FCC TEST REPORT

REPORT NO.:	RF940428H02
MODEL NO.:	NTE310AG
RECEIVED:	April 28, 2005
TESTED:	May 3 to 28, 2005
ISSUED:	May 28, 2005

APPLICANT:	Nortel Netowrks Limited
ADDRESS:	3500 Carling Avenue Nepean, Ontario K2H 8E9 , Canada

ISSUED BY:	Advance Data Technology Corporation
LAB LOCATION:	No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien, Taiwan, R.O.C.

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0536 No. 2177-01

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1. CERTIFICATION

PRODUCT :	Wireless Access Point AP7215
BRAND NAME :	Nortel
MODEL NO. :	NTE310AG
TESTED:	May 3 to 28, 2005
APPLICANT :	Nortel Netowrks Limited
TEST ITEM:	ENGINEERING SAMPLE
STANDARDS :	47 CFR FCC Part 15, Subpart C (Section 15.247) 47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.4-2003

The above equipment (Model: NTE310AG) has been tested by **Advance Data Technology Corporation**, 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 : Carol Liao , **DATE:** May 28, 2005
(Carol Liao)

TECHNICAL ACCEPTANCE : Hank Chung , **DATE:** May 28, 2005
Responsible for RF
(Hank Chung)

APPROVED BY : , **DATE:** May 28, 2005
(Eric Lin, Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

for freq 2.4GHz

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Section	**Test Type and Limit**	**Result**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is –17.80dB at 17.695MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit
15.247(c)	Transmitter Radiated Emissions FCC Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is –1.0dB at 2483.5MHz
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit

for freq. 5.15~5.35GHz：

APPLIED STANDARD: 47 CFR Part 15, Subpart E			
Standard Section	**Test Type**	**Result**	**REMARK**
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is –17.02dB at 0.512MHz
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 –2.10dB at 5350.00MHz
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

for freq. 5.725~5.850GHz：

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Section	**Test Type and Limit**	**Result**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is –17.02dB at 0.512MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit
15.247(c)	Transmitter Radiated Emissions FCC Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is –2.70dB at 215.08MHz
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless Access Point AP7215
MODEL NO.	NTE310AG
POWER SUPPLY	DC 12V from power adapter
MODULATION	DSSS, OFDM
TRANSFER RATE	802.11b and 802.11g: 1/2/5.5/6/9/11/12/18/24/36/48/54Mbps 802.11a:6 to 54Mbps
FREQUENCY RANGE	802.11b and 802.11g: 2400MHz ~ 2483.5MHz 802.11a: 5.15~5.35GHz and 5.725~5.850GHz
NUMBER OF CHANNEL	802.11b and 802.11g: 11 802.11a: 14 for Normal mode
CHANNEL SPACING	802.11b and 802.11g: 5MHz 802.11a: 20MHz for Normal mode
Max. OUTPUT POWER	802.11b: 22.50dBm / 802.11g: 25.24dBm 802.11a: 22.45dBm
DATA CABLE	NA
ANTENNA TYPE	Please see note 3
I/O PORTS	RJ45 Port x 1, Power Port x 1
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT is a Wireless Access Point AP7215, which contains two radios capable of simultaneous 802.11b/g (2.4GHz) and 802.11a (5GHz) operations.

2. The EUT was powered by the following power adapter:

Brand:	PHIHONG
Model No.:	PSA31U-120
Input power :	AC100-240V, 1.0A, 50-60Hz Cable: 1.8m/ unshielded/ without core
Output power :	DC12V 2.5A Cable:1.5m/ unshielded/ without core

3. There are two antennas provided to this EUT, please refer to the following table:

No.	Gain (dBi)	Antenna Type	Antenna Connector	Note
1	2400-2500MHz: 4.0dBi 5150-5875MHz: 6.5dBi	Dual-Band Omni-Directional Antenna	RA MMCX Plug	Dual band
2	5150-5350MHz: 12dBi 5450-5875MHz: 14dBi	High Gain Panel Directional Antenna	Connector near AP site is " rp-SMA " Connector near antenna site is " SMA connector "	5GHz only, with 102cm antenna cable

4. The above EUT information was declared by the 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 2400 ~ 2483.5MHz band:

For 802.11b/g: Eleven channels are provided to this EUT.

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

Operated in 5150 ~ 5250MHz, 5250MHz ~ 5350MHz bands:

Eight channels are provided to this EUT for normal mode.

Channel	Frequency
1	5180 MHz
2	5200 MHz
3	5220 MHz
4	5240 MHz
5	5260 MHz
6	5280 MHz
7	5300 MHz
8	5320 MHz

Operated in 5725 ~ 5850MHz band:

For 802.11a (5725 ~ 5850MHz band): Six channels are provided to this EUT.

Channel	Frequency
9	5740MHz
10	5760MHz
11	5780MHz
12	5800MHz
13	5820MHz
14	5840MHz

FCC Part 15, Subpart C (15.247)

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
-	x	x	x	x	NA

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

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	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	11	OFDM	BPSK	6
802.11a	1 to 14	14	OFDM	BPSK	6

Radiated Emission Test (Below 1 GHz):

☒ 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	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	11	OFDM	BPSK	6
802.11a	1 to 14	14	OFDM	BPSK	6

Radiated Emission Test (Above 1 GHz):

☒ 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	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11a	9 to 14	9, 12, 14	OFDM	BPSK	6

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	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 11	DSSS	CCK	11
802.11g	1 to 11	1, 11	OFDM	BPSK	6
802.11a	9 to 14	9, 14	OFDM	BPSK	6

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	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11a	9 to 14	9, 12, 14	OFDM	BPSK	6

Note:

1. The EUT was tested for radiated emissions and conduction while transmitting on both 2.4GHz and 5GHz at simultaneously.
2. The access point was tested for radiated emission and conduction with the unit transmitting on 802.11g(2437MHz) and 802.11a(5840MHz).The frequencies and power level were chosen because these frequencies produced the worst case radiated emissions.The unit was set to transmit at the same power level as was used in the initial radiated emissions tests and was transmitting at the maximum data rate.

FCC Part 15, Subpart E (15.407)

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
-	x	x	x	x	NA

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

Radiated Emission Test (Above 1 GHz):

☒ 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	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 8	1, 4, 5, 8	OFDM	BPSK	6

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	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 8	1, 8	OFDM	BPSK	6

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	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 8	1, 4, 5, 8	OFDM	BPSK	6

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless Access Point AP7215. According to the specifications of the manufacturer; it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (15.247)

FCC Part 15, Subpart E (15.407)

ANSI C63.4-2003

All tests 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 47CFR Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

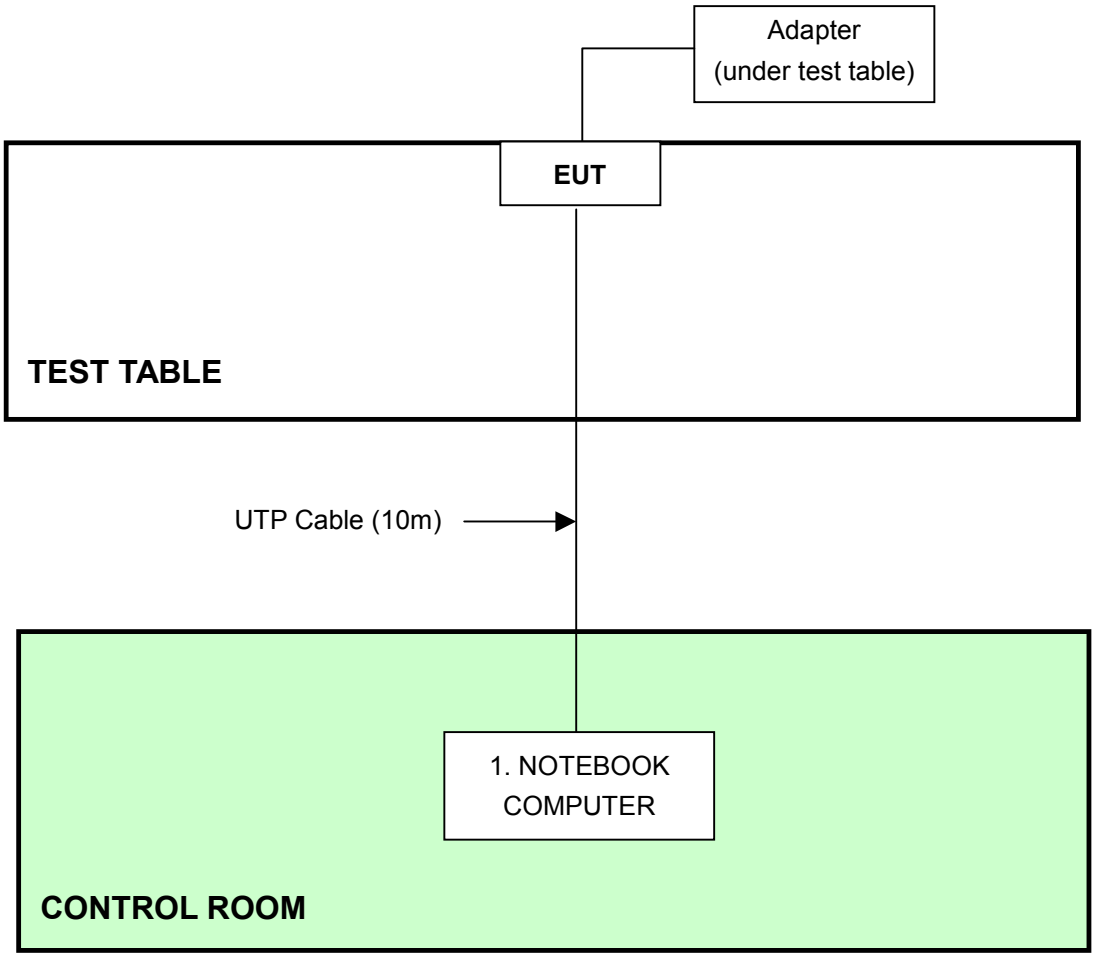
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP01L	TW-09c748-12800-165-3171	FCC DoC

No.	Signal cable description
1	NA

Note: 1. All power cords of the above support units are unshielded (1.8m).

3.5 CONFIGURATION OF SYSTEM UNDER TEST



NOTE: 1. Support unit 1 was kept in the control room during the test.
2. Please refer to the photos of test configuration in Item 6 also.

4. TEST TYPES AND RESULTS (FOR PART 802.11g)

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTES: (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 0.50 MHz.

(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.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	847124/029	Dec. 07, 2005
ROHDE & SCHWARZ LISN (for EUT)	ESHS-Z5	848773/004	Nov. 08, 2005
KYORITSU LISN (for peripheral)	KNW-407	8/1395/12	Jul. 23, 2005
RF Cable (JETBAO)	RG233/U	Cable_CA_01	Jul. 02, 2005
Terminator(for KYORITSU)	50	3	Oct. 12, 2005
Software	Cond-V2e	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 ADT Shielded Room No. A.
3 The VCCI Con A Registration No. is C-817.
4 The measurement uncertainty is 2.53 dB, which is calculated as per the document CISPR 16-4

4.1.3 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.

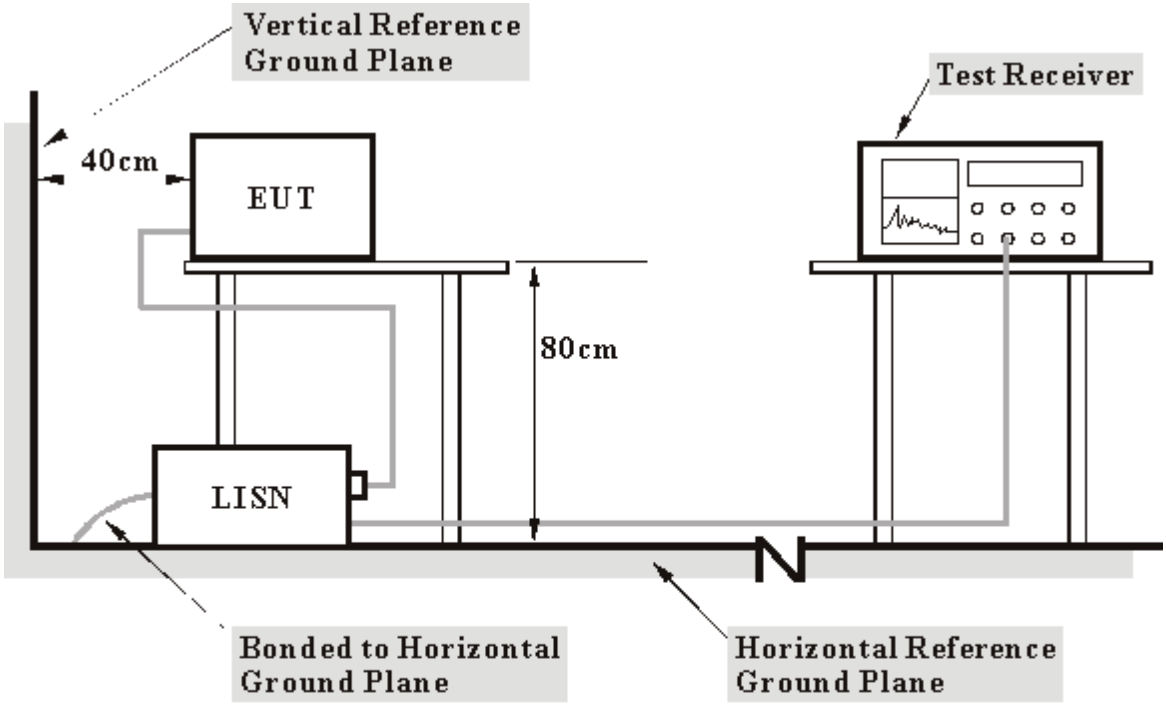
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

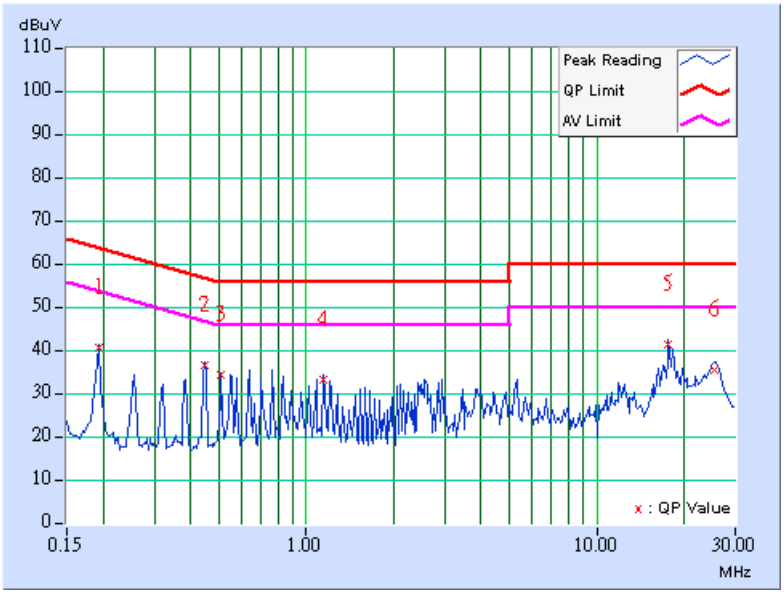
a. Placed the EUT on the testing table.
b. Prepared another computer system to act as a communication partner and placed it outside of testing area.
c. The communication partner run test program “Art 48 B 13” to enable EUT under transmission/receiving condition continuously at specific channel frequency via UTP cable.

4.1.7 TEST RESULTS

EUT	Wireless Access Point AP7215		
MODEL	NTE310AG		
TEST MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	30deg. C, 55%RH, 965 hPa	**TESTED BY**	Eric Lee

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	9.25	30.84	-	40.09	-	63.91	53.91	-23.82	-
2	0.447	9.19	26.91	-	36.10	-	56.93	46.93	-20.83	-
3	0.511	9.19	24.47	-	33.66	-	56.00	46.00	-22.34	-
4	1.150	9.24	23.44	-	32.68	-	56.00	46.00	-23.32	-
5	17.695	9.68	31.79	-	41.47	-	60.00	50.00	-18.53	-
6	25.496	9.85	25.80	-	35.65	-	60.00	50.00	-24.35	-

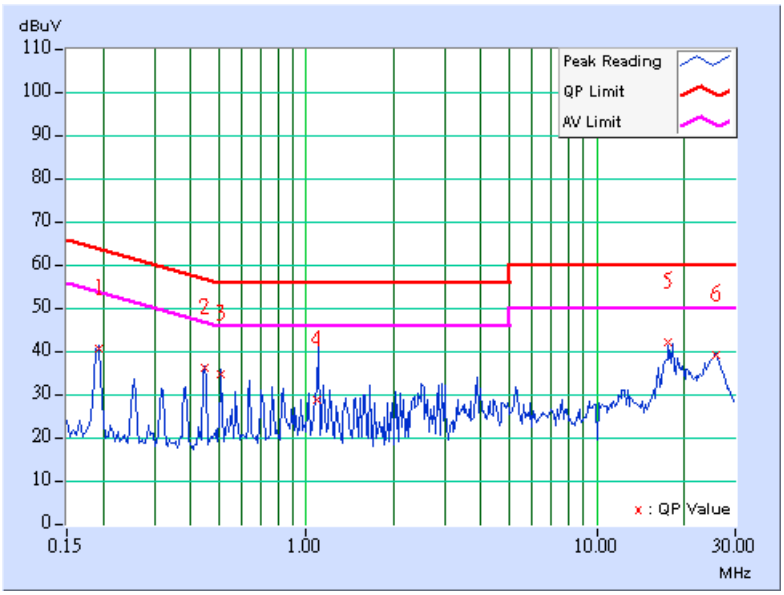
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless Access Point AP7215		
MODEL	NTE310AG		
TEST MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	30deg. C, 55%RH, 965 hPa	**TESTED BY**	Eric Lee

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	9.19	30.77	-	39.96	-	63.91	53.91	-23.95	-
2	0.447	9.24	26.25	-	35.49	-	56.93	46.93	-21.45	-
3	0.509	9.24	25.04	-	34.28	-	56.00	46.00	-21.72	-
4	1.084	9.22	19.03	-	28.25	-	56.00	46.00	-27.75	-
5	**17.695**	**9.71**	**32.49**	**-**	**42.20**	**-**	**60.00**	**50.00**	**-17.80**	**-**
6	25.680	9.89	29.30	-	39.19	-	60.00	50.00	-20.81	-

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.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Field strength limits are at the distance of 3 meters, 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.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
HP Spectrum Analyzer	8594E	3710A04861	Sep. 23, 2005
ADVANTEST Spectrum Analyzer	R3271A	85060311	Jun. 29, 2005
CHASE RF Pre_Amplifier	CPA9232	1057	Aug 06, 2005
HP Pre_Amplifier	8449B	3008A01922	Oct. 13, 2005
ROHDE & SCHWARZ Test Receiver	ESCS30	100287	Dec. 08, 2005
CHASE Broadband Antenna	VULB9168	138	Dec. 21, 2005
Schwarzbeck Horn_Antenna	BBHA9120	D124	Jun. 16, 2005
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 30, 2006
SCHWARZBECK Biconical Antenna	VHBA9123	459	Jun. 26, 2006
SCHWARZBECK Tunable Periodic Antenna	UPA6108	1148	Jun. 26, 2006
RF Switches (ARNITSU)	CS-201	1565157	Jul. 15, 2005
RF CABLE (Chaintek) 1GHz-20GHz	SF102	22054-2	Nov. 15. 2005
RF Cable(RICHTEC)	9913-30M	STCCAB-30M-1GHz-021	Jul. 15, 2005
Software	ADT_Radiated_V 5.14	NA	NA
CHANCE MOST Antenna Tower	AT-100	0203	NA
CHANCE MOST Turn Table	TT-100	0203	NA

Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Tunable Periodic Antenna)and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in ADT Open Site No. C.
4. The FCC Site Registration No. is 656396.
5. The VCCI Site Registration No. is R-1626.
6. The CANADA Site Registration No. is IC 4824-3.
7. The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4.

Measurement	Value
Radiated emissions (30MHz-1GHz)	2.98 dB
Radiated emissions (1GHz ~18GHz)	2.21 dB
Radiated emissions (18GHz ~20GHz)	1.88 dB

4.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. 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 10 dB 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 10 dB margin would be re-tested one by one using the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

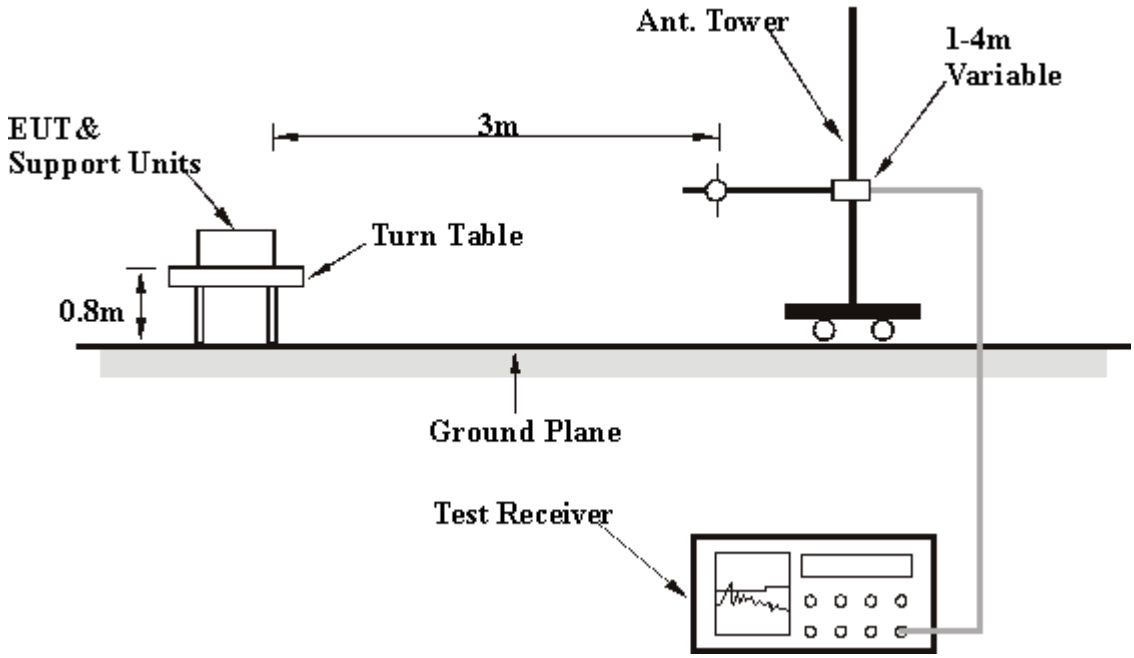
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
TEST MODE	Channel 11	**FREQUENCY RANGE**	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION & BANDWIDTH**	Quasi-Peak, 120kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.01	24.30 QP	43.50	-19.20	1.76 H	3	10.50	13.80
2	215.02	39.10 QP	43.50	-4.40	1.74 H	96	27.30	11.80
3	250.02	38.00 QP	46.00	-8.00	1.41 H	17	24.70	13.30
4	375.02	36.40 QP	46.00	-9.60	1.00 H	335	18.80	17.60
5	400.02	33.80 QP	46.00	-12.20	1.00 H	131	15.40	18.40
6	600.03	32.30 QP	46.00	-13.70	1.52 H	342	8.80	23.50
7	640.00	29.10 QP	46.00	-16.90	1.23 H	142	5.20	23.90
8	750.04	34.20 QP	46.00	-11.80	1.12 H	351	7.80	26.40
9	800.04	32.30 QP	46.00	-13.70	1.18 H	358	5.70	26.60

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	160.00	28.30 QP	43.50	-15.20	1.00 V	13	14.50	13.80
2	215.05	40.60 QP	43.50	-2.90	1.00 V	15	28.80	11.80
3	250.02	39.50 QP	46.00	-6.50	1.00 V	186	26.20	13.30
4	375.01	36.60 QP	46.00	-9.40	1.27 V	347	19.00	17.60
5	400.02	35.80 QP	46.00	-10.20	1.21 V	356	17.40	18.40
6	600.04	32.60 QP	46.00	-13.40	1.13 V	292	9.10	23.50
7	640.00	29.40 QP	46.00	-16.60	1.00 V	211	5.50	23.90
8	750.03	35.10 QP	46.00	-10.90	1.00 V	158	8.70	26.40
9	800.02	32.40 QP	46.00	-13.60	1.00 V	273	5.80	26.60

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

4.2.8 TEST RESULTS - DSSS

EUT	Wireless Access Point AP7215	**Model**	NTE310AG
MODE	Channel 1	**FREQUENCY RANGE**	1000MHz~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	44.50 PK	74.00	-29.50	1.56 H	80	10.80	33.70
1	2390.00	35.90 AV	54.00	-18.10	1.56 H	80	2.20	33.70
2	*2412.00	102.00 PK			1.56 H	80	72.20	29.80
2	*2412.00	95.00 AV			1.56 H	80	65.20	29.80
3	4824.00	46.50 PK	74.00	-27.50	1.00 H	321	11.40	35.10
3	4824.00	34.90 AV	54.00	-19.10	1.00 H	321	-0.20	35.10
4	7236.00	49.40 PK	74.00	-24.60	1.25 H	0	8.90	40.50
4	7236.00	37.50 AV	54.00	-16.50	1.25 H	0	-3.00	40.50

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	2390.00	59.90 PK	74.00	-14.10	1.00 V	18	26.20	33.70
1	2390.00	50.60 AV	54.00	-3.40	1.00 V	18	16.90	33.70
2	*2412.00	117.40 PK			1.00 V	18	87.60	29.80
2	*2412.00	109.70 AV			1.00 V	18	79.90	29.80
3	4824.00	51.60 PK	74.00	-22.40	1.07 V	155	16.50	35.10
3	4824.00	40.80 AV	54.00	-13.20	1.07 V	155	5.70	35.10
4	7236.00	51.60 PK	74.00	-22.40	1.06 V	10	11.10	40.50
4	7236.00	40.70 AV	54.00	-13.30	1.06 V	10	0.20	40.50

NOTE: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Channel 6	**FREQUENCY RANGE**	1000MHz~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	104.30 PK			1.56 H	80	74.40	29.90
1	*2437.00	96.60 AV			1.56 H	80	66.70	29.90
2	4874.00	47.30 PK	74.00	-26.70	1.10 H	6	12.00	35.30
2	4874.00	35.40 AV	54.00	-18.60	1.10 H	6	0.10	35.30
3	7311.00	49.70 PK	74.00	-24.30	1.40 H	15	9.00	40.70
3	7311.00	37.50 AV	54.00	-16.50	1.40 H	15	-3.20	40.70

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	*2437.00	117.20 PK			1.18 V	16	87.30	29.90
1	*2437.00	109.50 AV			1.18 V	16	79.60	29.90
2	4874.00	52.10 PK	74.00	-21.90	1.09 V	126	16.80	35.30
2	4874.00	41.20 AV	54.00	-12.80	1.09 V	126	5.90	35.30
3	7311.00	51.60 PK	74.00	-22.40	1.18 V	25	10.90	40.70
3	7311.00	40.80 AV	54.00	-13.20	1.18 V	25	0.10	40.70

NOTE: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Channel 11	**FREQUENCY RANGE**	1000MHz~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	102.50 PK			1.57 H	84	72.50	30.00
1	*2462.00	95.30 AV			1.57 H	84	65.30	30.00
2	2483.50	45.30 PK	74.00	-28.70	1.57 H	84	15.20	30.10
2	2483.50	39.20 AV	54.00	-14.80	1.57 H	84	9.10	30.10
3	4924.00	46.30 PK	74.00	-27.70	1.20 H	12	10.70	35.50
3	4924.00	34.80 AV	54.00	-19.20	1.20 H	12	-0.80	35.50
4	7386.00	48.30 PK	74.00	-25.70	1.54 H	40	7.50	40.80
4	7386.00	36.90 AV	54.00	-17.10	1.54 H	40	-3.90	40.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	116.50 PK			1.26 V	259	86.50	30.00
1	*2462.00	108.90 AV			1.26 V	259	78.90	30.00
2	2483.50	59.30 PK	74.00	-14.70	1.26 V	259	29.20	30.10
2	2483.50	52.80 AV	54.00	-1.20	1.26 V	259	22.70	30.10
3	4924.00	51.70 PK	74.00	-22.30	1.15 V	115	16.10	35.50
3	4924.00	40.70 AV	54.00	-13.30	1.15 V	115	5.10	35.50
4	7386.00	50.90 PK	74.00	-23.10	1.15 V	105	10.10	40.80
4	7386.00	40.10 AV	54.00	-13.90	1.15 V	105	-0.70	40.80

NOTE: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.2.9 TEST RESULTS - OFDM

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Channel 1	**FREQUENCY RANGE**	1000MHz~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	46.50 PK	74.00	-27.50	1.00 H	61	12.80	33.70
1	2390.00	37.90 AV	54.00	-16.10	1.00 H	61	4.20	33.70
2	*2412.00	96.80 PK			1.00 H	61	67.00	29.80
2	*2412.00	87.60 AV			1.00 H	61	57.80	29.80
3	4824.00	42.60 PK	74.00	-31.40	1.14 H	40	7.50	35.10
3	4824.00	31.00 AV	54.00	-23.00	1.14 H	40	-4.10	35.10
4	7236.00	46.20 PK	74.00	-27.80	1.10 H	10	5.70	40.50
4	7236.00	35.90 AV	54.00	-18.10	1.10 H	10	-4.60	40.50

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	2390.00	60.20 PK	74.00	-13.80	1.06 V	16	26.50	33.70
1	2390.00	51.20 AV	54.00	-2.80	1.06 V	16	17.50	33.70
2	*2412.00	110.50 PK			1.06 V	16	80.70	29.80
2	*2412.00	100.90 AV			1.06 V	16	71.10	29.80
3	4824.00	43.80 PK	74.00	-30.20	1.60 V	62	8.70	35.10
3	4824.00	32.40 AV	54.00	-21.60	1.60 V	62	-2.70	35.10
4	7236.00	53.30 PK	74.00	-20.70	1.20 V	35	12.80	40.50
4	7236.00	36.50 AV	54.00	-17.50	1.20 V	35	-4.00	40.50

NOTE: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Channel 6	**FREQUENCY RANGE**	1000MHz~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	100.70 PK			1.00 H	16	70.80	29.90
1	*2437.00	91.20 AV			1.00 H	16	61.30	29.90
2	4874.00	43.90 PK	74.00	-30.10	1.41 H	344	8.60	35.30
2	4874.00	31.70 AV	54.00	-22.30	1.41 H	344	-3.60	35.30
3	7311.00	47.90 PK	74.00	-26.10	1.20 H	12	7.20	40.70
3	7311.00	36.70 AV	54.00	-17.30	1.20 H	12	-4.00	40.70

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	*2437.00	114.60 PK			1.00 V	16	84.70	29.90
1	*2437.00	105.10 AV			1.00 V	16	75.20	29.90
2	4874.00	50.90 PK	74.00	-23.10	1.20 V	118	15.60	35.30
2	4874.00	36.90 AV	54.00	-17.10	1.20 V	118	1.60	35.30
3	7311.00	63.70 PK	74.00	-10.30	1.17 V	252	23.00	40.70
3	7311.00	39.00 AV	54.00	-15.00	1.17 V	252	-1.70	40.70

NOTE: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Channel 11	**FREQUENCY RANGE**	1000MHz~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	97.10 PK			1.03 H	18	67.10	30.00
1	*2462.00	87.60 AV			1.03 H	18	57.60	30.00
2	2483.50	49.30 PK	74.00	-24.70	1.03 H	18	19.20	30.10
2	2483.50	39.70 AV	54.00	-14.30	1.03 H	18	9.60	30.10
3	4924.00	44.10 PK	74.00	-29.90	1.25 H	22	8.50	35.50
3	4924.00	31.90 AV	54.00	-22.10	1.25 H	22	-3.70	35.50
4	7386.00	47.40 PK	74.00	-26.60	1.07 H	5	6.60	40.80
4	7386.00	37.30 AV	54.00	-16.70	1.07 H	5	-3.50	40.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	110.60 PK			1.02 V	21	80.60	30.00
1	*2462.00	100.90 AV			1.02 V	21	70.90	30.00
2	2483.50	62.80 PK	74.00	-11.20	1.02 V	21	32.70	30.10
2	2483.50	53.00 AV	54.00	-1.00	1.02 V	21	22.90	30.10
3	4924.00	44.00 PK	74.00	-30.00	1.24 V	57	8.40	35.50
3	4924.00	32.40 AV	54.00	-21.60	1.24 V	57	-3.20	35.50
4	7386.00	54.30 PK	74.00	-19.70	1.26 V	8	13.50	40.80
4	7386.00	37.30 AV	54.00	-16.70	1.26 V	8	-3.50	40.80

NOTE: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Nov. 23, 2005

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.3.3 TEST PROCEDURE

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

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP

4.3.6 EUT OPERATING CONDITIONS

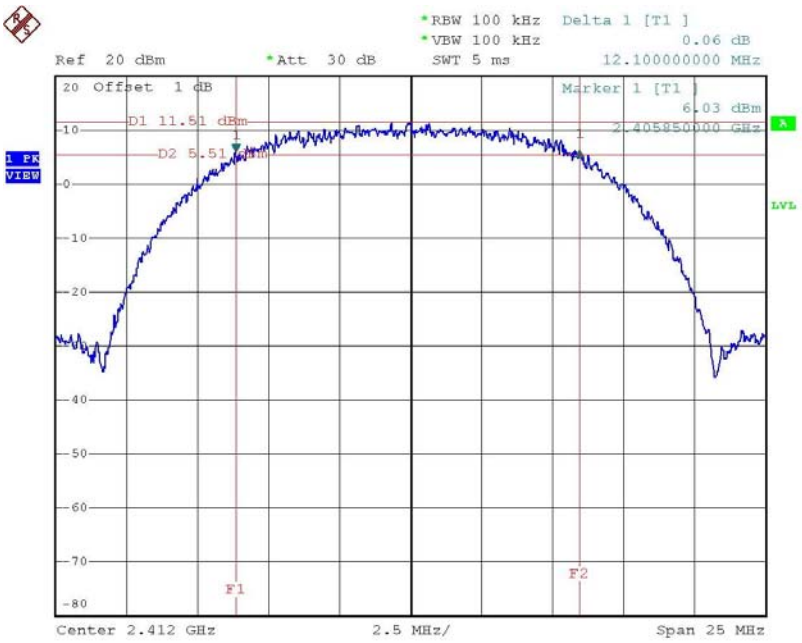
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS -DSSS

EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	ENVIRONMENTAL CONDITIONS	23deg. C, 68%RH, 965 hPa
INPUT POWER (SYSTEM)	120Vac, 60Hz	TESTED BY	Rex Huang

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	12.10	0.5	PASS
6	2437	11.00	0.5	PASS
11	2462	11.175	0.5	PASS

CH1



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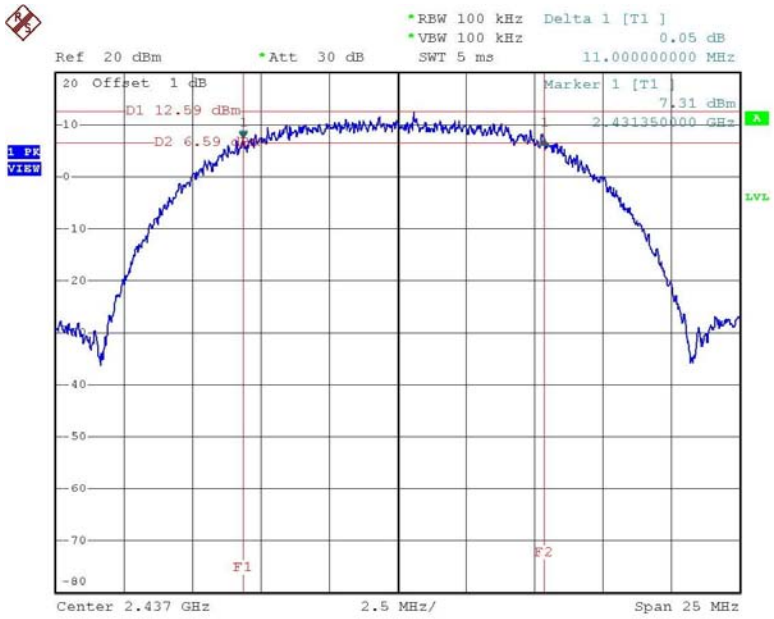

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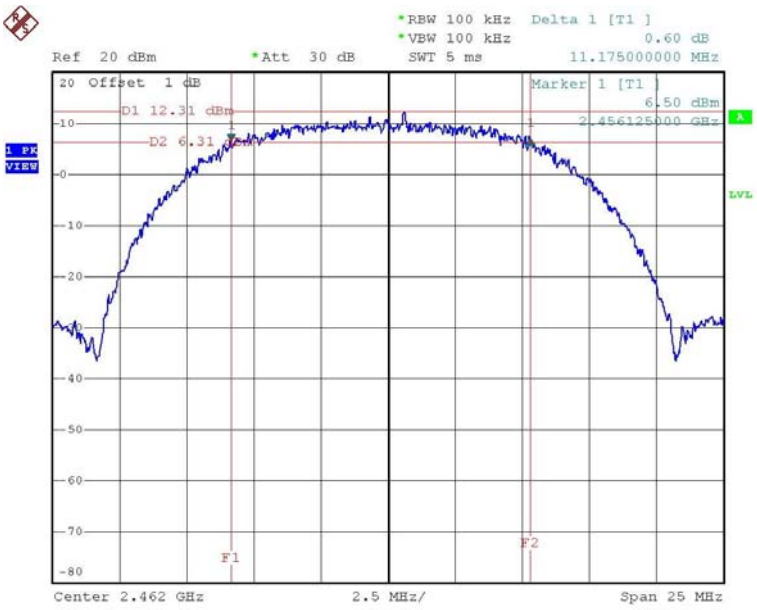

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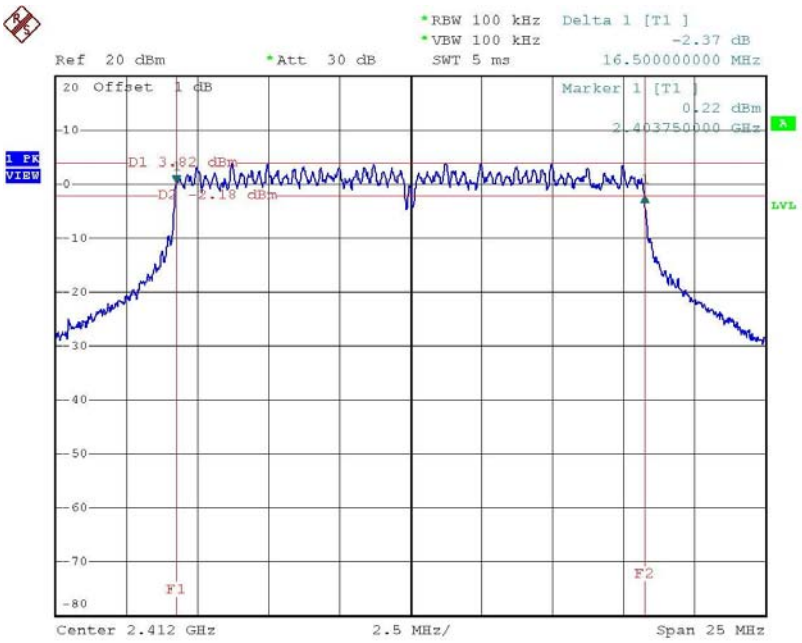
4.3.8 TEST RESULTS -OFDM

EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	ENVIRONMENTAL CONDITIONS	23deg. C, 68%RH, 965 hPa
INPUT POWER (SYSTEM)	120Vac, 60Hz	TESTED BY	Rex Huang

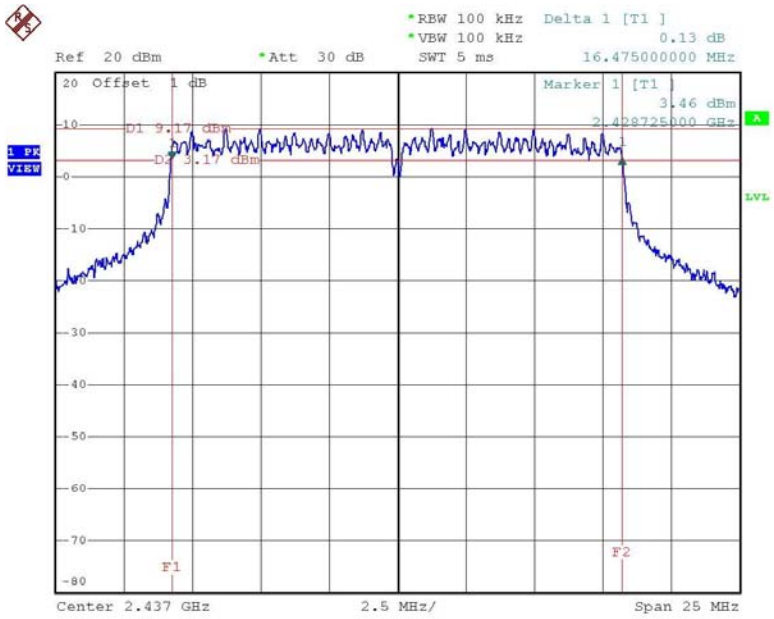
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.50	0.5	PASS
6	2437	16.475	0.5	PASS
11	2462	16.475	0.5	PASS

CH1



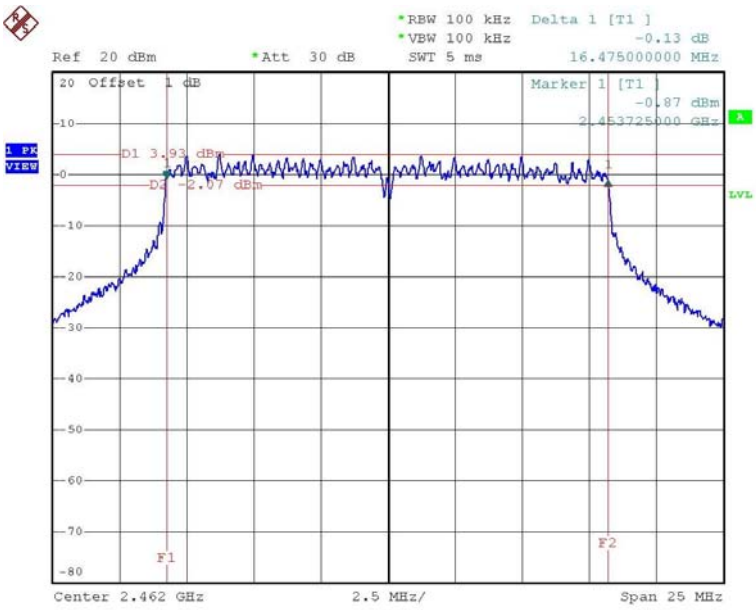
Date: 9.MAY.2005 14:42:36

CH6



Date: 9.MAY.2005 14:45:00

CH11



Date: 9.MAY.2005 14:39:17

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

Note:

1. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

2. Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

4.4.2 INSTRUMENTS

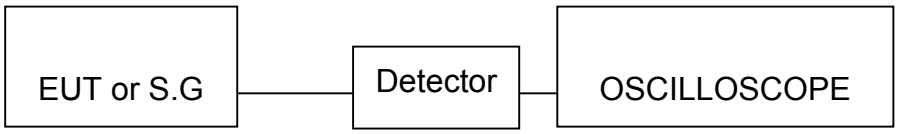
Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Nov. 23, 2005
Agilent SIGNAL GENERATOR	E8257C	MY43320668	Dec. 07, 2005
TEKTRONIX OSCILLOSCOPE	TDS 220	B027241	Jun. 30, 2005
NARDA DETECTOR	4503A	FSCM99899	NA

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

4.4.3 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to read the peak response of the detector.
2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same peak reading on oscilloscope. Record the power level.

4.4.4 TEST SETUP



4.4.5 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.6 TEST RESULTS -DSSS

EUT	Wireless Access Point AP7215		
INPUT POWER (SYSTEM)	120Vac, 60Hz	**MODEL**	NTE310AG
TESTED BY	Eric Lee	**ENVIRONMENTAL CONDITIONS**	23deg. C, 68%RH, 965 hPa

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	22.5	30	PASS
6	2437	22.41	30	PASS
11	2462	22.26	30	PASS

4.4.7 TEST RESULTS -OFDM

EUT	Wireless Access Point AP7215		
INPUT POWER (SYSTEM)	120Vac, 60Hz	**MODEL**	NTE310AG
TESTED BY	Eric Lee	**ENVIRONMENTAL CONDITIONS**	23deg. C, 68%RH, 965 hPa

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	20.5	30	PASS
6	2437	25.24	30	PASS
11	2462	20.32	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Nov. 23, 2005

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

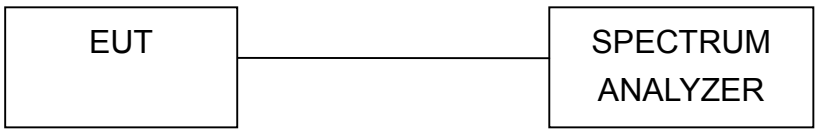
4.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3 kHz RBW and 30 kHz VBW, set sweep time = span/3 kHz. The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span/3 kHz for a full response of the mixer in the spectrum analyzer.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

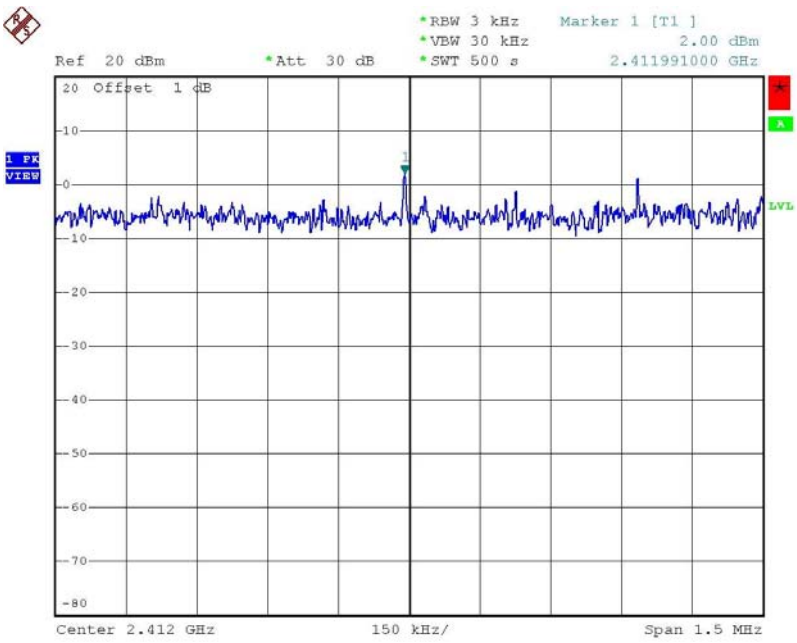
Same as Item 4.3.6

4.5.7 TEST RESULTS-DSSS

EUT	Wireless Access Point AP7215		
INPUT POWER (SYSTEM)	120Vac, 60Hz	**MODEL**	NTE310AG
TESTED BY	Rex Huang	**ENVIRONMENTAL CONDITIONS**	23deg. C, 68%RH, 965 hPa

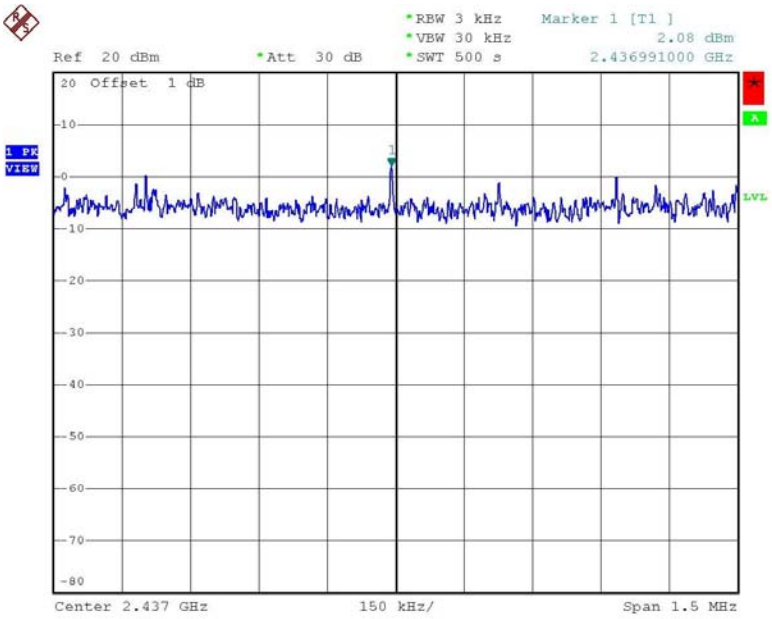
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	2.0	8	PASS
6	2437	2.08	8	PASS
11	2462	1.7	8	PASS

CH1



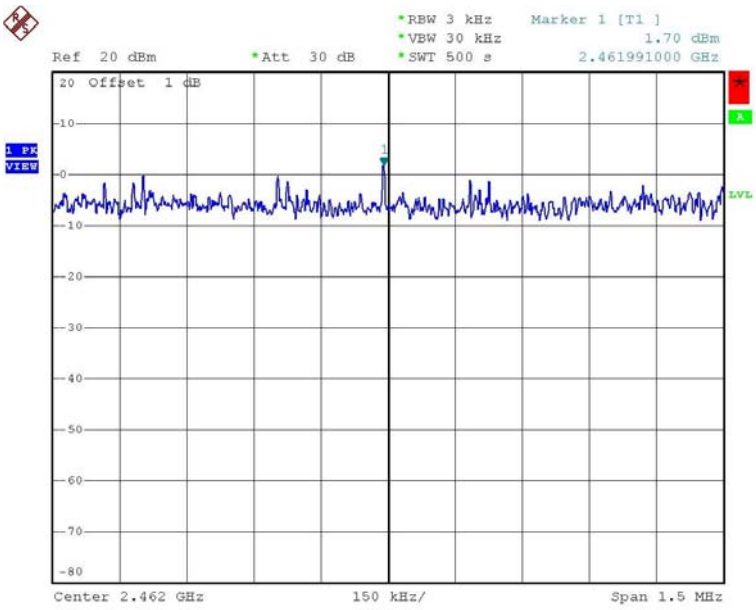
Date: 9.MAY.2005 13:56:52

CH6



Date: 9.MAY.2005 13:58:55

CH11



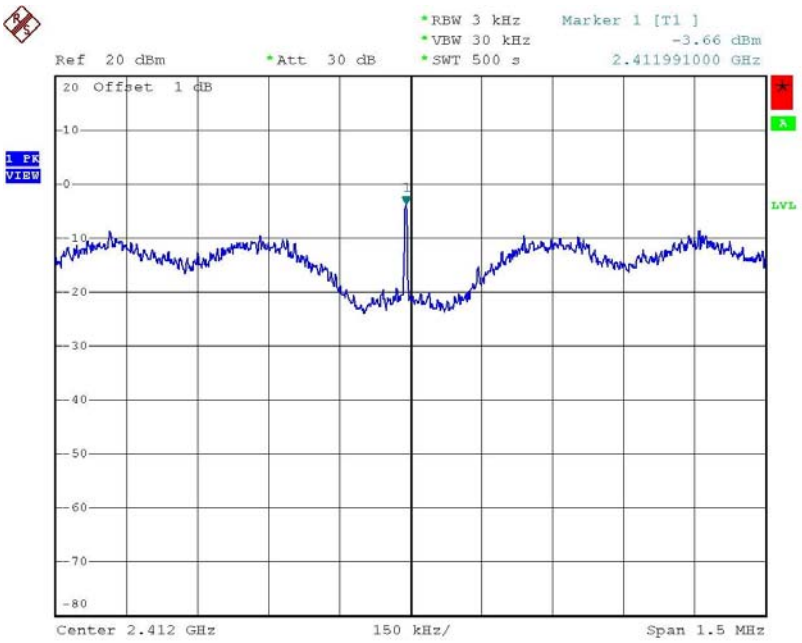
Date: 9.MAY.2005 14:01:17

4.5.8 TEST RESULTS-OFDM

EUT	Wireless Access Point AP7215		
INPUT POWER (SYSTEM)	120Vac, 60Hz	**MODEL**	NTE310AG
TESTED BY	Rex Huang	**ENVIRONMENTAL CONDITIONS**	23deg. C, 68%RH, 965 hPa

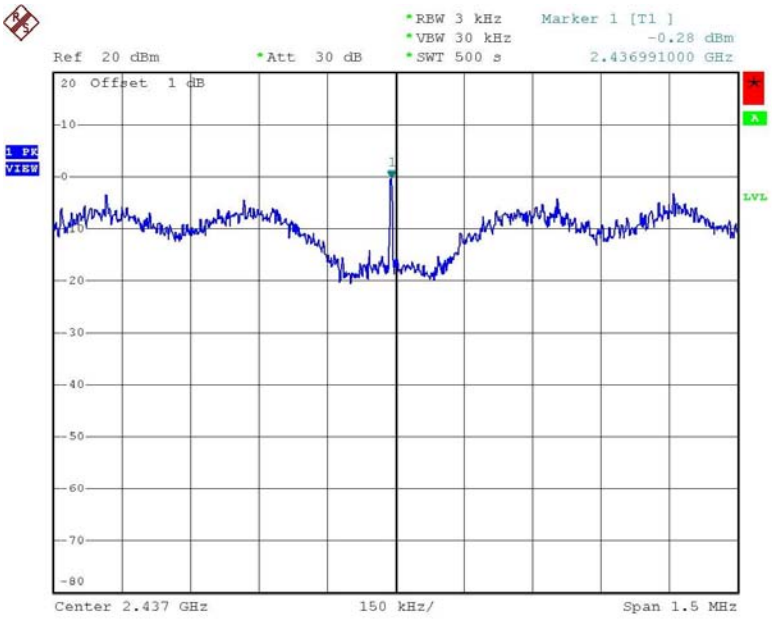
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-3.66	8	PASS
6	2437	-0.28	8	PASS
11	2462	-3.87	8	PASS

CH1



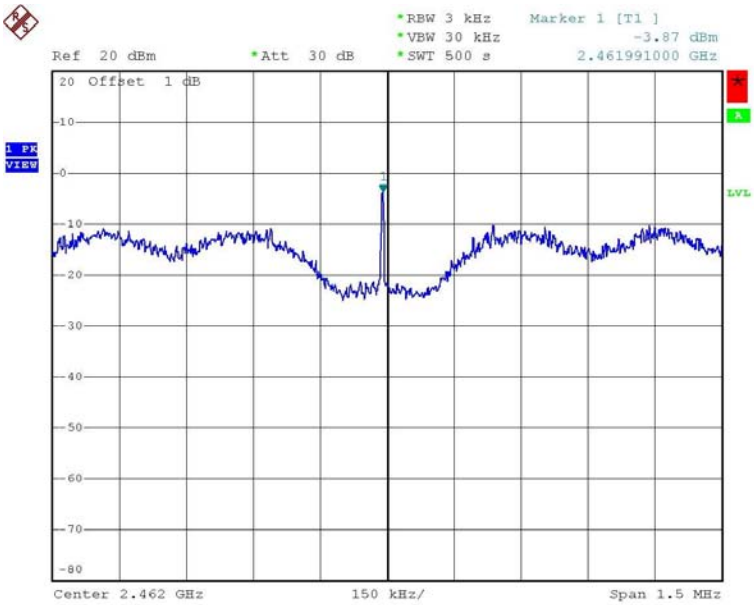
Date: 9.MAY.2005 13:54:13

CH6



Date: 9.MAY.2005 13:55:07

CH11



Date: 9.MAY.2005 13:52:45

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 1MHz Resolution Bandwidth).

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Nov. 23, 2005

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. 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 transmitter output was connected to the spectrum analyzer via a low lose cable. Set RBW spectrum analyzer to 1 MHz and set VBW spectrum analyzer to 10 Hz with suitable frequency span including 1 MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (Peak RBW=VBW=100kHz ; Average RBW=1MHz, VBW=10Hz) are attached on the following pages.

4.6.4 EUT OPERATING CONDITION

Same as Item 4.3.6

4.6.5 TEST RESULTS –DSSS

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

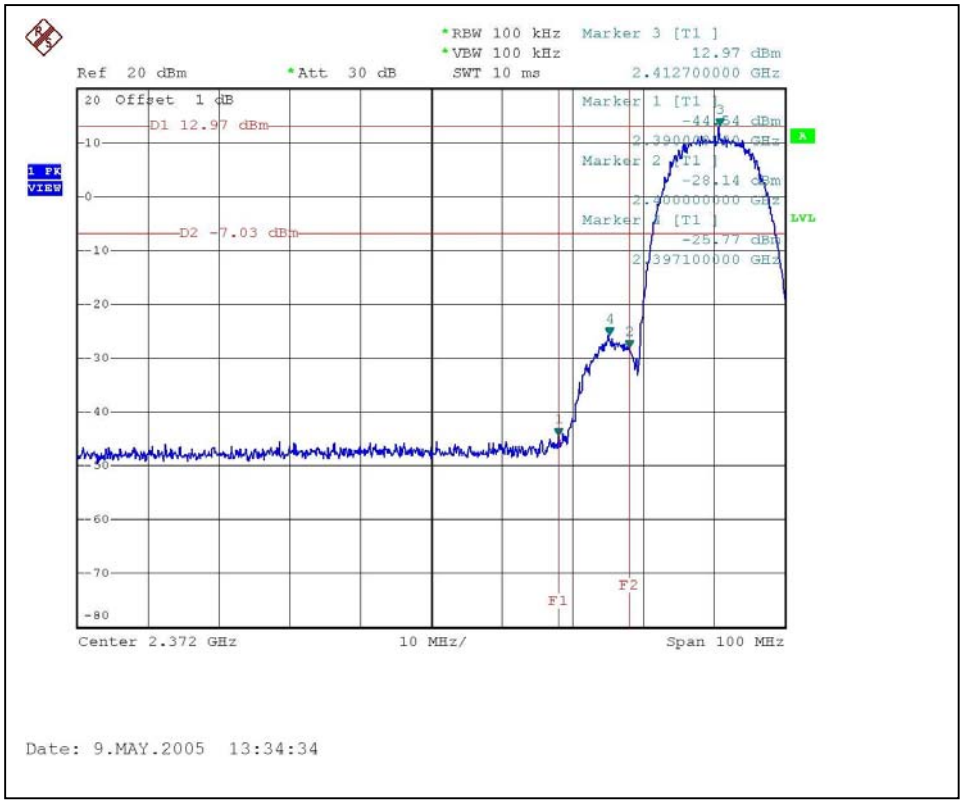
Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

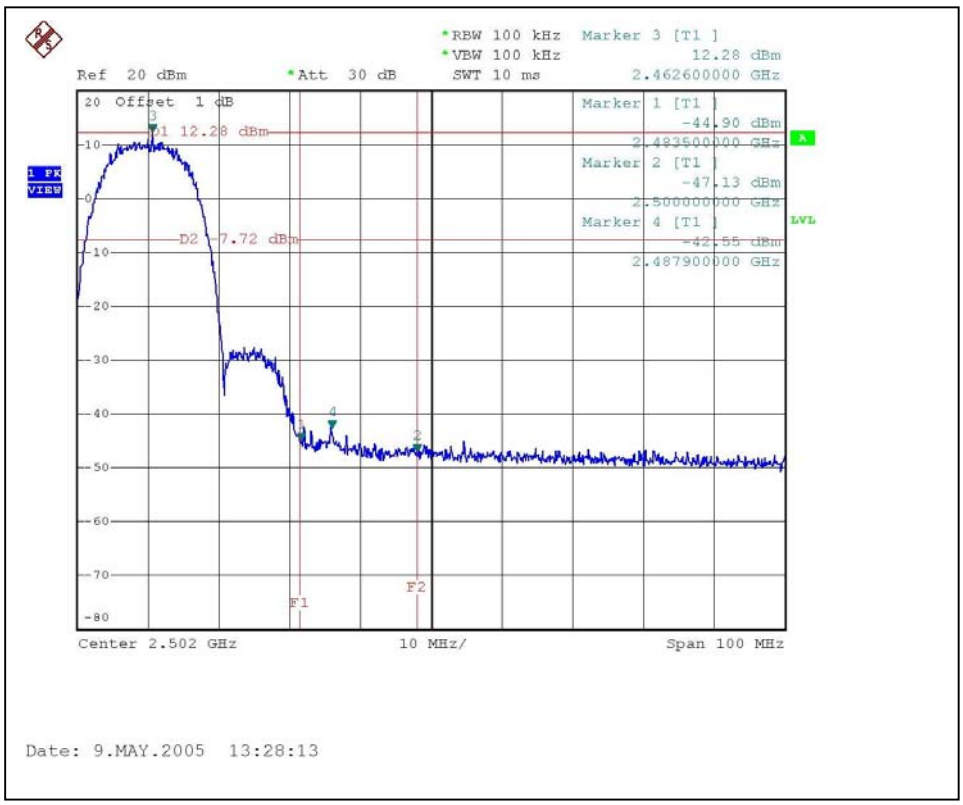
NOTE (Peak):
The band edge emission plot of DSSS technique on the following first page show 57.51dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 117.4dBuV/m, so the maximum field strength in restrict band is 117.4-57.51=59.89dBuV/m which is under 74 dBuV/m limit.

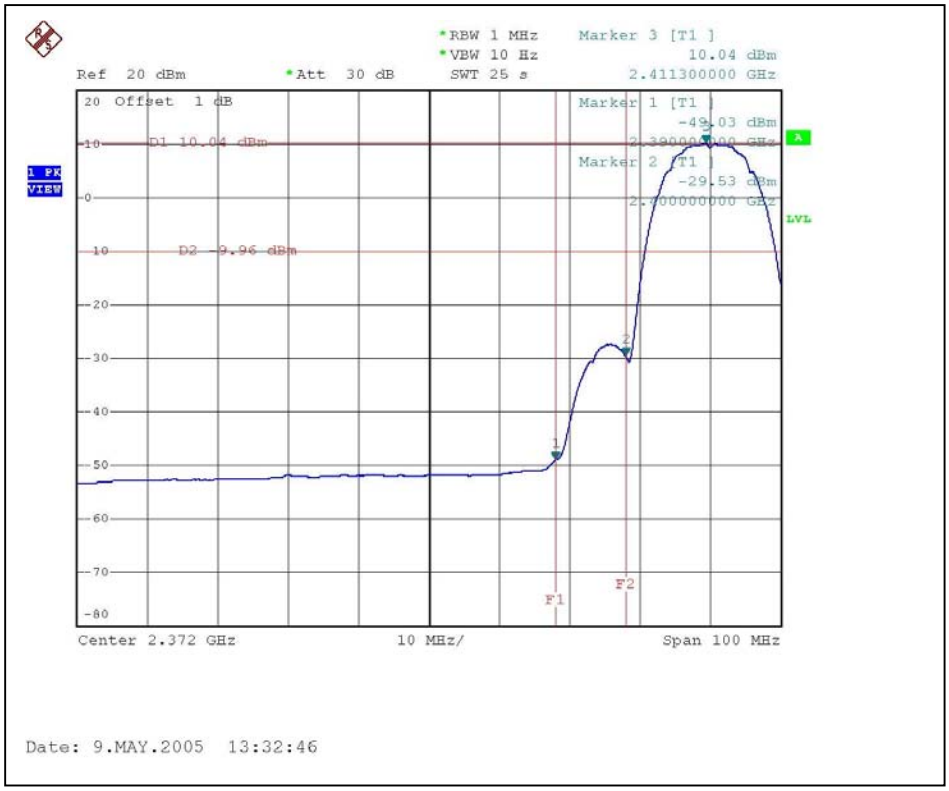
The band edge emission plot of DSSS technique on the following first page shows 57.18dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 116.50dBuV/m, so the maximum field strength in restrict band is 116.50-57.18=59.32dBuV/m which is under 74 dBuV/m limit.

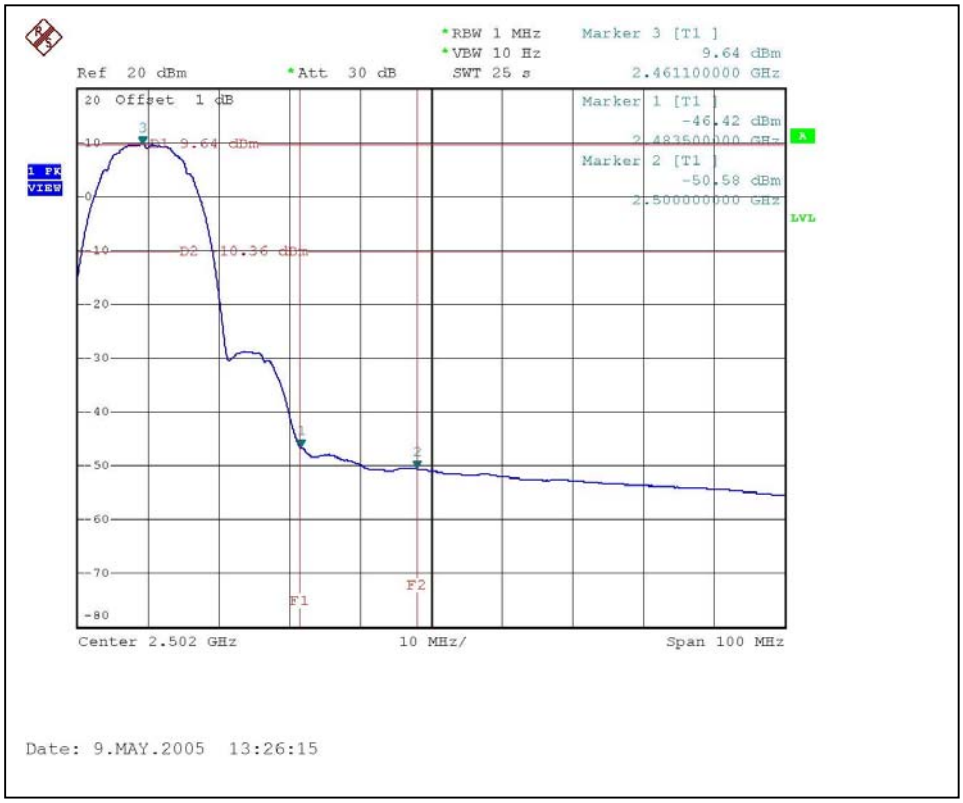
NOTE (Average):
The band edge emission plot of DSSS technique on the following second page shows 59.07strict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 109.70dBuV/m, so the maximum field strength in restrict band is 109.70-59.07=50.63dBuV/m which is under 54 dBuV/m limit.

The band edge emission plot of DSSS technique on the following second page shows 56.06dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 108.9dBuV/m, so the maximum field strength in restrict band is 108.9-56.06=52.84dBuV/m which is under 54 dBuV/m limit.


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 3 [T1]
12.97 dBm
2.412700000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
D1 12.97 dBm
D2 -7.03 dBm
Marker 1 [T1]
-44.54 dBm
Marker 2 [T1]
-28.14 dBm
Marker 4 [T1]
-25.77 dBm
2.397100000 GHz
1 PK VIEW
LVL
F1
F2
Center 2.372 GHz
10 MHz/
Span 100 MHz
Date: 9.MAY.2005 13:34:34


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 3 [T1]
12.28 dBm
2.462600000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
D1 12.28 dBm
D2 -7.72 dBm
Marker 1 [T1]
-44.90 dBm
2.483500000 GHz
Marker 2 [T1]
-47.13 dBm
2.500000000 GHz
Marker 4 [T1]
-42.55 dBm
2.487900000 GHz
1 PK VIEW
LVL
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz
Date: 9.MAY.2005 13:28:13


*RBW 1 MHz
*VBW 10 Hz
SWT 25 s
Marker 3 [T1]
10.04 dBm
2.411300000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
Marker 1 [T1]
-49.03 dBm
Marker 2 [T1]
-29.53 dBm
D1 10.04 dBm
D2 -9.96 dBm
1 PK VIEW
LVL
F1
F2
Center 2.372 GHz
10 MHz/
Span 100 MHz
Date: 9.MAY.2005 13:32:46


*RBW 1 MHz
*VBW 10 Hz
SWT 25 s
Marker 3 [T1]
9.64 dBm
2.461100000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
Marker 1 [T1]
-46.42 dBm
Marker 2 [T1]
-50.58 dBm
D1 9.64 dBm
D2 -10.36 dBm
1 PK VIEW
LVL
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz
Date: 9.MAY.2005 13:26:15

4.6.6 TEST RESULTS – OFDM

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

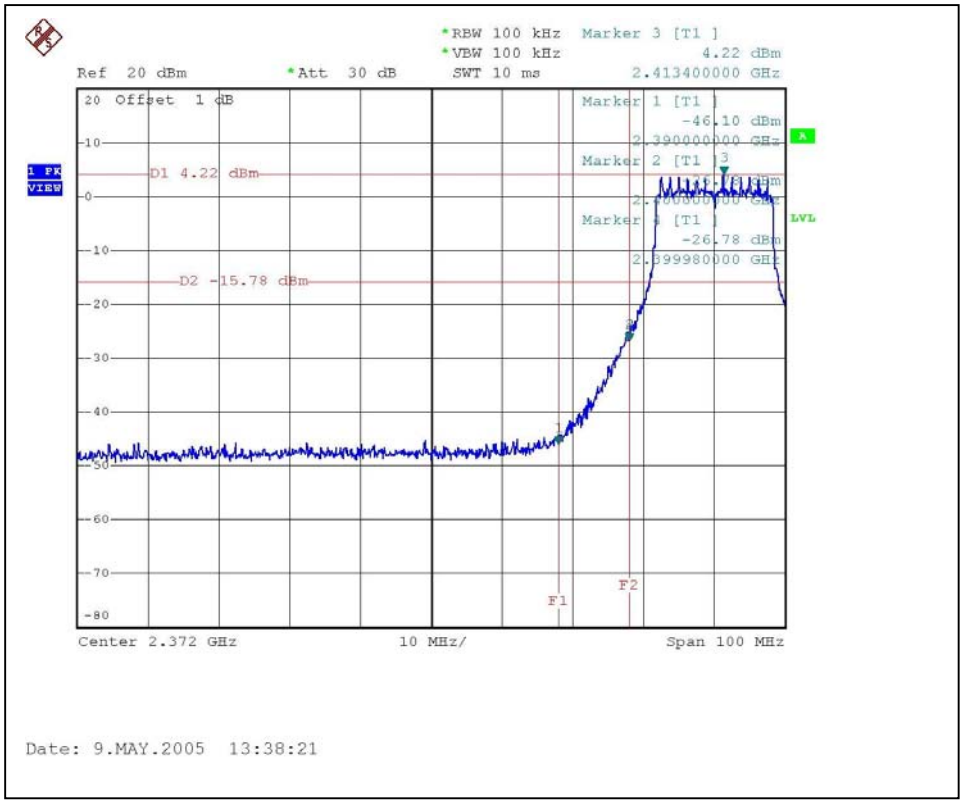
Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

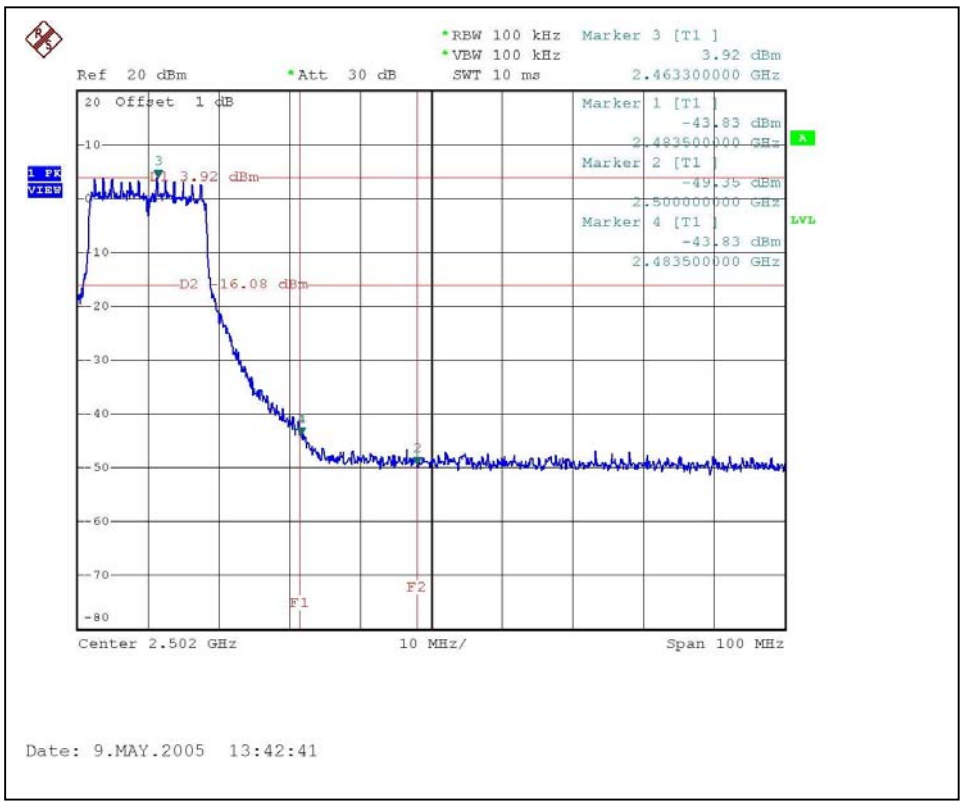
NOTE (Peak) :
The band edge emission plot of OFDM technique on the following first page show 50.32dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 110.50dBuV/m, so the maximum field strength in restrict band is 110.50-50.32=60.18dBuV/m which is under 74 dBuV/m limit.

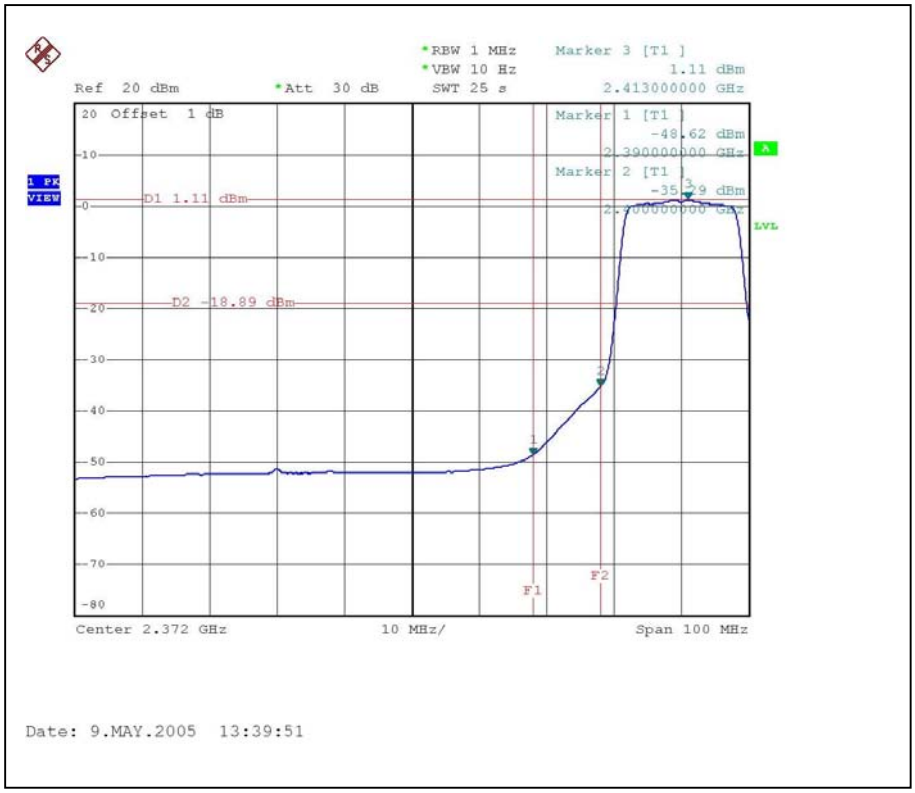
The band edge emission plot of OFDM technique on the following first page shows 47.75dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 110.60dBuV/m, so the maximum field strength in restrict band is 110.60-47.75=62.85dBuV/m which is under 74 dBuV/m limit.

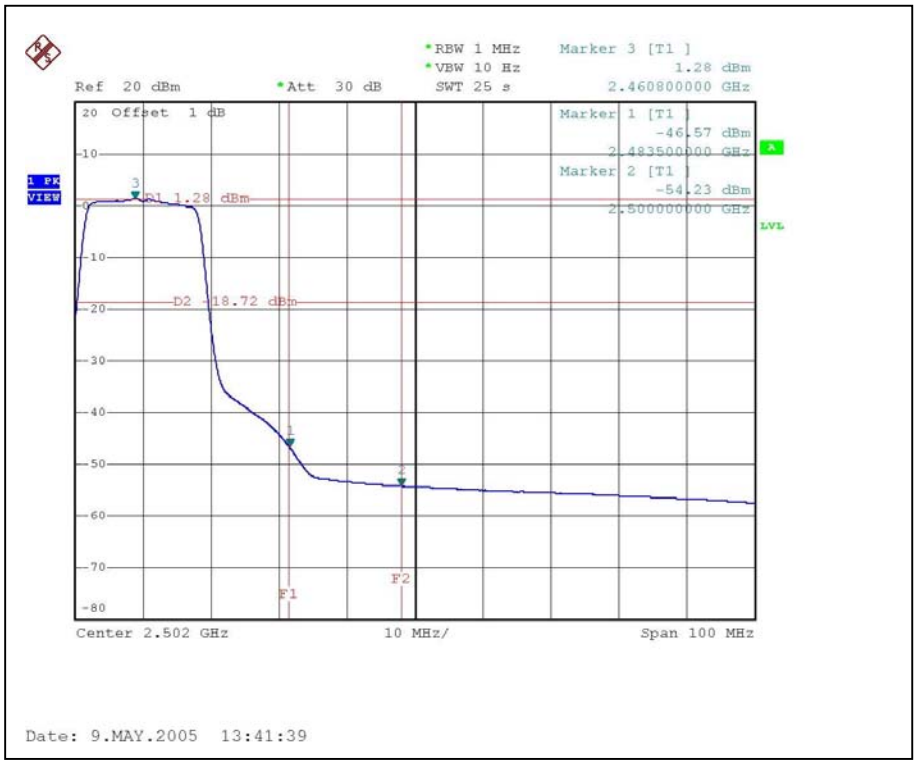
NOTE (Average):
The band edge emission plot of OFDM technique on the following second page shows 49.73dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 100.90dBuV/m, so the maximum field strength in restrict band is 100.90-49.73=51.17dBuV/m which is under 54 dBuV/m limit.

The band edge emission plot of OFDM technique on the following second page shows 47.85dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 100.90dBuV/m, so the maximum field strength in restrict band is 100.90-47.85=53.05dBuV/m which is under 54 dBuV/m limit.


*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 10 ms
Marker 3 [T1]
4.22 dBm
2.413400000 GHz
20 Offset 1 dB
Marker 1 [T1]
-46.10 dBm
2.390000000 GHz
Marker 2 [T1]
Marker 4 [T1]
-26.78 dBm
2.399980000 GHz
D1 4.22 dBm
D2 -15.78 dBm
1 PK VIEW
LVL
F1
F2
Center 2.372 GHz
10 MHz/
Span 100 MHz
Date: 9.MAY.2005 13:38:21


*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 10 ms
Marker 3 [T1]
3.92 dBm
2.463300000 GHz
20 Offset 1 dB
Marker 1 [T1]
-43.83 dBm
2.483500000 GHz
Marker 2 [T1]
-49.35 dBm
2.500000000 GHz
Marker 4 [T1]
-43.83 dBm
2.483500000 GHz
3.92 dBm
D2 -16.08 dBm
1 PK VIEW
LVL
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz
Date: 9.MAY.2005 13:42:41


RBW 1 MHz
VBW 10 Hz
SWT 25 s
Marker 3 [T1]
1.11 dBm
2.413000000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 1 dB
Marker 1 [T1]
-48.62 dBm
2.390000000 GHz
Marker 2 [T1]
-35.29 dBm
2.400000000 GHz
1 PK VIEW
D1 1.11 dBm
D2 -18.89 dBm
LVL
F1
F2
Center 2.372 GHz
10 MHz/
Span 100 MHz
Date: 9.MAY.2005 13:39:51


RBW 1 MHz
VBW 10 Hz
SWT 25 s
Marker 3 [T1]
1.28 dBm
2.460800000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 1 dB
Marker 1 [T1]
-46.57 dBm
2.483500000 GHz
Marker 2 [T1]
-54.23 dBm
2.500000000 GHz
1 PK VIEW
D1 1.28 dBm
D2 -18.72 dBm
LVL
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz
Date: 9.MAY.2005 13:41:39

4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is Dual-Band Omni-Directional antenna with RA MMCX Plug connector. The maximum Gain of the antenna is 4.0dBi.

5. TEST TYPES AND RESULTS (FOR PART 802.11a)

5.1 CONDUCTED EMISSION MEASUREMENT

5.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	847124/029	Dec. 07, 2005
ROHDE & SCHWARZ LISN (for EUT)	ESHS-Z5	848773/004	Nov. 08, 2005
KYORITSU LISN (for peripheral)	KNW-407	8/1395/12	Jul. 23, 2005
RF Cable (JETBAO)	RG233/U	Cable_CA_01	Jul. 02, 2005
Terminator(for KYORITSU)	50	3	Oct. 12, 2005
Software	Cond-V2e	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 ADT Shielded Room No. A.
3 The VCCI Con A Registration No. is C-817.
4 The measurement uncertainty is 2.53 dB, which is calculated as per the document CISPR 16-4

5.1.3 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.

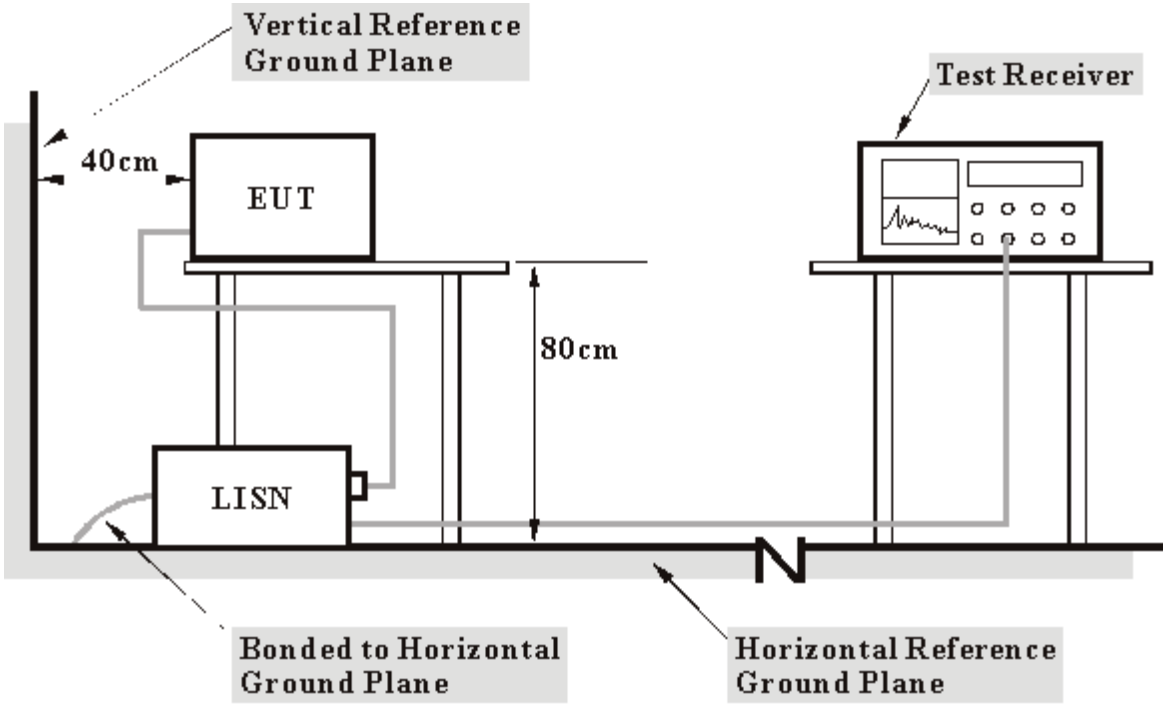
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.1.6 EUT OPERATING CONDITIONS

a. Placed the EUT on the testing table.

b. Prepared another computer system to act as a communication partner and placed it outside of testing area.

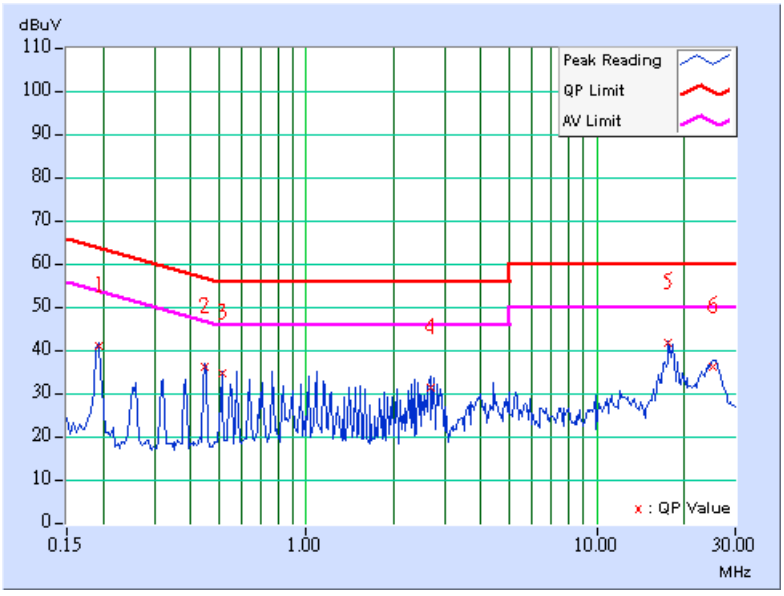
c. The communication partner run test program “Art 48 B 13” to enable EUT under transmission/receiving condition continuously at specific channel frequency via UTP cable.

5.1.7 TEST RESULTS

EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	30deg. C, 55%RH, 965 hPa	TESTED BY	Eric Lee
TEST MODE	802.11a		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	9.25	31.14	-	40.39	-	63.91	53.91	-23.52	-
2	0.447	9.19	26.32	-	35.51	-	56.93	46.93	-21.42	-
3	0.513	9.19	25.01	-	34.20	-	56.00	46.00	-21.80	-
4	2.685	9.28	21.80	-	31.08	-	56.00	46.00	-24.92	-
5	17.695	9.68	31.87	-	41.55	-	60.00	50.00	-18.45	-
6	25.008	9.86	26.61	-	36.47	-	60.00	50.00	-23.53	-

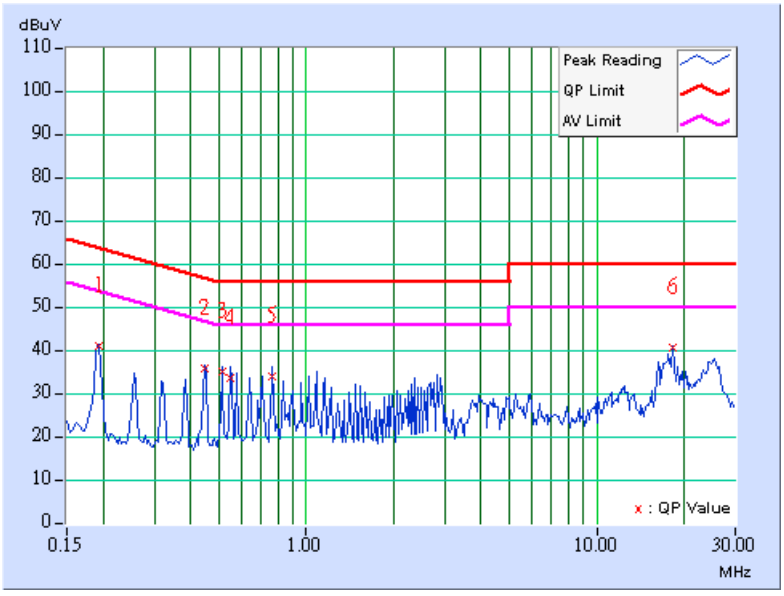
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	30deg. C, 55%RH, 965 hPa	**TESTED BY**	Eric Lee
TEST MODE	802.11a		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	9.19	31.34	-	40.53	-	63.91	53.91	-23.38	-
2	0.447	9.24	26.13	-	35.37	-	56.93	46.93	-21.57	-
3	0.513	9.24	25.34	-	34.58	-	56.00	46.00	-21.42	-
4	0.548	9.23	23.91	-	33.14	-	56.00	46.00	-22.86	-
5	0.767	9.20	24.20	-	33.40	-	56.00	46.00	-22.60	-
6	18.246	9.74	30.85	-	40.59	-	60.00	50.00	-19.41	-

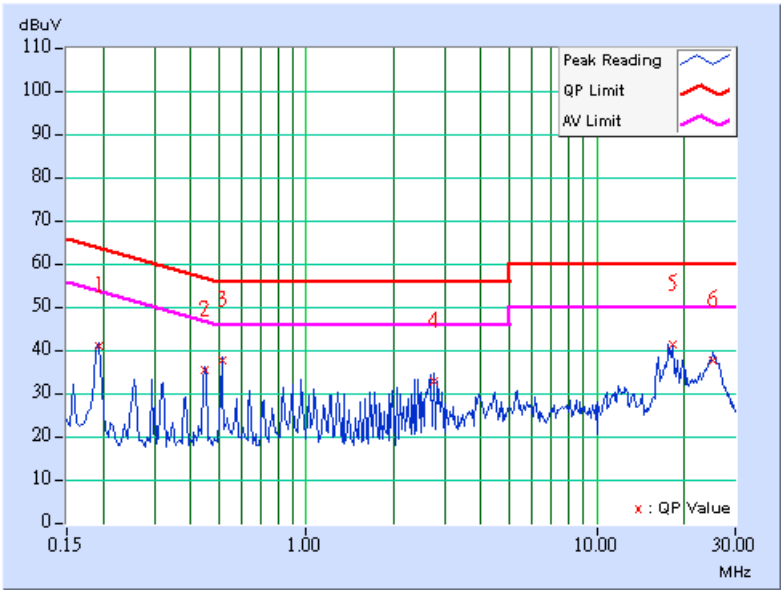
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	30deg. C, 55%RH, 965 hPa	**TESTED BY**	Eric Lee
TEST MODE	802.11a+g		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	9.25	31.28	-	40.53	-	63.91	53.91	-23.38	-
2	0.447	9.19	25.72	-	34.91	-	56.93	46.93	-22.02	-
3	0.513	9.19	27.82	-	37.01	-	56.00	46.00	-18.99	-
4	2.752	9.29	23.13	-	32.42	-	56.00	46.00	-23.58	-
5	18.242	9.69	31.64	-	41.33	-	60.00	50.00	-18.67	-
6	25.008	9.86	28.10	-	37.96	-	60.00	50.00	-22.04	-

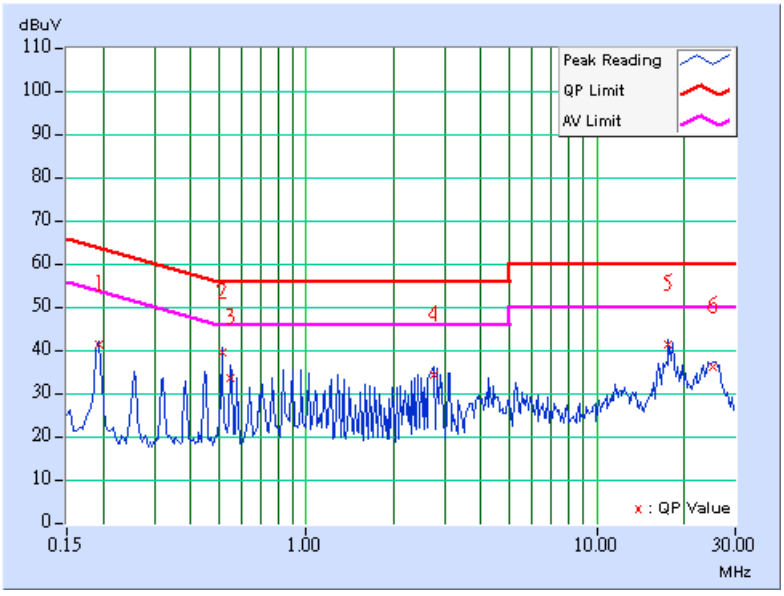
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	30deg. C, 55%RH, 965 hPa	**TESTED BY**	Eric Lee
TEST MODE	802.11a+g		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	9.19	31.57	-	40.76	-	63.91	53.91	-23.15	-
2	**0.512**	**9.24**	**29.74**	**-**	**38.98**	**-**	**56.00**	**46.00**	**-17.02**	**-**
3	0.548	9.23	23.70	-	32.93	-	56.00	46.00	-23.07	-
4	2.750	9.35	24.51	-	33.86	-	56.00	46.00	-22.14	-
5	17.695	9.71	31.69	-	41.40	-	60.00	50.00	-18.60	-
6	25.008	9.88	26.43	-	36.31	-	60.00	50.00	-23.69	-

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



5.2 RADIATED EMISSION MEASUREMENT

5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

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

5.2.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m) *note 3
5150~5250	-27	68.3
5250~5350	-27	68.3

NOTE:

1. For frequencies 10MHz or greater above or below the band edge.
2. All emissions within the frequency range from the band edge to 10MHz above or below the band edge.
3. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength

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

5.2.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
HP Spectrum Analyzer	8594E	3710A04861	Sep. 23, 2005
ADVANTEST Spectrum Analyzer	R3271A	85060311	Jun. 29, 2005
CHASE RF Pre_Amplifier	CPA9232	1057	Aug 06, 2005
HP Pre_Amplifier	8449B	3008A01922	Oct. 13, 2005
ROHDE & SCHWARZ Test Receiver	ESCS30	100287	Dec. 08, 2005
CHASE Broadband Antenna	VULB9168	138	Dec. 21, 2005
Schwarzbeck Horn_Antenna	BBHA9120	D124	Jun. 16, 2005
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 30, 2006
SCHWARZBECK Biconical Antenna	VHBA9123	459	Jun. 26, 2006
SCHWARZBECK Tunable Periodic Antenna	UPA6108	1148	Jun. 26, 2006
RF Switches (ARNITSU)	CS-201	1565157	Jul. 15, 2005
RF CABLE (Chaintek) 1GHz-20GHz	SF102	22054-2	Nov. 15. 2005
RF Cable(RICHTEC)	9913-30M	STCCAB-30M-1GHz-021	Jul. 15, 2005
Software	ADT_Radiated_V 5.14	NA	NA
CHANCE MOST Antenna Tower	AT-100	0203	NA
CHANCE MOST Turn Table	TT-100	0203	NA

Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Tunable Periodic Antenna)and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in ADT Open Site No. C.
4. The FCC Site Registration No. is 656396.
5. The VCCI Site Registration No. is R-1626.
6. The CANADA Site Registration No. is IC 4824-3.
7. The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4.

Measurement	Value
Radiated emissions (30MHz-1GHz)	2.98 dB
Radiated emissions (1GHz ~18GHz)	2.21 dB
Radiated emissions (18GHz ~20GHz)	1.88 dB

5.2.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. 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.

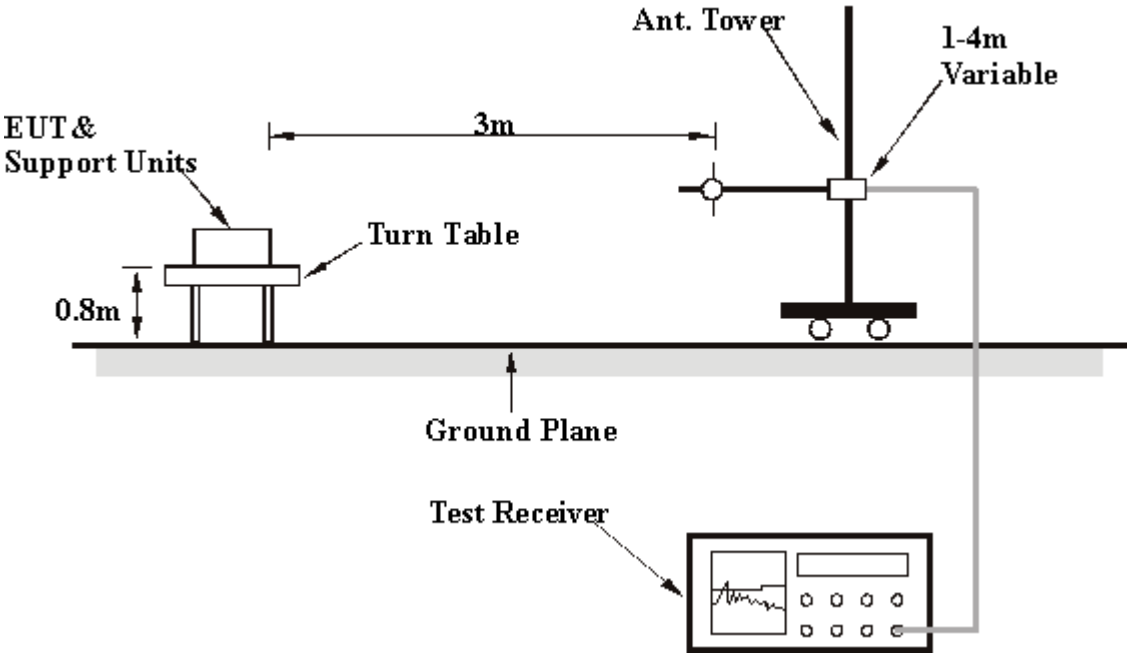
NOTE:

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 and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.

5.2.5 DEVIATION FROM TEST STANDARD

No deviation

5.2.6 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.2.7 EUT OPERATING CONDITIONS

Same as 5.1.6.

5.2.8 TEST RESULTS (WITH ANTENNA 1 – 11 a)

EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	**TEST MODE**	802.11a
FREQUENCY RANGE	30 - 1000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Quasi-Peak, 120kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.00	24.10 QP	43.50	-19.40	1.57 H	12	10.30	13.80
2	215.07	38.60 QP	43.50	-4.90	1.69 H	283	26.80	11.80
3	250.02	38.30 QP	46.00	-7.70	1.38 H	352	25.00	13.30
4	375.02	36.30 QP	46.00	-9.70	1.00 H	27	18.70	17.60
5	400.03	33.60 QP	46.00	-12.40	1.06 H	128	15.20	18.40
6	600.04	31.90 QP	46.00	-14.10	1.47 H	49	8.40	23.50
7	640.00	28.80 QP	46.00	-17.20	1.30 H	143	4.90	23.90
8	750.03	34.10 QP	46.00	-11.90	1.08 H	14	7.70	26.40
9	800.02	32.70 QP	46.00	-13.30	1.21 H	347	6.10	26.60

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	160.00	29.10 QP	43.50	-14.40	1.00 V	184	15.30	13.80
2	**215.08**	**40.80 QP**	**43.50**	**-2.70**	**1.00 V**	**16**	**29.00**	**11.80**
3	250.01	39.70 QP	46.00	-6.30	1.00 V	175	26.40	13.30
4	375.02	36.80 QP	46.00	-9.20	1.33 V	353	19.20	17.60
5	400.02	35.50 QP	46.00	-10.50	1.19 V	7	17.10	18.40
6	600.04	32.80 QP	46.00	-13.20	1.11 V	318	9.30	23.50
7	640.00	28.90 QP	46.00	-17.10	1.01 V	221	5.00	23.90
8	750.03	34.80 QP	46.00	-11.20	1.00 V	71	8.40	26.40
9	800.03	32.60 QP	46.00	-13.40	1.00 V	96	6.00	26.60

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

STANDARD SECTION 15.407

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	1
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	47.00 PK	74.00	-27.00	1.56 H	244	11.20	35.80
1	#5150.00	36.30 AV	54.00	-17.70	1.56 H	244	0.50	35.80
2	*5180.00	91.60 PK			1.56 H	244	55.80	35.80
2	*5180.00	83.70 AV			1.56 H	244	47.90	35.80
3	10360.00	51.30 PK	68.30	-17.00	1.48 H	62	7.10	44.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (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	61.80 PK	74.00	-12.20	1.10 V	272	26.00	35.80
1	#5150.00	50.90 AV	54.00	-3.10	1.10 V	272	15.10	35.80
2	*5180.00	106.40 PK			1.10 V	272	70.60	35.80
2	*5180.00	98.30 AV			1.10 V	272	62.50	35.80
3	10360.00	52.00 PK	68.30	-16.30	1.17 V	121	7.90	44.10

NOTE:

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

STANDARD SECTION 15.407

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	4
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	91.70 PK			1.49 H	237	55.90	35.80
1	*5240.00	84.30 AV			1.49 H	237	48.50	35.80
2	10480.00	50.80 PK	68.30	-17.50	1.40 H	3	6.30	44.40

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	107.50 PK			1.19 V	300	71.70	35.80
1	*5240.00	98.10 AV			1.19 V	300	62.30	35.80
2	10480.00	51.50 PK	68.30	-16.80	1.50 V	62	7.10	44.40

NOTE:

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

STANDARD SECTION 15.407

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	5
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	98.60 PK			1.20 H	298	62.80	35.80
1	*5260.00	90.40 AV			1.20 H	298	54.60	35.80
2	10520.00	50.70 PK	68.30	-17.60	1.69 H	345	6.00	44.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (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	114.40 PK			1.09 V	232	78.60	35.80
1	*5260.00	104.30 AV			1.09 V	232	68.50	35.80
2	10520.00	51.70 PK	68.30	-16.60	1.11 V	341	7.00	44.70

NOTE:

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

STANDARD SECTION 15.407

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	8
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	93.40 PK			1.53 H	251	57.60	35.80
1	*5320.00	84.60 AV			1.53 H	251	48.80	35.80
2	#5350.00	48.00 PK	74.00	-26.00	1.53 H	251	12.20	35.80
2	#5350.00	35.70 AV	54.00	-18.30	1.53 H	251	-0.10	35.80
3	#10640.00	53.00 PK	74.00	-21.00	1.63 H	56	7.10	45.90
3	#10640.00	43.50 AV	54.00	-10.50	1.63 H	56	-2.40	45.90

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	*5320.00	108.20 PK			1.29 V	297	72.40	35.80
1	*5320.00	98.80 AV			1.29 V	297	63.00	35.80
2	#5350.00	62.80 PK	74.00	-11.20	1.29 V	297	27.00	35.80
2	#5350.00	49.90 AV	54.00	-4.10	1.29 V	297	14.10	35.80
3	#10640.00	53.30 PK	74.00	-20.70	1.16 V	73	7.40	45.90
3	#10640.00	44.70 AV	54.00	-9.30	1.16 V	73	-1.20	45.90

NOTE:

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

STANDARD SECTION 15.247

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	9
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	*5740.00	100.70 PK			1.20 H	189	64.30	36.40
1	*5740.00	93.30 AV			1.20 H	189	56.90	36.40
2	#11480.00	53.30 PK	74.00	-20.70	1.50 H	243	2.20	51.10
2	#11480.00	42.20 AV	54.00	-11.80	1.50 H	243	-8.90	51.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5740.00	114.60 PK			1.16 V	113	78.30	36.40
1	*5740.00	106.70 AV			1.16 V	113	70.30	36.40
2	#11480.00	53.70 PK	74.00	-20.30	1.14 V	82	2.60	51.10
2	#11480.00	42.60 AV	54.00	-11.40	1.14 V	82	-8.50	51.10

NOTE:

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

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STANDARD SECTION 15.247

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	12
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	*5800.00	100.70 PK			1.20 H	201	64.10	36.60
1	*5800.00	92.50 AV			1.20 H	201	56.00	36.60
2	#11600.00	53.40 PK	74.00	-20.60	1.49 H	3	2.60	50.80
2	#11600.00	42.30 AV	54.00	-11.70	1.49 H	3	-8.50	50.80

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	*5800.00	114.90 PK			1.19 V	120	78.30	36.60
1	*5800.00	106.90 AV			1.19 V	120	70.40	36.60
2	#11600.00	54.10 PK	74.00	-19.90	1.30 V	69	3.30	50.80
2	#11600.00	43.00 AV	54.00	-11.00	1.30 V	69	-7.80	50.80

NOTE:

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

.STANDARD SECTION 15.247

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	14
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	*5840.00	98.80 PK			1.21 H	240	62.10	36.70
1	*5840.00	90.70 AV			1.21 H	240	54.00	36.70
2	#11680.00	52.40 PK	74.00	-21.60	1.58 H	69	1.90	50.50
2	#11680.00	42.90 AV	54.00	-11.10	1.58 H	69	-7.60	50.50

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	*5840.00	112.50 PK			1.14 V	118	75.80	36.70
1	*5840.00	103.90 AV			1.14 V	118	67.30	36.70
2	#11680.00	54.00 PK	74.00	-20.00	1.01 V	49	3.40	50.50
2	#11680.00	43.70 AV	54.00	-10.30	1.01 V	49	-6.90	50.50

NOTE:

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

5.2.9 TEST RESULTS (WITH ANTENNA 2 – 11 a)

EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	**TEST MODE**	802.11a
FREQUENCY RANGE	30 - 1000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Quasi-Peak, 120kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.00	24.60 QP	43.50	-18.90	1.94 H	357	10.80	13.80
2	215.09	38.40 QP	43.50	-5.10	1.63 H	112	26.60	11.80
3	250.01	39.70 QP	46.00	-6.30	1.34 H	96	26.40	13.30
4	375.02	35.80 QP	46.00	-10.20	1.13 H	47	18.20	17.60
5	400.03	33.60 QP	46.00	-12.40	1.05 H	296	15.20	18.40
6	600.02	30.10 QP	46.00	-15.90	1.52 H	323	6.60	23.50
7	640.00	27.90 QP	46.00	-18.10	1.48 H	351	4.00	23.90
8	750.03	32.30 QP	46.00	-13.70	1.76 H	86	5.90	26.40
9	800.04	30.60 QP	46.00	-15.40	1.34 H	118	4.00	26.60

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	160.00	29.80 QP	43.50	-13.70	1.00 V	43	16.00	13.80
2	215.01	39.70 QP	43.50	-3.80	1.00 V	8	27.90	11.80
3	250.02	38.50 QP	46.00	-7.50	1.00 V	354	25.20	13.30
4	375.01	39.30 QP	46.00	-6.70	1.34 V	358	21.70	17.60
5	400.03	37.10 QP	46.00	-8.90	1.21 V	26	18.70	18.40
6	600.02	30.90 QP	46.00	-15.10	1.16 V	339	7.40	23.50
7	640.01	27.80 QP	46.00	-18.20	1.03 V	307	3.90	23.90
8	750.04	33.60 QP	46.00	-12.40	1.00 V	273	7.20	26.40
9	800.03	30.70 QP	46.00	-15.30	1.07 V	312	4.10	26.60

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

STANDARD SECTION 15.407

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	1
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	50.00 PK	74.00	-24.00	1.00 H	327	14.20	35.80
1	#5150.00	36.10 AV	54.00	-17.90	1.00 H	327	0.30	35.80
2	*5180.00	94.60 PK			1.00 H	327	58.80	35.80
2	*5180.00	85.10 AV			1.00 H	327	49.30	35.80
3	10360.00	52.00 PK	68.30	-16.30	1.31 H	258	7.80	44.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (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	61.50 PK	74.00	-12.50	1.00 V	353	25.70	35.80
1	#5150.00	48.30 AV	54.00	-5.70	1.00 V	353	12.50	35.80
2	*5180.00	106.10 PK			1.00 V	353	70.30	35.80
2	*5180.00	97.30 AV			1.00 V	353	61.50	35.80
3	10360.00	52.40 PK	68.30	-15.90	1.20 V	138	8.30	44.10

NOTE:

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

STANDARD SECTION 15.407

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	4
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	94.80 PK			1.00 H	326	59.00	35.80
1	*5240.00	85.20 AV			1.00 H	326	49.40	35.80
2	10480.00	52.30 PK	68.30	-16.00	1.41 H	300	7.80	44.40

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	105.80 PK			1.01 V	352	70.00	35.80
1	*5240.00	96.80 AV			1.01 V	352	61.00	35.80
2	10480.00	52.30 PK	68.30	-16.00	1.31 V	50	7.80	44.40

NOTE:

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

STANDARD SECTION 15.407

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	5
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	102.40 PK			1.00 H	325	66.60	35.80
1	*5260.00	94.20 AV			1.00 H	325	58.40	35.80
2	10520.00	53.10 PK	68.30	-15.20	1.01 H	358	8.40	44.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (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	114.60 PK			1.02 V	351	78.80	35.80
1	*5260.00	105.70 AV			1.02 V	351	69.90	35.80
2	10520.00	53.80 PK	68.30	-14.50	1.31 V	250	9.10	44.70

NOTE:

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

STANDARD SECTION 15.407

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	8
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	97.30 PK			1.02 H	325	61.50	35.80
1	*5320.00	89.00 AV			1.02 H	325	53.20	35.80
2	#5350.00	51.80 PK	74.00	-22.20	1.02 H	325	16.00	35.80
2	#5350.00	39.70 AV	54.00	-14.30	1.02 H	325	3.90	35.80
3	#10640.00	52.00 PK	74.00	-22.00	1.11 H	60	6.10	45.90
3	#10640.00	42.90 AV	54.00	-11.10	1.11 H	60	-3.00	45.90

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	*5320.00	109.60 PK			1.27 V	353	73.80	35.80
1	*5320.00	101.20 AV			1.27 V	353	65.40	35.80
2	#5350.00	64.10 PK	74.00	-9.90	1.27 V	353	28.30	35.80
2	**#5350.00**	**51.90 AV**	**54.00**	**-2.10**	**1.27 V**	**353**	**16.10**	**35.80**
3	#10640.00	53.40 PK	74.00	-20.60	1.30 V	111	7.50	45.90
3	#10640.00	44.30 AV	54.00	-9.70	1.30 V	111	-1.60	45.90

NOTE:

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

STANDARD SECTION 15.247

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	9
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	*5740.00	106.40 PK			1.21 H	341	70.00	36.40
1	*5740.00	97.30 AV			1.21 H	341	61.00	36.40
2	#11480.00	53.50 PK	74.00	-20.50	1.05 H	151	2.40	51.10
2	#11480.00	42.60 AV	54.00	-11.40	1.05 H	151	-8.50	51.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5740.00	118.80 PK			1.12 V	358	82.50	36.40
1	*5740.00	110.20 AV			1.12 V	358	73.80	36.40
2	#11480.00	54.40 PK	74.00	-19.60	1.50 V	48	3.30	51.10
2	#11480.00	43.50 AV	54.00	-10.50	1.50 V	48	-7.60	51.10

NOTE:

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

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STANDARD SECTION 15.247

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	12
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	*5800.00	104.50 PK			1.30 H	343	67.90	36.60
1	*5800.00	96.20 AV			1.30 H	343	59.70	36.60
2	#11600.00	52.80 PK	74.00	-21.20	1.12 H	358	2.00	50.80
2	#11600.00	42.90 AV	54.00	-11.10	1.12 H	358	-7.90	50.80

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	*5800.00	119.50 PK			1.12 V	359	82.90	36.60
1	*5800.00	110.20 AV			1.12 V	359	73.70	36.60
2	#11600.00	53.70 PK	74.00	-20.30	1.14 V	360	2.90	50.80
2	#11600.00	43.30 AV	54.00	-10.70	1.14 V	360	-7.50	50.80

NOTE:

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

.STANDARD SECTION 15.247

EUT	Wireless Access Point AP7215	**MODEL**	NTE310AG
MODE	Normal Mode	**CHANNEL**	14
FREQUENCY RANGE	1000MHz~40000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH, 965 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Eric Lee		

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	*5840.00	103.50 PK			1.29 H	344	66.80	36.70
1	*5840.00	94.80 AV			1.29 H	344	58.10	36.70
2	#11680.00	51.40 PK	74.00	-22.60	1.13 H	343	0.80	50.50
2	#11680.00	41.60 AV	54.00	-12.40	1.13 H	343	-9.00	50.50

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	*5840.00	117.70 PK			1.12 V	358	81.00	36.70
1	*5840.00	108.50 AV			1.12 V	358	71.80	36.70
2	#11680.00	54.60 PK	74.00	-19.40	1.15 V	2	4.10	50.50
2	#11680.00	44.10 AV	54.00	-9.90	1.15 V	2	-6.40	50.50

NOTE:

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

5.2.10 TEST RESULTS (WITH ANTENNA 1 – 11 a+g)

EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	**TEST MODE**	802.11a+g
FREQUENCY RANGE	30 - 1000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Quasi-Peak, 120kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.00	23.80 QP	43.50	-19.70	1.25 H	1	10.00	13.80
2	215.15	38.90 QP	43.50	-4.60	1.70 H	134	27.10	11.80
3	250.02	38.10 QP	46.00	-7.90	1.29 H	343	24.80	13.30
4	375.02	36.70 QP	46.00	-9.30	1.00 H	31	19.10	17.60
5	400.03	33.40 QP	46.00	-12.60	1.00 H	114	15.00	18.40
6	600.04	32.00 QP	46.00	-14.00	1.30 H	321	8.50	23.50
7	640.00	29.70 QP	46.00	-16.30	1.14 H	143	5.80	23.90
8	750.05	34.00 QP	46.00	-12.00	1.10 H	17	7.60	26.40
9	800.05	32.90 QP	46.00	-13.10	1.15 H	16	6.30	26.60

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	120.00	25.80 QP	43.50	-17.70	1.00 V	61	14.30	11.50
2	160.00	28.60 QP	43.50	-14.90	1.00 V	187	14.80	13.80
3	215.00	40.50 QP	43.50	-3.00	1.00 V	18	28.70	11.80
4	250.02	39.90 QP	46.00	-6.10	1.00 V	183	26.60	13.30
5	360.00	32.50 QP	46.00	-13.50	1.33 V	7	15.40	17.10
6	375.03	36.90 QP	46.00	-9.10	1.46 V	356	19.30	17.60
7	400.03	35.30 QP	46.00	-10.70	1.14 V	2	16.90	18.40
8	600.04	33.20 QP	46.00	-12.80	1.06 V	280	9.70	23.50
9	640.00	30.20 QP	46.00	-15.80	1.00 V	267	6.20	23.90
10	750.04	35.30 QP	46.00	-10.70	1.00 V	167	8.90	26.40
11	800.06	33.30 QP	46.00	-12.70	1.00 V	254	6.70	26.60

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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	Wireless Access Point AP7215		
TEST MODE	802.11a+g	MODEL	NTE310AG
FREQUENCY RANGE	1000MHz~40000MHz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 71%RH, 965 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Eric Lee		

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	#4874.00	47.10 PK	74.00	-26.90	1.05 H	343	11.80	35.30
1	#4874.00	35.10 AV	54.00	-18.90	1.05 H	343	-0.20	35.30
2	#7311.00	49.80 PK	74.00	-24.20	1.37 H	352	9.10	40.70
2	#7311.00	37.40 AV	54.00	-16.60	1.37 H	352	-3.30	40.70
3	#11680.00	52.20 PK	74.00	-21.80	1.62 H	317	1.70	50.50
3	#11680.00	41.80 AV	54.00	-12.20	1.62 H	317	-8.70	50.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#4874.00	51.90 PK	74.00	-22.10	1.14 V	143	16.60	35.30
1	#4874.00	40.90 AV	54.00	-13.10	1.14 V	143	5.60	35.30
2	#7311.00	51.50 PK	74.00	-22.50	1.23 V	46	10.80	40.70
2	#7311.00	40.80 AV	54.00	-13.20	1.23 V	46	0.10	40.70
3	#11680.00	54.10 PK	74.00	-19.90	1.05 V	53	3.60	50.50
3	#11680.00	43.70 AV	54.00	-10.30	1.05 V	53	-6.80	50.50

NOTE:

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

5.2.11 TEST RESULTS (WITH ANTENNA 2 – 11 a+g)

EUT	Wireless Access Point AP7215		
MODEL	NTE310AG	**TEST MODE**	802.11a+g
FREQUENCY RANGE	30 - 1000MHz	**DETECTOR FUNCTION & BANDWIDTH**	Quasi-Peak, 120kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 965 hPa	**TESTED BY**	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.00	24.90 QP	43.50	-18.60	1.96 H	1	11.20	13.80
2	215.08	38.30 QP	43.50	-5.20	1.50 H	91	26.50	11.80
3	250.02	40.60 QP	46.00	-5.40	1.22 H	109	27.30	13.30
4	375.03	36.20 QP	46.00	-9.80	1.00 H	61	18.60	17.60
5	400.03	32.80 QP	46.00	-13.20	1.00 H	111	14.40	18.40
6	600.03	29.50 QP	46.00	-16.50	1.70 H	302	5.90	23.50
7	640.00	27.00 QP	46.00	-19.00	1.60 H	340	3.10	23.90
8	750.05	31.90 QP	46.00	-14.10	2.11 H	40	5.50	26.40
9	800.04	30.50 QP	46.00	-15.50	1.91 H	39	3.90	26.60

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	120.00	25.90 QP	43.50	-17.60	1.00 V	138	14.40	11.50
2	160.00	30.10 QP	43.50	-13.40	1.11 V	20	16.30	13.80
3	215.00	39.90 QP	43.50	-3.60	1.00 V	3	28.10	11.80
4	250.02	38.60 QP	46.00	-7.40	1.00 V	294	25.30	13.30
5	360.00	34.50 QP	46.00	-11.50	1.31 V	3	17.40	17.10
6	375.02	39.10 QP	46.00	-6.90	1.33 V	1	21.50	17.60
7	400.03	36.70 QP	46.00	-9.30	1.14 V	13	18.30	18.40
8	600.03	31.50 QP	46.00	-14.50	1.12 V	292	8.00	23.50
9	640.00	27.40 QP	46.00	-18.60	1.00 V	275	3.40	23.90
10	750.05	33.00 QP	46.00	-13.00	1.00 V	129	6.60	26.40
11	800.03	31.90 QP	46.00	-14.10	1.00 V	234	5.30	26.60

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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	Wireless Access Point AP7215		
TEST MODE	802.11a+g	MODEL	NTE310AG
FREQUENCY RANGE	1000MHz~40000MHz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 71%RH, 965 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Eric Lee		

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	#4874.00	47.30 PK	74.00	-26.70	1.06 H	341	12.00	35.30
1	#4874.00	35.40 AV	54.00	-18.60	1.06 H	341	0.10	35.30
2	#7311.00	49.70 PK	74.00	-24.30	1.40 H	347	9.00	40.70
2	#7311.00	37.30 AV	54.00	-16.70	1.40 H	347	-3.40	40.70
3	#11680.00	51.70 PK	74.00	-22.30	1.62 H	314	1.20	50.50
3	#11680.00	41.50 AV	54.00	-12.50	1.62 H	314	-9.00	50.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#4874.00	52.00 PK	74.00	-22.00	1.17 V	156	16.70	35.30
1	#4874.00	41.10 AV	54.00	-12.90	1.17 V	156	5.80	35.30
2	#7311.00	51.70 PK	74.00	-22.30	1.21 V	22	11.00	40.70
2	#7311.00	40.90 AV	54.00	-13.10	1.21 V	22	0.20	40.70
3	#11680.00	54.30 PK	74.00	-19.70	1.18 V	11	3.80	50.50
3	#11680.00	43.90 AV	54.00	-10.10	1.18 V	11	-6.60	50.50

NOTE:

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