

FCC TEST REPORT (15.407)

REPORT NO.: RF980723L08A-1

MODEL NO.: WES610N

FCC ID: Q87-WES610N

RECEIVED: Feb. 18, 2011

TESTED: Feb. 18 ~ Feb. 25, 2011

ISSUED: Mar. 03, 2011

APPLICANT: Cisco Consumer Products LLC

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
Original release	N/A	Mar. 03, 2011

1. CERTIFICATION

PRODUCT: 4-Port Dual-Band N Ethernet Bridge

MODEL: WES610N

BRAND: Cisco

APPLICANT: Cisco Consumer Products LLC

TESTED: Feb. 18 ~ Feb. 25, 2011

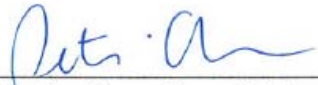
TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 15, Subpart E (Section 15.407)

ANSI C63.4-2003

ANSI C63.10-2009

The above equipment (Model: WES610N) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY :  , DATE : Mar. 03, 2011
Pettie Chen / Specialist

APPROVED BY :  , DATE : Mar. 03, 2011
Gary Chang / Assistant Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART 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 -3.11dB at 0.150MHz.
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 -1.0dB at 59.06, 150.45, 5725.00, 10600.00, 11000.00, 11160.00 & 11320.00MHz.
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 connector is UFL not a standard connector.

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.19 dB
	200MHz ~1000MHz	3.21 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

EUT	4-Port Dual-Band N Ethernet Bridge
MODEL NO.	WES610N
FCC ID	Q87-WES610N
POWER SUPPLY	12Vdc
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 ~ 5320MHz & 5500 ~ 5700MHz
NUMBER OF CHANNEL	5180 ~ 5320MHz: 8 for 802.11a, 802.11n (20MHz) 4 for 802.11n (40MHz) 5500 ~ 5700MHz: 11 for 802.11a, 802.11n (20MHz) 5 for 802.11n (40MHz)
OUTPUT POWER	27.0mW for 5180 ~ 5240MHz 30.3mW for 5260 ~ 5320MHz 27.3mW for 5500 ~ 5700MHz
ANTENNA TYPE	PIFA antenna with 5.5dBi gain
ANTENNA CONNECTOR	UFL
I/O PORTS	RJ45
DATA CABLE	NA
ACCESSORY DEVICES	Adapter

NOTE:

1. The EUT is a 4-Port Dual-Band N Ethernet Bridge. 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)	RF980723L08A
WLAN 802.11a, 802.11n (5745~5825 MHz)		
WLAN 802.11a, 802.11n (5180~5320MHz & 5500 ~5700MHz)	FCC Part 15, Subpart E (Section 15.407)	RF980723L08A-1
WLAN 802.11a, 802.11n (For DFS report) (5260~5320MHz & 5500~5700MHz)		RF980723L08A-2

2. The EUT was powered by the following adapters:

Adapter 1	
BRAND:	BesTec
MODEL:	EA0121WAA
INPUT:	100-240Vac, 0.5A, 50-60Hz
OUTPUT:	12Vdc, 1A, 12W
POWER LINE:	1.5m non-shielded cable without core

Adapter 2	
BRAND:	Bestec
MODEL:	EAA121WWB
INPUT:	100-240Vac, 0.5A, 50-60Hz
OUTPUT:	12Vdc, 1A, 12W
POWER LINE:	1.5m non-shielded cable without core

Adapter 3	
BRAND:	LEI
MODEL:	MU12-G120100-A1
INPUT:	100-240Vac, 0.5A, 50-60Hz
OUTPUT:	12Vdc, 1A
POWER LINE:	1.5m non-shielded cable without core

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

Frequency Band (MHz)	2412~2462	5180~5320	5500~5700	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 two completed transmitters and three receivers.

MODULATION MODE	TX FUNCTION
802.11b	1TX
802.11g	2TX
802.11a	2TX
802.11n (20MHz)	2TX
802.11n (40MHz)	2TX

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

3.2 DESCRIPTION OF TEST MODES

Operated in 5180 ~ 5320MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	52	5260 MHz
40	5200 MHz	56	5280 MHz
44	5220 MHz	60	5300 MHz
48	5240 MHz	64	5320 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	54	5270 MHz
46	5230 MHz	62	5310 MHz

Operated in 5500 ~ 5700MHz

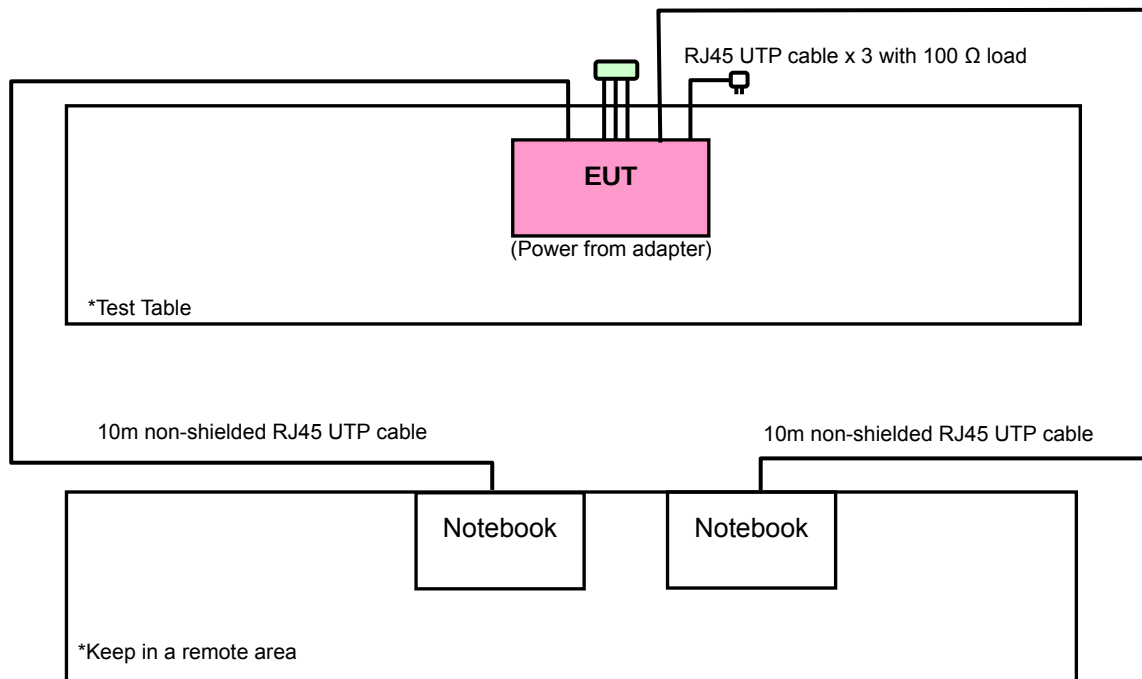
11 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5690 MHz		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where **RE $\geq$ 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 and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5180-5320	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6.0
802.11n (20MHz)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	7.2
802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	15.0
802.11a	5500-5700	100 to 140	100, 116, 132, 140	OFDM	BPSK	6.0
802.11n (20MHz)		100 to 140	100, 116, 132, 140	OFDM	BPSK	7.2
802.11n (40MHz)		102 to 134	102, 110, 134	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 and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5180-5320	36 to 64	64	OFDM	BPSK	6.0
802.11a	5500-5700	100 to 140	100	OFDM	BPSK	6.0

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.

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5180-5320	36 to 64	64	OFDM	BPSK	6.0
802.11a	5500-5700	100 to 140	100	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.

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5180-5320	36 to 64	36, 48, 52, 64	OFDM	BPSK	6.0
802.11n (20MHz)		36 to 64	36, 48, 52, 64	OFDM	BPSK	7.2
802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	15.0
802.11a	5500-5700	100 to 140	100, 140	OFDM	BPSK	6.0
802.11n (20MHz)		100 to 140	100, 140	OFDM	BPSK	7.2
802.11n (40MHz)		102 to 134	102, 134	OFDM	BPSK	15.0

ANTENNA PORT CONDUCTED MEASUREMENT:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5180-5320	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6.0
802.11n (20MHz)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	7.2
802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	15.0
802.11a	5500-5700	100 to 140	100, 116, 132, 140	OFDM	BPSK	6.0
802.11n (20MHz)		100 to 140	100, 116, 132, 140	OFDM	BPSK	7.2
802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	15.0

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

ANSI C63.10-2009

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

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

3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	E5410	1HC2XM1	FCC DoC Approved
2	NOTEBOOK	DELL	D531	CN-0XM006-48643 -81U-2610	QDS-BRCM1020

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m non-shielded RJ45 UTP cable
2	10m non-shielded RJ45 UTP cable

NOTE: 1. All power cords of the above support units are non shielded (1.8m).
2. Item 1, 2 acted as communication partners to transfer data.

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 ~ 5350	-27	68.3
5470 ~ 5725	-27	68.3

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

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

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. 27, 2010	Dec. 26, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Aug. 02, 2010	Aug. 01, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 28, 2010	Apr. 27, 2011
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 06, 2011	Jan. 05, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8449B	3008A01961	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8447D	2944A10738	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	274041/4	Aug. 21, 2010	Aug. 20, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Aug. 21, 2010	Aug. 20, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	07026401	Aug. 25, 2010	Aug. 24, 2011

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 4.
 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The FCC Site Registration No. is 988962.
 5. The IC Site Registration No. is IC7450F-4.

4.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

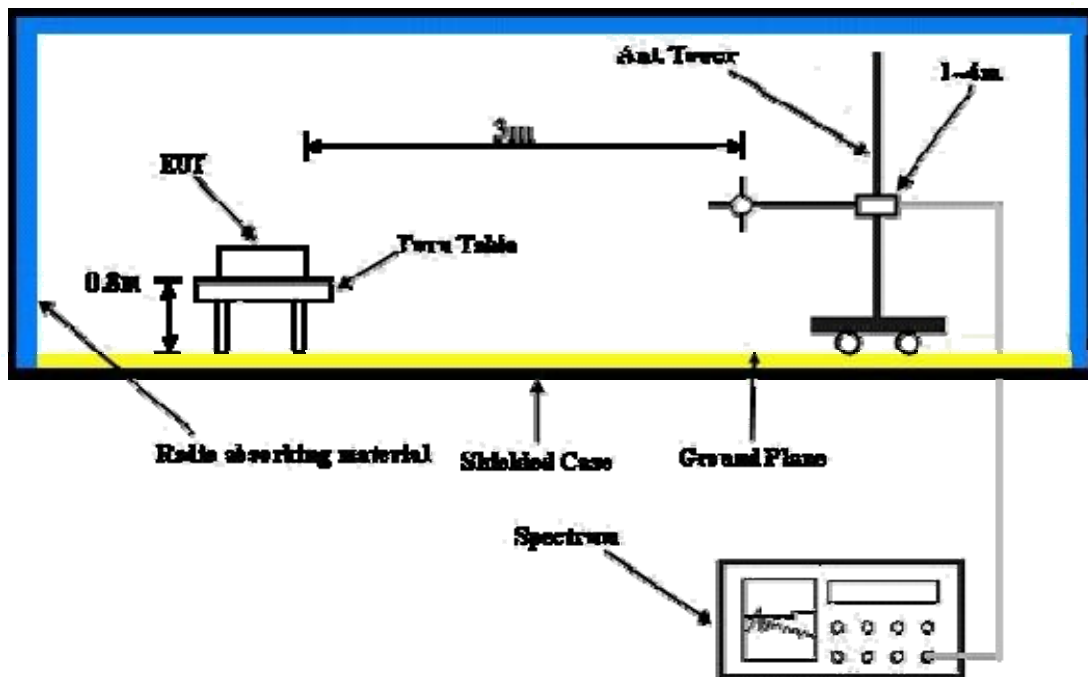
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 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

- Placed the EUT on the testing table.
- Prepared notebook systems outside of testing area to act as communication partners.
- The communication partners connected with EUT via a RJ45 UTP cable and run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
- The communication partners sent data to EUT by command "PING".

4.1.8 TEST RESULTS

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	68.6 PK	74.0	-5.4	1.11 H	100	31.40	37.20
2	5150.00	45.9 AV	54.0	-8.1	1.11 H	100	8.70	37.20
3	*5180.00	110.9 PK			1.11 H	100	73.60	37.30
4	*5180.00	100.3 AV			1.11 H	100	63.00	37.30
5	#10360.00	64.1 PK	68.3	-4.2	1.00 H	211	15.90	48.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.8 PK	74.0	-7.2	1.11 V	290	29.60	37.20
2	5150.00	43.9 AV	54.0	-10.1	1.11 V	290	6.70	37.20
3	*5180.00	109.3 PK			1.11 V	290	72.00	37.30
4	*5180.00	98.9 AV			1.11 V	290	61.60	37.30
5	#10360.00	67.2 PK	68.3	-1.1	1.22 V	300	19.00	48.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	66.9 PK	74.0	-7.1	1.27 H	350	29.70	37.20
2	5150.00	44.1 AV	54.0	-9.9	1.27 H	350	6.90	37.20
3	*5200.00	111.0 PK			1.27 H	350	73.70	37.30
4	*5200.00	100.8 AV			1.27 H	350	63.50	37.30
5	#10400.00	63.8 PK	68.3	-4.5	1.10 H	120	15.60	48.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.5 PK	74.0	-7.5	1.00 V	310	29.30	37.20
2	5150.00	43.5 AV	54.0	-10.5	1.00 V	310	6.30	37.20
3	*5200.00	109.2 PK			1.00 V	310	71.90	37.30
4	*5200.00	98.9 AV			1.00 V	310	61.60	37.30
5	#10400.00	67.1 PK	68.3	-1.2	1.21 V	24	18.90	48.20

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	67.1 PK	74.0	-6.9	1.20 H	92	29.90	37.20
2	5150.00	44.2 AV	54.0	-9.8	1.20 H	92	7.00	37.20
3	*5240.00	110.6 PK			1.20 H	92	73.20	37.40
4	*5240.00	100.4 AV			1.20 H	92	63.00	37.40
5	#10480.00	62.4 PK	68.3	-5.9	1.07 H	360	14.00	48.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.7 PK	74.0	-7.3	1.04 V	250	29.50	37.20
2	5150.00	43.2 AV	54.0	-10.8	1.04 V	250	6.00	37.20
3	*5240.00	109.1 PK			1.04 V	250	71.70	37.40
4	*5240.00	98.7 AV			1.04 V	250	61.30	37.40
5	#10480.00	67.1 PK	68.3	-1.2	1.20 V	360	18.70	48.40

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	67.2 PK	74.0	-6.8	1.17 H	100	30.00	37.20
2	5150.00	44.3 AV	54.0	-9.7	1.17 H	100	7.10	37.20
3	*5260.00	110.5 PK			1.17 H	100	73.10	37.40
4	*5260.00	101.3 AV			1.17 H	100	63.90	37.40
5	#10520.00	63.8 PK	68.3	-4.5	1.04 H	300	15.30	48.50
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	5150.00	66.4 PK	74.0	-7.6	1.21 V	311	29.20	37.20
2	5150.00	43.5 AV	54.0	-10.5	1.21 V	311	6.30	37.20
3	*5260.00	109.4 PK			1.21 V	311	72.00	37.40
4	*5260.00	98.9 AV			1.21 V	311	61.50	37.40
5	#10520.00	66.4 PK	68.3	-1.9	1.04 V	310	17.90	48.50

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5300.00	110.6 PK			1.21 H	99	73.10	37.50
2	*5300.00	100.3 AV			1.21 H	99	62.80	37.50
3	5350.00	62.2 PK	74.0	-11.8	1.21 H	99	24.70	37.50
4	5350.00	43.5 AV	54.0	-10.5	1.21 H	99	6.00	37.50
5	10600.00	68.6 PK	74.0	-5.4	1.10 H	99	20.00	48.60
6	10600.00	52.7 AV	54.0	-1.3	1.10 H	99	4.10	48.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	109.2 PK			1.19 V	290	71.70	37.50
2	*5300.00	98.8 AV			1.19 V	290	61.30	37.50
3	5350.00	61.1 PK	74.0	-12.9	1.19 V	290	23.60	37.50
4	5350.00	43.4 AV	54.0	-10.6	1.19 V	290	5.90	37.50
5	10600.00	70.1 PK	74.0	-3.9	1.27 V	277	21.50	48.60
6	10600.00	53.0 AV	54.0	-1.0	1.27 V	277	4.40	48.60

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5320.00	110.5 PK			1.20 H	99	73.00	37.50
2	*5320.00	100.0 AV			1.20 H	99	62.50	37.50
3	5350.00	70.9 PK	74.0	-3.1	1.20 H	99	33.40	37.50
4	5350.00	46.8 AV	54.0	-7.2	1.20 H	99	9.30	37.50
5	10640.00	65.7 PK	74.0	-8.3	1.04 H	99	17.00	48.70
6	10640.00	51.1 AV	54.0	-2.9	1.04 H	99	2.40	48.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	109.4 PK			1.14 V	307	71.90	37.50
2	*5320.00	98.9 AV			1.14 V	307	61.40	37.50
3	5350.00	68.7 PK	74.0	-5.3	1.14 V	307	31.20	37.50
4	5350.00	44.9 AV	54.0	-9.1	1.14 V	307	7.40	37.50
5	10640.00	65.9 PK	74.0	-8.1	1.27 V	300	17.20	48.70
6	10640.00	52.1 AV	54.0	-1.9	1.27 V	300	3.40	48.70

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	5460.00	65.8 PK	74.0	-8.2	1.17 H	99	28.10	37.70
2	5460.00	49.0 AV	54.0	-5.0	1.17 H	99	11.30	37.70
3	#5470.00	66.3 PK	68.3	-2.0	1.17 H	99	28.50	37.80
4	*5500.00	108.9 PK			1.17 H	99	71.10	37.80
5	*5500.00	98.7 AV			1.17 H	99	60.90	37.80
6	11000.00	67.8 PK	74.0	-6.2	1.01 H	350	18.30	49.50
7	11000.00	53.0 AV	54.0	-1.0	1.01 H	350	3.50	49.50
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	5460.00	66.7 PK	74.0	-7.3	1.20 V	290	29.00	37.70
2	5460.00	50.4 AV	54.0	-3.6	1.20 V	290	12.70	37.70
3	#5470.00	67.2 PK	68.3	-1.1	1.20 V	290	29.40	37.80
4	*5500.00	110.5 PK			1.20 V	290	72.70	37.80
5	*5500.00	100.0 AV			1.20 V	290	62.20	37.80
6	11000.00	68.9 PK	74.0	-5.1	1.24 V	301	19.40	49.50
7	11000.00	53.0 AV	54.0	-1.0	1.24 V	301	3.50	49.50

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5580.00	109.9 PK			1.00 H	188	71.90	38.00
2	*5580.00	99.7 AV			1.00 H	188	61.70	38.00
3	11160.00	71.3 PK	74.0	-2.7	1.36 H	292	21.80	49.50
4	11160.00	53.0 AV	54.0	-1.0	1.36 H	292	3.50	49.50
5	#16740.00	62.3 PK	68.3	-6.0	1.05 H	360	11.30	51.00
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	*5580.00	111.0 PK			1.07 V	191	73.00	38.00
2	*5580.00	100.9 AV			1.07 V	191	62.90	38.00
3	11160.00	67.9 PK	74.0	-6.1	1.01 V	334	18.40	49.50
4	11160.00	52.3 AV	54.0	-1.7	1.01 V	334	2.80	49.50
5	#16740.00	61.7 PK	68.3	-6.6	1.00 V	360	10.70	51.00

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. "#": The radiated frequency is out the restricted band.
5. Margin value = Emission level – Limit value.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 132	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5660.00	109.9 PK			1.00 H	176	71.70	38.20
2	*5660.00	99.8 AV			1.00 H	176	61.60	38.20
3	11320.00	71.1 PK	74.0	-2.9	1.29 H	311	21.40	49.70
4	11320.00	53.0 AV	54.0	-1.0	1.29 H	311	3.30	49.70
5	#16980.00	61.7 PK	68.3	-6.6	1.00 H	360	10.10	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5660.00	111.1 PK			1.05 V	184	72.90	38.20
2	*5660.00	101.0 AV			1.05 V	184	62.80	38.20
3	11320.00	68.0 PK	74.0	-6.0	1.00 V	330	18.30	49.70
4	11320.00	52.5 AV	54.0	-1.5	1.00 V	330	2.80	49.70
5	#16980.00	61.9 PK	68.3	-6.4	1.00 V	0	10.30	51.60

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5700.00	107.0 PK			1.00 H	311	68.70	38.30
2	*5700.00	96.7 AV			1.00 H	311	58.40	38.30
3	#5725.00	65.9 PK	68.3	-2.4	1.00 H	311	27.60	38.30
4	11400.00	63.4 PK	74.0	-10.6	1.04 H	177	13.80	49.60
5	11400.00	49.0 AV	54.0	-5.0	1.04 H	177	-0.60	49.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	108.3 PK			1.04 V	350	70.00	38.30
2	*5700.00	97.7 AV			1.04 V	350	59.40	38.30
3	#5725.00	67.3 PK	68.3	-1.0	1.04 V	350	29.00	38.30
4	11400.00	63.9 PK	74.0	-10.1	1.00 V	310	14.30	49.60
5	11400.00	49.9 AV	54.0	-4.1	1.00 V	310	0.30	49.60

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

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	68.1 PK	74.0	-5.9	1.17 H	97	30.90	37.20
2	5150.00	44.2 AV	54.0	-9.8	1.17 H	97	7.00	37.20
3	*5180.00	108.7 PK			1.17 H	97	71.40	37.30
4	*5180.00	98.6 AV			1.17 H	97	61.30	37.30
5	#10360.00	63.8 PK	68.3	-4.5	1.00 H	350	15.60	48.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.8 PK	74.0	-8.2	1.11 V	310	28.60	37.20
2	5150.00	42.8 AV	54.0	-11.2	1.11 V	310	5.60	37.20
3	*5180.00	107.2 PK			1.11 V	310	69.90	37.30
4	*5180.00	96.7 AV			1.11 V	310	59.40	37.30
5	#10360.00	67.1 PK	68.3	-1.2	1.04 V	310	18.90	48.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	64.9 PK	74.0	-9.1	1.20 H	100	27.70	37.20
2	5150.00	42.7 AV	54.0	-11.3	1.20 H	100	5.50	37.20
3	*5200.00	108.9 PK			1.20 H	100	71.60	37.30
4	*5200.00	98.5 AV			1.20 H	100	61.20	37.30
5	#10400.00	63.6 PK	68.3	-4.7	1.04 H	360	15.40	48.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.5 PK	74.0	-9.5	1.07 V	291	27.30	37.20
2	5150.00	42.3 AV	54.0	-11.7	1.07 V	291	5.10	37.20
3	*5200.00	107.3 PK			1.07 V	281	70.00	37.30
4	*5200.00	97.3 AV			1.07 V	281	60.00	37.30
5	#10400.00	67.0 PK	68.3	-1.3	1.07 V	310	18.80	48.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	1.17 H	100	27.30	37.20
2	5150.00	42.2 AV	54.0	-11.8	1.17 H	100	5.00	37.20
3	*5240.00	108.8 PK			1.17 H	100	71.40	37.40
4	*5240.00	98.5 AV			1.17 H	100	61.10	37.40
5	#10480.00	61.9 PK	68.3	-6.4	1.07 H	117	13.50	48.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.5 PK	74.0	-9.5	1.03 V	29	27.30	37.20
2	5150.00	42.2 AV	54.0	-11.8	1.03 V	29	5.00	37.20
3	*5240.00	107.3 PK			1.03 V	29	69.90	37.40
4	*5240.00	97.1 AV			1.03 V	29	59.70	37.40
5	#10480.00	67.0 PK	68.3	-1.3	1.00 V	188	18.60	48.40

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5260.00	108.7 PK			1.22 H	97	71.30	37.40
2	*5260.00	98.6 AV			1.22 H	97	61.20	37.40
3	5350.00	66.2 PK	74.0	-7.8	1.22 H	97	28.70	37.50
4	5350.00	44.0 AV	54.0	-10.0	1.22 H	97	6.50	37.50
5	#10520.00	63.9 PK	68.3	-4.4	1.04 H	300	15.40	48.50
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	*5260.00	107.5 PK			1.19 V	320	70.10	37.40
2	*5260.00	96.9 AV			1.19 V	320	59.50	37.40
3	5350.00	65.9 PK	74.0	-8.1	1.19 V	320	28.40	37.50
4	5350.00	43.8 AV	54.0	-10.2	1.19 V	320	6.30	37.50
5	#10520.00	66.0 PK	68.3	-2.3	1.04 V	178	17.50	48.50

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5300.00	108.8 PK			1.24 H	93	71.30	37.50
2	*5300.00	98.6 AV			1.24 H	93	61.10	37.50
3	5350.00	66.6 PK	74.0	-7.4	1.24 H	93	29.10	37.50
4	5350.00	44.3 AV	54.0	-9.7	1.24 H	93	6.80	37.50
5	10600.00	65.7 PK	74.0	-8.3	1.22 H	100	17.10	48.60
6	10600.00	51.6 AV	54.0	-2.4	1.22 H	100	3.00	48.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	107.4 PK			1.14 V	310	69.90	37.50
2	*5300.00	97.3 AV			1.14 V	310	59.80	37.50
3	5350.00	66.1 PK	74.0	-7.9	1.14 V	310	28.60	37.50
4	5350.00	43.9 AV	54.0	-10.1	1.14 V	310	6.40	37.50
5	10600.00	66.9 PK	74.0	-7.1	1.07 V	310	18.30	48.60
6	10600.00	52.3 AV	54.0	-1.7	1.07 V	310	3.70	48.60

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5320.00	109.1 PK			1.20 H	102	71.60	37.50
2	*5320.00	98.8 AV			1.20 H	102	61.30	37.50
3	5350.00	69.2 PK	74.0	-4.8	1.20 H	102	31.70	37.50
4	5350.00	46.3 AV	54.0	-7.7	1.20 H	102	8.80	37.50
5	10640.00	63.8 PK	74.0	-10.2	1.00 H	174	15.10	48.70
6	10640.00	50.7 AV	54.0	-3.3	1.00 H	174	2.00	48.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	107.6 PK			1.10 V	297	70.10	37.50
2	*5320.00	97.2 AV			1.10 V	297	59.70	37.50
3	5350.00	66.9 PK	74.0	-7.1	1.10 V	297	29.40	37.50
4	5350.00	44.4 AV	54.0	-9.6	1.10 V	297	6.90	37.50
5	10640.00	64.8 PK	74.0	-9.2	1.12 V	310	16.10	48.70
6	10640.00	51.3 AV	54.0	-2.7	1.12 V	310	2.60	48.70

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	5460.00	63.9 PK	74.0	-10.1	1.09 H	163	26.20	37.70
2	5460.00	47.5 AV	54.0	-6.5	1.09 H	163	9.80	37.70
3	#5470.00	65.5 PK	68.3	-2.8	1.09 H	163	27.70	37.80
4	*5500.00	107.6 PK			1.09 H	163	69.80	37.80
5	*5500.00	97.1 AV			1.09 H	163	59.30	37.80
6	11000.00	65.0 PK	74.0	-9.0	1.10 H	101	15.50	49.50
7	11000.00	51.3 AV	54.0	-2.7	1.10 H	101	1.80	49.50
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	5460.00	65.7 PK	74.0	-8.3	1.10 V	360	28.00	37.70
2	5460.00	48.8 AV	54.0	-5.2	1.10 V	360	11.10	37.70
3	#5470.00	67.0 PK	68.3	-1.3	1.10 V	360	29.20	37.80
4	*5500.00	109.1 PK			1.10 V	360	71.30	37.80
5	*5500.00	98.6 AV			1.10 V	360	60.80	37.80
6	11000.00	66.2 PK	74.0	-7.8	1.20 V	198	16.70	49.50
7	11000.00	51.8 AV	54.0	-2.2	1.20 V	198	2.30	49.50

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5580.00	109.0 PK			1.00 H	185	71.00	38.00
2	*5580.00	98.2 AV			1.00 H	185	60.20	38.00
3	11160.00	68.7 PK	74.0	-5.3	1.12 H	294	19.20	49.50
4	11160.00	53.0 AV	54.0	-1.0	1.12 H	294	3.50	49.50
5	#16740.00	63.3 PK	68.3	-5.0	1.06 H	180	12.30	51.00
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	*5580.00	110.0 PK			1.00 V	168	72.00	38.00
2	*5580.00	99.2 AV			1.00 V	168	61.20	38.00
3	11160.00	68.1 PK	74.0	-5.9	1.21 V	116	18.60	49.50
4	11160.00	52.5 AV	54.0	-1.5	1.21 V	116	3.00	49.50
5	#16740.00	62.5 PK	68.3	-5.8	1.00 V	36	11.50	51.00

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. "#": The radiated frequency is out the restricted band.
5. Margin value = Emission level – Limit value.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 132	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5660.00	108.8 PK			1.00 H	178	70.60	38.20
2	*5660.00	98.0 AV			1.00 H	178	59.80	38.20
3	11320.00	68.9 PK	74.0	-5.1	1.17 H	311	19.20	49.70
4	11320.00	53.0 AV	54.0	-1.0	1.17 H	311	3.30	49.70
5	#16980.00	63.4 PK	68.3	-4.9	1.00 H	360	11.80	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5660.00	109.8 PK			1.00 V	172	71.60	38.20
2	*5660.00	99.3 AV			1.00 V	172	61.10	38.20
3	11320.00	67.9 PK	74.0	-6.1	1.19 V	123	18.20	49.70
4	11320.00	52.3 AV	54.0	-1.7	1.19 V	123	2.60	49.70
5	#16980.00	62.7 PK	68.3	-5.6	1.00 V	41	11.10	51.60

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5700.00	106.9 PK			1.11 H	99	68.60	38.30
2	*5700.00	96.3 AV			1.11 H	99	58.00	38.30
3	#5725.00	66.2 PK	68.3	-2.1	1.11 H	99	27.90	38.30
4	11400.00	63.4 PK	74.0	-10.6	1.00 H	133	13.80	49.60
5	11400.00	48.8 AV	54.0	-5.2	1.00 H	133	-0.80	49.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	108.3 PK			1.00 V	354	70.00	38.30
2	*5700.00	97.7 AV			1.00 V	354	59.40	38.30
3	#5725.00	67.3 PK	68.3	-1.0	1.00 V	354	29.00	38.30
4	11400.00	63.7 PK	74.0	-10.3	1.00 V	174	14.10	49.60
5	11400.00	49.9 AV	54.0	-4.1	1.00 V	174	0.30	49.60

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

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	67.6 PK	74.0	-6.4	1.13 H	100	30.40	37.20
2	5150.00	44.7 AV	54.0	-9.3	1.13 H	100	7.50	37.20
3	*5190.00	105.3 PK			1.13 H	100	68.00	37.30
4	*5190.00	94.8 AV			1.13 H	100	57.50	37.30
5	#10380.00	62.2 PK	68.3	-6.1	1.10 H	87	14.00	48.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.8 PK	74.0	-8.2	1.10 V	8	28.60	37.20
2	5150.00	43.1 AV	54.0	-10.9	1.10 V	8	5.90	37.20
3	*5190.00	103.4 PK			1.10 V	8	66.10	37.30
4	*5190.00	93.1 AV			1.10 V	8	55.80	37.30
5	#10380.00	65.1 PK	68.3	-3.2	1.00 V	300	16.90	48.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	64.7 PK	74.0	-9.3	1.10 H	104	27.50	37.20
2	5150.00	42.8 AV	54.0	-11.2	1.10 H	104	5.60	37.20
3	*5230.00	105.5 PK			1.10 H	104	68.10	37.40
4	*5230.00	95.0 AV			1.10 H	104	57.60	37.40
5	#10460.00	61.5 PK	68.3	-6.8	1.00 H	174	13.10	48.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.6 PK	74.0	-9.4	1.07 V	21	27.40	37.20
2	5150.00	42.2 AV	54.0	-11.8	1.07 V	21	5.00	37.20
3	*5230.00	103.7 PK			1.07 V	21	66.30	37.40
4	*5230.00	93.4 AV			1.07 V	21	56.00	37.40
5	#10460.00	64.5 PK	68.3	-3.8	1.07 V	188	16.10	48.40

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5270.00	105.4 PK			1.10 H	82	68.00	37.40
2	*5270.00	94.9 AV			1.10 H	82	57.50	37.40
3	5350.00	64.6 PK	74.0	-9.4	1.10 H	82	27.10	37.50
4	5350.00	42.2 AV	54.0	-11.8	1.10 H	82	4.70	37.50
5	#10540.00	61.6 PK	68.3	-6.7	1.04 H	171	13.10	48.50
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	*5270.00	103.6 PK			1.20 V	269	66.20	37.40
2	*5270.00	93.2 AV			1.20 V	269	55.80	37.40
3	5350.00	64.1 PK	74.0	-9.9	1.20 V	269	26.60	37.50
4	5350.00	42.1 AV	54.0	-11.9	1.20 V	269	4.60	37.50
5	#10540.00	64.3 PK	68.3	-4.0	1.04 V	189	15.80	48.50

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5310.00	105.2 PK			1.10 H	69	67.70	37.50
2	*5310.00	94.7 AV			1.10 H	69	57.20	37.50
3	5350.00	69.7 PK	74.0	-4.3	1.10 H	69	32.20	37.50
4	5350.00	46.3 AV	54.0	-7.7	1.10 H	69	8.80	37.50
5	10620.00	61.9 PK	74.0	-12.1	1.04 H	193	13.30	48.60
6	10620.00	48.9 AV	54.0	-5.1	1.04 H	193	0.30	48.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	103.5 PK			1.04 V	311	66.00	37.50
2	*5310.00	94.2 AV			1.04 V	311	56.70	37.50
3	5350.00	67.3 PK	74.0	-6.7	1.04 V	311	29.80	37.50
4	5350.00	44.9 AV	54.0	-9.1	1.04 V	311	7.40	37.50
5	10620.00	62.6 PK	74.0	-11.4	1.10 V	240	14.00	48.60
6	10620.00	49.9 AV	54.0	-4.1	1.10 V	240	1.30	48.60

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	5460.00	64.2 PK	74.0	-9.8	1.10 H	335	26.50	37.70
2	5460.00	47.6 AV	54.0	-6.4	1.10 H	335	9.90	37.70
3	#5470.00	65.5 PK	68.3	-2.8	1.10 H	335	27.70	37.80
4	*5510.00	104.3 PK			1.10 H	335	66.40	37.90
5	*5510.00	93.9 AV			1.10 H	335	56.00	37.90
6	11020.00	61.9 PK	74.0	-12.1	1.12 H	310	12.40	49.50
7	11020.00	48.5 AV	54.0	-5.5	1.12 H	310	-1.00	49.50
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	5460.00	65.9 PK	74.0	-8.1	1.04 V	355	28.20	37.70
2	5460.00	48.3 AV	54.0	-5.7	1.04 V	355	10.60	37.70
3	#5470.00	67.0 PK	68.3	-1.3	1.04 V	355	29.20	37.80
4	*5510.00	105.6 PK			1.04 V	355	67.70	37.90
5	*5510.00	95.3 AV			1.04 V	355	57.40	37.90
6	11020.00	62.3 PK	74.0	-11.7	1.18 V	279	12.80	49.50
7	11020.00	49.3 AV	54.0	-4.7	1.18 V	279	-0.20	49.50

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5550.00	104.6 PK			1.00 H	324	66.70	37.90
2	*5550.00	94.7 AV			1.00 H	324	56.80	37.90
3	11100.00	64.8 PK	74.0	-9.2	1.11 H	293	15.30	49.50
4	11100.00	51.5 AV	54.0	-2.5	1.11 H	293	2.00	49.50
5	#16650.00	62.3 PK	68.3	-6.0	1.02 H	360	11.40	50.90
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	*5550.00	105.9 PK			1.07 V	189	68.00	37.90
2	*5550.00	95.7 AV			1.07 V	189	57.80	37.90
3	11100.00	64.6 PK	74.0	-9.4	1.16 V	112	15.10	49.50
4	11100.00	51.1 AV	54.0	-2.9	1.16 V	112	1.60	49.50
5	#16650.00	62.0 PK	68.3	-6.3	1.00 V	180	11.10	50.90

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.
6. "#": The radiated frequency is out the restricted band.
4. Margin value = Emission level – Limit value.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH 1005 hPa	TESTED BY	Match Tsui

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	*5670.00	104.2 PK			1.10 H	98	66.00	38.20
2	*5670.00	94.4 AV			1.10 H	98	56.20	38.20
3	#5725.00	65.9 PK	68.3	-2.4	1.10 H	98	27.60	38.30
4	11340.00	63.3 PK	74.0	-10.7	1.00 H	174	13.60	49.70
5	11340.00	49.5 AV	54.0	-4.5	1.00 H	174	-0.20	49.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	105.4 PK			1.01 V	354	67.20	38.20
2	*5670.00	95.2 AV			1.01 V	354	57.00	38.20
3	#5725.00	67.2 PK	68.3	-1.1	1.01 V	354	28.90	38.30
4	11340.00	63.9 PK	74.0	-10.1	1.04 V	188	14.20	49.70
5	11340.00	49.5 AV	54.0	-4.5	1.04 V	188	-0.20	49.70

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

BELOW 1GHz WORST-CASE DATA : 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1005 hPa	TESTED BY	David Huang
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	125.17	42.3 QP	43.5	-1.2	2.00 H	91	29.20	13.10
2	150.45	38.1 QP	43.5	-5.4	2.00 H	97	23.40	14.70
3	201.00	42.1 QP	43.5	-1.4	1.00 H	280	29.90	12.20
4	249.60	38.9 QP	46.0	-7.1	1.00 H	238	25.40	13.50
5	624.85	35.4 QP	46.0	-10.6	1.00 H	142	11.40	24.00
6	751.23	41.1 QP	46.0	-4.9	1.00 H	196	14.90	26.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	59.06	39.0 QP	40.0	-1.0	1.00 V	178	24.70	14.30
2	101.84	39.1 QP	43.5	-4.4	1.00 V	109	27.70	11.40
3	150.45	39.9 QP	43.5	-3.6	1.00 V	64	25.20	14.70
4	201.00	42.2 QP	43.5	-1.3	1.00 V	214	30.00	12.20
5	500.42	37.9 QP	46.0	-8.1	1.00 V	310	16.50	21.40
6	751.23	39.5 QP	46.0	-6.5	2.00 V	181	13.30	26.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1005 hPa	TESTED BY	David Huang
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	125.17	42.0 QP	43.5	-1.5	1.50 H	109	28.90	13.10
2	150.45	39.0 QP	43.5	-4.5	1.50 H	121	24.30	14.70
3	201.00	42.4 QP	43.5	-1.1	1.25 H	289	30.20	12.20
4	500.42	35.9 QP	46.0	-10.1	1.50 H	133	14.50	21.40
5	624.85	37.9 QP	46.0	-8.1	1.25 H	202	13.90	24.00
6	751.23	40.4 QP	46.0	-5.6	1.00 H	199	14.20	26.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.20	38.4 QP	40.0	-1.6	1.25 V	163	25.50	12.90
2	64.90	35.1 QP	40.0	-4.9	1.00 V	343	21.70	13.40
3	99.89	39.8 QP	43.5	-3.7	1.25 V	274	28.60	11.20
4	150.45	41.2 QP	43.5	-2.3	1.25 V	85	26.50	14.70
5	201.00	40.7 QP	43.5	-2.8	1.00 V	298	28.50	12.20
6	751.23	42.8 QP	46.0	-3.2	1.25 V	199	16.60	26.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1005 hPa	TESTED BY	David Huang
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	150.45	39.9 QP	43.5	-3.6	1.00 H	118	25.20	14.70
2	201.00	39.7 QP	43.5	-3.8	1.00 H	319	27.50	12.20
3	249.60	43.8 QP	46.0	-2.2	1.00 H	100	30.30	13.50
4	500.42	35.2 QP	46.0	-10.8	1.00 H	46	13.80	21.40
5	751.23	39.7 QP	46.0	-6.3	1.00 H	193	13.50	26.20
6	875.67	36.1 QP	46.0	-9.9	1.00 H	136	7.70	28.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	33.79	38.2 QP	40.0	-1.8	1.00 V	274	25.20	13.00
2	125.17	39.7 QP	43.5	-3.8	1.00 V	255	26.60	13.10
3	150.45	42.2 QP	43.5	-1.3	1.00 V	103	27.50	14.70
4	249.60	39.4 QP	46.0	-6.6	1.00 V	229	25.90	13.50
5	500.42	38.2 QP	46.0	-7.8	1.00 V	182	16.80	21.40
6	751.23	38.1 QP	46.0	-7.9	1.00 V	13	11.90	26.20

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

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1005 hPa	TESTED BY	David Huang
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	125.17	42.1 QP	43.5	-1.4	1.00 H	91	29.00	13.10
2	201.00	42.3 QP	43.5	-1.2	1.00 H	298	30.10	12.20
3	249.60	40.2 QP	46.0	-5.8	1.00 H	244	26.70	13.50
4	375.98	36.5 QP	46.0	-9.5	1.00 H	217	18.70	17.80
5	624.85	36.1 QP	46.0	-9.9	1.00 H	211	12.10	24.00
6	751.23	42.3 QP	46.0	-3.7	1.00 H	199	16.10	26.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	59.06	38.9 QP	40.0	-1.1	1.00 V	161	24.60	14.30
2	101.84	39.0 QP	43.5	-4.5	1.00 V	142	27.60	11.40
3	150.45	39.7 QP	43.5	-3.8	1.00 V	154	25.00	14.70
4	201.00	42.0 QP	43.5	-1.5	1.00 V	264	29.80	12.20
5	249.60	38.4 QP	46.0	-7.6	1.00 V	193	24.90	13.50
6	751.23	39.5 QP	46.0	-6.5	2.00 V	181	13.30	26.20

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1005 hPa	TESTED BY	David Huang
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	125.17	41.3 QP	43.5	-2.2	1.50 H	100	28.20	13.10
2	150.45	39.5 QP	43.5	-4.0	1.25 H	127	24.80	14.70
3	201.00	42.3 QP	43.5	-1.2	1.25 H	319	30.10	12.20
4	624.85	38.8 QP	46.0	-7.2	1.25 H	226	14.80	24.00
5	751.23	40.7 QP	46.0	-5.3	1.00 H	79	14.50	26.20
6	875.67	40.7 QP	46.0	-5.3	1.50 H	91	12.30	28.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.10	38.8 QP	40.0	-1.2	1.00 V	226	26.00	12.80
2	99.89	40.2 QP	43.5	-3.3	1.00 V	274	29.00	11.20
3	150.45	42.1 QP	43.5	-1.4	1.00 V	91	27.40	14.70
4	201.00	39.8 QP	43.5	-3.7	1.00 V	70	27.60	12.20
5	500.42	38.2 QP	46.0	-7.8	1.25 V	280	16.80	21.40
6	751.23	42.7 QP	46.0	-3.3	1.25 V	172	16.50	26.20

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH 1005 hPa	TESTED BY	David Huang
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	131.00	38.4 QP	43.5	-5.1	1.00 H	76	24.60	13.80
2	201.00	40.8 QP	43.5	-2.7	1.00 H	221	28.60	12.20
3	249.60	43.1 QP	46.0	-2.9	1.00 H	120	29.60	13.50
4	358.48	34.1 QP	46.0	-11.9	1.00 H	100	16.90	17.20
5	624.85	36.8 QP	46.0	-9.2	1.00 H	222	12.80	24.00
6	751.23	41.6 QP	46.0	-4.4	1.00 H	231	15.40	26.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	33.79	38.4 QP	40.0	-1.6	1.00 V	244	25.40	13.00
2	150.45	42.5 QP	43.5	-1.0	1.00 V	103	27.80	14.70
3	201.00	38.7 QP	43.5	-4.8	1.00 V	250	26.50	12.20
4	249.60	39.4 QP	46.0	-6.6	1.00 V	229	25.90	13.50
5	500.42	37.2 QP	46.0	-8.8	1.00 V	322	15.80	21.40
6	624.85	38.9 QP	46.0	-7.1	1.00 V	349	14.90	24.00

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.

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 23, 2010	Nov. 22, 2011
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 30, 2010	Dec. 29, 2011
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 06, 2011	Jan. 05, 2012
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jul. 08, 2010	Jul. 07, 2011
V-LISN SCHWARZBECK	NNBL 8226-2	8226-142	Jul. 12, 2010	Jul. 11, 2011
LISN ROHDE & SCHWARZ	ENV216	100072	Jun. 11, 2010	Jun. 10, 2011
Software ADT	ADT_Conc_ V7.3.7	NA	NA	NA

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 2.
3. The VCCI Site Registration No. is C-2047.

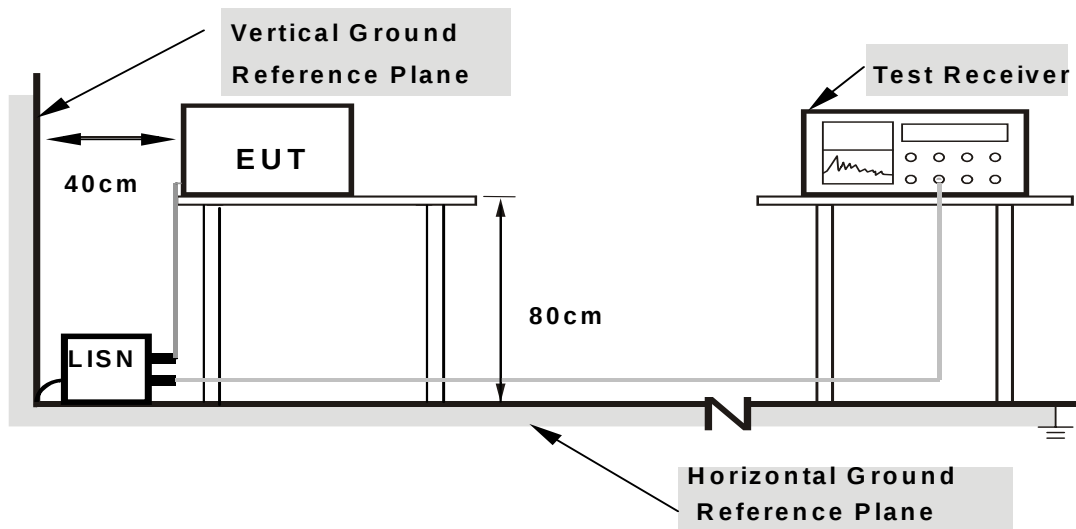
4.2.3 TEST PROCEDURES

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

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

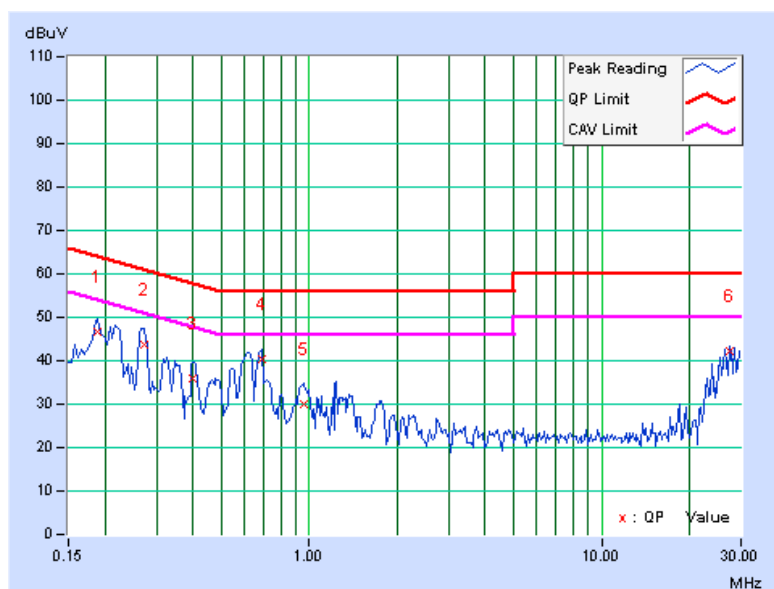
CONDUCTED WORST-CASE DATA

FOR 5180-5320MHz BAND: 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.15	46.57	-	46.72	-	64.08	54.08	-17.36	-
2	0.271	0.16	43.68	-	43.84	-	61.08	51.08	-17.25	-
3	0.400	0.17	35.78	-	35.95	-	57.85	47.85	-21.90	-
4	0.685	0.18	40.13	-	40.31	-	56.00	46.00	-15.69	-
5	0.955	0.19	29.71	-	29.90	-	56.00	46.00	-26.10	-
6	27.309	1.25	41.13	-	42.38	-	60.00	50.00	-17.62	-

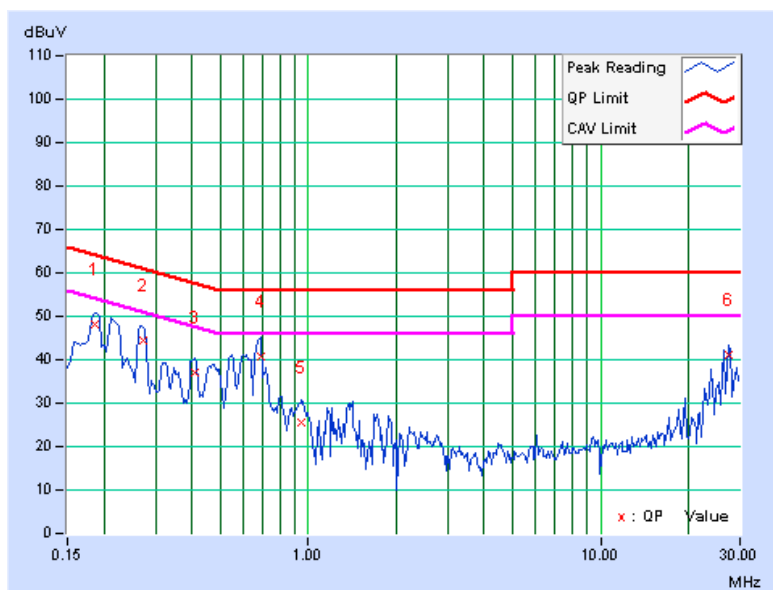
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.185	0.17	47.96	-	48.13	-	64.25	54.25	-16.13	-
2	0.271	0.18	44.31	-	44.49	-	61.09	51.09	-16.60	-
3	0.408	0.19	37.00	-	37.19	-	57.69	47.69	-20.50	-
4	0.685	0.20	40.71	-	40.91	-	56.00	46.00	-15.09	-
5	0.951	0.21	25.46	-	25.67	-	56.00	46.00	-30.33	-
6	27.309	1.08	40.03	-	41.11	-	60.00	50.00	-18.89	-

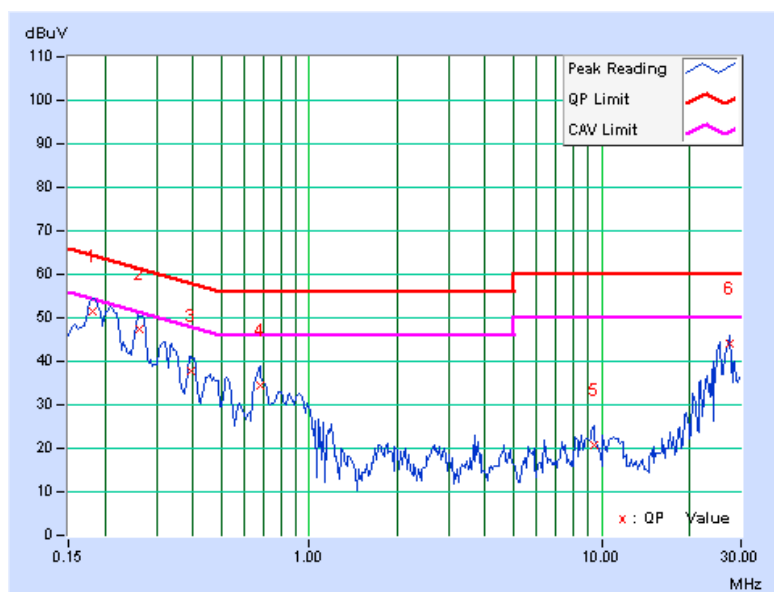
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.181	0.15	51.15	-	51.30	-	64.43	54.43	-13.13	-
2	0.263	0.16	47.23	-	47.39	-	61.33	51.33	-13.94	-
3	0.392	0.17	37.72	-	37.89	-	58.02	48.02	-20.13	-
4	0.677	0.18	34.29	-	34.47	-	56.00	46.00	-21.53	-
5	9.469	0.54	20.06	-	20.60	-	60.00	50.00	-39.40	-
6	27.313	1.25	42.80	-	44.05	-	60.00	50.00	-15.95	-

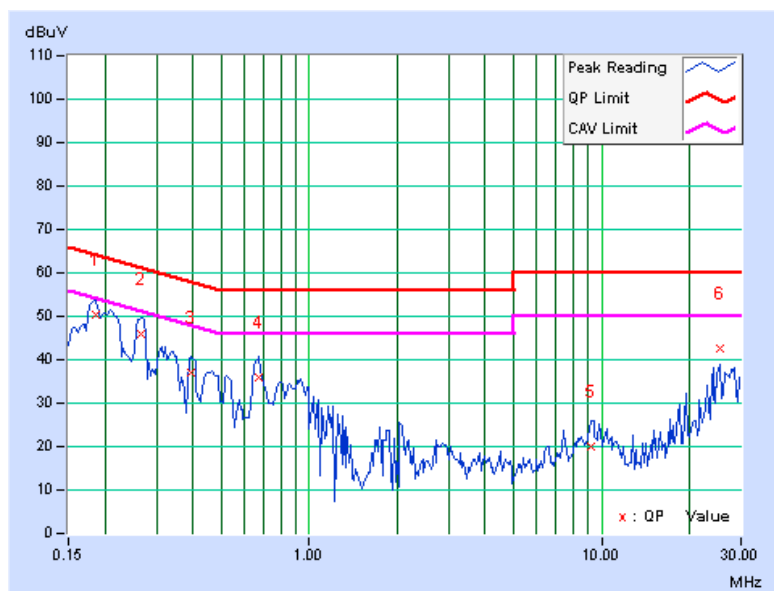
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.185	0.17	50.04	-	50.21	-	64.25	54.25	-14.05	-
2	0.267	0.18	45.88	-	46.06	-	61.20	51.20	-15.15	-
3	0.392	0.19	36.99	-	37.18	-	58.02	48.02	-20.84	-
4	0.673	0.20	35.86	-	36.06	-	56.00	46.00	-19.94	-
5	9.242	0.48	19.41	-	19.89	-	60.00	50.00	-40.11	-
6	25.289	1.04	41.50	-	42.54	-	60.00	50.00	-17.46	-

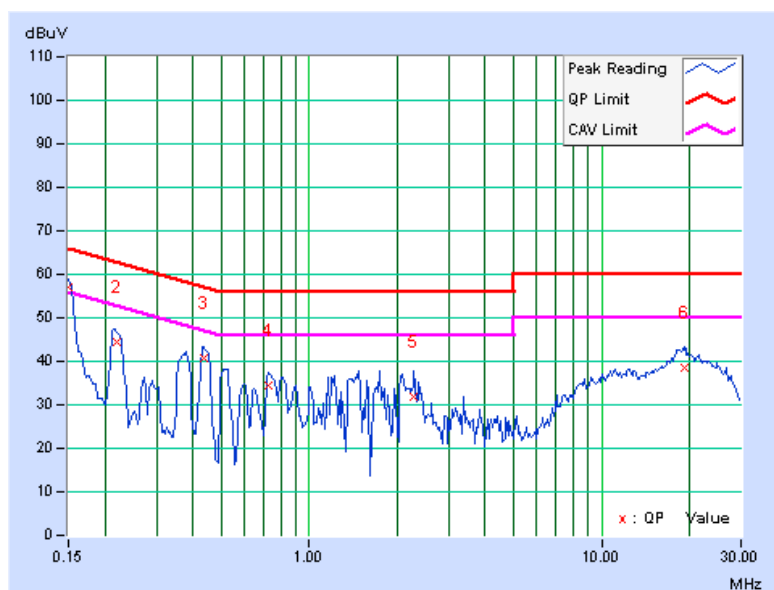
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	C		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.15	56.86	52.74	57.01	52.89	66.00	56.00	-8.99	-3.11
2	0.220	0.15	44.21	-	44.36	-	62.81	52.81	-18.45	-
3	0.435	0.17	40.53	-	40.70	-	57.15	47.15	-16.45	-
4	0.724	0.18	34.37	-	34.55	-	56.00	46.00	-21.45	-
5	2.270	0.23	31.57	-	31.80	-	56.00	46.00	-24.20	-
6	19.113	1.09	37.46	-	38.55	-	60.00	50.00	-21.45	-

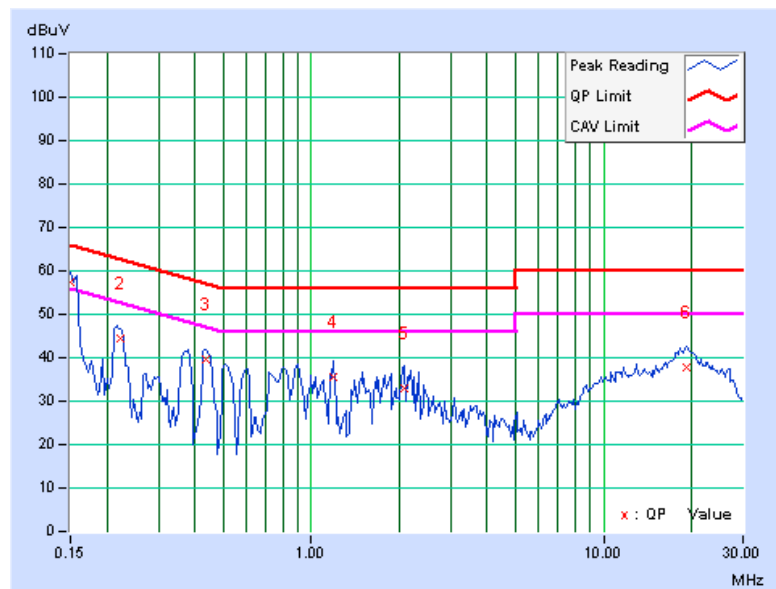
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	C		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.16	57.27	51.58	57.43	51.74	66.00	56.00	-8.57	-4.26
2	0.222	0.17	44.27	-	44.44	-	62.76	52.76	-18.32	-
3	0.435	0.19	39.36	-	39.55	-	57.15	47.15	-17.60	-
4	1.195	0.21	35.41	-	35.62	-	56.00	46.00	-20.38	-
5	2.074	0.23	32.87	-	33.10	-	56.00	46.00	-22.90	-
6	19.203	0.89	36.82	-	37.71	-	60.00	50.00	-22.29	-

- 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.

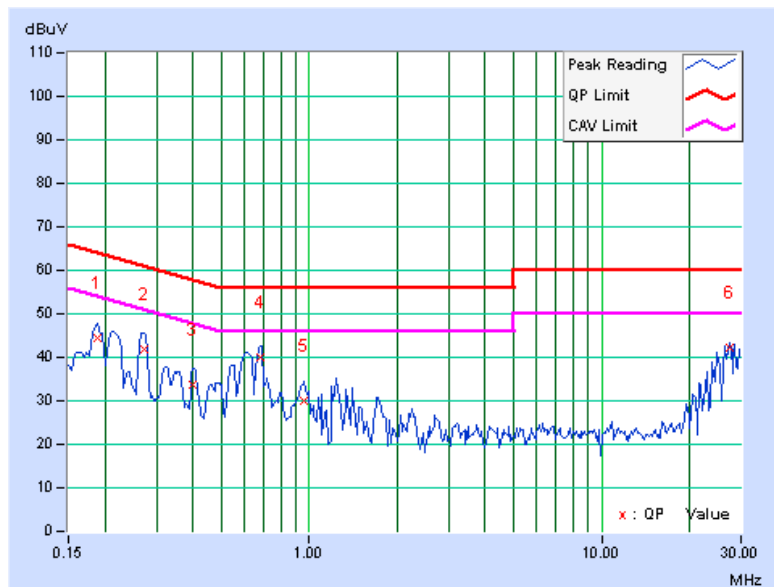


FOR 5500-5700MHz BAND: 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.15	44.34	-	44.49	-	64.08	54.08	-19.59	-
2	0.271	0.16	41.83	-	41.99	-	61.08	51.08	-19.10	-
3	0.400	0.17	33.50	-	33.67	-	57.85	47.85	-24.18	-
4	0.677	0.18	39.90	-	40.08	-	56.00	46.00	-15.92	-
5	0.963	0.19	29.69	-	29.88	-	56.00	46.00	-26.12	-
6	27.309	1.25	41.13	-	42.38	-	60.00	50.00	-17.62	-

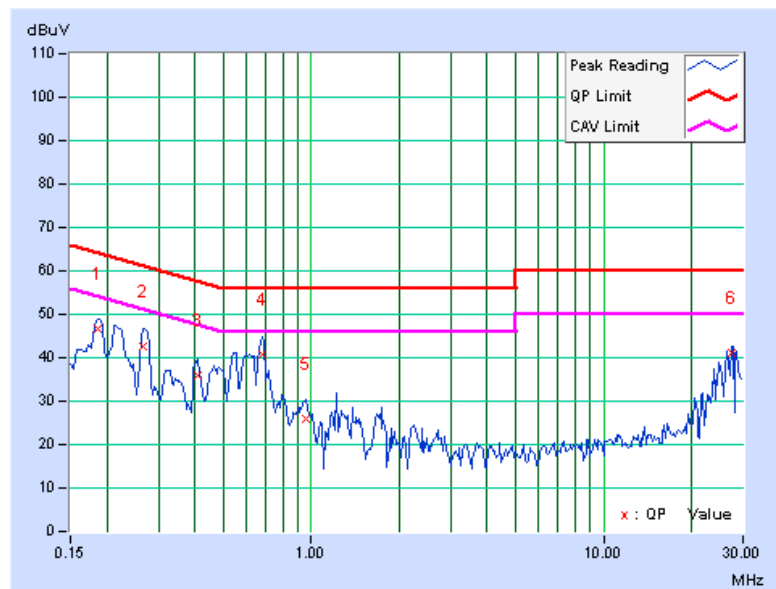
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.185	0.17	46.35	-	46.52	-	64.25	54.25	-17.74	-
2	0.267	0.18	42.52	-	42.70	-	61.20	51.20	-18.51	-
3	0.408	0.19	35.60	-	35.79	-	57.69	47.69	-21.90	-
4	0.681	0.20	40.39	-	40.59	-	56.00	46.00	-15.41	-
5	0.959	0.21	25.88	-	26.09	-	56.00	46.00	-29.91	-
6	27.309	1.08	40.01	-	41.09	-	60.00	50.00	-18.91	-

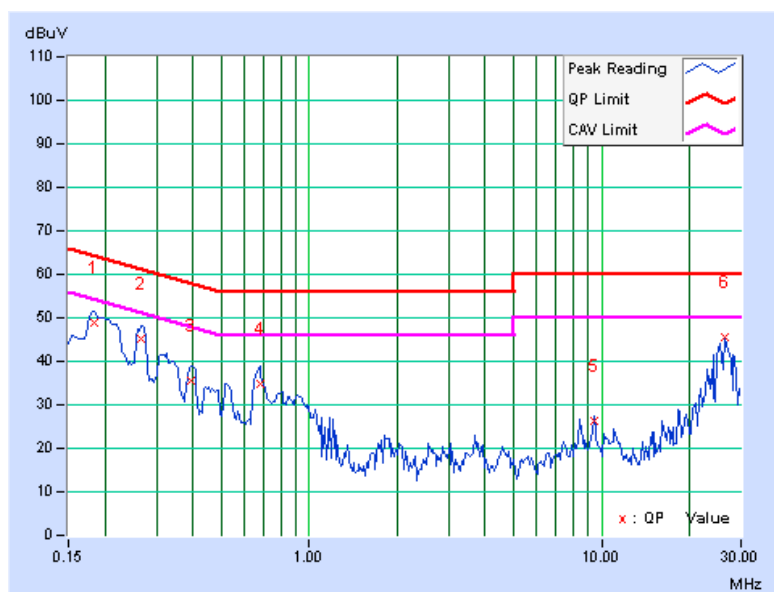
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.183	0.15	48.58	-	48.73	-	64.33	54.33	-15.60	-
2	0.267	0.16	44.85	-	45.01	-	61.20	51.20	-16.20	-
3	0.394	0.17	35.26	-	35.43	-	57.99	47.99	-22.56	-
4	0.677	0.18	34.75	-	34.93	-	56.00	46.00	-21.07	-
5	9.442	0.54	25.70	-	26.24	-	60.00	50.00	-33.76	-
6	26.297	1.24	44.26	-	45.50	-	60.00	50.00	-14.50	-

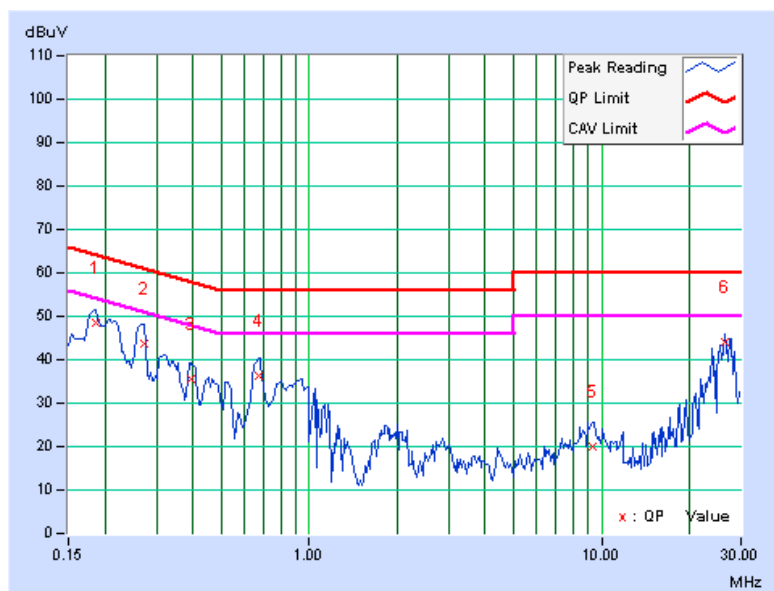
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.185	0.17	48.28	-	48.45	-	64.25	54.25	-15.81	-
2	0.271	0.18	43.60	-	43.78	-	61.08	51.08	-17.31	-
3	0.392	0.19	35.50	-	35.69	-	58.02	48.02	-22.33	-
4	0.670	0.20	36.22	-	36.42	-	56.00	46.00	-19.58	-
5	9.336	0.48	19.59	-	20.07	-	60.00	50.00	-39.93	-
6	26.297	1.06	42.89	-	43.95	-	60.00	50.00	-16.05	-

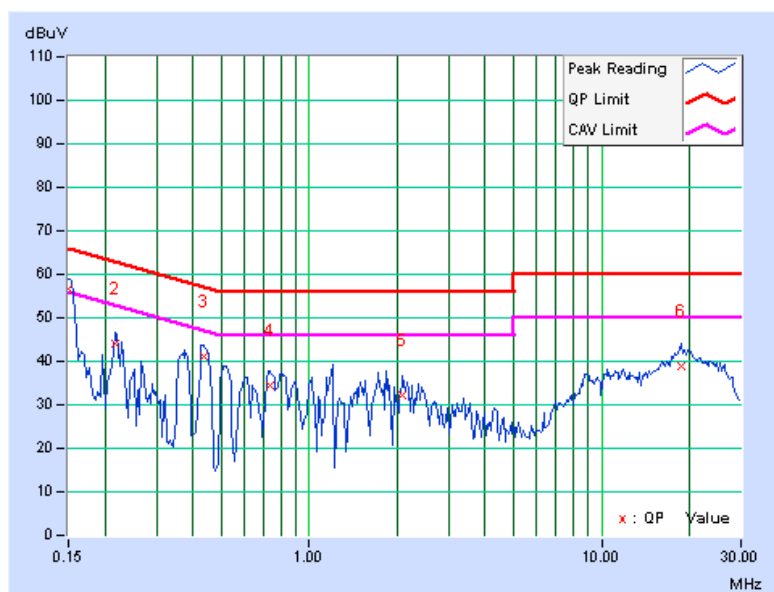
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	C		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.15	56.39	52.56	56.54	52.71	66.00	56.00	-9.46	-3.29
2	0.216	0.15	43.92	-	44.07	-	62.96	52.96	-18.88	-
3	0.438	0.17	40.78	-	40.95	-	57.11	47.11	-16.16	-
4	0.736	0.18	34.35	-	34.53	-	56.00	46.00	-21.47	-
5	2.094	0.22	32.07	-	32.29	-	56.00	46.00	-23.71	-
6	18.750	1.07	37.89	-	38.96	-	60.00	50.00	-21.04	-

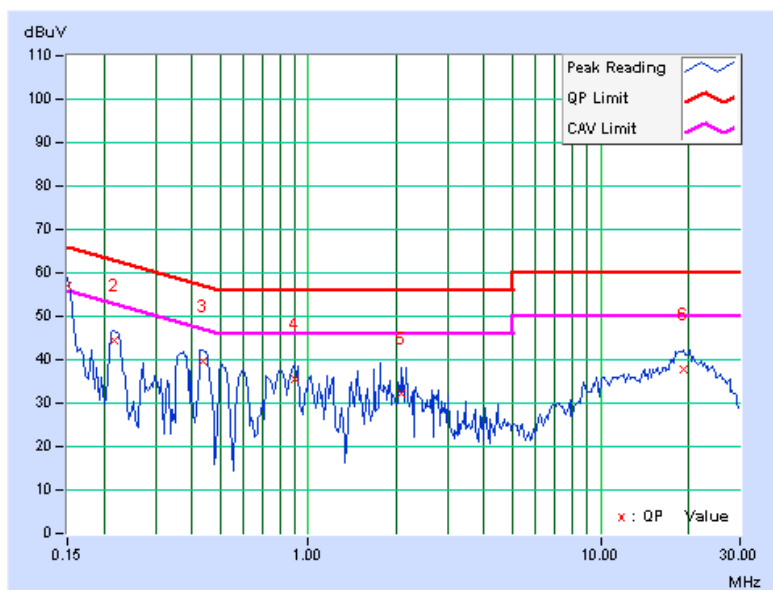
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission 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		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.16	56.70	51.34	56.86	51.50	66.00	56.00	-9.14	-4.50
2	0.216	0.17	44.14	-	44.31	-	62.96	52.96	-18.64	-
3	0.435	0.19	39.60	-	39.79	-	57.16	47.16	-17.37	-
4	0.900	0.21	35.49	-	35.70	-	56.00	46.00	-20.30	-
5	2.094	0.23	31.89	-	32.12	-	56.00	46.00	-23.88	-
6	19.207	0.89	36.85	-	37.74	-	60.00	50.00	-22.26	-

- 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
5.150 ~ 5.250GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.250 ~ 5.350GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.470 ~ 5.725GHz	The lesser of 250mW (24dBm) or 11dBm + 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	DUE DATE OF CALIBRATION
High Speed Peak Power Meter	ML2495A	0842014	Apr. 21, 2010	Apr. 20, 2011
Power Sensor	MA2411B	0738404	Apr. 21, 2010	Apr. 20, 2011

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Measurement Bandwidth of ML2495A is 65MHz greater than 26dB bandwidth of emission.

FOR 26dB OCCUPIED BANDWIDTH

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

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

4.3.3 TEST PROCEDURE

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

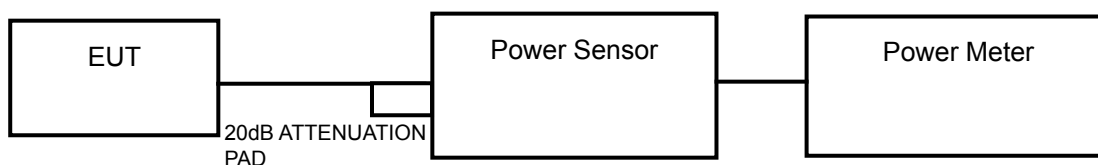
The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 300kHz RBW and 1MHz VBW. The 26dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 26dB.

4.3.4 DEVIATION FROM TEST STANDARD

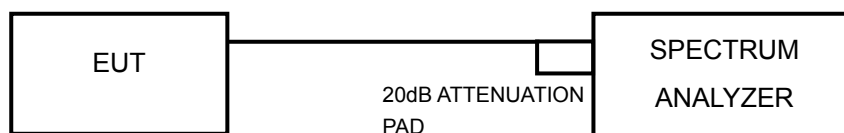
No deviation.

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: 802.11a

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	11.2	11.2	26.4	14.2	14.5	PASS
40	5200	11.2	11.4	27.0	14.3	14.5	PASS
48	5240	11.1	11.5	27.0	14.3	14.5	PASS
52	5260	11.1	11.1	25.8	14.1	21.5	PASS
60	5300	11.2	10.4	24.1	13.8	21.5	PASS
64	5320	11.8	11.8	30.3	14.8	21.5	PASS
100	5500	11.4	11.3	27.3	14.4	21.5	PASS
116	5580	11.1	11.4	26.7	14.3	21.5	PASS
132	5660	11.3	11.2	26.7	14.3	21.5	PASS
140	5700	9.1	9.0	16.1	12.1	21.5	PASS

NOTE:

For 5180MHz ~ 5240MHz

Directional gain = $5.5\text{dBi} + 10\log(2) = 8.5\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $17 - (8.5 - 6) = 14.5\text{dBm}$.

For 5260MHz ~ 5700MHz

Directional gain = $5.5\text{dBi} + 10\log(2) = 8.5\text{dBi} > 6\text{dBi}$, so the conducted power limit shall be reduced to $24 - (8.5 - 6) = 21.5\text{dBm}$.

802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	9.3	9.2	16.8	12.3	17	PASS
40	5200	10.1	9.5	19.1	12.8	17	PASS
48	5240	9.3	9.8	18.1	12.6	17	PASS
52	5260	9.6	9.1	17.2	12.4	24	PASS
60	5300	10.0	9.1	18.1	12.6	24	PASS
64	5320	9.8	9.7	18.9	12.8	24	PASS
100	5500	9.4	9.5	17.6	12.5	24	PASS
116	5580	9.7	9.2	17.7	12.5	24	PASS
132	5660	9.2	9.6	17.4	12.4	24	PASS
140	5700	8.6	8.3	14.0	11.5	24	PASS

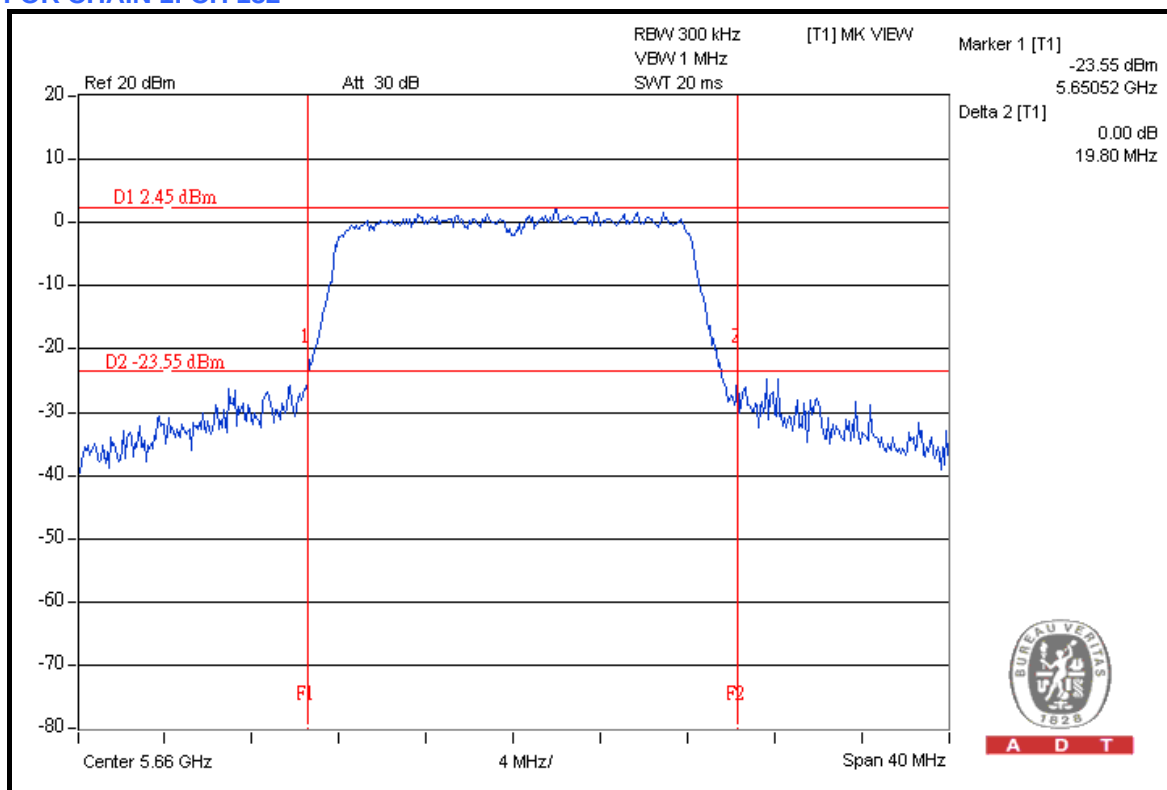
802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	9.0	9.2	16.3	12.1	17	PASS
46	5230	9.5	9.0	16.9	12.3	17	PASS
54	5270	9.8	9.1	17.7	12.5	24	PASS
62	5310	9.9	8.9	17.5	12.4	24	PASS
102	5510	9.6	9.0	17.1	12.3	24	PASS
110	5550	10.2	9.4	19.2	12.8	24	PASS
134	5670	9.5	10.1	19.1	12.8	24	PASS

26dB OCCUPIED BANDWIDTH: 802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	19.25	19.14	PASS
40	5200	19.28	19.16	PASS
48	5240	19.18	19.08	PASS
52	5260	19.23	19.02	PASS
60	5300	19.21	19.08	PASS
64	5320	19.27	19.09	PASS
100	5500	19.24	19.13	PASS
116	5580	19.20	19.29	PASS
132	5660	19.17	19.80	PASS
140	5700	19.24	19.12	PASS

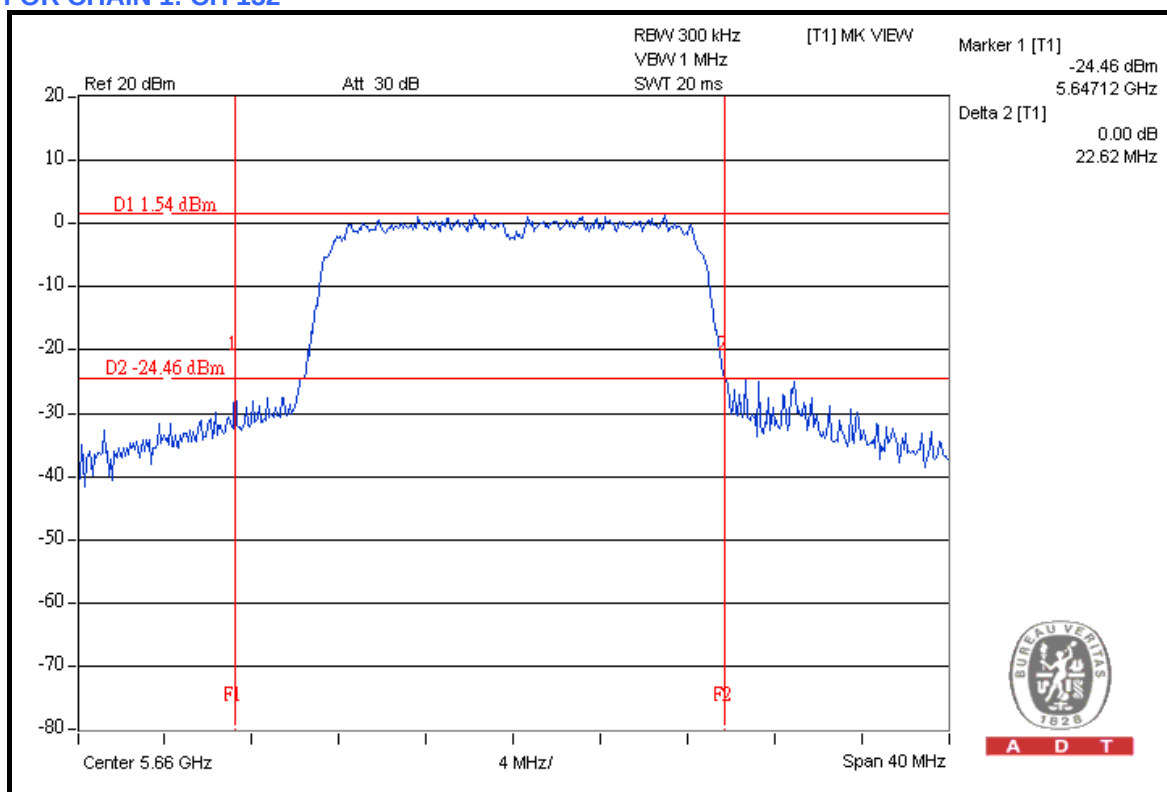
FOR CHAIN 1: CH 132



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	19.52	19.55	PASS
40	5200	19.54	19.46	PASS
48	5240	19.53	19.47	PASS
52	5260	19.58	19.48	PASS
60	5300	19.55	19.48	PASS
64	5320	19.58	19.48	PASS
100	5500	19.66	19.46	PASS
116	5580	19.45	19.40	PASS
132	5660	19.49	22.62	PASS
140	5700	19.66	19.45	PASS

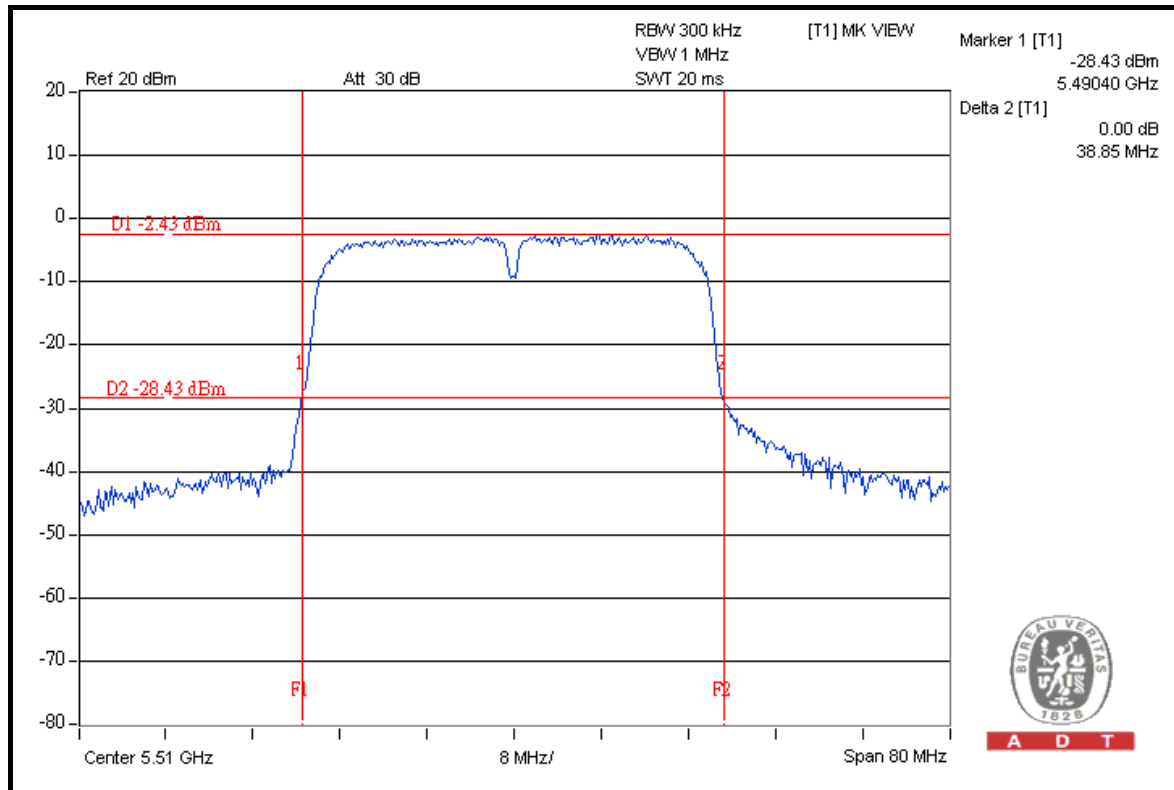
FOR CHAIN 1: CH 132



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
38	5190	38.73	38.52	PASS
46	5230	38.84	38.34	PASS
54	5270	38.74	38.37	PASS
62	5310	38.72	38.42	PASS
102	5510	38.85	38.34	PASS
110	5550	38.60	38.34	PASS
134	5670	38.64	38.57	PASS

CHAIN 0: CH 102



4.4 PEAK POWER EXCURSION MEASUREMENT

4.4.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	13dB
5.250 ~ 5.350GHz	13dB
5.470 ~ 5.725GHz	13dB

4.4.2 TEST INSTRUMENTS

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

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

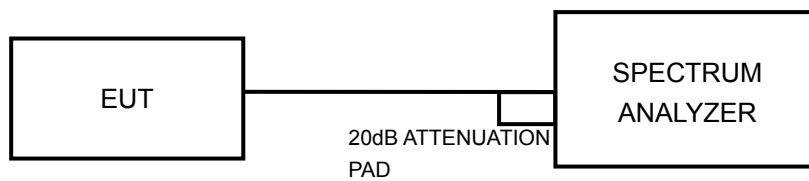
4.4.3 TEST PROCEDURE

- The transmitter output was connected to the spectrum analyzer.
- Set the spectrum bandwidth span to view the entire spectrum.
- Using peak detector and Max-hold function for Trace 1 (RB = 1MHz, VB = 3MHz) and 2 (RB = 1MHz, VB = 300kHz).
- 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

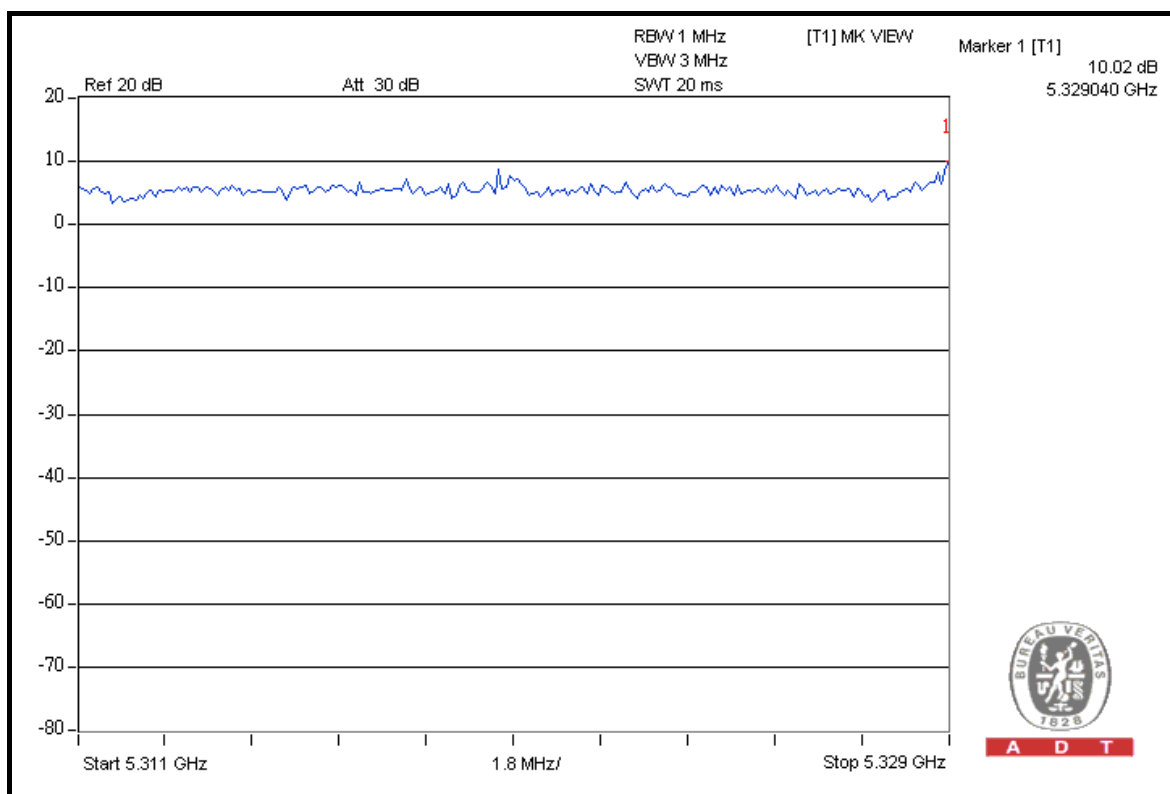
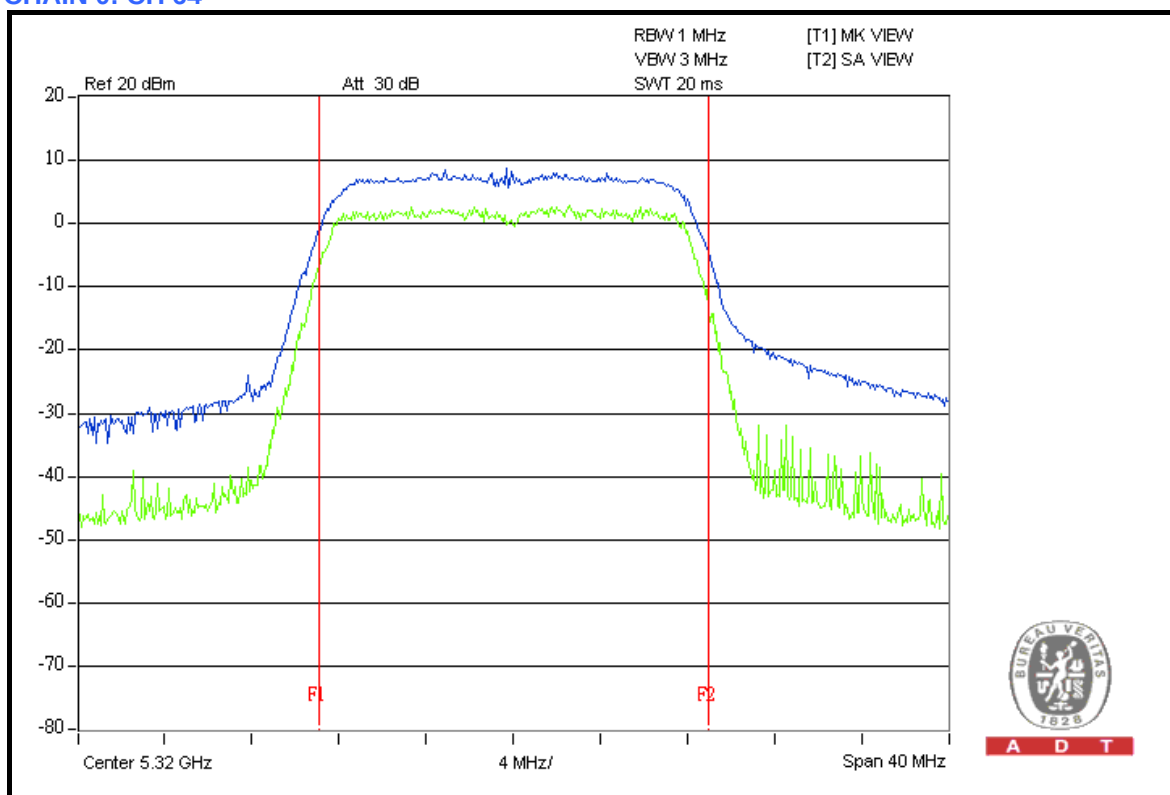
802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)		PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1		
36	5180	8.88	8.15	13	PASS
40	5200	8.95	7.90	13	PASS
48	5240	8.37	8.95	13	PASS
52	5260	8.71	8.07	13	PASS
60	5300	8.06	9.59	13	PASS
64	5320	10.02	7.77	13	PASS
100	5500	8.94	8.58	13	PASS
116	5580	8.44	8.10	13	PASS
132	5660	8.17	7.90	13	PASS
140	5700	8.22	8.76	13	PASS



A D T

CHAIN 0: CH 64



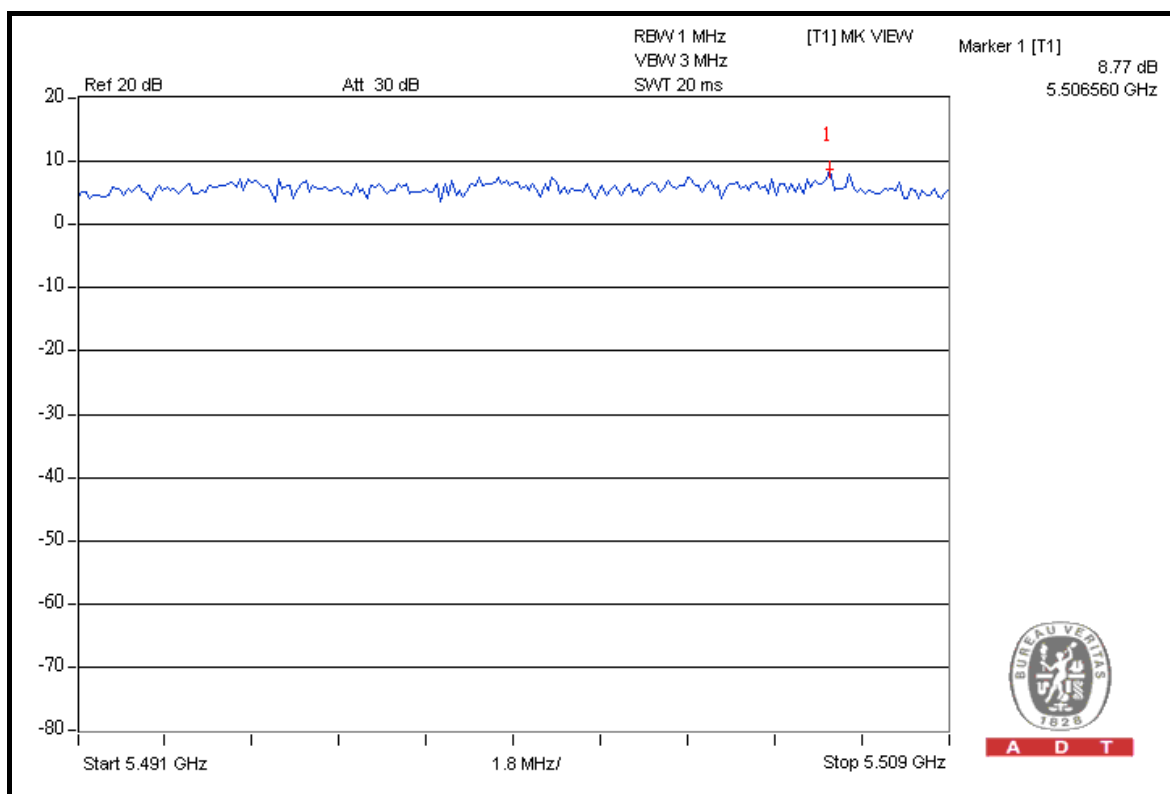
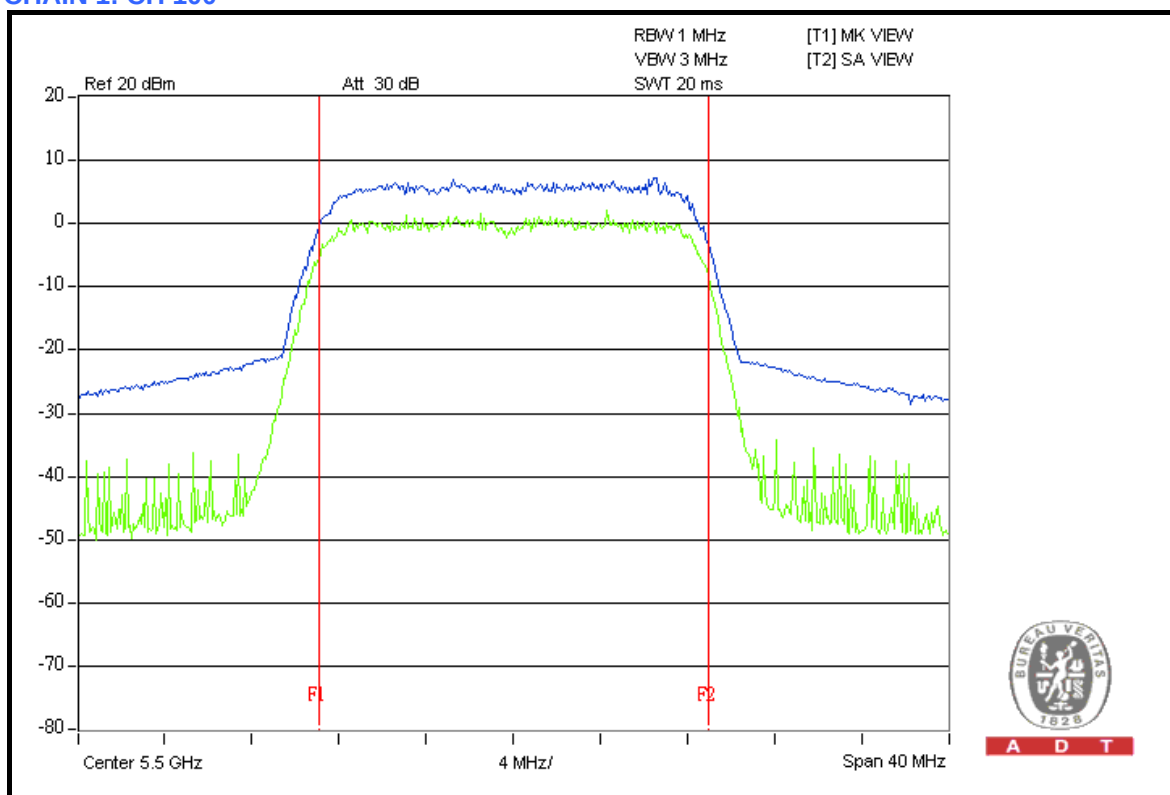
802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)		PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1		
36	5180	6.96	8.18	13	PASS
40	5200	7.72	7.72	13	PASS
48	5240	7.50	7.85	13	PASS
52	5260	8.13	7.80	13	PASS
60	5300	7.87	7.94	13	PASS
64	5320	7.59	7.94	13	PASS
100	5500	7.66	8.77	13	PASS
116	5580	8.06	8.38	13	PASS
132	5660	7.19	7.89	13	PASS
140	5700	7.70	7.79	13	PASS



A D T

CHAIN 1: CH 100



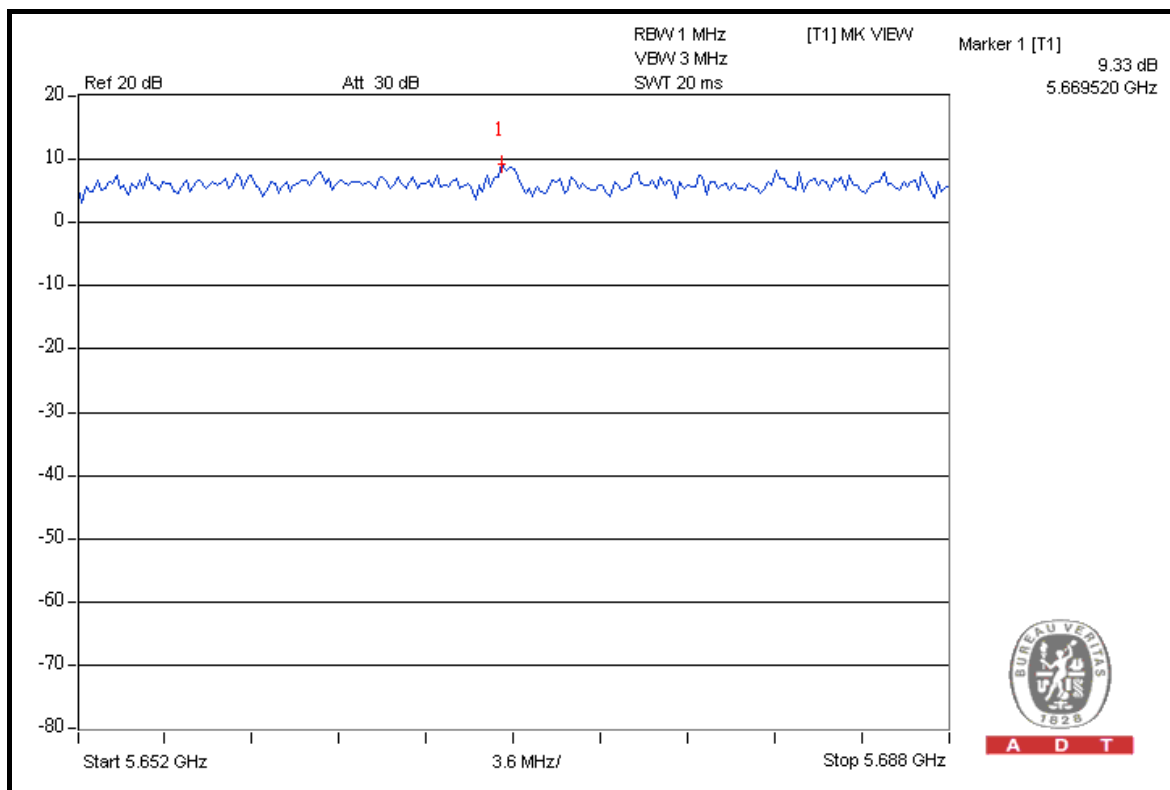
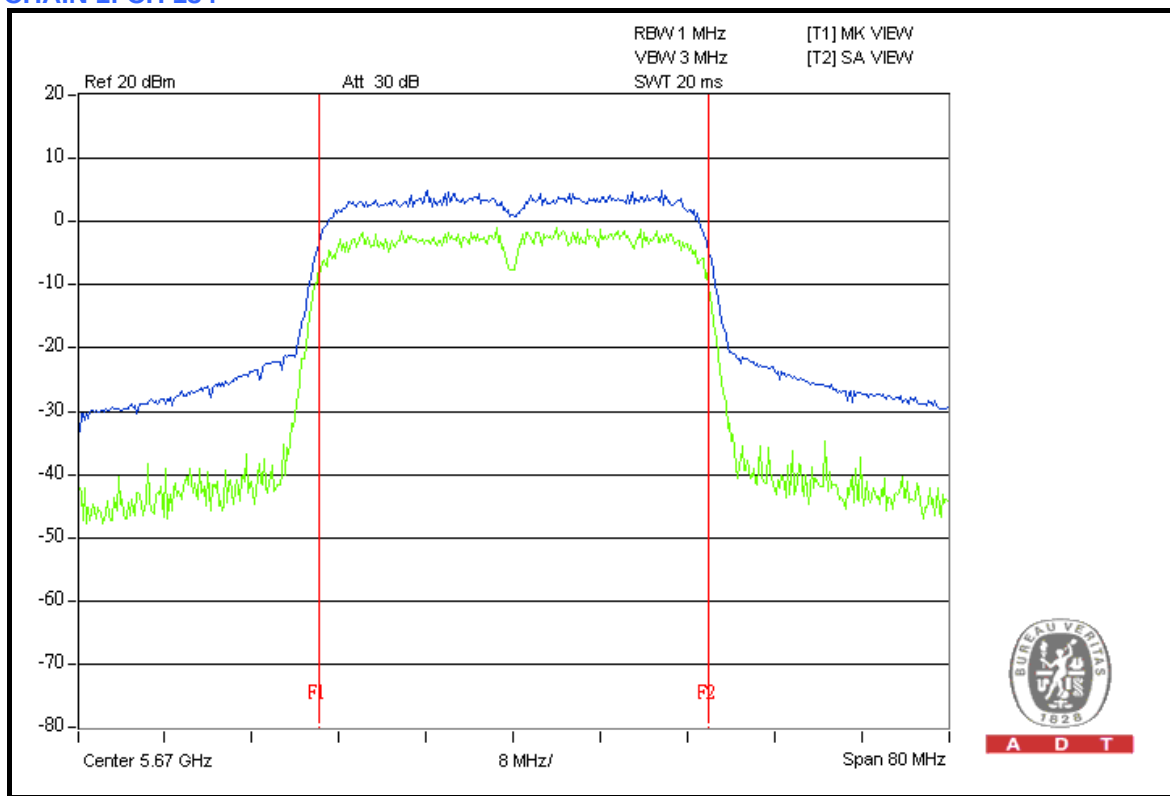
**A D T****802.11n (40MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)		PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1		
38	5190	9.22	8.61	13	PASS
46	5230	8.81	8.09	13	PASS
54	5270	8.78	8.42	13	PASS
62	5310	7.56	8.65	13	PASS
102	5510	8.72	8.19	13	PASS
110	5550	8.13	8.25	13	PASS
134	5670	8.21	9.33	13	PASS



A D T

CHAIN 1: CH 134



4.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	4dBm
5.250 ~ 5.350GHz	11dBm
5.470 ~ 5.725GHz	11dBm

4.5.2 TEST INSTRUMENTS

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

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

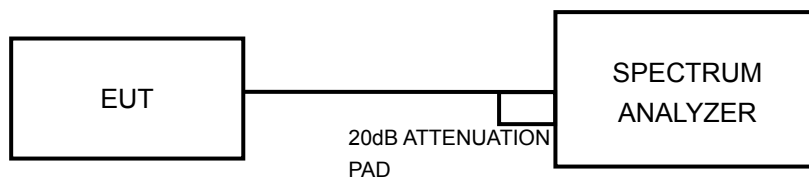
4.5.3 TEST PROCEDURES

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

802.11a

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	-3.21	-3.27	0.949	-0.23	1.5	PASS
40	5200	-3.19	-2.88	0.995	-0.02	1.5	PASS
48	5240	-3.29	-2.71	1.005	0.02	1.5	PASS
52	5260	-3.09	-3.23	0.966	-0.15	8.5	PASS
60	5300	-3.39	-3.84	0.871	-0.60	8.5	PASS
64	5320	-2.46	-2.51	1.129	0.53	8.5	PASS
100	5500	-2.98	-3.08	0.996	-0.02	8.5	PASS
116	5580	-3.64	-3.19	0.912	-0.40	8.5	PASS
132	5660	-2.09	-3.53	1.062	0.26	8.5	PASS
140	5700	-5.07	-5.27	0.608	-2.16	8.5	PASS

NOTE:

For 5180MHz ~ 5240MHz

Directional gain = $5.5\text{dBi} + 10\log(2) = 8.5\text{dBi} > 6\text{dBi}$, so the power spectral density limit shall be reduced to $4 - (8.5 - 6) = 1.5\text{dBm}$.

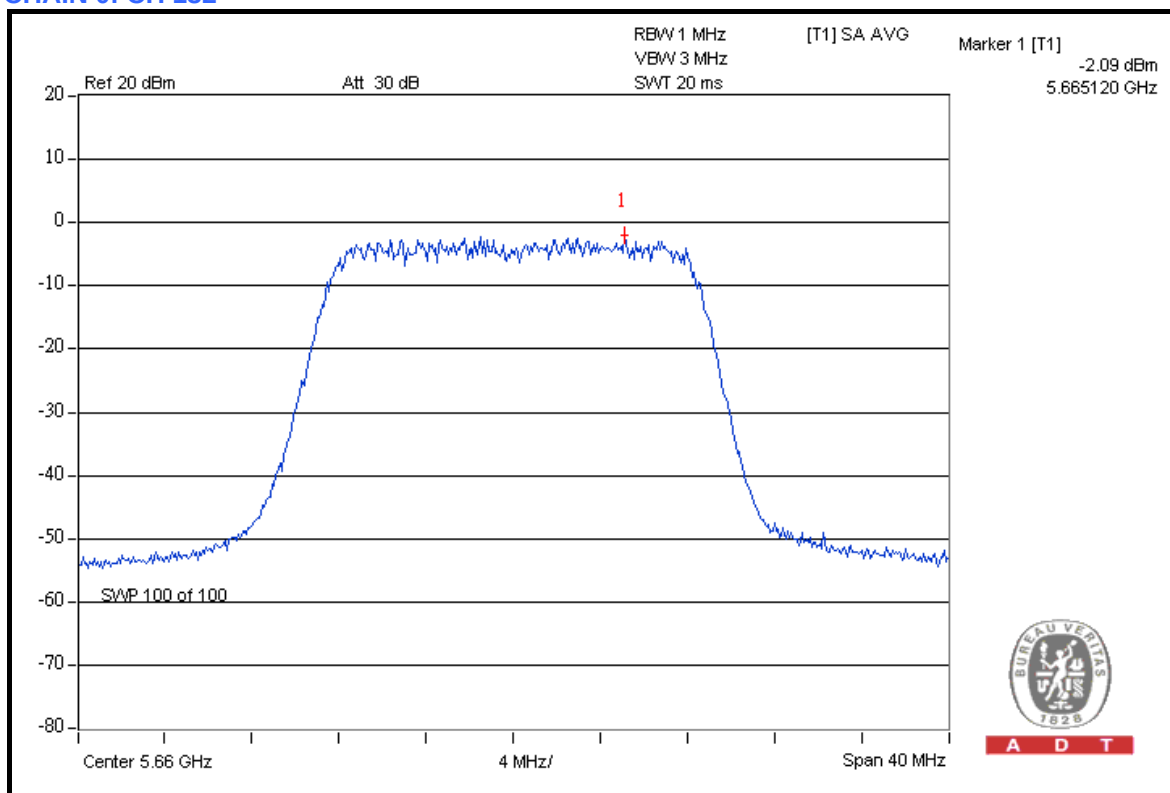
For 5260MHz ~ 5700MHz

Directional gain = $5.5\text{dBi} + 10\log(2) = 8.5\text{dBi} > 6\text{dBi}$, so the power spectral density limit shall be reduced to $11 - (8.5 - 6) = 8.5\text{dBm}$.



A D T

CHAIN 0: CH 132

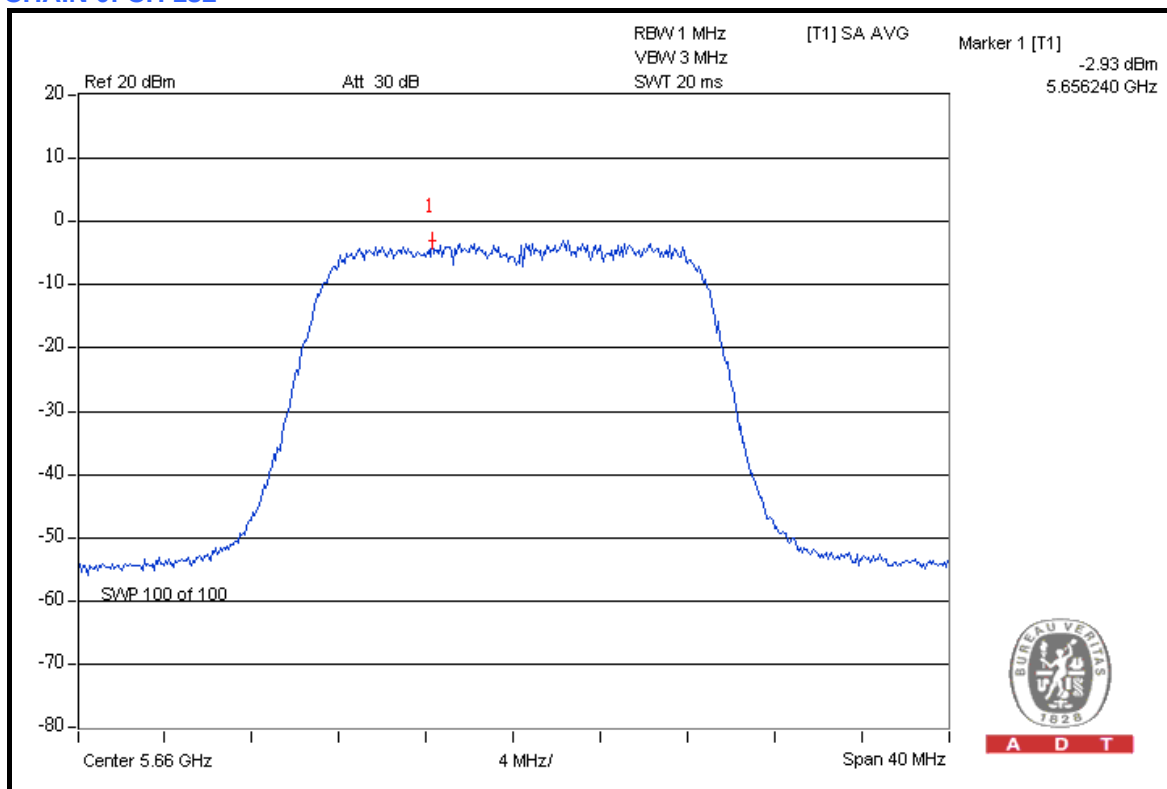


A D T

802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	-4.85	-6.06	0.575	-2.40	4	PASS
40	5200	-3.87	-5.53	0.690	-1.61	4	PASS
48	5240	-5.15	-5.35	0.597	-2.24	4	PASS
52	5260	-4.40	-5.95	0.617	-2.10	11	PASS
60	5300	-4.08	-5.95	0.645	-1.90	11	PASS
64	5320	-4.51	-5.38	0.644	-1.91	11	PASS
100	5500	-4.57	-5.67	0.620	-2.08	11	PASS
116	5580	-3.52	-5.08	0.755	-1.22	11	PASS
132	5660	-2.93	-5.63	0.783	-1.06	11	PASS
140	5700	-5.37	-6.81	0.499	-3.02	11	PASS

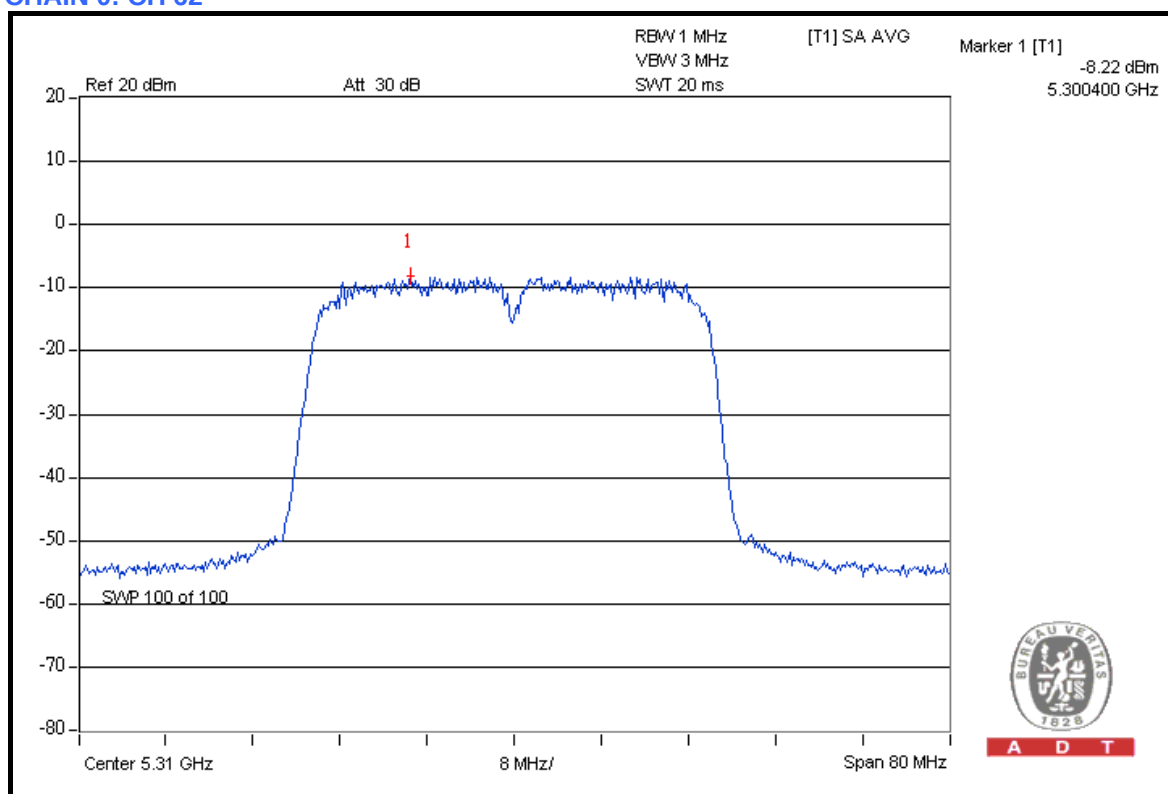
CHAIN 0: CH 132



802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	-9.31	-9.36	0.233	-6.33	4	PASS
46	5230	-8.63	-9.48	0.250	-6.02	4	PASS
54	5270	-8.39	-9.30	0.262	-5.82	11	PASS
62	5310	-8.22	-9.57	0.261	-5.83	11	PASS
102	5510	-8.59	-9.35	0.255	-5.93	11	PASS
110	5550	-9.81	-8.93	0.232	-6.35	11	PASS
134	5670	-8.63	-8.41	0.281	-5.51	11	PASS

CHAIN 0: CH 62



4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency tolerance of the carrier signal shall be maintained within the band of operation 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	DUE DATE OF CALIBRATION
R&S SPECTRUM ANALYZER	FSP40	100040	Jul. 17, 2010	Jul. 16, 2011
WIT STANDARD TEMPERATURE AND HUMIDITY CHAMBER	TH-4S-C	W981030	Jun. 28, 2010	Jun. 27, 2011

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

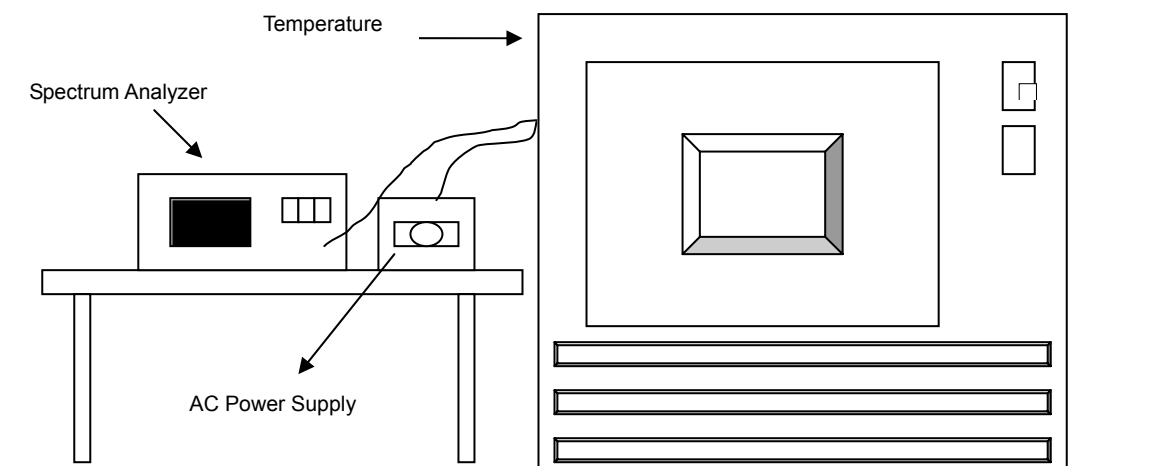
4.6.3 TEST PROCEDURE

- The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- 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.
- Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- 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

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
55	110.0	5319.996567	-0.645	5319.996918	-0.579	5319.996709	-0.619	5319.996700	-0.620
50	110.0	5319.996220	-0.711	5319.996356	-0.685	5319.996027	-0.747	5319.996039	-0.745
40	110.0	5319.996491	-0.660	5319.996563	-0.646	5319.996421	-0.673	5319.996483	-0.661
30	110.0	5319.996645	-0.631	5319.996424	-0.672	5319.996902	-0.582	5319.996262	-0.703
20	110.0	5319.997299	-0.508	5319.996782	-0.605	5319.997047	-0.555	5319.997023	-0.560
10	110.0	5319.996799	-0.602	5319.996389	-0.679	5319.996532	-0.652	5319.996234	-0.708
0	110.0	5319.996878	-0.587	5319.996817	-0.598	5319.997124	-0.541	5319.997018	-0.561
-10	110.0	5319.996598	-0.639	5319.996821	-0.598	5319.996597	-0.640	5319.996623	-0.635
-20	110.0	5319.997007	-0.563	5319.997046	-0.555	5319.997415	-0.486	5319.997321	-0.504
-30	110.0	5319.996630	-0.633	5319.996173	-0.719	5319.996275	-0.700	5319.996856	-0.591

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	93.5	5319.997040	-0.556	5319.996886	-0.585	5319.996716	-0.617	5319.996902	-0.582
	110.0	5319.997299	-0.508	5319.996782	-0.605	5319.997047	-0.555	5319.997023	-0.560
	126.5	5319.996878	-0.587	5319.997202	-0.526	5319.996857	-0.591	5319.996880	-0.586

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. 27, 2010	Dec. 26, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Aug. 02, 2010	Aug. 01, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 28, 2010	Apr. 27, 2011
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 06, 2011	Jan. 05, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8449B	3008A01961	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8447D	2944A10738	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	274041/4	Aug. 21, 2010	Aug. 20, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Aug. 21, 2010	Aug. 20, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	07026401	Aug. 25, 2010	Aug. 24, 2011

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

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 100kHz and 300kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

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

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

4.7.3 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 5.35GHz and 5.47 to 5.725GHz 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 field 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.

FOR 5180-5320MHz BAND:

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)	110.9	42.01	68.89	74.00
5180.00 (AV)	100.3	49.75	50.55	54.00

RESTRICT BAND (5350 ~ 5460 MHz)

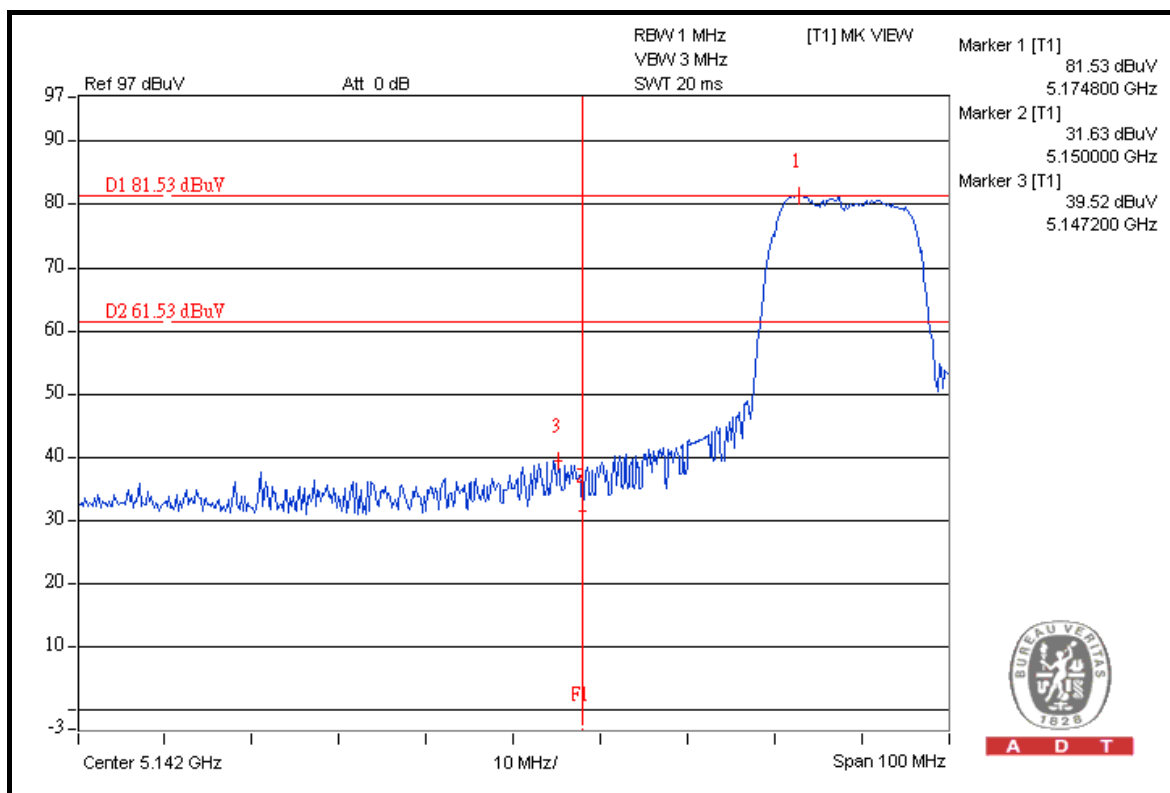
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5320.00 (PK)	110.5	43.18	67.32	74.00
5320.00 (AV)	100.0	50.42	49.58	54.00

NOTE:

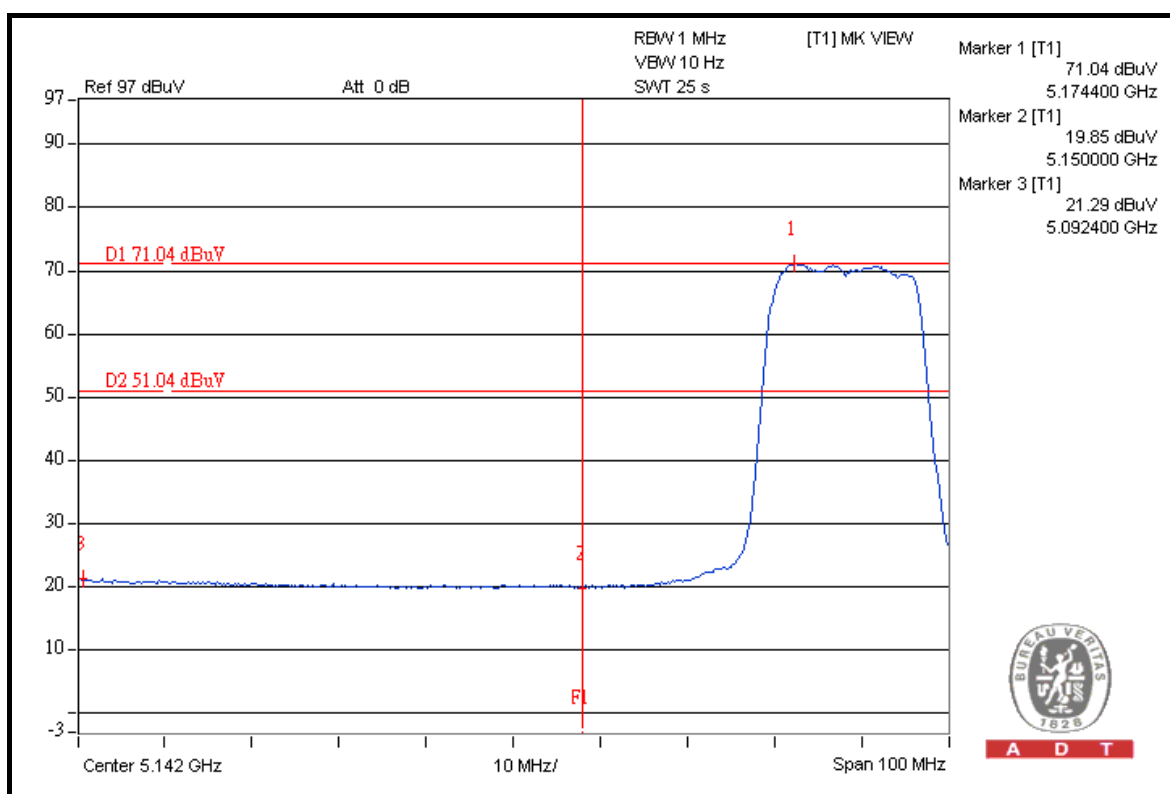
- Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
- Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



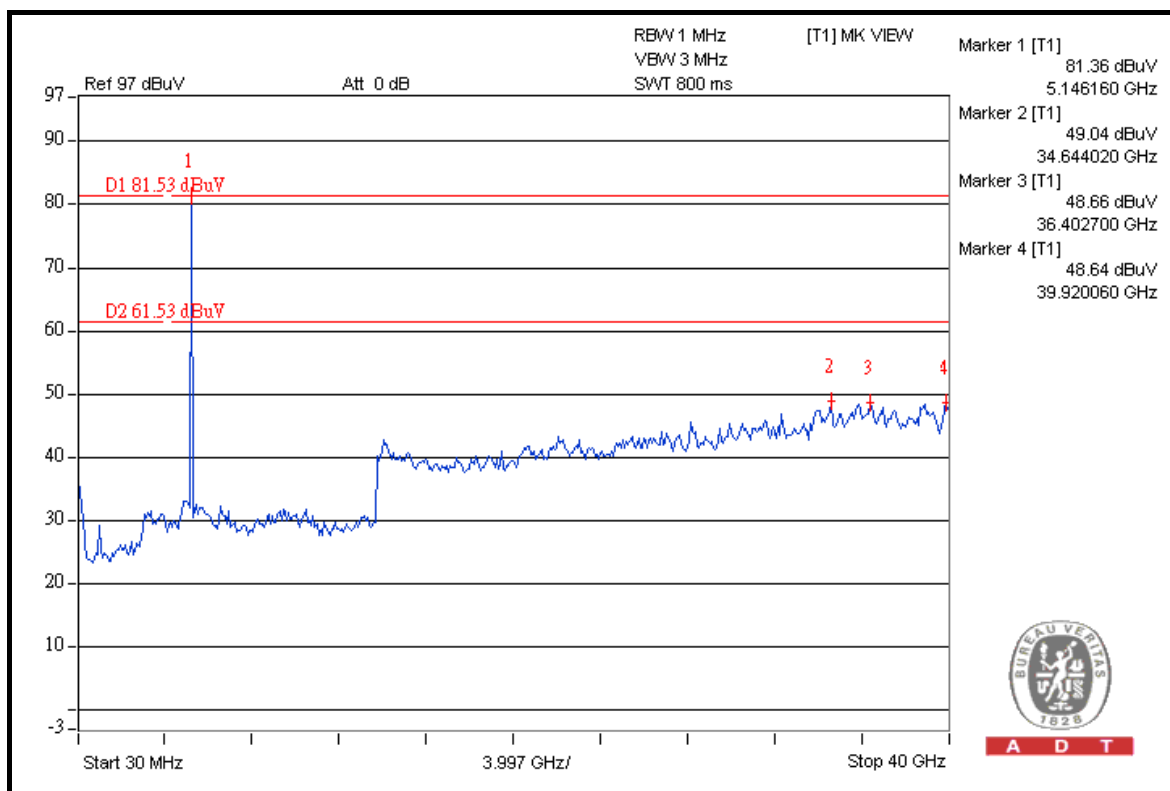
A D T



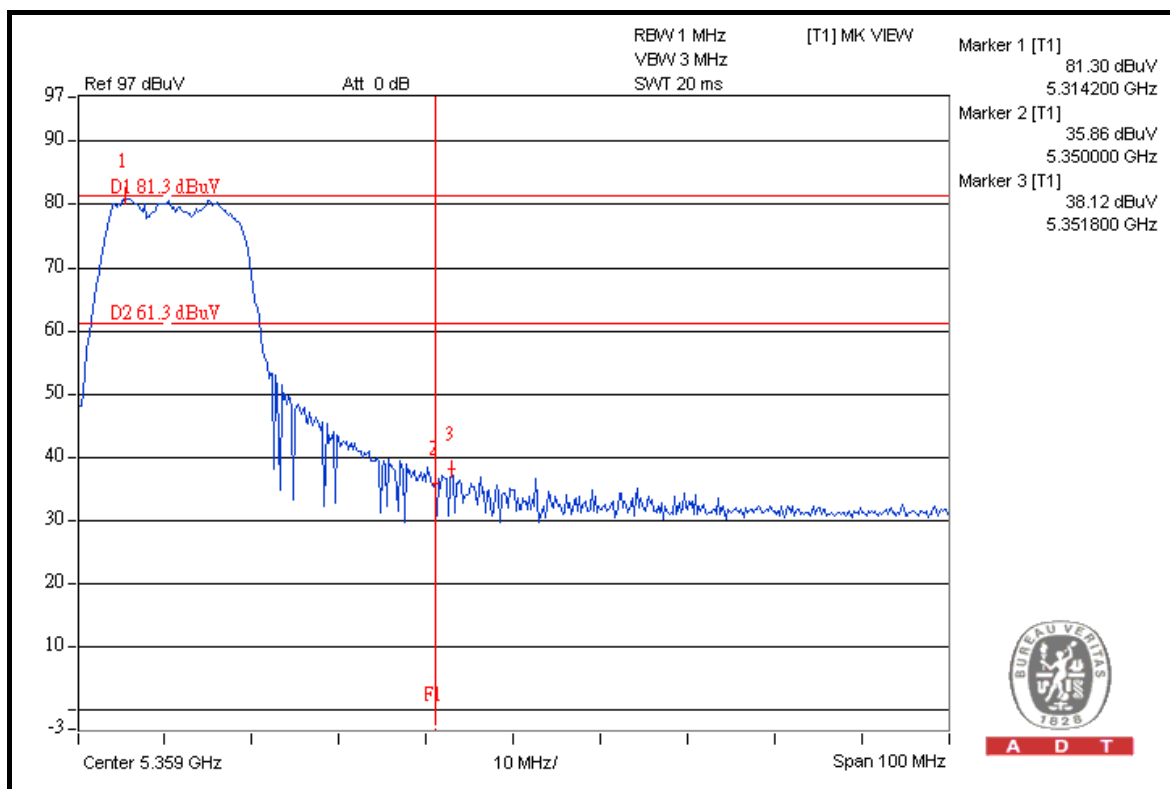
A D T



A D T



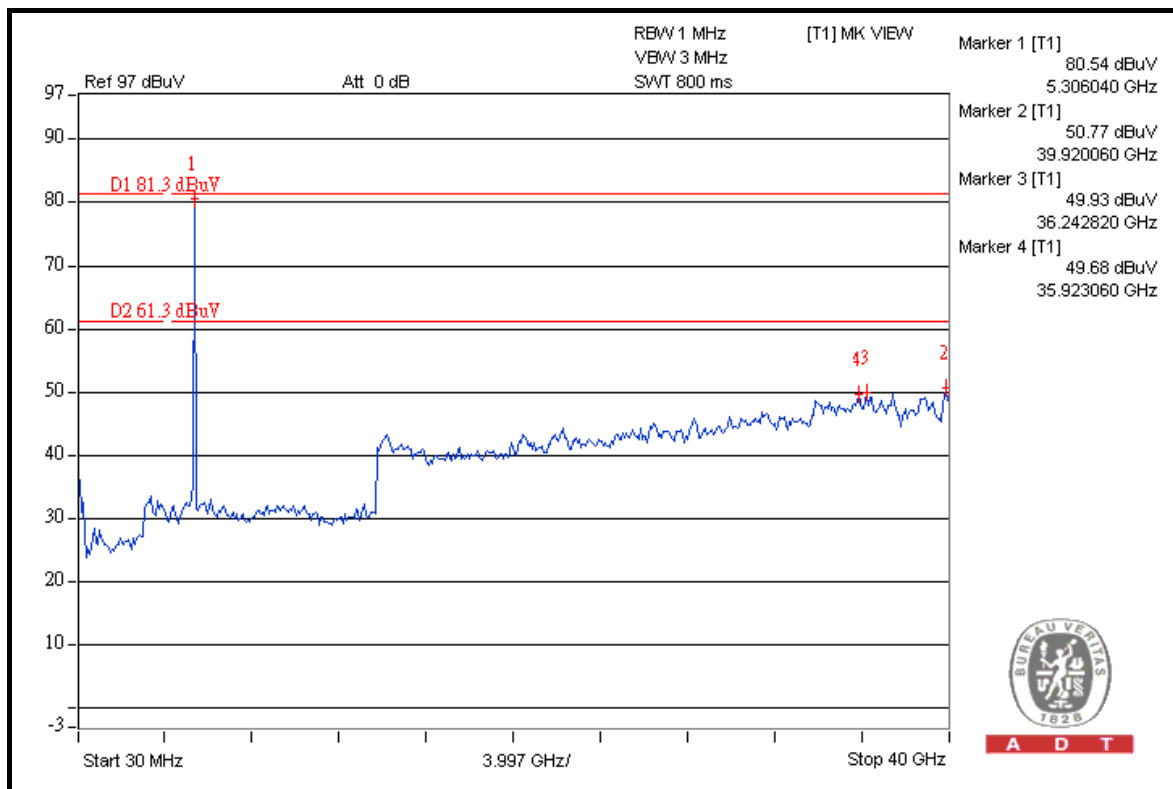
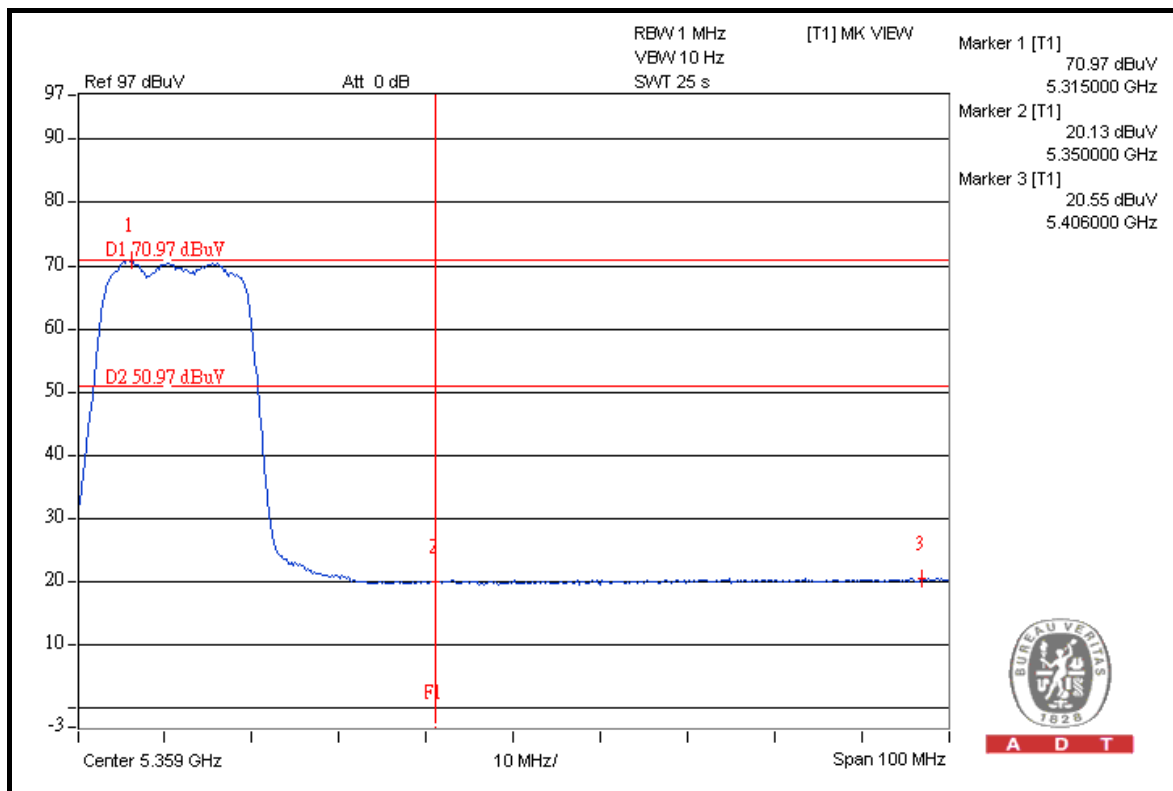
A D T



A D T



A D T



FOR 5500-5700MHz BAND: 802.11a

RESTRICT BAND (5350 ~ 5460 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5500.00 (PK)	110.5	44.53	65.97	74.00
5500.00 (AV)	100.0	48.56	51.44	54.00

FREQUENCY BAND (5460 ~ 5470 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)
5500.00 (PK)	110.5	43.25	67.25	68.30

5700MHz

ABOVE 5725 MHz

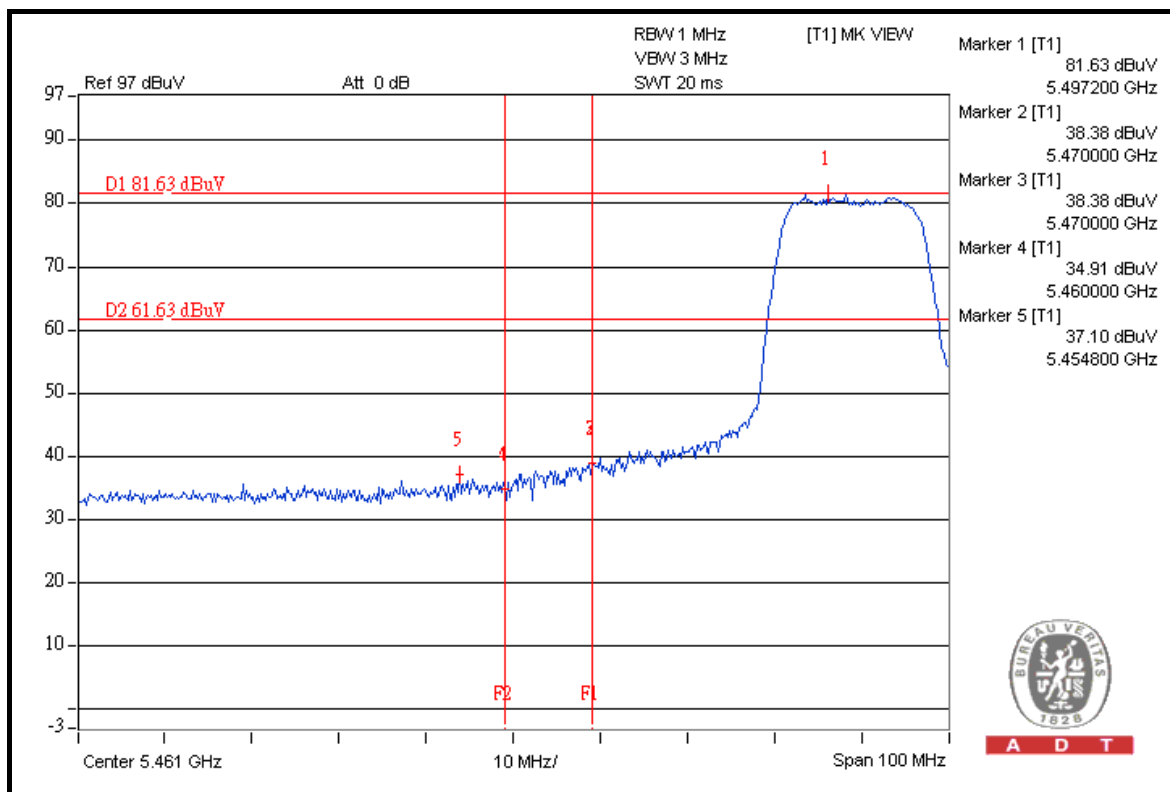
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)
5700.00 (PK)	108.3	40.99	67.31	68.30

NOTE:

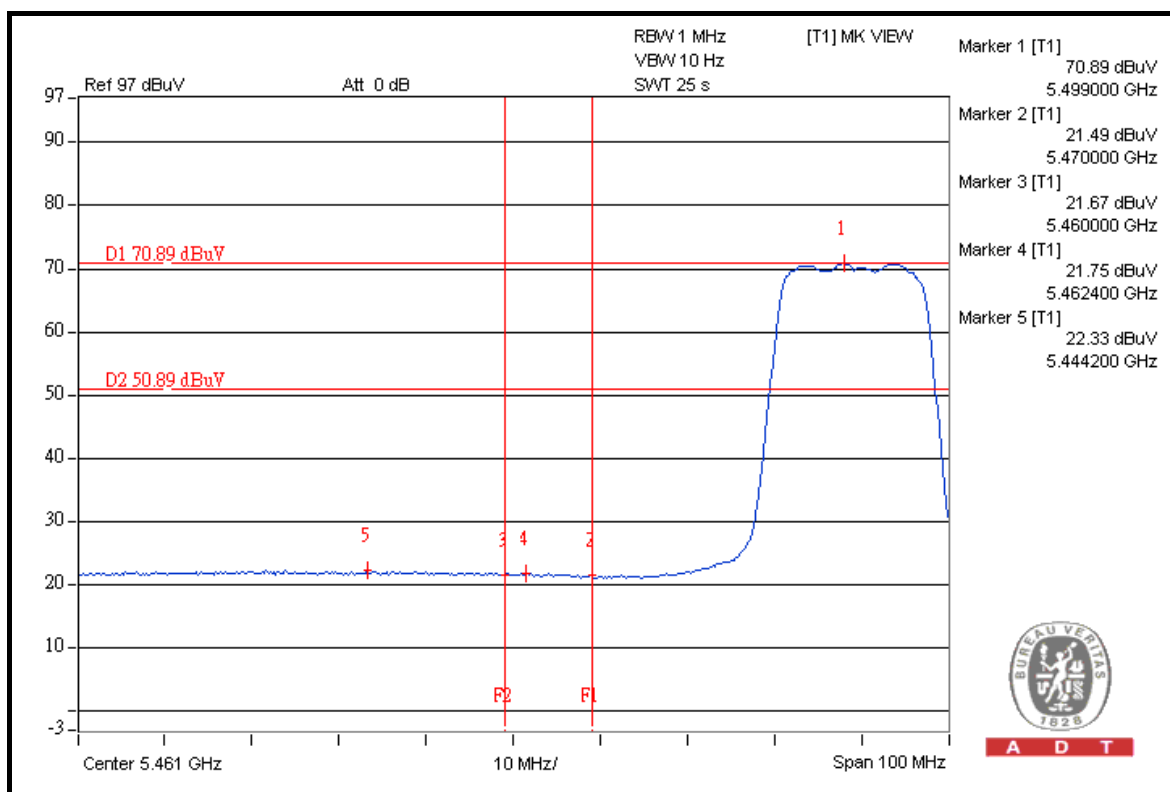
- Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
- Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



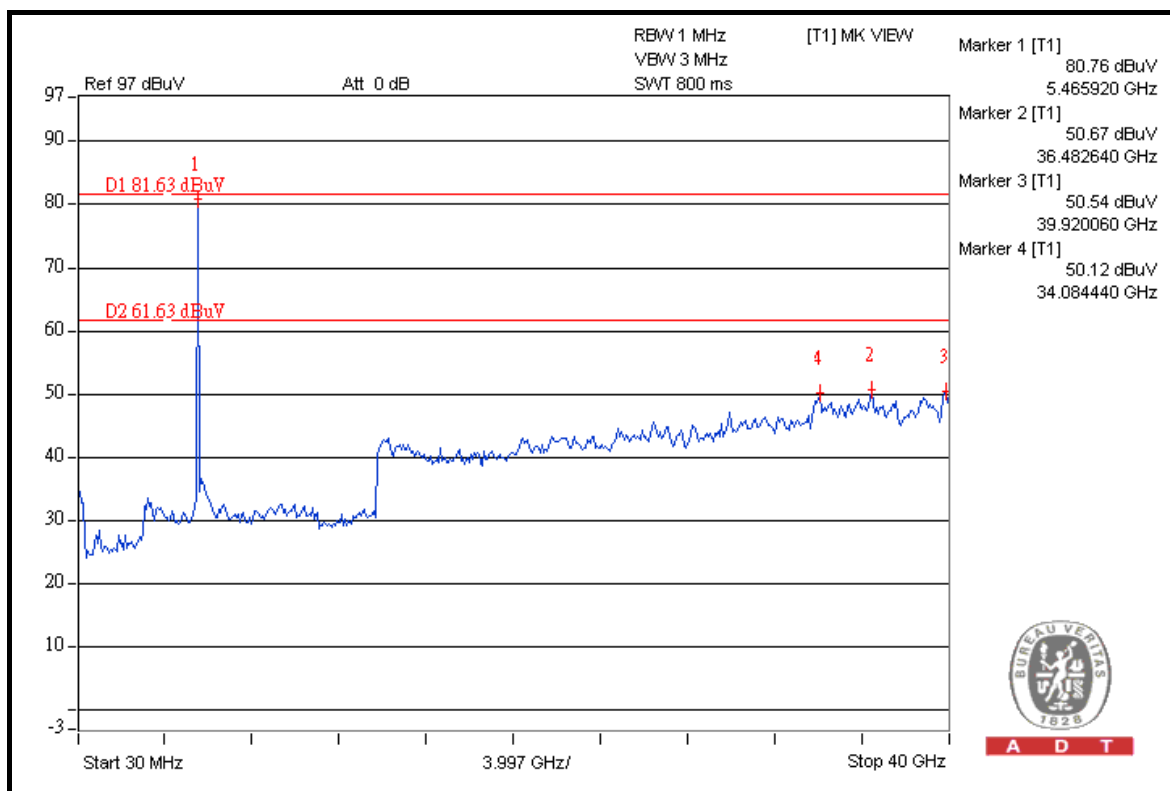
A D T



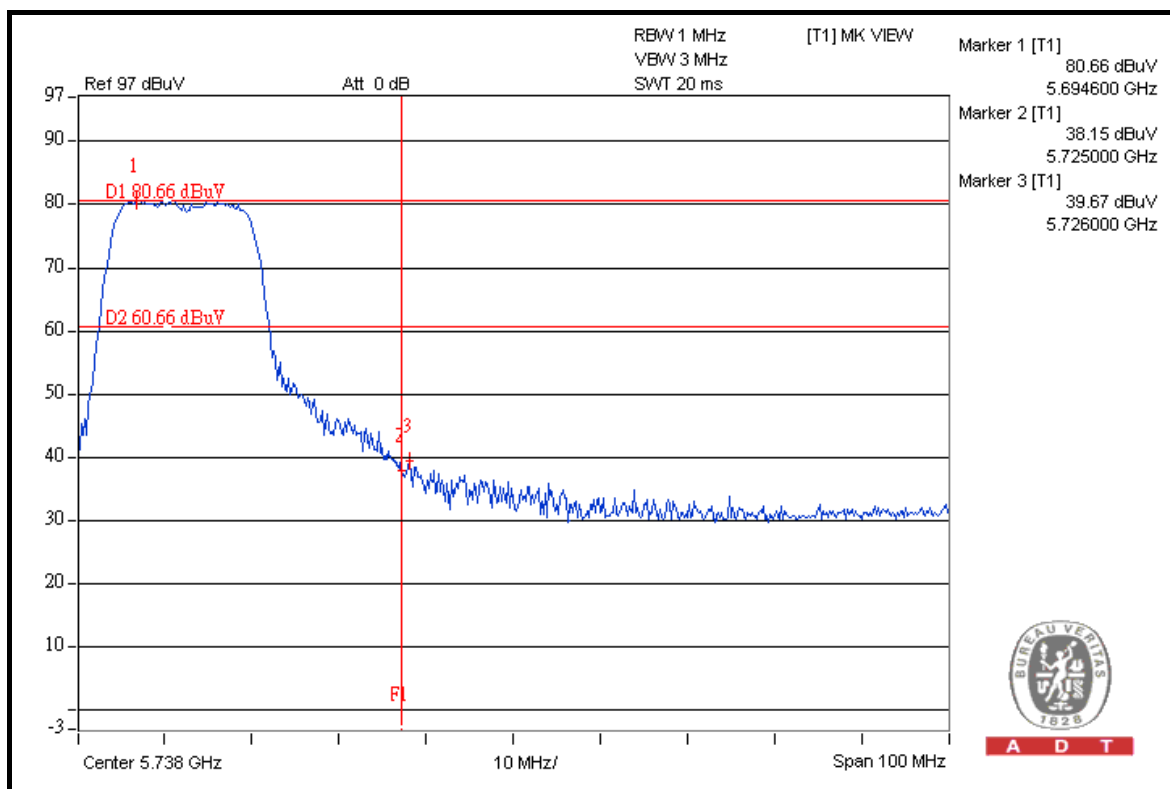
A D T



A D T



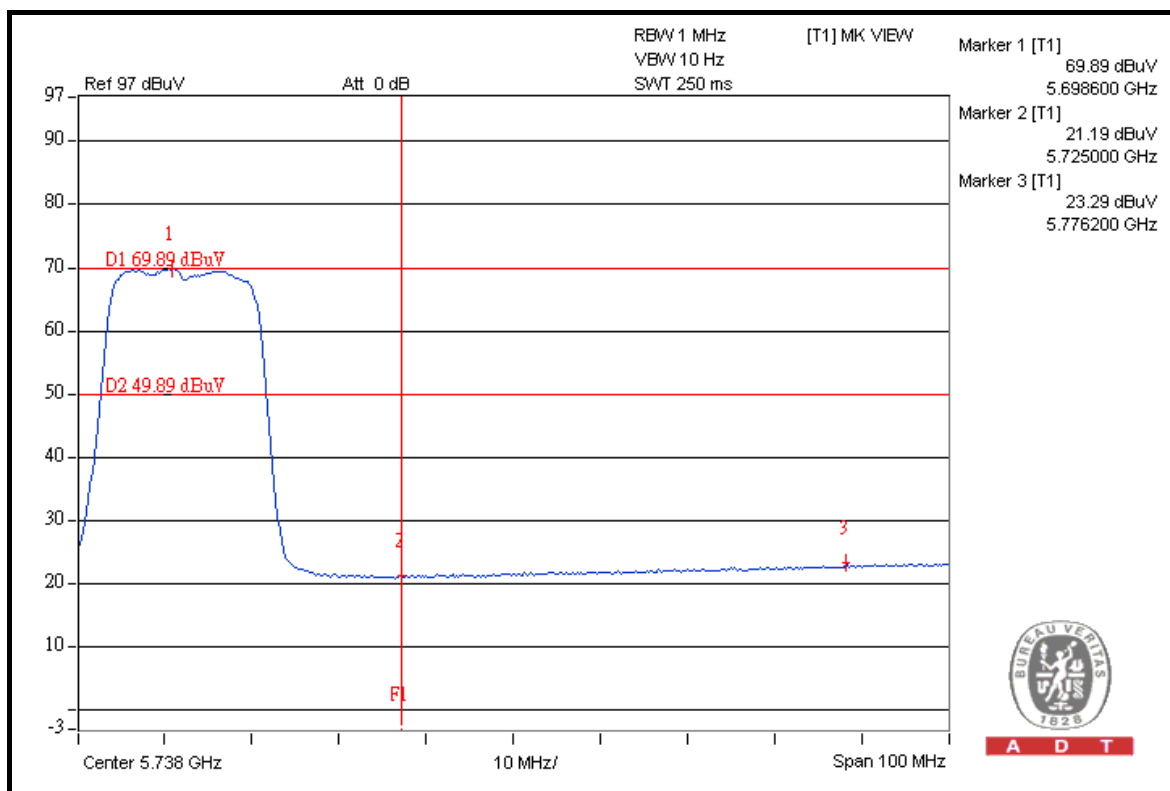
A D T



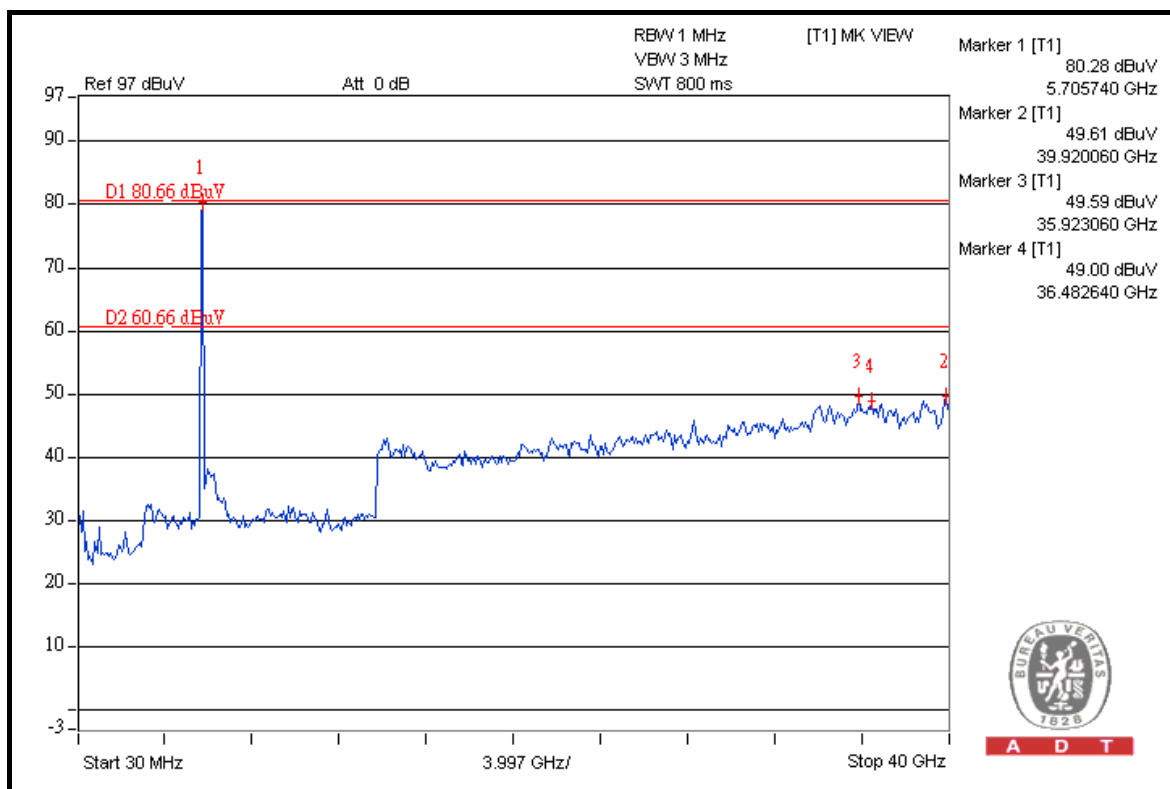
A D T



A D T



A D T



A D T

FOR 5180-5320MHz BAND: 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)	108.7	37.78	70.92	74.00
5180.00 (AV)	98.6	47.98	50.62	54.00

RESTRICT BAND (5350 ~ 5460 MHz)

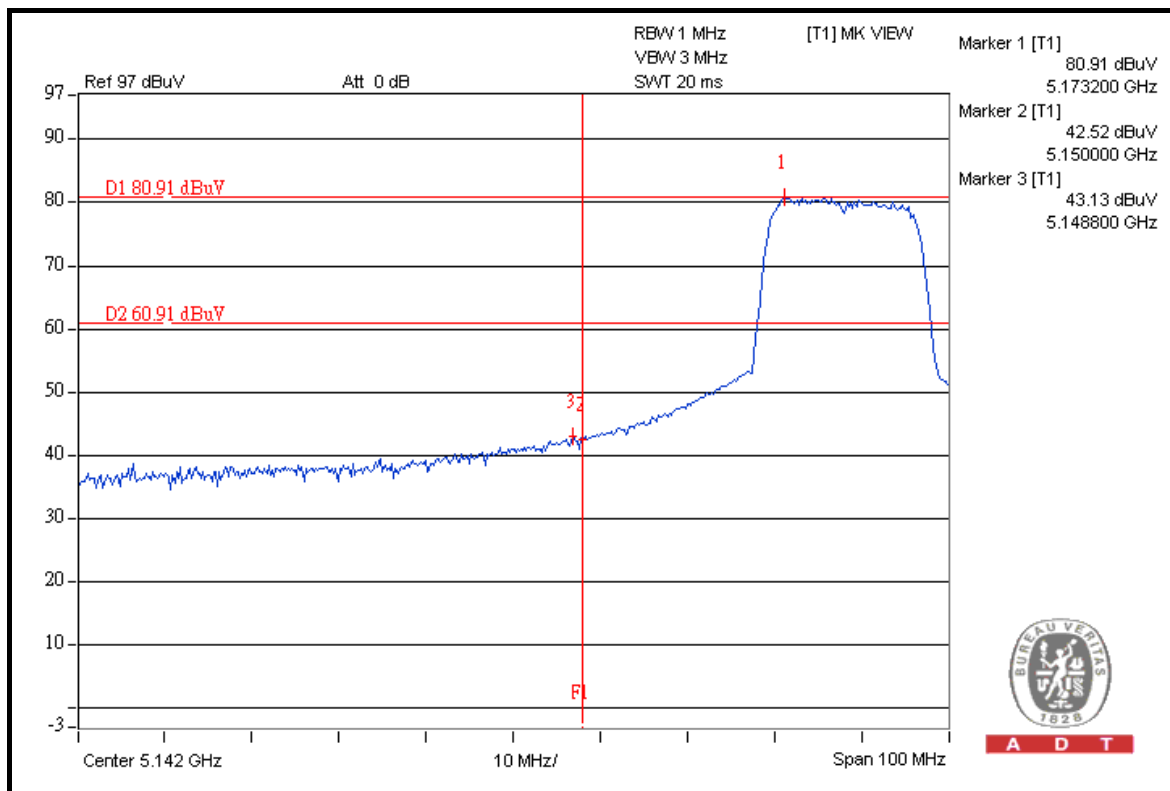
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5320.00 (PK)	109.1	38.69	70.41	74.00
5320.00 (AV)	98.8	48.24	50.56	54.00

NOTE:

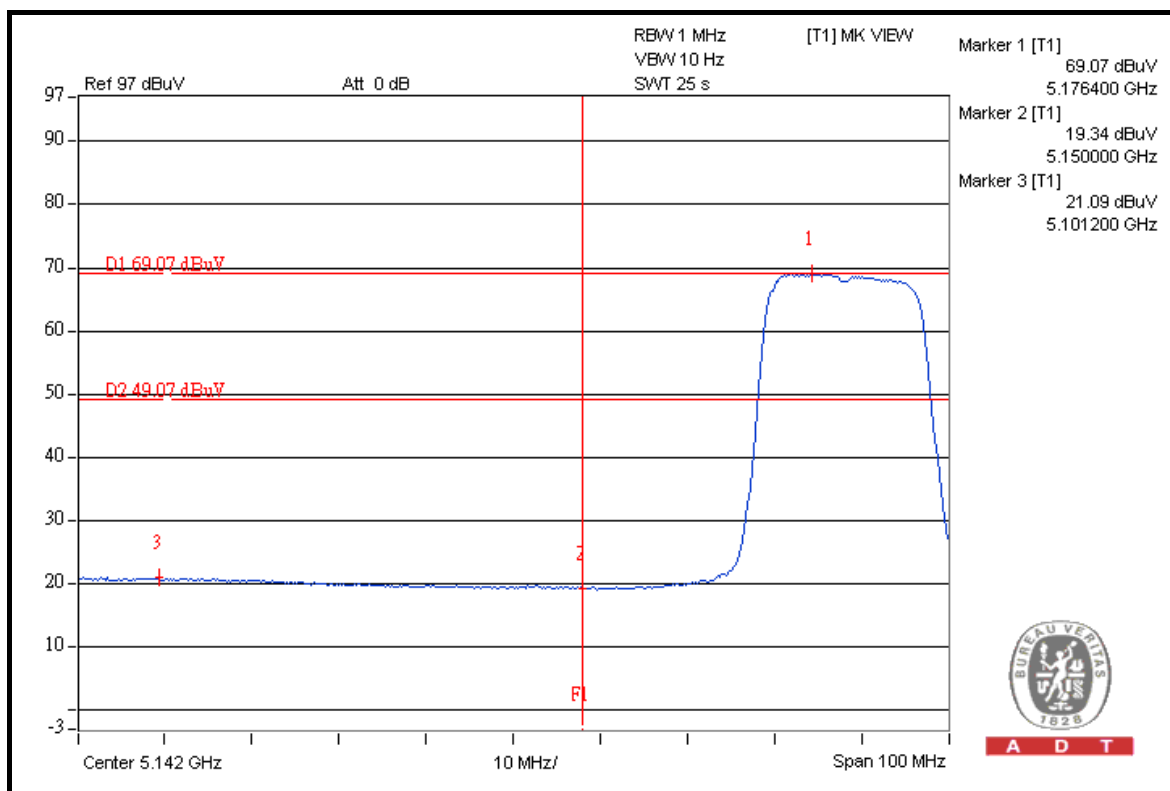
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



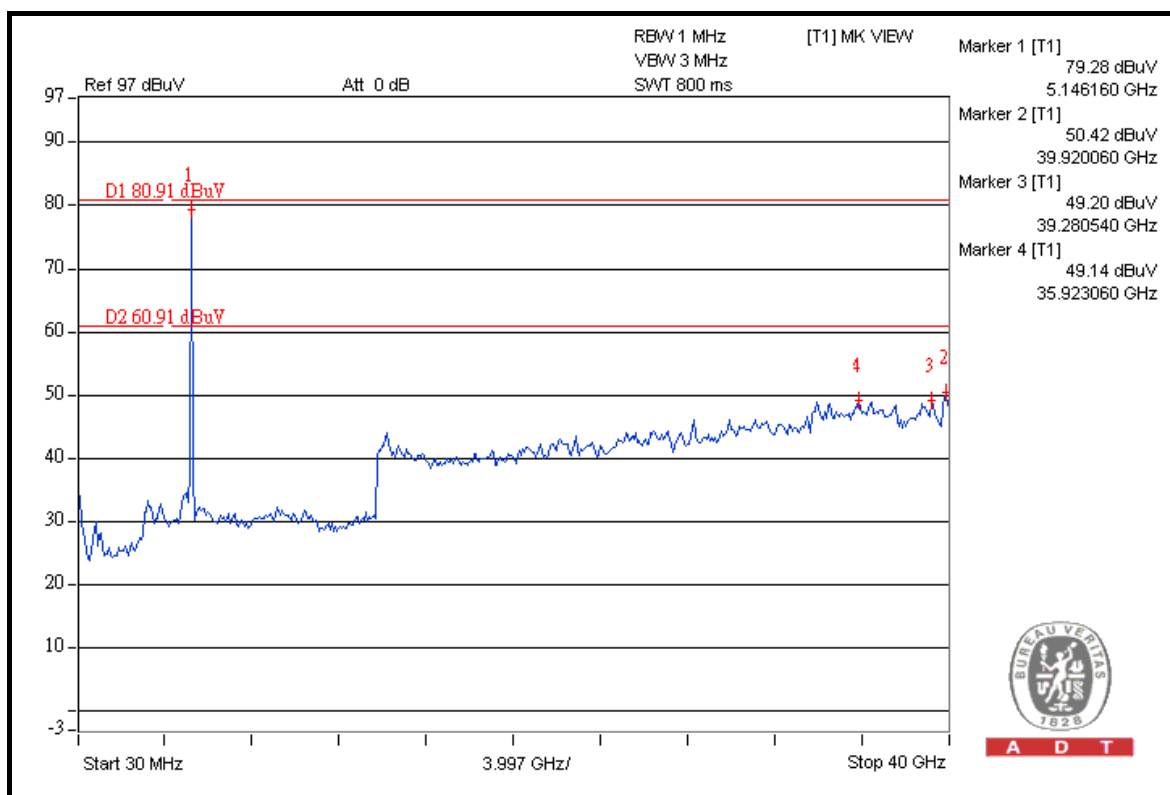
A D T



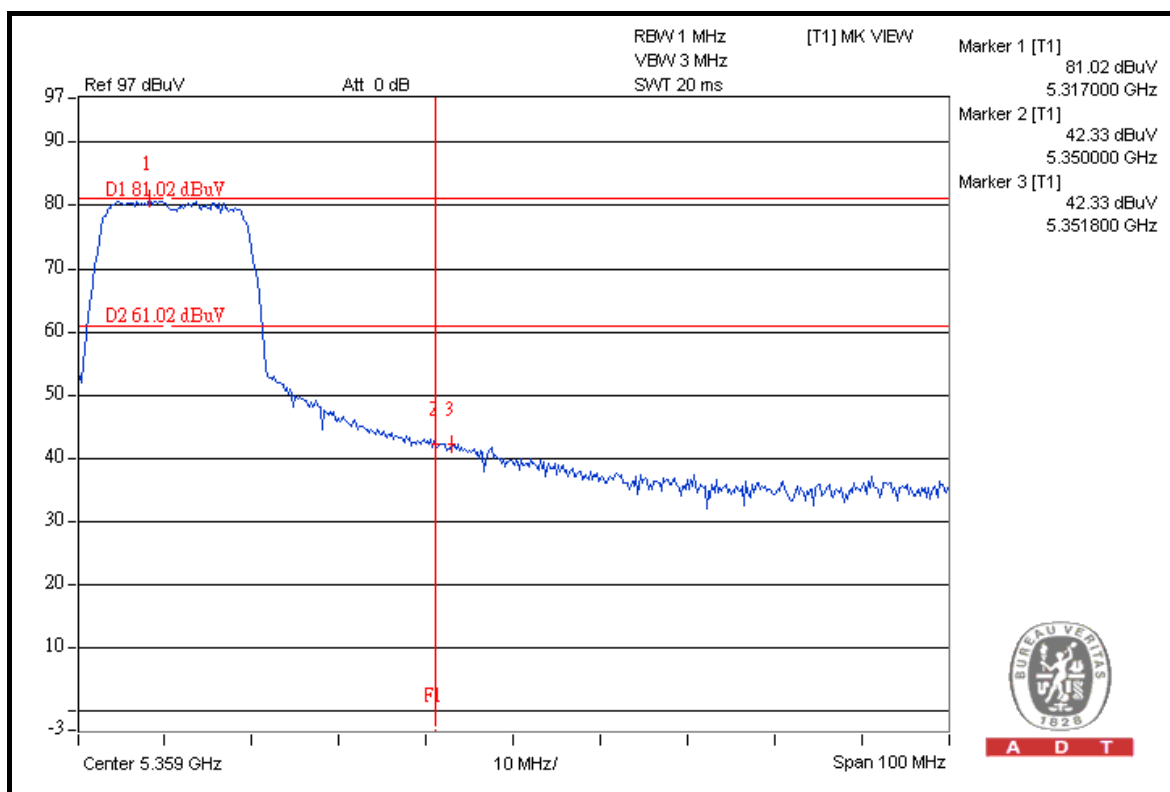
A D T



A D T



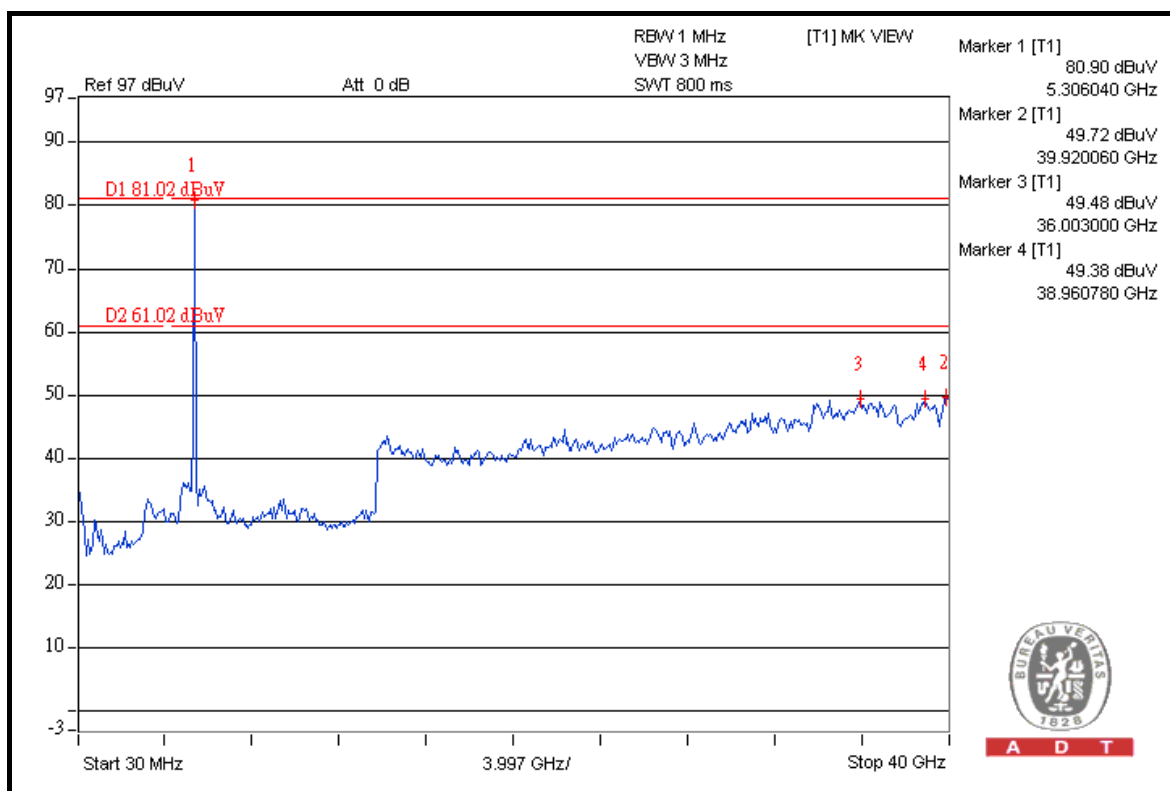
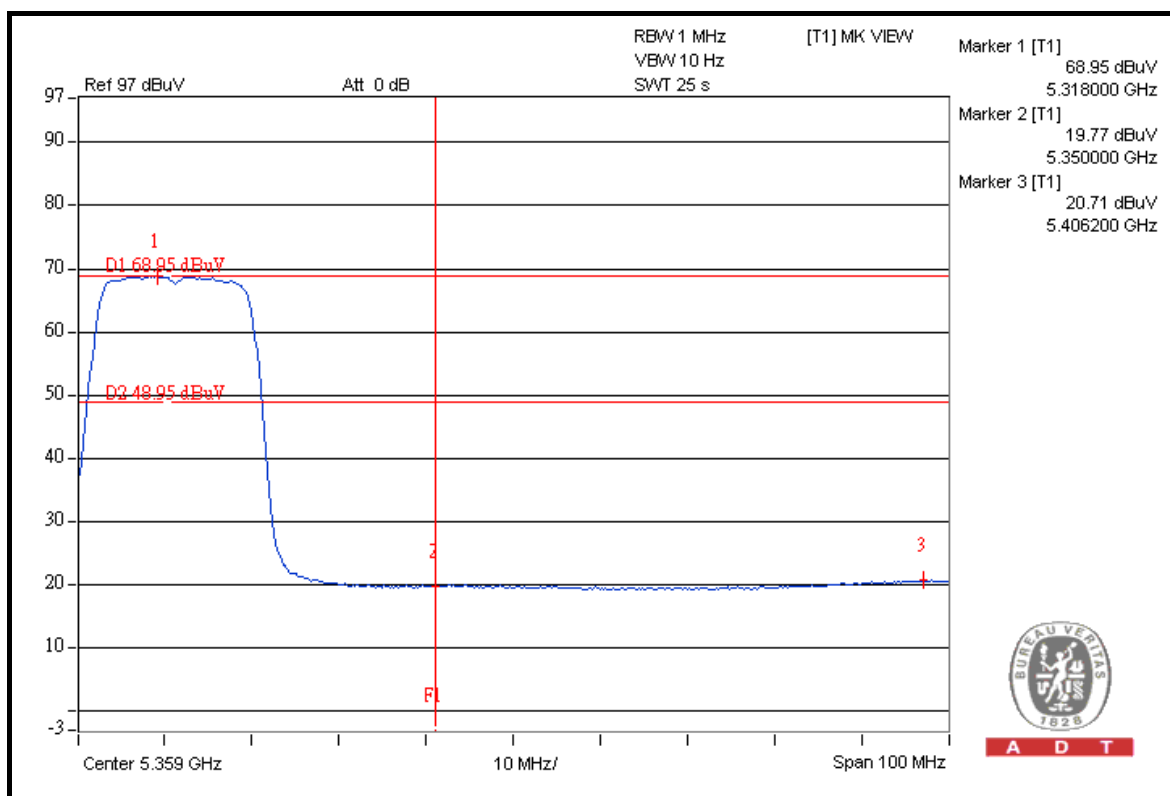
A D T



A D T



A D T



FOR 5500-5700MHz BAND: 802.11n (20MHz)

5500MHz

RESTRICT BAND (5350 ~ 5460 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5500.00 (PK)	109.1	44.32	64.78	74.00
5500.00 (AV)	98.6	47.76	50.84	54.00

FREQUENCY BAND (5460 ~ 5470 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)
5500.00 (PK)	109.1	41.77	67.33	68.30

5700MHz

ABOVE 5725 MHz

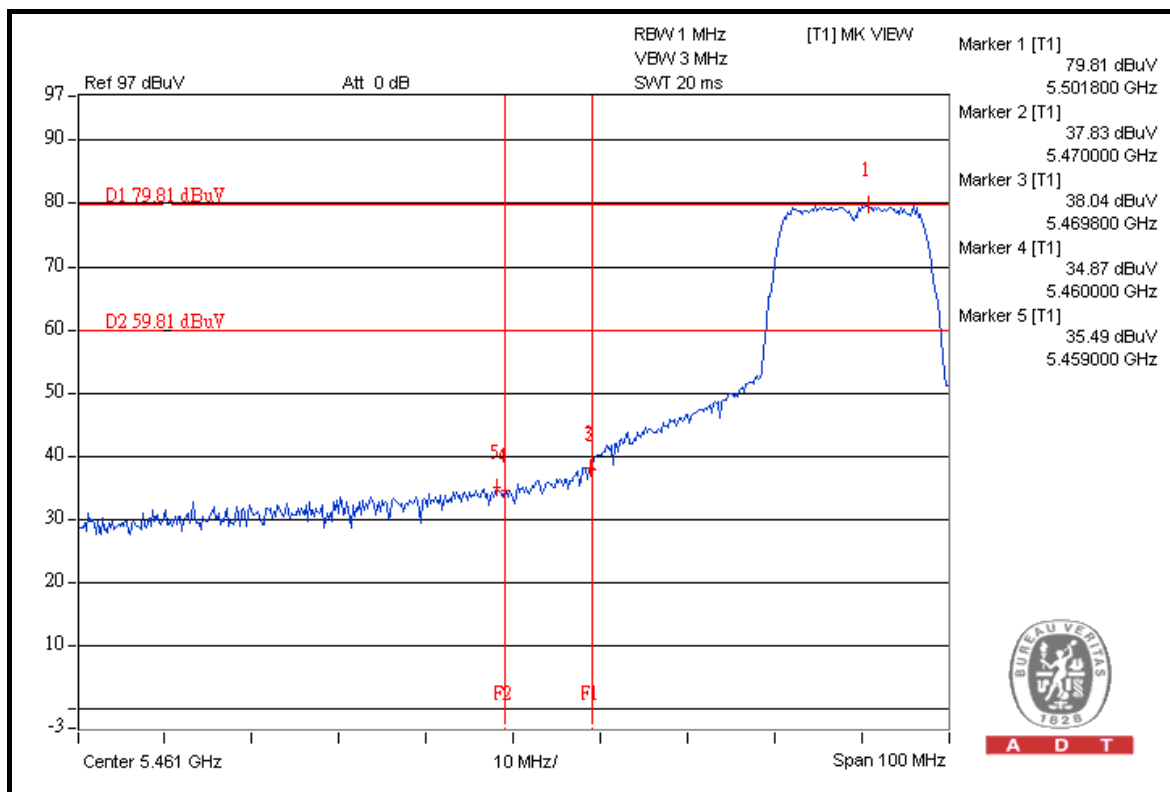
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)
5700.00 (PK)	108.3	41.07	67.23	68.30

NOTE:

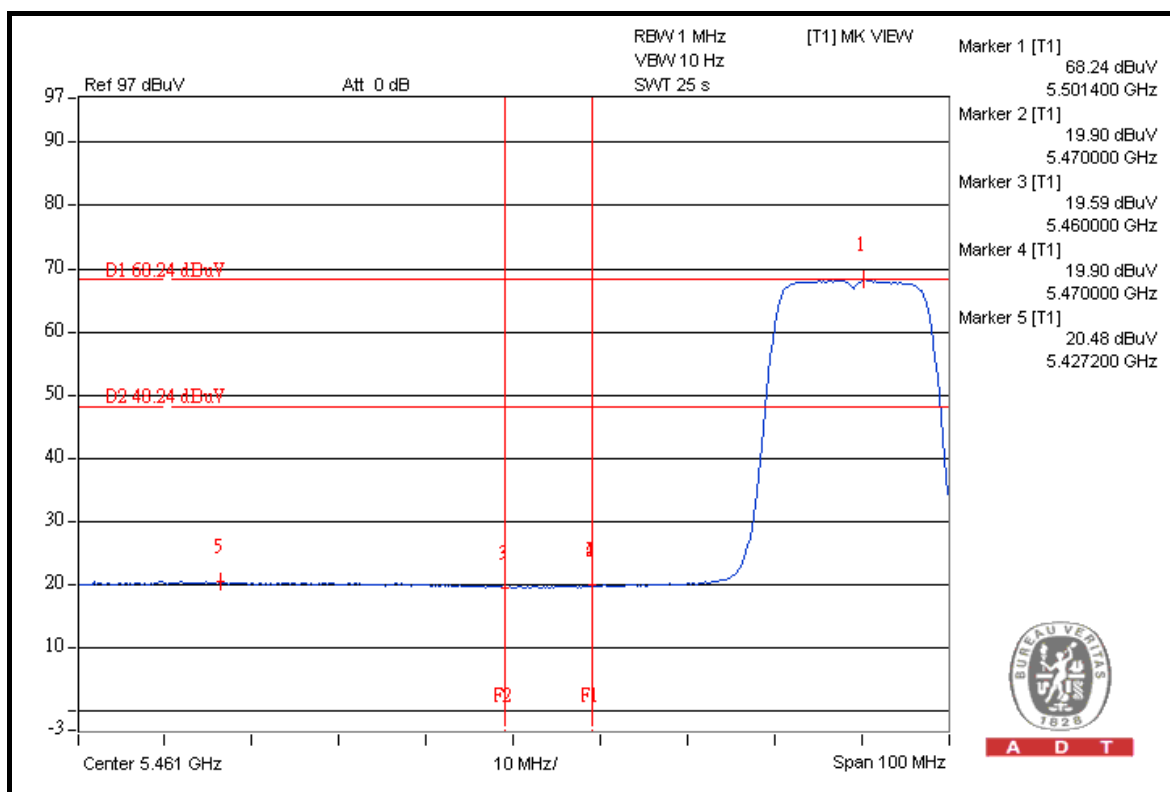
- Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
- Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



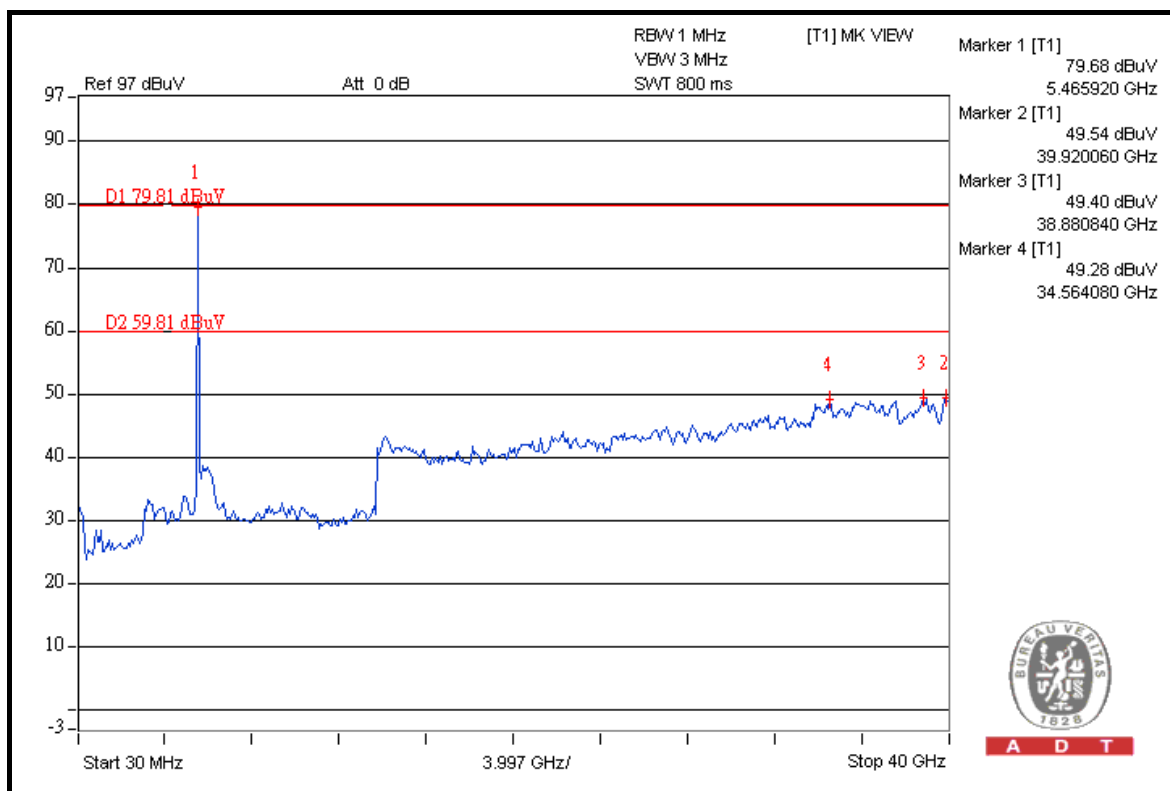
A D T



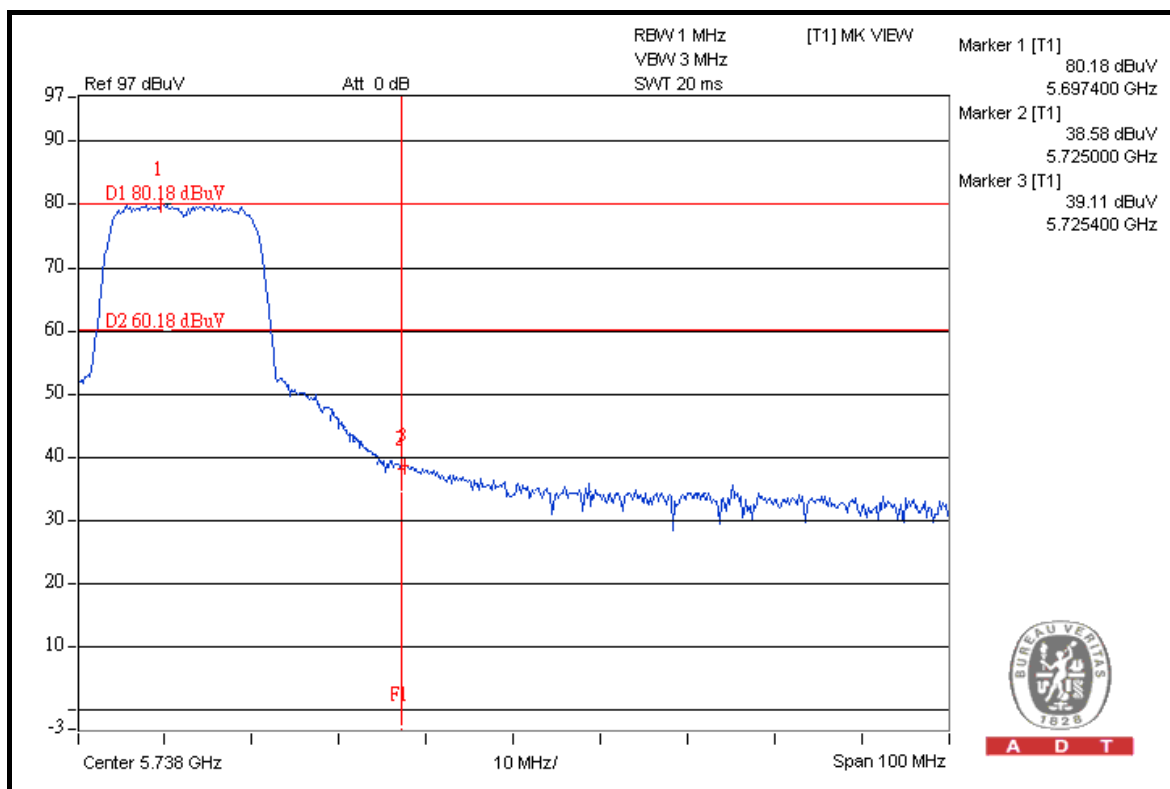
A D T



A D T



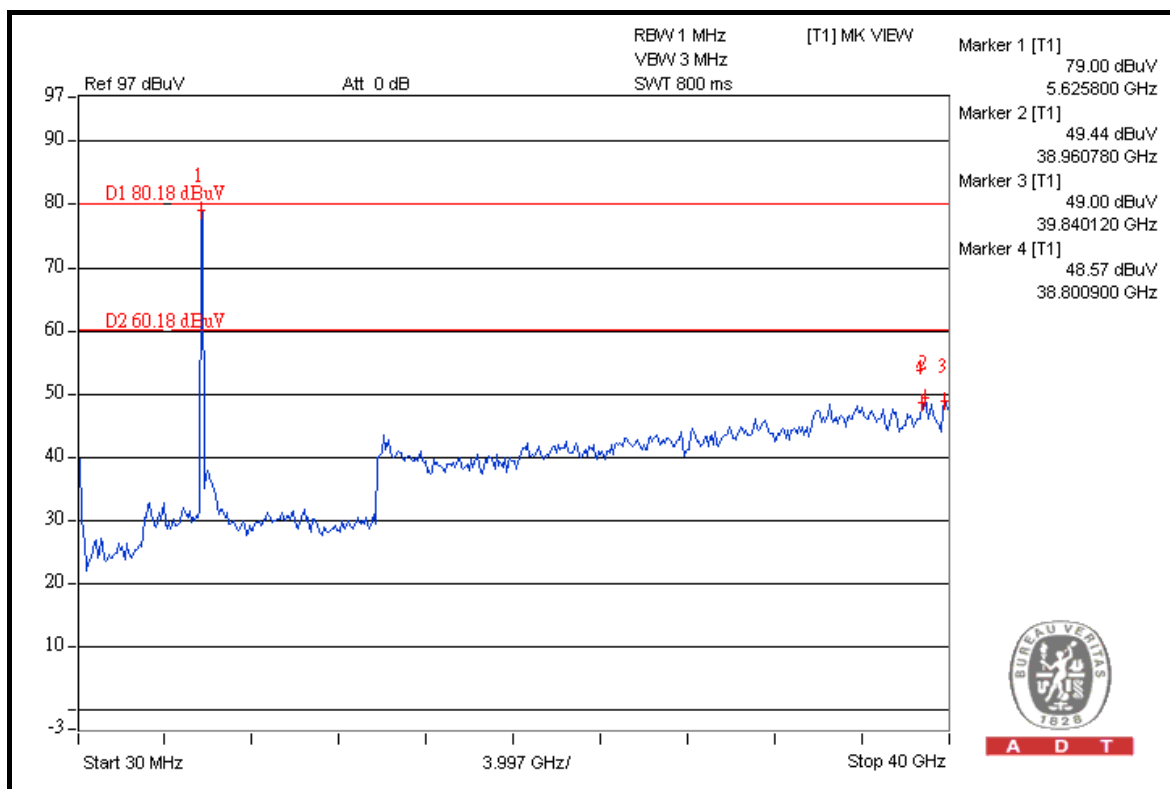
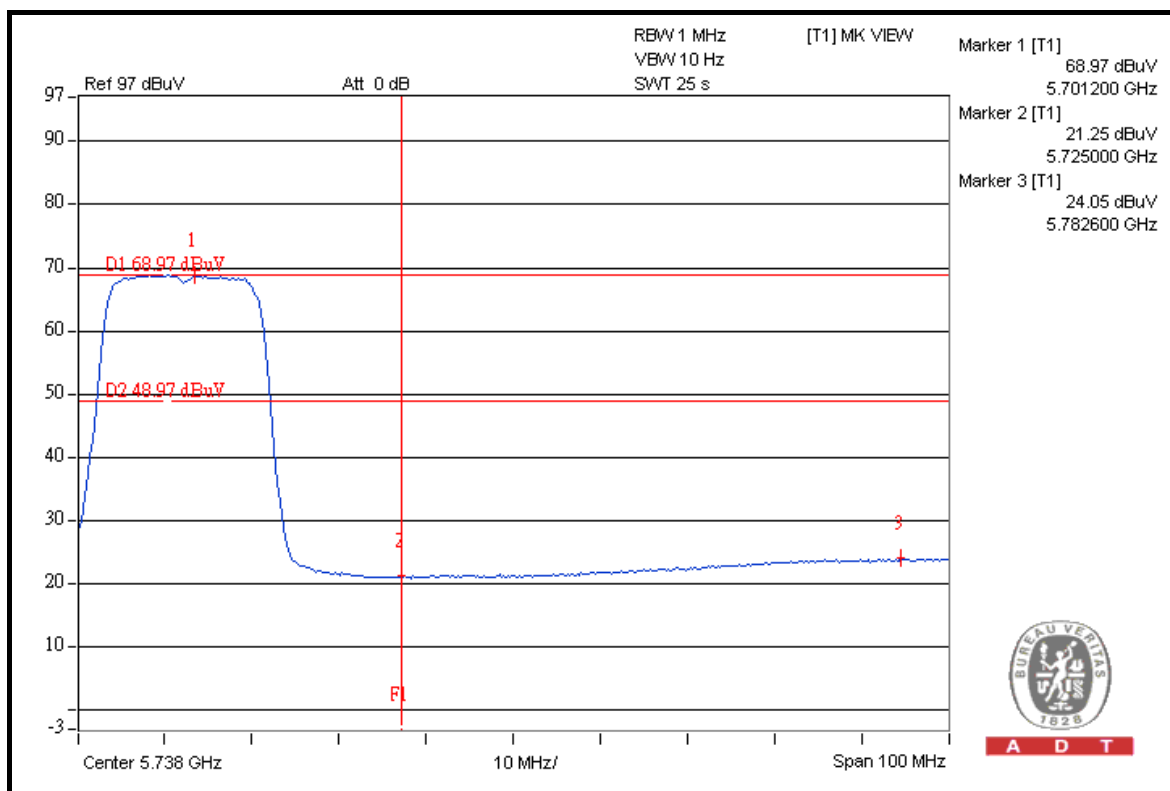
A D T



A D T



A D T



FOR 5180-5320MHz BAND: 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)	105.3	33.23	72.07	74.00
5190.00 (AV)	94.8	44.76	50.04	54.00

RESTRICT BAND (5350 ~ 5460 MHz)

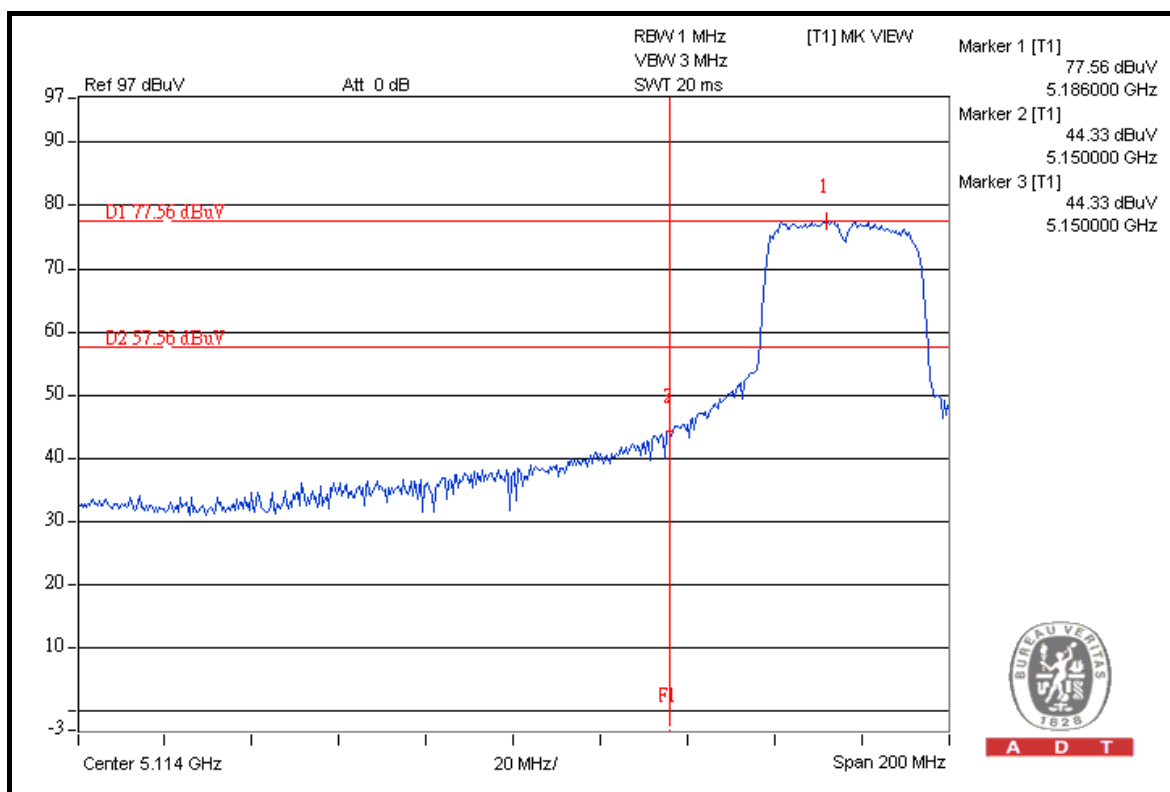
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5310.00 (PK)	105.2	34.25	70.95	74.00
5310.00 (AV)	94.7	44.51	50.19	54.00

NOTE:

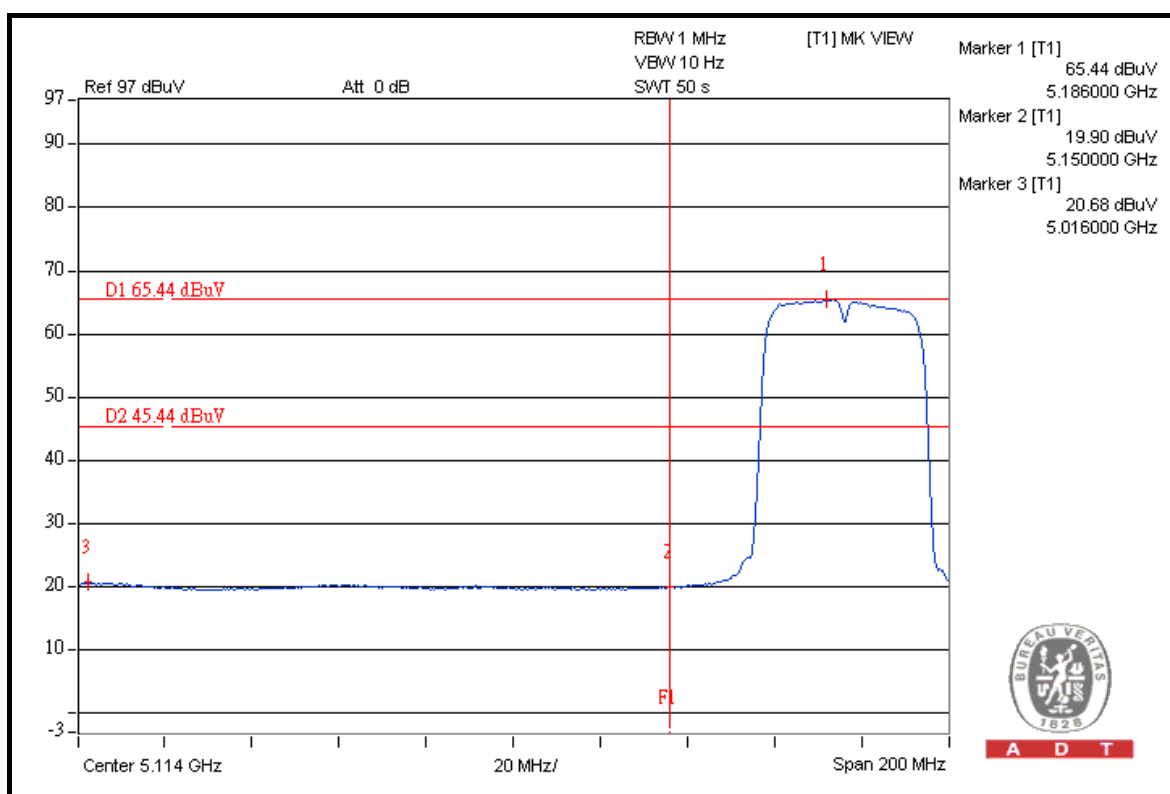
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.



A D T



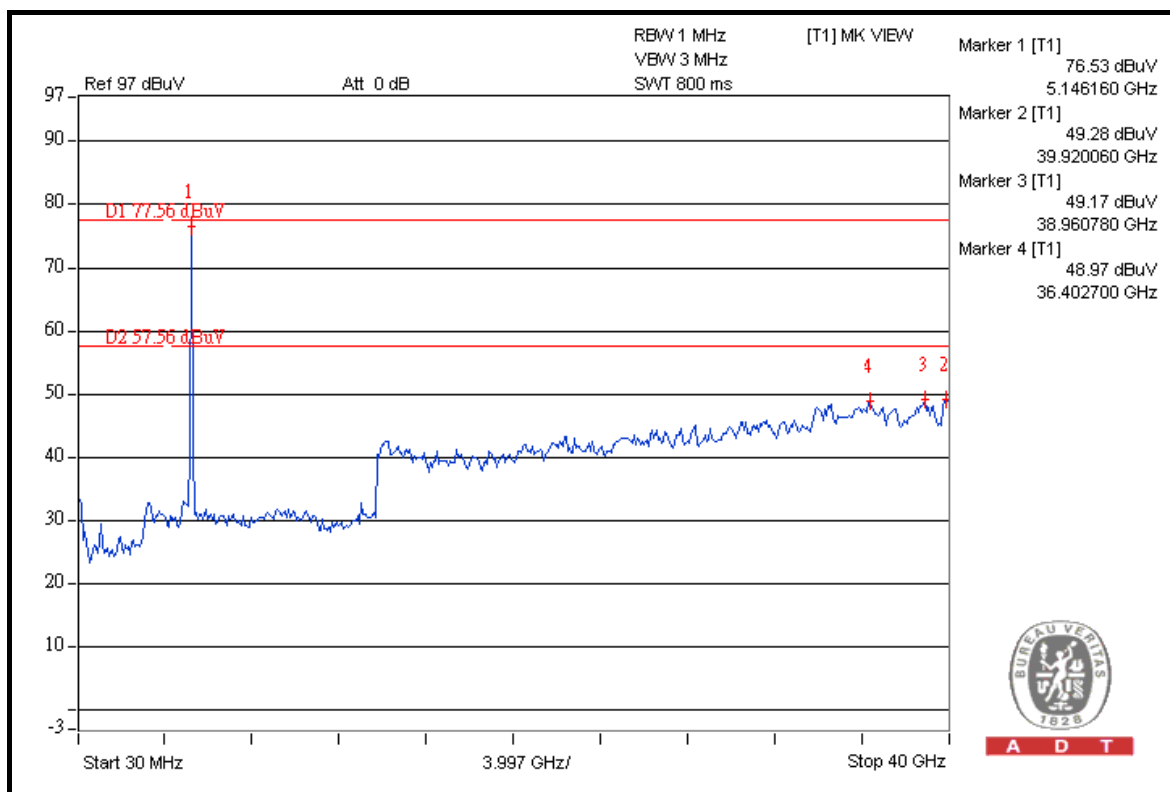
A D T



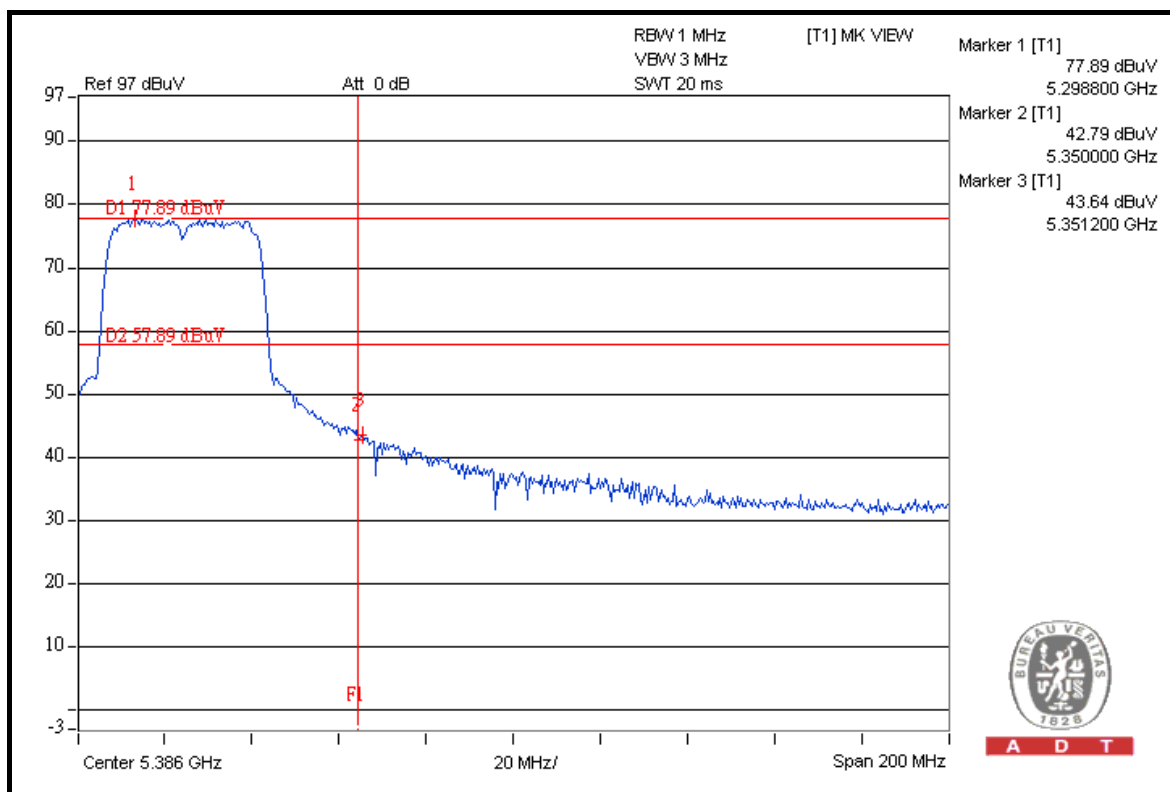
A D T



A D T



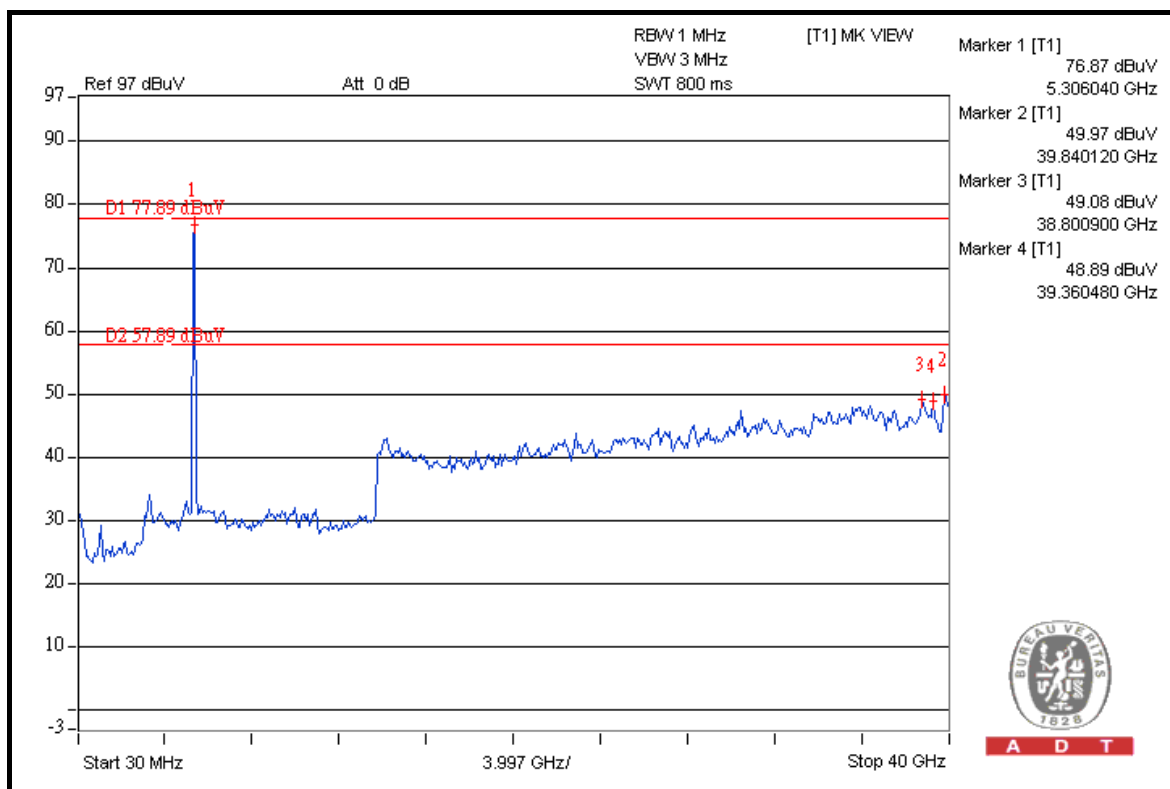
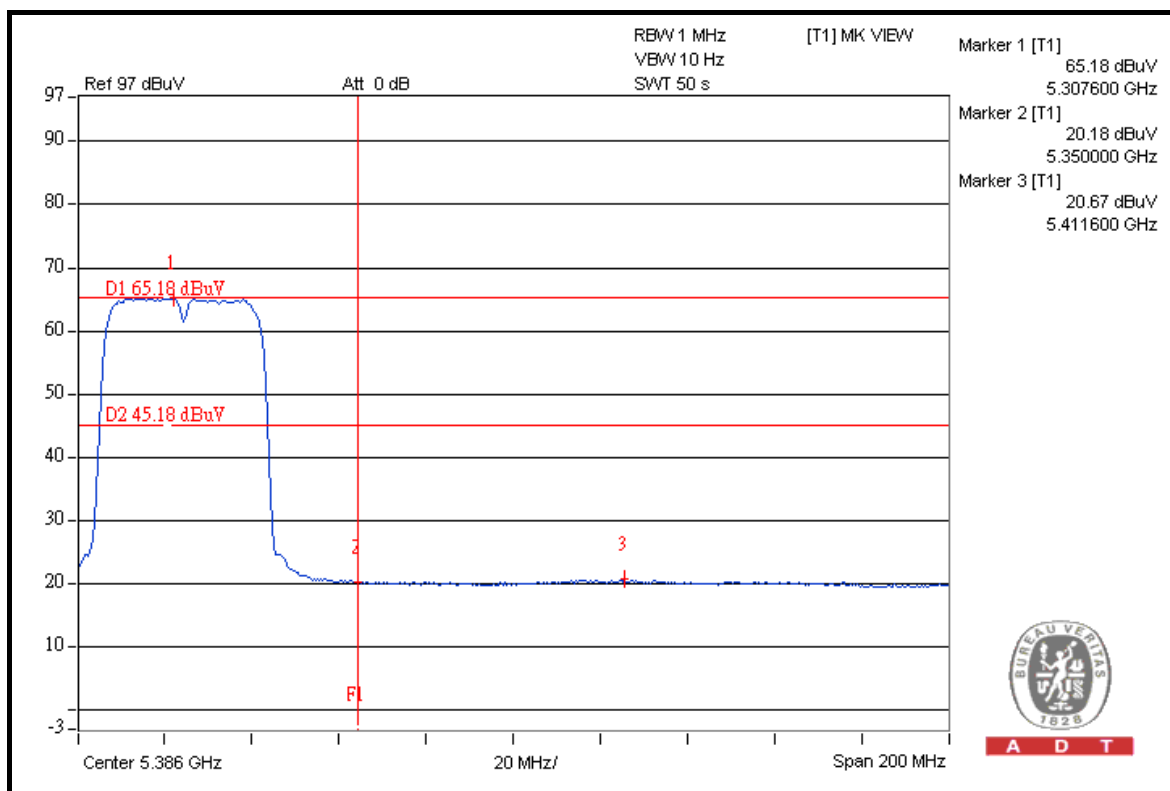
A D T



A D T



A D T



FOR 5500-5700MHz BAND: 802.11n (40MHz)

5510MHz

RESTRICT BAND (5350 ~ 5460 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5510.00 (PK)	105.6	39.91	65.69	74.00
5510.00 (AV)	95.3	43.36	51.94	54.00

FREQUENCY BAND (5460 ~ 5470 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)
5510.00 (PK)	105.6	38.11	67.49	68.30

5670MHz

ABOVE 5725 MHz

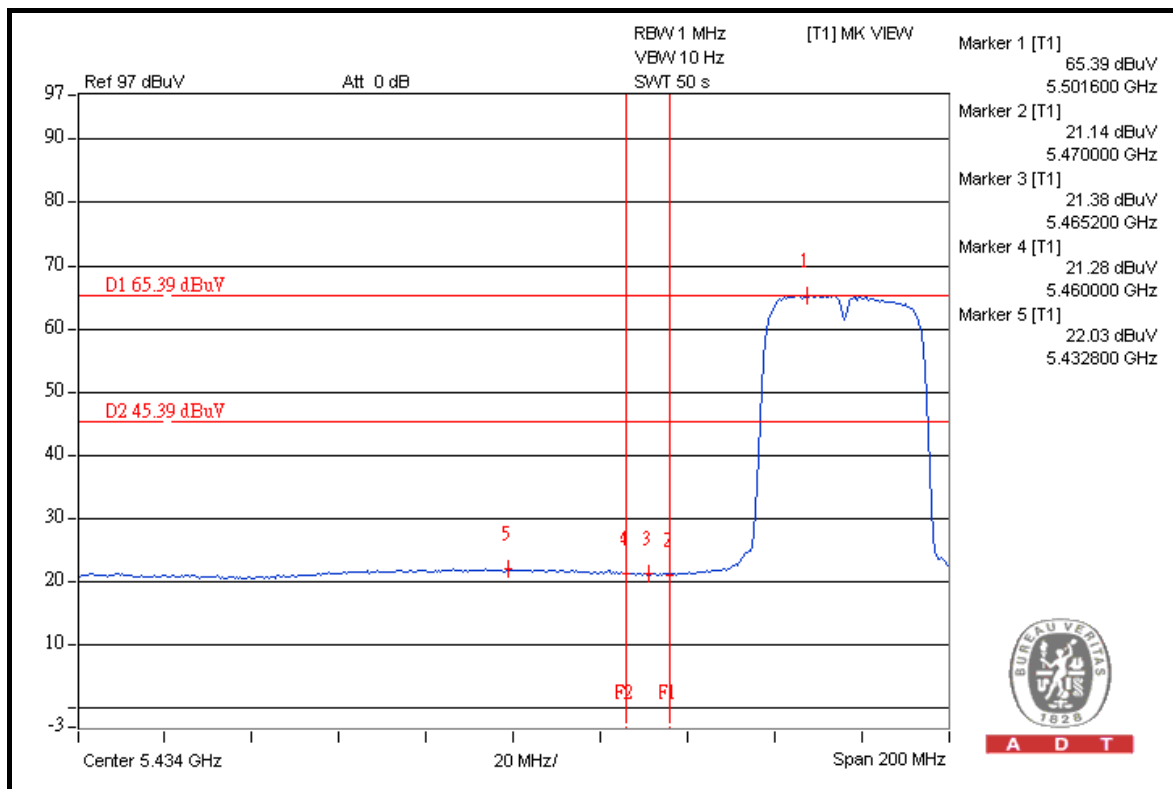
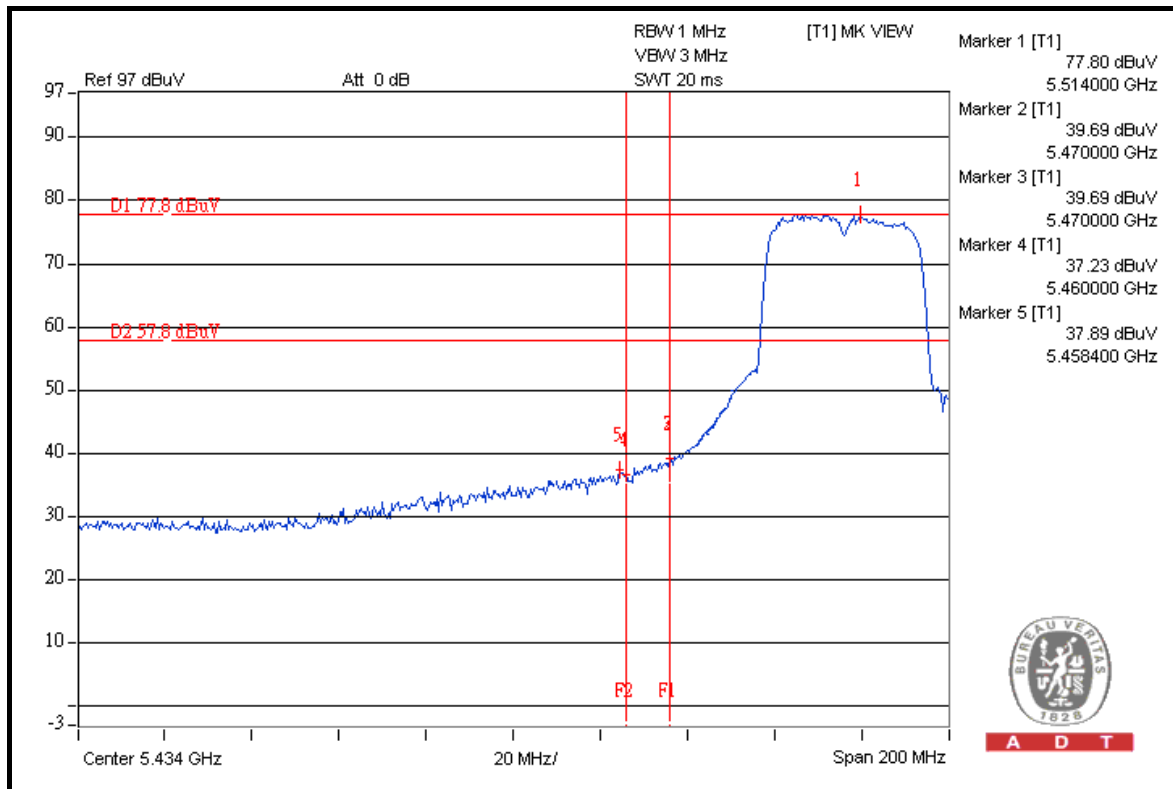
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)
5670.00 (PK)	105.4	40.00	65.40	68.30

NOTE:

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

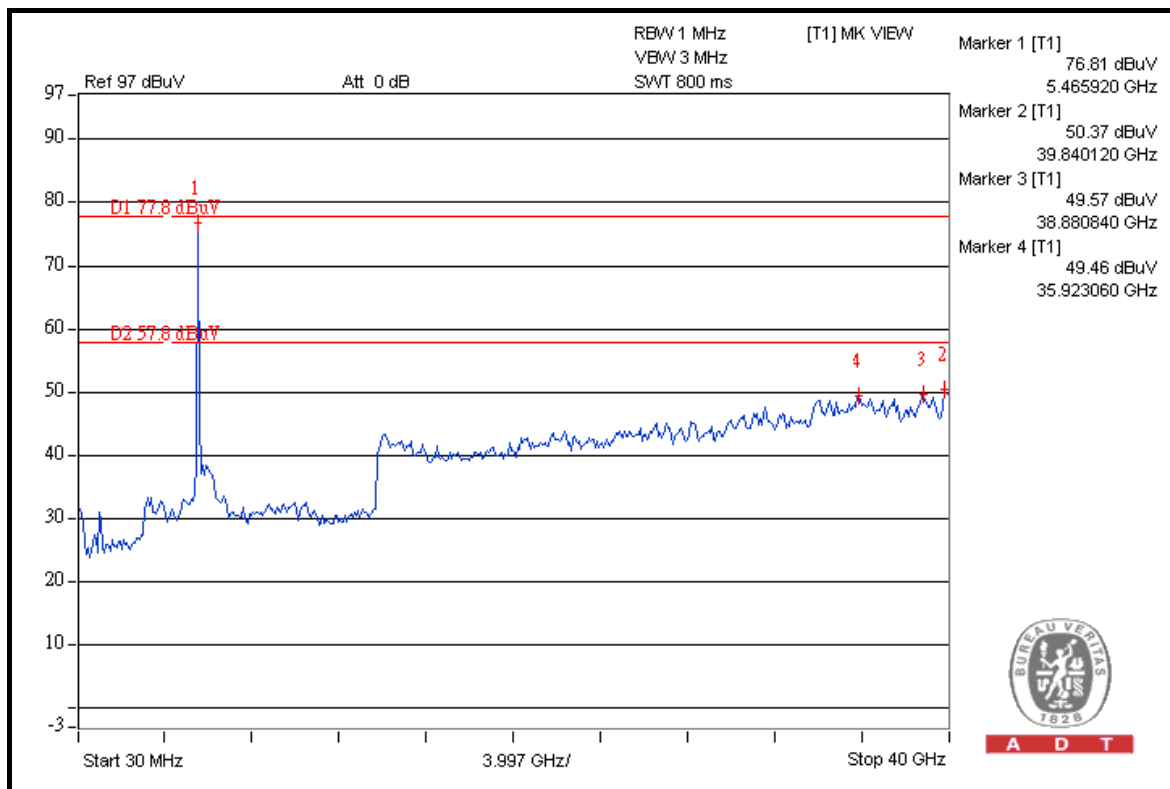


A D T

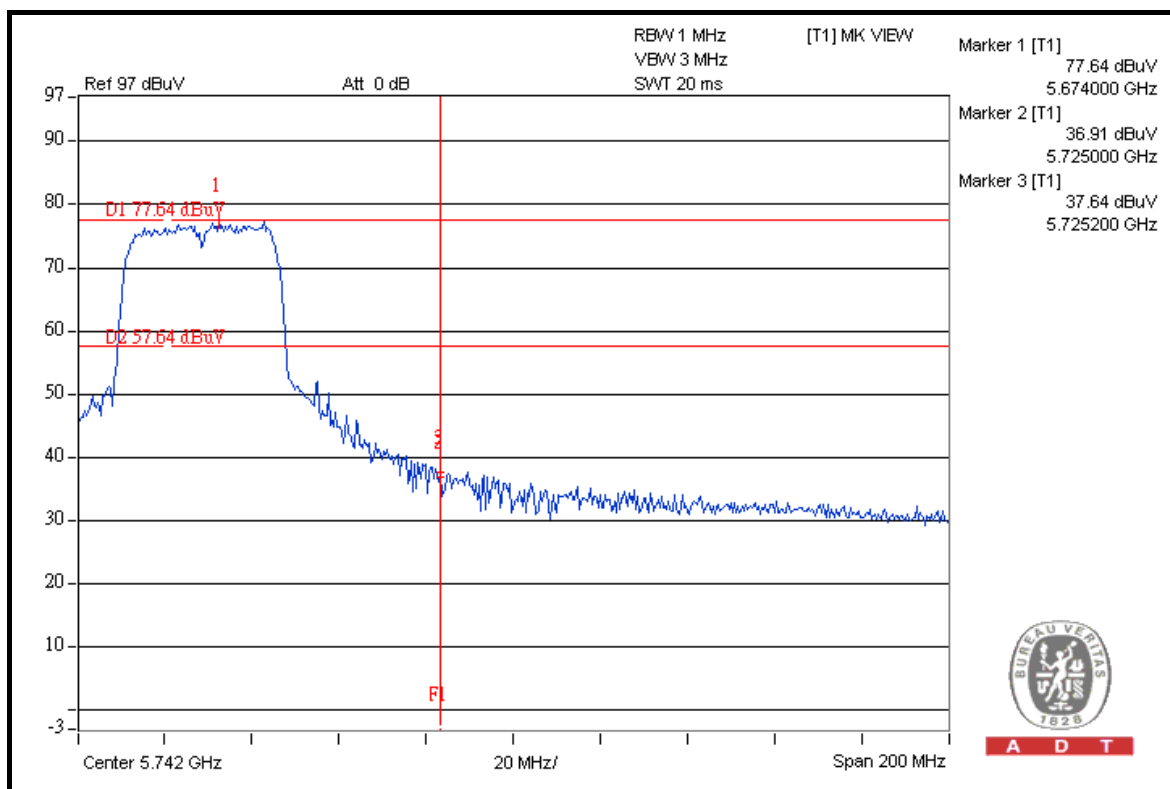




A D T



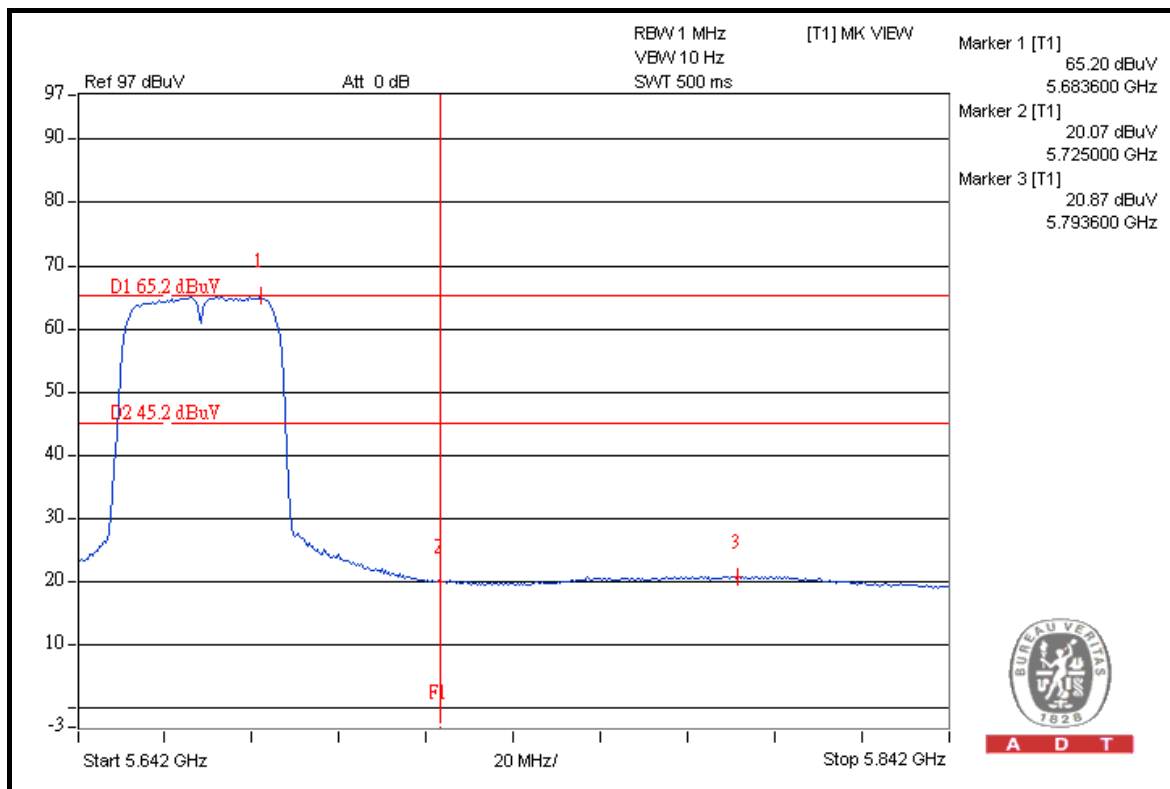
A D T



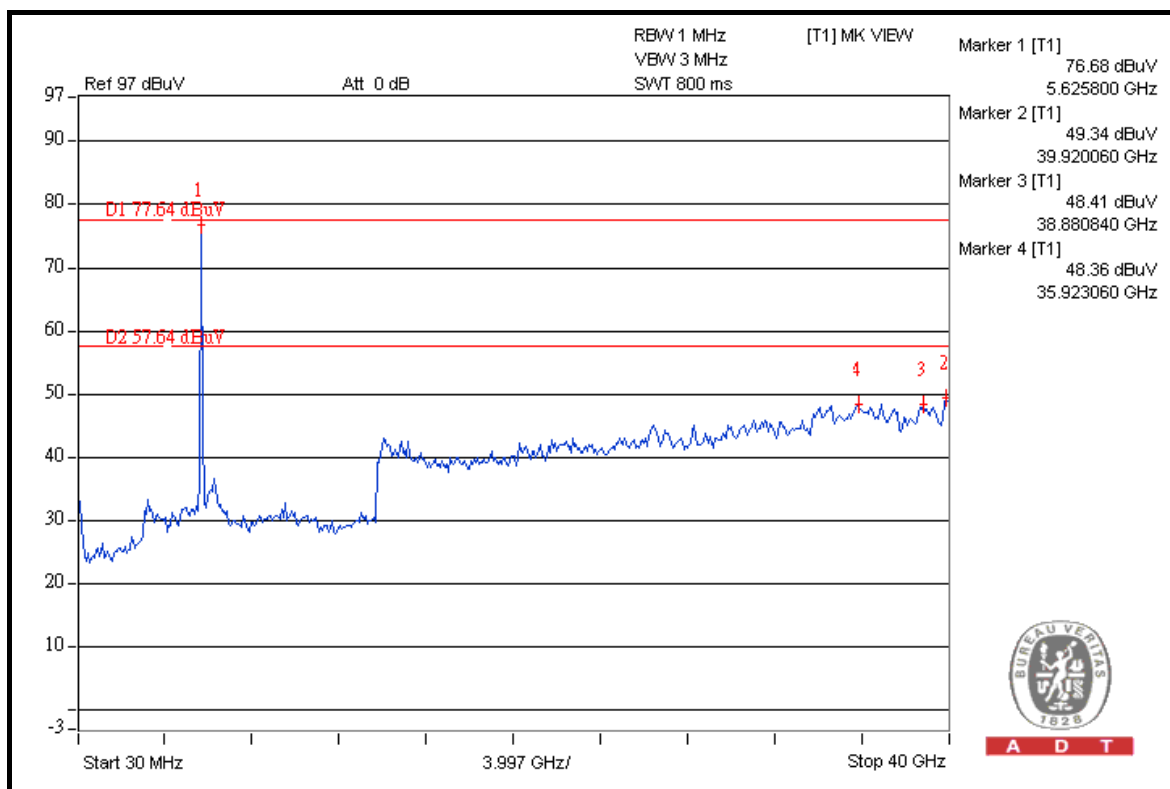
A D T



A D T



A D T



A D T

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.

---END---