

FCC TEST REPORT (15.407)

REPORT NO.: RF121011C15-3

MODEL NO.: GT-I9268

FCC ID: A3LGTI9268

RECEIVED: Oct. 11, 2012

TESTED: Oct. 17 ~ Oct. 19, 2012

ISSUED: Oct. 26, 2012

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF121011C15-3	Original release	Oct. 26, 2012

1. CERTIFICATION

PRODUCT: Mobile Phone

MODEL NO.: GT-I9268

BRAND: SAMSUNG

APPLICANT: SAMSUNG Electronics Co., LTD.

TESTED: Oct. 17 ~ Oct. 19, 2012

TEST SAMPLE: Production Unit

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

ANSI C63.10-2009

The above equipment (model: GT-I9268) 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 : Ivonne Wu , **DATE** : Oct. 26, 2012
Ivonne Wu / Senior Specialist

APPROVED BY : Ken Liu , **DATE** : Oct. 26, 2012
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 -3.42dB at 13.55859MHz.
15.407(b/1/2/3)(b)(6)	Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.74dB at 44.58MHz.
15.407(a/1/2)	Peak Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a/1/2)	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	No antenna connector is used.

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	2.93 dB
	200MHz ~1000MHz	2.95 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	Mobile Phone
MODEL NO.	GT-I9268
POWER SUPPLY	5.0Vdc (adapter or host equipment) 3.8Vdc (Li-ion battery)
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 135.0Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz & 5500 ~ 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: 11 for 802.11a, 802.11n (20MHz) 5 for 802.11n (40MHz)
OUTPUT POWER	18.32mW for 5180 ~ 5240MHz 18.79mW for 5260 ~ 5320MHz 18.37mW for 5500 ~ 5700MHz
ANTENNA TYPE	PIFA antenna with -3.5dBi gain
ANTENNA CONNECTOR	NA
DATA CABLE	Refer to Note as below
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Refer to Note as below

NOTE:

1. The EUT has following accessories.

No.	Product	Brand	MODEL	Description
1	Power Adapter	SAMSUNG	ETA0U82CBC	I/P: 100-240Vac, 50-60Hz, 0.15A O/P: 5.0Vdc, 1.0A
2	Battery	SAMSUNG	EB-L1H7LLU	Rating: 3.8 Vdc, 7.98Wh, 2100mAh Type: Li-ion
3	Earphone	SAMSUNG	EHS64AVFWE (GH59-11720)	1.2m non-shielded cable without ferrite core
4	USB Cable	SAMSUNG	ECB-DU5ABC (RT1C730KS E)	1.0m non-shielded cable without ferrite core

2. SW version is I9268.01.
3. HW version is I9268.01.

4. The EUT provides one completed transmitter and one receiver.

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

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

3.2 DESCRIPTION OF TEST MODES

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 ~ 5700MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510MHz	126	5630MHz
110	5550MHz	134	5670MHz
118	5590MHz		

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

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

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

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane**.

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.

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	BPSK	6.0
802.11n (20MHz)		36 to 48	36, 44, 48	OFDM	BPSK	6.5
802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5

RADIATED EMISSION TEST (BELOW 1GHz):

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11n (40MHz)	5260-5320	54 to 62	62	OFDM	BPSK	13.5

POWER LINE CONDUCTED EMISSION TEST:

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11n (40MHz)	5260-5320	54 to 62	62	OFDM	BPSK	13.5

BANDEDGE MEASUREMENT:

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5180-5240	36 to 48	36, 48	OFDM	BPSK	6.0
802.11n (20MHz)		36 to 48	36, 48	OFDM	BPSK	6.5
802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11a	5260-5320	52 to 64	52, 64	OFDM	BPSK	6.0
802.11n (20MHz)		52 to 64	52, 64	OFDM	BPSK	6.5
802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11a	5500-5700	100 to 140	100, 140	OFDM	BPSK	6.0
802.11n (20MHz)		100 to 140	100, 140	OFDM	BPSK	6.5
802.11n (40MHz)		102 to 134	102, 134	OFDM	BPSK	13.5

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.

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	BPSK	6.0
802.11n (20MHz)		36 to 48	36, 44, 48	OFDM	BPSK	6.5
802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5

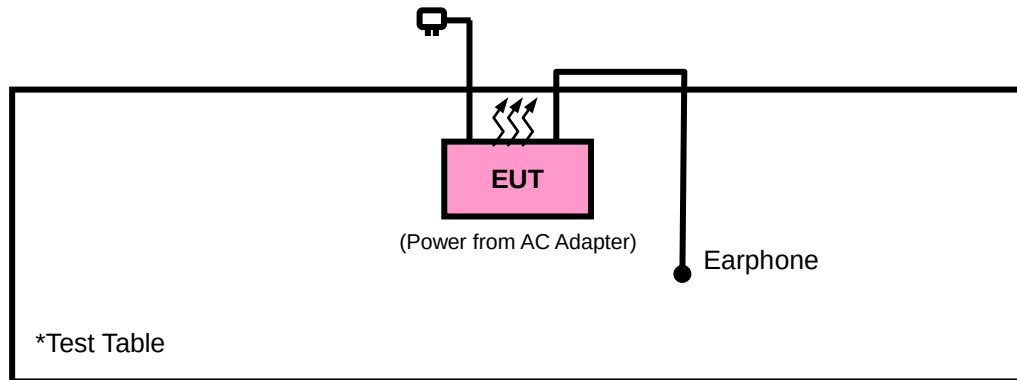
TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu
PLC	25deg. C, 65%RH	120Vac, 60Hz	David Huang
APCM	25deg. C, 65%RH	120Vac, 60Hz	Phoenix Chen

3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



3.4 DUTY CYCLE OF TEST SIGNAL

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

802.11a: Duty cycle = $1.42/1.53 = 0.928$, Duty factor = $10 * \log(1/0.928) = 0.32$

802.11n (20MHz): Duty cycle = $1.33/1.44 = 0.924$, Duty factor = $10 * \log(1/0.924) = 0.34$

802.11n (40MHz): Duty cycle = $660/770 = 0.857$, Duty factor = $10 * \log(1/0.857) = 0.67$



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)

ANSI C63.10-2009

KDB 789033 D01 General UNII Test Procedures v01r01

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

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

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

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver Agilent	N9038A	MY51210203	Dec. 22, 2011	Dec. 21, 2012
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2011	Dec. 20, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Dec. 20, 2011	Dec. 19, 2012
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Dec. 20, 2011	Dec. 19, 2012
ORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 20, 2011	Dec. 19, 2012
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier EMCI	EMC 012645	980115	Dec. 30, 2011	Dec. 29, 2012
Preamplifier EMCI	EMC 330H	980112	Dec. 30, 2011	Dec. 29, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4	Oct. 21, 2011	Oct. 20, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Jan. 02, 2012	Jan. 01, 2013
RF signal cable Worken	RG-213	NA	Jan. 02, 2012	Jan. 01, 2013
Software	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 29, 2011	Oct. 28, 2012
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA
JFW 20dB attenuation	50HF-020-SMA	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 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 9.
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 IC 7450F-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.

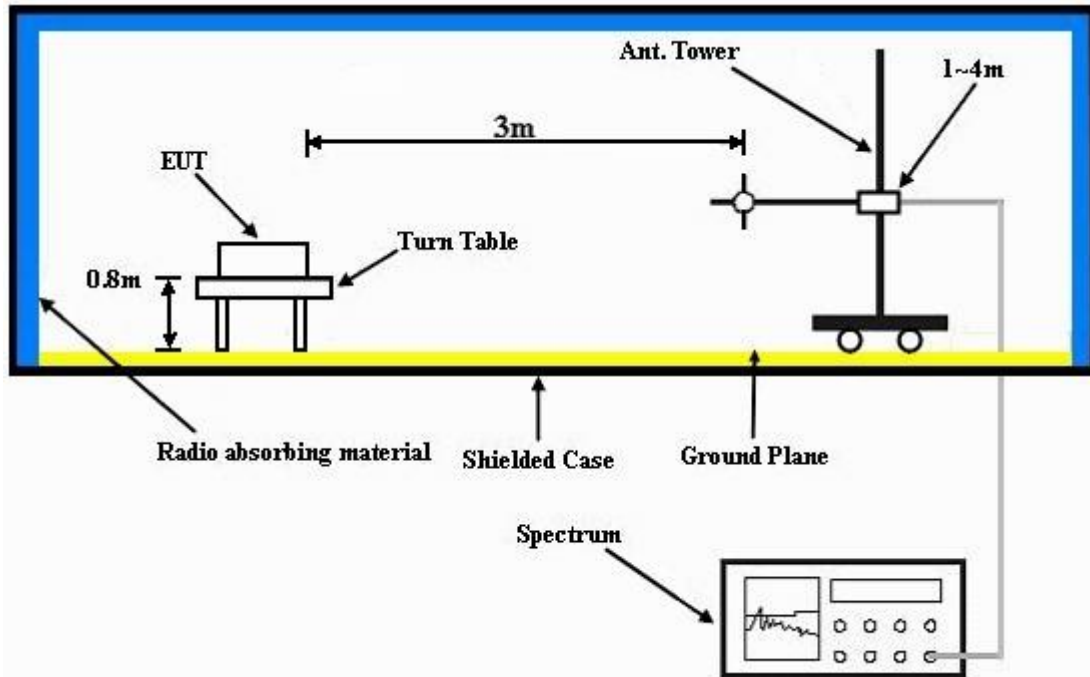
NOTE:

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

- Placed the EUT on a testing table.
- Use the software to control the EUT under transmission condition continuously at specific channel frequency.

4.1.8 TEST RESULTS

ABOVE 1GHz DATA: 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5142	40.57	38.66	54	-13.43	31.87	7.34	37.3	108	282	Average
5142	56.7	54.79	74	-17.3	31.87	7.34	37.3	108	282	Peak
5180	91.2	89.34			31.88	7.32	37.34	108	282	Average
5180	101.12	99.26			31.88	7.32	37.34	108	282	Peak
5424	39.57	37.35	54	-14.43	32	7.4	37.18	108	282	Average
5424	56.08	53.86	74	-17.92	32	7.4	37.18	108	282	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5100	40.84	38.93	54	-13.16	31.84	7.35	37.28	102	33	Average
5100	55.78	53.87	74	-18.22	31.84	7.35	37.28	102	33	Peak
5180	92.02	90.16			31.88	7.32	37.34	102	33	Average
5180	102.05	100.19			31.88	7.32	37.34	102	33	Peak
5422	39.48	37.26	54	-14.52	32	7.4	37.18	102	33	Average
5422	55.44	53.22	74	-18.56	32	7.4	37.18	102	33	Peak

REMARKS: 5180MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5144	39.84	37.96	54	-14.16	31.87	7.33	37.32	100	227	Average
5144	56.71	54.83	74	-17.29	31.87	7.33	37.32	100	227	Peak
5220	87.45	85.59			31.9	7.32	37.36	100	227	Average
5220	97.54	95.68			31.9	7.32	37.36	100	227	Peak
5388	39.85	37.65	54	-14.15	31.98	7.4	37.18	100	227	Average
5388	56.4	54.2	74	-17.6	31.98	7.4	37.18	100	227	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5034	39.63	37.87	54	-14.37	31.81	7.19	37.24	100	26	Average
5034	56.57	54.81	74	-17.43	31.81	7.19	37.24	100	26	Peak
5220	90.31	88.45			31.9	7.32	37.36	100	26	Average
5220	100.25	98.39			31.9	7.32	37.36	100	26	Peak
5394	39.79	37.59	54	-14.21	31.98	7.4	37.18	100	26	Average
5394	56.06	53.86	74	-17.94	31.98	7.4	37.18	100	26	Peak

REMARKS: 5220MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5142	39.84	37.93	54	-14.16	31.87	7.34	37.3	100	228	Average
5142	56.12	54.21	74	-17.88	31.87	7.34	37.3	100	228	Peak
5240	87.94	86.01			31.91	7.34	37.32	100	228	Average
5240	97.8	95.87			31.91	7.34	37.32	100	228	Peak
5372	39.76	37.57	54	-14.24	31.97	7.4	37.18	100	228	Average
5372	56.69	54.5	74	-17.31	31.97	7.4	37.18	100	228	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5148	39.94	38.06	54	-14.06	31.87	7.33	37.32	100	19	Average
5148	56.02	54.14	74	-17.98	31.87	7.33	37.32	100	19	Peak
5240	89.55	87.62			31.91	7.34	37.32	100	19	Average
5240	99.3	97.37			31.91	7.34	37.32	100	19	Peak
5400	39.95	37.74	54	-14.05	31.99	7.4	37.18	100	19	Average
5400	56.53	54.32	74	-17.47	31.99	7.4	37.18	100	19	Peak

REMARKS: 5240MHz: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5146	39.76	37.88	54	-14.24	31.87	7.33	37.32	105	229	Average
5146	57.08	55.2	74	-16.92	31.87	7.33	37.32	105	229	Peak
5260	87.87	85.86			31.92	7.36	37.27	105	229	Average
5260	98.11	96.1			31.92	7.36	37.27	105	229	Peak
5366	39.7	37.51	54	-14.3	31.97	7.4	37.18	105	229	Average
5366	56.63	54.44	74	-17.37	31.97	7.4	37.18	105	229	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5072	39.55	37.69	54	-14.45	31.83	7.3	37.27	100	353	Average
5072	56.13	54.27	74	-17.87	31.83	7.3	37.27	100	353	Peak
5260	89.41	87.4			31.92	7.36	37.27	100	353	Average
5260	99.16	97.15			31.92	7.36	37.27	100	353	Peak
5426	39.95	37.61	54	-14.05	32	7.47	37.13	100	353	Average
5426	56.35	54.01	74	-17.65	32	7.47	37.13	100	353	Peak

REMARKS: 5260MHz: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5090	39.57	37.7	54	-14.43	31.84	7.3	37.27	103	288	Average
5090	56.58	54.71	74	-17.42	31.84	7.3	37.27	103	288	Peak
5300	89.08	86.93			31.94	7.4	37.19	103	288	Average
5300	98.58	96.43			31.94	7.4	37.19	103	288	Peak
5400	39.86	37.65	54	-14.14	31.99	7.4	37.18	103	288	Average
5400	56.37	54.16	74	-17.63	31.99	7.4	37.18	103	288	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5140	39.8	37.89	54	-14.2	31.87	7.34	37.3	100	18	Average
5140	56.59	54.68	74	-17.41	31.87	7.34	37.3	100	18	Peak
5300	91.83	89.68			31.94	7.4	37.19	100	18	Average
5300	101.84	99.69			31.94	7.4	37.19	100	18	Peak
5370	39.94	37.75	54	-14.06	31.97	7.4	37.18	100	18	Average
5370	56.74	54.55	74	-17.26	31.97	7.4	37.18	100	18	Peak

REMARKS: 5300MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5082	39.45	37.59	54	-14.55	31.83	7.3	37.27	111	245	Average
5082	56.33	54.47	74	-17.67	31.83	7.3	37.27	111	245	Peak
5320	88.47	86.31			31.95	7.4	37.19	111	245	Average
5320	98.54	96.38			31.95	7.4	37.19	111	245	Peak
5404	40.02	37.81	54	-13.98	31.99	7.4	37.18	111	245	Average
5404	56.75	54.54	74	-17.25	31.99	7.4	37.18	111	245	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5140	39.73	37.82	54	-14.27	31.87	7.34	37.3	100	23	Average
5140	56.88	54.97	74	-17.12	31.87	7.34	37.3	100	23	Peak
5320	89.12	86.96			31.95	7.4	37.19	100	23	Average
5320	99.63	97.47			31.95	7.4	37.19	100	23	Peak
5460	40.17	37.71	54	-13.83	32.01	7.53	37.08	100	23	Average
5460	56.68	54.22	74	-17.32	32.01	7.53	37.08	100	23	Peak

REMARKS: 5320MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5394	40.36	38.16	54	-13.64	31.98	7.4	37.18	100	263	Average
5394	57.09	54.89	74	-16.91	31.98	7.4	37.18	100	263	Peak
5470	56.14	53.67	68.3	-12.16	32.02	7.53	37.08	100	263	Peak
5500	79.06	76.46			32.04	7.59	37.03	100	263	Average
5500	89.61	87.01			32.04	7.59	37.03	100	263	Peak
5725	55.62	52.98	68.3	-12.68	32.36	7.71	37.43	100	263	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5386	40.44	38.24	54	-13.56	31.98	7.4	37.18	112	110	Average
5386	57.13	54.93	74	-16.87	31.98	7.4	37.18	112	110	Peak
5470	54.39	51.92	68.3	-13.91	32.02	7.53	37.08	112	110	Peak
5500	79.13	76.53			32.04	7.59	37.03	112	110	Average
5500	88.92	86.32			32.04	7.59	37.03	112	110	Peak
5725	55.83	53.19	68.3	-12.47	32.36	7.71	37.43	112	110	Peak

REMARKS:

- 5550MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5374	40.11	37.92	54	-13.89	31.97	7.4	37.18	108	286	Average
5374	55.87	53.68	74	-18.13	31.97	7.4	37.18	108	286	Peak
5470	54.57	52.1	68.3	-13.73	32.02	7.53	37.08	108	286	Peak
5580	91.53	88.98			32.14	7.57	37.16	108	286	Average
5580	100.93	98.38			32.14	7.57	37.16	108	286	Peak
5725	55.67	53.03	68.3	-12.63	32.36	7.71	37.43	108	286	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5458	40.12	37.66	54	-13.88	32.01	7.53	37.08	100	115	Average
5458	55.88	53.42	74	-18.12	32.01	7.53	37.08	100	115	Peak
5470	55.04	52.57	68.3	-13.26	32.02	7.53	37.08	100	115	Peak
5580	90.34	87.79			32.14	7.57	37.16	100	115	Average
5580	99.98	97.43			32.14	7.57	37.16	100	115	Peak
5725	55.2	52.56	68.3	-13.1	32.36	7.71	37.43	100	115	Peak

REMARKS:

- 5580MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5392	39.94	37.74	54	-14.06	31.98	7.4	37.18	100	229	Average
5392	56.67	54.47	74	-17.33	31.98	7.4	37.18	100	229	Peak
5470	54.79	52.32	68.3	-13.51	32.02	7.53	37.08	100	229	Peak
5700	89.67	87.07			32.31	7.69	37.4	100	229	Average
5700	99.14	96.54			32.31	7.69	37.4	100	229	Peak
5725	55.04	52.4	68.3	-13.26	32.36	7.71	37.43	100	229	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5392	39.77	37.57	54	-14.23	31.98	7.4	37.18	100	123	Average
5392	56.42	54.22	74	-17.58	31.98	7.4	37.18	100	123	Peak
5470	54.54	52.07	68.3	-13.76	32.02	7.53	37.08	100	123	Peak
5700	89.58	86.98			32.31	7.69	37.4	100	123	Average
5700	98.86	96.26			32.31	7.69	37.4	100	123	Peak
5725	55.63	52.99	68.3	-12.67	32.36	7.71	37.43	100	123	Peak

REMARKS:

- 5700MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	40.06	38.18	54	-13.94	31.87	7.33	37.32	104	282	Average
5150	53.83	51.95	74	-20.17	31.87	7.33	37.32	104	282	Peak
5180	87.47	85.61			31.88	7.32	37.34	104	282	Average
5180	97.08	95.22			31.88	7.32	37.34	104	282	Peak
5350	40.06	37.87	54	-13.94	31.97	7.4	37.18	104	282	Average
5350	53.6	51.41	74	-20.4	31.97	7.4	37.18	104	282	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5144	40.23	38.35	54	-13.77	31.87	7.33	37.32	101	34	Average
5144	55.85	53.97	74	-18.15	31.87	7.33	37.32	101	34	Peak
5180	90.07	88.21			31.88	7.32	37.34	101	34	Average
5180	99.45	97.59			31.88	7.32	37.34	101	34	Peak
5350	40.24	38.05	54	-13.76	31.97	7.4	37.18	101	34	Average
5350	54.33	52.14	74	-19.67	31.97	7.4	37.18	101	34	Peak

REMARKS: 5180MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 44	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5136	39.62	37.72	54	-14.38	31.86	7.34	37.3	118	285	Average
5136	56.57	54.67	74	-17.43	31.86	7.34	37.3	118	285	Peak
5220	87.46	85.6			31.9	7.32	37.36	118	285	Average
5220	96.8	94.94			31.9	7.32	37.36	118	285	Peak
5350	39.41	37.22	54	-14.59	31.97	7.4	37.18	118	285	Average
5350	52.96	50.77	74	-21.04	31.97	7.4	37.18	118	285	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.88	38	54	-14.12	31.87	7.33	37.32	101	30	Average
5150	53.21	51.33	74	-20.79	31.87	7.33	37.32	101	30	Peak
5220	91.51	89.65			31.9	7.32	37.36	101	30	Average
5220	100.68	98.82			31.9	7.32	37.36	101	30	Peak
5350	39.54	37.35	54	-14.46	31.97	7.4	37.18	101	30	Average
5350	53.76	51.57	74	-20.24	31.97	7.4	37.18	101	30	Peak

REMARKS: 5220MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.61	37.73	54	-14.39	31.87	7.33	37.32	103	293	Average
5150	54.79	52.91	74	-19.21	31.87	7.33	37.32	103	293	Peak
5240	87.89	85.96			31.91	7.34	37.32	103	293	Average
5240	97.78	95.85			31.91	7.34	37.32	103	293	Peak
5350	39.57	37.38	54	-14.43	31.97	7.4	37.18	103	293	Average
5350	55.26	53.07	74	-18.74	31.97	7.4	37.18	103	293	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.79	37.91	54	-14.21	31.87	7.33	37.32	101	31	Average
5150	55.27	53.39	74	-18.73	31.87	7.33	37.32	101	31	Peak
5240	90.9	88.97			31.91	7.34	37.32	101	31	Average
5240	100.51	98.58			31.91	7.34	37.32	101	31	Peak
5350	39.38	37.19	54	-14.62	31.97	7.4	37.18	101	31	Average
5350	55.81	53.62	74	-18.19	31.97	7.4	37.18	101	31	Peak

REMARKS: 5240MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.69	37.81	54	-14.31	31.87	7.33	37.32	105	285	Average
5150	54.34	52.46	74	-19.66	31.87	7.33	37.32	105	285	Peak
5260	88.19	86.18			31.92	7.36	37.27	105	285	Average
5260	97.73	95.72			31.92	7.36	37.27	105	285	Peak
5350	39.8	37.61	54	-14.2	31.97	7.4	37.18	105	285	Average
5350	54.79	52.6	74	-19.21	31.97	7.4	37.18	105	285	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.49	37.61	54	-14.51	31.87	7.33	37.32	100	29	Average
5150	54.21	52.33	74	-19.79	31.87	7.33	37.32	100	29	Peak
5260	90.61	88.6			31.92	7.36	37.27	100	29	Average
5260	100.17	98.16			31.92	7.36	37.27	100	29	Peak
5350	39.66	37.47	54	-14.34	31.97	7.4	37.18	100	29	Average
5350	53.44	51.25	74	-20.56	31.97	7.4	37.18	100	29	Peak

REMARKS: 5260MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.46	37.58	54	-14.54	31.87	7.33	37.32	100	290	Average
5150	54.43	52.55	74	-19.57	31.87	7.33	37.32	100	290	Peak
5300	87.82	85.67			31.94	7.4	37.19	100	290	Average
5300	97.32	95.17			31.94	7.4	37.19	100	290	Peak
5350	39.83	37.64	54	-14.17	31.97	7.4	37.18	100	290	Average
5350	54.36	52.17	74	-19.64	31.97	7.4	37.18	100	290	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.66	37.78	54	-14.34	31.87	7.33	37.32	100	30	Average
5150	54.49	52.61	74	-19.51	31.87	7.33	37.32	100	30	Peak
5300	90.37	88.22			31.94	7.4	37.19	100	30	Average
5300	99.6	97.45			31.94	7.4	37.19	100	30	Peak
5350	39.68	37.49	54	-14.32	31.97	7.4	37.18	100	30	Average
5350	53.22	51.03	74	-20.78	31.97	7.4	37.18	100	30	Peak

REMARKS: 5300MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.37	37.49	54	-14.63	31.87	7.33	37.32	100	291	Average
5150	54.52	52.64	74	-19.48	31.87	7.33	37.32	100	291	Peak
5320	87.77	85.61			31.95	7.4	37.19	100	291	Average
5320	97	94.84			31.95	7.4	37.19	100	291	Peak
5350	39.55	37.36	54	-14.45	31.97	7.4	37.18	100	291	Average
5350	55.62	53.43	74	-18.38	31.97	7.4	37.18	100	291	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	39.65	37.77	54	-14.35	31.87	7.33	37.32	100	29	Average
5150	54.11	52.23	74	-19.89	31.87	7.33	37.32	100	29	Peak
5320	89.66	87.5			31.95	7.4	37.19	100	29	Average
5320	99.09	96.93			31.95	7.4	37.19	100	29	Peak
5350	39.89	37.7	54	-14.11	31.97	7.4	37.18	100	29	Average
5350	55.01	52.82	74	-18.99	31.97	7.4	37.18	100	29	Peak

REMARKS: 5320MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	40.29	37.83	54	-13.71	32.01	7.53	37.08	100	282	Average
5460	55.2	52.74	74	-18.8	32.01	7.53	37.08	100	282	Peak
5470	54.35	51.88	68.3	-13.95	32.02	7.53	37.08	100	282	Peak
5500	90.73	88.13			32.04	7.59	37.03	100	282	Average
5500	100.93	98.33			32.04	7.59	37.03	100	282	Peak
5725	55.15	52.51	68.3	-13.15	32.36	7.71	37.43	100	282	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	39.98	37.52	54	-14.02	32.01	7.53	37.08	100	0	Average
5460	53.84	51.38	74	-20.16	32.01	7.53	37.08	100	0	Peak
5470	55.99	53.52	68.3	-12.31	32.02	7.53	37.08	100	0	Peak
5500	87.99	85.39			32.04	7.59	37.03	100	0	Average
5500	97.46	94.86			32.04	7.59	37.03	100	0	Peak
5725	54.2	51.56	68.3	-14.1	32.36	7.71	37.43	100	0	Peak

REMARKS:

- 5500MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	40.23	37.77	54	-13.77	32.01	7.53	37.08	117	283	Average
5460	55.34	52.88	74	-18.66	32.01	7.53	37.08	117	283	Peak
5470	54.67	52.2	68.3	-13.63	32.02	7.53	37.08	117	283	Peak
5580	91.17	88.62			32.14	7.57	37.16	117	283	Average
5580	100.61	98.06			32.14	7.57	37.16	117	283	Peak
5725	54.56	51.92	68.3	-13.74	32.36	7.71	37.43	117	283	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	40.07	37.61	54	-13.93	32.01	7.53	37.08	100	52	Average
5460	55.57	53.11	74	-18.43	32.01	7.53	37.08	100	52	Peak
5470	54.09	51.62	68.3	-14.21	32.02	7.53	37.08	100	52	Peak
5580	88.5	85.95			32.14	7.57	37.16	100	52	Average
5580	97.63	95.08			32.14	7.57	37.16	100	52	Peak
5725	54.24	51.6	68.3	-14.06	32.36	7.71	37.43	100	52	Peak

REMARKS:

- 5580MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	40.04	37.58	54	-13.96	32.01	7.53	37.08	114	285	Average
5460	54.88	52.42	74	-19.12	32.01	7.53	37.08	114	285	Peak
5470	53.97	51.5	68.3	-14.33	32.02	7.53	37.08	114	285	Peak
5700	90.44	87.84			32.31	7.69	37.4	114	285	Average
5700	99.37	96.77			32.31	7.69	37.4	114	285	Peak
5725	55.22	52.58	68.3	-13.08	32.36	7.71	37.43	114	285	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	40.17	37.71	54	-13.83	32.01	7.53	37.08	102	18	Average
5460	53.66	51.2	74	-20.34	32.01	7.53	37.08	102	18	Peak
5470	53.57	51.1	68.3	-14.73	32.02	7.53	37.08	102	18	Peak
5700	91.17	88.57			32.31	7.69	37.4	102	18	Average
5700	100.58	97.98			32.31	7.69	37.4	102	18	Peak
5725	54.29	51.65	68.3	-14.01	32.36	7.71	37.43	102	18	Peak

REMARKS:

1. 5700MHz: Fundamental frequency.
2. 5470MHz & 5725MHz: Out of restricted band

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5148	43.1	41.22	54	-10.9	31.87	7.33	37.32	100	224	Average
5148	62.14	60.26	74	-11.86	31.87	7.33	37.32	100	224	Peak
5190	86.12	84.26			31.88	7.32	37.34	100	224	Average
5190	96.79	94.92			31.89	7.32	37.34	100	224	Peak
5380	40.24	38.04	54	-13.76	31.98	7.4	37.18	100	224	Average
5380	52.34	50.14	74	-21.66	31.98	7.4	37.18	100	224	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5148	42.08	40.2	54	-11.92	31.87	7.33	37.32	100	28	Average
5148	54.63	52.75	74	-19.37	31.87	7.33	37.32	100	28	Peak
5190	87.13	85.27			31.88	7.32	37.34	100	28	Average
5190	96.77	94.91			31.88	7.32	37.34	100	28	Peak
5372	40.24	38.05	54	-13.76	31.97	7.4	37.18	100	28	Average
5372	52.12	49.93	74	-21.88	31.97	7.4	37.18	100	28	Peak

REMARKS: 5190MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5134	39.98	38.08	54	-14.02	31.86	7.34	37.3	100	317	Average
5134	52.82	50.92	74	-21.18	31.86	7.34	37.3	100	317	Peak
5230	85.75	83.82			31.91	7.34	37.32	100	317	Average
5230	96.64	94.71			31.91	7.34	37.32	100	317	Peak
5402	39.61	37.4	54	-14.39	31.99	7.4	37.18	100	317	Average
5402	52.85	50.64	74	-21.15	31.99	7.4	37.18	100	317	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5052	40.06	38.24	54	-13.94	31.82	7.25	37.25	101	29	Average
5052	52.59	50.77	74	-21.41	31.82	7.25	37.25	101	29	Peak
5230	89.76	87.83			31.91	7.34	37.32	101	29	Average
5230	100.82	98.89			31.91	7.34	37.32	101	29	Peak
5348	39.94	37.75	54	-14.06	31.97	7.4	37.18	101	29	Average
5348	52.1	49.91	74	-21.9	31.97	7.4	37.18	101	29	Peak

REMARKS: 5230MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5118	39.79	37.87	54	-14.21	31.85	7.35	37.28	105	282	Average
5118	52.69	50.77	74	-21.31	31.85	7.35	37.28	105	282	Peak
5270	88.71	86.7			31.92	7.36	37.27	105	282	Average
5270	99.33	97.32			31.92	7.36	37.27	105	282	Peak
5458	40.3	37.84	54	-13.7	32.01	7.53	37.08	105	282	Average
5458	51.9	49.44	74	-22.1	32.01	7.53	37.08	105	282	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5148	40.03	38.15	54	-13.97	31.87	7.33	37.32	100	21	Average
5148	52.94	51.06	74	-21.06	31.87	7.33	37.32	100	21	Peak
5270	89.62	87.61			31.92	7.36	37.27	100	21	Average
5270	99.55	97.54			31.92	7.36	37.27	100	21	Peak
5372	40.15	37.96	54	-13.85	31.97	7.4	37.18	100	21	Average
5372	52.94	50.75	74	-21.06	31.97	7.4	37.18	100	21	Peak

REMARKS: 5270MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5148	39.89	38.01	54	-14.11	31.87	7.33	37.32	101	297	Average
5148	51.97	50.09	74	-22.03	31.87	7.33	37.32	101	297	Peak
5310	87.95	85.79			31.95	7.4	37.19	101	297	Average
5310	97.6	95.44			31.95	7.4	37.19	101	297	Peak
5350	42.54	40.35	54	-11.46	31.97	7.4	37.18	101	297	Average
5350	57.87	55.68	74	-16.13	31.97	7.4	37.18	101	297	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5138	39.99	0.79	54	-14.01	31.86	7.34	0	100	31	Average
5138	52.15	12.95	74	-21.85	31.86	7.34	0	100	31	Peak
5310	89.53	50.18			31.95	7.4	0	100	31	Average
5310	98.75	59.41			31.94	7.4	0	100	31	Peak
5350	42.86	3.49	54	-11.14	31.97	7.4	0	100	31	Average
5350	57.69	18.32	74	-16.31	31.97	7.4	0	100	31	Peak

REMARKS: 5310MHz: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5458	41.57	39.11	54	-12.43	32.01	7.53	37.08	100	227	Average
5458	53.51	51.05	74	-20.49	32.01	7.53	37.08	100	227	Peak
5470	56.25	53.78	68.3	-12.05	32.02	7.53	37.08	100	227	Peak
5510	89.94	87.37			32.04	7.59	37.06	100	227	Average
5510	99.4	96.83			32.04	7.59	37.06	100	227	Peak
5725	51.27	48.63	68.3	-17.03	32.36	7.71	37.43	100	227	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5394	40.96	38.76	54	-13.04	31.98	7.4	37.18	101	58	Average
5394	52.59	50.39	74	-21.41	31.98	7.4	37.18	101	58	Peak
5470	51.18	48.71	68.3	-17.12	32.02	7.53	37.08	101	58	Peak
5510	88.91	86.34			32.04	7.59	37.06	101	58	Average
5510	98.11	95.54			32.04	7.59	37.06	101	58	Peak
5725	50.33	47.69	68.3	-17.97	32.36	7.71	37.43	101	58	Peak

REMARKS:

- 5510MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5424	41.23	39.01	54	-12.77	32	7.4	37.18	111	280	Average
5424	53.27	51.05	74	-20.73	32	7.4	37.18	111	280	Peak
5470	52.4	49.93	68.3	-15.9	32.02	7.53	37.08	111	280	Peak
5550	89.83	87.23			32.11	7.58	37.09	111	280	Average
5550	100.09	97.49			32.11	7.58	37.09	111	280	Peak
5725	51.14	48.5	68.3	-17.16	32.36	7.71	37.43	111	280	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5388	40.48	38.28	54	-13.52	31.98	7.4	37.18	103	133	Average
5388	52.63	50.43	74	-21.37	31.98	7.4	37.18	103	133	Peak
5470	52.15	49.68	68.3	-16.15	32.02	7.53	37.08	103	133	Peak
5550	88.53	85.93			32.11	7.58	37.09	103	133	Average
5550	98.85	96.25			32.11	7.58	37.09	103	133	Peak
5725	50.48	47.84	68.3	-17.82	32.36	7.71	37.43	103	133	Peak

REMARKS:

- 5550MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1GHz ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5362	40.95	38.76	54	-13.05	31.97	7.4	37.18	100	229	Average
5362	52.23	50.04	74	-21.77	31.97	7.4	37.18	100	229	Peak
5470	51.46	48.99	68.3	-16.84	32.02	7.53	37.08	100	229	Peak
5670	89.22	86.62			32.28	7.66	37.34	100	229	Average
5670	98.3	95.7			32.28	7.66	37.34	100	229	Peak
5725	51.26	48.62	68.3	-17.04	32.36	7.71	37.43	100	229	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5404	40.45	38.24	54	-13.55	31.99	7.4	37.18	109	67	Average
5404	52.57	50.36	74	-21.43	31.99	7.4	37.18	109	67	Peak
5470	51.17	48.7	68.3	-17.13	32.02	7.53	37.08	109	67	Peak
5670	89.13	86.53			32.28	7.66	37.34	109	67	Average
5670	99.08	96.48			32.28	7.66	37.34	109	67	Peak
5725	52.45	49.81	68.3	-15.85	32.36	7.71	37.43	109	67	Peak

REMARKS:

- 5670MHz: Fundamental frequency.
- 5470MHz & 5725MHz: Out of restricted band



A D T

BELOW 1GHz WORST-CASE DATA : 802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	30MHz ~ 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
42.96	32.07	48.87	40	-7.93	13.58	0.7	31.08	152	211	Peak
151.77	34.62	52.22	43.5	-8.88	12.71	1.35	31.66	132	225	Peak
207.12	33.37	53.69	43.5	-10.13	9.69	1.63	31.64	102	227	Peak
396.6	32.12	46.55	46	-13.88	15.26	2.41	32.1	100	331	Peak
498.1	29.3	40.89	46	-16.7	17.29	2.77	31.65	100	123	Peak
813.1	28.48	33.86	46	-17.52	22.39	3.73	31.5	123	321	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
44.58	38.26	55.07	40	-1.74	13.6	0.73	31.14	100	250	QP
103.71	24.3	45.69	43.5	-19.2	9.43	1.09	31.91	102	333	Peak
158.25	33.68	51.4	43.5	-9.82	12.73	1.38	31.83	205	22	Peak
400.1	23.77	38.11	46	-22.23	15.35	2.43	32.12	132	25	Peak
508.6	31.16	42.44	46	-14.84	17.51	2.81	31.6	100	241	Peak
626.9	26.25	35.3	46	-19.75	19.93	3.17	32.15	100	133	Peak

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 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.

4.2.3 TEST PROCEDURES

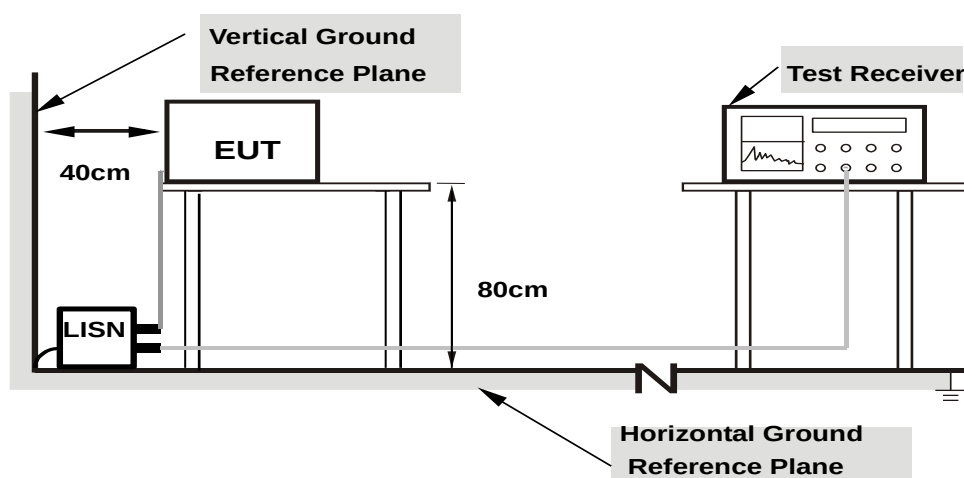
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA :

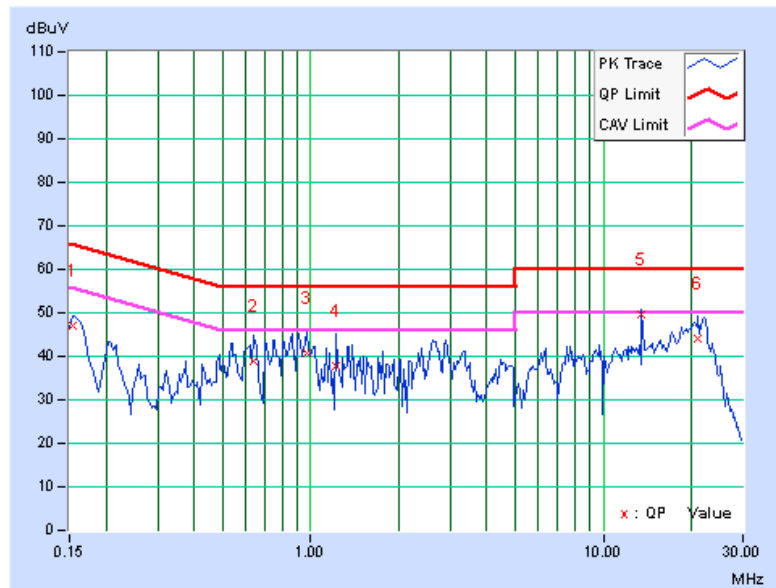
802.11n (40MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.15	46.89	36.73	47.04	36.88	65.79	55.79	-18.75	-18.91
2	0.64219	0.18	38.61	26.10	38.79	26.28	56.00	46.00	-17.21	-19.72
3	0.96641	0.19	40.52	31.04	40.71	31.23	56.00	46.00	-15.29	-14.77
4	1.22656	0.21	37.39	29.57	37.60	29.78	56.00	46.00	-18.40	-16.22
5	13.55859	0.50	49.05	45.99	49.55	46.49	60.00	50.00	-10.45	-3.51
6	21.09375	0.62	43.29	34.95	43.91	35.57	60.00	50.00	-16.09	-14.43

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.

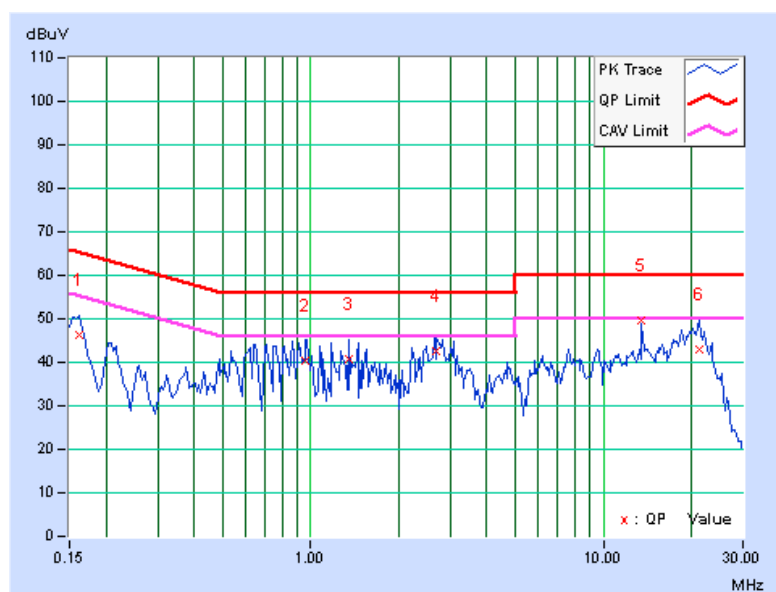


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16172	0.13	46.13	35.70	46.26	35.83	65.38	55.38	-19.11	-19.54
2	0.96250	0.19	40.03	29.91	40.22	30.10	56.00	46.00	-15.78	-15.90
3	1.34375	0.21	40.51	33.71	40.72	33.92	56.00	46.00	-15.28	-12.08
4	2.69922	0.29	42.47	33.30	42.76	33.59	56.00	46.00	-13.24	-12.41
5	13.55859	0.57	49.09	46.01	49.66	46.58	60.00	50.00	-10.34	-3.42
6	21.41016	0.70	42.41	34.22	43.11	34.92	60.00	50.00	-16.89	-15.08

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

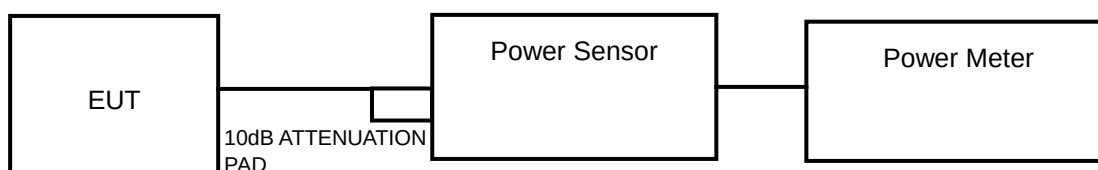
4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

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

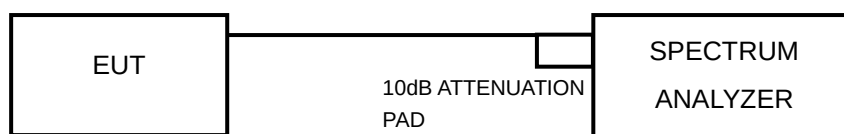
NOTE: Where B is the 26dB emission bandwidth in MHz.

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

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

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	14.86	11.72	17	PASS
44	5220	15.42	11.88	17	PASS
48	5240	15.63	11.94	17	PASS
52	5260	15.70	11.96	24	PASS
60	5300	16.00	12.04	24	PASS
64	5320	16.33	12.13	24	PASS
100	5500	15.70	11.96	24	PASS
116	5580	14.26	11.54	24	PASS
140	5700	15.45	11.89	24	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	15.21	11.82	17	PASS
44	5220	15.45	11.89	17	PASS
48	5240	15.89	12.01	17	PASS
52	5260	15.92	12.02	24	PASS
60	5300	16.14	12.08	24	PASS
64	5320	16.22	12.10	24	PASS
100	5500	16.33	12.13	24	PASS
116	5580	14.72	11.68	24	PASS
140	5700	12.88	11.10	24	PASS

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	18.32	12.63	17	PASS
46	5230	18.32	12.63	17	PASS
54	5270	18.41	12.65	24	PASS
62	5310	18.79	12.74	24	PASS
102	5510	18.37	12.64	24	PASS
110	5550	17.66	12.47	24	PASS
134	5670	15.96	12.03	24	PASS

26dB BANDWIDTH: 802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
36	5180	23.72	PASS
44	5220	23.67	PASS
48	5240	23.73	PASS
52	5260	24.11	PASS
60	5300	23.95	PASS
64	5320	23.58	PASS
100	5500	23.51	PASS
116	5580	23.86	PASS
140	5700	23.69	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
36	5180	24.27	PASS
44	5220	24.20	PASS
48	5240	24.36	PASS
52	5260	23.81	PASS
60	5300	23.69	PASS
64	5320	24.62	PASS
100	5500	24.15	PASS
116	5580	24.14	PASS
140	5700	24.02	PASS

802.11n (40MHz)

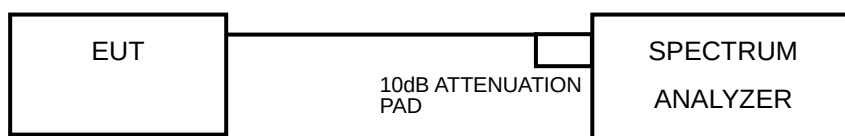
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
38	5190	48.38	PASS
46	5230	47.11	PASS
54	5270	46.61	PASS
62	5310	47.55	PASS
102	5510	47.83	PASS
110	5550	46.30	PASS
134	5670	48.09	PASS

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

Using method SA-2 alternative

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

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

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	0.01	0.32	0.33	4	PASS
44	5220	0.35	0.32	0.67	4	PASS
48	5240	0.48	0.32	0.80	4	PASS
52	5260	0.51	0.32	0.83	11	PASS
60	5300	0.25	0.32	0.57	11	PASS
64	5320	0.13	0.32	0.45	11	PASS
100	5500	0.24	0.32	0.56	11	PASS
116	5580	-0.32	0.32	0.00	11	PASS
140	5700	-0.08	0.32	0.24	11	PASS

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

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	-0.12	0.34	0.22	4	PASS
44	5220	0.22	0.34	0.56	4	PASS
48	5240	0.13	0.34	0.47	4	PASS
52	5260	0.25	0.34	0.59	11	PASS
60	5300	-0.23	0.34	0.11	11	PASS
64	5320	0.10	0.34	0.44	11	PASS
100	5500	0.00	0.34	0.34	11	PASS
116	5580	-0.58	0.34	-0.24	11	PASS
140	5700	-1.12	0.34	-0.78	11	PASS

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

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
38	5190	-1.42	0.67	-0.75	4	PASS
46	5230	-1.93	0.67	-1.26	4	PASS
54	5270	-2.06	0.67	-1.39	11	PASS
62	5310	-1.57	0.67	-0.90	11	PASS
102	5510	-1.68	0.67	-1.01	11	PASS
110	5550	-1.90	0.67	-1.23	11	PASS
134	5670	-2.78	0.67	-2.11	11	PASS

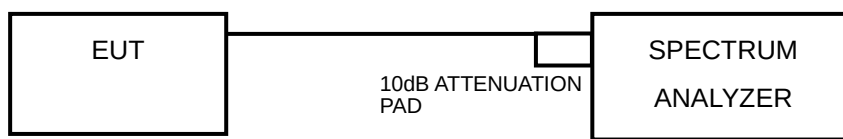
NOTE: Refer to section 3.3 for duty cycle spectrum plot.

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

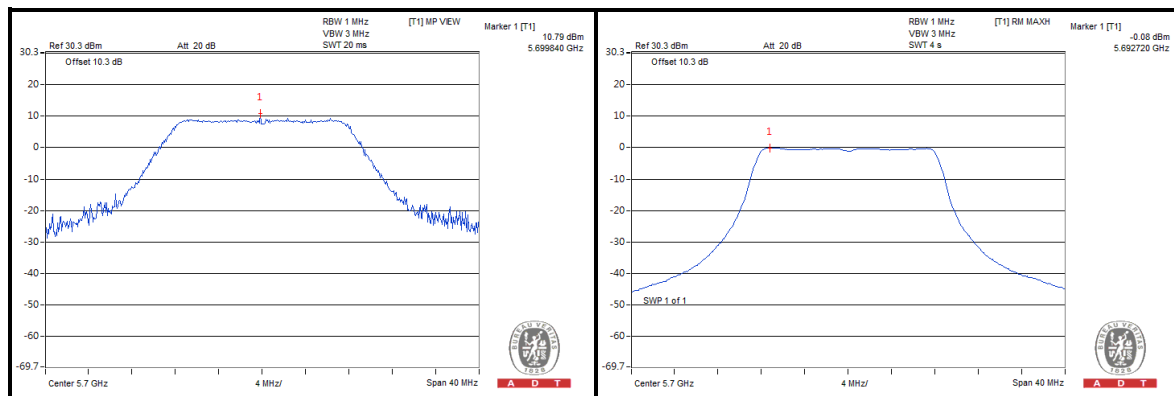
Same as 4.2.6

4.5.7 TEST RESULTS

802.11a

CHAN.	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS /FAIL
36	5180	10.35	0.01	0.33	10.02	13	PASS
44	5220	10.25	0.35	0.67	9.58	13	PASS
48	5240	10.63	0.48	0.80	9.83	13	PASS
52	5260	10.94	0.51	0.83	10.11	13	PASS
60	5300	10.35	0.25	0.57	9.78	13	PASS
64	5320	9.92	0.13	0.45	9.47	13	PASS
100	5500	9.81	0.24	0.56	9.25	13	PASS
116	5580	9.39	-0.32	0.00	9.39	13	PASS
140	5700	10.79	-0.08	0.24	10.55	13	PASS

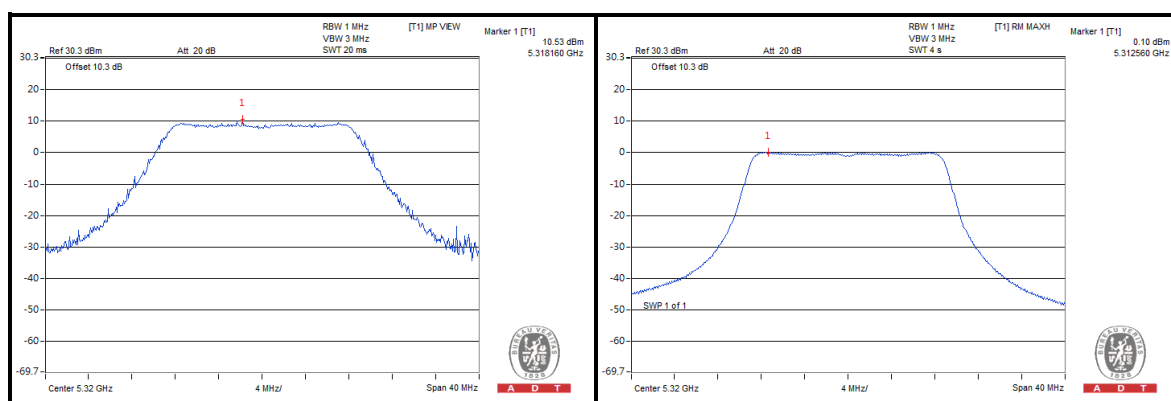
NOTE: Refer to section 3.3 for duty cycle spectrum plot.



802.11n (20MHz)

CHAN.	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS /FAIL
36	5180	9.90	-0.12	0.22	9.68	13	PASS
44	5220	9.78	0.22	0.56	9.22	13	PASS
48	5240	9.66	0.13	0.47	9.19	13	PASS
52	5260	9.62	0.25	0.59	9.03	13	PASS
60	5300	9.23	-0.23	0.11	9.12	13	PASS
64	5320	10.53	0.10	0.44	10.09	13	PASS
100	5500	9.44	0.00	0.34	9.10	13	PASS
116	5580	8.57	-0.58	-0.24	8.81	13	PASS
140	5700	8.42	-1.12	-0.78	9.20	13	PASS

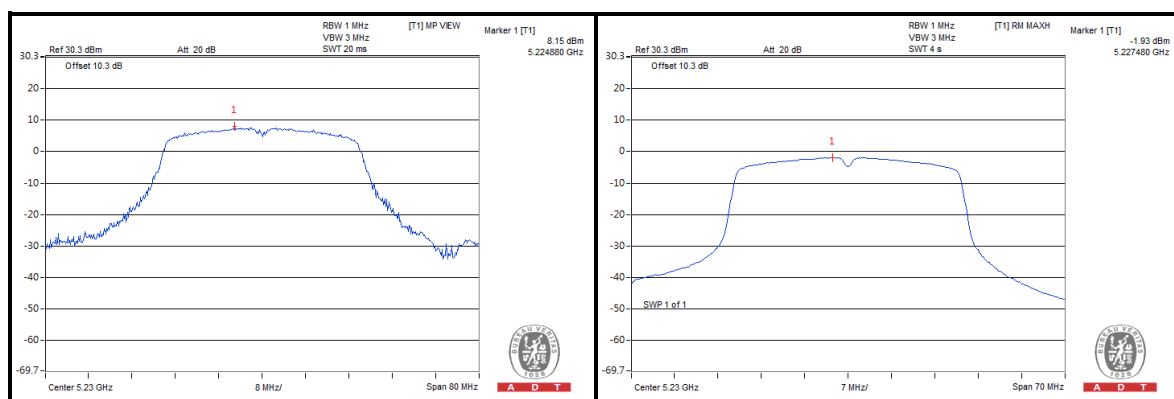
NOTE: Refer to section 3.3 for duty cycle spectrum plot.



802.11n (40MHz)

CHAN.	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS /FAIL
38	5190	8.45	-1.42	-0.75	9.20	13	PASS
46	5230	8.15	-1.93	-1.26	9.41	13	PASS
54	5270	7.69	-2.06	-1.39	9.08	13	PASS
62	5310	8.08	-1.57	-0.90	8.98	13	PASS
102	5510	7.93	-1.68	-1.01	8.94	13	PASS
110	5550	7.70	-1.90	-1.23	8.93	13	PASS
134	5670	6.80	-2.78	-2.11	8.91	13	PASS

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

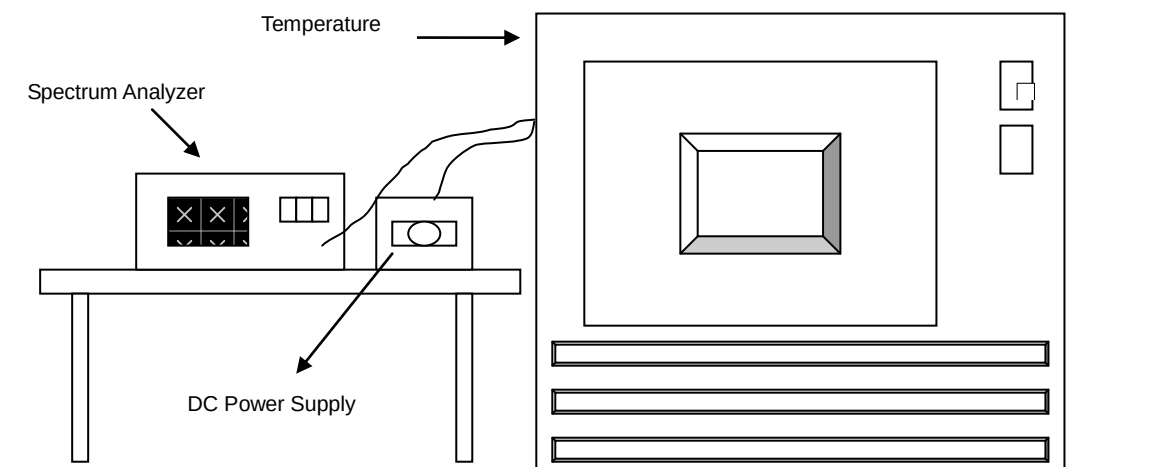


4.6 FREQUENCY STABILITY

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. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
- b. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
- c. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

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: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
55	3.8	5320.014963	2.813	5320.014881	2.797	5320.015147	2.847	5320.014737	2.770
50	3.8	5320.015487	2.911	5320.015408	2.896	5320.015571	2.927	5320.015397	2.894
40	3.8	5320.016843	3.166	5320.017124	3.219	5320.016700	3.139	5320.016657	3.131
30	3.8	5320.018483	3.474	5320.018072	3.397	5320.018156	3.413	5320.017840	3.353
20	3.8	5320.017761	3.339	5320.017827	3.351	5320.017762	3.339	5320.018410	3.461
10	3.8	5320.017749	3.336	5320.017630	3.314	5320.018279	3.436	5320.018005	3.384
0	3.8	5320.016560	3.113	5320.016328	3.069	5320.016491	3.100	5320.016713	3.142
-10	3.8	5320.015788	2.968	5320.016110	3.028	5320.016019	3.011	5320.015661	2.944
-20	3.8	5320.014814	2.785	5320.014730	2.769	5320.014739	2.770	5320.014900	2.801
-30	3.8	5320.014814	2.785	5320.014730	2.769	5320.014739	2.770	5320.014900	2.801

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	3.5	5320.017129	3.220	5320.017608	3.310	5320.017097	3.214	5320.017456	3.281
	3.8	5320.017761	3.339	5320.017827	3.351	5320.017762	3.339	5320.018410	3.461
	4.2	5320.020087	3.776	5320.019619	3.688	5320.019640	3.692	5320.019574	3.679

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

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232

Fax: 886-3-3270892

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---