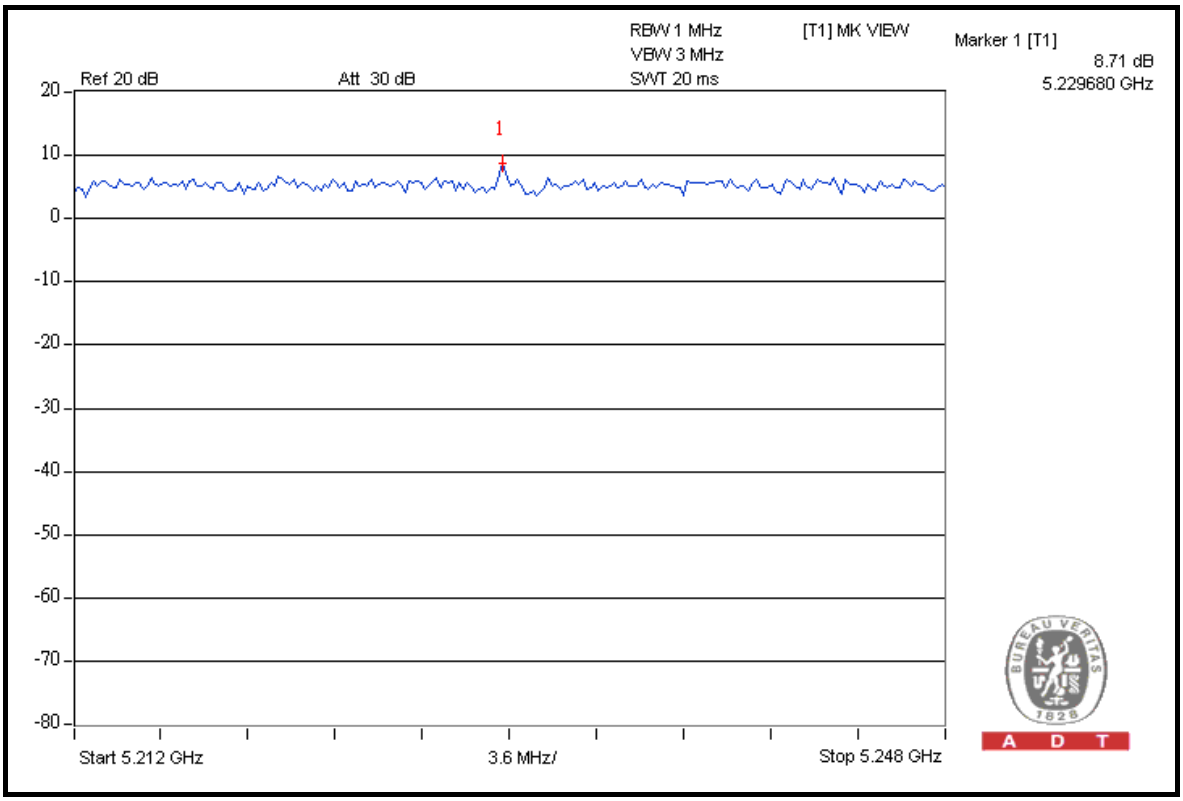


802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
38	5190	7.16	7.84	7.40	13	PASS
46	5230	6.81	8.71	6.90	13	PASS

FOR CHAIN 1: CH 46



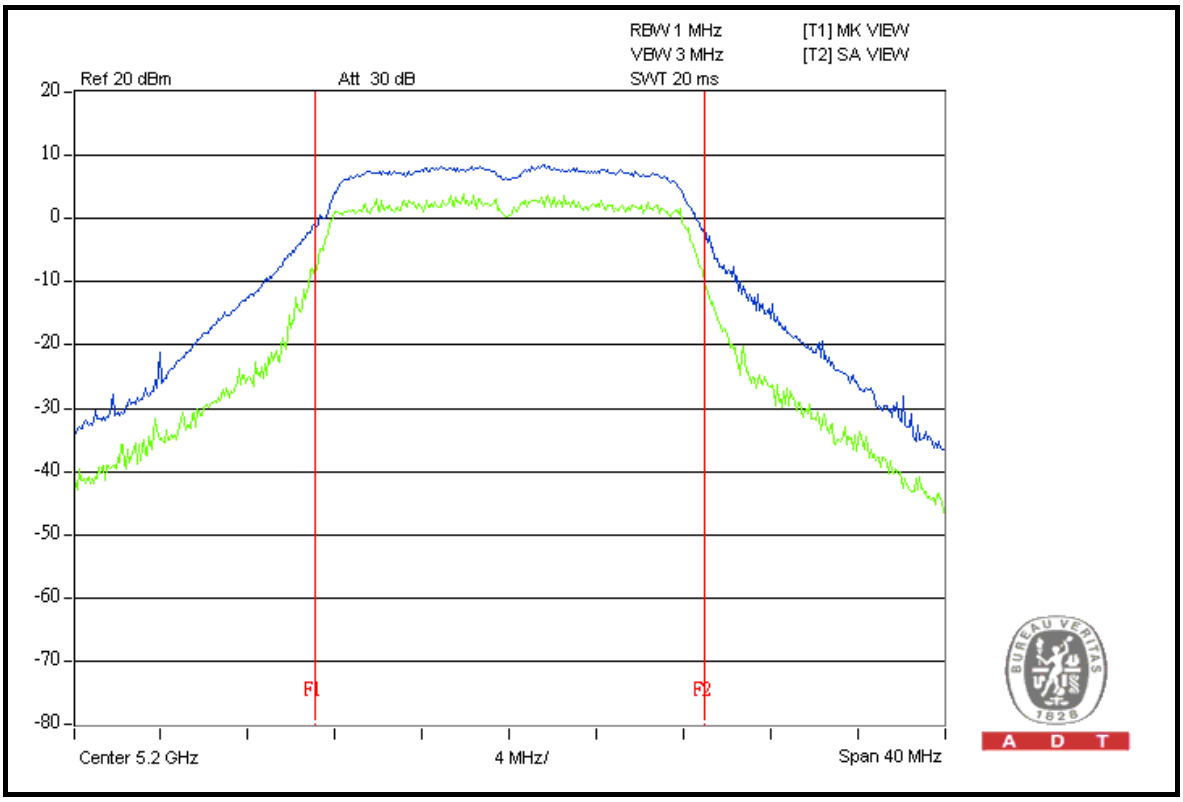


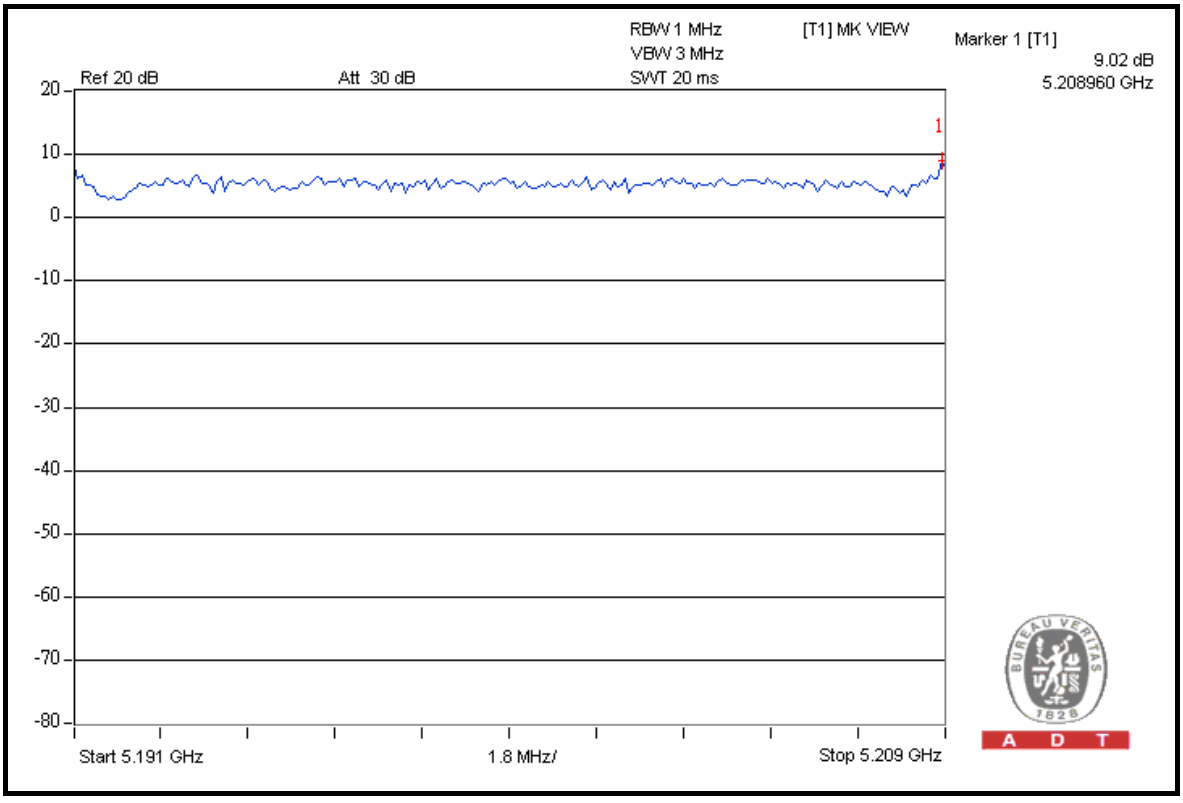
TEST MODE C

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	7.26	7.24	7.75	13	PASS
40	5200	7.54	7.50	9.02	13	PASS
48	5240	6.87	7.71	7.31	13	PASS

FOR CHAIN 2: CH 40

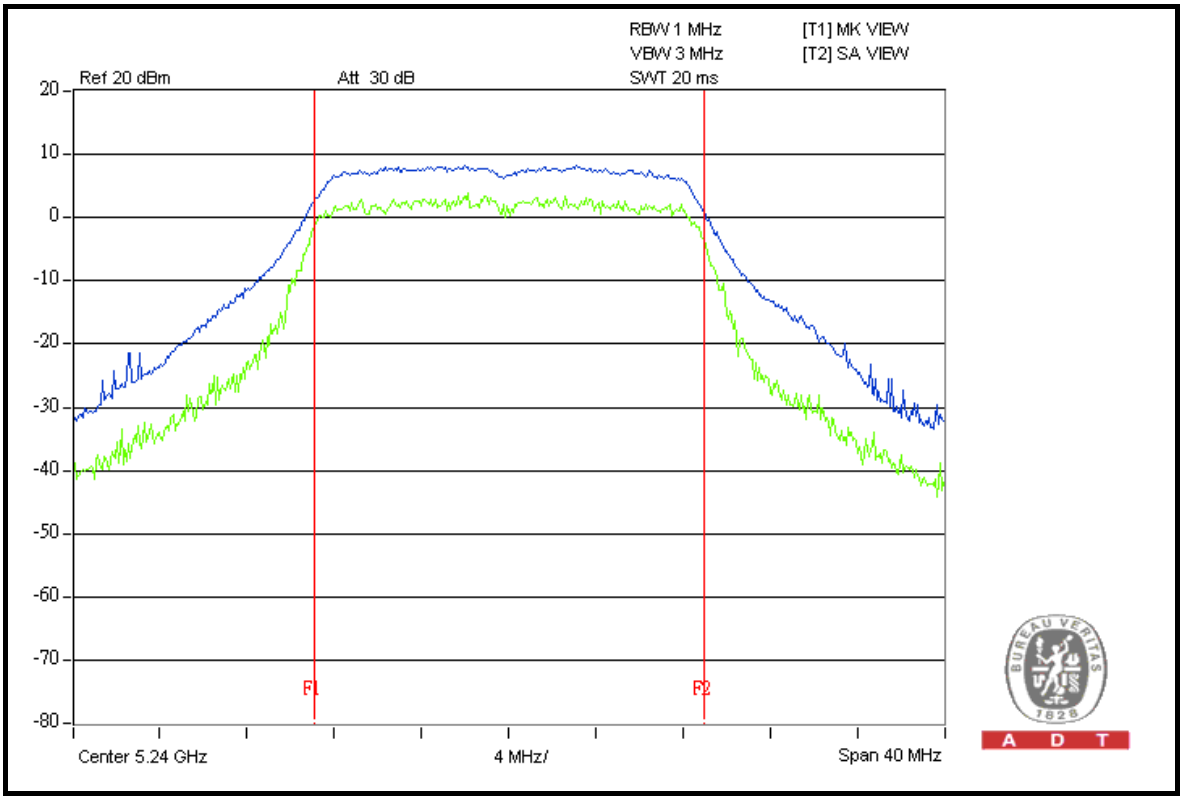


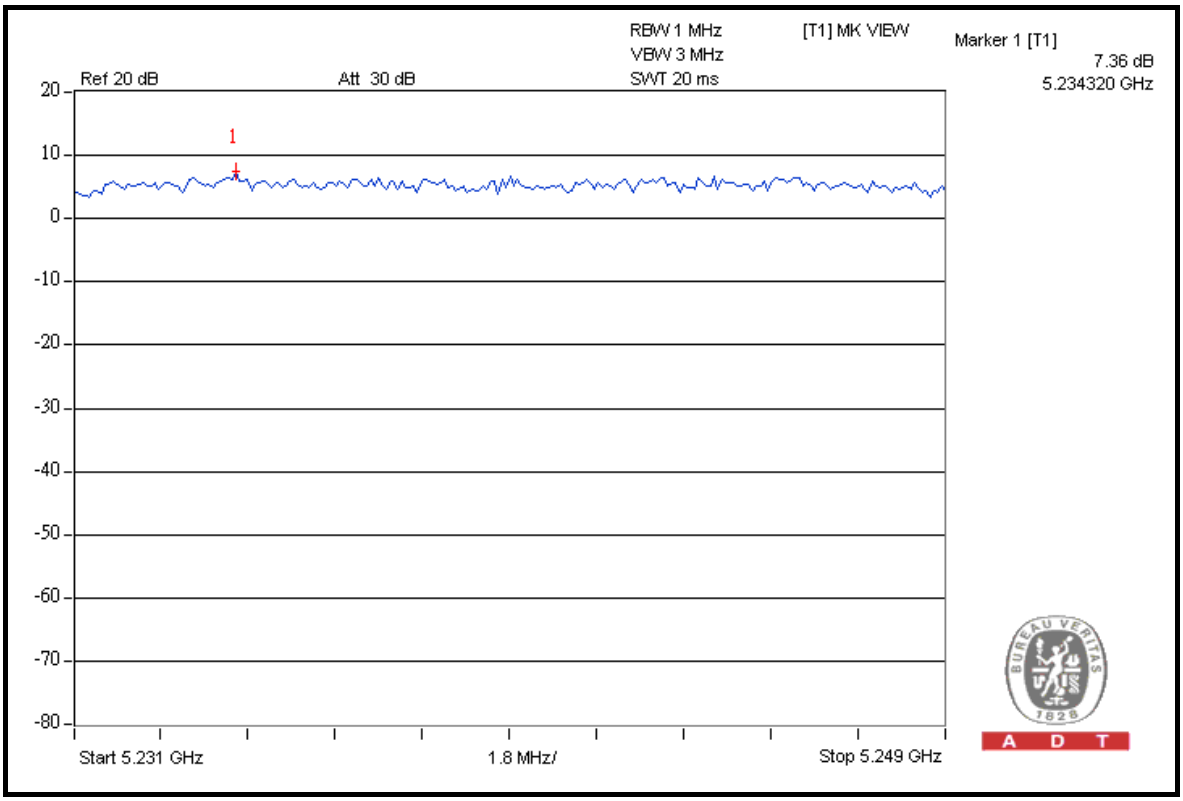


802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	7.12	6.62	6.81	13	PASS
40	5200	6.65	6.96	6.80	13	PASS
48	5240	7.20	7.36	6.93	13	PASS

FOR CHAIN 1: CH 48

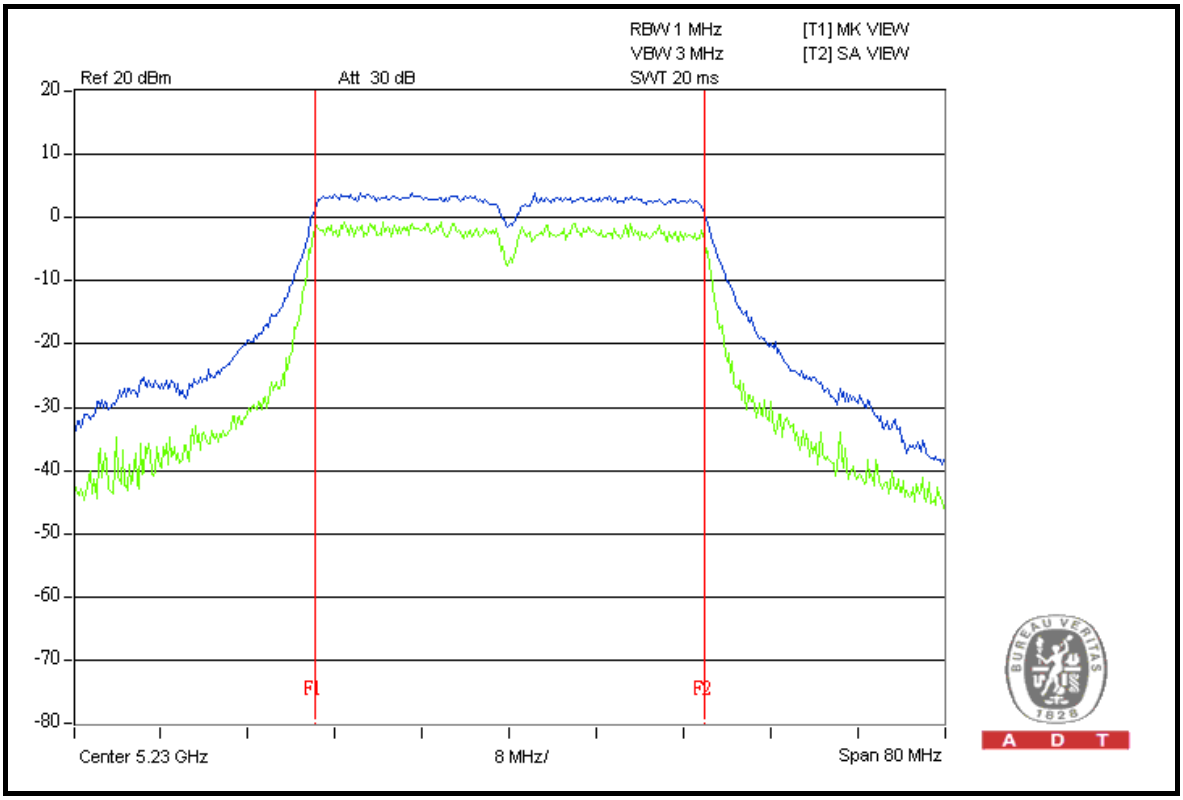


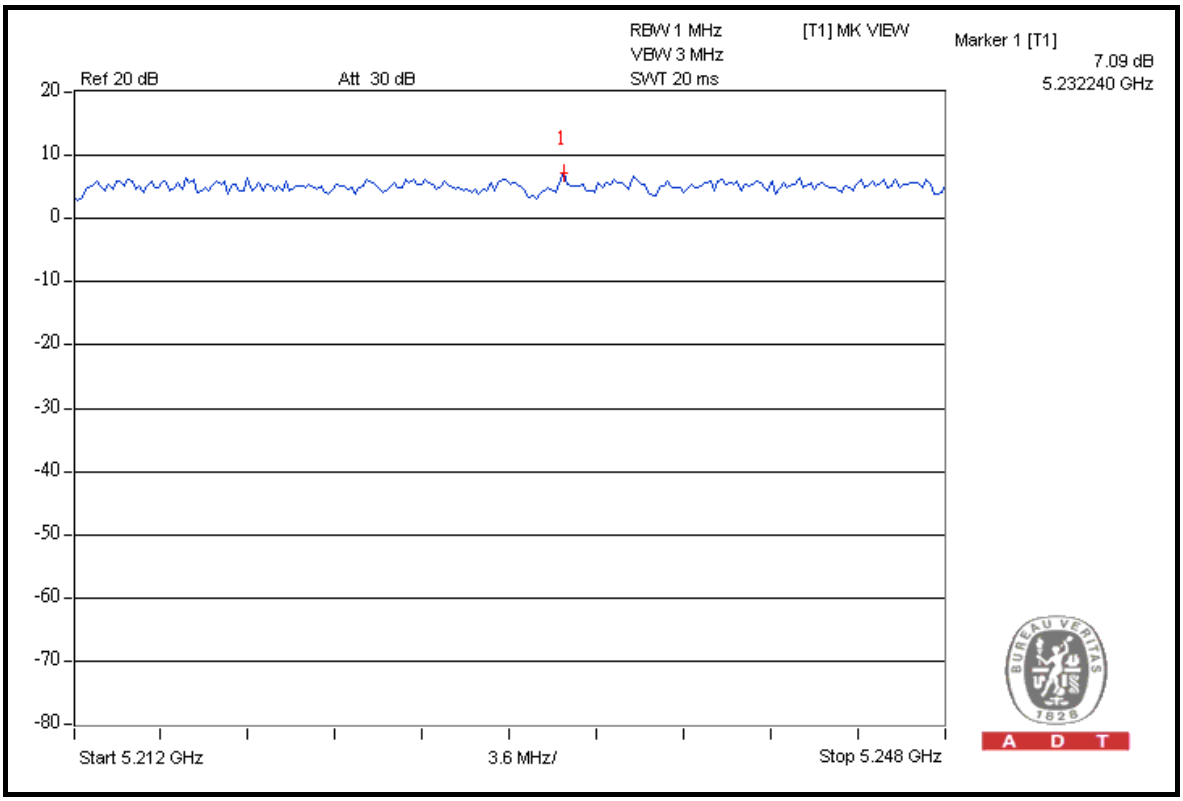


802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
38	5190	7.08	6.90	6.94	13	PASS
46	5230	7.09	7.04	6.77	13	PASS

FOR CHAIN 0: CH 46



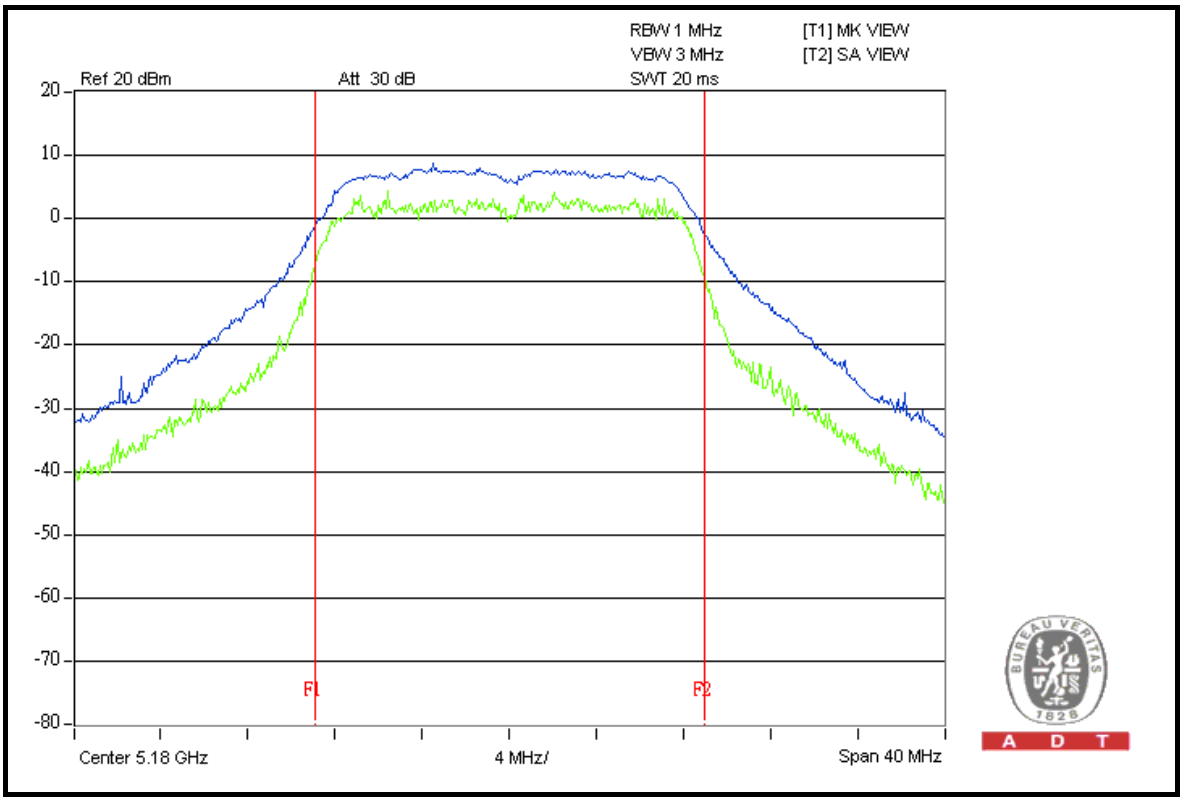


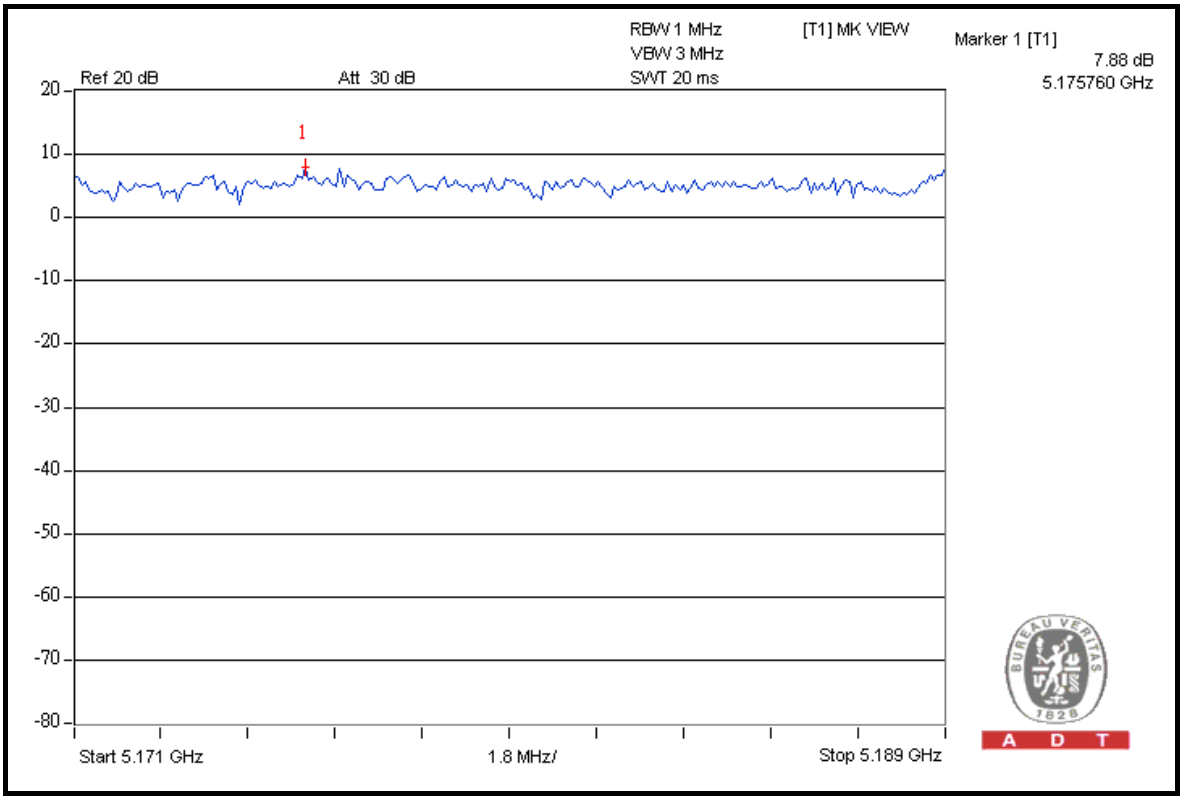
TEST MODE D

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	7.86	7.38	7.88	13	PASS
40	5200	6.83	6.95	7.67	13	PASS
48	5240	7.81	7.37	7.33	13	PASS

FOR CHAIN 2: CH 36

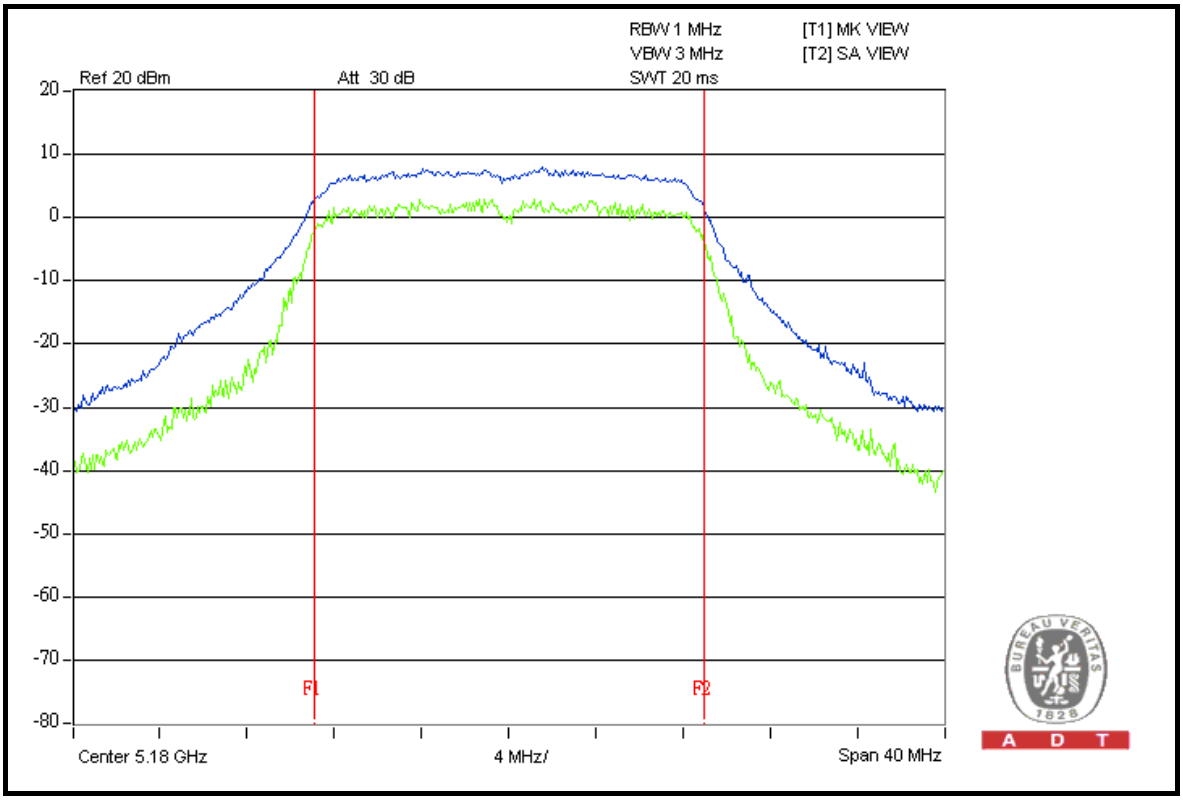


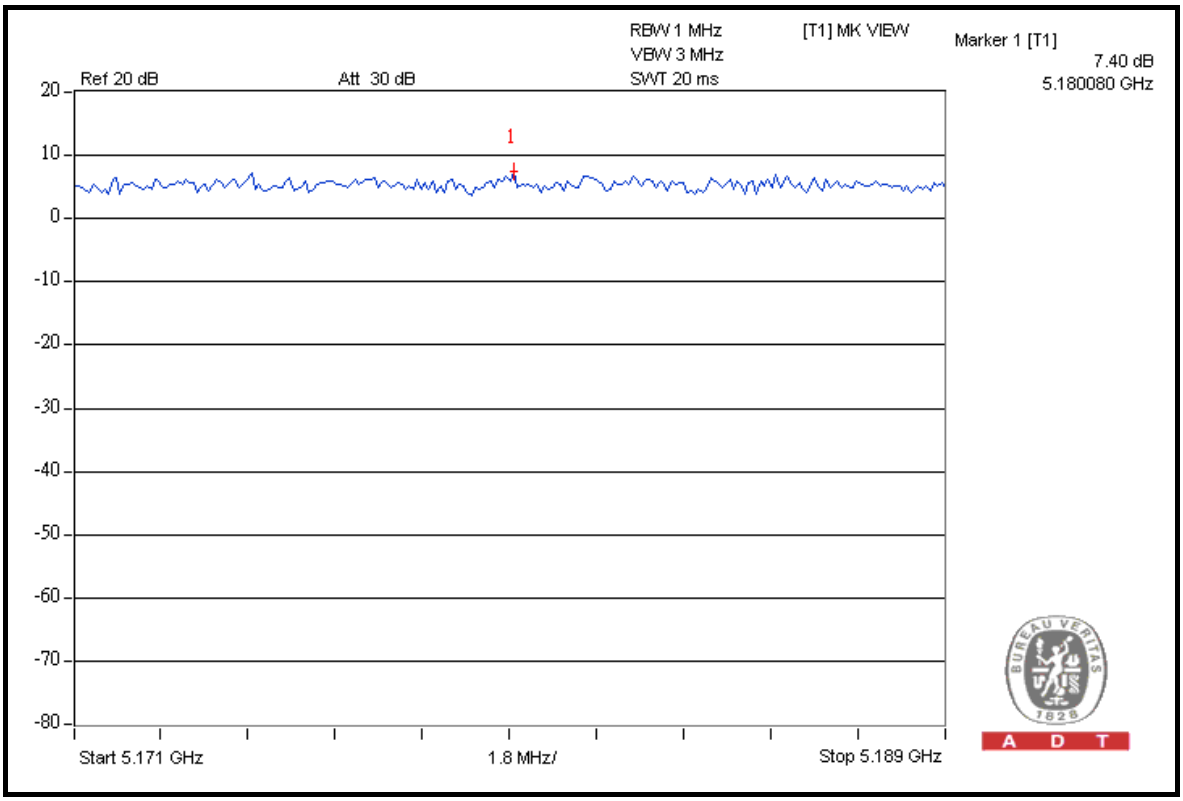


802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	6.94	7.40	7.07	13	PASS
40	5200	7.01	6.74	7.00	13	PASS
48	5240	6.95	7.16	6.88	13	PASS

FOR CHAIN 1: CH 36

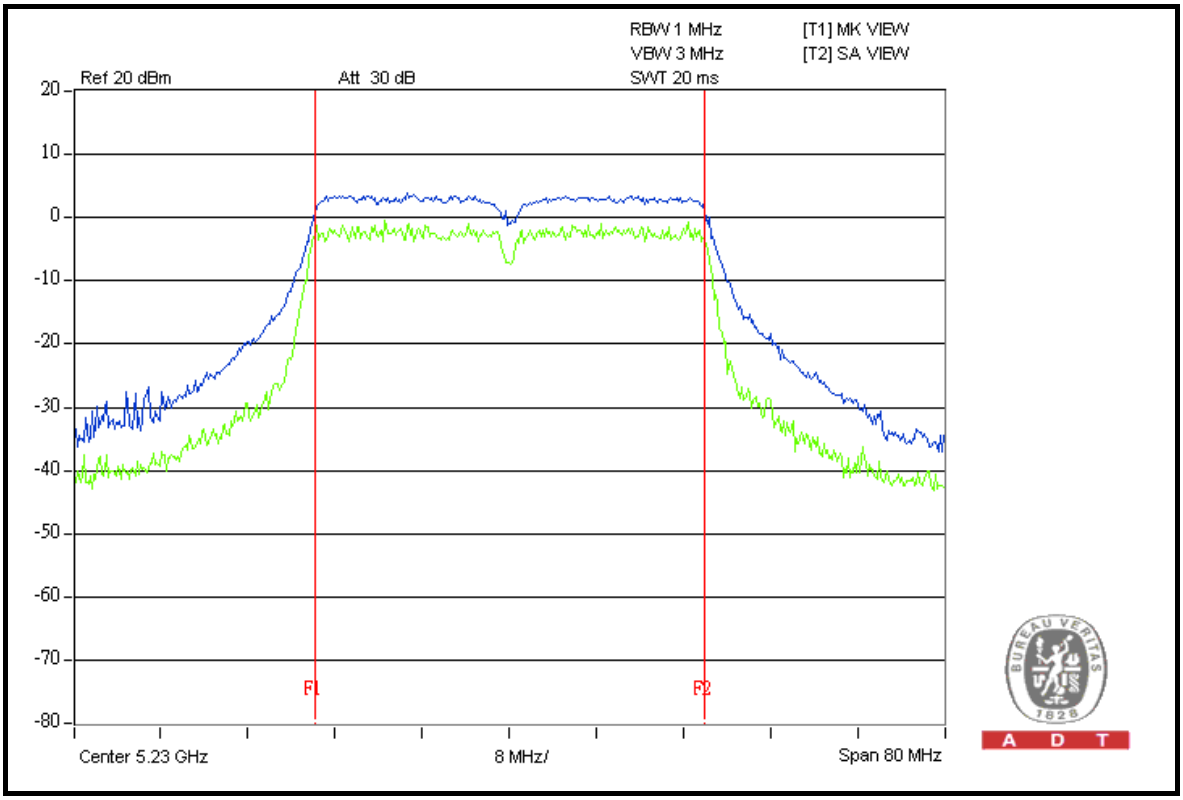


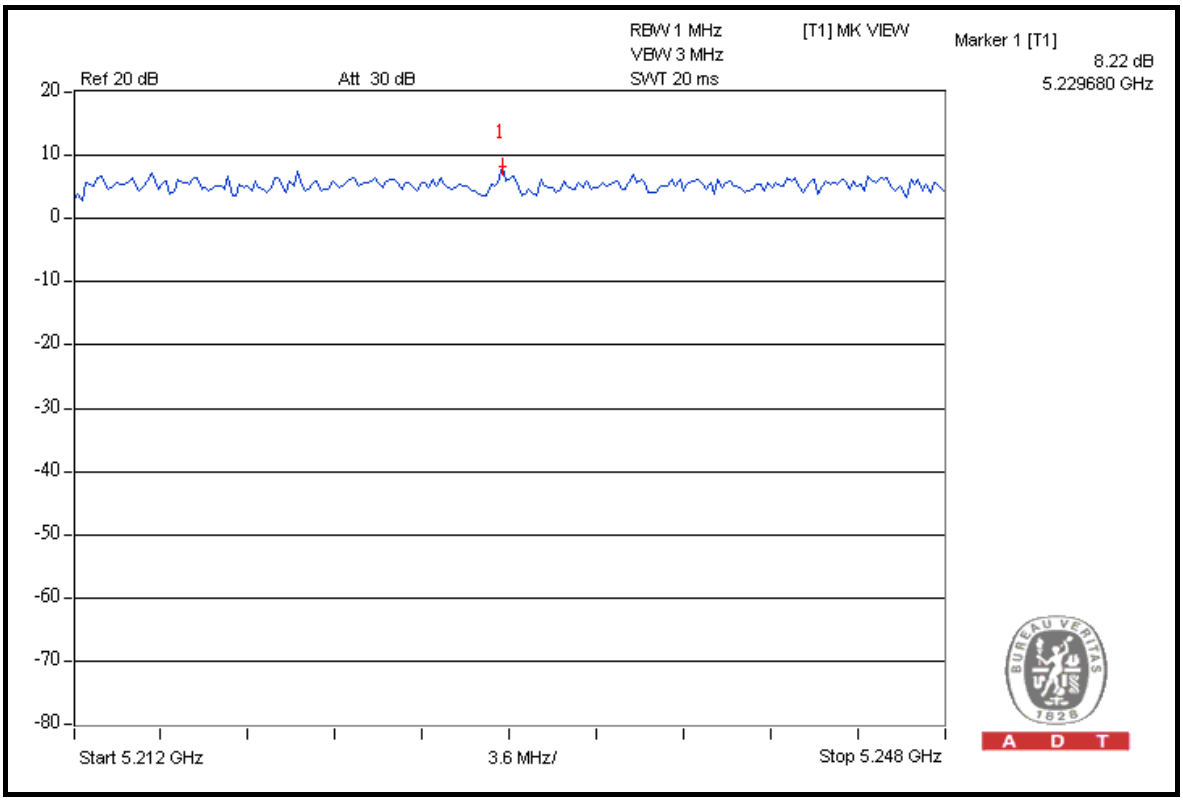


802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
38	5190	7.47	7.72	7.36	13	PASS
46	5230	8.18	8.22	7.50	13	PASS

FOR CHAIN 1: CH 46





4.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

FREQUENCY BAND	LIMIT
5.15 ~ 5.25GHz	4dBm

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 PROCEDURES

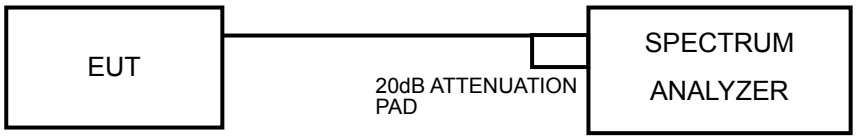
a. The transmitter output was connected to the spectrum analyzer.

b. Set RBW = 1MHz, VBW = 3MHz. The PPSD is the highest level found across the emission in any 1MHz band.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

Same as 5.3.6

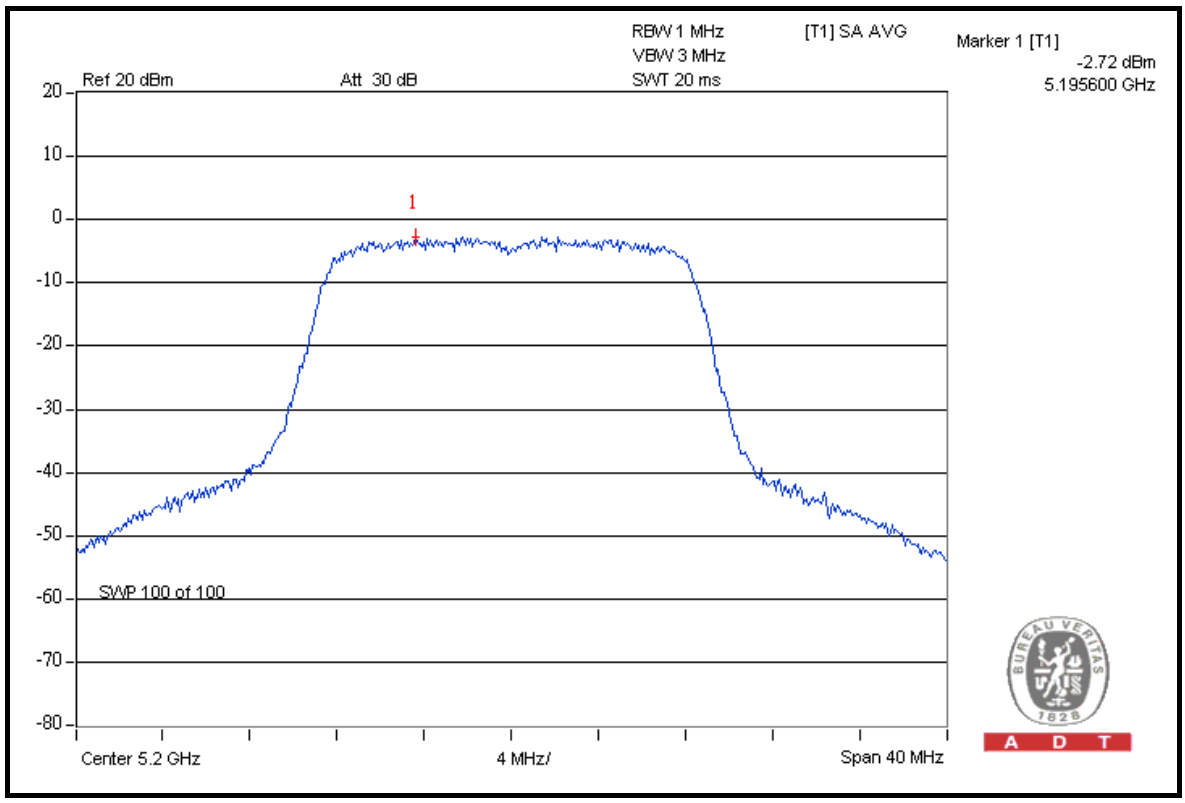
4.5.7 TEST RESULTS

TEST MODE A

802.11a

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-3.43	-3.59	-3.39	1.30	4	PASS
40	5200	-2.72	-3.29	-3.36	1.66	4	PASS
48	5240	-3.05	-3.41	-3.42	1.48	4	PASS

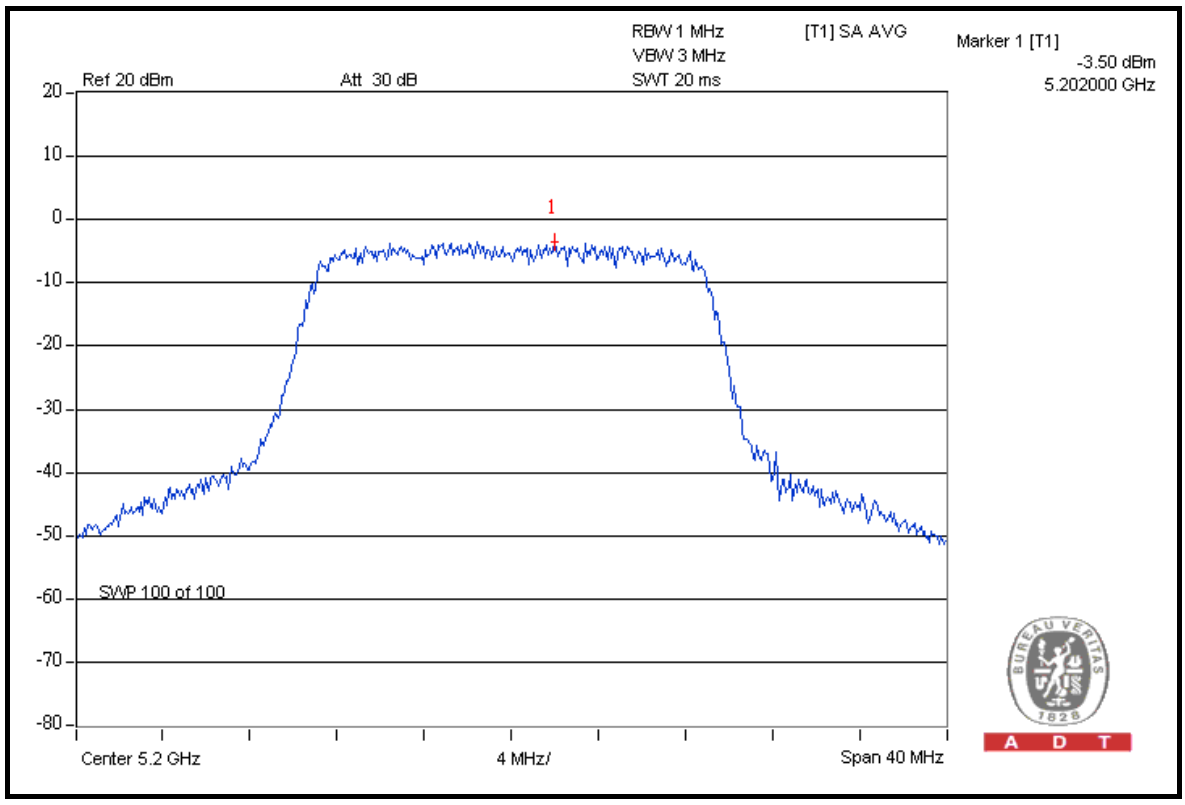
FOR CHAIN 0: CH 40



802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-4.15	-4.07	-3.90	0.73	4	PASS
40	5200	-3.50	-3.63	-3.85	1.11	4	PASS
48	5240	-3.67	-3.97	-3.89	0.93	4	PASS

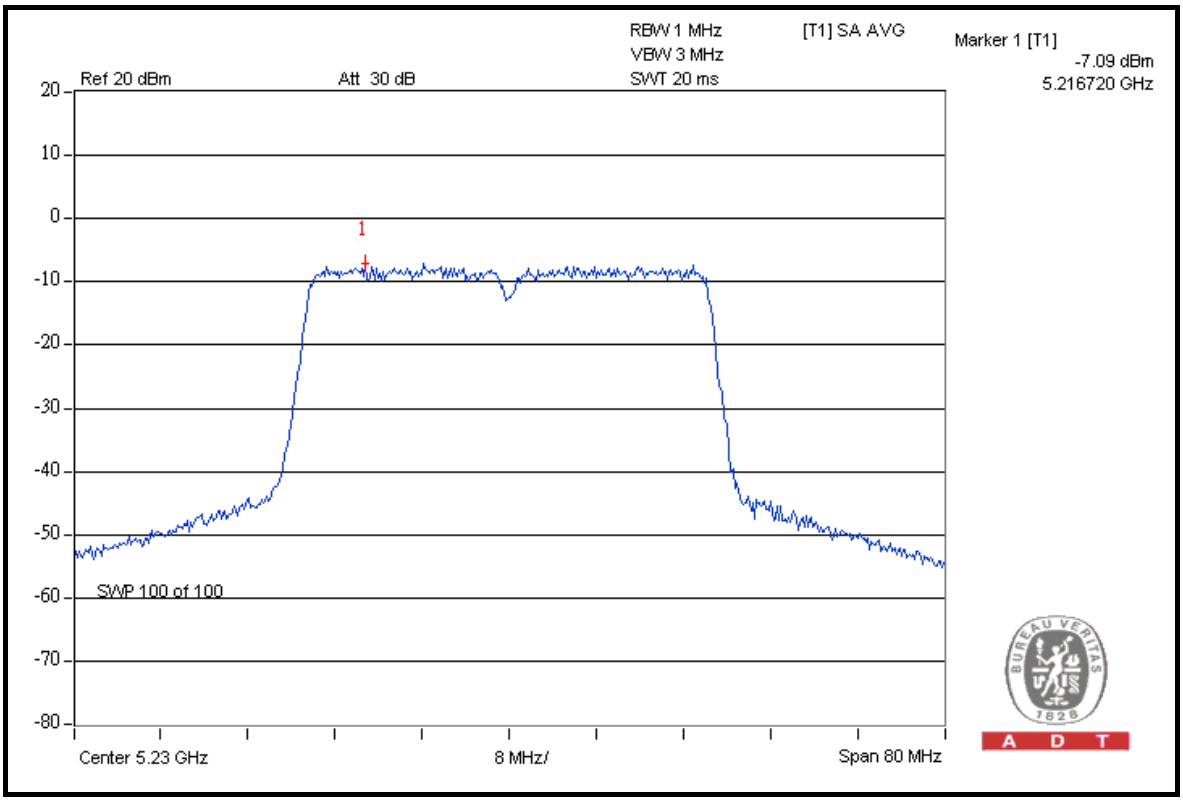
FOR CHAIN 0: CH 40



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
38	5190	-7.68	-8.35	-7.57	-3.08	4	PASS
46	5230	-7.09	-8.65	-7.57	-2.95	4	PASS

FOR CHAIN 0: CH 46

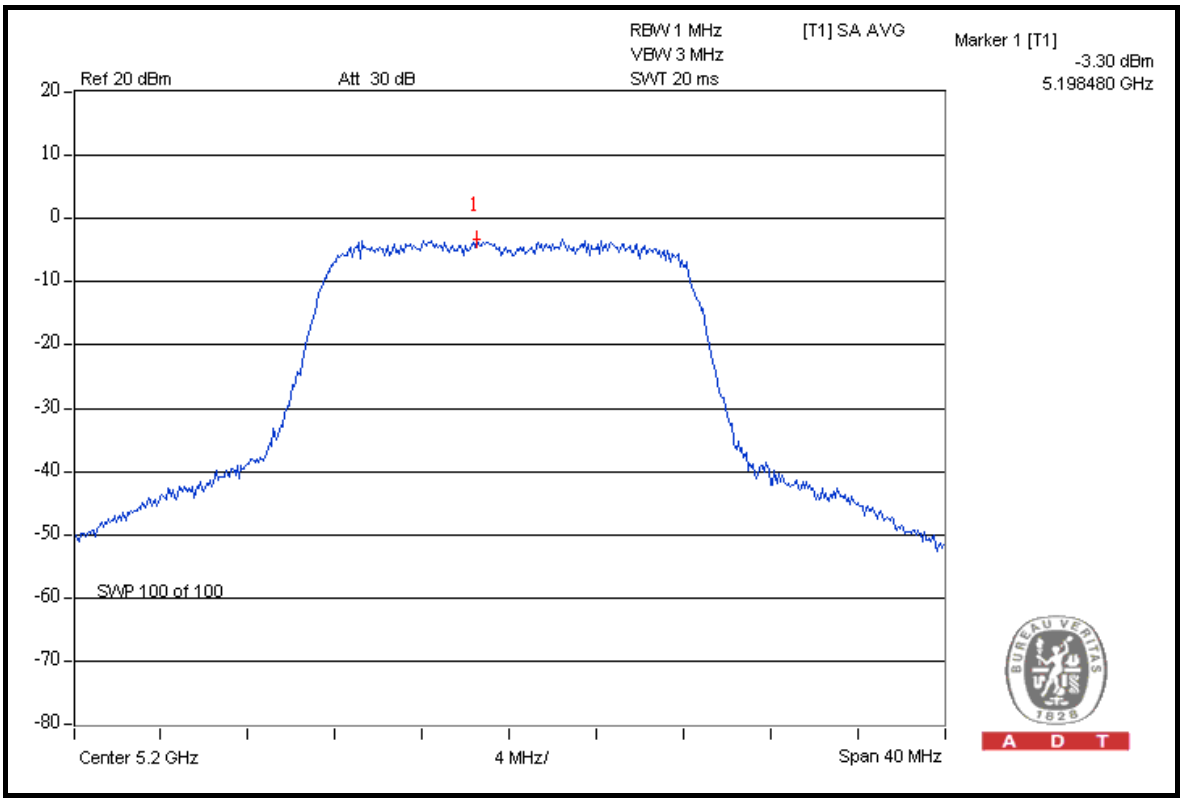


TEST MODE B

802.11a

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-4.20	-3.57	-3.30	1.10	4	PASS
40	5200	-4.01	-3.30	-3.51	1.18	4	PASS
48	5240	-4.23	-3.38	-3.34	1.14	4	PASS

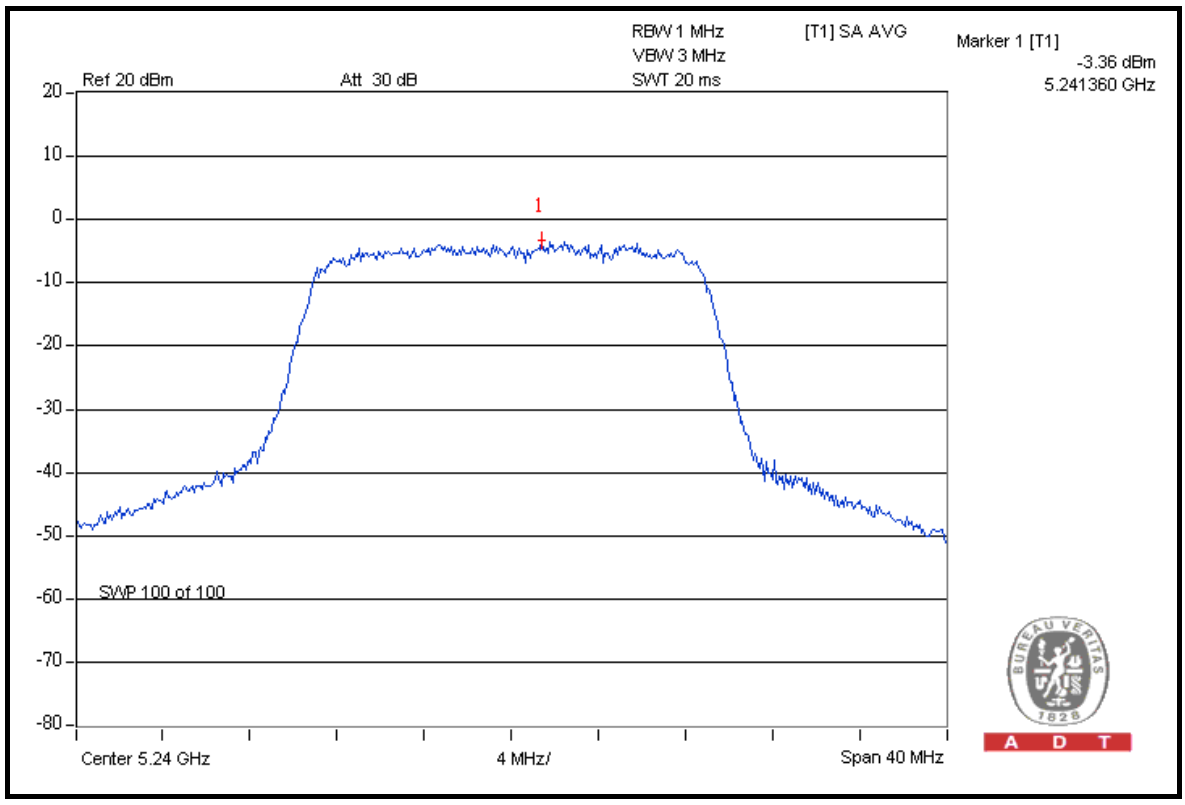
FOR CHAIN 1: CH 40



802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-4.94	-3.47	-3.52	0.85	4	PASS
40	5200	-4.65	-3.57	-3.68	0.83	4	PASS
48	5240	-4.70	-3.91	-3.36	0.82	4	PASS

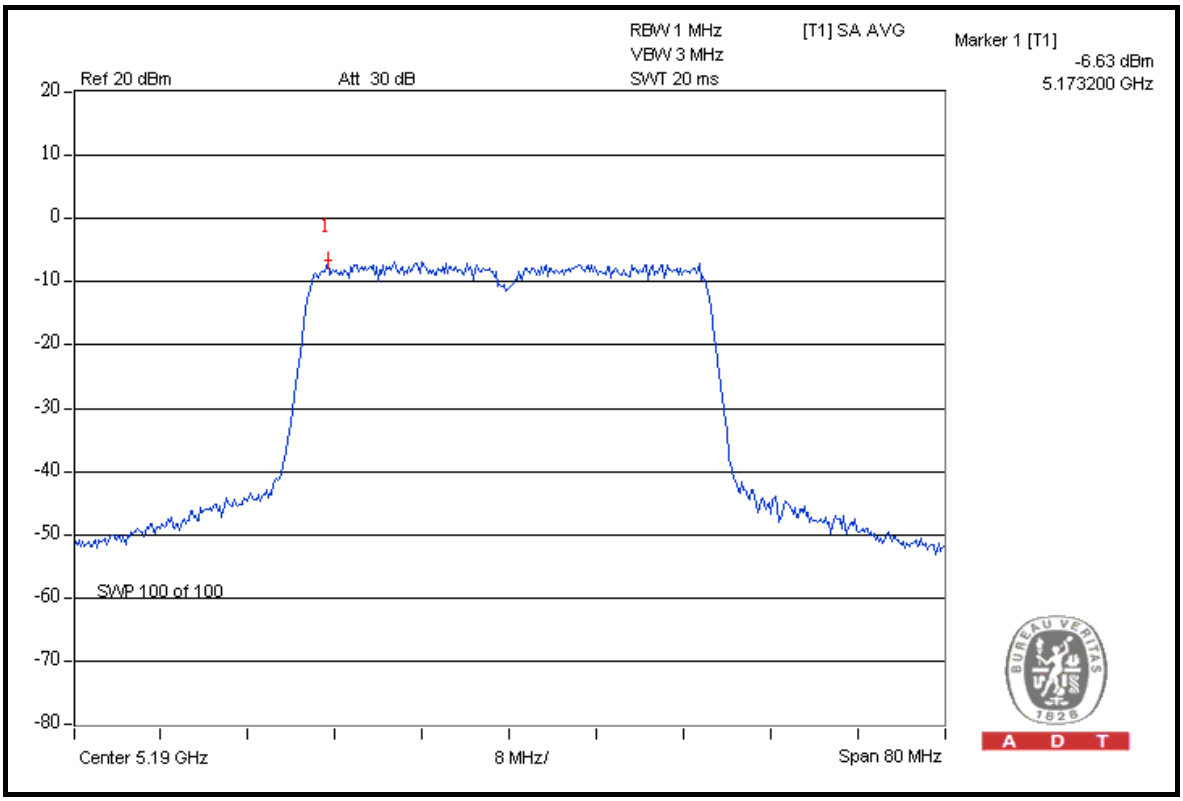
FOR CHAIN 2: CH 48



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
38	5190	-7.54	-7.35	-6.63	-2.38	4	PASS
46	5230	-7.62	-8.07	-7.06	-2.79	4	PASS

FOR CHAIN 2: CH 38

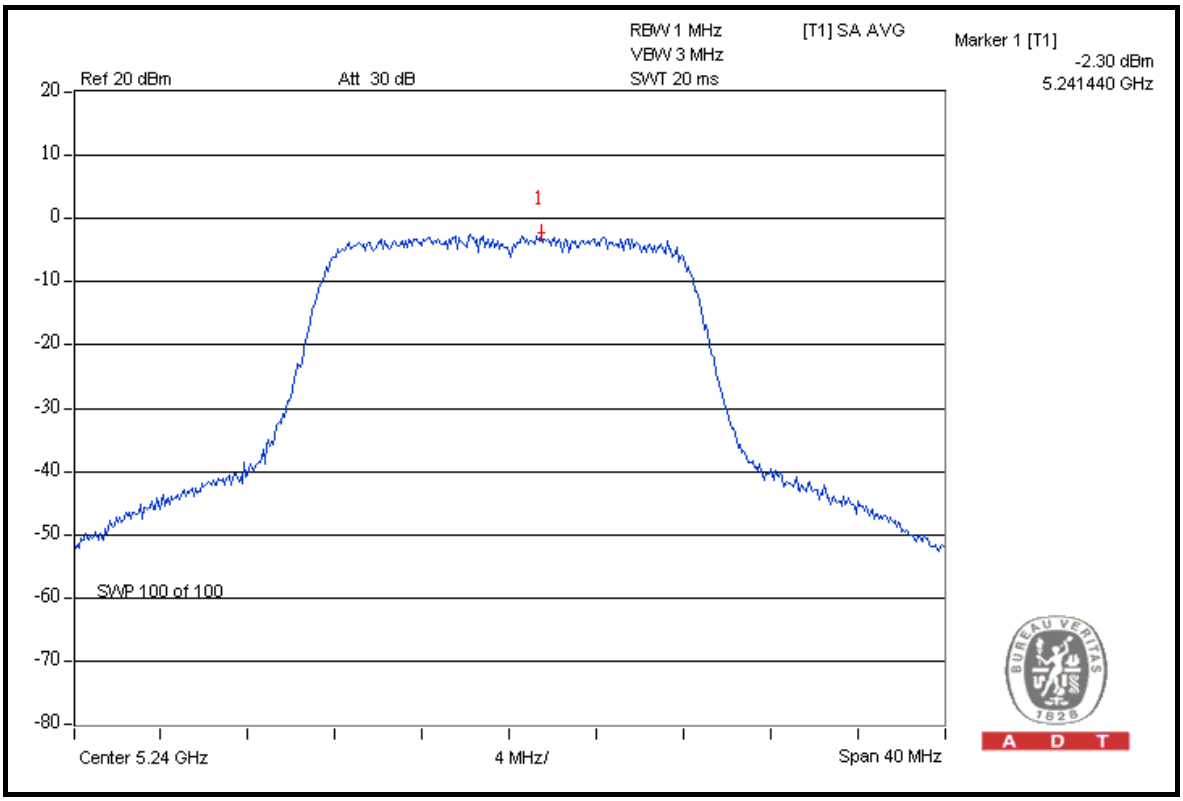


TEST MODE C

802.11a

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-3.17	-2.32	-2.32	2.19	4	PASS
40	5200	-2.79	-2.48	-2.54	2.17	4	PASS
48	5240	-2.74	-2.41	-2.30	2.29	4	PASS

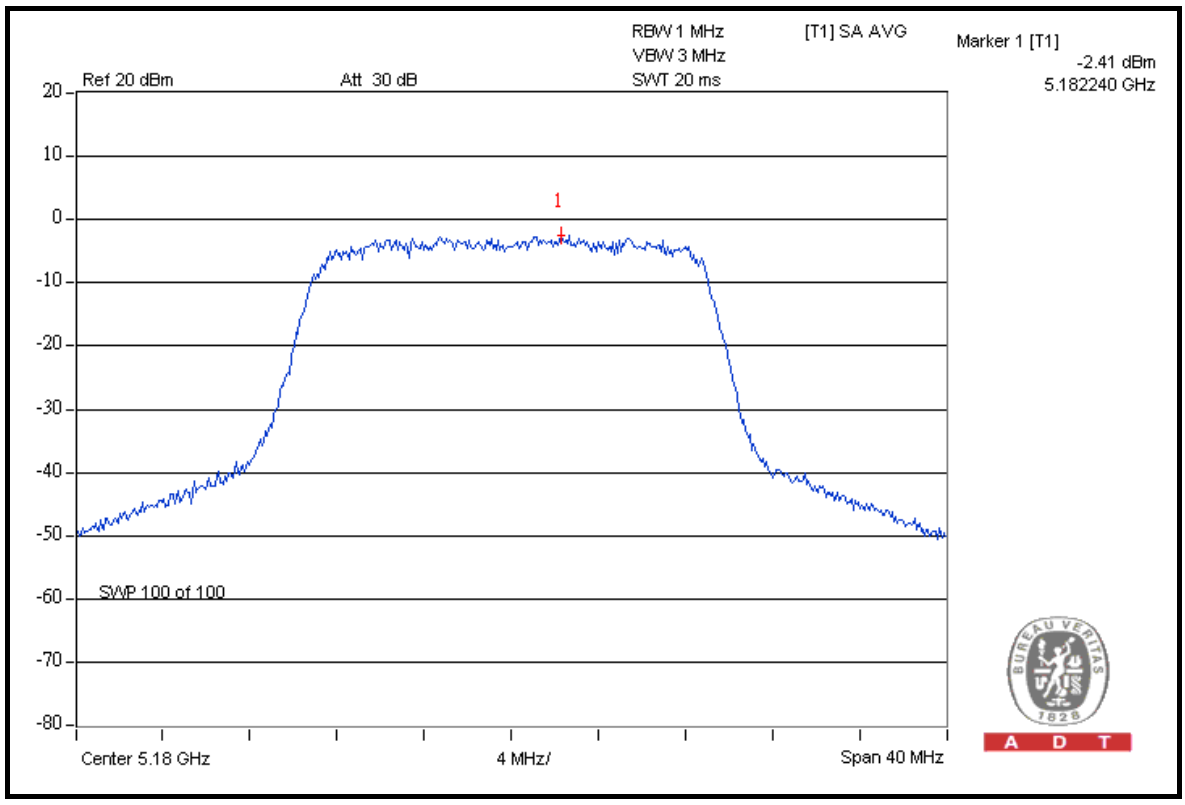
FOR CHAIN 2: CH 48



802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-3.83	-2.42	-2.41	1.93	4	PASS
40	5200	-3.54	-2.41	-2.51	1.98	4	PASS
48	5240	-3.47	-2.82	-2.65	1.80	4	PASS

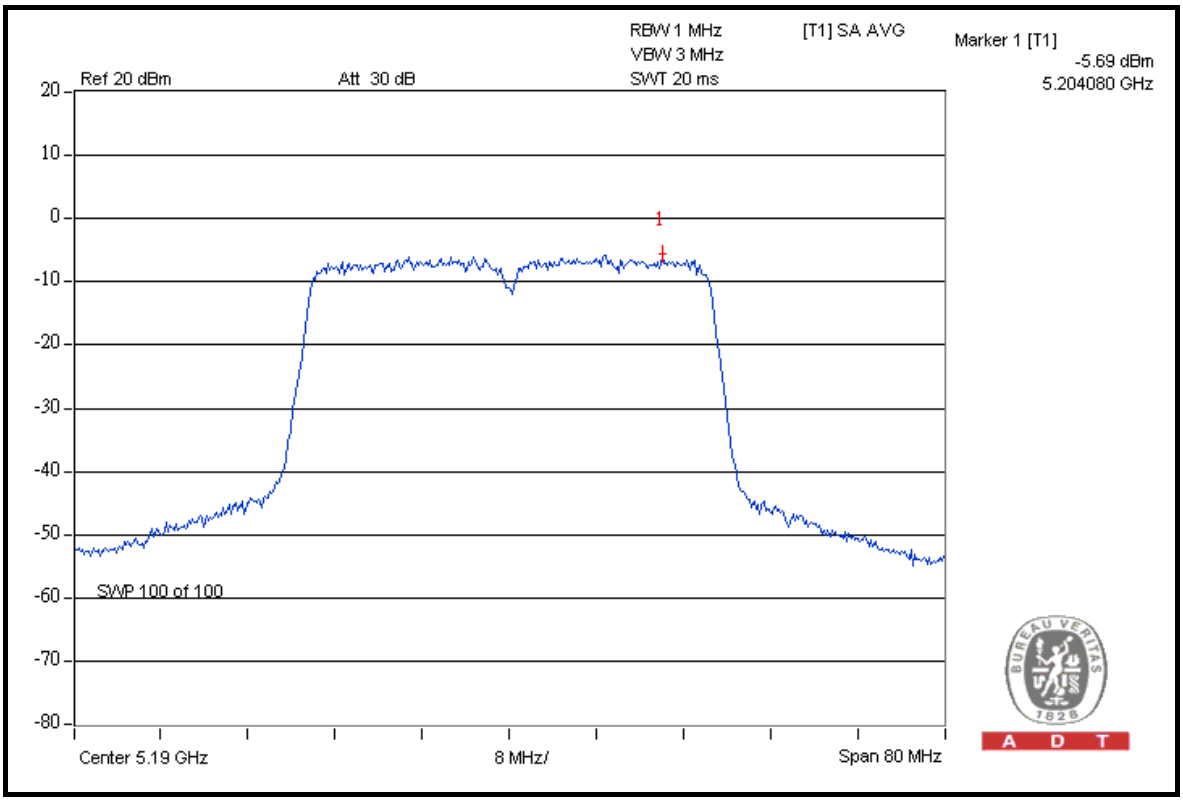
FOR CHAIN 2: CH 36



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
38	5190	-6.50	-6.34	-5.69	-1.39	4	PASS
46	5230	-6.51	-6.99	-5.98	-1.70	4	PASS

FOR CHAIN 2: CH 38



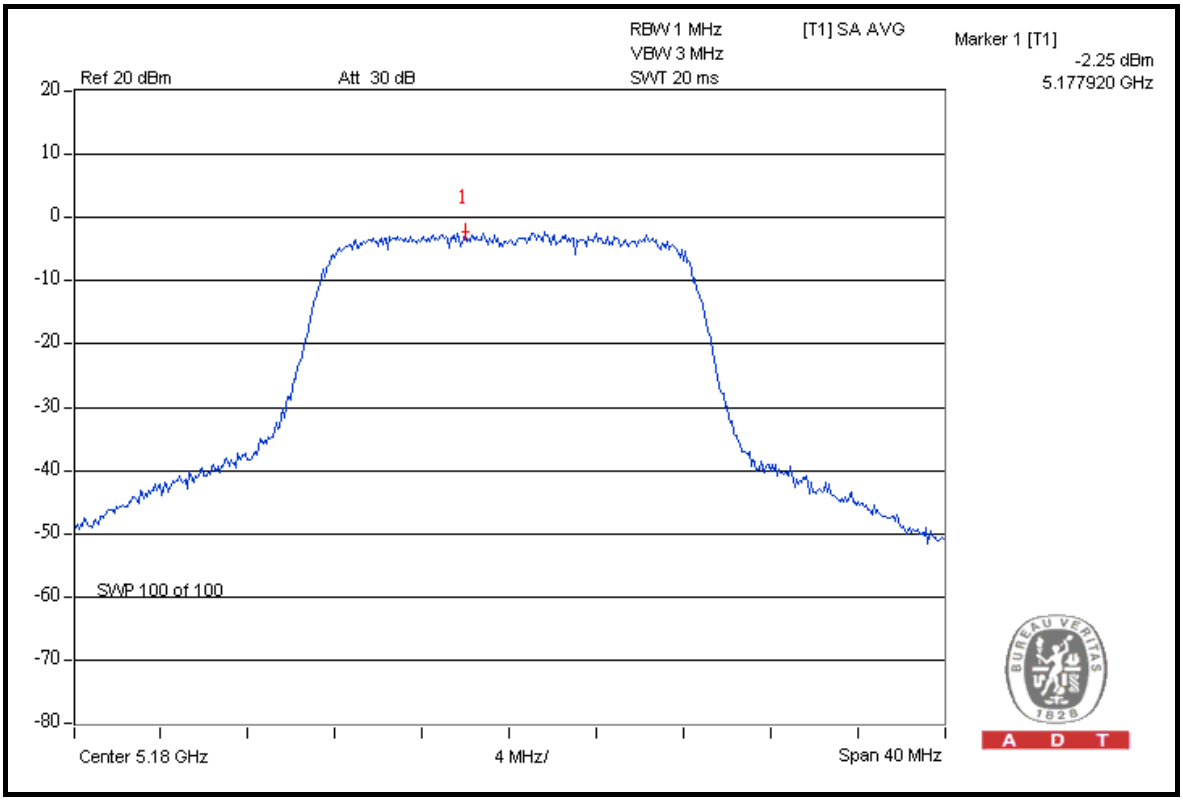
TEST MODE D

802.11a

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-3.75	-2.25	-3.09	1.78	3.7	PASS
40	5200	-3.49	-2.27	-3.42	1.75	3.7	PASS
48	5240	-3.72	-2.33	-3.50	1.63	3.7	PASS

NOTE: According to 15.407 (a) (1) (2) (3), the maximum antenna gain 6.3dBi is higher than 6dBi, so the limit of peak power spectral density shall be reduced by 0.3dB.

FOR CHAIN 1: CH 36

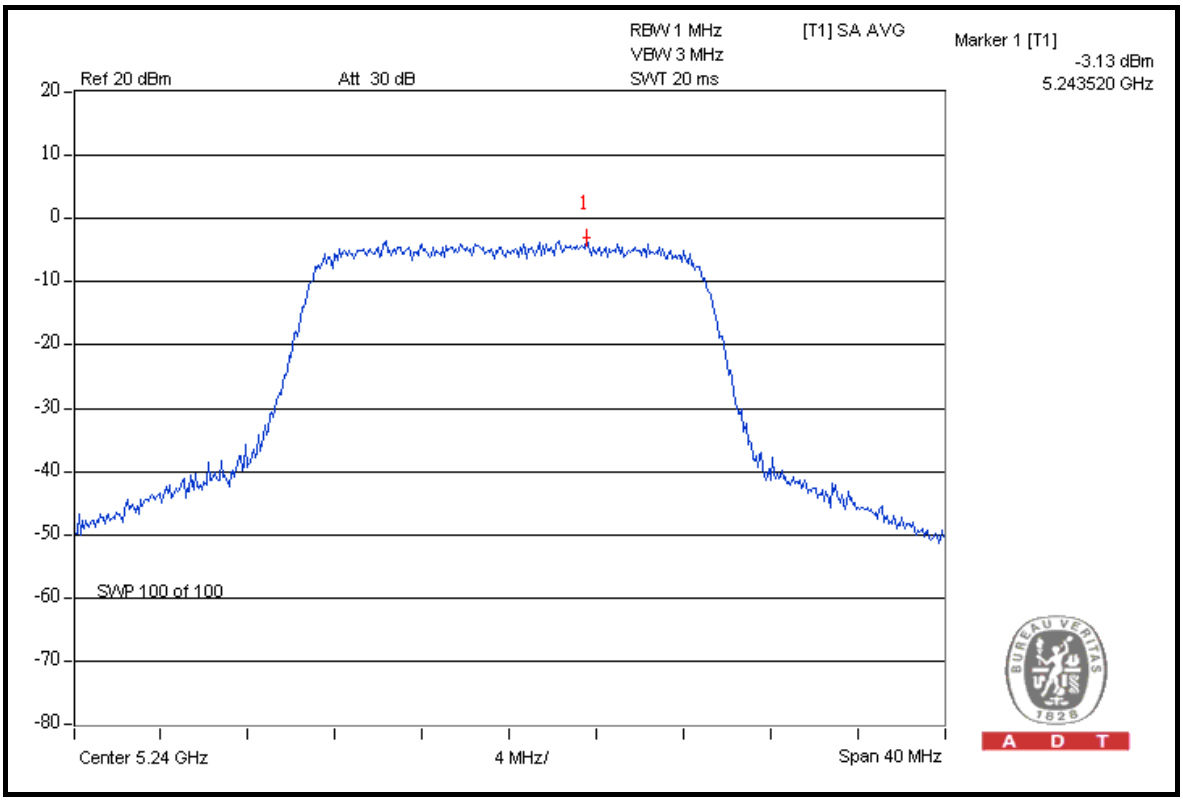


802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-4.37	-3.26	-3.50	1.09	3.7	PASS
40	5200	-4.19	-3.44	-3.47	1.09	3.7	PASS
48	5240	-4.08	-3.13	-3.74	1.14	3.7	PASS

NOTE: According to 15.407 (a) (1) (2) (3), the maximum antenna gain 6.3dBi is higher than 6dBi, so the limit of peak power spectral density shall be reduced by 0.3dB.

FOR CHAIN 1: CH 48

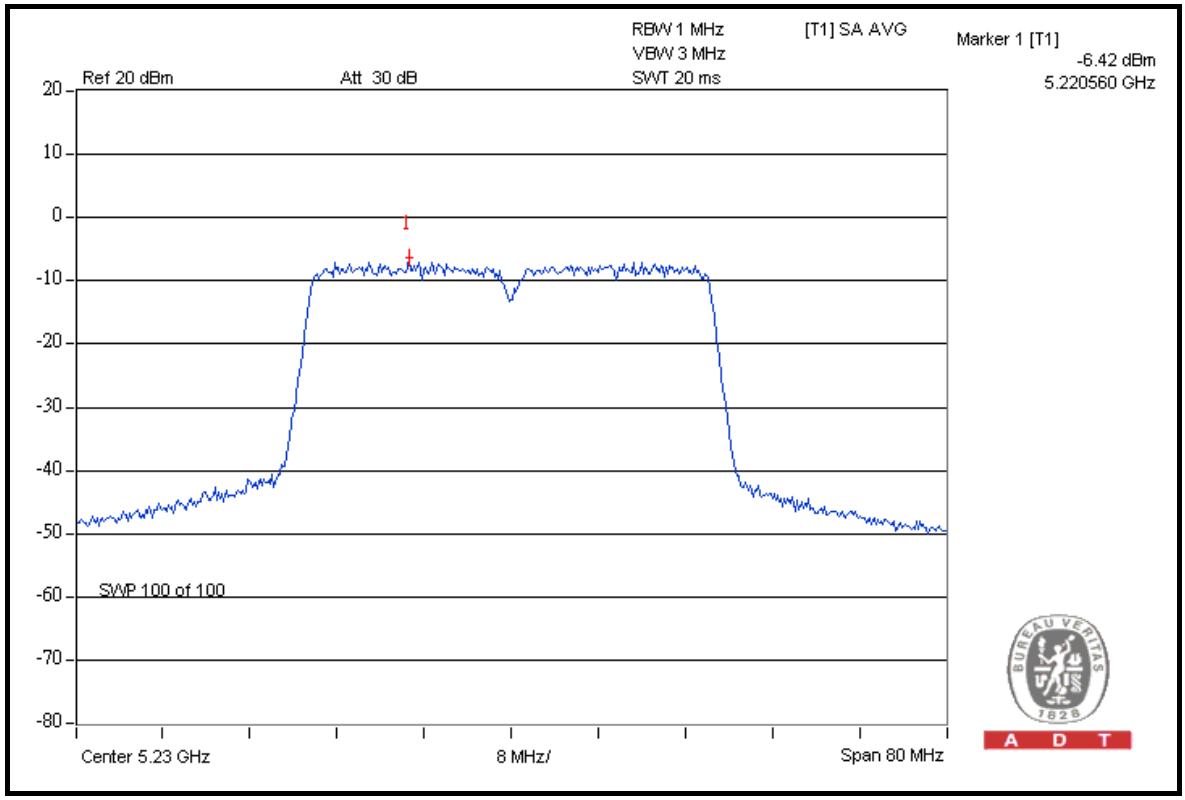


802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHZ BW (DBM)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
38	5190	-7.34	-6.94	-6.66	-2.20	3.7	PASS
46	5230	-6.42	-7.30	-6.93	-2.10	3.7	PASS

NOTE: According to 15.407 (a) (1) (2) (3), the maximum antenna gain 6.3dBi is higher than 6dBi, so the limit of peak power spectral density shall be reduced by 0.3dB.

FOR CHAIN 0: CH 46



4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency tolerance of the carrier signal shall be maintained within +/- 0.02% of the operating frequency over a temperature variation of –30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	CALIBRATED UNTIL
SPECTRUM ANALYZER	FSP40	100039	Jan. 11, 2010	Jan. 10, 2011
WIT STANDARD TEMPERATURE AND HUMIDITY CHAMBER	TH-4S-C	W981030	Jun. 24, 2009	Jun. 23, 2010

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 inside the environmental test chamber and powered by nominal DC voltage.

b. Turn the EUT on and couple its output to a spectrum analyzer.

c. Turn the EUT off and set the chamber to the highest temperature specified.

d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.

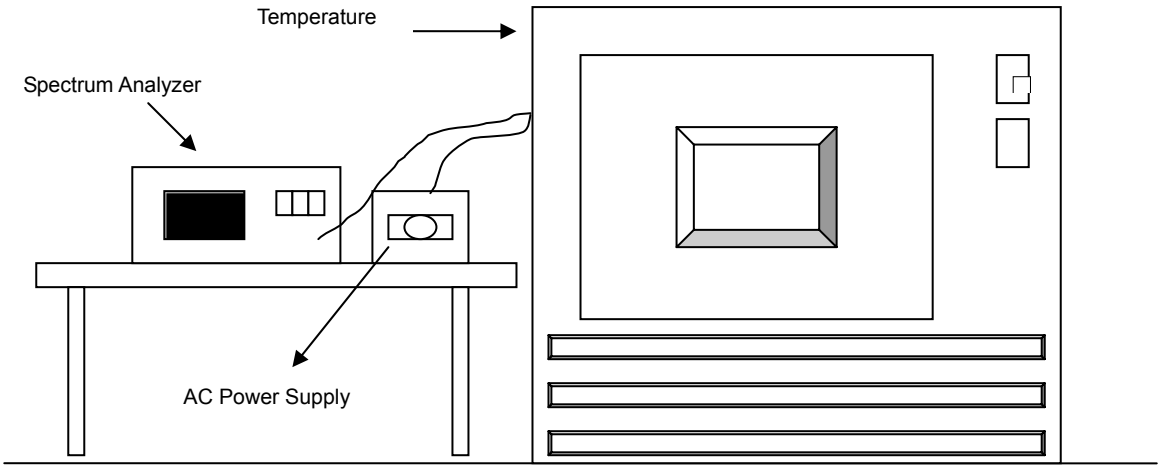
e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.

f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 TEST SETUP



4.6.6 EUT OPERATING CONDITION

Same as Item 4.1.6

4.6.7 TEST RESULTS

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5200MHz									
TEMP. (℃)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift
		(MHz)	ppm	(MHz)	ppm	(MHz)	ppm	(MHz)	ppm
55	110.0	5199.987698	-2.366	5199.988101	-2.288	5199.988064	-2.295	5199.987662	-2.373
50	110.0	5199.988098	-2.289	5199.988264	-2.257	5199.988347	-2.241	5199.988373	-2.236
40	110.0	5199.987979	-2.312	5199.987873	-2.332	5199.988375	-2.236	5199.988393	-2.232
30	110.0	5199.988072	-2.294	5199.988209	-2.267	5199.988188	-2.272	5199.987887	-2.329
20	110.0	5199.988364	-2.238	5199.988780	-2.158	5199.988604	-2.192	5199.988449	-2.221
10	110.0	5199.988047	-2.299	5199.988383	-2.234	5199.987829	-2.341	5199.988252	-2.259
0	110.0	5199.987999	-2.308	5199.988433	-2.224	5199.988442	-2.223	5199.987970	-2.313
-10	110.0	5199.987842	-2.338	5199.987838	-2.339	5199.988166	-2.276	5199.988146	-2.280
-20	110.0	5199.987689	-2.367	5199.987936	-2.320	5199.987628	-2.379	5199.988147	-2.279
-30	110.0	5199.988358	-2.239	5199.988699	-2.173	5199.988607	-2.191	5199.988208	-2.268

FREQUEMCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5200MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift
		(MHz)	ppm	(MHz)	ppm	(MHz)	ppm	(MHz)	ppm
20	93.5	5199.987885	-2.330	5199.988354	-2.240	5199.988565	-2.199	5199.987993	-2.309
	110.0	5199.988364	-2.238	5199.988780	-2.158	5199.988604	-2.192	5199.988449	-2.221
	126.5	5199.988249	-2.260	5199.987999	-2.308	5199.987917	-2.324	5199.988384	-2.234

4.7 BAND EDGES MEASUREMENT

4.7.1 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. 27, 2009	Aug. 26, 2010

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

4.7.2 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 1MHz and 3MHz 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

4.7.3 EUT OPERATING CONDITION

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

4.7.4 TEST RESULTS

For signals in the restricted bands above and below the 5.15 to 5.25GHz allocated band a measurement was made of the amplitude of the spurious emissions with respect to the intentional signals. The relative amplitude, in dBc, was applied to the average and peak filed strength of the intentional signal made on the OATS to calculate the field strength of the unintentional signals.

The spectrum plots (Peak RBW = 1MHz, VBW = 3MHz) are attached on the following pages.

TEST MODE A

802.11a

RESTRICT BAND (4500 ~ 5150 MHz)

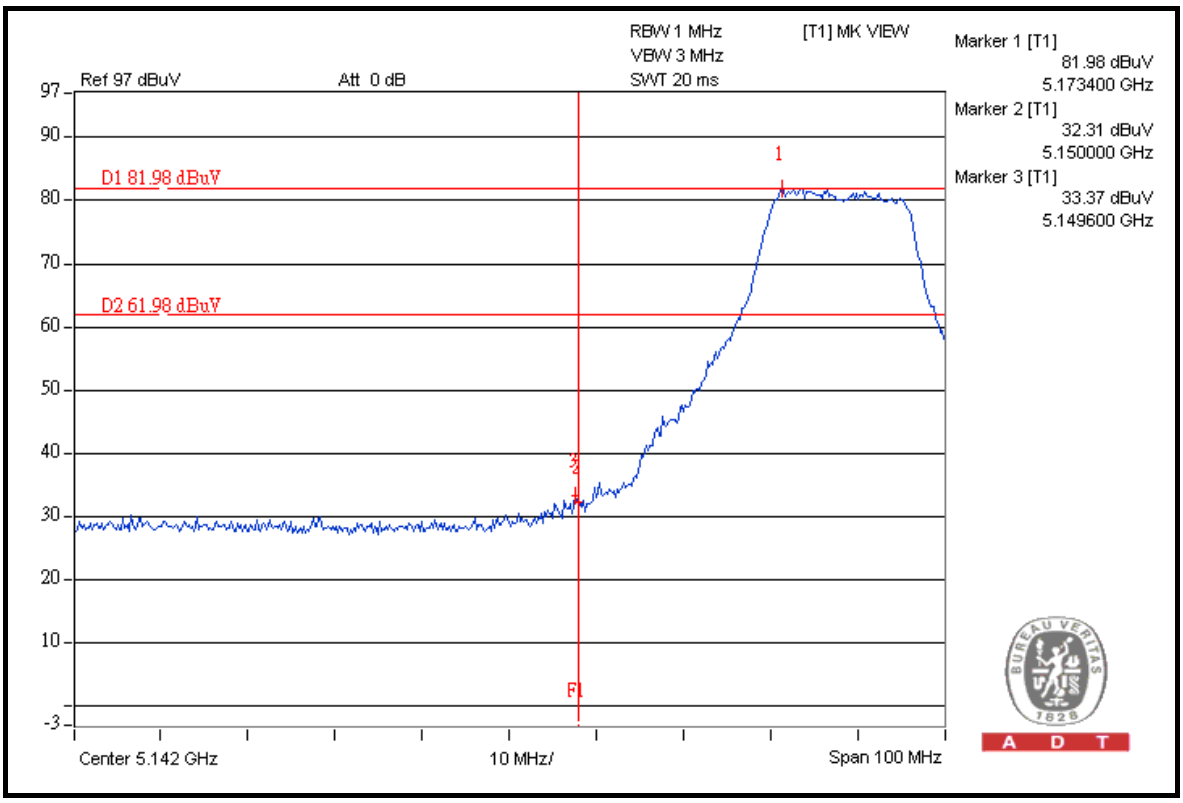
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5180.00 (PK)	110.2	48.61	61.59	74.00
5180.00 (AV)	96.6	51.72	44.88	54.00

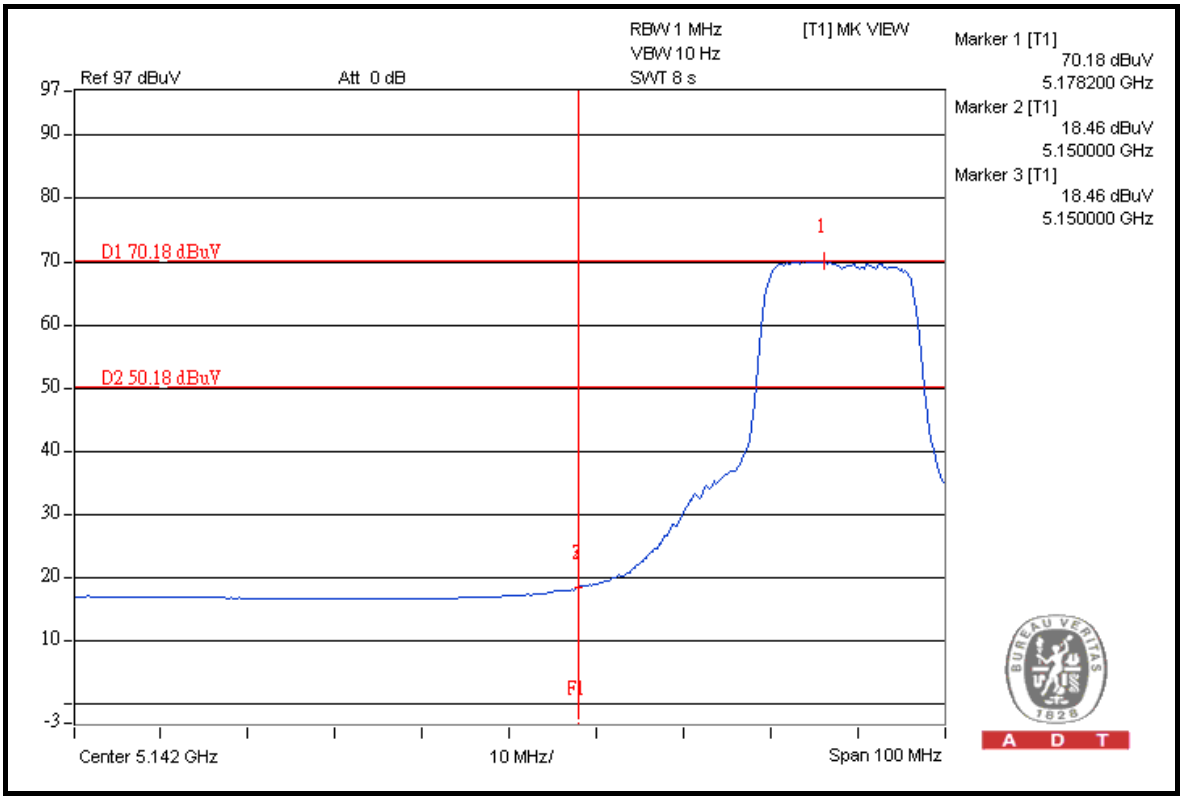
RESTRICT BAND (5350 ~ 5460 MHz)

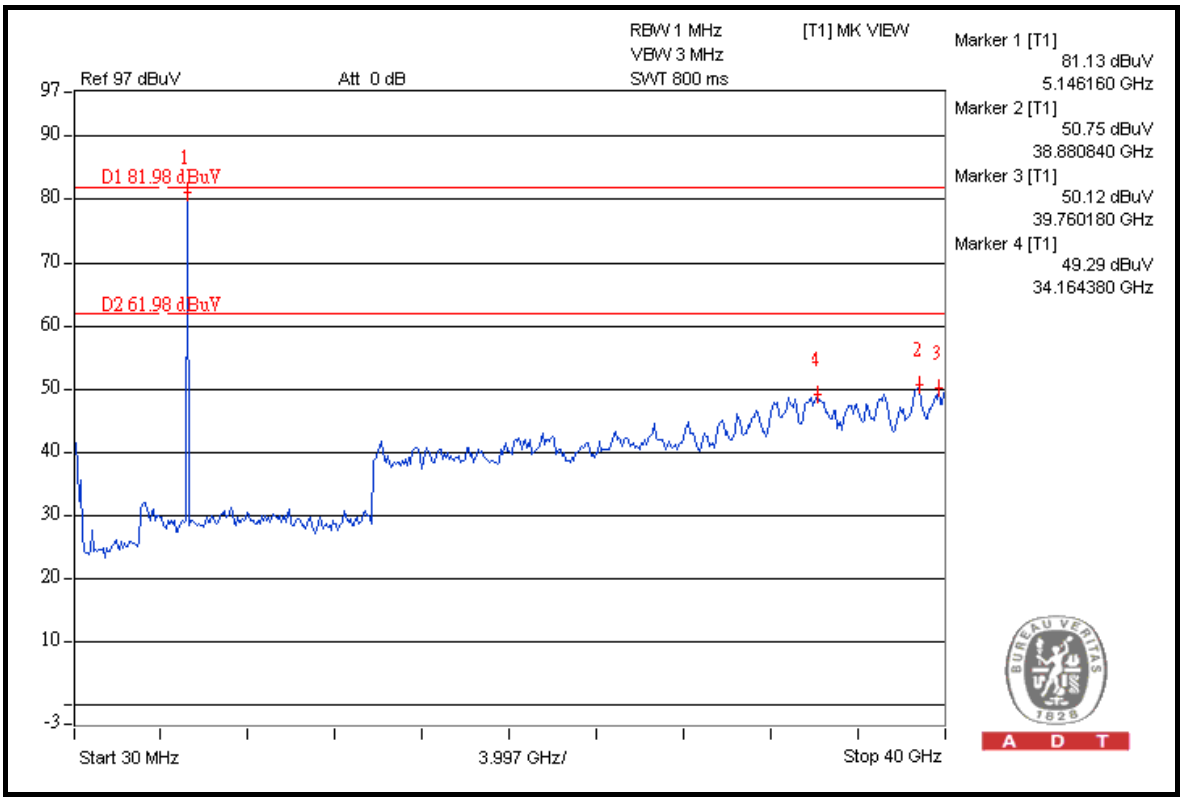
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5240.00 (PK)	110.5	47.74	62.76	74.00
5240.00 (AV)	97.0	50.13	46.87	54.00

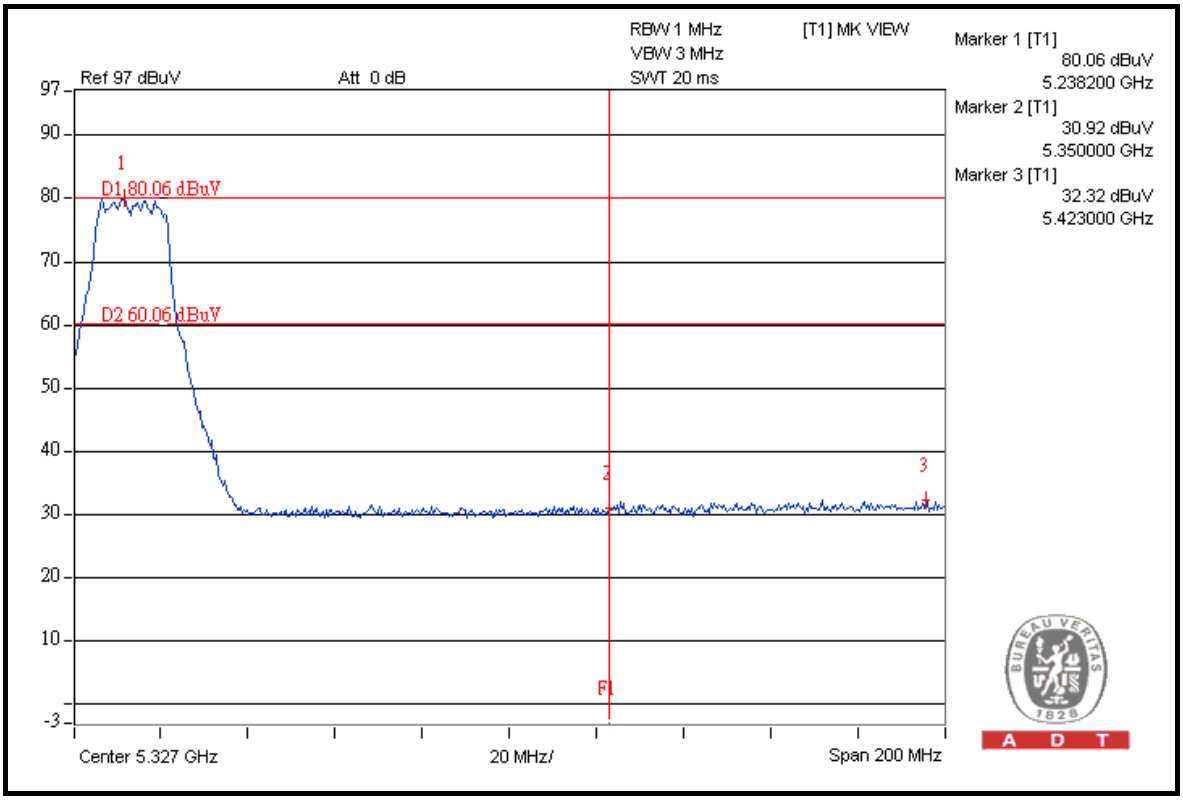
NOTE:

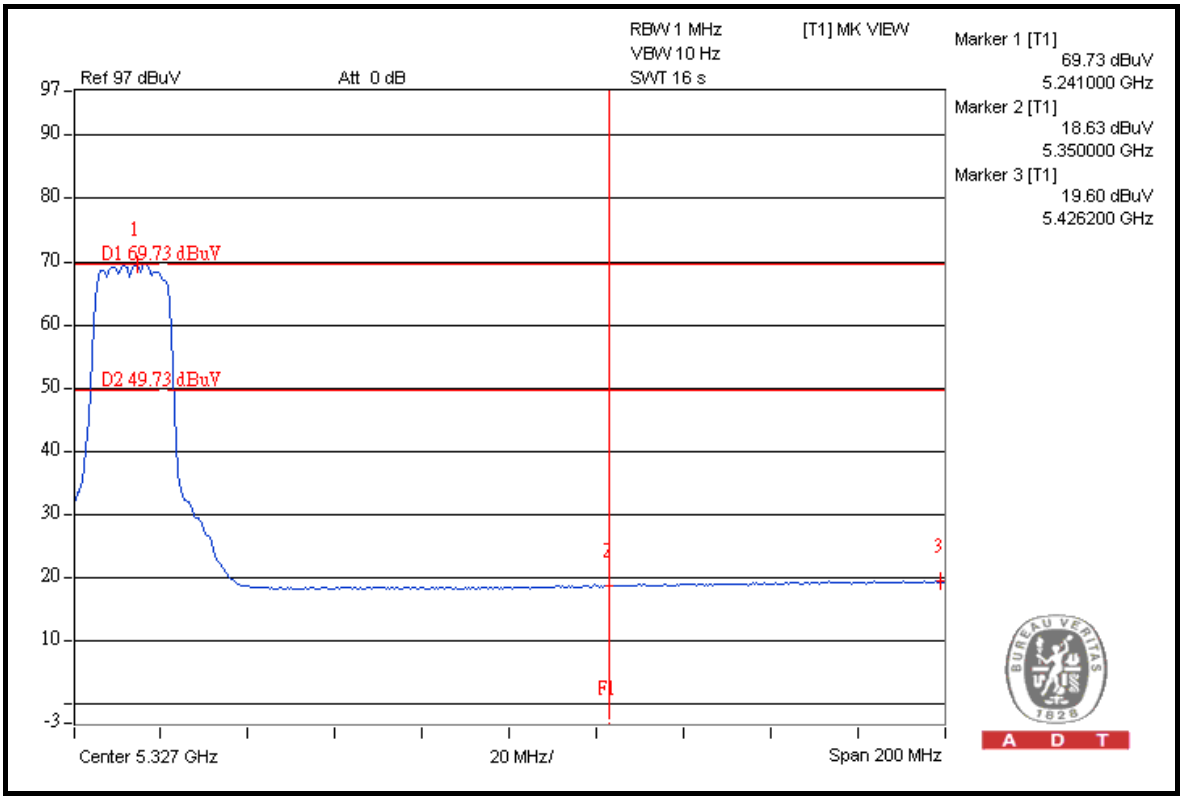
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

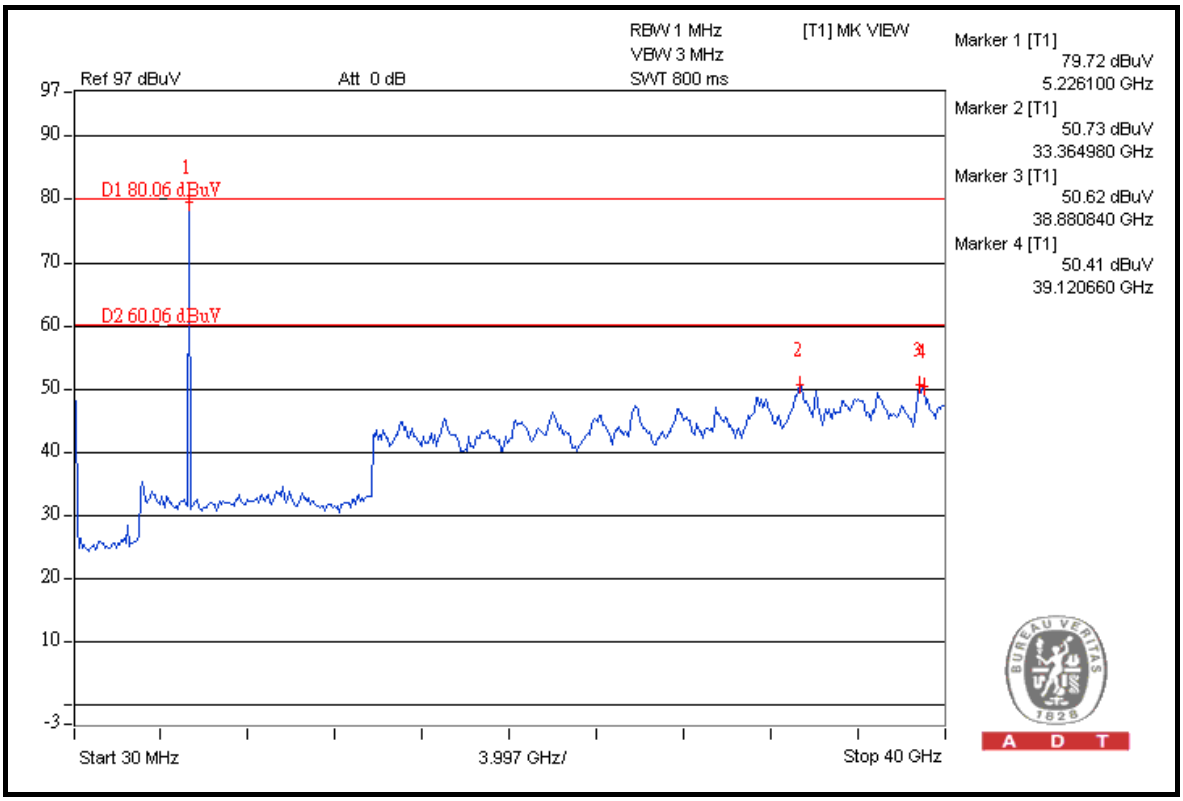

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 81.98 dBuV
D2 61.98 dBuV
Marker 1 [T1]
81.98 dBuV
5.173400 GHz
Marker 2 [T1]
32.31 dBuV
5.150000 GHz
Marker 3 [T1]
33.37 dBuV
5.149600 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 70.18 dBuV
D2 50.18 dBuV
Marker 1 [T1]
70.18 dBuV
5.178200 GHz
Marker 2 [T1]
18.46 dBuV
5.150000 GHz
Marker 3 [T1]
18.46 dBuV
5.150000 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 81.98 dBuV
D2 61.98 dBuV
Marker 1 [T1]
81.13 dBuV
5.146160 GHz
Marker 2 [T1]
50.75 dBuV
38.880840 GHz
Marker 3 [T1]
50.12 dBuV
39.760180 GHz
Marker 4 [T1]
49.29 dBuV
34.164380 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 80.06 dBuV
D2 60.06 dBuV
Marker 1 [T1]
80.06 dBuV
5.238200 GHz
Marker 2 [T1]
30.92 dBuV
5.350000 GHz
Marker 3 [T1]
32.32 dBuV
5.423000 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
69.73 dBuV
5.241000 GHz
Marker 2 [T1]
18.63 dBuV
5.350000 GHz
Marker 3 [T1]
19.60 dBuV
5.426200 GHz
D1 69.73 dBuV
D2 49.73 dBuV
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
79.72 dBuV
5.226100 GHz
Marker 2 [T1]
50.73 dBuV
33.364980 GHz
Marker 3 [T1]
50.62 dBuV
38.880840 GHz
Marker 4 [T1]
50.41 dBuV
39.120660 GHz
D1 80.06 dBuV
D2 60.06 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11n (20MHz)

RESTRICT BAND (4500 ~ 5150 MHz)

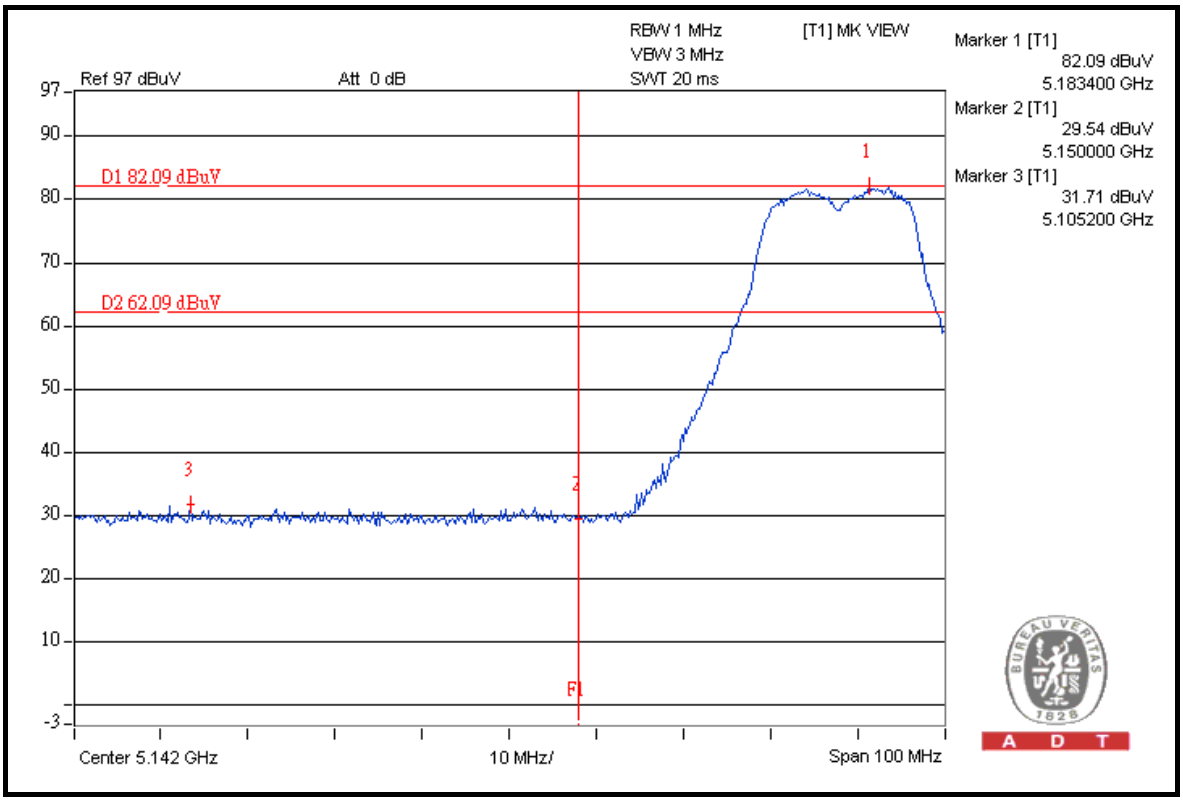
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5180.00 (PK)	110.0	50.38	59.62	74.00
5180.00 (AV)	96.4	50.69	45.71	54.00

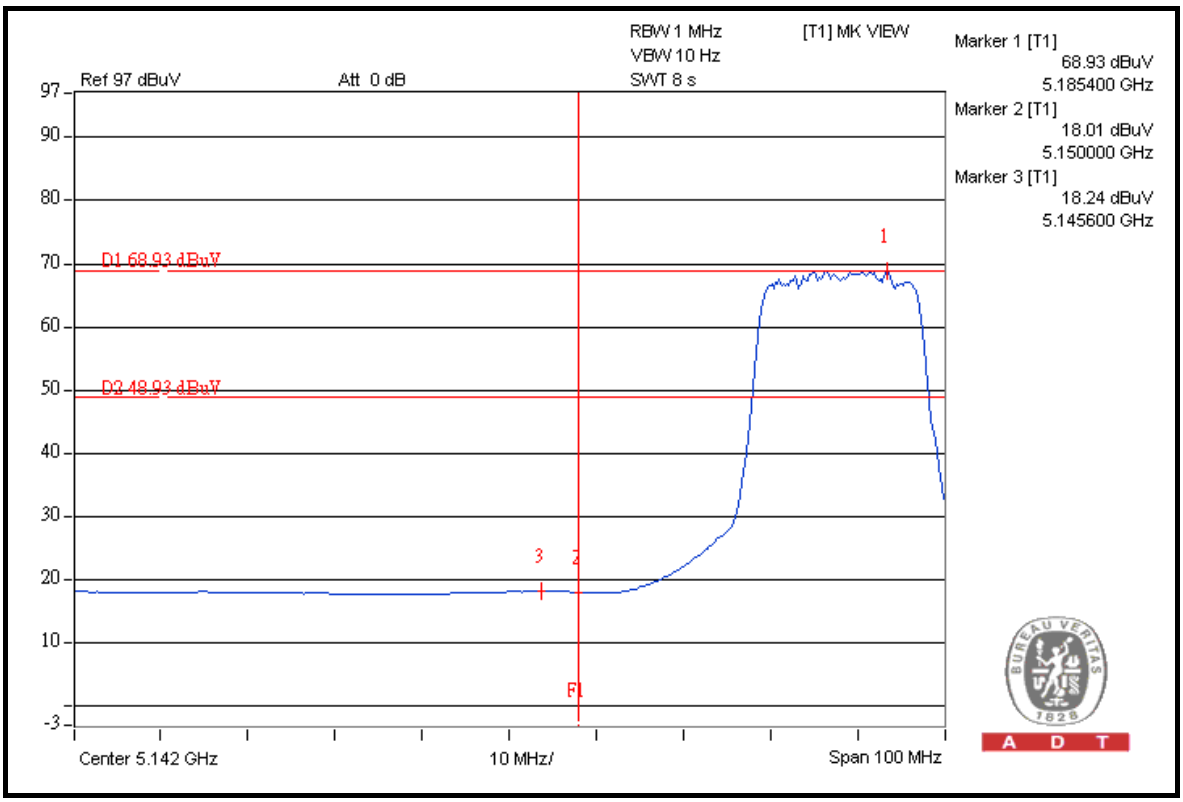
RESTRICT BAND (5350 ~ 5460 MHz)

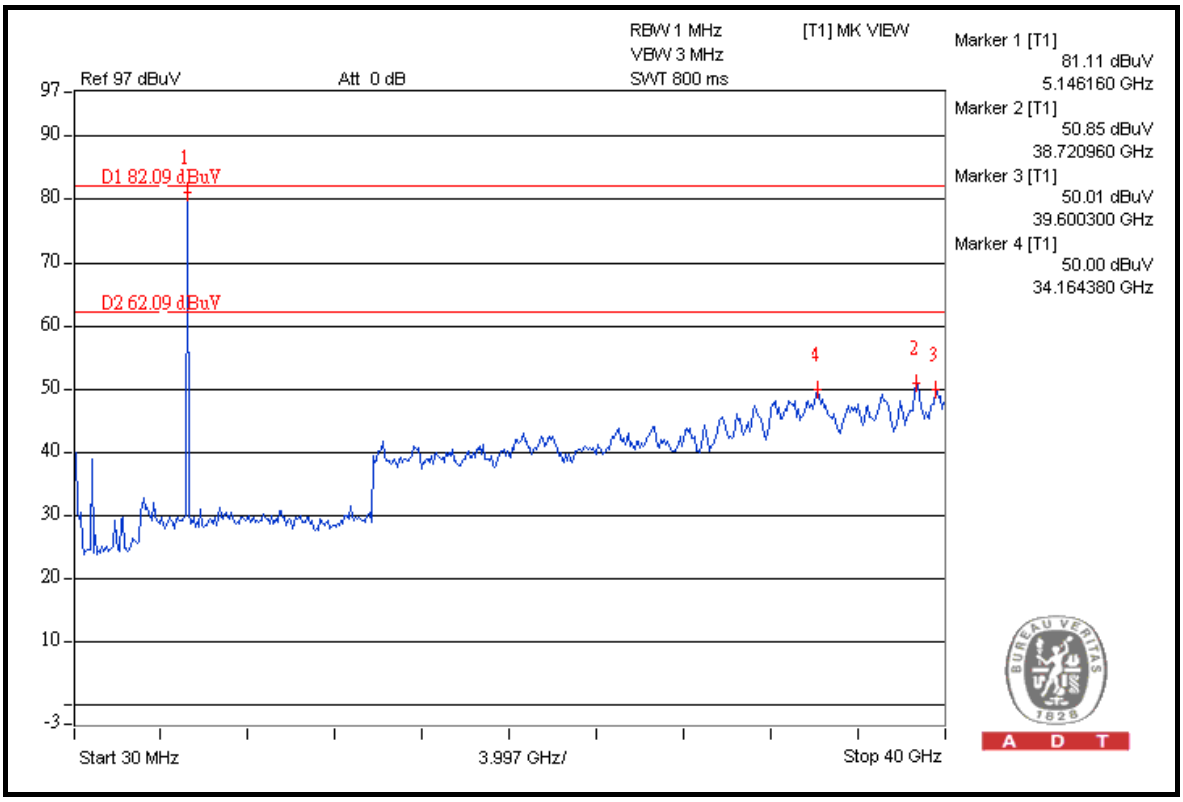
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5240.00 (PK)	110.1	48.00	62.10	74.00
5240.00 (AV)	96.6	49.21	47.39	54.00

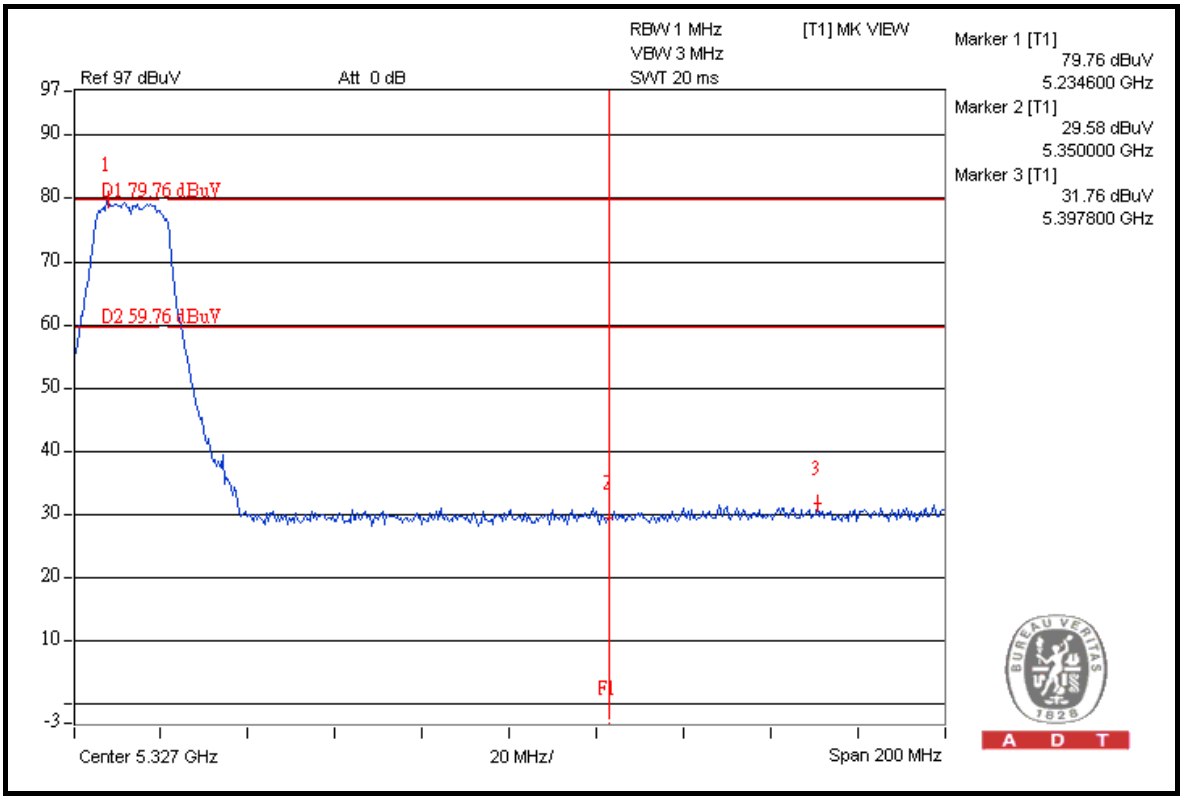
NOTE:

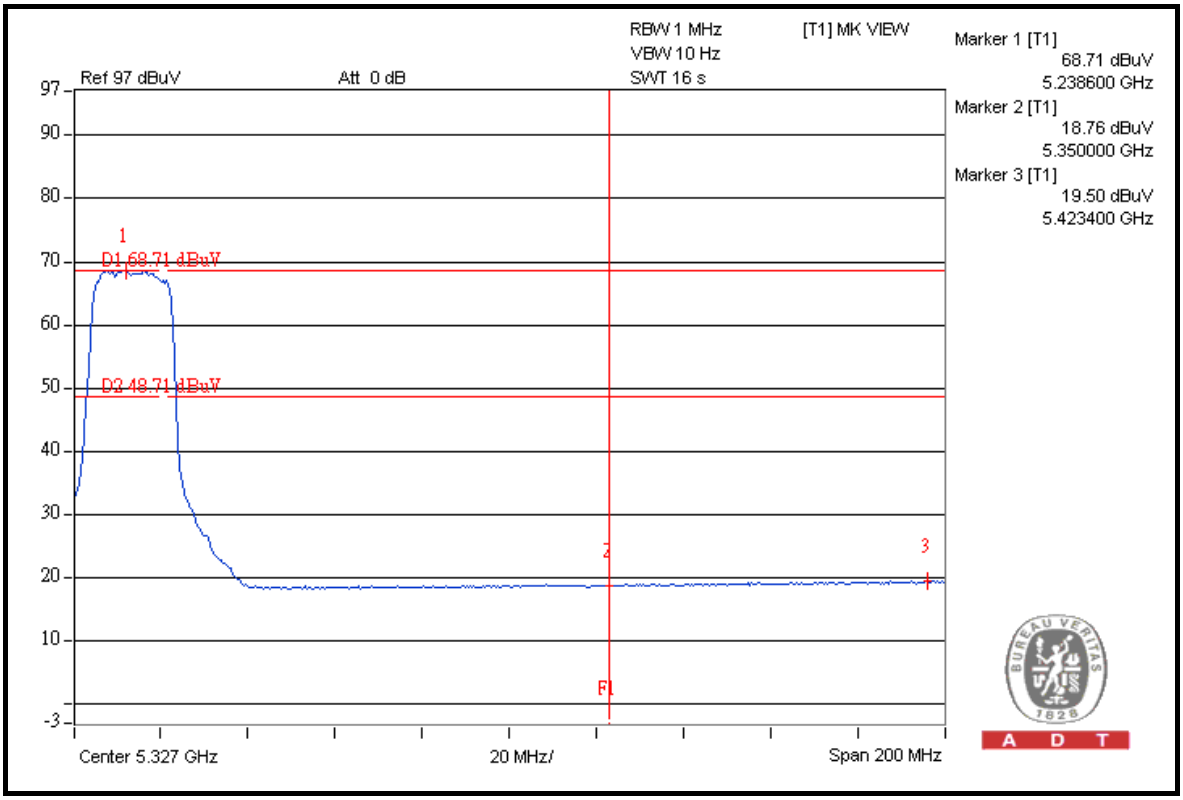
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

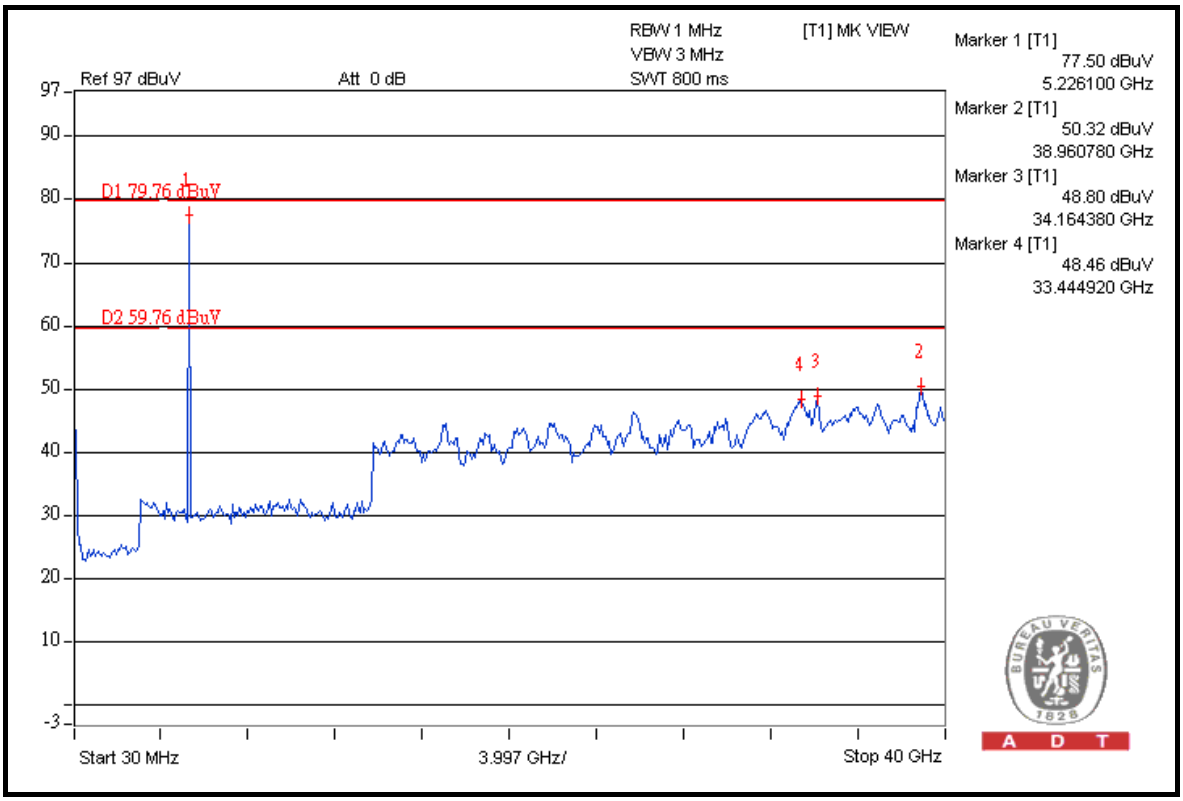

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
82.09 dBuV
5.183400 GHz
Marker 2 [T1]
29.54 dBuV
5.150000 GHz
Marker 3 [T1]
31.71 dBuV
5.105200 GHz
D1 82.09 dBuV
D2 62.09 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
68.93 dBuV
5.185400 GHz
Marker 2 [T1]
18.01 dBuV
5.150000 GHz
Marker 3 [T1]
18.24 dBuV
5.145600 GHz
D1 68.93 dBuV
D2 48.93 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 82.09 dBuV
D2 62.09 dBuV
Marker 1 [T1]
81.11 dBuV
5.146160 GHz
Marker 2 [T1]
50.85 dBuV
38.720960 GHz
Marker 3 [T1]
50.01 dBuV
39.600300 GHz
Marker 4 [T1]
50.00 dBuV
34.164380 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 79.76 dBuV
D2 59.76 dBuV
Marker 1 [T1]
79.76 dBuV
5.234600 GHz
Marker 2 [T1]
29.58 dBuV
5.350000 GHz
Marker 3 [T1]
31.76 dBuV
5.397800 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
68.71 dBuV
5.238600 GHz
Marker 2 [T1]
18.76 dBuV
5.350000 GHz
Marker 3 [T1]
19.50 dBuV
5.423400 GHz
D1 68.71 dBuV
D2 48.71 dBuV
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
77.50 dBuV
5.226100 GHz
Marker 2 [T1]
50.32 dBuV
38.960780 GHz
Marker 3 [T1]
48.80 dBuV
34.164380 GHz
Marker 4 [T1]
48.46 dBuV
33.444920 GHz
D1 79.76 dBuV
D2 59.76 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11n (40MHz)

RESTRICT BAND (4500 ~ 5150 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5190.00 (PK)	106.8	42.94	63.86	74.00
5190.00 (AV)	93.1	44.06	49.04	54.00

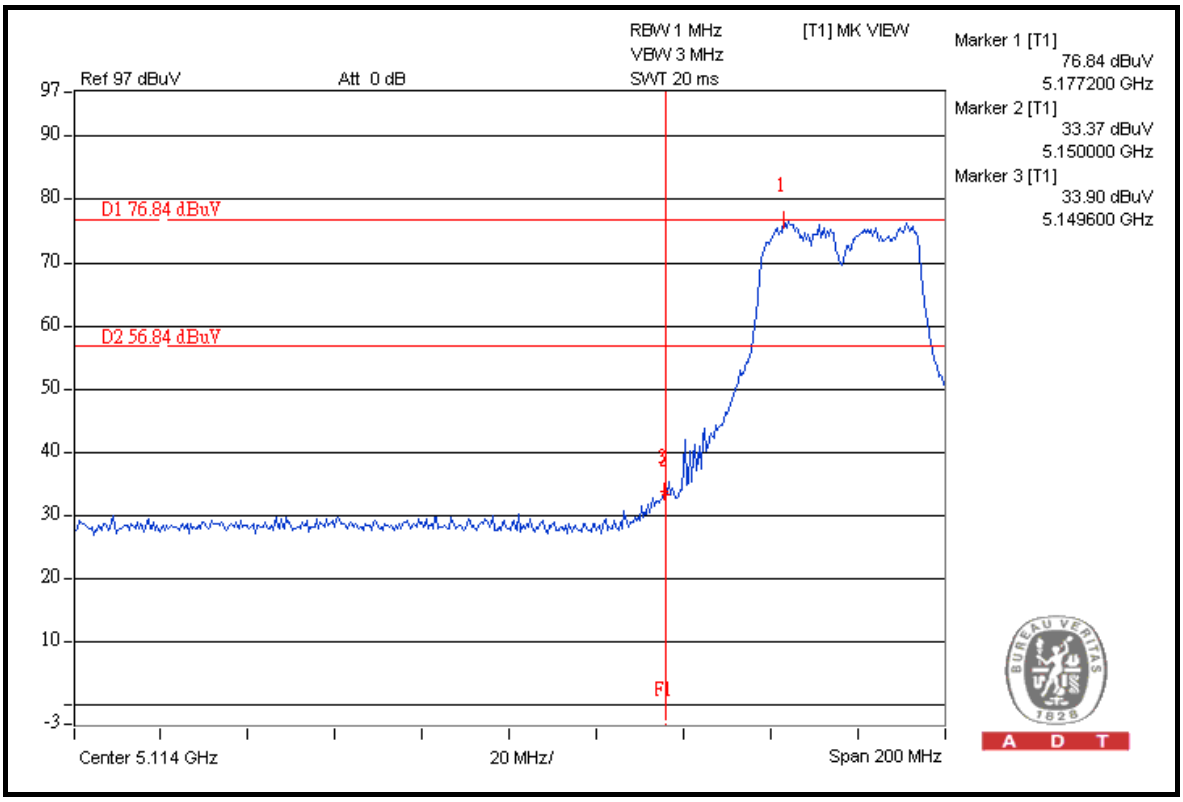
RESTRICT BAND (5350 ~ 5460 MHz)

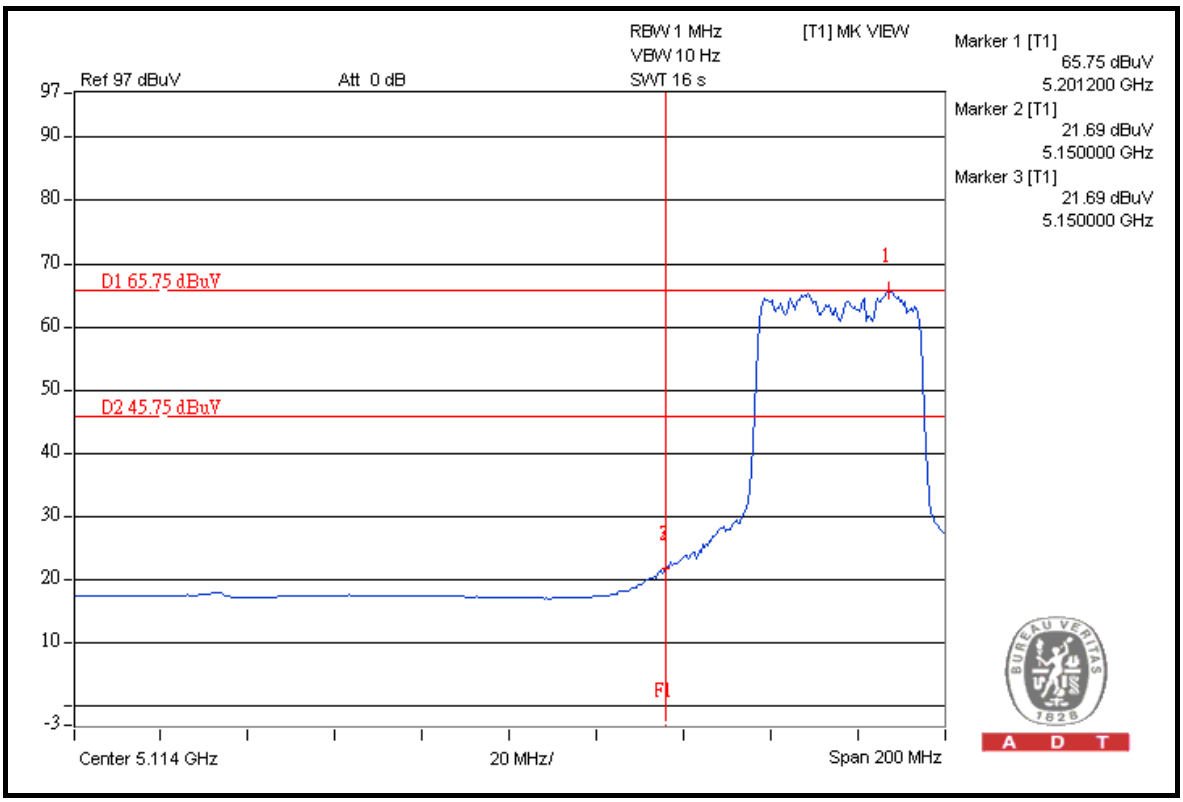
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5230.00 (PK)	107.1	47.25	59.85	74.00
5230.00 (AV)	93.4	47.17	46.23	54.00

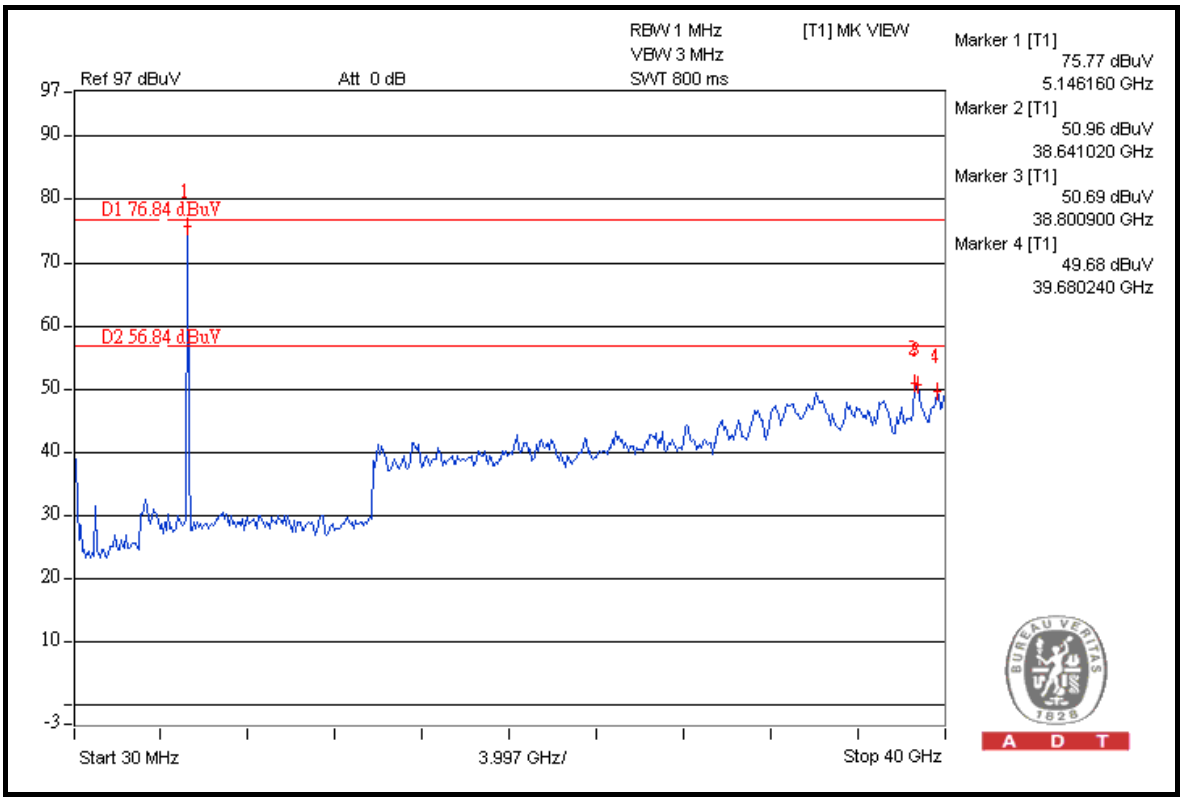
NOTE:

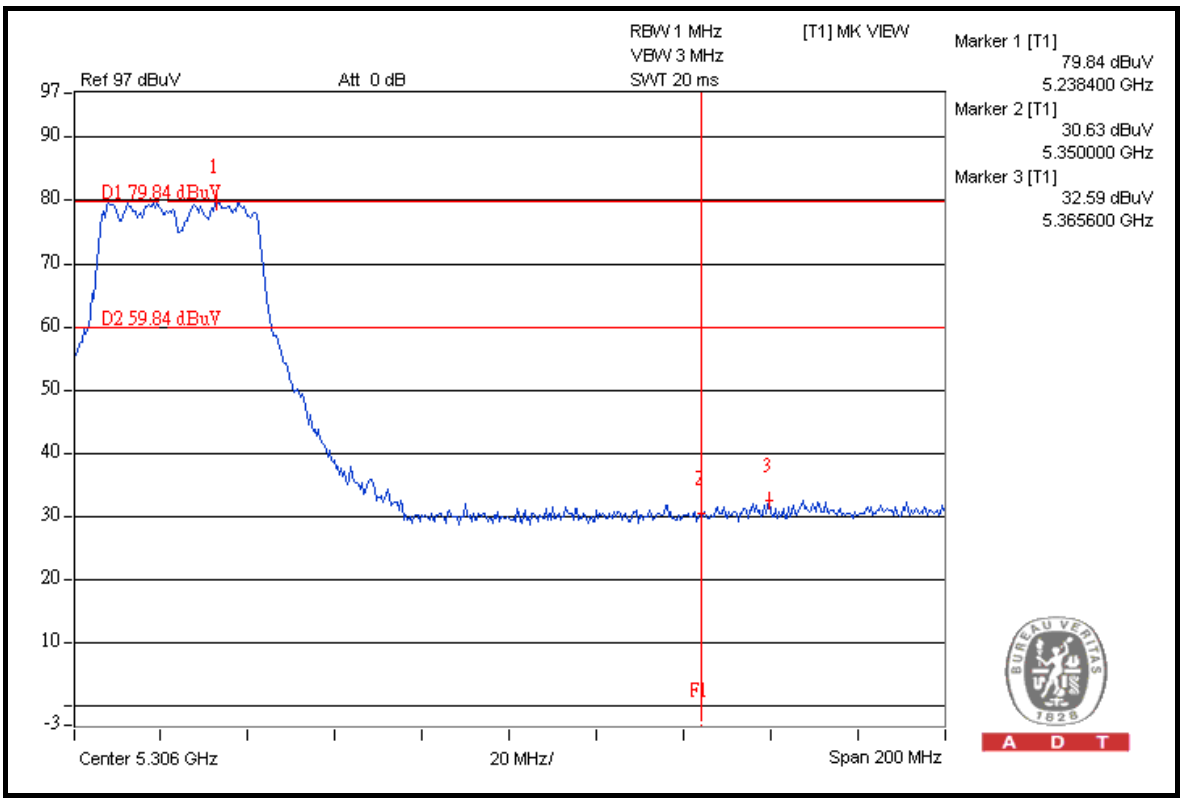
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.

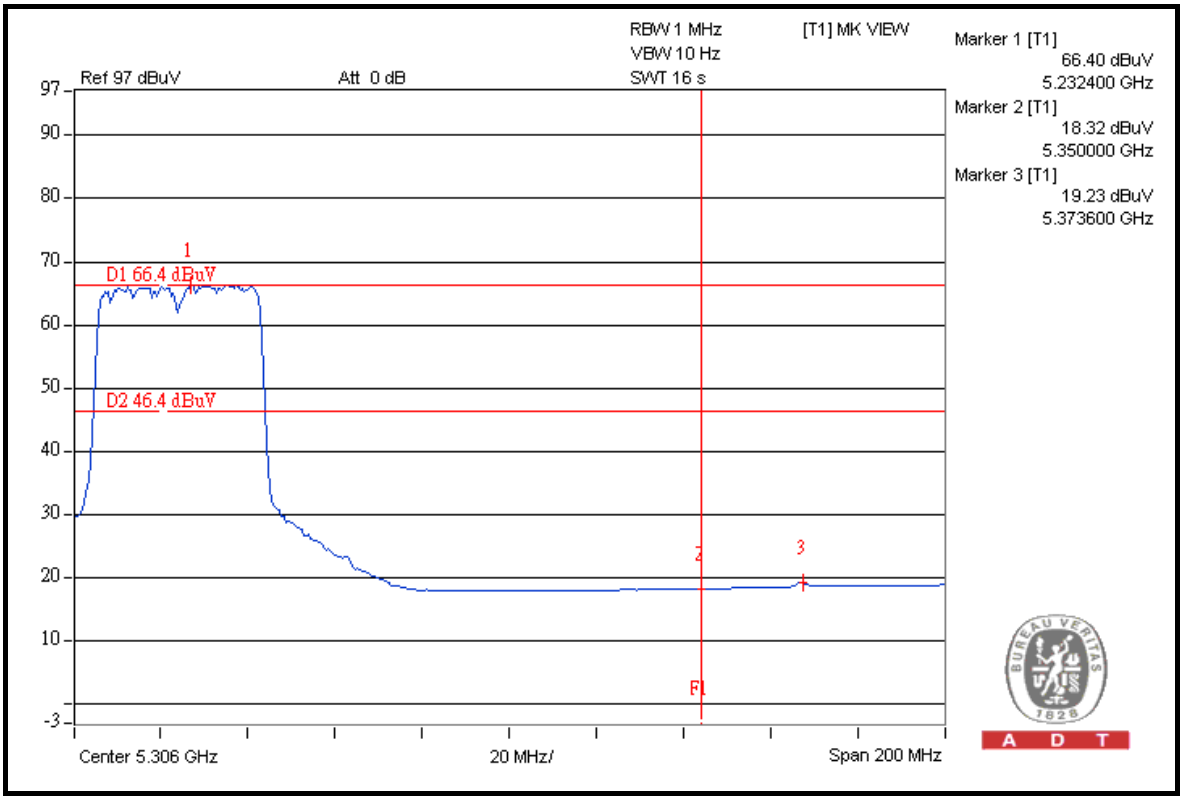
2. Maximum field strength in restrict band = Fundamental emission – Delta.

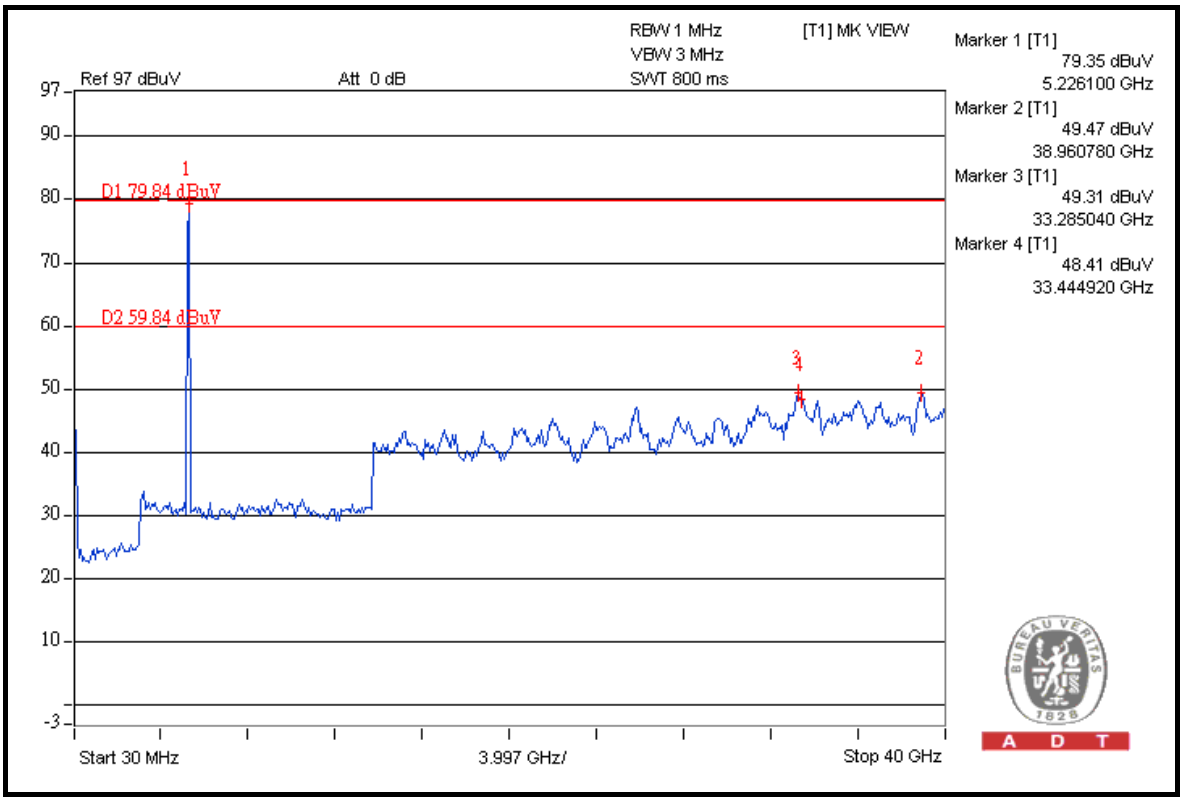

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
76.84 dBuV
5.177200 GHz
Marker 2 [T1]
33.37 dBuV
5.150000 GHz
Marker 3 [T1]
33.90 dBuV
5.149600 GHz
D1 76.84 dBuV
D2 56.84 dBuV
Center 5.114 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
65.75 dBuV
5.201200 GHz
Marker 2 [T1]
21.69 dBuV
5.150000 GHz
Marker 3 [T1]
21.69 dBuV
5.150000 GHz
D1 65.75 dBuV
D2 45.75 dBuV
Center 5.114 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
75.77 dBuV
5.146160 GHz
Marker 2 [T1]
50.96 dBuV
38.641020 GHz
Marker 3 [T1]
50.69 dBuV
38.800900 GHz
Marker 4 [T1]
49.68 dBuV
39.680240 GHz
D1 76.84 dBuV
D2 56.84 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
79.84 dBuV
5.238400 GHz
Marker 2 [T1]
30.63 dBuV
5.350000 GHz
Marker 3 [T1]
32.59 dBuV
5.365600 GHz
D1 79.84 dBuV
D2 59.84 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Center 5.306 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
66.40 dBuV
5.232400 GHz
Marker 2 [T1]
18.32 dBuV
5.350000 GHz
Marker 3 [T1]
19.23 dBuV
5.373600 GHz
D1 66.4 dBuV
D2 46.4 dBuV
Center 5.306 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
79.35 dBuV
5.226100 GHz
Marker 2 [T1]
49.47 dBuV
38.960780 GHz
Marker 3 [T1]
49.31 dBuV
33.285040 GHz
Marker 4 [T1]
48.41 dBuV
33.444920 GHz
D1 79.84 dBuV
D2 59.84 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

TEST MODE B

802.11a

RESTRICT BAND (4500 ~ 5150 MHz)

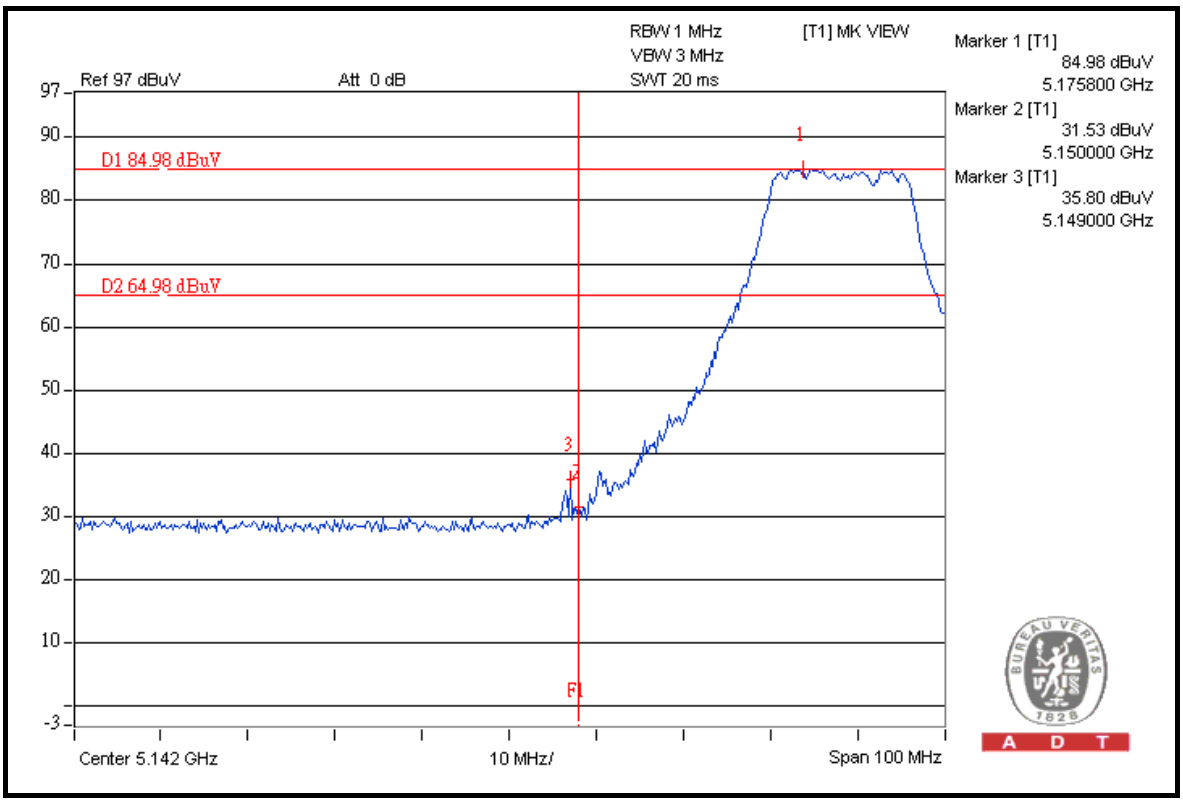
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5180.00 (PK)	113.6	49.18	64.42	74.00
5180.00 (AV)	99.5	54.38	45.12	54.00

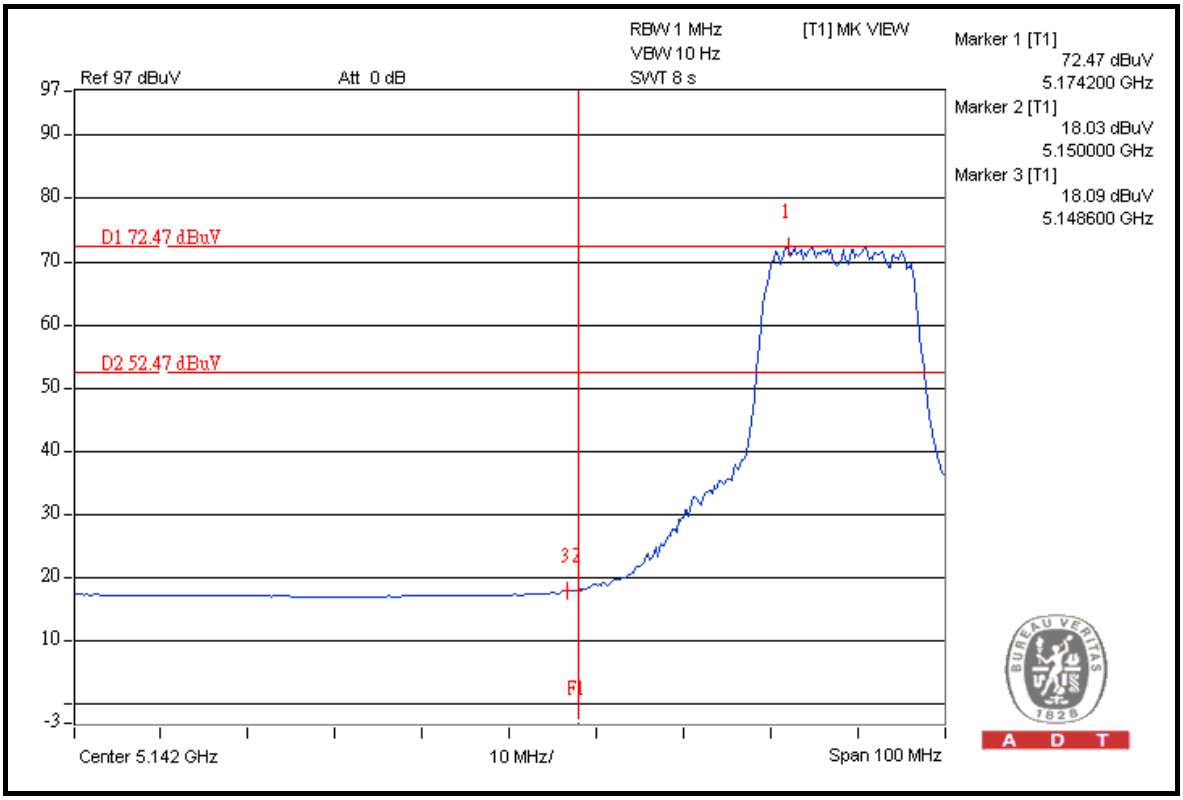
RESTRICT BAND (5350 ~ 5460 MHz)

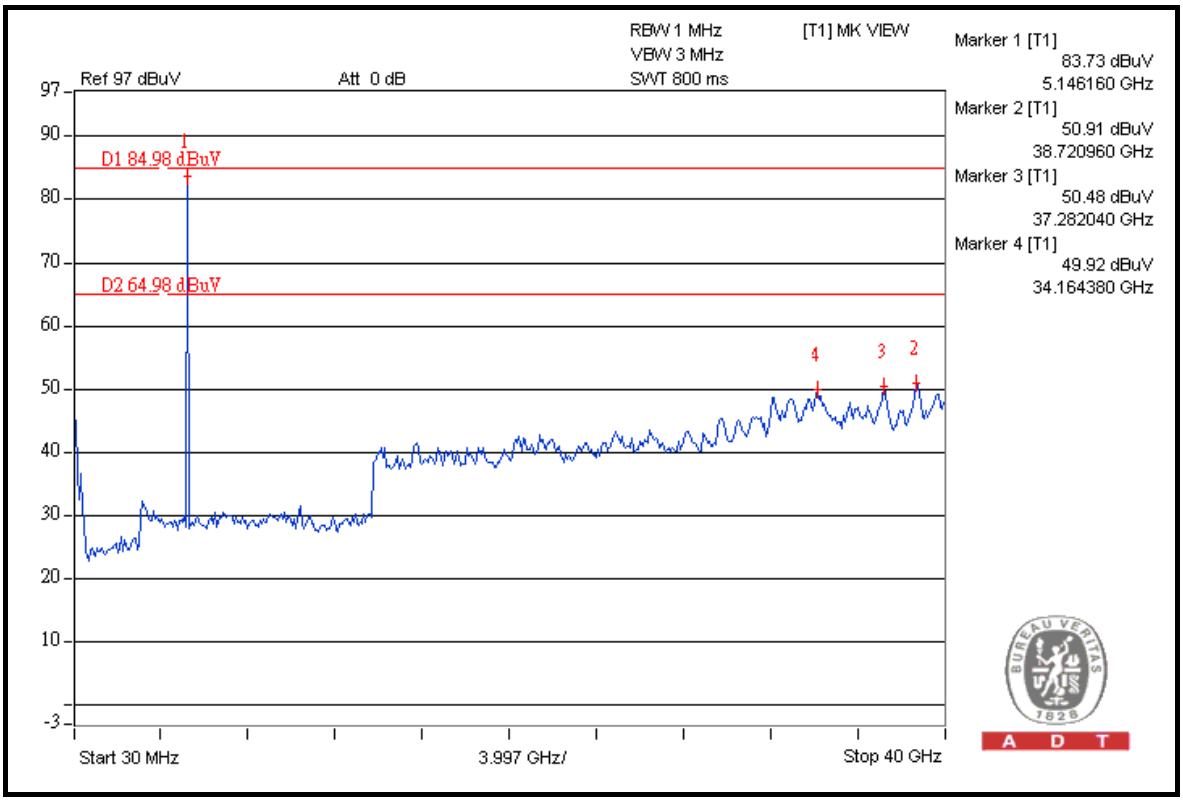
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5240.00 (PK)	113.8	51.13	62.67	74.00
5240.00 (AV)	99.9	53.26	46.64	54.00

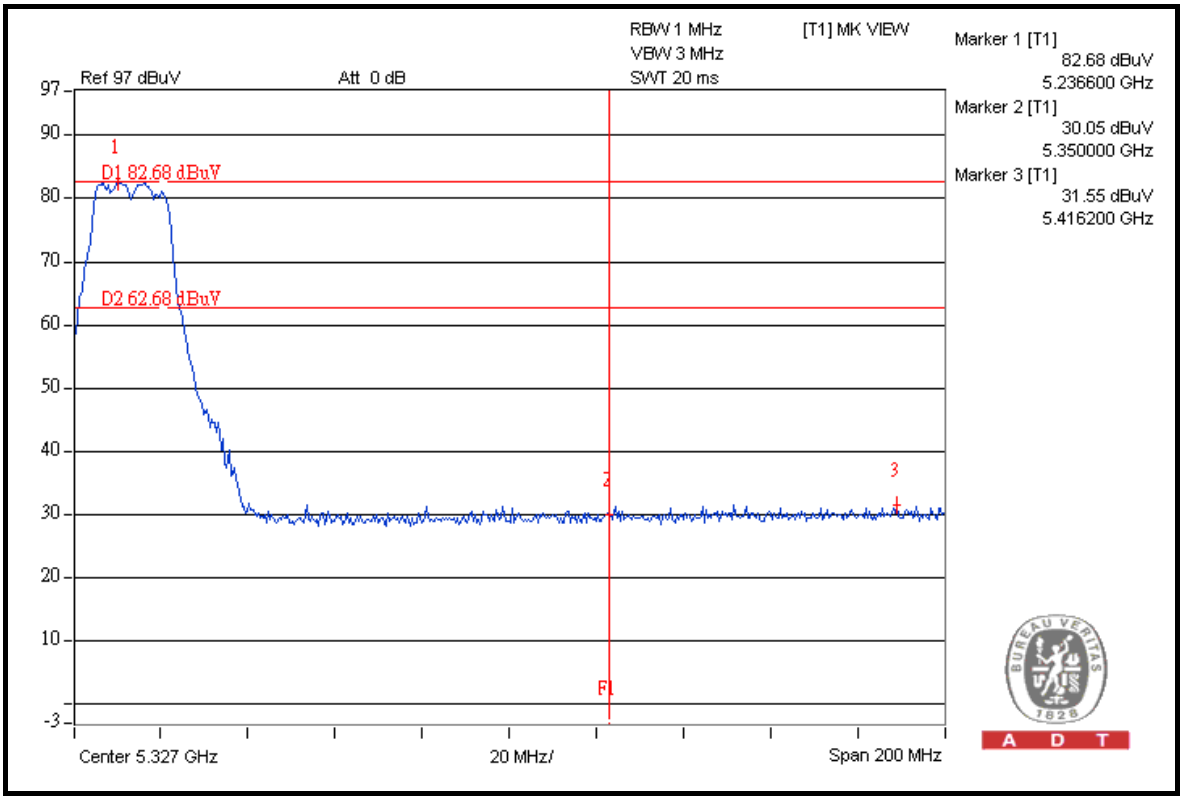
NOTE:

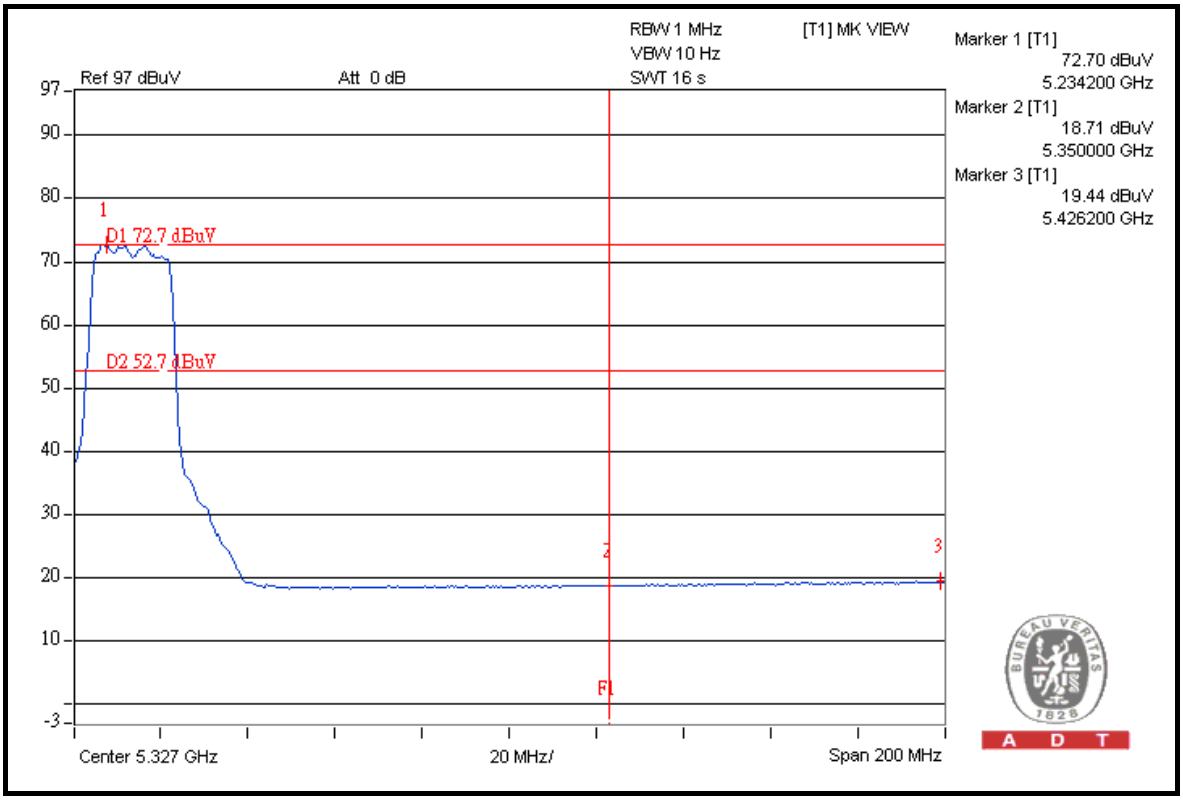
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

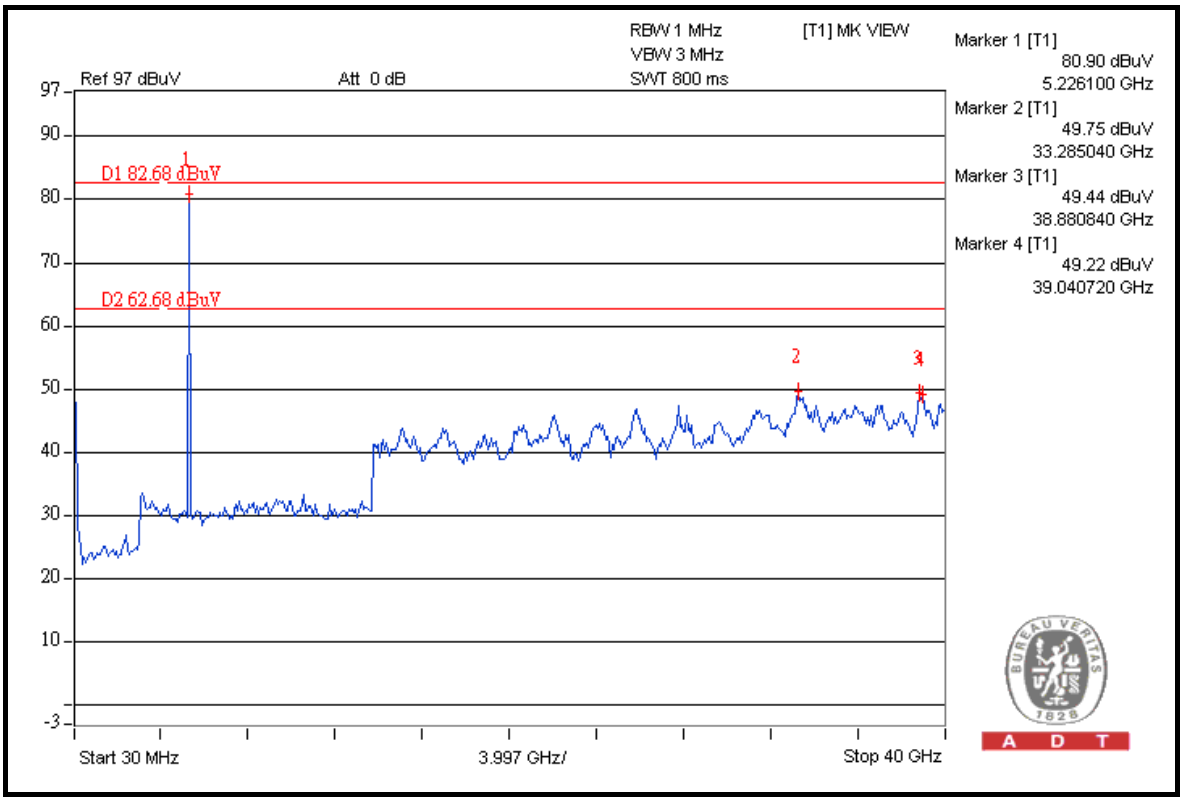

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 84.98 dBuV
D2 64.98 dBuV
Marker 1 [T1]
84.98 dBuV
5.175800 GHz
Marker 2 [T1]
31.53 dBuV
5.150000 GHz
Marker 3 [T1]
35.80 dBuV
5.149000 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 72.47 dBuV
D2 52.47 dBuV
Marker 1 [T1]
72.47 dBuV
5.174200 GHz
Marker 2 [T1]
18.03 dBuV
5.150000 GHz
Marker 3 [T1]
18.09 dBuV
5.148600 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 84.98 dBuV
D2 64.98 dBuV
Marker 1 [T1]
83.73 dBuV
5.146160 GHz
Marker 2 [T1]
50.91 dBuV
38.720960 GHz
Marker 3 [T1]
50.48 dBuV
37.282040 GHz
Marker 4 [T1]
49.92 dBuV
34.164380 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 82.68 dBuV
D2 62.68 dBuV
Marker 1 [T1]
82.68 dBuV
5.236600 GHz
Marker 2 [T1]
30.05 dBuV
5.350000 GHz
Marker 3 [T1]
31.55 dBuV
5.416200 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
72.70 dBuV
5.234200 GHz
Marker 2 [T1]
18.71 dBuV
5.350000 GHz
Marker 3 [T1]
19.44 dBuV
5.426200 GHz
D1 72.7 dBuV
D2 52.7 dBuV
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
80.90 dBuV
5.226100 GHz
Marker 2 [T1]
49.75 dBuV
33.285040 GHz
Marker 3 [T1]
49.44 dBuV
38.880840 GHz
Marker 4 [T1]
49.22 dBuV
39.040720 GHz
D1 82.68 dBuV
D2 62.68 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11n (20MHz)

RESTRICT BAND (4500 ~ 5150 MHz)

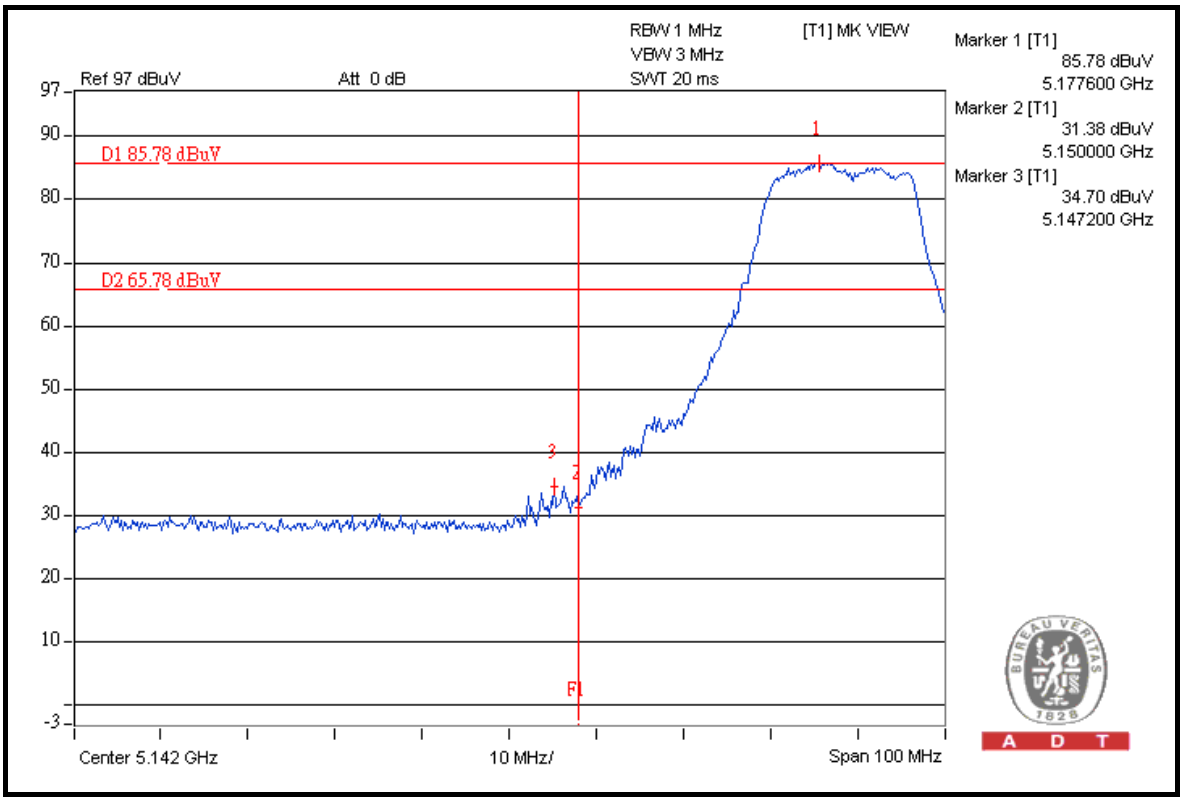
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5180.00 (PK)	113.2	51.08	62.12	74.00
5180.00 (AV)	99.2	53.98	45.22	54.00

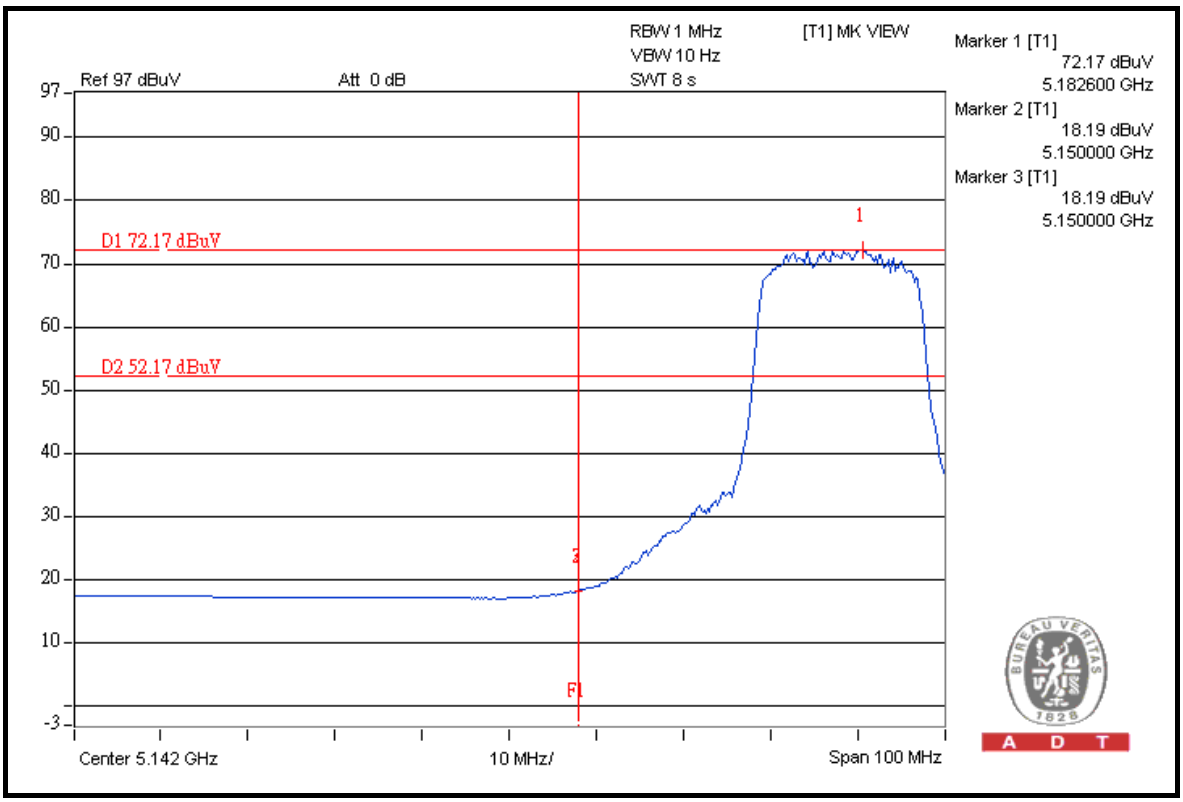
RESTRICT BAND (5350 ~ 5460 MHz)

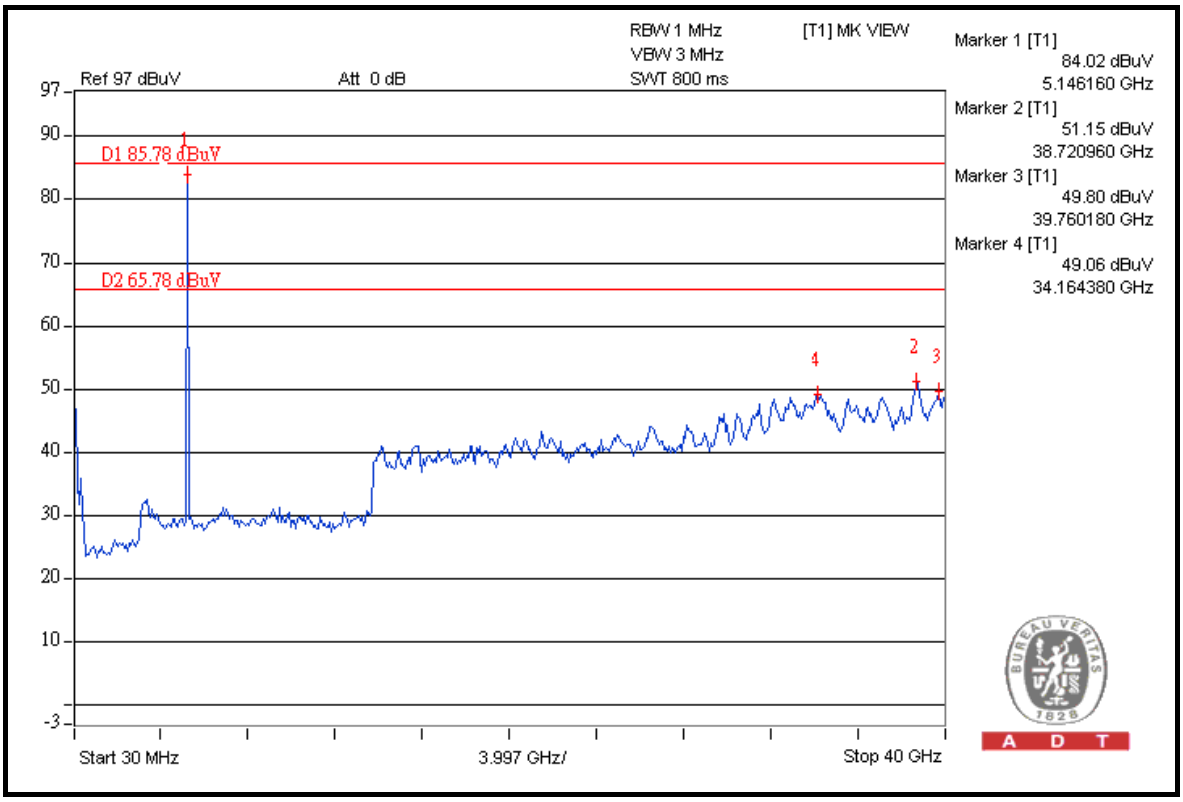
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5240.00 (PK)	113.5	53.10	60.40	74.00
5240.00 (AV)	99.6	54.10	45.50	54.00

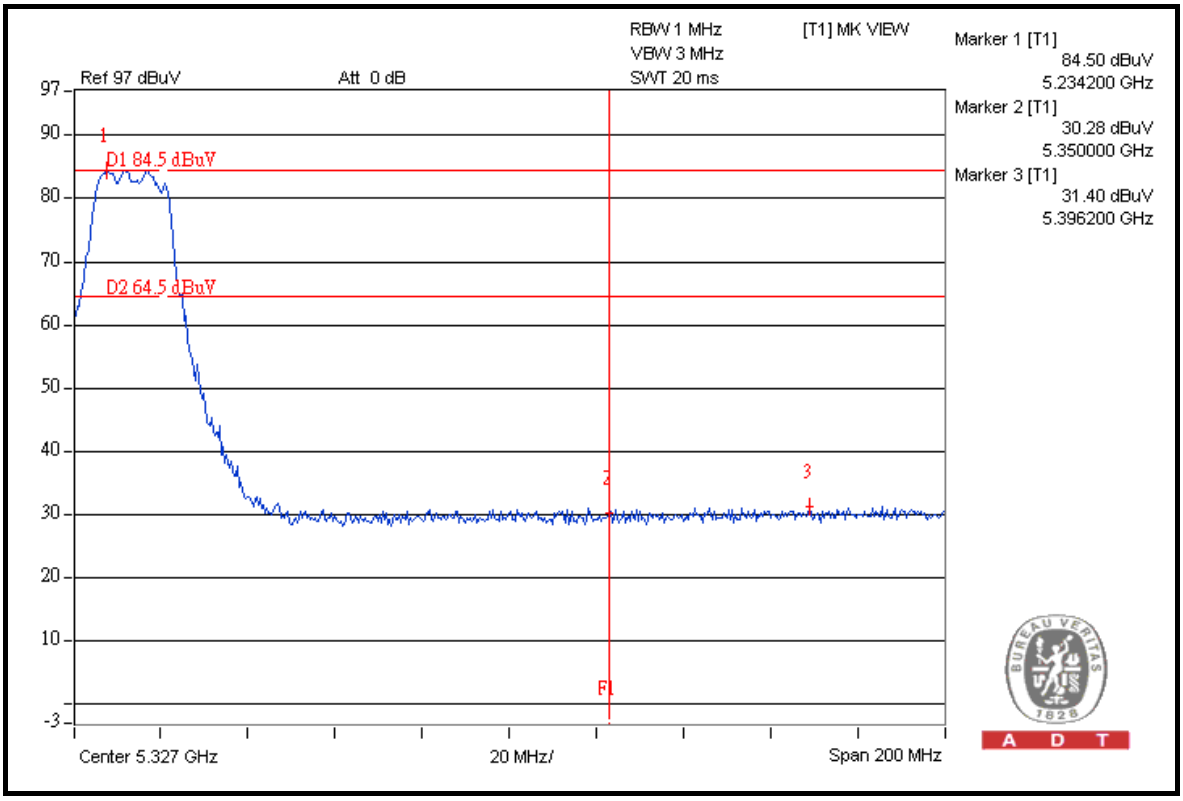
NOTE:

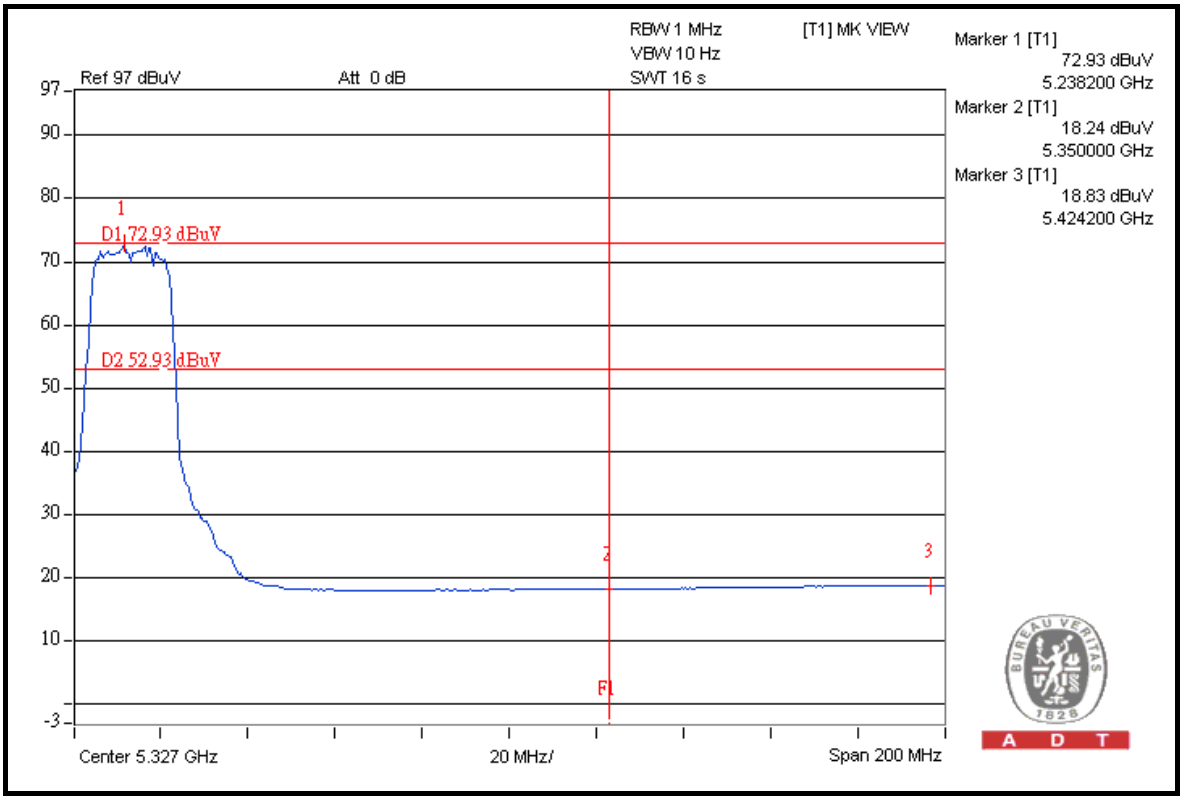
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

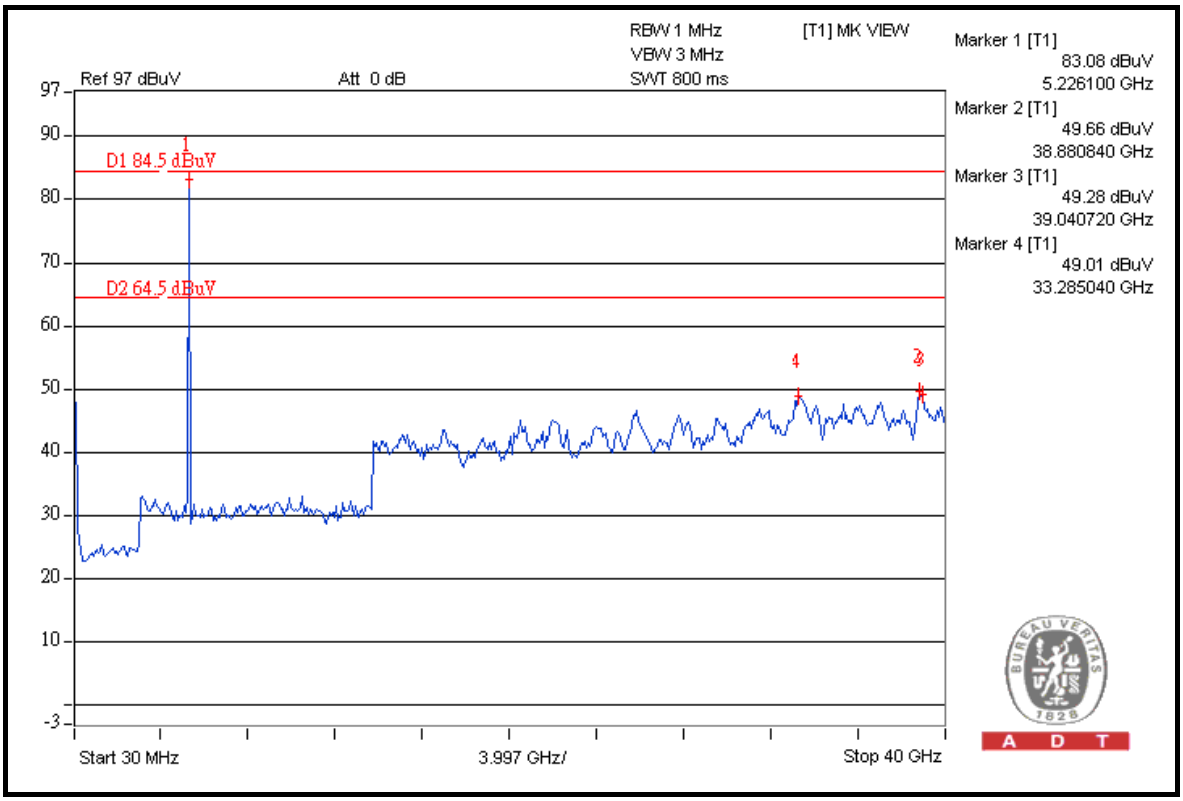

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 85.78 dBuV
D2 65.78 dBuV
Marker 1 [T1]
85.78 dBuV
5.177600 GHz
Marker 2 [T1]
31.38 dBuV
5.150000 GHz
Marker 3 [T1]
34.70 dBuV
5.147200 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 72.17 dBuV
D2 52.17 dBuV
Marker 1 [T1]
72.17 dBuV
5.182600 GHz
Marker 2 [T1]
18.19 dBuV
5.150000 GHz
Marker 3 [T1]
18.19 dBuV
5.150000 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 85.78 dBuV
D2 65.78 dBuV
Marker 1 [T1]
84.02 dBuV
5.146160 GHz
Marker 2 [T1]
51.15 dBuV
38.720960 GHz
Marker 3 [T1]
49.80 dBuV
39.760180 GHz
Marker 4 [T1]
49.06 dBuV
34.164380 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 84.5 dBuV
D2 64.5 dBuV
Marker 1 [T1]
84.50 dBuV
5.234200 GHz
Marker 2 [T1]
30.28 dBuV
5.350000 GHz
Marker 3 [T1]
31.40 dBuV
5.396200 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
72.93 dBuV
5.238200 GHz
Marker 2 [T1]
18.24 dBuV
5.350000 GHz
Marker 3 [T1]
18.83 dBuV
5.424200 GHz
D1 72.93 dBuV
D2 52.93 dBuV
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
83.08 dBuV
5.226100 GHz
Marker 2 [T1]
49.66 dBuV
38.880840 GHz
Marker 3 [T1]
49.28 dBuV
39.040720 GHz
Marker 4 [T1]
49.01 dBuV
33.285040 GHz
D1 84.5 dBuV
D2 64.5 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11n (40MHz)

RESTRICT BAND (4500 ~ 5150 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5190.00 (PK)	110.4	40.75	69.65	74.00
5190.00 (AV)	95.3	43.21	52.09	54.00

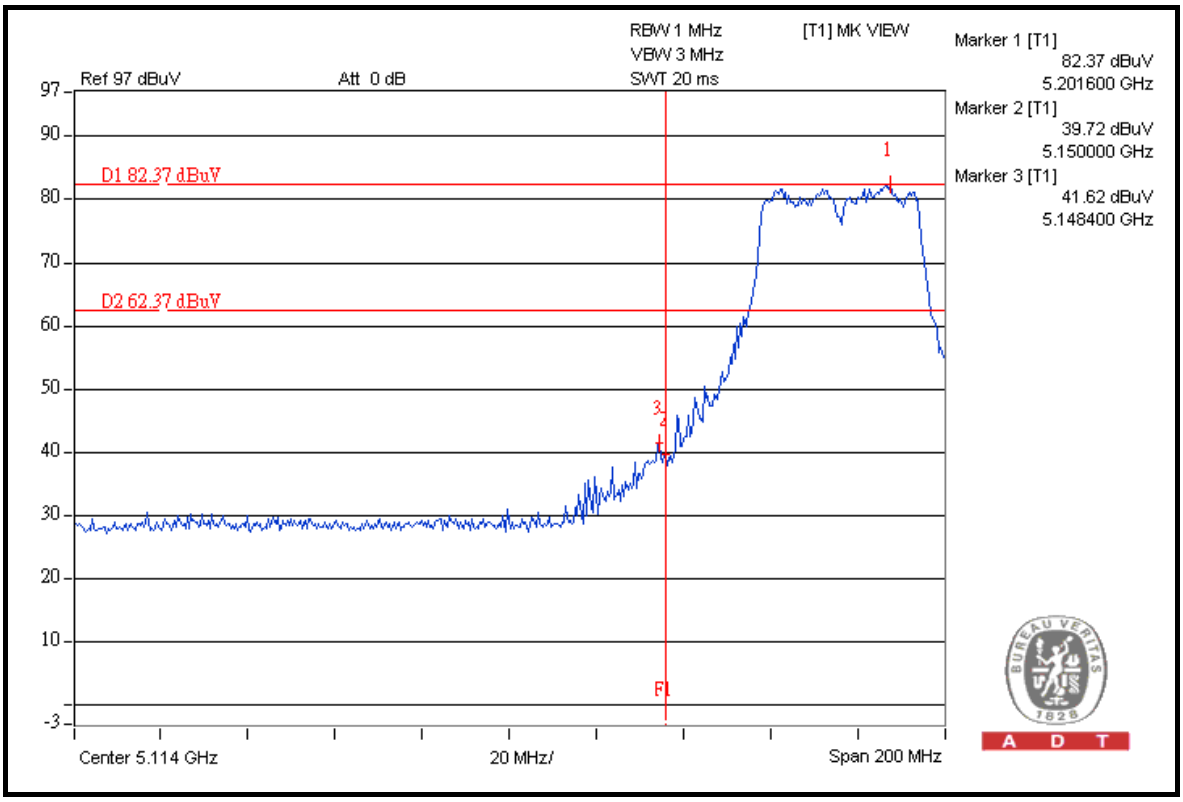
RESTRICT BAND (5350 ~ 5460 MHz)

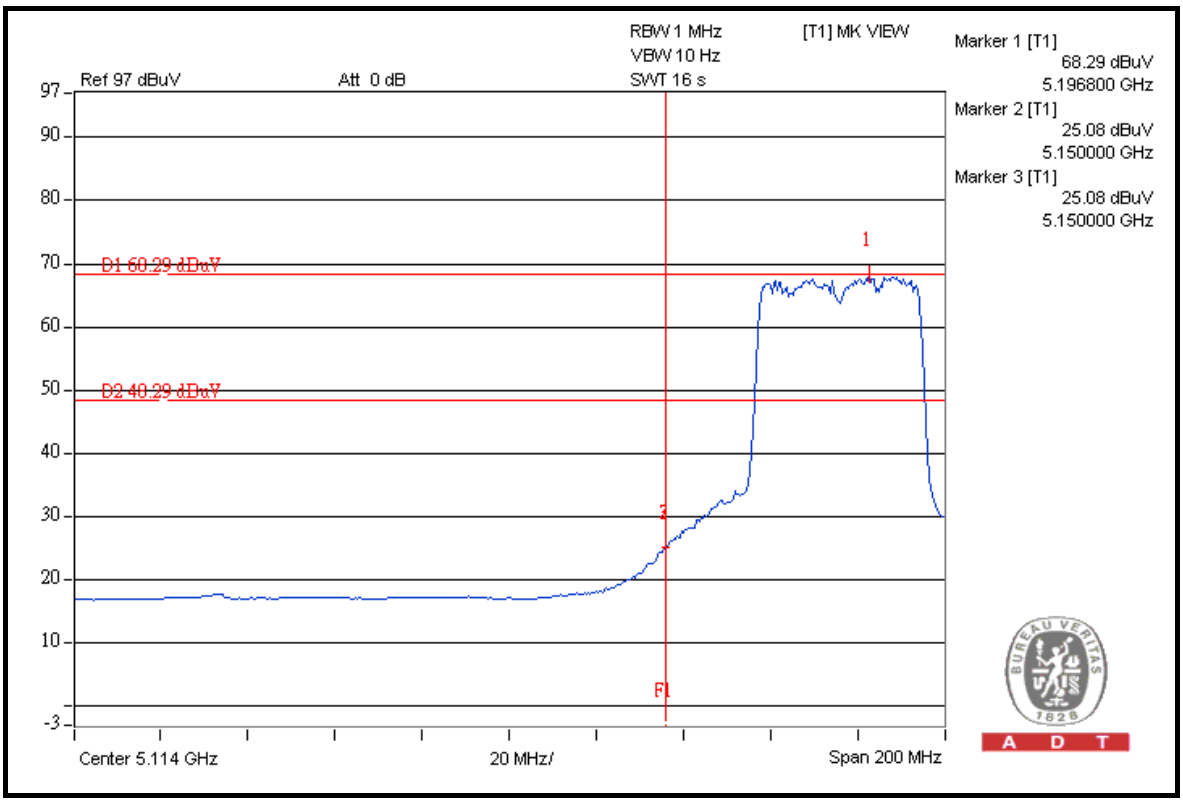
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5230.00 (PK)	110.6	49.30	61.30	74.00
5230.00 (AV)	95.5	48.66	46.84	54.00

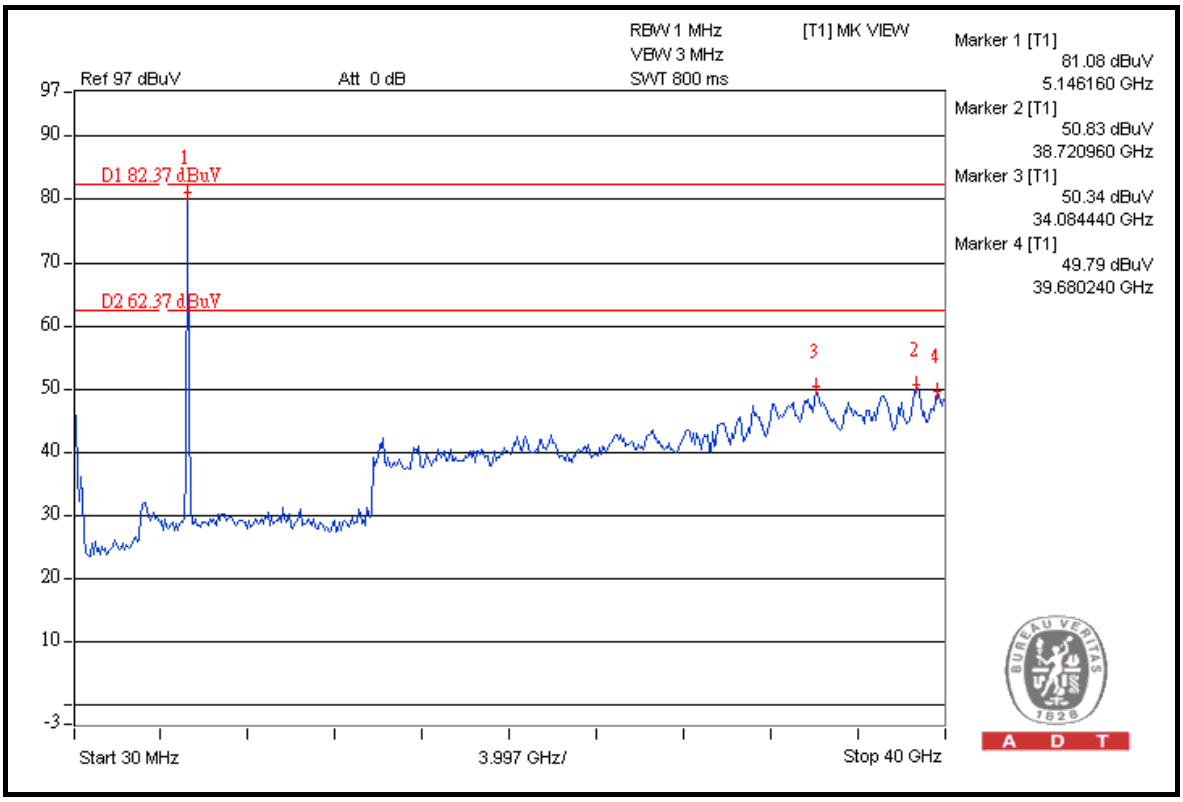
NOTE:

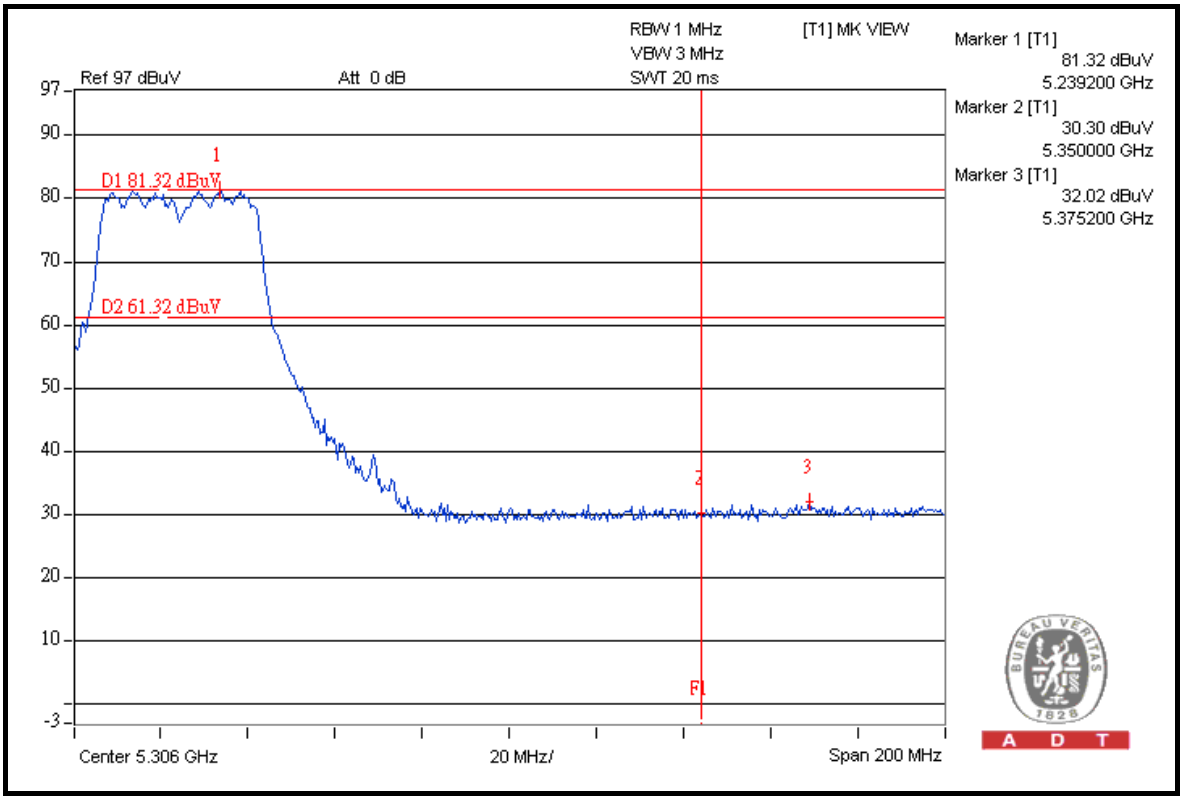
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.

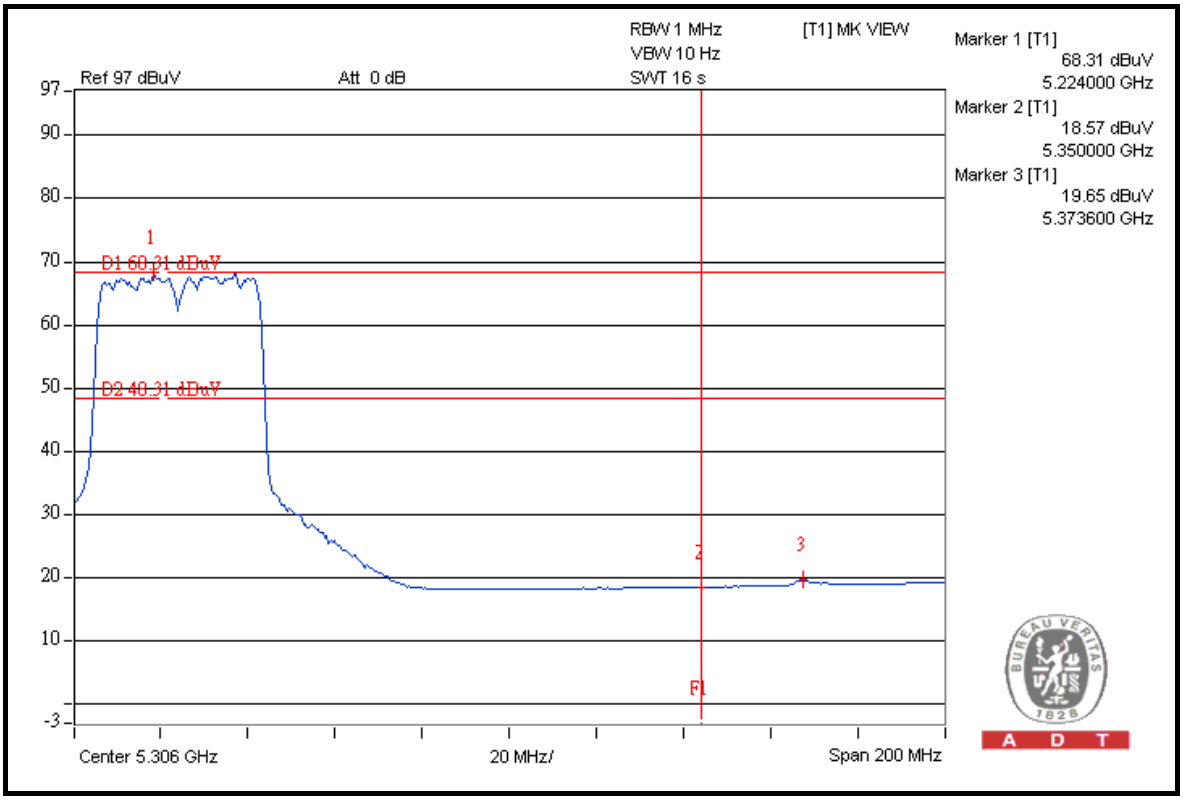
2. Maximum field strength in restrict band = Fundamental emission – Delta.

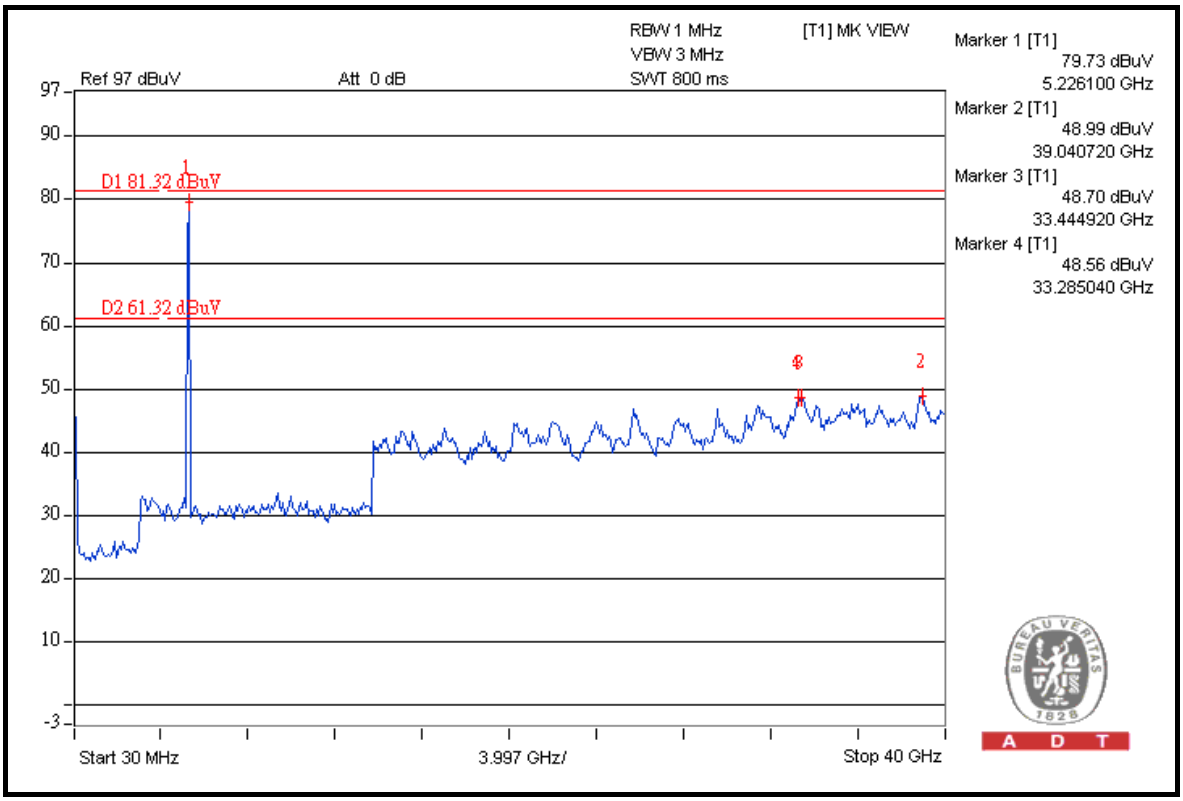

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
82.37 dBuV
5.201600 GHz
Marker 2 [T1]
39.72 dBuV
5.150000 GHz
Marker 3 [T1]
41.62 dBuV
5.148400 GHz
D1 82.37 dBuV
D2 62.37 dBuV
Center 5.114 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
68.29 dBuV
5.196800 GHz
Marker 2 [T1]
25.08 dBuV
5.150000 GHz
Marker 3 [T1]
25.08 dBuV
5.150000 GHz
D1 60.29 dBuV
D2 40.29 dBuV
Center 5.114 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 82.37 dBuV
D2 62.37 dBuV
Marker 1 [T1]
81.08 dBuV
5.146160 GHz
Marker 2 [T1]
50.83 dBuV
38.720960 GHz
Marker 3 [T1]
50.34 dBuV
34.084440 GHz
Marker 4 [T1]
49.79 dBuV
39.680240 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 81.32 dBuV
D2 61.32 dBuV
Marker 1 [T1]
81.32 dBuV
5.239200 GHz
Marker 2 [T1]
30.30 dBuV
5.350000 GHz
Marker 3 [T1]
32.02 dBuV
5.375200 GHz
Center 5.306 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
68.31 dBuV
5.224000 GHz
Marker 2 [T1]
18.57 dBuV
5.350000 GHz
Marker 3 [T1]
19.65 dBuV
5.373600 GHz
D1 60.31 dBuV
D2 40.31 dBuV
Center 5.306 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
79.73 dBuV
5.226100 GHz
Marker 2 [T1]
48.99 dBuV
39.040720 GHz
Marker 3 [T1]
48.70 dBuV
33.444920 GHz
Marker 4 [T1]
48.56 dBuV
33.285040 GHz
D1 81.32 dBuV
D2 61.32 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

TEST MODE C

802.11a

RESTRICT BAND (4500 ~ 5150 MHz)

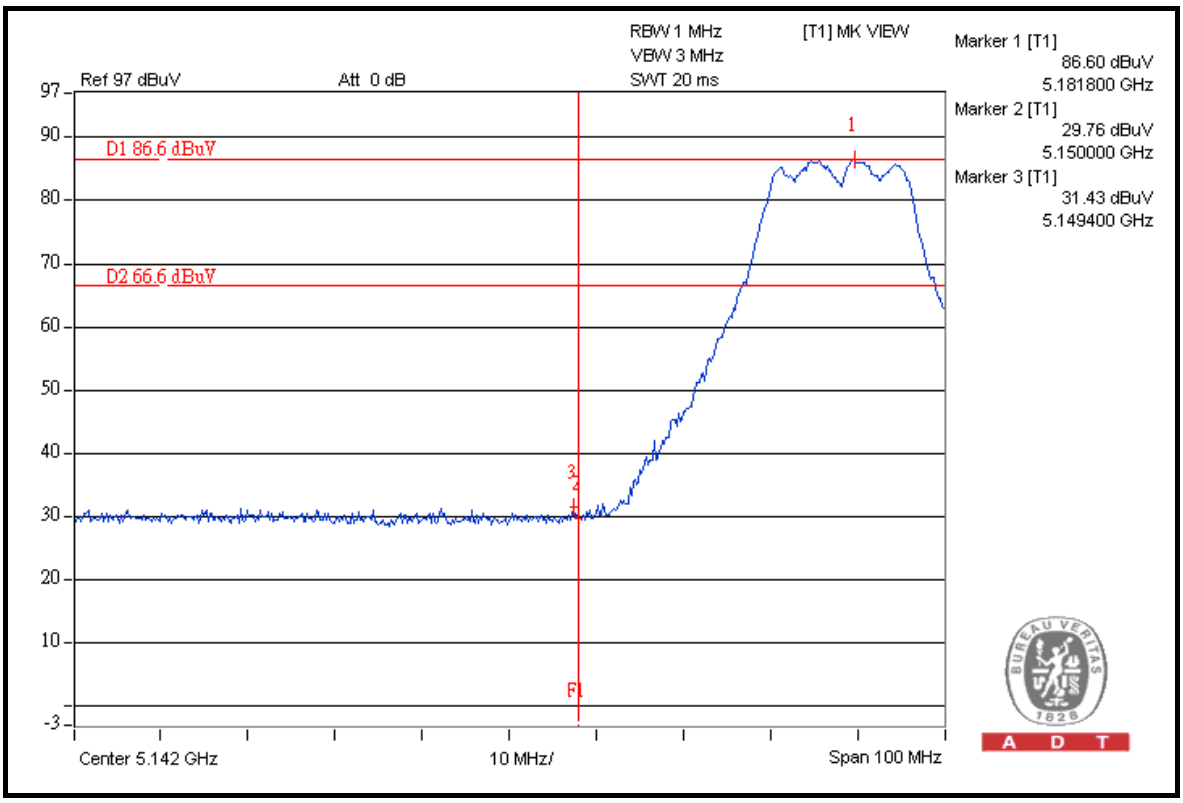
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5180.00 (PK)	114.4	55.17	59.23	74.00
5180.00 (AV)	101.1	55.44	45.66	54.00

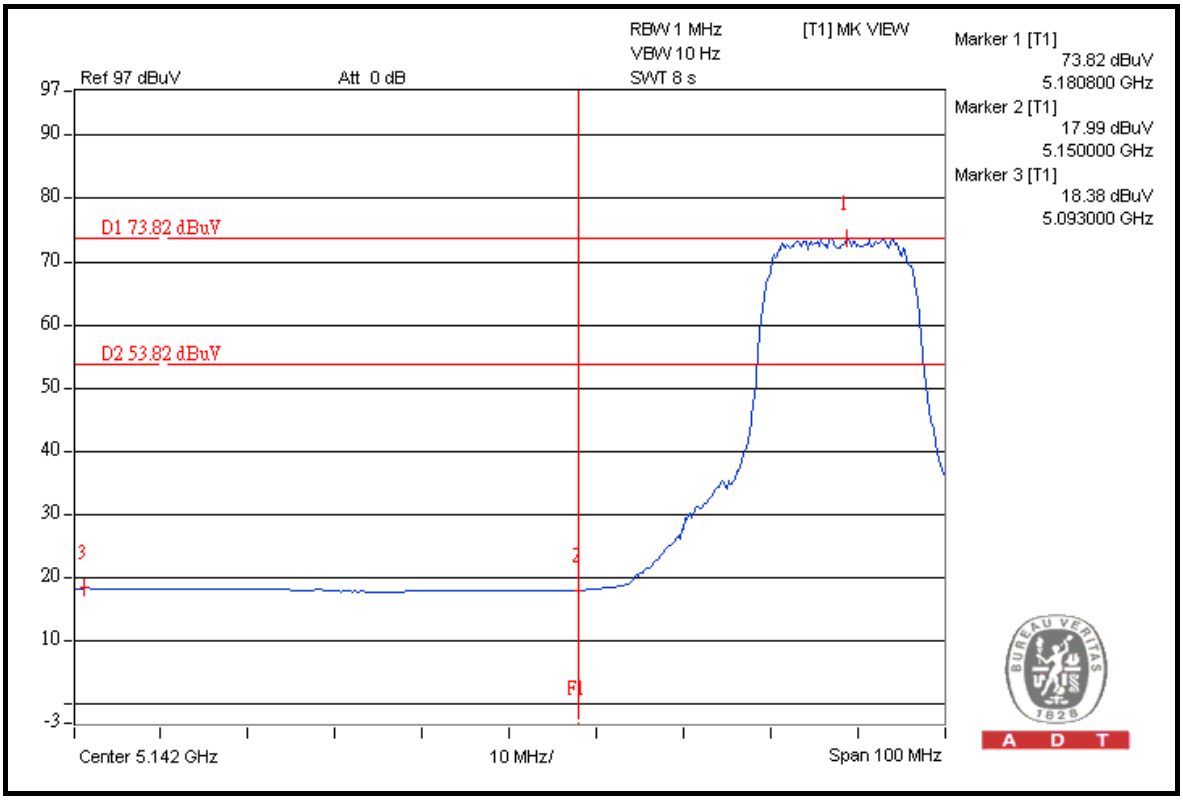
RESTRICT BAND (5350 ~ 5460 MHz)

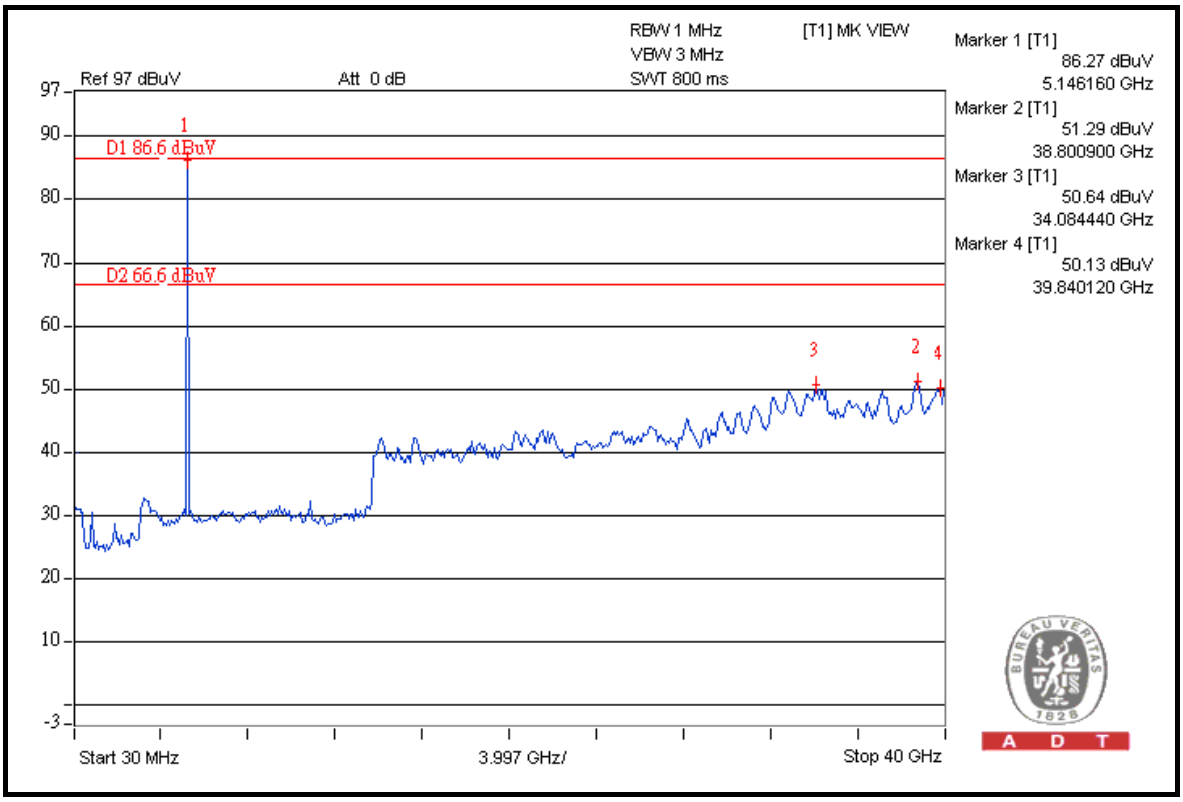
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5240.00 (PK)	114.5	53.84	60.66	74.00
5240.00 (AV)	101.3	54.70	46.60	54.00

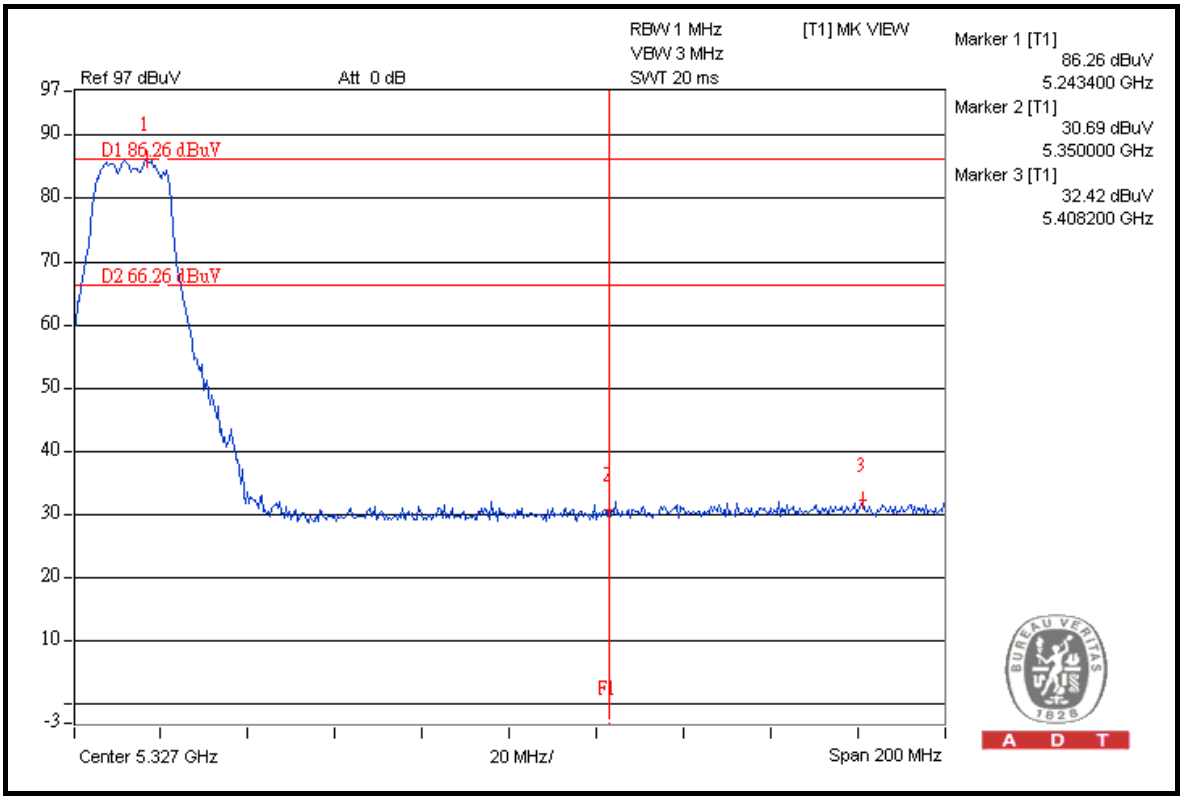
NOTE:

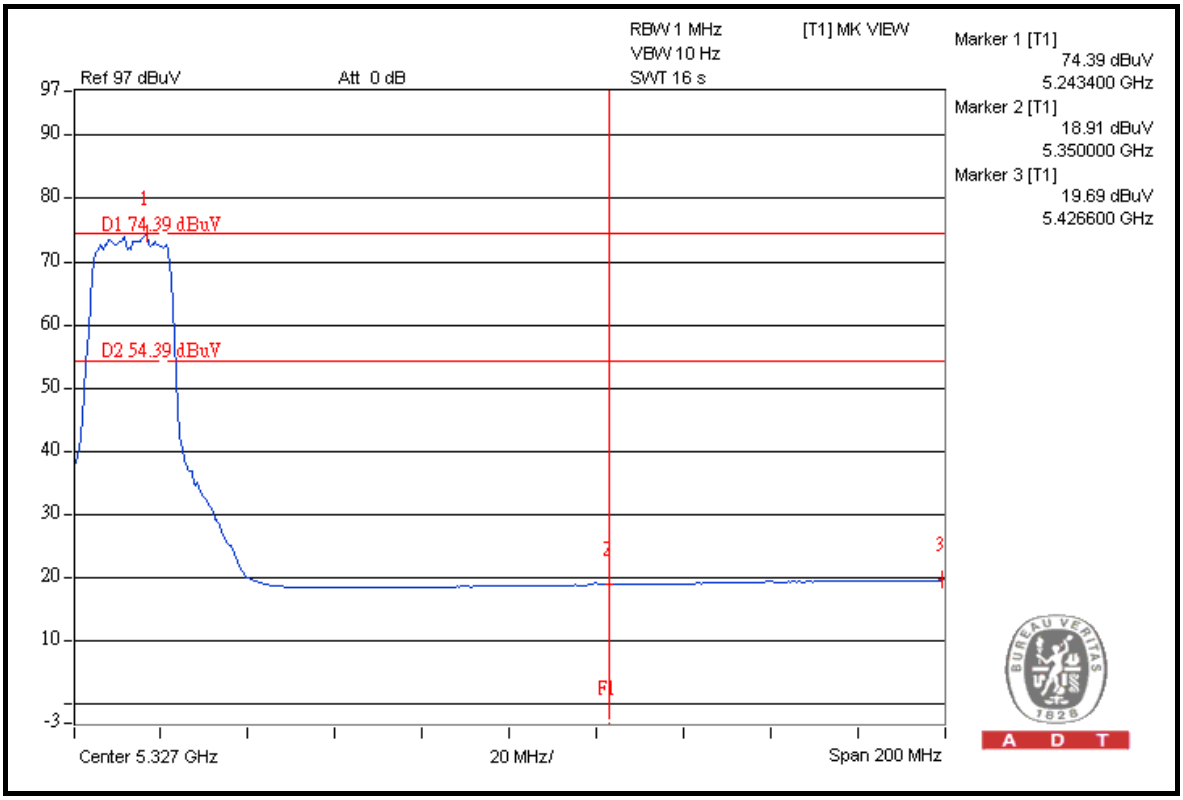
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

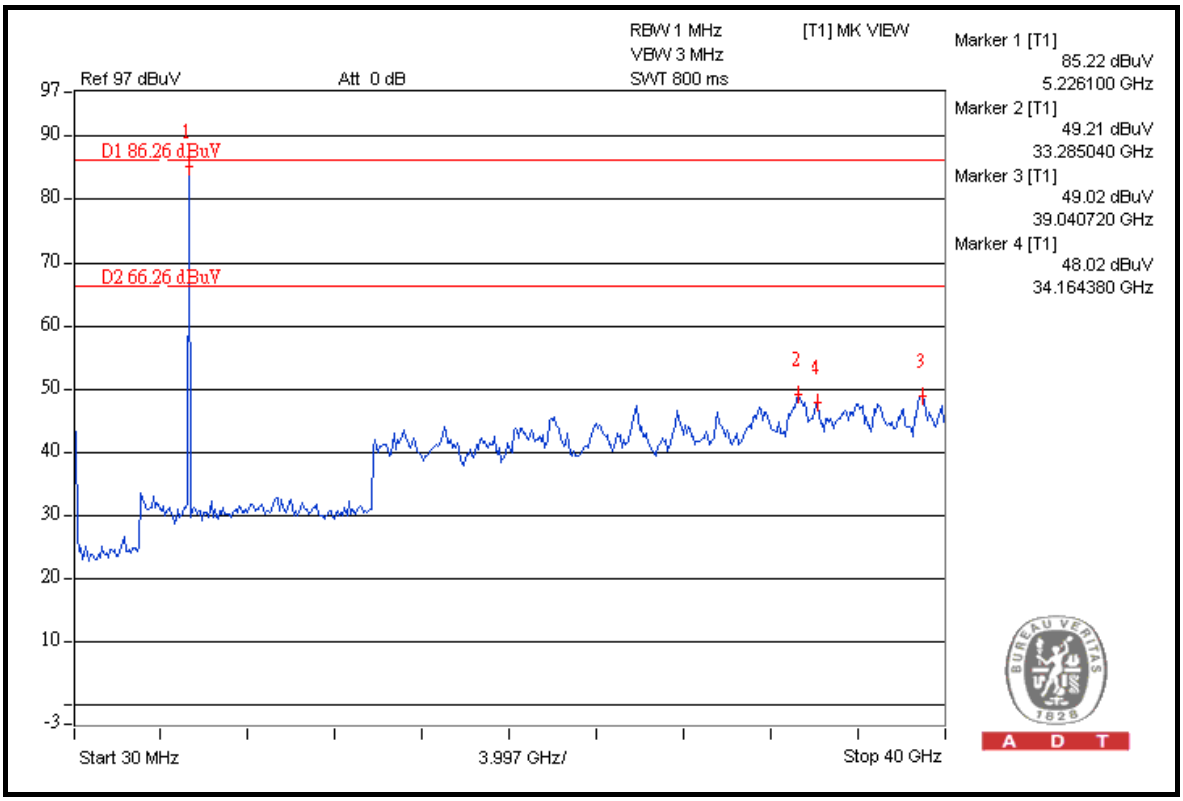

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 86.6 dBuV
D2 66.6 dBuV
Marker 1 [T1]
86.60 dBuV
5.181800 GHz
Marker 2 [T1]
29.76 dBuV
5.150000 GHz
Marker 3 [T1]
31.43 dBuV
5.149400 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 73.82 dBuV
D2 53.82 dBuV
Marker 1 [T1]
73.82 dBuV
5.180800 GHz
Marker 2 [T1]
17.99 dBuV
5.150000 GHz
Marker 3 [T1]
18.38 dBuV
5.093000 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 86.6 dBuV
D2 66.6 dBuV
Marker 1 [T1]
86.27 dBuV
5.146160 GHz
Marker 2 [T1]
51.29 dBuV
38.800900 GHz
Marker 3 [T1]
50.64 dBuV
34.084440 GHz
Marker 4 [T1]
50.13 dBuV
39.840120 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 86.26 dBuV
D2 66.26 dBuV
Marker 1 [T1]
86.26 dBuV
5.243400 GHz
Marker 2 [T1]
30.69 dBuV
5.350000 GHz
Marker 3 [T1]
32.42 dBuV
5.408200 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
74.39 dBuV
5.243400 GHz
Marker 2 [T1]
18.91 dBuV
5.350000 GHz
Marker 3 [T1]
19.69 dBuV
5.426600 GHz
D1 74.39 dBuV
D2 54.39 dBuV
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
85.22 dBuV
5.226100 GHz
Marker 2 [T1]
49.21 dBuV
33.285040 GHz
Marker 3 [T1]
49.02 dBuV
39.040720 GHz
Marker 4 [T1]
48.02 dBuV
34.164380 GHz
D1 86.26 dBuV
D2 66.26 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11n (20MHz)

RESTRICT BAND (4500 ~ 5150 MHz)

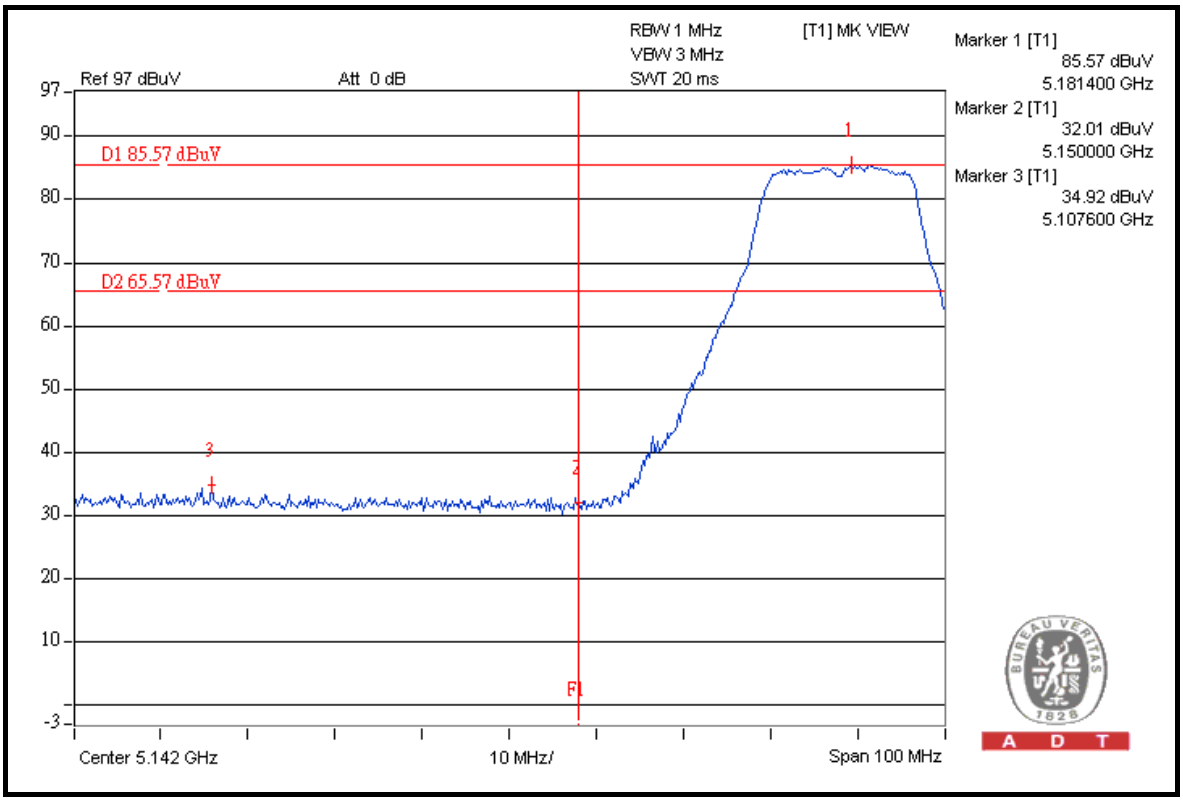
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5180.00 (PK)	114.2	50.65	63.55	74.00
5180.00 (AV)	100.9	52.73	48.17	54.00

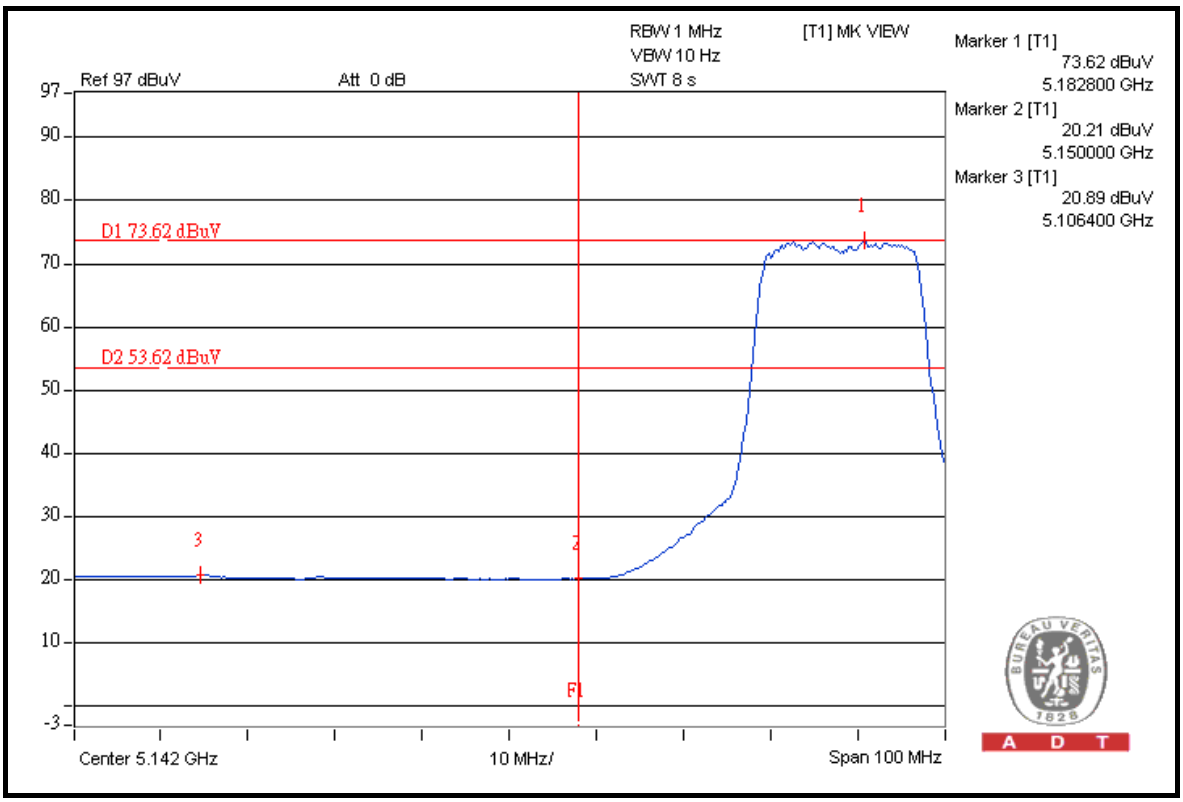
RESTRICT BAND (5350 ~ 5460 MHz)

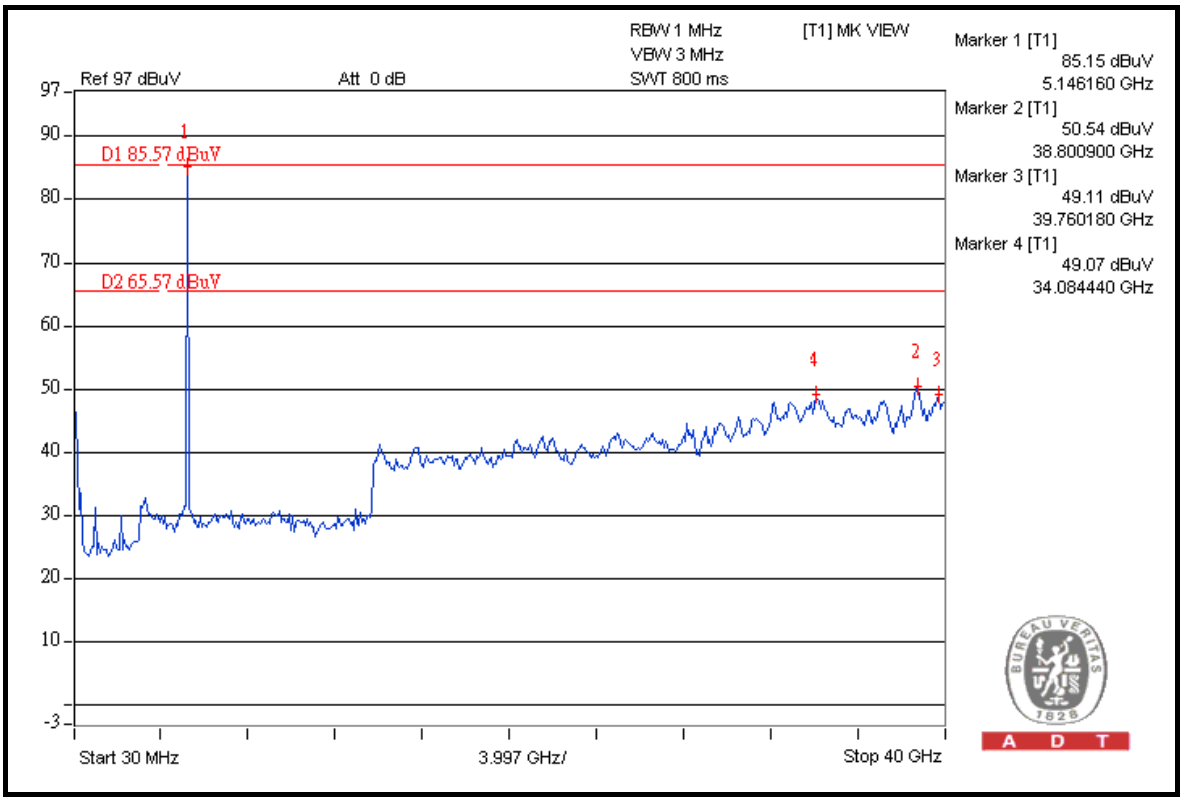
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5240.00 (PK)	114.1	52.93	61.17	74.00
5240.00 (AV)	101.0	54.04	46.96	54.00

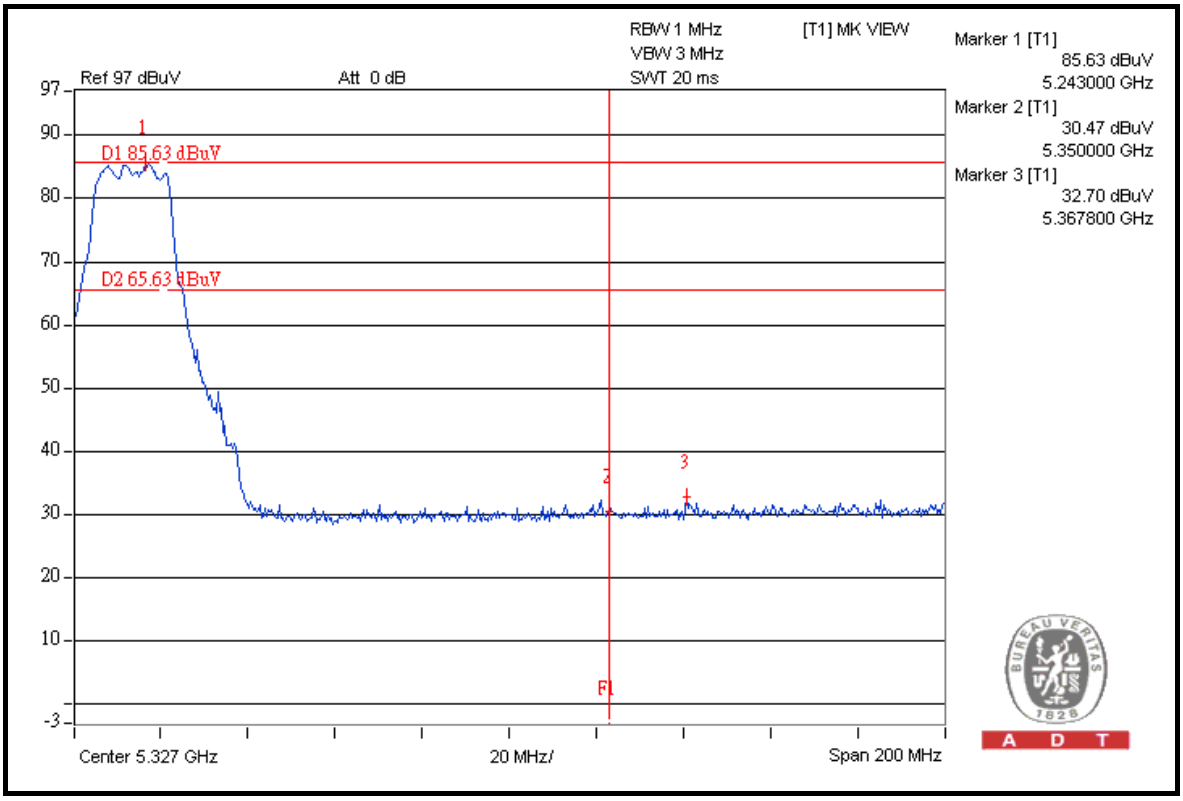
NOTE:

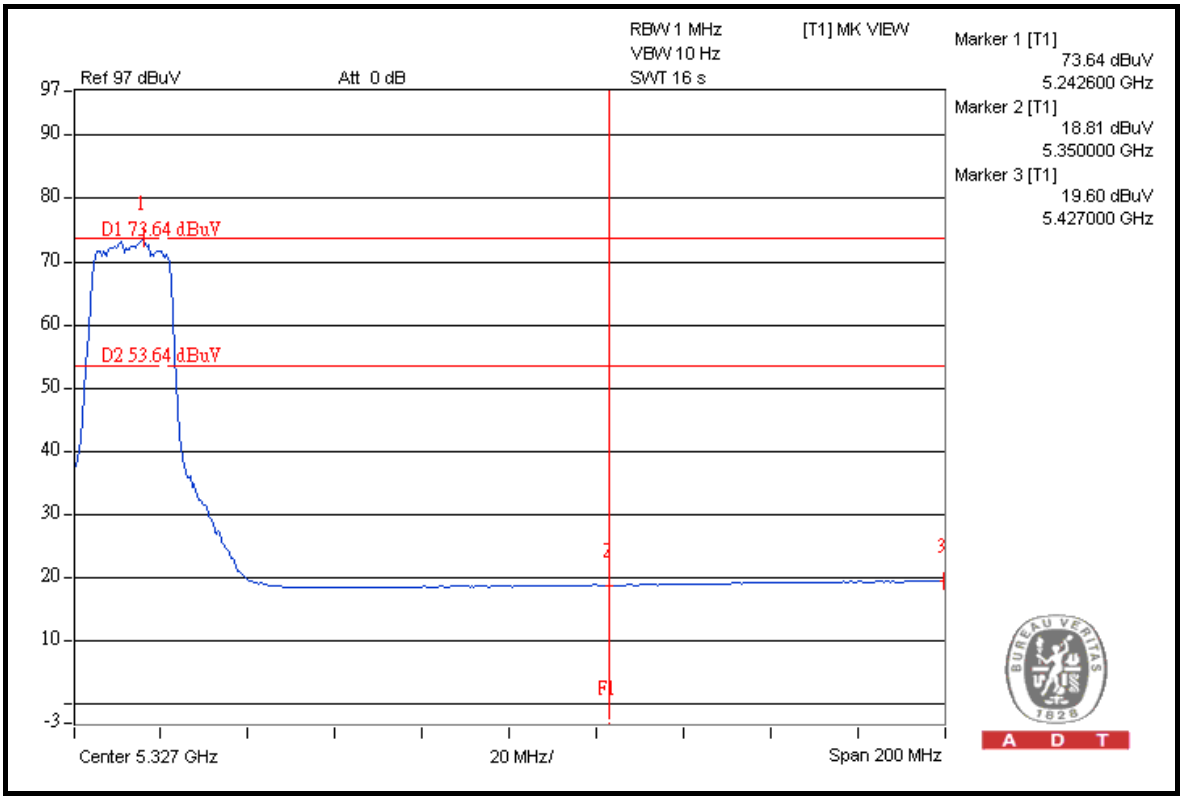
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

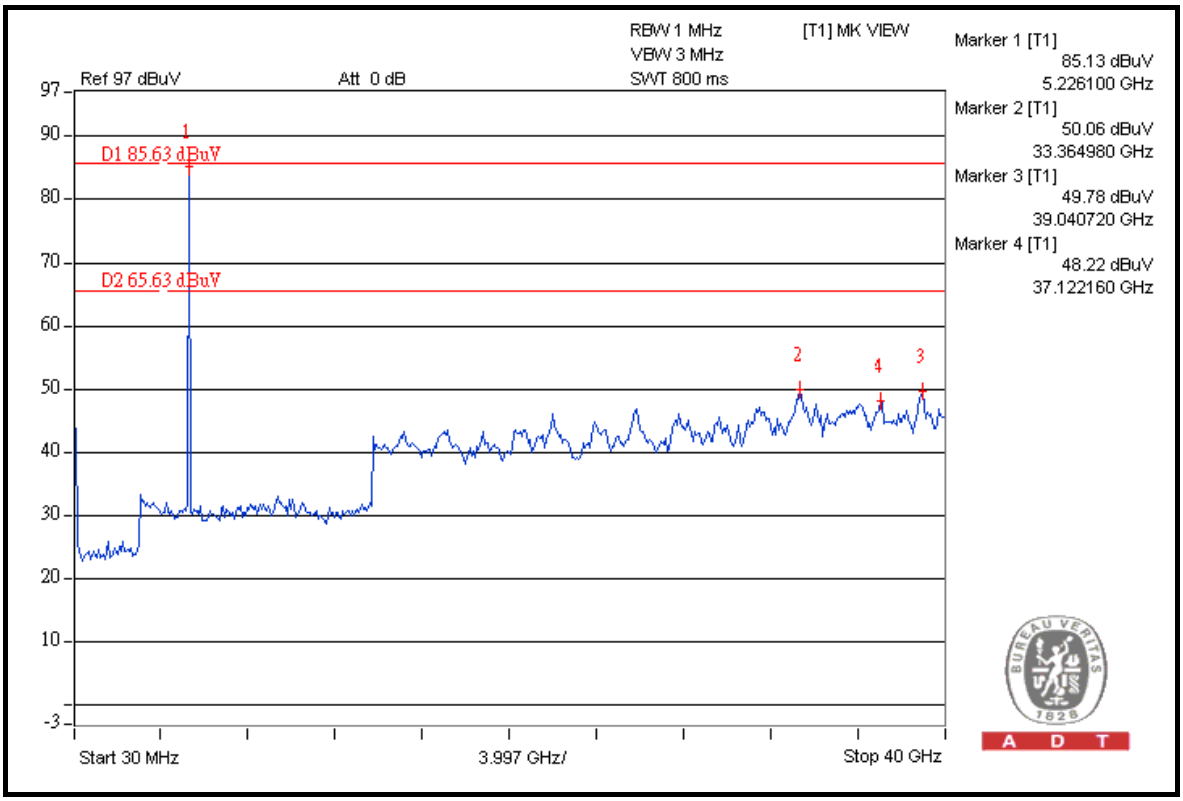

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
85.57 dBuV
5.181400 GHz
Marker 2 [T1]
32.01 dBuV
5.150000 GHz
Marker 3 [T1]
34.92 dBuV
5.107600 GHz
D1 85.57 dBuV
D2 65.57 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
73.62 dBuV
5.182800 GHz
Marker 2 [T1]
20.21 dBuV
5.150000 GHz
Marker 3 [T1]
20.89 dBuV
5.106400 GHz
D1 73.62 dBuV
D2 53.62 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 85.57 dBuV
D2 65.57 dBuV
Marker 1 [T1]
85.15 dBuV
5.146160 GHz
Marker 2 [T1]
50.54 dBuV
38.800900 GHz
Marker 3 [T1]
49.11 dBuV
39.760180 GHz
Marker 4 [T1]
49.07 dBuV
34.084440 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 85.63 dBuV
D2 65.63 dBuV
Marker 1 [T1]
85.63 dBuV
5.243000 GHz
Marker 2 [T1]
30.47 dBuV
5.350000 GHz
Marker 3 [T1]
32.70 dBuV
5.367800 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
73.64 dBuV
5.242600 GHz
Marker 2 [T1]
18.81 dBuV
5.350000 GHz
Marker 3 [T1]
19.60 dBuV
5.427000 GHz
D1 73.64 dBuV
D2 53.64 dBuV
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
85.13 dBuV
5.226100 GHz
Marker 2 [T1]
50.06 dBuV
33.364980 GHz
Marker 3 [T1]
49.78 dBuV
39.040720 GHz
Marker 4 [T1]
48.22 dBuV
37.122160 GHz
D1 85.63 dBuV
D2 65.63 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11n (40MHz)

RESTRICT BAND (4500 ~ 5150 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5190.00 (PK)	111.1	43.08	68.02	74.00
5190.00 (AV)	96.9	47.83	49.07	54.00

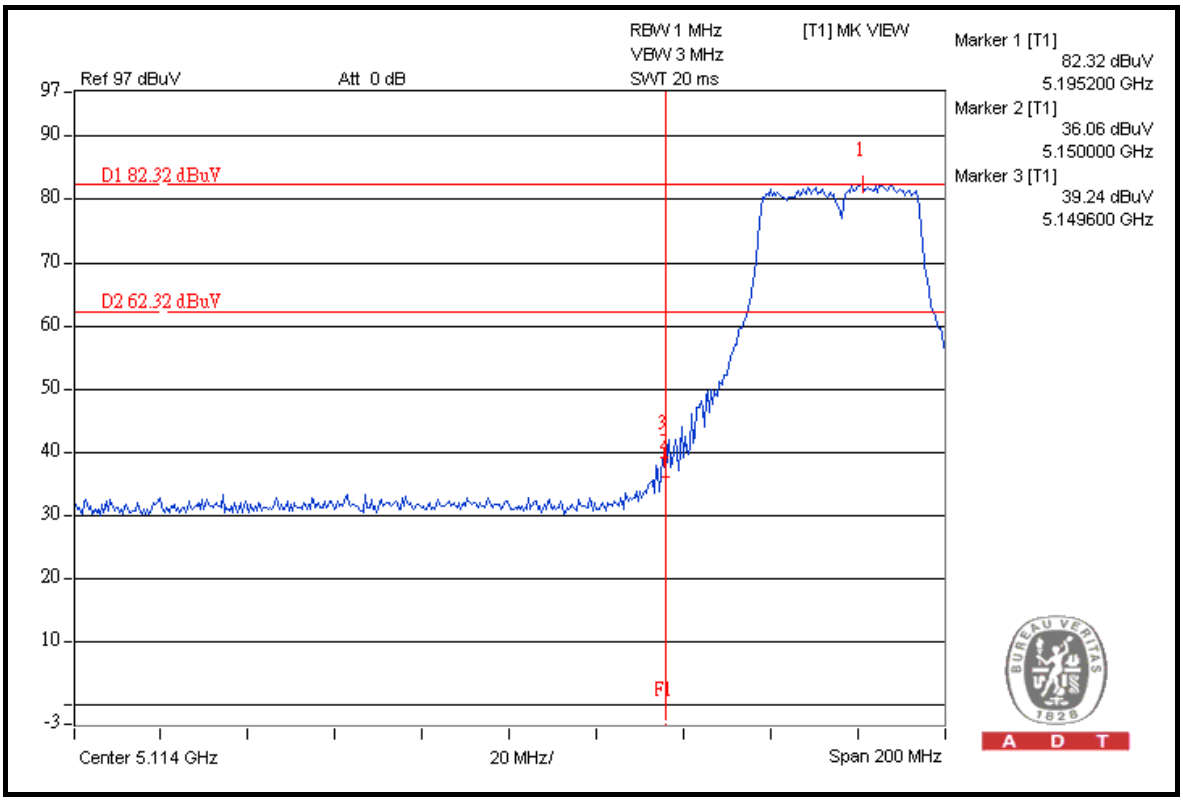
RESTRICT BAND (5350 ~ 5460 MHz)

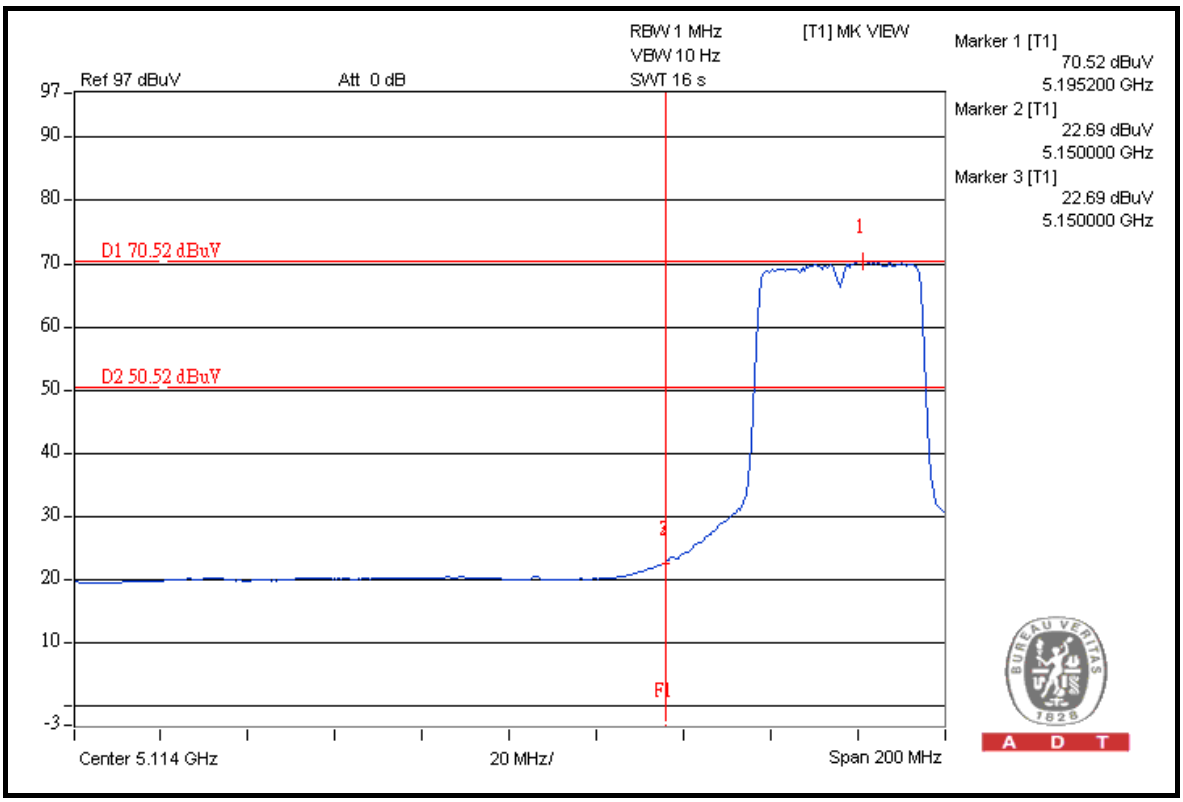
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5230.00 (PK)	111.3	49.52	61.78	74.00
5230.00 (AV)	97.1	49.31	47.79	54.00

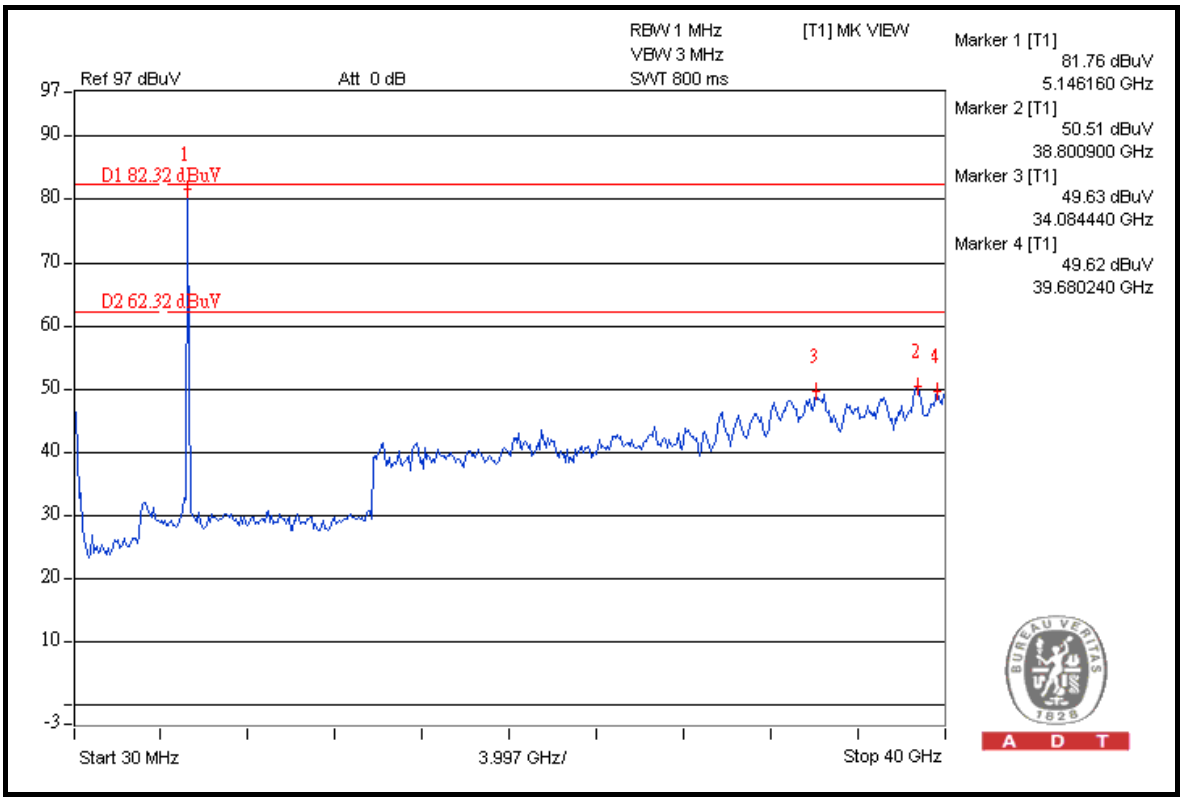
NOTE:

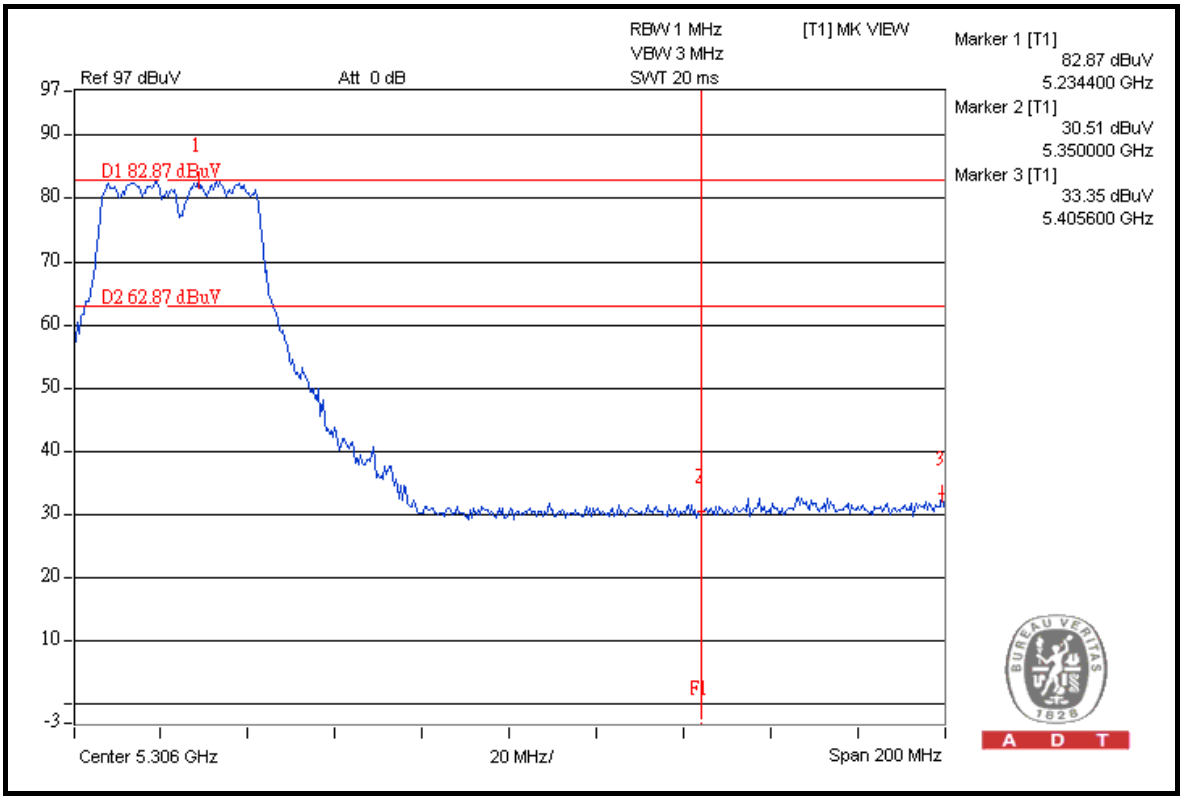
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.

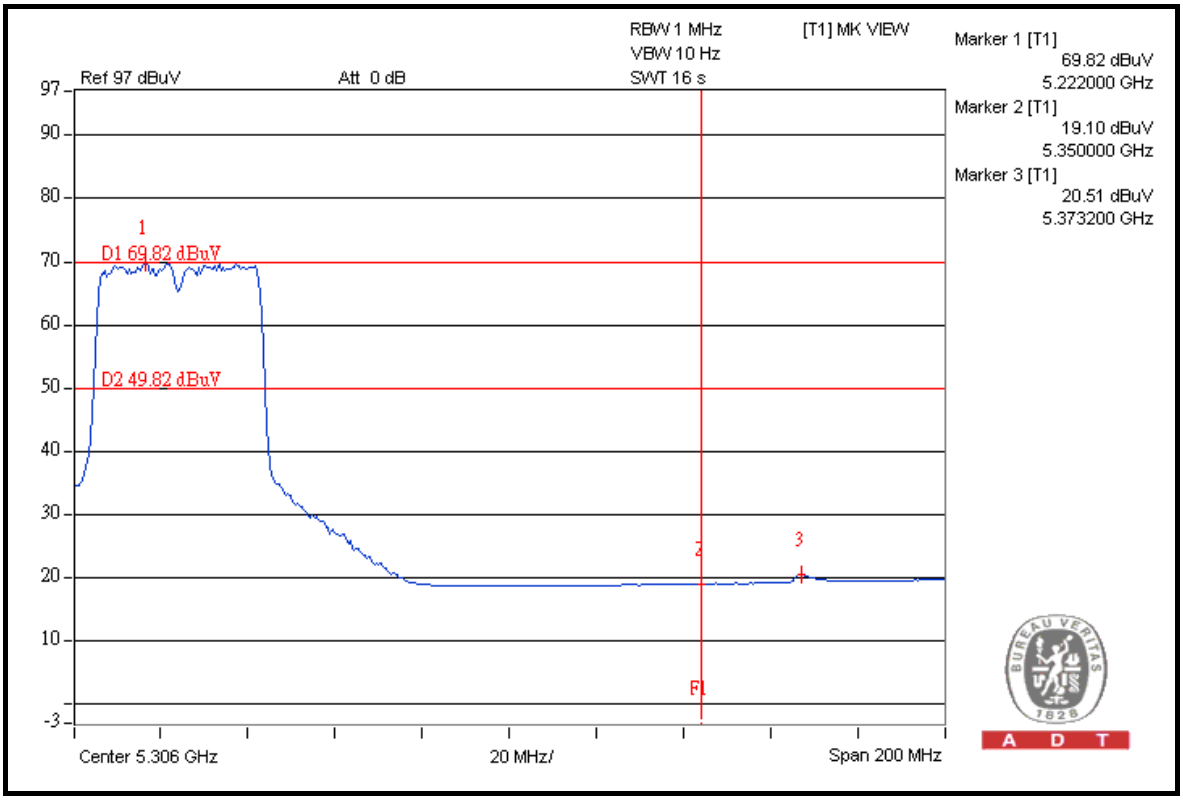
2. Maximum field strength in restrict band = Fundamental emission – Delta.

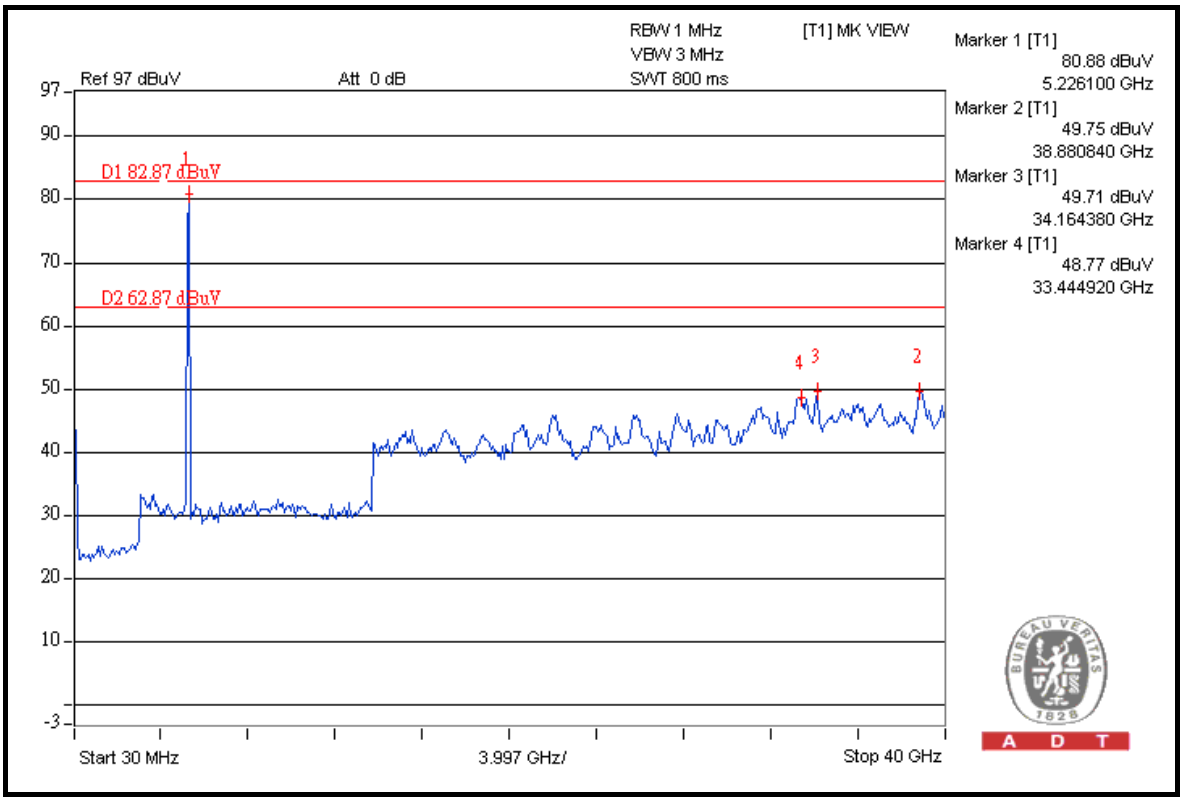

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
82.32 dBuV
5.195200 GHz
Marker 2 [T1]
36.06 dBuV
5.150000 GHz
Marker 3 [T1]
39.24 dBuV
5.149600 GHz
D1 82.32 dBuV
D2 62.32 dBuV
Center 5.114 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
70.52 dBuV
5.195200 GHz
Marker 2 [T1]
22.69 dBuV
5.150000 GHz
Marker 3 [T1]
22.69 dBuV
5.150000 GHz
D1 70.52 dBuV
D2 50.52 dBuV
Center 5.114 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 82.32 dBuV
D2 62.32 dBuV
Marker 1 [T1]
81.76 dBuV
5.146160 GHz
Marker 2 [T1]
50.51 dBuV
38.800900 GHz
Marker 3 [T1]
49.63 dBuV
34.084440 GHz
Marker 4 [T1]
49.62 dBuV
39.680240 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 82.87 dBuV
D2 62.87 dBuV
Marker 1 [T1]
82.87 dBuV
5.234400 GHz
Marker 2 [T1]
30.51 dBuV
5.350000 GHz
Marker 3 [T1]
33.35 dBuV
5.405600 GHz
Center 5.306 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
69.82 dBuV
5.222000 GHz
Marker 2 [T1]
19.10 dBuV
5.350000 GHz
Marker 3 [T1]
20.51 dBuV
5.373200 GHz
D1 69.82 dBuV
D2 49.82 dBuV
Center 5.306 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
80.88 dBuV
5.226100 GHz
Marker 2 [T1]
49.75 dBuV
38.880840 GHz
Marker 3 [T1]
49.71 dBuV
34.164380 GHz
Marker 4 [T1]
48.77 dBuV
33.444920 GHz
D1 82.87 dBuV
D2 62.87 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

TEST MODE D

802.11a

RESTRICT BAND (4500 ~ 5150 MHz)

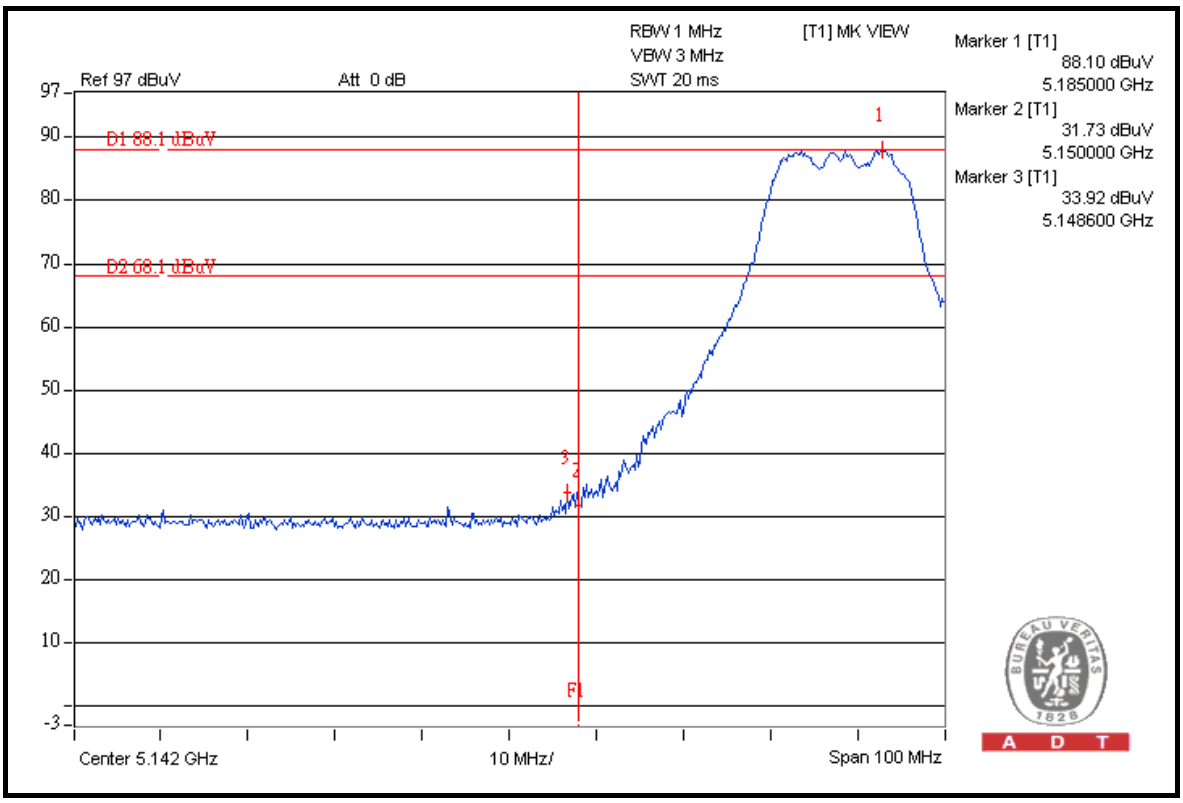
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5180.00 (PK)	115.6	54.18	61.42	74.00
5180.00 (AV)	102.2	58.52	43.68	54.00

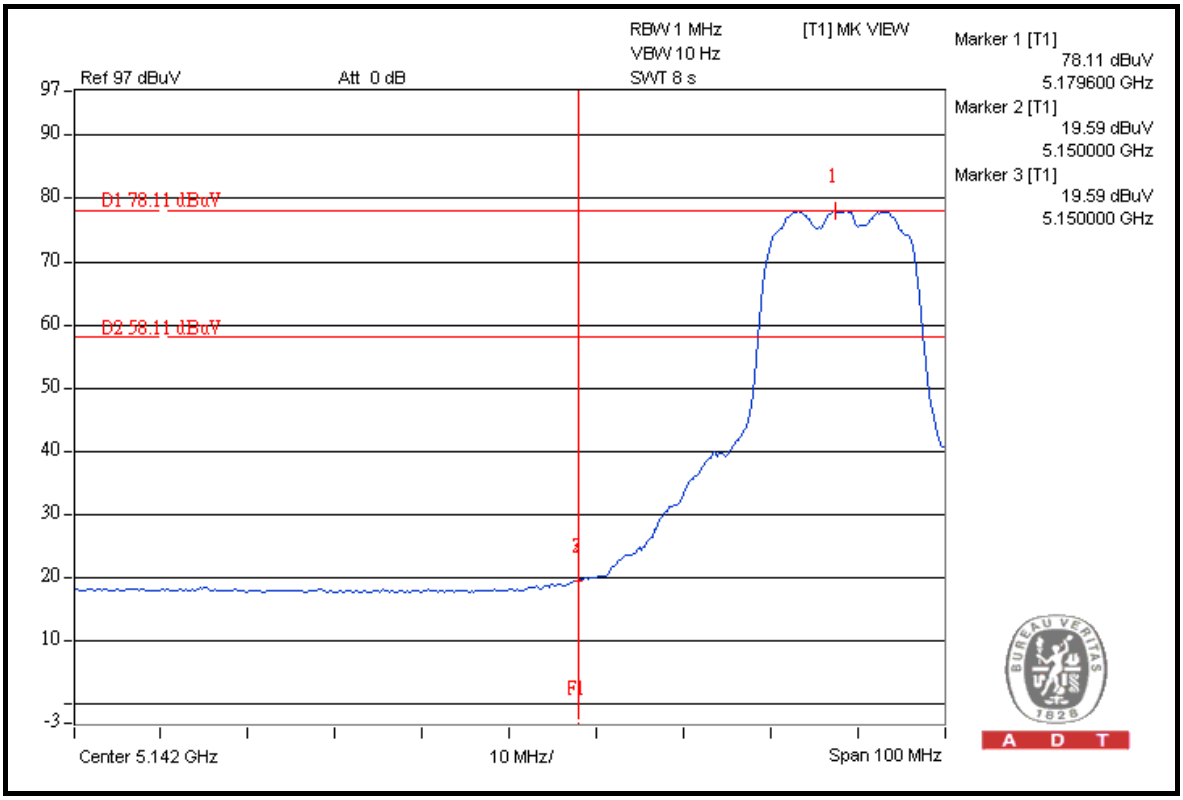
RESTRICT BAND (5350 ~ 5460 MHz)

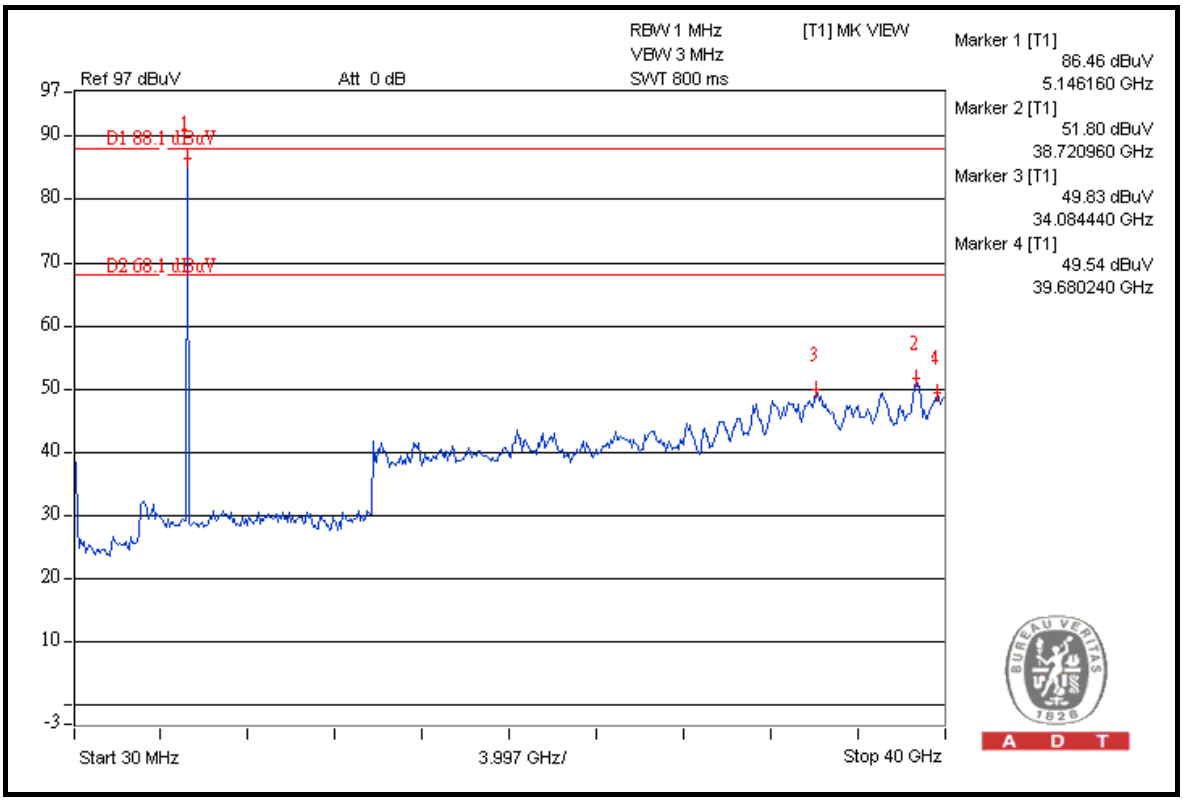
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5240.00 (PK)	116.2	53.99	62.21	74.00
5240.00 (AV)	102.3	55.36	46.94	54.00

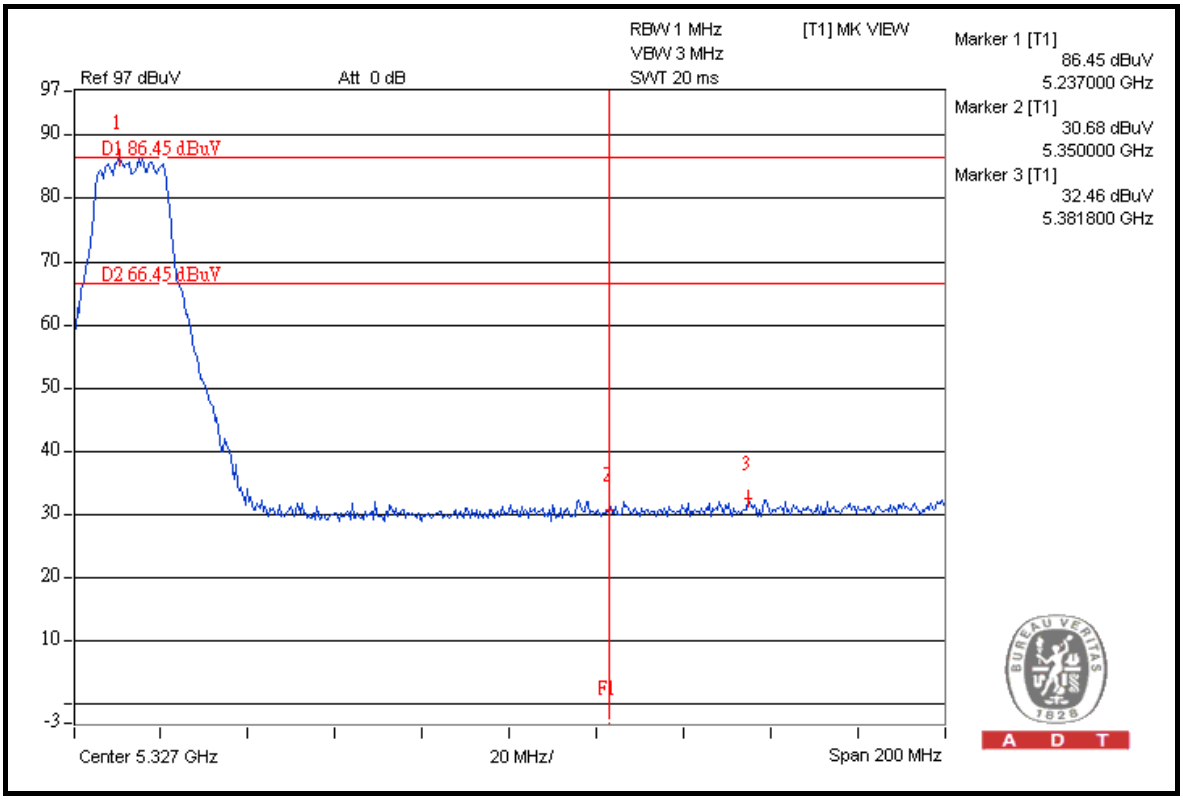
NOTE:

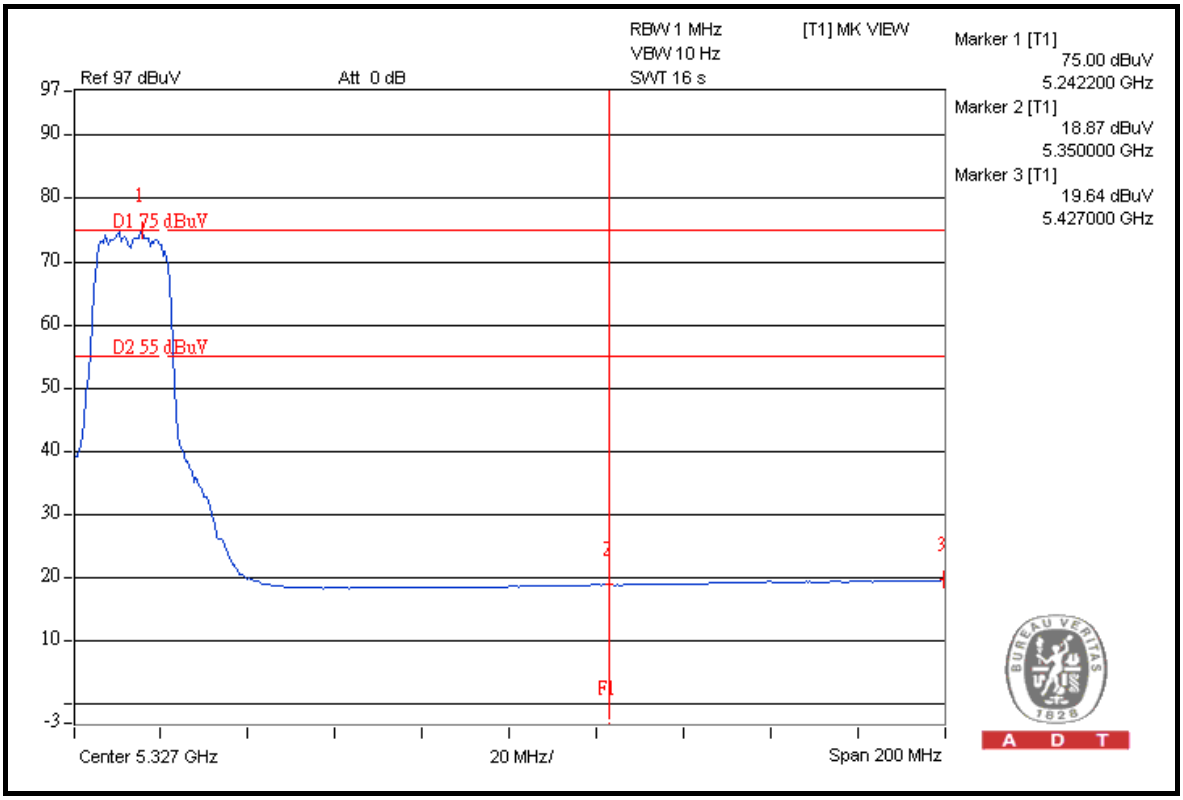
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

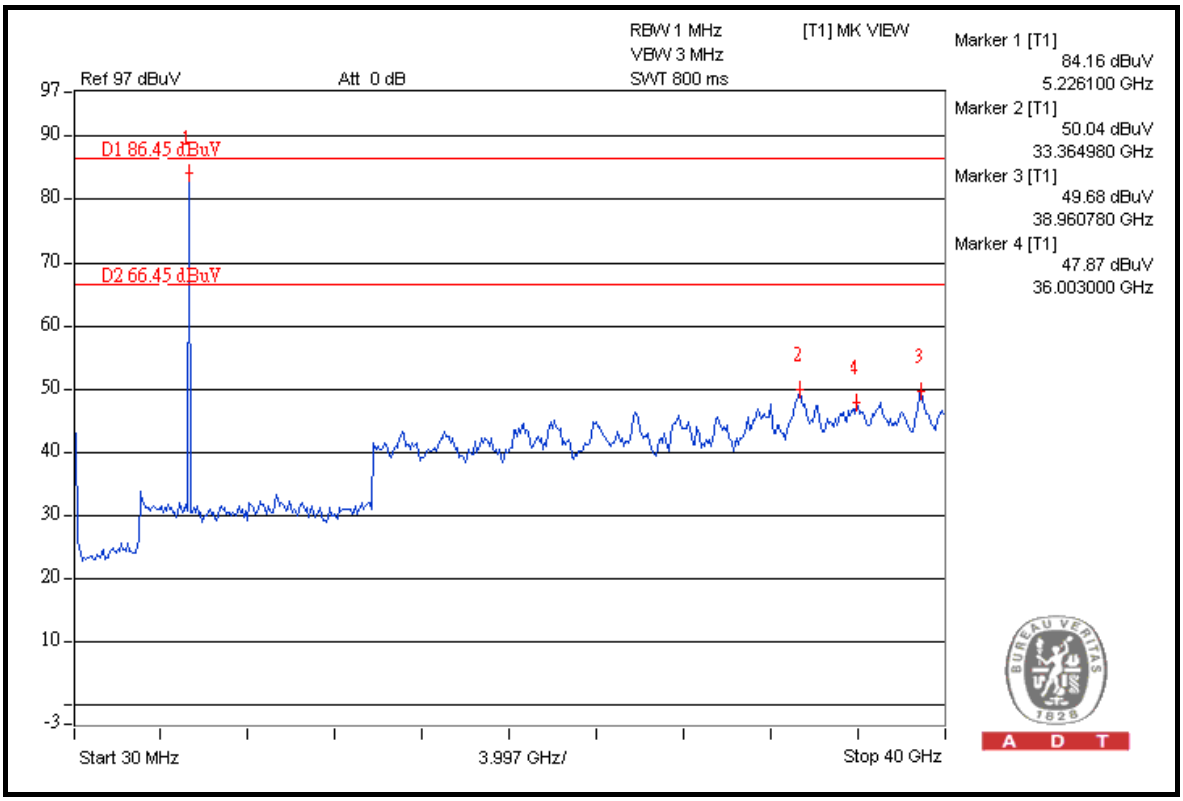

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 88.1 dBuV
D2 68.1 dBuV
Marker 1 [T1]
88.10 dBuV
5.185000 GHz
Marker 2 [T1]
31.73 dBuV
5.150000 GHz
Marker 3 [T1]
33.92 dBuV
5.148600 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 78.11 dBuV
D2 58.11 dBuV
Marker 1 [T1]
78.11 dBuV
5.179600 GHz
Marker 2 [T1]
19.59 dBuV
5.150000 GHz
Marker 3 [T1]
19.59 dBuV
5.150000 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 88.1 dBuV
D2 68.1 dBuV
Marker 1 [T1]
86.46 dBuV
5.146160 GHz
Marker 2 [T1]
51.80 dBuV
38.720960 GHz
Marker 3 [T1]
49.83 dBuV
34.084440 GHz
Marker 4 [T1]
49.54 dBuV
39.680240 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 86.45 dBuV
D2 66.45 dBuV
Marker 1 [T1]
86.45 dBuV
5.237000 GHz
Marker 2 [T1]
30.68 dBuV
5.350000 GHz
Marker 3 [T1]
32.46 dBuV
5.381800 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 75 dBuV
D2 55 dBuV
Marker 1 [T1]
75.00 dBuV
5.242200 GHz
Marker 2 [T1]
18.87 dBuV
5.350000 GHz
Marker 3 [T1]
19.64 dBuV
5.427000 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 86.45 dBuV
D2 66.45 dBuV
Marker 1 [T1]
84.16 dBuV
5.226100 GHz
Marker 2 [T1]
50.04 dBuV
33.364980 GHz
Marker 3 [T1]
49.68 dBuV
38.960780 GHz
Marker 4 [T1]
47.87 dBuV
36.003000 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11n (20MHz)

RESTRICT BAND (4500 ~ 5150 MHz)

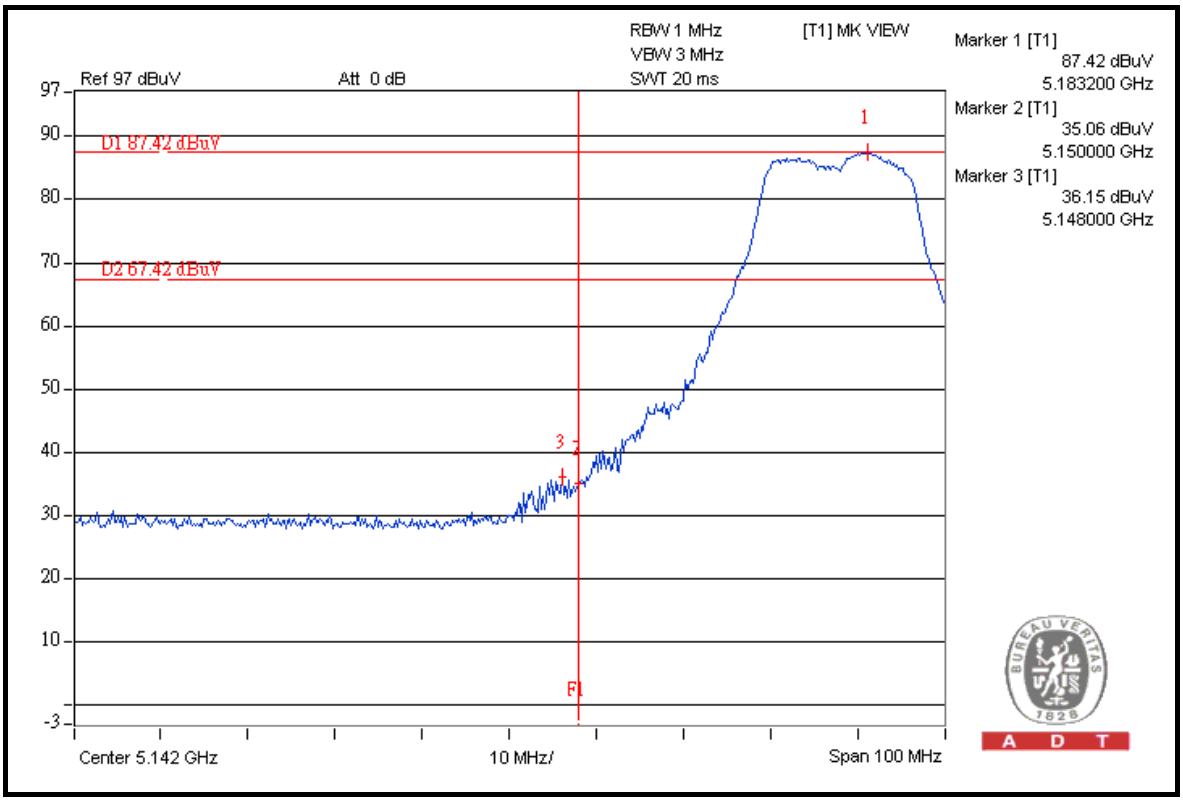
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5180.00 (PK)	115.9	51.27	64.63	74.00
5180.00 (AV)	101.7	56.62	45.08	54.00

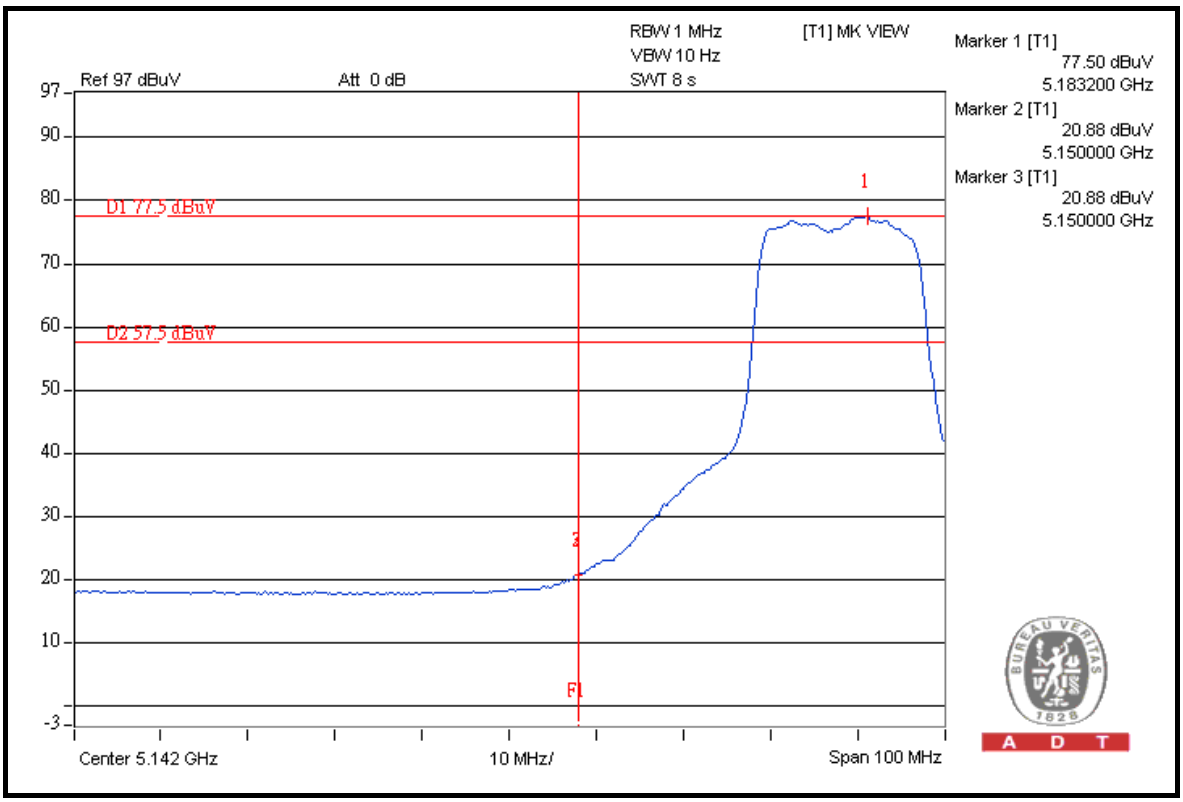
RESTRICT BAND (5350 ~ 5460 MHz)

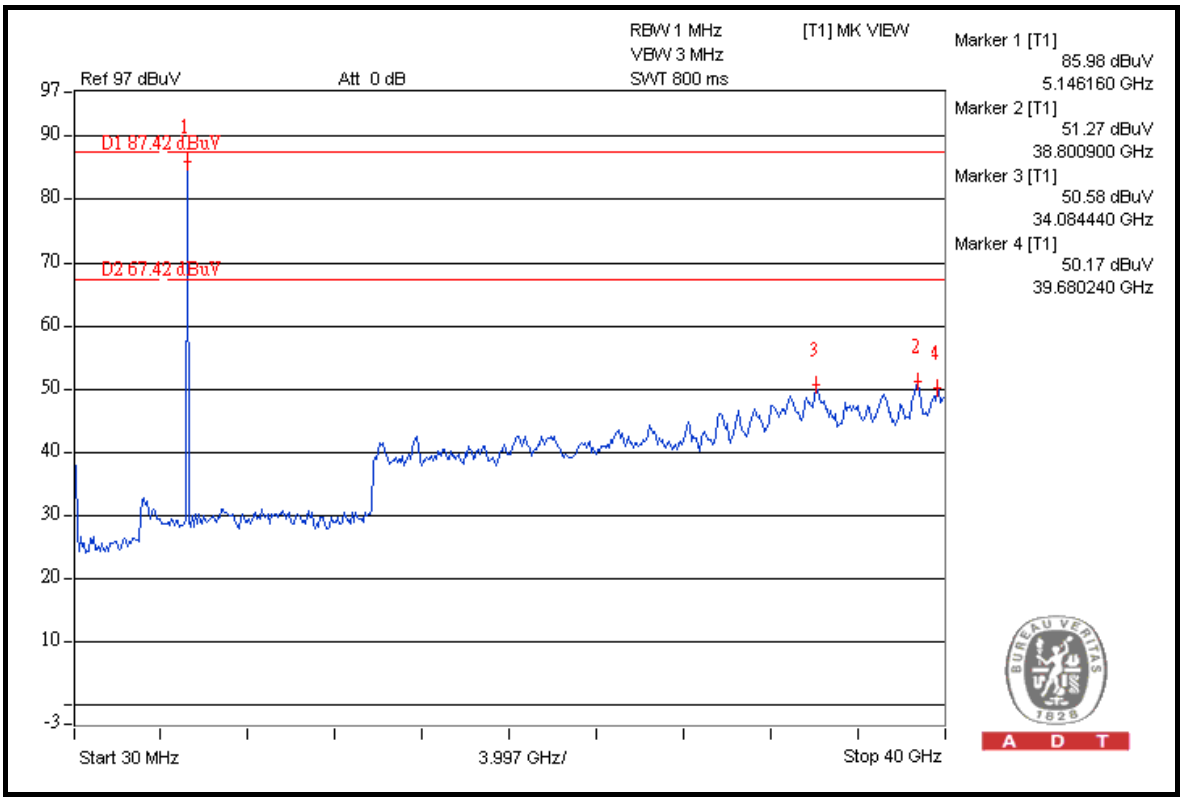
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5240.00 (PK)	116.4	53.44	62.96	74.00
5240.00 (AV)	102.6	55.47	47.13	54.00

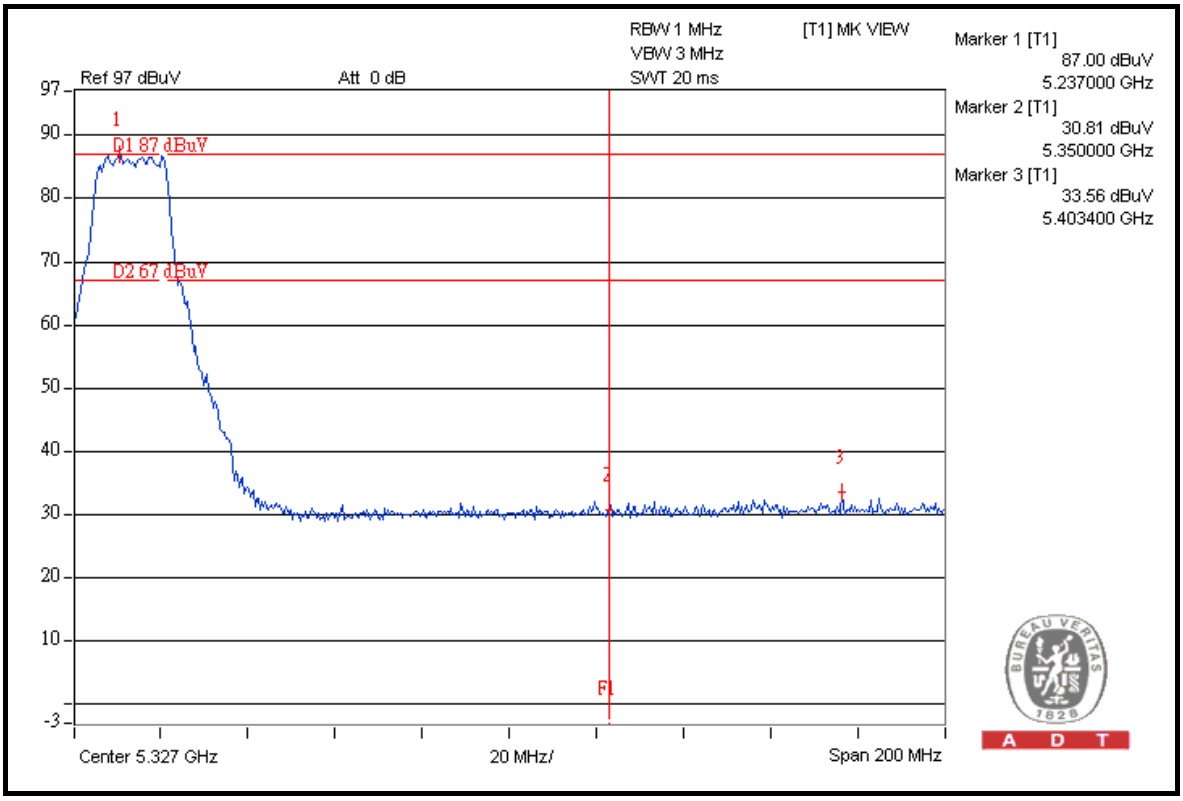
NOTE:

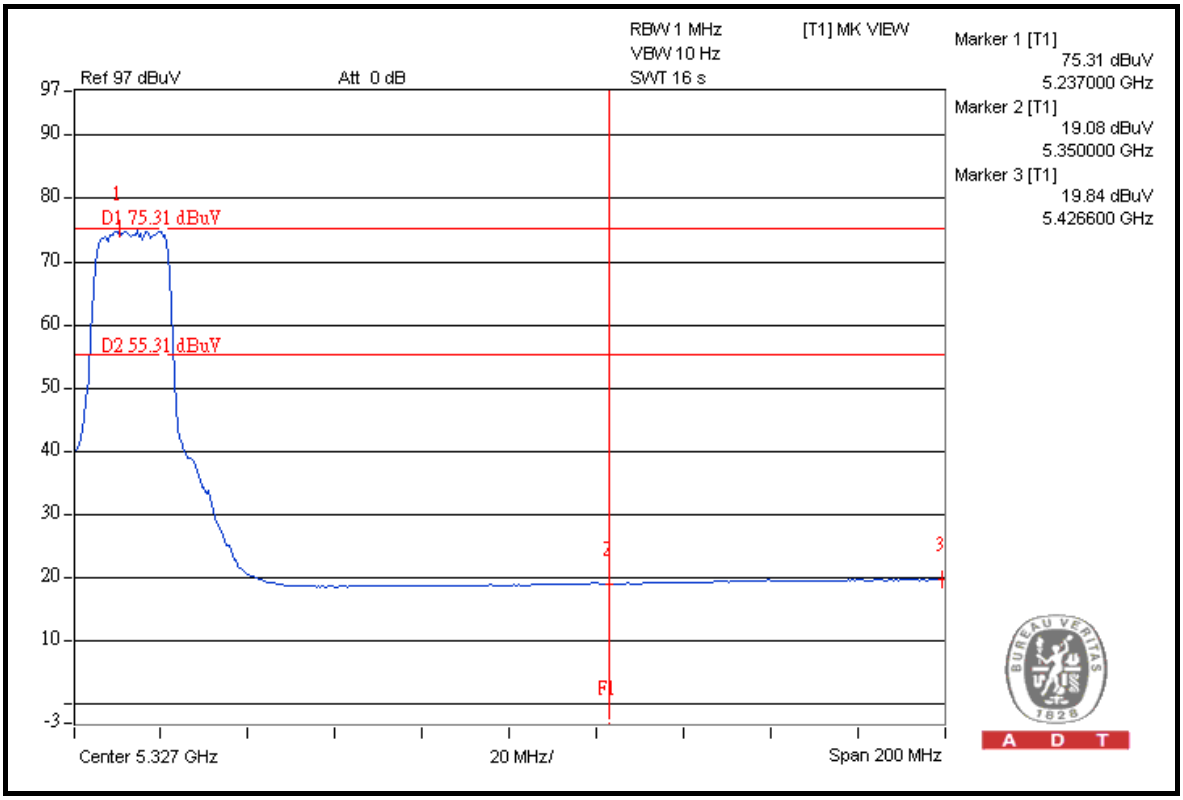
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

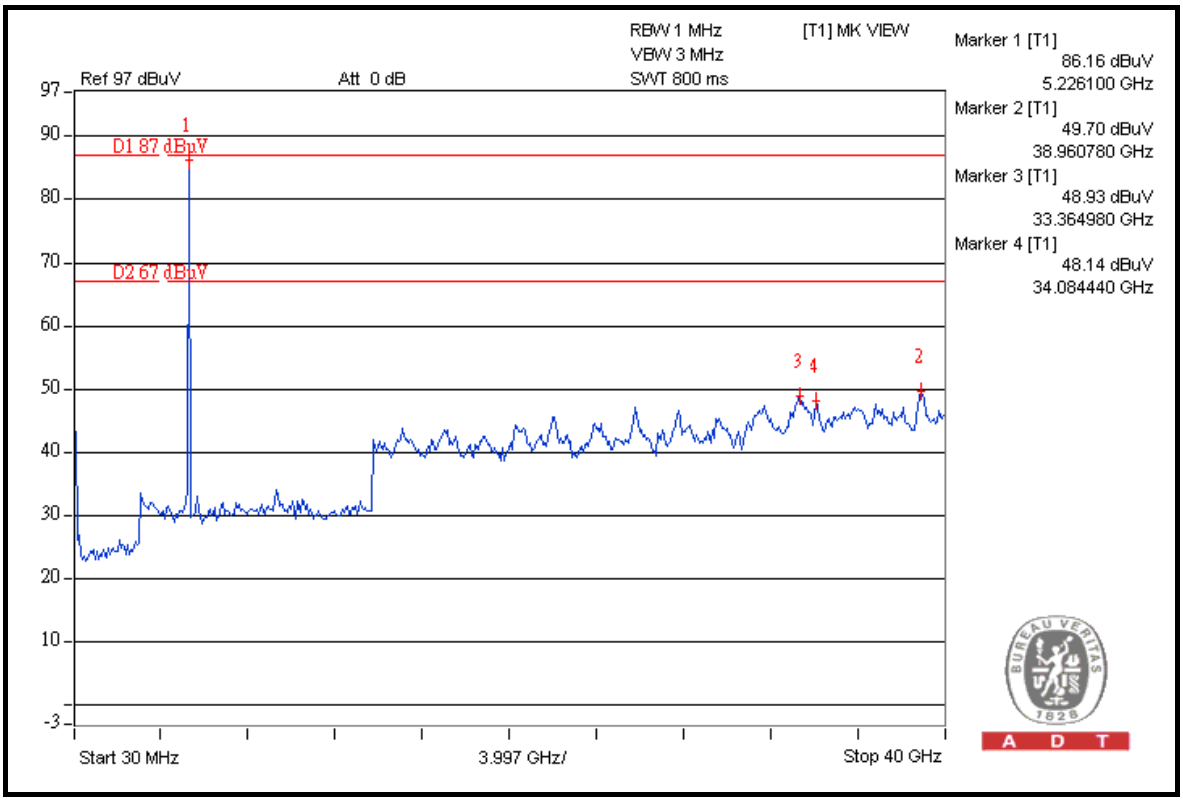

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 87.42 dBuV
D2 67.42 dBuV
Marker 1 [T1]
87.42 dBuV
5.183200 GHz
Marker 2 [T1]
35.06 dBuV
5.150000 GHz
Marker 3 [T1]
36.15 dBuV
5.148000 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 10 Hz
SWT 8 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 77.5 dBuV
D2 57.5 dBuV
Marker 1 [T1]
77.50 dBuV
5.183200 GHz
Marker 2 [T1]
20.88 dBuV
5.150000 GHz
Marker 3 [T1]
20.88 dBuV
5.150000 GHz
Center 5.142 GHz
10 MHz/
Span 100 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 87.42 dBuV
D2 67.42 dBuV
Marker 1 [T1]
85.98 dBuV
5.146160 GHz
Marker 2 [T1]
51.27 dBuV
38.800900 GHz
Marker 3 [T1]
50.58 dBuV
34.084440 GHz
Marker 4 [T1]
50.17 dBuV
39.680240 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 87 dBuV
D2 67 dBuV
Marker 1 [T1]
87.00 dBuV
5.237000 GHz
Marker 2 [T1]
30.81 dBuV
5.350000 GHz
Marker 3 [T1]
33.56 dBuV
5.403400 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 75.31 dBuV
D2 55.31 dBuV
Marker 1 [T1]
75.31 dBuV
5.237000 GHz
Marker 2 [T1]
19.08 dBuV
5.350000 GHz
Marker 3 [T1]
19.84 dBuV
5.426600 GHz
Center 5.327 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 87 dBuV
D2 67 dBuV
Marker 1 [T1]
86.16 dBuV
5.226100 GHz
Marker 2 [T1]
49.70 dBuV
38.960780 GHz
Marker 3 [T1]
48.93 dBuV
33.364980 GHz
Marker 4 [T1]
48.14 dBuV
34.084440 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

802.11n (40MHz)

RESTRICT BAND (4500 ~ 5150 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5190.00 (PK)	111.5	42.36	69.14	74.00
5190.00 (AV)	97.4	48.45	48.95	54.00

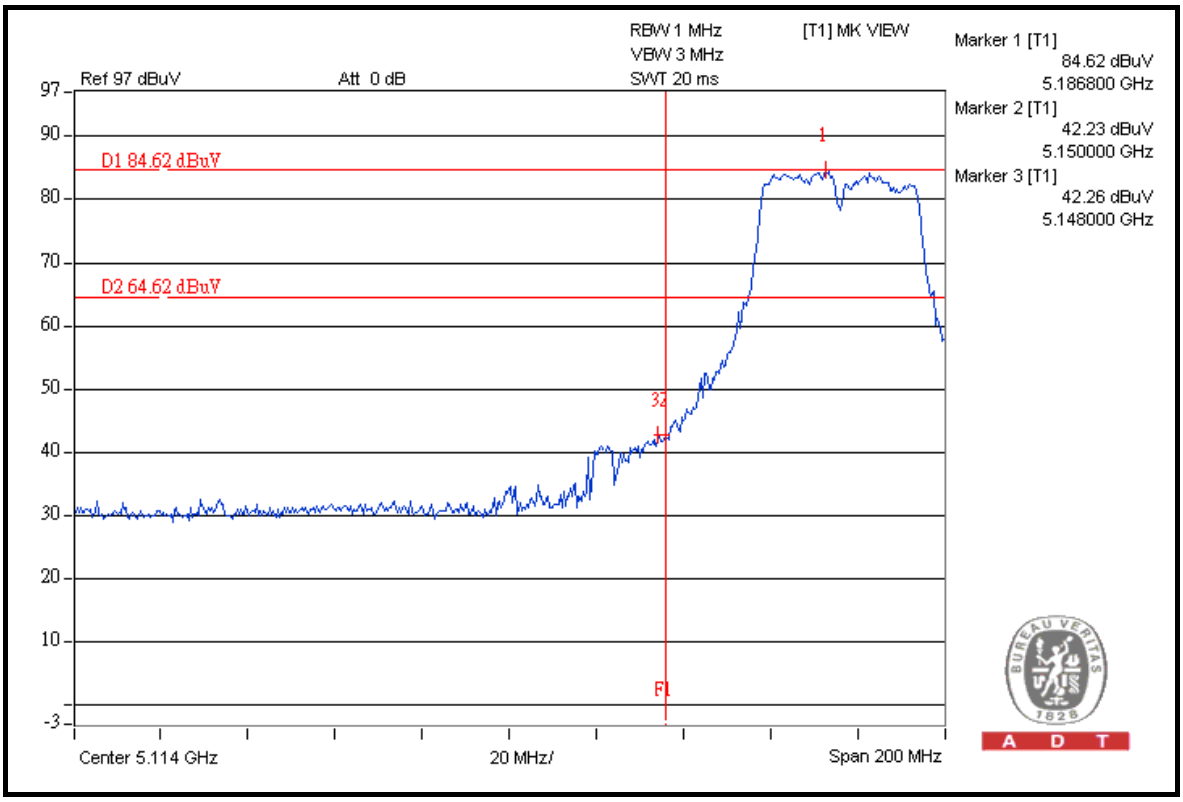
RESTRICT BAND (5350 ~ 5460 MHz)

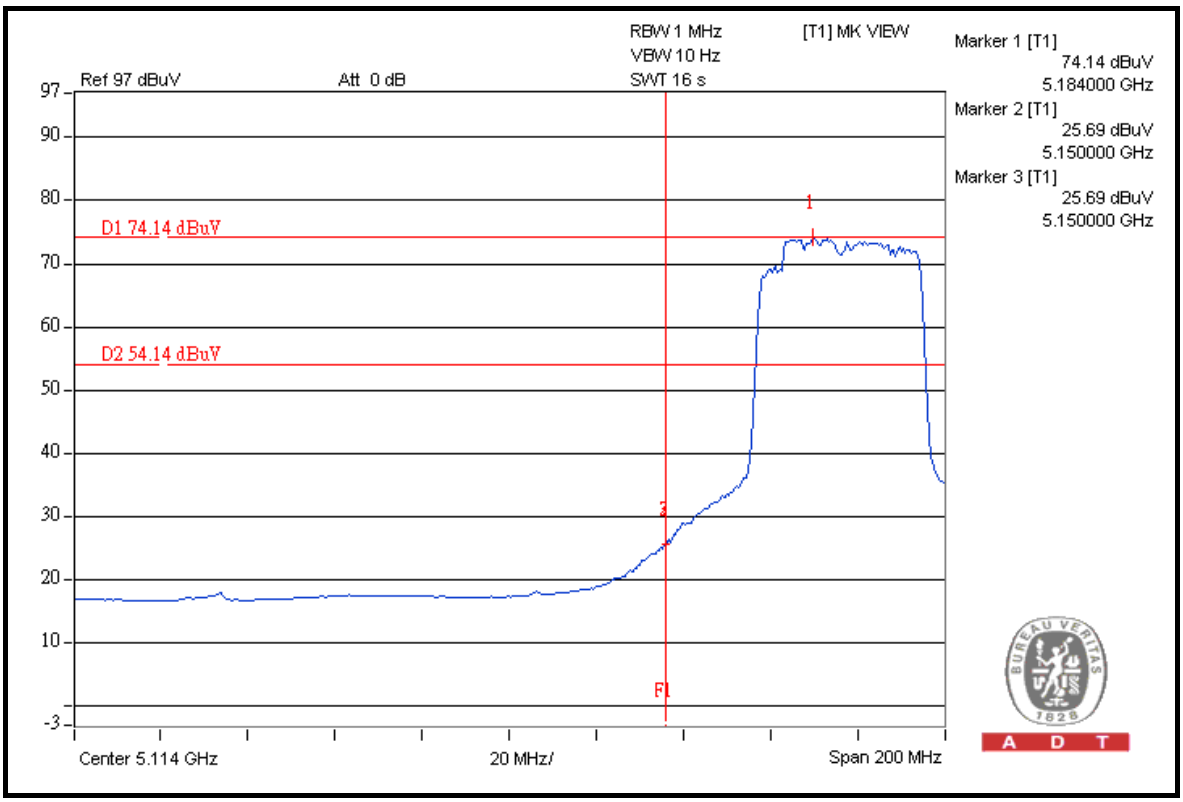
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5230.00 (PK)	111.3	49.75	61.55	74.00
5230.00 (AV)	97.6	49.95	47.65	54.00

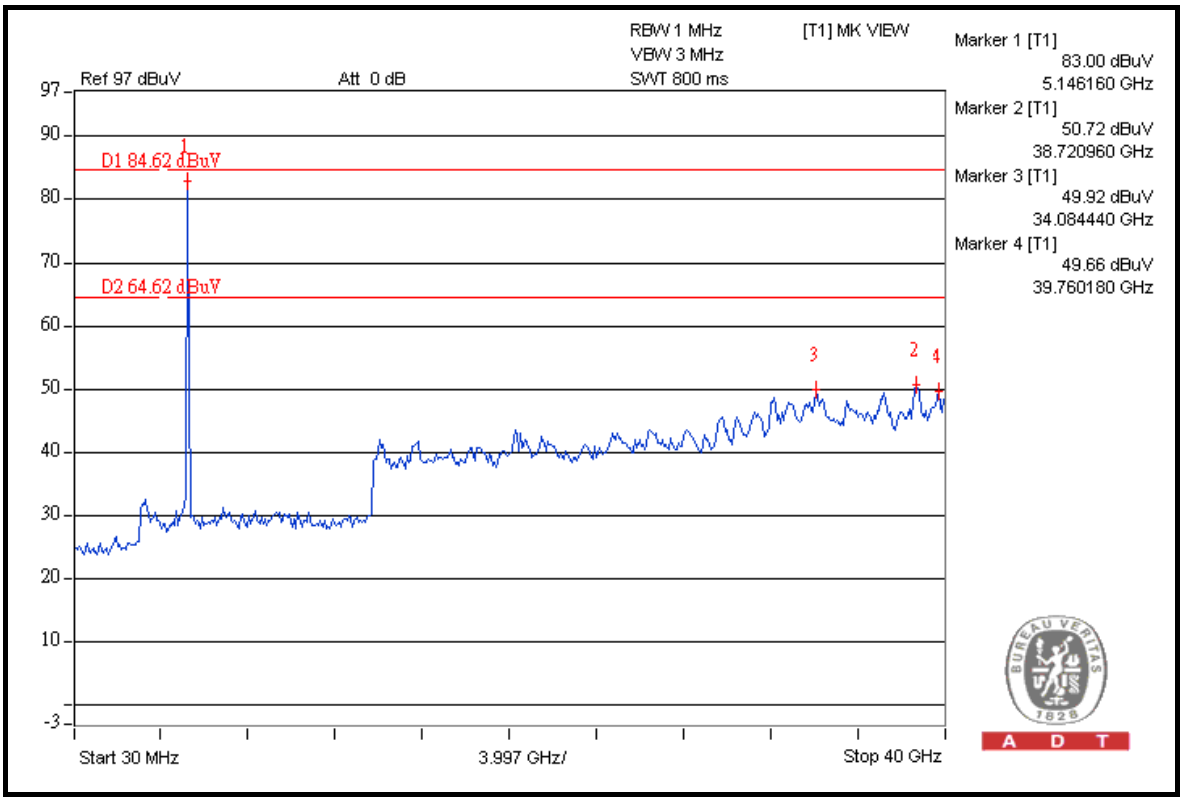
NOTE:

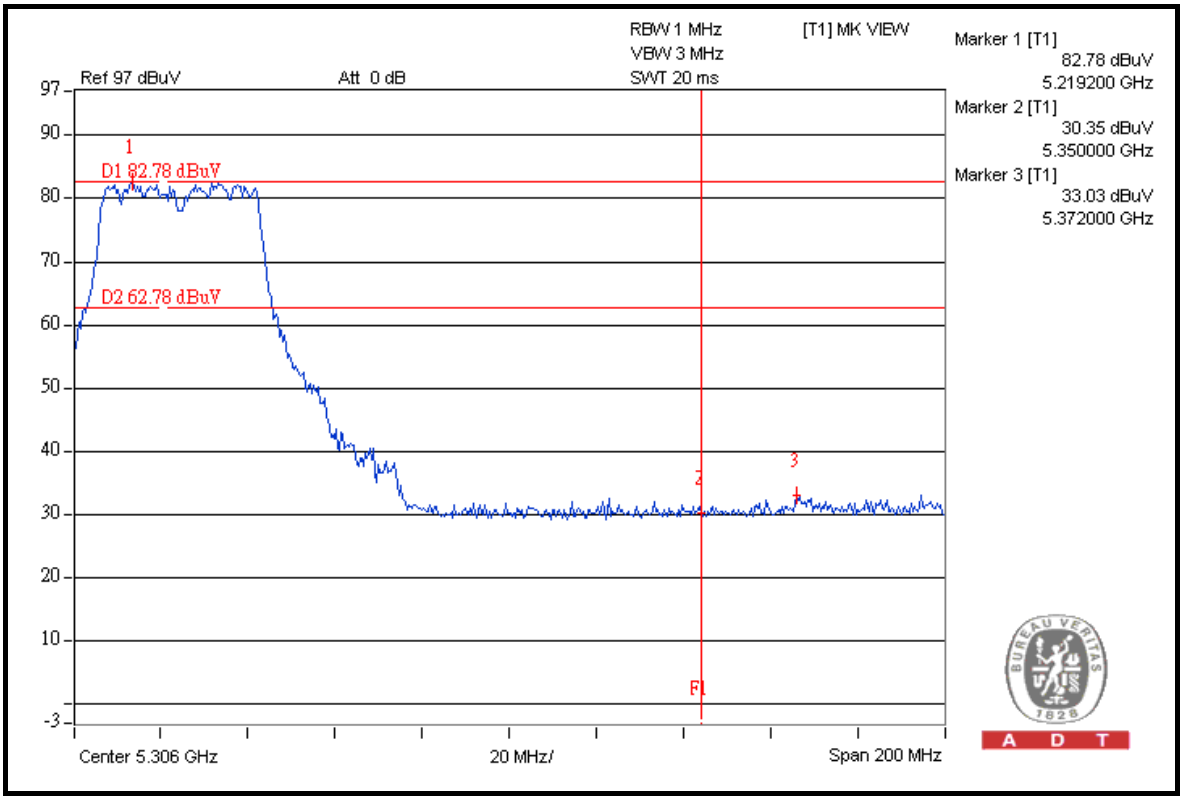
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.

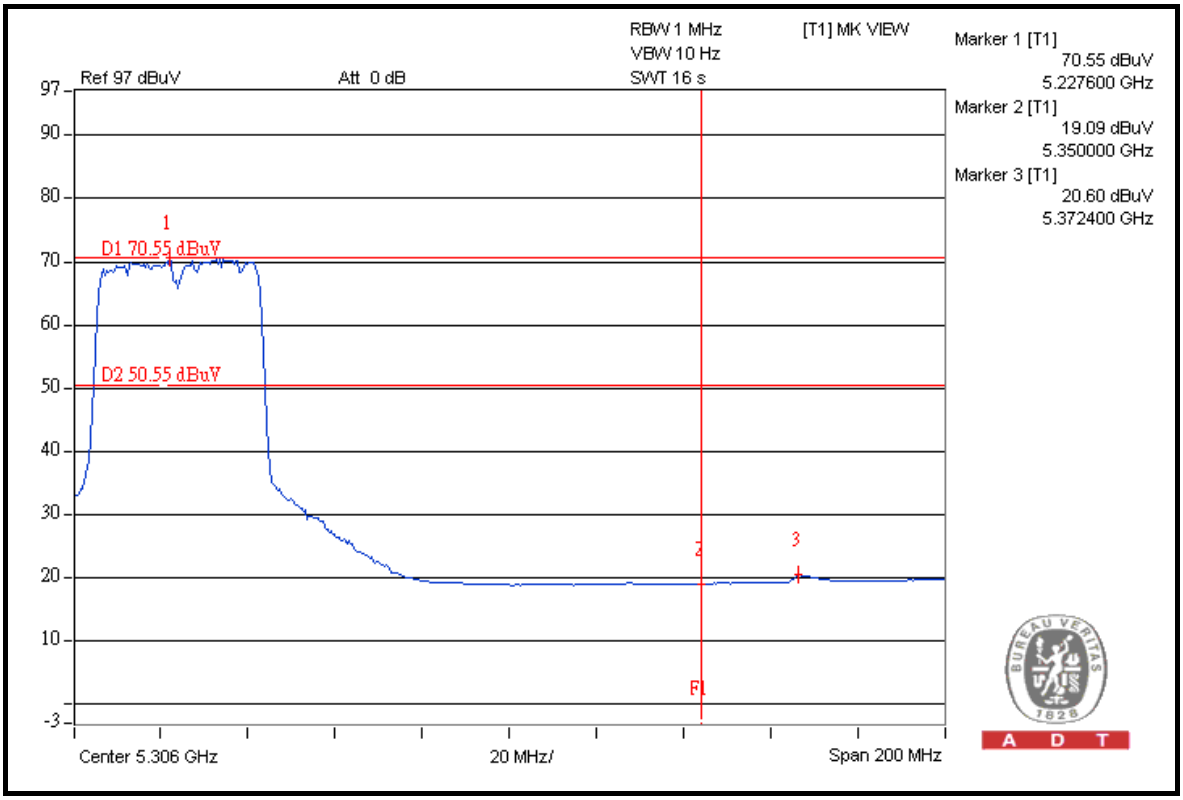
2. Maximum field strength in restrict band = Fundamental emission – Delta.

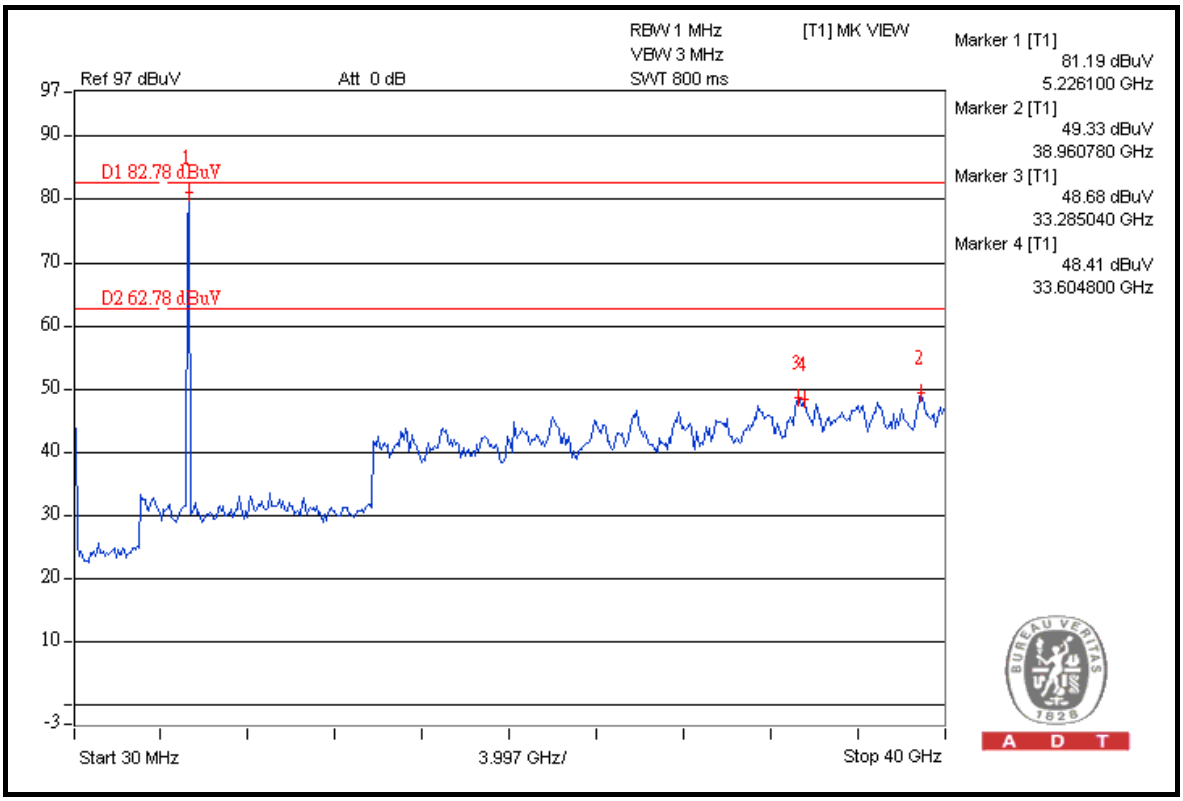

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
84.62 dBuV
5.186800 GHz
Marker 2 [T1]
42.23 dBuV
5.150000 GHz
Marker 3 [T1]
42.26 dBuV
5.148000 GHz
D1 84.62 dBuV
D2 64.62 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Center 5.114 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
74.14 dBuV
5.184000 GHz
Marker 2 [T1]
25.69 dBuV
5.150000 GHz
Marker 3 [T1]
25.69 dBuV
5.150000 GHz
D1 74.14 dBuV
D2 54.14 dBuV
97
90
80
70
60
50
40
30
20
10
-3
Center 5.114 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 84.62 dBuV
D2 64.62 dBuV
Marker 1 [T1]
83.00 dBuV
5.146160 GHz
Marker 2 [T1]
50.72 dBuV
38.720960 GHz
Marker 3 [T1]
49.92 dBuV
34.084440 GHz
Marker 4 [T1]
49.66 dBuV
39.760180 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
D1 82.78 dBuV
D2 62.78 dBuV
Marker 1 [T1]
82.78 dBuV
5.219200 GHz
Marker 2 [T1]
30.35 dBuV
5.350000 GHz
Marker 3 [T1]
33.03 dBuV
5.372000 GHz
Center 5.306 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
70.55 dBuV
5.227600 GHz
Marker 2 [T1]
19.09 dBuV
5.350000 GHz
Marker 3 [T1]
20.60 dBuV
5.372400 GHz
D1 70.55 dBuV
D2 50.55 dBuV
Center 5.306 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
81.19 dBuV
5.226100 GHz
Marker 2 [T1]
49.33 dBuV
38.960780 GHz
Marker 3 [T1]
48.68 dBuV
33.285040 GHz
Marker 4 [T1]
48.41 dBuV
33.604800 GHz
D1 82.78 dBuV
D2 62.78 dBuV
Start 30 MHz
3.997 GHz/
Stop 40 GHz

5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

6. INFORMATION ON THE TESTING LABORATORIES

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

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.

7. 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.

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