



FCC TEST REPORT (15.407)

REPORT NO.: RF131223C35G

MODEL NO.: XR600

FCC ID: SK6-XR620

RECEIVED: Dec. 12, 2013

TESTED: Dec. 19, 2013 ~ Sep. 11, 2014

ISSUED: Sep. 15, 2014

APPLICANT: Xirrus, INC.

ADDRESS: 2101 Corporate Center Driver Thousand Oaks,
California 91320

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

LAB ADDRESS: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist.,
New Taipei City, Taiwan, R.O.C.

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF131223C35G	Original release	Sep. 15, 2014



1. CERTIFICATION

PRODUCT: 802.11ac 2x2 AP

MODEL: XR600

BRAND: Xirrus

APPLICANT: Xirrus, INC.

TESTED: Dec. 19, 2013 ~ Sep. 11, 2014

TEST SAMPLE: ENGINEERING SAMPLE

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

ANSI C63.10-2009

The above equipment (model: XR600) 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 : Ivy Lin , **DATE :** Sep. 15, 2014
Ivy Lin / Specialist

APPROVED BY : Ken Liu , **DATE :** Sep. 15, 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 Emission	PASS	Meet the requirement of limit. Minimum passing margin is -16.26dB at 15.13312MHz.
15.407(b/1/2/3) (b)(6)	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 11440.00MHz, 5725.00MHz, 5470.00MHz.
15.407(a/1/2)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a/1/2)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is N-Type. (The device is professionally installed)

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.19 dB
	200MHz ~1000MHz	3.21 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	802.11ac 2x2 AP
MODEL NO.	XR600
POWER SUPPLY	55Vdc (POE)
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK 256QAM for OFDM in 11ac mode only
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 450.0Mbps 802.11ac: up to 867.0Mbps
OPERATING FREQUENCY	5260 ~ 5320MHz & 5500 ~ 5720MHz
NUMBER OF CHANNEL	5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz), 802.11ac (20MHz) 2 for 802.11n (40MHz), 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5720MHz: 9 for 802.11a, 802.11n (20MHz), 802.11ac (20MHz) 4 for 802.11n (40MHz), 802.11ac (40MHz) 2 for 802.11ac (80MHz)
OUTPUT POWER	5260 ~ 5320MHz: 80.416mW 5500 ~ 5720MHz: 77.541mW
ANTENNA TYPE	Monopole antenna with 5.16dBi gain
ANTENNA CONNECTOR	I-PEX
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	NA

NOTE:

1. This is a supplementary report to RF131223C35-1. This report shall be combined together with its original report.
2. This report is prepared for FCC class II permissive change. The difference compared with the original report is adding Band 2 & Band 3 of 5GHz. Therefore, all test items for the operating frequency were re-tested and presented in the test report.
3. The EUT has two collocated dual band RF modules (Radio 1, Radio 2), which cannot co-transmit in the same band.

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

MODULATION MODE	TX FUNCTION
802.11a	2TX
802.11n (20MHz) (MCS 8 ~ 15)	2TX
802.11n (40MHz) (MCS 8 ~ 15)	2TX
802.11ac (80MHz)	2TX

5. The EUT was powered by the following POE (provided as a support unit only).

BRAND	PowerDsine
MODEL	PD9001G
INPUT POWER	100-250Vac, 50/60Hz, 0.8A
OUTPUT POWER	55Vdc, 0.60A

6. All transmissions above 5.725 GHz is under 15.407 (old rules) whenever operating on a channel where the EBW crosses 5.725 GHz.
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 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (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), 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY
58	5290MHz

FOR 5500 ~ 5720MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	132	5660 MHz
104	5520 MHz	136	5680 MHz
108	5540 MHz	140	5700 MHz
112	5560 MHz	144	5720 MHz
116	5580 MHz		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	134	5670 MHz
110	5550 MHz	142	5710 MHz

2 channels are provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530MHz	138	5690MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE \geq 1G	RE<1G	PLC	APCM	
A	√	√	√	√	Radio 1
B	√	√	√	√	Radio 2

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. **Radio 1**: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane**.
2. **Radio 2**: 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.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B	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	7.2
	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	15.0
	802.11ac (80MHz)		58	58	OFDM	BPSK	58.5
A, B	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6.0
	802.11n (20MHz)		100 to 144	100, 116, 140, 144	OFDM	BPSK	7.2
	802.11n (40MHz)		102 to 142	102, 110, 134, 142	OFDM	BPSK	15.0
	802.11ac (80MHz)		106, 138	106, 138	OFDM	BPSK	58.5

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.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5260-5320, 5500-5720	52 to 64, 100 to 144	52	OFDM	BPSK	6.0
B	802.11n (20MHz)	5260-5320, 5500-5720	52 to 64, 100 to 144	52	OFDM	BPSK	7.2

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	802.11a	5260-5320, 5500-5720	52 to 64, 100 to 144	52	OFDM	BPSK	6.0
B	802.11n (20MHz)	5260-5320, 5500-5720	52 to 64, 100 to 144	52	OFDM	BPSK	7.2

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, B	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	7.2
	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	15.0
	802.11ac (80MHz)		58	58	OFDM	BPSK	58.5
A, B	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6.0
	802.11n (20MHz)		100 to 144	100, 116, 140, 144	OFDM	BPSK	7.2
	802.11n (40MHz)		102 to 142	102, 110, 134, 142	OFDM	BPSK	15.0
	802.11ac (80MHz)		106, 138	106, 138	OFDM	BPSK	58.5



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TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE \geq 1G	22deg. C, 69%RH, 25deg. C, 66%RH	120Vac, 60Hz	Brad Tung, Jones Chang, Alan Wu
RE $<$ 1G	22deg. C, 69%RH	120Vac, 60Hz	Jones Chang
PLC	24deg. C, 70%RH	120Vac, 60Hz	Alan Wu
APCM	24deg. C, 64%RH, 25deg. C, 60%RH	120Vac, 60Hz	Match Tsui, Jun Wu

3.3 DUTY CYCLE OF TEST SIGNAL

Test mode A

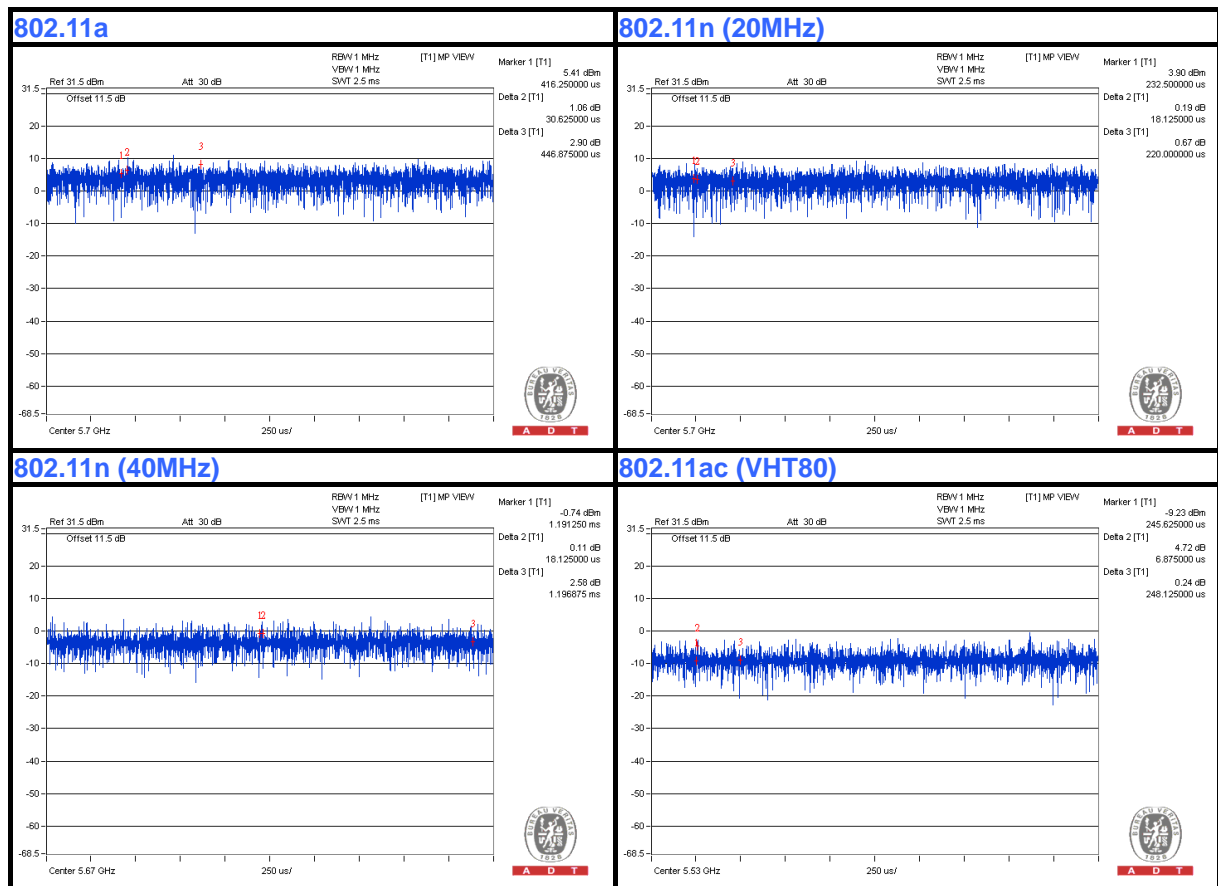
MODULATION TYPE: BPSK

02.11a: Duty cycle of test signal is > 98 %

802.11n (20MHz): Duty cycle of test signal is > 98 %

802.11n (40MHz): Duty cycle of test signal is > 98 %

802.11ac (VHT80): Duty cycle of test signal is > 98 %





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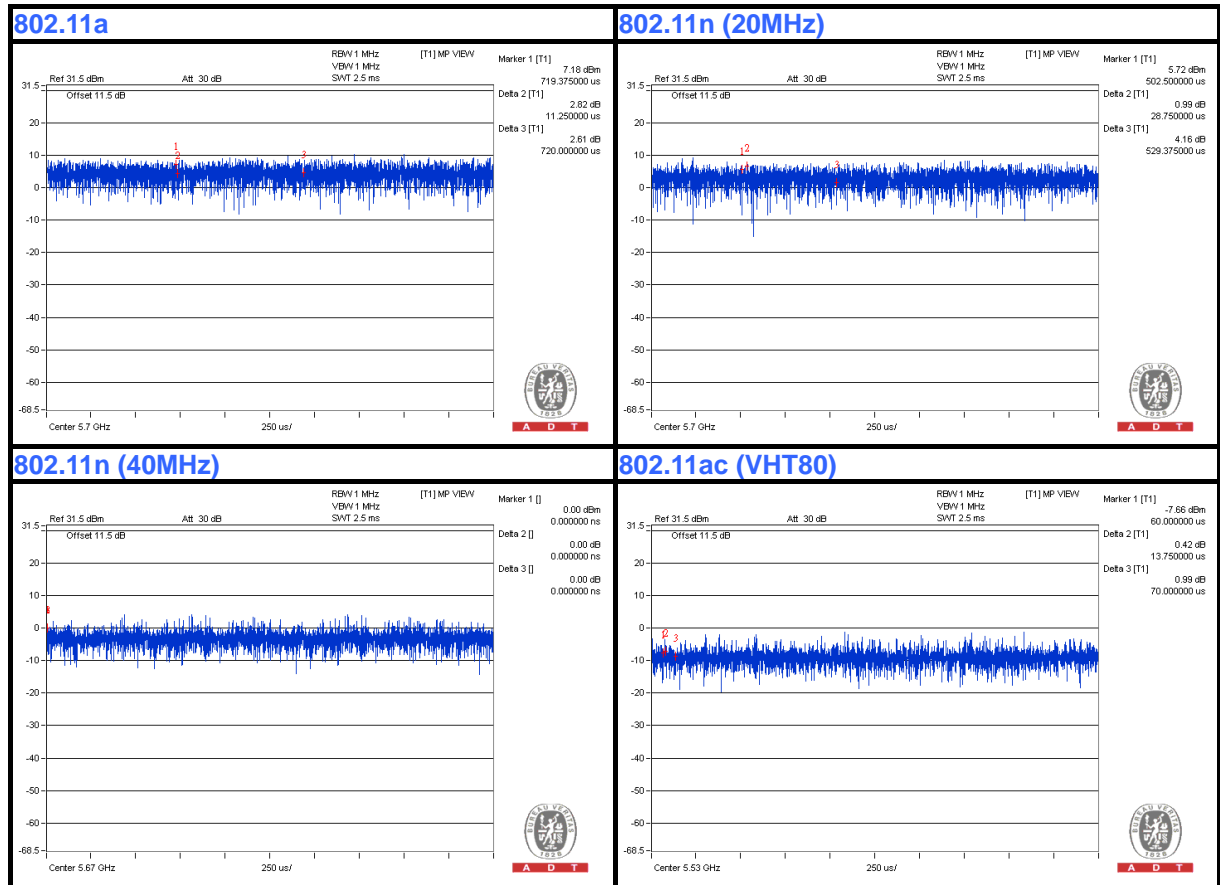
MODULATION TYPE: QPSK

02.11a: Duty cycle of test signal is > 98 %

802.11n (20MHz): Duty cycle of test signal is > 98 %

802.11n (40MHz): Duty cycle of test signal is > 98 %

802.11ac (VHT80): Duty cycle of test signal is > 98 %





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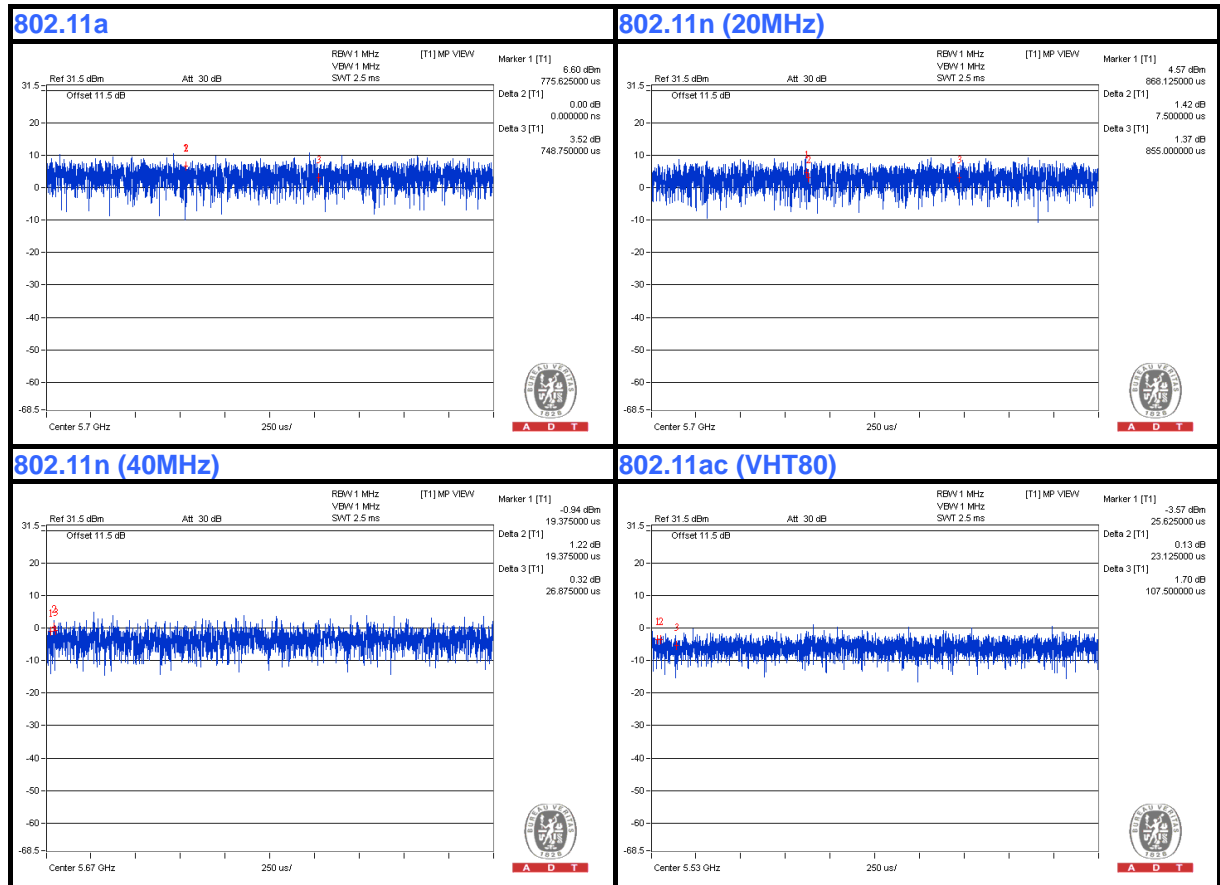
MODULATION TYPE: 16QAM

02.11a: Duty cycle of test signal is > 98 %

802.11n (20MHz): Duty cycle of test signal is > 98 %

802.11n (40MHz): Duty cycle of test signal is > 98 %

802.11ac (VHT80): Duty cycle of test signal is > 98 %





A D T

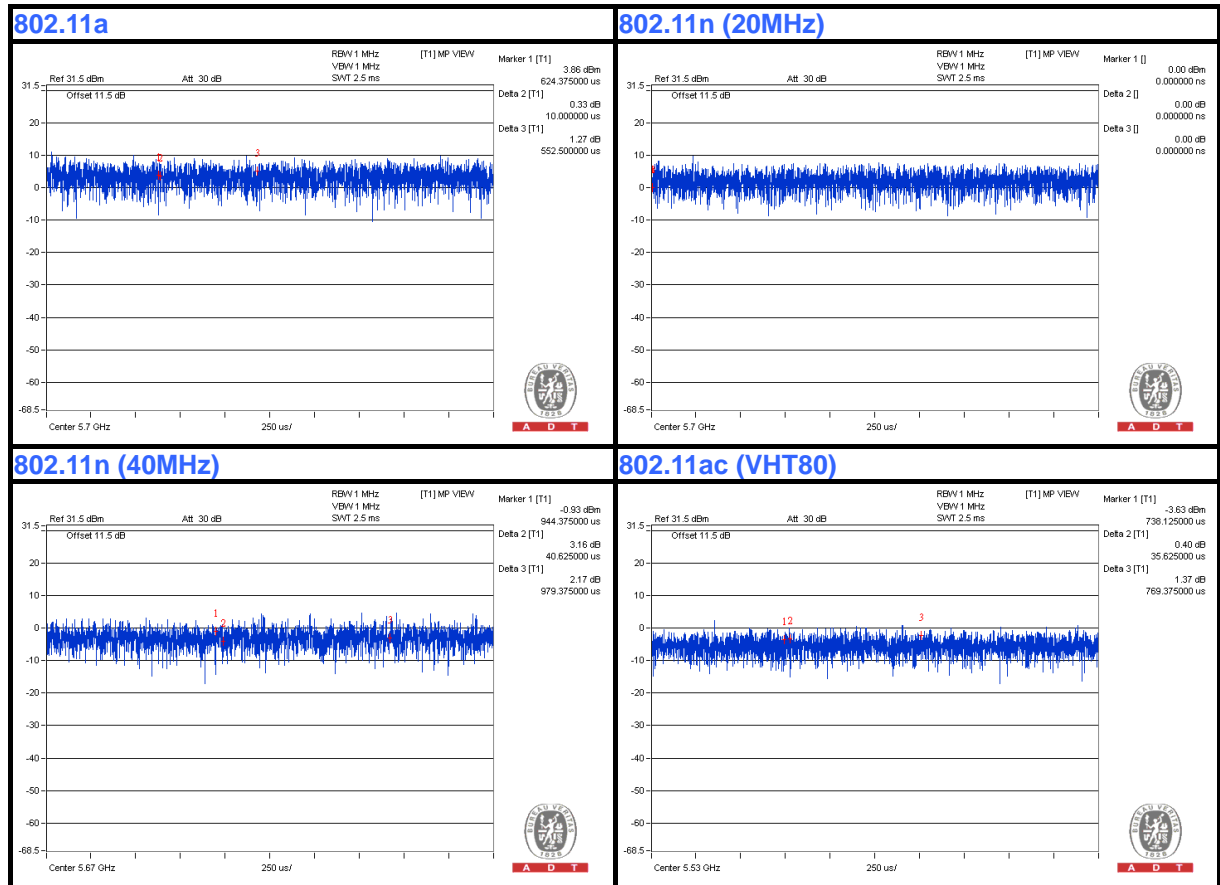
MODULATION TYPE: 64QAM

02.11a: Duty cycle of test signal is > 98 %

802.11n (20MHz): Duty cycle of test signal is > 98 %

802.11n (40MHz): Duty cycle of test signal is > 98 %

802.11ac (VHT80): Duty cycle of test signal is > 98 %

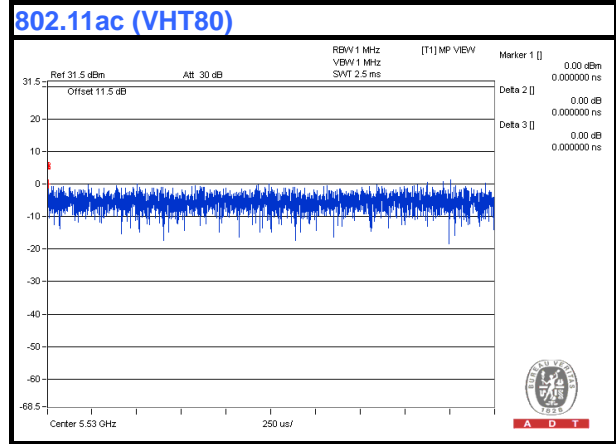




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MODULATION TYPE: 256QAM

802.11ac (VHT80): Duty cycle of test signal is > 98 %





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Test mode B

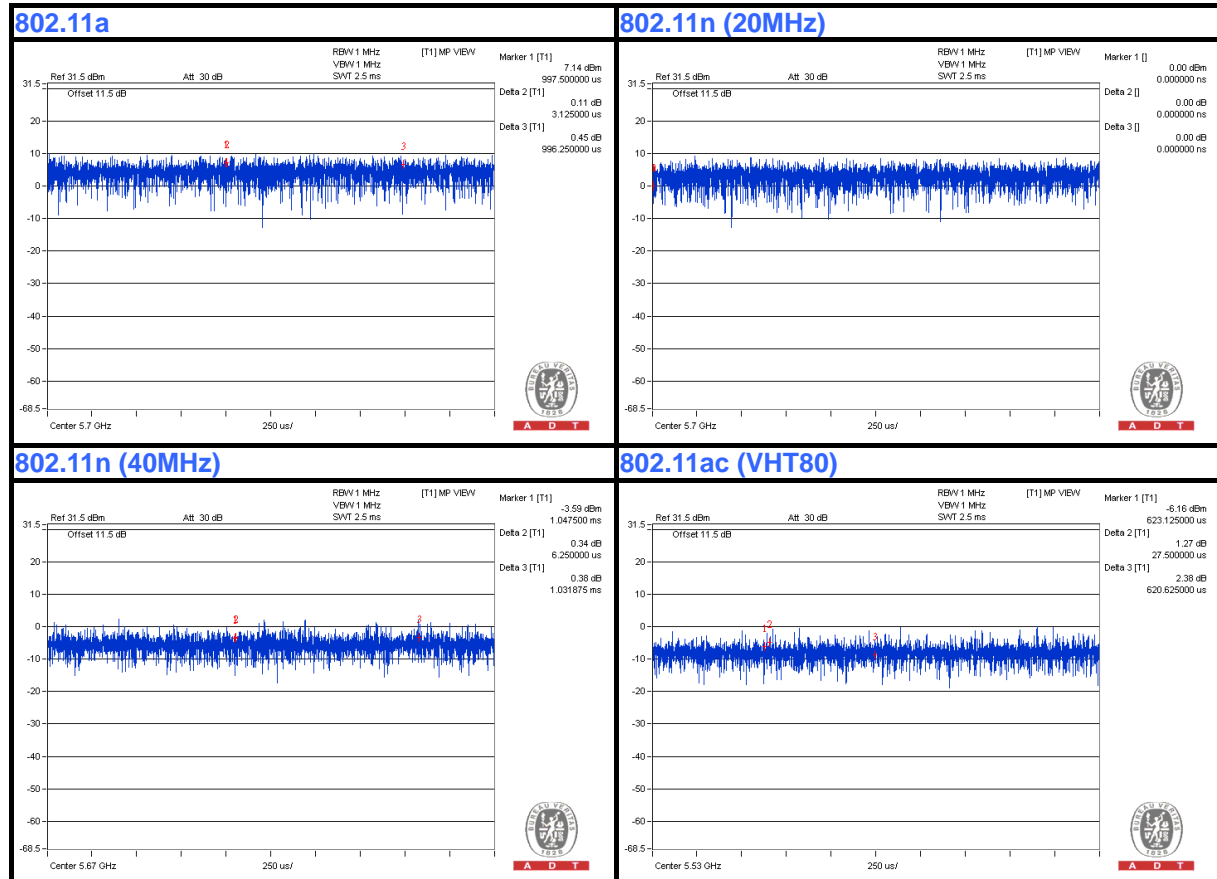
MODULATION TYPE: BPSK

02.11a: Duty cycle of test signal is > 98 %

802.11n (20MHz): Duty cycle of test signal is > 98 %

802.11n (40MHz): Duty cycle of test signal is > 98 %

802.11ac (VHT80): Duty cycle of test signal is > 98 %





A D T

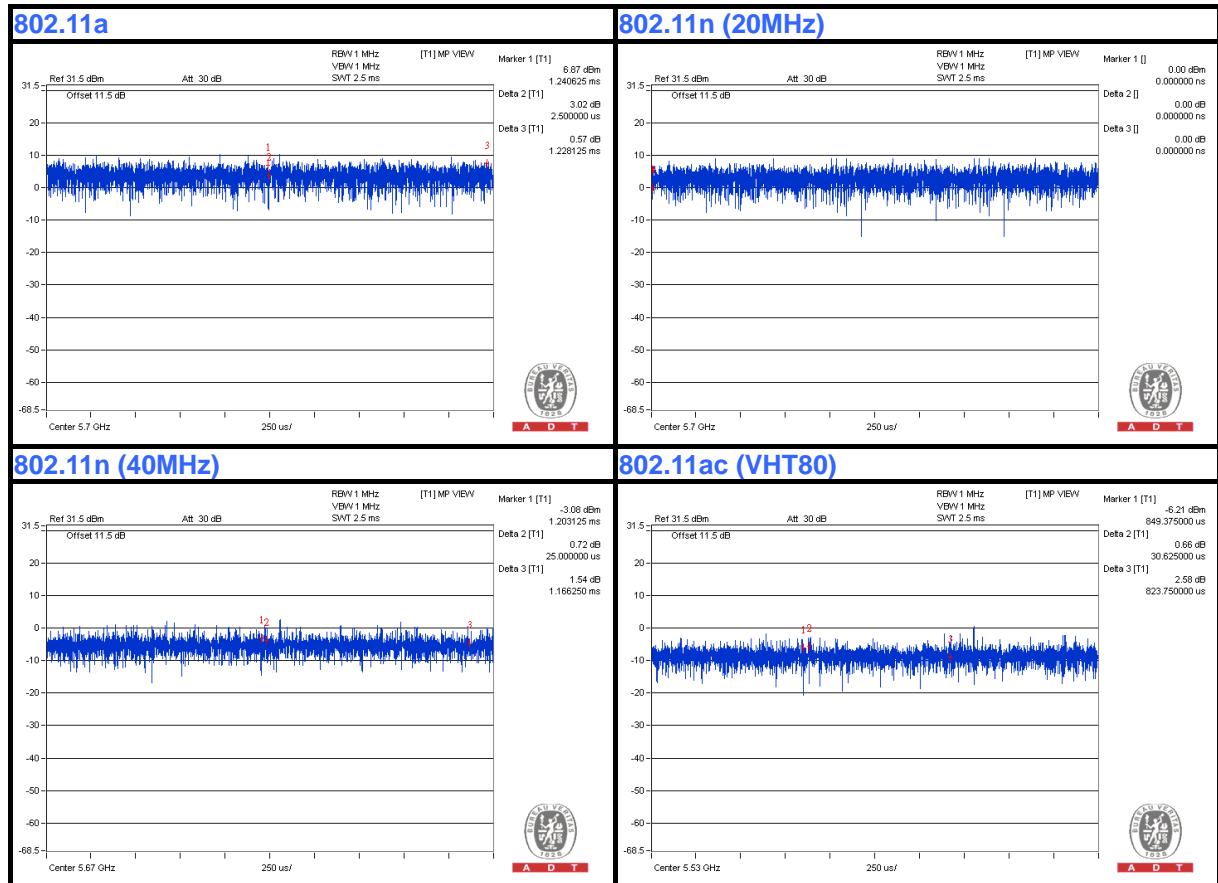
MODULATION TYPE: QPSK

02.11a: Duty cycle of test signal is > 98 %

802.11n (20MHz): Duty cycle of test signal is > 98 %

802.11n (40MHz): Duty cycle of test signal is > 98 %

802.11ac (VHT80): Duty cycle of test signal is > 98 %





A D T

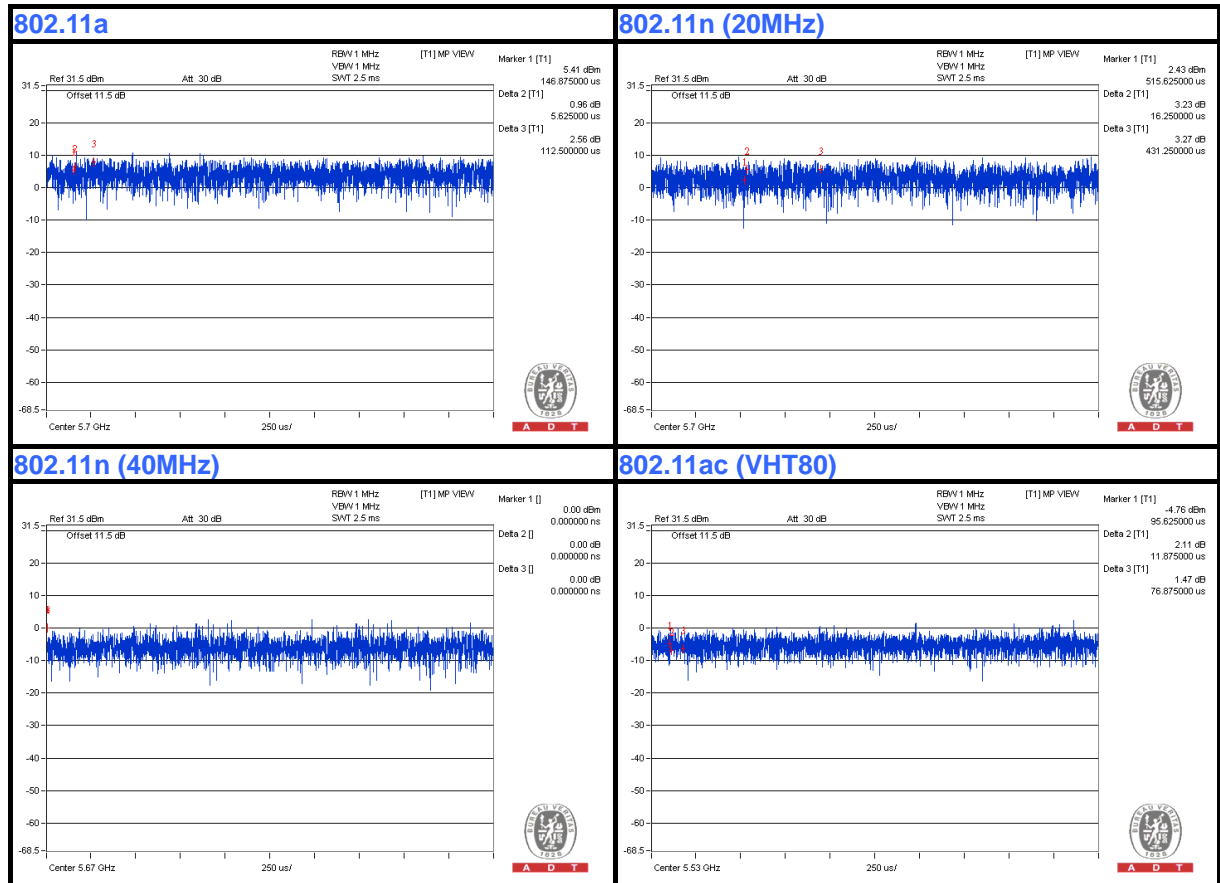
MODULATION TYPE: 16QAM

02.11a: Duty cycle of test signal is > 98 %

802.11n (20MHz): Duty cycle of test signal is > 98 %

802.11n (40MHz): Duty cycle of test signal is > 98 %

802.11ac (VHT80): Duty cycle of test signal is > 98 %





A D T

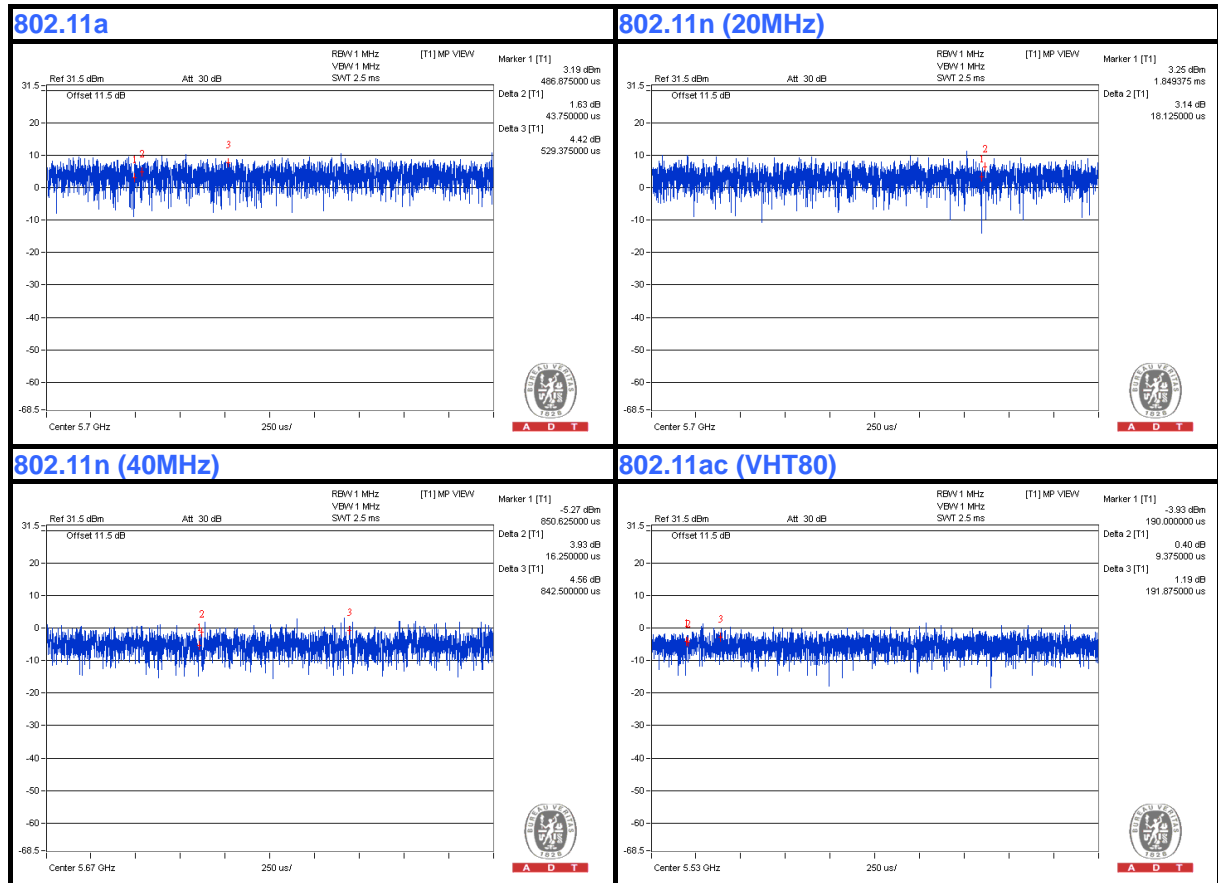
MODULATION TYPE: 64QAM

02.11a: Duty cycle of test signal is > 98 %

802.11n (20MHz): Duty cycle of test signal is > 98 %

802.11n (40MHz): Duty cycle of test signal is > 98 %

802.11ac (VHT80): Duty cycle of test signal is > 98 %

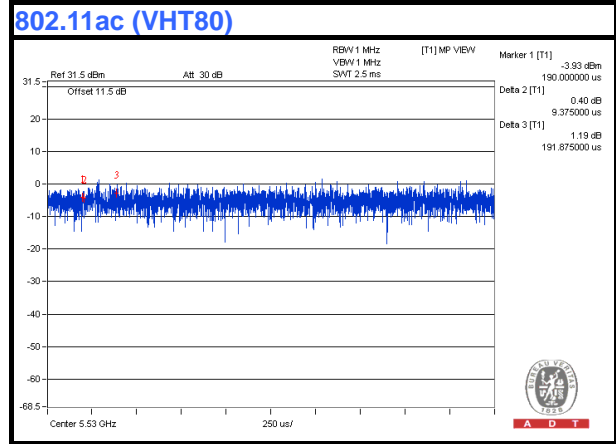




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MODULATION TYPE: 256QAM

802.11ac (VHT80): Duty cycle of test signal is > 98 %



3.4 DESCRIPTION OF SUPPORT UNITS

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

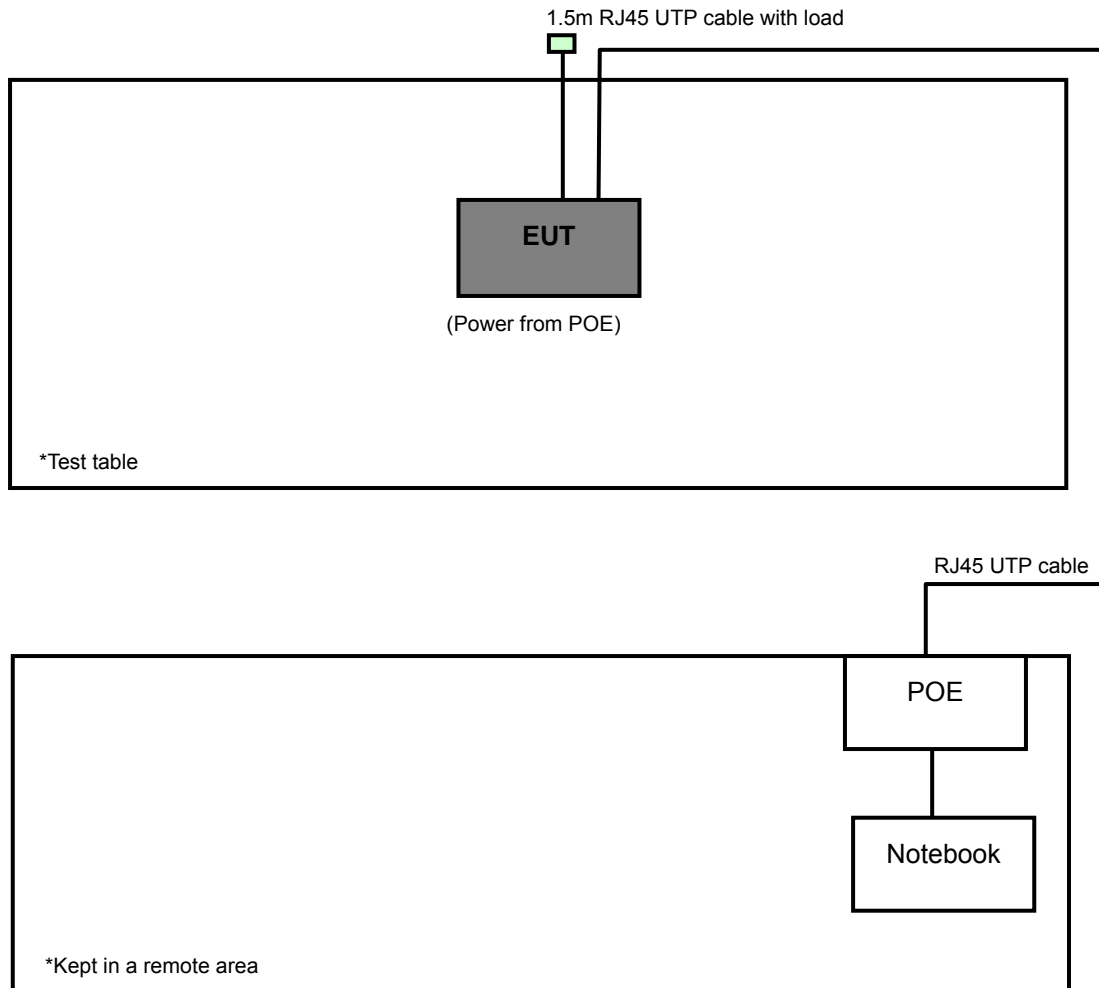
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	D531	CN-0XM006-48643-8 1U-2973	QDS-BRCM1020
2	POE	PowerDsine	PD9001G	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	3m RJ45 UTP cable
2	1.5m RJ45 UTP cable

NOTE:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item 1 ~ 2 acted as a communication partner to transfer data.
3. Item 2 was provided by the client.

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)

789033 D01 General UNII Test Procedures Old Rules v01r04

662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2009

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

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

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

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

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

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

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

4.1.3 TEST INSTRUMENTS

Tested Date: Dec. 19, 2013 ~ Jan. 09, 2014

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Sep. 09, 2013	Sep. 08, 2014
Spectrum Analyzer ROHDE & SCHWARZ	FSU 43	100115	Dec. 18, 2013	Dec. 17, 2014
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Mar. 25, 2013	Mar. 24, 2014
HORN Antenna SCHWARZBECK	9120D	209	Sep. 12, 2013	Sep. 11, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 15, 2013	Jul. 14, 2014
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. 26, 2013	Aug. 25, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Aug. 26, 2013	Aug. 25, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Aug. 26, 2013	Aug. 25, 2014
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
High Speed Peak Power Meter	ML2495A	0824011	Jul. 29, 2013	Jul. 28, 2014
Power Sensor	MA2411B	0738171	Jul. 29, 2013	Jul. 28, 2014
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 10, 2013	Jun. 09, 2014

- 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.



Tested Date: Sep. 03 ~ Sep. 11, 2014

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100744	Apr. 15, 2014	Apr. 14, 2015
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:

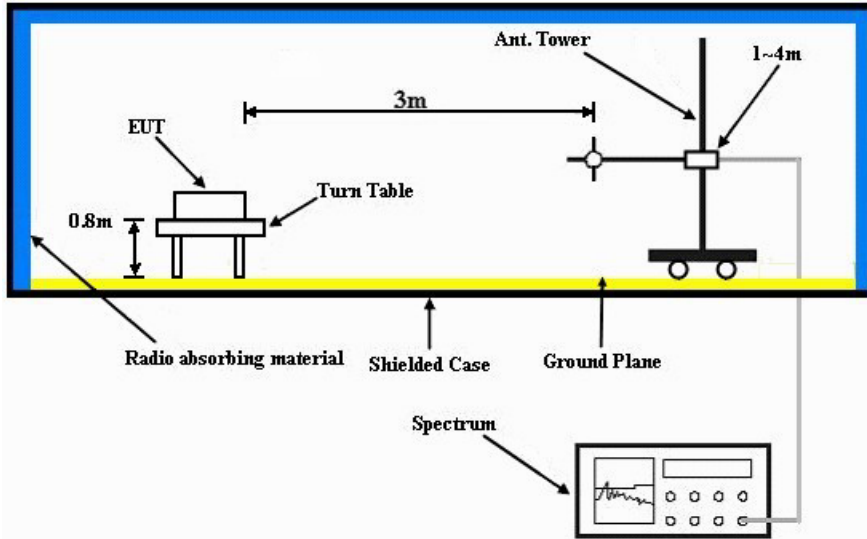
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution 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

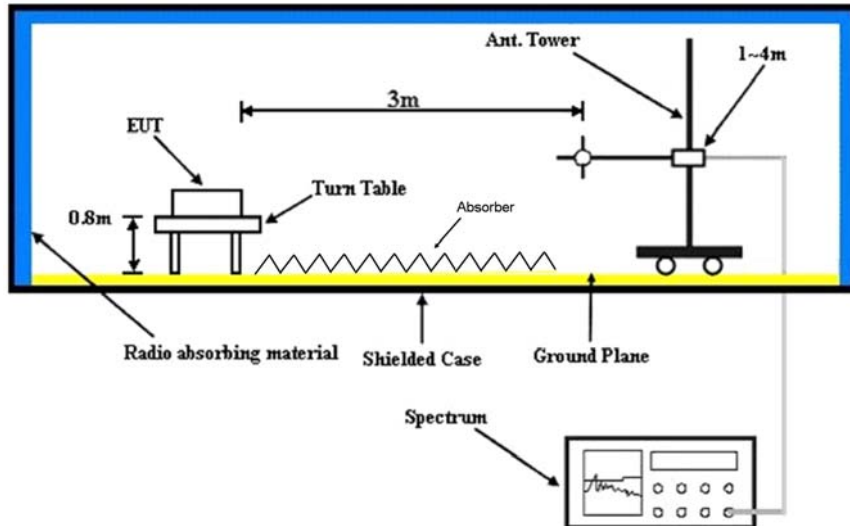
No deviation.

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

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

4.1.8 TEST RESULTS

TEST MODE A

ABOVE 1GHz DATA : 802.11a

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	108.3 PK			1.13 H	95	69.00	39.30
2	*5260.00	98.2 AV			1.13 H	95	58.90	39.30
3	#10520.00	59.2 PK	74.0	-14.8	1.07 H	300	42.40	16.80
4	#10520.00	47.4 AV	54.0	-6.6	1.07 H	300	30.60	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	*5260.00	104.3 PK			1.04 V	17	65.00	39.30
2	*5260.00	94.2 AV			1.04 V	17	54.90	39.30
3	#10520.00	59.0 PK	74.0	-15.0	1.25 V	224	42.20	16.80
4	#10520.00	47.0 AV	54.0	-7.0	1.25 V	224	30.20	16.80

REMARKS:

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



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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	108.3 PK			1.15 H	99	68.90	39.40
2	*5300.00	98.2 AV			1.15 H	99	58.80	39.40
3	10600.00	58.8 PK	74.0	-15.2	1.03 H	18	42.30	16.50
4	10600.00	47.2 AV	54.0	-6.8	1.03 H	18	30.70	16.50
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	*5300.00	104.3 PK			1.00 V	30	64.90	39.40
2	*5300.00	94.0 AV			1.00 V	30	54.60	39.40
3	10600.00	58.5 PK	74.0	-15.5	1.27 V	203	42.00	16.50
4	10600.00	46.8 AV	54.0	-7.2	1.27 V	203	30.30	16.50

REMARKS:

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

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	108.4 PK			1.12 H	87	69.00	39.40
2	*5320.00	98.1 AV			1.12 H	87	58.70	39.40
3	5350.00	64.5 PK	74.0	-9.5	1.12 H	87	59.00	5.50
4	5350.00	49.0 AV	54.0	-5.0	1.12 H	87	43.50	5.50
5	10640.00	59.3 PK	74.0	-14.7	1.15 H	24	42.50	16.80
6	10640.00	47.4 AV	54.0	-6.6	1.15 H	24	30.60	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	*5320.00	104.4 PK			1.00 V	21	65.00	39.40
2	*5320.00	94.2 AV			1.00 V	21	54.80	39.40
3	5350.00	62.0 PK	74.0	-12.0	1.00 V	21	56.50	5.50
4	5350.00	46.1 AV	54.0	-7.9	1.00 V	21	40.60	5.50
5	10640.00	59.1 PK	74.0	-14.9	1.26 V	193	42.30	16.80
6	10640.00	47.2 AV	54.0	-6.8	1.26 V	193	30.40	16.80

REMARKS:

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

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	57.1 PK	74.0	-16.9	1.39 H	77	51.50	5.60
2	5460.00	45.4 AV	54.0	-8.6	1.39 H	77	39.80	5.60
3	#5470.00	65.8 PK	74.0	-8.2	1.38 H	79	60.20	5.60
4	#5470.00	51.6 AV	54.0	-2.4	1.38 H	79	46.00	5.60
5	*5500.00	108.8 PK			1.38 H	79	69.20	39.60
6	*5500.00	98.6 AV			1.38 H	79	59.00	39.60
7	11000.00	60.4 PK	74.0	-13.6	1.25 H	82	41.90	18.50
8	11000.00	48.5 AV	54.0	-5.5	1.25 H	82	30.00	18.50

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	54.6 PK	74.0	-19.4	1.00 V	13	49.00	5.60
2	5460.00	43.0 AV	54.0	-11.0	1.00 V	13	37.40	5.60
3	#5470.00	62.6 PK	74.0	-11.4	1.00 V	13	57.00	5.60
4	#5470.00	46.6 AV	54.0	-7.4	1.00 V	13	41.00	5.60
5	*5500.00	105.0 PK			1.00 V	13	65.40	39.60
6	*5500.00	94.8 AV			1.00 V	13	55.20	39.60
7	11000.00	60.2 PK	74.0	-13.8	1.14 V	131	41.70	18.50
8	11000.00	48.2 AV	54.0	-5.8	1.14 V	131	29.70	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	109.5 PK			1.36 H	82	69.70	39.80
2	*5580.00	99.3 AV			1.36 H	82	59.50	39.80
3	11160.00	60.4 PK	74.0	-13.6	1.12 H	99	42.00	18.40
4	11160.00	48.2 AV	54.0	-5.8	1.12 H	99	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	*5580.00	105.5 PK			1.00 V	18	65.70	39.80
2	*5580.00	95.3 AV			1.00 V	18	55.50	39.80
3	11160.00	60.3 PK	74.0	-13.7	1.07 V	128	41.90	18.40
4	11160.00	48.2 AV	54.0	-5.8	1.07 V	128	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)
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	109.9 PK			1.65 H	87	69.80	40.10
2	*5700.00	99.8 AV			1.65 H	87	59.70	40.10
3	#5725.00	67.8 PK	74.0	-6.2	1.65 H	87	61.50	6.30
4	#5725.00	52.5 AV	54.0	-1.5	1.65 H	87	46.20	6.30
5	11400.00	60.1 PK	74.0	-13.9	1.24 H	150	41.90	18.20
6	11400.00	48.3 AV	54.0	-5.7	1.24 H	150	30.10	18.20
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	*5700.00	106.1 PK			1.00 V	10	66.00	40.10
2	*5700.00	96.1 AV			1.00 V	10	56.00	40.10
3	#5725.00	65.5 PK	74.0	-8.5	1.00 V	10	59.20	6.30
4	#5725.00	49.5 AV	54.0	-4.5	1.00 V	10	43.20	6.30
5	11400.00	59.9 PK	74.0	-14.1	1.09 V	181	41.70	18.20
6	11400.00	48.0 AV	54.0	-6.0	1.09 V	181	29.80	18.20

REMARKS:

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



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CHANNEL	TX Channel 144	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	#5470.00	58.1 PK	74.0	-15.9	1.00 H	326	52.00	6.10
2	#5470.00	46.6 AV	54.0	-7.4	1.00 H	326	40.50	6.10
3	*5720.00	107.2 PK			1.00 H	75	66.80	40.40
4	*5720.00	97.3 AV			1.00 H	75	56.90	40.40
5	#5825.00	58.3 PK	74.0	-15.7	1.00 H	60	51.50	6.80
6	#5825.00	45.7 AV	54.0	-8.3	1.00 H	60	38.90	6.80
7	11440.00	62.8 PK	74.0	-11.2	1.00 H	209	44.90	17.90
8	11440.00	49.7 AV	54.0	-4.3	1.00 H	209	31.80	17.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	59.8 PK	74.0	-14.2	1.03 V	8	53.70	6.10
2	#5470.00	48.5 AV	54.0	-5.5	1.03 V	8	42.40	6.10
3	*5720.00	105.6 PK			1.03 V	15	65.20	40.40
4	*5720.00	95.9 AV			1.03 V	15	55.50	40.40
5	#5825.00	58.0 PK	74.0	-16.0	1.00 V	130	51.20	6.80
6	#5825.00	45.6 AV	54.0	-8.4	1.00 V	130	38.80	6.80
7	11440.00	67.5 PK	74.0	-6.5	1.18 V	185	49.60	17.90
8	11440.00	52.9 AV	54.0	-1.1	1.18 V	185	35.00	17.90

REMARKS:

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



A D T

802.11n (20MHz)

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	109.2 PK			1.49 H	79	69.90	39.30
2	*5260.00	98.7 AV			1.79 H	79	59.40	39.30
3	#10520.00	59.2 PK	74.0	-14.8	1.28 H	131	42.40	16.80
4	#10520.00	47.1 AV	54.0	-6.9	1.28 H	131	30.30	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	*5260.00	105.1 PK			1.00 V	22	65.80	39.30
2	*5260.00	94.5 AV			1.00 V	22	55.20	39.30
3	#10520.00	59.0 PK	74.0	-15.0	1.00 V	6	42.20	16.80
4	#10520.00	46.9 AV	54.0	-7.1	1.00 V	6	30.10	16.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	109.0 PK			1.39 H	90	69.60	39.40
2	*5300.00	98.5 AV			1.39 H	90	59.10	39.40
3	10600.00	58.9 PK	74.0	-15.1	1.35 H	152	42.40	16.50
4	10600.00	46.8 AV	54.0	-7.2	1.35 H	152	30.30	16.50
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	*5300.00	104.7 PK			1.00 V	16	65.30	39.40
2	*5300.00	94.5 AV			1.00 V	16	55.10	39.40
3	10600.00	58.7 PK	74.0	-15.3	1.05 V	61	42.20	16.50
4	10600.00	46.5 AV	54.0	-7.5	1.05 V	61	30.00	16.50

REMARKS:

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

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	108.6 PK			1.42 H	83	69.20	39.40
2	*5320.00	98.6 AV			1.42 H	83	59.20	39.40
3	5350.00	65.4 PK	74.0	-8.6	1.42 H	83	59.90	5.50
4	5350.00	51.4 AV	54.0	-2.6	1.42 H	83	45.90	5.50
5	10640.00	59.5 PK	74.0	-14.5	1.17 H	148	42.70	16.80
6	10640.00	47.3 AV	54.0	-6.7	1.17 H	148	30.50	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	*5320.00	104.8 PK			1.00 V	20	65.40	39.40
2	*5320.00	94.7 AV			1.00 V	20	55.30	39.40
3	5350.00	61.7 PK	74.0	-12.3	1.00 V	20	56.20	5.50
4	5350.00	47.4 AV	54.0	-6.6	1.00 V	20	41.90	5.50
5	10640.00	59.3 PK	74.0	-14.7	1.06 V	353	42.50	16.80
6	10640.00	47.0 AV	54.0	-7.0	1.06 V	353	30.20	16.80

REMARKS:

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

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	57.3 PK	74.0	-16.7	1.06 H	98	51.70	5.60
2	5460.00	46.1 AV	54.0	-7.9	1.06 H	98	40.50	5.60
3	#5470.00	64.6 PK	74.0	-9.4	1.06 H	98	59.00	5.60
4	#5470.00	49.6 AV	54.0	-4.4	1.06 H	98	44.00	5.60
5	*5500.00	108.7 PK			1.06 H	94	69.10	39.60
6	*5500.00	98.2 AV			1.06 H	94	58.60	39.60
7	11000.00	60.3 PK	74.0	-13.7	1.19 H	95	41.80	18.50
8	11000.00	48.3 AV	54.0	-5.7	1.19 H	95	29.80	18.50
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	55.5 PK	74.0	-18.5	1.00 V	42	49.90	5.60
2	5460.00	42.6 AV	54.0	-11.4	1.00 V	42	37.00	5.60
3	#5470.00	60.6 PK	74.0	-13.4	1.00 V	42	55.00	5.60
4	#5470.00	45.6 AV	54.0	-8.4	1.00 V	42	40.00	5.60
5	*5500.00	105.3 PK			1.00 V	42	65.70	39.60
6	*5500.00	94.5 AV			1.00 V	42	54.90	39.60
7	11000.00	60.2 PK	74.0	-13.8	1.03 V	127	41.70	18.50
8	11000.00	48.2 AV	54.0	-5.8	1.03 V	127	29.70	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	109.3 PK			1.08 H	78	69.50	39.80
2	*5580.00	98.5 AV			1.08 H	78	58.70	39.80
3	11160.00	60.3 PK	74.0	-13.7	1.24 H	82	41.90	18.40
4	11160.00	48.3 AV	54.0	-5.7	1.24 H	82	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	*5580.00	105.3 PK			1.00 V	37	65.50	39.80
2	*5580.00	94.5 AV			1.00 V	37	54.70	39.80
3	11160.00	60.1 PK	74.0	-13.9	1.10 V	104	41.70	18.40
4	11160.00	48.1 AV	54.0	-5.9	1.10 V	104	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)
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	111.0 PK			1.67 H	81	70.90	40.10
2	*5700.00	100.3 AV			1.67 H	81	60.20	40.10
3	#5725.00	71.2 PK	74.0	-2.8	1.29 H	74	64.90	6.30
4	#5725.00	52.8 AV	54.0	-1.2	1.29 H	74	46.50	6.30
5	11400.00	60.3 PK	74.0	-13.7	1.22 H	80	42.10	18.20
6	11400.00	48.1 AV	54.0	-5.9	1.22 H	80	29.90	18.20
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	*5700.00	107.1 PK			1.00 V	22	67.00	40.10
2	*5700.00	96.6 AV			1.00 V	22	56.50	40.10
3	#5725.00	67.3 PK	74.0	-6.7	1.00 V	35	61.00	6.30
4	#5725.00	49.3 AV	54.0	-4.7	1.00 V	35	43.00	6.30
5	11400.00	60.2 PK	74.0	-13.8	1.08 V	107	42.00	18.20
6	11400.00	47.8 AV	54.0	-6.2	1.08 V	107	29.60	18.20

REMARKS:

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

CHANNEL	TX Channel 144	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	5360.00	58.9 PK	74.0	-15.1	1.00 H	81	53.10	5.80
2	5360.00	48.3 AV	54.0	-5.7	1.00 H	81	42.50	5.80
3	*5720.00	108.8 PK			1.60 H	78	68.40	40.40
4	*5720.00	99.0 AV			1.60 H	78	58.60	40.40
5	#5825.00	58.0 PK	74.0	-16.0	1.00 H	42	51.20	6.80
6	#5825.00	45.7 AV	54.0	-8.3	1.00 H	42	38.90	6.80
7	11440.00	62.9 PK	74.0	-11.1	1.00 H	205	45.00	17.90
8	11440.00	49.5 AV	54.0	-4.5	1.00 H	205	31.60	17.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5400.00	59.9 PK	74.0	-14.1	1.05 V	9	53.90	6.00
2	5400.00	48.7 AV	54.0	-5.3	1.05 V	9	42.70	6.00
3	*5720.00	105.6 PK			1.03 V	3	65.20	40.40
4	*5720.00	95.3 AV			1.03 V	3	54.90	40.40
5	#5825.00	57.7 PK	74.0	-16.3	1.00 V	53	50.90	6.80
6	#5825.00	45.5 AV	54.0	-8.5	1.00 V	53	38.70	6.80
7	11440.00	67.9 PK	74.0	-6.1	1.00 V	184	50.00	17.90
8	11440.00	53.0 AV	54.0	-1.0	1.00 V	184	35.10	17.90

REMARKS:

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



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802.11n (40MHz)

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	105.4 PK			1.48 H	89	66.00	39.40
2	*5270.00	94.9 AV			1.48 H	89	55.50	39.40
3	#10540.00	59.2 PK	74.0	-14.8	1.12 H	162	42.50	16.70
4	#10540.00	47.6 AV	54.0	-6.4	1.12 H	162	30.90	16.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	101.8 PK			1.00 V	35	62.40	39.40
2	*5270.00	91.0 AV			1.00 V	35	51.60	39.40
3	#10540.00	59.0 PK	74.0	-15.0	1.05 V	60	42.30	16.70
4	#10540.00	47.5 AV	54.0	-6.5	1.05 V	60	30.80	16.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	104.4 PK			1.43 H	82	65.00	39.40
2	*5310.00	94.2 AV			1.43 H	82	54.80	39.40
3	5350.00	66.7 PK	74.0	-7.3	1.43 H	82	61.20	5.50
4	5350.00	52.8 AV	54.0	-1.2	1.43 H	82	47.30	5.50
5	10620.00	59.2 PK	74.0	-14.8	1.20 H	154	42.50	16.70
6	10620.00	47.5 AV	54.0	-6.5	1.20 H	154	30.80	16.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	101.1 PK			1.10 V	27	61.70	39.40
2	*5310.00	90.4 AV			1.10 V	27	51.00	39.40
3	5350.00	64.5 PK	74.0	-9.5	1.10 V	27	59.00	5.50
4	5350.00	50.5 AV	54.0	-3.5	1.10 V	27	45.00	5.50
5	10620.00	58.9 PK	74.0	-15.1	1.07 V	54	42.20	16.70
6	10620.00	47.3 AV	54.0	-6.7	1.07 V	54	30.60	16.70

REMARKS:

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

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	59.2 PK	74.0	-14.8	1.37 H	58	53.60	5.60
2	5460.00	47.5 AV	54.0	-6.5	1.37 H	58	41.90	5.60
3	#5470.00	70.2 PK	74.0	-3.8	1.37 H	87	64.60	5.60
4	#5470.00	52.6 AV	54.0	-1.4	1.37 H	87	47.00	5.60
5	*5510.00	103.5 PK			1.35 H	91	63.90	39.60
6	*5510.00	92.6 AV			1.35 H	91	53.00	39.60
7	11020.00	60.2 PK	74.0	-13.8	1.16 H	163	41.60	18.60
8	11020.00	48.3 AV	54.0	-5.7	1.16 H	163	29.70	18.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.6 PK	74.0	-17.4	1.00 V	37	51.00	5.60
2	5460.00	43.8 AV	54.0	-10.2	1.00 V	37	38.20	5.60
3	#5470.00	66.6 PK	74.0	-7.4	1.00 V	37	61.00	5.60
4	#5470.00	48.6 AV	54.0	-5.4	1.00 V	37	43.00	5.60
5	*5510.00	100.4 PK			1.00 V	37	60.80	39.60
6	*5510.00	89.4 AV			1.00 V	37	49.80	39.60
7	11020.00	60.2 PK	74.0	-13.8	1.08 V	145	41.60	18.60
8	11020.00	48.1 AV	54.0	-5.9	1.08 V	145	29.50	18.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	106.5 PK			1.11 H	76	66.70	39.80
2	*5550.00	96.0 AV			1.11 H	76	56.20	39.80
3	11100.00	60.7 PK	74.0	-13.3	1.07 H	110	42.10	18.60
4	11100.00	48.5 AV	54.0	-5.5	1.07 H	110	29.90	18.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	103.3 PK			1.00 V	40	63.50	39.80
2	*5550.00	92.8 AV			1.00 V	40	53.00	39.80
3	11100.00	60.6 PK	74.0	-13.4	1.09 V	126	42.00	18.60
4	11100.00	48.3 AV	54.0	-5.7	1.09 V	126	29.70	18.60

REMARKS:

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



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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	107.3 PK			1.33 H	75	67.30	40.00
2	*5670.00	97.1 AV			1.33 H	75	57.10	40.00
3	#5725.00	65.3 PK	74.0	-8.7	1.32 H	87	59.00	6.30
4	#5725.00	52.5 AV	54.0	-1.5	1.32 H	87	46.20	6.30
5	11340.00	59.4 PK	74.0	-14.6	1.25 H	315	41.10	18.30
6	11340.00	48.2 AV	54.0	-5.8	1.25 H	315	29.90	18.30

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	*5670.00	104.0 PK			1.00 V	14	64.00	40.00
2	*5670.00	93.7 AV			1.00 V	14	53.70	40.00
3	#5725.00	62.3 PK	74.0	-11.7	1.00 V	14	56.00	6.30
4	#5725.00	48.7 AV	54.0	-5.3	1.00 V	14	42.40	6.30
5	11340.00	59.3 PK	74.0	-14.7	1.03 V	55	41.00	18.30
6	11340.00	48.0 AV	54.0	-6.0	1.03 V	55	29.70	18.30

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)
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 142	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	#5470.00	59.3 PK	74.0	-14.7	1.00 H	90	53.20	6.10
2	#5470.00	47.2 AV	54.0	-6.8	1.00 H	90	41.10	6.10
3	*5710.00	106.8 PK			1.60 H	76	66.40	40.40
4	*5710.00	97.1 AV			1.60 H	76	56.70	40.40
5	#5825.00	58.3 PK	74.0	-15.7	1.00 H	33	51.50	6.80
6	#5825.00	45.6 AV	54.0	-8.4	1.00 H	33	38.80	6.80
7	11420.00	63.9 PK	74.0	-10.1	1.00 H	200	46.00	17.90
8	11420.00	49.1 AV	54.0	-4.9	1.00 H	200	31.20	17.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	59.8 PK	74.0	-14.2	1.00 V	8	53.70	6.10
2	#5470.00	47.6 AV	54.0	-6.4	1.00 V	8	41.50	6.10
3	*5710.00	102.5 PK			1.00 V	0	62.10	40.40
4	*5710.00	92.6 AV			1.00 V	0	52.20	40.40
5	#5825.00	58.5 PK	74.0	-15.5	1.00 V	22	51.70	6.80
6	#5825.00	45.6 AV	54.0	-8.4	1.00 V	22	38.80	6.80
7	11420.00	67.7 PK	74.0	-6.3	1.00 V	176	49.80	17.90
8	11420.00	52.8 AV	54.0	-1.2	1.00 V	176	34.90	17.90

REMARKS:

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



A D T

802.11ac (80MHz)

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	99.1 PK			1.42 H	85	59.70	39.40
2	*5290.00	89.8 AV			1.42 H	85	50.40	39.40
3	5350.00	65.5 PK	74.0	-8.5	1.42 H	85	60.00	5.50
4	5350.00	52.1 AV	54.0	-1.9	1.42 H	85	46.60	5.50
5	#10580.00	58.7 PK	74.0	-15.3	1.24 H	345	42.10	16.60
6	#10580.00	46.9 AV	54.0	-7.1	1.24 H	345	30.30	16.60
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	*5290.00	95.7 PK			1.00 V	18	56.30	39.40
2	*5290.00	86.5 AV			1.00 V	18	47.10	39.40
3	5350.00	61.5 PK	74.0	-12.5	1.00 V	18	56.00	5.50
4	5350.00	47.4 AV	54.0	-6.6	1.00 V	18	41.90	5.50
5	#10580.00	58.6 PK	74.0	-15.4	1.16 V	136	42.00	16.60
6	#10580.00	46.7 AV	54.0	-7.3	1.16 V	136	30.10	16.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	69.0 PK	74.0	-5.0	1.38 H	78	63.40	5.60
2	5460.00	51.6 AV	54.0	-2.4	1.38 H	78	46.00	5.60
3	#5470.00	67.2 PK	74.0	-6.8	1.37 H	79	61.60	5.60
4	#5470.00	52.8 AV	54.0	-1.2	1.37 H	79	47.20	5.60
5	*5530.00	99.8 PK			1.38 H	86	60.10	39.70
6	*5530.00	89.8 AV			1.38 H	86	50.10	39.70
7	11060.00	59.7 PK	74.0	-14.3	1.36 H	21	41.20	18.50
8	11060.00	48.2 AV	54.0	-5.8	1.36 H	21	29.70	18.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	65.7 PK	74.0	-8.3	1.00 V	15	60.10	5.60
2	5460.00	48.6 AV	54.0	-5.4	1.00 V	15	43.00	5.60
3	#5470.00	64.3 PK	74.0	-9.7	1.00 V	15	58.70	5.60
4	#5470.00	49.6 AV	54.0	-4.4	1.00 V	15	44.00	5.60
5	*5530.00	96.7 PK			1.05 V	34	57.00	39.70
6	*5530.00	86.7 AV			1.05 V	34	47.00	39.70
7	11060.00	59.6 PK	74.0	-14.4	1.05 V	100	41.10	18.50
8	11060.00	47.9 AV	54.0	-6.1	1.05 V	100	29.40	18.50

REMARKS:

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



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CHANNEL	TX Channel 138	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	#5470.00	58.9 PK	74.0	-15.1	1.00 H	96	52.80	6.10
2	#5470.00	46.3 AV	54.0	-7.7	1.00 H	96	40.20	6.10
3	*5690.00	104.3 PK			1.59 H	79	63.90	40.40
4	*5690.00	93.6 AV			1.59 H	79	53.20	40.40
5	#5825.00	62.8 PK	74.0	-11.2	1.00 H	75	56.00	6.80
6	#5825.00	50.8 AV	54.0	-3.2	1.00 H	75	44.00	6.80
7	11380.00	63.9 PK	74.0	-10.1	1.00 H	195	45.50	18.40
8	11380.00	49.6 AV	54.0	-4.4	1.00 H	195	31.20	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	#5465.00	58.6 PK	74.0	-15.4	1.00 V	0	52.50	6.10
2	#5465.00	47.1 AV	54.0	-6.9	1.00 V	0	41.00	6.10
3	*5690.00	100.5 PK			1.00 V	359	60.10	40.40
4	*5690.00	90.5 AV			1.00 V	359	50.10	40.40
5	#5825.00	59.2 PK	74.0	-14.8	1.00 V	3	52.40	6.80
6	#5825.00	48.0 AV	54.0	-6.0	1.00 V	3	41.20	6.80
7	11380.00	66.9 PK	74.0	-7.1	1.56 V	166	48.50	18.40
8	11380.00	52.6 AV	54.0	-1.4	1.56 V	166	34.20	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)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.
6. "#":The radiated frequency is out the restricted band.

TEST MODE B

ABOVE 1GHz DATA : 802.11a

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	108.0 PK			1.77 H	286	68.70	39.30
2	*5260.00	97.9 AV			1.77 H	286	58.60	39.30
3	#10520.00	59.1 PK	74.0	-14.9	1.06 H	90	42.30	16.80
4	#10520.00	47.3 AV	54.0	-6.7	1.06 H	90	30.50	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	*5260.00	103.8 PK			1.00 V	12	64.50	39.30
2	*5260.00	93.8 AV			1.00 V	12	54.50	39.30
3	#10520.00	58.8 PK	74.0	-15.2	1.24 V	170	42.00	16.80
4	#10520.00	47.0 AV	54.0	-7.0	1.24 V	170	30.20	16.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out 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	108.3 PK			1.65 H	285	68.90	39.40
2	*5300.00	98.3 AV			1.65 H	285	58.90	39.40
3	10600.00	58.8 PK	74.0	-15.2	1.24 H	20	42.30	16.50
4	10600.00	47.0 AV	54.0	-7.0	1.24 H	20	30.50	16.50
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	*5300.00	104.3 PK			1.00 V	33	64.90	39.40
2	*5300.00	94.3 AV			1.00 V	33	54.90	39.40
3	10600.00	58.5 PK	74.0	-15.5	1.17 V	145	42.00	16.50
4	10600.00	46.7 AV	54.0	-7.3	1.17 V	145	30.20	16.50

REMARKS:

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

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	108.2 PK			1.70 H	289	68.80	39.40
2	*5320.00	98.3 AV			1.70 H	289	58.90	39.40
3	5350.00	63.4 PK	74.0	-10.6	1.70 H	289	57.90	5.50
4	5350.00	49.8 AV	54.0	-4.2	1.70 H	289	44.30	5.50
5	10640.00	58.9 PK	74.0	-15.1	1.15 H	157	42.10	16.80
6	10640.00	46.9 AV	54.0	-7.1	1.15 H	157	30.10	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	*5320.00	104.2 PK			1.00 V	25	64.80	39.40
2	*5320.00	94.1 AV			1.00 V	25	54.70	39.40
3	5350.00	61.5 PK	74.0	-12.5	1.00 V	25	56.00	5.50
4	5350.00	48.6 AV	54.0	-5.4	1.00 V	25	43.10	5.50
5	10640.00	58.9 PK	74.0	-15.1	1.30 V	26	42.10	16.80
6	10640.00	46.8 AV	54.0	-7.2	1.30 V	26	30.00	16.80

REMARKS:

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

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	59.8 PK	74.0	-14.2	1.39 H	76	54.20	5.60
2	5460.00	46.1 AV	54.0	-7.9	1.39 H	76	40.50	5.60
3	#5470.00	65.6 PK	74.0	-8.4	1.39 H	76	60.00	5.60
4	#5470.00	50.1 AV	54.0	-3.9	1.39 H	76	44.50	5.60
5	*5500.00	109.3 PK			1.37 H	296	69.70	39.60
6	*5500.00	99.2 AV			1.37 H	296	59.60	39.60
7	11000.00	60.3 PK	74.0	-13.7	1.10 H	70	41.80	18.50
8	11000.00	48.5 AV	54.0	-5.5	1.10 H	70	30.00	18.50

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	57.6 PK	74.0	-16.4	1.42 V	13	52.00	5.60
2	5460.00	44.1 AV	54.0	-9.9	1.42 V	13	38.50	5.60
3	#5470.00	63.6 PK	74.0	-10.4	1.42 V	13	58.00	5.60
4	#5470.00	47.6 AV	54.0	-6.4	1.42 V	13	42.00	5.60
5	*5500.00	105.3 PK			1.42 V	13	65.70	39.60
6	*5500.00	95.2 AV			1.42 V	13	55.60	39.60
7	11000.00	60.2 PK	74.0	-13.8	1.13 V	328	41.70	18.50
8	11000.00	48.3 AV	54.0	-5.7	1.13 V	328	29.80	18.50

REMARKS:

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



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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	109.3 PK			1.36 H	77	69.50	39.80
2	*5580.00	99.1 AV			1.36 H	77	59.30	39.80
3	11160.00	60.2 PK	74.0	-13.8	1.06 H	64	41.80	18.40
4	11160.00	48.2 AV	54.0	-5.8	1.06 H	64	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	*5580.00	105.4 PK			1.46 V	8	65.60	39.80
2	*5580.00	95.2 AV			1.46 V	8	55.40	39.80
3	11160.00	60.0 PK	74.0	-14.0	1.20 V	311	41.60	18.40
4	11160.00	48.0 AV	54.0	-6.0	1.20 V	311	29.60	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)
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	109.7 PK			1.70 H	279	69.60	40.10
2	*5700.00	99.3 AV			1.70 H	279	59.20	40.10
3	#5725.00	66.8 PK	74.0	-7.2	1.70 H	279	60.50	6.30
4	#5725.00	53.0 AV	54.0	-1.0	1.70 H	279	46.70	6.30
5	11400.00	59.9 PK	74.0	-14.1	1.12 H	53	41.70	18.20
6	11400.00	48.3 AV	54.0	-5.7	1.12 H	53	30.10	18.20
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	*5700.00	105.7 PK			1.53 V	55	65.60	40.10
2	*5700.00	95.3 AV			1.53 V	55	55.20	40.10
3	#5725.00	64.4 PK	74.0	-9.6	1.53 V	55	58.10	6.30
4	#5725.00	49.8 AV	54.0	-4.2	1.53 V	55	43.50	6.30
5	11400.00	59.8 PK	74.0	-14.2	1.09 V	327	41.60	18.20
6	11400.00	48.0 AV	54.0	-6.0	1.09 V	327	29.80	18.20

REMARKS:

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

CHANNEL	TX Channel 144	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	#5470.00	60.9 PK	74.0	-13.1	1.54 H	294	54.80	6.10
2	#5470.00	48.3 AV	54.0	-5.7	1.54 H	294	42.20	6.10
3	*5720.00	111.3 PK			1.58 H	290	70.90	40.40
4	*5720.00	101.7 AV			1.58 H	290	61.30	40.40
5	#5825.00	60.6 PK	74.0	-13.4	1.50 H	298	53.80	6.80
6	#5825.00	46.9 AV	54.0	-7.1	1.50 H	298	40.10	6.80
7	11440.00	63.2 PK	74.0	-10.8	1.71 H	176	45.30	17.90
8	11440.00	49.6 AV	54.0	-4.4	1.71 H	176	31.70	17.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.1 PK	74.0	-15.9	1.00 V	209	52.00	6.10
2	#5470.00	45.7 AV	54.0	-8.3	1.00 V	209	39.60	6.10
3	*5720.00	105.3 PK			1.00 V	202	64.90	40.40
4	*5720.00	95.1 AV			1.00 V	202	54.70	40.40
5	#5825.00	59.3 PK	74.0	-14.7	1.00 V	217	52.50	6.80
6	#5825.00	46.0 AV	54.0	-8.0	1.00 V	217	39.20	6.80
7	11440.00	62.9 PK	74.0	-11.1	1.00 V	196	45.00	17.90
8	11440.00	50.2 AV	54.0	-3.8	1.00 V	196	32.30	17.90

REMARKS:

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



A D T

802.11n (20MHz)

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	108.2 PK			1.71 H	290	68.90	39.30
2	*5260.00	98.3 AV			1.71 H	290	59.00	39.30
3	#10520.00	58.9 PK	74.0	-15.1	1.16 H	354	42.10	16.80
4	#10520.00	47.1 AV	54.0	-6.9	1.16 H	354	30.30	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	*5260.00	104.2 PK			1.00 V	28	64.90	39.30
2	*5260.00	94.3 AV			1.00 V	28	55.00	39.30
3	#10520.00	58.8 PK	74.0	-15.2	1.06 V	253	42.00	16.80
4	#10520.00	47.0 AV	54.0	-7.0	1.06 V	253	30.20	16.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	108.0 PK			1.56 H	281	68.60	39.40
2	*5300.00	98.1 AV			1.56 H	281	58.70	39.40
3	10600.00	58.8 PK	74.0	-15.2	1.05 H	312	42.30	16.50
4	10600.00	46.6 AV	54.0	-7.4	1.05 H	312	30.10	16.50
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	*5300.00	104.0 PK			1.00 V	14	64.60	39.40
2	*5300.00	94.0 AV			1.00 V	14	54.60	39.40
3	10600.00	58.5 PK	74.0	-15.5	1.18 V	57	42.00	16.50
4	10600.00	46.5 AV	54.0	-7.5	1.18 V	57	30.00	16.50

REMARKS:

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

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	108.0 PK			1.70 H	289	68.60	39.40
2	*5320.00	98.1 AV			1.70 H	289	58.70	39.40
3	5350.00	63.4 PK	74.0	-10.6	1.70 H	289	57.90	5.50
4	5350.00	50.7 AV	54.0	-3.3	1.70 H	289	45.20	5.50
5	10640.00	59.2 PK	74.0	-14.8	1.12 H	88	42.40	16.80
6	10640.00	46.9 AV	54.0	-7.1	1.12 H	88	30.10	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	*5320.00	103.9 PK			1.00 V	50	64.50	39.40
2	*5320.00	93.9 AV			1.00 V	50	54.50	39.40
3	5350.00	60.5 PK	74.0	-13.5	1.00 V	50	55.00	5.50
4	5350.00	48.6 AV	54.0	-5.4	1.00 V	50	43.10	5.50
5	10640.00	59.1 PK	74.0	-14.9	1.06 V	329	42.30	16.80
6	10640.00	46.8 AV	54.0	-7.2	1.06 V	329	30.00	16.80

REMARKS:

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

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	67.8 PK	74.0	-6.2	1.00 H	275	62.20	5.60
2	5460.00	50.6 AV	54.0	-3.4	1.00 H	275	45.00	5.60
3	#5470.00	70.6 PK	74.0	-3.4	1.00 H	275	65.00	5.60
4	#5470.00	52.6 AV	54.0	-1.4	1.00 H	275	47.00	5.60
5	*5500.00	107.6 PK			1.00 H	278	68.00	39.60
6	*5500.00	97.6 AV			1.00 H	278	58.00	39.60
7	11000.00	60.6 PK	74.0	-13.4	1.24 H	253	42.10	18.50
8	11000.00	48.7 AV	54.0	-5.3	1.24 H	253	30.20	18.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	65.6 PK	74.0	-8.4	1.00 V	25	60.00	5.60
2	5460.00	47.6 AV	54.0	-6.4	1.00 V	25	42.00	5.60
3	#5470.00	67.6 PK	74.0	-6.4	1.00 V	25	62.00	5.60
4	#5470.00	50.6 AV	54.0	-3.4	1.00 V	25	45.00	5.60
5	*5500.00	103.8 PK			1.00 V	25	64.20	39.60
6	*5500.00	93.9 AV			1.00 V	25	54.30	39.60
7	11000.00	61.6 PK	74.0	-12.4	1.19 V	163	43.10	18.50
8	11000.00	50.3 AV	54.0	-3.7	1.19 V	163	31.80	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	108.5 PK			1.00 H	185	68.70	39.80
2	*5580.00	98.3 AV			1.00 H	285	58.50	39.80
3	11160.00	60.5 PK	74.0	-13.5	1.30 H	259	42.10	18.40
4	11160.00	48.5 AV	54.0	-5.5	1.30 H	259	30.10	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	*5580.00	104.6 PK			1.00 V	19	64.80	39.80
2	*5580.00	94.5 AV			1.00 V	19	54.70	39.80
3	11160.00	61.6 PK	74.0	-12.4	1.22 V	171	43.20	18.40
4	11160.00	50.4 AV	54.0	-3.6	1.22 V	171	32.00	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)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



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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	107.5 PK			1.02 H	264	67.40	40.10
2	*5700.00	97.3 AV			1.02 H	264	57.20	40.10
3	#5725.00	68.2 PK	74.0	-5.8	1.02 H	266	61.90	6.30
4	#5725.00	52.6 AV	54.0	-1.4	1.02 H	266	46.30	6.30
5	11400.00	59.7 PK	74.0	-14.3	1.15 H	275	41.50	18.20
6	11400.00	48.4 AV	54.0	-5.6	1.15 H	275	30.20	18.20

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	*5700.00	103.7 PK			1.00 V	16	63.60	40.10
2	*5700.00	93.6 AV			1.00 V	16	53.50	40.10
3	#5725.00	64.4 PK	74.0	-9.6	1.00 V	16	58.10	6.30
4	#5725.00	49.3 AV	54.0	-4.7	1.00 V	16	43.00	6.30
5	11400.00	61.5 PK	74.0	-12.5	1.30 V	157	43.30	18.20
6	11400.00	50.2 AV	54.0	-3.8	1.30 V	157	32.00	18.20

REMARKS:

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



A D T

CHANNEL	TX Channel 144	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	#5470.00	61.2 PK	74.0	-12.8	1.50 H	277	55.10	6.10
2	#5470.00	48.1 AV	54.0	-5.9	1.50 H	277	42.00	6.10
3	*5720.00	110.3 PK			1.58 H	280	69.90	40.40
4	*5720.00	100.2 AV			1.58 H	280	59.80	40.40
5	#5825.00	60.8 PK	74.0	-13.2	1.57 H	277	54.00	6.80
6	#5825.00	46.6 AV	54.0	-7.4	1.57 H	277	39.80	6.80
7	11440.00	62.2 PK	74.0	-11.8	1.66 H	174	44.30	17.90
8	11440.00	49.0 AV	54.0	-5.0	1.66 H	174	31.10	17.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	57.6 PK	74.0	-16.4	1.00 V	202	51.50	6.10
2	#5470.00	45.0 AV	54.0	-9.0	1.00 V	202	38.90	6.10
3	*5720.00	104.4 PK			1.00 V	203	64.00	40.40
4	*5720.00	94.2 AV			1.00 V	203	53.80	40.40
5	#5825.00	59.0 PK	74.0	-15.0	1.01 V	207	52.20	6.80
6	#5825.00	45.1 AV	54.0	-8.9	1.01 V	207	38.30	6.80
7	11440.00	63.4 PK	74.0	-10.6	1.48 V	197	45.50	17.90
8	11440.00	50.2 AV	54.0	-3.8	1.48 V	197	32.30	17.90

REMARKS:

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



A D T

802.11n (40MHz)

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	5000.00	53.8 PK	74.0	-20.2	1.38 H	285	48.60	5.20
2	5000.00	48.9 AV	54.0	-5.1	1.38 H	285	43.70	5.20
3	*5270.00	106.2 PK			1.03 H	288	66.80	39.40
4	*5270.00	96.3 AV			1.03 H	288	56.90	39.40
5	5350.00	55.5 PK	74.0	-18.5	1.03 H	288	50.00	5.50
6	5350.00	46.0 AV	54.0	-8.0	1.03 H	288	40.50	5.50
7	#10540.00	59.3 PK	74.0	-14.7	1.15 H	154	42.60	16.70
8	#10540.00	47.0 AV	54.0	-7.0	1.15 H	154	30.30	16.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	103.2 PK			1.50 V	37	63.80	39.40
2	*5270.00	93.1 AV			1.50 V	37	53.70	39.40
3	#10540.00	58.7 PK	74.0	-15.3	1.26 V	93	42.00	16.70
4	#10540.00	46.8 AV	54.0	-7.2	1.26 V	93	30.10	16.70

REMARKS:

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



A D T

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	5000.00	53.7 PK	74.0	-20.3	1.35 H	274	48.50	5.20
2	5000.00	48.6 AV	54.0	-5.4	1.35 H	274	43.40	5.20
3	*5310.00	103.5 PK			1.70 H	289	64.10	39.40
4	*5310.00	93.7 AV			1.70 H	289	54.30	39.40
5	5350.00	67.0 PK	74.0	-7.0	1.70 H	289	61.50	5.50
6	5350.00	52.5 AV	54.0	-1.5	1.70 H	289	47.00	5.50
7	10620.00	59.2 PK	74.0	-14.8	1.12 H	16	42.50	16.70
8	10620.00	46.7 AV	54.0	-7.3	1.12 H	16	30.00	16.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	99.7 PK			1.55 V	40	60.30	39.40
2	*5310.00	89.9 AV			1.55 V	40	50.50	39.40
3	5350.00	63.5 PK	74.0	-10.5	1.55 V	40	58.00	5.50
4	5350.00	47.5 AV	54.0	-6.5	1.55 V	40	42.00	5.50
5	10620.00	59.0 PK	74.0	-15.0	1.30 V	25	42.30	16.70
6	10620.00	46.6 AV	54.0	-7.4	1.30 V	25	29.90	16.70

REMARKS:

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

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	64.1 PK	74.0	-9.9	1.00 H	271	58.50	5.60
2	5460.00	50.3 AV	54.0	-3.7	1.00 H	271	44.70	5.60
3	#5470.00	69.5 PK	74.0	-4.5	1.00 H	271	63.90	5.60
4	#5470.00	53.0 AV	54.0	-1.0	1.00 H	271	47.40	5.60
5	*5510.00	101.0 PK			1.00 H	272	61.40	39.60
6	*5510.00	91.5 AV			1.00 H	272	51.90	39.60
7	11020.00	60.3 PK	74.0	-13.7	1.15 H	127	41.70	18.60
8	11020.00	48.7 AV	54.0	-5.3	1.15 H	127	30.10	18.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	60.7 PK	74.0	-13.3	1.00 V	14	55.10	5.60
2	5460.00	47.3 AV	54.0	-6.7	1.00 V	14	41.70	5.60
3	#5470.00	66.2 PK	74.0	-7.8	1.00 V	14	60.60	5.60
4	#5470.00	50.2 AV	54.0	-3.8	1.00 V	14	44.60	5.60
5	*5510.00	98.0 PK			1.00 V	14	58.40	39.60
6	*5510.00	88.4 AV			1.00 V	14	48.80	39.60
7	11020.00	61.6 PK	74.0	-12.4	1.35 V	166	43.00	18.60
8	11020.00	50.6 AV	54.0	-3.4	1.35 V	166	32.00	18.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	104.1 PK			1.08 H	267	64.30	39.80
2	*5550.00	94.6 AV			1.08 H	267	54.80	39.80
3	11000.00	61.1 PK	74.0	-12.9	1.12 H	235	42.60	18.50
4	11000.00	48.9 AV	54.0	-5.1	1.12 H	235	30.40	18.50
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	101.0 PK			1.00 V	22	61.20	39.80
2	*5550.00	91.5 AV			1.00 V	22	51.70	39.80
3	11000.00	62.1 PK	74.0	-11.9	1.08 V	158	43.60	18.50
4	11000.00	50.3 AV	54.0	-3.7	1.08 V	158	31.80	18.50

REMARKS:

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

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	102.2 PK			1.06 H	261	62.20	40.00
2	*5670.00	92.3 AV			1.06 H	261	52.30	40.00
3	#5725.00	66.4 PK	74.0	-7.6	1.06 H	261	60.10	6.30
4	#5725.00	52.9 AV	54.0	-1.1	1.06 H	261	46.60	6.30
5	11340.00	60.4 PK	74.0	-13.6	1.08 H	212	42.10	18.30
6	11340.00	48.4 AV	54.0	-5.6	1.08 H	212	30.10	18.30
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	*5670.00	99.2 PK			1.00 V	27	59.20	40.00
2	*5670.00	89.3 AV			1.00 V	27	49.30	40.00
3	#5725.00	63.3 PK	74.0	-10.7	1.00 V	27	57.00	6.30
4	#5725.00	49.5 AV	54.0	-4.5	1.00 V	27	43.20	6.30
5	11340.00	61.6 PK	74.0	-12.4	1.42 V	154	43.30	18.30
6	11340.00	50.1 AV	54.0	-3.9	1.42 V	154	31.80	18.30

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)
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 142	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	#5470.00	60.2 PK	74.0	-13.8	1.51 H	294	54.10	6.10
2	#5470.00	47.0 AV	54.0	-7.0	1.51 H	294	40.90	6.10
3	*5710.00	106.2 PK			1.58 H	293	65.80	40.40
4	*5710.00	96.2 AV			1.58 H	293	55.80	40.40
5	#5825.00	59.4 PK	74.0	-14.6	1.53 H	295	52.60	6.80
6	#5825.00	46.4 AV	54.0	-7.6	1.53 H	295	39.60	6.80
7	11420.00	62.0 PK	74.0	-12.0	1.70 H	170	44.10	17.90
8	11420.00	48.3 AV	54.0	-5.7	1.70 H	170	30.40	17.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	59.5 PK	74.0	-14.5	1.36 V	167	53.40	6.10
2	#5470.00	46.9 AV	54.0	-7.1	1.36 V	167	40.80	6.10
3	*5710.00	100.8 PK			1.33 V	165	60.40	40.40
4	*5710.00	91.1 AV			1.33 V	165	50.70	40.40
5	#5825.00	58.8 PK	74.0	-15.2	1.31 V	163	52.00	6.80
6	#5825.00	46.0 AV	54.0	-8.0	1.31 V	163	39.20	6.80
7	11420.00	62.4 PK	74.0	-11.6	1.00 V	189	44.50	17.90
8	11420.00	48.8 AV	54.0	-5.2	1.00 V	189	30.90	17.90

REMARKS:

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



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802.11ac BW80

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	5000.00	53.4 PK	74.0	-20.6	1.37 H	277	48.20	5.20
2	5000.00	48.3 AV	54.0	-5.7	1.37 H	277	43.10	5.20
3	*5290.00	99.7 PK			1.03 H	269	60.30	39.40
4	*5290.00	89.7 AV			1.03 H	269	50.30	39.40
5	5350.00	65.8 PK	74.0	-8.2	1.03 H	269	60.30	5.50
6	5350.00	52.4 AV	54.0	-1.6	1.03 H	269	46.90	5.50
7	#10580.00	58.6 PK	74.0	-15.4	1.11 H	60	42.00	16.60
8	#10580.00	46.5 AV	54.0	-7.5	1.11 H	60	29.90	16.60

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	*5290.00	96.0 PK			1.55 V	16	56.60	39.40
2	*5290.00	86.1 AV			1.55 V	16	46.70	39.40
3	5350.00	63.5 PK	74.0	-10.5	1.55 V	16	58.00	5.50
4	5350.00	49.2 AV	54.0	-4.8	1.55 V	16	43.70	5.50
5	#10580.00	58.5 PK	74.0	-15.5	1.02 V	129	41.90	16.60
6	#10580.00	46.3 AV	54.0	-7.7	1.02 V	129	29.70	16.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out 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	68.5 PK	74.0	-5.5	1.59 H	287	62.90	5.60
2	5460.00	50.7 AV	54.0	-3.3	1.59 H	287	45.10	5.60
3	#5470.00	66.9 PK	74.0	-7.1	1.59 H	287	61.30	5.60
4	#5470.00	52.6 AV	54.0	-1.4	1.59 H	287	47.00	5.60
5	*5530.00	98.7 PK			1.60 H	280	59.00	39.70
6	*5530.00	88.7 AV			1.60 H	280	49.00	39.70
7	11060.00	58.6 PK	74.0	-15.4	1.20 H	24	40.10	18.50
8	11060.00	48.0 AV	54.0	-6.0	1.20 H	24	29.50	18.50

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	62.2 PK	74.0	-11.8	1.00 V	35	56.60	5.60
2	5460.00	47.4 AV	54.0	-6.6	1.00 V	35	41.80	5.60
3	#5470.00	63.7 PK	74.0	-10.3	1.00 V	35	58.10	5.60
4	#5470.00	48.5 AV	54.0	-5.5	1.00 V	35	42.90	5.60
5	*5530.00	96.3 PK			1.00 V	33	56.60	39.70
6	*5530.00	86.3 AV			1.00 V	33	46.60	39.70
7	11060.00	58.5 PK	74.0	-15.5	1.10 V	140	40.00	18.50
8	11060.00	47.6 AV	54.0	-6.4	1.10 V	140	29.10	18.50

REMARKS:

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

CHANNEL	TX Channel 138	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	#5470.00	60.1 PK	74.0	-13.9	1.55 H	283	54.00	6.10
2	#5470.00	47.2 AV	54.0	-6.8	1.55 H	283	41.10	6.10
3	*5690.00	103.3 PK			1.58 H	289	62.90	40.40
4	*5690.00	93.1 AV			1.58 H	289	52.70	40.40
5	#5825.00	60.9 PK	74.0	-13.1	1.52 H	288	54.10	6.80
6	#5825.00	47.5 AV	54.0	-6.5	1.52 H	288	40.70	6.80
7	11380.00	61.2 PK	74.0	-12.8	1.73 H	175	42.80	18.40
8	11380.00	47.5 AV	54.0	-6.5	1.73 H	175	29.10	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	#5470.00	59.7 PK	74.0	-14.3	1.00 V	209	53.60	6.10
2	#5470.00	47.0 AV	54.0	-7.0	1.00 V	209	40.90	6.10
3	*5690.00	97.4 PK			1.00 V	205	57.00	40.40
4	*5690.00	87.1 AV			1.00 V	205	46.70	40.40
5	#5825.00	60.5 PK	74.0	-13.5	1.09 V	209	53.70	6.80
6	#5825.00	47.2 AV	54.0	-6.8	1.09 V	209	40.40	6.80
7	11380.00	62.0 PK	74.0	-12.0	1.00 V	180	43.60	18.40
8	11380.00	48.2 AV	54.0	-5.8	1.00 V	180	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 the restricted band.

TEST MODE A

BELOW 1GHz WORST-CASE DATA: 802.11a

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	35.6 QP	46.0	-10.4	1.25 H	218	50.10	-14.50
2	375.29	35.3 QP	46.0	-10.7	1.01 H	12	46.60	-11.30
3	549.93	44.2 QP	46.0	-1.8	1.50 H	145	52.50	-8.30
4	600.38	43.2 QP	46.0	-2.8	1.25 H	137	50.20	-7.00
5	650.83	41.7 QP	46.0	-4.3	1.25 H	153	47.80	-6.10
6	749.79	35.9 QP	46.0	-10.1	1.01 H	193	39.80	-3.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	55.13	36.0 QP	40.0	-4.0	1.24 V	5	50.10	-14.10
2	375.29	35.9 QP	46.0	-10.1	1.00 V	246	47.20	-11.30
3	450.97	38.2 QP	46.0	-7.8	1.24 V	12	47.90	-9.70
4	549.93	40.2 QP	46.0	-5.8	1.00 V	22	48.50	-8.30
5	650.83	43.1 QP	46.0	-2.9	1.00 V	8	49.20	-6.10
6	749.79	34.0 QP	46.0	-12.0	1.24 V	315	37.90	-3.90

REMARKS:

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

TEST MODE B

BELOW 1GHz WORST-CASE DATA : 802.11n (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	249.17	35.7 QP	46.0	-10.3	1.00 H	217	50.20	-14.50
2	549.93	44.3 QP	46.0	-1.7	1.49 H	9	52.60	-8.30
3	600.38	42.4 QP	46.0	-3.6	1.49 H	177	49.40	-7.00
4	650.83	40.9 QP	46.0	-5.1	1.49 H	9	47.00	-6.10
5	751.73	35.7 QP	46.0	-10.3	1.00 H	180	39.40	-3.70
6	850.69	35.1 QP	46.0	-10.9	1.49 H	180	37.60	-2.50

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	29.90	38.2 QP	40.0	-1.8	1.01 V	16	53.60	-15.40
2	39.60	36.8 QP	40.0	-3.2	1.51 V	291	51.90	-15.10
3	49.30	36.7 QP	40.0	-3.3	1.51 V	13	51.30	-14.60
4	450.97	37.9 QP	46.0	-8.1	1.01 V	6	47.60	-9.70
5	549.93	39.5 QP	46.0	-6.5	1.01 V	6	47.80	-8.30
6	600.38	37.7 QP	46.0	-8.3	1.01 V	23	44.70	-7.00
7	650.83	42.8 QP	46.0	-3.2	1.01 V	6	48.90	-6.10

REMARKS:

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

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

Tested Date: Dec. 23, 2013

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 29, 2013	Nov. 28, 2014
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 17, 2013	Jul. 16, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 04, 2013	Feb. 03, 2014
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 1.
 3. The VCCI Site Registration No. is C-2040.

4.2.3 TEST PROCEDURES

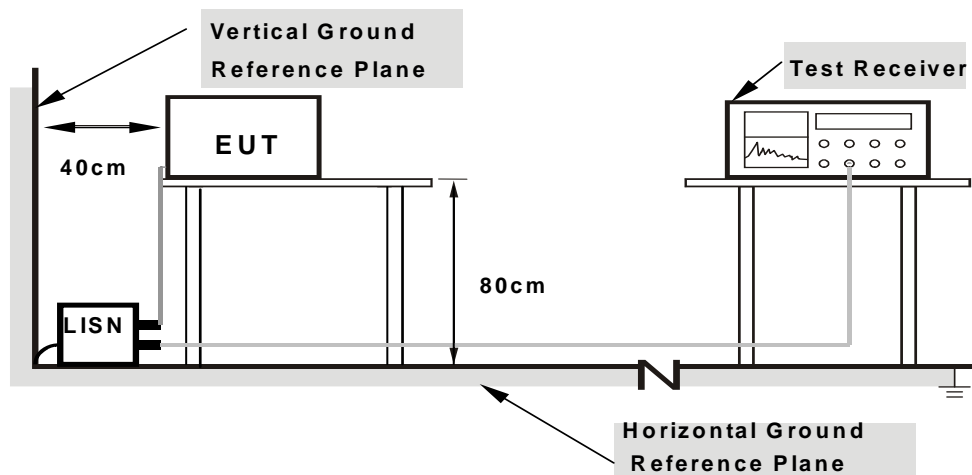
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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.

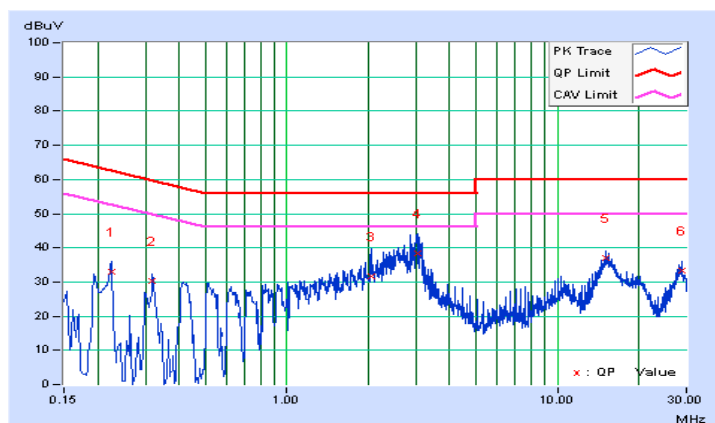
4.2.7 TEST RESULTS

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	0.22429	0.17	32.79	14.05	32.96	14.22	62.66	52.66	-29.70	-38.44
2	0.31849	0.20	30.11	20.45	30.31	20.65	59.75	49.75	-29.43	-29.09
3	2.04244	0.29	31.41	20.87	31.70	21.16	56.00	46.00	-24.30	-24.84
4	3.02776	0.35	38.16	25.71	38.51	26.06	56.00	46.00	-17.49	-19.94
5	15.13312	0.98	36.14	32.74	37.12	33.72	60.00	50.00	-22.88	-16.28
6	28.86113	1.63	31.81	28.55	33.44	30.18	60.00	50.00	-26.56	-19.82

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



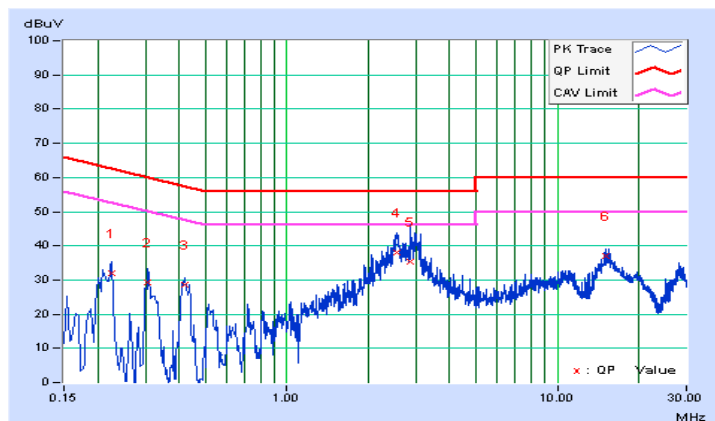


A D T

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	0.22429	0.18	31.96	15.05	32.14	15.23	62.66	52.66	-30.52	-37.43
2	0.30640	0.21	29.11	17.57	29.32	17.78	60.07	50.07	-30.75	-32.29
3	0.42000	0.24	28.23	22.57	28.47	22.81	57.45	47.45	-28.98	-24.64
4	2.54683	0.31	37.65	26.25	37.96	26.56	56.00	46.00	-18.04	-19.44
5	2.87527	0.32	35.17	25.90	35.49	26.22	56.00	46.00	-20.51	-19.78
6	15.13312	0.76	36.34	32.98	37.10	33.74	60.00	50.00	-22.90	-16.26

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





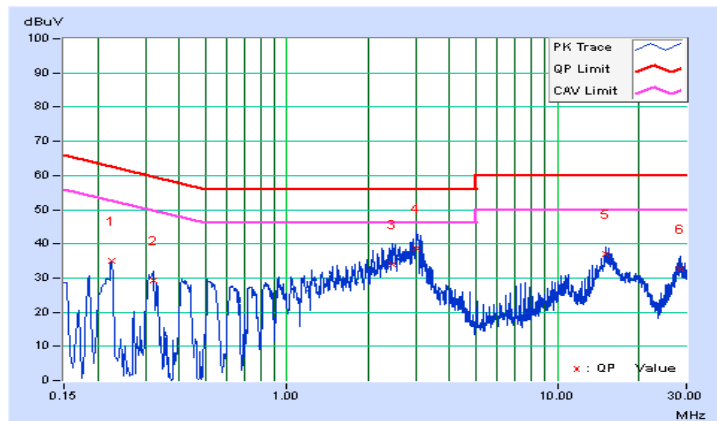
A D T

CONDUCTED WORST-CASE DATA : 802.11n (20MHz)

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	0.22434	0.17	34.70	15.33	34.87	15.50	62.66	52.66	-27.79	-37.16
2	0.32187	0.20	29.14	18.18	29.34	18.38	59.66	49.66	-30.32	-31.28
3	2.44908	0.31	33.81	23.35	34.12	23.66	56.00	46.00	-21.88	-22.34
4	3.01603	0.35	38.22	25.58	38.57	25.93	56.00	46.00	-17.43	-20.07
5	15.14094	0.98	36.12	32.63	37.10	33.61	60.00	50.00	-22.90	-16.39
6	28.59916	1.62	31.13	27.55	32.75	29.17	60.00	50.00	-27.25	-20.83

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



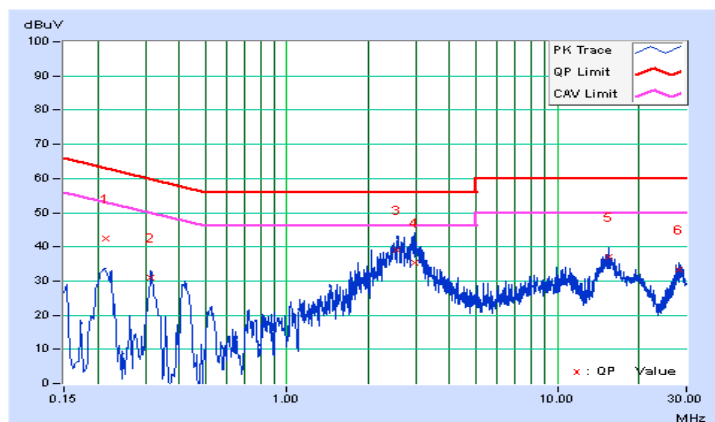


A D T

PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

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	0.21282	0.17	42.15	30.68	42.32	30.85	63.09	53.09	-20.77	-22.24
2	0.31432	0.21	30.87	22.42	31.08	22.63	59.86	49.86	-28.78	-27.23
3	2.56638	0.31	38.80	27.31	39.11	27.62	56.00	46.00	-16.89	-18.38
4	2.96520	0.33	35.16	25.70	35.49	26.03	56.00	46.00	-20.51	-19.97
5	15.41855	0.77	36.41	32.89	37.18	33.66	60.00	50.00	-22.82	-16.34
6	28.31373	1.19	32.16	29.09	33.35	30.28	60.00	50.00	-26.65	-19.72

- 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

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

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

Per KDB 662911 D01 Multiple Transmitter Output v02r01 Method of conducted output power measurement on IEEE 802.11 devices,

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

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

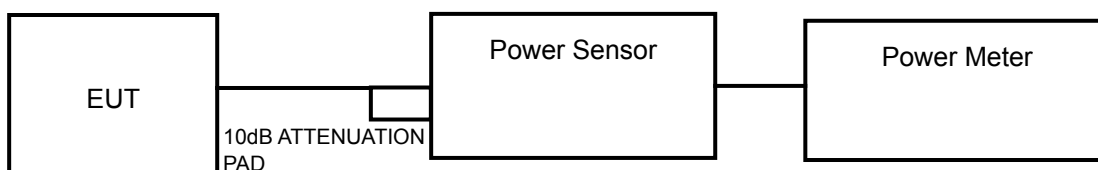
Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.

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

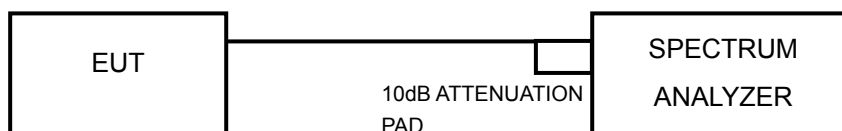
4.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

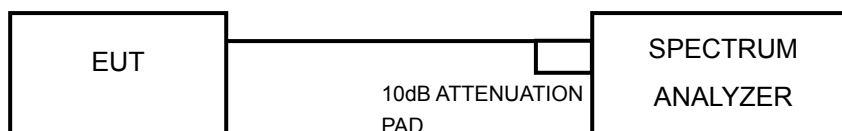
For 802.11a, 802.11n (20MHz), 802.11n (40MHz)



For 802.11ac (80MHz)



FOR 26dB BANDWIDTH



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

For 802.11a, 802.11n (20MHz), 802.11n (40MHz)

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

For 802.11ac (80MHz)

Method SA-1

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1 MHz.
- 3) Set VBW \geq 3 MHz.
- 4) Number of points in sweep \geq 2 Span / RBW.
- 5) Sweep time = auto.
- 6) Set trigger to free run (duty cycle \geq 98 percent); Set video trigger (duty cycle $<$ 98 percent)
- 7) Detector = RMS.
- 8) Trace average at least 100 traces in power averaging mode
- 9) Compute power by integrating the spectrum across the 26 dB EBW of the signal.

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

TEST MODE A

POWER OUTPUT:

802.11a

CHAN.	FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	15.52	16.51	80.416	19.05	24	PASS
60	5300	15.72	15.21	70.514	18.48	24	PASS
64	5320	15.62	15.42	71.309	18.53	24	PASS
100	5500	16.24	15.37	76.508	18.84	24	PASS
116	5580	15.89	15.88	77.541	18.90	24	PASS
140	5700	15.42	16.11	75.666	18.79	24	PASS
144	5720 For U-NII-2C	12.89	12.57	37.526	15.74	24	PASS
144	5720 For U-NII-3	10.56	9.44	20.166	13.05	27.15	PASS

NOTE:

CHAIN 0

1. $11\text{dBm} + 10\log(31.62) = 26.00\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(35.06) = 26.45\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(34.04) = 26.32\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(40.25) = 27.05\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(39.08) = 26.92\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(23.70) = 24.75\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5700.51) = 24.89\text{ dBm} > 24\text{dBm}$
8. $17\text{dBm} + 10\log(5700.51 + 38.80 - 5725.00) = 28.56\text{ dBm} < 30\text{dBm}$

CHAIN 1

1. $11\text{dBm} + 10\log(29.31) = 25.67\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(35.55) = 26.51\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(33.57) = 26.26\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(40.25) = 27.05\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(39.08) = 26.92\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(23.70) = 24.75\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5703.72) = 24.28\text{ dBm} > 24\text{dBm}$
8. $17\text{dBm} + 10\log(5703.72 + 31.62 - 5725.00) = 27.15\text{ dBm} < 30.00\text{ dBm}$



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802.11n (20MHz)

CHAN.	FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	15.45	16.52	79.950	19.03	24	PASS
60	5300	16.11	15.12	73.341	18.65	24	PASS
64	5320	16.15	15.32	75.251	18.77	24	PASS
100	5500	16.21	15.06	73.846	18.68	24	PASS
116	5580	15.62	16.08	77.026	18.87	24	PASS
140	5700	15.00	14.79	61.753	17.91	24	PASS
144	5720 For U-NII-2C	13.36	12.82	40.82	16.11	24	PASS
144	5720 For U-NII-3	10.52	9.68	20.562	13.13	27.32	PASS

NOTE:

CHAIN 0

1. $11\text{dBm} + 10\log(33.50) = 26.25\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(36.24) = 26.59\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(37.72) = 26.77\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.53) = 27.18\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(40.26) = 27.05\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(24.56) = 24.90\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5703.85) = 24.25\text{ dBm} > 24\text{dBm}$
8. $17\text{dBm} + 10\log(5703.85 + 32.16 - 5725.00) = 27.42\text{ dBm} < 30.00\text{dBm}$

CHAIN 1

1. $11\text{dBm} + 10\log(29.31) = 25.67\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(32.25) = 26.09\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(31.08) = 25.92\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.31) = 27.16\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(38.18) = 26.82\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(23.34) = 24.68\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5702.83) = 24.46\text{ dBm} > 24\text{dBm}$
8. $17\text{dBm} + 10\log(5702.83 + 32.93 - 5725.00) = 27.32\text{ dBm} < 30.00\text{dBm}$

**802.11n (40MHz)**

CHAN.	FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
54	5270	15.52	15.20	68.758	18.37	24	PASS
62	5310	14.23	14.16	52.547	17.21	24	PASS
102	5510	13.28	13.10	41.698	16.20	24	PASS
110	5550	15.48	15.43	70.232	18.47	24	PASS
134	5670	15.29	16.07	74.264	18.71	24	PASS
142	5710 For U-NII-2C	13.69	13.59	46.244	16.65	24	PASS
142	5710 For U-NII-3	10.10	7.86	16.342	12.13	27.42	PASS

NOTE:**CHAIN 0**

1. $11\text{dBm} + 10\log(61.04) = 28.86\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(74.45) = 29.72\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(49.72) = 27.97\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(81.85) = 30.13\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(51.12) = 28.09\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5665.50) = 28.75\text{ dBm} > 24\text{dBm}$
7. $17\text{dBm} + 10\log(5665.50+85.52 - 5725.00) = 31.15\text{ dBm} > 30\text{dBm}$

CHAIN 1

1. $11\text{dBm} + 10\log(58.85) = 28.70\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(54.51) = 28.36\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(51.07) = 28.08\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(76.63) = 29.84\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(45.80) = 28.32\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5683.73) = 27.16\text{ dBm} > 24\text{dBm}$
7. $17\text{dBm} + 10\log(5683.73+52.29 - 5725.00) = 27.42\text{ dBm} < 30\text{dBm}$



802.11ac (80MHz)

CHAN.	FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
58	5290	13.10	13.00	40.370	16.06	24	PASS
106	5530	12.54	12.63	36.270	15.60	24	PASS
138	5690 For U-NII-2C	12.26	11.13	29.799	14.74	24	PASS
138	5690 For U-NII-3	3.12	4.42	4.818	6.83	27.06	PASS

NOTE:

CHAIN 0

1. $11\text{dBm} + 10\log(98.52) = 30.94\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(93.69) = 30.72\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(5725.00 - 5641.70) = 30.21\text{ dBm} > 24\text{dBm}$
4. $17\text{dBm} + 10\log(5641.70+93.44 - 5725.00) = 27.06\text{ dBm} < 30\text{dBm}$

CHAIN 1

1. $11\text{dBm} + 10\log(108.76) = 31.36\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(95.72) = 30.81\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(5725.00 - 5635.57) = 30.51\text{ dBm} > 24\text{dBm}$
4. $17\text{dBm} + 10\log(5635.57+108.52 - 5725.00) = 29.81\text{ dBm} < 30\text{dBm}$

**26dB BANDWIDTH:****802.11a**

CHANNEL	FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
52	5260	31.62	29.31	PASS
60	5300	35.06	35.55	PASS
64	5320	34.04	33.57	PASS
100	5500	38.81	40.25	PASS
116	5580	37.95	39.08	PASS
140	5700	25.03	23.70	PASS
144	5720	38.80	31.62	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
52	5260	33.50	29.31	PASS
60	5300	36.24	32.25	PASS
64	5320	37.72	31.08	PASS
100	5500	41.53	41.31	PASS
116	5580	40.26	38.18	PASS
140	5700	24.56	23.34	PASS
144	5720	32.16	32.93	PASS



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802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
54	5270	61.04	58.85	PASS
62	5310	74.45	54.51	PASS
102	5510	49.72	51.07	PASS
110	5550	81.85	76.63	PASS
134	5670	51.12	53.95	PASS
142	5710	85.52	52.29	PASS

802.11ac (80MHz)

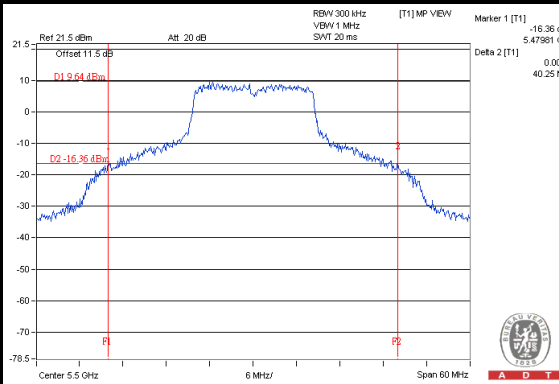
CHANNEL	FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
58	5290	98.52	108.76	PASS
106	5530	93.69	95.72	PASS
138	5690	93.44	108.52	PASS



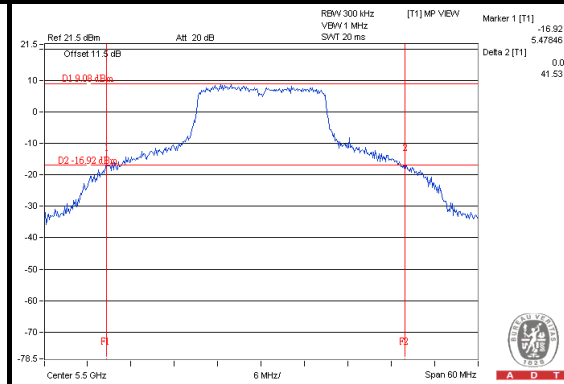
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SPECTRUM PLOT OF WORST VALUE

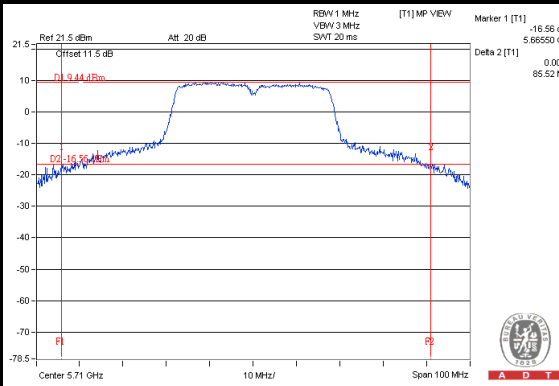
802.11a



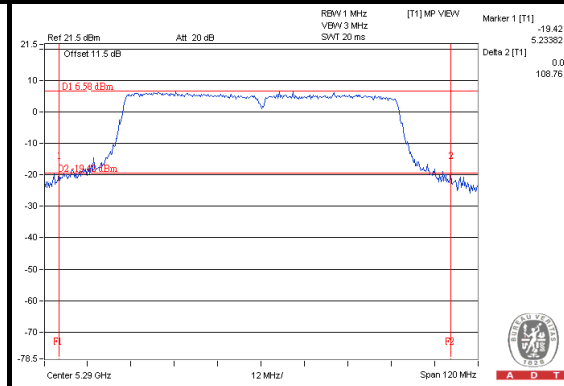
802.11n (20MHz)



802.11n (40MHz)



802.11ac (80MHz)





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TEST MODE B

POWER OUTPUT:

802.11a

CHAN.	FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	15.99	15.33	73.838	18.68	24	PASS
60	5300	16.52	15.00	76.498	18.84	24	PASS
64	5320	16.32	15.02	74.624	18.73	24	PASS
100	5500	15.21	15.42	68.023	18.33	24	PASS
116	5580	15.26	15.68	70.557	18.49	24	PASS
140	5700	15.21	16.12	74.115	18.70	24	PASS
144	5720 For U-NII-2C	13.46	13.79	46.115	16.64	24	PASS
144	5720 For U-NII-3	10.80	11.49	26.116	14.17	27.66	PASS

NOTE:

CHAIN 0

1. $11\text{dBm} + 10\log(27.24) = 25.35\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(35.43) = 26.49\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(33.08) = 26.20\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(40.25) = 27.05\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(39.08) = 26.92\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(23.70) = 24.75\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5703.56) = 24.31\text{ dBm} > 24\text{dBm}$
8. $17\text{dBm} + 10\log(5703.56 + 33.07 - 5725.00) = 27.66\text{ dBm} < 30\text{dBm}$

CHAIN 1

1. $11\text{dBm} + 10\log(25.65) = 25.09\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(27.96) = 25.47\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(28.75) = 25.59\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(40.25) = 27.05\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(39.08) = 26.92\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(23.70) = 24.75\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5701.96) = 24.62\text{ dBm} > 24\text{dBm}$
8. $17\text{dBm} + 10\log(5701.96 + 36.59 - 5725.00) = 28.32\text{ dBm} < 30.00\text{ dBm}$



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802.11n (20MHz)

CHAN.	FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	16.77	15.11	79.968	19.03	24	PASS
60	5300	16.42	15.06	75.916	18.80	24	PASS
64	5320	16.22	14.86	72.499	18.60	24	PASS
100	5500	14.75	15.21	63.043	18.00	24	PASS
116	5580	15.52	15.32	69.686	18.43	24	PASS
140	5700	15.30	15.77	71.641	18.55	24	PASS
144	5720 For U-NII-2C	13.28	13.48	43.565	16.39	24	PASS
144	5720 For U-NII-3	10.30	11.20	23.898	13.78	27.46	PASS

NOTE:

CHAIN 0

1. $11\text{dBm} + 10\log(29.20) = 25.65\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(31.52) = 25.99\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(33.67) = 26.27\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(40.25) = 27.05\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(39.08) = 26.92\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(23.70) = 24.75\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5702.93) = 24.44\text{ dBm} > 24\text{dBm}$
8. $17\text{dBm} + 10\log(5702.93+33.18 - 5725.00) = 27.46\text{ dBm} < 30\text{dBm}$

CHAIN 1

1. $11\text{dBm} + 10\log(27.12) = 25.33\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(26.46) = 25.23\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(26.99) = 25.31\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(40.25) = 27.05\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(39.08) = 26.92\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(23.70) = 24.75\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5700.48) = 24.90\text{ dBm} > 24\text{dBm}$
8. $17\text{dBm} + 10\log(5700.48+39.00 - 5725.00) = 28.61\text{ dBm} < 30.00\text{ dBm}$

**802.11n (40MHz)**

CHAN.	FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
54	5270	15.99	15.62	76.194	18.82	24	PASS
62	5310	13.66	13.55	45.873	16.62	24	PASS
102	5510	12.41	11.56	31.740	15.02	24	PASS
110	5550	15.11	16.21	74.217	18.71	24	PASS
134	5670	13.16	12.00	36.550	15.63	24	PASS
142	5710 For U-NII-2C	11.51	11.92	29.718	14.73	24	PASS
142	5710 For U-NII-3	4.84	5.58	6.662	8.24	26.24	PASS

NOTE:**CHAIN 0**

1. $11\text{dBm} + 10\log(70.21) = 29.46\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(50.51) = 28.03\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(49.72) = 27.97\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(81.85) = 30.13\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(51.12) = 28.09\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5685.91) = 26.92\text{ dBm} > 24\text{dBm}$
7. $17\text{dBm} + 10\log(5685.91+47.49 - 5725.00) = 26.24\text{ dBm} < 30\text{dBm}$

CHAIN 1

1. $11\text{dBm} + 10\log(60.75) = 28.84\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(48.53) = 27.86\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(51.07) = 28.08\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(76.63) = 29.84\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(45.80) = 28.32\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5686.96) = 26.80\text{ dBm} > 24\text{dBm}$
7. $17\text{dBm} + 10\log(5686.96+46.88 - 5725.00) = 26.46\text{ dBm} < 30\text{dBm}$



802.11ac (80MHz)

CHAN.	FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
58	5290	13.11	12.90	39.962	16.02	24	PASS
106	5530	12.30	11.41	30.818	14.89	24	PASS
138	5690 For U-NII-2C	11.05	11.28	26.163	14.18	24	PASS
138	5690 For U-NII-3	1.26	2.14	2.974	4.73	26.32	PASS

NOTE:

CHAIN 0

1. $11\text{dBm} + 10\log(92.10) = 30.64\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(93.69) = 30.72\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(5725.00 - 5643.66) = 30.10\text{ dBm} > 24\text{dBm}$
4. $17\text{dBm} + 10\log(5643.66 + 89.89 - 5725.00) = 26.32\text{ dBm} < 30\text{dBm}$

CHAIN 1

1. $11\text{dBm} + 10\log(97.78) = 30.90\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(95.72) = 30.81\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(5725.00 - 5644.51) = 30.06\text{ dBm} > 24\text{dBm}$
4. $17\text{dBm} + 10\log(5644.51 + 90.31 - 5725.00) = 26.92\text{ dBm} < 30\text{dBm}$

**26dB BANDWIDTH:****802.11a**

CHANNEL	FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
52	5260	27.24	25.65	PASS
60	5300	35.43	27.96	PASS
64	5320	33.08	28.75	PASS
100	5500	28.39	27.49	PASS
116	5580	30.61	30.77	PASS
140	5700	24.70	23.63	PASS
144	5720	33.07	36.59	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
52	5260	29.20	27.12	PASS
60	5300	31.52	26.46	PASS
64	5320	33.67	26.99	PASS
100	5500	29.71	27.13	PASS
116	5580	30.52	27.22	PASS
140	5700	23.98	24.11	PASS
144	5720	33.18	39.00	PASS



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802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
54	5270	70.21	60.75	PASS
62	5310	50.51	48.53	PASS
102	5510	48.25	46.09	PASS
110	5550	72.34	59.85	PASS
134	5670	46.34	47.33	PASS
142	5710	47.49	46.88	PASS

802.11ac (80MHz)

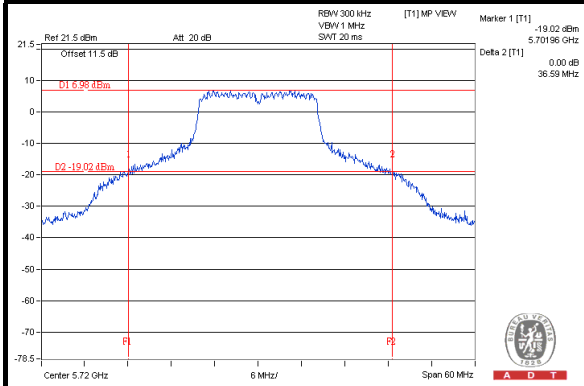
CHANNEL	FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
58	5290	92.10	97.78	PASS
106	5530	94.66	89.32	PASS
138	5690	89.89	90.31	PASS



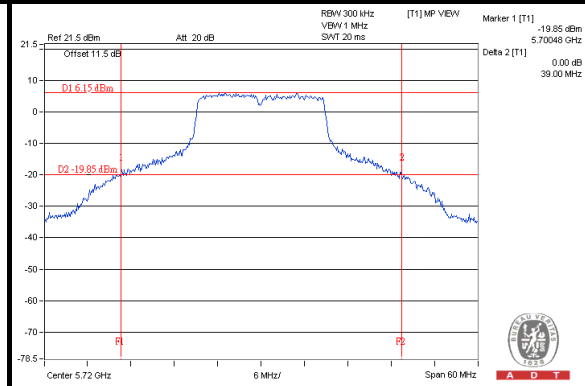
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SPECTRUM PLOT OF WORST VALUE

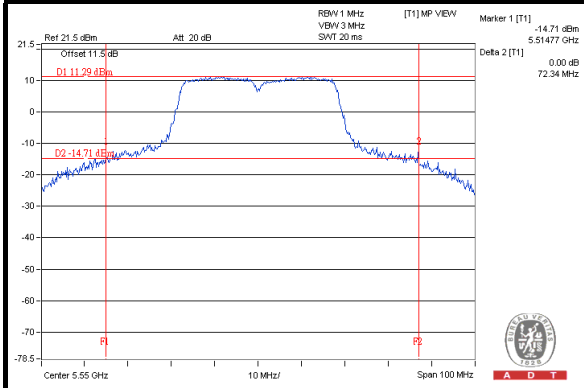
802.11a



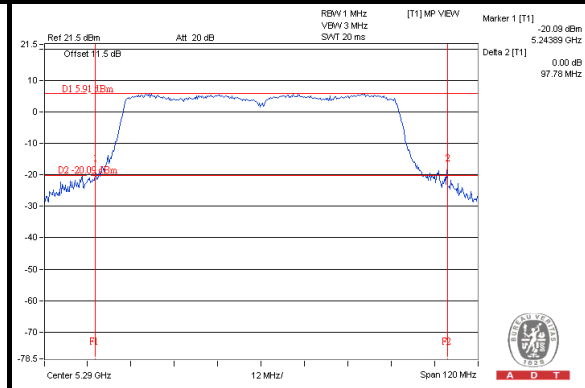
802.11n (20MHz)



802.11n (40MHz)



802.11ac (80MHz)

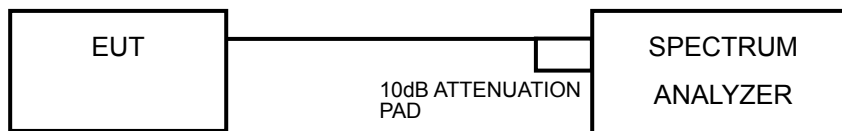


4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

FREQUENCY BAND	LIMIT
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-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

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

TEST MODE A

802.11a

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
52	5260	3.01	4.67	6.93	8.8	PASS
60	5300	3.20	3.37	6.30	8.8	PASS
64	5320	3.07	3.56	6.33	8.8	PASS
100	5500	3.80	3.31	6.57	8.8	PASS
116	5580	3.87	3.82	6.86	8.8	PASS
140	5700	3.17	4.07	6.65	8.8	PASS
144	5720 For U-NII-2C	2.25	0.95	4.68	8.8	PASS
144	5720 For U-NII-3	1.87	0.68	4.34	14.8	PASS

NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-2A, U-NII-2C Band:**
Directional gain = $5.16\text{dBi} + 10\log(2) = 8.2\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11-(8.2-6) = 8.8\text{dBm}$.
For U-NII-3 Band:
Directional gain = $5.16\text{dBi} + 10\log(2) = 8.2\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(8.2-6) = 14.8\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
52	5260	2.94	4.12	6.58	11	PASS
60	5300	3.44	2.97	6.22	11	PASS
64	5320	3.60	3.34	6.48	11	PASS
100	5500	3.36	3.05	6.22	11	PASS
116	5580	3.10	3.51	6.32	11	PASS
140	5700	2.67	2.19	5.45	11	PASS
144	5720 For U-NII-2C	1.31	1.04	4.21	11	PASS
144	5720 For U-NII-3	1.00	0.34	3.72	17	PASS

NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-2A, U-NII-2C Band:**
IEEE 802.11n, MCS = 8-15, NSS = 2,
Directional gain = $5.16\text{dBi} + 10\log(2/2) = 5.16\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.
- For U-NII-3 Band:**
IEEE 802.11n, MCS = 8-15, NSS = 2,
Directional gain = $5.16\text{dBi} + 10\log(2/2) = 5.16\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
54	5270	0.39	-0.21	3.11	11	PASS
62	5310	-1.03	-1.05	1.97	11	PASS
102	5510	-2.30	-1.61	2.81	11	PASS
110	5550	-0.29	-0.11	2.91	11	PASS
134	5670	-0.69	0.42	3.01	11	PASS
142	5710 For U-NII-2C	-0.76	-3.23	1.21	11	PASS
142	5710 For U-NII-3	-2.20	-3.40	0.28	17	PASS

NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-2A, U-NII-2C Band:**
IEEE 802.11n, MCS = 8-15, NSS = 2,
Directional gain = $5.16\text{dBi} + 10\log(2/2) = 5.16\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.
For U-NII-3 Band:
IEEE 802.11n, MCS = 8-15, NSS = 2,
Directional gain = $5.16\text{dBi} + 10\log(2/2) = 5.16\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (80MHz)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
58	5290	-4.78	-3.44	-1.05	8.8	PASS
106	5530	-5.97	-5.59	-2.77	8.8	PASS
138	5690 For U-NII-2C	-6.37	-6.48	-3.40	8.8	PASS
138	5690 For U-NII-3	-9.17	-7.12	-5.00	14.8	PASS

NOTE:

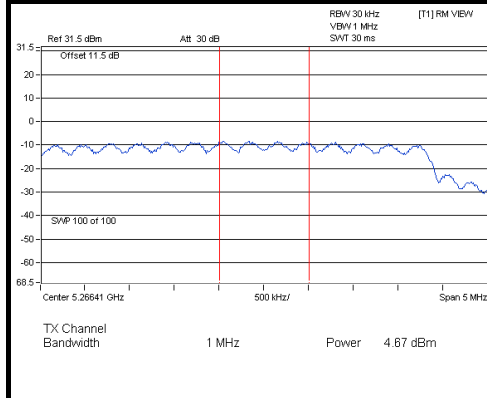
- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-2A, U-NII-2C Band:**
 Directional gain = $5.16\text{dBi} + 10\log(2) = 8.2\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11-(8.2-6) = 8.8\text{dBm}$.
For U-NII-3 Band:
 Directional gain = $5.16\text{dBi} + 10\log(2) = 8.2\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(8.2-6) = 14.8\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.



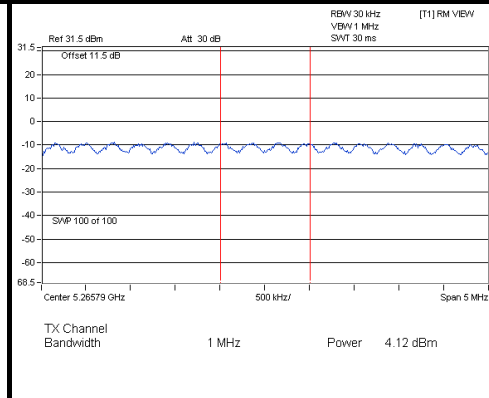
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SPECTRUM PLOT OF WORST VALUE

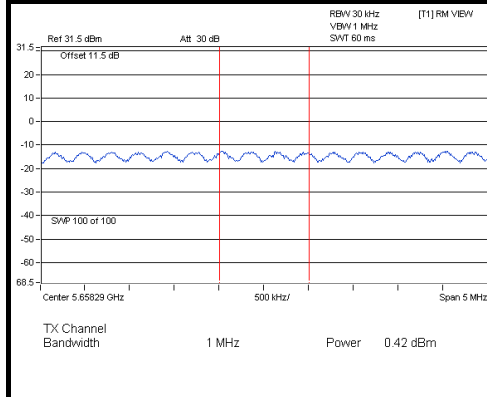
802.11a



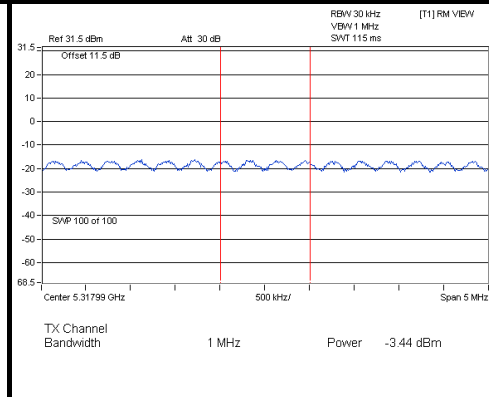
802.11n (20MHz)



802.11n (40MHz)



802.11ac (80MHz)



TEST MODE B

802.11a

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
52	5260	3.92	3.84	6.89	8.8	PASS
60	5300	4.85	3.61	7.28	8.8	PASS
64	5320	4.58	2.28	6.59	8.8	PASS
100	5500	2.90	3.26	6.09	8.8	PASS
116	5580	3.51	3.45	6.49	8.8	PASS
140	5700	3.65	3.29	6.48	8.8	PASS
144	5720 For U-NII-2C	2.05	2.29	5.23	8.8	PASS
144	5720 For U-NII-3	1.72	1.75	4.80	14.8	PASS

NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-2A, U-NII-2C Band:**
 Directional gain = $5.16\text{dBi} + 10\log(2) = 8.2\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11-(8.2-6) = 8.8\text{dBm}$.
For U-NII-3 Band:
 Directional gain = $5.16\text{dBi} + 10\log(2) = 8.2\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(8.2-6) = 14.8\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11n (20MHz)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
52	5260	4.05	2.36	6.30	11	PASS
60	5300	4.29	2.59	6.53	11	PASS
64	5320	4.12	2.30	6.31	11	PASS
100	5500	2.55	2.99	5.79	11	PASS
116	5580	3.36	3.32	6.35	11	PASS
140	5700	2.51	3.08	5.81	11	PASS
144	5720 For U-NII-2C	1.46	1.92	4.72	11	PASS
144	5720 For U-NII-3	1.15	1.41	4.31	17	PASS

NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-2A, U-NII-2C Band:**
IEEE 802.11n, MCS = 8-15, NSS = 2,
Directional gain = $5.16\text{dBi} + 10\log(2/2) = 5.16\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.
- For U-NII-3 Band:**
IEEE 802.11n, MCS = 8-15, NSS = 2,
Directional gain = $5.16\text{dBi} + 10\log(2/2) = 5.16\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11n (40MHz)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
54	5270	0.35	0.05	3.21	11	PASS
62	5310	-1.61	-1.51	1.45	11	PASS
102	5510	-2.59	-4.43	-0.40	11	PASS
110	5550	-0.17	0.37	3.12	11	PASS
134	5670	-2.01	-3.67	0.25	11	PASS
142	5710 For U-NII-2C	-4.01	-3.96	-0.95	11	PASS
142	5710 For U-NII-3	-5.07	-4.63	-1.81	17	PASS

NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-2A, U-NII-2C Band:**
 IEEE 802.11n, MCS = 8-15, NSS = 2,
 Directional gain = $5.16\text{dBi} + 10\log(2/2) = 5.16\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.
For U-NII-3 Band:
 IEEE 802.11n, MCS = 8-15, NSS = 2,
 Directional gain = $5.16\text{dBi} + 10\log(2/2) = 5.16\text{dBi} < 6\text{dBi}$, so the limit no need to reduced.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (80MHz)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
58	5290	-3.92	-4.82	-1.34	8.8	PASS
106	5530	-5.62	-6.17	-2.88	8.8	PASS
138	5690 For U-NII-2C	-7.59	-8.29	-4.89	8.8	PASS
138	5690 For U-NII-3	-10.21	-8.99	-6.52	14.8	PASS

NOTE:

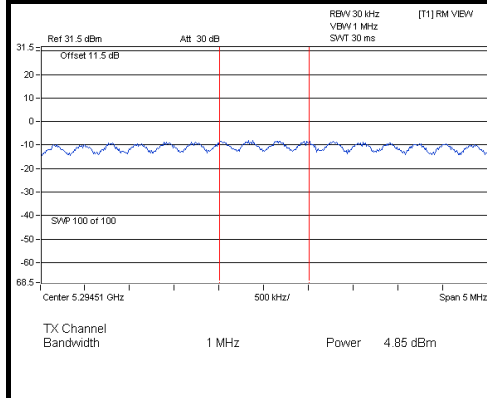
- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-2A, U-NII-2C Band:**
 Directional gain = $5.16\text{dBi} + 10\log(2) = 8.2\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11-(8.2-6) = 8.8\text{dBm}$.
For U-NII-3 Band:
 Directional gain = $5.16\text{dBi} + 10\log(2) = 8.2\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(8.2-6) = 14.8\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.



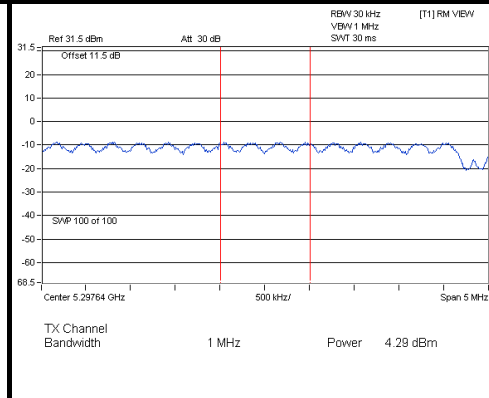
A D T

SPECTRUM PLOT OF WORST VALUE

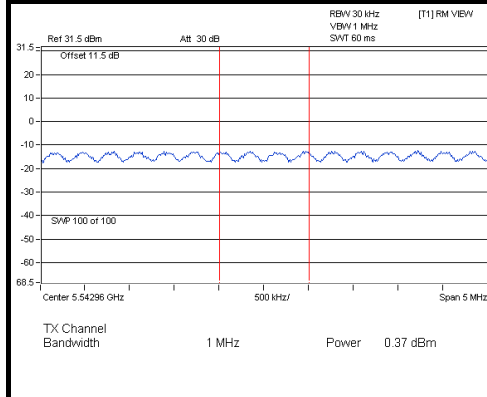
802.11a



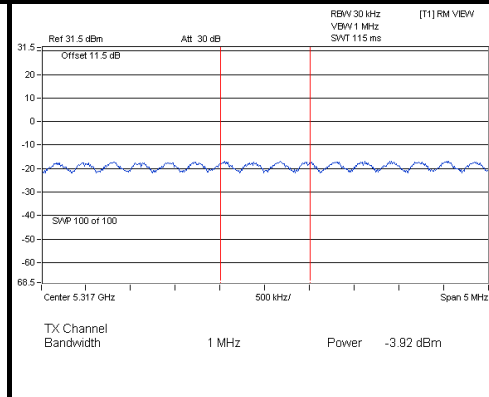
802.11n (20MHz)



802.11n (40MHz)



802.11ac (80MHz)



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. Find the worst channel and modulation mode as above test procedure, and follow KDB 789033 D01 General UNII Test Procedures Old Rules v01r04 and repeat step 1 to 5 for final testing of each modulation mode on a single channel (all modulation types) in a single operating band to compliance with the peak excursion requirement.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITIONS

Same as 4.2.6

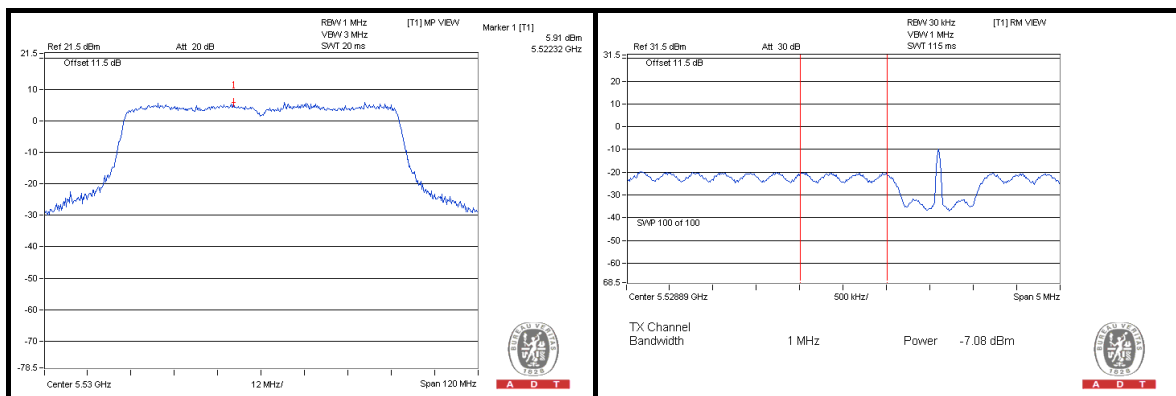


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4.5.7 TEST RESULTS

TEST MODE A

MODULATION MODE	MODULATION TYPE	FREQ. (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/ FAIL
802.11a	BPSK	5700	14.53	3.17	11.36	13	PASS
	QPSK		14.64	3.35	11.29	13	PASS
	16QAM		14.55	3.09	11.46	13	PASS
	64QAM		14.47	3	11.47	13	PASS
802.11n (20MHz)	BPSK	5700	13.83	2.67	11.16	13	PASS
	QPSK		13.32	2.51	10.81	13	PASS
	16QAM		13.42	2.05	11.37	13	PASS
	64QAM		14.15	1.26	12.89	13	PASS
802.11n (40MHz)	BPSK	5670	10.77	-0.69	11.46	13	PASS
	QPSK		11.3	0.17	11.13	13	PASS
	16QAM		11.43	0.23	11.20	13	PASS
	64QAM		11.82	-0.12	11.94	13	PASS
802.11ac (80MHz)	BPSK	5530	5.38	-5.97	11.35	13	PASS
	QPSK		6.28	-6.01	12.29	13	PASS
	16QAM		5.91	-7.08	12.99	13	PASS
	64QAM		6.32	-5.84	12.16	13	PASS
	256QAM		6.60	-5.87	12.47	13	PASS

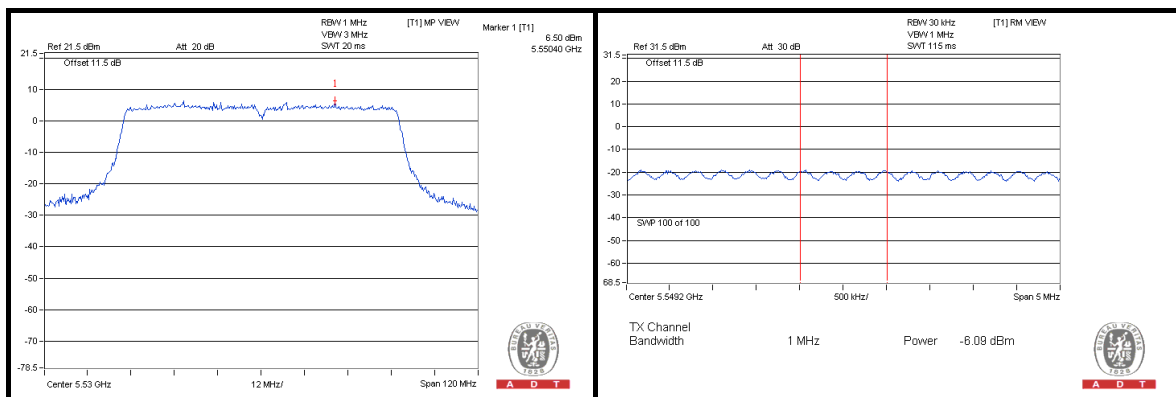




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TEST MODE B

MODULATION MODE	MODULATION TYPE	FREQ. (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/ FAIL
802.11a	BPSK	5700	14.07	3.65	10.42	13	PASS
	QPSK		14.91	3.23	11.68	13	PASS
	16QAM		15.29	3.32	11.97	13	PASS
	64QAM		14.95	3.19	11.76	13	PASS
802.11n (20MHz)	BPSK	5700	12.91	2.51	10.4	13	PASS
	QPSK		13.97	2.87	11.1	13	PASS
	16QAM		13.76	2.6	11.16	13	PASS
	64QAM		13.69	2.67	11.02	13	PASS
802.11n (40MHz)	BPSK	5670	8.86	-2.01	10.87	13	PASS
	QPSK		9.33	-2.51	11.84	13	PASS
	16QAM		9.41	-2.4	11.81	13	PASS
	64QAM		9.08	-2.9	11.98	13	PASS
802.11ac (80MHz)	BPSK	5530	6.09	-5.62	11.71	13	PASS
	QPSK		5.54	-6.05	11.59	13	PASS
	16QAM		6.50	-6.09	12.59	13	PASS
	64QAM		6.19	-5.61	11.80	13	PASS
	256QAM		6.52	-5.66	12.18	13	PASS

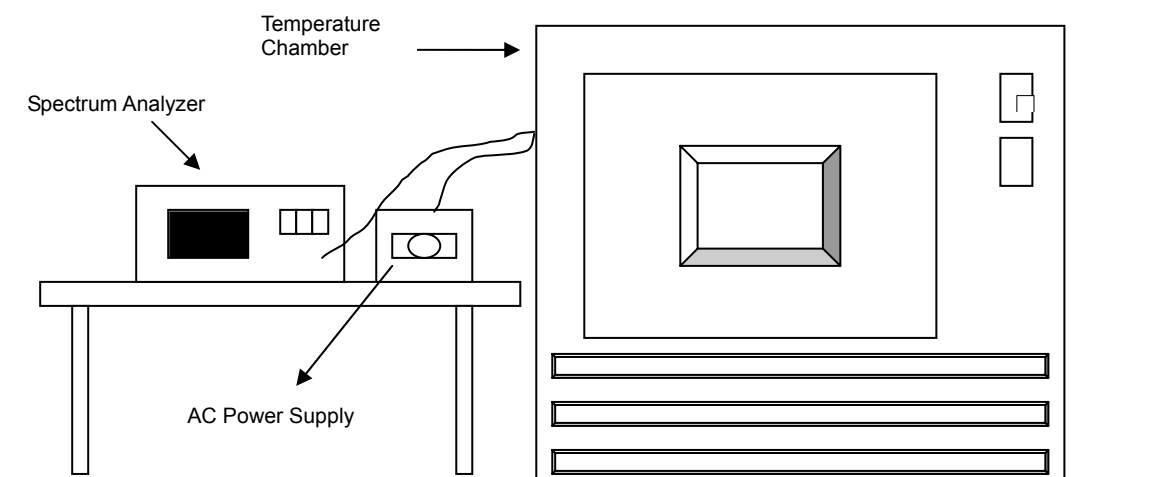


4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.6.4 TEST PROCEDURE

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

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITION

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

4.6.7 TEST RESULTS

TEST MODE A

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. ()	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 (%)
50	120.0	5320.0100	0.00019	5320.0150	0.00028	5320.0134	0.00025	5320.0136	0.00026
40	120.0	5319.9895	-0.00020	5319.9922	-0.00015	5319.9867	-0.00025	5319.9922	-0.00015
30	120.0	5319.9953	-0.00009	5319.9887	-0.00021	5319.9930	-0.00013	5319.9884	-0.00022
20	120.0	5319.9776	-0.00042	5319.9710	-0.00055	5319.9691	-0.00058	5319.9753	-0.00046
10	120.0	5320.0261	0.00049	5320.0287	0.00054	5320.0267	0.00050	5320.0252	0.00047
0	120.0	5320.0055	0.00010	5320.0044	0.00008	5319.9980	-0.00004	5319.9992	-0.00002
-10	120.0	5319.9773	-0.00043	5319.9789	-0.00040	5319.9829	-0.00032	5319.9822	-0.00033
-20	120.0	5319.9832	-0.00032	5319.9795	-0.00039	5319.9780	-0.00041	5319.9856	-0.00027
-30	120.0	5319.9854	-0.00027	5319.9942	-0.00011	5319.9913	-0.00016	5319.9881	-0.00022

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. ()	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	5319.9779	-0.00042	5319.9708	-0.00055	5319.9692	-0.00058	5319.9747	-0.00048
	120	5319.9776	-0.00042	5319.9710	-0.00055	5319.9691	-0.00058	5319.9753	-0.00046
	102	5319.9785	-0.00040	5319.9710	-0.00055	5319.9690	-0.00058	5319.9747	-0.00048



TEST MODE B

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. ()	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 (%)
50	120	5320.0130	0.00024	5320.0127	0.00024	5320.0161	0.00030	5320.0149	0.00028
40	120	5320.0079	0.00015	5320.0017	0.00003	5320.0014	0.00003	5320.0087	0.00016
30	120	5320.0113	0.00021	5320.0061	0.00011	5320.0065	0.00012	5320.0064	0.00012
20	120	5320.0226	0.00042	5320.0214	0.00040	5320.0161	0.00030	5320.0215	0.00040
10	120	5319.9974	-0.00005	5319.9957	-0.00008	5319.9987	-0.00002	5320.0017	0.00003
0	120	5319.976	-0.00045	5319.9812	-0.00035	5319.9827	-0.00033	5319.9759	-0.00045
-10	120	5320.0059	0.00011	5320.0028	0.00005	5320.0043	0.00008	5320.0025	0.00005
-20	120	5320.0128	0.00024	5320.0108	0.00020	5320.0109	0.00020	5320.0124	0.00023
-30	120	5320.0035	0.00007	5320.0051	0.00010	5320.008	0.00015	5320.0027	0.00005

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. ()	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	5320.0220	0.00041	5320.0215	0.00040	5320.0159	0.00030	5320.0215	0.00040
	120	5320.0226	0.00042	5320.0214	0.00040	5320.0161	0.00030	5320.0215	0.00040
	102	5320.0219	0.00041	5320.0218	0.00041	5320.017	0.00032	5320.0224	0.00042

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

Fax: 886-3-5935342

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Tel: 886-3-3183232

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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

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

---END---