

FCC TEST REPORT

(15.407)

REPORT NO.: RF140807C02-9

MODEL NO.: F-03G

FCC ID: VQK-F03G

RECEIVED: Aug. 08, 2014

TESTED: Aug. 29 ~ Sep. 17, 2014

ISSUED: Sep. 18, 2014

APPLICANT: FUJITSU LIMITED

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ISSUED BY: Bureau Veritas Consumer Products Services
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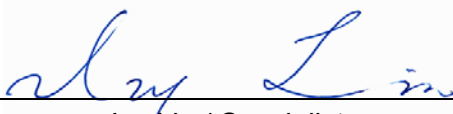
RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140807C02-9	Original release.	Sep. 18, 2014

1. CERTIFICATION

PRODUCT: Tablet PC
MODEL: F-03G
BRAND: FUJITSU
APPLICANT: FUJITSU LIMITED
TESTED: Aug. 29 ~ Sep. 17, 2014
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: **FCC Part 15, Subpart E (Section 15.407)**
ANSI C63.10-2009

The above equipment (model: F-03G) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY :  , **DATE :** Sep. 18, 2014
Ivy Lin / Specialist

APPROVED BY :  , **DATE :** Sep. 18, 2014
Ken Liu / Senior 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 Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -2.94dB at 0.48203MHz.
15.407(b)(1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -4.6dB at 11000.00MHz, 11160.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(e)	6dB bandwidth	PASS	Meet the requirement of limit. (U-NII-3 Band only)
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	3.59 dB
	200MHz ~1000MHz	3.60 dB
	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 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	Tablet PC
MODEL NO.	F-03G
POWER SUPPLY	3.8Vdc (Battery) 5Vdc (Adapter or cradle when normal charging) 9Vdc (Adapter or cradle when quick charging)
MODULATION TYPE	256QAM, 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 150.0Mbps 802.11ac: up to 433.3Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 3 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80)
OUTPUT POWER	5180 ~ 5240MHz: 36.983mW 5260 ~ 5320MHz: 36.983mW 5500 ~ 5700MHz: 37.670mW
ANTENNA TYPE	$\lambda/4$ Monopole antenna with -0.4dBi gain
ANTENNA CONNECTOR	N/A
DATA CABLE	N/A
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Refer to Note as below

NOTE:

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

MODULATION MODE	TX FUNCTION
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX
802.11ac (VHT20)	1TX
802.11ac (VHT40)	1TX
802.11ac (VHT80)	1TX

* The modulation and bandwidth are similar for 802.11n mode for 20MHz / 40MHz and 802.11ac mode for 20MHz / 40MHz, therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

2. The EUT contains the following accessories.

No.	Product	Brand	Model	Description
1	Battery	NTT docomo	N/A	3.75Vdc, 7,840mAh
2	Cradle	NTT docomo	F48	Input : 5.0Vdc, 1.5A, 9.0V 1.5A (QC) Output : 5.0Vdc, 1.5A, 9.0V 1.5A (QC)

3. The following adapter is supports only.

PRODUCT	BRAND	MODEL	DESCRIPTION
Adapter	NTT docomo	AC Adaptor 05	Input: 100-240Vac, 0.12A, 50-60Hz, 0.4A Output: 5.0Vdc, 1.8A 9.0Vdc, 1.8A Power line: 1.25m cable with two cores attached on adapter

4. SW version is R07Ae.
5. HW version is V2.1.0.
6. IMEI Code: 354015060005469.
7. 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 (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
42	5210MHz

FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
58	5290MHz

FOR 5500 ~ 5700MHz

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	116	5580 MHz
104	5520 MHz	132	5660 MHz
108	5540 MHz	136	5680 MHz
112	5560 MHz	140	5700 MHz

3 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

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

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
106	5530MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	APCM	
A	√	√	√	√	Powered by adapter
B	-	√	√	-	Powered by cradle

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)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
A	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	13.5
A	802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
A	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
A	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	13.5
A	802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
A	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
A	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
A	802.11ac (VHT80)		106	106	OFDM	BPSK	29.3

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	802.11a	5180-5320	36 to 64	36	OFDM	BPSK	6.0
A, B	802.11a	5500-5700	100 to 140		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	802.11a	5180-5320	36 to 64	36	OFDM	BPSK	6.0
A, B	802.11a	5500-5700	100 to 140		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)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
A	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	13.5
A	802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
A	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
A	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	13.5
A	802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
A	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
A	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
A	802.11ac (VHT80)		106	106	OFDM	BPSK	29.3

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	23deg. C, 64%RH	120Vac, 60Hz	Brad Tung
RE<1G	23deg. C, 64%RH, 28deg. C, 64%RH	120Vac, 60Hz	Brad Tung, Alan Wu
PLC	23deg. C, 71%RH	120Vac, 60Hz	Nick Hsu
APCM	25deg. C, 60%RH	120Vac, 60Hz	Antony Lee

3.3 DUTY CYCLE OF TEST SIGNAL

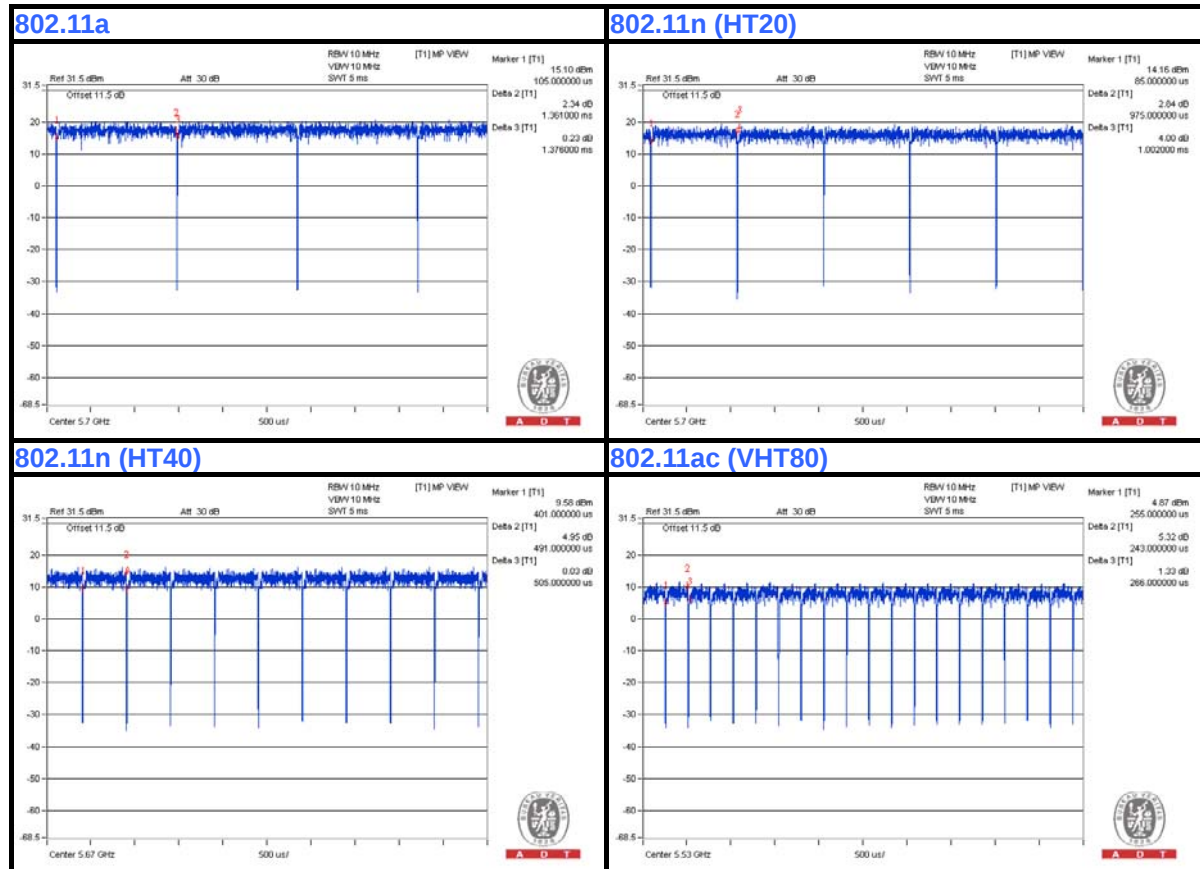
802.11a: Duty cycle = $1.361/1.376 = 0.989$, Duty cycle of test signal is $> 98\%$, duty factor is not required.

802.11n (HT20), 802.11n (HT40), 802.11ac (VHT80): Duty cycle of test signal is $< 98\%$, duty factor is required.

802.11n (HT20): Duty cycle = $0.975/1.002 = 0.973$, Duty factor = $10 * \log(1/0.973) = 0.12$

802.11n (HT40): Duty cycle = $0.491/0.505 = 0.972$, Duty factor = $10 * \log(1/0.972) = 0.12$

802.11ac (VHT80): Duty cycle = $0.243/0.266 = 0.914$, Duty factor = $10 * \log(1/0.914) = 0.39$



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	Adapter	NTT docomo	AC Adaptor 05	NA	NA

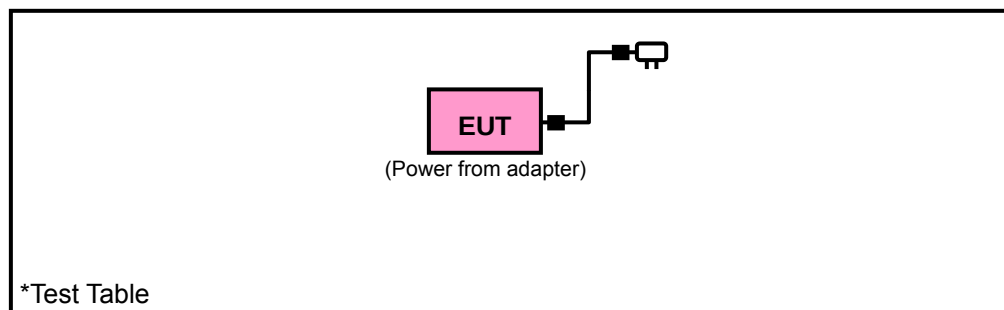
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

NOTE:

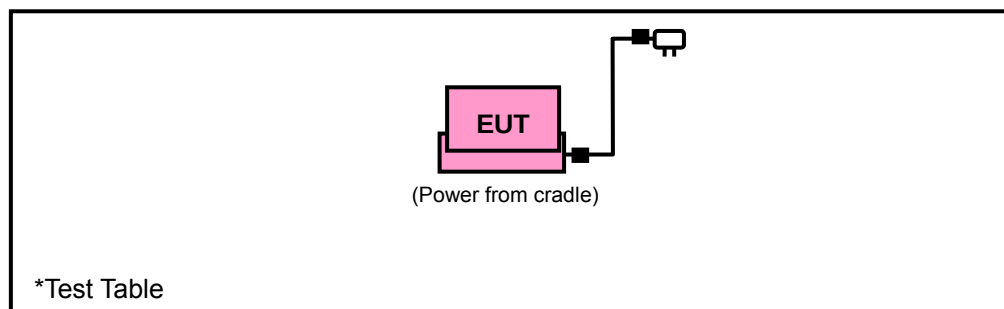
1. For item 1: 1.25m DC cable with 2 cores.
2. Item 1 is provided by the client.

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST

TEST MODE A



TEST MODE B



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01

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	
789033 D02 General UNII Test Procedures New Rules v01	FIELD STRENGTH AT 3m	
	PK: 74 (dBuV/m)	AV: 54 (dBuV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBuV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK: -27 (dBm/MHz) ^{*1} PK: -17 (dBm/MHz) ^{*2}	PK: 68.2 (dBuV/m) ^{*1} PK: 78.2 (dBuV/m) ^{*2}

NOTE: ^{*1} beyond 10MHz of the band edge ^{*2} within 10 MHz of band edge

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

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

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Oct. 24, 2013	Oct. 23, 2014
Spectrum Analyzer ROHDE & SCHWARZ	FSU 43	100115	Dec. 18, 2013	Dec. 17, 2014
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Feb. 26, 2014	Feb. 25, 2015
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-404	Jan. 05, 2014	Jan. 04, 2015
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 17, 2014	Feb. 16, 2015
Preamplifier Agilent	8449B	3008A01961	Oct. 28, 2013	Oct. 27, 2014
Preamplifier Agilent	8447D	2944A10738	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309220/4	Aug. 09, 2014	Aug. 08, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Aug. 09, 2014	Aug. 08, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Aug. 09, 2014	Aug. 08, 2015
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	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 BV ADT	TT100.	TT93021704	NA	NA
Turn Table Controller BV ADT	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 18, 2013	Oct. 17, 2014
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 9, 2014	Jun. 08, 2015

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 4.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 460141.
5. The IC Site Registration No. is IC7450F-4.

4.1.4 TEST PROCEDURES

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

NOTE:

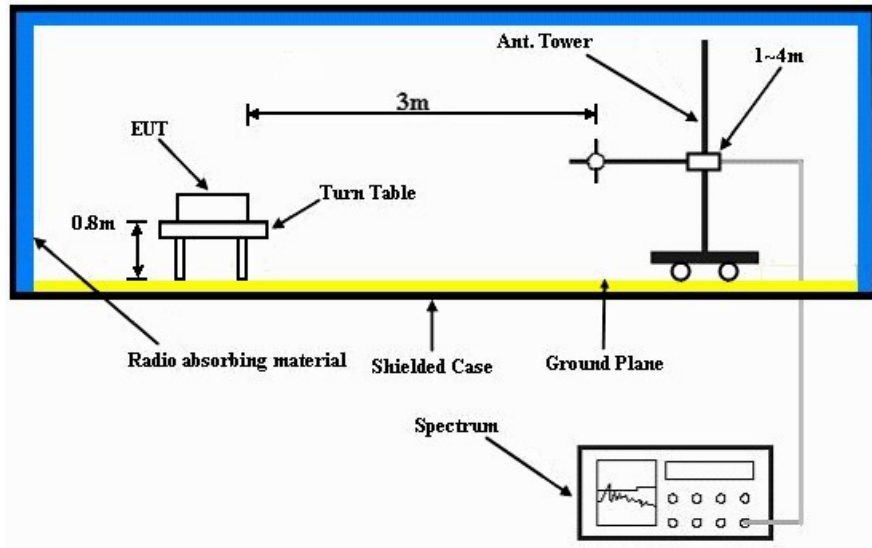
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle > 98%) 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

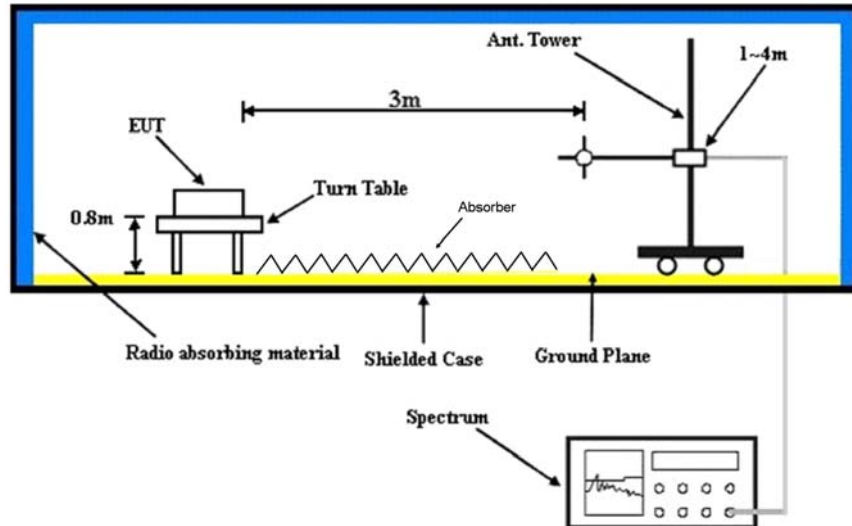
No deviation.

4.1.6 TEST SETUP

Frequency range 30MHz~1GHz



Frequency range above 1GHz



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

4.1.7 EUT OPERATING CONDITION

TEST MODE A

Set the EUT under transmission condition continuously at specific channel frequency.

TEST MODE B

- a. Plugged the EUT into the cradle and placed them on the test table.
- b. Set the EUT under transmission condition continuously at specific channel frequency.

4.1.8 TEST RESULTS

ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	57.6 PK	74.0	-16.4	1.00 H	0	52.20	5.40
2	5150.00	46.2 AV	54.0	-7.8	1.00 H	0	40.80	5.40
3	*5180.00	105.1 PK			1.00 H	354	65.80	39.30
4	*5180.00	94.4 AV			1.00 H	354	55.10	39.30
5	#10360.00	58.9 PK	74.0	-15.1	1.00 H	253	42.70	16.20
6	#10360.00	46.7 AV	54.0	-7.3	1.00 H	253	30.50	16.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.0 PK	74.0	-16.0	1.48 V	100	52.60	5.40
2	5150.00	45.8 AV	54.0	-8.2	1.48 V	100	40.40	5.40
3	*5180.00	102.5 PK			1.48 V	13	63.20	39.30
4	*5180.00	92.1 AV			1.48 V	13	52.80	39.30
5	#10360.00	58.7 PK	74.0	-15.3	1.00 V	120	42.50	16.20
6	#10360.00	46.5 AV	54.0	-7.5	1.00 V	120	30.30	16.20

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)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	105.1 PK			1.00 H	356	65.80	39.30
2	*5200.00	94.3 AV			1.00 H	356	55.00	39.30
3	#10400.00	59.2 PK	74.0	-14.8	1.00 H	175	42.80	16.40
4	#10400.00	46.8 AV	54.0	-7.2	1.00 H	175	30.40	16.40
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	*5200.00	102.4 PK			1.42 V	115	63.10	39.30
2	*5200.00	91.8 AV			1.42 V	115	52.50	39.30
3	#10400.00	59.0 PK	74.0	-15.0	1.00 V	132	42.60	16.40
4	#10400.00	46.8 AV	54.0	-7.2	1.00 V	132	30.40	16.40

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)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	104.7 PK			1.00 H	349	65.40	39.30
2	*5240.00	94.0 AV			1.00 H	349	54.70	39.30
3	#10480.00	59.9 PK	74.0	-14.1	1.00 H	248	42.60	17.30
4	#10480.00	47.6 AV	54.0	-6.4	1.00 H	248	30.30	17.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	102.2 PK			1.45 V	9	62.90	39.30
2	*5240.00	91.6 AV			1.45 V	9	52.30	39.30
3	#10480.00	59.7 PK	74.0	-14.3	1.00 V	113	42.40	17.30
4	#10480.00	47.5 AV	54.0	-6.5	1.00 V	113	30.20	17.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	104.3 PK			1.07 H	352	65.00	39.30
2	*5260.00	93.8 AV			1.07 H	352	54.50	39.30
3	#10520.00	60.1 PK	74.0	-13.9	1.00 H	223	42.70	17.40
4	#10520.00	47.8 AV	54.0	-6.2	1.00 H	223	30.40	17.40
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	*5260.00	102.3 PK			1.50 V	22	63.00	39.30
2	*5260.00	91.8 AV			1.50 V	22	52.50	39.30
3	#10520.00	59.8 PK	74.0	-14.2	1.00 V	115	42.40	17.40
4	#10520.00	47.7 AV	54.0	-6.3	1.00 V	115	30.30	17.40

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)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	104.4 PK			1.06 H	354	65.00	39.40
2	*5300.00	93.9 AV			1.06 H	354	54.50	39.40
3	10600.00	59.8 PK	74.0	-14.2	1.00 H	243	42.60	17.20
4	10600.00	47.5 AV	54.0	-6.5	1.00 H	243	30.30	17.20
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	*5300.00	102.2 PK			1.43 V	17	62.80	39.40
2	*5300.00	91.6 AV			1.43 V	17	52.20	39.40
3	10600.00	59.5 PK	74.0	-14.5	1.00 V	110	42.30	17.20
4	10600.00	47.3 AV	54.0	-6.7	1.00 V	110	30.10	17.20

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	104.8 PK			1.18 H	357	65.40	39.40
2	*5320.00	94.2 AV			1.18 H	357	54.80	39.40
3	5350.00	60.4 PK	74.0	-13.6	1.18 H	355	54.90	5.50
4	5350.00	45.4 AV	54.0	-8.6	1.18 H	355	39.90	5.50
5	10640.00	60.3 PK	74.0	-13.7	1.00 H	208	42.70	17.60
6	10640.00	48.0 AV	54.0	-6.0	1.00 H	208	30.40	17.60
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	*5320.00	102.7 PK			1.43 V	17	63.30	39.40
2	*5320.00	92.0 AV			1.43 V	17	52.60	39.40
3	5350.00	57.6 PK	74.0	-16.4	1.43 V	20	52.10	5.50
4	5350.00	44.5 AV	54.0	-9.5	1.43 V	20	39.00	5.50
5	10640.00	60.0 PK	74.0	-14.0	1.00 V	95	42.40	17.60
6	10640.00	47.8 AV	54.0	-6.2	1.00 V	95	30.20	17.60

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	56.6 PK	74.0	-17.4	1.00 H	354	51.00	5.60
2	5460.00	44.5 AV	54.0	-9.5	1.00 H	354	38.90	5.60
3	#5470.00	58.6 PK	74.0	-15.4	1.00 H	348	53.00	5.60
4	#5470.00	44.6 AV	54.0	-9.4	1.00 H	348	39.00	5.60
5	*5500.00	105.6 PK			1.00 H	344	66.00	39.60
6	*5500.00	94.9 AV			1.00 H	344	55.30	39.60
7	11000.00	62.0 PK	74.0	-12.0	1.00 H	242	42.50	19.50
8	11000.00	49.4 AV	54.0	-4.6	1.00 H	242	29.90	19.50
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	56.4 PK	74.0	-17.6	1.38 V	16	50.80	5.60
2	5460.00	44.2 AV	54.0	-9.8	1.38 V	16	38.60	5.60
3	#5470.00	58.4 PK	74.0	-15.6	1.38 V	16	52.80	5.60
4	#5470.00	44.3 AV	54.0	-9.7	1.38 V	16	38.70	5.60
5	*5500.00	103.6 PK			1.48 V	22	64.00	39.60
6	*5500.00	92.9 AV			1.48 V	22	53.30	39.60
7	11000.00	61.9 PK	74.0	-12.1	1.00 V	112	42.40	19.50
8	11000.00	49.3 AV	54.0	-4.7	1.00 V	112	29.80	19.50

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier Factor(dB)
- The other emission levels were very low against the limit.
- Margin value = Emission Level – Limit value
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	104.6 PK			1.00 H	336	64.80	39.80
2	*5580.00	94.0 AV			1.00 H	336	54.20	39.80
3	11160.00	61.9 PK	74.0	-12.1	1.00 H	230	42.40	19.50
4	11160.00	49.4 AV	54.0	-4.6	1.00 H	230	29.90	19.50
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	*5580.00	102.7 PK			1.40 V	3	62.90	39.80
2	*5580.00	92.2 AV			1.40 V	3	52.40	39.80
3	11160.00	61.7 PK	74.0	-12.3	1.00 V	142	42.20	19.50
4	11160.00	49.2 AV	54.0	-4.8	1.00 V	142	29.70	19.50

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier Factor(dB)
- The other emission levels were very low against the limit.
- Margin value = Emission Level – Limit value
- " * ": Fundamental frequency.

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	104.9 PK			1.19 H	327	64.80	40.10
2	*5700.00	94.1 AV			1.19 H	327	54.00	40.10
3	#5725.00	61.2 PK	74.0	-12.8	1.19 H	327	55.00	6.20
4	#5725.00	46.9 AV	54.0	-7.1	1.19 H	327	40.70	6.20
5	11400.00	60.7 PK	74.0	-13.3	1.00 H	258	42.30	18.40
6	11400.00	48.3 AV	54.0	-5.7	1.00 H	258	29.90	18.40
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	*5700.00	102.9 PK			1.50 V	42	62.80	40.10
2	*5700.00	92.1 AV			1.50 V	42	52.00	40.10
3	#5725.00	60.3 PK	74.0	-13.7	1.50 V	42	54.10	6.20
4	#5725.00	45.9 AV	54.0	-8.1	1.50 V	42	39.70	6.20
5	11400.00	60.6 PK	74.0	-13.4	1.00 V	117	42.20	18.40
6	11400.00	48.1 AV	54.0	-5.9	1.00 V	117	29.70	18.40

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)
– Pre-Amplifier 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 of the restricted band.

802.11n (HT20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	58.3 PK	74.0	-15.7	1.34 H	350	52.90	5.40
2	5150.00	46.3 AV	54.0	-7.7	1.34 H	350	40.90	5.40
3	*5180.00	103.8 PK			1.34 H	350	64.50	39.30
4	*5180.00	93.2 AV			1.34 H	350	53.90	39.30
5	#10360.00	59.2 PK	74.0	-14.8	1.00 H	255	43.00	16.20
6	#10360.00	46.3 AV	54.0	-7.7	1.00 H	255	30.10	16.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.5 PK	74.0	-16.5	1.54 V	16	52.10	5.40
2	5150.00	45.5 AV	54.0	-8.5	1.54 V	16	40.10	5.40
3	*5180.00	102.5 PK			1.54 V	16	63.20	39.30
4	*5180.00	91.6 AV			1.54 V	16	52.30	39.30
5	#10360.00	59.1 PK	74.0	-14.9	1.00 V	20	42.90	16.20
6	#10360.00	46.3 AV	54.0	-7.7	1.00 V	20	30.10	16.20

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)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	103.3 PK			1.07 H	356	64.00	39.30
2	*5200.00	93.1 AV			1.07 H	356	53.80	39.30
3	#10400.00	59.2 PK	74.0	-14.8	1.00 H	195	42.80	16.40
4	#10400.00	46.4 AV	54.0	-7.6	1.00 H	195	30.00	16.40
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	*5200.00	101.7 PK			1.52 V	16	62.40	39.30
2	*5200.00	91.5 AV			1.52 V	16	52.20	39.30
3	#10400.00	58.9 PK	74.0	-15.1	1.00 V	8	42.50	16.40
4	#10400.00	46.4 AV	54.0	-7.6	1.00 V	8	30.00	16.40

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)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	103.3 PK			1.07 H	354	64.00	39.30
2	*5240.00	92.6 AV			1.07 H	354	53.30	39.30
3	#10480.00	59.9 PK	74.0	-14.1	1.00 H	225	42.60	17.30
4	#10480.00	47.2 AV	54.0	-6.8	1.00 H	225	29.90	17.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	101.8 PK			1.42 V	19	62.50	39.30
2	*5240.00	91.3 AV			1.42 V	19	52.00	39.30
3	#10480.00	59.7 PK	74.0	-14.3	1.00 V	61	42.40	17.30
4	#10480.00	47.2 AV	54.0	-6.8	1.00 V	61	29.90	17.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	102.8 PK			1.07 H	355	63.50	39.30
2	*5260.00	92.1 AV			1.07 H	355	52.80	39.30
3	#10520.00	60.0 PK	74.0	-14.0	1.00 H	258	42.60	17.40
4	#10520.00	47.2 AV	54.0	-6.8	1.00 H	258	29.80	17.40
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	*5260.00	101.3 PK			1.52 V	8	62.00	39.30
2	*5260.00	90.5 AV			1.52 V	8	51.20	39.30
3	#10520.00	59.8 PK	74.0	-14.2	1.00 V	45	42.40	17.40
4	#10520.00	47.2 AV	54.0	-6.8	1.00 V	45	29.80	17.40

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)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	103.4 PK			1.18 H	358	64.00	39.40
2	*5300.00	92.4 AV			1.18 H	358	53.00	39.40
3	10600.00	59.8 PK	74.0	-14.2	1.00 H	199	42.60	17.20
4	10600.00	47.2 AV	54.0	-6.8	1.00 H	199	30.00	17.20
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	*5300.00	101.7 PK			1.52 V	16	62.30	39.40
2	*5300.00	91.3 AV			1.52 V	16	51.90	39.40
3	10600.00	59.7 PK	74.0	-14.3	1.00 V	50	42.50	17.20
4	10600.00	47.2 AV	54.0	-6.8	1.00 V	50	30.00	17.20

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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			1.17 H	357	64.70	39.40
2	*5320.00	93.3 AV			1.17 H	357	53.90	39.40
3	5350.00	59.7 PK	74.0	-14.3	1.17 H	357	54.20	5.50
4	5350.00	45.4 AV	54.0	-8.6	1.17 H	357	39.90	5.50
5	10640.00	60.1 PK	74.0	-13.9	1.00 H	250	42.50	17.60
6	10640.00	47.3 AV	54.0	-6.7	1.00 H	250	29.70	17.60
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	*5320.00	102.6 PK			1.50 V	27	63.20	39.40
2	*5320.00	92.0 AV			1.50 V	27	52.60	39.40
3	5350.00	59.2 PK	74.0	-14.8	1.50 V	27	53.70	5.50
4	5350.00	44.6 AV	54.0	-9.4	1.50 V	27	39.10	5.50
5	10640.00	59.9 PK	74.0	-14.1	1.00 V	45	42.30	17.60
6	10640.00	47.2 AV	54.0	-6.8	1.00 V	45	29.60	17.60

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	56.8 PK	74.0	-17.2	1.24 H	330	51.20	5.60
2	5460.00	44.5 AV	54.0	-9.5	1.24 H	330	38.90	5.60
3	#5470.00	58.1 PK	74.0	-15.9	1.24 H	350	52.50	5.60
4	#5470.00	44.5 AV	54.0	-9.5	1.24 H	350	38.90	5.60
5	*5500.00	103.7 PK			1.24 H	344	64.10	39.60
6	*5500.00	92.8 AV			1.24 H	344	53.20	39.60
7	11000.00	61.9 PK	74.0	-12.1	1.00 H	258	42.40	19.50
8	11000.00	49.2 AV	54.0	-4.8	1.00 H	258	29.70	19.50
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	56.6 PK	74.0	-17.4	1.55 V	43	51.00	5.60
2	5460.00	44.2 AV	54.0	-9.8	1.55 V	43	38.60	5.60
3	#5470.00	57.8 PK	74.0	-16.2	1.55 V	40	52.20	5.60
4	#5470.00	44.2 AV	54.0	-9.8	1.55 V	40	38.60	5.60
5	*5500.00	102.6 PK			1.55 V	40	63.00	39.60
6	*5500.00	91.6 AV			1.55 V	40	52.00	39.60
7	11000.00	61.8 PK	74.0	-12.2	1.00 V	16	42.30	19.50
8	11000.00	49.2 AV	54.0	-4.8	1.00 V	16	29.70	19.50

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier Factor(dB)
- The other emission levels were very low against the limit.
- Margin value = Emission Level – Limit value
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	103.4 PK			1.33 H	336	63.60	39.80
2	*5580.00	92.8 AV			1.33 H	336	53.00	39.80
3	11160.00	62.0 PK	74.0	-12.0	1.00 H	226	42.50	19.50
4	11160.00	49.2 AV	54.0	-4.8	1.00 H	226	29.70	19.50
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	*5580.00	102.0 PK			1.52 V	24	62.20	39.80
2	*5580.00	91.4 AV			1.52 V	24	51.60	39.80
3	11160.00	61.8 PK	74.0	-12.2	1.00 V	42	42.30	19.50
4	11160.00	49.1 AV	54.0	-4.9	1.00 V	42	29.60	19.50

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	103.4 PK			1.30 H	330	63.30	40.10
2	*5700.00	92.6 AV			1.30 H	330	52.50	40.10
3	#5725.00	60.2 PK	74.0	-13.8	1.30 H	330	54.00	6.20
4	#5725.00	46.8 AV	54.0	-7.2	1.30 H	330	40.60	6.20
5	11400.00	60.9 PK	74.0	-13.1	1.00 H	241	42.50	18.40
6	11400.00	48.2 AV	54.0	-5.8	1.00 H	241	29.80	18.40
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	*5700.00	102.1 PK			1.58 V	30	62.00	40.10
2	*5700.00	91.6 AV			1.58 V	30	51.50	40.10
3	#5725.00	59.5 PK	74.0	-14.5	1.58 V	30	53.30	6.20
4	#5725.00	46.3 AV	54.0	-7.7	1.58 V	30	40.10	6.20
5	11400.00	60.7 PK	74.0	-13.3	1.00 V	13	42.30	18.40
6	11400.00	48.2 AV	54.0	-5.8	1.00 V	13	29.80	18.40

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)
– Pre-Amplifier 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 of the restricted band.

802.11n (HT40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	1.32 H	351	58.50	5.40
2	5150.00	47.7 AV	54.0	-6.3	1.32 H	351	42.30	5.40
3	*5190.00	100.6 PK			1.32 H	351	61.30	39.30
4	*5190.00	89.3 AV			1.32 H	351	50.00	39.30
5	#10380.00	58.7 PK	74.0	-15.3	1.00 H	243	42.30	16.40
6	#10380.00	46.3 AV	54.0	-7.7	1.00 H	243	29.90	16.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.3 PK	74.0	-7.7	1.36 V	89	60.90	5.40
2	5150.00	47.4 AV	54.0	-6.6	1.36 V	89	42.00	5.40
3	*5190.00	99.6 PK			1.36 V	89	60.30	39.30
4	*5190.00	89.3 AV			1.36 V	89	50.00	39.30
5	#10380.00	58.7 PK	74.0	-15.3	1.00 V	213	42.30	16.40
6	#10380.00	46.1 AV	54.0	-7.9	1.00 V	213	29.70	16.40

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier Factor(dB)
- The other emission levels were very low against the limit.
- Margin value = Emission Level – Limit value
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	99.8 PK			1.33 H	353	60.50	39.30
2	*5230.00	88.3 AV			1.33 H	353	49.00	39.30
3	#10460.00	59.2 PK	74.0	-14.8	1.00 H	258	42.20	17.00
4	#10460.00	46.8 AV	54.0	-7.2	1.00 H	258	29.80	17.00
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	*5230.00	99.0 PK			1.40 V	90	59.70	39.30
2	*5230.00	87.2 AV			1.40 V	90	47.90	39.30
3	#10460.00	59.1 PK	74.0	-14.9	1.00 V	210	42.10	17.00
4	#10460.00	46.8 AV	54.0	-7.2	1.00 V	210	29.80	17.00

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)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	100.0 PK			1.30 H	353	60.60	39.40
2	*5270.00	88.4 AV			1.30 H	353	49.00	39.40
3	#10540.00	59.4 PK	74.0	-14.6	1.00 H	213	42.10	17.30
4	#10540.00	47.1 AV	54.0	-6.9	1.00 H	213	29.80	17.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	99.3 PK			1.36 V	86	59.90	39.40
2	*5270.00	87.6 AV			1.36 V	86	48.20	39.40
3	#10540.00	59.3 PK	74.0	-14.7	1.00 V	193	42.00	17.30
4	#10540.00	47.0 AV	54.0	-7.0	1.00 V	193	29.70	17.30

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier Factor(dB)
- The other emission levels were very low against the limit.
- Margin value = Emission Level – Limit value
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	100.2 PK			1.30 H	354	60.80	39.40
2	*5310.00	89.2 AV			1.30 H	354	49.80	39.40
3	5350.00	67.0 PK	74.0	-7.0	1.30 H	354	61.50	5.50
4	5350.00	48.9 AV	54.0	-5.1	1.30 H	354	43.40	5.50
5	10620.00	59.6 PK	74.0	-14.4	1.00 H	253	42.30	17.30
6	10620.00	47.2 AV	54.0	-6.8	1.00 H	253	29.90	17.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	99.6 PK			1.30 V	88	60.20	39.40
2	*5310.00	88.6 AV			1.30 V	88	49.20	39.40
3	5350.00	66.7 PK	74.0	-7.3	1.30 V	88	61.20	5.50
4	5350.00	48.5 AV	54.0	-5.5	1.30 V	88	43.00	5.50
5	10620.00	59.5 PK	74.0	-14.5	1.00 V	195	42.20	17.30
6	10620.00	47.2 AV	54.0	-6.8	1.00 V	195	29.90	17.30

REMARKS:

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

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	57.7 PK	74.0	-16.3	1.24 H	342	52.10	5.60
2	5460.00	43.4 AV	54.0	-10.6	1.24 H	342	37.80	5.60
3	#5470.00	65.5 PK	74.0	-8.5	1.24 H	342	59.90	5.60
4	#5470.00	44.5 AV	54.0	-9.5	1.24 H	342	38.90	5.60
5	*5510.00	100.4 PK			1.24 H	342	60.80	39.60
6	*5510.00	89.8 AV			1.24 H	342	50.20	39.60
7	11020.00	61.5 PK	74.0	-12.5	1.00 H	189	42.00	19.50
8	11020.00	49.0 AV	54.0	-5.0	1.00 H	189	29.50	19.50
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	57.2 PK	74.0	-16.8	1.66 V	24	51.60	5.60
2	5460.00	42.8 AV	54.0	-11.2	1.66 V	24	37.20	5.60
3	#5470.00	64.8 PK	74.0	-9.2	1.66 V	24	59.20	5.60
4	#5470.00	43.6 AV	54.0	-10.4	1.66 V	24	38.00	5.60
5	*5510.00	99.5 PK			1.66 V	24	59.90	39.60
6	*5510.00	89.0 AV			1.66 V	24	49.40	39.60
7	11020.00	61.4 PK	74.0	-12.6	1.00 V	275	41.90	19.50
8	11020.00	48.9 AV	54.0	-5.1	1.00 V	275	29.40	19.50

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier Factor(dB)
- The other emission levels were very low against the limit.
- Margin value = Emission Level – Limit value
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	101.0 PK			1.00 H	343	61.20	39.80
2	*5550.00	89.4 AV			1.00 H	343	49.60	39.80
3	11100.00	61.6 PK	74.0	-12.4	1.00 H	199	42.10	19.50
4	11100.00	49.0 AV	54.0	-5.0	1.00 H	199	29.50	19.50
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	*5550.00	100.2 PK			1.00 V	343	60.40	39.80
2	*5550.00	88.6 AV			1.00 V	343	48.80	39.80
3	11100.00	61.5 PK	74.0	-12.5	1.00 V	199	42.00	19.50
4	11100.00	48.8 AV	54.0	-5.2	1.00 V	199	29.30	19.50

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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			1.08 H	327	60.50	39.90
2	*5670.00	88.9 AV			1.08 H	327	49.00	39.90
3	#5725.00	56.0 PK	74.0	-18.0	1.08 H	327	49.80	6.20
4	#5725.00	43.2 AV	54.0	-10.8	1.08 H	327	37.00	6.20
5	11340.00	60.8 PK	74.0	-13.2	1.00 H	240	42.00	18.80
6	11340.00	48.2 AV	54.0	-5.8	1.00 H	240	29.40	18.80
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	*5670.00	99.7 PK			1.00 V	355	59.80	39.90
2	*5670.00	87.9 AV			1.00 V	355	48.00	39.90
3	#5725.00	55.4 PK	74.0	-18.6	1.00 V	355	49.20	6.20
4	#5725.00	42.8 AV	54.0	-11.2	1.00 V	355	36.60	6.20
5	11340.00	60.7 PK	74.0	-13.3	1.00 V	175	41.90	18.80
6	11340.00	48.0 AV	54.0	-6.0	1.00 V	175	29.20	18.80

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)
– Pre-Amplifier 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 of the restricted band.

802.11ac (VHT80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.8 PK	74.0	-12.2	1.33 H	351	56.40	5.40
2	5150.00	45.0 AV	54.0	-9.0	1.33 H	351	39.60	5.40
3	*5210.00	94.3 PK			1.33 H	351	55.00	39.30
4	*5210.00	79.3 AV			1.33 H	351	40.00	39.30
5	#10420.00	58.9 PK	74.0	-15.1	1.00 H	80	42.10	16.80
6	#10420.00	46.2 AV	54.0	-7.8	1.00 H	80	29.40	16.80
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	61.5 PK	74.0	-12.5	1.36 V	88	56.10	5.40
2	5150.00	44.5 AV	54.0	-9.5	1.36 V	88	39.10	5.40
3	*5210.00	93.6 PK			1.36 V	88	54.30	39.30
4	*5210.00	78.6 AV			1.36 V	88	39.30	39.30
5	#10420.00	58.8 PK	74.0	-15.2	1.00 V	129	42.00	16.80
6	#10420.00	46.2 AV	54.0	-7.8	1.00 V	129	29.40	16.80

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier Factor(dB)
- The other emission levels were very low against the limit.
- Margin value = Emission Level – Limit value
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5290.00	94.6 PK			1.07 H	353	55.20	39.40
2	*5290.00	79.7 AV			1.07 H	353	40.30	39.40
3	5350.00	56.9 PK	74.0	-17.1	1.07 H	353	51.40	5.50
4	5350.00	44.8 AV	54.0	-9.2	1.07 H	353	39.30	5.50
5	#10580.00	59.4 PK	74.0	-14.6	1.00 H	106	42.20	17.20
6	#10580.00	46.6 AV	54.0	-7.4	1.00 H	106	29.40	17.20
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	*5290.00	94.1 PK			1.32 V	90	54.70	39.40
2	*5290.00	79.2 AV			1.32 V	90	39.80	39.40
3	5350.00	56.6 PK	74.0	-17.4	1.32 V	90	51.10	5.50
4	5350.00	44.5 AV	54.0	-9.5	1.32 V	90	39.00	5.50
5	#10580.00	59.3 PK	74.0	-14.7	1.00 V	142	42.10	17.20
6	#10580.00	46.6 AV	54.0	-7.4	1.00 V	142	29.40	17.20

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)
– Pre-Amplifier 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 of the restricted band.

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	55.4 PK	74.0	-18.6	1.00 H	340	49.80	5.60
2	5460.00	43.1 AV	54.0	-10.9	1.00 H	340	37.50	5.60
3	#5470.00	56.1 PK	74.0	-17.9	1.00 H	340	50.50	5.60
4	#5470.00	43.6 AV	54.0	-10.4	1.00 H	340	38.00	5.60
5	*5530.00	94.6 PK			1.00 H	340	54.90	39.70
6	*5530.00	80.1 AV			1.00 H	340	40.40	39.70
7	11060.00	61.6 PK	74.0	-12.4	1.00 H	99	42.10	19.50
8	11060.00	48.8 AV	54.0	-5.2	1.00 H	99	29.30	19.50
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	55.2 PK	74.0	-18.8	1.33 V	100	49.60	5.60
2	5460.00	42.9 AV	54.0	-11.1	1.33 V	100	37.30	5.60
3	#5470.00	55.8 PK	74.0	-18.2	1.33 V	100	50.20	5.60
4	#5470.00	43.3 AV	54.0	-10.7	1.33 V	100	37.70	5.60
5	*5530.00	93.7 PK			1.33 V	100	54.00	39.70
6	*5530.00	79.5 AV			1.33 V	100	39.80	39.70
7	11060.00	61.5 PK	74.0	-12.5	1.00 V	157	42.00	19.50
8	11060.00	48.6 AV	54.0	-5.4	1.00 V	157	29.10	19.50

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
– Pre-Amplifier Factor(dB)
- The other emission levels were very low against the limit.
- Margin value = Emission Level – Limit value
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

BELOW 1GHz WORST-CASE DATA

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	45.42	21.7 QP	40.0	-18.3	1.50 H	48	35.90	-14.20
2	97.81	22.7 QP	43.5	-20.8	1.00 H	65	41.60	-18.90
3	171.55	23.3 QP	43.5	-20.2	1.25 H	278	37.50	-14.20
4	212.30	21.7 QP	43.5	-21.8	1.50 H	300	38.00	-16.30
5	386.93	26.4 QP	46.0	-19.6	2.00 H	295	37.30	-10.90
6	429.62	25.8 QP	46.0	-20.2	1.00 H	145	35.80	-10.00
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	49.30	32.9 QP	40.0	-7.1	1.50 V	22	46.90	-14.00
2	103.64	23.6 QP	43.5	-19.9	2.00 V	13	41.50	-17.90
3	159.91	24.4 QP	43.5	-19.1	1.50 V	8	38.00	-13.60
4	381.11	27.1 QP	46.0	-18.9	1.25 V	123	38.10	-11.00
5	656.65	25.4 QP	46.0	-20.6	1.50 V	287	31.30	-5.90
6	786.66	26.5 QP	46.0	-19.5	1.00 V	270	29.60	-3.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	35.72	27.3 QP	40.0	-12.7	1.00 H	79	42.50	-15.20
2	80.35	17.3 QP	40.0	-22.7	1.00 H	234	35.50	-18.20
3	254.99	22.6 QP	46.0	-23.4	1.75 H	90	36.80	-14.20
4	388.87	23.5 QP	46.0	-22.5	1.00 H	224	34.40	-10.90
5	456.79	21.5 QP	46.0	-24.5	2.00 H	249	31.00	-9.50
6	645.01	22.5 QP	46.0	-23.5	1.00 H	129	28.50	-6.00
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	55.13	28.8 QP	40.0	-11.2	1.00 V	166	42.90	-14.10
2	109.46	23.6 QP	43.5	-19.9	1.75 V	233	40.80	-17.20
3	181.25	23.5 QP	43.5	-20.0	1.00 V	241	38.80	-15.30
4	456.79	23.4 QP	46.0	-22.6	1.00 V	104	32.90	-9.50
5	536.34	26.6 QP	46.0	-19.4	1.00 V	125	35.00	-8.40
6	617.84	25.4 QP	46.0	-20.6	3.00 V	13	31.60	-6.20

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Apr. 24, 2014	Apr. 23, 2015
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 23, 2013	Dec. 22, 2014
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 10, 2014	Jul. 09, 2015
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

- Notes: 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

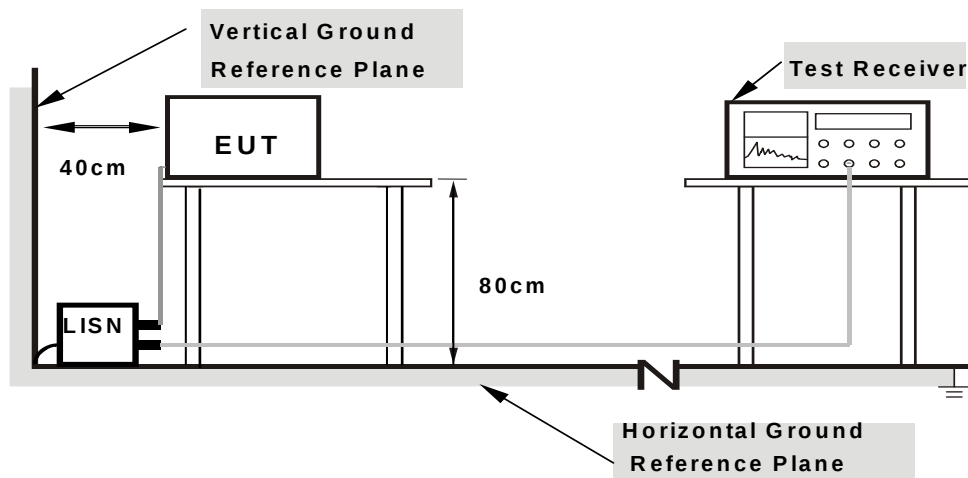
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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) were 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

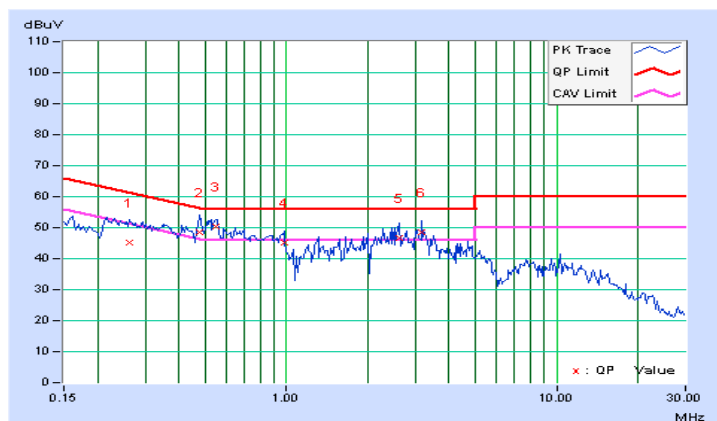
CONDUCTED WORST-CASE DATA: 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.26328	0.23	45.00	34.61	45.23	34.84	61.33	51.33	-16.09	-16.48
2	0.47813	0.23	48.28	41.04	48.51	41.27	56.37	46.37	-7.86	-5.10
3	0.55116	0.24	50.13	42.26	50.37	42.50	56.00	46.00	-5.63	-3.50
4	0.97772	0.30	44.90	35.67	45.20	35.97	56.00	46.00	-10.80	-10.03
5	2.60156	0.39	46.25	36.27	46.64	36.66	56.00	46.00	-9.36	-9.34
6	3.17644	0.41	48.28	34.26	48.69	34.67	56.00	46.00	-7.31	-11.33

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

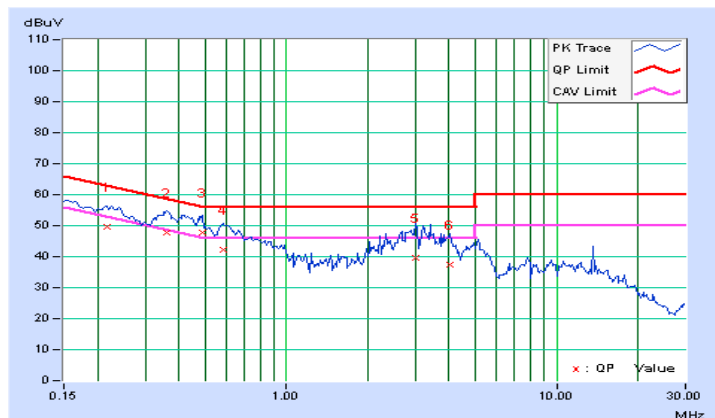


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

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	0.21641	0.24	49.39	38.03	49.63	38.27	62.96	52.96	-13.32	-14.68
2	0.36094	0.29	47.31	35.48	47.60	35.77	58.71	48.71	-11.11	-12.94
3	0.48594	0.30	47.37	38.21	47.67	38.51	56.24	46.24	-8.57	-7.73
4	0.58359	0.30	41.91	28.98	42.21	29.28	56.00	46.00	-13.79	-16.72
5	3.01563	0.44	39.05	30.33	39.49	30.77	56.00	46.00	-16.51	-15.23
6	4.01953	0.49	36.74	27.40	37.23	27.89	56.00	46.00	-18.77	-18.11

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

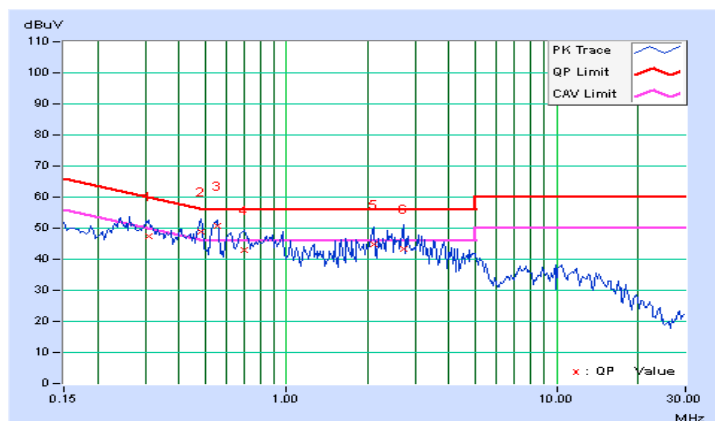


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

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	0.31016	0.23	47.11	36.25	47.34	36.48	59.97	49.97	-12.63	-13.49
2	0.48203	0.23	48.68	43.13	48.91	43.36	56.30	46.30	-7.39	-2.94
3	0.55234	0.24	50.33	41.90	50.57	42.14	56.00	46.00	-5.43	-3.86
4	0.70078	0.26	42.69	34.87	42.95	35.13	56.00	46.00	-13.05	-10.87
5	2.10919	0.37	44.52	34.79	44.89	35.16	56.00	46.00	-11.11	-10.84
6	2.72266	0.40	42.93	34.53	43.33	34.93	56.00	46.00	-12.67	-11.07

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

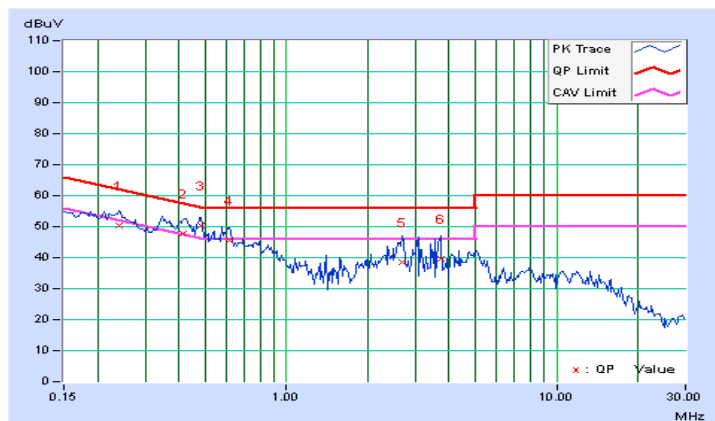


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

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	0.23984	0.25	50.12	38.74	50.37	38.99	62.10	52.10	-11.73	-13.11
2	0.41444	0.30	47.39	36.27	47.69	36.57	57.56	47.56	-9.87	-10.99
3	0.48195	0.30	49.91	40.34	50.21	40.64	56.31	46.31	-6.10	-5.67
4	0.61484	0.30	45.41	35.33	45.71	35.63	56.00	46.00	-10.29	-10.37
5	2.68359	0.42	37.99	30.69	38.41	31.11	56.00	46.00	-17.59	-14.89
6	3.73828	0.48	39.01	27.21	39.49	27.69	56.00	46.00	-16.51	-18.31

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



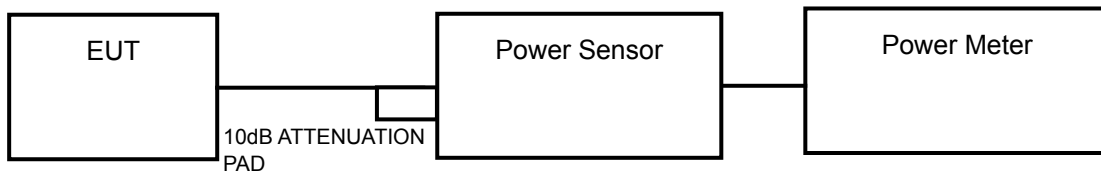
4.3 TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	√	---	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√	---	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3		---	1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

4.3.2 TEST SETUP



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, 802.11n (HT20), 802.11n (HT40)

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 802.11ac (VHT80)

- 1) Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- 2) Set sweep trigger to “free run”.
- 3) Set RBW = 1 MHz.
- 4) Set VBW $\geq$ 3 MHz
- 5) Number of points in sweep $\geq$ 2 Span / RBW.
- 6) Sweep time $\leq$ (number of points in sweep) * T
- 7) Detector = RMS.
- 8) Trace mode = max hold.
- 9) Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

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)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	34.834	15.42	24	PASS
40	5200	36.983	15.68	24	PASS
48	5240	35.892	15.55	24	PASS
52	5260	36.813	15.66	24	PASS
60	5300	36.983	15.68	24	PASS
64	5320	29.923	14.76	24	PASS
100	5500	32.509	15.12	24	PASS
116	5580	37.670	15.76	24	PASS
140	5700	37.239	15.71	24	PASS

NOTE:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(22.70) = 24.56 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(23.32) = 24.68 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(23.01) = 24.62 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(22.79) = 24.58 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(22.58) = 24.54 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(24.17) = 24.83 > 24\text{dBm}$

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	27.797	14.44	24	PASS
40	5200	30.409	14.83	24	PASS
48	5240	30.269	14.81	24	PASS
52	5260	30.479	14.84	24	PASS
60	5300	31.477	14.98	24	PASS
64	5320	29.444	14.69	24	PASS
100	5500	23.823	13.77	24	PASS
116	5580	27.925	14.46	24	PASS
140	5700	30.409	14.83	24	PASS

NOTE:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(22.40) = 24.50 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(22.39) = 24.50 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(22.37) = 24.50 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(22.41) = 24.50 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(22.36) = 24.49 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(22.85) = 24.59 > 24\text{dBm}$

802.11n (HT40)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	26.242	14.19	24	PASS
46	5230	27.164	14.34	24	PASS
54	5270	27.542	14.40	24	PASS
62	5310	25.763	14.11	24	PASS
102	5510	20.845	13.19	24	PASS
110	5550	22.284	13.48	24	PASS
134	5670	24.378	13.87	24	PASS

NOTE:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(45.32) = 27.56 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(45.20) = 27.55 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(45.00) = 27.53 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(45.60) = 27.59 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(45.15) = 27.55 > 24\text{dBm}$

802.11ac (VHT80)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	20.184	13.05	24	PASS
58	5290	19.953	13.00	24	PASS
106	5530	21.038	13.23	24	PASS

NOTE:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(84.70) = 30.28 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(84.73) = 30.28 > 24\text{dBm}$

26dB BANDWIDTH:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	22.70	PASS
60	5300	23.32	PASS
64	5320	23.01	PASS
100	5500	22.79	PASS
116	5580	22.58	PASS
140	5700	24.17	PASS

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	22.40	PASS
60	5300	22.39	PASS
64	5320	22.37	PASS
100	5500	22.41	PASS
116	5580	22.36	PASS
140	5700	22.85	PASS

802.11n (HT40)

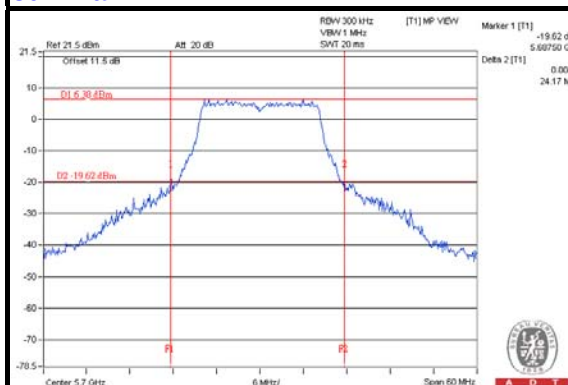
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
54	5270	45.32	PASS
62	5310	45.20	PASS
102	5510	45.00	PASS
110	5550	45.60	PASS
134	5670	45.15	PASS

802.11ac (VHT80)

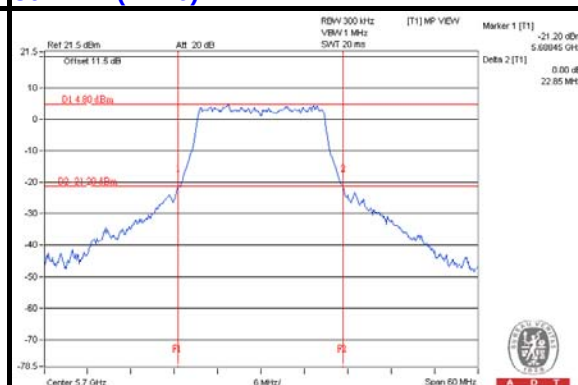
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
58	5290	84.70	PASS
106	5530	84.73	PASS

SPECTRUM PLOT OF WORST VALUE

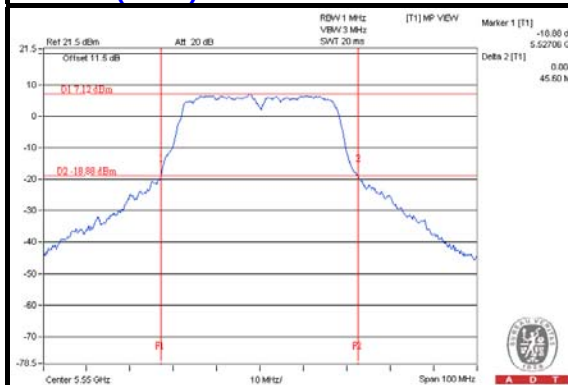
802.11a



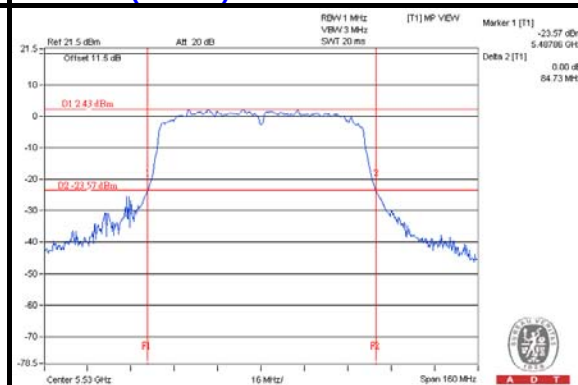
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

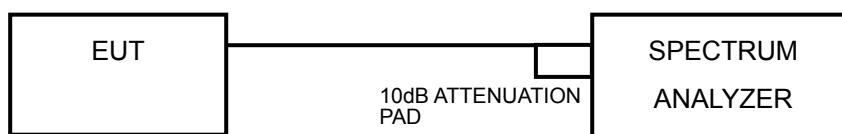


4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√	---	11dBm/ MHz
U-NII-2C	√	---	11dBm/ MHz
U-NII-3		---	30dBm/ MHz

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:

Using method SA-1

- 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 = auto, trigger set to “free run”.
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value

For 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT80):

Using method SA-2

- 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 = auto, trigger set to “free run”.
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add $10 \log (1/\text{duty cycle})$

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 (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	2.00	11	PASS
40	5200	2.12	11	PASS
48	5240	2.11	11	PASS
52	5260	2.37	11	PASS
60	5300	2.11	11	PASS
64	5320	1.59	11	PASS
100	5500	1.48	11	PASS
116	5580	2.15	11	PASS
140	5700	1.80	11	PASS

802.11n (HT20)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	0.82	0.12	0.94	11	PASS
40	5200	1.05	0.12	1.17	11	PASS
48	5240	0.79	0.12	0.91	11	PASS
52	5260	1.19	0.12	1.31	11	PASS
60	5300	1.24	0.12	1.36	11	PASS
64	5320	0.35	0.12	0.47	11	PASS
100	5500	-0.16	0.12	-0.04	11	PASS
116	5580	0.66	0.12	0.78	11	PASS
140	5700	0.32	0.12	0.44	11	PASS

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

802.11n (HT40)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
38	5190	-2.37	0.12	-2.25	11	PASS
46	5230	-2.38	0.12	-2.26	11	PASS
54	5270	-1.94	0.12	-1.82	11	PASS
62	5310	-2.34	0.12	-2.22	11	PASS
102	5510	-3.44	0.12	-3.32	11	PASS
110	5550	-2.75	0.12	-2.63	11	PASS
134	5670	-3.53	0.12	-3.41	11	PASS

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

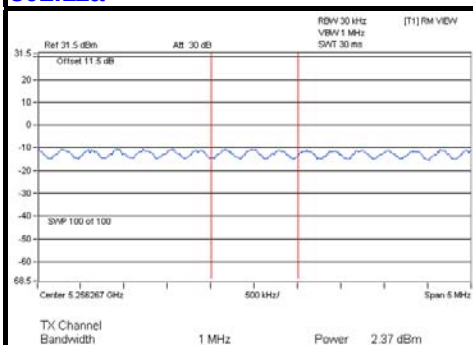
802.11ac (VHT80)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
42	5210	-6.86	0.39	-6.47	11	PASS
58	5290	-6.10	0.39	-5.71	11	PASS
106	5530	-7.94	0.39	-7.55	11	PASS

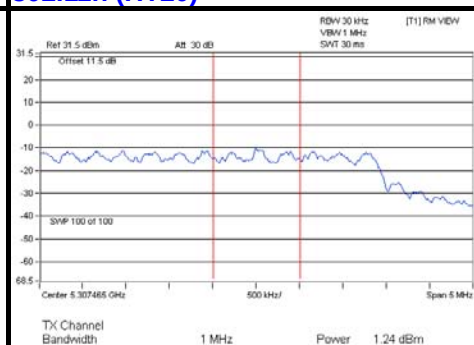
NOTE: Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE

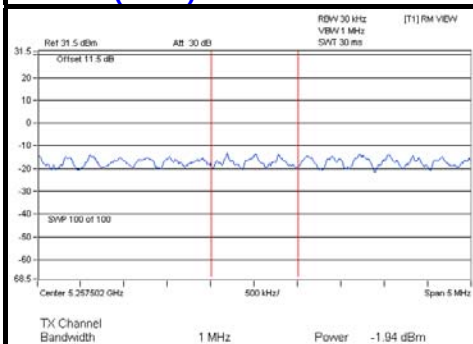
802.11a



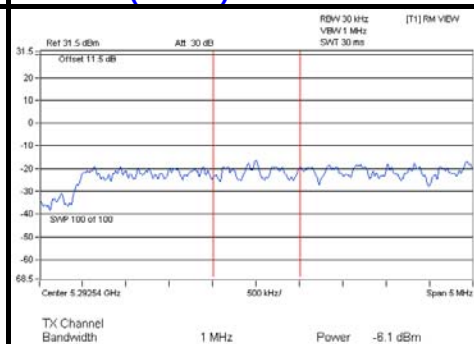
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

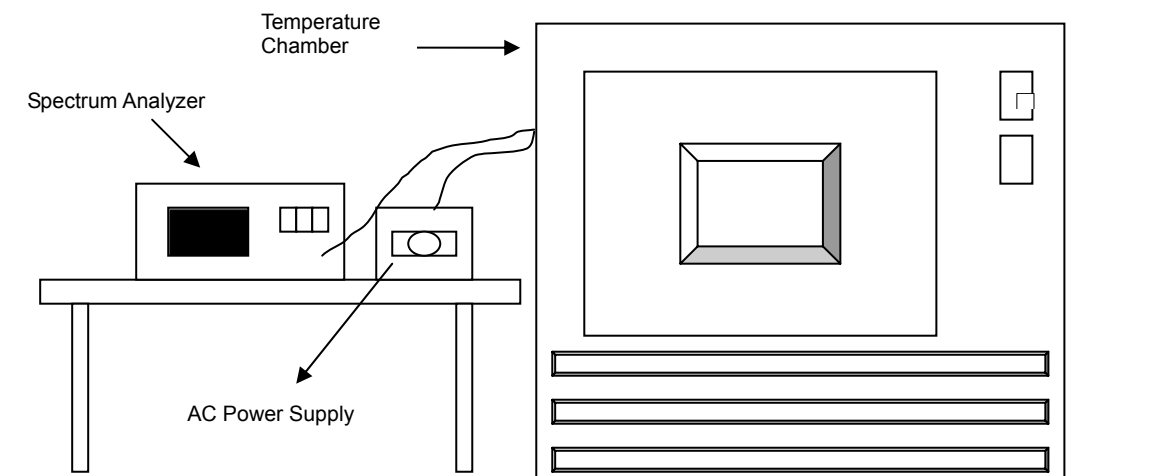


4.5 FREQUENCY STABILITY

4.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

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

- 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.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

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

4.5.7 TEST RESULTS

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
55	120	5320.0045	0.00008	5320.0046	0.00009	5320.0064	0.00012	5320.0088	0.00017
50	120	5319.9809	-0.00036	5319.979	-0.00039	5319.9772	-0.00043	5319.9779	-0.00042
40	120	5320.0152	0.00029	5320.0173	0.00033	5320.0183	0.00034	5320.0161	0.00030
30	120	5320.0041	0.00008	5320.0058	0.00011	5320.0073	0.00014	5320.0065	0.00012
20	120	5320.0118	0.00022	5320.016	0.00030	5320.0137	0.00026	5320.0143	0.00027
10	120	5320.0166	0.00031	5320.0144	0.00027	5320.0156	0.00029	5320.017	0.00032
0	120	5320.0006	0.00001	5320.0014	0.00003	5319.9978	-0.00004	5319.9975	-0.00005
-10	120	5319.9736	-0.00050	5319.9736	-0.00050	5319.9735	-0.00050	5319.9772	-0.00043
-20	120	5320.0046	0.00009	5320.0052	0.00010	5320.0031	0.00006	5320.0035	0.00007

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	138	5320.0032	0.00006	5320.0058	0.00011	5320.0064	0.00012	5320.0058	0.00011
	120	5320.0041	0.00008	5320.0058	0.00011	5320.0073	0.00014	5320.0065	0.00012
	102	5320.0041	0.00008	5320.0055	0.00010	5320.0068	0.00013	5320.0074	0.00014

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/Telecom Lab:

Tel: 886-3-5935343

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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---