



FCC TEST REPORT (15.407)

REPORT NO.: RF120917C21-1 R1

MODEL NO.: VIP2500

FCC ID: ACQ-VIP2500

RECEIVED: Sep. 17, 2012

TESTED: Sep. 25, 2012 ~ Feb. 20, 2013

ISSUED: Feb. 21, 2013

APPLICANT: Motorola Mobility, LLC.

ADDRESS: 101 Tournament Drive Horsham, PA 19044 United States

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

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120917C21-1	Original release	Dec. 04, 2012
RF120917C21-1 R1	Update power density for new KDB	Feb. 21, 2013



1. CERTIFICATION

PRODUCT: VIP2500 set top box

MODEL: VIP2500

BRAND: Motorola

APPLICANT: Motorola Mobility, LLC.

TESTED: Sep. 25, 2012 ~ Feb. 20, 2013

TEST SAMPLE: ENGINEERING SAMPLE

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

ANSI C63.10-2009

The above equipment (model: VIP2500) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Celine Chou , **DATE** : Feb. 21, 2013
Celine Chou / Specialist

APPROVED BY : Ken Liu , **DATE** : Feb. 21, 2013
Ken Liu / Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -1.02dB at 0.17344MHz.
15.407(b/1/2/3) (b)(6)	Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 5360.00MHz.
15.407(a/1/2)	Max Average 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)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is I-PEX not a standard connector.

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.19 dB
	200MHz ~1000MHz	3.21 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	VIP2500 set top box
MODEL NO.	VIP2500
POWER SUPPLY	12Vdc from adapter
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps
OPERATING FREQUENCY	5180~5240MHz , 5260~5320MHz , 5500~5580MHz & 5670~5700MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 5500 ~ 5700MHz: 7 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz)
OUTPUT POWER	49.47mW for 5180 ~ 5240MHz 215.46mW for 5260 ~ 5320MHz 218.54mW for 5500 ~ 5700MHz
ANTENNA TYPE	5180 ~ 5240MHz: Dipole antenna with 0.1dBi gain 5260 ~ 5320MHz: Dipole antenna with 0.1dBi gain 5500 ~ 5700MHz: Dipole antenna with 0.8dBi gain
ANTENNA CONNECTOR	I-PEX
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Adapter

NOTE:

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

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

2. The EUT has disabled the 5600-5650MHz band by S/W to avoid 5600-5650MHz band for FCC certification.

3. The EUT consumes power from the following adapters:

ADAPTER 1	
BRAND	LEADER ELECTRONICS INC.
MODEL	ML18-V120150-A1
INPUT POWER	120Vac, 60Hz, 0.5A
OUTPUT POWER	12Vdc, 1.5A
POWER LINE	1.5m non-shielded cable w/o core

ADAPTER 2	
BRAND	Asian Power Devices Inc.
MODEL	WB-18F12FU
INPUT POWER	110-120Vac, 50-60Hz, 0.6A Max.
OUTPUT POWER	12Vdc, 1.5A
POWER LINE	1.5m non-shielded cable w/o core

ADAPTER 3	
BRAND	LITEON
MODEL	PB-1180-1M01(1.5m / 0core)
INPUT POWER	100-132Vac~60Hz, 0.6A
OUTPUT POWER	12Vdc, 1.5A
POWER LINE	1.5m non-shielded cable w/o core

ADAPTER 4	
BRAND	DELTA Electronics, INC.
MODEL	ADP-18AR AA
INPUT POWER	110-120Vac,57-63Hz, 0.8A
OUTPUT POWER	12Vdc, 1.5A
POWER LINE	1.5m non-shielded cable w/o core

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

3.2 DESCRIPTION OF TEST MODES

FOR 5180 ~ 5240MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

FOR 5260 ~ 5320MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

FOR 5500 ~ 5580MHz & 5670 ~ 5700MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	116	5580 MHz
104	5520 MHz	136	5680 MHz
108	5540 MHz	140	5700 MHz
112	5560 MHz		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	134	5670 MHz
110	5550 MHz		

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE \geq 1G	RE $<$ 1G	PLC	APCM	
A	-	√	√	-	Power form Adapter 1
B	-	√	√	-	Power form Adapter 2
C	√	√	√	√	Power form Adapter 3
D	-	√	√	-	Power form Adapter 4

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

- NOTE:** 1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.
2. "-" means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
C	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
C	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	7.2
C	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	15.0
C	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
C	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	7.2
C	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	15.0
C	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
C	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	7.2
C	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	15.0

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B, C & D	802.11a	5180-5240	36 to 48	40	OFDM	BPSK	6.0
A, B, C & D	802.11a	5260-5320	52 to 64	52	OFDM	BPSK	6.0
A, B, C & D	802.11a	5500-5700	100 to 140	116	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B, C & D	802.11a	5180-5240	36 to 48	40	OFDM	BPSK	6.0
A, B, C & D	802.11a	5260-5320	52 to 64	52	OFDM	BPSK	6.0
A, B, C & D	802.11a	5500-5700	100 to 140	116	OFDM	BPSK	6.0

ANTENNA PORT CONDUCTED MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
C	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
C	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	7.2
C	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	15.0
C	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
C	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	7.2
C	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	15.0
C	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
C	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	7.2
C	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	23deg. C, 66%RH 24deg. C, 65%RH	120Vac, 60Hz	Alan Wu
RE<1G	26deg. C, 77%RH 24deg. C, 72%RH 25deg. C, 65%RH	120Vac, 60Hz	Cedric Wu Alan Wu
PLC	26deg. C, 65%RH 25deg. C, 65%RH	120Vac, 60Hz	Cedric Wu
APCM	25deg. C, 65%RH	120Vac, 60Hz	Mark Liao

3.3 DUTY CYCLE OF TEST SIGNAL

For 802.11a

Duty cycle is < 98%, duty factor shall be considered.

For 802.11n (20MHz) & 802.11n (40MHz)

Duty cycle of test signal is > 98 %, duty factor is not required.

802.11a: Duty cycle = 708/740 = 0.957, Duty factor = $10 * \log(1/0.957) = 0.19$

802.11n (20MHz): Duty cycle = 5.044/5.096 = 0.990

802.11n (40MHz): Duty cycle = 2.450/2.506 = 0.998



3.4 DESCRIPTION OF SUPPORT UNITS

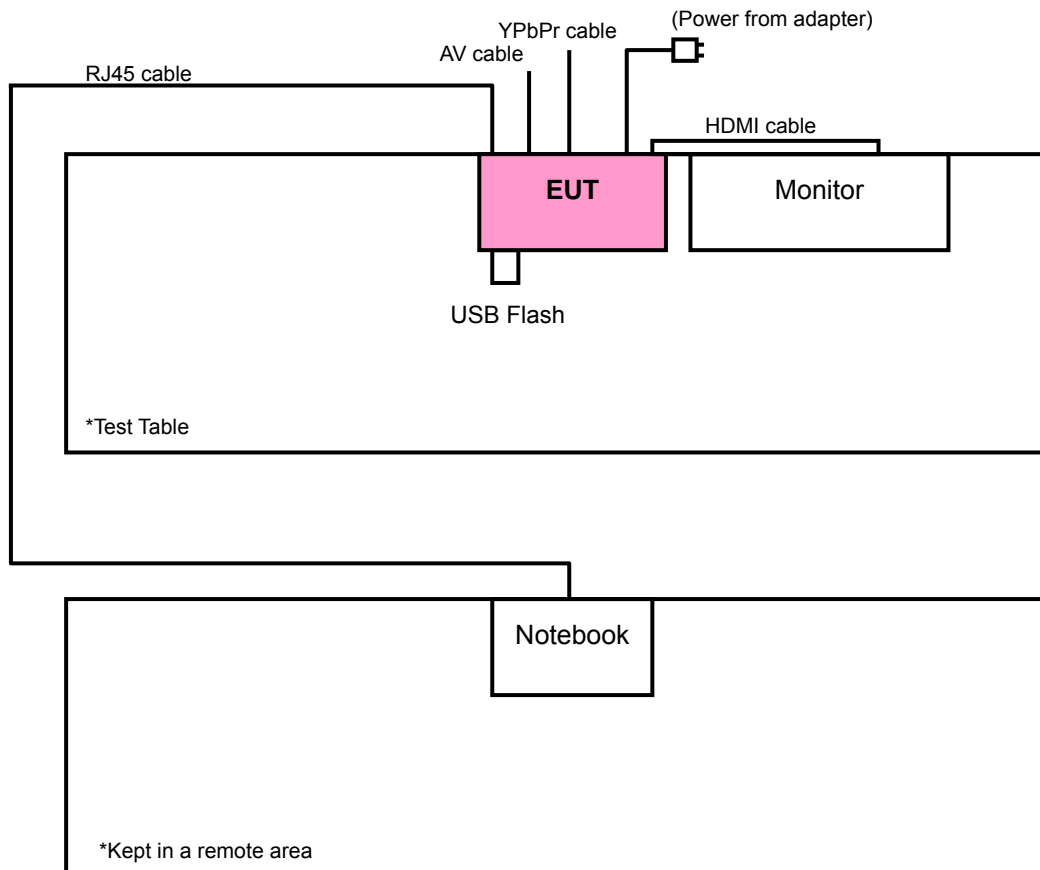
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	MONITOR	Panasonic	TH-L32E30W	14300669	FCC DoC Approved
2	NOTEBOOK	DELL	E5420	33MKMQ1	FCC DoC Approved
3	USB FLASH	Transcend	Jet Flash	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.8m HDMI cable
2	30m non-shielded RJ45 cable
3	NA

- NOTE:**
1. All power cords of the above support units are non shielded (1.8m).
 2. Item 2 as a communication partner to transfer data.
 3. Item 3 & HDMI cable were supplied from client

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)

789033 D01 General UNII Test Procedures v01 r02

662911 D01 Multiple Transmitter Output v01 r02

ANSI C63.10-2009

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

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

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

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. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
	FIELD STRENGTH AT 3m (dBµV/m)	
	PK	AV
	74	54
√	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)
	PK	PK
	-27	68.3

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

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



4.1.3 TEST INSTRUMENTS

TEST MODE A, B, C (Test Data: Sep. 25 ~ Oct. 04, 2012)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Jan. 03, 2012	Jan. 02, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP 40	100039	Feb. 03, 2012	Feb. 02, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 06, 2012	Apr. 05, 2013
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 05, 2012	Jan. 04, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier Agilent	8449B	3008A01961	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8447D	2944A10738	Oct. 26, 2012	Oct. 25, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309220/4	Nov. 03, 2011	Nov. 02, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Nov. 03, 2011	Nov. 02, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Nov. 03, 2011	Nov. 02, 2012
Software ADT	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT	TT100.	TT93021704	NA	NA
Turn Table Controller ADT	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 25, 2012	Oct. 24, 2013
High Speed Peak Power Meter	ML2495A	0842014	Apr. 28, 2012	Apr. 27, 2013
Power Sensor	MA2411B	0738404	Apr. 28, 2012	Apr. 27, 2013
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 13, 2012	Jun. 12, 2013

- 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 calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. The test was performed in HwaYa Chamber 4.
 4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 5. The FCC Site Registration No. is 460141.
 6. The IC Site Registration No. is IC7450F-4.



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TEST MODE D (Test Data: Nov. 26, ~ Dec. 03, 2012)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Jan. 03, 2012	Jan. 02, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP 40	100039	Feb. 03, 2012	Feb. 02, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 06, 2012	Apr. 05, 2013
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 05, 2012	Jan. 04, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier Agilent	8449B	3008A01961	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8447D	2944A10738	Oct. 26, 2012	Oct. 25, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309220/4	Nov. 03, 2012	Nov. 02, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Nov. 03, 2012	Nov. 02, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Nov. 03, 2012	Nov. 02, 2013
Software ADT	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT	TT100.	TT93021704	NA	NA
Turn Table Controller ADT	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 25, 2012	Oct. 24, 2013
High Speed Peak Power Meter	ML2495A	0842014	Apr. 28, 2012	Apr. 27, 2013
Power Sensor	MA2411B	0738404	Apr. 28, 2012	Apr. 27, 2013
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 13, 2012	Jun. 12, 2013

- 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 calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. The test was performed in HwaYa Chamber 4.
 4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 5. The FCC Site Registration No. is 460141.
 6. The IC Site Registration No. is IC7450F-4.

4.1.4 TEST PROCEDURES

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

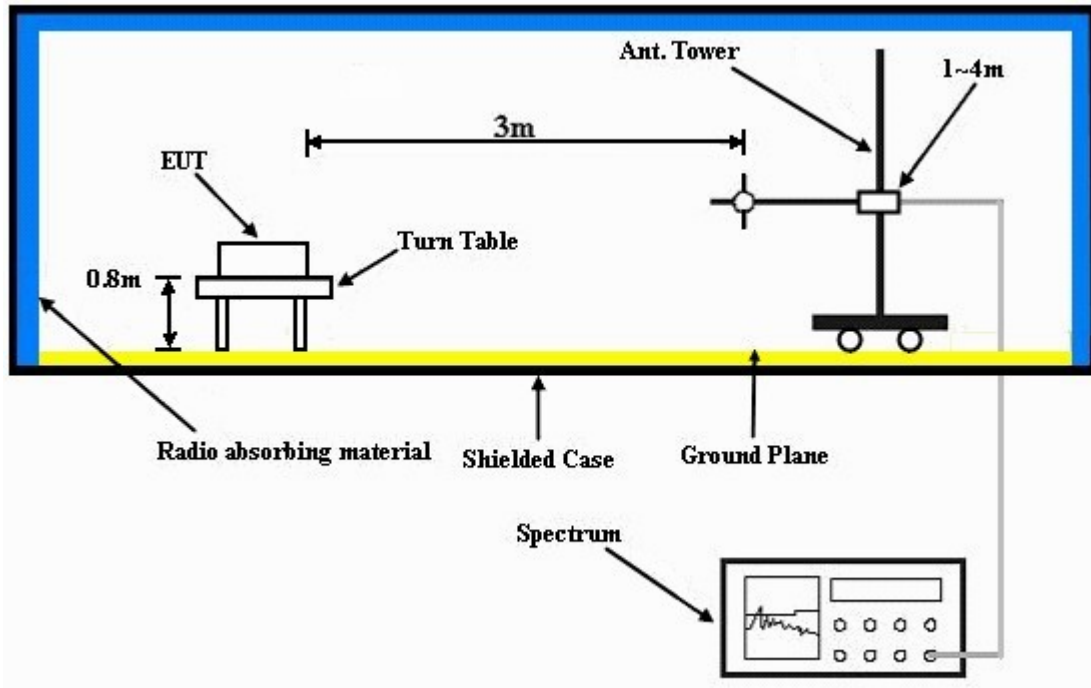
NOTE:

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

4.1.5 DEVIATION FROM TEST STANDARD

No deviation.

4.1.6 TEST SETUP



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

4.1.7 EUT OPERATING CONDITION

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



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4.1.8 TEST RESULTS

ABOVE 1GHz DATA: 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Alan Wu

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	63.9 PK	74.0	-10.1	1.00 H	194	25.30	38.60
2	5150.00	44.2 AV	54.0	-9.8	1.00 H	194	5.60	38.60
3	*5180.00	100.1 PK			1.00 H	191	61.50	38.60
4	*5180.00	89.4 AV			1.00 H	191	50.80	38.60
5	#10360.00	58.6 PK	68.3	-9.7	1.00 H	238	9.10	49.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.5 PK	74.0	-9.5	1.05 V	196	25.90	38.60
2	5150.00	44.8 AV	54.0	-9.2	1.05 V	196	6.20	38.60
3	*5180.00	113.1 PK			1.02 V	193	74.50	38.60
4	*5180.00	102.0 AV			1.02 V	193	63.40	38.60
5	#10360.00	59.7 PK	68.3	-8.6	1.31 V	159	10.20	49.50

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	101.0 PK			1.00 H	192	62.40	38.60
2	*5200.00	90.2 AV			1.00 H	192	51.60	38.60
3	#10400.00	59.6 PK	68.3	-8.7	1.00 H	75	10.10	49.50
4	15600.00	58.3 PK	74.0	-15.7	1.00 H	24	7.60	50.70
5	15600.00	44.8 AV	54.0	-9.2	1.00 H	24	-5.90	50.70
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	*5200.00	113.7 PK			1.00 V	194	75.10	38.60
2	*5200.00	102.4 AV			1.00 V	194	63.80	38.60
3	#10400.00	60.6 PK	68.3	-7.7	1.33 V	157	11.10	49.50
4	15600.00	58.5 PK	74.0	-15.5	1.00 V	48	7.80	50.70
5	15600.00	45.3 AV	54.0	-8.7	1.00 V	48	-5.40	50.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	101.8 PK			1.00 H	192	63.10	38.70
2	*5240.00	90.7 AV			1.00 H	192	52.00	38.70
3	5350.00	57.2 PK	74.0	-16.8	1.00 H	198	18.40	38.80
4	5350.00	45.1 AV	54.0	-8.9	1.00 H	198	6.30	38.80
5	#10480.00	59.7 PK	68.3	-8.6	1.00 H	95	10.00	49.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	114.2 PK			1.00 V	195	75.50	38.70
2	*5240.00	103.1 AV			1.00 V	195	64.40	38.70
3	5350.00	58.4 PK	74.0	-15.6	1.00 V	191	19.60	38.80
4	5350.00	46.5 AV	54.0	-7.5	1.00 V	191	7.70	38.80
5	#10480.00	60.7 PK	68.3	-7.6	1.31 V	159	11.00	49.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

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	57.9 PK	74.0	-16.1	1.00 H	172	19.30	38.60
2	5150.00	46.0 AV	54.0	-8.0	1.00 H	172	7.40	38.60
3	*5260.00	106.2 PK			1.00 H	179	67.50	38.70
4	*5260.00	95.7 AV			1.00 H	179	57.00	38.70
5	#10520.00	63.5 PK	68.3	-4.8	1.00 H	20	13.70	49.80
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	5150.00	58.1 PK	74.0	-15.9	1.00 V	189	19.50	38.60
2	5150.00	46.4 AV	54.0	-7.6	1.00 V	189	7.80	38.60
3	*5260.00	119.5 PK			1.00 V	188	80.80	38.70
4	*5260.00	109.1 AV			1.00 V	188	70.40	38.70
5	#10520.00	65.0 PK	68.3	-3.3	1.43 V	8	15.20	49.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	107.0 PK			1.00 H	291	68.20	38.80
2	*5300.00	96.6 AV			1.00 H	291	57.80	38.80
3	10600.00	63.0 PK	74.0	-11.0	1.00 H	176	13.00	50.00
4	10600.00	48.8 AV	54.0	-5.2	1.00 H	176	-1.20	50.00
5	15900.00	58.6 PK	74.0	-15.4	1.00 H	301	8.50	50.10
6	15900.00	45.0 AV	54.0	-9.0	1.00 H	301	-5.10	50.10
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	*5300.00	119.5 PK			1.00 V	191	80.70	38.80
2	*5300.00	108.8 AV			1.00 V	191	70.00	38.80
3	10600.00	63.7 PK	74.0	-10.3	1.46 V	267	13.70	50.00
4	10600.00	49.9 AV	54.0	-4.1	1.46 V	267	-0.10	50.00
5	15900.00	58.8 PK	74.0	-15.2	1.00 V	10	8.70	50.10
6	15900.00	45.5 AV	54.0	-8.5	1.00 V	10	-4.60	50.10

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

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	104.6 PK			1.28 H	265	65.80	38.80
2	*5320.00	93.6 AV			1.28 H	265	54.80	38.80
3	5360.00	59.0 PK	74.0	-15.0	1.20 H	269	20.20	38.80
4	5360.00	45.2 AV	54.0	-8.8	1.20 H	269	6.40	38.80
5	10640.00	57.1 PK	74.0	-16.9	1.00 H	11	6.90	50.20
6	10640.00	43.9 AV	54.0	-10.1	1.00 H	11	-6.30	50.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	116.2 PK			1.00 V	6	77.40	38.80
2	*5320.00	105.2 AV			1.00 V	6	66.40	38.80
3	5360.00	69.9 PK	74.0	-4.1	1.00 V	4	31.10	38.80
4	5360.00	52.8 AV	54.0	-1.2	1.00 V	4	14.00	38.80
5	10640.00	57.4 PK	74.0	-16.6	1.00 V	17	7.20	50.20
6	10640.00	44.5 AV	54.0	-9.5	1.00 V	17	-5.70	50.20

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.4 PK	74.0	-16.6	1.00 H	47	18.40	39.00
2	5460.00	43.8 AV	54.0	-10.2	1.00 H	47	4.80	39.00
3	#5470.00	59.2 PK	68.3	-9.1	1.00 H	47	20.20	39.00
4	*5500.00	104.8 PK			1.00 H	49	65.70	39.10
5	*5500.00	94.0 AV			1.00 H	49	54.90	39.10
6	11000.00	57.5 PK	74.0	-16.5	1.00 H	117	5.90	51.60
7	11000.00	46.5 AV	54.0	-7.5	1.00 H	117	-5.10	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	64.7 PK	74.0	-9.3	1.00 V	2	25.70	39.00
2	5460.00	50.6 AV	54.0	-3.4	1.00 V	2	11.60	39.00
3	#5470.00	66.8 PK	68.3	-1.5	1.00 V	2	27.80	39.00
4	*5500.00	115.9 PK			1.08 V	15	76.80	39.10
5	*5500.00	105.2 AV			1.08 V	15	66.10	39.10
6	11000.00	58.0 PK	74.0	-16.0	1.49 V	271	6.40	51.60
7	11000.00	47.0 AV	54.0	-7.0	1.49 V	271	-4.60	51.60

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	108.0 PK			1.00 H	26	68.80	39.20
2	*5580.00	97.6 AV			1.00 H	26	58.40	39.20
3	11160.00	60.0 PK	74.0	-14.0	1.00 H	137	8.70	51.30
4	11160.00	49.1 AV	54.0	-4.9	1.00 H	137	-2.20	51.30
5	#16740.00	55.5 PK	68.3	-12.8	1.00 H	350	2.50	53.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	118.0 PK			1.00 V	357	78.80	39.20
2	*5580.00	107.5 AV			1.00 V	357	68.30	39.20
3	11160.00	61.9 PK	74.0	-12.1	1.48 V	273	10.60	51.30
4	11160.00	50.1 AV	54.0	-3.9	1.48 V	273	-1.20	51.30
5	#16740.00	60.0 PK	68.3	-8.3	1.00 V	5	7.00	53.00

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	102.4 PK			1.00 H	28	62.90	39.50
2	*5700.00	91.7 AV			1.00 H	28	52.20	39.50
3	#5725.00	57.4 PK	68.3	-10.9	1.00 H	27	17.90	39.50
4	11400.00	56.9 PK	74.0	-17.1	1.00 H	127	5.30	51.60
5	11400.00	45.7 AV	54.0	-8.3	1.00 H	127	-5.90	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	113.7 PK			1.02 V	197	74.20	39.50
2	*5700.00	102.9 AV			1.02 V	197	63.40	39.50
3	#5725.00	66.9 PK	68.3	-1.4	1.02 V	180	27.40	39.50
4	11400.00	57.2 PK	74.0	-16.8	1.43 V	272	5.60	51.60
5	11400.00	46.1 AV	54.0	-7.9	1.43 V	272	-5.50	51.60

REMARKS:

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

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Alan Wu

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	56.0 PK	74.0	-18.0	1.38 H	192	17.40	38.60
2	5150.00	44.8 AV	54.0	-9.2	1.38 H	192	6.20	38.60
3	*5180.00	97.5 PK			1.40 H	191	58.90	38.60
4	*5180.00	87.1 AV			1.40 H	191	48.50	38.60
5	#10360.00	58.3 PK	68.3	-10.0	1.00 H	50	8.80	49.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	1.06 V	197	17.80	38.60
2	5150.00	45.3 AV	54.0	-8.7	1.06 V	197	6.70	38.60
3	*5180.00	109.8 PK			1.02 V	193	71.20	38.60
4	*5180.00	98.5 AV			1.02 V	193	59.90	38.60
5	#10360.00	59.4 PK	68.3	-8.9	1.30 V	150	9.90	49.50

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	98.6 PK			1.00 H	192	60.00	38.60
2	*5200.00	87.8 AV			1.00 H	192	49.20	38.60
3	#10400.00	59.5 PK	68.3	-8.8	1.00 H	85	10.00	49.50
4	15600.00	58.0 PK	74.0	-16.0	1.00 H	24	7.30	50.70
5	15600.00	44.7 AV	54.0	-9.3	1.00 H	24	-6.00	50.70
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	*5200.00	110.0 PK			1.00 V	194	71.40	38.60
2	*5200.00	98.8 AV			1.00 V	194	60.20	38.60
3	#10400.00	60.5 PK	68.3	-7.8	1.38 V	158	11.00	49.50
4	15600.00	59.1 PK	74.0	-14.9	1.00 V	48	8.40	50.70
5	15600.00	45.2 AV	54.0	-8.8	1.00 V	48	-5.50	50.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Alan Wu

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	98.9 PK			1.00 H	192	60.20	38.70
2	*5240.00	87.9 AV			1.00 H	192	49.20	38.70
3	5350.00	57.3 PK	74.0	-16.7	1.00 H	197	18.50	38.80
4	5350.00	44.7 AV	54.0	-9.3	1.00 H	197	5.90	38.80
5	#10480.00	57.3 PK	68.3	-11.0	1.00 H	65	7.60	49.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	110.4 PK			1.00 V	194	71.70	38.70
2	*5240.00	99.6 AV			1.00 V	194	60.90	38.70
3	5350.00	57.6 PK	74.0	-16.4	1.00 V	196	18.80	38.80
4	5350.00	45.2 AV	54.0	-8.8	1.00 V	196	6.40	38.80
5	#10480.00	60.6 PK	68.3	-7.7	1.30 V	156	10.90	49.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

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	56.5 PK	74.0	-17.5	1.47 H	273	17.90	38.60
2	5150.00	45.8 AV	54.0	-8.2	1.47 H	273	7.20	38.60
3	*5260.00	105.8 PK			1.42 H	273	67.10	38.70
4	*5260.00	96.2 AV			1.42 H	273	57.50	38.70
5	#10520.00	63.1 PK	68.3	-5.2	1.00 H	20	13.30	49.80
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	5150.00	57.8 PK	74.0	-16.2	1.00 V	181	19.20	38.60
2	5150.00	47.1 AV	54.0	-6.9	1.00 V	181	8.50	38.60
3	*5260.00	117.8 PK			1.00 V	188	79.10	38.70
4	*5260.00	108.0 AV			1.00 V	188	69.30	38.70
5	#10520.00	64.7 PK	68.3	-3.6	1.44 V	8	14.90	49.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	105.8 PK			1.40 H	268	67.00	38.80
2	*5300.00	95.8 AV			1.40 H	268	57.00	38.80
3	10600.00	63.5 PK	74.0	-10.5	1.00 H	126	13.50	50.00
4	10600.00	48.5 AV	54.0	-5.5	1.00 H	126	-1.50	50.00
5	15900.00	58.5 PK	74.0	-15.5	1.00 H	321	8.40	50.10
6	15900.00	44.5 AV	54.0	-9.5	1.00 H	321	-5.60	50.10
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	*5300.00	117.8 PK			1.00 V	194	79.00	38.80
2	*5300.00	107.6 AV			1.00 V	194	68.80	38.80
3	10600.00	64.0 PK	74.0	-10.0	1.48 V	262	14.00	50.00
4	10600.00	49.6 AV	54.0	-4.4	1.48 V	262	-0.40	50.00
5	15900.00	59.6 PK	74.0	-14.4	1.00 V	12	9.50	50.10
6	15900.00	46.0 AV	54.0	-8.0	1.00 V	12	-4.10	50.10

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

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	104.1 PK			1.41 H	275	65.30	38.80
2	*5320.00	94.5 AV			1.41 H	275	55.70	38.80
3	5360.00	61.4 PK	74.0	-12.6	1.42 H	278	22.60	38.80
4	5360.00	44.8 AV	54.0	-9.2	1.42 H	278	6.00	38.80
5	10640.00	57.5 PK	74.0	-16.5	1.00 H	1	7.30	50.20
6	10640.00	43.6 AV	54.0	-10.4	1.00 H	1	-6.60	50.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	115.8 PK			1.00 V	17	77.00	38.80
2	*5320.00	105.5 AV			1.00 V	17	66.70	38.80
3	5360.00	68.5 PK	74.0	-5.5	1.00 V	2	29.70	38.80
4	5360.00	53.0 AV	54.0	-1.0	1.00 V	2	14.20	38.80
5	10640.00	57.8 PK	74.0	-16.2	1.00 V	16	7.60	50.20
6	10640.00	44.2 AV	54.0	-9.8	1.00 V	16	-6.00	50.20

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.9 PK	74.0	-17.1	1.00 H	41	17.90	39.00
2	5460.00	43.9 AV	54.0	-10.1	1.00 H	41	4.90	39.00
3	#5470.00	58.9 PK	68.3	-9.4	1.00 H	41	19.90	39.00
4	*5500.00	102.0 PK			1.00 H	48	62.90	39.10
5	*5500.00	92.3 AV			1.00 H	48	53.20	39.10
6	11000.00	57.0 PK	74.0	-17.0	1.00 H	167	5.40	51.60
7	11000.00	46.8 AV	54.0	-7.2	1.00 H	167	-4.80	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.2 PK	74.0	-10.8	1.00 V	1	24.20	39.00
2	5460.00	49.2 AV	54.0	-4.8	1.00 V	1	10.20	39.00
3	#5470.00	66.5 PK	68.3	-1.8	1.00 V	1	27.50	39.00
4	*5500.00	114.9 PK			1.07 V	17	75.80	39.10
5	*5500.00	104.6 AV			1.07 V	17	65.50	39.10
6	11000.00	58.2 PK	74.0	-15.8	1.40 V	276	6.60	51.60
7	11000.00	47.1 AV	54.0	-6.9	1.40 V	276	-4.50	51.60

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	106.1 PK			1.00 H	44	66.90	39.20
2	*5580.00	96.7 AV			1.00 H	44	57.50	39.20
3	11160.00	60.6 PK	74.0	-13.4	1.00 H	117	9.30	51.30
4	11160.00	48.4 AV	54.0	-5.6	1.00 H	117	-2.90	51.30
5	#16740.00	57.0 PK	68.3	-11.3	1.00 H	13	4.00	53.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	117.7 PK			1.06 V	17	78.50	39.20
2	*5580.00	107.6 AV			1.06 V	17	68.40	39.20
3	11160.00	61.5 PK	74.0	-12.5	1.45 V	271	10.20	51.30
4	11160.00	49.5 AV	54.0	-4.5	1.45 V	271	-1.80	51.30
5	#16740.00	60.5 PK	68.3	-7.8	1.00 V	6	7.50	53.00

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	101.0 PK			1.29 H	40	61.50	39.50
2	*5700.00	90.9 AV			1.29 H	40	51.40	39.50
3	#5725.00	56.8 PK	68.3	-11.5	1.30 H	39	17.30	39.50
4	11400.00	60.0 PK	74.0	-14.0	1.00 H	170	8.40	51.60
5	11400.00	46.5 AV	54.0	-7.5	1.00 H	170	-5.10	51.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	112.2 PK			1.03 V	3	72.70	39.50
2	*5700.00	102.9 AV			1.03 V	3	63.40	39.50
3	#5725.00	66.7 PK	68.3	-1.6	1.02 V	1	27.20	39.50
4	11400.00	59.6 PK	74.0	-14.4	1.43 V	280	8.00	51.60
5	11400.00	46.7 AV	54.0	-7.3	1.43 V	280	-4.90	51.60

REMARKS:

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

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Alan Wu

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	57.2 PK	74.0	-16.8	1.00 H	197	18.60	38.60
2	5150.00	42.9 AV	54.0	-11.1	1.00 H	197	4.30	38.60
3	*5190.00	97.4 PK			1.00 H	192	58.80	38.60
4	*5190.00	86.4 AV			1.00 H	192	47.80	38.60
5	#10380.00	58.2 PK	68.3	-10.1	1.00 H	35	8.70	49.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	69.5 PK	74.0	-4.5	1.00 V	202	30.90	38.60
2	5150.00	49.7 AV	54.0	-4.3	1.00 V	202	11.10	38.60
3	*5190.00	107.9 PK			1.00 V	195	69.30	38.60
4	*5190.00	96.2 AV			1.00 V	195	57.60	38.60
5	#10380.00	58.4 PK	68.3	-9.9	1.30 V	153	8.90	49.50

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.0 PK	74.0	-19.0	1.00 H	196	16.40	38.60
2	5150.00	41.9 AV	54.0	-12.1	1.00 H	196	3.30	38.60
3	*5230.00	96.4 PK			1.00 H	193	57.80	38.60
4	*5230.00	85.4 AV			1.00 H	193	46.80	38.60
5	#10460.00	57.4 PK	68.3	-10.9	1.00 H	95	7.80	49.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.0 PK	74.0	-18.0	1.00 V	195	17.40	38.60
2	5150.00	42.7 AV	54.0	-11.3	1.00 V	195	4.10	38.60
3	*5230.00	108.1 PK			1.00 V	194	69.50	38.60
4	*5230.00	97.0 AV			1.00 V	194	58.40	38.60
5	#10460.00	58.6 PK	68.3	-9.7	1.35 V	159	9.00	49.60

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.5 PK	74.0	-18.5	1.00 H	188	16.90	38.60
2	5150.00	43.5 AV	54.0	-10.5	1.00 H	188	4.90	38.60
3	*5270.00	104.0 PK			1.00 H	182	65.30	38.70
4	*5270.00	93.1 AV			1.00 H	182	54.40	38.70
5	#10540.00	58.1 PK	68.3	-10.2	1.00 H	25	8.30	49.80
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	5150.00	57.7 PK	74.0	-16.3	1.00 V	13	19.10	38.60
2	5150.00	45.1 AV	54.0	-8.9	1.00 V	13	6.50	38.60
3	*5270.00	114.2 PK			1.00 V	19	75.50	38.70
4	*5270.00	102.8 AV			1.00 V	19	64.10	38.70
5	#10540.00	62.6 PK	68.3	-5.7	1.40 V	8	12.80	49.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	97.1 PK			1.00 H	191	58.30	38.80
2	*5310.00	86.0 AV			1.00 H	191	47.20	38.80
3	5350.00	59.0 PK	74.0	-15.0	1.00 H	181	20.20	38.80
4	5350.00	44.1 AV	54.0	-9.9	1.00 H	181	5.30	38.80
5	10620.00	57.2 PK	74.0	-16.8	1.00 H	33	7.10	50.10
6	10620.00	44.4 AV	54.0	-9.6	1.00 H	33	-5.70	50.10
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	*5310.00	108.5 PK			1.00 V	189	69.70	38.80
2	*5310.00	97.0 AV			1.00 V	189	58.20	38.80
3	5350.00	69.5 PK	74.0	-4.5	1.00 V	184	30.70	38.80
4	5350.00	52.4 AV	54.0	-1.6	1.00 V	184	13.60	38.80
5	10620.00	57.4 PK	74.0	-16.6	1.00 V	12	7.30	50.10
6	10620.00	44.9 AV	54.0	-9.1	1.00 V	12	-5.20	50.10

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.2 PK	74.0	-16.8	1.00 H	41	18.20	39.00
2	5460.00	43.7 AV	54.0	-10.3	1.00 H	41	4.70	39.00
3	#5470.00	58.4 PK	68.3	-9.9	1.00 H	45	19.40	39.00
4	*5510.00	96.9 PK			1.00 H	42	57.80	39.10
5	*5510.00	86.1 AV			1.00 H	42	47.00	39.10
6	11020.00	59.1 PK	74.0	-14.9	1.00 H	170	7.60	51.50
7	11020.00	45.5 AV	54.0	-8.5	1.00 H	170	-6.00	51.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.5 PK	74.0	-14.5	1.06 V	17	20.50	39.00
2	5460.00	47.0 AV	54.0	-7.0	1.06 V	17	8.00	39.00
3	#5470.00	66.8 PK	68.3	-1.5	1.06 V	13	27.80	39.00
4	*5510.00	107.5 PK			1.05 V	16	68.40	39.10
5	*5510.00	96.3 AV			1.05 V	16	57.20	39.10
6	11020.00	58.7 PK	74.0	-15.3	1.20 V	280	7.20	51.50
7	11020.00	45.5 AV	54.0	-8.5	1.20 V	280	-6.00	51.50

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	104.2 PK			1.00 H	41	65.10	39.10
2	*5550.00	93.6 AV			1.00 H	41	54.50	39.10
3	11100.00	58.0 PK	74.0	-16.0	1.00 H	120	6.70	51.30
4	11100.00	44.9 AV	54.0	-9.1	1.00 H	120	-6.40	51.30
5	#16650.00	58.5 PK	68.3	-9.8	1.00 H	20	5.90	52.60
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	*5550.00	115.3 PK			1.04 V	15	76.20	39.10
2	*5550.00	104.0 AV			1.04 V	15	64.90	39.10
3	11100.00	58.6 PK	74.0	-15.4	1.00 V	270	7.30	51.30
4	11100.00	45.6 AV	54.0	-8.4	1.00 V	270	-5.70	51.30
5	#16650.00	60.0 PK	68.3	-8.3	1.00 V	10	7.40	52.60

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH	TESTED BY	Alan Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	100.4 PK			1.00 H	353	61.00	39.40
2	*5670.00	89.5 AV			1.00 H	353	50.10	39.40
3	#5725.00	56.5 PK	68.3	-11.8	1.02 H	355	17.00	39.50
4	11340.00	59.2 PK	74.0	-14.8	1.00 H	175	7.50	51.70
5	11340.00	44.3 AV	54.0	-9.7	1.00 H	175	-7.40	51.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	112.6 PK			1.02 V	2	73.20	39.40
2	*5670.00	101.6 AV			1.02 V	2	62.20	39.40
3	#5725.00	66.1 PK	68.3	-2.2	1.02 V	1	26.60	39.50
4	11340.00	59.7 PK	74.0	-14.3	1.00 V	282	8.00	51.70
5	11340.00	46.3 AV	54.0	-7.7	1.00 V	282	-5.40	51.70

REMARKS:

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



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BELOW 1GHz WORST-CASE DATA : 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 77%RH	TEST MODE	A
TESTED BY	Cedric Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	39.7 QP	46.0	-6.3	1.49 H	73	26.90	12.80
2	299.62	42.7 QP	46.0	-3.3	1.00 H	5	28.00	14.70
3	392.75	41.3 QP	46.0	-4.7	1.00 H	5	24.30	17.00
4	433.50	40.3 QP	46.0	-5.7	1.99 H	162	22.40	17.90
5	499.99	44.0 QP	46.0	-2.0	1.75 H	145	24.50	19.50
6	625.70	43.8 QP	46.0	-2.2	1.50 H	48	22.10	21.70
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	53.18	33.7 QP	40.0	-6.3	1.24 V	26	19.80	13.90
2	249.17	39.7 QP	46.0	-6.3	1.00 V	174	26.90	12.80
3	375.29	42.1 QP	46.0	-3.9	1.00 V	155	25.50	16.60
4	499.99	44.0 QP	46.0	-2.0	1.75 V	200	24.50	19.50
5	625.60	42.0 QP	46.0	-4.0	1.49 V	209	20.30	21.70
6	749.79	38.2 QP	46.0	-7.8	1.00 V	184	14.80	23.40

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 77%RH	TEST MODE	A
TESTED BY	Alan Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	39.7 QP	46.0	-6.3	3.00 H	73	26.90	12.80
2	299.62	42.9 QP	46.0	-3.1	1.00 H	350	28.20	14.70
3	392.75	41.3 QP	46.0	-4.7	1.00 H	5	24.30	17.00
4	433.50	40.3 QP	46.0	-5.7	1.99 H	162	22.40	17.90
5	499.99	43.0 QP	46.0	-3.0	1.75 H	54	23.50	19.50
6	625.70	43.1 QP	46.0	-2.9	1.50 H	24	21.40	21.70

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	53.18	33.7 QP	40.0	-6.3	1.24 V	26	19.80	13.90
2	249.17	39.7 QP	46.0	-6.3	1.00 V	174	26.90	12.80
3	375.29	42.3 QP	46.0	-3.7	1.00 V	55	25.70	16.60
4	499.99	42.0 QP	46.0	-4.0	1.75 V	100	22.50	19.50
5	625.60	41.0 QP	46.0	-5.0	1.49 V	190	19.30	21.70
6	749.79	38.2 QP	46.0	-7.8	2.00 V	184	14.80	23.40

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 77%RH	TEST MODE	A
TESTED BY	Alan Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	39.9 QP	46.0	-6.1	1.49 H	67	27.10	12.80
2	299.62	43.4 QP	46.0	-2.6	1.00 H	340	28.70	14.70
3	375.29	41.3 QP	46.0	-4.7	1.00 H	126	24.70	16.60
4	433.50	41.2 QP	46.0	-4.8	3.00 H	150	23.30	17.90
5	499.48	43.0 QP	46.0	-3.0	1.75 H	55	23.50	19.50
6	625.60	43.1 QP	46.0	-2.9	1.49 H	315	21.40	21.70

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	82.29	33.6 QP	40.0	-6.4	1.00 V	129	24.00	9.60
2	249.17	39.8 QP	46.0	-6.2	3.00 V	162	27.00	12.80
3	375.29	41.9 QP	46.0	-4.1	1.00 V	64	25.30	16.60
4	499.99	43.2 QP	46.0	-2.8	1.75 V	120	23.70	19.50
5	625.60	41.0 QP	46.0	-5.0	1.50 V	190	19.30	21.70
6	749.79	38.3 QP	46.0	-7.7	1.25 V	177	14.90	23.40

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 72%RH	TEST MODE	B
TESTED BY	Cedric Wu		

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	30.01	36.3 QP	40.0	-3.7	1.00 H	134	36.30	0.00
2	299.62	43.7 QP	46.0	-2.3	1.00 H	198	29.00	14.70
3	400.52	39.4 QP	46.0	-6.6	1.00 H	357	22.30	17.10
4	499.48	42.6 QP	46.0	-3.4	1.75 H	141	23.10	19.50
5	625.60	41.7 QP	46.0	-4.3	1.75 H	181	20.00	21.70
6	749.79	37.7 QP	46.0	-8.3	1.00 H	74	14.30	23.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	105.58	32.9 QP	43.5	-10.6	1.00 V	258	22.90	10.00
2	249.17	36.9 QP	46.0	-9.1	1.00 V	126	24.10	12.80
3	359.77	37.7 QP	46.0	-8.3	1.00 V	144	21.50	16.20
4	499.48	42.6 QP	46.0	-3.4	1.00 V	224	23.10	19.50
5	625.60	43.4 QP	46.0	-2.6	1.74 V	200	21.70	21.70
6	749.79	35.3 QP	46.0	-10.7	1.00 V	184	11.90	23.40

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 72%RH	TEST MODE	B
TESTED BY	Alan Wu		

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	299.62	44.0 QP	46.0	-2.0	1.00 H	198	29.30	14.70
2	350.07	39.4 QP	46.0	-6.6	1.50 H	29	23.40	16.00
3	400.52	39.4 QP	46.0	-6.6	1.00 H	275	22.30	17.10
4	499.48	42.8 QP	46.0	-3.2	1.75 H	141	23.30	19.50
5	625.60	41.8 QP	46.0	-4.2	1.75 H	181	20.10	21.70
6	749.79	37.7 QP	46.0	-8.3	1.25 H	347	14.30	23.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	53.18	35.0 QP	40.0	-5.0	1.00 V	340	21.10	13.90
2	249.17	36.9 QP	46.0	-9.1	1.50 V	126	24.10	12.80
3	359.77	37.7 QP	46.0	-8.3	1.00 V	144	21.50	16.20
4	499.48	42.8 QP	46.0	-3.2	1.00 V	142	23.30	19.50
5	625.60	43.7 QP	46.0	-2.3	1.74 V	100	22.00	21.70
6	800.24	36.1 QP	46.0	-9.9	2.00 V	179	11.50	24.60

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 72%RH	TEST MODE	B
TESTED BY	Alan Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	37.5 QP	46.0	-8.5	3.00 H	51	24.70	12.80
2	299.62	43.9 QP	46.0	-2.1	1.00 H	19	29.20	14.70
3	400.52	39.3 QP	46.0	-6.7	1.00 H	220	22.20	17.10
4	499.99	43.1 QP	46.0	-2.9	1.50 H	14	23.60	19.50
5	625.60	41.6 QP	46.0	-4.4	1.74 H	8	19.90	21.70
6	749.99	37.5 QP	46.0	-8.5	1.00 H	61	14.10	23.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	53.18	34.5 QP	40.0	-5.5	1.00 V	305	20.60	13.90
2	249.17	37.5 QP	46.0	-8.5	1.00 V	114	24.70	12.80
3	363.65	36.1 QP	46.0	-9.9	2.00 V	138	19.80	16.30
4	499.48	42.5 QP	46.0	-3.5	1.00 V	152	23.00	19.50
5	625.60	43.5 QP	46.0	-2.5	1.50 V	19	21.80	21.70
6	800.24	36.9 QP	46.0	-9.1	1.75 V	179	12.30	24.60

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 72%RH	TEST MODE	C
TESTED BY	Cedric Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	41.1 QP	46.0	-4.9	1.49 H	58	28.30	12.80
2	300.00	43.8 QP	46.0	-2.2	1.00 H	200	29.00	14.80
3	350.07	41.0 QP	46.0	-5.0	1.00 H	202	25.00	16.00
4	375.29	43.2 QP	46.0	-2.8	1.00 H	64	26.60	16.60
5	499.48	40.9 QP	46.0	-5.1	1.75 H	231	21.40	19.50
6	625.60	43.2 QP	46.0	-2.8	1.25 H	41	21.50	21.70
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	82.29	32.1 QP	40.0	-7.9	1.49 V	224	22.50	9.60
2	249.17	38.5 QP	46.0	-7.5	1.00 V	76	25.70	12.80
3	396.64	38.2 QP	46.0	-7.8	1.99 V	2	21.10	17.10
4	499.48	42.0 QP	46.0	-4.0	1.99 V	148	22.50	19.50
5	625.60	42.4 QP	46.0	-3.6	1.49 V	220	20.70	21.70
6	749.79	37.7 QP	46.0	-8.3	1.24 V	165	14.30	23.40

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 72%RH	TEST MODE	C
TESTED BY	Alan Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	41.1 QP	46.0	-4.9	1.49 H	58	28.30	12.80
2	300.00	43.1 QP	46.0	-2.9	1.00 H	100	28.30	14.80
3	350.07	41.0 QP	46.0	-5.0	2.00 H	202	25.00	16.00
4	375.29	43.5 QP	46.0	-2.5	1.00 H	346	26.90	16.60
5	499.48	40.9 QP	46.0	-5.1	1.75 H	231	21.40	19.50
6	625.60	43.5 QP	46.0	-2.5	1.25 H	314	21.80	21.70
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	82.29	32.1 QP	40.0	-7.9	1.49 V	224	22.50	9.60
2	249.17	38.3 QP	46.0	-7.7	1.00 V	7	25.50	12.80
3	396.64	38.2 QP	46.0	-7.8	1.75 V	2	21.10	17.10
4	499.48	43.0 QP	46.0	-3.0	1.99 V	84	23.50	19.50
5	625.60	42.6 QP	46.0	-3.4	1.49 V	102	20.90	21.70
6	749.79	37.7 QP	46.0	-8.3	1.24 V	165	14.30	23.40

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 72%RH	TEST MODE	C
TESTED BY	Alan Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	40.7 QP	46.0	-5.3	1.24 H	68	27.90	12.80
2	299.62	44.0 QP	46.0	-2.0	1.00 H	150	29.30	14.70
3	350.07	41.2 QP	46.0	-4.8	3.00 H	199	25.20	16.00
4	375.29	43.1 QP	46.0	-2.9	1.00 H	305	26.50	16.60
5	499.48	40.4 QP	46.0	-5.6	1.74 H	231	20.90	19.50
6	625.60	43.6 QP	46.0	-2.4	1.24 H	33	21.90	21.70

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	249.17	38.2 QP	46.0	-7.8	1.00 V	69	25.40	12.80
2	350.07	39.0 QP	46.0	-7.0	1.75 V	159	23.00	16.00
3	499.48	42.3 QP	46.0	-3.7	2.00 V	84	22.80	19.50
4	625.60	43.0 QP	46.0	-3.0	1.25 V	152	21.30	21.70
5	749.79	39.1 QP	46.0	-6.9	1.25 V	26	15.70	23.40
6	825.46	35.3 QP	46.0	-10.7	1.50 V	302	10.40	24.90

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TEST MODE	D
TESTED BY	Alan Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	43.2 QP	46.0	-2.8	1.24 H	256	30.40	12.80
2	274.39	39.5 QP	46.0	-6.5	1.00 H	348	25.70	13.80
3	375.29	40.4 QP	46.0	-5.6	1.00 H	70	23.80	16.60
4	396.64	41.1 QP	46.0	-4.9	1.74 H	181	24.00	17.10
5	499.48	43.3 QP	46.0	-2.7	1.49 H	137	23.80	19.50
6	625.60	43.5 QP	46.0	-2.5	1.24 H	208	21.80	21.70
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	55.13	37.7 QP	40.0	-2.3	1.00 V	343	24.00	13.70
2	64.83	37.7 QP	40.0	-2.3	1.00 V	263	24.80	12.90
3	249.17	43.1 QP	46.0	-2.9	1.00 V	263	30.30	12.80
4	375.29	41.8 QP	46.0	-4.2	1.24 V	146	25.20	16.60
5	499.48	43.9 QP	46.0	-2.1	1.00 V	169	24.40	19.50
6	625.60	43.4 QP	46.0	-2.6	1.49 V	165	21.70	21.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TEST MODE	D
TESTED BY	Alan Wu		

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	198.71	34.8 QP	43.5	-8.7	1.99 H	284	23.90	10.90
2	299.62	37.6 QP	46.0	-8.4	1.00 H	336	22.90	14.70
3	361.71	37.6 QP	46.0	-8.4	1.00 H	221	21.40	16.20
4	410.22	41.0 QP	46.0	-5.0	1.74 H	166	23.60	17.40
5	499.48	48.2 QP	46.0	2.2	1.49 H	137	28.70	19.50
6	751.73	38.9 QP	46.0	-7.1	1.00 H	126	15.50	23.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	80.35	33.0 QP	40.0	-7.0	1.49 V	245	23.10	9.90
2	103.64	32.7 QP	43.5	-10.8	1.24 V	238	22.90	9.80
3	249.17	43.1 QP	46.0	-2.9	1.00 V	263	30.30	12.80
4	350.07	38.3 QP	46.0	-7.7	1.49 V	314	22.30	16.00
5	499.48	44.0 QP	46.0	-2.0	1.00 V	169	24.50	19.50
6	751.73	38.8 QP	46.0	-7.2	1.24 V	169	15.40	23.40

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TEST MODE	D
TESTED BY	Alan Wu		

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	53.18	35.1 QP	40.0	-4.9	1.24 H	228	21.20	13.90
2	249.17	43.5 QP	46.0	-2.5	1.24 H	265	30.70	12.80
3	375.29	40.8 QP	46.0	-5.2	1.00 H	92	24.20	16.60
4	499.48	43.3 QP	46.0	-2.7	1.74 H	134	23.80	19.50
5	600.38	40.6 QP	46.0	-5.4	1.49 H	128	19.00	21.60
6	625.60	43.7 QP	46.0	-2.3	1.24 H	217	22.00	21.70

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	55.13	37.2 QP	40.0	-2.8	1.00 V	2	23.50	13.70
2	249.17	43.0 QP	46.0	-3.0	1.00 V	261	30.20	12.80
3	375.29	40.7 QP	46.0	-5.3	1.50 V	161	24.10	16.60
4	500.00	44.0 QP	46.0	-2.0	1.00 V	207	24.50	19.50
5	625.60	43.6 QP	46.0	-2.4	1.50 V	158	21.90	21.70
6	875.91	38.3 QP	46.0	-7.7	1.75 V	174	12.80	25.50

REMARKS:

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

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.2.2 TEST INSTRUMENTS

TEST MODE A, B, C (Tested Date: Sep. 25 ~ Oct. 04, 2012)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 19, 2011	Nov. 18, 2012
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 29, 2011	Dec. 28, 2012
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 30, 2011	Dec. 29, 2012
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 06, 2012	Jul. 05, 2013
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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



ADT

TEST MODE D (Tested Date: Nov. 26, ~ Dec. 03, 2012)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 19, 2012	Nov. 18, 2013
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 29, 2011	Dec. 28, 2012
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 30, 2011	Dec. 29, 2012
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 06, 2012	Jul. 05, 2013
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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

4.2.3 TEST PROCEDURES

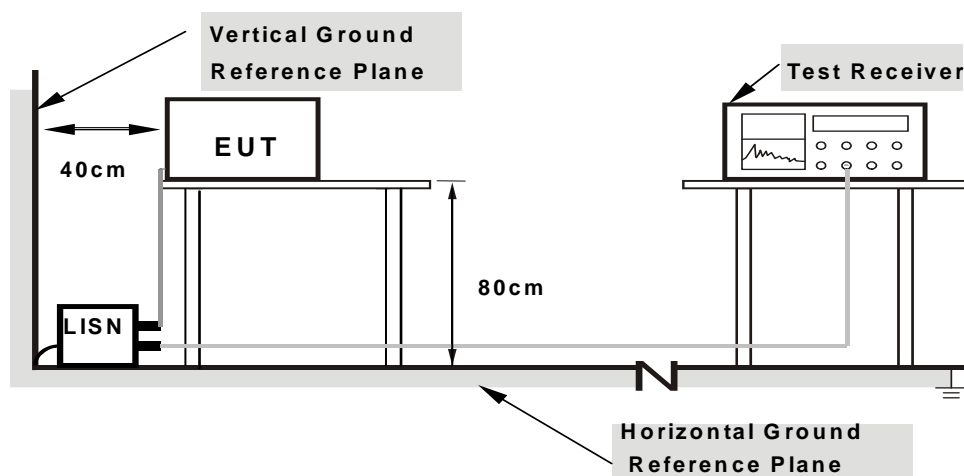
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



- Note:**
- Support units were connected to second LISN.
 - Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

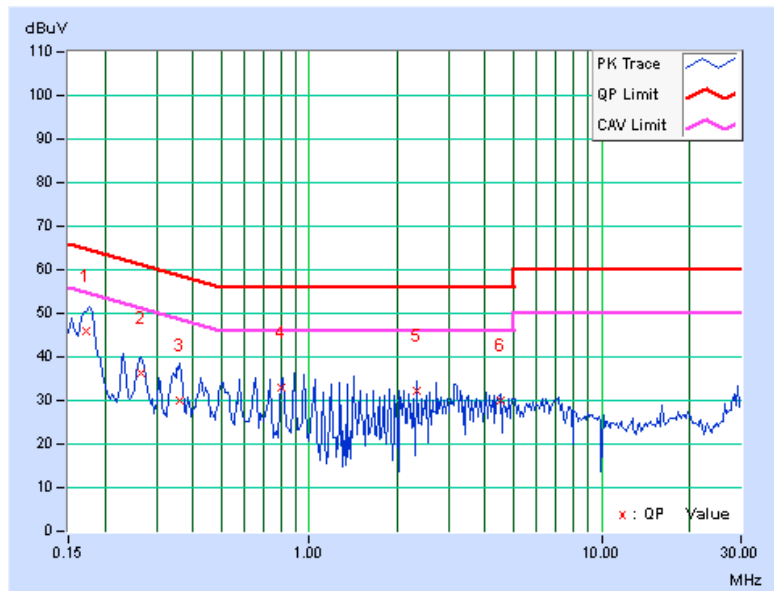
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA : 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A	CHANNEL	Channel 40

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.17	45.88	28.32	46.05	28.49	64.79	54.79	-18.74	-26.30
2	0.26719	0.18	35.99	26.70	36.17	26.88	61.20	51.20	-25.03	-24.32
3	0.36094	0.18	29.99	10.24	30.17	10.42	58.71	48.71	-28.54	-38.29
4	0.80625	0.20	32.81	26.07	33.01	26.27	56.00	46.00	-22.99	-19.73
5	2.34766	0.31	32.01	29.24	32.32	29.55	56.00	46.00	-23.68	-16.45
6	4.50391	0.38	29.75	26.22	30.13	26.60	56.00	46.00	-25.87	-19.40

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



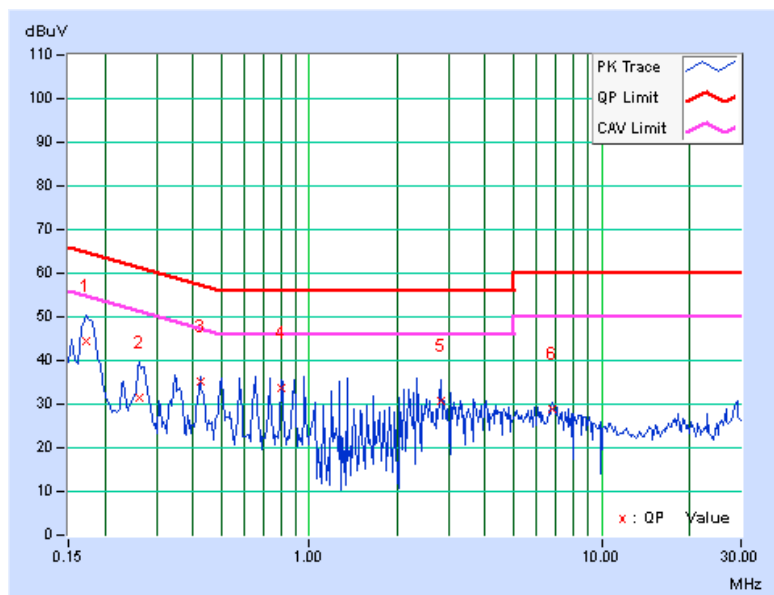


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PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A	CHANNEL	Channel 40

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.14	44.17	25.93	44.31	26.07	64.79	54.79	-20.48	-28.72
2	0.26328	0.16	31.29	20.42	31.45	20.58	61.33	51.33	-29.88	-30.75
3	0.42344	0.18	34.87	28.42	35.05	28.60	57.38	47.38	-22.33	-18.78
4	0.80625	0.21	33.34	29.04	33.55	29.25	56.00	46.00	-22.45	-16.75
5	2.81250	0.34	30.39	28.32	30.73	28.66	56.00	46.00	-25.27	-17.34
6	6.81641	0.49	28.43	24.41	28.92	24.90	60.00	50.00	-31.08	-25.10

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



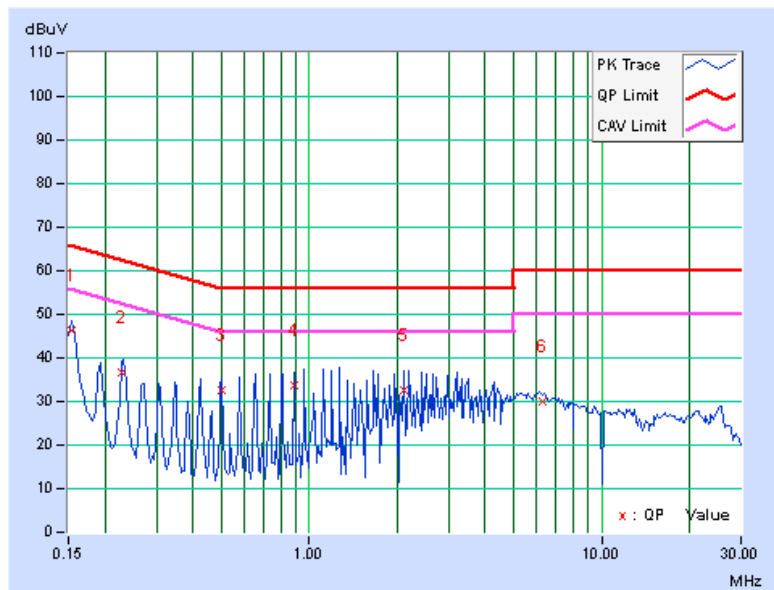


A D T

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A	CHANNEL	Channel 52

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.20	46.15	37.60	46.35	37.80	65.79	55.79	-19.43	-17.98
2	0.22812	0.20	36.29	26.98	36.49	27.18	62.52	52.52	-26.03	-25.34
3	0.50156	0.23	32.27	24.96	32.50	25.19	56.00	46.00	-23.50	-20.81
4	0.88438	0.26	33.35	27.18	33.61	27.44	56.00	46.00	-22.39	-18.56
5	2.11719	0.32	32.24	28.36	32.56	28.68	56.00	46.00	-23.44	-17.32
6	6.27344	0.50	29.62	25.99	30.12	26.49	60.00	50.00	-29.88	-23.51

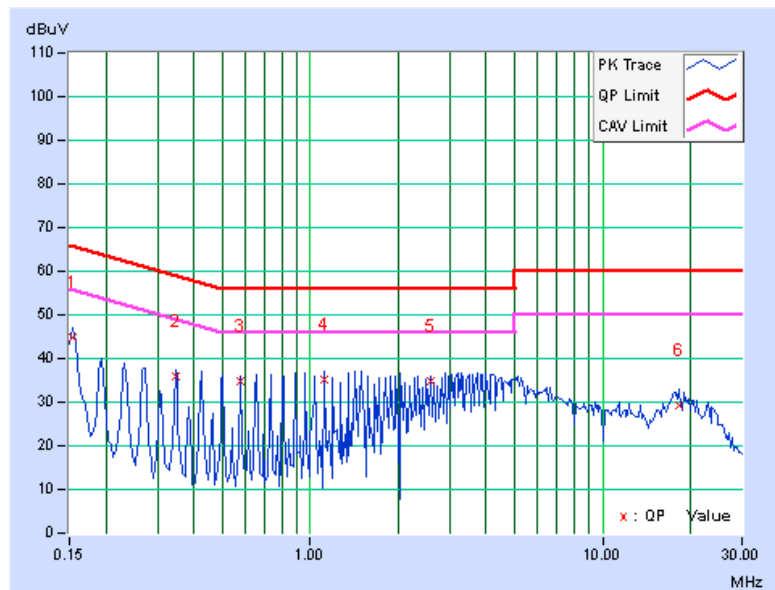
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. The emission levels of other frequencies were very low against the limit.
 3. Margin value = Emission level - Limit value
 4. Correction factor = Insertion loss + Cable loss
 5. Emission Level = Correction Factor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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A	CHANNEL	Channel 52

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.21	44.75	36.00	44.96	36.21	65.79	55.79	-20.83	-19.58
2	0.34531	0.23	35.79	29.30	36.02	29.53	59.07	49.07	-23.05	-19.54
3	0.57578	0.26	34.44	30.23	34.70	30.49	56.00	46.00	-21.30	-15.51
4	1.11719	0.31	34.95	31.89	35.26	32.20	56.00	46.00	-20.74	-13.80
5	2.57813	0.37	34.50	30.83	34.87	31.20	56.00	46.00	-21.13	-14.80
6	18.24609	0.74	28.41	24.38	29.15	25.12	60.00	50.00	-30.85	-24.88

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



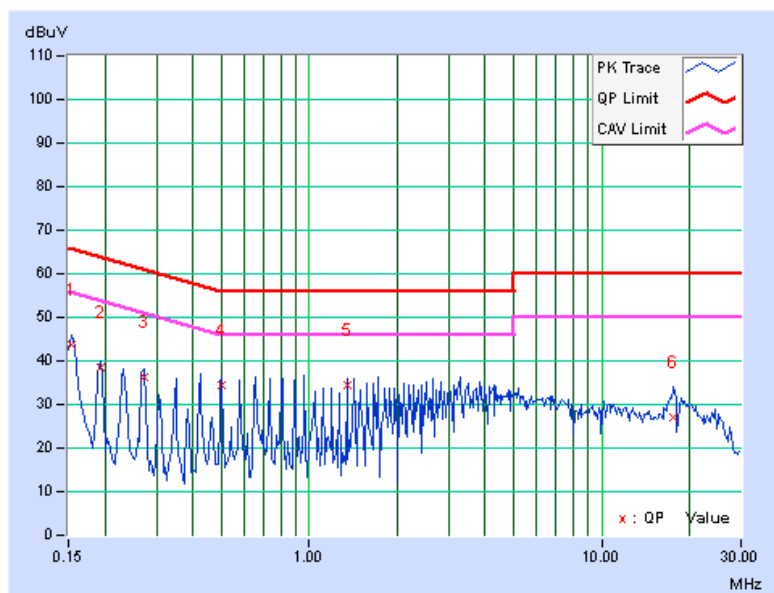


A D T

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A	CHANNEL	Channel 116

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.21	43.47	34.72	43.68	34.93	65.79	55.79	-22.11	-20.86
2	0.19297	0.22	38.43	29.64	38.65	29.86	63.91	53.91	-25.26	-24.05
3	0.27109	0.23	35.93	27.31	36.16	27.54	61.08	51.08	-24.93	-23.55
4	0.50156	0.25	34.19	29.11	34.44	29.36	56.00	46.00	-21.56	-16.64
5	1.34766	0.32	34.24	30.05	34.56	30.37	56.00	46.00	-21.44	-15.63
6	17.57031	0.72	26.45	20.03	27.17	20.75	60.00	50.00	-32.83	-29.25

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



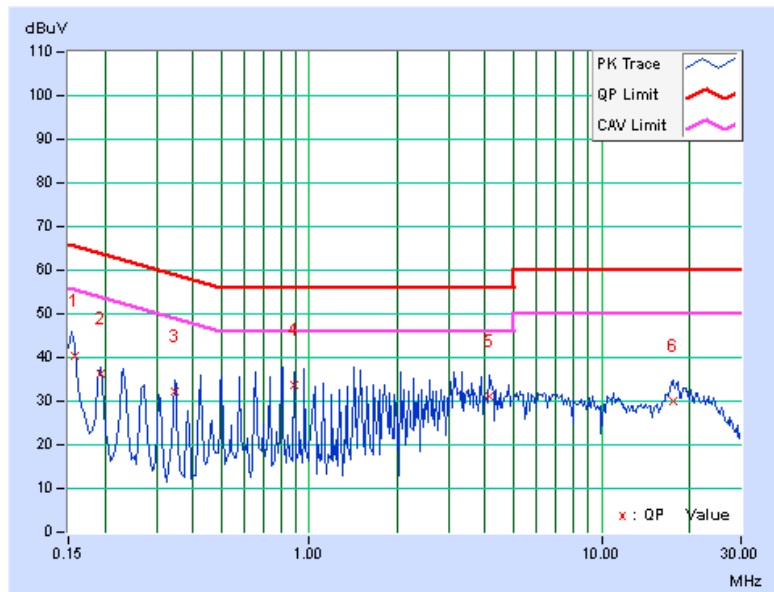


A D T

PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A	CHANNEL	Channel 116

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.20	40.33	31.58	40.53	31.78	65.58	55.58	-25.04	-23.79
2	0.19297	0.20	36.16	25.78	36.36	25.98	63.91	53.91	-27.55	-27.93
3	0.34531	0.21	31.86	23.60	32.07	23.81	59.07	49.07	-27.00	-25.26
4	0.88438	0.26	33.31	26.42	33.57	26.68	56.00	46.00	-22.43	-19.32
5	4.12109	0.43	30.86	27.80	31.29	28.23	56.00	46.00	-24.71	-17.77
6	17.59766	0.82	29.05	21.13	29.87	21.95	60.00	50.00	-30.13	-28.05

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



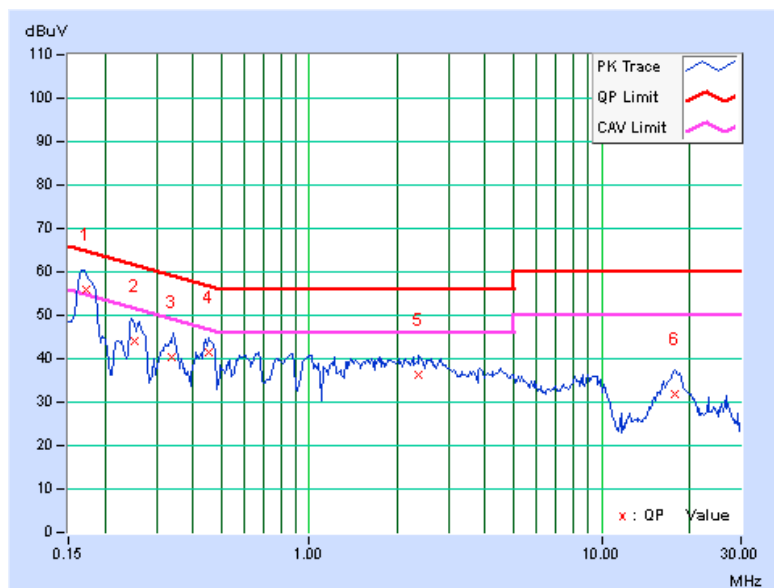


A D T

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B	CHANNEL	Channel 40

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17294	0.17	55.70	39.74	55.87	39.91	64.82	54.82	-8.95	-14.91
2	0.25251	0.18	44.07	32.04	44.25	32.22	61.67	51.67	-17.42	-19.45
3	0.33709	0.18	40.19	30.82	40.37	31.00	59.27	49.27	-18.90	-18.27
4	0.45078	0.18	41.25	31.53	41.43	31.71	56.86	46.86	-15.43	-15.15
5	2.36328	0.31	36.12	24.38	36.43	24.69	56.00	46.00	-19.57	-21.31
6	17.73828	0.67	31.33	25.26	32.00	25.93	60.00	50.00	-28.00	-24.07

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



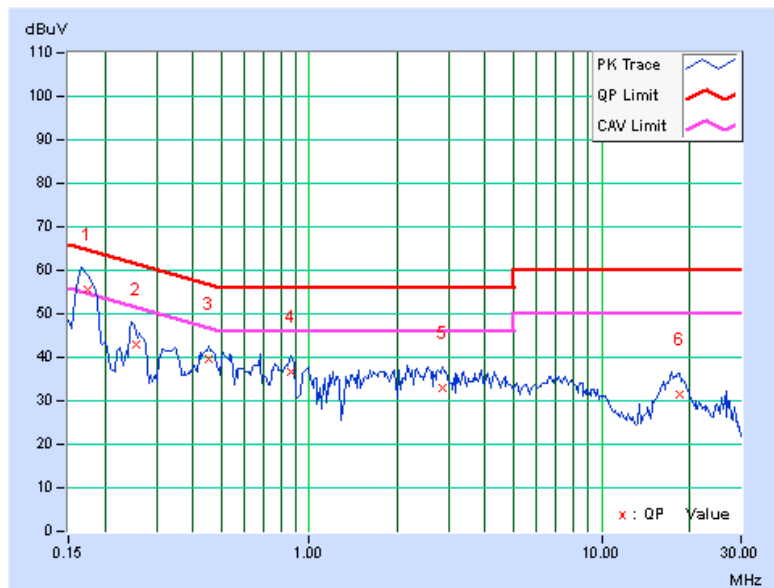


A D T

PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B	CHANNEL	Channel 40

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17472	0.14	55.41	39.44	55.55	39.58	64.73	54.73	-9.18	-15.15
2	0.25554	0.16	42.73	28.84	42.89	29.00	61.58	51.58	-18.69	-22.58
3	0.45469	0.18	39.58	30.09	39.76	30.27	56.79	46.79	-17.03	-16.52
4	0.86875	0.21	36.63	24.31	36.84	24.52	56.00	46.00	-19.16	-21.48
5	2.87109	0.35	32.49	20.81	32.84	21.16	56.00	46.00	-23.16	-24.84
6	18.57031	0.78	30.85	24.65	31.63	25.43	60.00	50.00	-28.37	-24.57

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



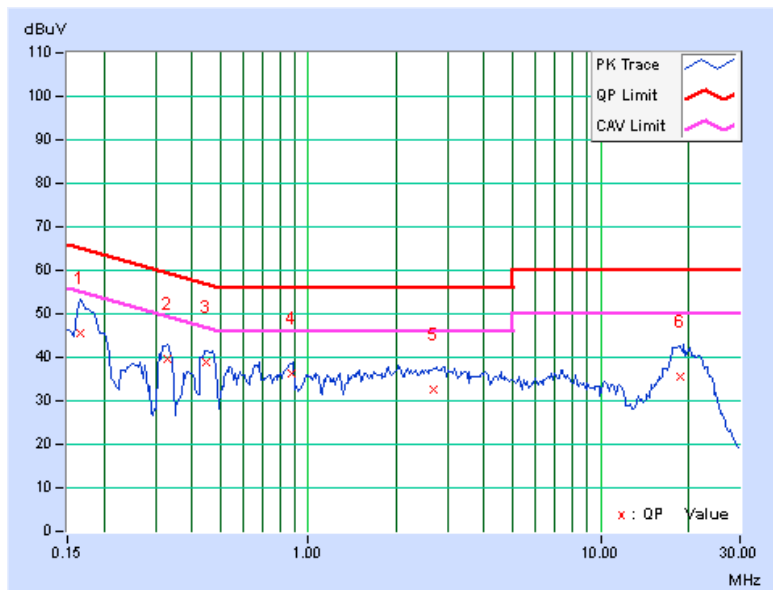


A D T

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B	CHANNEL	Channel 52

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16562	0.21	45.28	24.12	45.49	24.33	65.18	55.18	-19.69	-30.85
2	0.32969	0.23	39.26	30.91	39.49	31.14	59.46	49.46	-19.97	-18.32
3	0.44688	0.25	38.52	27.84	38.77	28.09	56.93	46.93	-18.17	-18.85
4	0.87266	0.30	36.00	23.97	36.30	24.27	56.00	46.00	-19.70	-21.73
5	2.69141	0.37	32.19	20.20	32.56	20.57	56.00	46.00	-23.44	-25.43
6	18.79688	0.76	34.91	28.04	35.67	28.80	60.00	50.00	-24.33	-21.20

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



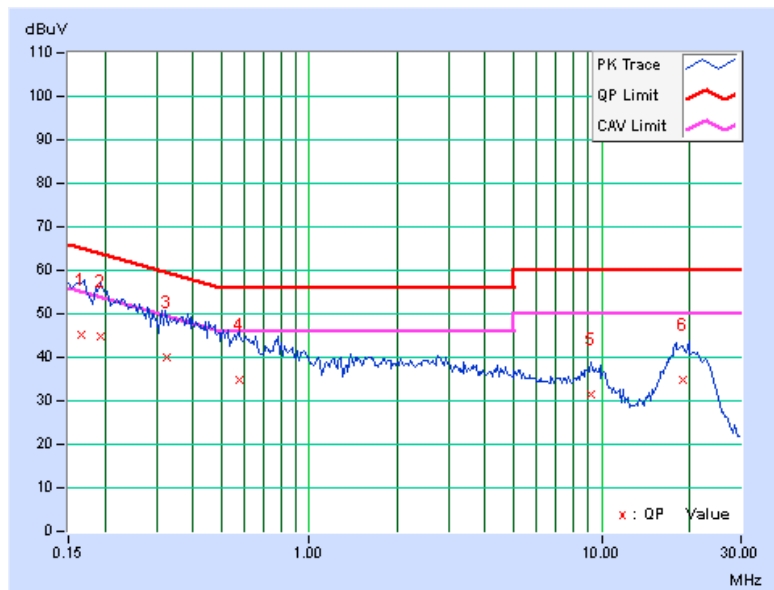


A D T

PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B	CHANNEL	Channel 52

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16562	0.20	44.81	24.85	45.01	25.05	65.18	55.18	-20.16	-30.12
2	0.19297	0.20	44.67	34.45	44.87	34.65	63.91	53.91	-19.04	-19.26
3	0.32578	0.21	39.88	31.40	40.09	31.61	59.56	49.56	-19.47	-17.95
4	0.57578	0.23	34.60	22.66	34.83	22.89	56.00	46.00	-21.17	-23.11
5	9.17188	0.59	30.78	23.63	31.37	24.22	60.00	50.00	-28.63	-25.78
6	19.04297	0.85	33.94	27.12	34.79	27.97	60.00	50.00	-25.21	-22.03

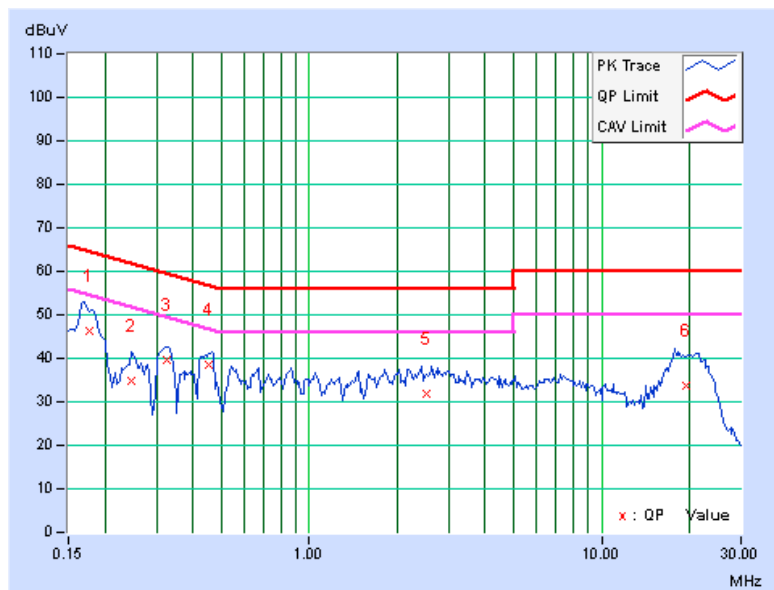
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. The emission levels of other frequencies were very low against the limit.
 3. Margin value = Emission level - Limit value
 4. Correction factor = Insertion loss + Cable loss
 5. Emission Level = Correction Factor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



PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B	CHANNEL	Channel 116

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17734	0.21	46.00	27.82	46.21	28.03	64.61	54.61	-18.40	-26.58
2	0.24766	0.22	34.69	24.11	34.91	24.33	61.84	51.84	-26.92	-27.50
3	0.32578	0.23	39.28	31.29	39.51	31.52	59.56	49.56	-20.05	-18.04
4	0.45078	0.25	38.35	27.77	38.60	28.02	56.86	46.86	-18.26	-18.84
5	2.51563	0.37	31.45	19.67	31.82	20.04	56.00	46.00	-24.18	-25.96
6	19.46484	0.78	33.05	26.22	33.83	27.00	60.00	50.00	-26.17	-23.00

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



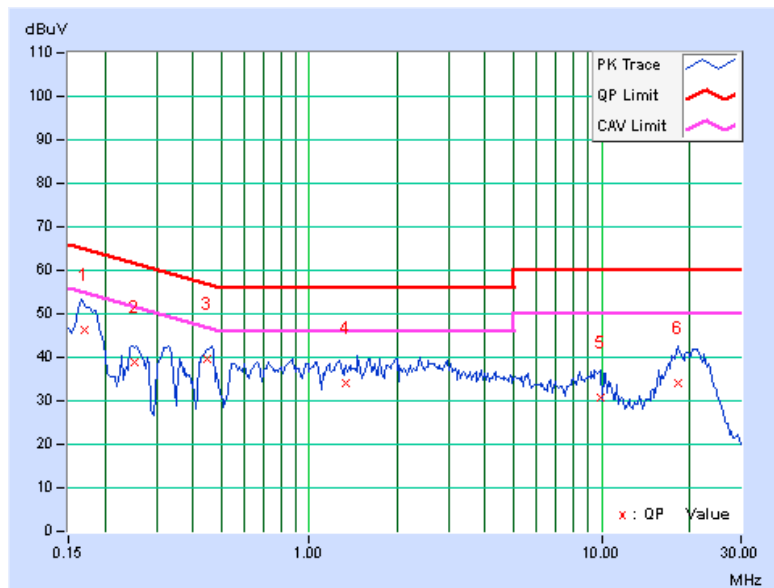


A D T

PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B	CHANNEL	Channel 116

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16953	0.20	46.11	25.50	46.31	25.70	64.98	54.98	-18.67	-29.28
2	0.25156	0.21	38.73	28.51	38.94	28.72	61.71	51.71	-22.77	-22.99
3	0.44688	0.22	39.27	27.94	39.49	28.16	56.93	46.93	-17.44	-18.77
4	1.33984	0.28	33.92	21.18	34.20	21.46	56.00	46.00	-21.80	-24.54
5	9.98438	0.61	30.06	22.82	30.67	23.43	60.00	50.00	-29.33	-26.57
6	18.29688	0.83	33.33	25.76	34.16	26.59	60.00	50.00	-25.84	-23.41

- REMARKS:**
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 2. The emission levels of other frequencies were very low against the limit.
 3. Margin value = Emission level - Limit value
 4. Correction factor = Insertion loss + Cable loss
 5. Emission Level = Correction Factor + Reading Value.



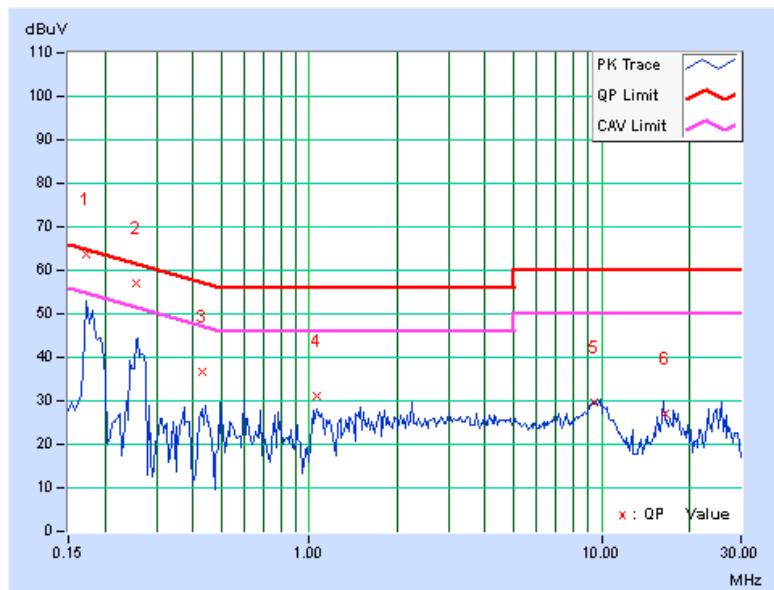


A D T

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	C	CHANNEL	Channel 40

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.17	63.60	41.55	63.77	41.72	64.79	54.79	-1.02	-13.07
2	0.25547	0.18	56.74	34.68	56.92	34.86	61.58	51.58	-4.66	-16.72
3	0.43125	0.18	36.49	22.17	36.67	22.35	57.23	47.23	-20.56	-24.88
4	1.05859	0.22	30.76	17.57	30.98	17.79	56.00	46.00	-25.02	-28.21
5	9.46094	0.48	29.13	23.82	29.61	24.30	60.00	50.00	-30.39	-25.70
6	16.47266	0.64	26.44	20.15	27.08	20.79	60.00	50.00	-32.92	-29.21

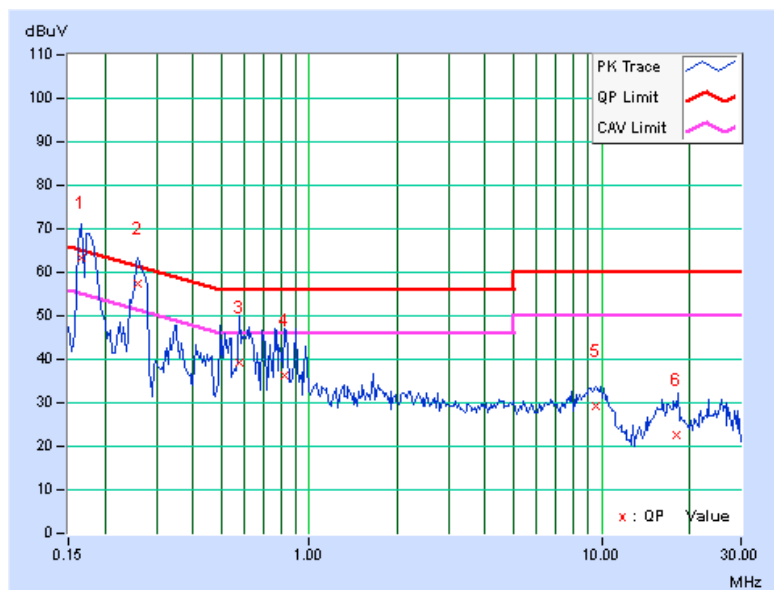
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. The emission levels of other frequencies were very low against the limit.
 3. Margin value = Emission level - Limit value
 4. Correction factor = Insertion loss + Cable loss
 5. Emission Level = Correction Factor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



PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	C	CHANNEL	Channel 40

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16562	0.14	63.24	37.12	63.38	37.26	65.18	55.18	-1.79	-17.91
2	0.25938	0.16	57.20	35.20	57.36	35.36	61.45	51.45	-4.09	-16.09
3	0.57969	0.19	39.25	20.60	39.44	20.79	56.00	46.00	-16.56	-25.21
4	0.82578	0.21	35.94	19.70	36.15	19.91	56.00	46.00	-19.85	-26.09
5	9.51172	0.56	28.63	23.00	29.19	23.56	60.00	50.00	-30.81	-26.44
6	17.98047	0.76	22.01	15.51	22.77	16.27	60.00	50.00	-37.23	-33.73

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



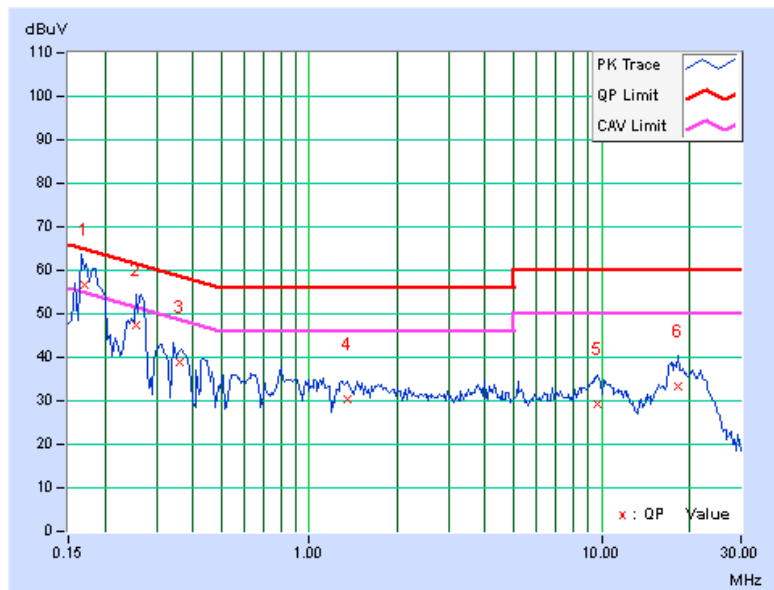


A D T

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	C	CHANNEL	Channel 52

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17122	0.21	56.38	31.69	56.59	31.90	64.90	54.90	-8.31	-23.00
2	0.25547	0.23	47.22	31.53	47.45	31.76	61.58	51.58	-14.13	-19.82
3	0.36094	0.24	38.48	25.45	38.72	25.69	58.71	48.71	-19.99	-23.02
4	1.34766	0.32	30.10	19.39	30.42	19.71	56.00	46.00	-25.58	-26.29
5	9.67188	0.52	28.77	23.13	29.29	23.65	60.00	50.00	-30.71	-26.35
6	18.36719	0.75	32.64	26.30	33.39	27.05	60.00	50.00	-26.61	-22.95

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



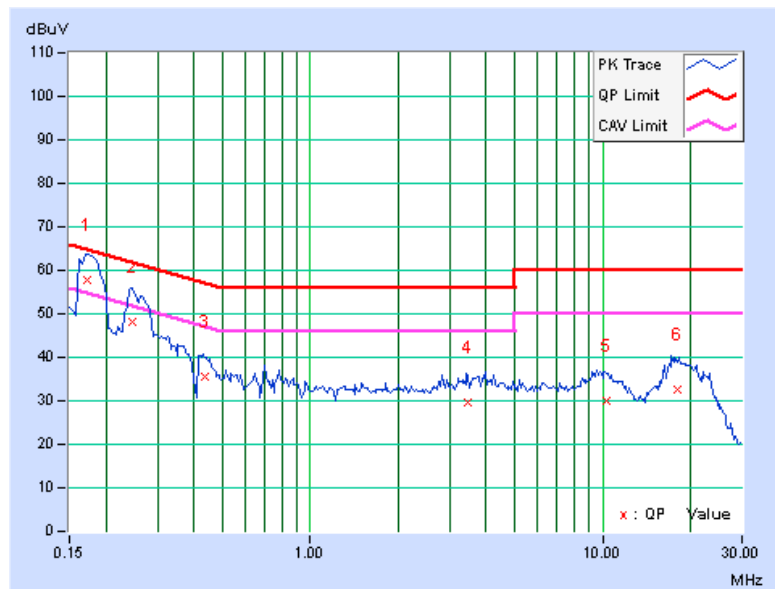


A D T

PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	C	CHANNEL	Channel 52

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.20	57.41	36.10	57.61	36.30	64.79	54.79	-7.18	-18.49
2	0.24766	0.20	47.88	34.10	48.08	34.30	61.84	51.84	-13.75	-17.53
3	0.43516	0.22	35.38	21.42	35.60	21.64	57.15	47.15	-21.55	-25.51
4	3.46484	0.40	29.20	23.14	29.60	23.54	56.00	46.00	-26.40	-22.46
5	10.36719	0.62	29.36	23.04	29.98	23.66	60.00	50.00	-30.02	-26.34
6	17.99609	0.83	31.65	24.37	32.48	25.20	60.00	50.00	-27.52	-24.80

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



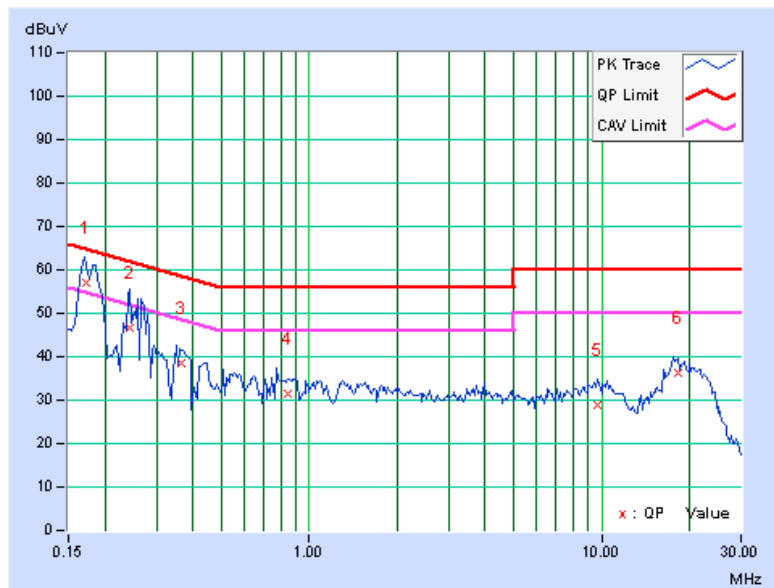


A D T

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	C	CHANNEL	Channel 116

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.21	56.75	36.65	56.96	36.86	64.79	54.79	-7.83	-17.93
2	0.24375	0.22	46.52	31.44	46.74	31.66	61.97	51.97	-15.22	-20.30
3	0.36484	0.24	38.34	26.95	38.58	27.19	58.62	48.62	-20.04	-21.43
4	0.84531	0.29	31.05	20.06	31.34	20.35	56.00	46.00	-24.66	-25.65
5	9.71875	0.52	28.45	22.01	28.97	22.53	60.00	50.00	-31.03	-27.47
6	18.24219	0.74	35.45	29.35	36.19	30.09	60.00	50.00	-23.81	-19.91

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



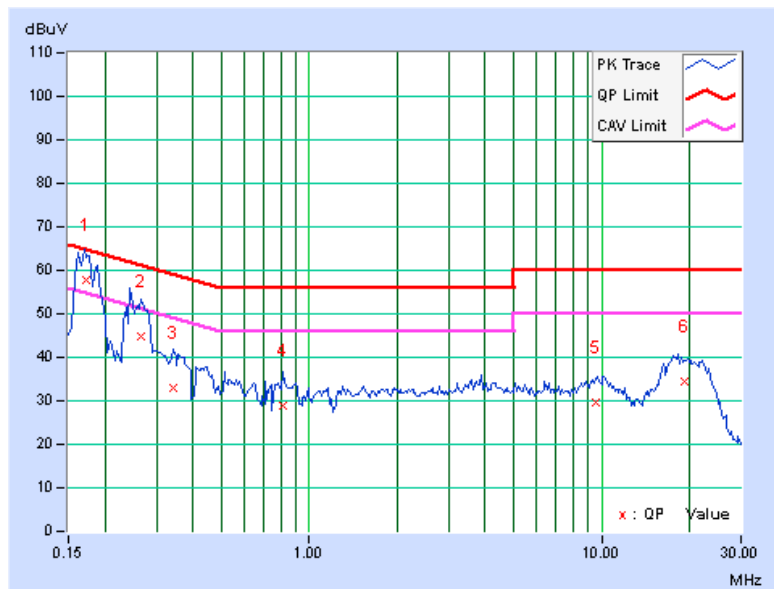


A D T

PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	C	CHANNEL	Channel 116

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.20	57.71	36.73	57.91	36.93	64.79	54.79	-6.88	-17.86
2	0.26719	0.21	44.75	21.68	44.96	21.89	61.20	51.20	-16.25	-29.32
3	0.34141	0.21	32.57	11.39	32.78	11.60	59.17	49.17	-26.38	-37.56
4	0.81406	0.25	28.78	16.45	29.03	16.70	56.00	46.00	-26.97	-29.30
5	9.57813	0.60	28.98	23.34	29.58	23.94	60.00	50.00	-30.42	-26.06
6	19.27344	0.86	33.55	27.32	34.41	28.18	60.00	50.00	-25.59	-21.82

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





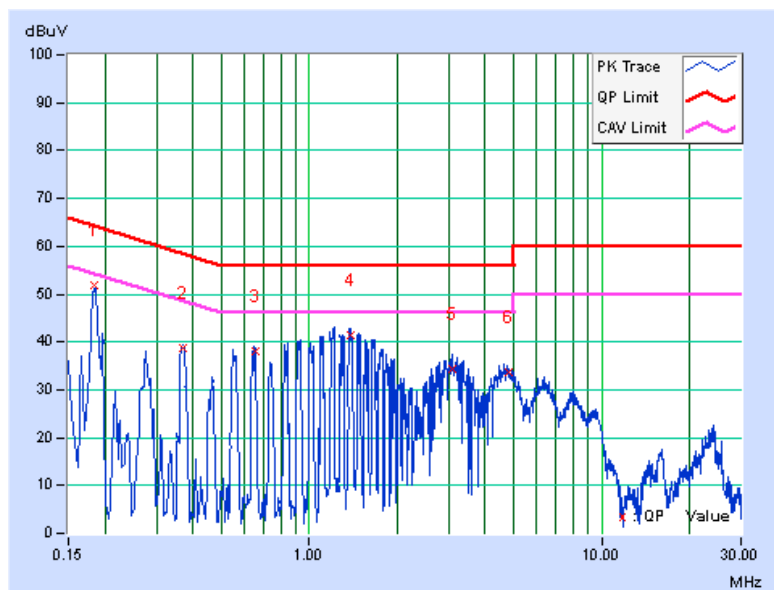
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PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	D	CHANNEL	Channel 40

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18266	0.21	51.49	45.35	51.70	45.56	64.36	54.36	-12.66	-8.80
2	0.36816	0.24	38.44	35.40	38.68	35.64	58.54	48.54	-19.87	-12.91
3	0.65216	0.27	37.71	31.78	37.98	32.05	56.00	46.00	-18.02	-13.95
4	1.38193	0.32	40.97	28.34	41.29	28.66	56.00	46.00	-14.71	-17.34
5	3.06686	0.39	33.97	16.73	34.36	17.12	56.00	46.00	-21.64	-28.88
6	4.78726	0.45	33.12	18.71	33.57	19.16	56.00	46.00	-22.43	-26.84

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.





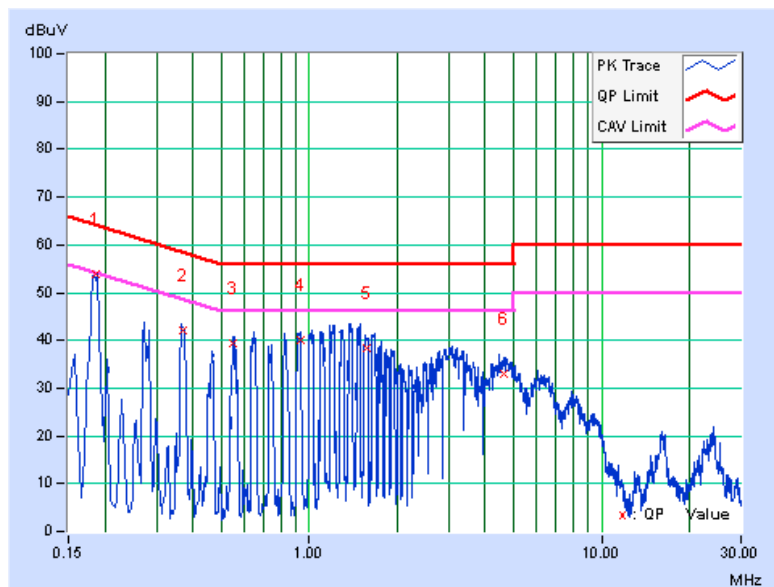
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PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	D	CHANNEL	Channel 40

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18606	0.20	53.55	48.91	53.75	49.11	64.21	54.21	-10.46	-5.10
2	0.36896	0.22	41.81	38.86	42.03	39.08	58.52	48.52	-16.50	-9.45
3	0.54518	0.23	39.16	27.58	39.39	27.81	56.00	46.00	-16.61	-18.19
4	0.93076	0.26	39.75	31.32	40.01	31.58	56.00	46.00	-15.99	-14.42
5	1.57238	0.29	38.22	25.05	38.51	25.34	56.00	46.00	-17.49	-20.66
6	4.61522	0.45	32.59	14.12	33.04	14.57	56.00	46.00	-22.96	-31.43

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.





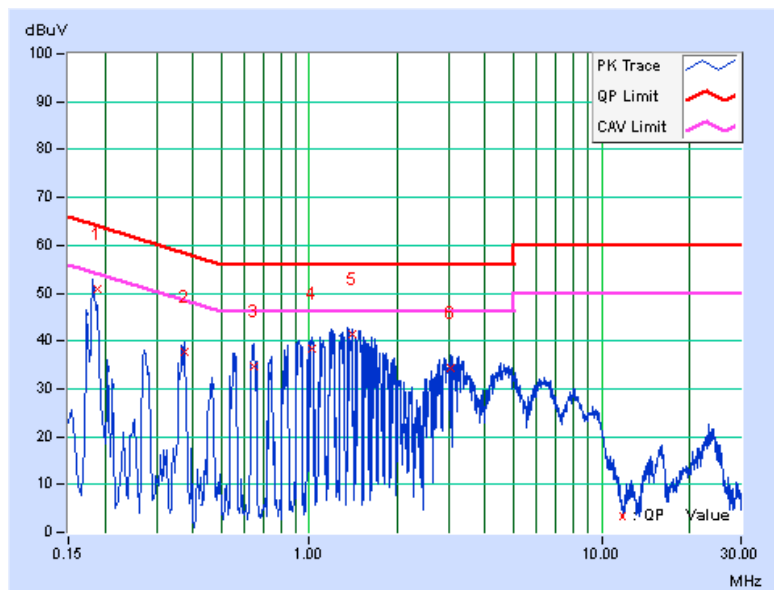
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PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	D	CHANNEL	Channel 52

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18772	0.22	50.63	42.11	50.85	42.33	64.14	54.14	-13.29	-11.81
2	0.37508	0.24	37.58	35.12	37.82	35.36	58.39	48.39	-20.57	-13.03
3	0.64331	0.27	34.52	30.55	34.79	30.82	56.00	46.00	-21.21	-15.18
4	1.01952	0.31	37.99	28.99	38.30	29.30	56.00	46.00	-17.70	-16.70
5	1.39751	0.32	41.12	28.41	41.44	28.73	56.00	46.00	-14.56	-17.27
6	3.03342	0.39	33.88	16.77	34.27	17.16	56.00	46.00	-21.73	-28.84

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.





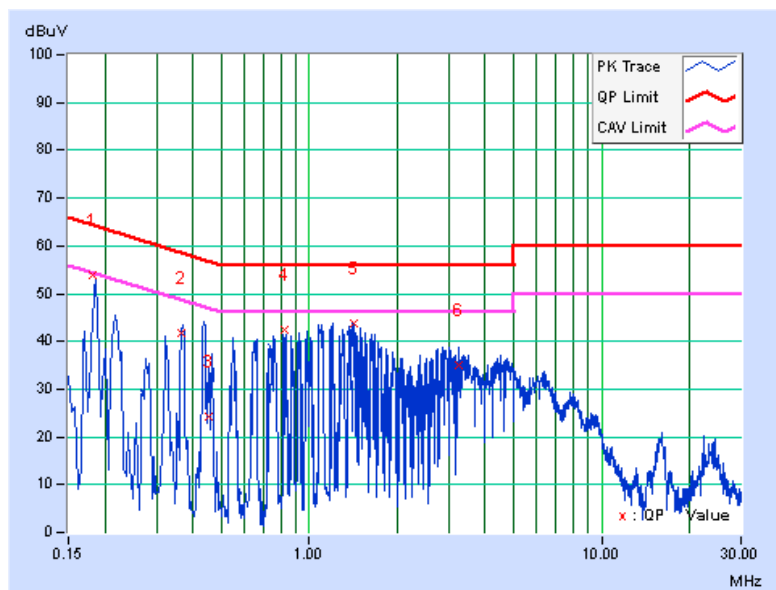
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PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	D	CHANNEL	Channel 52

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18112	0.20	53.81	48.01	54.01	48.21	64.43	54.43	-10.42	-6.22
2	0.36331	0.22	41.55	36.85	41.77	37.07	58.65	48.65	-16.89	-11.59
3	0.45221	0.22	24.01	9.03	24.23	9.25	56.83	46.83	-32.60	-37.58
4	0.82335	0.26	42.17	31.11	42.43	31.37	56.00	46.00	-13.57	-14.63
5	1.41752	0.29	43.54	23.45	43.83	23.74	56.00	46.00	-12.17	-22.26
6	3.22998	0.38	34.55	16.85	34.93	17.23	56.00	46.00	-21.07	-28.77

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

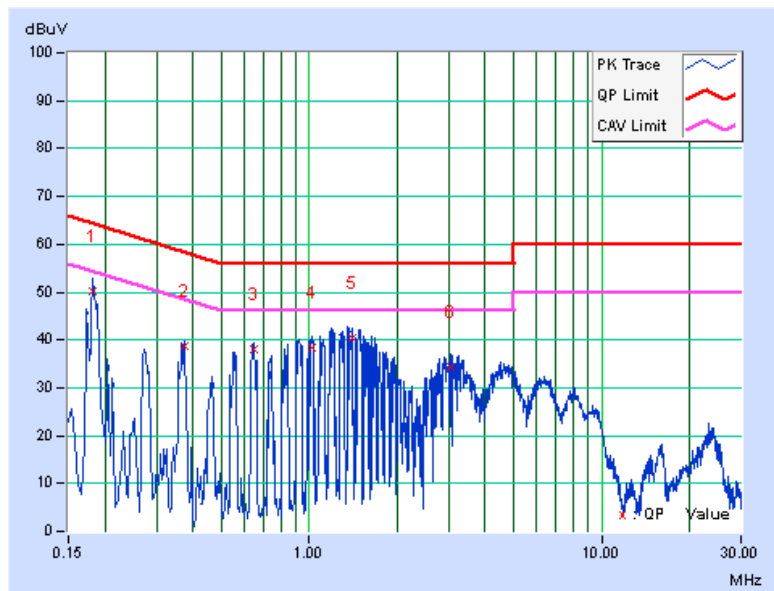


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	D	CHANNEL	Channel 116

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18075	0.21	50.03	41.60	50.24	41.81	64.45	54.45	-14.21	-12.64
2	0.37304	0.24	38.47	35.65	38.71	35.89	58.43	48.43	-19.73	-12.55
3	0.64532	0.27	37.67	30.94	37.94	31.21	56.00	46.00	-18.06	-14.79
4	1.01799	0.31	38.18	28.31	38.49	28.62	56.00	46.00	-17.51	-17.38
5	1.39657	0.32	40.23	28.39	40.55	28.71	56.00	46.00	-15.45	-17.29
6	3.03034	0.39	34.12	16.69	34.51	17.08	56.00	46.00	-21.49	-28.92

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.





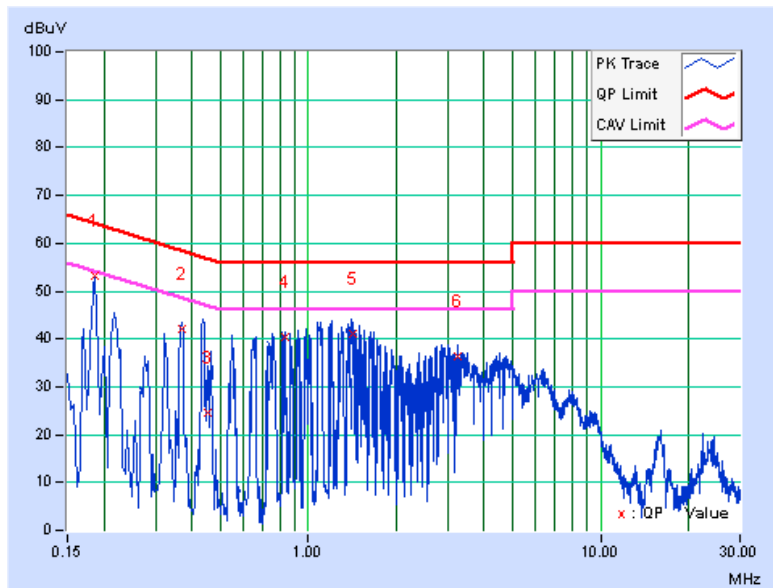
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PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	D	CHANNEL	Channel 116

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18508	0.20	52.85	49.02	53.05	49.22	64.25	54.25	-11.20	-5.03
2	0.36816	0.22	41.97	37.93	42.19	38.15	58.54	48.54	-16.36	-10.40
3	0.45097	0.22	24.22	9.92	24.44	10.14	56.86	46.86	-32.41	-36.71
4	0.82887	0.26	40.15	31.34	40.41	31.60	56.00	46.00	-15.59	-14.40
5	1.41293	0.29	40.92	24.87	41.21	25.16	56.00	46.00	-14.79	-20.84
6	3.22816	0.38	35.95	17.96	36.33	18.34	56.00	46.00	-19.67	-27.66

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



4.3 PEAK TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.250 ~ 5.350GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.470 ~ 5.725GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB

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

Per KDB 662911 D01 Multiple Transmitter Output v01r02 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;

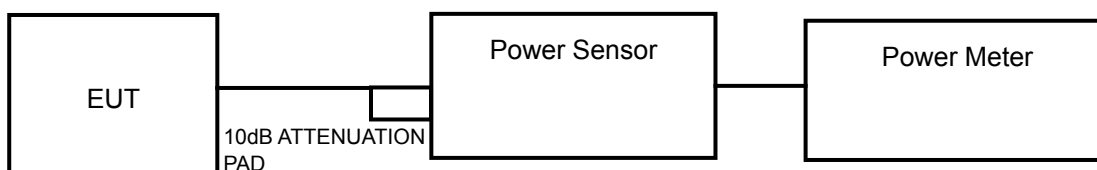
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;

Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.

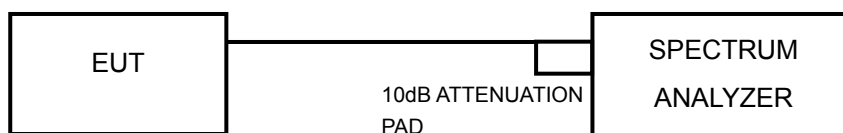
For power measurements on all other devices: Array Gain = 10 log(NANT/NSS) dB.

4.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT



FOR 26dB BANDWIDTH



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

For 802.11a

Duty cycle of test signal is < 98 %. Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

For 802.11n (20MHz) & 802.11n (40MHz)

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 26dB BANDWIDTH

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

4.3.6 EUT OPERATING CONDITIONS

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

4.3.7 TEST RESULTS

POWER OUTPUT: 802.11a

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	13.49	14.11	48.10	16.82	17	PASS
44	5220	13.41	14.4	49.47	16.94	17	PASS
48	5240	13.32	14.27	48.21	16.83	17	PASS
52	5260	19.97	20.65	215.46	23.33	24	PASS
60	5300	19.87	20.45	207.97	23.18	24	PASS
64	5320	16.84	17.23	101.15	20.05	24	PASS
100	5500	17.14	17.15	103.64	20.16	24	PASS
116	5580	20.37	20.4	218.54	23.40	24	PASS
140	5700	14.66	14.70	58.75	17.69	24	PASS

802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	13.21	14.05	46.35	16.66	17	PASS
44	5220	13.06	14.1	45.93	16.62	17	PASS
48	5240	12.95	13.91	44.33	16.47	17	PASS
52	5260	20.13	20.47	214.47	23.31	24	PASS
60	5300	20.03	20.29	207.60	23.17	24	PASS
64	5320	17.49	17.81	116.50	20.66	24	PASS
100	5500	16.22	16.16	83.18	19.20	24	PASS
116	5580	20.3	20.13	210.19	23.23	24	PASS
140	5700	13.57	13.93	47.47	16.76	24	PASS



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802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	13.45	13.70	45.57	16.59	17	PASS
46	5230	13.57	13.96	47.64	16.78	17	PASS
54	5270	19.69	20.37	202.00	23.05	24	PASS
62	5310	13.82	14.11	49.86	16.98	24	PASS
102	5510	12.22	12.00	32.52	15.12	24	PASS
110	5550	19.96	20.24	204.76	23.11	24	PASS
134	5670	18.83	19.06	156.92	21.96	24	PASS

**26dB BANDWIDTH: 802.11a**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	24.29	24.58	PASS
44	5220	24.17	24.63	PASS
48	5240	23.88	24.52	PASS
52	5260	27.42	28.33	PASS
60	5300	26.99	28.24	PASS
64	5320	25.76	25.84	PASS
100	5500	26.89	25.51	PASS
116	5580	27.42	26.45	PASS
140	5700	24.15	25.00	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	27.77	28.30	PASS
44	5220	27.47	27.82	PASS
48	5240	27.52	27.79	PASS
52	5260	28.91	29.90	PASS
60	5300	28.37	30.00	PASS
64	5320	28.53	29.98	PASS
100	5500	27.45	28.50	PASS
116	5580	28.89	29.92	PASS
140	5700	27.41	28.56	PASS

802.11n (40MHz)

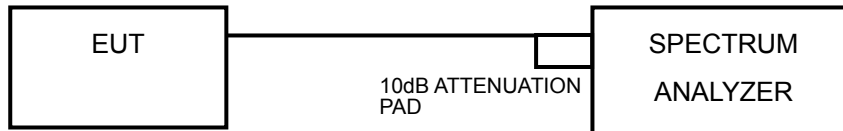
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
38	5190	44.47	45.17	PASS
46	5230	44.23	45.15	PASS
54	5270	60.00	60.00	PASS
62	5310	44.10	44.23	PASS
102	5510	44.07	43.64	PASS
110	5550	60.00	59.94	PASS
134	5670	51.44	51.91	PASS

4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.4.4 TEST PROCEDURES

FOR 802.11a

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 KHz, Set VBW \geq 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = 30ms.
- 5) Perform a single sweep.
- 6) Record the max value and add 10 log (1/duty cycle)

802.11n (20MHz) & 802.11n (40MHz)

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 KHz, Set VBW \geq 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = 30ms, 60ms
- 5) Perform a single sweep.
- 6) Record the max value

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as 4.3.6.

4.4.7 TEST RESULTS

802.11a

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
36	5180	0.52	-0.70	2.96	0.19	3.15	4	PASS
40	5200	0.58	-0.46	3.10	0.19	3.29	4	PASS
48	5240	0.38	-0.70	2.88	0.19	3.07	4	PASS
52	5260	7.10	7.15	10.14	0.19	10.33	11	PASS
60	5300	6.68	6.80	9.90	0.19	10.09	11	PASS
64	5320	6.79	6.20	9.76	0.19	9.95	11	PASS
100	5500	6.94	6.34	9.88	0.19	10.07	11	PASS
116	5580	6.98	7.18	9.45	0.19	9.64	11	PASS
140	5700	4.93	4.87	10.11	0.19	10.30	11	PASS

NOTE: 1. Refer to section 3.3 for duty cycle spectrum plot.

2. 5180 ~ 5240MHz and 5260 ~ 5320MHz: Directional gain = $0.1\text{dBi} + 10\log(2) = 3.11\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.

5500 ~ 5700MHz: Directional gain = $0.8\text{dBi} + 10\log(2) = 3.81\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.

802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
36	5180	0.07	-0.21	2.94	4	PASS
44	5220	0.24	-0.35	2.97	4	PASS
48	5240	-0.08	-0.57	2.69	4	PASS
52	5260	7.32	7.21	10.28	11	PASS
60	5300	6.65	7.22	9.88	11	PASS
64	5320	7.65	7.27	9.74	11	PASS
100	5500	5.09	4.43	10.27	11	PASS
116	5580	7.63	6.63	9.66	11	PASS
140	5700	3.26	2.67	10.28	11	PASS

NOTE: 1. Refer to section 3.3 for duty cycle spectrum plot.

2. 5180 ~ 5240MHz and 5260 ~ 5320MHz: Directional gain = 0.1dBi + 10log(2) = 3.11dBi < 6dBi , so the limit no need to reduced.

5500 ~ 5700MHz: Directional gain = 0.8dBi + 10log(2) = 3.81dBi < 6dBi , so the limit no need to reduced.

802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
38	5190	-3.46	-4.11	-0.76	4	PASS
46	5230	-3.41	-3.71	-0.99	4	PASS
54	5270	2.90	3.48	6.21	11	PASS
62	5310	-3.65	-3.42	6.55	11	PASS
102	5510	-4.31	-4.55	6.26	11	PASS
110	5550	2.89	3.28	6.10	11	PASS
134	5670	0.82	0.05	5.95	11	PASS

NOTE: 1. Refer to section 3.3 for duty cycle spectrum plot.

2. 5180 ~ 5240MHz and 5260 ~ 5320MHz: Directional gain = 0.1dBi + 10log(2) = 3.11dBi < 6dBi , so the limit no need to reduced.

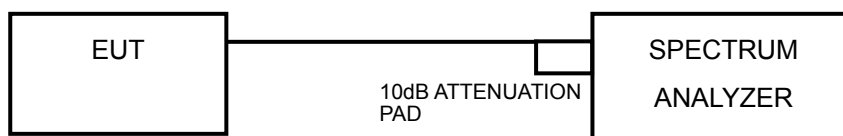
5500 ~ 5700MHz: Directional gain = 0.8dBi + 10log(2) = 3.81dBi < 6dBi , so the limit no need to reduced.

4.5 PEAK POWER EXCURSION MEASUREMENT

4.5.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Shall not exceed 13 dB.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.5.4 TEST PROCEDURE

- 1) Set RBW = 1 MHz, VBW \geq 3 MHz, Detector = peak.
- 2) Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
- 3) Use the peak search function to find the peak of the spectrum.
- 4) Measure the PPSD.
- 5) Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITIONS

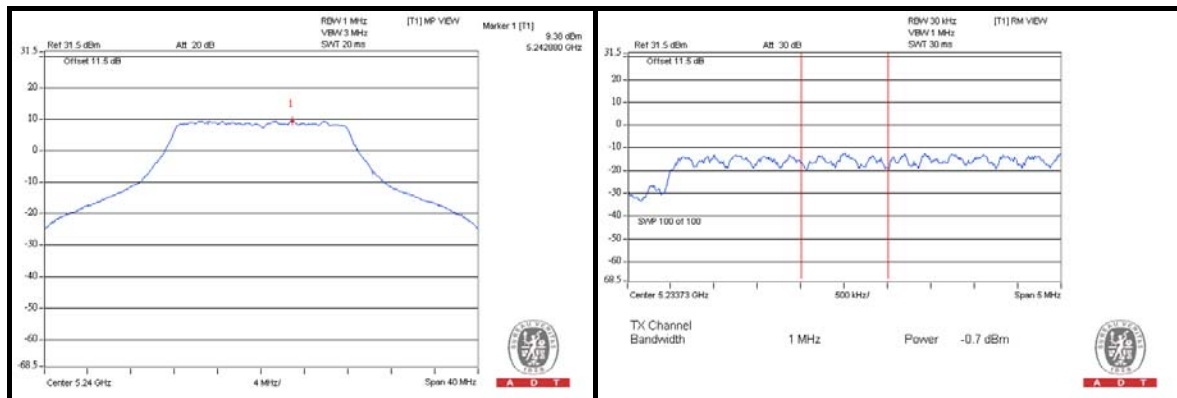
Same as 4.2.6

4.5.7 TEST RESULTS

802.11a

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD WITHOUT DUTY FACTOR (dBm)		PPSD WITH DUTY FACTOR (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS /FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
36	5180	9.86	9.31	0.52	-0.70	0.71	-0.51	9.15	9.82	13	PASS
40	5200	9.96	9.28	0.58	-0.46	0.77	-0.27	9.19	9.55	13	PASS
48	5240	9.98	9.38	0.38	-0.70	0.57	-0.51	9.41	9.89	13	PASS
52	5260	15.06	15.4	7.10	7.15	7.29	7.34	7.77	8.06	13	PASS
60	5300	14.72	15.28	6.68	6.80	6.87	6.99	7.85	8.29	13	PASS
64	5320	14.52	14.56	6.79	6.20	6.98	6.39	7.54	8.17	13	PASS
100	5500	14.95	14.58	6.94	6.34	7.13	6.53	7.82	8.05	13	PASS
116	5580	14.99	15.13	6.98	7.18	7.17	7.37	7.82	7.76	13	PASS
140	5700	12.33	12.14	4.93	4.87	5.12	5.06	7.21	7.08	13	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

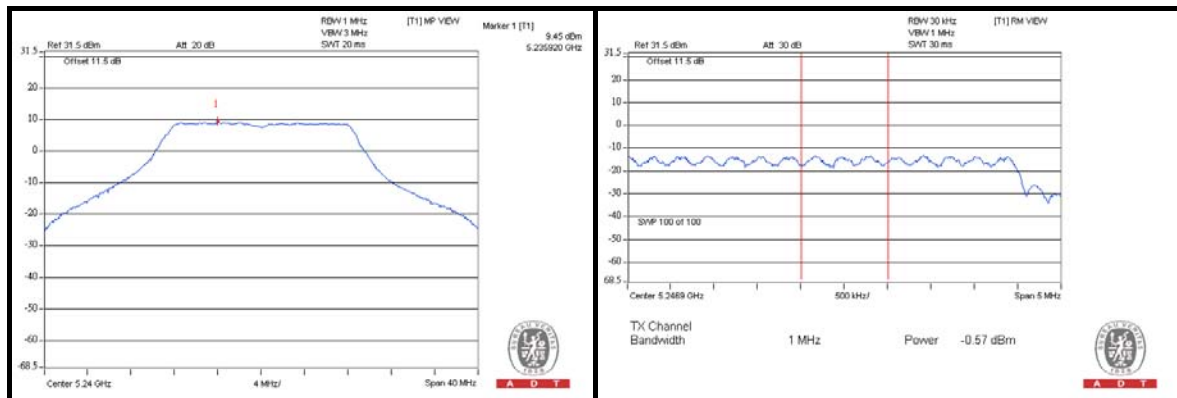




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802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
36	5180	10.00	9.54	0.07	-0.21	9.93	9.75	13	PASS
44	5220	9.92	9.54	0.24	-0.35	9.68	9.89	13	PASS
48	5240	9.75	9.45	-0.08	-0.57	9.83	10.02	13	PASS
52	5260	15.16	15.32	7.32	7.21	7.84	8.11	13	PASS
60	5300	14.83	15.22	6.65	7.22	8.18	8.00	13	PASS
64	5320	15.64	15.23	7.65	7.27	7.99	7.96	13	PASS
100	5500	13.42	12.22	5.09	4.43	8.33	7.79	13	PASS
116	5580	15.61	14.56	7.63	6.63	7.98	7.93	13	PASS
140	5700	11.46	10.96	3.26	2.67	8.20	8.29	13	PASS

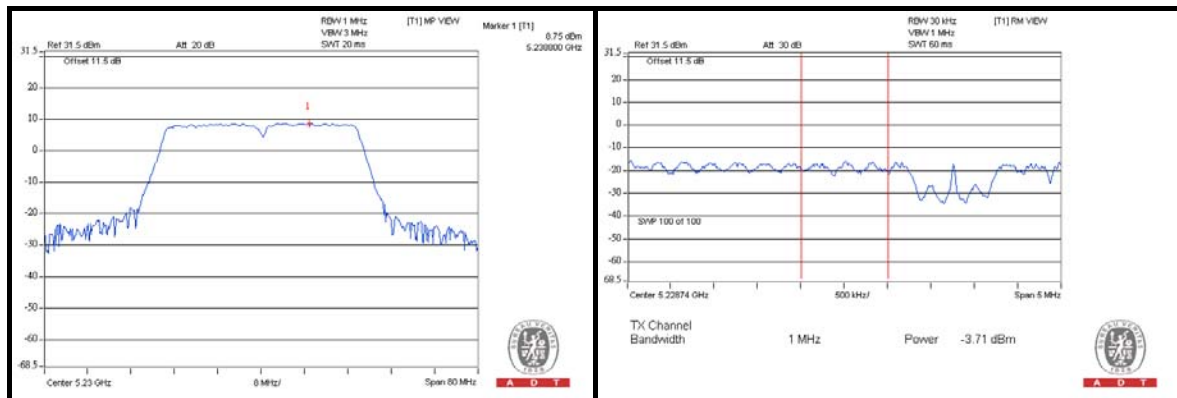




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802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)		PPSD (dBm)		PEAK EXCURSION (dB)		LIMIT (dB)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
38	5190	8.27	8.31	-3.46	-4.11	11.73	12.42	13	PASS
46	5230	8.25	8.75	-3.41	-3.71	11.66	12.46	13	PASS
54	5270	14.45	15.27	2.90	3.48	11.55	11.79	13	PASS
62	5310	7.87	8.50	-3.65	-3.42	11.52	11.92	13	PASS
102	5510	6.88	6.54	-4.31	-4.55	11.19	11.09	13	PASS
110	5550	14.5	15.03	2.89	3.28	11.61	11.75	13	PASS
134	5670	12.08	12.39	0.82	0.05	11.26	12.34	13	PASS

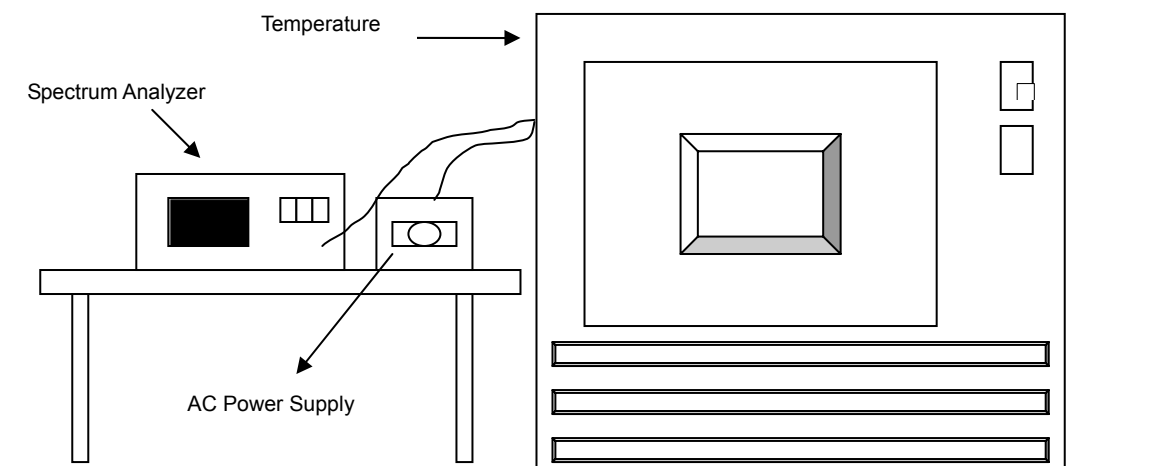


4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency of the carrier signal shall be maintained within band of operation

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.6.4 TEST PROCEDURE

- a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITION

Set the EUT transmit at un-modulation mode to test frequency stability.



4.6.7 TEST RESULTS

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5200MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
50	110.0	5200.003295	0.634	5200.003573	0.687	5200.002991	0.575	5200.003155	0.607
40	110.0	5200.003742	0.720	5200.003543	0.681	5200.003969	0.763	5200.003690	0.710
30	110.0	5200.004750	0.913	5200.005167	0.994	5200.004888	0.940	5200.005017	0.965
20	110.0	5200.006068	1.167	5200.005907	1.136	5200.005988	1.152	5200.006572	1.264
10	110.0	5200.007654	1.472	5200.007691	1.479	5200.008508	1.636	5200.008155	1.568
0	110.0	5200.006236	1.199	5200.005759	1.108	5200.006453	1.241	5200.006325	1.216
-10	110.0	5200.004827	0.928	5200.004822	0.927	5200.004836	0.930	5200.004860	0.935
-20	110.0	5200.003737	0.719	5200.003798	0.730	5200.004190	0.806	5200.004511	0.868
-30	110.0	5200.002804	0.539	5200.003173	0.610	5200.003083	0.593	5200.003158	0.607

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5200MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	93.5	5200.005138	0.988	5200.005228	1.005	5200.005027	0.967	5200.005168	0.994
	110.0	5200.006068	1.167	5200.005907	1.136	5200.005988	1.152	5200.006572	1.264
	126.5	5200.007863	1.512	5200.007609	1.463	5200.007742	1.489	5200.008015	1.541

5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



6. INFORMATION ON THE TESTING LABORATORIES

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

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF Lab

Tel: 886-3-5935343

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Tel: 886-3-3183232

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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

No modifications were made to the EUT by the lab during the test.

---END---