

## FCC Test Report

**Report No.:** RF130927E08O-1

**FCC ID:** Z3M-FG1100

**Test Model:** FiOS-G1100

**Received Date:** Mar. 29, 2016

**Test Date:** Apr. 11 to 14, 2016

**Issued Date:** Apr. 28, 2016

**Applicant:** Greenwave Systems Pte. Ltd.

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A D T

### Release Control Record

Issue No.	Description	Date Issued
RF130927E08O-1	Original release.	Apr. 28, 2016

## 1 Certificate of Conformity

**Product:** FiOS Gateway

**Brand:** Frontier

**Test Model:** FiOS-G1100

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** Greenwave Systems Pte. Ltd.

**Test Date:** Apr. 11 to 14, 2016

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)

ANSI C63.10: 2013

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

**Prepared by :**  , **Date:** Apr. 28, 2016

Claire Kuan / Specialist

**Approved by :**  , **Date:** Apr. 28, 2016

May Chen / Manager

## 2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (SECTION 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -2.16dB at 0.25547MHz.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -0.1dB at 5378.00MHz, 5381.00MHz, 5394.00MHz, 5420.00MHz, 5430.00MHz, 5470.00MHz, 5733.00MHz, 5780.00MHz, 5837.00MHz, 5881.00MHz, 5882.00MHz.
15.407(a)(1/2 /3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2 /3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(e)	6dB bandwidth	PASS	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is I-PEX not a standard connector.

- NOTE:** 1. This report is prepared for FCC class II permissive change. (Add DFS band: 5.26GHz ~ 5.32GHz, 5.5GHz ~ 5.7GHz).  
2. The DFS report was recorded in another test report.

### 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	Expended Uncertainty (k=2) ( $\pm$ )
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.86 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.31 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.40 dB
	6GHz ~ 18GHz	3.73 dB
	18GHz ~ 40GHz	4.11 dB

### 2.2 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT (DFS Band)

Product	FiOS Gateway
Brand	Frontier
Test Model	FiOS-G1100
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	DC 12V from power adapter
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode only
Modulation Technology	OFDM
Transfer Rate	802.11a: up to 54Mbps 802.11n: up to 450Mbps 802.11ac: up to 1300Mbps
Operating Frequency	5.26GHz ~ 5.32GHz, 5.50GHz ~ 5.58GHz & 5.66GHz ~ 5.72GHz
Number of Channel	13 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 6 for 802.11n (HT40), 802.11ac (VHT40) 3 for 802.11ac (VHT80)
Output Power	<p><b>5GHz (5.26 ~ 5.32GHz):</b></p> <p><b>1TX</b> 7.834mW</p> <p><b>2TX</b> <b>CDD Mode:</b> 47.709mW <b>SDM Mode:</b> 47.709mW <b>STBC Mode:</b> 69.627mW <b>Beamforming Mode:</b> 47.709mW</p> <p><b>3TX</b> <b>CDD Mode:</b> 39.38mW <b>SDM Mode:</b> 39.38mW <b>STBC Mode:</b> 39.38mW <b>Beamforming Mode:</b> 39.38mW</p> <p><b>5GHz (5.5 ~ 5.58GHz &amp; 5.66 ~ 5.72GHz):</b></p> <p><b>1TX</b> 14.028mW</p> <p><b>2TX</b> <b>CDD Mode:</b> 93.702mW <b>SDM Mode:</b> 93.702mW <b>STBC Mode:</b> 93.702mW <b>Beamforming Mode:</b> 93.702mW</p> <p><b>3TX</b> <b>CDD Mode:</b> 67.047mW <b>SDM Mode:</b> 67.047mW <b>STBC Mode:</b> 83.069mW <b>Beamforming Mode:</b> 67.047mW</p>
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter x1
Data Cable Supplied	NA

## Note:

1. This report is prepared for FCC Class II change. The difference compared with the Report No.: RF130927E08L-1 design is as the following:
  - ◆ Add DFS band <5250~5350MHz & 5470~5725MHz>
2. According to above conditions, all test items need to be performed. And all data were verified to meet the requirements.
3. There are Z-Wave technology and WLAN (2.4GHz & 5GHz) technology used for the EUT.
4. The emission of the simultaneous operation (Z-Wave & WLAN) has been evaluated and no non-compliance was found.
5. The antennas provided to the EUT, please refer to the following table:

**WLAN Antenna Spec.****2.4GHz**

Transmitter Circuit	Gain (dBi) (Include cable loss)	Antenna Type	Connector Type	Frequency range (GHz to GHz)
Chain (0)	3.97	Dipole(Metal)	NA	2.4~2.4835
Chain (1)	4.1	Dipole(Metal)	NA	2.4~2.4835
Chain (2)	3.36	PIFA(Metal)	NA	2.4~2.4835

**5GHz**

Transmitter Circuit	Gain (dBi) (Include cable loss)	Antenna Type	Connector Type	Frequency range (GHz to GHz)
Chain (0)	3.56	Dipole(Metal)	NA	5.15~5.25
	3.86			5.25~5.35
	4.05			5.47~5.725
	4.05			5.725~5.85
Chain (1)	5.3	Dipole(Metal)	NA	5.15~5.25
	5.75			5.25~5.35
	5.75			5.47~5.725
	5.71			5.725~5.85
Chain (2)	4.6	Dipole(Metal)	NA	5.15~5.25
	4.35			5.25~5.35
	4.35			5.47~5.725
	4.21			5.725~5.85

**Z-Wave Antenna Spec.**

Gain (dBi) (Include cable loss)	Antenna Type	Connector Type	Frequency range (MHz to MHz)
1.73	PIFA (Metal)	NA	902~928

Note: 1. For 1Tx mode will fix transmission on Chain (0).  
 2. For 2Tx mode will fix transmission on Chain (0) and Chain (1)

6. The EUT must be supplied with a power adapter and following two different model names could be chosen:

No.	Brand	Model No.	Spec.
1	Ktec	KSA20C1200300HU	AC Input : 100-240V, 1A, 50-60Hz DC Output : 12V, 3.0A DC output cable(unshielded ,1.5m)
2	LEI	MU36-D120300-A1	AC Input : 100-240V, 1.5A, 50-60Hz DC Output : 12V, 3.0A DC output cable(unshielded ,1.5m)

From the above adapters, the worst radiated emission were found in **Adapter 1**. Therefore only the test data of the modes were recorded in this report.

7. The specifications of EUT listed as below:

MODULATION MODE	TX/RX FUNCTION
802.11b	1TX/3RX
	2TX/3RX(CDD Mode)
	3TX/3RX(CDD Mode)
802.11g	1TX/3RX
802.11n (HT20)	1TX/3RX
	2TX/3RX (SDM Mode)
	3TX/3RX (CDD Mode)
	3TX/3RX (STBC Mode)
	2TX/3RX (Beamforming Mode, only 5GHz band)
	3TX/3RX (Beamforming Mode, only 5GHz band)
802.11n (HT40)	1TX/3RX
	2TX/3RX (SDM Mode)
	3TX/3RX (CDD Mode)
	3TX/3RX (STBC Mode)
	2TX/3RX (Beamforming Mode, only 5GHz band)
	3TX/3RX (Beamforming Mode, only 5GHz band)
802.11a	1TX/3RX
802.11ac (VHT20)	2TX/3RX (SDM Mode)
	2TX/3RX (CDD Mode)
	2TX/3RX (STBC Mode)
	2TX/3RX (Beamforming Mode)
	3TX/3RX (SDM Mode)
	3TX/3RX (CDD Mode)
	3TX/3RX (STBC Mode)
	3TX/3RX (Beamforming Mode)
	2TX/3RX (SDM Mode)
	2TX/3RX (CDD Mode)
802.11ac (VHT40)	2TX/3RX (STBC Mode)
	2TX/3RX (Beamforming Mode)
	3TX/3RX (SDM Mode)
	3TX/3RX (CDD Mode)
	3TX/3RX (STBC Mode)
	3TX/3RX (Beamforming Mode)
	2TX/3RX (SDM Mode)
	2TX/3RX (CDD Mode)
	2TX/3RX (STBC Mode)
	2TX/3RX (Beamforming Mode)
802.11ac (VHT80)	3TX/3RX (SDM Mode)
	3TX/3RX (CDD Mode)
	3TX/3RX (STBC Mode)
	3TX/3RX (Beamforming Mode)
	2TX/3RX (SDM Mode)
	2TX/3RX (CDD Mode)
	2TX/3RX (STBC Mode)
	2TX/3RX (Beamforming Mode)
	3TX/3RX (SDM Mode)
	3TX/3RX (CDD Mode)

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

8. When the EUT operating in 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 23.
9. When the EUT operating in 802.11ac, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 9.
10. 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, (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

#### FOR 5500 ~ 5720MHz

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

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 (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	134	5670 MHz
110	5550 MHz	142	5710 MHz

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
106	5530MHz	138	5690 MHz

### 3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
1	√	-	-	√	1TX configuration (with Adapter 1)
2	√	-	-	√	2TX configuration (with Adapter 1)
3	√	√	√	√	3TX configuration (with Adapter 1)
4	-	-	√	-	3TX configuration (with Adapter 2)

Where **RE≥1G:** Radiated Emission above 1GHz

**PLC:** Power Line Conducted Emission

**RE<1G:** Radiated Emission below 1GHz

**APCM:** Antenna Port Conducted Measurement

#### NOTE:

1. “-” means no effect.
2. The Frequency Stability is only test **3Tx configuration mode**.
3. In the original test report, for 5GHz radiated emissions above 1GHz test, the EUT's Beamforming, SDM and CDD mode had been pre-tested. The worst case was found when **CDD mode**. Therefore only the test data was recorded in this report.

#### 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.

1TX CONFIGURATION						
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11a	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	6
2TX CONFIGURATION						
CDD / STBC MODE						
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11ac (VHT20)	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 110 , 134 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	29.3

<b>3TX CONFIGURATION</b>						
<b>CDD / STBC MODE</b>						
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11ac (VHT20)	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 110 , 134 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	29.3

#### Radiated Emission Test (Below 1GHz):

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

<b>3TX CONFIGURATION</b>						
<b>CDD / STBC MODE</b>						
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ac (VHT20)	5260-5320 5500-5720	52 to 64 102 to 110 , 134 to 142	54	OFDM	BPSK	6.5

#### Power Line Conducted Emission Test:

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

<b>3TX CONFIGURATION</b>						
<b>CDD / STBC MODE</b>						
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ac (VHT20)	5260-5320 5500-5720	52 to 64 102 to 110 , 134 to 142	54	OFDM	BPSK	6.5

### Antenna Port Conducted Measurement:

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

<b>1TX CONFIGURATION</b>						
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11a	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	6
<b>2TX CONFIGURATION</b>						
<b>CDD / STBC MODE</b>						
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11ac (VHT20)	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 110 , 134 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	29.3
<b>SDM MODE</b>						
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	13
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	27
802.11ac (VHT80)		58	58	OFDM	BPSK	58.5
802.11ac (VHT20)	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	13
802.11ac (VHT40)		102 to 110 , 134 to 142	102, 110, 134, 142	OFDM	BPSK	27
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	58.5

<b>Beamforming MODE</b>								
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	NSS	
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5	1	
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5	1	
802.11ac (VHT80)		58	58	OFDM	BPSK	27	2	
802.11ac (VHT20)	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	29.3	1	
802.11ac (VHT40)		102 to 110, 134 to 142	102, 110, 134, 142	OFDM	BPSK	58.5	2	
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	6.5	1	
<b>3TX CONFIGURATION</b>								
<b>CDD / STBC MODE</b>								
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)		
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5		
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5		
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3		
802.11ac (VHT20)	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	6.5		
802.11ac (VHT40)		102 to 110, 134 to 142	102, 110, 134, 142	OFDM	BPSK	13.5		
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	29.3		
<b>SDM MODE</b>								
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)		
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5		
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5		
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3		
802.11ac (VHT20)	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	6.5		
802.11ac (VHT40)		102 to 110, 134 to 142	102, 110, 134, 142	OFDM	BPSK	13.5		
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	29.3		

Beamforming MODE									
MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	NSS		
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5	1		
		54 to 62	54, 62			13	2		
						19.5	3		
802.11ac (VHT40)	5500-5720	100 to 116 & 132 to 144	100, 116, 140, 144	OFDM	BPSK	13.5	1		
						27	2		
						40.5	3		
802.11ac (VHT80)	5500-5720	102 to 110 , 134 to 142	102, 110, 134, 142	OFDM	BPSK	29.3	1		
						58.5	2		
						87.8	3		
802.11ac (VHT20)	5500-5720	106 to 138	106, 138	OFDM	BPSK	6.5	1		
						13	2		
						19.5	3		
802.11ac (VHT40)	5500-5720	29.3	1	OFDM	BPSK	13.5	1		
						27	2		
						40.5	3		
802.11ac (VHT80)	5500-5720	58.5	2	OFDM	BPSK	29.3	1		
						58.5	2		
						87.8	3		

### Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY	TEST LOCATION
RE≥1G	23deg. C, 70%RH	120Vac, 60Hz	Andy Ho	1
RE<1G	22deg. C, 64%RH	120Vac, 60Hz	Andy Ho	1
PLC	25deg. C, 62%RH	120Vac, 60Hz	Wythe Lin	2
APCM	25deg. C, 60%RH	120Vac, 60Hz	Chilin Lee	1

### 3.3 Duty Cycle of Test Signal

If duty cycle of test signal is  $\geq 98\%$ , duty factor is not required.

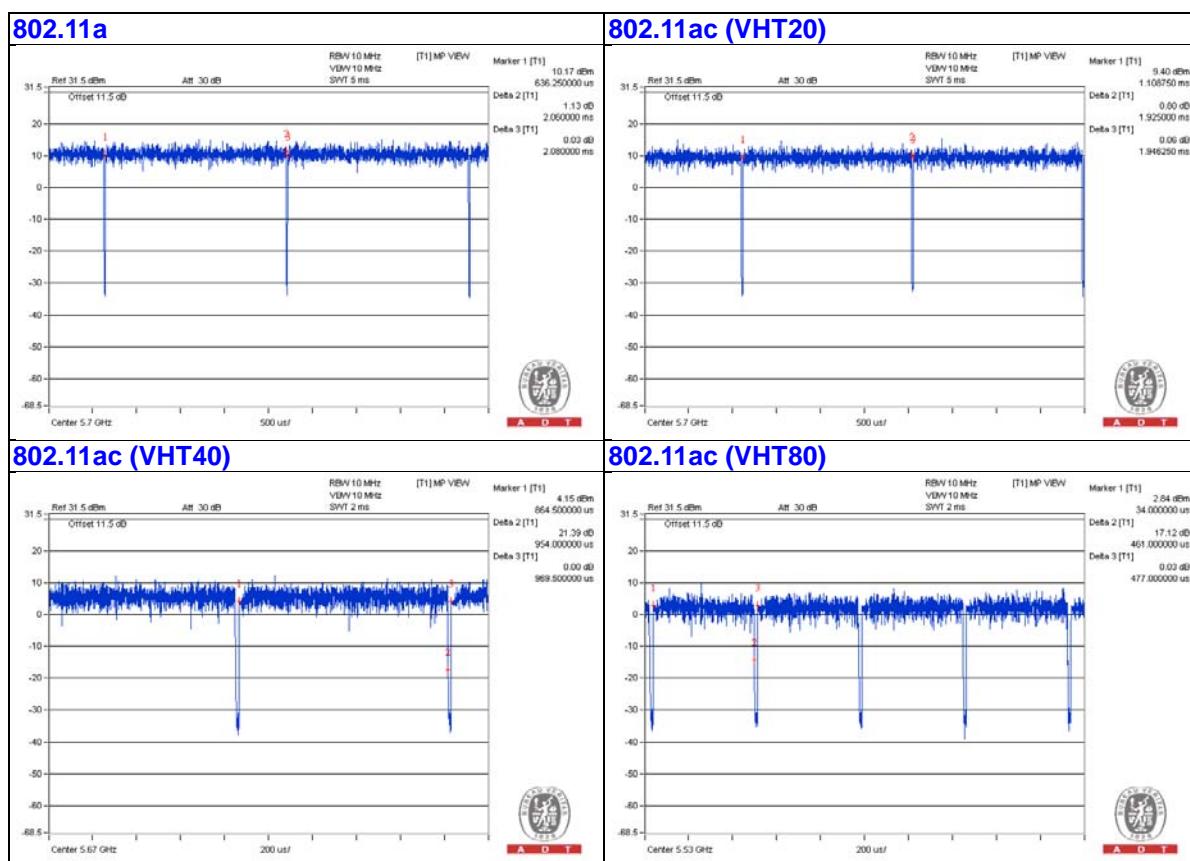
If duty cycle of test signal is  $< 98\%$ , duty factor shall be considered.

**802.11a:** Duty cycle = 2.06 ms/2.08 ms = 0.99

**802.11ac (VHT20):** Duty cycle = 1.925 ms/1.94625 ms = 0.989

**802.11ac (VHT40):** Duty cycle = 0.954 ms/0.9695 ms = 0.984

**802.11ac (VHT80):** Duty cycle = 0.461 ms/0.477 ms = 0.966, Duty factor =  $10 * \log(1/0.966) = 0.15$



### 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.

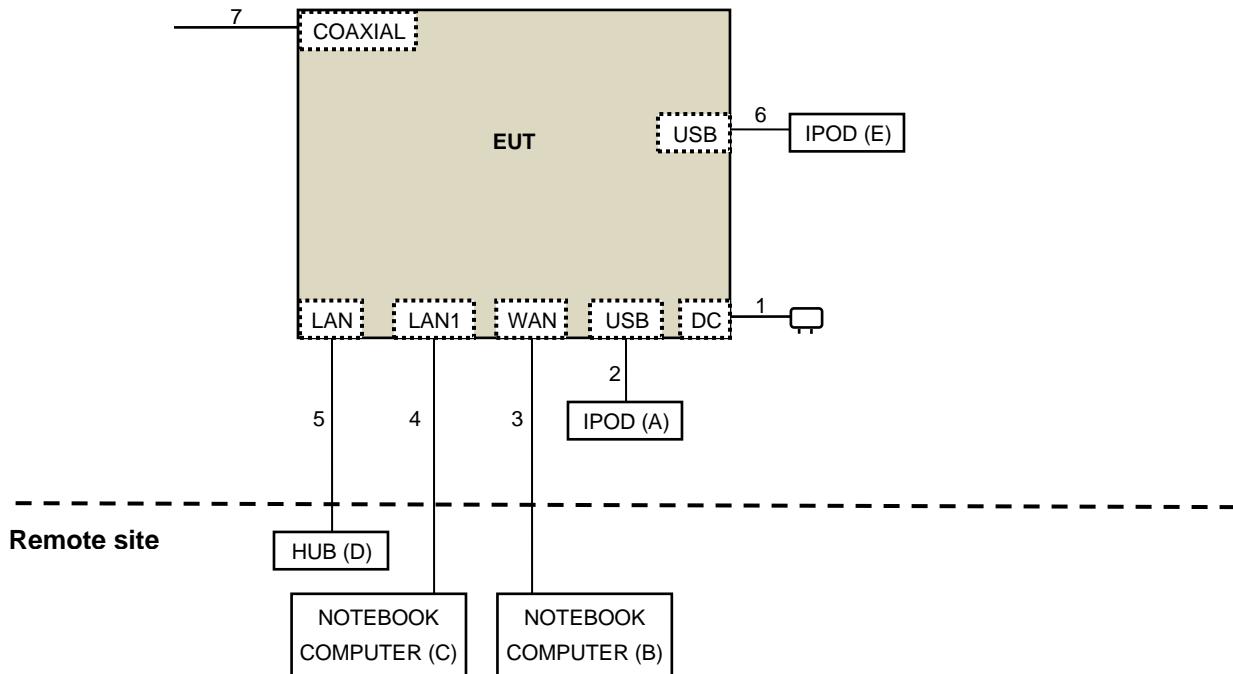
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	IPOD	BUFFALO	HD-LBU3	55291820800967	NA	Provided by Lab
B.	NOTEBOOK COMPUTER	DELL	E5430	4YV4VY1	FCC DoC	Provided by Lab
C.	NOTEBOOK COMPUTER	DELL	E5430	HYV4VY1	FCC DoC	Provided by Lab
D.	HUB	ZyXEL	ES-116P	S060H02000215	FCC DoC	Provided by Lab
E.	IPOD	Apple	MD778TA/A	CC4JG680F4T1	NA	Provided by Lab

Note:

1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC	1	1.5	No	0	Supplied by Client
2.	USB	1	0.1	Yes	0	Provided by Lab
3.	RJ-45	1	10	No	0	Provided by Lab
4.	RJ-45	1	10	No	0	Provided by Lab
5.	RJ-45	3	10	No	0	Provided by Lab
6.	USB	1	0.1	Yes	0	Provided by Lab
7.	Coaxial	1	1.2	Yes	0	Provided by Lab

### 3.4.1 Configuration of System under Test



### 3.5 General Description of Applied Standard

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)**

**KDB 789033 D02 General UNII Test Procedure New Rules v01r02**

**KDB 662911 D01 Multiple Transmitter Output v02r01**

ANSI C63.10-2013

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

**NOTE:** The EUT 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 (dB $\mu$ V/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.

#### LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
789033 D02 General UNII Test Procedure New Rules v01r02	FIELD STRENGTH AT 3m	
	PK:74 (dB $\mu$ V/m)	AV:54 (dB $\mu$ V/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)		
15.407(b)(2)	PK:-27 (dBm/MHz)	PK:68.2(dB $\mu$ V/m)
15.407(b)(3)		
15.407(b)(4)	PK:-27 (dBm/MHz) <sup>*1</sup> PK:-17 (dBm/MHz) <sup>*2</sup>	PK: 68.2(dB $\mu$ V/m) <sup>*1</sup> PK:78.2 (dB $\mu$ V/m) <sup>*2</sup>

NOTE: <sup>\*1</sup>beyond 10MHz of the band edge    <sup>\*2</sup>within 10 MHz of band edge

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

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

#### 4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	Aug. 12, 2015	Aug. 11, 2016
Pre-Amplifier <sup>(*)</sup> EMCI	EMC001340	980142	Jan. 20, 2016	Jan. 19, 2018
Loop Antenna <sup>(*)</sup> Electro-Metrics	EM-6879	264	Dec. 16, 2014	Dec. 15, 2016
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 18, 2016	Jan. 17, 2017
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-07	May 08, 2015	May 07, 2016
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-156	Jan. 04, 2016	Jan. 03, 2017
RF Cable	8D	966-3-1 966-3-2 966-3-3	Apr. 02, 2016	Apr. 01, 2017
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Jan. 20, 2016	Jan. 19, 2017
Pre-Amplifier Agilent	8449B	3008A02465	Apr. 05, 2016	Apr. 04, 2017
RF Cable	EMC104-SM-SM-2000 EMC104-SM-SM-5000 EMC104-SM-SM-5000	150317 150321 150322	Mar. 30, 2016	Mar. 29, 2017
Spectrum Analyzer Keysight	N9030A	MY54490520	July 26, 2015	July 25, 2016
Pre-Amplifier EMCI	EMC184045	980143	Jan. 15, 2016	Jan. 14, 2017
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Jan. 08, 2016	Jan. 07, 2017
RF Cable	SUCOFLEX 102	36432/2 36441/2	Jan. 16, 2016	Jan. 15, 2017
Software	ADT_Radiated_V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA
Boresight Antenna Fixture	NA	NA	NA	NA
SPECTRUM ANALYZER R&S	FSP 40	100060	May 08, 2015	May 07, 2016
Power meter Anritsu	ML2495A	1014008	Apr. 28, 2015	Apr. 27, 2016
Power sensor Anritsu	MA2411B	0917122	Apr. 28, 2015	Apr. 27, 2016
Temperature & Humidity Chamber GIANTFORCE	GTH-150-40-S P-AR	MAA0812-008	Jan. 15, 2016	Jan. 14, 2017



A D T

**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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in 966 Chamber No. 3.
4. The FCC Site Registration No. is 147459
5. The CANADA Site Registration No. is 20331-1
6. Tested Date: Apr. 12 to 14, 2016

#### 4.1.3 Test Procedure

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. 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 height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

**Note:**

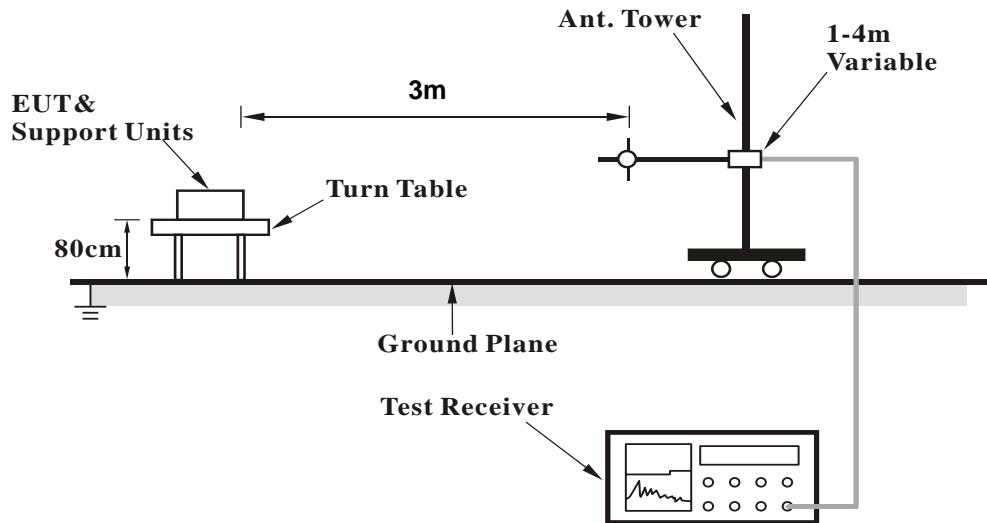
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ( $10 \log(1/\text{duty cycle})$ ).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

#### 4.1.4 Deviation from Test Standard

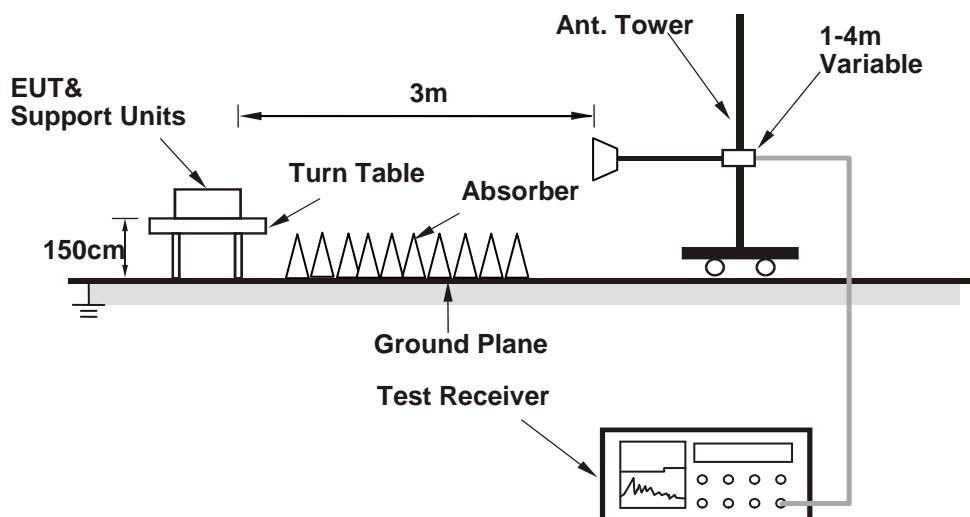
No deviation.

#### 4.1.5 Test Setup

##### <Frequency Range below 1GHz>



##### <Frequency Range above 1GHz>



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

#### 4.1.6 EUT Operating Condition

1. Placed the EUT on testing table.
2. Connect the EUT with the support unit B (Notebook Computer) which is placed in a remote area.
3. The communication partner run test program “BCMTool\_BHR4.exe [v1.05]” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

#### 4.1.7 Test Results (Mode 1)

##### CDD\_MODE

###### Above 1GHz Data:

###### 802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	50.4 PK	74.0	-23.6	1.04 H	84	49.81	0.59
2	5150.00	39.0 AV	54.0	-15.0	1.04 H	84	38.41	0.59
3	*5260.00	96.5 PK			1.04 H	84	95.53	0.97
4	*5260.00	85.1 AV			1.04 H	84	84.13	0.97
5	5420.00	52.8 PK	74.0	-21.2	1.03 H	90	51.56	1.24
6	5420.00	43.0 AV	54.0	-11.0	1.03 H	90	41.76	1.24
7	#10520.00	55.4 PK	74.0	-18.6	1.06 H	252	44.54	10.86
8	#10520.00	42.2 AV	54.0	-11.8	1.06 H	252	31.34	10.86
9	15780.00	60.3 PK	74.0	-13.7	1.13 H	119	48.48	11.82
10	15780.00	48.6 AV	54.0	-5.4	1.13 H	119	36.78	11.82

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.3 PK	74.0	-11.7	1.05 V	200	61.71	0.59
2	5150.00	51.0 AV	54.0	-3.0	1.05 V	200	50.41	0.59
3	*5260.00	108.3 PK			1.05 V	200	107.33	0.97
4	*5260.00	98.4 AV			1.05 V	200	97.43	0.97
5	5420.00	69.9 PK	74.0	-4.1	1.19 V	151	68.66	1.24
6	<b>5420.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.19 V</b>	<b>151</b>	<b>52.66</b>	<b>1.24</b>
7	#10520.00	56.9 PK	74.0	-17.1	1.09 V	317	46.04	10.86
8	#10520.00	42.0 AV	54.0	-12.0	1.09 V	317	31.14	10.86
9	15780.00	56.7 PK	74.0	-17.3	1.00 V	200	44.88	11.82
10	15780.00	41.8 AV	54.0	-12.2	1.00 V	200	29.98	11.82

###### REMARKS:

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

<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	93.0 PK			1.04 H	59	91.89	1.11
2	*5300.00	83.1 AV			1.04 H	59	81.99	1.11
3	5381.00	53.2 PK	74.0	-20.8	1.01 H	84	52.03	1.17
4	5381.00	42.6 AV	54.0	-11.4	1.01 H	84	41.43	1.17
5	5458.00	53.3 PK	74.0	-20.7	1.16 H	69	51.97	1.33
6	5458.00	42.0 AV	54.0	-12.0	1.16 H	69	40.67	1.33
7	10600.00	54.6 PK	74.0	-19.4	1.00 H	253	43.35	11.25
8	10600.00	41.9 AV	54.0	-12.1	1.00 H	253	30.65	11.25
9	15900.00	60.2 PK	74.0	-13.8	1.07 H	129	48.36	11.84
10	15900.00	48.4 AV	54.0	-5.6	1.07 H	129	36.56	11.84
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	107.1 PK			1.17 V	189	105.99	1.11
2	*5300.00	96.8 AV			1.17 V	189	95.69	1.11
3	5381.00	65.6 PK	74.0	-8.4	1.13 V	217	64.43	1.17
4	<b>5381.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.13 V</b>	<b>217</b>	<b>52.73</b>	<b>1.17</b>
5	5458.00	64.4 PK	74.0	-9.6	1.02 V	193	63.07	1.33
6	5458.00	53.0 AV	54.0	-1.0	1.02 V	193	51.67	1.33
7	10600.00	57.5 PK	74.0	-16.5	1.00 V	282	46.25	11.25
8	10600.00	42.6 AV	54.0	-11.4	1.00 V	282	31.35	11.25
9	15900.00	57.8 PK	74.0	-16.2	1.07 V	207	45.96	11.84
10	15900.00	42.3 AV	54.0	-11.7	1.07 V	207	30.46	11.84

**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.

<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	92.9 PK			1.07 H	68	91.77	1.13
2	*5320.00	83.7 AV			1.07 H	68	82.57	1.13
3	5400.00	52.3 PK	74.0	-21.7	1.12 H	86	51.11	1.19
4	5400.00	40.9 AV	54.0	-13.1	1.12 H	86	39.71	1.19
5	#5480.00	53.2 PK	74.0	-20.8	1.07 H	89	51.82	1.38
6	#5480.00	41.7 AV	54.0	-12.3	1.07 H	89	40.32	1.38
7	10640.00	55.5 PK	74.0	-18.5	1.05 H	255	44.23	11.27
8	10640.00	42.5 AV	54.0	-11.5	1.05 H	255	31.23	11.27
9	15960.00	60.9 PK	74.0	-13.1	1.03 H	98	49.18	11.72
10	15960.00	48.8 AV	54.0	-5.2	1.03 H	98	37.08	11.72
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.0 PK			1.14 V	208	106.87	1.13
2	*5320.00	96.8 AV			1.14 V	208	95.67	1.13
3	5400.00	64.7 PK	74.0	-9.3	1.07 V	197	63.51	1.19
4	5400.00	53.6 AV	54.0	-0.4	1.07 V	197	52.41	1.19
5	#5480.00	64.4 PK	74.0	-9.6	1.06 V	225	63.02	1.38
6	#5480.00	53.5 AV	54.0	-0.5	1.06 V	225	52.12	1.38
7	10640.00	57.4 PK	74.0	-16.6	1.04 V	297	46.13	11.27
8	10640.00	42.2 AV	54.0	-11.8	1.04 V	297	30.93	11.27
9	15960.00	57.5 PK	74.0	-16.5	1.00 V	214	45.78	11.72
10	15960.00	42.3 AV	54.0	-11.7	1.00 V	214	30.58	11.72

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 100	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5417.00	54.0 PK	74.0	-20.0	1.28 H	81	52.76	1.24
2	5417.00	42.2 AV	54.0	-11.8	1.28 H	81	40.96	1.24
3	*5500.00	96.1 PK			1.05 H	87	94.67	1.43
4	*5500.00	86.8 AV			1.05 H	87	85.37	1.43
5	11000.00	55.3 PK	74.0	-18.7	1.08 H	245	42.73	12.57
6	11000.00	42.6 AV	54.0	-11.4	1.08 H	245	30.03	12.57
7	#16500.00	60.0 PK	74.0	-14.0	1.01 H	109	45.53	14.47
8	#16500.00	48.3 AV	54.0	-5.7	1.01 H	109	33.83	14.47

**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	5417.00	65.3 PK	74.0	-8.7	1.07 V	215	64.06	1.24
2	5417.00	53.6 AV	54.0	-0.4	1.07 V	215	52.36	1.24
3	*5500.00	109.6 PK			1.03 V	157	108.17	1.43
4	*5500.00	99.8 AV			1.03 V	157	98.37	1.43
5	11000.00	57.0 PK	74.0	-17.0	1.06 V	282	44.43	12.57
6	11000.00	42.2 AV	54.0	-11.8	1.06 V	282	29.63	12.57
7	#16500.00	58.1 PK	74.0	-15.9	1.09 V	198	43.63	14.47
8	#16500.00	43.0 AV	54.0	-11.0	1.09 V	198	28.53	14.47

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5420.00	53.2 PK	74.0	-20.8	1.08 H	84	51.96	1.24
2	5420.00	41.5 AV	54.0	-12.5	1.08 H	84	40.26	1.24
3	*5580.00	95.8 PK			1.10 H	75	94.27	1.53
4	*5580.00	86.4 AV			1.10 H	75	84.87	1.53
5	#5740.00	55.0 PK	74.0	-19.0	1.23 H	272	53.27	1.73
6	#5740.00	42.1 AV	54.0	-11.9	1.23 H	272	40.37	1.73
7	11160.00	56.0 PK	74.0	-18.0	1.04 H	277	43.64	12.36
8	11160.00	43.1 AV	54.0	-10.9	1.04 H	277	30.74	12.36
9	#16740.00	59.2 PK	74.0	-14.8	1.11 H	76	43.95	15.25
10	#16740.00	47.7 AV	54.0	-6.3	1.11 H	76	32.45	15.25
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	5420.00	62.9 PK	74.0	-11.1	1.23 V	196	61.66	1.24
2	5420.00	52.0 AV	54.0	-2.0	1.23 V	196	50.76	1.24
3	*5580.00	110.5 PK			1.19 V	167	108.97	1.53
4	*5580.00	100.4 AV			1.19 V	167	98.87	1.53
5	#5740.00	68.1 PK	74.0	-5.9	1.02 V	225	66.37	1.73
6	#5740.00	53.5 AV	54.0	-0.5	1.02 V	225	51.77	1.73
7	11160.00	57.9 PK	74.0	-16.1	1.10 V	296	45.54	12.36
8	11160.00	42.7 AV	54.0	-11.3	1.10 V	296	30.34	12.36
9	#16740.00	57.3 PK	74.0	-16.7	1.11 V	211	42.05	15.25
10	#16740.00	42.3 AV	54.0	-11.7	1.11 V	211	27.05	15.25

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	97.8 PK			1.15 H	280	96.12	1.68
2	*5700.00	85.8 AV			1.15 H	280	84.12	1.68
3	#5780.00	59.8 PK	74.0	-14.2	1.02 H	262	58.00	1.80
4	#5780.00	41.8 AV	54.0	-12.2	1.02 H	262	40.00	1.80
5	#5860.00	60.0 PK	74.0	-14.0	1.01 H	271	58.18	1.82
6	#5860.00	41.4 AV	54.0	-12.6	1.01 H	271	39.58	1.82
7	11400.00	57.2 PK	74.0	-16.8	1.10 H	260	44.78	12.42
8	11400.00	44.0 AV	54.0	-10.0	1.10 H	260	31.58	12.42
9	#17100.00	59.9 PK	74.0	-14.1	1.16 H	78	43.34	16.56
10	#17100.00	47.8 AV	54.0	-6.2	1.16 H	78	31.24	16.56

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	109.7 PK			1.03 V	213	108.02	1.68
2	*5700.00	99.0 AV			1.03 V	213	97.32	1.68
3	#5780.00	68.5 PK	74.0	-5.5	1.13 V	199	66.70	1.80
4	#5780.00	53.6 AV	54.0	-0.4	1.13 V	199	51.80	1.80
5	#5860.00	65.5 PK	74.0	-8.5	1.13 V	205	63.68	1.82
6	#5860.00	52.4 AV	54.0	-1.6	1.13 V	205	50.58	1.82
7	11400.00	58.8 PK	74.0	-15.2	1.00 V	281	46.38	12.42
8	11400.00	43.5 AV	54.0	-10.5	1.00 V	281	31.08	12.42
9	#17100.00	57.5 PK	74.0	-16.5	1.07 V	208	40.94	16.56
10	#17100.00	42.4 AV	54.0	-11.6	1.07 V	208	25.84	16.56

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 144	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5720.00	100.5 PK			1.12 H	277	98.80	1.70
2	*5720.00	90.8 AV			1.12 H	277	89.10	1.70
3	#5881.00	58.5 PK	74.0	-15.5	1.11 H	76	56.68	1.82
4	#5881.00	41.3 AV	54.0	-12.7	1.11 H	76	39.48	1.82
5	11440.00	56.9 PK	74.0	-17.1	1.03 H	254	44.49	12.41
6	11440.00	43.5 AV	54.0	-10.5	1.03 H	254	31.09	12.41
7	#17160.00	59.6 PK	74.0	-14.4	1.11 H	111	43.00	16.60
8	#17160.00	47.7 AV	54.0	-6.3	1.11 H	111	31.10	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	*5720.00	111.5 PK			1.09 V	165	109.80	1.70
2	*5720.00	101.6 AV			1.09 V	165	99.90	1.70
3	#5881.00	68.5 PK	74.0	-5.5	1.00 V	151	66.68	1.82
4	#5881.00	53.8 AV	54.0	-0.2	1.00 V	151	51.98	1.82
5	11440.00	58.3 PK	74.0	-15.7	1.12 V	273	45.89	12.41
6	11440.00	42.7 AV	54.0	-11.3	1.12 V	273	30.29	12.41
7	#17160.00	58.2 PK	74.0	-15.8	1.09 V	208	41.60	16.60
8	#17160.00	42.6 AV	54.0	-11.4	1.09 V	208	26.00	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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

#### 4.1.8 Test Results (Mode 2)

##### CDD\_MODE

**Above 1GHz Data:**

**802.11ac VHT20**

<b>CHANNEL</b>	TX Channel 52	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	103.3 PK			1.15 H	17	102.33	0.97
2	*5260.00	91.7 AV			1.15 H	17	90.73	0.97
3	5421.00	56.3 PK	74.0	-17.7	1.03 H	192	55.06	1.24
4	5421.00	44.0 AV	54.0	-10.0	1.03 H	192	42.76	1.24
5	#10520.00	56.2 PK	74.0	-17.8	1.23 H	140	45.34	10.86
6	#10520.00	43.2 AV	54.0	-10.8	1.23 H	140	32.34	10.86
7	15780.00	59.7 PK	74.0	-14.3	1.14 H	131	47.88	11.82
8	15780.00	47.4 AV	54.0	-6.6	1.14 H	131	35.58	11.82

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	106.5 PK			1.05 V	157	105.53	0.97
2	*5260.00	96.9 AV			1.05 V	157	95.93	0.97
3	5421.00	67.3 PK	74.0	-6.7	1.03 V	154	66.06	1.24
4	5421.00	53.6 AV	54.0	-0.4	1.03 V	154	52.36	1.24
5	#10520.00	54.4 PK	74.0	-19.6	1.15 V	94	43.54	10.86
6	#10520.00	41.9 AV	54.0	-12.1	1.15 V	94	31.04	10.86
7	15780.00	57.0 PK	74.0	-17.0	1.31 V	90	45.18	11.82
8	15780.00	45.7 AV	54.0	-8.3	1.31 V	90	33.88	11.82

##### REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	103.7 PK			1.21 H	10	102.59	1.11
2	*5300.00	92.5 AV			1.21 H	10	91.39	1.11
3	5378.00	61.8 PK	74.0	-12.2	1.05 H	350	60.63	1.17
4	5378.00	51.0 AV	54.0	-3.0	1.05 H	350	49.83	1.17
5	#5461.00	56.0 PK	74.0	-18.0	1.10 H	5	54.66	1.34
6	#5461.00	52.1 AV	54.0	-1.9	1.10 H	5	50.76	1.34
7	10600.00	56.2 PK	74.0	-17.8	1.25 H	129	44.95	11.25
8	10600.00	43.3 AV	54.0	-10.7	1.25 H	129	32.05	11.25
9	15900.00	60.7 PK	74.0	-13.3	1.13 H	166	48.86	11.84
10	15900.00	48.4 AV	54.0	-5.6	1.13 H	166	36.56	11.84
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	108.6 PK			1.11 V	161	107.49	1.11
2	*5300.00	98.0 AV			1.11 V	161	96.89	1.11
3	5378.00	63.3 PK	74.0	-10.7	1.07 V	152	62.13	1.17
4	5378.00	53.2 AV	54.0	-0.8	1.07 V	152	52.03	1.17
5	#5461.00	63.9 PK	74.0	-10.1	1.19 V	166	62.56	1.34
6	#5461.00	53.5 AV	54.0	-0.5	1.19 V	166	52.16	1.34
7	10600.00	54.5 PK	74.0	-19.5	1.12 V	89	43.25	11.25
8	10600.00	42.1 AV	54.0	-11.9	1.12 V	89	30.85	11.25
9	15900.00	57.2 PK	74.0	-16.8	1.18 V	67	45.36	11.84
10	15900.00	45.9 AV	54.0	-8.1	1.18 V	67	34.06	11.84

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	103.3 PK			1.09 H	0	102.17	1.13
2	*5320.00	92.0 AV			1.09 H	0	90.87	1.13
3	5400.00	62.7 PK	74.0	-11.3	1.03 H	1	61.51	1.19
4	5400.00	51.6 AV	54.0	-2.4	1.03 H	1	50.41	1.19
5	10640.00	55.4 PK	74.0	-18.6	1.25 H	114	44.13	11.27
6	10640.00	42.9 AV	54.0	-11.1	1.25 H	114	31.63	11.27
7	15960.00	59.1 PK	74.0	-14.9	1.00 H	157	47.38	11.72
8	15960.00	47.4 AV	54.0	-6.6	1.00 H	157	35.68	11.72

**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	107.2 PK			1.07 V	169	106.07	1.13
2	*5320.00	97.4 AV			1.07 V	169	96.27	1.13
3	5400.00	64.0 PK	74.0	-10.0	1.05 V	165	62.81	1.19
4	5400.00	53.6 AV	54.0	-0.4	1.05 V	165	52.41	1.19
5	10640.00	54.4 PK	74.0	-19.6	1.19 V	76	43.13	11.27
6	10640.00	41.5 AV	54.0	-12.5	1.19 V	76	30.23	11.27
7	15960.00	57.5 PK	74.0	-16.5	1.20 V	80	45.78	11.72
8	15960.00	46.0 AV	54.0	-8.0	1.20 V	80	34.28	11.72

**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.

<b>CHANNEL</b>	TX Channel 100	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5421.00	64.5 PK	74.0	-9.5	1.09 H	197	63.26	1.24
2	5421.00	52.8 AV	54.0	-1.2	1.09 H	197	51.56	1.24
3	*5500.00	104.1 PK			1.08 H	0	102.67	1.43
4	*5500.00	93.4 AV			1.08 H	0	91.97	1.43
5	11000.00	55.0 PK	74.0	-19.0	1.16 H	118	42.43	12.57
6	11000.00	42.6 AV	54.0	-11.4	1.16 H	118	30.03	12.57
7	#16500.00	60.3 PK	74.0	-13.7	1.04 H	122	45.83	14.47
8	#16500.00	48.1 AV	54.0	-5.9	1.04 H	122	33.63	14.47

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	5421.00	63.5 PK	74.0	-10.5	1.06 V	162	62.26	1.24
2	5421.00	53.6 AV	54.0	-0.4	1.06 V	162	52.36	1.24
3	*5500.00	108.3 PK			1.06 V	137	106.87	1.43
4	*5500.00	98.5 AV			1.06 V	137	97.07	1.43
5	11000.00	54.7 PK	74.0	-19.3	1.11 V	89	42.13	12.57
6	11000.00	42.1 AV	54.0	-11.9	1.11 V	89	29.53	12.57
7	#16500.00	57.6 PK	74.0	-16.4	1.31 V	88	43.13	14.47
8	#16500.00	45.9 AV	54.0	-8.1	1.31 V	88	31.43	14.47

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5417.00	58.4 PK	74.0	-15.6	1.10 H	178	57.16	1.24
2	5417.00	48.0 AV	54.0	-6.0	1.10 H	178	46.76	1.24
3	*5580.00	106.1 PK			1.06 H	25	104.57	1.53
4	*5580.00	96.0 AV			1.06 H	25	94.47	1.53
5	#5740.00	59.0 PK	68.2	-9.2	1.05 H	168	57.27	1.73
6	11160.00	55.9 PK	74.0	-18.1	1.17 H	126	43.54	12.36
7	11160.00	43.1 AV	54.0	-10.9	1.17 H	126	30.74	12.36
8	#16740.00	60.4 PK	74.0	-13.6	1.01 H	139	45.15	15.25
9	#16740.00	47.9 AV	54.0	-6.1	1.01 H	139	32.65	15.25
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	5417.00	63.7 PK	74.0	-10.3	1.05 V	142	62.46	1.24
2	5417.00	53.6 AV	54.0	-0.4	1.05 V	142	52.36	1.24
3	*5580.00	110.6 PK			1.06 V	152	109.07	1.53
4	*5580.00	100.8 AV			1.06 V	152	99.27	1.53
5	#5740.00	68.0 PK	68.2	-0.2	1.01 V	141	66.27	1.73
6	11160.00	54.4 PK	74.0	-19.6	1.13 V	110	42.04	12.36
7	11160.00	41.6 AV	54.0	-12.4	1.13 V	110	29.24	12.36
8	#16740.00	58.1 PK	74.0	-15.9	1.31 V	66	42.85	15.25
9	#16740.00	46.1 AV	54.0	-7.9	1.31 V	66	30.85	15.25

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	106.5 PK			1.05 H	11	104.82	1.68
2	*5700.00	95.8 AV			1.05 H	11	94.12	1.68
3	#5781.00	65.0 PK	68.2	-3.2	1.18 H	360	63.20	1.80
4	#5859.00	58.0 PK	68.2	-10.2	1.24 H	356	56.18	1.82
5	11400.00	55.8 PK	74.0	-18.2	1.22 H	138	43.38	12.42
6	11400.00	43.0 AV	54.0	-11.0	1.22 H	138	30.58	12.42
7	#17100.00	60.0 PK	74.0	-14.0	1.12 H	102	43.44	16.56
8	#17100.00	47.1 AV	54.0	-6.9	1.12 H	102	30.54	16.56

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	110.2 PK			1.12 V	85	108.52	1.68
2	*5700.00	100.8 AV			1.12 V	85	99.12	1.68
3	#5781.00	67.6 PK	68.2	-0.6	1.00 V	158	65.80	1.80
4	#5859.00	68.0 PK	68.2	-0.2	1.02 V	155	66.18	1.82
5	11400.00	54.4 PK	74.0	-19.6	1.13 V	67	41.98	12.42
6	11400.00	42.0 AV	54.0	-12.0	1.13 V	67	29.58	12.42
7	#17100.00	58.2 PK	74.0	-15.8	1.23 V	71	41.64	16.56
8	#17100.00	46.6 AV	54.0	-7.4	1.23 V	71	30.04	16.56

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 144	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5720.00	112.6 PK			1.25 H	358	110.90	1.70
2	*5720.00	101.4 AV			1.25 H	358	99.70	1.70
3	#5881.00	60.7 PK	68.2	-7.5	1.10 H	163	58.88	1.82
4	11440.00	55.6 PK	74.0	-18.4	1.28 H	125	43.19	12.41
5	11440.00	42.8 AV	54.0	-11.2	1.28 H	125	30.39	12.41
6	#17160.00	60.2 PK	74.0	-13.8	1.07 H	117	43.60	16.60
7	#17160.00	47.7 AV	54.0	-6.3	1.07 H	117	31.10	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	*5720.00	111.4 PK			1.04 V	76	109.70	1.70
2	*5720.00	102.0 AV			1.04 V	76	100.30	1.70
3	#5881.00	67.9 PK	68.2	-0.3	1.01 V	151	66.08	1.82
4	11440.00	54.4 PK	74.0	-19.6	1.23 V	73	41.99	12.41
5	11440.00	42.2 AV	54.0	-11.8	1.23 V	73	29.79	12.41
6	#17160.00	58.9 PK	74.0	-15.1	1.28 V	73	42.30	16.60
7	#17160.00	46.8 AV	54.0	-7.2	1.28 V	73	30.20	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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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<b>CHANNEL</b>	TX Channel 54	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	106.1 PK			1.10 H	120	105.10	1.00
2	*5270.00	95.6 AV			1.10 H	120	94.60	1.00
3	5352.00	62.3 PK	74.0	-11.7	1.02 H	172	61.15	1.15
4	5352.00	51.3 AV	54.0	-2.7	1.02 H	172	50.15	1.15
5	5424.00	57.9 PK	74.0	-16.1	1.24 H	151	56.65	1.25
6	5424.00	46.8 AV	54.0	-7.2	1.24 H	151	45.55	1.25
7	#10540.00	56.8 PK	74.0	-17.2	1.24 H	161	45.83	10.97
8	#10540.00	43.4 AV	54.0	-10.6	1.24 H	161	32.43	10.97
9	15810.00	59.8 PK	74.0	-14.2	1.12 H	123	48.02	11.78
10	15810.00	47.5 AV	54.0	-6.5	1.12 H	123	35.72	11.78

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	107.7 PK			1.36 V	77	106.70	1.00
2	*5270.00	98.4 AV			1.36 V	77	97.40	1.00
3	5352.00	62.9 PK	74.0	-11.1	1.25 V	96	61.75	1.15
4	5352.00	53.2 AV	54.0	-0.8	1.25 V	96	52.05	1.15
5	5424.00	63.2 PK	74.0	-10.8	1.29 V	86	61.95	1.25
6	5424.00	53.6 AV	54.0	-0.4	1.29 V	86	52.35	1.25
7	#10540.00	55.4 PK	74.0	-18.6	1.28 V	63	44.43	10.97
8	#10540.00	42.6 AV	54.0	-11.4	1.28 V	63	31.63	10.97
9	15810.00	58.8 PK	74.0	-15.2	1.27 V	83	47.02	11.78
10	15810.00	46.6 AV	54.0	-7.4	1.27 V	83	34.82	11.78

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 62	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	104.7 PK			1.05 H	112	103.58	1.12
2	*5310.00	94.6 AV			1.05 H	112	93.48	1.12
3	5394.00	68.8 PK	74.0	-5.2	1.05 H	173	67.62	1.18
4	5394.00	52.3 AV	54.0	-1.7	1.05 H	173	51.12	1.18
5	10620.00	56.5 PK	74.0	-17.5	1.29 H	136	45.25	11.25
6	10620.00	43.1 AV	54.0	-10.9	1.29 H	136	31.85	11.25
7	15930.00	60.1 PK	74.0	-13.9	1.00 H	147	48.32	11.78
8	15930.00	47.2 AV	54.0	-6.8	1.00 H	147	35.42	11.78

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	108.6 PK			1.14 V	80	107.48	1.12
2	*5310.00	98.8 AV			1.14 V	80	97.68	1.12
3	5394.00	65.9 PK	74.0	-8.1	1.00 V	193	64.72	1.18
4	<b>5394.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.00 V</b>	<b>193</b>	<b>52.72</b>	<b>1.18</b>
5	10620.00	55.0 PK	74.0	-19.0	1.24 V	89	43.75	11.25
6	10620.00	42.2 AV	54.0	-11.8	1.24 V	89	30.95	11.25
7	15930.00	58.4 PK	74.0	-15.6	1.25 V	84	46.62	11.78
8	15930.00	46.1 AV	54.0	-7.9	1.25 V	84	34.32	11.78

**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.

<b>CHANNEL</b>	TX Channel 102	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5434.00	65.8 PK	74.0	-8.2	1.18 H	182	64.53	1.27
2	5434.00	50.4 AV	54.0	-3.6	1.18 H	182	49.13	1.27
3	#5470.00	66.8 PK	68.2	-1.4	1.12 H	157	65.44	1.36
4	*5510.00	104.3 PK			1.11 H	110	102.86	1.44
5	*5510.00	96.0 AV			1.11 H	110	94.56	1.44
6	11020.00	56.0 PK	74.0	-18.0	1.33 H	181	43.46	12.54
7	11020.00	42.9 AV	54.0	-11.1	1.33 H	181	30.36	12.54
8	#16530.00	60.2 PK	74.0	-13.8	1.03 H	128	45.59	14.61
9	#16530.00	47.4 AV	54.0	-6.6	1.03 H	128	32.79	14.61
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	5434.00	65.2 PK	74.0	-8.8	1.00 V	165	63.93	1.27
2	5434.00	50.4 AV	54.0	-3.6	1.00 V	165	49.13	1.27
3	<b>#5470.00</b>	<b>68.1 PK</b>	<b>68.2</b>	<b>-0.1</b>	<b>1.01 V</b>	<b>179</b>	<b>66.74</b>	<b>1.36</b>
4	*5510.00	108.0 PK			1.23 V	125	106.56	1.44
5	*5510.00	99.3 AV			1.23 V	125	97.86	1.44
6	11020.00	53.5 PK	74.0	-20.5	1.29 V	90	40.96	12.54
7	11020.00	41.0 AV	54.0	-13.0	1.29 V	90	28.46	12.54
8	#16530.00	58.7 PK	74.0	-15.3	1.23 V	73	44.09	14.61
9	#16530.00	46.5 AV	54.0	-7.5	1.23 V	73	31.89	14.61

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 110	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	65.4 PK	74.0	-8.6	1.30 H	170	64.06	1.34
2	5460.00	51.7 AV	54.0	-2.3	1.30 H	170	50.36	1.34
3	#5470.00	68.6 PK	74.0	-5.4	1.03 H	188	67.24	1.36
4	#5470.00	52.8 AV	54.0	-1.2	1.03 H	188	51.44	1.36
5	*5550.00	108.1 PK			1.18 H	176	106.62	1.48
6	*5550.00	96.6 AV			1.18 H	176	95.12	1.48
7	11100.00	56.3 PK	74.0	-17.7	1.26 H	163	43.90	12.40
8	11100.00	43.1 AV	54.0	-10.9	1.26 H	163	30.70	12.40
9	#16650.00	60.6 PK	74.0	-13.4	1.04 H	135	45.56	15.04
10	#16650.00	47.7 AV	54.0	-6.3	1.04 H	135	32.66	15.04

**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	66.4 PK	74.0	-7.6	1.05 V	172	65.06	1.34
2	5460.00	51.7 AV	54.0	-2.3	1.05 V	172	50.36	1.34
3	#5470.00	68.0 PK	74.0	-6.0	1.05 V	168	66.64	1.36
4	#5470.00	53.7 AV	54.0	-0.3	1.05 V	168	52.34	1.36
5	*5550.00	108.6 PK			1.15 V	111	107.12	1.48
6	*5550.00	99.7 AV			1.15 V	111	98.22	1.48
7	11100.00	54.4 PK	74.0	-19.6	1.20 V	73	42.00	12.40
8	11100.00	41.4 AV	54.0	-12.6	1.20 V	73	29.00	12.40
9	#16650.00	58.7 PK	74.0	-15.3	1.17 V	99	43.66	15.04
10	#16650.00	46.5 AV	54.0	-7.5	1.17 V	99	31.46	15.04

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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			1.13 H	151	105.66	1.64
2	*5670.00	97.3 AV			1.13 H	151	95.66	1.64
3	#5725.00	67.8 PK	74.0	-6.2	1.12 H	173	66.09	1.71
4	#5725.00	52.6 AV	54.0	-1.4	1.12 H	173	50.89	1.71
5	11340.00	56.0 PK	74.0	-18.0	1.28 H	172	43.26	12.74
6	11340.00	43.3 AV	54.0	-10.7	1.28 H	172	30.56	12.74
7	#17010.00	61.6 PK	74.0	-12.4	1.04 H	115	45.28	16.32
8	#17010.00	48.4 AV	54.0	-5.6	1.04 H	115	32.08	16.32
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	108.6 PK			1.20 V	82	106.96	1.64
2	*5670.00	99.6 AV			1.20 V	82	97.96	1.64
3	#5725.00	67.5 PK	74.0	-6.5	1.20 V	181	65.79	1.71
4	#5725.00	53.5 AV	54.0	-0.5	1.20 V	181	51.79	1.71
5	11340.00	54.7 PK	74.0	-19.3	1.16 V	80	41.96	12.74
6	11340.00	41.9 AV	54.0	-12.1	1.16 V	80	29.16	12.74
7	#17010.00	58.7 PK	74.0	-15.3	1.14 V	99	42.38	16.32
8	#17010.00	46.4 AV	54.0	-7.6	1.14 V	99	30.08	16.32

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 142	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	66.5 PK	74.0	-7.5	1.23 H	186	65.14	1.36
2	#5470.00	43.4 AV	54.0	-10.6	1.23 H	186	42.04	1.36
3	*5710.00	112.6 PK			1.13 H	167	110.90	1.70
4	*5710.00	102.1 AV			1.13 H	167	100.40	1.70
5	#5850.00	66.3 PK	74.0	-7.7	1.08 H	166	64.48	1.82
6	#5850.00	52.2 AV	54.0	-1.8	1.08 H	166	50.38	1.82
7	11420.00	55.5 PK	74.0	-18.5	1.33 H	157	43.08	12.42
8	11420.00	42.7 AV	54.0	-11.3	1.33 H	157	30.28	12.42
9	#17130.00	60.8 PK	74.0	-13.2	1.10 H	144	44.23	16.57
10	#17130.00	48.3 AV	54.0	-5.7	1.10 H	144	31.73	16.57

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	65.5 PK	74.0	-8.5	1.20 V	188	64.14	1.36
2	#5470.00	44.0 AV	54.0	-10.0	1.20 V	188	42.64	1.36
3	*5710.00	115.0 PK			1.20 V	74	113.30	1.70
4	*5710.00	105.5 AV			1.20 V	74	103.80	1.70
5	#5850.00	68.3 PK	74.0	-5.7	1.01 V	143	66.48	1.82
6	#5850.00	53.5 AV	54.0	-0.5	1.01 V	143	51.68	1.82
7	11420.00	55.4 PK	74.0	-18.6	1.23 V	67	42.98	12.42
8	11420.00	42.6 AV	54.0	-11.4	1.23 V	67	30.18	12.42
9	#17130.00	59.0 PK	74.0	-15.0	1.21 V	128	42.43	16.57
10	#17130.00	46.9 AV	54.0	-7.1	1.21 V	128	30.33	16.57

**REMARKS:**

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

**802.11ac VHT80**

<b>CHANNEL</b>	TX Channel 58	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	104.5 PK			1.01 H	360	103.43	1.07
2	*5290.00	94.1 AV			1.01 H	360	93.03	1.07
3	5374.00	62.1 PK	74.0	-11.9	1.05 H	343	60.93	1.17
4	5374.00	50.2 AV	54.0	-3.8	1.05 H	343	49.03	1.17
5	#5470.00	60.6 PK	74.0	-13.4	1.06 H	358	59.24	1.36
6	#5470.00	50.2 AV	54.0	-3.8	1.06 H	358	48.84	1.36
7	#5877.00	60.3 PK	74.0	-13.7	1.15 H	360	58.49	1.81
8	#5877.00	50.4 AV	54.0	-3.6	1.15 H	360	48.59	1.81
9	#10580.00	56.2 PK	74.0	-17.8	1.34 H	153	45.05	11.15
10	#10580.00	43.3 AV	54.0	-10.7	1.34 H	153	32.15	11.15
11	15870.00	61.0 PK	74.0	-13.0	1.01 H	143	49.18	11.82
12	15870.00	48.0 AV	54.0	-6.0	1.01 H	143	36.18	11.82
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	106.9 PK			1.09 V	153	105.83	1.07
2	*5290.00	96.3 AV			1.09 V	153	95.23	1.07
3	5374.00	65.1 PK	74.0	-8.9	1.10 V	166	63.93	1.17
4	5374.00	53.6 AV	54.0	-0.4	1.10 V	166	52.43	1.17
5	#5470.00	63.8 PK	74.0	-10.2	1.12 V	163	62.44	1.36
6	#5470.00	51.1 AV	54.0	-2.9	1.12 V	163	49.74	1.36
7	#5877.00	62.7 PK	74.0	-11.3	1.03 V	161	60.89	1.81
8	#5877.00	52.0 AV	54.0	-2.0	1.03 V	161	50.19	1.81
9	#10580.00	55.4 PK	74.0	-18.6	1.31 V	82	44.25	11.15
10	#10580.00	42.9 AV	54.0	-11.1	1.31 V	82	31.75	11.15
11	15870.00	58.6 PK	74.0	-15.4	1.21 V	126	46.78	11.82
12	15870.00	46.8 AV	54.0	-7.2	1.21 V	126	34.98	11.82

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 106	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	60.2 PK	74.0	-13.8	1.17 H	338	58.86	1.34
2	5460.00	47.8 AV	54.0	-6.2	1.17 H	338	46.46	1.34
3	#5470.00	62.1 PK	74.0	-11.9	1.16 H	349	60.74	1.36
4	#5470.00	52.8 AV	54.0	-1.2	1.16 H	349	51.44	1.36
5	*5530.00	101.2 PK			1.12 H	360	99.74	1.46
6	*5530.00	89.9 AV			1.12 H	360	88.44	1.46
7	11060.00	56.6 PK	74.0	-17.4	1.32 H	143	44.13	12.47
8	11060.00	43.7 AV	54.0	-10.3	1.32 H	143	31.23	12.47
9	#16590.00	60.6 PK	74.0	-13.4	1.05 H	159	45.71	14.89
10	#16590.00	47.6 AV	54.0	-6.4	1.05 H	159	32.71	14.89
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	66.5 PK	74.0	-7.5	1.05 V	149	65.16	1.34
2	5460.00	50.5 AV	54.0	-3.5	1.05 V	149	49.16	1.34
3	#5470.00	68.9 PK	74.0	-5.1	1.12 V	170	67.54	1.36
4	#5470.00	53.8 AV	54.0	-0.2	1.12 V	170	52.44	1.36
5	*5530.00	103.5 PK			1.01 V	159	102.04	1.46
6	*5530.00	93.1 AV			1.01 V	159	91.64	1.46
7	11060.00	54.2 PK	74.0	-19.8	1.31 V	110	41.73	12.47
8	11060.00	42.1 AV	54.0	-11.9	1.31 V	110	29.63	12.47
9	#16590.00	58.6 PK	74.0	-15.4	1.23 V	144	43.71	14.89
10	#16590.00	46.7 AV	54.0	-7.3	1.23 V	144	31.81	14.89

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 138	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	60.3 PK	74.0	-13.7	1.23 H	360	58.94	1.36
2	#5470.00	45.1 AV	54.0	-8.9	1.23 H	360	43.74	1.36
3	*5690.00	106.6 PK			1.14 H	360	104.93	1.67
4	*5690.00	96.1 AV			1.14 H	360	94.43	1.67
5	#5850.00	60.8 PK	74.0	-13.2	1.22 H	352	58.98	1.82
6	#5850.00	52.4 AV	54.0	-1.6	1.22 H	352	50.58	1.82
7	11380.00	57.3 PK	74.0	-16.7	1.31 H	159	44.78	12.52
8	11380.00	44.7 AV	54.0	-9.3	1.31 H	159	32.18	12.52
9	#17070.00	59.9 PK	74.0	-14.1	1.08 H	161	43.42	16.48
10	#17070.00	46.9 AV	54.0	-7.1	1.08 H	161	30.42	16.48

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	65.6 PK	74.0	-8.4	1.12 V	153	64.24	1.36
2	#5470.00	46.3 AV	54.0	-7.7	1.12 V	153	44.94	1.36
3	*5690.00	109.9 PK			1.07 V	167	108.23	1.67
4	*5690.00	99.2 AV			1.07 V	167	97.53	1.67
5	#5850.00	67.5 PK	74.0	-6.5	1.05 V	85	65.68	1.82
6	#5850.00	53.7 AV	54.0	-0.3	1.05 V	85	51.88	1.82
7	11380.00	55.2 PK	74.0	-18.8	1.31 V	81	42.68	12.52
8	11380.00	42.4 AV	54.0	-11.6	1.31 V	81	29.88	12.52
9	#17070.00	58.1 PK	74.0	-15.9	1.26 V	105	41.62	16.48
10	#17070.00	46.4 AV	54.0	-7.6	1.26 V	105	29.92	16.48

**REMARKS:**

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

**STBC\_MODE****Above 1GHz Data:****802.11ac VHT20**

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

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	102.7 PK			1.19 H	5	101.73	0.97
2	*5260.00	91.6 AV			1.19 H	5	90.63	0.97
3	5422.00	58.2 PK	74.0	-15.8	1.08 H	186	56.96	1.24
4	5422.00	46.2 AV	54.0	-7.8	1.08 H	186	44.96	1.24
5	#10520.00	56.4 PK	74.0	-17.6	1.15 H	135	45.54	10.86
6	#10520.00	43.1 AV	54.0	-10.9	1.15 H	135	32.24	10.86
7	15780.00	60.4 PK	74.0	-13.6	1.12 H	149	48.58	11.82
8	15780.00	47.9 AV	54.0	-6.1	1.12 H	149	36.08	11.82

**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	107.1 PK			1.16 V	169	106.13	0.97
2	*5260.00	97.8 AV			1.16 V	169	96.83	0.97
3	5422.00	63.6 PK	74.0	-10.4	1.05 V	144	62.36	1.24
4	5422.00	53.5 AV	54.0	-0.5	1.05 V	144	52.26	1.24
5	#10520.00	54.6 PK	74.0	-19.4	1.05 V	100	43.74	10.86
6	#10520.00	42.0 AV	54.0	-12.0	1.05 V	100	31.14	10.86
7	15780.00	57.1 PK	74.0	-16.9	1.34 V	80	45.28	11.82
8	15780.00	45.7 AV	54.0	-8.3	1.34 V	80	33.88	11.82

**REMARKS:**

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	103.9 PK			1.18 H	0	102.79	1.11
2	*5300.00	92.6 AV			1.18 H	0	91.49	1.11
3	5378.00	61.7 PK	74.0	-12.3	1.11 H	334	60.53	1.17
4	5378.00	50.2 AV	54.0	-3.8	1.11 H	334	49.03	1.17
5	5458.00	62.1 PK	74.0	-11.9	1.06 H	309	60.77	1.33
6	5458.00	51.3 AV	54.0	-2.7	1.06 H	309	49.97	1.33
7	#5470.00	57.4 PK	68.2	-10.8	1.08 H	11	56.04	1.36
8	10600.00	56.8 PK	74.0	-17.2	1.29 H	131	45.55	11.25
9	10600.00	43.7 AV	54.0	-10.3	1.29 H	131	32.45	11.25
10	15900.00	59.7 PK	74.0	-14.3	1.14 H	144	47.86	11.84
11	15900.00	47.7 AV	54.0	-6.3	1.14 H	144	35.86	11.84

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	106.3 PK			1.18 V	179	105.19	1.11
2	*5300.00	97.1 AV			1.18 V	179	95.99	1.11
3	5378.00	64.7 PK	74.0	-9.3	1.11 V	134	63.53	1.17
4	<b>5378.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.11 V</b>	<b>134</b>	<b>52.73</b>	<b>1.17</b>
5	5458.00	63.8 PK	74.0	-10.2	1.10 V	145	62.47	1.33
6	5458.00	53.3 AV	54.0	-0.7	1.10 V	145	51.97	1.33
7	#5470.00	64.4 PK	68.2	-3.8	1.09 V	156	63.04	1.36
8	10600.00	54.3 PK	74.0	-19.7	1.16 V	107	43.05	11.25
9	10600.00	41.9 AV	54.0	-12.1	1.16 V	107	30.65	11.25
10	15900.00	57.8 PK	74.0	-16.2	1.24 V	81	45.96	11.84
11	15900.00	46.9 AV	54.0	-7.1	1.24 V	81	35.06	11.84

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	102.7 PK			1.22 H	37	101.57	1.13
2	*5320.00	91.6 AV			1.22 H	37	90.47	1.13
3	5400.00	62.7 PK	74.0	-11.3	1.00 H	0	61.51	1.19
4	5400.00	51.5 AV	54.0	-2.5	1.00 H	0	50.31	1.19
5	10640.00	57.8 PK	74.0	-16.2	1.21 H	116	46.53	11.27
6	10640.00	44.4 AV	54.0	-9.6	1.21 H	116	33.13	11.27
7	15960.00	59.4 PK	74.0	-14.6	1.20 H	149	47.68	11.72
8	15960.00	47.2 AV	54.0	-6.8	1.20 H	149	35.48	11.72

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	107.2 PK			1.20 V	179	106.07	1.13
2	*5320.00	97.3 AV			1.20 V	179	96.17	1.13
3	5400.00	63.4 PK	74.0	-10.6	1.12 V	154	62.21	1.19
4	5400.00	53.8 AV	54.0	-0.2	1.12 V	154	52.61	1.19
5	10640.00	54.7 PK	74.0	-19.3	1.20 V	75	43.43	11.27
6	10640.00	41.8 AV	54.0	-12.2	1.20 V	75	30.53	11.27
7	15960.00	57.3 PK	74.0	-16.7	1.23 V	94	45.58	11.72
8	15960.00	46.3 AV	54.0	-7.7	1.23 V	94	34.58	11.72

**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.

<b>CHANNEL</b>	TX Channel 100	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5422.00	64.7 PK	74.0	-9.3	1.00 H	176	63.46	1.24
2	5422.00	53.0 AV	54.0	-1.0	1.00 H	176	51.76	1.24
3	#5470.00	55.6 PK	74.0	-18.4	1.00 H	15	54.24	1.36
4	#5470.00	42.1 AV	54.0	-11.9	1.00 H	15	40.74	1.36
5	*5500.00	103.8 PK			1.10 H	18	102.37	1.43
6	*5500.00	93.1 AV			1.10 H	18	91.67	1.43
7	11000.00	56.8 PK	74.0	-17.2	1.19 H	138	44.23	12.57
8	11000.00	43.4 AV	54.0	-10.6	1.19 H	138	30.83	12.57
9	#16500.00	59.2 PK	74.0	-14.8	1.20 H	140	44.73	14.47
10	#16500.00	47.1 AV	54.0	-6.9	1.20 H	140	32.63	14.47
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	5422.00	63.4 PK	74.0	-10.6	1.10 V	137	62.16	1.24
2	5422.00	53.6 AV	54.0	-0.4	1.10 V	137	52.36	1.24
3	#5470.00	56.1 PK	74.0	-17.9	1.06 V	155	54.74	1.36
4	#5470.00	43.3 AV	54.0	-10.7	1.06 V	155	41.94	1.36
5	*5500.00	108.9 PK			1.08 V	144	107.47	1.43
6	*5500.00	99.1 AV			1.08 V	144	97.67	1.43
7	11000.00	55.4 PK	74.0	-18.6	1.18 V	108	42.83	12.57
8	11000.00	42.4 AV	54.0	-11.6	1.18 V	108	29.83	12.57
9	#16500.00	56.9 PK	74.0	-17.1	1.17 V	74	42.43	14.47
10	#16500.00	45.5 AV	54.0	-8.5	1.17 V	74	31.03	14.47

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5421.00	58.5 PK	74.0	-15.5	1.08 H	141	57.26	1.24
2	5421.00	48.0 AV	54.0	-6.0	1.08 H	141	46.76	1.24
3	*5580.00	104.2 PK			1.10 H	12	102.67	1.53
4	*5580.00	94.6 AV			1.10 H	12	93.07	1.53
5	#5740.00	60.5 PK	68.2	-7.7	1.05 H	163	58.77	1.73
6	11160.00	56.4 PK	74.0	-17.6	1.15 H	161	44.04	12.36
7	11160.00	43.0 AV	54.0	-11.0	1.15 H	161	30.64	12.36
8	#16740.00	59.6 PK	74.0	-14.4	1.14 H	120	44.35	15.25
9	#16740.00	47.5 AV	54.0	-6.5	1.14 H	120	32.25	15.25
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	5421.00	63.8 PK	74.0	-10.2	1.00 V	141	62.56	1.24
2	5421.00	52.6 AV	54.0	-1.4	1.00 V	141	51.36	1.24
3	*5580.00	108.0 PK			1.02 V	145	106.47	1.53
4	*5580.00	98.5 AV			1.02 V	145	96.97	1.53
5	#5740.00	68.0 PK	68.2	-0.2	1.03 V	146	66.27	1.73
6	11160.00	55.2 PK	74.0	-18.8	1.24 V	109	42.84	12.36
7	11160.00	42.5 AV	54.0	-11.5	1.24 V	109	30.14	12.36
8	#16740.00	56.8 PK	74.0	-17.2	1.16 V	75	41.55	15.25
9	#16740.00	45.4 AV	54.0	-8.6	1.16 V	75	30.15	15.25

**REMARKS:**

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

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

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	104.7 PK			1.10 H	5	103.02	1.68
2	*5700.00	94.5 AV			1.10 H	5	92.82	1.68
3	#5780.00	62.1 PK	68.2	-6.1	1.16 H	355	60.30	1.80
4	#5858.00	66.3 PK	68.2	-1.9	1.03 H	247	64.48	1.82
5	11400.00	56.3 PK	74.0	-17.7	1.19 H	176	43.88	12.42
6	11400.00	43.1 AV	54.0	-10.9	1.19 H	176	30.68	12.42
7	#17100.00	59.3 PK	74.0	-14.7	1.22 H	103	42.74	16.56
8	#17100.00	47.0 AV	54.0	-7.0	1.22 H	103	30.44	16.56

**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	107.7 PK			1.02 V	115	106.02	1.68
2	*5700.00	97.9 AV			1.02 V	115	96.22	1.68
3	#5780.00	64.9 PK	68.2	-3.3	1.03 V	136	63.10	1.80
4	#5858.00	67.9 PK	68.2	-0.3	1.00 V	145	66.08	1.82
5	11400.00	55.1 PK	74.0	-18.9	1.10 V	99	42.68	12.42
6	11400.00	42.0 AV	54.0	-12.0	1.10 V	99	29.58	12.42
7	#17100.00	57.2 PK	74.0	-16.8	1.27 V	79	40.64	16.56
8	#17100.00	46.1 AV	54.0	-7.9	1.27 V	79	29.54	16.56

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 144	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5720.00	108.9 PK			1.22 H	339	107.20	1.70
2	*5720.00	99.3 AV			1.22 H	339	97.60	1.70
3	#5840.00	57.1 PK	74.0	-16.9	1.11 H	172	55.28	1.82
4	#5840.00	49.3 AV	54.0	-4.7	1.11 H	172	47.48	1.82
5	#5881.00	59.4 PK	68.2	-8.8	1.06 H	173	57.58	1.82
6	11440.00	57.2 PK	74.0	-16.8	1.14 H	189	44.79	12.41
7	11440.00	43.9 AV	54.0	-10.1	1.14 H	189	31.49	12.41
8	#17160.00	59.1 PK	74.0	-14.9	1.13 H	100	42.50	16.60
9	#17160.00	46.6 AV	54.0	-7.4	1.13 H	100	30.00	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	*5720.00	112.3 PK			1.06 V	132	110.60	1.70
2	*5720.00	101.8 AV			1.06 V	132	100.10	1.70
3	#5840.00	61.2 PK	74.0	-12.8	1.12 V	156	59.38	1.82
4	#5840.00	50.2 AV	54.0	-3.8	1.12 V	156	48.38	1.82
5	<b>#5881.00</b>	<b>68.1 PK</b>	<b>68.2</b>	<b>-0.1</b>	<b>1.10 V</b>	<b>145</b>	<b>66.28</b>	<b>1.82</b>
6	11440.00	55.2 PK	74.0	-18.8	1.16 V	85	42.79	12.41
7	11440.00	42.1 AV	54.0	-11.9	1.16 V	85	29.69	12.41
8	#17160.00	56.7 PK	74.0	-17.3	1.26 V	116	40.10	16.60
9	#17160.00	45.9 AV	54.0	-8.1	1.26 V	116	29.30	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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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<b>CHANNEL</b>	TX Channel 54	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	105.8 PK			1.09 H	128	104.80	1.00
2	*5270.00	94.9 AV			1.09 H	128	93.90	1.00
3	5354.00	61.6 PK	74.0	-12.4	1.11 H	182	60.45	1.15
4	5354.00	50.8 AV	54.0	-3.2	1.11 H	182	49.65	1.15
5	5425.00	57.5 PK	74.0	-16.5	1.24 H	148	56.24	1.26
6	5425.00	46.8 AV	54.0	-7.2	1.24 H	148	45.54	1.26
7	#10540.00	56.8 PK	74.0	-17.2	1.12 H	181	45.83	10.97
8	#10540.00	43.8 AV	54.0	-10.2	1.12 H	181	32.83	10.97
9	15810.00	59.6 PK	74.0	-14.4	1.15 H	115	47.82	11.78
10	15810.00	47.1 AV	54.0	-6.9	1.15 H	115	35.32	11.78

**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	107.9 PK			1.04 V	142	106.90	1.00
2	*5270.00	97.4 AV			1.04 V	142	96.40	1.00
3	5354.00	63.9 PK	74.0	-10.1	1.14 V	142	62.75	1.15
4	5354.00	52.9 AV	54.0	-1.1	1.14 V	142	51.75	1.15
5	5425.00	65.3 PK	74.0	-8.7	1.11 V	155	64.04	1.26
6	5425.00	53.8 AV	54.0	-0.2	1.11 V	155	52.54	1.26
7	#10540.00	55.6 PK	74.0	-18.4	1.16 V	79	44.63	10.97
8	#10540.00	42.5 AV	54.0	-11.5	1.16 V	79	31.53	10.97
9	15810.00	56.7 PK	74.0	-17.3	1.20 V	96	44.92	11.78
10	15810.00	45.7 AV	54.0	-8.3	1.20 V	96	33.92	11.78

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 62	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	104.3 PK			1.10 H	112	103.18	1.12
2	*5310.00	94.3 AV			1.10 H	112	93.18	1.12
3	5394.00	67.6 PK	74.0	-6.4	1.01 H	162	66.42	1.18
4	5394.00	51.4 AV	54.0	-2.6	1.01 H	162	50.22	1.18
5	5460.00	61.0 PK	74.0	-13.0	1.06 H	13	59.66	1.34
6	5460.00	51.2 AV	54.0	-2.8	1.06 H	13	49.86	1.34
7	#5470.00	59.0 PK	74.0	-15.0	1.04 H	158	57.64	1.36
8	#5470.00	52.3 AV	54.0	-1.7	1.04 H	158	50.94	1.36
9	10620.00	56.6 PK	74.0	-17.4	1.14 H	166	45.35	11.25
10	10620.00	43.9 AV	54.0	-10.1	1.14 H	166	32.65	11.25
11	15930.00	59.3 PK	74.0	-14.7	1.27 H	110	47.52	11.78
12	15930.00	46.8 AV	54.0	-7.2	1.27 H	110	35.02	11.78
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	108.3 PK			1.10 V	158	107.18	1.12
2	*5310.00	98.7 AV			1.10 V	158	97.58	1.12
3	5394.00	64.8 PK	74.0	-9.2	1.11 V	149	63.62	1.18
4	5394.00	53.7 AV	54.0	-0.3	1.11 V	149	52.52	1.18
5	5460.00	62.5 PK	74.0	-11.5	1.05 V	169	61.16	1.34
6	5460.00	52.3 AV	54.0	-1.7	1.05 V	169	50.96	1.34
7	#5470.00	63.9 PK	74.0	-10.1	1.04 V	145	62.54	1.36
8	#5470.00	53.2 AV	54.0	-0.8	1.04 V	145	51.84	1.36
9	10620.00	55.6 PK	74.0	-18.4	1.04 V	60	44.35	11.25
10	10620.00	43.0 AV	54.0	-11.0	1.04 V	60	31.75	11.25
11	15930.00	57.6 PK	74.0	-16.4	1.18 V	80	45.82	11.78
12	15930.00	46.5 AV	54.0	-7.5	1.18 V	80	34.72	11.78

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 102	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5425.00	65.4 PK	74.0	-8.6	1.09 H	163	64.14	1.26
2	5425.00	50.1 AV	54.0	-3.9	1.09 H	163	48.84	1.26
3	#5470.00	66.8 PK	74.0	-7.2	1.12 H	166	65.44	1.36
4	#5470.00	52.6 AV	54.0	-1.4	1.12 H	166	51.24	1.36
5	*5510.00	105.1 PK			1.15 H	117	103.66	1.44
6	*5510.00	96.3 AV			1.15 H	117	94.86	1.44
7	11020.00	56.4 PK	74.0	-17.6	1.18 H	163	43.86	12.54
8	11020.00	42.9 AV	54.0	-11.1	1.18 H	163	30.36	12.54
9	#16530.00	60.0 PK	74.0	-14.0	1.21 H	114	45.39	14.61
10	#16530.00	47.4 AV	54.0	-6.6	1.21 H	114	32.79	14.61

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	5425.00	64.6 PK	74.0	-9.4	1.02 V	145	63.34	1.26
2	5425.00	51.4 AV	54.0	-2.6	1.02 V	145	50.14	1.26
3	#5470.00	67.9 PK	74.0	-6.1	1.04 V	135	66.54	1.36
4	#5470.00	53.8 AV	54.0	-0.2	1.04 V	135	52.44	1.36
5	*5510.00	108.0 PK			1.07 V	140	106.56	1.44
6	*5510.00	99.2 AV			1.07 V	140	97.76	1.44
7	11020.00	56.2 PK	74.0	-17.8	1.16 V	62	43.66	12.54
8	11020.00	43.1 AV	54.0	-10.9	1.16 V	62	30.56	12.54
9	#16530.00	57.9 PK	74.0	-16.1	1.20 V	107	43.29	14.61
10	#16530.00	46.7 AV	54.0	-7.3	1.20 V	107	32.09	14.61

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 110	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	65.7 PK	74.0	-8.3	1.19 H	188	64.36	1.34
2	5460.00	51.6 AV	54.0	-2.4	1.19 H	188	50.26	1.34
3	#5470.00	66.1 PK	74.0	-7.9	1.11 H	168	64.74	1.36
4	#5470.00	52.4 AV	54.0	-1.6	1.11 H	168	51.04	1.36
5	*5550.00	108.1 PK			1.19 H	160	106.62	1.48
6	*5550.00	97.0 AV			1.19 H	160	95.52	1.48
7	#5725.00	61.8 PK	74.0	-12.2	1.16 H	176	60.09	1.71
8	#5725.00	52.3 AV	54.0	-1.7	1.16 H	176	50.59	1.71
9	11100.00	56.8 PK	74.0	-17.2	1.16 H	164	44.40	12.40
10	11100.00	43.2 AV	54.0	-10.8	1.16 H	164	30.80	12.40
11	#16650.00	59.6 PK	74.0	-14.4	1.27 H	131	44.56	15.04
12	#16650.00	47.2 AV	54.0	-6.8	1.27 H	131	32.16	15.04
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	65.3 PK	74.0	-8.7	1.07 V	140	63.96	1.34
2	5460.00	52.5 AV	54.0	-1.5	1.07 V	140	51.16	1.34
3	#5470.00	67.9 PK	74.0	-6.1	1.03 V	147	66.54	1.36
4	#5470.00	53.6 AV	54.0	-0.4	1.03 V	147	52.24	1.36
5	*5550.00	109.7 PK			1.06 V	140	108.22	1.48
6	*5550.00	98.6 AV			1.06 V	140	97.12	1.48
7	#5725.00	64.9 PK	74.0	-9.1	1.05 V	149	63.19	1.71
8	#5725.00	53.4 AV	54.0	-0.6	1.05 V	149	51.69	1.71
9	11100.00	56.0 PK	74.0	-18.0	1.20 V	77	43.60	12.40
10	11100.00	42.8 AV	54.0	-11.2	1.20 V	77	30.40	12.40
11	#16650.00	57.1 PK	74.0	-16.9	1.30 V	119	42.06	15.04
12	#16650.00	46.3 AV	54.0	-7.7	1.30 V	119	31.26	15.04

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	107.2 PK			1.20 H	184	105.56	1.64
2	*5670.00	96.3 AV			1.20 H	184	94.66	1.64
3	#5733.00	67.8 PK	68.2	-0.4	1.13 H	165	66.08	1.72
4	#5834.00	63.1 PK	74.0	-10.9	1.09 H	186	61.29	1.81
5	#5834.00	52.6 AV	54.0	-1.4	1.09 H	186	50.79	1.81
6	11340.00	56.4 PK	74.0	-17.6	1.11 H	157	43.66	12.74
7	11340.00	42.9 AV	54.0	-11.1	1.11 H	157	30.16	12.74
8	#17010.00	60.6 PK	74.0	-13.4	1.29 H	126	44.28	16.32
9	#17010.00	48.2 AV	54.0	-5.8	1.29 H	126	31.88	16.32
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	108.5 PK			1.13 V	154	106.86	1.64
2	*5670.00	98.3 AV			1.13 V	154	96.66	1.64
3	<b>#5733.00</b>	<b>68.1 PK</b>	<b>68.2</b>	<b>-0.1</b>	<b>1.03 V</b>	<b>155</b>	<b>66.38</b>	<b>1.72</b>
4	#5834.00	64.2 PK	74.0	-9.8	1.12 V	164	62.39	1.81
5	#5834.00	53.5 AV	54.0	-0.5	1.12 V	164	51.69	1.81
6	11340.00	56.3 PK	74.0	-17.7	1.15 V	66	43.56	12.74
7	11340.00	43.6 AV	54.0	-10.4	1.15 V	66	30.86	12.74
8	#17010.00	58.0 PK	74.0	-16.0	1.32 V	121	41.68	16.32
9	#17010.00	46.7 AV	54.0	-7.3	1.32 V	121	30.38	16.32

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 142	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5710.00	112.8 PK			1.18 H	186	111.10	1.70
2	*5710.00	102.1 AV			1.18 H	186	100.40	1.70
3	#5864.00	66.8 PK	68.2	-1.4	1.18 H	154	64.98	1.82
4	11420.00	56.3 PK	74.0	-17.7	1.04 H	182	43.88	12.42
5	11420.00	42.9 AV	54.0	-11.1	1.04 H	182	30.48	12.42
6	#17130.00	60.3 PK	74.0	-13.7	1.32 H	129	43.73	16.57
7	#17130.00	48.2 AV	54.0	-5.8	1.32 H	129	31.63	16.57

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	*5710.00	113.5 PK			1.20 V	166	111.80	1.70
2	*5710.00	104.7 AV			1.20 V	166	103.00	1.70
3	#5864.00	67.8 PK	68.2	-0.4	1.08 V	169	65.98	1.82
4	11420.00	55.4 PK	74.0	-18.6	1.07 V	53	42.98	12.42
5	11420.00	42.8 AV	54.0	-11.2	1.07 V	53	30.38	12.42
6	#17130.00	57.2 PK	74.0	-16.8	1.23 V	99	40.63	16.57
7	#17130.00	46.0 AV	54.0	-8.0	1.23 V	99	29.43	16.57

**REMARKS:**

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

**802.11ac VHT80**

<b>CHANNEL</b>	TX Channel 58	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	105.5 PK			1.06 H	345	104.43	1.07
2	*5290.00	95.1 AV			1.06 H	345	94.03	1.07
3	5371.00	61.5 PK	74.0	-12.5	1.09 H	340	60.33	1.17
4	5371.00	49.7 AV	54.0	-4.3	1.09 H	340	48.53	1.17
5	#10580.00	56.8 PK	74.0	-17.2	1.11 H	174	45.65	11.15
6	#10580.00	43.3 AV	54.0	-10.7	1.11 H	174	32.15	11.15
7	15870.00	60.1 PK	74.0	-13.9	1.37 H	107	48.28	11.82
8	15870.00	47.7 AV	54.0	-6.3	1.37 H	107	35.88	11.82

**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	108.1 PK			1.09 V	160	107.03	1.07
2	*5290.00	97.1 AV			1.09 V	160	96.03	1.07
3	5371.00	71.3 PK	74.0	-2.7	1.19 V	159	70.13	1.17
4	5371.00	53.7 AV	54.0	-0.3	1.19 V	159	52.53	1.17
5	#10580.00	55.2 PK	74.0	-18.8	1.04 V	33	44.05	11.15
6	#10580.00	42.5 AV	54.0	-11.5	1.04 V	33	31.35	11.15
7	15870.00	56.9 PK	74.0	-17.1	1.14 V	113	45.08	11.82
8	15870.00	45.7 AV	54.0	-8.3	1.14 V	113	33.88	11.82

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 106	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	59.9 PK	74.0	-14.1	1.07 H	334	58.56	1.34
2	5460.00	48.2 AV	54.0	-5.8	1.07 H	334	46.86	1.34
3	#5470.00	61.9 PK	74.0	-12.1	1.14 H	335	60.54	1.36
4	#5470.00	47.3 AV	54.0	-6.7	1.14 H	335	45.94	1.36
5	*5530.00	101.4 PK			1.00 H	360	99.94	1.46
6	*5530.00	90.0 AV			1.00 H	360	88.54	1.46
7	11060.00	56.6 PK	74.0	-17.4	1.14 H	172	44.13	12.47
8	11060.00	43.6 AV	54.0	-10.4	1.14 H	172	31.13	12.47
9	#16590.00	60.8 PK	74.0	-13.2	1.34 H	112	45.91	14.89
10	#16590.00	47.9 AV	54.0	-6.1	1.34 H	112	33.01	14.89

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	65.2 PK	74.0	-8.8	1.06 V	135	63.86	1.34
2	5460.00	47.7 AV	54.0	-6.3	1.06 V	135	46.36	1.34
3	#5470.00	68.5 PK	74.0	-5.5	1.03 V	142	67.14	1.36
4	#5470.00	53.8 AV	54.0	-0.2	1.03 V	142	52.44	1.36
5	*5530.00	102.5 PK			1.11 V	138	101.04	1.46
6	*5530.00	92.4 AV			1.11 V	138	90.94	1.46
7	11060.00	54.6 PK	74.0	-19.4	1.04 V	54	42.13	12.47
8	11060.00	42.1 AV	54.0	-11.9	1.04 V	54	29.63	12.47
9	#16590.00	57.8 PK	74.0	-16.2	1.17 V	109	42.91	14.89
10	#16590.00	46.6 AV	54.0	-7.4	1.17 V	109	31.71	14.89

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 138	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	1.15 H	218	58.84	1.36
2	#5470.00	43.1 AV	54.0	-10.9	1.15 H	218	41.74	1.36
3	*5690.00	107.5 PK			1.15 H	360	105.83	1.67
4	*5690.00	96.8 AV			1.15 H	360	95.13	1.67
5	#5833.00	63.8 PK	74.0	-10.2	1.25 H	358	61.99	1.81
6	#5833.00	52.4 AV	54.0	-1.6	1.25 H	358	50.59	1.81
7	11380.00	57.2 PK	74.0	-16.8	1.11 H	148	44.68	12.52
8	11380.00	43.9 AV	54.0	-10.1	1.11 H	148	31.38	12.52
9	#17070.00	60.6 PK	74.0	-13.4	1.31 H	120	44.12	16.48
10	#17070.00	48.1 AV	54.0	-5.9	1.31 H	120	31.62	16.48

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	63.7 PK	74.0	-10.3	1.05 V	141	62.34	1.36
2	#5470.00	44.4 AV	54.0	-9.6	1.05 V	141	43.04	1.36
3	*5690.00	109.2 PK			1.13 V	157	107.53	1.67
4	*5690.00	98.3 AV			1.13 V	157	96.63	1.67
5	#5833.00	67.5 PK	74.0	-6.5	1.23 V	139	65.69	1.81
6	#5833.00	53.7 AV	54.0	-0.3	1.23 V	139	51.89	1.81
7	11380.00	55.8 PK	74.0	-18.2	1.06 V	36	43.28	12.52
8	11380.00	42.9 AV	54.0	-11.1	1.06 V	36	30.38	12.52
9	#17070.00	57.0 PK	74.0	-17.0	1.12 V	136	40.52	16.48
10	#17070.00	45.8 AV	54.0	-8.2	1.12 V	136	29.32	16.48

**REMARKS:**

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

## 4.1.9 Test Results (Mode 3)

**CDD\_MODE****Above 1GHz Data:****802.11ac VHT20**

<b>CHANNEL</b>	TX Channel 52	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	103.2 PK			1.03 H	2	102.23	0.97
2	*5260.00	92.7 AV			1.03 H	2	91.73	0.97
3	5380.00	57.4 PK	74.0	-16.6	1.14 H	353	56.23	1.17
4	5380.00	44.8 AV	54.0	-9.2	1.14 H	353	43.63	1.17
5	5420.00	60.2 PK	74.0	-13.8	1.06 H	8	58.96	1.24
6	5420.00	47.9 AV	54.0	-6.1	1.06 H	8	46.66	1.24
7	#5670.00	60.6 PK	74.0	-13.4	1.03 H	2	58.96	1.64
8	#5670.00	48.5 AV	54.0	-5.5	1.03 H	2	46.86	1.64
9	#10520.00	56.2 PK	74.0	-17.8	1.10 H	236	45.34	10.86
10	#10520.00	42.8 AV	54.0	-11.2	1.10 H	236	31.94	10.86
11	15780.00	60.5 PK	74.0	-13.5	1.06 H	110	48.68	11.82
12	15780.00	48.0 AV	54.0	-6.0	1.06 H	110	36.18	11.82

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	108.0 PK			1.24 V	281	107.03	0.97
2	*5260.00	97.6 AV			1.24 V	281	96.63	0.97
3	5380.00	59.0 PK	74.0	-15.0	1.13 V	217	57.83	1.17
4	5380.00	47.3 AV	54.0	-6.7	1.13 V	217	46.13	1.17
5	5420.00	63.4 PK	74.0	-10.6	1.03 V	215	62.16	1.24
6	5420.00	53.4 AV	54.0	-0.6	1.03 V	215	52.16	1.24
7	#5670.00	58.6 PK	74.0	-15.4	1.24 V	281	56.96	1.64
8	#5670.00	46.9 AV	54.0	-7.1	1.24 V	281	45.26	1.64
9	#10520.00	58.7 PK	74.0	-15.3	1.09 V	305	47.84	10.86
10	#10520.00	43.0 AV	54.0	-11.0	1.09 V	305	32.14	10.86
11	15780.00	59.1 PK	74.0	-14.9	1.08 V	218	47.28	11.82
12	15780.00	43.3 AV	54.0	-10.7	1.08 V	218	31.48	11.82

**REMARKS:**

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

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

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	103.4 PK			1.37 H	194	102.29	1.11
2	*5300.00	92.1 AV			1.37 H	194	90.99	1.11
3	5380.00	60.5 PK	74.0	-13.5	1.37 H	194	59.33	1.17
4	5380.00	49.8 AV	54.0	-4.2	1.37 H	194	48.63	1.17
5	10600.00	57.1 PK	74.0	-16.9	1.11 H	248	45.85	11.25
6	10600.00	43.2 AV	54.0	-10.8	1.11 H	248	31.95	11.25
7	15900.00	60.7 PK	74.0	-13.3	1.04 H	115	48.86	11.84
8	15900.00	47.8 AV	54.0	-6.2	1.04 H	115	35.96	11.84

**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	106.0 PK			1.47 V	183	104.89	1.11
2	*5300.00	96.4 AV			1.47 V	183	95.29	1.11
3	5380.00	64.4 PK	74.0	-9.6	1.47 V	183	63.23	1.17
4	5380.00	53.5 AV	54.0	-0.5	1.47 V	183	52.33	1.17
5	10600.00	58.3 PK	74.0	-15.7	1.05 V	292	47.05	11.25
6	10600.00	42.5 AV	54.0	-11.5	1.05 V	292	31.25	11.25
7	15900.00	58.1 PK	74.0	-15.9	1.08 V	231	46.26	11.84
8	15900.00	42.6 AV	54.0	-11.4	1.08 V	231	30.76	11.84

**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.

<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	103.0 PK			1.02 H	360	101.87	1.13
2	*5320.00	92.8 AV			1.02 H	360	91.67	1.13
3	5350.00	63.6 PK	74.0	-10.4	1.02 H	360	62.44	1.16
4	5350.00	51.7 AV	54.0	-2.3	1.02 H	360	50.54	1.16
5	10640.00	56.8 PK	74.0	-17.2	1.05 H	257	45.53	11.27
6	10640.00	42.9 AV	54.0	-11.1	1.05 H	257	31.63	11.27
7	15960.00	59.8 PK	74.0	-14.2	1.00 H	123	48.08	11.72
8	15960.00	47.6 AV	54.0	-6.4	1.00 H	123	35.88	11.72

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	106.6 PK			1.23 V	185	105.47	1.13
2	*5320.00	97.0 AV			1.23 V	185	95.87	1.13
3	5350.00	64.9 PK	74.0	-9.1	1.23 V	185	63.74	1.16
4	5350.00	53.3 AV	54.0	-0.7	1.23 V	185	52.14	1.16
5	10640.00	59.1 PK	74.0	-14.9	1.04 V	287	47.83	11.27
6	10640.00	43.2 AV	54.0	-10.8	1.04 V	287	31.93	11.27
7	15960.00	58.9 PK	74.0	-15.1	1.12 V	197	47.18	11.72
8	15960.00	43.3 AV	54.0	-10.7	1.12 V	197	31.58	11.72

**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.

<b>CHANNEL</b>	TX Channel 100	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5420.00	64.1 PK	74.0	-9.9	1.06 H	4	62.86	1.24
2	5420.00	52.4 AV	54.0	-1.6	1.06 H	4	51.16	1.24
3	*5500.00	103.5 PK			1.10 H	342	102.07	1.43
4	*5500.00	93.6 AV			1.10 H	342	92.17	1.43
5	11000.00	56.6 PK	74.0	-17.4	1.03 H	235	44.03	12.57
6	11000.00	42.8 AV	54.0	-11.2	1.03 H	235	30.23	12.57
7	#16500.00	60.1 PK	74.0	-13.9	1.05 H	150	45.63	14.47
8	#16500.00	47.6 AV	54.0	-6.4	1.05 H	150	33.13	14.47

**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	5420.00	63.5 PK	74.0	-10.5	1.12 V	192	62.26	1.24
2	5420.00	53.6 AV	54.0	-0.4	1.12 V	192	52.36	1.24
3	*5500.00	109.6 PK			1.12 V	192	108.17	1.43
4	*5500.00	99.1 AV			1.12 V	192	97.67	1.43
5	11000.00	59.3 PK	74.0	-14.7	1.16 V	274	46.73	12.57
6	11000.00	43.3 AV	54.0	-10.7	1.16 V	274	30.73	12.57
7	#16500.00	59.2 PK	74.0	-14.8	1.12 V	192	44.73	14.47
8	#16500.00	43.9 AV	54.0	-10.1	1.12 V	192	29.43	14.47

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	#5347.00	53.4 PK	74.0	-20.6	1.01 H	347	52.25	1.15
2	#5347.00	46.0 AV	54.0	-8.0	1.01 H	347	44.85	1.15
3	5420.00	56.6 PK	74.0	-17.4	1.10 H	333	55.36	1.24
4	5420.00	45.3 AV	54.0	-8.7	1.10 H	333	44.06	1.24
5	*5580.00	106.1 PK			1.04 H	294	104.57	1.53
6	*5580.00	96.6 AV			1.04 H	294	95.07	1.53
7	#5740.00	59.0 PK	74.0	-15.0	1.04 H	335	57.27	1.73
8	#5740.00	51.6 AV	54.0	-2.4	1.04 H	335	49.87	1.73
9	11160.00	56.3 PK	74.0	-17.7	1.28 H	138	43.94	12.36
10	11160.00	43.4 AV	54.0	-10.6	1.28 H	138	31.04	12.36
11	#16740.00	60.8 PK	74.0	-13.2	1.01 H	147	45.55	15.25
12	#16740.00	48.2 AV	54.0	-5.8	1.01 H	147	32.95	15.25
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	#5347.00	61.5 PK	74.0	-12.5	1.25 V	101	60.35	1.15
2	#5347.00	52.3 AV	54.0	-1.7	1.25 V	101	51.15	1.15
3	5420.00	62.0 PK	74.0	-12.0	1.25 V	88	60.76	1.24
4	5420.00	50.9 AV	54.0	-3.1	1.25 V	88	49.66	1.24
5	*5580.00	111.4 PK			1.02 V	264	109.87	1.53
6	*5580.00	102.0 AV			1.02 V	264	100.47	1.53
7	#5740.00	67.6 PK	74.0	-6.4	1.28 V	102	65.87	1.73
8	#5740.00	53.5 AV	54.0	-0.5	1.28 V	102	51.77	1.73
9	11160.00	55.1 PK	74.0	-18.9	1.23 V	80	42.74	12.36
10	11160.00	42.4 AV	54.0	-11.6	1.23 V	80	30.04	12.36
11	#16740.00	59.7 PK	74.0	-14.3	1.04 V	186	44.45	15.25
12	#16740.00	44.3 AV	54.0	-9.7	1.04 V	186	29.05	15.25

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	112.7 PK			1.01 H	280	111.02	1.68
2	*5700.00	93.1 AV			1.01 H	280	91.42	1.68
3	#5780.00	61.8 PK	74.0	-12.2	1.23 H	343	60.00	1.80
4	#5780.00	52.8 AV	54.0	-1.2	1.23 H	343	51.00	1.80
5	#5860.00	56.2 PK	74.0	-17.8	1.13 H	71	54.38	1.82
6	#5860.00	48.2 AV	54.0	-5.8	1.13 H	71	46.38	1.82
7	11400.00	55.9 PK	74.0	-18.1	1.33 H	146	43.48	12.42
8	11400.00	43.1 AV	54.0	-10.9	1.33 H	146	30.68	12.42
9	#17100.00	60.3 PK	74.0	-13.7	1.07 H	110	43.74	16.56
10	#17100.00	47.6 AV	54.0	-6.4	1.07 H	110	31.04	16.56
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	108.6 PK			1.07 V	140	106.92	1.68
2	*5700.00	98.7 AV			1.07 V	140	97.02	1.68
3	#5780.00	68.2 PK	74.0	-5.8	1.09 V	203	66.40	1.80
4	<b>#5780.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.09 V</b>	<b>203</b>	<b>52.10</b>	<b>1.80</b>
5	#5860.00	64.8 PK	74.0	-9.2	1.17 V	221	62.98	1.82
6	#5860.00	50.7 AV	54.0	-3.3	1.17 V	221	48.88	1.82
7	11400.00	55.7 PK	74.0	-18.3	1.19 V	78	43.28	12.42
8	11400.00	42.8 AV	54.0	-11.2	1.19 V	78	30.38	12.42
9	#17100.00	59.2 PK	74.0	-14.8	1.00 V	157	42.64	16.56
10	#17100.00	43.4 AV	54.0	-10.6	1.00 V	157	26.84	16.56

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 144	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5720.00	113.1 PK			1.02 H	358	111.40	1.70
2	*5720.00	103.0 AV			1.02 H	358	101.30	1.70
3	#5881.00	61.0 PK	74.0	-13.0	1.02 H	43	59.18	1.82
4	#5881.00	52.1 AV	54.0	-1.9	1.02 H	43	50.28	1.82
5	11440.00	60.1 PK	74.0	-13.9	1.06 H	126	47.69	12.41
6	11440.00	47.5 AV	54.0	-6.5	1.06 H	126	35.09	12.41
7	#17160.00	59.7 PK	74.0	-14.3	1.06 H	135	43.10	16.60
8	#17160.00	47.7 AV	54.0	-6.3	1.06 H	135	31.10	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	*5720.00	113.2 PK			1.00 V	259	111.50	1.70
2	*5720.00	104.5 AV			1.00 V	259	102.80	1.70
3	#5881.00	68.2 PK	74.0	-5.8	1.09 V	101	66.38	1.82
4	#5881.00	53.7 AV	54.0	-0.3	1.09 V	101	51.88	1.82
5	11440.00	56.6 PK	74.0	-17.4	1.23 V	87	44.19	12.41
6	11440.00	43.6 AV	54.0	-10.4	1.23 V	87	31.19	12.41
7	#17160.00	59.3 PK	74.0	-14.7	1.06 V	170	42.70	16.60
8	#17160.00	42.9 AV	54.0	-11.1	1.06 V	170	26.30	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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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<b>CHANNEL</b>	TX Channel 54	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	106.3 PK			1.14 H	338	105.30	1.00
2	*5270.00	95.4 AV			1.14 H	338	94.40	1.00
3	5360.00	63.3 PK	74.0	-10.7	1.05 H	360	62.15	1.15
4	5360.00	52.6 AV	54.0	-1.4	1.05 H	360	51.45	1.15
5	5430.00	58.1 PK	74.0	-15.9	1.15 H	13	56.83	1.27
6	5430.00	44.6 AV	54.0	-9.4	1.15 H	13	43.33	1.27
7	#10540.00	55.4 PK	74.0	-18.6	1.29 H	151	44.43	10.97
8	#10540.00	42.9 AV	54.0	-11.1	1.29 H	151	31.93	10.97
9	15810.00	60.6 PK	74.0	-13.4	1.12 H	123	48.82	11.78
10	15810.00	47.7 AV	54.0	-6.3	1.12 H	123	35.92	11.78

**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	108.2 PK			1.02 V	141	107.20	1.00
2	*5270.00	98.1 AV			1.02 V	141	97.10	1.00
3	5360.00	64.4 PK	74.0	-9.6	1.05 V	140	63.25	1.15
4	5360.00	53.2 AV	54.0	-0.8	1.05 V	140	52.05	1.15
5	5430.00	63.0 PK	74.0	-11.0	1.03 V	125	61.73	1.27
6	5430.00	52.3 AV	54.0	-1.7	1.03 V	125	51.03	1.27
7	#10540.00	55.9 PK	74.0	-18.1	1.24 V	87	44.93	10.97
8	#10540.00	43.3 AV	54.0	-10.7	1.24 V	87	32.33	10.97
9	15810.00	60.0 PK	74.0	-14.0	1.03 V	171	48.22	11.78
10	15810.00	44.0 AV	54.0	-10.0	1.03 V	171	32.22	11.78

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 62	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	105.8 PK			1.06 H	322	104.68	1.12
2	*5310.00	96.2 AV			1.06 H	322	95.08	1.12
3	5350.00	64.2 PK	74.0	-9.8	1.03 H	360	63.04	1.16
4	5350.00	49.1 AV	54.0	-4.9	1.03 H	360	47.94	1.16
5	#5470.00	56.5 PK	74.0	-17.5	1.06 H	355	55.14	1.36
6	#5470.00	52.9 AV	54.0	-1.1	1.06 H	355	51.54	1.36
7	10620.00	56.0 PK	74.0	-18.0	1.20 H	177	44.75	11.25
8	10620.00	43.2 AV	54.0	-10.8	1.20 H	177	31.95	11.25
9	15930.00	59.8 PK	74.0	-14.2	1.10 H	132	48.02	11.78
10	15930.00	47.6 AV	54.0	-6.4	1.10 H	132	35.82	11.78

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	107.2 PK			1.01 V	125	106.08	1.12
2	*5310.00	97.5 AV			1.01 V	125	96.38	1.12
3	5350.00	66.2 PK	74.0	-7.8	1.01 V	138	65.04	1.16
4	5350.00	53.6 AV	54.0	-0.4	1.01 V	138	52.44	1.16
5	#5470.00	63.8 PK	74.0	-10.2	1.11 V	162	62.44	1.36
6	#5470.00	53.1 AV	54.0	-0.9	1.11 V	162	51.74	1.36
7	10620.00	55.9 PK	74.0	-18.1	1.27 V	102	44.65	11.25
8	10620.00	43.4 AV	54.0	-10.6	1.27 V	102	32.15	11.25
9	15930.00	60.2 PK	74.0	-13.8	1.02 V	142	48.42	11.78
10	15930.00	44.0 AV	54.0	-10.0	1.02 V	142	32.22	11.78

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 102	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5050.00	51.9 PK	74.0	-22.1	1.02 H	113	51.60	0.30
2	5050.00	42.4 AV	54.0	-11.6	1.02 H	113	42.10	0.30
3	5350.00	60.8 PK	74.0	-13.2	1.10 H	9	59.64	1.16
4	5350.00	44.0 AV	54.0	-10.0	1.10 H	9	42.84	1.16
5	5430.00	67.1 PK	74.0	-6.9	1.03 H	339	65.83	1.27
6	5430.00	49.7 AV	54.0	-4.3	1.03 H	339	48.43	1.27
7	*5510.00	105.4 PK			1.03 H	338	103.96	1.44
8	*5510.00	95.5 AV			1.03 H	338	94.06	1.44
9	11020.00	55.9 PK	74.0	-18.1	1.23 H	156	43.36	12.54
10	11020.00	42.9 AV	54.0	-11.1	1.23 H	156	30.36	12.54
11	#16530.00	59.7 PK	74.0	-14.3	1.17 H	128	45.09	14.61
12	#16530.00	47.4 AV	54.0	-6.6	1.17 H	128	32.79	14.61
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	5050.00	59.0 PK	74.0	-15.0	1.07 V	198	58.70	0.30
2	5050.00	51.7 AV	54.0	-2.3	1.07 V	198	51.40	0.30
3	5350.00	61.6 PK	74.0	-12.4	1.01 V	118	60.44	1.16
4	5350.00	48.5 AV	54.0	-5.5	1.01 V	118	47.34	1.16
5	5430.00	64.3 PK	74.0	-9.7	1.31 V	196	63.03	1.27
6	<b>5430.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.31 V</b>	<b>196</b>	<b>52.63</b>	<b>1.27</b>
7	*5510.00	108.0 PK			1.32 V	273	106.56	1.44
8	*5510.00	98.1 AV			1.32 V	273	96.66	1.44
9	11020.00	56.3 PK	74.0	-17.7	1.24 V	101	43.76	12.54
10	11020.00	43.6 AV	54.0	-10.4	1.24 V	101	31.06	12.54
11	#16530.00	59.7 PK	74.0	-14.3	1.12 V	135	45.09	14.61
12	#16530.00	43.2 AV	54.0	-10.8	1.12 V	135	28.59	14.61

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 110	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5390.00	61.1 PK	74.0	-12.9	1.00 H	333	59.91	1.19
2	5390.00	47.5 AV	54.0	-6.5	1.00 H	333	46.31	1.19
3	#5470.00	64.7 PK	74.0	-9.3	1.01 H	291	63.34	1.36
4	#5470.00	52.1 AV	54.0	-1.9	1.01 H	291	50.74	1.36
5	*5550.00	107.0 PK			1.01 H	360	105.52	1.48
6	*5550.00	96.4 AV			1.01 H	360	94.92	1.48
7	#5725.00	55.9 PK	74.0	-18.1	1.01 H	356	54.19	1.71
8	#5725.00	50.8 AV	54.0	-3.2	1.01 H	356	49.09	1.71
9	11100.00	55.9 PK	74.0	-18.1	1.21 H	131	43.50	12.40
10	11100.00	43.0 AV	54.0	-11.0	1.21 H	131	30.60	12.40
11	#16650.00	59.3 PK	74.0	-14.7	1.17 H	114	44.26	15.04
12	#16650.00	46.8 AV	54.0	-7.2	1.17 H	114	31.76	15.04
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	5390.00	62.5 PK	74.0	-11.5	1.30 V	198	61.31	1.19
2	5390.00	48.4 AV	54.0	-5.6	1.30 V	198	47.21	1.19
3	#5470.00	68.4 PK	74.0	-5.6	1.00 V	259	67.04	1.36
4	#5470.00	53.2 AV	54.0	-0.8	1.00 V	259	51.84	1.36
5	*5550.00	109.1 PK			1.06 V	285	107.62	1.48
6	*5550.00	99.3 AV			1.06 V	285	97.82	1.48
7	#5725.00	64.6 PK	74.0	-9.4	1.03 V	144	62.89	1.71
8	#5725.00	51.0 AV	54.0	-3.0	1.03 V	144	49.29	1.71
9	11100.00	56.1 PK	74.0	-17.9	1.26 V	119	43.70	12.40
10	11100.00	43.0 AV	54.0	-11.0	1.26 V	119	30.60	12.40
11	#16650.00	61.0 PK	74.0	-13.0	1.01 V	127	45.96	15.04
12	#16650.00	44.4 AV	54.0	-9.6	1.01 V	127	29.36	15.04

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	104.8 PK			1.12 H	293	103.16	1.64
2	*5670.00	94.6 AV			1.12 H	293	92.96	1.64
3	#5750.00	61.9 PK	74.0	-12.1	1.14 H	0	60.15	1.75
4	#5750.00	52.8 AV	54.0	-1.2	1.14 H	0	51.05	1.75
5	#5830.00	56.0 PK	74.0	-18.0	1.22 H	360	54.18	1.82
6	#5830.00	50.4 AV	54.0	-3.6	1.22 H	360	48.58	1.82
7	11340.00	55.3 PK	74.0	-18.7	1.27 H	168	42.56	12.74
8	11340.00	42.4 AV	54.0	-11.6	1.27 H	168	29.66	12.74
9	#17010.00	60.1 PK	74.0	-13.9	1.12 H	138	43.78	16.32
10	#17010.00	47.7 AV	54.0	-6.3	1.12 H	138	31.38	16.32
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	109.3 PK			1.37 V	79	107.66	1.64
2	*5670.00	98.6 AV			1.37 V	79	96.96	1.64
3	#5750.00	67.8 PK	74.0	-6.2	1.36 V	69	66.05	1.75
4	#5750.00	53.5 AV	54.0	-0.5	1.36 V	69	51.75	1.75
5	#5830.00	63.3 PK	74.0	-10.7	1.04 V	212	61.48	1.82
6	#5830.00	51.4 AV	54.0	-2.6	1.04 V	212	49.58	1.82
7	11340.00	56.2 PK	74.0	-17.8	1.22 V	134	43.46	12.74
8	11340.00	42.9 AV	54.0	-11.1	1.22 V	134	30.16	12.74
9	#17010.00	60.8 PK	74.0	-13.2	1.04 V	139	44.48	16.32
10	#17010.00	43.9 AV	54.0	-10.1	1.04 V	139	27.58	16.32

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 142	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5710.00	107.7 PK			1.12 H	293	106.00	1.70
2	*5710.00	97.9 AV			1.12 H	293	96.20	1.70
3	#5856.00	63.4 PK	74.0	-10.6	1.13 H	360	61.58	1.82
4	#5856.00	52.4 AV	54.0	-1.6	1.13 H	360	50.58	1.82
5	11420.00	55.0 PK	74.0	-19.0	1.16 H	163	42.58	12.42
6	11420.00	42.3 AV	54.0	-11.7	1.16 H	163	29.88	12.42
7	#17130.00	60.0 PK	74.0	-14.0	1.19 H	122	43.43	16.57
8	#17130.00	47.2 AV	54.0	-6.8	1.19 H	122	30.63	16.57

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	*5710.00	110.9 PK			1.14 V	279	109.20	1.70
2	*5710.00	100.9 AV			1.14 V	279	99.20	1.70
3	#5856.00	68.9 PK	74.0	-5.1	1.22 V	152	67.08	1.82
4	#5856.00	53.6 AV	54.0	-0.4	1.22 V	152	51.78	1.82
5	11420.00	56.7 PK	74.0	-17.3	1.19 V	133	44.28	12.42
6	11420.00	43.2 AV	54.0	-10.8	1.19 V	133	30.78	12.42
7	#17130.00	60.4 PK	74.0	-13.6	1.03 V	131	43.83	16.57
8	#17130.00	43.7 AV	54.0	-10.3	1.03 V	131	27.13	16.57

**REMARKS:**

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

**802.11ac VHT80**

<b>CHANNEL</b>	TX Channel 58	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	103.8 PK			1.09 H	360	102.73	1.07
2	*5290.00	92.2 AV			1.09 H	360	91.13	1.07
3	5374.00	60.3 PK	74.0	-13.7	1.09 H	360	59.13	1.17
4	5374.00	48.8 AV	54.0	-5.2	1.09 H	360	47.63	1.17
5	#10580.00	55.5 PK	74.0	-18.5	1.19 H	169	44.35	11.15
6	#10580.00	42.4 AV	54.0	-11.6	1.19 H	169	31.25	11.15
7	15870.00	59.6 PK	74.0	-14.4	1.15 H	144	47.78	11.82
8	15870.00	47.1 AV	54.0	-6.9	1.15 H	144	35.28	11.82

**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	105.4 PK			1.24 V	197	104.33	1.07
2	*5290.00	95.1 AV			1.24 V	197	94.03	1.07
3	5374.00	65.6 PK	74.0	-8.4	1.17 V	200	64.43	1.17
4	5374.00	53.4 AV	54.0	-0.6	1.17 V	200	52.23	1.17
5	#10580.00	57.9 PK	74.0	-16.1	1.18 V	133	46.75	11.15
6	#10580.00	44.3 AV	54.0	-9.7	1.18 V	133	33.15	11.15
7	15870.00	60.4 PK	74.0	-13.6	1.03 V	143	48.58	11.82
8	15870.00	43.8 AV	54.0	-10.2	1.03 V	143	31.98	11.82

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 106	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	65.6 PK	74.0	-8.4	1.24 H	180	64.24	1.36
2	#5470.00	52.1 AV	54.0	-1.9	1.24 H	180	50.74	1.36
3	*5530.00	102.8 PK			1.02 H	338	101.34	1.46
4	*5530.00	90.6 AV			1.02 H	338	89.14	1.46
5	#5725.00	53.3 PK	74.0	-20.7	1.03 H	8	51.59	1.71
6	#5725.00	48.4 AV	54.0	-5.6	1.03 H	8	46.69	1.71
7	11060.00	54.8 PK	74.0	-19.2	1.18 H	160	42.33	12.47
8	11060.00	42.5 AV	54.0	-11.5	1.18 H	160	30.03	12.47
9	#16590.00	59.3 PK	74.0	-14.7	1.16 H	141	44.41	14.89
10	#16590.00	46.6 AV	54.0	-7.4	1.16 H	141	31.71	14.89

**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	67.7 PK	74.0	-6.3	1.32 V	100	66.34	1.36
2	#5470.00	53.5 AV	54.0	-0.5	1.32 V	100	52.14	1.36
3	*5530.00	104.0 PK			1.30 V	104	102.54	1.46
4	*5530.00	94.5 AV			1.30 V	104	93.04	1.46
5	#5725.00	61.1 PK	74.0	-12.9	1.23 V	85	59.39	1.71
6	#5725.00	49.2 AV	54.0	-4.8	1.23 V	85	47.49	1.71
7	11060.00	57.4 PK	74.0	-16.6	1.11 V	137	44.93	12.47
8	11060.00	43.7 AV	54.0	-10.3	1.11 V	137	31.23	12.47
9	#16590.00	60.9 PK	74.0	-13.1	1.11 V	142	46.01	14.89
10	#16590.00	44.8 AV	54.0	-9.2	1.11 V	142	29.91	14.89

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 138	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5060.00	54.9 PK	74.0	-19.1	1.18 H	355	54.56	0.34
2	5060.00	48.9 AV	54.0	-5.1	1.18 H	355	48.56	0.34
3	*5690.00	105.2 PK			1.03 H	336	103.53	1.67
4	*5690.00	94.9 AV			1.03 H	336	93.23	1.67
5	#5850.00	62.2 PK	68.2	-6.0	1.06 H	344	60.38	1.82
6	11380.00	55.0 PK	74.0	-19.0	1.14 H	158	42.48	12.52
7	11380.00	42.4 AV	54.0	-11.6	1.14 H	158	29.88	12.52
8	#17070.00	59.3 PK	74.0	-14.7	1.21 H	137	42.82	16.48
9	#17070.00	46.7 AV	54.0	-7.3	1.21 H	137	30.22	16.48
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	5060.00	58.3 PK	74.0	-15.7	1.00 V	167	57.96	0.34
2	5060.00	49.2 AV	54.0	-4.8	1.00 V	167	48.86	0.34
3	*5690.00	110.2 PK			1.05 V	136	108.53	1.67
4	*5690.00	101.1 AV			1.05 V	136	99.43	1.67
5	#5850.00	67.9 PK	68.2	-0.3	1.01 V	257	66.08	1.82
6	11380.00	57.4 PK	74.0	-16.6	1.09 V	123	44.88	12.52
7	11380.00	43.8 AV	54.0	-10.2	1.09 V	123	31.28	12.52
8	#17070.00	60.6 PK	74.0	-13.4	1.09 V	134	44.12	16.48
9	#17070.00	44.1 AV	54.0	-9.9	1.09 V	134	27.62	16.48

**REMARKS:**

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

## STBC\_MODE

Above 1GHz Data:

802.11ac VHT20

<b>CHANNEL</b>	TX Channel 52	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	107.2 PK			1.05 H	357	106.23	0.97
2	*5260.00	95.4 AV			1.05 H	357	94.43	0.97
3	5420.00	59.3 PK	74.0	-14.7	1.12 H	9	58.06	1.24
4	5420.00	46.9 AV	54.0	-7.1	1.12 H	9	45.66	1.24
5	#10520.00	56.3 PK	74.0	-17.7	1.18 H	146	45.44	10.86
6	#10520.00	43.8 AV	54.0	-10.2	1.18 H	146	32.94	10.86
7	15780.00	60.6 PK	74.0	-13.4	1.22 H	137	48.78	11.82
8	15780.00	48.0 AV	54.0	-6.0	1.22 H	137	36.18	11.82

### 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	106.0 PK			1.14 V	206	105.03	0.97
2	*5260.00	95.5 AV			1.14 V	206	94.53	0.97
3	5420.00	65.4 PK	74.0	-8.6	1.12 V	211	64.16	1.24
4	5420.00	53.5 AV	54.0	-0.5	1.12 V	211	52.26	1.24
5	#10520.00	55.6 PK	74.0	-18.4	1.48 V	89	44.74	10.86
6	#10520.00	42.7 AV	54.0	-11.3	1.48 V	89	31.84	10.86
7	15780.00	59.3 PK	74.0	-14.7	1.17 V	143	47.48	11.82
8	15780.00	46.9 AV	54.0	-7.1	1.17 V	143	35.08	11.82

### REMARKS:

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

<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5080.00	59.4 PK	74.0	-14.6	1.01 H	161	59.01	0.39
2	5080.00	46.8 AV	54.0	-7.2	1.01 H	161	46.41	0.39
3	*5300.00	106.2 PK			1.00 H	188	105.09	1.11
4	*5300.00	95.1 AV			1.00 H	188	93.99	1.11
5	5381.00	58.7 PK	74.0	-15.3	1.27 H	23	57.53	1.17
6	5381.00	46.5 AV	54.0	-7.5	1.27 H	23	45.33	1.17
7	10600.00	55.4 PK	74.0	-18.6	1.27 H	162	44.15	11.25
8	10600.00	43.0 AV	54.0	-11.0	1.27 H	162	31.75	11.25
9	15900.00	60.7 PK	74.0	-13.3	1.08 H	141	48.86	11.84
10	15900.00	47.6 AV	54.0	-6.4	1.08 H	141	35.76	11.84
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	5080.00	59.3 PK	74.0	-14.7	1.05 V	187	58.91	0.39
2	5080.00	50.1 AV	54.0	-3.9	1.05 V	187	49.71	0.39
3	*5300.00	106.4 PK			1.19 V	182	105.29	1.11
4	*5300.00	95.7 AV			1.19 V	182	94.59	1.11
5	5381.00	64.6 PK	74.0	-9.4	1.07 V	198	63.43	1.17
6	5381.00	53.8 AV	54.0	-0.2	1.07 V	198	52.63	1.17
7	10600.00	55.4 PK	74.0	-18.6	1.42 V	76	44.15	11.25
8	10600.00	42.7 AV	54.0	-11.3	1.42 V	76	31.45	11.25
9	15900.00	58.9 PK	74.0	-15.1	1.14 V	111	47.06	11.84
10	15900.00	46.7 AV	54.0	-7.3	1.14 V	111	34.86	11.84

**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.

<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	105.5 PK			1.12 H	174	104.37	1.13
2	*5320.00	94.2 AV			1.12 H	174	93.07	1.13
3	5350.00	58.7 PK	74.0	-15.3	1.00 H	174	57.54	1.16
4	5350.00	46.6 AV	54.0	-7.4	1.00 H	174	45.44	1.16
5	10640.00	56.0 PK	74.0	-18.0	1.16 H	168	44.73	11.27
6	10640.00	43.4 AV	54.0	-10.6	1.16 H	168	32.13	11.27
7	15960.00	61.2 PK	74.0	-12.8	1.13 H	163	49.48	11.72
8	15960.00	48.1 AV	54.0	-5.9	1.13 H	163	36.38	11.72

**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	105.8 PK			1.11 V	217	104.67	1.13
2	*5320.00	95.0 AV			1.11 V	217	93.87	1.13
3	5350.00	64.1 PK	74.0	-9.9	1.11 V	200	62.94	1.16
4	5350.00	53.6 AV	54.0	-0.4	1.11 V	200	52.44	1.16
5	10640.00	54.6 PK	74.0	-19.4	1.31 V	83	43.33	11.27
6	10640.00	42.3 AV	54.0	-11.7	1.31 V	83	31.03	11.27
7	15960.00	58.0 PK	74.0	-16.0	1.20 V	115	46.28	11.72
8	15960.00	45.9 AV	54.0	-8.1	1.20 V	115	34.18	11.72

**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.

<b>CHANNEL</b>	TX Channel 100	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	#5340.00	54.4 PK	74.0	-19.6	1.28 H	275	53.25	1.15
2	#5340.00	48.2 AV	54.0	-5.8	1.28 H	275	47.05	1.15
3	5420.00	62.5 PK	74.0	-11.5	1.21 H	210	61.26	1.24
4	5420.00	51.4 AV	54.0	-2.6	1.21 H	210	50.16	1.24
5	*5500.00	106.7 PK			1.09 H	183	105.27	1.43
6	*5500.00	97.0 AV			1.09 H	183	95.57	1.43
7	11000.00	55.2 PK	74.0	-18.8	1.24 H	162	42.63	12.57
8	11000.00	42.8 AV	54.0	-11.2	1.24 H	162	30.23	12.57
9	#16500.00	62.1 PK	74.0	-11.9	1.16 H	153	47.63	14.47
10	#16500.00	48.6 AV	54.0	-5.4	1.16 H	153	34.13	14.47
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	#5340.00	60.8 PK	74.0	-13.2	1.04 V	123	59.65	1.15
2	#5340.00	49.1 AV	54.0	-4.9	1.04 V	123	47.95	1.15
3	5420.00	64.0 PK	74.0	-10.0	1.07 V	215	62.76	1.24
4	5420.00	53.4 AV	54.0	-0.6	1.07 V	215	52.16	1.24
5	*5500.00	109.9 PK			1.03 V	198	108.47	1.43
6	*5500.00	99.2 AV			1.03 V	198	97.77	1.43
7	11000.00	55.5 PK	74.0	-18.5	1.27 V	84	42.93	12.57
8	11000.00	43.2 AV	54.0	-10.8	1.27 V	84	30.63	12.57
9	#16500.00	58.4 PK	74.0	-15.6	1.20 V	151	43.93	14.47
10	#16500.00	46.1 AV	54.0	-7.9	1.20 V	151	31.63	14.47

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5420.00	53.0 PK	74.0	-21.0	1.09 H	72	51.76	1.24
2	5420.00	41.4 AV	54.0	-12.6	1.09 H	72	40.16	1.24
3	*5580.00	110.5 PK			1.00 H	194	108.97	1.53
4	*5580.00	99.9 AV			1.00 H	194	98.37	1.53
5	#5740.00	57.3 PK	74.0	-16.7	1.23 H	288	55.57	1.73
6	#5740.00	53.2 AV	54.0	-0.8	1.23 H	288	51.47	1.73
7	11160.00	55.6 PK	74.0	-18.4	1.13 H	133	43.24	12.36
8	11160.00	43.0 AV	54.0	-11.0	1.13 H	133	30.64	12.36
9	#16740.00	61.5 PK	74.0	-12.5	1.07 H	130	46.25	15.25
10	#16740.00	48.4 AV	54.0	-5.6	1.07 H	130	33.15	15.25
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	5420.00	64.4 PK	74.0	-9.6	1.02 V	138	63.16	1.24
2	5420.00	51.9 AV	54.0	-2.1	1.02 V	138	50.66	1.24
3	*5580.00	112.4 PK			1.05 V	197	110.87	1.53
4	*5580.00	101.8 AV			1.05 V	197	100.27	1.53
5	#5740.00	68.4 PK	74.0	-5.6	1.00 V	222	66.67	1.73
6	#5740.00	53.5 AV	54.0	-0.5	1.00 V	222	51.77	1.73
7	11160.00	55.7 PK	74.0	-18.3	1.32 V	90	43.34	12.36
8	11160.00	43.3 AV	54.0	-10.7	1.32 V	90	30.94	12.36
9	#16740.00	58.2 PK	74.0	-15.8	1.11 V	126	42.95	15.25
10	#16740.00	45.9 AV	54.0	-8.1	1.11 V	126	30.65	15.25

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	108.4 PK			1.05 H	1	106.72	1.68
2	*5700.00	97.5 AV			1.05 H	1	95.82	1.68
3	#5780.00	61.6 PK	74.0	-12.4	1.02 H	285	59.80	1.80
4	#5780.00	52.3 AV	54.0	-1.7	1.02 H	285	50.50	1.80
5	11400.00	56.2 PK	74.0	-17.8	1.19 H	166	43.78	12.42
6	11400.00	42.9 AV	54.0	-11.1	1.19 H	166	30.48	12.42
7	#17100.00	61.5 PK	74.0	-12.5	1.00 H	149	44.94	16.56
8	#17100.00	48.5 AV	54.0	-5.5	1.00 H	149	31.94	16.56

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	111.0 PK			1.00 V	201	109.32	1.68
2	*5700.00	100.4 AV			1.00 V	201	98.72	1.68
3	#5780.00	68.0 PK	74.0	-6.0	1.00 V	204	66.20	1.80
4	#5780.00	53.6 AV	54.0	-0.4	1.00 V	204	51.80	1.80
5	11400.00	53.9 PK	74.0	-20.1	1.33 V	87	41.48	12.42
6	11400.00	41.5 AV	54.0	-12.5	1.33 V	87	29.08	12.42
7	#17100.00	58.3 PK	74.0	-15.7	1.17 V	134	41.74	16.56
8	#17100.00	46.2 AV	54.0	-7.8	1.17 V	134	29.64	16.56

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 144	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5720.00	110.1 PK			1.04 H	22	108.40	1.70
2	*5720.00	101.4 AV			1.04 H	22	99.70	1.70
3	#5882.00	60.1 PK	68.2	-8.1	1.14 H	76	58.28	1.82
4	11440.00	55.9 PK	74.0	-18.1	1.29 H	161	43.49	12.41
5	11440.00	42.8 AV	54.0	-11.2	1.29 H	161	30.39	12.41
6	#17160.00	61.6 PK	74.0	-12.4	1.03 H	150	45.00	16.60
7	#17160.00	48.5 AV	54.0	-5.5	1.03 H	150	31.90	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	*5720.00	112.9 PK			1.02 V	157	111.20	1.70
2	*5720.00	103.5 AV			1.02 V	157	101.80	1.70
3	<b>#5882.00</b>	<b>68.1 PK</b>	<b>68.2</b>	<b>-0.1</b>	<b>1.12 V</b>	<b>174</b>	<b>66.28</b>	<b>1.82</b>
4	11440.00	54.6 PK	74.0	-19.4	1.25 V	69	42.19	12.41
5	11440.00	42.3 AV	54.0	-11.7	1.25 V	69	29.89	12.41
6	#17160.00	58.2 PK	74.0	-15.8	1.17 V	109	41.60	16.60
7	#17160.00	46.1 AV	54.0	-7.9	1.17 V	109	29.50	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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

**802.11ac VHT40**

<b>CHANNEL</b>	TX Channel 54	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	105.8 PK			1.10 H	329	104.80	1.00
2	*5270.00	94.9 AV			1.10 H	329	93.90	1.00
3	5360.00	63.5 PK	74.0	-10.5	1.03 H	360	62.35	1.15
4	5360.00	53.1 AV	54.0	-0.9	1.03 H	360	51.95	1.15
5	#10540.00	56.3 PK	74.0	-17.7	1.22 H	171	45.33	10.97
6	#10540.00	43.5 AV	54.0	-10.5	1.22 H	171	32.53	10.97
7	15810.00	61.5 PK	74.0	-12.5	1.03 H	142	49.72	11.78
8	15810.00	48.4 AV	54.0	-5.6	1.03 H	142	36.62	11.78

**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	107.5 PK			1.46 V	276	106.50	1.00
2	*5270.00	96.5 AV			1.46 V	276	95.50	1.00
3	5360.00	63.7 PK	74.0	-10.3	1.46 V	268	62.55	1.15
4	5360.00	53.4 AV	54.0	-0.6	1.46 V	268	52.25	1.15
5	#10540.00	54.1 PK	74.0	-19.9	1.26 V	103	43.13	10.97
6	#10540.00	42.0 AV	54.0	-12.0	1.26 V	103	31.03	10.97
7	15810.00	58.2 PK	74.0	-15.8	1.06 V	108	46.42	11.78
8	15810.00	46.1 AV	54.0	-7.9	1.06 V	108	34.32	11.78

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 62	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	104.3 PK			1.07 H	348	103.18	1.12
2	*5310.00	93.0 AV			1.07 H	348	91.88	1.12
3	5386.00	64.3 PK	74.0	-9.7	1.05 H	20	63.12	1.18
4	5386.00	48.9 AV	54.0	-5.1	1.05 H	20	47.72	1.18
5	5460.00	60.1 PK	74.0	-13.9	1.19 H	32	58.76	1.34
6	5460.00	47.4 AV	54.0	-6.6	1.19 H	32	46.06	1.34
7	10620.00	56.5 PK	74.0	-17.5	1.16 H	144	45.25	11.25
8	10620.00	43.4 AV	54.0	-10.6	1.16 H	144	32.15	11.25
9	15930.00	61.1 PK	74.0	-12.9	1.03 H	150	49.32	11.78
10	15930.00	48.3 AV	54.0	-5.7	1.03 H	150	36.52	11.78
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	106.1 PK			1.49 V	280	104.98	1.12
2	*5310.00	95.2 AV			1.49 V	280	94.08	1.12
3	5386.00	63.8 PK	74.0	-10.2	1.37 V	266	62.62	1.18
4	5386.00	53.6 AV	54.0	-0.4	1.37 V	266	52.42	1.18
5	5460.00	62.6 PK	74.0	-11.4	1.35 V	174	61.26	1.34
6	5460.00	51.4 AV	54.0	-2.6	1.35 V	174	50.06	1.34
7	10620.00	54.0 PK	74.0	-20.0	1.25 V	85	42.75	11.25
8	10620.00	42.1 AV	54.0	-11.9	1.25 V	85	30.85	11.25
9	15930.00	58.2 PK	74.0	-15.8	1.15 V	133	46.42	11.78
10	15930.00	46.0 AV	54.0	-8.0	1.15 V	133	34.22	11.78

**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.

<b>CHANNEL</b>	TX Channel 102	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5430.00	67.9 PK	74.0	-6.1	1.09 H	348	66.63	1.27
2	5430.00	50.6 AV	54.0	-3.4	1.09 H	348	49.33	1.27
3	#5470.00	61.8 PK	74.0	-12.2	1.02 H	117	60.44	1.36
4	#5470.00	42.3 AV	54.0	-11.7	1.02 H	117	40.94	1.36
5	*5510.00	106.7 PK			1.08 H	360	105.26	1.44
6	*5510.00	96.5 AV			1.08 H	360	95.06	1.44
7	11020.00	56.1 PK	74.0	-17.9	1.21 H	143	43.56	12.54
8	11020.00	42.8 AV	54.0	-11.2	1.21 H	143	30.26	12.54
9	#16530.00	62.5 PK	74.0	-11.5	1.11 H	144	47.89	14.61
10	#16530.00	49.4 AV	54.0	-4.6	1.11 H	144	34.79	14.61
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	5430.00	67.4 PK	74.0	-6.6	1.42 V	264	66.13	1.27
2	5430.00	53.6 AV	54.0	-0.4	1.42 V	264	52.33	1.27
3	#5470.00	68.5 PK	74.0	-5.5	1.05 V	163	67.14	1.36
4	#5470.00	44.1 AV	54.0	-9.9	1.05 V	163	42.74	1.36
5	*5510.00	109.6 PK			1.17 V	194	108.16	1.44
6	*5510.00	98.1 AV			1.17 V	194	96.66	1.44
7	11020.00	55.3 PK	74.0	-18.7	1.20 V	84	42.76	12.54
8	11020.00	42.9 AV	54.0	-11.1	1.20 V	84	30.36	12.54
9	#16530.00	57.7 PK	74.0	-16.3	1.03 V	139	43.09	14.61
10	#16530.00	45.9 AV	54.0	-8.1	1.03 V	139	31.29	14.61

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 110	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	5457.00	61.3 PK	74.0	-12.7	1.06 H	316	59.97	1.33
2	5457.00	48.0 AV	54.0	-6.0	1.06 H	316	46.67	1.33
3	#5470.00	65.2 PK	74.0	-8.8	1.06 H	250	63.84	1.36
4	#5470.00	52.8 AV	54.0	-1.2	1.06 H	250	51.44	1.36
5	*5550.00	109.0 PK			1.05 H	349	107.52	1.48
6	*5550.00	97.3 AV			1.05 H	349	95.82	1.48
7	#5725.00	56.4 PK	74.0	-17.6	1.04 H	349	54.69	1.71
8	#5725.00	51.4 AV	54.0	-2.6	1.04 H	349	49.69	1.71
9	11100.00	56.8 PK	74.0	-17.2	1.14 H	155	44.40	12.40
10	11100.00	43.1 AV	54.0	-10.9	1.14 H	155	30.70	12.40
11	#16650.00	61.8 PK	74.0	-12.2	1.07 H	150	46.76	15.04
12	#16650.00	48.9 AV	54.0	-5.1	1.07 H	150	33.86	15.04

**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	5457.00	64.8 PK	74.0	-9.2	1.04 V	155	63.47	1.33
2	5457.00	53.4 AV	54.0	-0.6	1.04 V	155	52.07	1.33
3	#5470.00	68.0 PK	74.0	-6.0	1.32 V	263	66.64	1.36
4	#5470.00	53.7 AV	54.0	-0.3	1.32 V	263	52.34	1.36
5	*5550.00	110.3 PK			1.36 V	273	108.82	1.48
6	*5550.00	99.7 AV			1.36 V	273	98.22	1.48
7	#5725.00	63.8 PK	74.0	-10.2	1.01 V	179	62.09	1.71
8	#5725.00	52.9 AV	54.0	-1.1	1.01 V	179	51.19	1.71
9	11100.00	54.0 PK	74.0	-20.0	1.31 V	78	41.60	12.40
10	11100.00	42.2 AV	54.0	-11.8	1.31 V	78	29.80	12.40
11	#16650.00	57.6 PK	74.0	-16.4	1.07 V	148	42.56	15.04
12	#16650.00	45.3 AV	54.0	-8.7	1.07 V	148	30.26	15.04

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	105.2 PK			1.01 H	287	103.56	1.64
2	*5670.00	94.9 AV			1.01 H	287	93.26	1.64
3	#5750.00	62.4 PK	74.0	-11.6	1.12 H	18	60.65	1.75
4	#5750.00	52.4 AV	54.0	-1.6	1.12 H	18	50.65	1.75
5	11340.00	56.9 PK	74.0	-17.1	1.21 H	145	44.16	12.74
6	11340.00	43.1 AV	54.0	-10.9	1.21 H	145	30.36	12.74
7	#17010.00	62.1 PK	74.0	-11.9	1.02 H	139	45.78	16.32
8	#17010.00	49.0 AV	54.0	-5.0	1.02 H	139	32.68	16.32
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	110.2 PK			1.12 V	176	108.56	1.64
2	*5670.00	99.3 AV			1.12 V	176	97.66	1.64
3	#5750.00	67.8 PK	74.0	-6.2	1.16 V	205	66.05	1.75
4	#5750.00	53.7 AV	54.0	-0.3	1.16 V	205	51.95	1.75
5	11340.00	54.6 PK	74.0	-19.4	1.29 V	94	41.86	12.74
6	11340.00	42.4 AV	54.0	-11.6	1.29 V	94	29.66	12.74
7	#17010.00	58.0 PK	74.0	-16.0	1.10 V	123	41.68	16.32
8	#17010.00	45.6 AV	54.0	-8.4	1.10 V	123	29.28	16.32

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 142	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5710.00	107.3 PK			1.06 H	252	105.60	1.70
2	*5710.00	97.6 AV			1.06 H	252	95.90	1.70
3	#5865.00	62.1 PK	68.2	-6.1	1.27 H	11	60.27	1.83
4	11420.00	56.2 PK	74.0	-17.8	1.08 H	144	43.78	12.42
5	11420.00	42.7 AV	54.0	-11.3	1.08 H	144	30.28	12.42
6	#17130.00	61.6 PK	74.0	-12.4	1.03 H	144	45.03	16.57
7	#17130.00	48.8 AV	54.0	-5.2	1.03 H	144	32.23	16.57

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	*5710.00	111.9 PK			1.08 V	174	110.20	1.70
2	*5710.00	100.7 AV			1.08 V	174	99.00	1.70
3	#5865.00	67.7 PK	68.2	-0.5	1.16 V	152	65.87	1.83
4	11420.00	54.1 PK	74.0	-19.9	1.21 V	97	41.68	12.42
5	11420.00	42.2 AV	54.0	-11.8	1.21 V	97	29.78	12.42
6	#17130.00	58.1 PK	74.0	-15.9	1.09 V	144	41.53	16.57
7	#17130.00	45.9 AV	54.0	-8.1	1.09 V	144	29.33	16.57

**REMARKS:**

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.7 PK	74.0	-15.3	1.03 H	187	58.11	0.59
2	5150.00	46.4 AV	54.0	-7.6	1.03 H	187	45.81	0.59
3	*5290.00	104.9 PK			1.10 H	360	103.83	1.07
4	*5290.00	93.3 AV			1.10 H	360	92.23	1.07
5	5382.00	64.2 PK	74.0	-9.8	1.11 H	200	63.02	1.18
6	5382.00	50.8 AV	54.0	-3.2	1.11 H	200	49.62	1.18
7	#10580.00	56.7 PK	74.0	-17.3	1.18 H	158	45.55	11.15
8	#10580.00	43.2 AV	54.0	-10.8	1.18 H	158	32.05	11.15
9	15870.00	61.8 PK	74.0	-12.2	1.03 H	178	49.98	11.82
10	15870.00	48.8 AV	54.0	-5.2	1.03 H	178	36.98	11.82

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.1 PK	74.0	-11.9	1.00 V	193	61.51	0.59
2	5150.00	45.3 AV	54.0	-8.7	1.00 V	193	44.71	0.59
3	*5290.00	106.5 PK			1.23 V	189	105.43	1.07
4	*5290.00	95.3 AV			1.23 V	189	94.23	1.07
5	5382.00	66.7 PK	74.0	-7.3	1.21 V	190	65.52	1.18
6	5382.00	53.8 AV	54.0	-0.2	1.21 V	190	52.62	1.18
7	#10580.00	54.1 PK	74.0	-19.9	1.19 V	78	42.95	11.15
8	#10580.00	41.7 AV	54.0	-12.3	1.19 V	78	30.55	11.15
9	15870.00	57.7 PK	74.0	-16.3	1.13 V	155	45.88	11.82
10	15870.00	45.5 AV	54.0	-8.5	1.13 V	155	33.68	11.82

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 106	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	61.3 PK	74.0	-12.7	1.06 H	345	59.96	1.34
2	5460.00	48.0 AV	54.0	-6.0	1.06 H	345	46.66	1.34
3	#5470.00	67.8 PK	74.0	-6.2	1.05 H	194	66.44	1.36
4	#5470.00	52.1 AV	54.0	-1.9	1.05 H	194	50.74	1.36
5	*5530.00	104.0 PK			1.03 H	203	102.54	1.46
6	*5530.00	92.2 AV			1.03 H	203	90.74	1.46
7	#5725.00	54.2 PK	74.0	-19.8	1.00 H	23	52.49	1.71
8	#5725.00	48.6 AV	54.0	-5.4	1.00 H	23	46.89	1.71
9	11060.00	57.4 PK	74.0	-16.6	1.12 H	148	44.93	12.47
10	11060.00	43.7 AV	54.0	-10.3	1.12 H	148	31.23	12.47
11	#16590.00	62.7 PK	74.0	-11.3	1.02 H	167	47.81	14.89
12	#16590.00	49.8 AV	54.0	-4.2	1.02 H	167	34.91	14.89

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	65.5 PK	74.0	-8.5	1.12 V	168	64.16	1.34
2	5460.00	49.4 AV	54.0	-4.6	1.12 V	168	48.06	1.34
3	#5470.00	67.7 PK	74.0	-6.3	1.20 V	112	66.34	1.36
4	#5470.00	53.8 AV	54.0	-0.2	1.20 V	112	52.44	1.36
5	*5530.00	104.9 PK			1.18 V	107	103.44	1.46
6	*5530.00	93.9 AV			1.18 V	107	92.44	1.46
7	#5725.00	62.2 PK	74.0	-11.8	1.12 V	197	60.49	1.71
8	#5725.00	49.1 AV	54.0	-4.9	1.12 V	197	47.39	1.71
9	11060.00	54.5 PK	74.0	-19.5	1.18 V	79	42.03	12.47
10	11060.00	42.4 AV	54.0	-11.6	1.18 V	79	29.93	12.47
11	#16590.00	57.8 PK	74.0	-16.2	1.16 V	135	42.91	14.89
12	#16590.00	45.4 AV	54.0	-8.6	1.16 V	135	30.51	14.89

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 138	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	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	*5690.00	105.4 PK			1.00 H	351	103.73	1.67
2	*5690.00	94.4 AV			1.00 H	351	92.73	1.67
3	#5837.00	64.1 PK	74.0	-9.9	1.13 H	181	62.28	1.82
4	#5837.00	50.6 AV	54.0	-3.4	1.13 H	181	48.78	1.82
5	11380.00	56.9 PK	74.0	-17.1	1.17 H	131	44.38	12.52
6	11380.00	43.3 AV	54.0	-10.7	1.17 H	131	30.78	12.52
7	#17070.00	61.6 PK	74.0	-12.4	1.03 H	163	45.12	16.48
8	#17070.00	48.8 AV	54.0	-5.2	1.03 H	163	32.32	16.48

**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	*5690.00	110.4 PK			1.05 V	169	108.73	1.67
2	*5690.00	99.9 AV			1.05 V	169	98.23	1.67
3	#5837.00	67.4 PK	74.0	-6.6	1.01 V	168	65.58	1.82
4	<b>#5837.00</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.01 V</b>	<b>168</b>	<b>52.08</b>	<b>1.82</b>
5	11380.00	54.6 PK	74.0	-19.4	1.28 V	62	42.08	12.52
6	11380.00	42.2 AV	54.0	-11.8	1.28 V	62	29.68	12.52
7	#17070.00	57.5 PK	74.0	-16.5	1.13 V	139	41.02	16.48
8	#17070.00	45.0 AV	54.0	-9.0	1.13 V	139	28.52	16.48

**REMARKS:**

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

**Below 1GHz Worst-Case Data:**

<b>CHANNEL</b>	TX Channel 54	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	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	69.88	35.8 QP	40.0	-4.2	1.00 H	143	45.55	-9.76
2	90.30	37.5 QP	43.5	-6.0	1.50 H	271	51.42	-13.90
3	160.62	38.5 QP	43.5	-5.0	1.50 H	179	46.19	-7.67
4	437.52	41.4 QP	46.0	-4.6	1.64 H	281	45.02	-3.64
5	562.50	40.8 QP	46.0	-5.2	1.43 H	118	42.07	-1.28
6	875.02	39.6 QP	46.0	-6.4	2.23 H	181	35.46	4.14

**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	375.00	40.7 QP	46.0	-5.3	1.50 V	221	46.13	-5.44
2	437.51	42.7 QP	46.0	-3.3	1.50 V	214	46.35	-3.64
3	562.50	40.2 QP	46.0	-5.8	1.50 V	118	41.51	-1.28
4	600.00	40.5 QP	46.0	-5.5	1.50 V	281	40.56	-0.03
5	625.01	41.7 QP	46.0	-4.3	1.50 V	178	41.44	0.25
6	875.00	41.4 QP	46.0	-4.6	1.50 V	243	37.29	4.14

**REMARKS:**

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

## 4.2 Conducted Emission Measurement

### 4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	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.

### 4.2.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	100375	May 06, 2015	May 05, 2016
Line-Impedance Stabilization Network (for EUT) SCHWARZBECK	NSLK-8127	8127-522	Sep. 01, 2015	Aug. 31, 2016
Line-Impedance Stabilization Network (for Peripheral ) R&S	ENV216	100072	June 11, 2015	June 10, 2016
RF Cable	5D-FB	COCCAB-001	Mar. 08, 2016	Mar. 07, 2017
50 ohms Terminator	N/A	EMC-03	Sep. 23, 2015	Sep. 22, 2016
50 ohms Terminator	N/A	EMC-02	Oct. 01, 2015	Sep. 30, 2016
50 ohms Terminator	E1-011315	13	Dec. 11 2015	Dec. 10 2016
Software BVADT	BVADT_Cond_V7.3.7.3	NA	NA	NA

#### Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. C.
3. The VCCI Con C Registration No. is C-3611.
4. Tested Date: Apr. 11, 2016

#### 4.2.3 Test Procedure

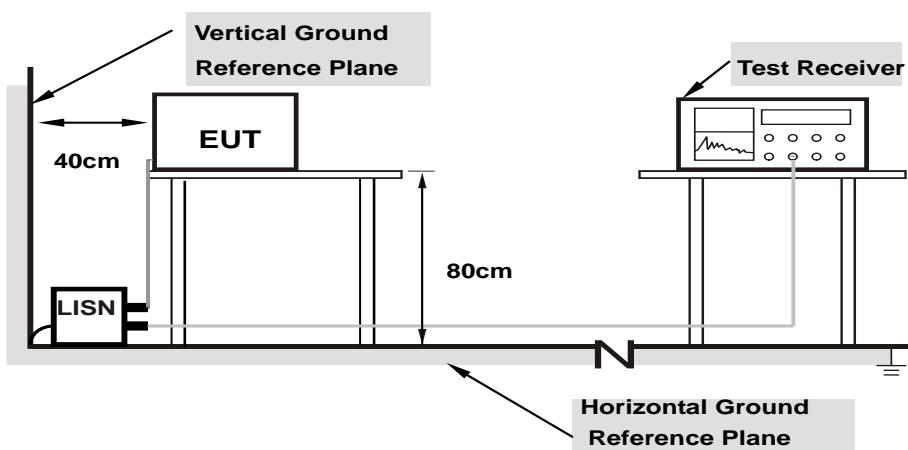
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

#### 4.2.4 Deviation from Test Standard

No deviation.

#### 4.2.5 Test Setup



**Note: 1. Support units were connected to second LISN.**

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

#### 4.2.6 EUT Operating Condition

Same as 4.1.6.

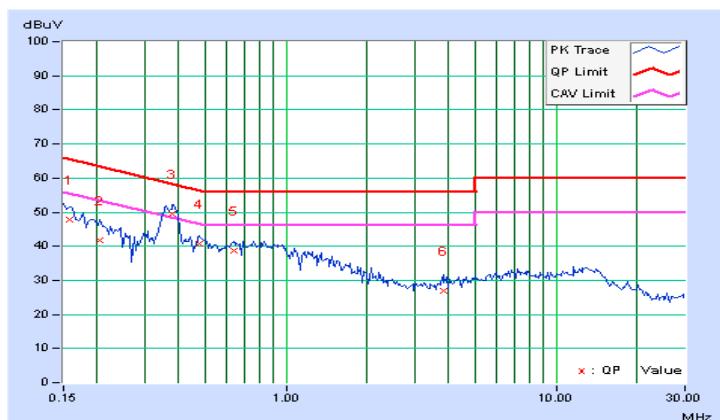
#### 4.2.7 Test Results (Mode 3)

Phase		Line (L)		Detector Function		Quasi-Peak (QP) / Average (AV)			
-------	--	----------	--	-------------------	--	--------------------------------	--	--	--

No	Freq. [MHz]	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	10.44	37.27	26.12	47.71	36.56	65.58	55.58	-17.87	-19.02
2	0.20469	10.40	31.31	23.76	41.71	34.16	63.42	53.42	-21.71	-19.26
3	0.38047	10.43	39.01	33.23	49.44	43.66	58.27	48.27	-8.83	-4.61
4	0.47813	10.42	30.37	24.64	40.79	35.06	56.37	46.37	-15.58	-11.31
5	0.64219	10.41	28.16	22.74	38.57	33.15	56.00	46.00	-17.43	-12.85
6	3.83203	10.61	16.28	12.12	26.89	22.73	56.00	46.00	-29.11	-23.27

#### REMARKS:

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

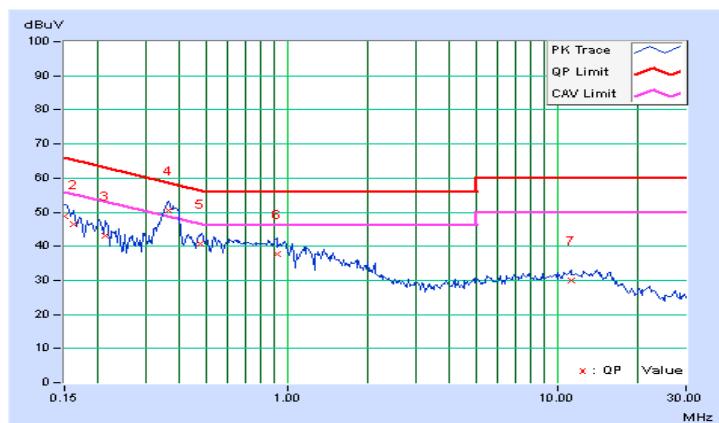


Phase	Neutral (N)			Detector Function		Quasi-Peak (QP) / Average (AV)	
-------	-------------	--	--	-------------------	--	--------------------------------	--

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor (dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	
1	0.15000	10.44	38.37	26.40	48.81	36.84	66.00	56.00	-17.19	-19.16
2	0.16172	10.45	36.17	25.36	46.62	35.81	65.38	55.38	-18.76	-19.57
3	0.21250	10.45	32.48	26.27	42.93	36.72	63.11	53.11	-20.18	-16.39
4	0.36484	10.47	40.10	33.39	50.57	43.86	58.62	48.62	-8.04	-4.75
5	0.47422	10.47	30.35	24.25	40.82	34.72	56.44	46.44	-15.62	-11.72
6	0.91953	10.44	27.26	23.45	37.70	33.89	56.00	46.00	-18.30	-12.11
7	11.24609	11.02	18.90	15.02	29.92	26.04	60.00	50.00	-30.08	-23.96

**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



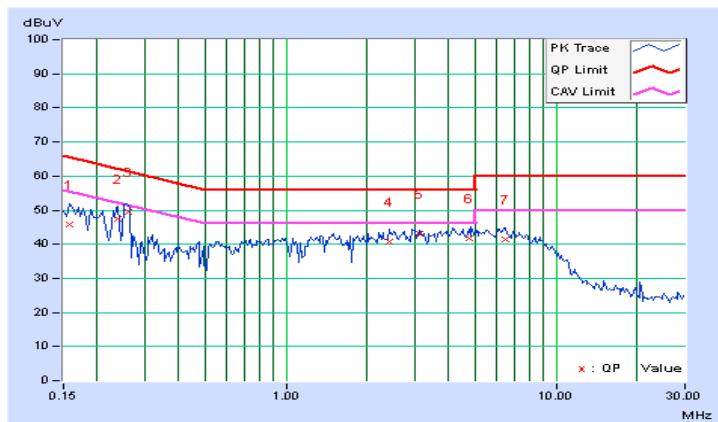
#### 4.2.8 Test Results (Mode 4)

Phase	Line (L)	Detector Function		Quasi-Peak (QP) / Average (AV)	
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No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor (dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	
1	0.15781	10.44	35.23	28.50	45.67	38.94	65.58	55.58	-19.91	-16.64
2	0.23984	10.41	37.12	31.52	47.53	41.93	62.10	52.10	-14.58	-10.18
3	0.25938	10.41	39.17	36.94	49.58	47.35	61.45	51.45	-11.87	-4.10
4	2.39844	10.48	30.35	25.02	40.83	35.50	56.00	46.00	-15.17	-10.50
5	3.10938	10.55	32.69	25.88	43.24	36.43	56.00	46.00	-12.76	-9.57
6	4.74219	10.67	31.17	24.27	41.84	34.94	56.00	46.00	-14.16	-11.06
7	6.46484	10.75	30.55	23.25	41.30	34.00	60.00	50.00	-18.70	-16.00

#### REMARKS:

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

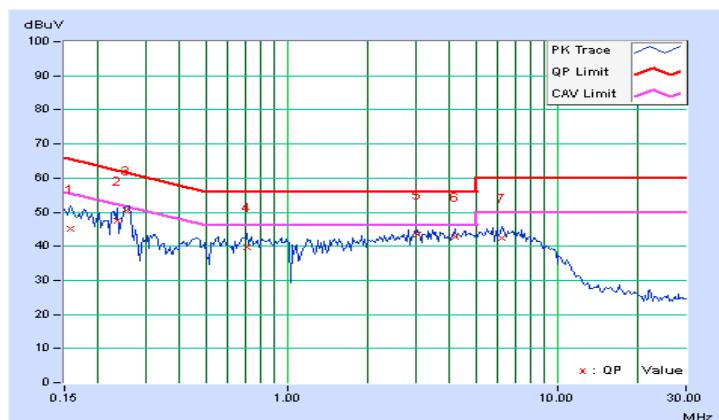


Phase	Neutral (N)		Detector Function		Quasi-Peak (QP) / Average (AV)	
-------	-------------	--	-------------------	--	--------------------------------	--

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor (dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	Q.P. (dB)	AV. (dB)	
1	0.15781	10.45	34.73	24.98	45.18	35.43	65.58	55.58	-20.40	-20.15
2	0.23594	10.46	37.12	35.64	47.58	46.10	62.24	52.24	-14.66	-6.14
<b>3</b>	<b>0.25547</b>	<b>10.46</b>	<b>40.13</b>	<b>38.96</b>	<b>50.59</b>	<b>49.42</b>	<b>61.58</b>	<b>51.58</b>	<b>-10.99</b>	<b>-2.16</b>
4	0.70859	10.45	29.27	25.76	39.72	36.21	56.00	46.00	-16.28	-9.79
5	3.04297	10.62	32.67	25.79	43.29	36.41	56.00	46.00	-12.71	-9.59
6	4.21094	10.74	31.89	25.35	42.63	36.09	56.00	46.00	-13.37	-9.91
7	6.24609	10.81	31.47	25.90	42.28	36.71	60.00	50.00	-17.72	-13.29

**REMARKS:**

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



### 4.3 Transmit Power Measurement

#### 4.3.1 Limits of Transmit Power Measurement

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

\*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for  $N_{ANT} \leq 4$ ;

Array Gain = 0 dB (i.e., no array gain) for channel widths  $\geq 40$  MHz for any  $N_{ANT}$ ;

Array Gain =  $5 \log(N_{ANT}/N_{SS})$  dB or 3 dB, whichever is less for 20-MHz channel widths with  $N_{ANT} \geq 5$ .

For power measurements on all other devices: Array Gain =  $10 \log(N_{ANT}/N_{SS})$  dB.

#### 4.3.2 Test Setup

##### FOR POWER OUTPUT MEASUREMENT

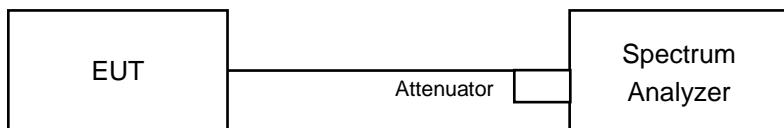
For channel straddling 5725MHz:



For other channels:



##### FOR 26dB OCCUPIED BANDWIDTH



#### 4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

#### 4.3.4 Test Procedure

### FOR POWER OUTPUT MEASUREMENT

#### For channel straddling 5725MHz:

##### 802.11ac (VHT80)

###### Method SA-2

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

###### Other Modulation mode

###### Method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW =1MHz.
3. Set the VBW  $\geq 3 \times$  RBW.
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)
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 other channels:

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

### FOR 26dB OCCUPIED 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 Condition

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

#### 4.3.7 Test Result (Mode 1)

##### POWER OUTPUT:

802.11a					
CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
52	5260	7.834	8.94	24	PASS
60	5300	6.166	7.90	24	PASS
64	5320	6.026	7.80	24	PASS
100	5500	12.190	10.86	24	PASS
116	5580	14.028	11.47	24	PASS
140	5700	11.402	10.57	24	PASS
144 (UNII-2c Band)	5720	12.474	10.96	22.86	PASS
144 (UNII-3 Band)	5720	2.838	4.53	24.22	PASS

##### 26dB OCCUPIED BANDWIDTH:

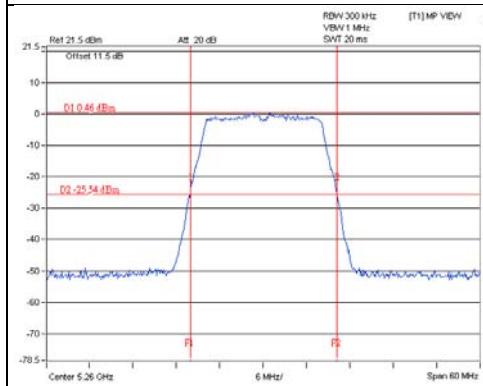
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
52	5260	20.35
60	5300	20.57
64	5320	20.53
100	5500	20.49
116	5580	20.53
140	5700	20.50
144 (UNII-2c Band)	5720	15.35
144 (UNII-3 Band)	5720	5.28

Note: For output power limitation is determined based on 26dBc bandwidth.

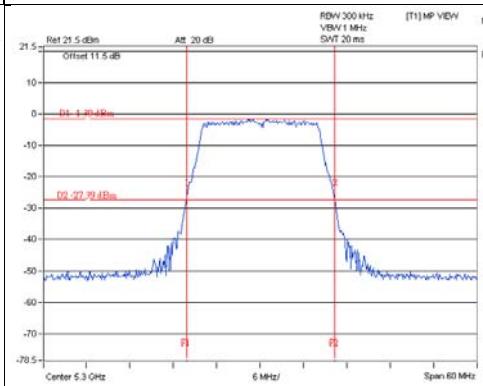
Power Limit = 11dBm + 10logB < UNII Band 2~3>					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Limit (dBm)	Conducted	
52	5260	20.35	24.08	>	24
60	5300	20.57	24.13	>	24
64	5320	20.53	24.12	>	24
100	5500	20.49	24.11	>	24
116	5580	20.53	24.12	>	24
140	5700	20.50	24.11	>	24
144 (UNII-2c Band)	5720	15.35	22.86	<	24
144 (UNII-3 Band)	5720	5.28	24.22	<	30

## 802.11a

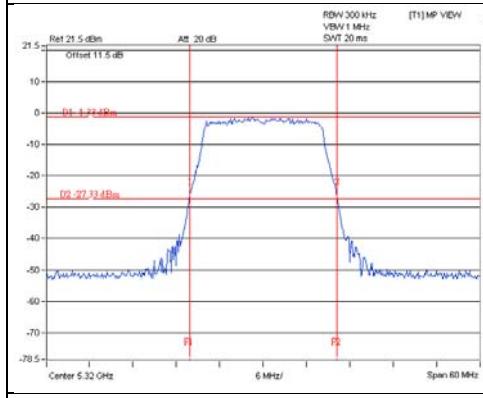
CH52



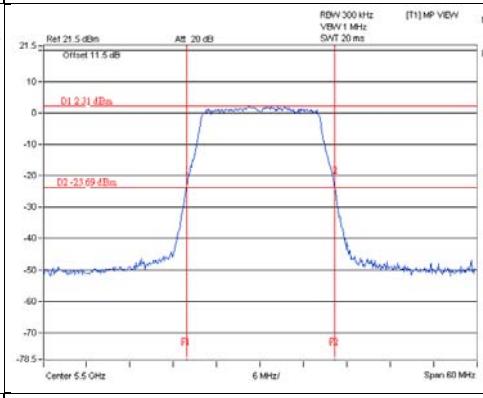
CH60



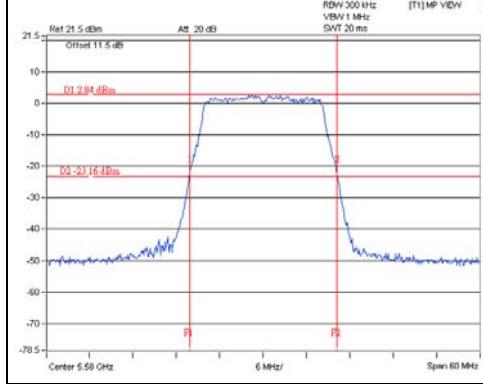
CH64



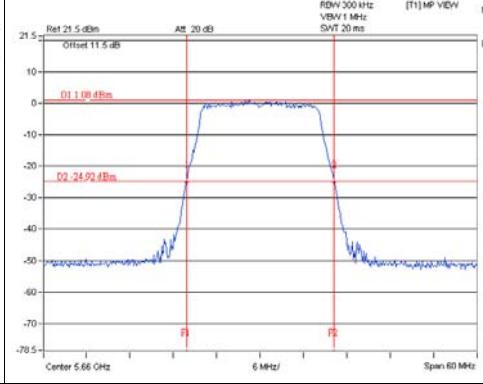
CH100



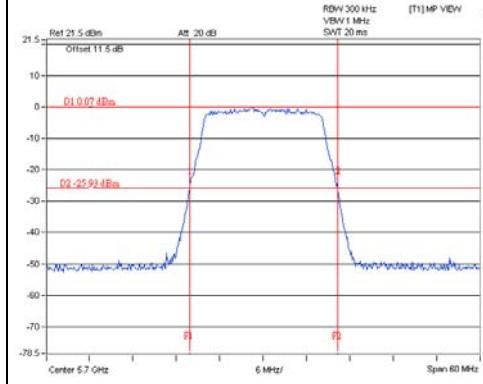
CH116



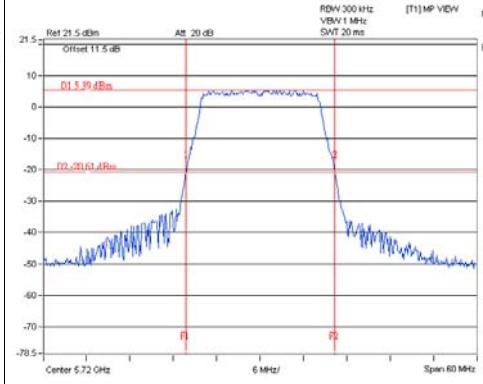
CH132



CH140



CH144 (UNII-2c Band) / CH144 (UNII-3 Band)



## NOTE:

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

#### 4.3.8 Test Result (Mode 2)

##### POWER OUTPUT:

<b>CDD, SDM &amp; Beamforming (MCS0 NSS=2) MODE</b>							
CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
<b>802.11ac (VHT20)</b>							
52	5260	8.56	10.02	17.224	12.36	24	PASS
60	5300	8.45	9.91	16.793	12.25	24	PASS
64	5320	8.61	10.14	17.589	12.45	24	PASS
100	5500	10.71	11.68	26.499	14.23	24	PASS
116	5580	14.41	14.51	55.855	17.47	24	PASS
140	5700	13.35	13.55	44.273	16.46	24	PASS
144 (UNII-2c Band)	5720	12.36	14.34	44.383	16.47	22.83	PASS
144 (UNII-3 Band)	5720	6.47	8.48	11.483	10.60	24.22	PASS
<b>802.11ac (VHT40)</b>							
54	5270	12.35	13.07	37.456	15.74	24	PASS
62	5310	12.15	13.09	36.776	15.66	24	PASS
102	5510	11.46	12.28	30.900	14.90	24	PASS
110	5550	13.65	14.53	51.553	17.12	24	PASS
134	5670	14.92	14.98	62.523	17.96	24	PASS
142 (UNII-2c Band)	5710	14.99	16.90	80.528	19.06	24	PASS
142 (UNII-3 Band)	5710	4.43	6.48	7.219	8.58	24.42	PASS
<b>802.11ac (VHT80)</b>							
58	5290	13.39	14.13	47.709	16.79	24	PASS
106	5530	11.17	11.88	28.509	14.55	24	PASS
138 (UNII-2c Band)	5690	15.66	17.30	93.702	19.72	24	PASS
138 (UNII-3 Band)	5690	1.16	3.29	3.56	5.51	25.11	PASS
For CH138: Total Power(dBm)= Average Power (dBm) + Duty Factor (0.15dB)							

**26dB OCCUPIED BANDWIDTH:**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
<b>802.11ac (VHT20)</b>			
52	5260	20.81	20.61
60	5300	20.77	20.57
64	5320	20.78	20.55
100	5500	20.68	20.44
116	5580	20.85	20.56
140	5700	20.75	20.57
144 (UNII-2c Band)	5720	15.26	15.32
144 (UNII-3 Band)	5720	5.29	5.28
<b>802.11ac (VHT40)</b>			
54	5270	41.01	40.62
62	5310	41.17	40.69
102	5510	41.25	40.71
110	5550	40.86	40.71
134	5670	41.12	40.82
142 (UNII-2c Band)	5710	38.88	36.05
142 (UNII-3 Band)	5710	11.01	5.54
<b>802.11ac (VHT80)</b>			
58	5290	83.30	82.68
106	5530	83.00	82.55
138 (UNII-2c Band)	5690	76.90	76.56
138 (UNII-3 Band)	5690	10.48	6.48

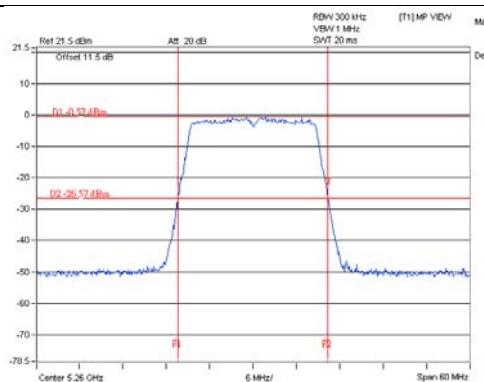
**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	
<b>802.11ac (VHT20)</b>				
52	5260	20.61	24.14	> 24
60	5300	20.57	24.13	> 24
64	5320	20.55	24.12	> 24
100	5500	20.44	24.1	> 24
116	5580	20.56	24.13	> 24
140	5700	20.57	24.13	> 24
144 (UNII-2c Band)	5720	15.26	22.83	< 24
144 (UNII-3 Band)	5720	5.28	24.22	< 30
<b>802.11ac (VHT40)</b>				
54	5270	40.62	27.08	> 24
62	5310	40.69	27.09	> 24
102	5510	40.71	27.09	> 24
110	5550	40.71	27.09	> 24
134	5670	40.82	27.1	> 24
142 (UNII-2c Band)	5710	36.05	26.56	> 24
142 (UNII-3 Band)	5710	5.53	24.42	< 30
<b>802.11ac (VHT80)</b>				
58	5290	82.68	30.17	> 24
106	5530	82.55	30.16	> 24
138 (UNII-2c Band)	5690	76.56	29.84	> 24
138 (UNII-3 Band)	5690	6.48	25.11	< 30

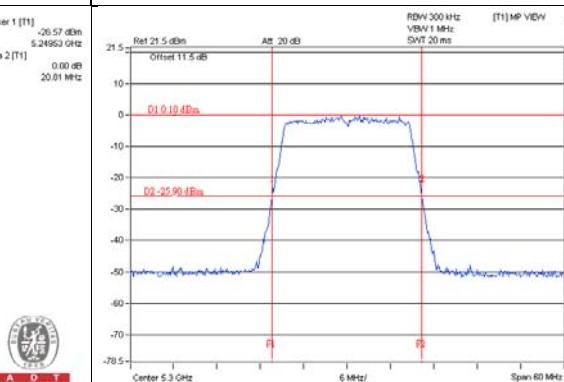
## 802.11ac (VHT20)

### For Chain (0)

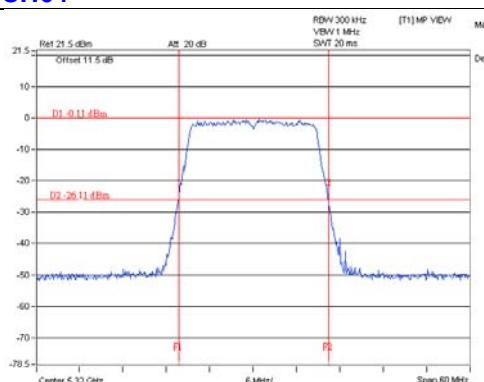
**CH52**



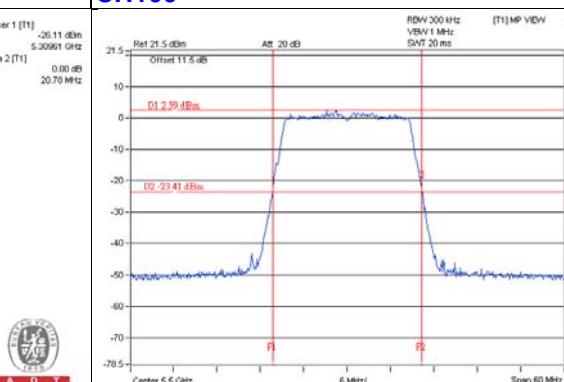
**CH60**



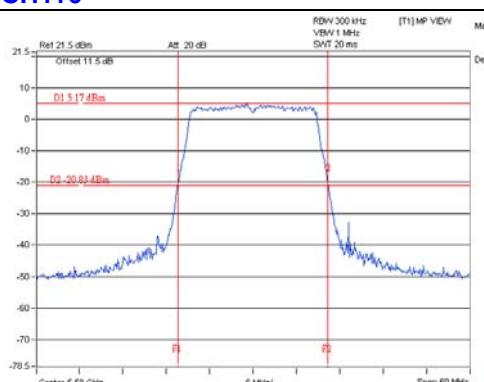
**CH64**



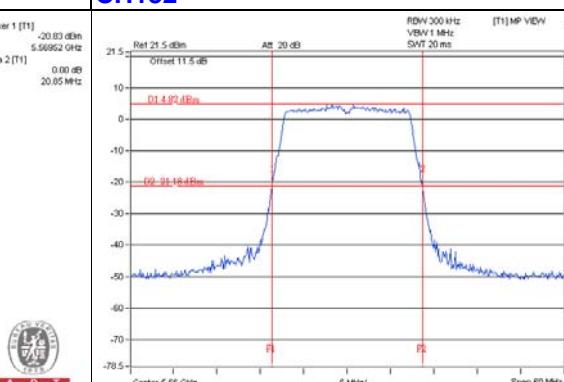
**CH100**



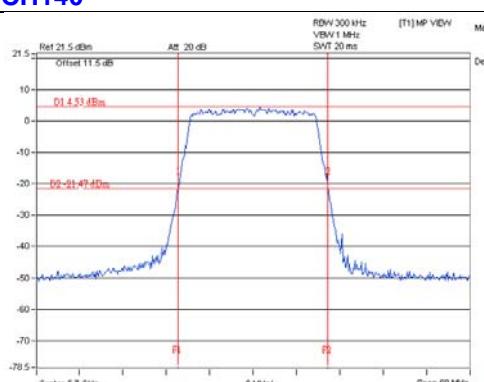
**CH116**



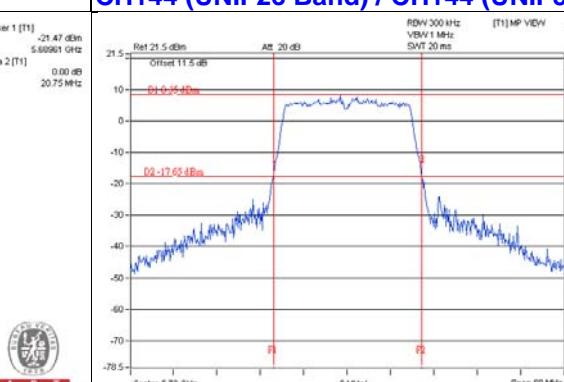
**CH132**



**CH140**



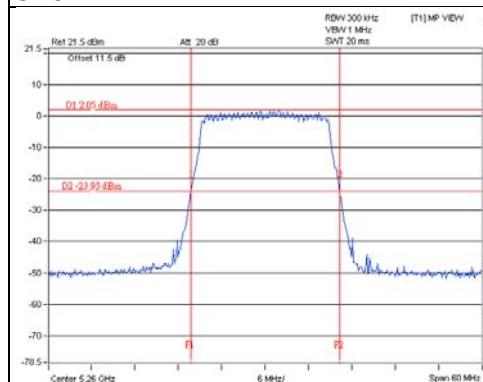
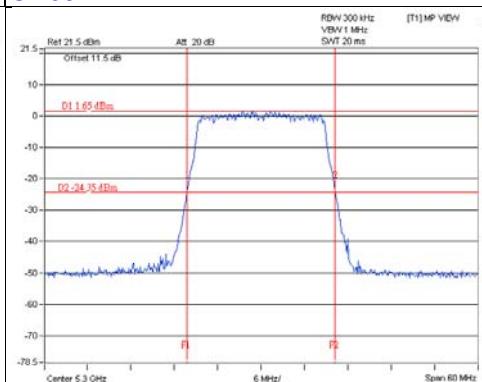
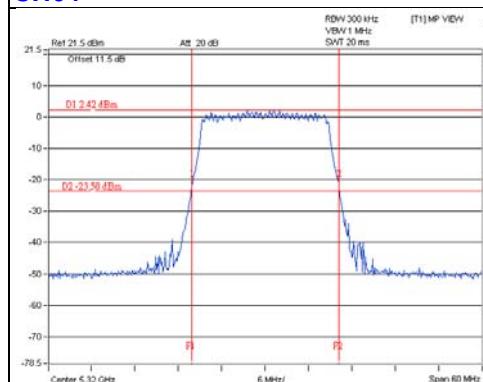
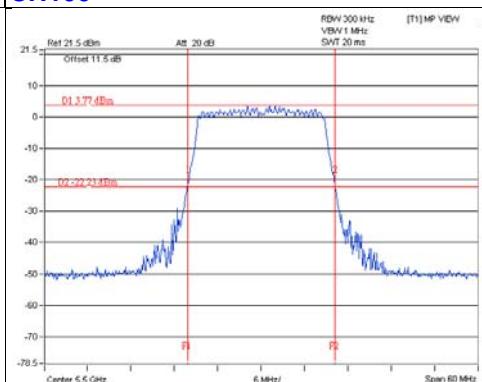
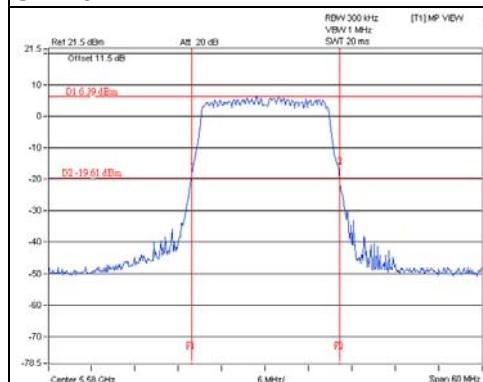
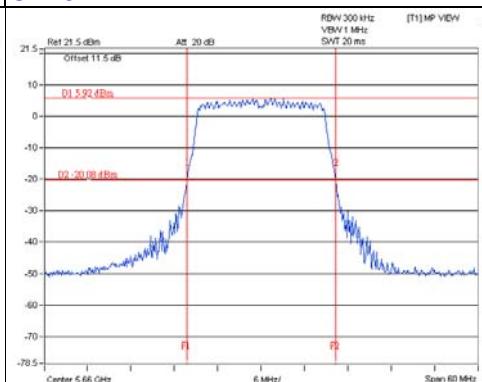
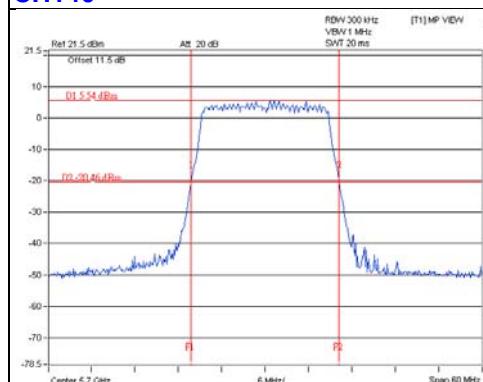
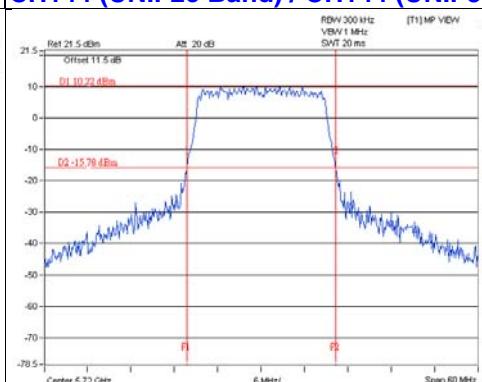
**CH144 (UNII-2c Band) / CH144 (UNII-3 Band)**



### NOTE:

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (1)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

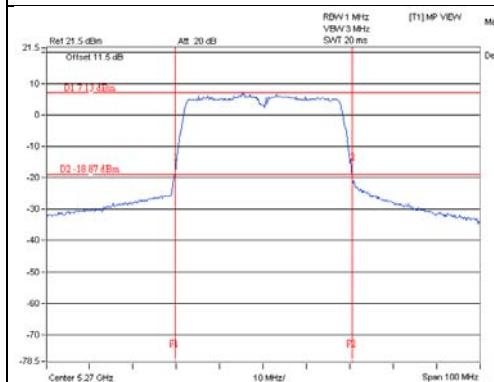
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

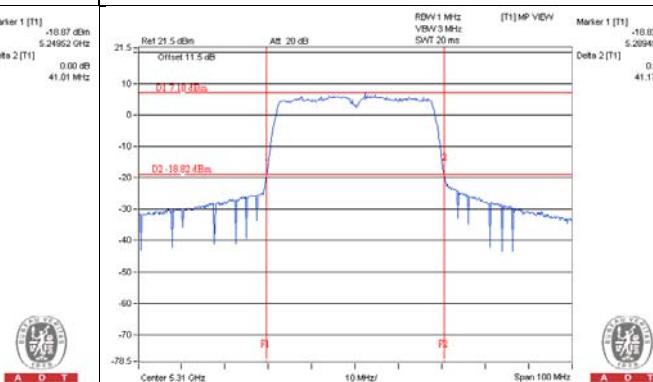
## 802.11ac (VHT40)

### For Chain (0)

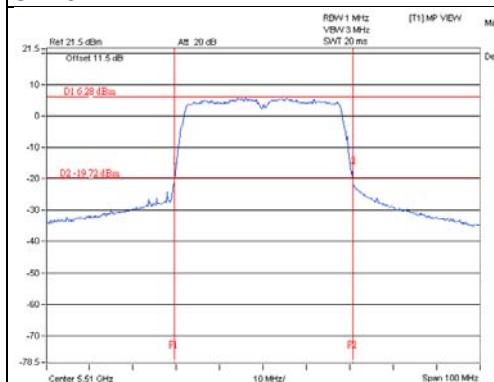
**CH54**



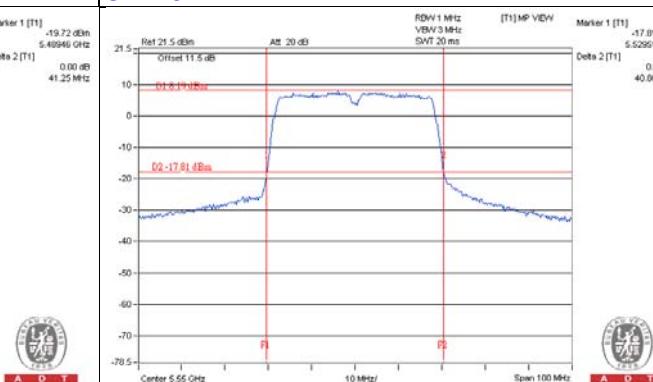
**CH62**



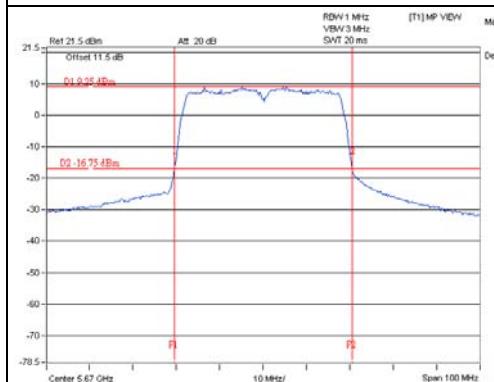
**CH102**



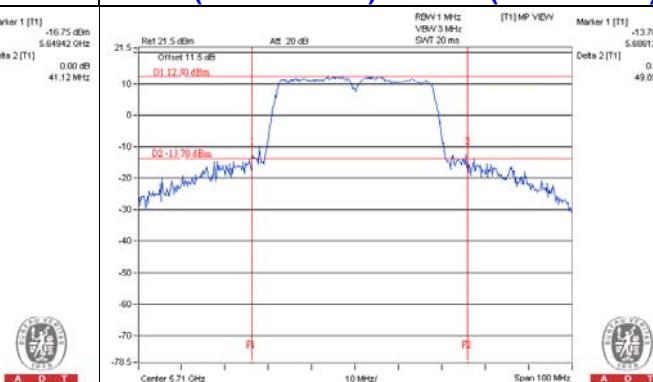
**CH110**



**CH134**



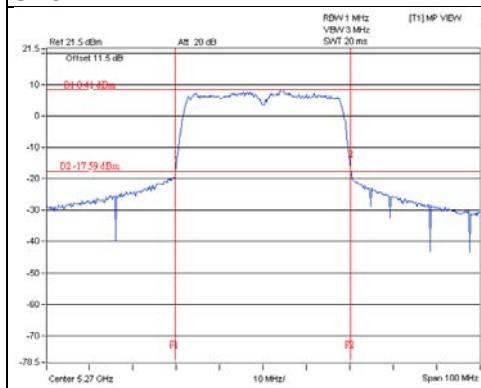
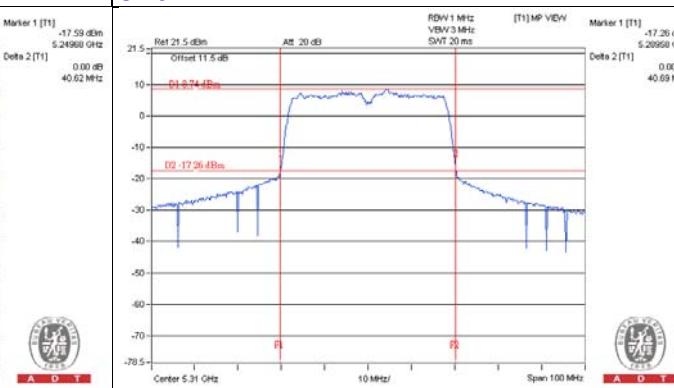
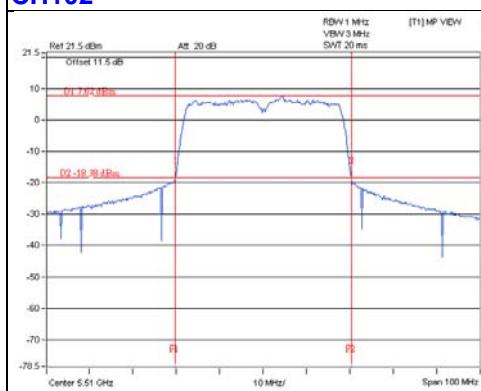
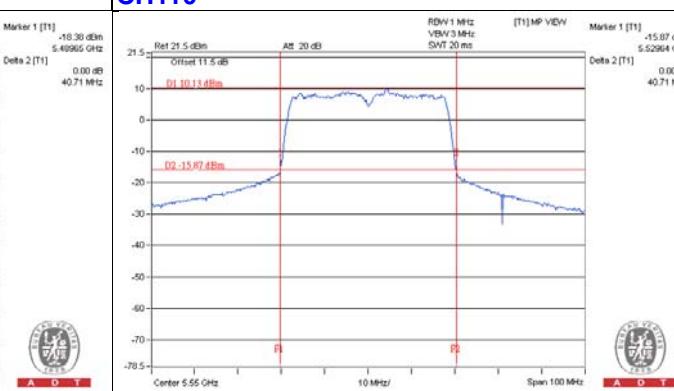
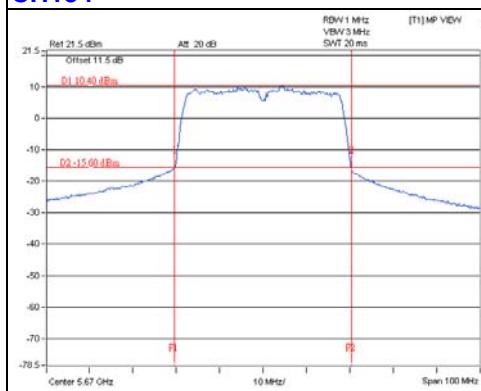
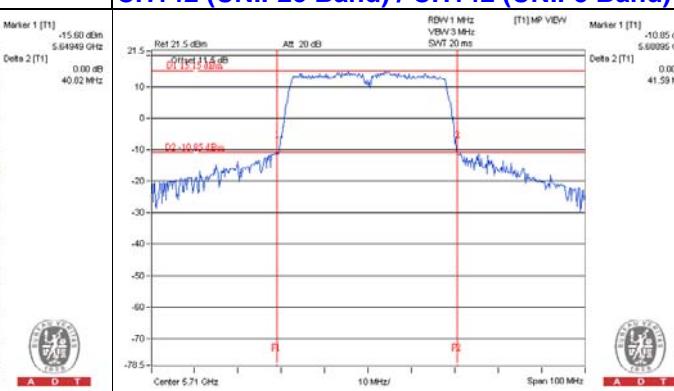
**CH142 (UNII-2c Band) / CH142 (UNII-3 Band)**



### NOTE:

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (1)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

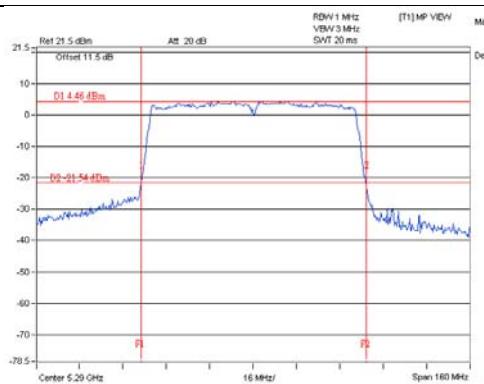
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

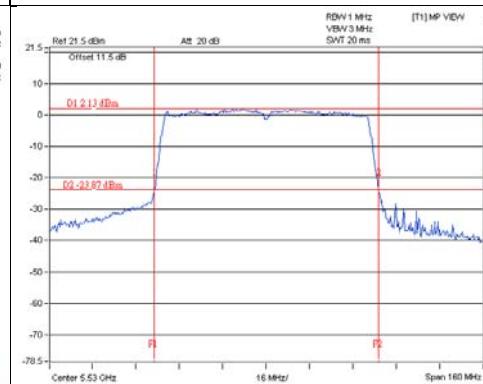
## 802.11ac (VHT80)

### For Chain (0)

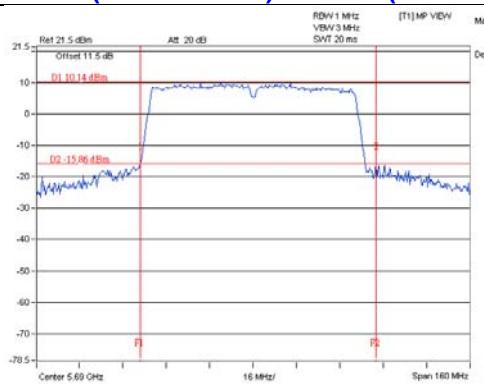
**CH58**



**CH106**



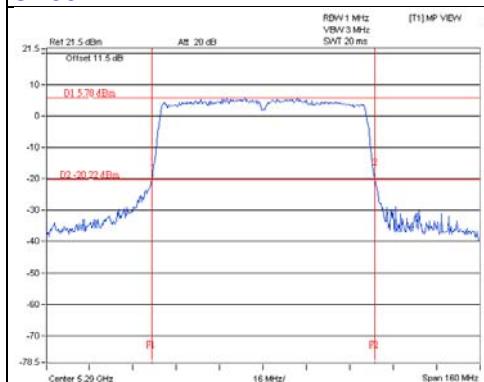
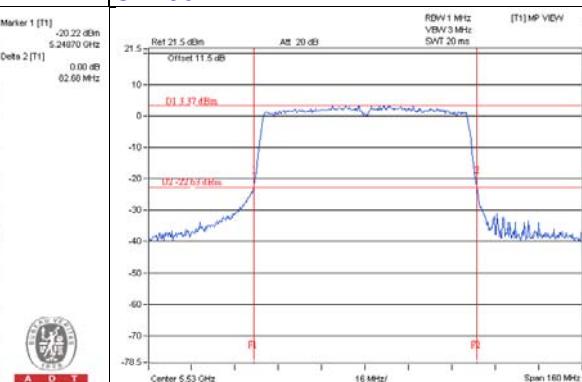
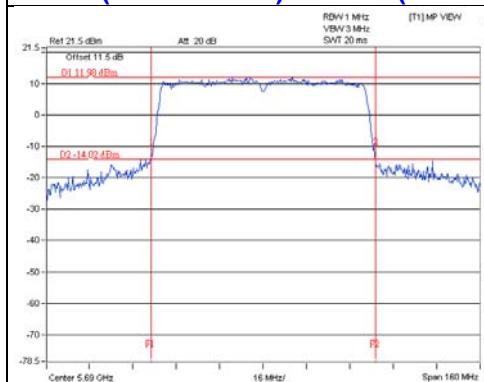
### CH138 (UNII-2c Band) / CH138 (UNII-3 Band)



### NOTE:

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (1)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**POWER OUTPUT:**

<b>Beamforming (MCS0 NSS=1) MODE</b>							
CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
<b>802.11ac (VHT20)</b>							
52	5260	8.56	10.02	17.224	12.36	22.13	PASS
60	5300	8.45	9.91	16.793	12.25	22.13	PASS
64	5320	8.61	10.14	17.589	12.45	22.13	PASS
100	5500	10.71	11.68	26.499	14.23	22.05	PASS
116	5580	14.41	14.51	55.855	17.47	22.05	PASS
140	5700	13.35	13.55	44.273	16.46	22.05	PASS
144 (UNII-2c Band)	5720	12.36	14.34	44.383	16.47	20.88	PASS
144 (UNII-3 Band)	5720	6.47	8.48	11.483	10.60	22.29	PASS
<b>802.11ac (VHT40)</b>							
54	5270	12.35	13.07	37.456	15.74	22.13	PASS
62	5310	12.15	13.09	36.776	15.66	22.13	PASS
102	5510	11.46	12.28	30.900	14.90	22.05	PASS
110	5550	13.65	14.53	51.553	17.12	22.05	PASS
134	5670	14.92	14.98	62.523	17.96	22.05	PASS
142 (UNII-2c Band)	5710	14.99	16.90	80.528	19.06	22.05	PASS
142 (UNII-3 Band)	5710	4.43	6.48	7.219	8.58	22.49	PASS

<b>802.11ac (VHT80)</b>							
58	5290	13.39	14.13	47.709	16.79	22.13	PASS
106	5530	11.17	11.88	28.509	14.55	22.05	PASS
138 (UNII-2c Band)	5690	15.66	17.30	93.702	19.72	22.05	PASS
138 (UNII-3 Band)	5690	1.16	3.29	3.56	5.51	23.18	PASS

For CH138: Total Power(dBm)= Average Power (dBm) + Duty Factor (0.15dB)

**NOTE:**

**5250~5350MHz:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.87\text{dBi} > 6\text{dBi}$  , so the power limit shall be reduced to "Determined Conducted Limit-(7.87-6)".

**5470~5725MHz (Except for UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.95\text{dBi} > 6\text{dBi}$  , so the power limit shall be reduced to "Determined Conducted Limit-(7.95-6)".

**5725~5825MHz (For UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.93\text{dBi} > 6\text{dBi}$  , so the power limit shall be reduced to "Determined Conducted Limit-(7.93-6)".

**26dB OCCUPIED BANDWIDTH:**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
<b>802.11ac (VHT20)</b>			
52	5260	20.81	20.61
60	5300	20.77	20.57
64	5320	20.78	20.55
100	5500	20.68	20.44
116	5580	20.85	20.56
140	5700	20.75	20.57
144 (UNII-2c Band)	5720	15.26	15.32
144 (UNII-3 Band)	5720	5.29	5.28
<b>802.11ac (VHT40)</b>			
54	5270	41.01	40.62
62	5310	41.17	40.69
102	5510	41.25	40.71
110	5550	40.86	40.71
134	5670	41.12	40.82
142 (UNII-2c Band)	5710	38.88	36.05
142 (UNII-3 Band)	5710	11.01	5.54
<b>802.11ac (VHT80)</b>			
58	5290	83.30	82.68
106	5530	83.00	82.55
138 (UNII-2c Band)	5690	76.90	76.56
138 (UNII-3 Band)	5690	10.48	6.48

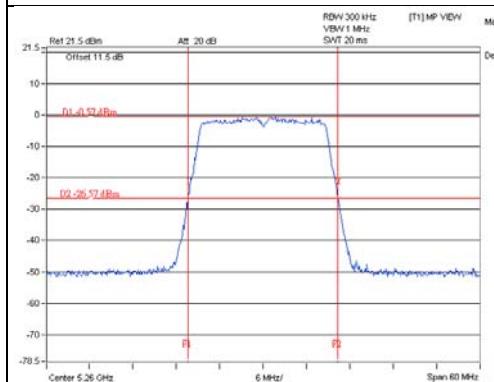
**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	
<b>802.11ac (VHT20)</b>				
52	5260	20.61	24.14	> 24
60	5300	20.57	24.13	> 24
64	5320	20.55	24.12	> 24
100	5500	20.44	24.1	> 24
116	5580	20.56	24.13	> 24
140	5700	20.57	24.13	> 24
144 (UNII-2c Band)	5720	15.26	22.83	< 24
144 (UNII-3 Band)	5720	5.28	24.22	< 30
<b>802.11ac (VHT40)</b>				
54	5270	40.62	27.08	> 24
62	5310	40.69	27.09	> 24
102	5510	40.71	27.09	> 24
110	5550	40.71	27.09	> 24
134	5670	40.82	27.1	> 24
142 (UNII-2c Band)	5710	36.05	26.56	> 24
142 (UNII-3 Band)	5710	5.53	24.42	< 30
<b>802.11ac (VHT80)</b>				
58	5290	82.68	30.17	> 24
106	5530	82.55	30.16	> 24
138 (UNII-2c Band)	5690	76.56	29.84	> 24
138 (UNII-3 Band)	5690	6.48	25.11	< 30

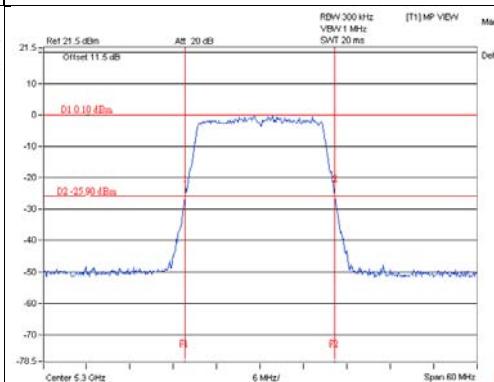
## 802.11ac (VHT20)

### For Chain (0)

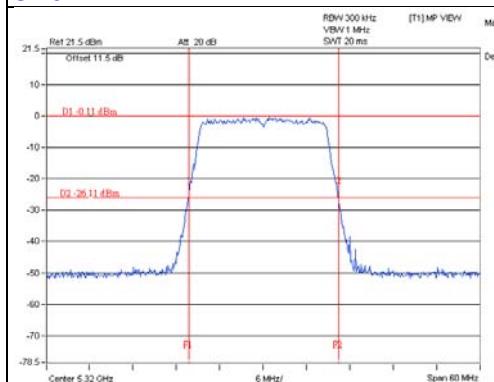
**CH52**



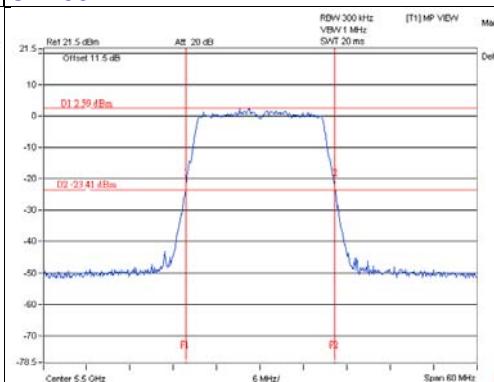
**CH60**



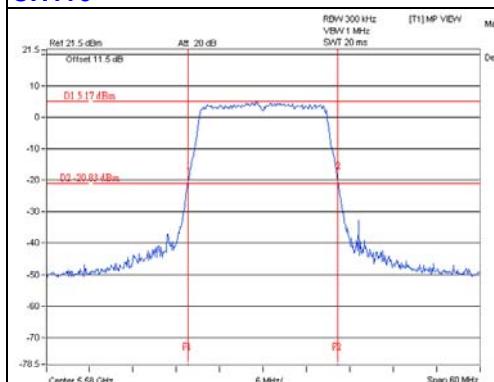
**CH64**



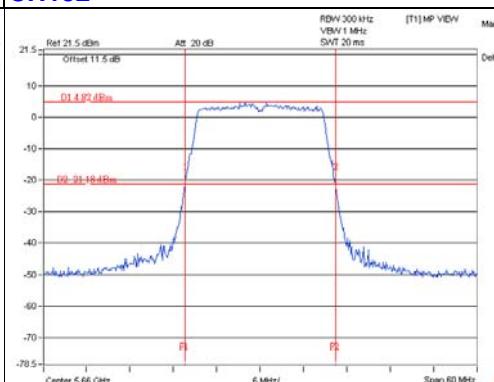
**CH100**



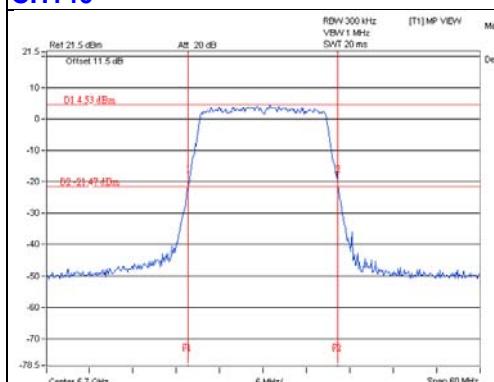
**CH116**



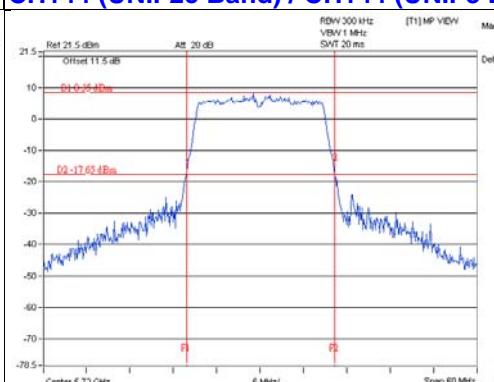
**CH132**



**CH140**



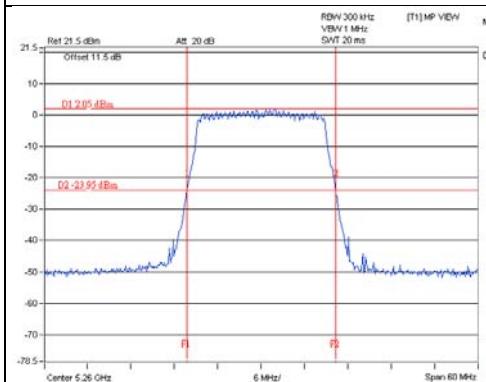
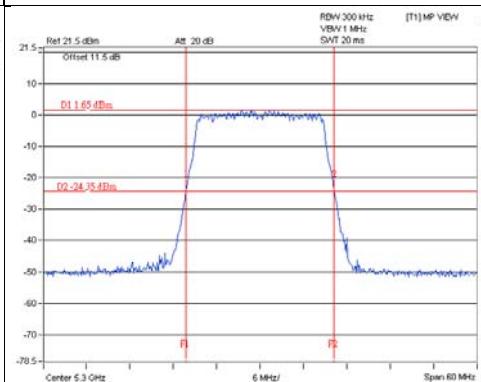
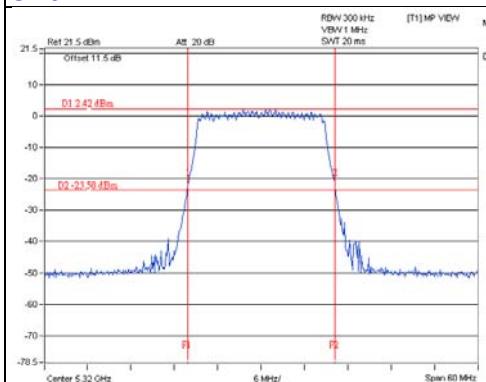
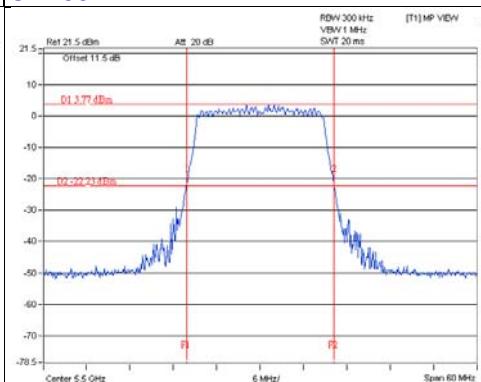
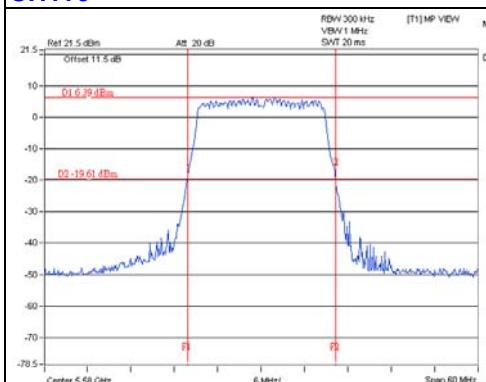
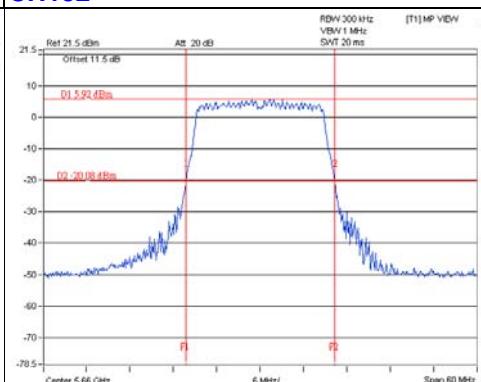
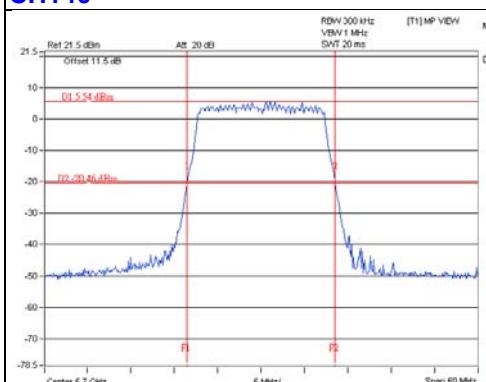
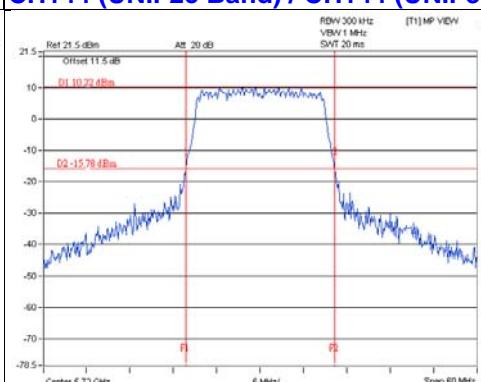
**CH144 (UNII-2c Band) / CH144 (UNII-3 Band)**



### NOTE:

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (1)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

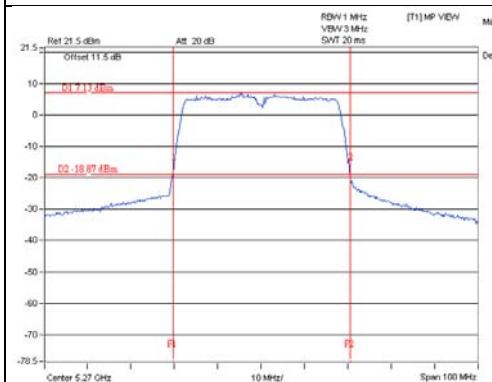
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

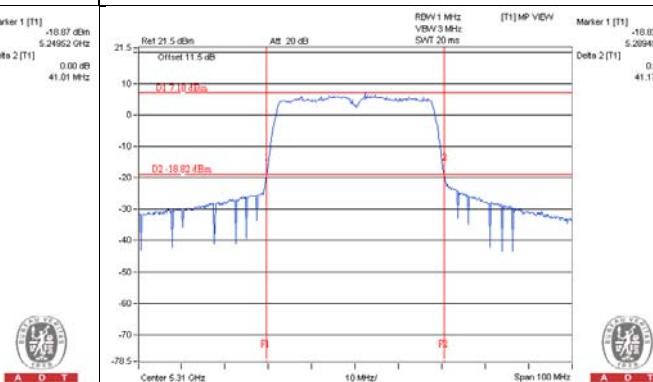
## 802.11ac (VHT40)

### For Chain (0)

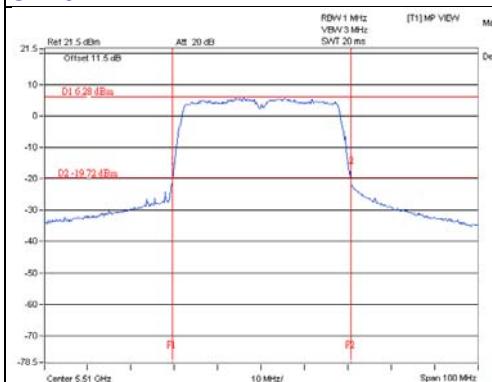
**CH54**



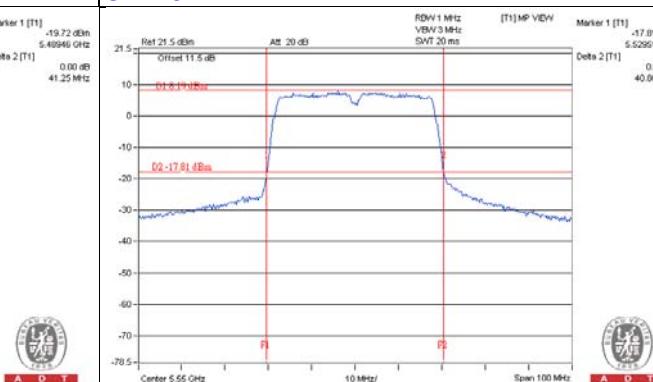
**CH62**



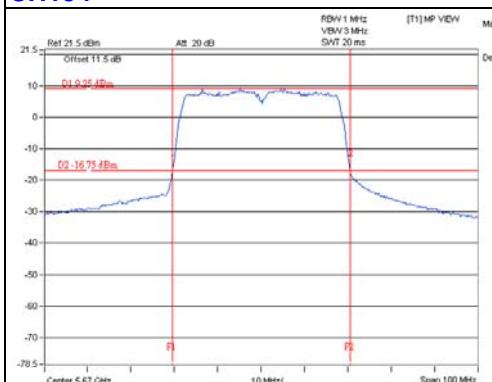
**CH102**



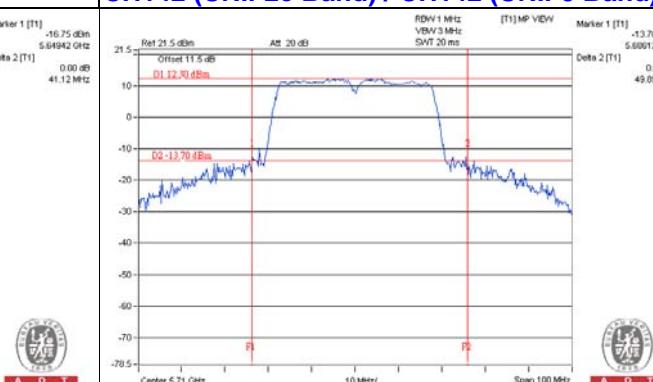
**CH110**



**CH134**



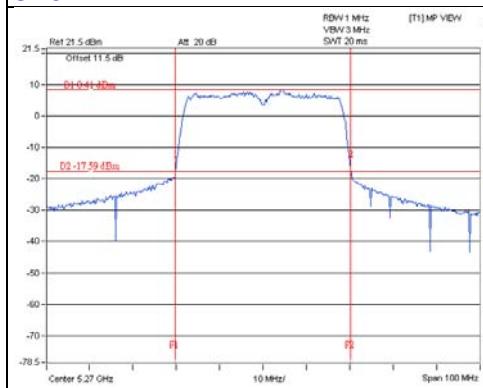
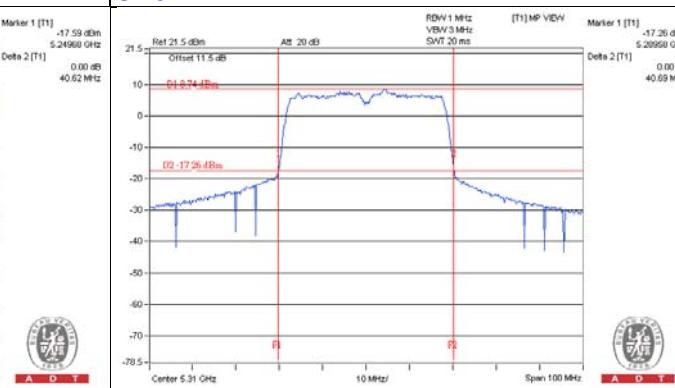
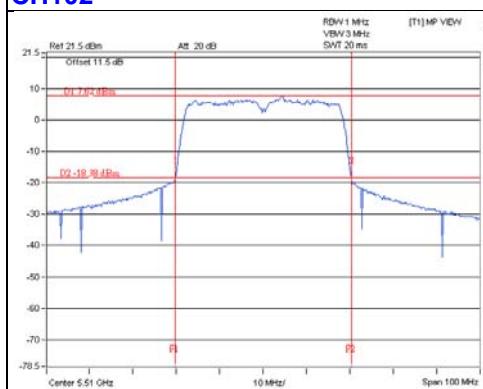
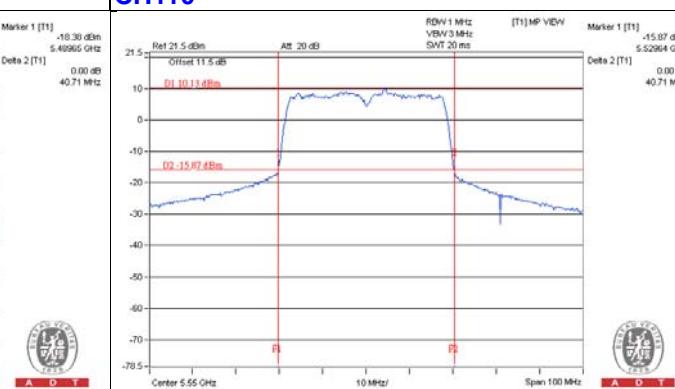
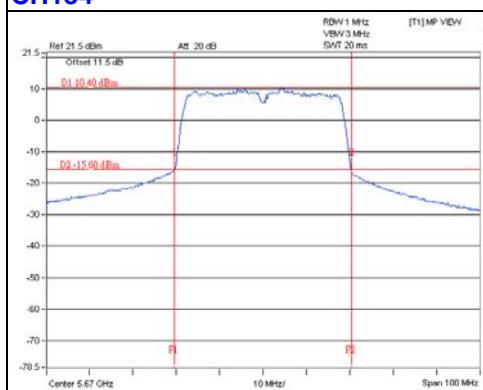
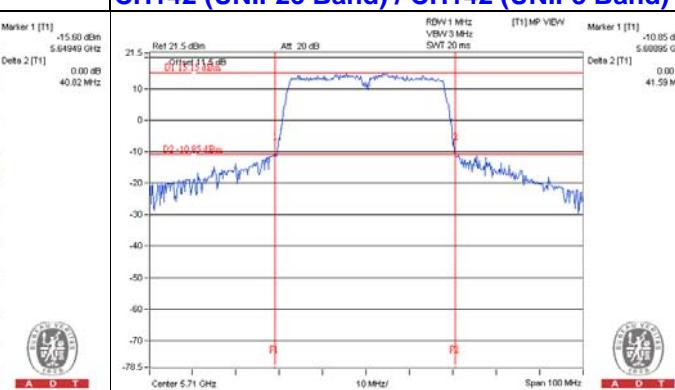
**CH142 (UNII-2c Band) / CH142 (UNII-3 Band)**



### NOTE:

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (1)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

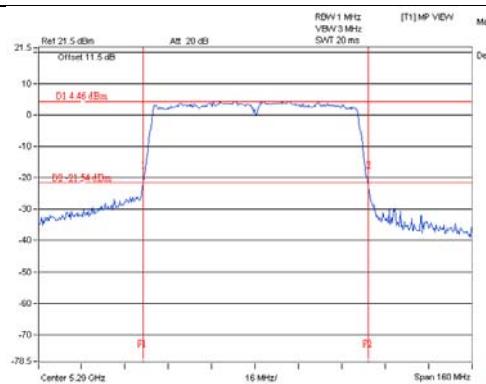
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

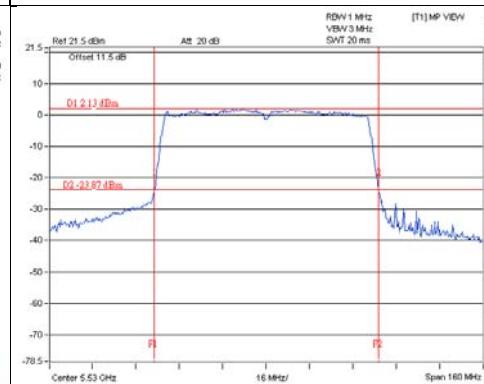
## 802.11ac (VHT80)

### For Chain (0)

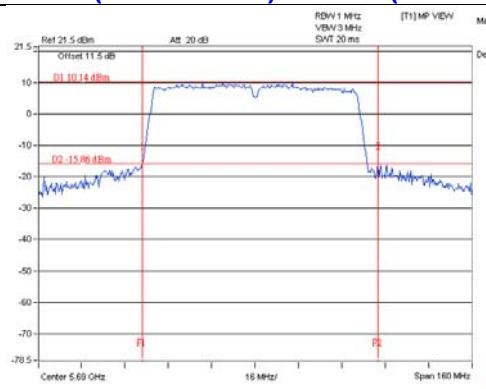
**CH58**



**CH106**



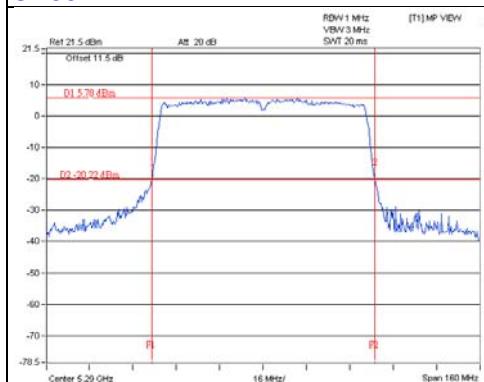
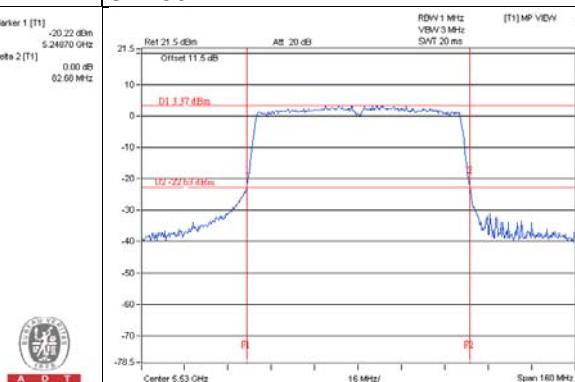
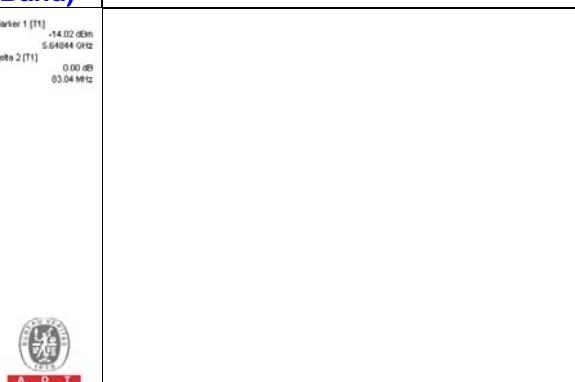
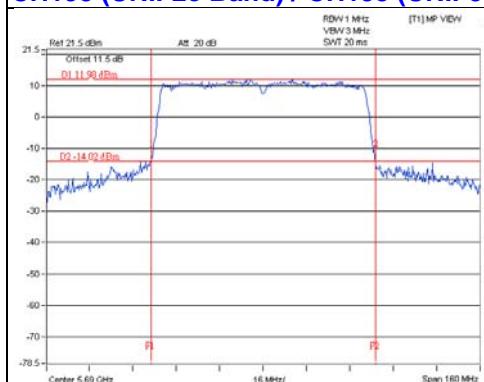
### CH138 (UNII-2c Band) / CH138 (UNII-3 Band)



### NOTE:

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (1)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**POWER OUTPUT:**

<b>STBC_MODE</b>							
<b>CHANNEL</b>	<b>FREQUENCY (MHz)</b>	<b>AVERAGE POWER (dBm)</b>		<b>TOTAL POWER (mW)</b>	<b>TOTAL POWER (dBm)</b>	<b>POWER LIMIT (dBm)</b>	<b>PASS / FAIL</b>
		<b>CHAIN 0</b>	<b>CHAIN 1</b>				
<b>802.11ac (VHT20)</b>							
52	5260	9.01	10.49	19.156	12.82	24	PASS
60	5300	8.97	9.50	16.802	12.25	24	PASS
64	5320	9.03	10.59	19.453	12.89	24	PASS
100	5500	11.17	12.21	29.726	14.73	24	PASS
116	5580	14.89	15.12	63.341	18.02	24	PASS
140	5700	13.97	14.03	50.239	17.01	24	PASS
144 (UNII-2c Band)	5720	12.36	14.34	44.383	16.47	22.83	PASS
144 (UNII-3 Band)	5720	6.47	8.48	11.483	10.60	24.22	PASS
<b>802.11ac (VHT40)</b>							
54	5270	12.81	13.51	41.538	16.18	24	PASS
62	5310	12.15	13.09	36.776	15.66	24	PASS
102	5510	11.99	12.72	34.519	15.38	24	PASS
110	5550	14.09	15.01	57.341	17.58	24	PASS
134	5670	14.92	14.98	62.523	17.96	24	PASS
142 (UNII-2c Band)	5710	15.66	17.52	93.307	19.70	24	PASS
142 (UNII-3 Band)	5710	5.01	7.14	8.346	9.21	25.38	PASS
<b>802.11ac (VHT80)</b>							
58	5290	15.01	15.79	69.627	18.43	24	PASS
106	5530	11.17	11.88	28.509	14.55	24	PASS
138 (UNII-2c Band)	5690	15.66	17.30	93.702	19.72	24	PASS
138 (UNII-3 Band)	5690	1.16	3.29	3.56	5.51	25.11	PASS
For CH138: Total Power(dBm)= Average Power (dBm) + Duty Factor (0.15dB)							

**26dB OCCUPIED BANDWIDTH:**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
<b>802.11ac (VHT20)</b>			
52	5260	20.82	20.52
60	5300	20.88	20.62
64	5320	20.62	20.55
100	5500	20.82	20.53
116	5580	20.71	20.58
140	5700	20.86	20.52
144 (UNII-2c Band)	5720	15.26	15.32
144 (UNII-3 Band)	5720	5.29	5.28
<b>802.11ac (VHT40)</b>			
54	5270	41.03	40.64
62	5310	41.17	40.69
102	5510	41.16	40.71
110	5550	41.18	40.83
134	5670	41.12	40.82
142 (UNII-2c Band)	5710	43.85	44.41
142 (UNII-3 Band)	5710	14.22	6.90
<b>802.11ac (VHT80)</b>			
58	5290	83.05	82.59
106	5530	83.00	82.55
138 (UNII-2c Band)	5690	76.90	76.56
138 (UNII-3 Band)	5690	10.48	6.48

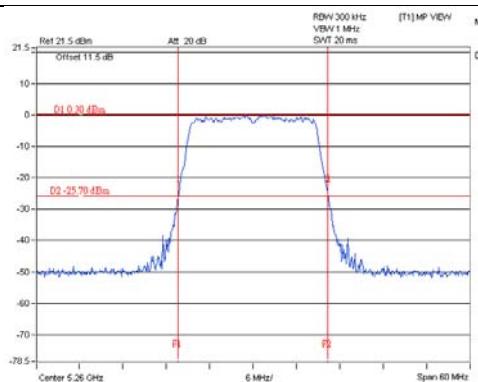
**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	
<b>802.11ac (VHT20)</b>				
52	5260	20.52	24.12	> 24
60	5300	20.62	24.14	> 24
64	5320	20.55	24.12	> 24
100	5500	20.53	24.12	> 24
116	5580	20.58	24.13	> 24
140	5700	20.52	24.12	> 24
144 (UNII-2c Band)	5720	15.26	22.83	< 24
144 (UNII-3 Band)	5720	5.28	24.22	< 30
<b>802.11ac (VHT40)</b>				
54	5270	40.64	27.08	> 24
62	5310	40.69	27.09	> 24
102	5510	40.71	27.09	> 24
110	5550	40.83	27.1	> 24
134	5670	40.82	27.1	> 24
142 (UNII-2c Band)	5710	43.85	27.41	> 24
142 (UNII-3 Band)	5710	6.90	25.38	< 30
<b>802.11ac (VHT80)</b>				
58	5290	82.59	30.16	> 24
106	5530	82.55	30.16	> 24
138 (UNII-2c Band)	5690	76.56	29.84	> 24
138 (UNII-3 Band)	5690	6.48	25.11	< 30

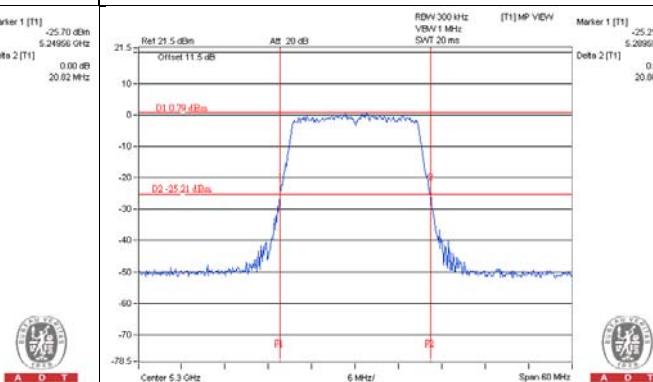
## 802.11ac (VHT20)

### For Chain (0)

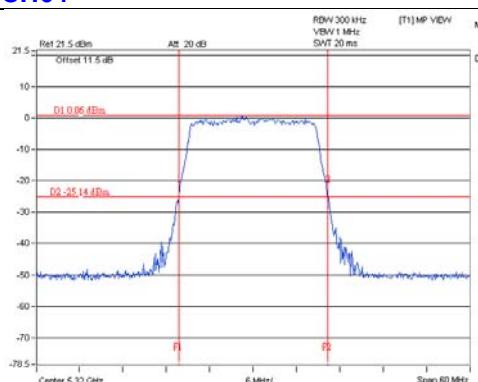
**CH52**



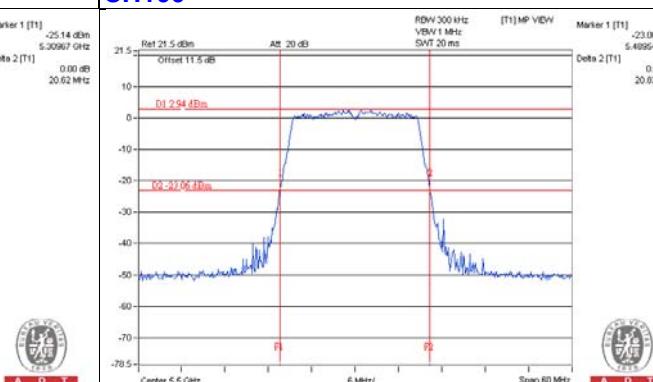
**CH60**



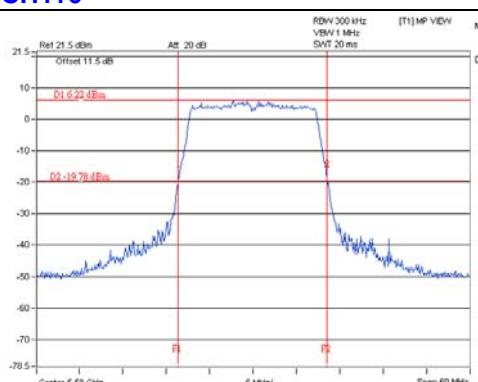
**CH64**



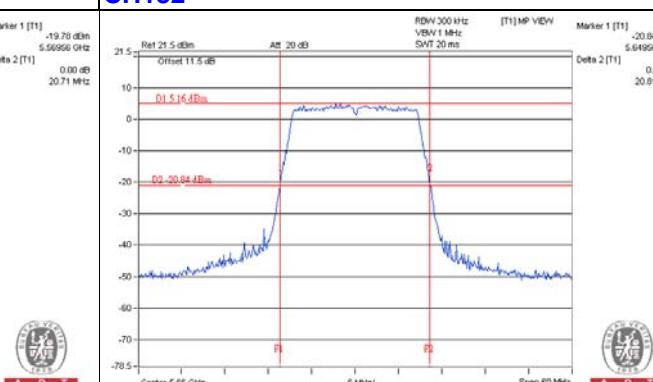
**CH100**



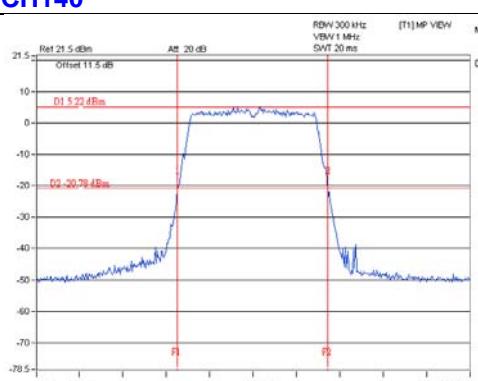
**CH116**



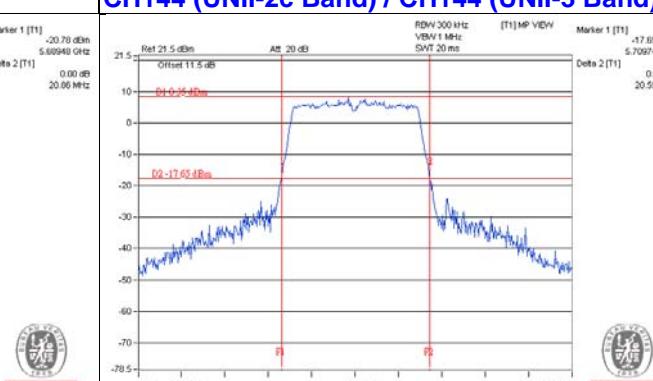
**CH132**



**CH140**



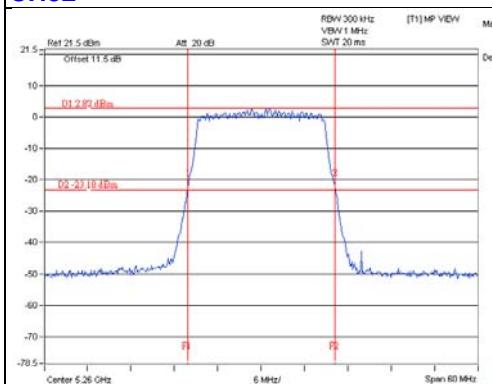
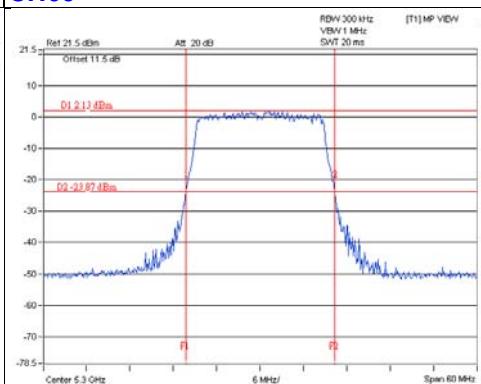
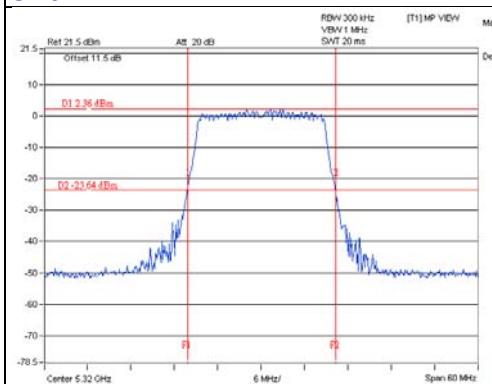
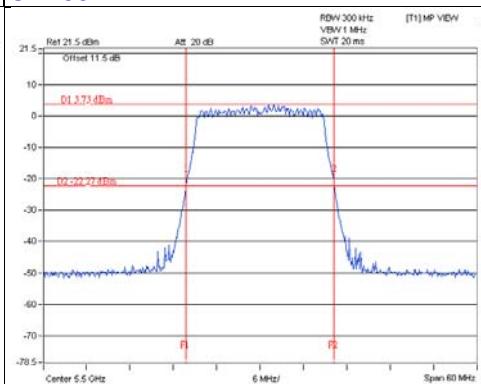
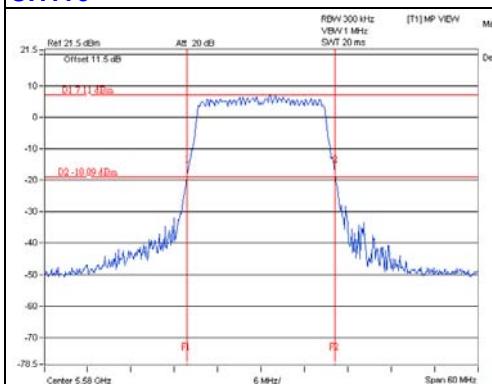
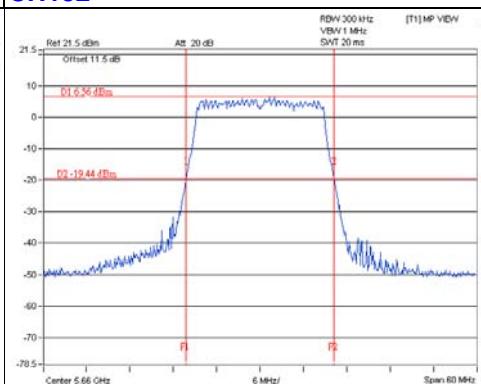
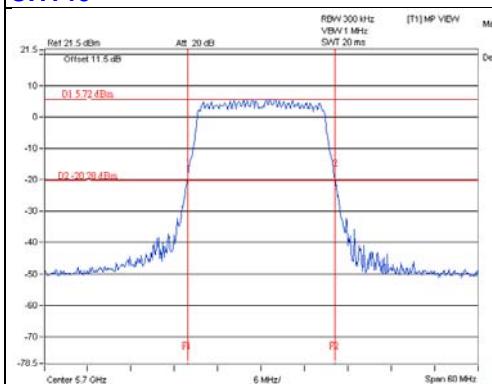
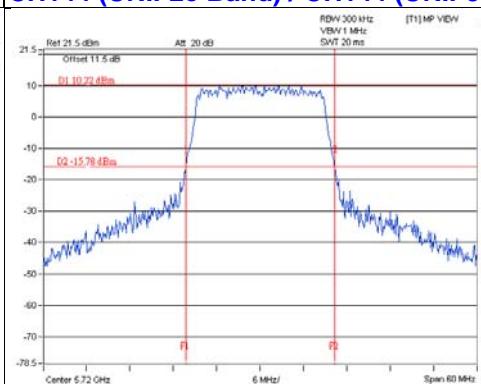
**CH144 (UNII-2c Band) / CH144 (UNII-3 Band)**



### NOTE:

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (1)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)**
**NOTE:**

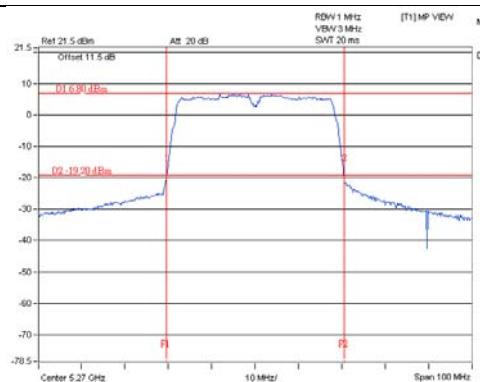
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

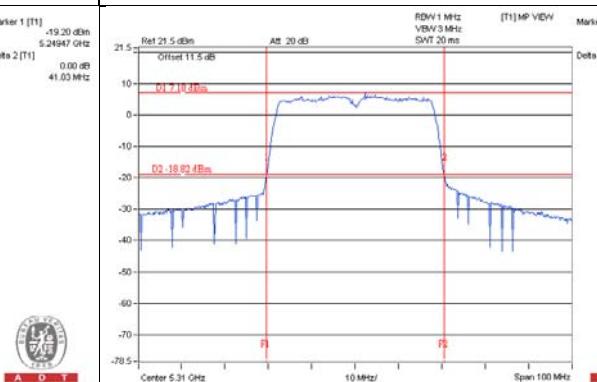
## 802.11ac (VHT40)

### For Chain (0)

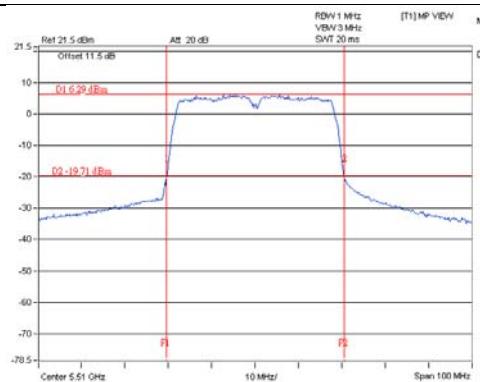
**CH54**



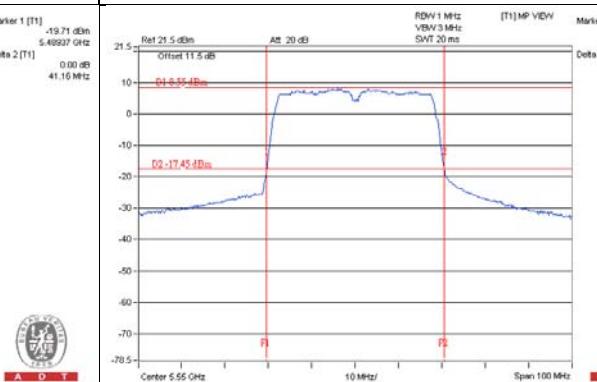
**CH62**



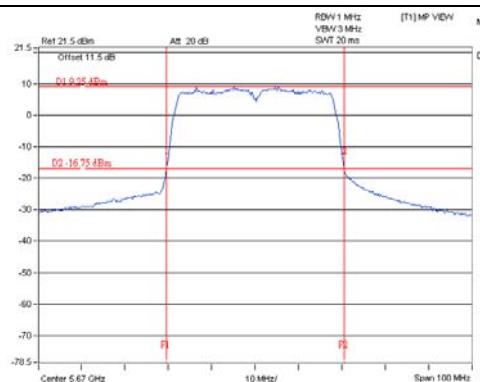
**CH102**



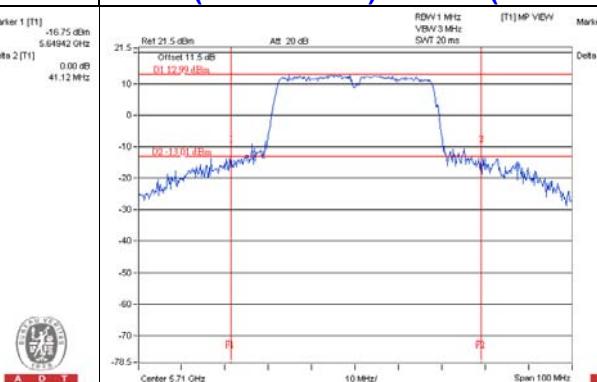
**CH110**



**CH134**



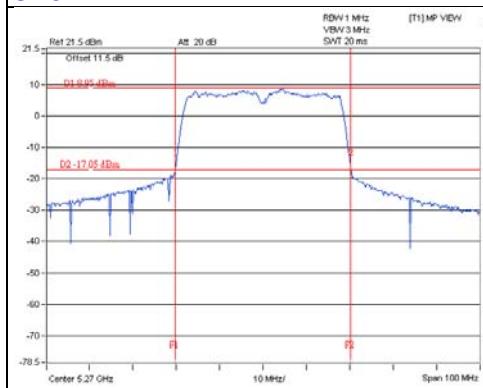
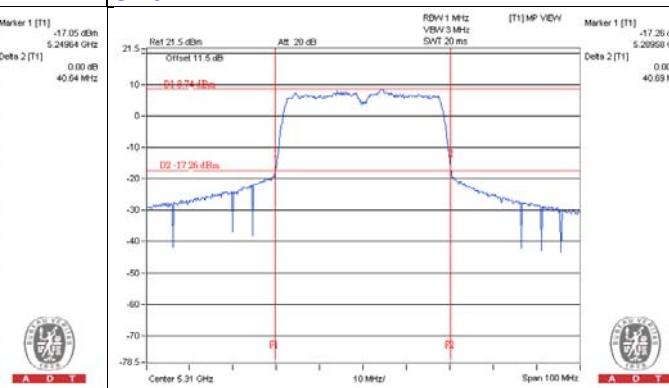
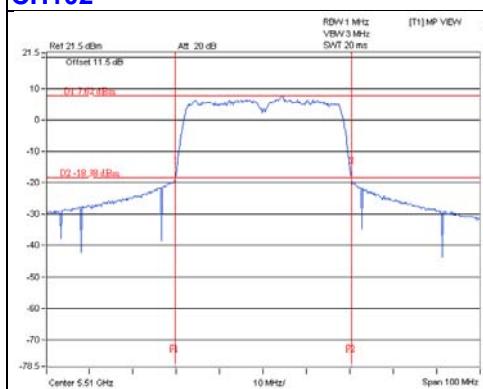
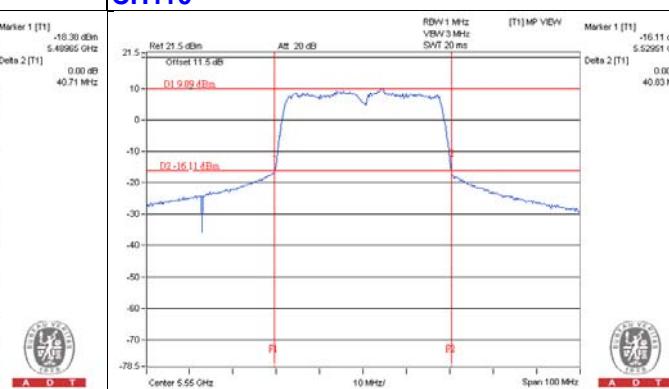
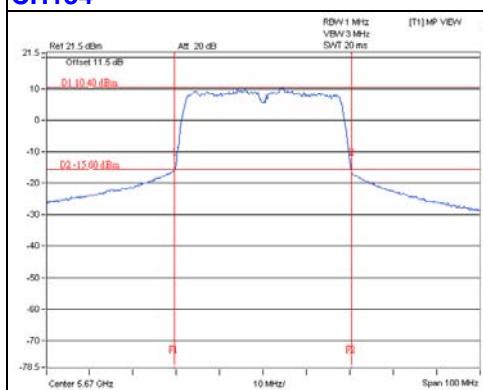
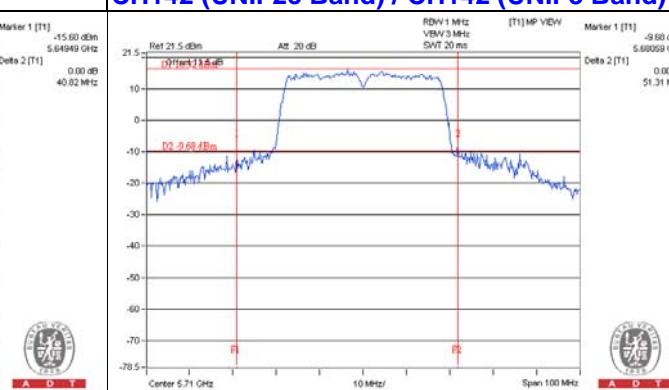
**CH142 (UNII-2c Band) / CH142 (UNII-3 Band)**



### NOTE:

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (1)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

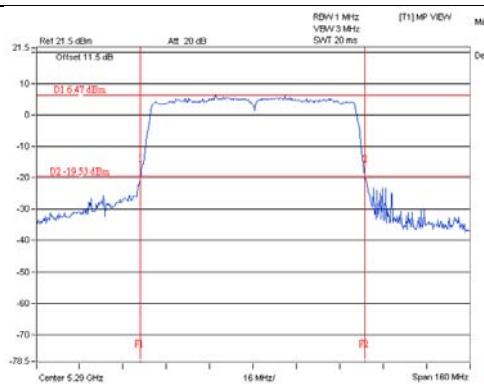
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

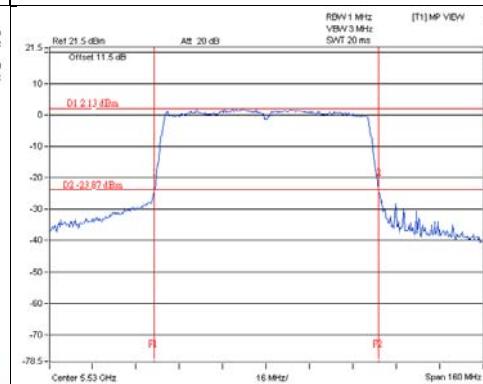
## 802.11ac (VHT80)

### For Chain (0)

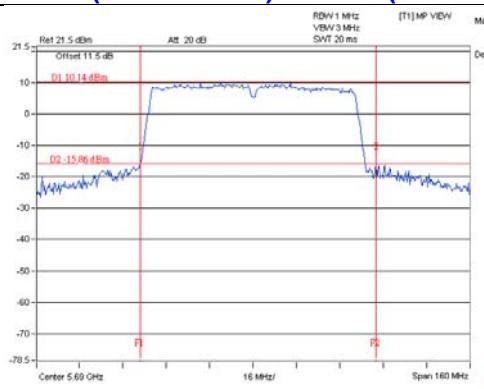
**CH58**



**CH106**



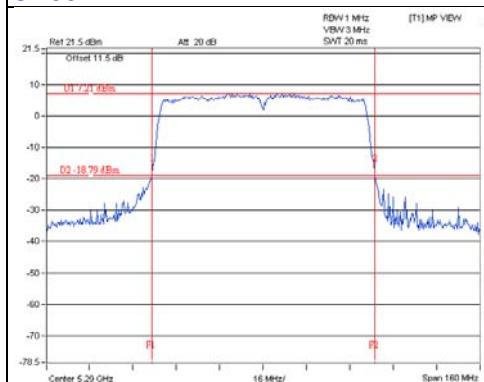
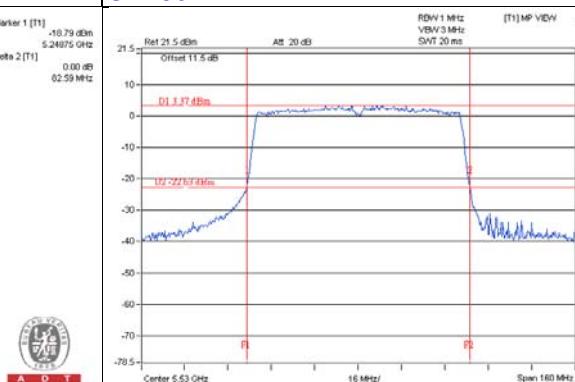
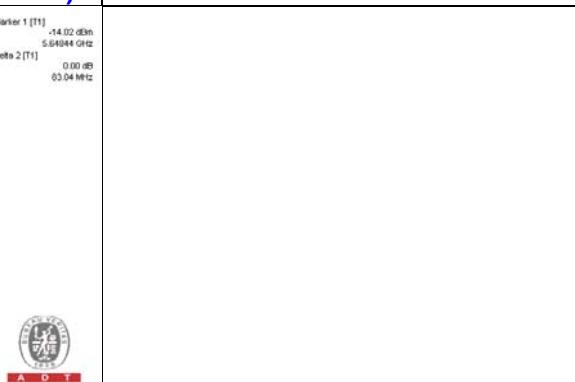
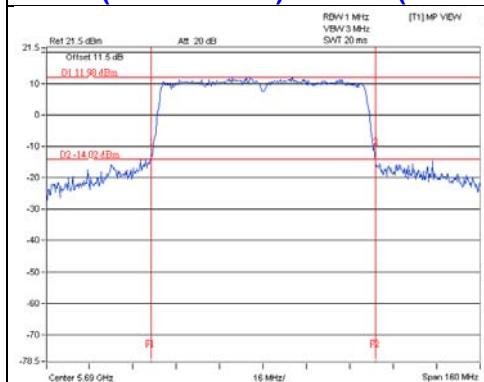
### CH138 (UNII-2c Band) / CH138 (UNII-3 Band)



### NOTE:

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (1)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

#### 4.3.9 Test Result (Mode 3)

##### POWER OUTPUT:

<b>CDD, SDM &amp; Beamforming (MCS0 NSS=3) MODE</b>								
CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
<b>802.11ac (VHT20)</b>								
52	5260	6.32	8.13	4.41	13.547	11.32	24	PASS
60	5300	5.99	8.17	3.89	12.982	11.13	24	PASS
64	5320	5.98	7.87	3.69	12.426	10.94	24	PASS
100	5500	7.41	7.93	7.33	17.125	12.34	24	PASS
116	5580	11.60	12.10	11.49	44.765	16.51	24	PASS
140	5700	9.56	10.02	9.03	27.080	14.33	24	PASS
144 (UNII-2c Band)	5720	13.03	14.07	13.31	67.047	18.26	22.84	PASS
144 (UNII-3 Band)	5720	7.12	7.97	7.86	17.527	12.44	24.20	PASS
<b>802.11ac (VHT40)</b>								
54	5270	10.26	11.39	9.14	32.593	15.13	24	PASS
62	5310	9.01	10.12	8.79	25.810	14.12	24	PASS
102	5510	10.15	10.63	7.62	27.693	14.42	24	PASS
110	5550	11.71	12.42	11.60	46.737	16.70	24	PASS
134	5670	10.62	11.06	10.15	34.650	15.40	24	PASS
142 (UNII-2c Band)	5710	11.48	12.97	12.80	52.930	17.24	24	PASS
142 (UNII-3 Band)	5710	1.10	2.56	2.65	4.932	6.93	24.36	PASS
<b>802.11ac (VHT80)</b>								
58	5290	11.01	12.17	10.12	39.38	15.95	24	PASS
106	5530	8.89	10.39	9.25	27.099	14.33	24	PASS
138 (UNII-2c Band)	5690	11.36	12.55	12.77	52.37	17.19	24	PASS
138 (UNII-3 Band)	5690	-2.93	-1.42	-1.05	2.0859	3.19	25.15	PASS
For CH138: Total Power(dBm)= Average Power (dBm) + Duty Factor (0.15dB)								

**26dB OCCUPIED BANDWIDTH:**

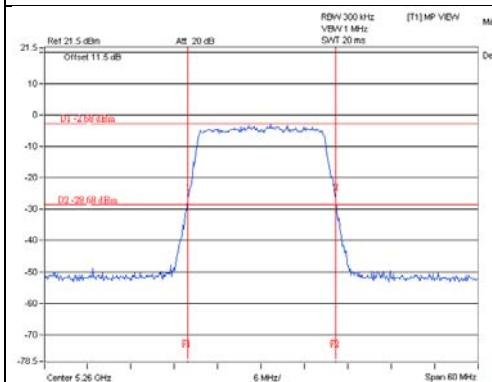
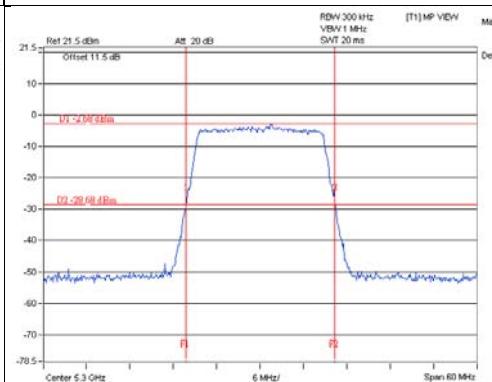
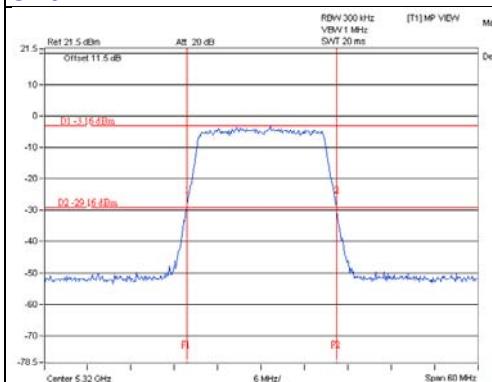
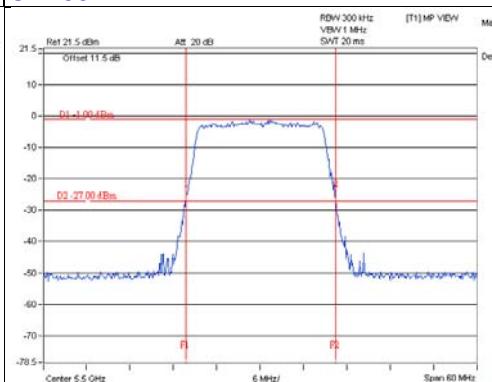
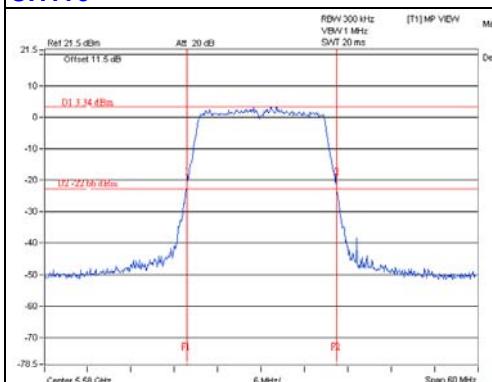
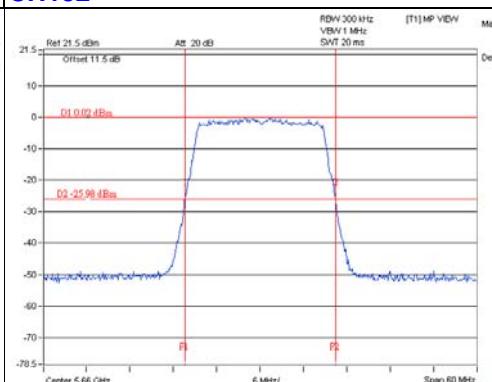
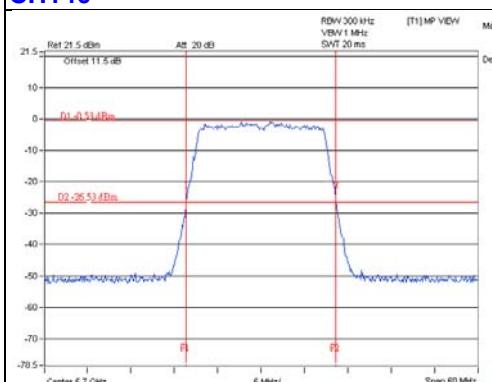
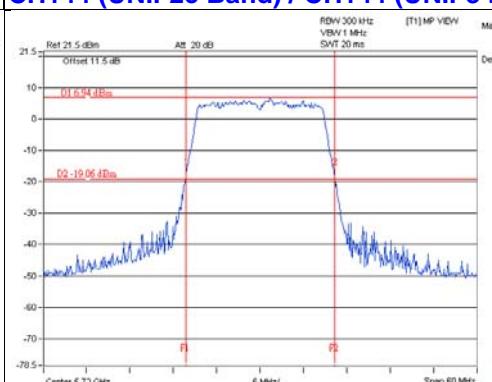
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		
		CHAIN 0	CHAIN 1	CHAIN 2
<b>802.11ac (VHT20)</b>				
52	5260	20.65	20.52	20.52
60	5300	20.66	20.38	20.55
64	5320	20.74	20.48	20.59
100	5500	20.85	20.56	20.58
116	5580	20.79	20.54	20.52
140	5700	20.79	20.56	20.72
144 (UNII-2c Band)	5720	15.36	15.28	15.28
144 (UNII-3 Band)	5720	5.35	5.25	5.33
<b>802.11ac (VHT40)</b>				
54	5270	41.60	40.91	41.09
62	5310	41.63	41.26	40.84
102	5510	41.56	41.55	40.67
110	5550	41.57	41.26	40.95
134	5670	41.61	41.42	41.77
142 (UNII-2c Band)	5710	35.74	35.62	35.57
142 (UNII-3 Band)	5710	5.66	6.03	5.45
<b>802.11ac (VHT80)</b>				
58	5290	82.93	82.76	82.28
106	5530	82.87	83.75	82.34
138 (UNII-2c Band)	5690	76.68	78.20	76.24
138 (UNII-3 Band)	5690	6.54	6.71	6.61

**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 11dBm + 10logB < UNII Band 2~3>					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)		
<b>802.11ac (VHT20)</b>					
52	5260	20.52	24.12	>	24
60	5300	20.38	24.09	>	24
64	5320	20.48	24.11	>	24
100	5500	20.56	24.13	>	24
116	5580	20.52	24.12	>	24
140	5700	20.56	24.13	>	24
144 (UNII-2c Band)	5720	15.28	22.84	<	24
144 (UNII-3 Band)	5720	5.25	24.2	<	30
<b>802.11ac (VHT40)</b>					
54	5270	40.91	27.11	>	24
62	5310	40.84	27.11	>	24
102	5510	40.67	27.09	>	24
110	5550	40.95	27.12	>	24
134	5670	41.42	27.17	>	24
142 (UNII-2c Band)	5710	35.57	26.5	>	24
142 (UNII-3 Band)	5710	5.45	24.36	<	30
<b>802.11ac (VHT80)</b>					
58	5290	82.28	30.15	>	24
106	5530	82.34	30.15	>	24
138 (UNII-2c Band)	5690	76.24	29.82	>	24
138 (UNII-3 Band)	5690	6.54	25.15	<	30

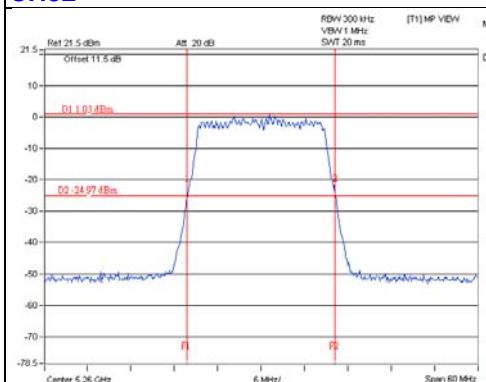
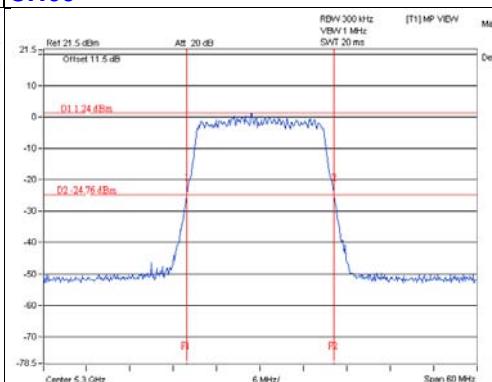
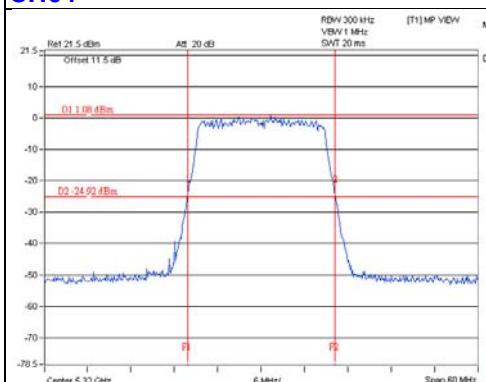
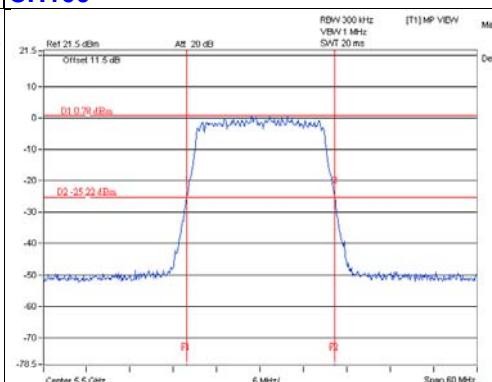
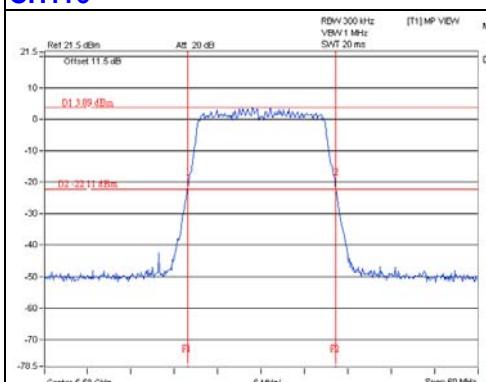
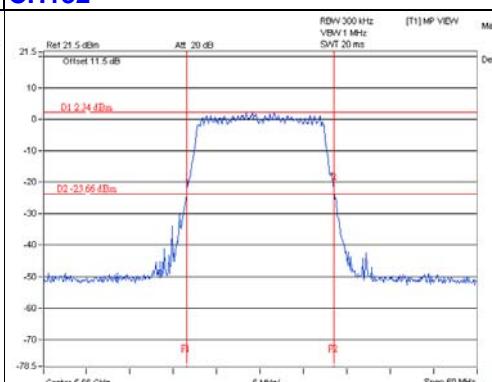
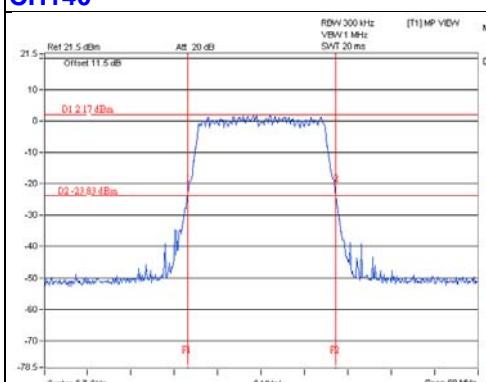
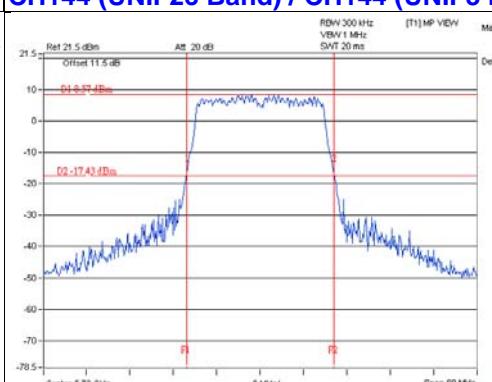
## 802.11ac (VHT20)

### For Chain (0)

**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)**
**NOTE:**

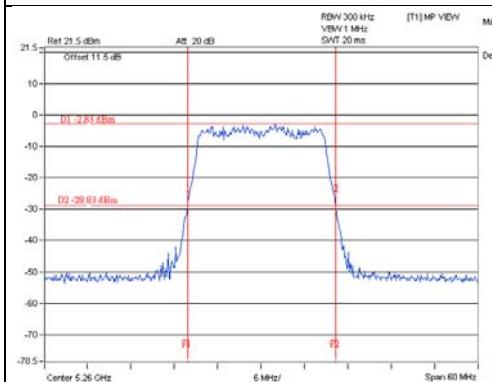
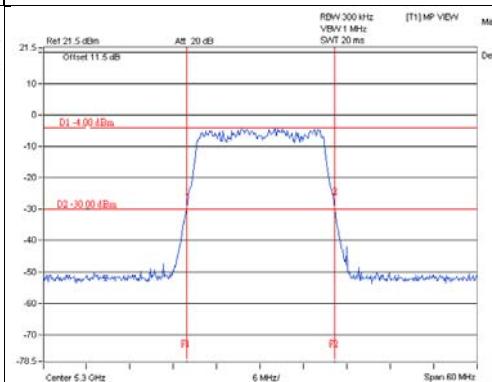
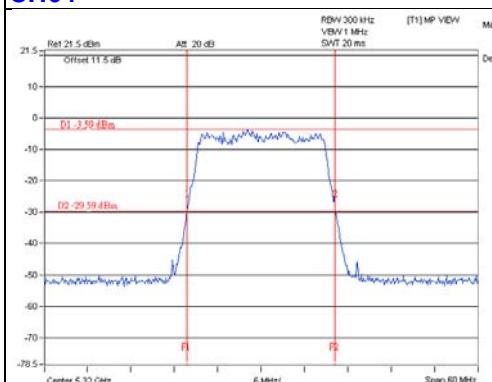
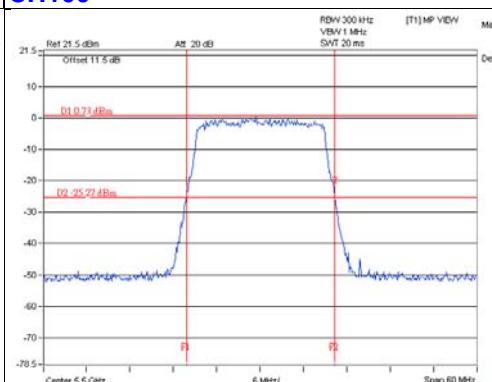
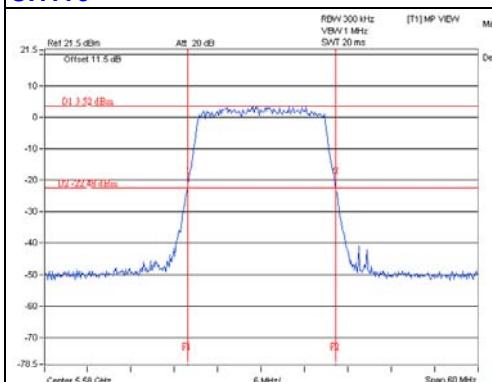
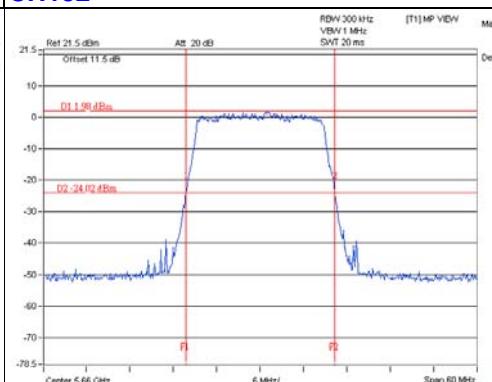
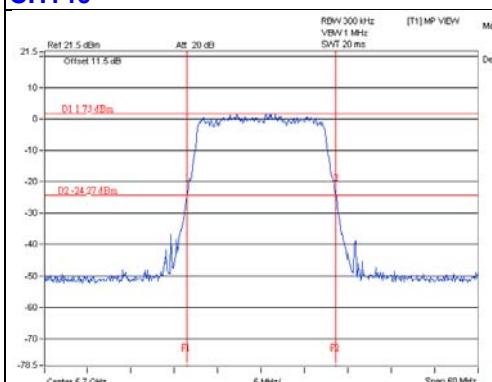
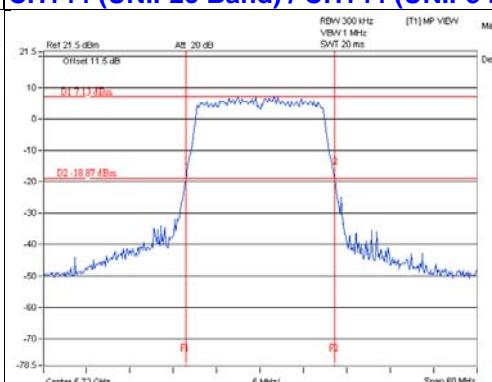
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (1)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (2)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

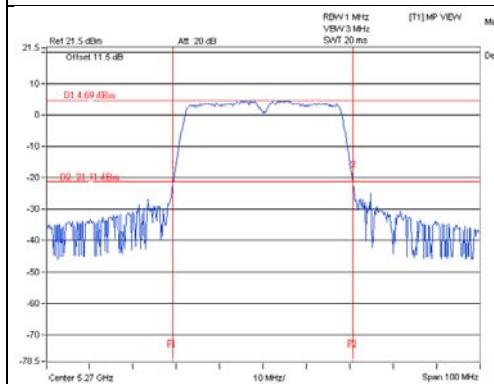
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

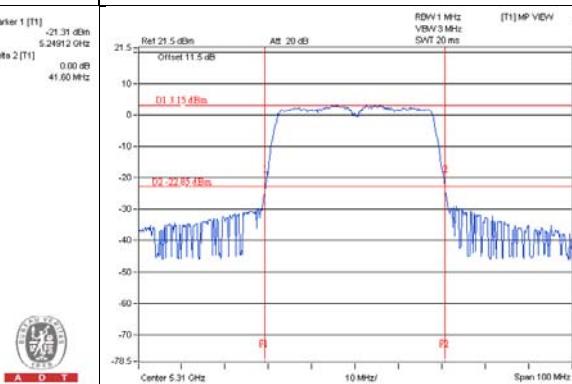
## 802.11ac (VHT40)

### For Chain (0)

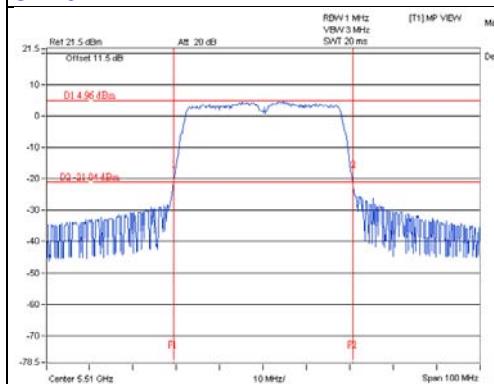
**CH54**



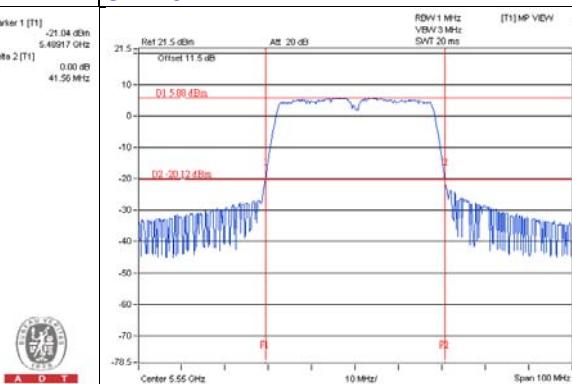
**CH62**



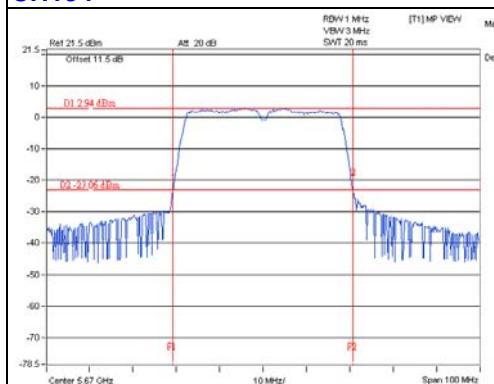
**CH102**



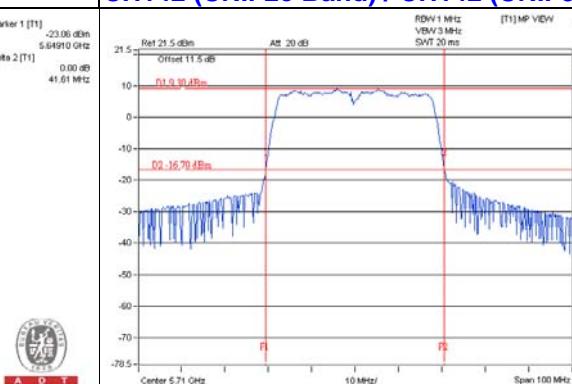
**CH110**



**CH134**



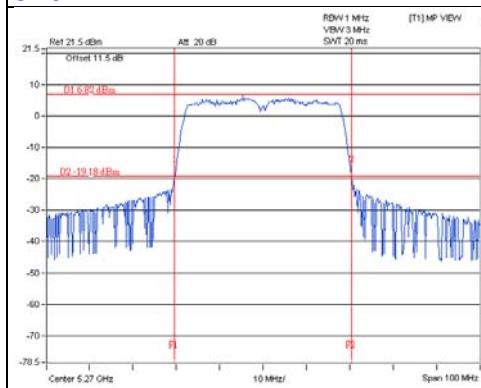
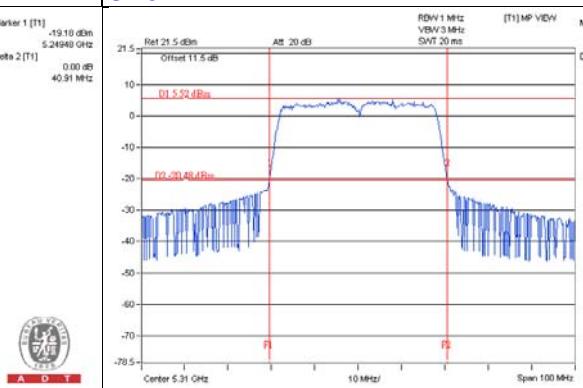
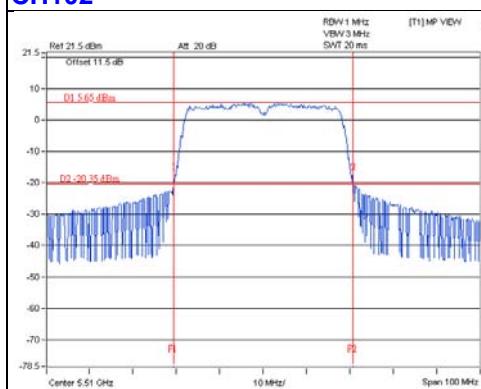
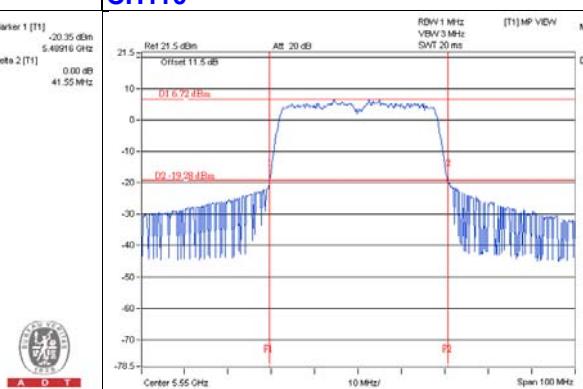
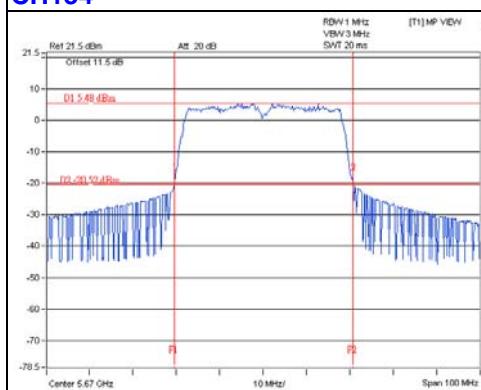
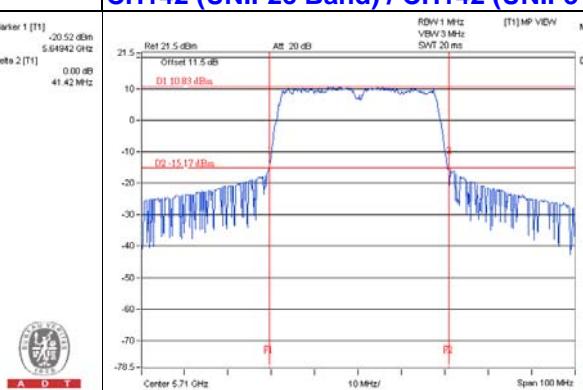
**CH142 (UNII-2c Band) / CH142 (UNII-3 Band)**



### NOTE:

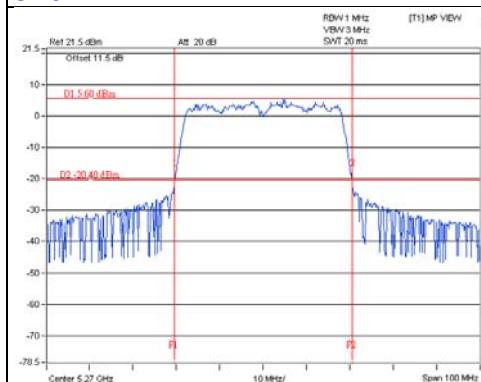
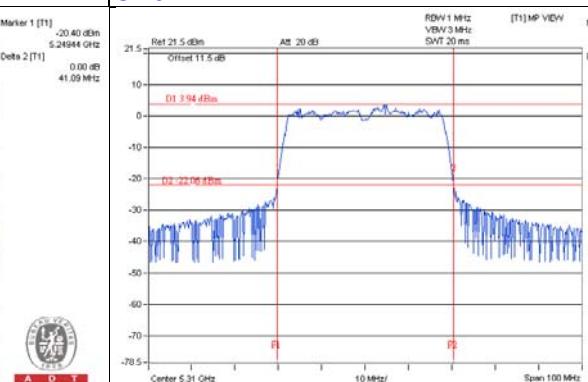
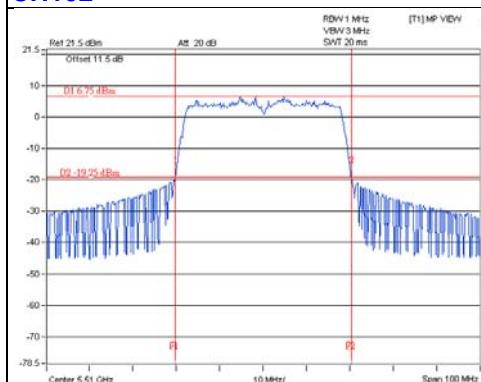
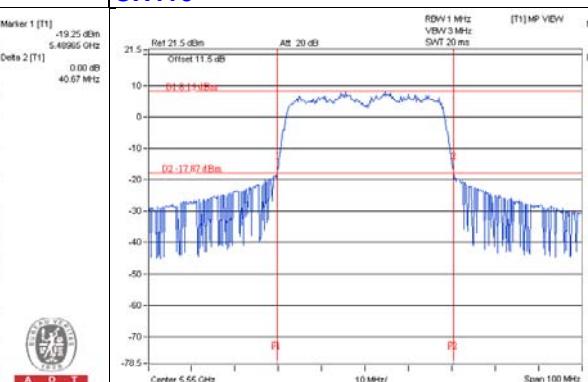
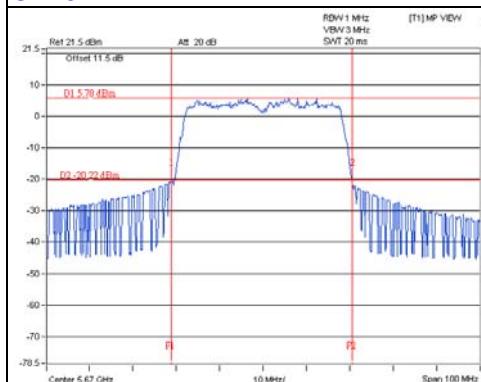
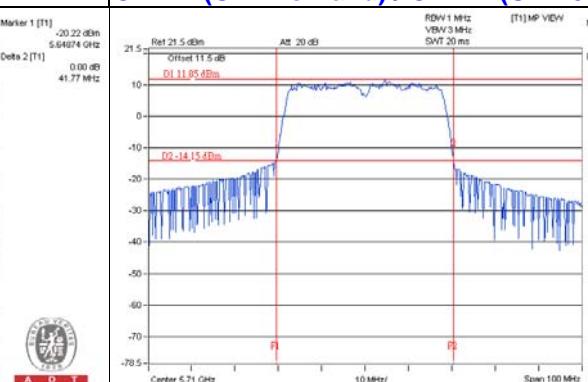
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (1)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (2)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

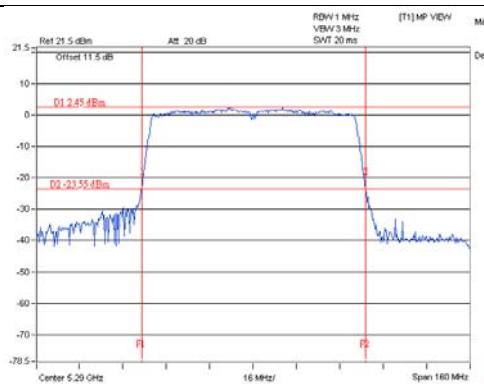
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

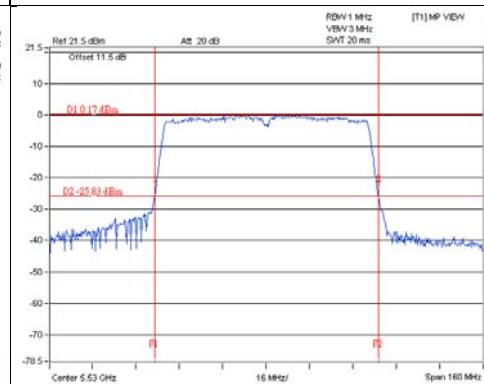
## 802.11ac (VHT80)

### For Chain (0)

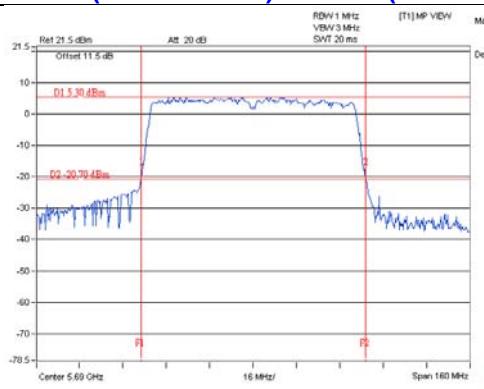
**CH58**



**CH106**



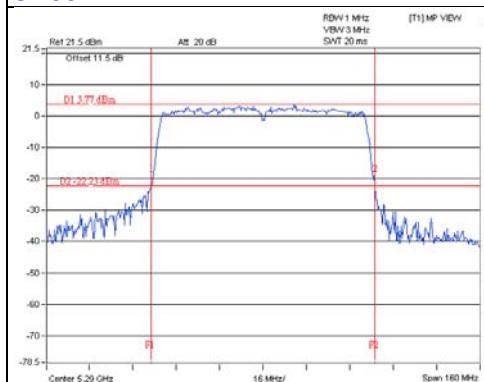
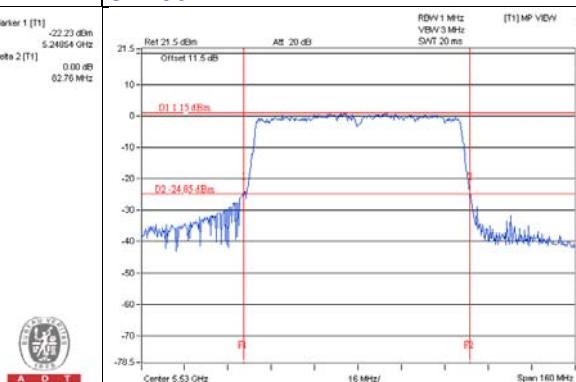
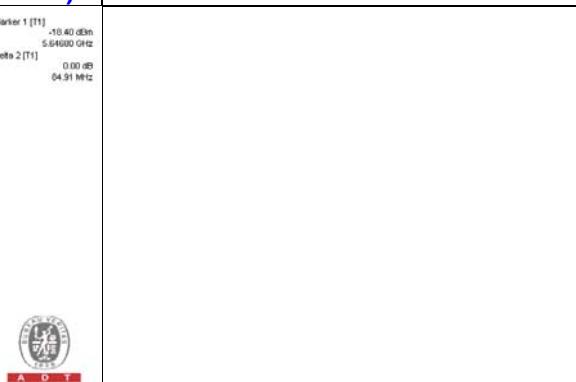
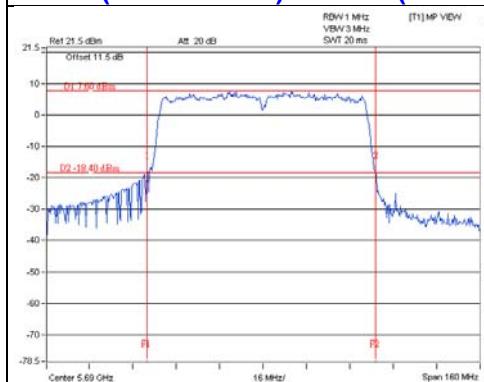
### CH138 (UNII-2c Band) / CH138 (UNII-3 Band)



### NOTE:

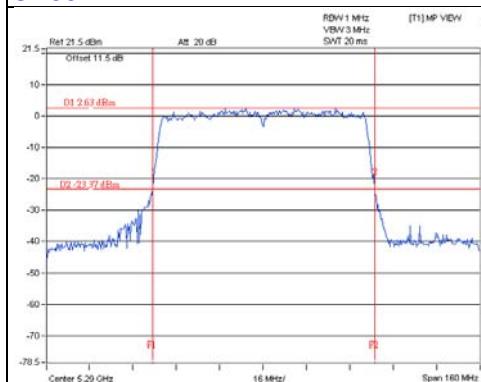
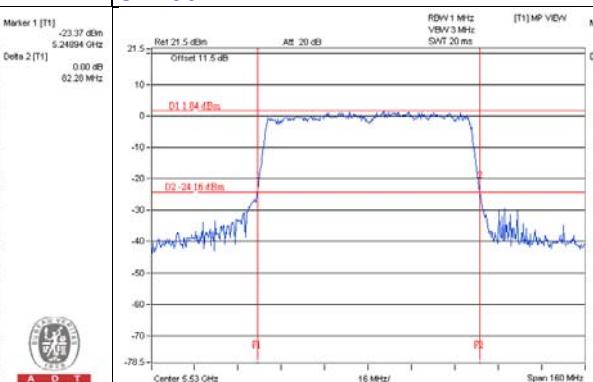
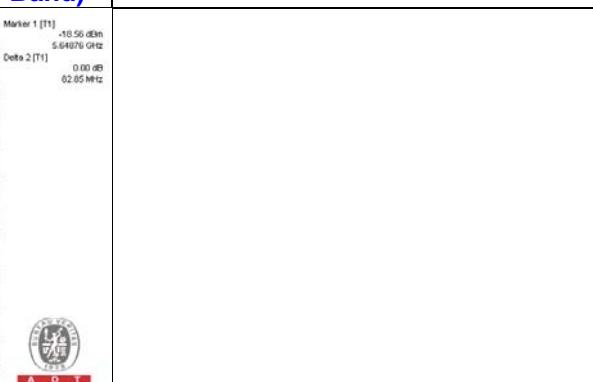
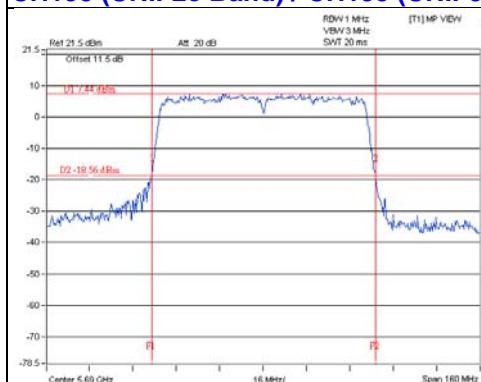
For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (1)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (2)**
**CH58****CH106****CH138 (UNII-2c Band) / CH138 (UNII-3 Band)****NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**POWER OUTPUT:**

<b>Beamforming (MCS0 NSS=1) MODE</b>								
CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
<b>802.11ac (VHT20)</b>								
52	5260	6.32	8.13	4.41	13.547	11.32	20.54	PASS
60	5300	5.99	8.17	3.89	12.982	11.13	20.54	PASS
64	5320	5.98	7.87	3.69	12.426	10.94	20.54	PASS
100	5500	7.41	7.93	7.33	17.125	12.34	20.48	PASS
116	5580	11.60	12.10	11.49	44.765	16.51	20.48	PASS
140	5700	9.56	10.02	9.03	27.080	14.33	20.48	PASS
144 (UNII-2c Band)	5720	13.03	14.07	13.31	67.047	18.26	19.32	PASS
144 (UNII-3 Band)	5720	7.12	7.97	7.86	17.527	12.44	20.74	PASS
<b>802.11ac (VHT40)</b>								
54	5270	10.26	11.39	9.14	32.593	15.13	20.54	PASS
62	5310	9.01	10.12	8.79	25.810	14.12	20.54	PASS
102	5510	10.15	10.63	7.62	27.693	14.42	20.48	PASS
110	5550	11.71	12.42	11.60	46.737	16.70	20.48	PASS
134	5670	10.62	11.06	10.15	34.650	15.40	20.48	PASS
142 (UNII-2c Band)	5710	11.48	12.97	12.80	52.930	17.24	20.48	PASS
142 (UNII-3 Band)	5710	1.10	2.56	2.65	4.932	6.93	20.90	PASS
<b>802.11ac (VHT80)</b>								
58	5290	11.01	12.17	10.12	39.38	15.95	20.54	PASS
106	5530	8.89	10.39	9.25	27.099	14.33	20.48	PASS
138 (UNII-2c Band)	5690	11.36	12.55	12.77	52.37	17.19	20.48	PASS
138 (UNII-3 Band)	5690	-2.93	-1.42	-1.05	2.0859	3.19	21.69	PASS
For CH138: Total Power(dBm)= Average Power (dBm) + Duty Factor (0.15dB)								
<b>NOTE:</b>								
<b>5250~5350MHz:</b> Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.46 \text{ dBi} > 6 \text{ dBi}$ , so the power limit shall be reduced to "Determined Conducted Limit-(9.46-6)".								
<b>5470~5725MHz (Except for UNII-3 Band):</b> Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.52 \text{ dBi} > 6 \text{ dBi}$ , so the power limit shall be reduced to "Determined Conducted Limit-(9.52-6)".								
<b>5725~5825MHz (For UNII-3 Band):</b> Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.46 \text{ dBi} > 6 \text{ dBi}$ , so the power limit shall be reduced to "Determined Conducted Limit-(9.46-6)".								

**26dB OCCUPIED BANDWIDTH:**

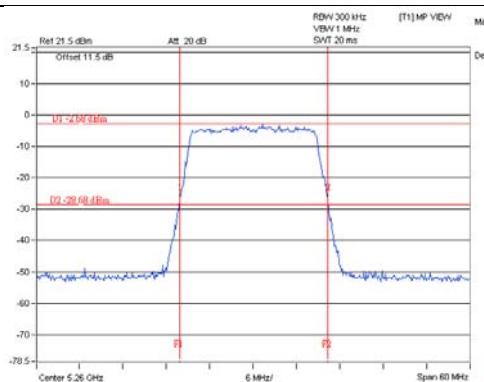
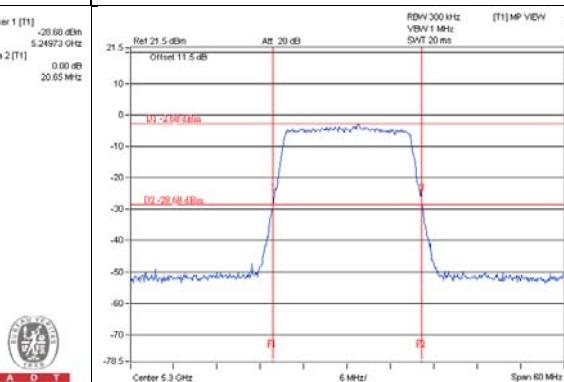
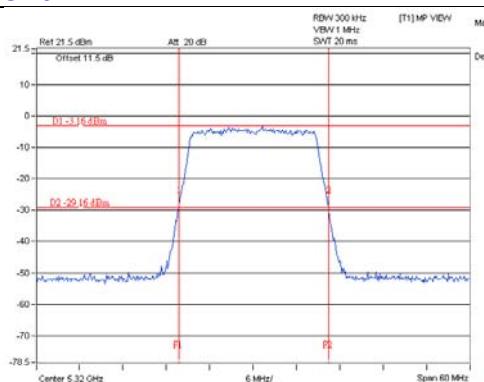
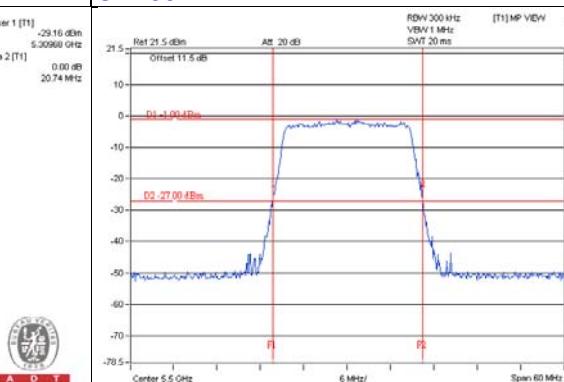
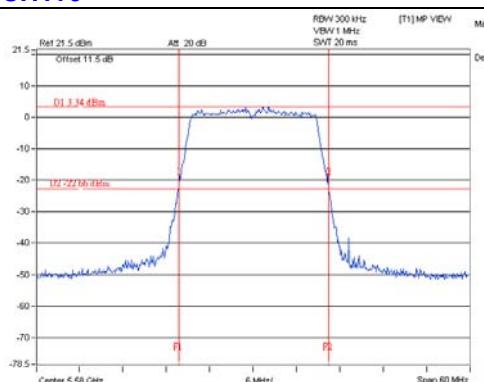
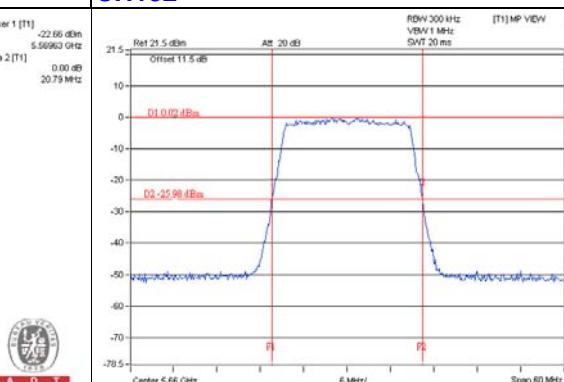
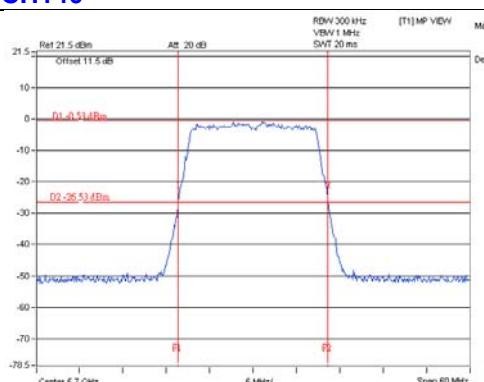
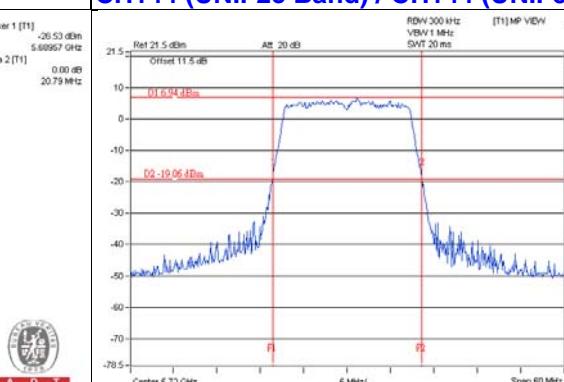
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		
		CHAIN 0	CHAIN 1	CHAIN 2
<b>802.11ac (VHT20)</b>				
52	5260	20.65	20.52	20.52
60	5300	20.66	20.38	20.55
64	5320	20.74	20.48	20.59
100	5500	20.85	20.56	20.58
116	5580	20.79	20.54	20.52
140	5700	20.79	20.56	20.72
144 (UNII-2c Band)	5720	15.36	15.28	15.28
144 (UNII-3 Band)	5720	5.35	5.25	5.33
<b>802.11ac (VHT40)</b>				
54	5270	41.60	40.91	41.09
62	5310	41.63	41.26	40.84
102	5510	41.56	41.55	40.67
110	5550	41.57	41.26	40.95
134	5670	41.61	41.42	41.77
142 (UNII-2c Band)	5710	35.74	35.62	35.57
142 (UNII-3 Band)	5710	5.66	6.03	5.45
<b>802.11ac (VHT80)</b>				
58	5290	82.93	82.76	82.28
106	5530	82.87	83.75	82.34
138 (UNII-2c Band)	5690	76.68	78.20	76.24
138 (UNII-3 Band)	5690	6.54	6.71	6.61

**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 11dBm + 10logB < UNII Band 2~3>					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)		
<b>802.11ac (VHT20)</b>					
52	5260	20.52	24.12	>	24
60	5300	20.38	24.09	>	24
64	5320	20.48	24.11	>	24
100	5500	20.56	24.13	>	24
116	5580	20.52	24.12	>	24
140	5700	20.56	24.13	>	24
144 (UNII-2c Band)	5720	15.28	22.84	<	24
144 (UNII-3 Band)	5720	5.25	24.2	<	30
<b>802.11ac (VHT40)</b>					
54	5270	40.91	27.11	>	24
62	5310	40.84	27.11	>	24
102	5510	40.67	27.09	>	24
110	5550	40.95	27.12	>	24
134	5670	41.42	27.17	>	24
142 (UNII-2c Band)	5710	35.57	26.5	>	24
142 (UNII-3 Band)	5710	5.45	24.36	<	30
<b>802.11ac (VHT80)</b>					
58	5290	82.28	30.15	>	24
106	5530	82.34	30.15	>	24
138 (UNII-2c Band)	5690	76.24	29.82	>	24
138 (UNII-3 Band)	5690	6.54	25.15	<	30

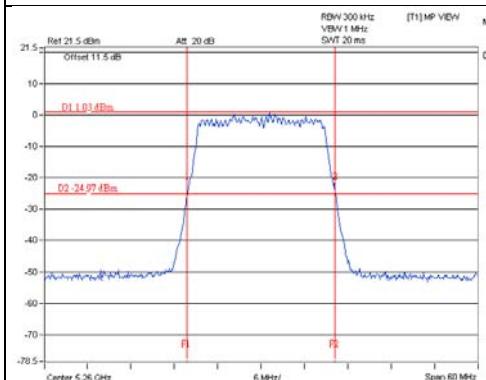
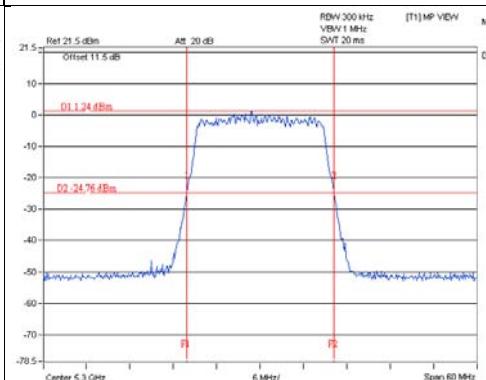
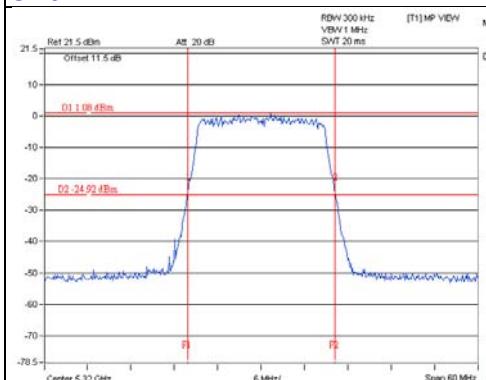
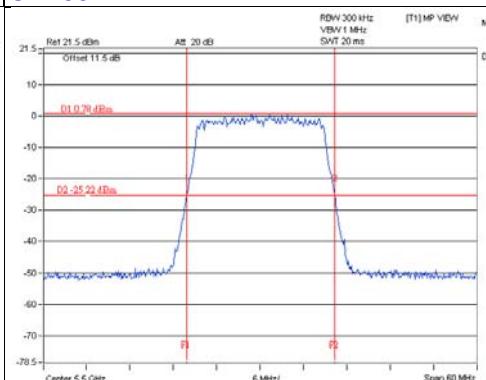
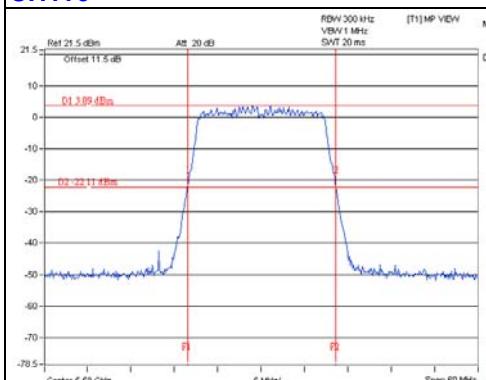
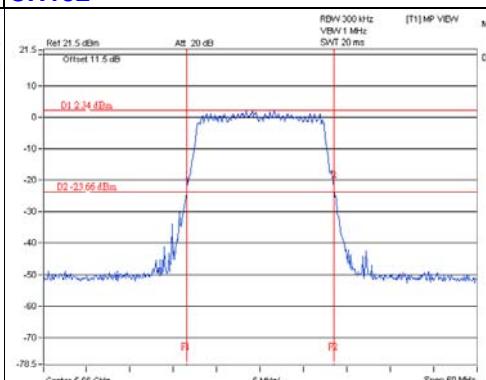
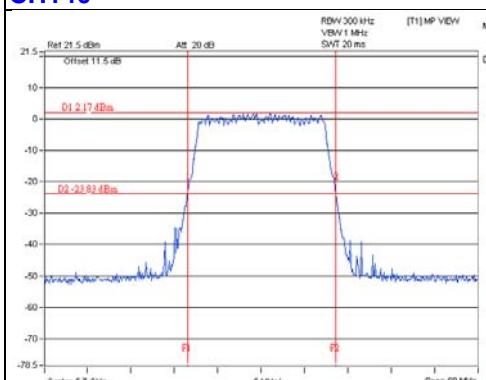
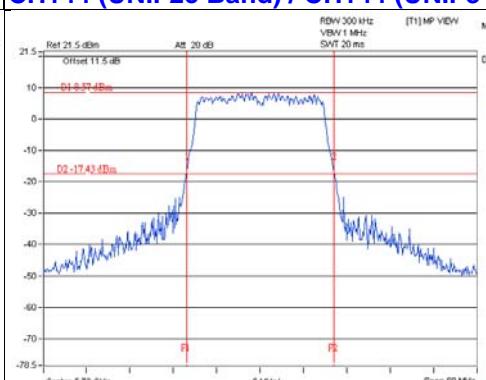
## 802.11ac (VHT20)

### For Chain (0)

**CH52**

**CH60**

**CH64**

**CH100**

**CH116**

**CH132**

**CH140**

**CH144 (UNII-2c Band) / CH144 (UNII-3 Band)**

**NOTE:**

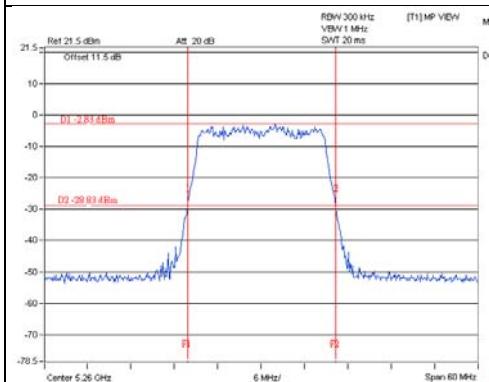
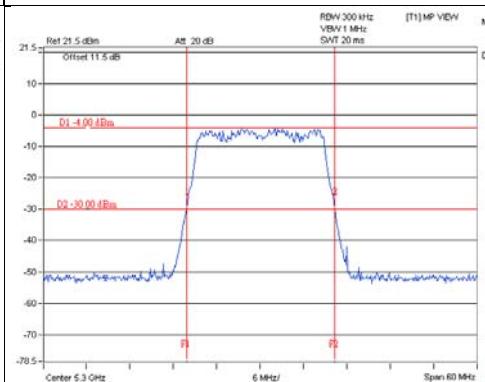
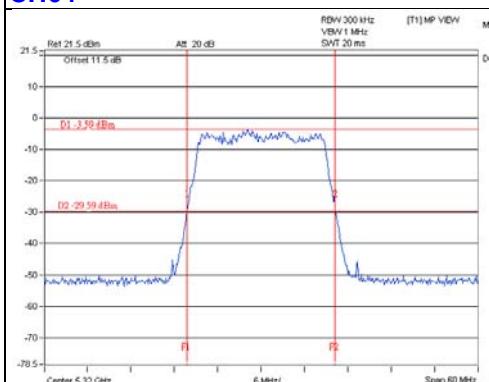
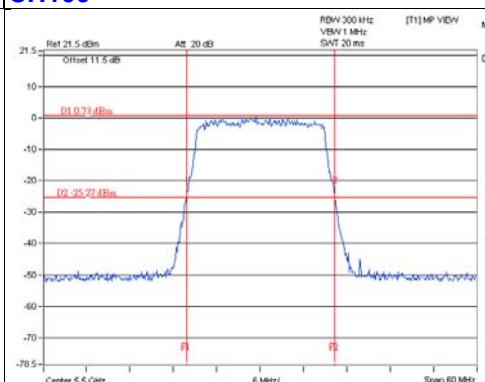
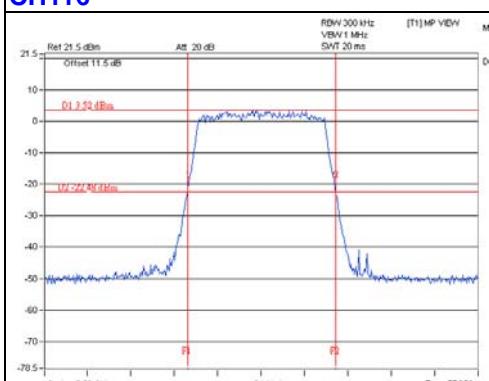
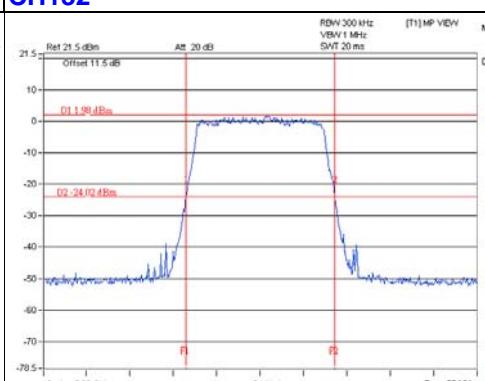
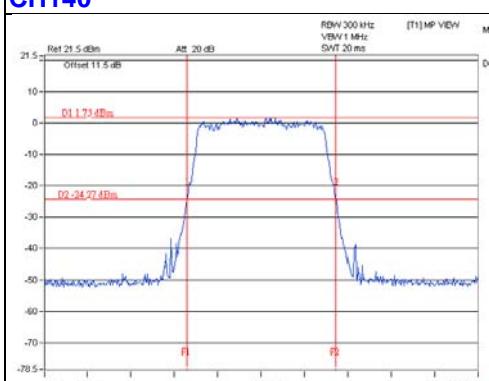
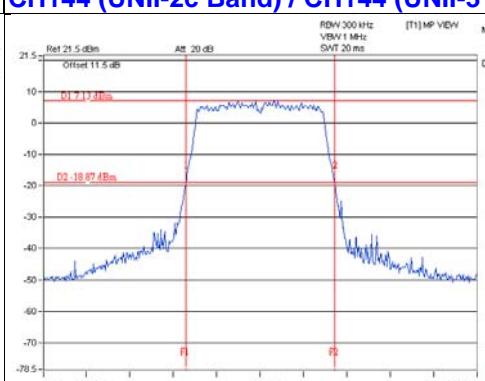
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (1)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (2)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

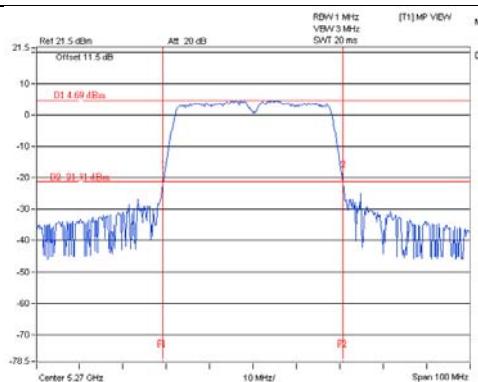
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

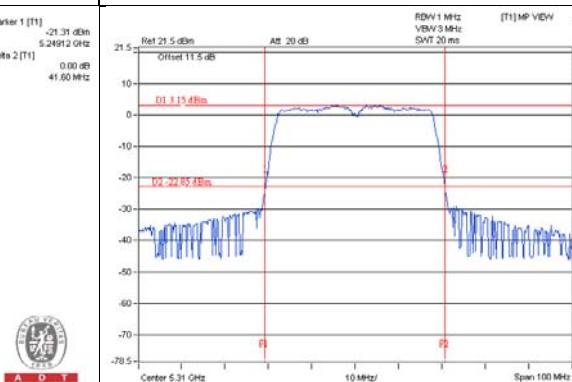
## 802.11ac (VHT40)

### For Chain (0)

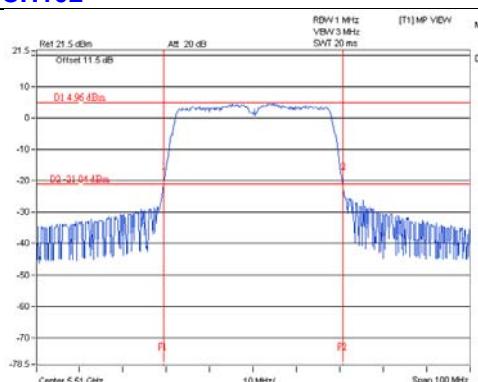
**CH54**



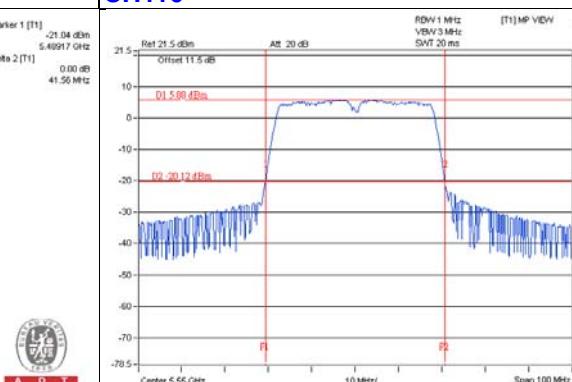
**CH62**



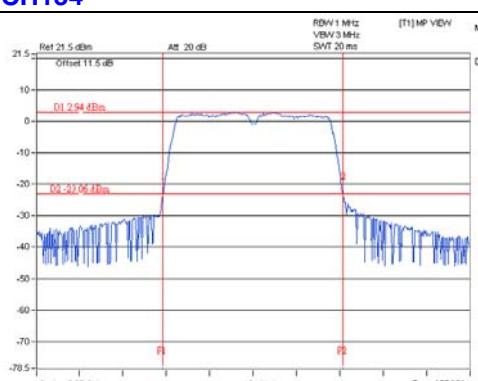
**CH102**



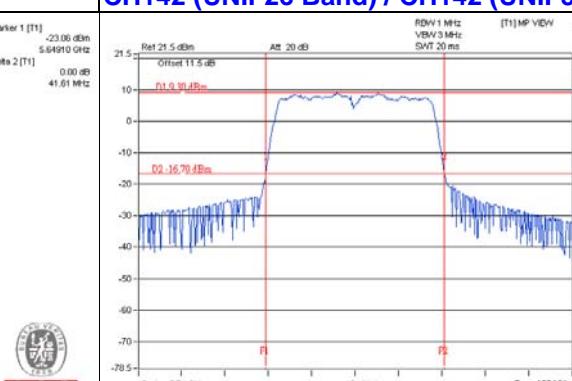
**CH110**



**CH134**



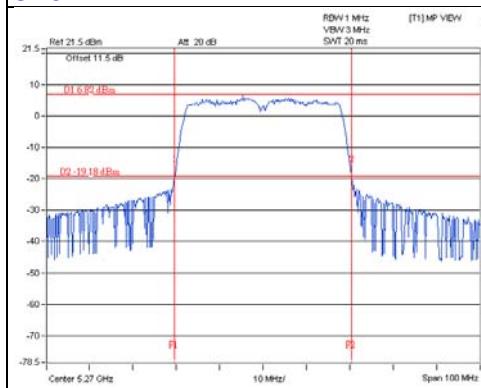
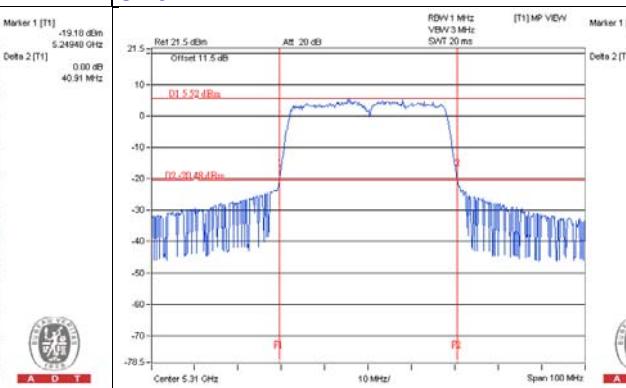
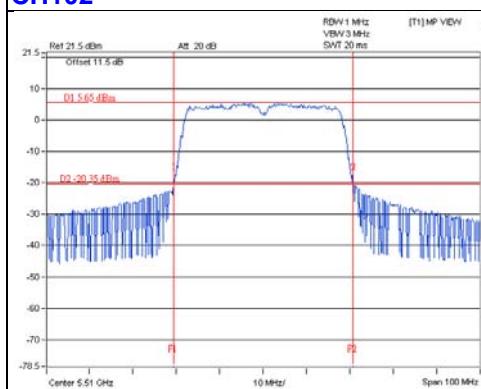
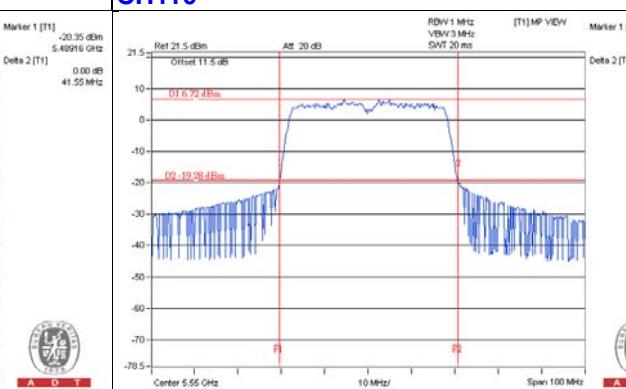
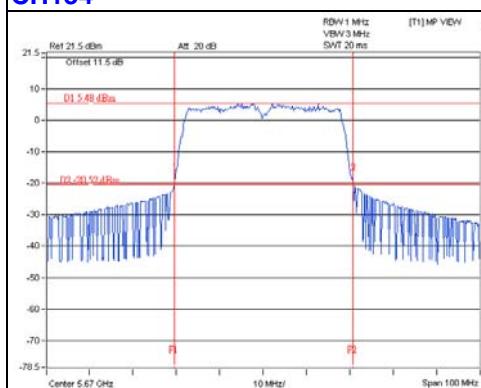
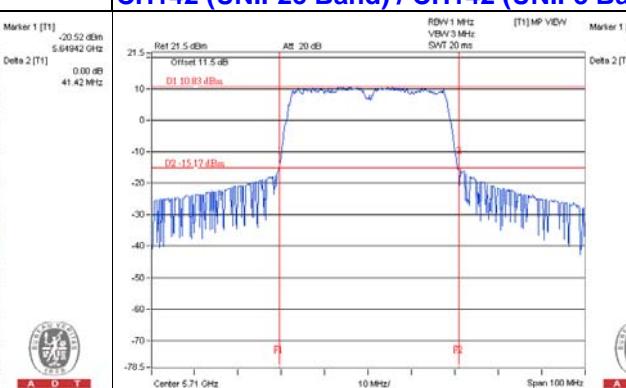
**CH142 (UNII-2c Band) / CH142 (UNII-3 Band)**



### NOTE:

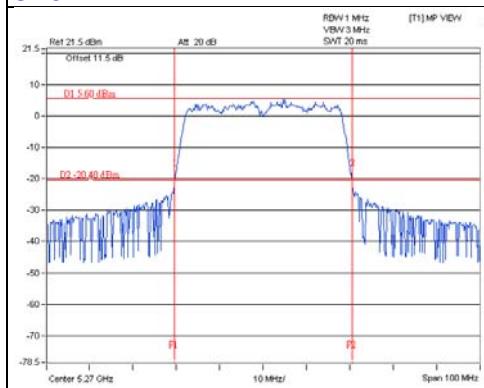
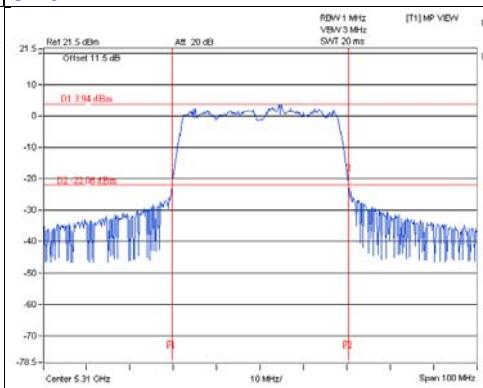
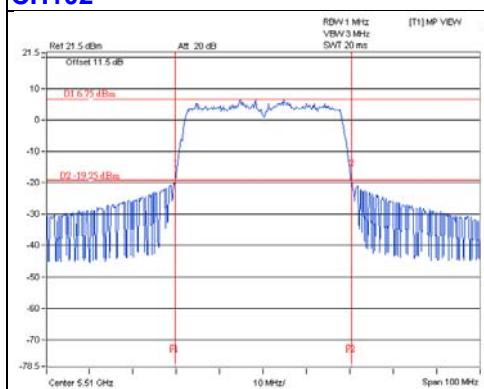
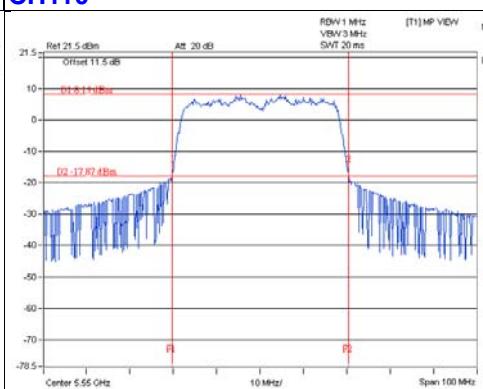
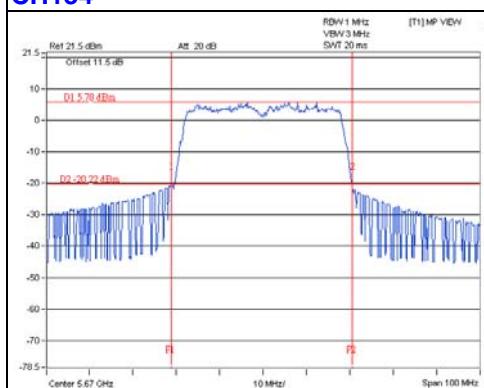
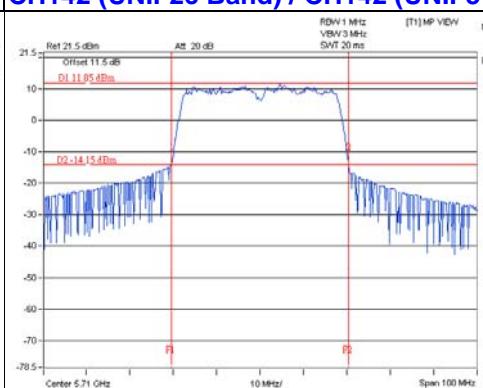
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (1)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (2)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

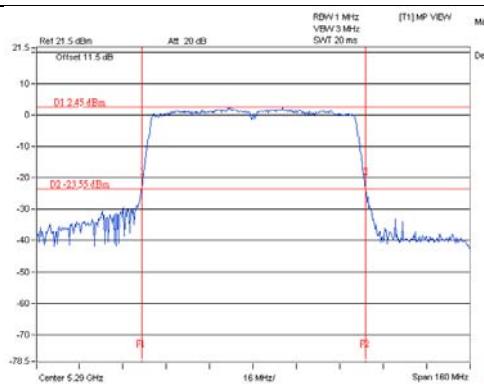
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

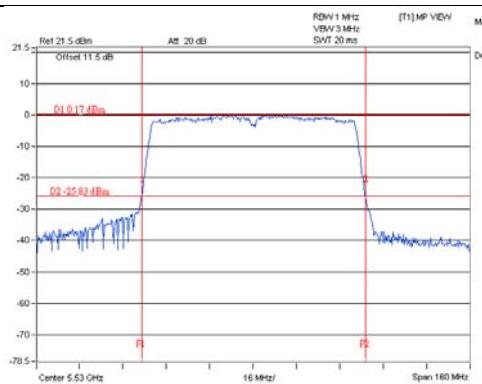
## 802.11ac (VHT80)

### For Chain (0)

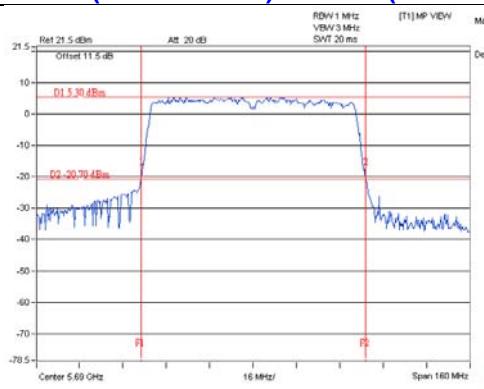
**CH58**



**CH106**



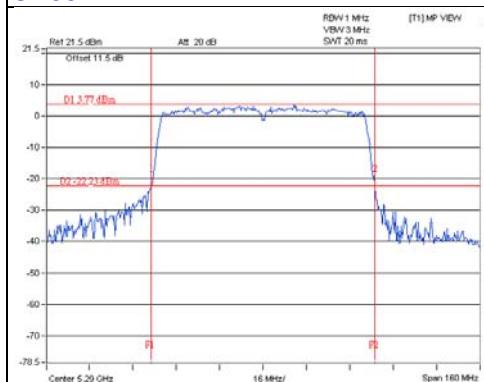
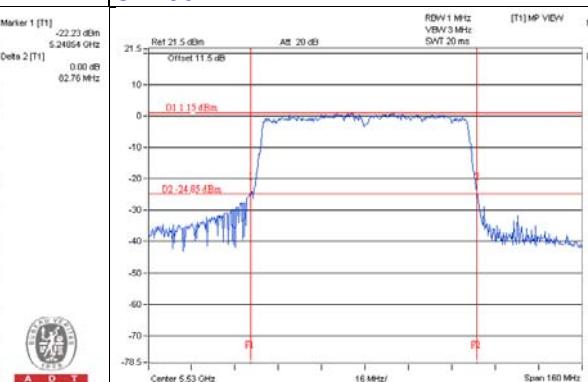
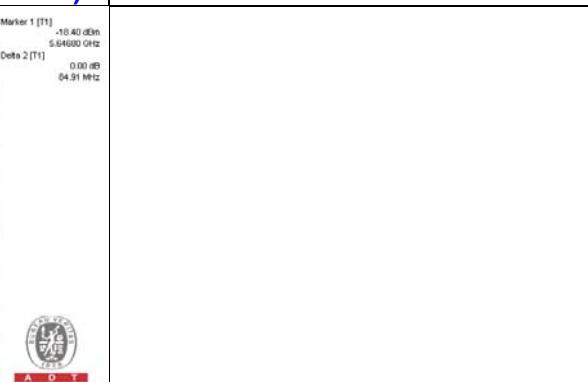
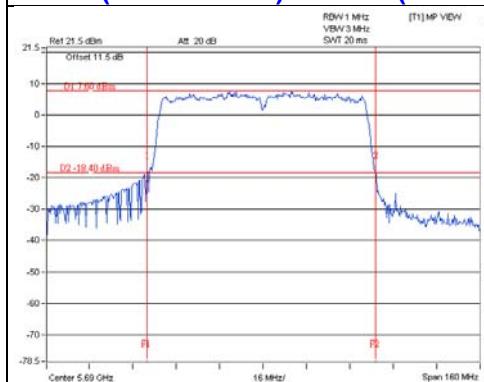
### CH138 (UNII-2c Band) / CH138 (UNII-3 Band)



### NOTE:

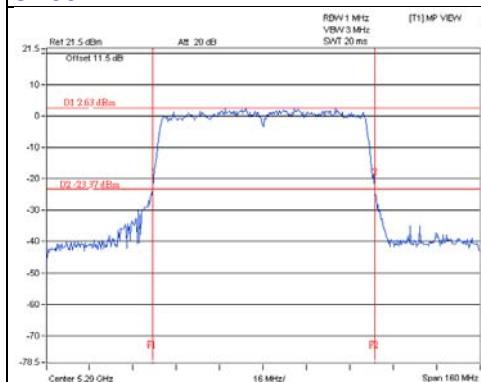
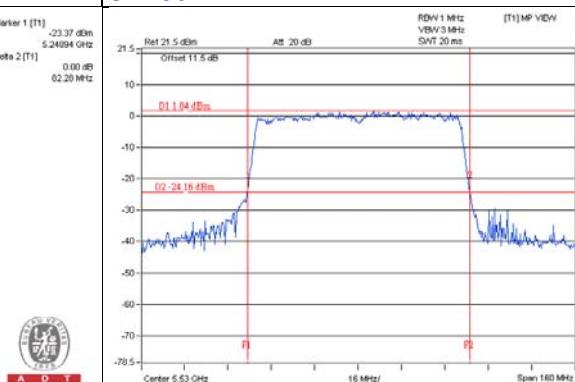
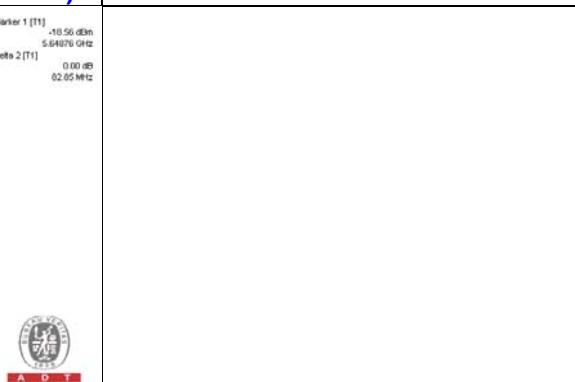
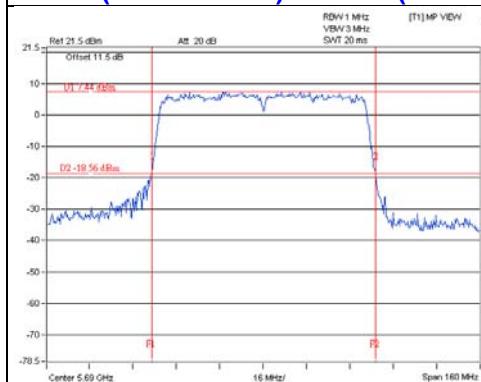
For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (1)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (2)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**POWER OUTPUT:**

<b>Beamforming (MCS0 NSS=2) MODE</b>								
CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
<b>802.11ac (VHT20)</b>								
52	5260	6.32	8.13	4.41	13.547	11.32	22.49	PASS
60	5300	5.99	8.17	3.89	12.982	11.13	22.49	PASS
64	5320	5.98	7.87	3.69	12.426	10.94	22.49	PASS
100	5500	7.41	7.93	7.33	17.125	12.34	22.49	PASS
116	5580	11.60	12.10	11.49	44.765	16.51	22.49	PASS
140	5700	9.56	10.02	9.03	27.080	14.33	22.49	PASS
144 (UNII-2c Band)	5720	13.03	14.07	13.31	67.047	18.26	21.33	PASS
144 (UNII-3 Band)	5720	7.12	7.97	7.86	17.527	12.44	22.73	PASS
<b>802.11ac (VHT40)</b>								
54	5270	10.26	11.39	9.14	32.593	15.13	22.49	PASS
62	5310	9.01	10.12	8.79	25.810	14.12	22.49	PASS
102	5510	10.15	10.63	7.62	27.693	14.42	22.49	PASS
110	5550	11.71	12.42	11.60	46.737	16.70	22.49	PASS
134	5670	10.62	11.06	10.15	34.650	15.40	22.49	PASS
142 (UNII-2c Band)	5710	11.48	12.97	12.80	52.930	17.24	22.49	PASS
142 (UNII-3 Band)	5710	1.10	2.56	2.65	4.932	6.93	22.89	PASS
<b>802.11ac (VHT80)</b>								
58	5290	11.01	12.17	10.12	39.38	15.95	22.49	PASS
106	5530	8.89	10.39	9.25	27.099	14.33	22.49	PASS
138 (UNII-2c Band)	5690	11.36	12.55	12.77	52.37	17.19	22.49	PASS
138 (UNII-3 Band)	5690	-2.93	-1.42	-1.05	2.0859	3.19	23.68	PASS
For CH138: Total Power(dBm)= Average Power (dBm) + Duty Factor (0.15dB)								
<b>NOTE:</b>								
<b>5250~5350MHz:</b> Directional gain = maximum gain of antennas + $10 \log(3/2)$ = 7.51dB > 6dB , so the power limit shall be reduced to "Determined Conducted Limit-(7.51-6)".								
<b>5470~5725MHz (Except for UNII-3 Band):</b> Directional gain = maximum gain of antennas + $10 \log(3/2)$ = 7.51dB > 6dB , so the power limit shall be reduced to "Determined Conducted Limit-(7.51-6)".								
<b>5725~5825MHz (For UNII-3 Band):</b> Directional gain = maximum gain of antennas + $10 \log(3/2)$ = 7.47dB > 6dB , so the power limit shall be reduced to "Determined Conducted Limit-(7.47-6)".								

**26dB OCCUPIED BANDWIDTH:**

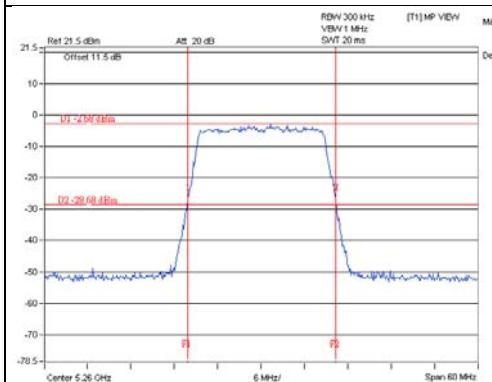
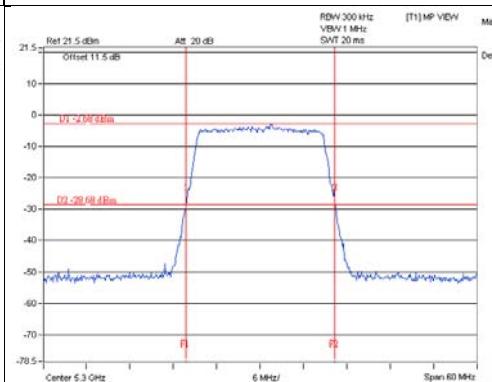
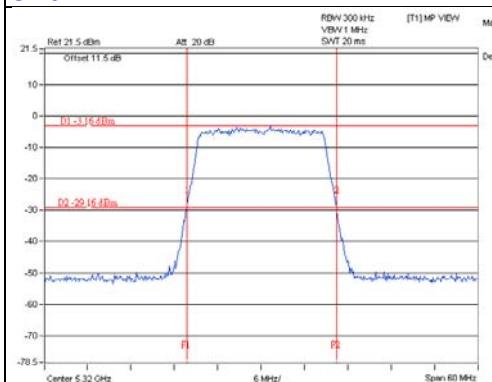
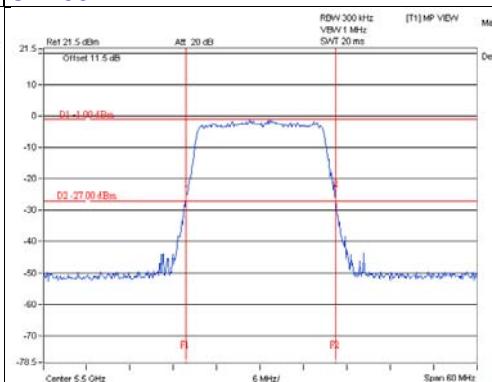
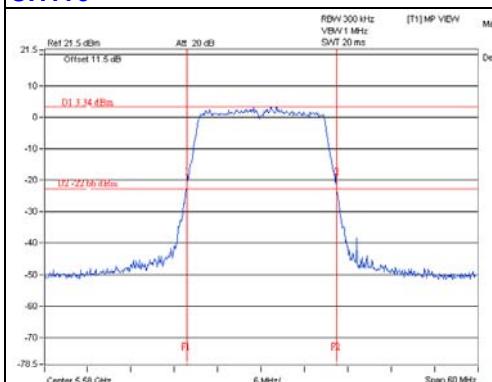
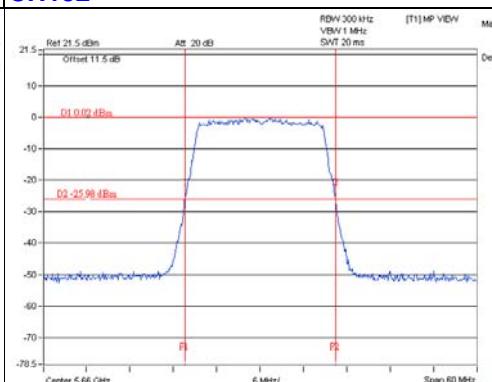
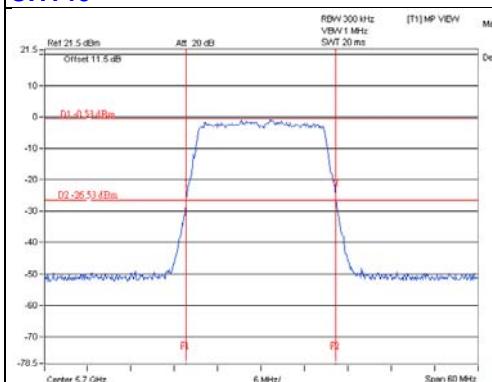
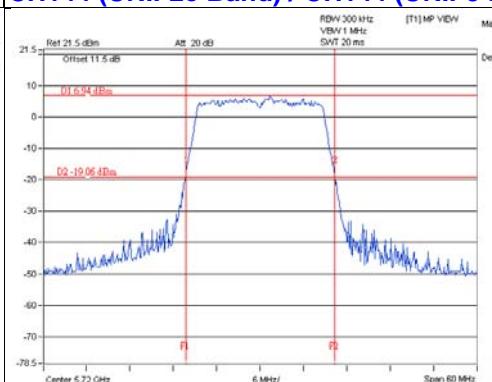
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		
		CHAIN 0	CHAIN 1	CHAIN 2
<b>802.11ac (VHT20)</b>				
52	5260	20.65	20.52	20.52
60	5300	20.66	20.38	20.55
64	5320	20.74	20.48	20.59
100	5500	20.85	20.56	20.58
116	5580	20.79	20.54	20.52
140	5700	20.79	20.56	20.72
144 (UNII-2c Band)	5720	15.36	15.28	15.28
144 (UNII-3 Band)	5720	5.35	5.25	5.33
<b>802.11ac (VHT40)</b>				
54	5270	41.60	40.91	41.09
62	5310	41.63	41.26	40.84
102	5510	41.56	41.55	40.67
110	5550	41.57	41.26	40.95
134	5670	41.61	41.42	41.77
142 (UNII-2c Band)	5710	35.74	35.62	35.57
142 (UNII-3 Band)	5710	5.66	6.03	5.45
<b>802.11ac (VHT80)</b>				
58	5290	82.93	82.76	82.28
106	5530	82.87	83.75	82.34
138 (UNII-2c Band)	5690	76.68	78.20	76.24
138 (UNII-3 Band)	5690	6.54	6.71	6.61

**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	
<b>802.11ac (VHT20)</b>				
52	5260	20.52	24.12	> 24
60	5300	20.38	24.09	> 24
64	5320	20.48	24.11	> 24
100	5500	20.56	24.13	> 24
116	5580	20.52	24.12	> 24
140	5700	20.56	24.13	> 24
144 (UNII-2c Band)	5720	15.28	22.84	< 24
144 (UNII-3 Band)	5720	5.25	24.2	< 30
<b>802.11ac (VHT40)</b>				
54	5270	40.91	27.11	> 24
62	5310	40.84	27.11	> 24
102	5510	40.67	27.09	> 24
110	5550	40.95	27.12	> 24
134	5670	41.42	27.17	> 24
142 (UNII-2c Band)	5710	35.57	26.5	> 24
142 (UNII-3 Band)	5710	5.45	24.36	< 30
<b>802.11ac (VHT80)</b>				
58	5290	82.28	30.15	> 24
106	5530	82.34	30.15	> 24
138 (UNII-2c Band)	5690	76.24	29.82	> 24
138 (UNII-3 Band)	5690	6.54	25.15	< 30

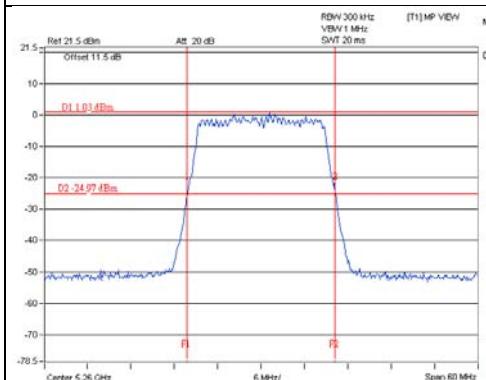
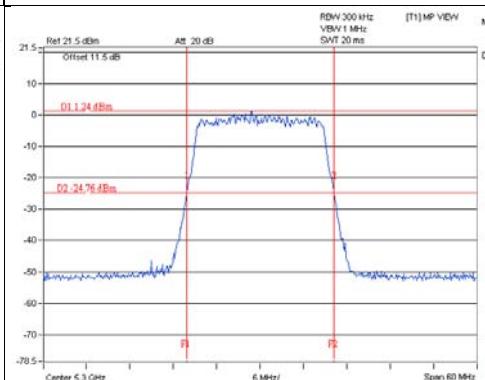
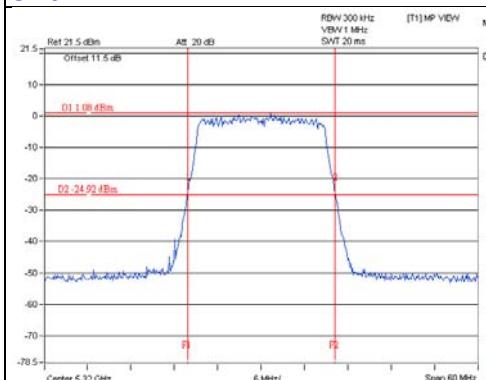
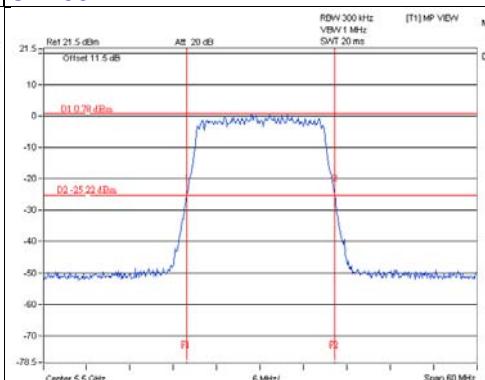
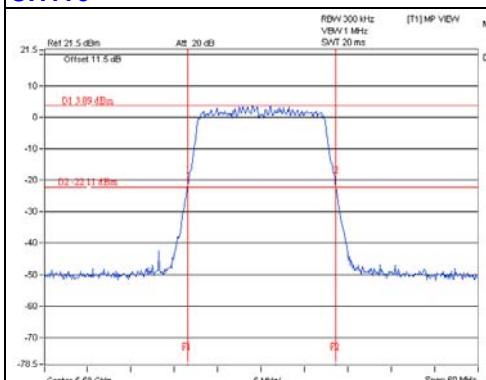
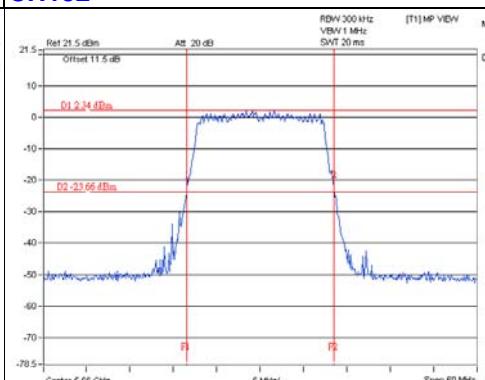
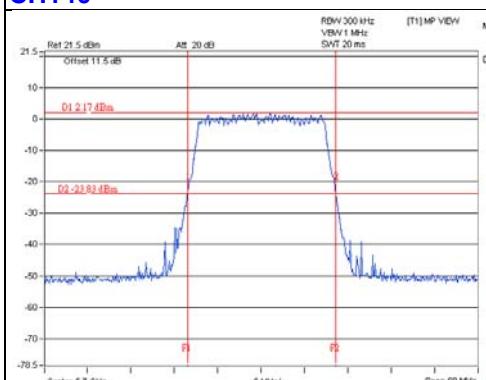
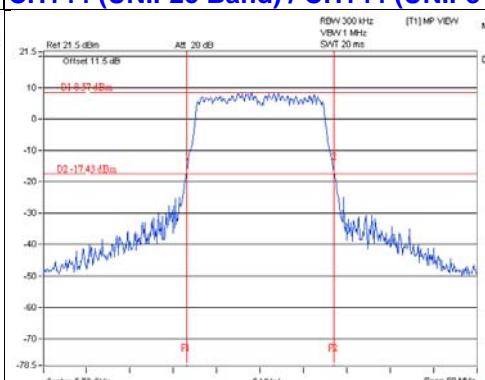
## 802.11ac (VHT20)

### For Chain (0)

**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)**
**NOTE:**

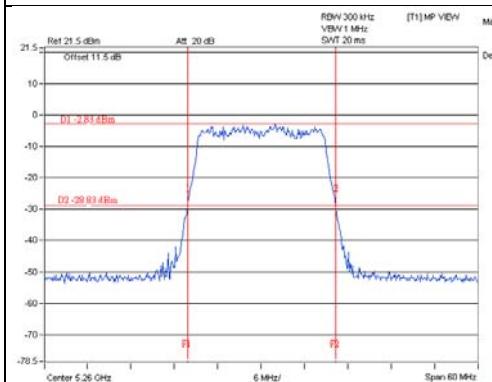
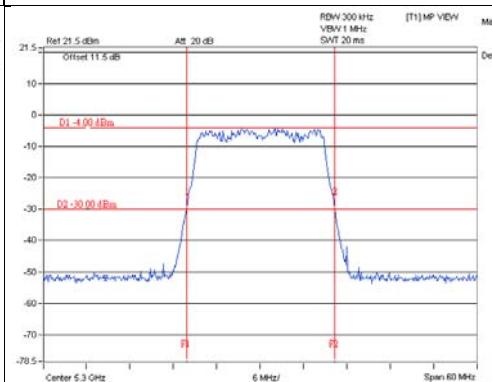
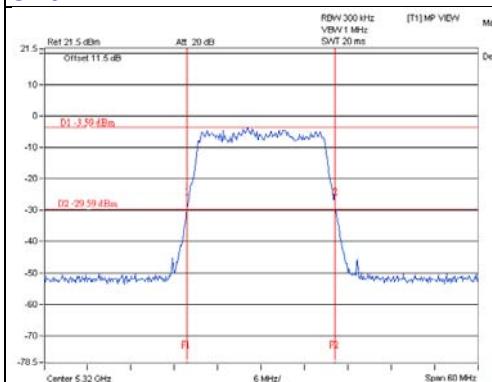
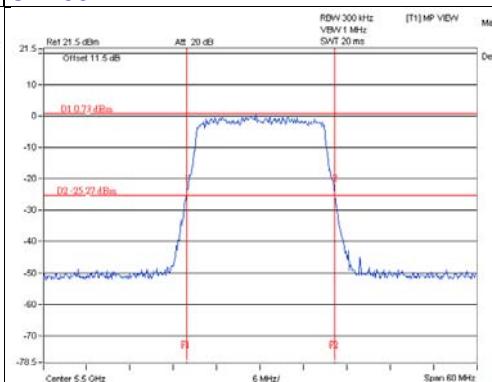
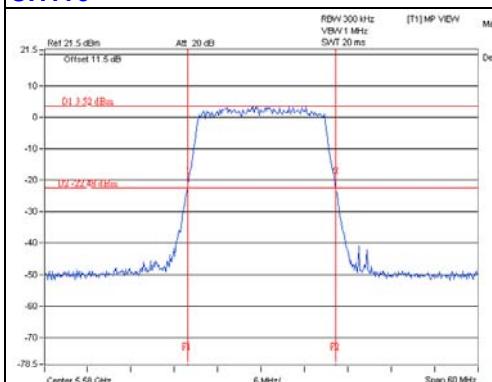
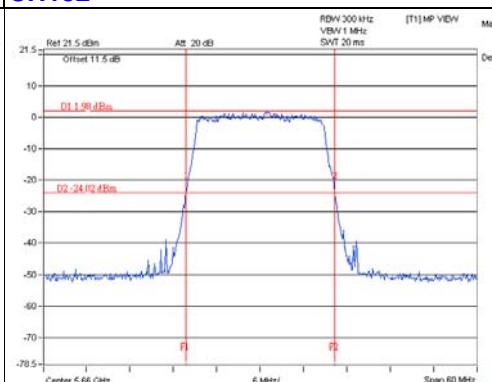
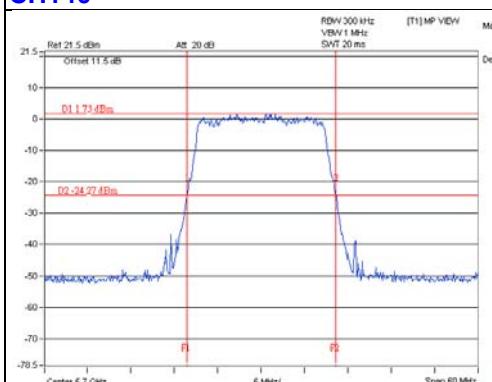
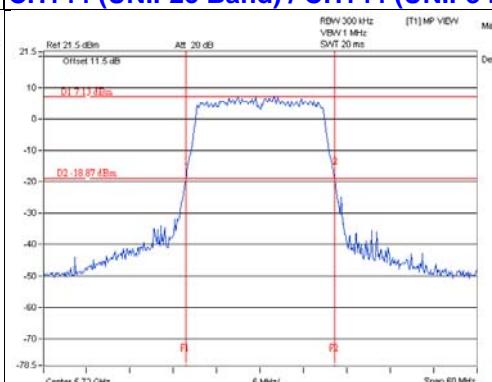
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (1)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (2)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

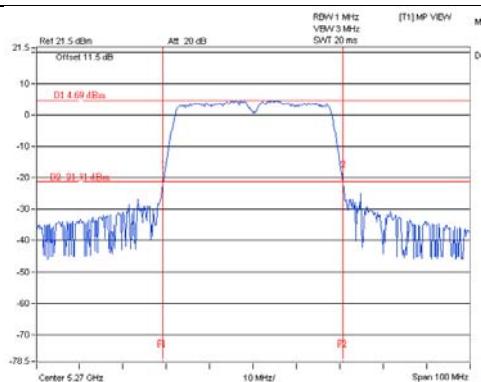
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

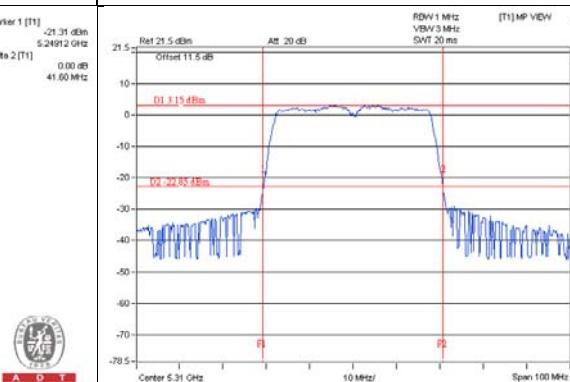
## 802.11ac (VHT40)

### For Chain (0)

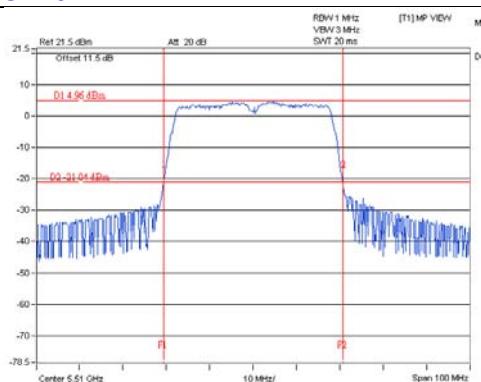
**CH54**



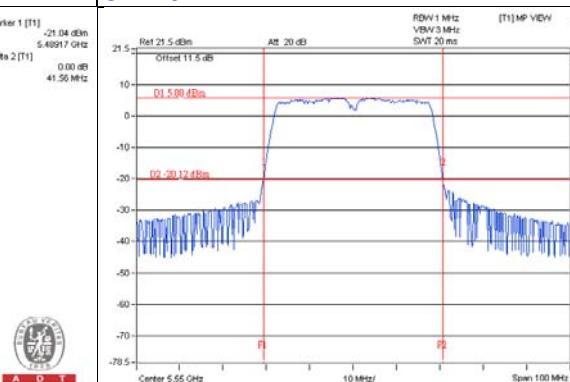
**CH62**



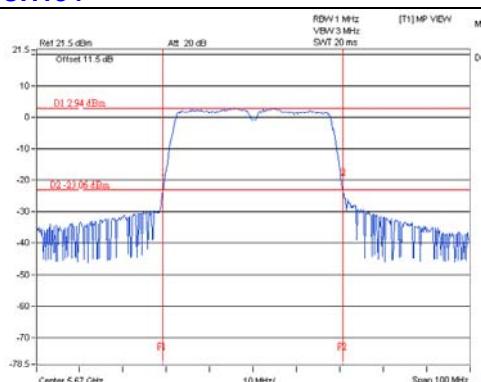
**CH102**



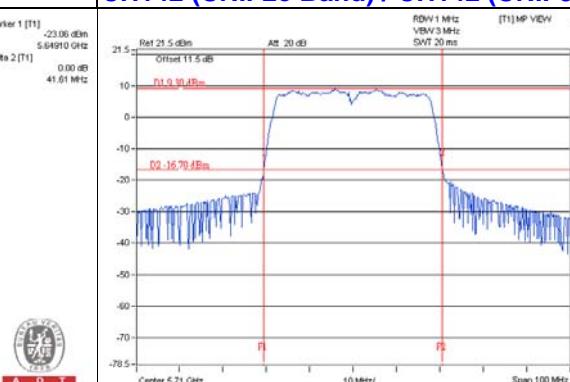
**CH110**



**CH134**



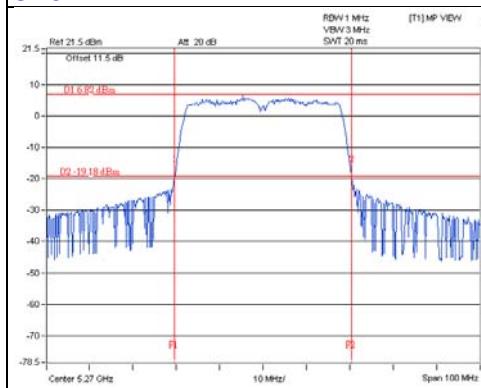
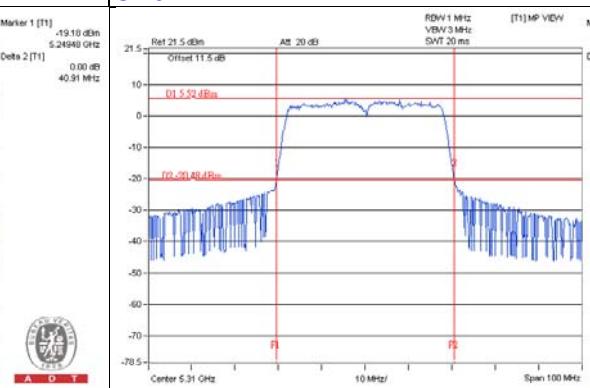
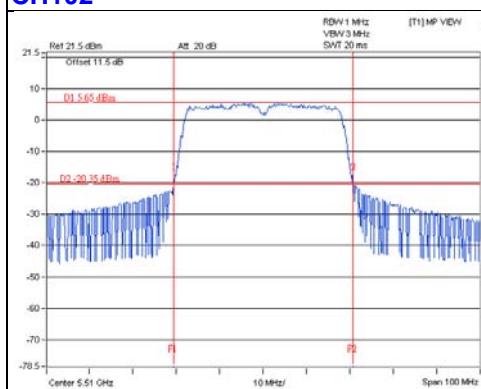
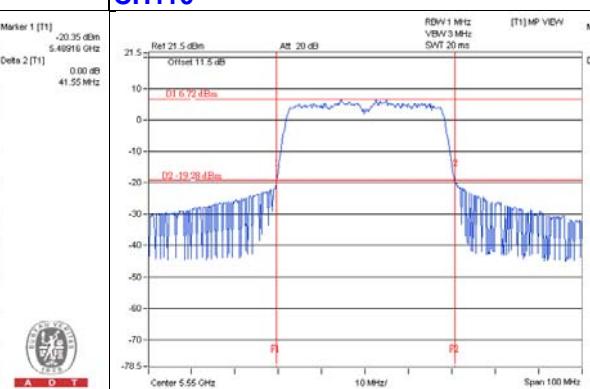
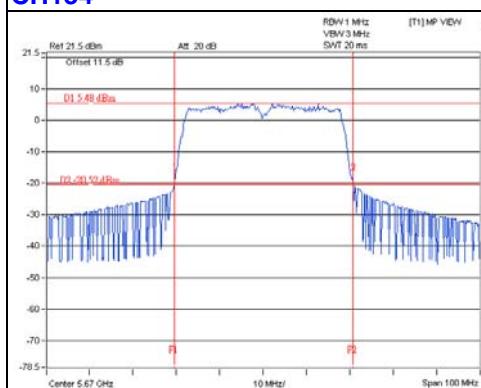
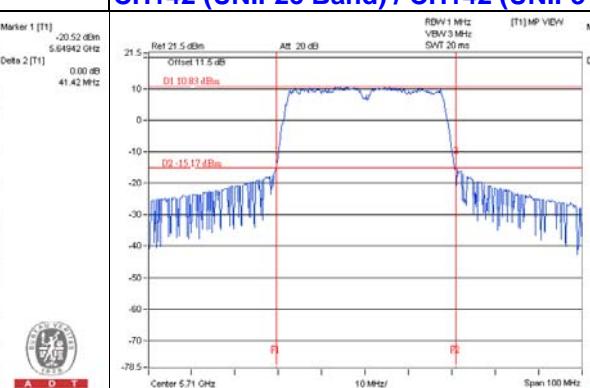
**CH142 (UNII-2c Band) / CH142 (UNII-3 Band)**



### NOTE:

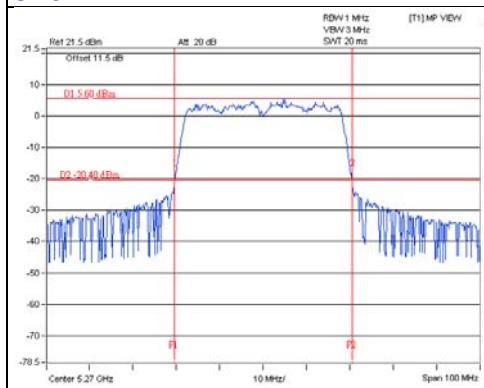
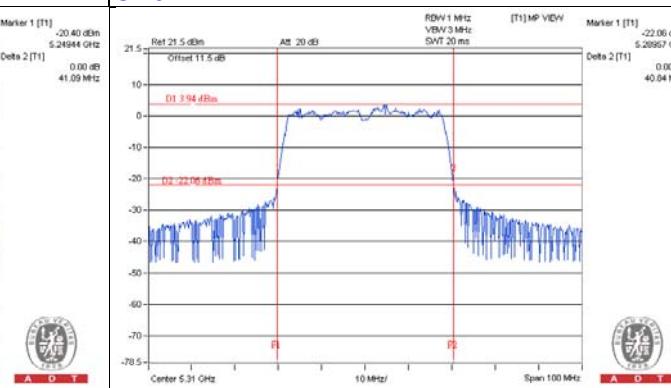
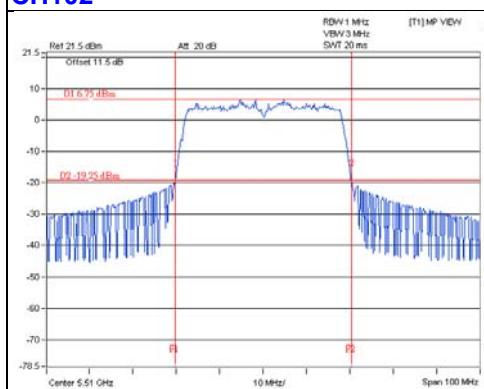
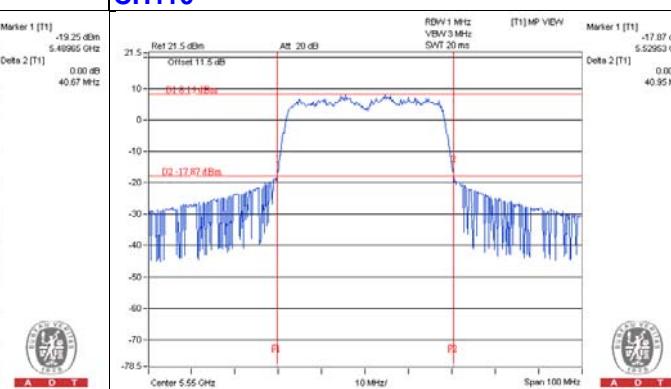
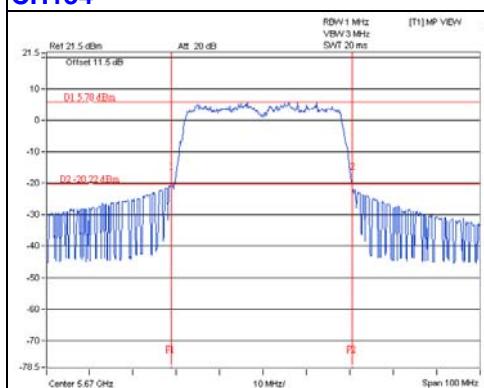
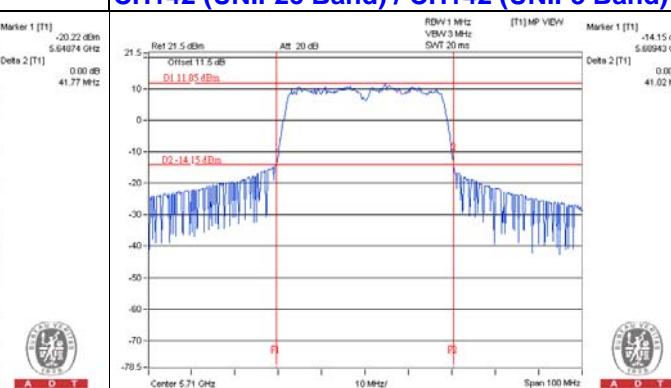
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (1)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (2)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

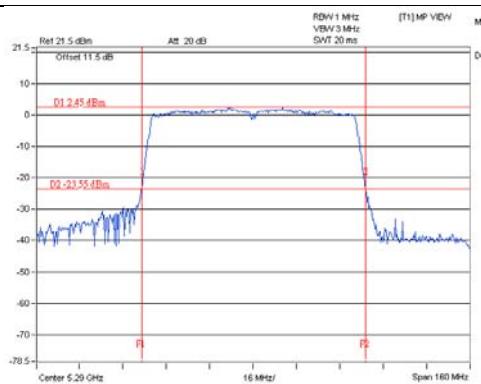
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

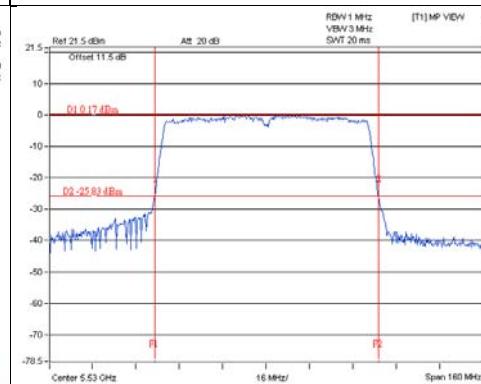
## 802.11ac (VHT80)

### For Chain (0)

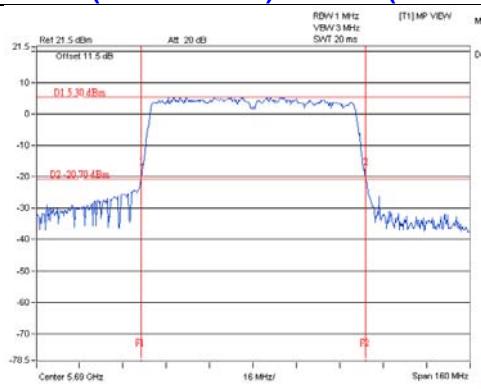
**CH58**



**CH106**



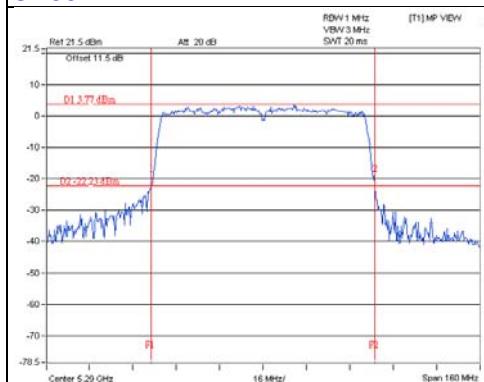
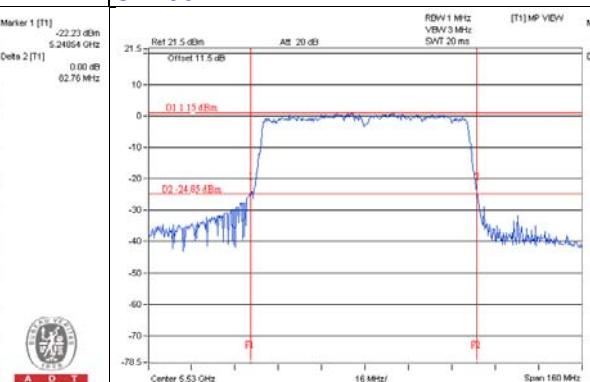
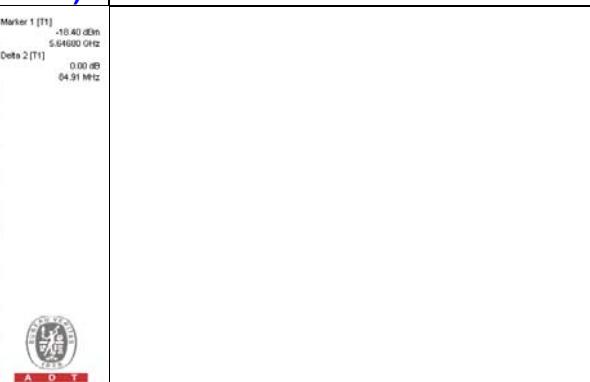
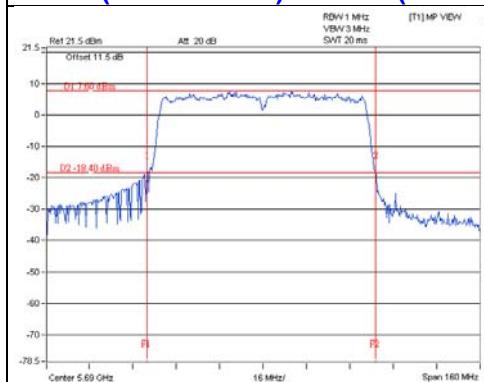
### CH138 (UNII-2c Band) / CH138 (UNII-3 Band)



### NOTE:

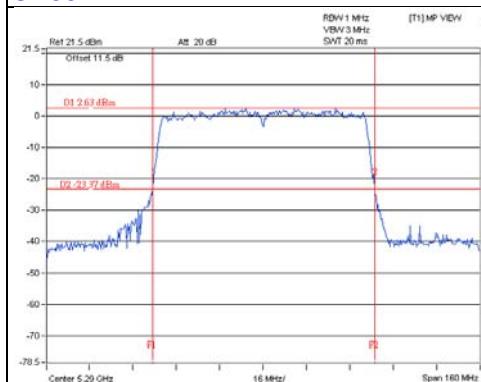
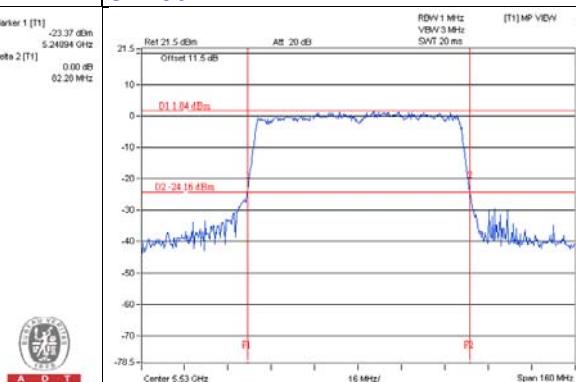
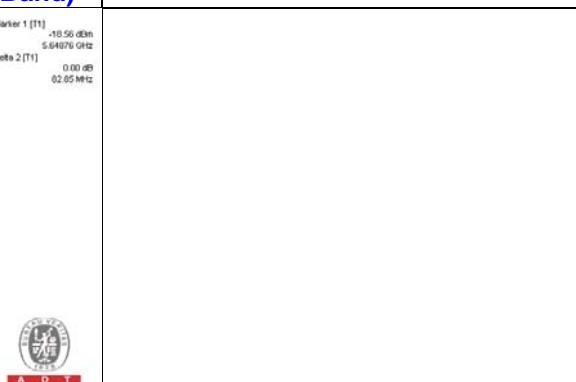
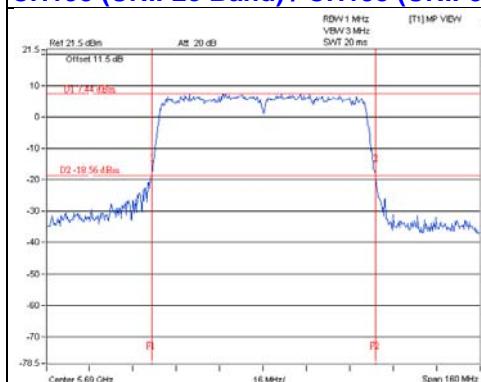
For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (1)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (2)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**POWER OUTPUT:**

<b>STBC_MODE</b>								
<b>CHANNEL</b>	<b>FREQUENCY (MHz)</b>	<b>AVERAGE POWER (dBm)</b>			<b>TOTAL POWER (mW)</b>	<b>TOTAL POWER (dBm)</b>	<b>POWER LIMIT (dBm)</b>	<b>PASS / FAIL</b>
		<b>CHAIN 0</b>	<b>CHAIN 1</b>	<b>CHAIN 2</b>				
<b>802.11ac (VHT20)</b>								
52	5260	6.32	8.13	4.41	13.547	11.32	24	PASS
60	5300	5.99	8.17	3.89	12.982	11.13	24	PASS
64	5320	5.98	7.87	3.69	12.426	10.94	24	PASS
100	5500	9.07	9.04	8.32	22.881	13.59	24	PASS
116	5580	11.60	12.10	11.49	44.765	16.51	24	PASS
140	5700	9.61	11.01	10.51	33.005	15.19	24	PASS
144 (UNII-2c Band)	5720	11.17	13.03	12.56	51.213	17.09	22.80	PASS
144 (UNII-3 Band)	5720	5.38	7.15	6.83	13.458	11.29	24.15	PASS
<b>802.11ac (VHT40)</b>								
54	5270	10.26	11.39	9.14	32.593	15.13	24	PASS
62	5310	9.01	10.12	8.79	25.810	14.12	24	PASS
102	5510	11.71	12.31	11.64	46.435	16.67	24	PASS
110	5550	13.31	12.61	12.32	56.729	17.54	24	PASS
134	5670	12.14	12.93	12.59	54.157	17.34	24	PASS
142 (UNII-2c Band)	5710	13.33	14.97	14.65	82.107	19.14	24	PASS
142 (UNII-3 Band)	5710	2.88	4.52	4.45	7.558	8.78	24.33	PASS
<b>802.11ac (VHT80)</b>								
58	5290	11.01	12.17	10.12	39.38	15.95	24	PASS
106	5530	8.89	10.39	9.25	27.099	14.33	24	PASS
138 (UNII-2c Band)	5690	13.43	14.68	14.60	83.069	19.19	24	PASS
138 (UNII-3 Band)	5690	-0.91	0.63	0.76	3.2692	5.14	24.79	PASS

**26dB OCCUPIED BANDWIDTH:**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		
		CHAIN 0	CHAIN 1	CHAIN 2
<b>802.11ac (VHT20)</b>				
52	5260	20.65	20.52	20.52
60	5300	20.66	20.38	20.55
64	5320	20.74	20.48	20.59
100	5500	20.64	20.60	20.68
116	5580	20.79	20.54	20.52
140	5700	20.64	20.48	20.74
144 (UNII-2c Band)	5720	15.36	15.17	15.17
144 (UNII-3 Band)	5720	5.34	5.23	5.19
<b>802.11ac (VHT40)</b>				
54	5270	41.60	40.91	41.09
62	5310	41.63	41.26	40.84
102	5510	41.20	41.33	41.23
110	5550	41.18	41.16	41.45
134	5670	41.31	41.18	41.56
142 (UNII-2c Band)	5710	35.82	35.63	35.56
142 (UNII-3 Band)	5710	5.65	6.07	5.42
<b>802.11ac (VHT80)</b>				
58	5290	82.93	82.76	82.28
106	5530	82.87	83.75	82.34
138 (UNII-2c Band)	5690	76.78	77.57	76.14
138 (UNII-3 Band)	5690	6.49	6.39	6.02

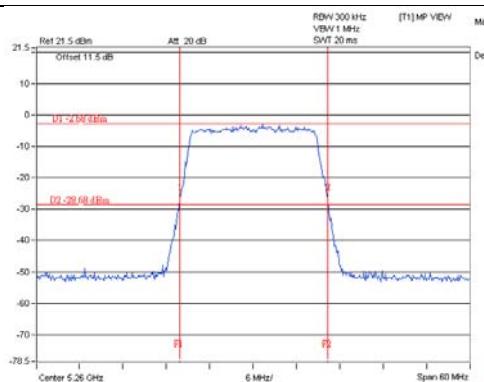
**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 11dBm + 10logB < UNII Band 2~3>					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)		
<b>802.11ac (VHT20)</b>					
52	5260	20.52	24.12	>	24
60	5300	20.38	24.09	>	24
64	5320	20.48	24.11	>	24
100	5500	20.60	24.13	>	24
116	5580	20.52	24.12	>	24
140	5700	20.48	24.11	>	24
144 (UNII-2c Band)	5720	15.17	22.8	<	24
144 (UNII-3 Band)	5720	5.19	24.15	<	30
<b>802.11ac (VHT40)</b>					
54	5270	40.91	27.11	>	24
62	5310	40.84	27.11	>	24
102	5510	41.20	27.14	>	24
110	5550	41.16	27.14	>	24
134	5670	41.18	27.14	>	24
142 (UNII-2c Band)	5710	35.56	26.5	>	24
142 (UNII-3 Band)	5710	5.42	24.33	<	30
<b>802.11ac (VHT80)</b>					
58	5290	82.28	30.15	>	24
106	5530	82.34	30.15	>	24
138 (UNII-2c Band)	5690	76.14	29.81	>	24
138 (UNII-3 Band)	5690	6.02	24.79	<	30

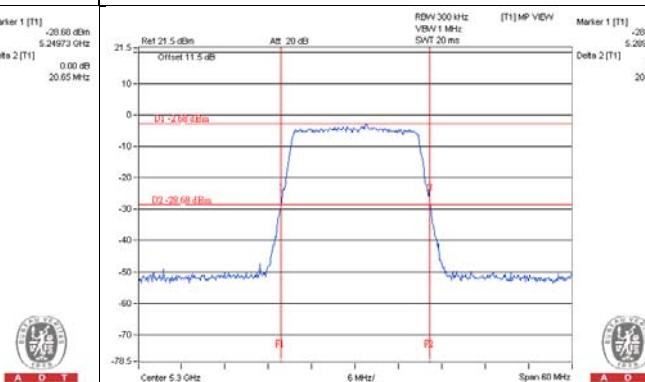
## 802.11ac (VHT20)

### For Chain (0)

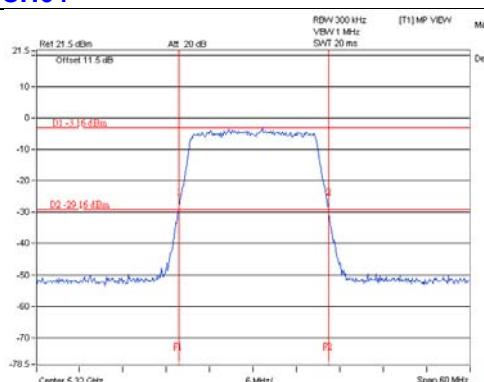
**CH52**



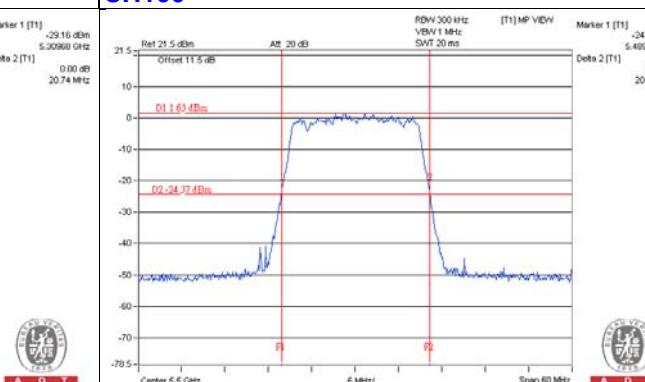
**CH60**



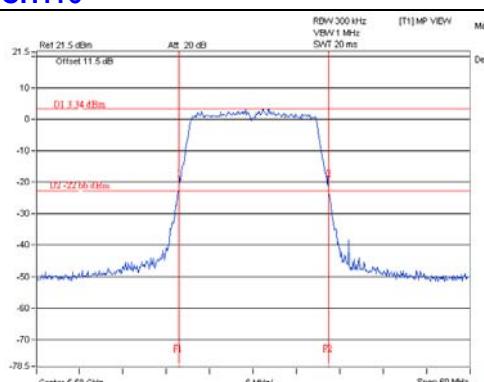
**CH64**



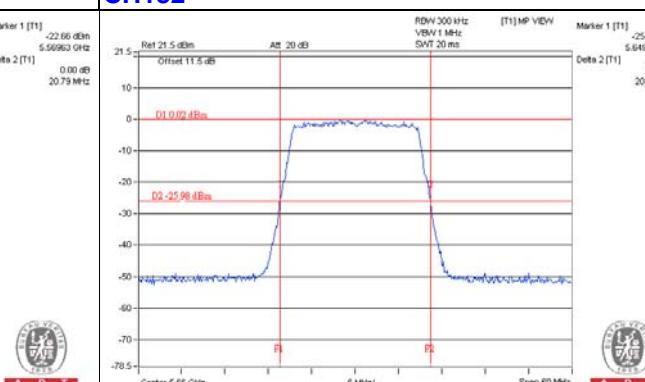
**CH100**



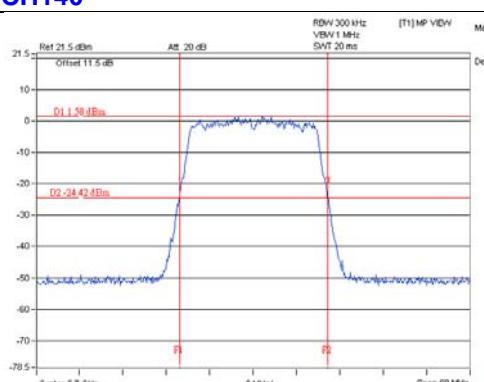
**CH116**



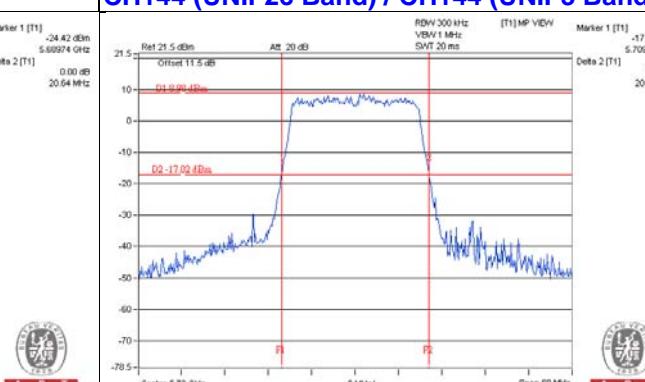
**CH132**



**CH140**



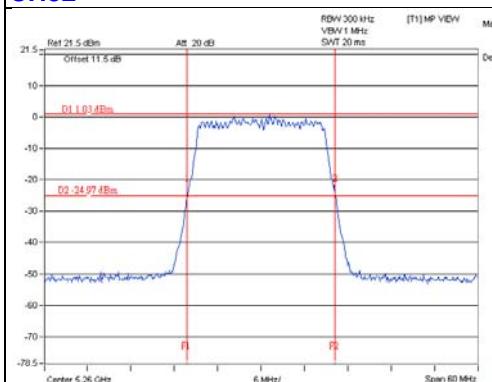
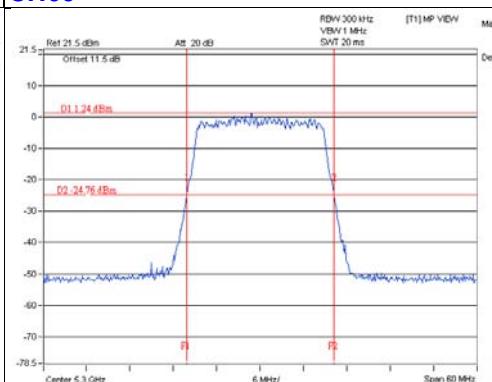
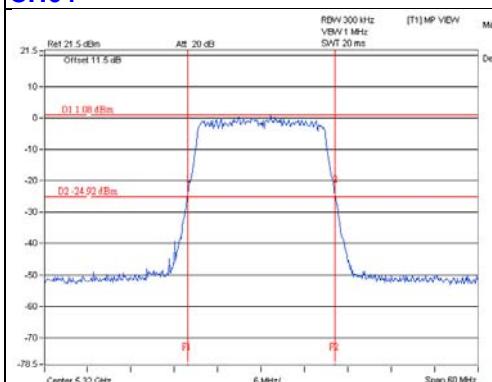
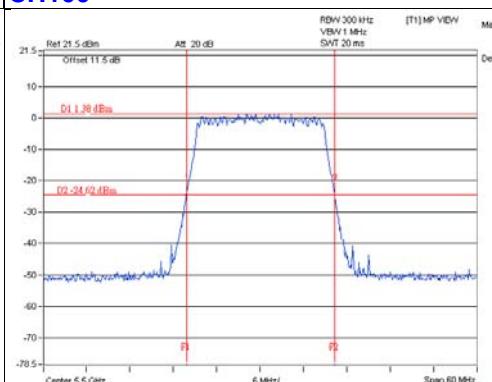
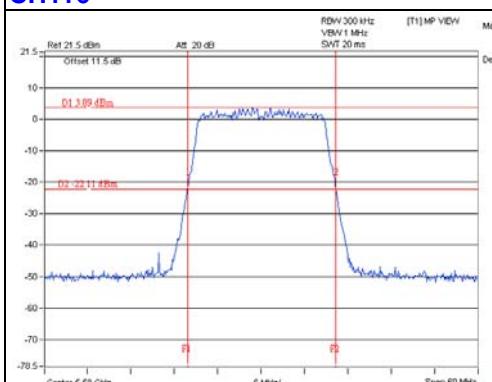
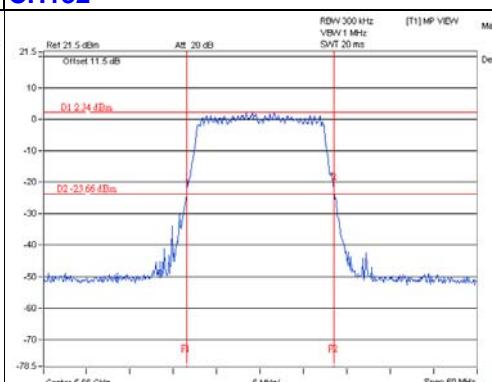
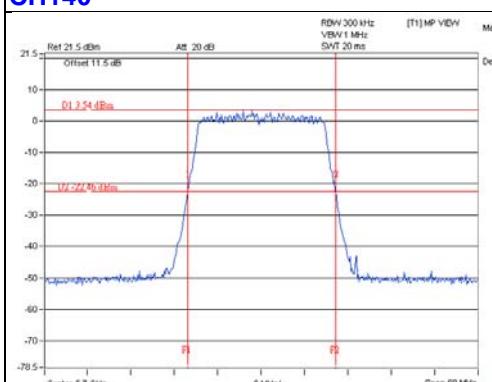
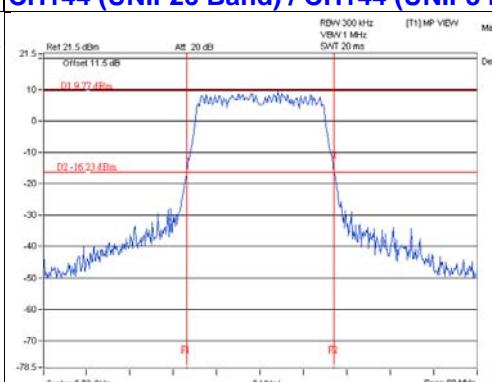
**CH144 (UNII-2c Band) / CH144 (UNII-3 Band)**



### NOTE:

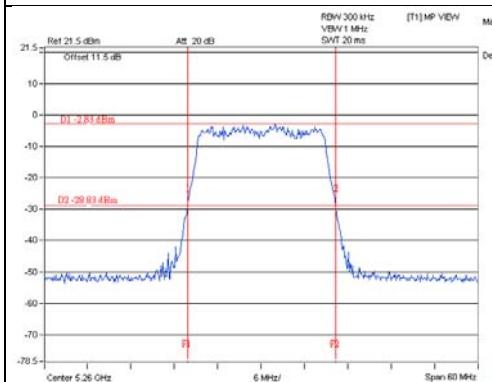
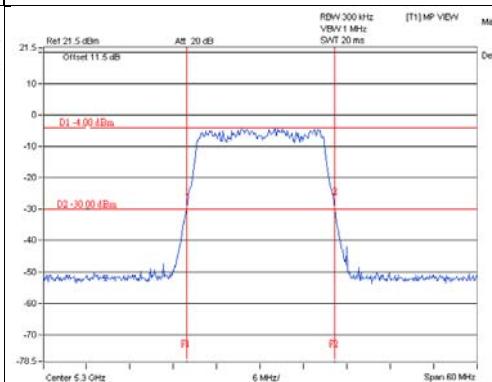
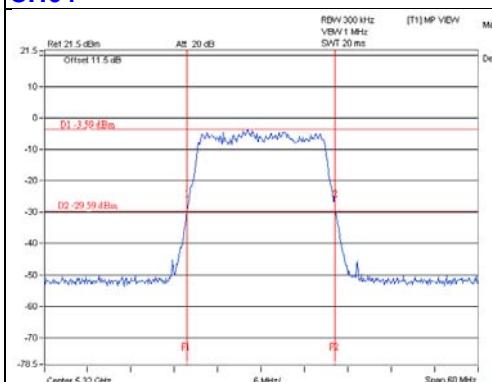
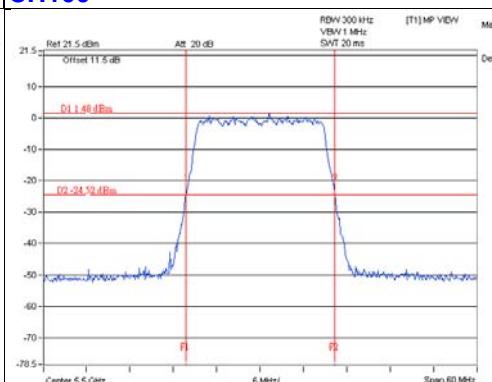
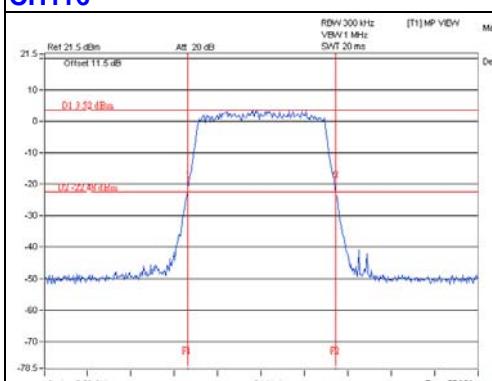
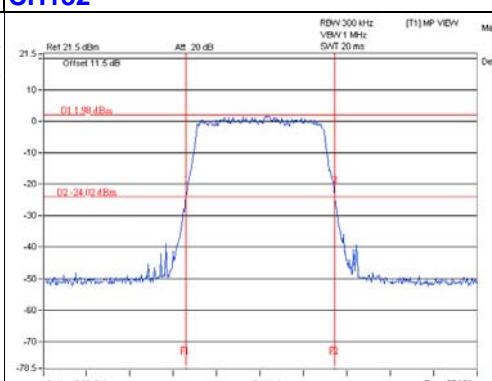
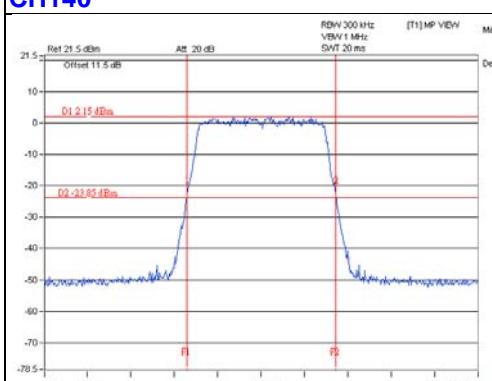
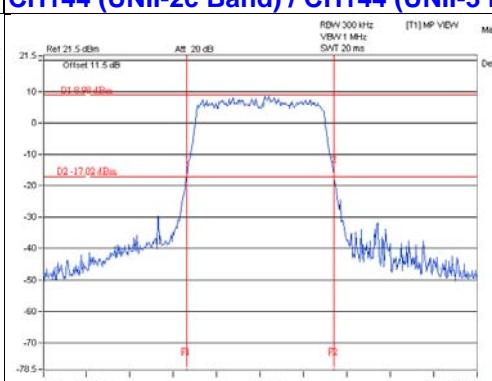
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (1)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

**For Chain (2)**
**CH52****CH60****CH64****CH100****CH116****CH132****CH140****CH144 (UNII-2c Band) / CH144 (UNII-3 Band)****NOTE:**

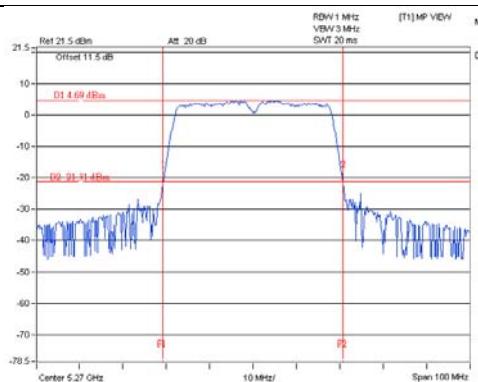
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

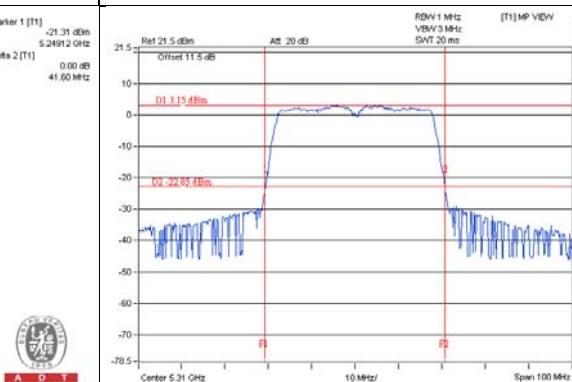
## 802.11ac (VHT40)

### For Chain (0)

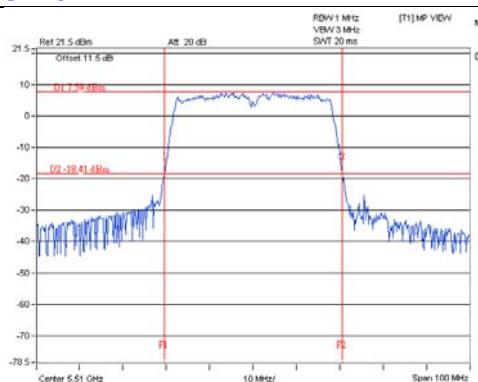
**CH54**



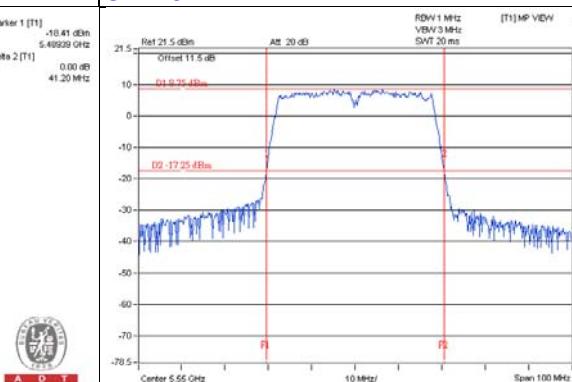
**CH62**



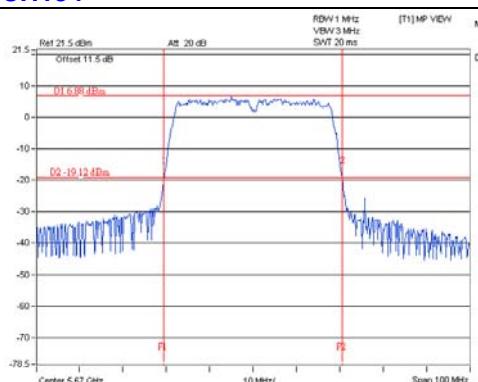
**CH102**



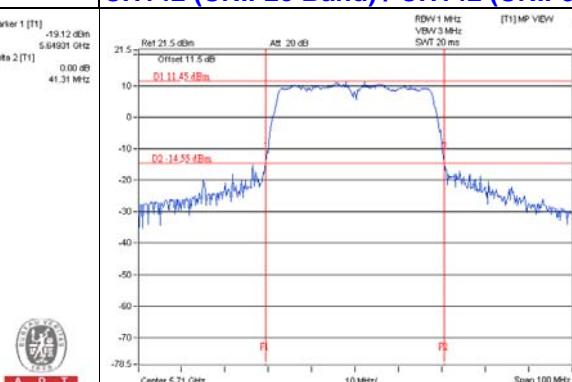
**CH110**



**CH134**



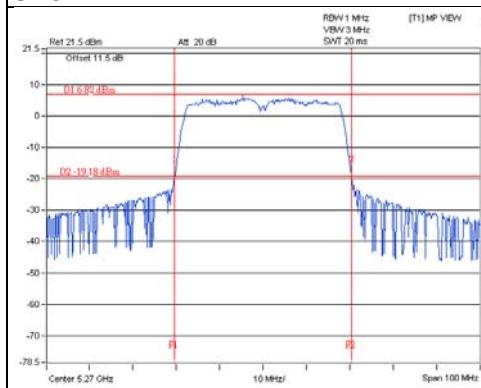
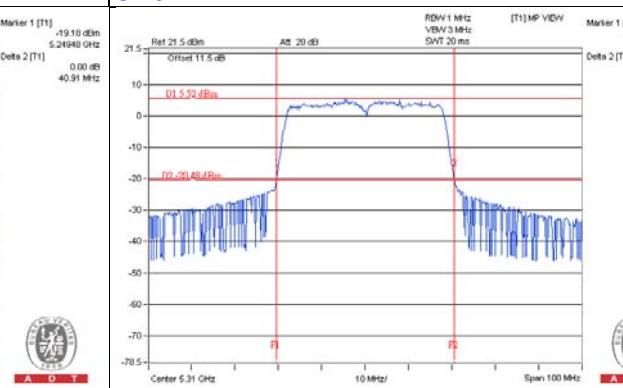
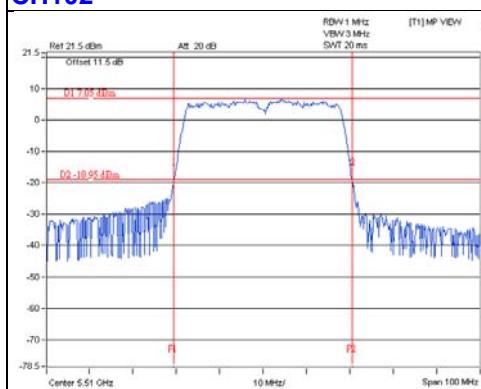
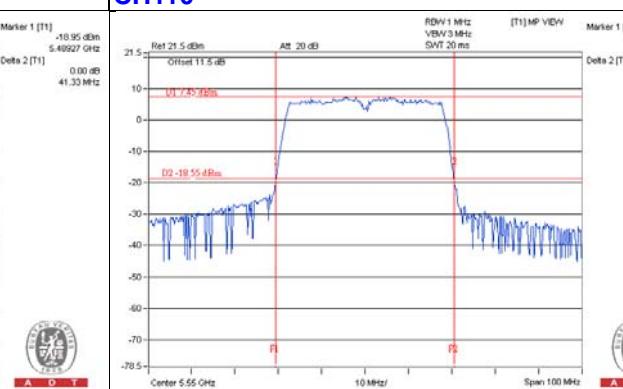
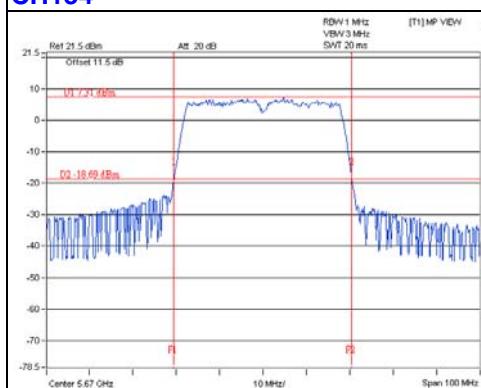
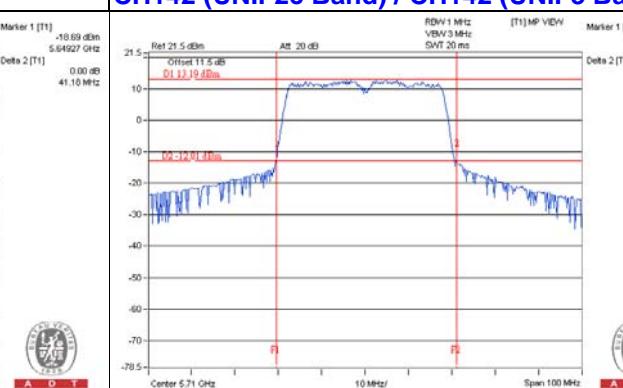
**CH142 (UNII-2c Band) / CH142 (UNII-3 Band)**



### NOTE:

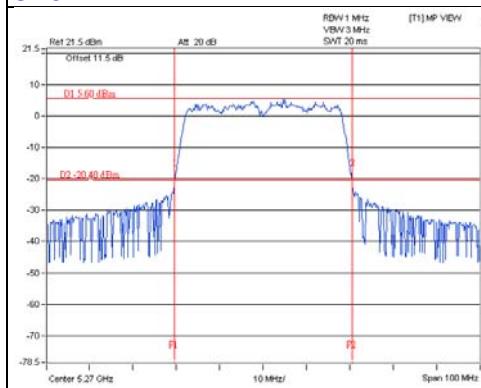
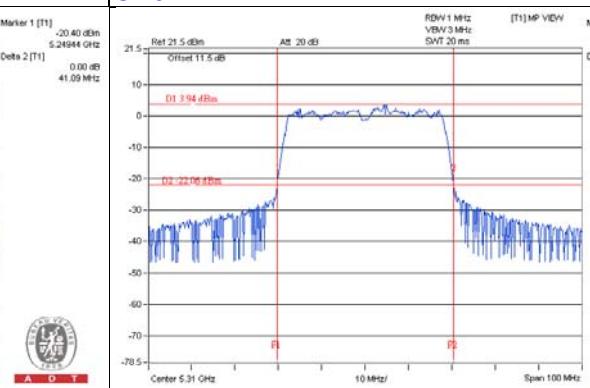
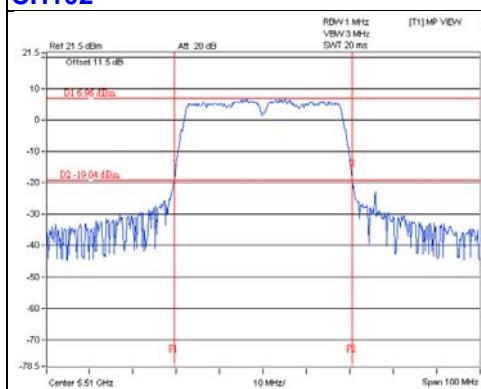
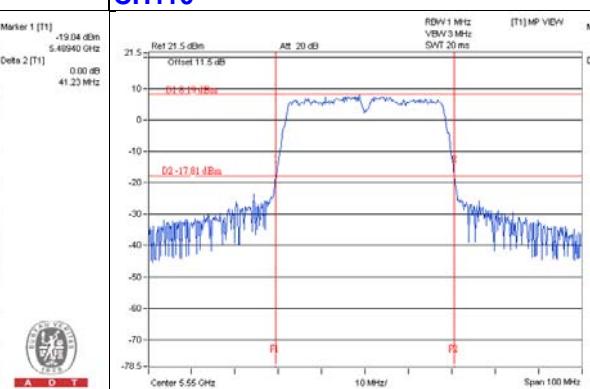
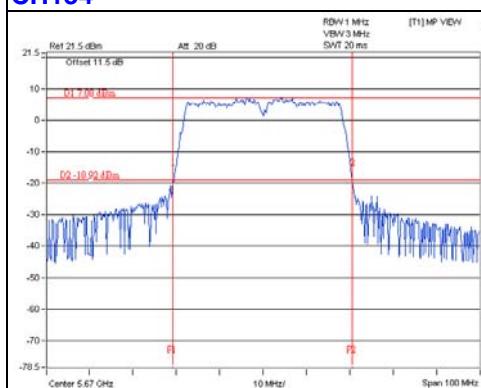
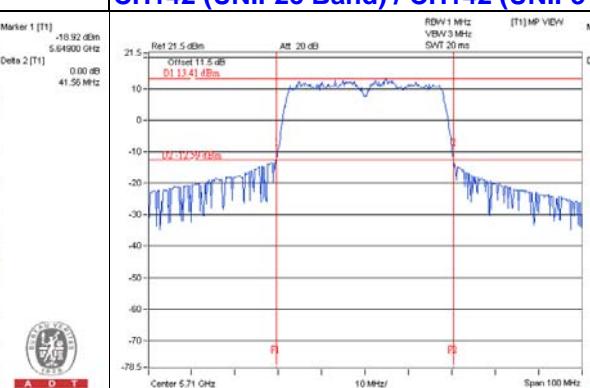
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (1)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

**For Chain (2)**
**CH54****CH62****CH102****CH110****CH134****CH142 (UNII-2c Band) / CH142 (UNII-3 Band)****NOTE:**

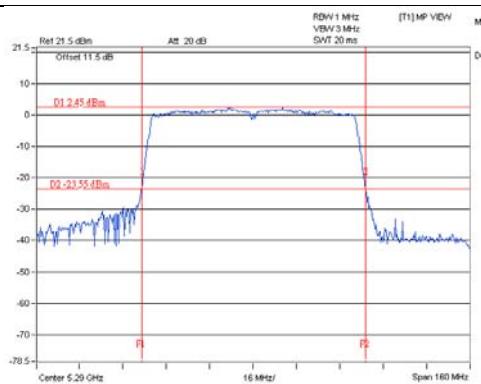
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

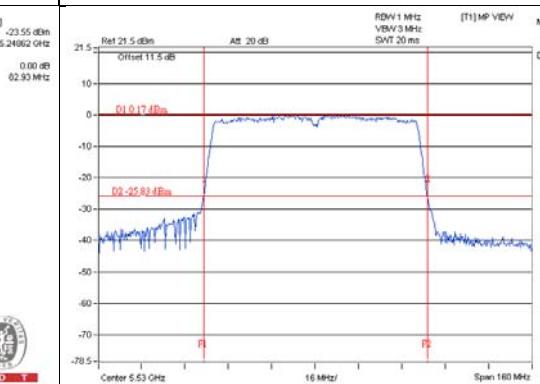
## 802.11ac (VHT80)

### For Chain (0)

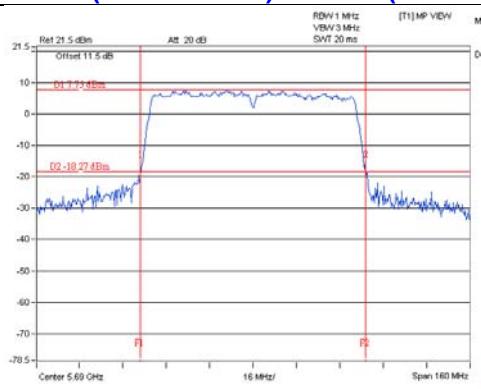
**CH58**



**CH106**



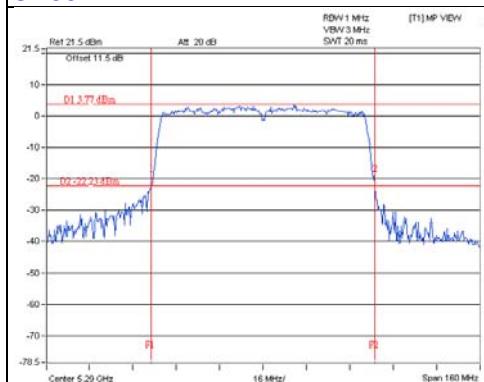
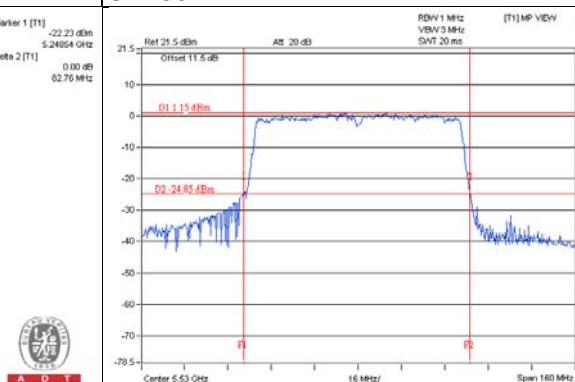
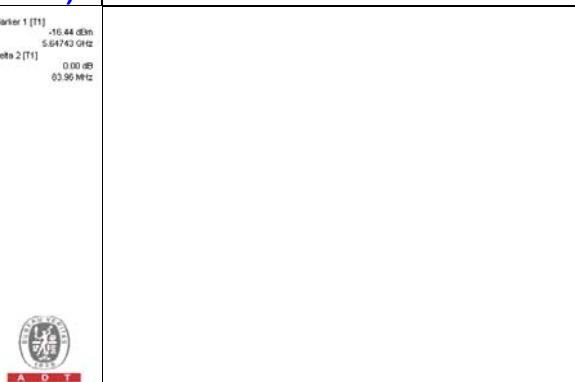
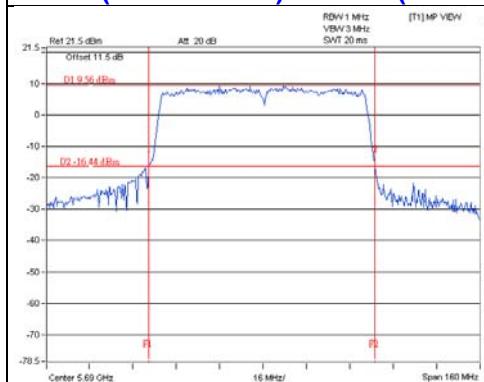
### CH138 (UNII-2c Band) / CH138 (UNII-3 Band)



### NOTE:

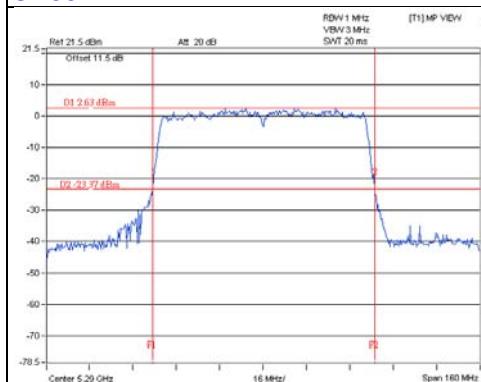
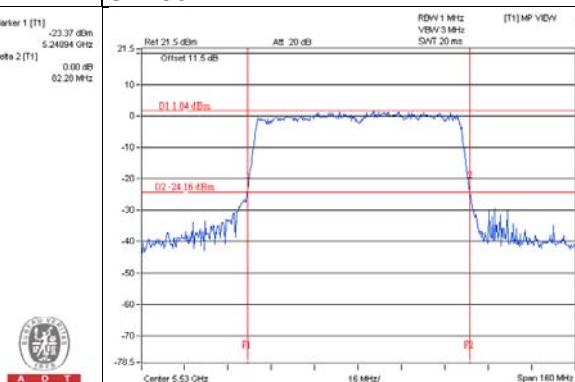
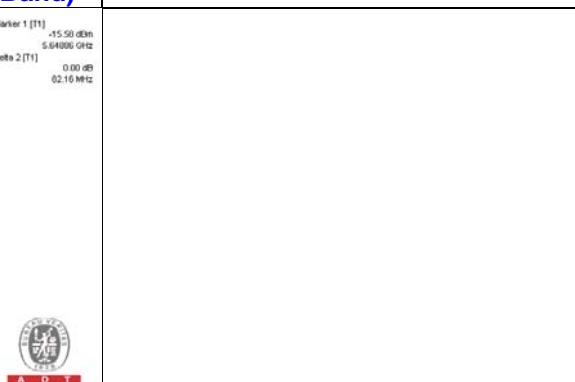
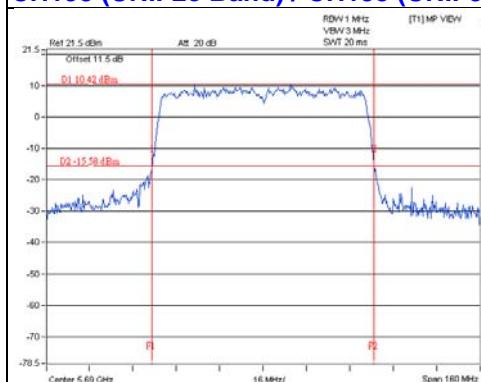
For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (1)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

**For Chain (2)**
**CH58****CH106**
**CH138 (UNII-2c Band) / CH138 (UNII-3 Band)**

**NOTE:**

For CH138 (UNII-2c Band) = 5725 - Market 1

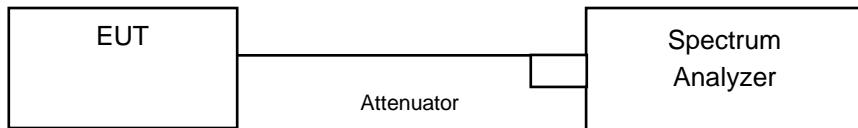
For CH138 (UNII-3 Band) = Delta 2 – CH138 (UNII-2c Band) BW

#### 4.4 Peak Power Spectral Density Measurement

##### 4.4.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		LIMIT	
U-NII-1	Outdoor Access Point		17dBm/ MHz	
	Fixed point-to-point Access Point			
	Indoor Access Point			
	Mobile and Portable client device		11dBm/ MHz	
U-NII-2A	√		11dBm/ MHz	
U-NII-2C	√		11dBm/ MHz	
U-NII-3	√		30dBm/ 500kHz	

##### 4.4.2 Test Setup



##### 4.4.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

#### 4.4.4 Test Procedure

**For U-NII-2A, U-NII-2C and U-NII-3 band:**

**For 802.11a, 802.11ac (VHT20) & 802.11ac (VHT40):**

Using method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value

**For 802.11ac (VHT80):**

Using method SA-2

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

#### 4.4.5 Deviation from Test Standard

No deviation.

#### 4.4.6 EUT Operating Condition

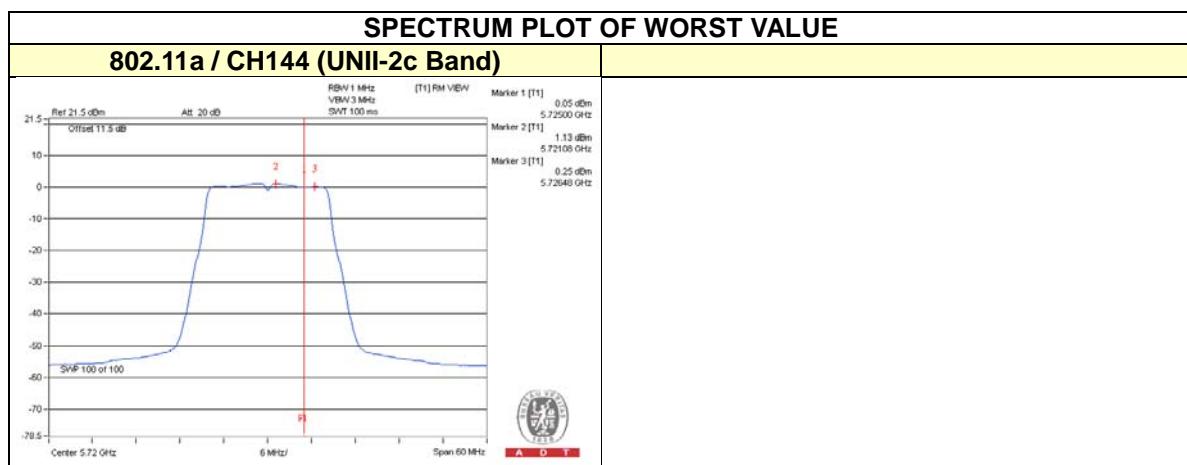
Same as Item 4.3.6.

#### 4.4.7 Test Results (Mode 1)

**For U-NII-2A, U-NII-2C, U-NII-3 band:**

**802.11a**

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
52	5260	-4.43	11	PASS
60	5300	-6.04	11	PASS
64	5320	-5.98	11	PASS
100	5500	-2.45	11	PASS
116	5580	-1.80	11	PASS
140	5700	-4.77	11	PASS
144 (UNII-2c Band)	5720	1.13	11	PASS
144 (UNII-3 Band)	5720	0.25	17	PASS



#### 4.4.8 Test Results (Mode 2)

**For U-NII-2A, U-NII-2C, U-NII-3 band:  
CDD, Beam forming (MCS0 NSS=1) MODE**

<b>802.11ac (VHT20)</b>						
<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>PSD (dBm)</b>		<b>TOTAL POWER DENSITY (dBm)</b>	<b>MAX. LIMIT (dBm)</b>	<b>PASS / FAIL</b>
		<b>CHAIN 0</b>	<b>CHAIN 1</b>			
52	5260	-4.82	-3.49	-1.09	9.13	PASS
60	5300	-4.89	-3.40	-1.07	9.13	PASS
64	5320	-4.66	-3.36	-0.95	9.13	PASS
100	5500	-2.47	-1.82	0.88	9.05	PASS
116	5580	0.65	1.15	3.92	9.05	PASS
140	5700	-0.35	0.07	2.88	9.05	PASS
144 (UNII-2c Band)	5720	2.64	4.28	6.55	9.05	PASS
144 (UNII-3 Band)	5720	1.59	3.32	5.55	15.07	PASS

**NOTE:**

- 1. Method a) 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.
- 2. **5250~5350MHz:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.87 \text{dBi} > 6 \text{dBi}$ , so the power density limit shall be reduced to  $11-(7.87-6) = 9.13 \text{dBm}$ .
- 5470~5725MHz (Except for UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.95 \text{dBi} > 6 \text{dBi}$ , so the power density limit shall be reduced to  $11-(7.95-6) = 9.05 \text{dBm}$ .
- 5725~5825MHz (For UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.93 \text{dBi} > 6 \text{dBi}$ , so the power density limit shall be reduced to  $17-(7.93-6) = 15.07 \text{dBm}$ .

**802.11ac (VHT40)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
54	5270	-3.81	-3.29	-0.37	9.13	PASS
62	5310	-4.05	-3.31	-0.49	9.13	PASS
102	5510	-4.58	-4.08	-1.15	9.05	PASS
110	5550	-2.94	-1.94	0.76	9.05	PASS
134	5670	-1.67	-1.42	1.63	9.05	PASS
142 (UNII-2c Band)	5710	1.53	3.27	5.50	9.05	PASS
142 (UNII-3 Band)	5710	0.47	2.16	4.41	15.07	PASS

**NOTE:**

- 1. Method a) 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.
- 2. **5250~5350MHz:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.87\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(7.87-6) = 9.13\text{dBm}$ .
- 5470~5725MHz (Except for UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.95\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(7.95-6) = 9.05\text{dBm}$ .
- 5725~5825MHz (For UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.93\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $17-(7.93-6) = 15.07\text{dBm}$ .

**802.11ac (VHT80)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)		DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1				
58	5290	-6.13	-5.32	0.15	-2.55	9.13	PASS
106	5530	-8.49	-7.78	0.15	-4.96	9.05	PASS
138 (UNII-2c Band)	5690	-1.27	0.25	0.15	2.72	9.05	PASS
138 (UNII-3 Band)	5690	-2.78	-1.10	0.15	1.30	15.07	PASS

**NOTE:**

1. Method a) 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.
2. **5250~5350MHz:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.87\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(7.87-6) = 9.13\text{dBm}$ .
- 5470~5725MHz (Except for UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.95\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(7.95-6) = 9.05\text{dBm}$ .
- 5725~5825MHz (For UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.93\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $17-(7.93-6) = 15.07\text{dBm}$ .
3. Refer to section 3.4 for duty cycle spectrum plot.

**802.11ac (VHT80)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)		DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1				
58	5290	-6.13	-5.32	0.3	-2.40	9.13	PASS
106	5530	-8.49	-7.78	0.3	-4.81	9.05	PASS
138 (UNII-2c Band)	5690	-1.27	0.25	0.3	2.87	9.05	PASS
138 (UNII-3 Band)	5690	-2.78	-1.10	0.3	1.45	15.07	PASS

**NOTE:** 1. Method a) 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.

2. **5250~5350MHz:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.87\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(7.87-6) = 9.13\text{dBm}$ .

**5470~5725MHz (Except for UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.95\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(7.95-6) = 9.05\text{dBm}$ .

**5725~5825MHz (For UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.93\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $17-(7.93-6) = 15.07\text{dBm}$ .

3. Refer to section 3.4 for duty cycle spectrum plot.

**SDM, Beam forming (MCS0 NSS=2)\_MODE**
**802.11ac (VHT20)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
52	5260	-4.82	-3.49	-1.09	11	PASS
60	5300	-4.89	-3.40	-1.07	11	PASS
64	5320	-4.66	-3.36	-0.95	11	PASS
100	5500	-2.47	-1.82	0.88	11	PASS
116	5580	0.65	1.15	3.92	11	PASS
140	5700	-0.35	0.07	2.88	11	PASS
144 (UNII-2c Band)	5720	2.64	4.28	6.55	11	PASS
144 (UNII-3 Band)	5720	1.59	3.32	5.55	17	PASS

**NOTE:** 1. Method a) 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.

**802.11ac (VHT40)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
54	5270	-3.81	-3.29	-0.37	11	PASS
62	5310	-4.05	-3.31	-0.49	11	PASS
102	5510	-4.58	-4.08	-1.15	11	PASS
110	5550	-2.94	-1.94	0.76	11	PASS
134	5670	-1.67	-1.42	1.63	11	PASS
142 (UNII-2c Band)	5710	1.53	3.27	5.66	11	PASS
142 (UNII-3 Band)	5710	0.47	2.16	4.57	17	PASS

**NOTE:** 1. Method a) 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.

<b>802.11ac (VHT80)</b>							
<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>PSD W/O DUTY FACTOR (dBm)</b>		<b>DUTY FACTOR (dB)</b>	<b>TOTAL PSD WITH DUTY FACTOR (dBm)</b>	<b>MAX. LIMIT (dBm)</b>	<b>PASS/FAIL</b>
		<b>CHAIN 0</b>	<b>CHAIN 1</b>				
58	5290	-6.13	-5.32	0.16	-2.40	11	PASS
106	5530	-8.49	-7.78	0.16	-4.81	11	PASS
138 (UNII-2c Band)	5690	-1.27	0.25	0.16	2.87	11	PASS
138 (UNII-3 Band)	5690	-2.78	-1.10	0.16	1.45	17	PASS
<b>NOTE:</b> 1. Method a) 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. 2. Refer to section 3.4 for duty cycle spectrum plot.							

**STBC\_MODE**
**802.11ac (VHT20)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
52	5260	-4.18	-2.71	-0.37	11	PASS
60	5300	-4.16	-3.16	-0.62	11	PASS
64	5320	-4.19	-3.09	-0.59	11	PASS
100	5500	-2.09	-1.88	1.03	11	PASS
116	5580	1.10	1.51	4.32	11	PASS
140	5700	0.26	0.47	3.38	11	PASS
144 (UNII-2c Band)	5720	2.64	4.28	6.55	11	PASS
144 (UNII-3 Band)	5720	1.59	3.32	5.55	17	PASS

**NOTE:** 1. Method a) 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.

**802.11ac (VHT40)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
54	5270	-3.52	-2.81	0.02	11	PASS
62	5310	-4.05	-3.31	-0.49	11	PASS
102	5510	-4.27	-3.86	-0.89	11	PASS
110	5550	-2.30	-1.78	1.14	11	PASS
134	5670	-1.67	-1.42	1.63	11	PASS
142 (UNII-2c Band)	5710	2.07	3.90	6.09	11	PASS
142 (UNII-3 Band)	5710	1.10	3.00	5.16	17	PASS

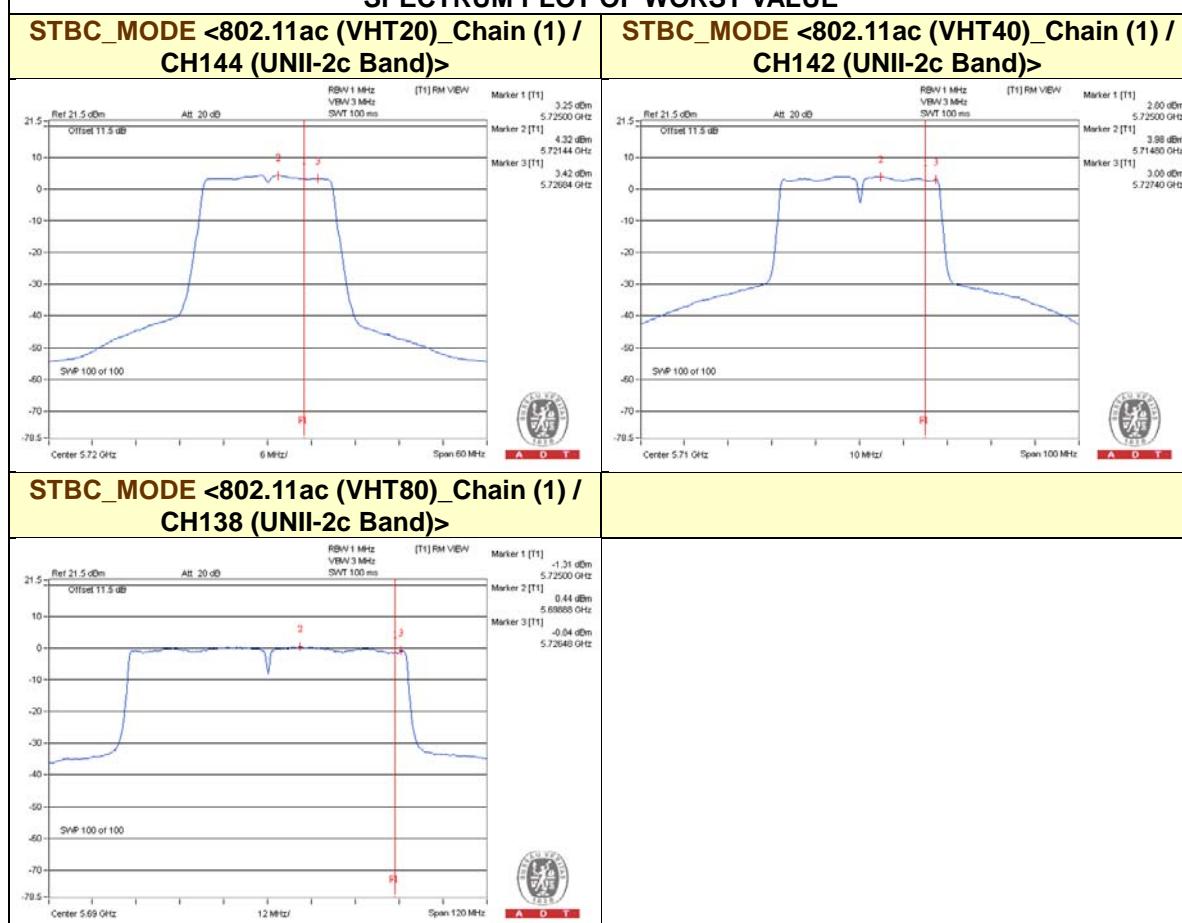
**NOTE:** 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

**802.11ac (VHT80)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)		DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1				
58	5290	-4.41	-3.82	0.15	-0.94	11	PASS
106	5530	-8.49	-7.78	0.15	-4.96	11	PASS
138 (UNII-2c Band)	5690	-1.27	0.25	0.15	2.72	11	PASS
138 (UNII-3 Band)	5690	-2.78	-1.10	0.15	1.30	17	PASS

**NOTE:** 1. Method a) 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.

2. Refer to section 3.4 for duty cycle spectrum plot.

**SPECTRUM PLOT OF WORST VALUE**


#### 4.4.9 Test Results (Mode 3)

**For U-NII-2A, U-NII-2C, U-NII-3 band:  
CDD, Beamforming (MCS0 NSS=1) MODE**

<b>802.11ac (VHT20)</b>							
<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>PSD (dBm)</b>			<b>TOTAL POWER DENSITY (dBm)</b>	<b>MAX. LIMIT (dBm)</b>	<b>PASS/FAIL</b>
		<b>CHAIN 0</b>	<b>CHAIN 1</b>	<b>CHAIN 2</b>			
52	5260	-8.10	-5.73	-8.93	-2.60	7.54	PASS
60	5300	-8.11	-5.64	-10.41	-2.85	7.54	PASS
64	5320	-8.40	-5.14	-10.57	-2.69	7.54	PASS
100	5500	-6.20	-5.45	-4.98	-0.74	7.48	PASS
116	5580	-2.04	-1.82	-1.71	2.92	7.48	PASS
140	5700	-5.84	-3.96	-3.56	0.43	7.48	PASS
144 (UNII-2c Band)	5720	2.33	2.69	2.50	7.28	7.48	PASS
144 (UNII-3 Band)	5720	0.92	2.42	1.16	6.32	13.54	PASS
<b>NOTE:</b>	1. Method a) 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. 2. <b>5250~5350MHz:</b> Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.46\text{dBi}$ > 6dBi , so the power density limit shall be reduced to $11-(9.46-6) = 7.54\text{dBm}$ . <b>5470~5725MHz (Except for UNII-3 Band):</b> Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.52\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to $11-(9.52-6) = 7.48\text{dBm}$ . <b>5725~5825MHz (For UNII-3 Band):</b> Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.46\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to $17-(9.46-6) = 13.54\text{dBm}$ .						

**802.11ac (VHT40)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
54	5270	-6.30	-5.35	-7.18	-1.44	7.54	PASS
62	5310	-7.87	-6.47	-9.61	-3.03	7.54	PASS
102	5510	-6.23	-5.59	-5.40	-0.95	7.48	PASS
110	5550	-4.85	-5.10	-3.96	0.16	7.48	PASS
134	5670	-7.85	-6.61	-5.94	-1.96	7.48	PASS
142 (UNII-2c Band)	5710	-1.63	-0.96	-0.35	3.82	7.48	PASS
142 (UNII-3 Band)	5710	-2.85	-2.12	-1.52	2.64	13.54	PASS

**NOTE:** 1. Method a) 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.  
 2. **5250~5350MHz:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.46\text{dBi}$  > 6dBi , so the power density limit shall be reduced to  $11-(9.46-6) = 7.54\text{dBm}$ .  
**5470~5725MHz (Except for UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.52\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $11-(9.52-6) = 7.48\text{dBm}$ .  
**5725~5825MHz (For UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.46\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $17-(9.46-6) = 13.54\text{dBm}$ .

**802.11ac (VHT80)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)			DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
58	5290	-8.62	-7.97	-9.45	0.15	-3.72	7.54	PASS
106	5530	-10.96	-10.20	-10.05	0.15	-5.46	7.48	PASS
138 (UNII-2c Band)	5690	-5.17	-4.70	-3.82	0.15	0.39	7.48	PASS
138 (UNII-3 Band)	5690	-6.73	-5.37	-5.78	0.15	-1.00	13.54	PASS

**NOTE:**

1. Method a) 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.
2. **5250~5350MHz:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.46\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(9.46-6) = 7.54\text{dBm}$ .
- 5470~5725MHz (Except for UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.52\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $11-(9.52-6) = 7.48\text{dBm}$ .
- 5725~5825MHz (For UNII-3 Band):** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 9.46\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $17-(9.46-6) = 13.54\text{dBm}$ .
3. Refer to section 3.4 for duty cycle spectrum plot.

**SDM, Beam forming (MCS0 NSS=3) \_ MODE**
**802.11ac (VHT20)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
52	5260	-8.10	-5.73	-8.93	-2.60	11	PASS
60	5300	-8.11	-5.64	-10.41	-2.85	11	PASS
64	5320	-8.40	-5.14	-10.57	-2.69	11	PASS
100	5500	-6.20	-5.45	-4.98	-0.74	11	PASS
116	5580	-2.04	-1.82	-1.71	2.92	11	PASS
140	5700	-5.84	-3.96	-3.56	0.43	11	PASS
144 (UNII-2c Band)	5720	2.33	2.69	2.50	7.28	11	PASS
144 (UNII-3 Band)	5720	0.92	2.42	1.16	6.32	17	PASS

**NOTE:**

1. Method a) 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.
2. The SDM mode is non-correlated mode.
3. For Beam forming (MCS0 NSS=3) Mode:  
**5250~5350MHz:** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.75\text{dBi} < 6\text{dBi}$ , so the power density limit shall not be reduced.  
**5470~5725MHz (Except for UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.75\text{dBi} < 6\text{dBi}$ , so the power density limit shall not be reduced.  
**5725~5825MHz (For UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.71\text{dBi} < 6\text{dBi}$ , so the power density limit shall not be reduced.

**802.11ac (VHT40)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
54	5270	-6.30	-5.35	-7.18	-1.44	11	PASS
62	5310	-7.87	-6.47	-9.61	-3.03	11	PASS
102	5510	-6.23	-5.59	-5.40	-0.95	11	PASS
110	5550	-4.85	-5.10	-3.96	0.16	11	PASS
134	5670	-7.85	-6.61	-5.94	-1.96	11	PASS
142 (UNII-2c Band)	5710	-1.63	-0.96	-0.35	3.82	11	PASS
142 (UNII-3 Band)	5710	-2.85	-2.12	-1.52	2.64	17	PASS

**NOTE:**

1. Method a) 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.
2. The SDM mode is non-correlated mode.
3. For Beam forming (MCS0 NSS=3) Mode:  
**5250~5350MHz:** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.75\text{dBi} < 6\text{dBi}$ , so the power density limit shall not be reduced.  
**5470~5725MHz (Except for UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.75\text{dBi} < 6\text{dBi}$ , so the power density limit shall not be reduced.  
**5725~5825MHz (For UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.71\text{dBi} < 6\text{dBi}$ , so the power density limit shall not be reduced.

**802.11ac (VHT80)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)			DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
58	5290	-8.62	-7.97	-9.45	0.15	-3.72	11	PASS
106	5530	-10.96	-10.20	-10.05	0.15	-5.46	11	PASS
138 (UNII-2c Band)	5690	-5.17	-4.70	-3.82	0.15	0.39	11	PASS
138 (UNII-3 Band)	5690	-6.73	-5.37	-5.78	0.15	-1.00	17	PASS

**NOTE:**

1. Method a) 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.
2. The SDM mode is non-correlated mode.
3. For Beam forming (MCS0 NSS=3) Mode:  
**5250~5350MHz:** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.75\text{dBi}$  < 6dBi , so the power density limit shall not be reduced.  
**5470~5725MHz (Except for UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.75\text{dBi} < 6\text{dBi}$  , so the power density limit shall not be reduced.  
**5725~5825MHz (For UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/3) = 5.71\text{dBi} < 6\text{dBi}$  , so the power density limit shall not be reduced.
4. Refer to section 3.4 for duty cycle spectrum plot.

**Beamforming (MCS0 NSS=2) MODE**
**802.11ac (VHT20)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
52	5260	-8.10	-5.73	-8.93	-2.60	9.49	PASS
60	5300	-8.11	-5.64	-10.41	-2.85	9.49	PASS
64	5320	-8.40	-5.14	-10.57	-2.69	9.49	PASS
100	5500	-6.20	-5.45	-4.98	-0.74	9.49	PASS
116	5580	-2.04	-1.82	-1.71	2.92	9.49	PASS
140	5700	-5.84	-3.96	-3.56	0.43	9.49	PASS
144 (UNII-2c Band)	5720	2.33	2.69	2.50	7.28	9.49	PASS
144 (UNII-3 Band)	5720	0.92	2.42	1.16	6.32	15.53	PASS

**NOTE:**

- 1. Method a) 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.
- 2. **5250~5350MHz:** Directional gain = maximum gain of antennas +  $10 \log(3/2)$  = 7.51dBi > 6dBi , so the power density limit shall be reduced to  $11-(7.51-6)$  = 9.49dBm.
- 5470~5725MHz (Except for UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/2)$  = 7.51dBi > 6dBi , so the power density limit shall be reduced to  $11-(7.51-6)$  = 9.49dBm.
- 5725~5825MHz (For UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/2)$  = 7.47dBi > 6dBi , so the power density limit shall be reduced to  $17-(7.47-6)$  = 15.53dBm.

**802.11ac (VHT40)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
54	5270	-6.30	-5.35	-7.18	-1.44	9.49	PASS
62	5310	-7.87	-6.47	-9.61	-3.03	9.49	PASS
102	5510	-6.23	-5.59	-5.40	-0.95	9.49	PASS
110	5550	-4.85	-5.10	-3.96	0.16	9.49	PASS
134	5670	-7.85	-6.61	-5.94	-1.96	9.49	PASS
142 (UNII-2c Band)	5710	-1.63	-0.96	-0.35	3.82	9.49	PASS
142 (UNII-3 Band)	5710	-2.85	-2.12	-1.52	2.64	15.53	PASS

**NOTE:** 1. Method a) 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.

2. **5250~5350MHz:** Directional gain = maximum gain of antennas +  $10 \log(3/2)$  = 7.51dBi > 6dBi , so the power density limit shall be reduced to  $11-(7.51-6)$  = 9.49dBm.

**5470~5725MHz (Except for UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/2)$  = 7.51dBi > 6dBi , so the power density limit shall be reduced to  $11-(7.51-6)$  = 9.49dBm.

**5725~5825MHz (For UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/2)$  = 7.47dBi > 6dBi , so the power density limit shall be reduced to  $17-(7.47-6)$  = 15.53dBm.

**802.11ac (VHT80)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)			DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
58	5290	-8.62	-7.97	-9.45	0.15	-3.72	9.49	PASS
106	5530	-10.96	-10.20	-10.05	0.15	-5.46	9.49	PASS
138 (UNII-2c Band)	5690	-5.17	-4.70	-3.82	0.15	0.39	9.49	PASS
138 (UNII-3 Band)	5690	-6.73	-5.37	-5.78	0.15	-1.00	15.53	PASS

**NOTE:** 1. Method a) 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.

2. **5250~5350MHz:** Directional gain = maximum gain of antennas +  $10 \log(3/2) = 7.51\text{dBi}$  > 6dBi , so the power density limit shall be reduced to  $11-(7.51-6) = 9.49\text{dBm}$ .

**5470~5725MHz (Except for UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/2) = 7.51\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $11-(7.51-6) = 9.49\text{dBm}$ .

**5725~5825MHz (For UNII-3 Band):** Directional gain = maximum gain of antennas +  $10 \log(3/2) = 7.47\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $17-(7.47-6) = 15.53\text{dBm}$ .

3. Refer to section 3.4 for duty cycle spectrum plot.

**STBC\_MODE**
**802.11ac (VHT20)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
52	5260	-8.10	-5.73	-8.93	-2.60	11	PASS
60	5300	-8.11	-5.64	-10.41	-2.85	11	PASS
64	5320	-8.40	-5.14	-10.57	-2.69	11	PASS
100	5500	-4.56	-4.55	-4.90	0.10	11	PASS
116	5580	-2.04	-1.82	-1.71	2.92	11	PASS
140	5700	-4.67	-3.03	-3.36	1.14	11	PASS
144 (UNII-2c Band)	5720	1.78	2.85	3.05	7.37	11	PASS
144 (UNII-3 Band)	5720	1.04	1.71	2.18	6.44	17	PASS

**NOTE:** 1. Method a) 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.

**802.11ac (VHT40)**

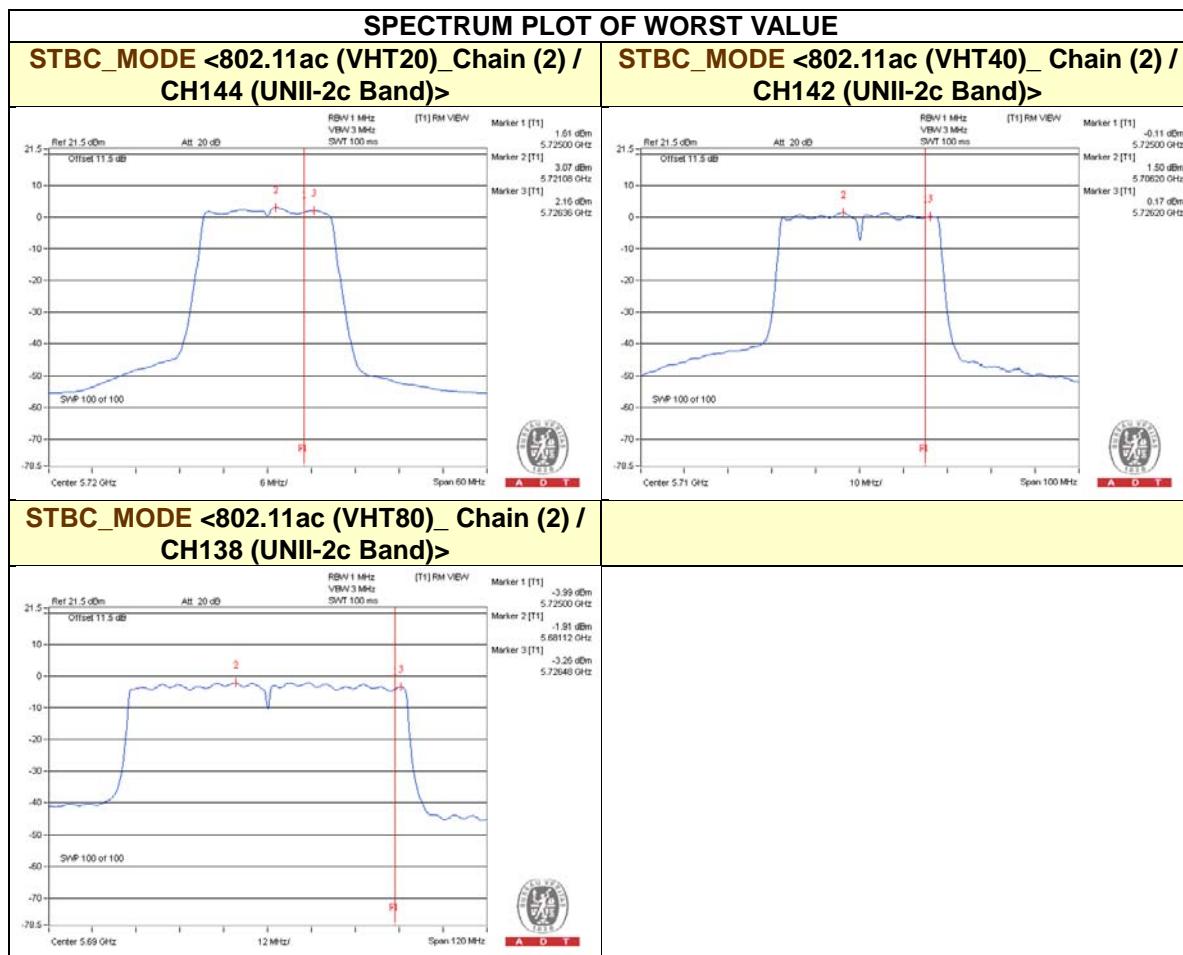
CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
54	5270	-6.30	-5.35	-7.18	-1.44	11	PASS
62	5310	-7.87	-6.47	-9.61	-3.03	11	PASS
102	5510	-4.19	-4.98	-4.95	0.08	11	PASS
110	5550	-3.12	-4.07	-4.18	1.01	11	PASS
134	5670	-5.14	-4.62	-4.89	-0.11	11	PASS
142 (UNII-2c Band)	5710	0.28	1.17	1.50	5.78	11	PASS
142 (UNII-3 Band)	5710	-1.79	0.60	0.09	4.52	17	PASS

**NOTE:** 1. Method a) 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.

**802.11ac (VHT80)**

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)			DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
58	5290	-8.62	-7.97	-9.45	0.15	-3.72	11	PASS
106	5530	-10.96	-10.20	-10.05	0.15	-5.46	11	PASS
138 (UNII-2c Band)	5690	-3.04	-2.68	-1.91	0.15	2.40	11	PASS
138 (UNII-3 Band)	5690	-4.06	-4.20	-3.45	0.15	1.03	17	PASS

**NOTE:** 1. Method a) 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.  
 2. Refer to section 3.4 for duty cycle spectrum plot.

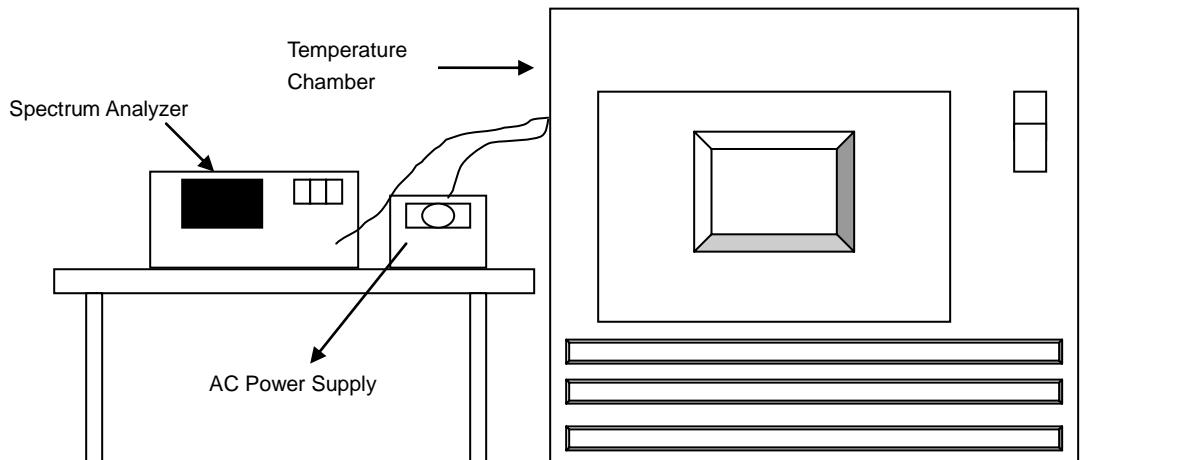


## 4.5 Frequency Stability Measurement

### 4.5.1 Limits of Frequency Stability Measurement

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

### 4.5.2 Test Setup



### 4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.5.4 Test Procedure

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

### 4.5.5 Deviation from Test Standard

No deviation.

### 4.5.6 EUT Operating Condition

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

#### 4.5.7 Test Results

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)						
50	120	5320.0192	0.00036	5320.0146	0.00027	5320.017	0.00032	5320.0157	0.00030
40	120	5320.0017	0.00003	5319.9994	-0.00001	5320.0024	0.00005	5320.0043	0.00008
30	120	5320.0234	0.00044	5320.0233	0.00044	5320.0251	0.00047	5320.0216	0.00041
20	120	5319.9956	-0.00008	5319.9998	0.00000	5320	0.00000	5319.9999	0.00000
10	120	5319.9984	-0.00003	5319.9988	-0.00002	5319.9944	-0.00011	5319.9995	-0.00001
0	120	5320.0039	0.00007	5320.0038	0.00007	5320.0023	0.00004	5320.0009	0.00002
-10	120	5319.9959	-0.00008	5319.9912	-0.00017	5319.9929	-0.00013	5319.9936	-0.00012
-20	120	5319.984	-0.00030	5319.9822	-0.00033	5319.9828	-0.00032	5319.9815	-0.00035
-30	120	5319.9866	-0.00025	5319.9888	-0.00021	5319.9894	-0.00020	5319.9853	-0.00028

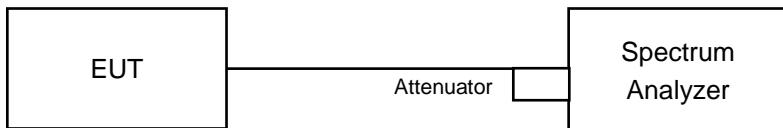
FREQUEMCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)						
20	138	5319.9957	-0.00008	5319.9998	0.00000	5320.0009	0.00002	5320.0003	0.00001
	120	5319.9956	-0.00008	5319.9998	0.00000	5320	0.00000	5319.9999	0.00000
	102	5319.9955	-0.00008	5320.0007	0.00001	5319.9999	0.00000	5319.999	-0.00002

## 4.6 6dB Bandwidth Measurement

### 4.6.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

### 4.6.2 Test Setup



### 4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.6.4 Test Procedure

#### MEASUREMENT PROCEDURE REF

- a. Set resolution bandwidth (RBW) = 100kHz
  - b. Set the video bandwidth (VBW)  $\geq 3 \times$  RBW, Detector = Peak.
  - c. Trace mode = max hold.
  - d. Sweep = auto couple.
  - e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission
- .

### 4.6.5 Deviation from Test Standard

No deviation.

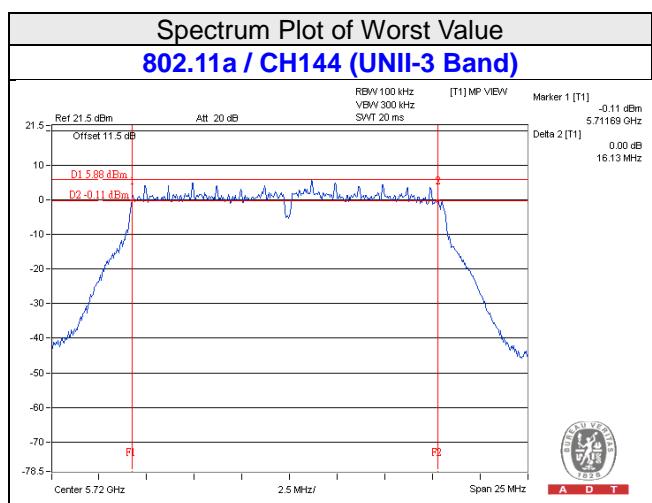
### 4.6.6 EUT Operating Condition

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

#### 4.6.7 Test Results (Mode 1)

##### 802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
*144 (UNII-3 Band)	5720	2.82	0.5	PASS



**Note:** \* The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz



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#### 4.6.8 Test Results (Mode 2)

##### 802.11ac (VHT20)

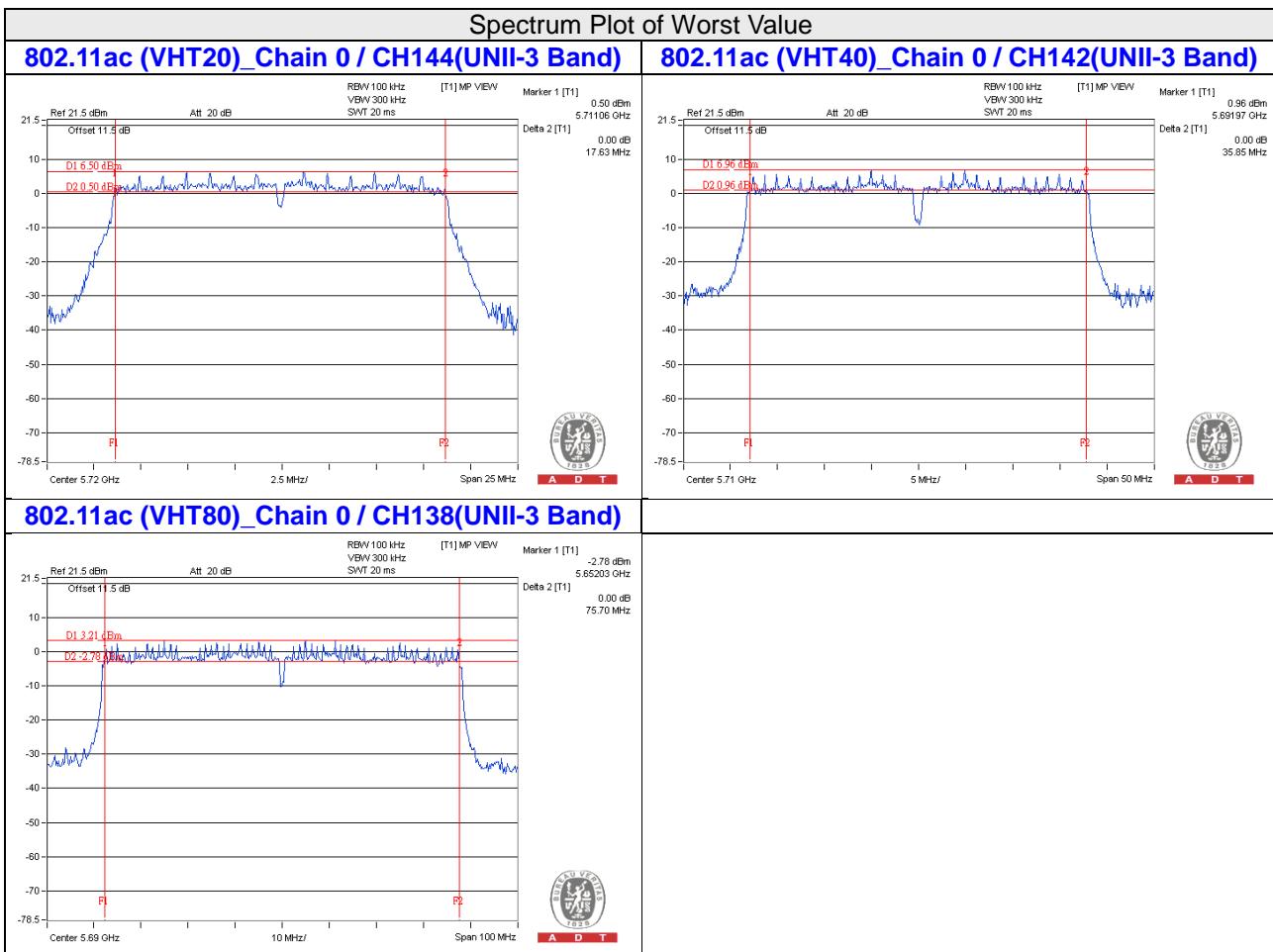
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
*144 (UNII-3 Band)	5720	3.69	3.72	0.5	PASS

##### 802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
*142 (UNII-3 Band)	5710	2.82	3.13	0.5	PASS

##### 802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
*138 (UNII-3 Band)	5690	2.73	2.79	0.5	PASS



**Note:** \* The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

#### 4.6.9 Test Results (Mode 3)

##### 802.11ac (VHT20)

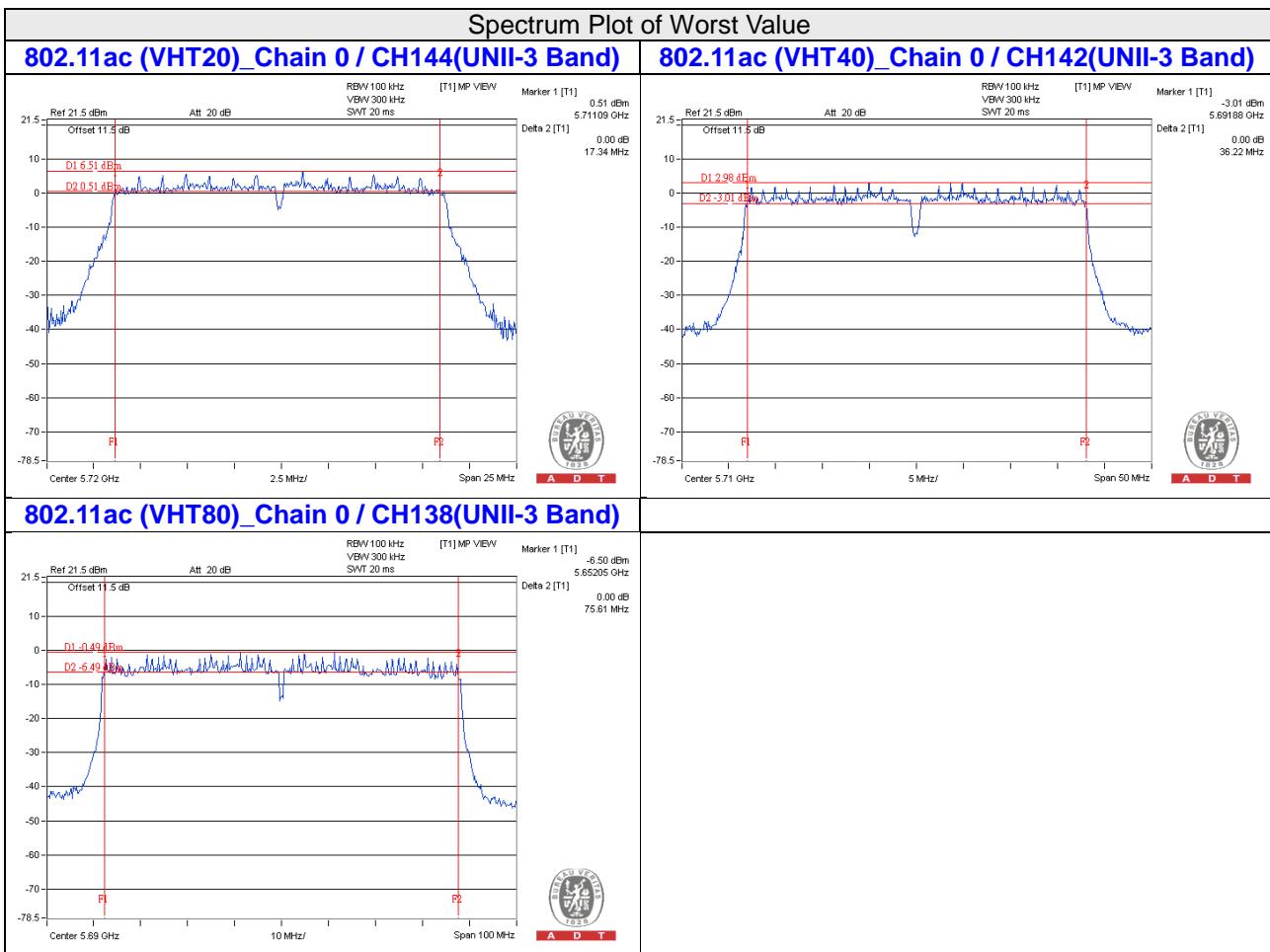
Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2		
*144 (UNII-3 Band)	5720	3.43	3.71	3.71	0.5	PASS

##### 802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2		
*142 (UNII-3 Band)	5710	3.10	3.12	3.13	0.5	PASS

##### 802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2		
*138 (UNII-3 Band)	5690	2.66	3.21	2.91	0.5	PASS



**Note:** \* The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz



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## 5 Pictures of Test Arrangements

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

## Appendix – 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:

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

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