FCC TEST REPORT (15.247)

REPORT NO.:	RF130221E04B
MODEL NO.:	CUS227
FCC ID:	PPD-CUS227
IC:	4104A-CUS227
RECEIVED:	Dec. 25, 2013
TESTED:	Jan. 10 to Feb. 06, 2014
ISSUED:	Feb. 06, 2014

APPLICANT:	Qualcomm Atheros, Inc.
ADDRESS:	1700 Technology Drive, San Jose, CA 95110

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
LAB ADDRESS :	No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.
TEST LOCATION (1):	No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.
TEST LOCATION (2):	No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.

This report should not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130221E04B	Original release	Feb. 06, 2014

1. CERTIFICATION

PRODUCT:	802.11a/b/g/n 2x2 WLAN card
BRAND NAME:	Qualcomm Atheros
MODEL NO.:	CUS227
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	Qualcomm Atheros, Inc.
TESTED:	Jan. 10 to Feb. 06, 2014
STANDARDS:	FCC Part 15, Subpart C (Section 15.247) ANSI C63.10-2009 Canada RSS-210 Issue 8 (2010-12) Canada RSS-Gen Issue 3 (2010-12)

The above equipment (Model: CUS227) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and was in 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:** *Feb. 06, 2014*
(Lori Chung, Specialist)

APPROVED BY : _____ , **DATE:** *Feb. 06, 2014*
(May Chen, Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

For 2.4GHz, 2412~2462MHz Band

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247) ; RSS-210; RSS-Gen				
STANDARD SECTION		TEST TYPE	RESULT	REMARK
FCC Part 15	RSS-Gen			
15.247(d) 15.209	RSS-210 A8.5	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.9dB at 4824.00MHz
15.247(b)	RSS-210 A8.2 (4)	Conducted power	PASS	Meet the requirement of limit.
15.203	-	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.

For 5GHz, 5725~5850MHz Band

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247) ; RSS-210; RSS-Gen				
STANDARD SECTION		TEST TYPE	RESULT	REMARK
FCC Part 15	RSS-210; RSS-Gen			
15.247(d) 15.209	RSS-210 A8.5	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -4.1dB at 875.515MHz
15.247(b)	RSS-210 A8.2 (4)	Conducted power	PASS	Meet the requirement of limit.
15.203	-	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.

NOTE:

1. The EUT was operating in 2400 ~ 2483.5MHz, 5.15~5.35GHz, 5.47~5.6GHz & 5.65~5.725GHz and 5.725~5.850GHz frequencies band. This report was recorded the RF parameters including 2400 ~ 2483.5MHz and 5.725~5.850GHz. For the 5.15~5.35GHz, 5.47~5.6GHz & 5.65~5.725GHz RF parameters was recorded in another test report.
2. This report is prepared for FCC class II permissive change. Only radiated emission / conducted output power were presented in this 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:

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

Measurement	Value
Radiated emissions (30MHz-1GHz)	5.43 dB
Radiated emissions (1GHz -6GHz)	3.65 dB
Radiated emissions (6GHz -18GHz)	3.88 dB
Radiated emissions (18GHz -40GHz)	4.11 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	802.11a/b/g/n 2x2 WLAN card
MODEL NO.	CUS227
POWER SUPPLY	DC 3.3V from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: up to 11Mbps 802.11a/g: up to 54Mbps 802.11n : up to 300Mbps
OPERATING FREQUENCY	**For 15.407** 5.18 ~ 5.24GHz, 5.26 ~ 5.32GHz, 5.5~5.58GHz & 5.66~5.7GHz
	For 15.247 2.4GHz: 2.412 ~ 2.462GHz 5GHz: 5.745 ~ 5.825GHz
NUMBER OF CHANNEL	**For 15.407** 16 for 802.11a, 802.11n (HT20) 7 for 802.11n (HT40)
	For 15.247(2.4GHz) 11 for 802.11b, 802.11g, 802.11n (HT20) 7 for 802.11n (HT40) **For 15.247(5GHz)** 5 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40)
MAXIMUM OUTPUT POWER	**For 15.407** 802.11a: 189.091mW 802.11n (HT20): 181.164mW 802.11n (HT40): 117.769mW **For 15.247(2.4GHz)** 802.11b: 118.995mW 802.11g: 238.795mW 802.11n (HT20): 234.005mW 802.11n (HT40): 118.170mW **For 15.247(5GHz)** 802.11a: 373.429mW 802.11n (HT20): 374.161mW 802.11n (HT40): 331.281mW

ANTENNA TYPE	See item 3.2
ANTENNA CONNECTOR	See item 3.2
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. This report is prepared for FCC Class II change. The difference compared with the Report No.: RF130221E04 design is as the following:

For internal antenna (Hardware version 041)

- Shielding shape change.
- Schematic change and BOM change to add test point and RF connectors (for manufacturing).
- PCB layout trace minor change but the PCB size and stack-up remains the same as original filing as well as main chip location.
- Main chip part number is changed from AR9344 to QCA4530.

For external antenna (Hardware version 241)

- BOM change from 041 to replace antenna connector with IPEX type.
- Support external antenna (PIFA, Dipole and Monopole).

Original - Internal antenna								
No.	Brand	Model	Antenna Type	Connecter Type	Cable Loss (dB)	Antenna gain 2.4G(dBi)	Antenna gain 5G(dBi)	Cable Length (mm)
1	Qualcomm	CUS227 V03-2	Integrated PCB antenna	NA	NA	2	3	NA
Newly – External antenna								
No.	Brand	Model	Antenna Type	Connecter Type	Freq. Range (MHz to MHz)	Cable Loss (dB)	Net Gain (dBi)	Cable Length (mm)
2	WNC	81EAAY15.G05	PIFA	IPEX	2400~2483.5	-0.20	3.25	100
					5150~5250	-0.28	4.42	
					5250~5350	-0.28	4.27	
					5470~5725	-0.28	4.50	
					5725~5850	-0.28	4.59	
3	WNC	81EAAY15.G06	MONOPOLE	IPEX	2400~2483.5	-0.20	3.15	100
					5150~5250	-0.28	2.89	
					5250~5350	-0.28	3.46	
					5470~5725	-0.28	3.79	
					5725~5850	-0.28	3.50	
4	WNC	81EAAY15.G07	DIPOLE	IPEX	2400~2483.5	-0.20	3.14	100
					5150~5250	-0.28	3.95	
					5250~5350	-0.28	4.51	
					5470~5725	-0.28	4.98	
					5725~5850	-0.28	4.78	

2. According to above conditions, only radiated emission / conducted output power need to be performed. And all data was verified to meet the requirements.

3. The EUT is 2 * 2 MIMO with 802.11n beam forming function.

MODULATION MODE	TX/RX FUNCTION
802.11b	2TX/2RX
802.11g	2TX/2RX
802.11a	2TX/2RX
802.11n (HT20)	2TX/2RX
802.11n (HT40)	2TX/2RX

The maximum compliance powers listed on the report are compliance with both Beam Forming and non-Beam Forming configurations.

4. 2.4GHz and 5GHz technology cannot transmit at same time.

5. In original report, the EUT was pre-tested under the following modes:

Test Mode	Data rate
Mode A	400ns GI
Mode B	**800ns GI**

From the above modes, the worst case was found in **Mode B**. Therefore only the test data of the mode was recorded in this report.

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

3.2 DESCRIPTION OF ANTENNA

The antennas provided to the EUT, please refer to the following table:

Internal antenna								
No.	Brand	Model	Antenna Type	Connecter Type	Cable Loss (dB)	Antenna gain 2.4G(dBi)	Antenna gain 5G(dBi)	Cable Length (mm)
1	Qualcomm	CUS227 V03-2	Integrated PCB antenna	NA	NA	2	3	NA
External antenna								
No.	Brand	Model	Antenna Type	Connecter Type	Freq. Range (MHz to MHz)	Cable Loss (dB)	Net Gain (dBi)	Cable Length (mm)
2	WNC	81EAAY15.G05	PIFA	IPEX	2400~2483.5	-0.20	3.25	100
					5150~5250	-0.28	4.42	
					5250~5350	-0.28	4.27	
					5470~5725	-0.28	4.50	
					5725~5850	-0.28	4.59	
3	WNC	81EAAY15.G06	MONOPOLE	IPEX	2400~2483.5	-0.20	3.15	100
					5150~5250	-0.28	2.89	
					5250~5350	-0.28	3.46	
					5470~5725	-0.28	3.79	
					5725~5850	-0.28	3.50	
4	WNC	81EAAY15.G07	DIPOLE	IPEX	2400~2483.5	-0.20	3.14	100
					5150~5250	-0.28	3.95	
					5250~5350	-0.28	4.51	
					5470~5725	-0.28	4.98	
					5725~5850	-0.28	4.78	

3.3 DESCRIPTION OF TEST MODES

Operated in 2400 ~ 2483.5MHz band:

11 channels are provided for 802.11b, 802.11g, 802.11n (HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412MHz	7	2442MHz
2	2417MHz	8	2447MHz
3	2422MHz	9	2452MHz
4	2427MHz	10	2457MHz
5	2432MHz	11	2462MHz
6	2437MHz		

7 channels are provided for 802.11n (HT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz		

Operated in 5725 ~ 5850MHz band:

5 channels are provided for 802.11a, 802.11n (HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n (HT40):

CHANNEL	FREQUENCY
151	5755 MHz
159	5795 MHz

3.3.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	UE < 1G	UE ≥ 1G	APCM	
MODE 1	√	√	√	With Internal antenna
MODE 2	√	√	√	With External antenna

Where **UE < 1G:** Unwanted Emission below 1GHz **UE ≥ 1G:** Unwanted Emission above 1GHz

APCM: Antenna Port Conducted Measurement

NOTE: The EUT's antenna had been pre-tested on the positioned of each 3 axis:

- For Integrated PCB antenna and PIFA antenna: the worst case was found when positioned on **X-plane**
- For External monopole antenna and Dipole antenna: the worst case was found when positioned on **Y-plane.**

UNWANTED EMISSION TEST (BELOW 1 GHz):

☒ Radiated versus Conducted Measurements

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	DATA RATE (Mbps)
802.11g	1 to 11	6	OFDM	6
802.11a	149 to 165	165	OFDM	6

UNWANTED EMISSION TEST (ABOVE 1 GHz):

☒ Radiated versus Conducted Measurements

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	1
802.11g	1 to 11	1, 6, 11	OFDM	6
For 2.4 GHz 802.11n (HT20)	1 to 11	1, 6, 11	OFDM	6.5
For 2.4 GHz 802.11n (HT40)	3 to 9	3, 6, 9	OFDM	13.5
802.11a	149 to 165	149, 157, 165	OFDM	6
For 5 GHz 802.11n (HT20)	149 to 165	149, 157, 165	OFDM	6.5
For 5 GHz 802.11n (HT40)	151 to 159	151, 159	OFDM	13.5

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	1
802.11g	1 to 11	1, 6, 11	OFDM	6
For 2.4 GHz 802.11n (HT20)	1 to 11	1, 6, 11	OFDM	6.5
For 2.4 GHz 802.11n (HT40)	3 to 9	3, 6, 9	OFDM	13.5
802.11a	149 to 165	149, 157, 165	OFDM	6
For 5 GHz 802.11n (HT20)	149 to 165	149, 157, 165	OFDM	6.5
For 5 GHz 802.11n (HT40)	151 to 159	151, 159	OFDM	13.5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
UE<1G	21deg. C, 73%RH	120Vac, 60Hz	Chilin Lee
UE≥1G	22deg. C, 73%RH 23deg. C, 73%RH	120Vac, 60Hz	Robert Cheng Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Robert Cheng

3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C (15.247)
Canada RSS-210 Issue 8 (2010-12)
Canada RSS-Gen Issue 3 (2010-12)
558074 D01 DTS Meas Guidance v03r01
662911 D01 Multiple Transmitter Output v02
ANSI C63.10-2009

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

3.5 DUTY CYCLE OF TEST SIGNAL

If duty cycle of test signal is ≥ 98 %, duty factor is not required.

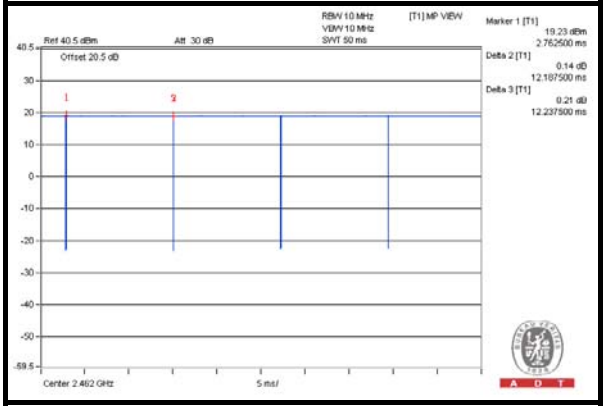
802.11b: Duty cycle = 12.19 ms/12.24 ms = 0.99

802.11g: Duty cycle = 5.36 ms/5.41 ms = 0.99

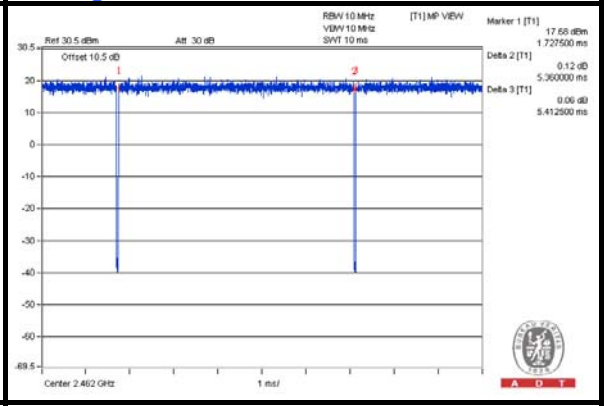
802.11n (HT20): Duty cycle = 4.97 ms/5.02 ms = 0.99

802.11n (HT40): Duty cycle = 2.4 ms/2.45 ms = 0.98

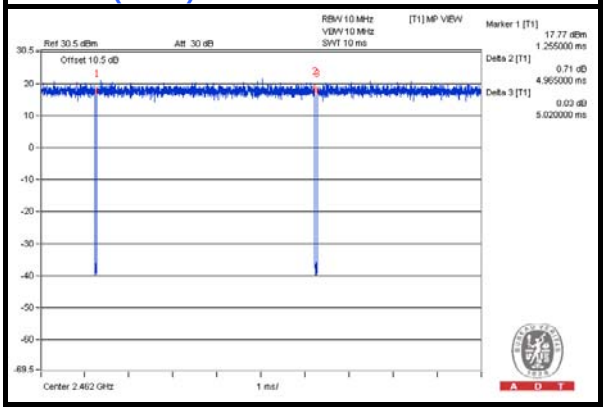
802.11b



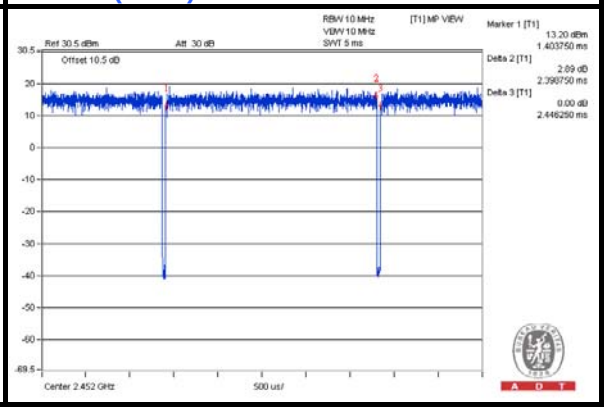
802.11g



802.11n (HT20)



802.11n (HT40)



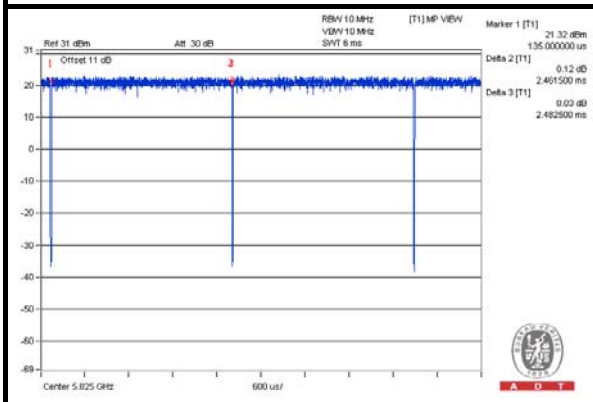
If duty cycle of test signal is ≥ 98 %, duty factor is not required.

802.11a: Duty cycle = 2.46 ms/2.48 ms = 0.99

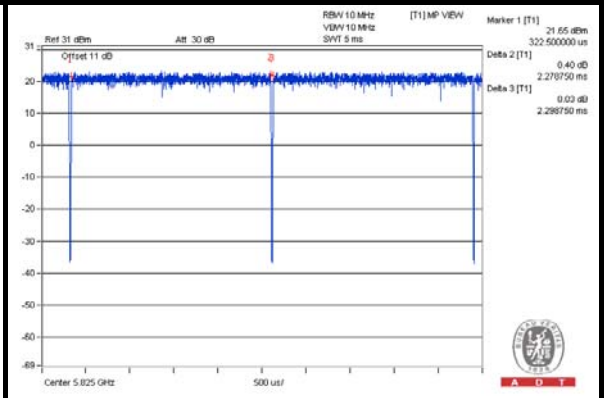
802.11n (HT20): Duty cycle = 2.28 ms/2.3 ms = 0.99

802.11n (HT40): Duty cycle = 1.11 ms/1.13 ms = 0.98

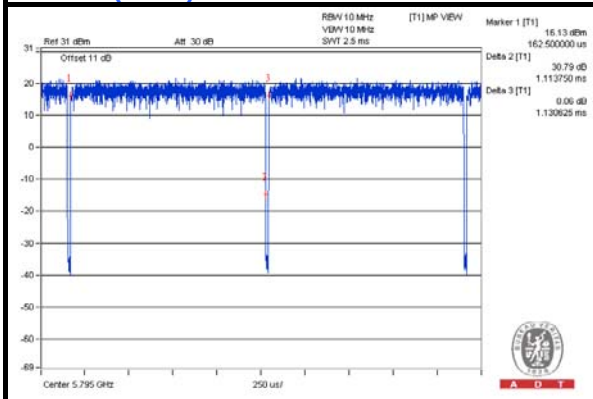
802.11a



802.11n (HT20)



802.11n (HT40)



3.6 DESCRIPTION OF SUPPORT UNITS

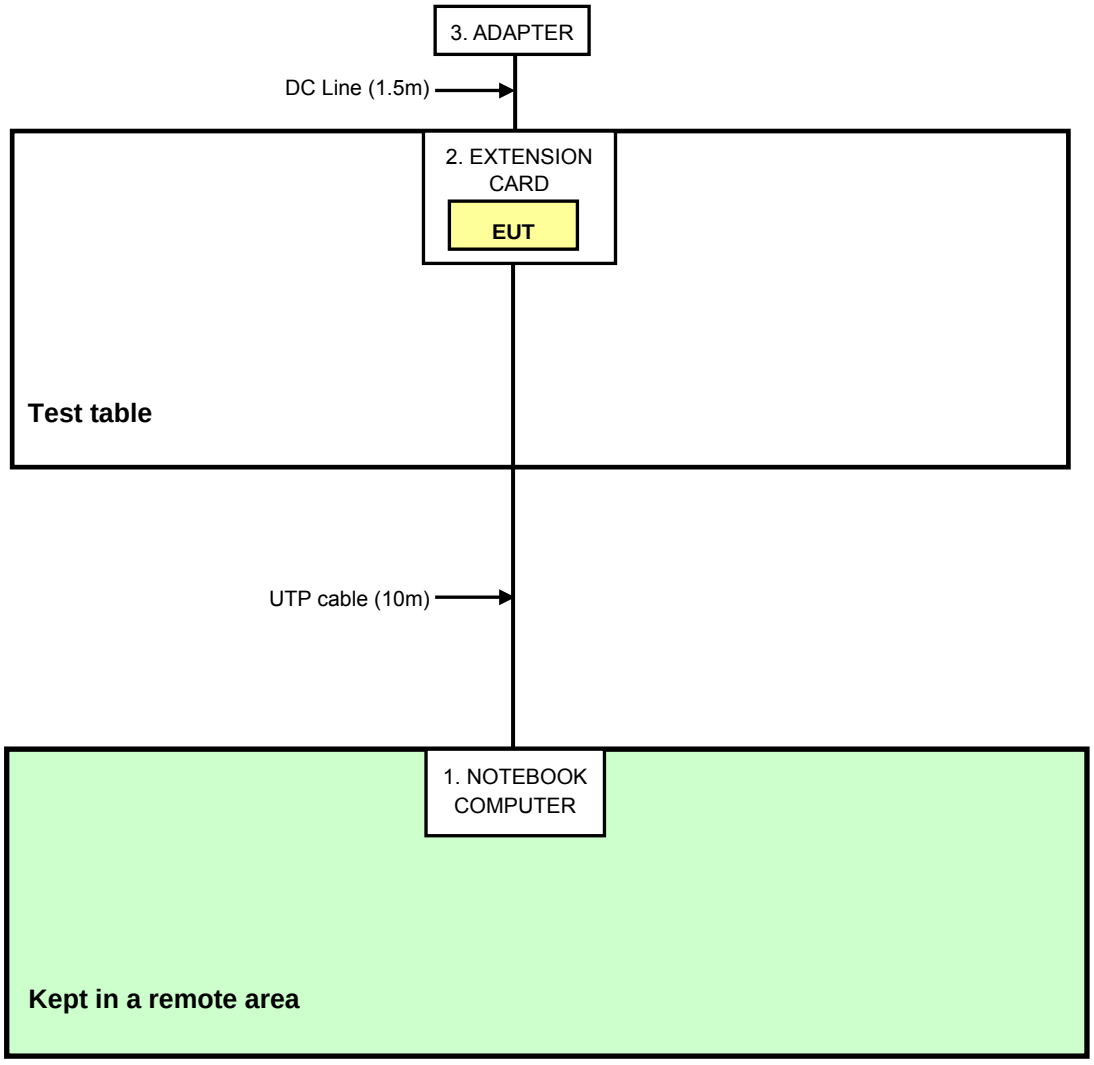
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP32LA	FSLB32S	FCC DoC
2	EXTENSION CARD	Qualcomm Atheros	NA	NA	NA
3	Adapter	JENTEC TECHNOLOGY CO,.LTD.	CF1205-B	795558	NA

No.	Signal cable description
1	UTP cable(10m)
2	NA
3	DC line (1.5m)

Note: The power cords of the above support units were unshielded (1.8m).

3.7 CONFIGURATION OF SYSTEM UNDER TEST



4. TEST TYPES AND RESULTS (FOR 2.4GHz, 2400 ~ 2483.5MHz Band)

4.1 CONDUCTED OUTPUT POWER MEASUREMENT

4.1.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm)

Per KDB 662911 D01 Multiple Transmitter Output v02 Method of conducted output power measurement on IEEE 802.11 devices,

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

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

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

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

4.1.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	0824006	May 20, 2013	May 19, 2014
Power sensor Anritsu	MA2411B	0738172	May 20, 2013	May 19, 2014

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 10, 2014

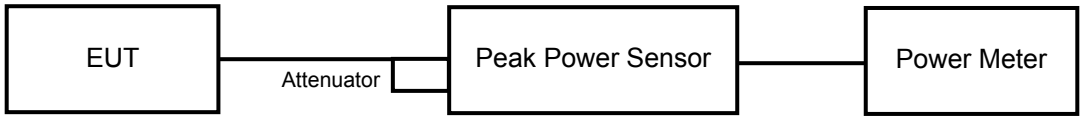
4.1.3 TEST PROCEDURES

The peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the peak power level.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



4.1.6 EUT OPERATING CONDITIONS

The software (artgui.exe [art2 ver 4 4 2g CUS227]) provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.1.7 TEST RESULTS (MODE 1)

802.11b

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	17.75	17.74	118.995	20.76	30	PASS
6	2437	17.73	17.51	115.657	20.63	30	PASS
11	2462	17.44	17.49	111.568	20.48	30	PASS

NOTE: Directional gain = 2dBi + 10log(2) = 5.01dBi < 6dBi , so the power limit shall not be reduced.

802.11g

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	17.92	18.11	126.658	21.03	30	PASS
6	2437	20.14	21.32	238.795	23.78	30	PASS
11	2462	16.56	16.62	91.210	19.60	30	PASS

NOTE: Directional gain = 2dBi + 10log(2) = 5.01dBi < 6dBi , so the power limit shall not be reduced.

802.11n (HT20)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	16.75	17.27	100.648	20.03	30	PASS
6	2437	20.81	20.55	234.005	23.69	30	PASS
11	2462	16.53	16.73	92.076	19.64	30	PASS

NOTE: Directional gain = 2dBi + 10log(2) = 5.01dBi < 6dBi , so the power limit shall not be reduced.

802.11n (HT40)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
3	2422	15.01	15.31	65.659	18.17	30	PASS
6	2437	17.28	18.11	118.170	20.73	30	PASS
9	2452	15.01	14.85	62.245	17.94	30	PASS

NOTE: Directional gain = 2dBi + 10log(2) = 5.01dBi < 6dBi , so the power limit shall not be reduced.

4.1.1 TEST RESULTS (MODE 2)

802.11b

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	17.75	17.74	118.995	20.76	29.74	PASS
6	2437	17.73	17.51	115.657	20.63	29.74	PASS
11	2462	17.44	17.49	111.568	20.48	29.74	PASS

NOTE: Directional gain = 3.25dBi + 10log(2) = 6.26dBi > 6dBi , so the power limit shall be reduced to 30-(6.26-6) = 29.74dBm.

802.11g

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	16.04	16.11	81.011	19.09	29.74	PASS
6	2437	20.14	21.32	238.795	23.78	29.74	PASS
11	2462	16.56	16.62	91.210	19.60	29.74	PASS

NOTE: Directional gain = 3.25dBi + 10log(2) = 6.26dBi > 6dBi , so the power limit shall be reduced to 30-(6.26-6) = 29.74dBm.

802.11n (HT20)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
1	2412	16.13	16.41	84.772	19.28	29.74	PASS
6	2437	20.81	20.55	234.005	23.69	29.74	PASS
11	2462	16.07	16.25	82.628	19.17	29.74	PASS

NOTE: Directional gain = 3.25dBi + 10log(2) = 6.26dBi > 6dBi , so the power limit shall be reduced to 30-(6.26-6) = 29.74dBm.

802.11n (HT40)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
3	2422	14.63	14.92	60.086	17.79	29.74	PASS
6	2437	17.28	18.11	118.170	20.73	29.74	PASS
9	2452	15.01	14.85	62.245	17.94	29.74	PASS

NOTE: Directional gain = 3.25dBi + 10log(2) = 6.26dBi > 6dBi , so the power limit shall be reduced to 30-(6.26-6) = 29.74dBm.

4.2 AVERAGE OUTPUT POWER

4.2.1 FOR REFERENCE.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	0824006	May 20, 2013	May 19, 2014
Power sensor Anritsu	MA2411B	0738172	May 20, 2013	May 19, 2014

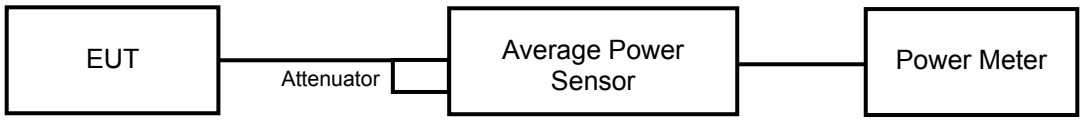
Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 10, 2014

4.2.3 TEST PROCEDURES

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

4.2.4 TEST SETUP



4.2.5 EUT OPERATING CONDITIONS

Same as Item 4.1.6

4.2.6 TEST RESULTS (MODE 1)

802.11b

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
1	2412	15.95	15.87	77.992	18.92
6	2437	15.77	15.51	73.320	18.65
11	2462	15.32	15.46	69.197	18.40

802.11g

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
1	2412	12.01	11.57	30.240	14.81
6	2437	15.41	15.33	68.873	18.38
11	2462	9.51	9.94	18.796	12.74

802.11n (HT20)

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
1	2412	10.96	10.65	24.088	13.82
6	2437	15.29	15.17	66.691	18.24
11	2462	10.63	10.07	21.723	13.37

802.11n (HT40)

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
3	2422	8.77	7.46	13.106	11.17
6	2437	12.10	11.77	31.249	14.95
9	2452	8.28	7.09	11.847	10.74

4.2.1 TEST RESULTS (MODE 2)

802.11b

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
1	2412	15.95	15.87	77.992	18.92
6	2437	15.77	15.51	73.320	18.65
11	2462	15.32	15.46	69.197	18.40

802.11g

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
1	2412	10.04	10.62	21.628	13.35
6	2437	15.41	15.33	68.873	18.38
11	2462	9.51	9.94	18.796	12.74

802.11n (HT20)

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
1	2412	10.12	9.56	19.316	12.86
6	2437	15.29	14.83	64.215	18.08
11	2462	10.13	9.01	18.266	12.62

802.11n (HT40)

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
3	2422	8.31	7.01	11.799	10.72
6	2437	12.10	11.77	31.249	14.95
9	2452	8.28	7.09	11.847	10.74

4.3 UNWANTED EMISSION MEASUREMENT (RADIATED VERSUS CONDUCTED)

4.3.1 LIMITS OF UNWANTED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

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

4.3.2 TEST INSTRUMENTS

Below 1GHz test

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY50010156	Jan. 16, 2013	Jan. 15, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-04	Nov. 13, 2013	Nov. 12, 2014
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Mar. 25, 2013	Mar. 24, 2014
RF Cable	NA	CHHCAB_001	Oct. 06, 2013	Oct. 05, 2014
Spectrum Analyzer R&S	FSV40	100964	July 15, 2013	July 14, 2014
Horn_Antenna AISI	AIH.8018	0000220091110	Dec. 06, 2013	Dec. 05, 2014
Pre-Amplifier Agilent	8449B	3008A01923	Oct. 29, 2013	Oct. 28, 2014
RF Cable	NA	RF104-205 RF104-207 RF104-202	Dec. 12, 2013	Dec. 11, 2014
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 13, 2013	Nov. 12, 2014
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 08, 2013	Oct. 07, 2014
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The 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. H.
4. The FCC Site Registration No. is 797305.
5 The CANADA Site Registration No. is IC 7450H-3.
6 Tested Date: Jan. 15, 2014

Above 1GHz test

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY51210105	Jan. 29, 2013	Jan. 28, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 13, 2013	Nov. 12, 2014
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Mar. 19, 2013	Mar. 18, 2014
RF Cable	NA	CHGCAB_001	Oct. 05, 2013	Oct. 04, 2014
Spectrum Analyzer R&S	FSV40	100964	July 15, 2013	July 14, 2014
Horn_Antenna AISI	AIH.8018	0000320091110	Nov. 18, 2013	Nov. 17, 2014
Pre-Amplifier Agilent	8449B	3008A02578	June 25, 2013	June 24, 2014
RF Cable	NA	RF104-201 RF104-203 RF104-204	Dec. 12, 2013	Dec. 11, 2014
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 13, 2013	Nov. 12, 2014
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 08, 2013	Oct. 07, 2014
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The 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. G.
4. The FCC Site Registration No. is 966073.
5 The VCCI Site Registration No. is G-137.
6 The CANADA Site Registration No. is IC 7450H-2.
7 Tested Date: Jan. 14, 2014

4.3.3 TEST PROCEDURES

Following FCC KDB 558074 D01 DTS Meas. Guidance :
Radiated versus Conducted Measurements.

The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.

b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT

c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater

d. EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)

e. For all of Radiation emission test

e-1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

e-2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

e-3. 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.

e-4. 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-5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

e-6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (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 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

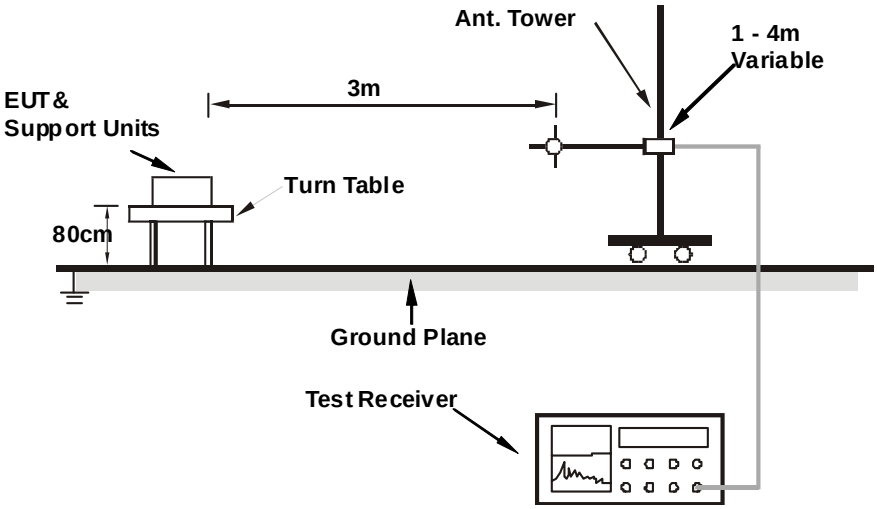
4.3.4 DEVIATION FROM TEST STANDARD

No deviation

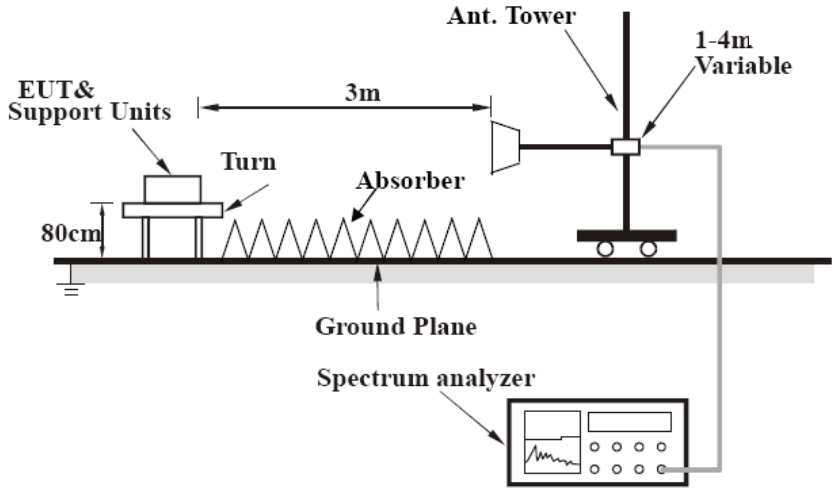
4.3.5 TEST SETUP

Radiation configuration:

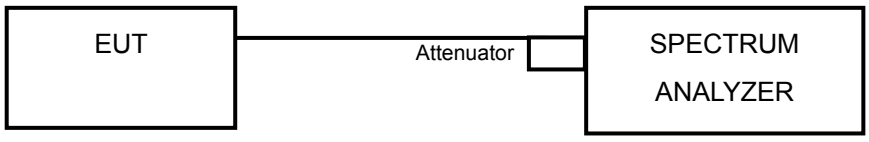
<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



Conducted configuration:



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.3.6 EUT OPERATING CONDITIONS

1. Connect the EUT with the support unit 1 (Notebook Computer) which is placed on a testing table.
2. The communication partner run test program “artgui.exe [art2 ver 4 4 2g CUS227]” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

4.3.7 TEST RESULTS (RADIATED MEASUREMENT)

Radiated versus Conducted Measurement	
☐ Conducted measurement	☒ Radiated measurement
For Radiated measurement: The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation) For Conducted measurement: The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).	

MODE 1

BELOW 1GHz WORST-CASE DATA

802.11g

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	Below 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	65.11	31.6 QP	40.0	-8.4	1.50 H	73	45.76	-14.19
2	201.79	34.4 QP	43.5	-9.2	1.50 H	82	50.32	-15.97
3	625.00	38.1 QP	46.0	-7.9	1.50 H	360	42.17	-4.06
4	750.03	41.8 QP	46.0	-4.2	1.00 H	33	43.45	-1.68
5	875.02	42.4 QP	46.0	-3.6	1.50 H	28	42.36	0.06
6	1000.00	38.8 QP	54.0	-15.2	1.50 H	39	36.69	2.14
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	37.50	34.3 QP	40.0	-5.7	1.00 V	1	47.75	-13.48
2	103.62	32.3 QP	43.5	-11.2	1.00 V	172	48.73	-16.42
3	625.00	38.1 QP	46.0	-7.9	1.50 V	348	42.17	-4.06
4	749.98	40.5 QP	46.0	-5.5	1.50 V	360	42.17	-1.68
5	875.02	40.9 QP	46.0	-5.1	1.00 V	0	40.80	0.06
6	1000.00	39.1 QP	54.0	-14.9	1.50 V	13	36.96	2.14

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

ABOVE 1GHz DATA

802.11b

CHANNEL	TX Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	55.4 PK	74.0	-18.6	1.03 H	168	48.60	6.80
2	4824.00	51.0 AV	54.0	-3.0	1.03 H	168	44.20	6.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	4824.00	55.6 PK	74.0	-18.4	1.02 V	190	48.80	6.80
2	**4824.00**	**52.1 AV**	**54.0**	**-1.9**	**1.02 V**	**190**	**45.30**	**6.80**

REMARKS:

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

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	53.2 PK	74.0	-20.8	1.04 H	176	46.20	7.00
2	4874.00	49.2 AV	54.0	-4.8	1.04 H	176	42.20	7.00
3	7311.00	56.2 PK	74.0	-17.8	1.00 H	220	41.60	14.60
4	7311.00	43.1 AV	54.0	-10.9	1.00 H	220	28.50	14.60
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	4874.00	54.6 PK	74.0	-19.4	1.03 V	188	47.60	7.00
2	4874.00	50.0 AV	54.0	-4.0	1.03 V	188	43.00	7.00
3	7311.00	57.0 PK	74.0	-17.0	1.17 V	188	42.40	14.60
4	7311.00	45.1 AV	54.0	-8.9	1.17 V	188	30.50	14.60

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

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	54.2 PK	74.0	-19.8	1.03 H	182	47.00	7.20
2	4924.00	48.0 AV	54.0	-6.0	1.03 H	182	40.80	7.20
3	7386.00	55.3 PK	74.0	-18.7	1.00 H	201	40.90	14.40
4	7386.00	43.2 AV	54.0	-10.8	1.00 H	201	28.80	14.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4924.00	54.6 PK	74.0	-19.4	1.02 V	196	47.40	7.20
2	4924.00	48.6 AV	54.0	-5.4	1.02 V	196	41.40	7.20
3	7386.00	55.4 PK	74.0	-18.6	1.00 V	180	41.00	14.40
4	7386.00	44.1 AV	54.0	-9.9	1.00 V	180	29.70	14.40

REMARKS:

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

802.11g

CHANNEL	TX Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	51.7 PK	74.0	-22.3	1.00 H	172	44.90	6.80
2	4824.00	39.9 AV	54.0	-14.1	1.00 H	172	33.10	6.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	4824.00	52.4 PK	74.0	-21.6	1.09 V	196	45.60	6.80
2	4824.00	40.0 AV	54.0	-14.0	1.09 V	196	33.20	6.80

REMARKS:

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

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	52.1 PK	74.0	-21.9	1.00 H	179	45.10	7.00
2	4874.00	40.1 AV	54.0	-13.9	1.00 H	179	33.10	7.00
3	7311.00	55.4 PK	74.0	-18.6	1.00 H	219	40.80	14.60
4	7311.00	43.1 AV	54.0	-10.9	1.00 H	219	28.50	14.60
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	4874.00	52.5 PK	74.0	-21.5	1.05 V	187	45.50	7.00
2	4874.00	40.2 AV	54.0	-13.8	1.05 V	187	33.20	7.00
3	7311.00	56.2 PK	74.0	-17.8	1.02 V	78	41.60	14.60
4	7311.00	43.6 AV	54.0	-10.4	1.02 V	78	29.00	14.60

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

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	51.8 PK	74.0	-22.2	1.03 H	183	44.60	7.20
2	4924.00	39.9 AV	54.0	-14.1	1.03 H	183	32.70	7.20
3	7386.00	55.7 PK	74.0	-18.3	1.00 H	217	41.30	14.40
4	7386.00	43.5 AV	54.0	-10.5	1.00 H	217	29.10	14.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4924.00	52.6 PK	74.0	-21.4	1.03 V	183	45.40	7.20
2	4924.00	40.1 AV	54.0	-13.9	1.03 V	183	32.90	7.20
3	7386.00	56.5 PK	74.0	-17.5	1.06 V	65	42.10	14.40
4	7386.00	43.8 AV	54.0	-10.2	1.06 V	65	29.40	14.40

REMARKS:

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

802.11n (HT20)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	51.9 PK	74.0	-22.1	1.00 H	184	45.10	6.80
2	4824.00	40.1 AV	54.0	-13.9	1.00 H	184	33.30	6.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4824.00	52.2 PK	74.0	-21.8	1.07 V	186	45.40	6.80
2	4824.00	39.9 AV	54.0	-14.1	1.07 V	186	33.10	6.80

REMARKS:

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

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	51.9 PK	74.0	-22.1	1.01 H	183	44.90	7.00
2	4874.00	39.7 AV	54.0	-14.3	1.01 H	183	32.70	7.00
3	7311.00	55.6 PK	74.0	-18.4	1.00 H	214	41.00	14.60
4	7311.00	43.2 AV	54.0	-10.8	1.00 H	214	28.60	14.60
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	4874.00	52.4 PK	74.0	-21.6	1.03 V	201	45.40	7.00
2	4874.00	40.2 AV	54.0	-13.8	1.03 V	201	33.20	7.00
3	7311.00	55.7 PK	74.0	-18.3	1.06 V	64	41.10	14.60
4	7311.00	43.1 AV	54.0	-10.9	1.06 V	64	28.50	14.60

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

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	52.2 PK	74.0	-21.8	1.05 H	193	45.00	7.20
2	4924.00	40.4 AV	54.0	-13.6	1.05 H	193	33.20	7.20
3	7386.00	55.5 PK	74.0	-18.5	1.00 H	207	41.10	14.40
4	7386.00	42.9 AV	54.0	-11.1	1.00 H	207	28.50	14.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4924.00	52.3 PK	74.0	-21.7	1.11 V	177	45.10	7.20
2	4924.00	39.8 AV	54.0	-14.2	1.11 V	177	32.60	7.20
3	7386.00	55.5 PK	74.0	-18.5	1.07 V	79	41.10	14.40
4	7386.00	43.2 AV	54.0	-10.8	1.07 V	79	28.80	14.40

REMARKS:

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

802.11n (HT40)

CHANNEL	TX Channel 3	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4844.00	52.1 PK	74.0	-21.9	1.00 H	170	45.20	6.90
2	4844.00	40.1 AV	54.0	-13.9	1.00 H	170	33.20	6.90
3	7266.00	55.6 PK	74.0	-18.4	1.05 H	214	41.00	14.60
4	7266.00	43.0 AV	54.0	-11.0	1.05 H	214	28.40	14.60
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	4844.00	52.3 PK	74.0	-21.7	1.01 V	174	45.40	6.90
2	4844.00	40.0 AV	54.0	-14.0	1.01 V	174	33.10	6.90
3	7266.00	55.8 PK	74.0	-18.2	1.03 V	79	41.20	14.60
4	7266.00	43.2 AV	54.0	-10.8	1.03 V	79	28.60	14.60

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

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	51.6 PK	74.0	-22.4	1.04 H	180	44.60	7.00
2	4874.00	39.6 AV	54.0	-14.4	1.04 H	180	32.60	7.00
3	7311.00	56.1 PK	74.0	-17.9	1.00 H	205	41.50	14.60
4	7311.00	43.7 AV	54.0	-10.3	1.00 H	205	29.10	14.60
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	4874.00	52.2 PK	74.0	-21.8	1.08 V	212	45.20	7.00
2	4874.00	39.7 AV	54.0	-14.3	1.08 V	212	32.70	7.00
3	7311.00	55.5 PK	74.0	-18.5	1.09 V	50	40.90	14.60
4	7311.00	42.9 AV	54.0	-11.1	1.09 V	50	28.30	14.60

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

CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4904.00	52.8 PK	74.0	-21.2	1.00 H	166	45.60	7.20
2	4904.00	40.5 AV	54.0	-13.5	1.00 H	166	33.30	7.20
3	7356.00	55.1 PK	74.0	-18.9	1.00 H	233	40.60	14.50
4	7356.00	43.1 AV	54.0	-10.9	1.00 H	233	28.60	14.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	4904.00	52.7 PK	74.0	-21.3	1.01 V	190	45.50	7.20
2	4904.00	40.2 AV	54.0	-13.8	1.01 V	190	33.00	7.20
3	7356.00	55.7 PK	74.0	-18.3	1.00 V	85	41.20	14.50
4	7356.00	43.3 AV	54.0	-10.7	1.00 V	85	28.80	14.50

REMARKS:

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

4.3.8 TEST RESULTS (CONDUCTED MEASUREMENT)

Radiated versus Conducted Measurement	
☒ Conducted measurement	☐ Radiated measurement

For Radiated measurement:

The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation)

For Conducted measurement:

The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).

Conducted Measurement Factor
a. The composite gain will be used when signal support the correlated signal. (Composite gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 5.01dBi for MODE 1 & 6.26dBi for MODE 2)
b. For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands.
c. For the band edge the gain for the specific band may have been used.
d. In restricted bands below 1000 MHz, add upper bound on ground plane reflection: For f = 30 – 1000 MHz, add 4.7 dB.
Note: The conducted emission test was considered some factor to compute test result.

MODE 1

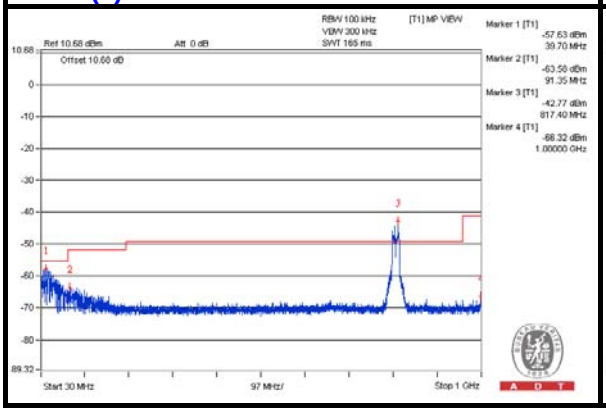
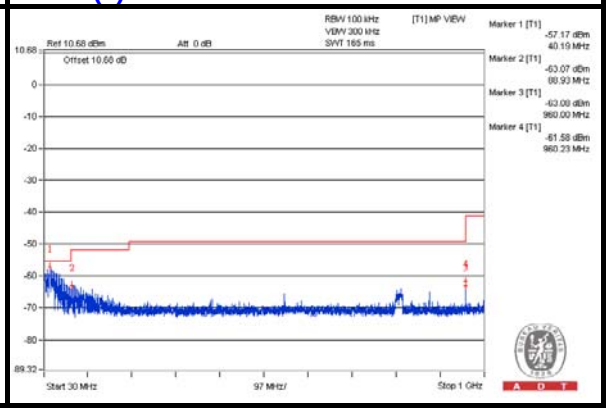
BELOW 1GHz WORST-CASE DATA

802.11g – Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	85.5325	37.74	40	-2.26	-64.88	-66.32	5.01	-57.52
2	98.87	39.12	43.5	-4.38	-65.45	-63.16	5.01	-56.14
3	395.9325	34.65	46	-11.35	-69.79	-67.71	5.01	-60.61
4	560.105	35.98	46	-10.02	-70.54	-65.47	5.01	-59.28
5	798.9675	40.79	46	-5.21	-59.76	-71.58	5.01	-54.47
6	960.23	39.66	54	-14.34	-67.6	-61.58	5.01	-55.6

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)	Chain (1)
	

ABOVE 1GHz DATA

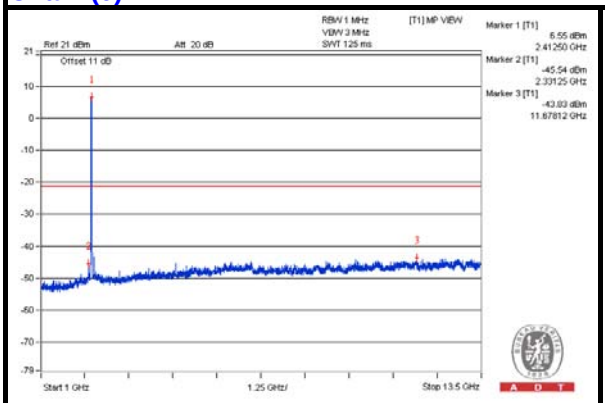
802.11b - Channel 1

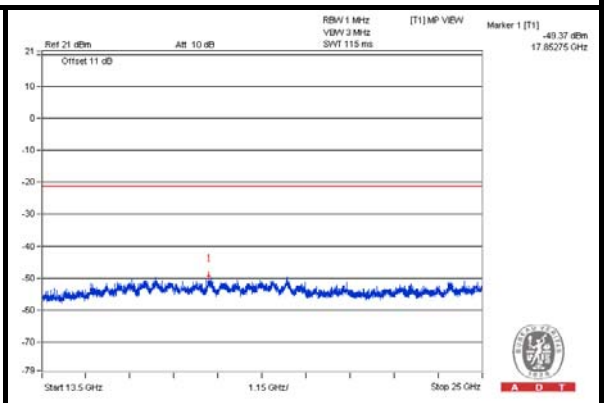
Conducted spurious emission table

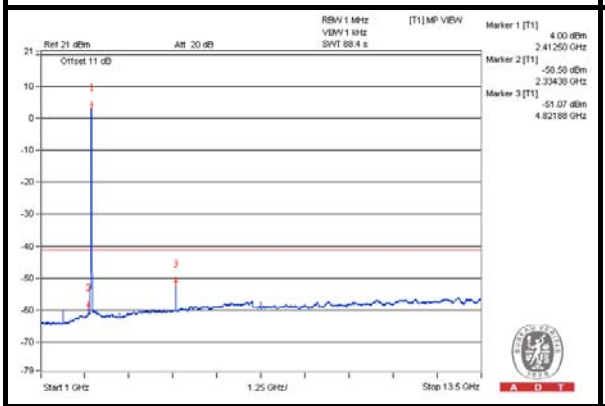
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1606.25 PK	51.27	74	-22.73	-51.37	-52.76	5.01	-43.99
2	1606.25 AV	41.61	54	-12.39	-60.46	-63.35	5.01	-53.65
3	4821.875 PK	56.19	74	-17.81	-45.56	-49.49	5.01	-39.07
4	4821.875 AV	49.9	54	-4.1	-51.07	-58.62	5.01	-45.36

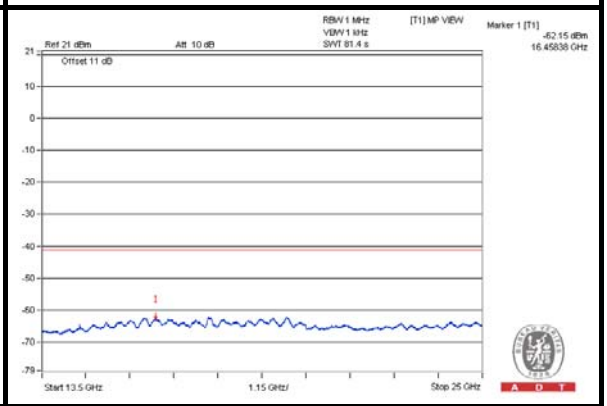
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

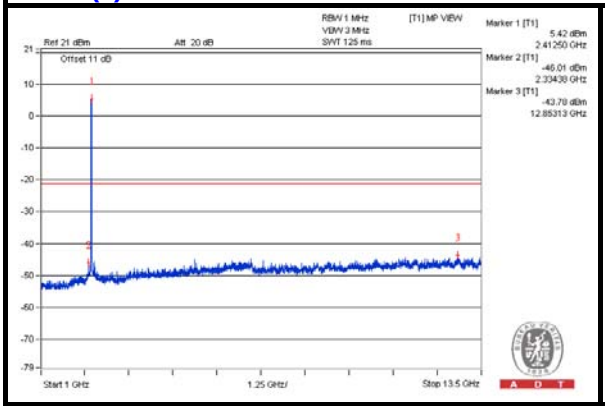


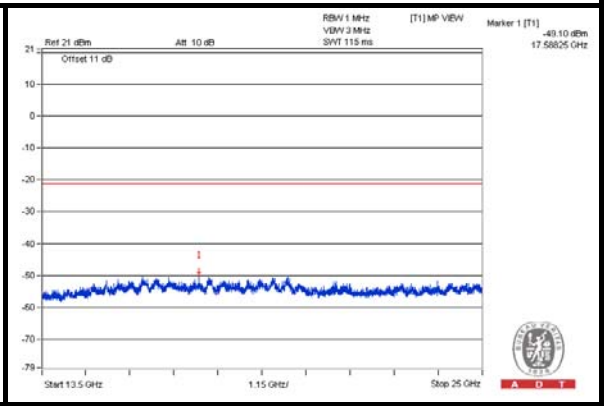


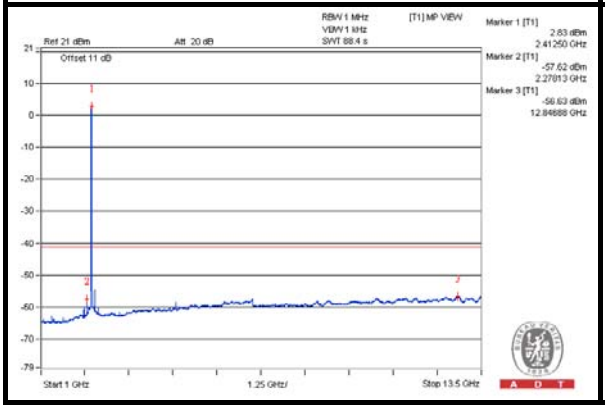


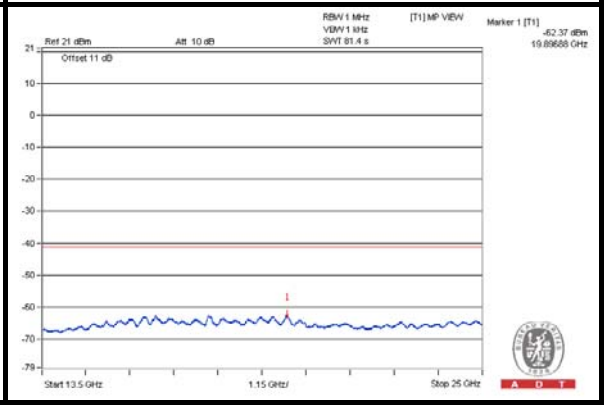


Chain (1)







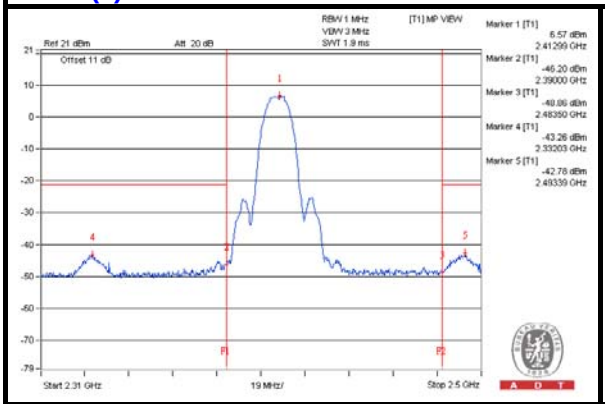


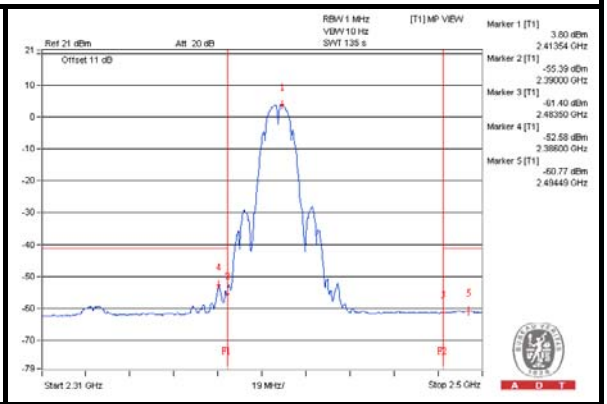
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2332.029 PK	59.68	74	-14.32	-43.26	-43.97	5.01	-35.58
2	2386 AV	48.34	54	-5.66	-52.58	-60.53	5.01	-46.92
3	2493.391 PK	59.28	74	-14.72	-42.78	-45.71	5.01	-35.98
4	2489.261 AV	42.47	54	-11.53	-60.84	-60.78	5.01	-52.79

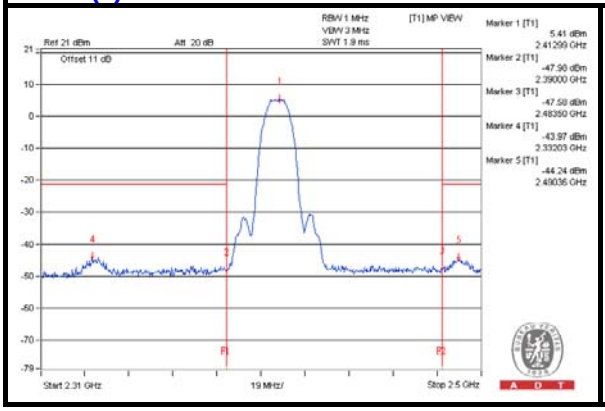
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

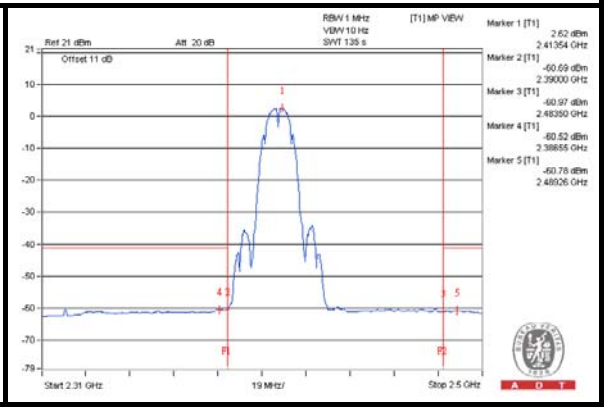
Chain (0)





Chain (1)





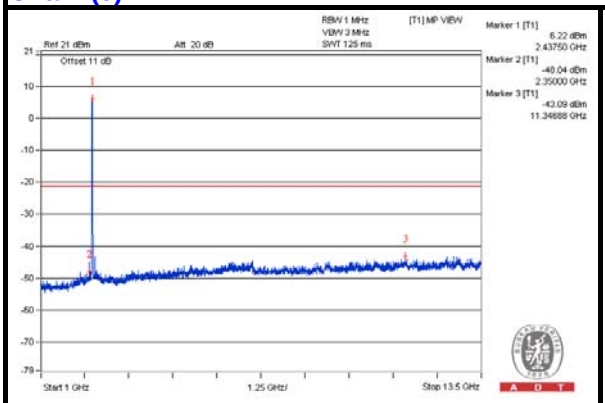
802.11b - Channel 6

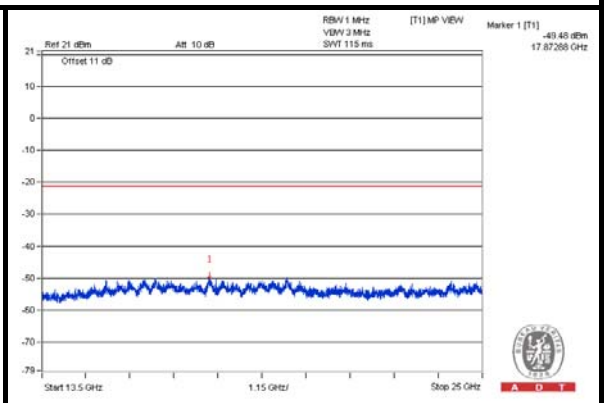
Conducted spurious emission table

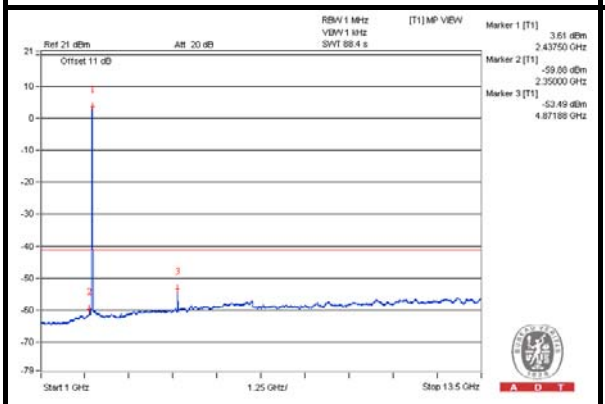
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1615.625 PK	50.81	74	-23.19	-52.06	-52.93	5.01	-44.45
2	1621.875 AV	39.56	54	-14.44	-63.57	-63.87	5.01	-55.7
3	4875 PK	55.83	74	-18.17	-46.94	-48.02	5.01	-39.43
4	4871.875 AV	48.17	54	-5.83	-53.49	-57.73	5.01	-47.09
5	7312.5 PK	56.32	74	-17.68	-47.67	-46.35	5.01	-38.94
6	7309.375 AV	44.51	54	-9.49	-58.17	-59.47	5.01	-50.75

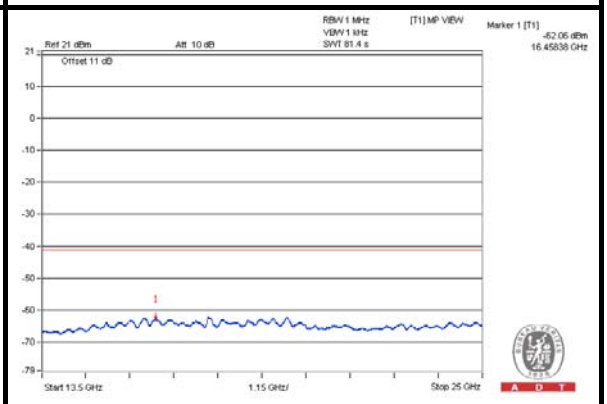
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

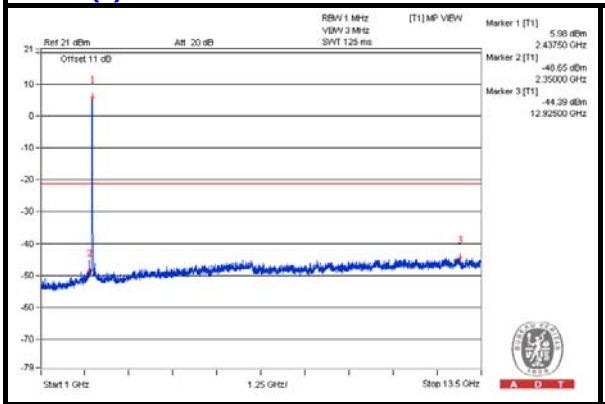


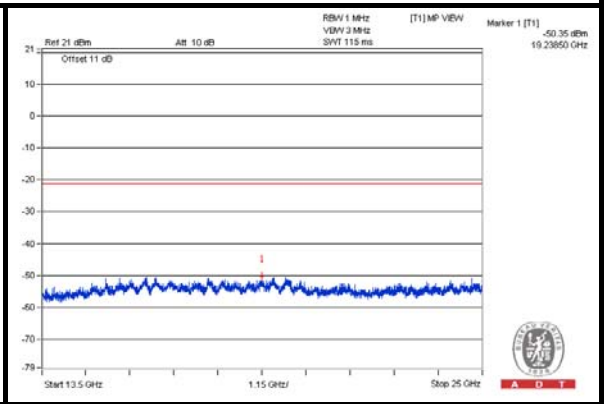


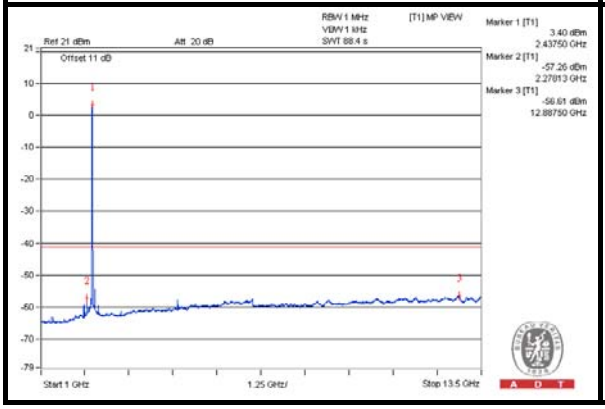


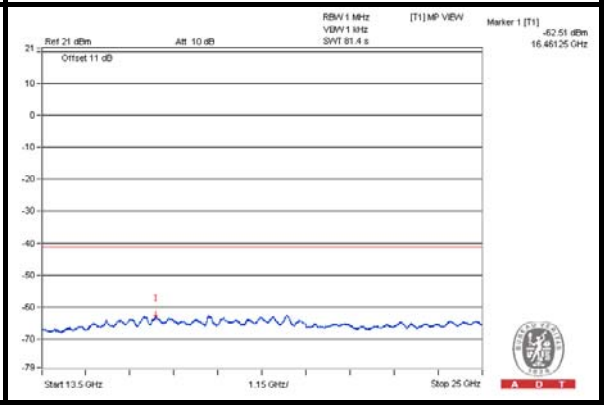


Chain (1)







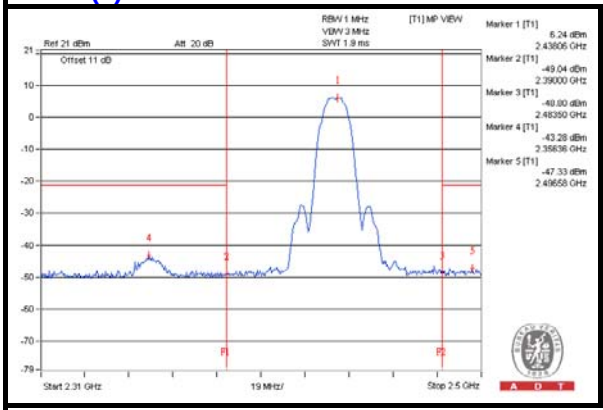


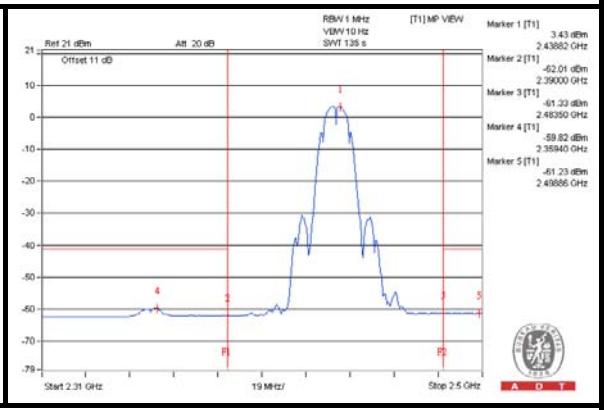
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2360.16 PK	59.4	74	-14.6	-44.99	-43	5.01	-35.86
2	2359.4 AV	43.4	54	-10.6	-59.82	-59.95	5.01	-51.86
3	2496.58 PK	55.82	74	-18.18	-47.33	-47.6	5.01	-39.44
4	2484.42 AV	42.35	54	-11.65	-61.26	-60.62	5.01	-52.91

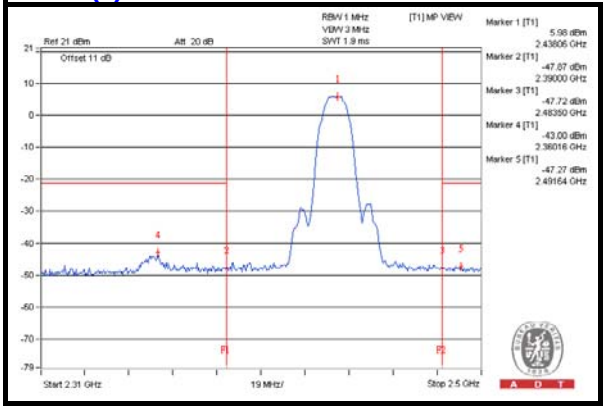
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

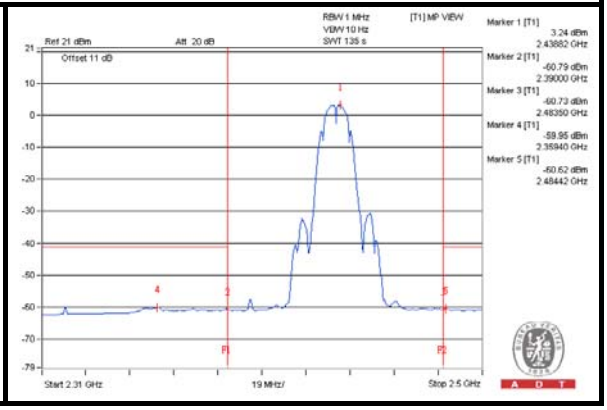
Chain (0)





Chain (1)





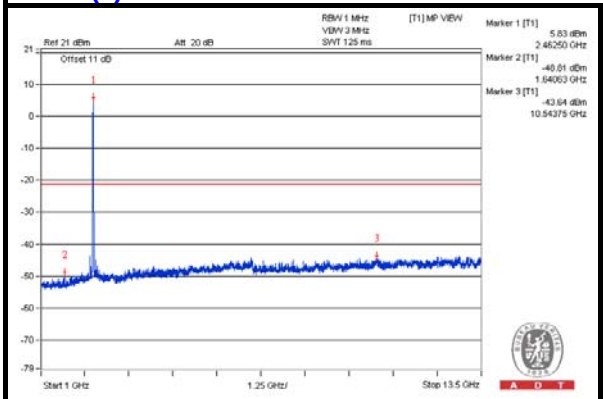
802.11b - Channel 11

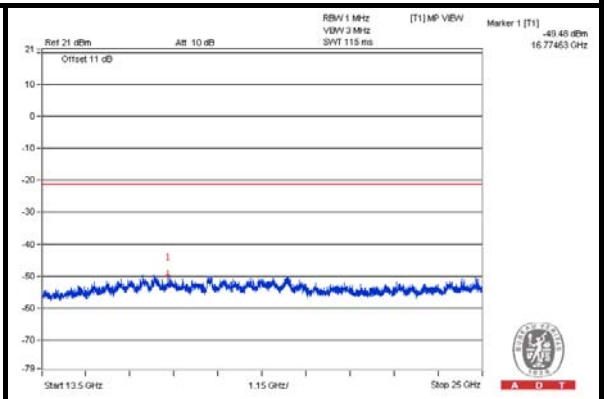
Conducted spurious emission table

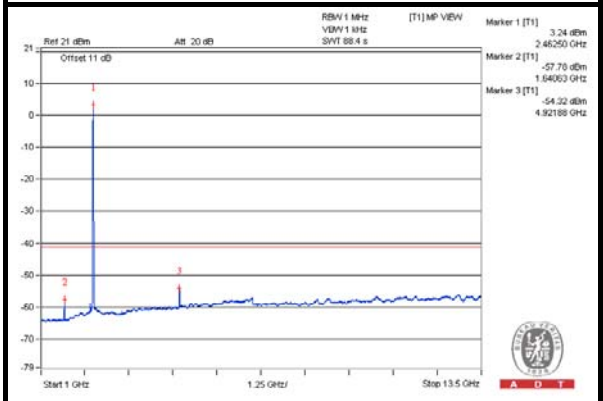
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	4921.875 PK	55.64	74	-18.36	-47.09	-48.28	5.01	-39.62
2	4921.875 AV	47.99	54	-6.01	-54.32	-56.53	5.01	-47.27
3	7378.125 PK	55.75	74	-18.25	-46.81	-48.4	5.01	-39.51
4	7384.375 AV	44.08	54	-9.92	-58.84	-59.6	5.01	-51.18

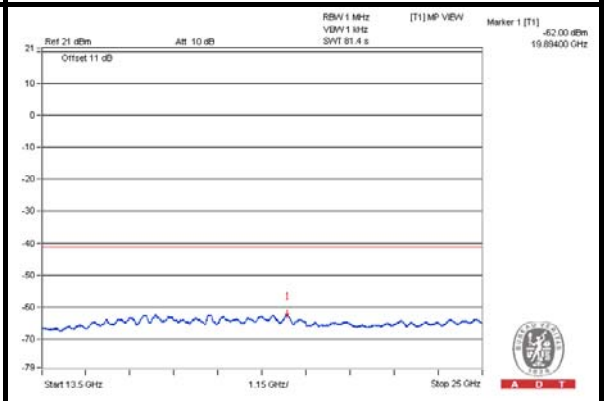
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

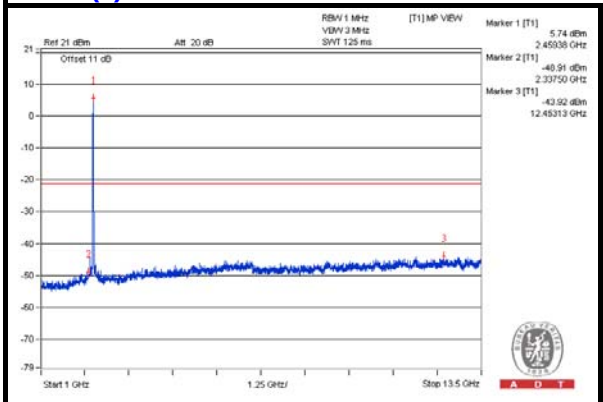


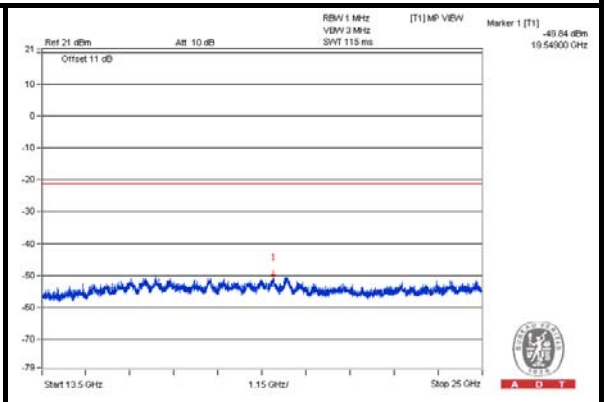


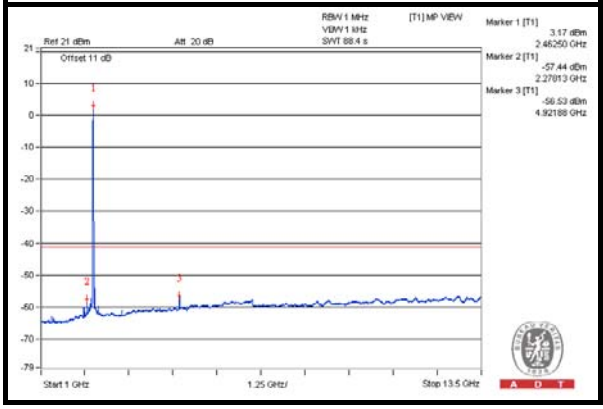


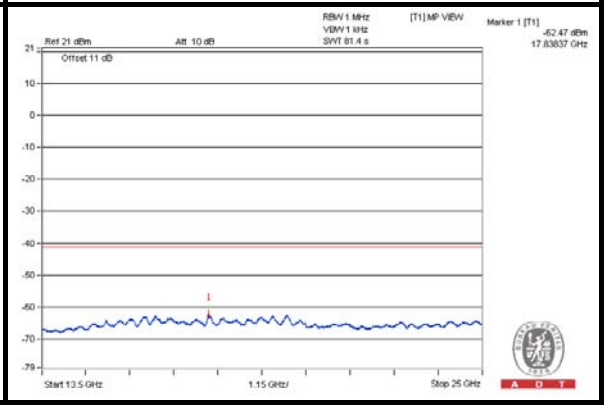


Chain (1)







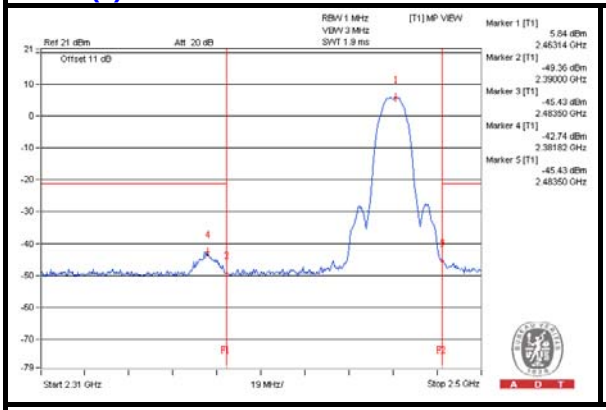


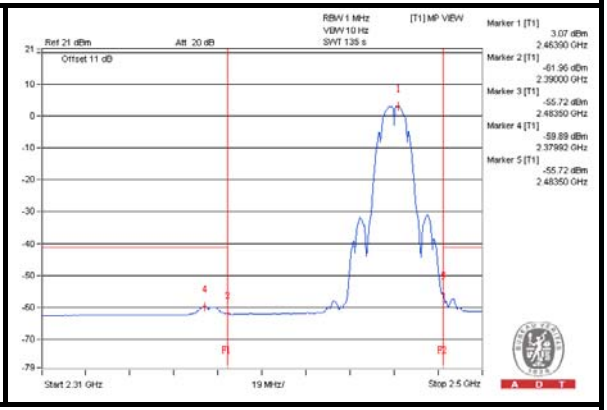
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2381.82 PK	59.93	74	-14.07	-42.74	-44.05	5.01	-35.33
2	2379.92 AV	43.3	54	-10.7	-59.89	-60.08	5.01	-51.96
3	2483.66 PK	57.64	74	-16.36	-45.74	-45.54	5.01	-37.62
4	2483.66 AV	46.12	54	-7.88	-56.12	-58.54	5.01	-49.14

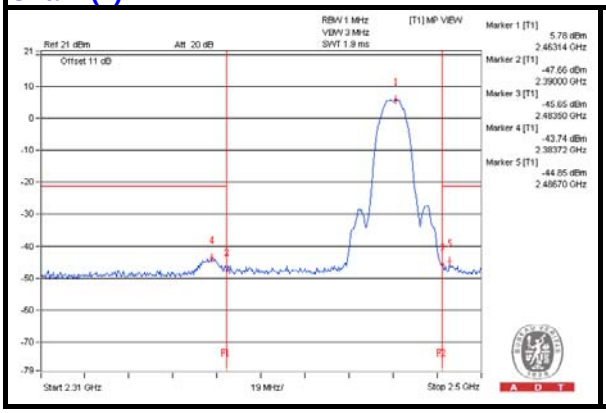
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

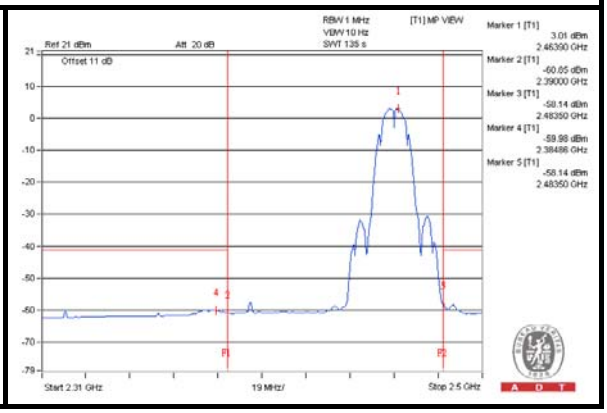
Chain (0)





Chain (1)





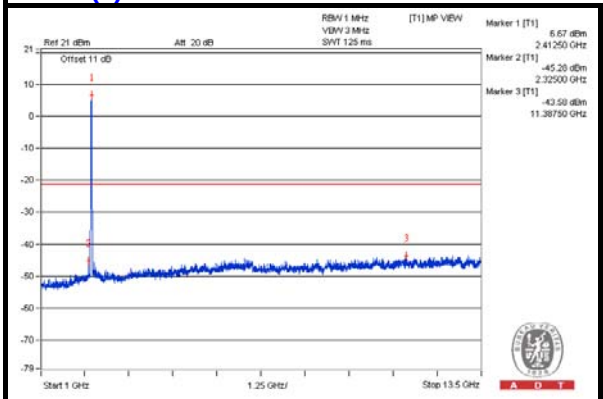
802.11g - Channel 1

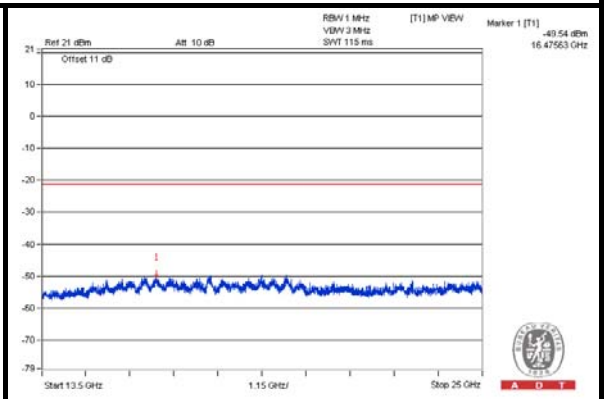
Conducted spurious emission table

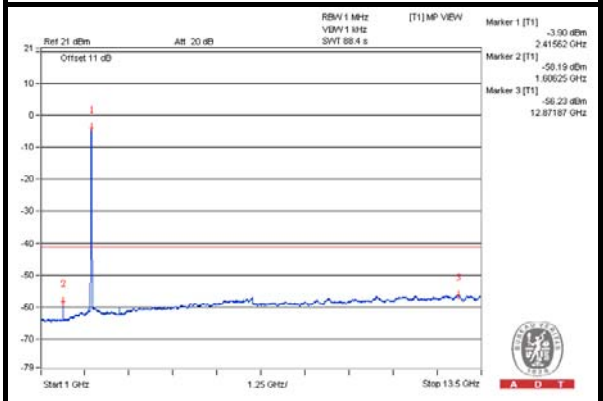
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1606.25 PK	51.26	74	-22.74	-50.83	-53.66	5.01	-44
2	1606.25 AV	43.01	54	-10.99	-58.19	-64.4	5.01	-52.25
3	4825 PK	54.78	74	-19.22	-48.53	-48.47	5.01	-40.48
4	4821.875 AV	43.06	54	-10.94	-59.96	-60.49	5.01	-52.2

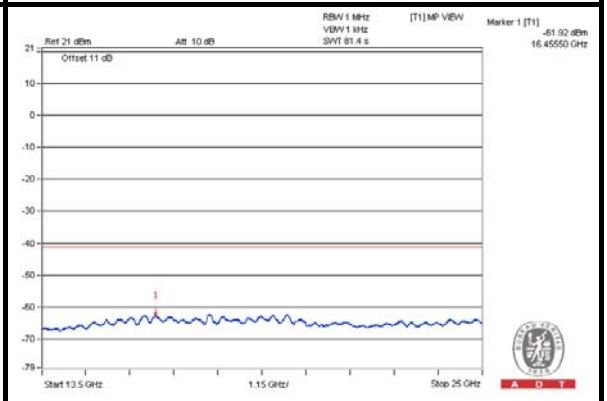
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

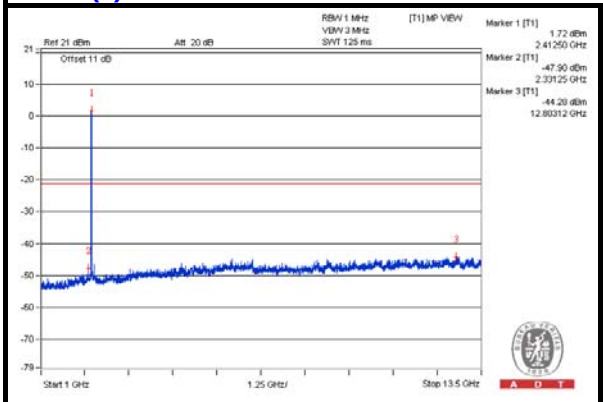


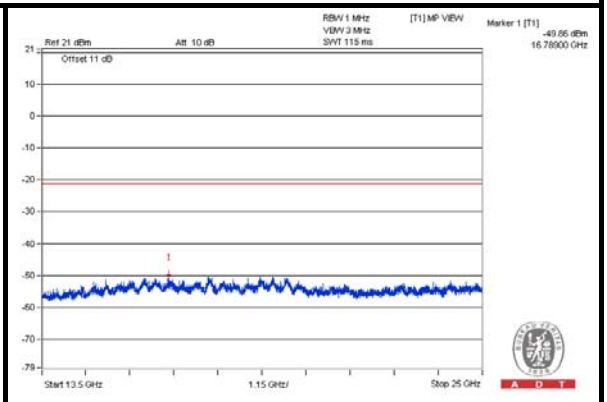


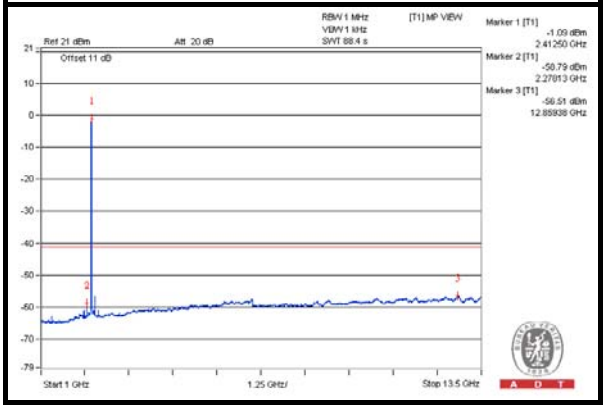


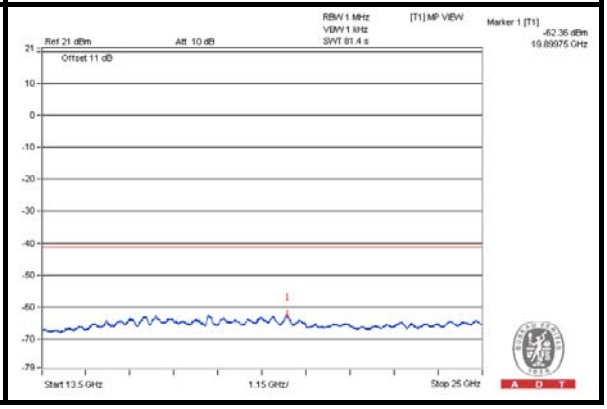


Chain (1)







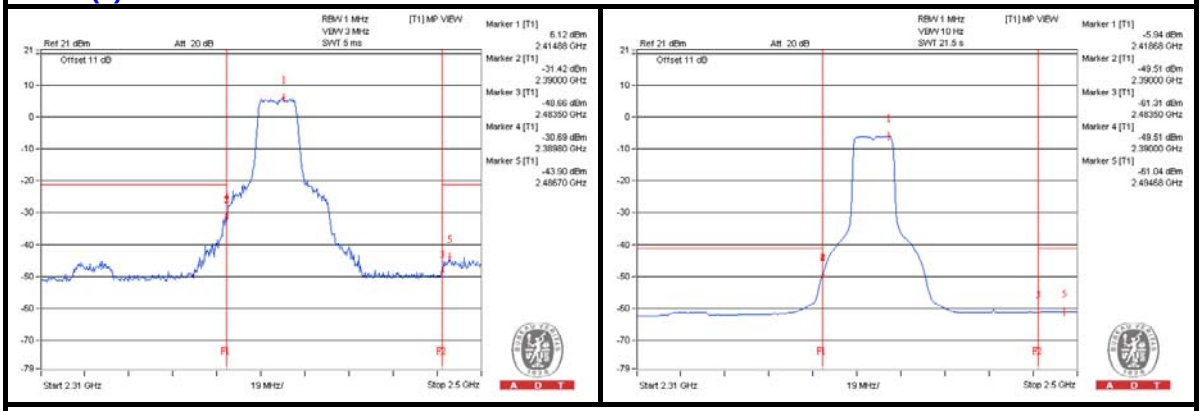


Bandedge table

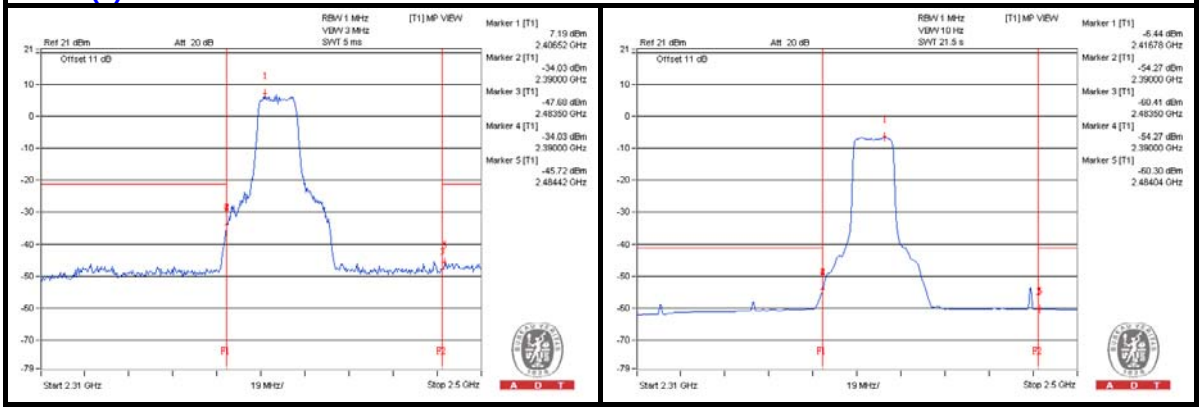
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2389.8 PK	71.01	74	-2.99	-30.69	-34.77	5.01	-24.25
2	2389.8 AV	51.48	54	-2.52	-50.01	-54.88	5.01	-43.78
3	2486.7 PK	58.07	74	-15.93	-43.9	-47.09	5.01	-37.19
4	2488.98 AV	42.59	54	-11.41	-61.08	-60.34	5.01	-52.67

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



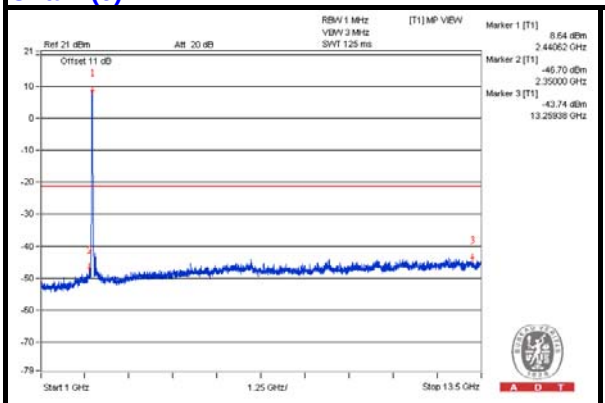
802.11g - Channel 6

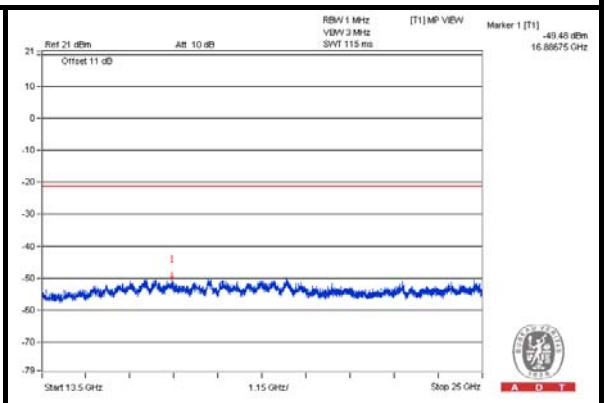
Conducted spurious emission table

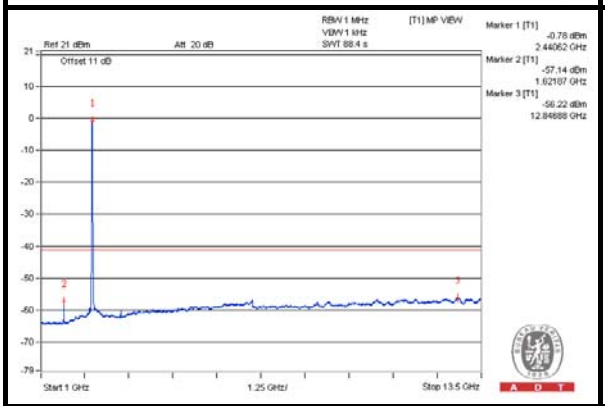
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1621.875 PK	52.3	74	-21.7	-49.94	-52.34	5.01	-42.96
2	1621.875 AV	44.2	54	-9.8	-57.14	-62.69	5.01	-51.06
3	4871.875 PK	54.78	74	-19.22	-47.52	-49.76	5.01	-40.48
4	4871.875 AV	43.25	54	-10.75	-59.54	-60.58	5.01	-52.01
5	7306.25 PK	56.66	74	-17.34	-45.83	-47.58	5.01	-38.6
6	7306.25 AV	44.34	54	-9.66	-58.49	-59.44	5.01	-50.92

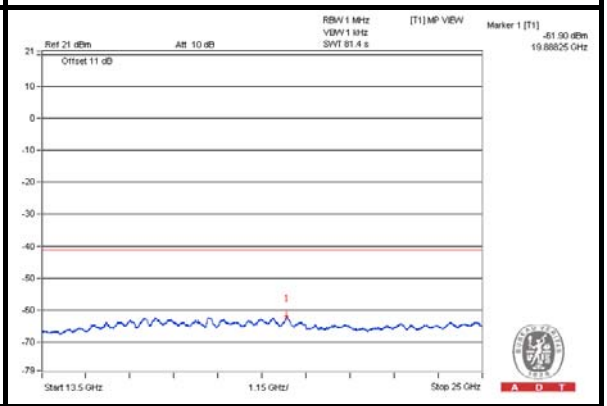
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

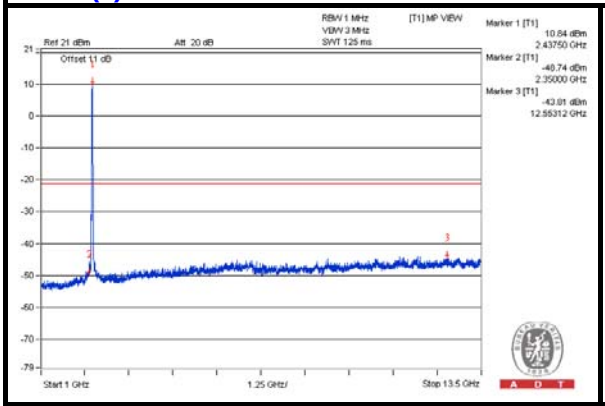


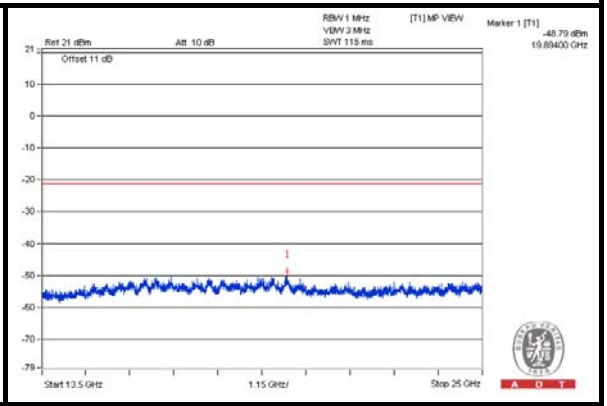


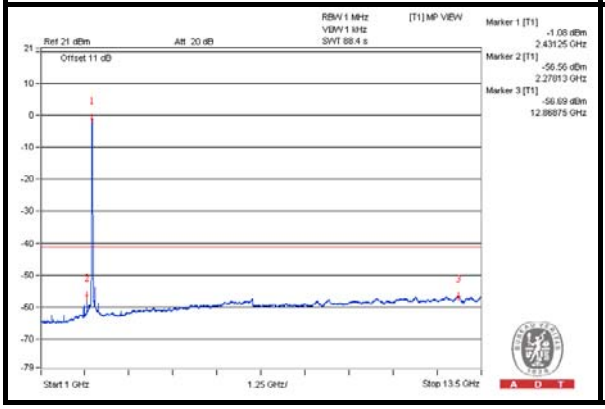


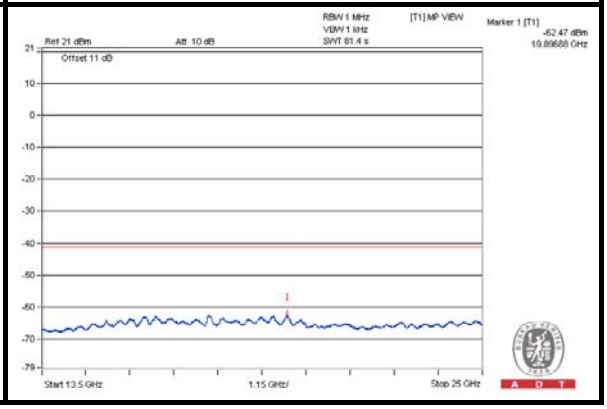


Chain (1)







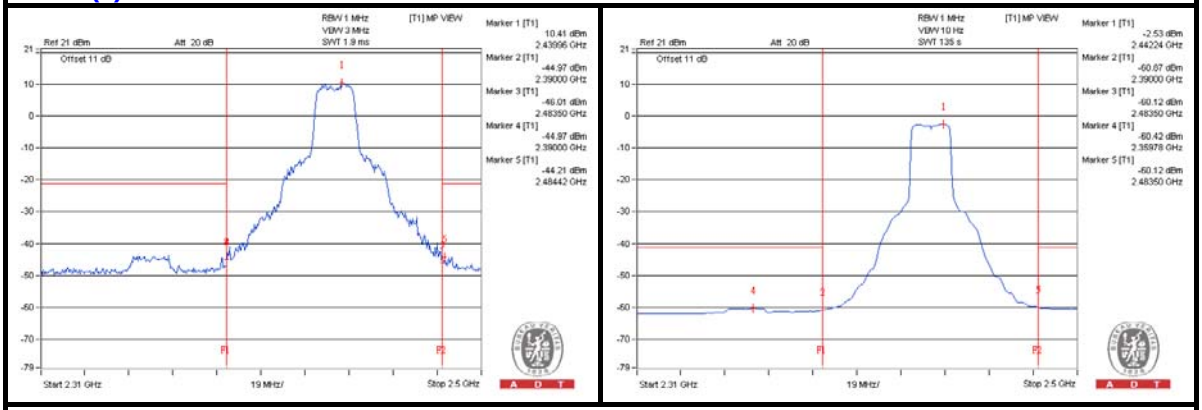


Bandedge table

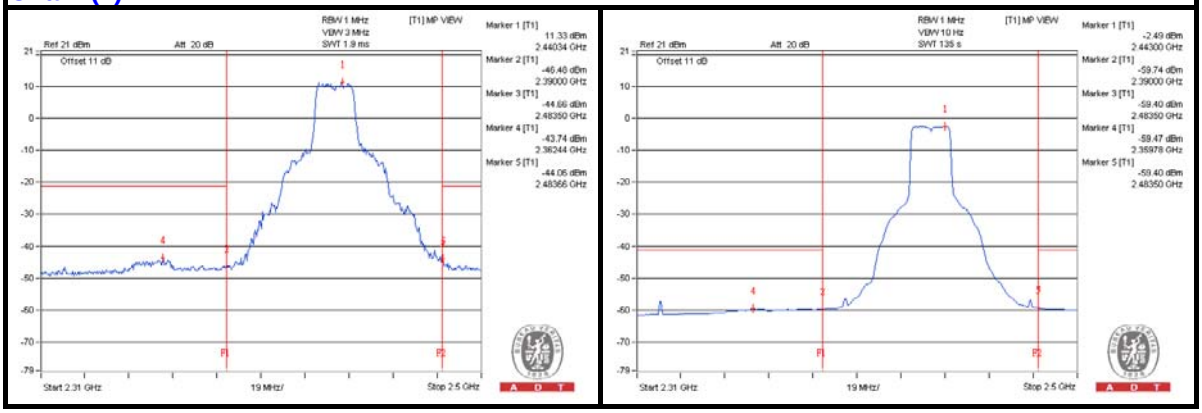
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2364.72 PK	59.21	74	-14.79	-43.61	-44.58	5.01	-36.05
2	2319.88 AV	44.29	54	-9.71	-61.82	-57.29	5.01	-50.97
3	2483.66 PK	58.32	74	-15.68	-46.09	-44.06	5.01	-36.94
4	2483.66 AV	43.48	54	-10.52	-60.18	-59.45	5.01	-51.78

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



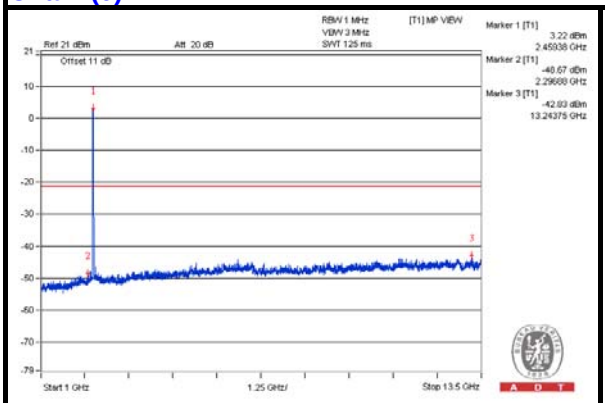
802.11g - Channel 11

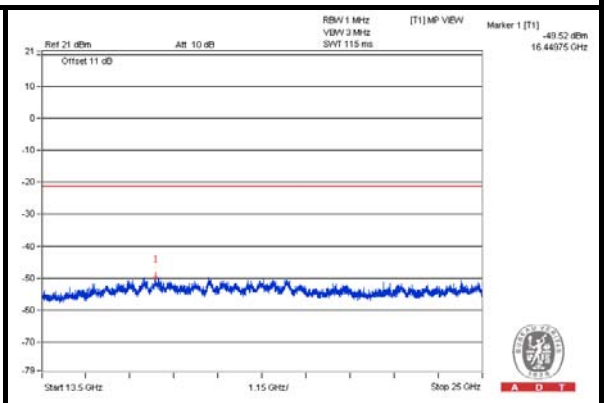
Conducted spurious emission table

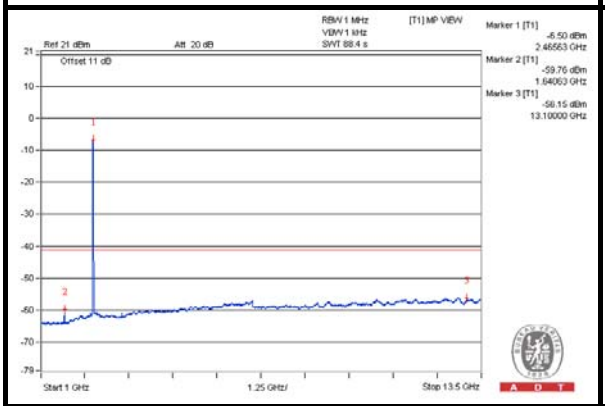
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	4918.75 PK	54.86	74	-19.14	-48.43	-48.41	5.01	-40.4
2	4921.875 AV	43.21	54	-10.79	-59.78	-60.39	5.01	-52.05
3	7390.625 PK	56.03	74	-17.97	-48.05	-46.57	5.01	-39.23
4	7390.625 AV	43.9	54	-10.1	-59.1	-59.68	5.01	-51.36

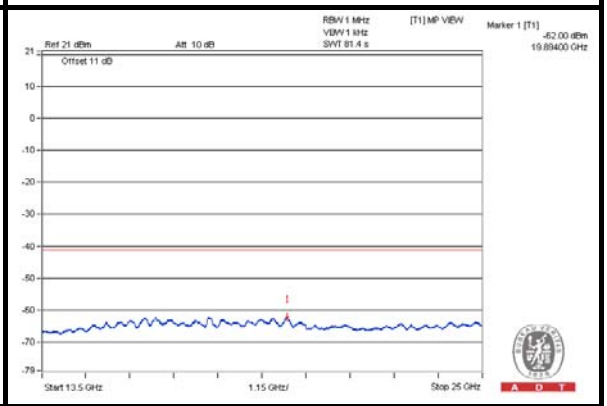
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

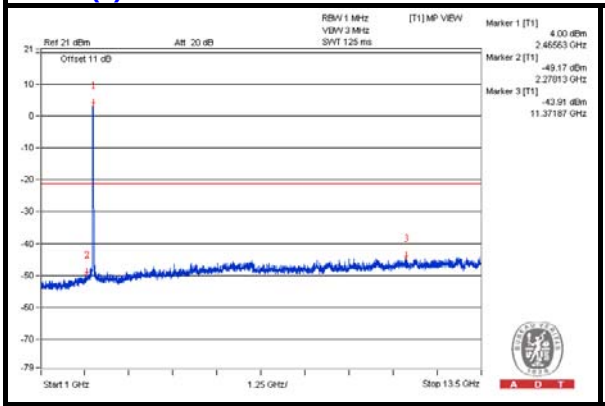


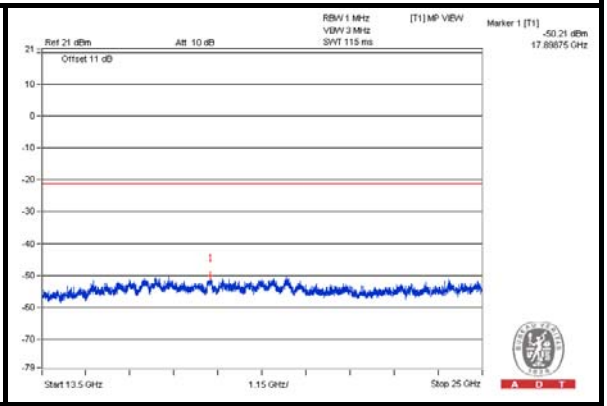


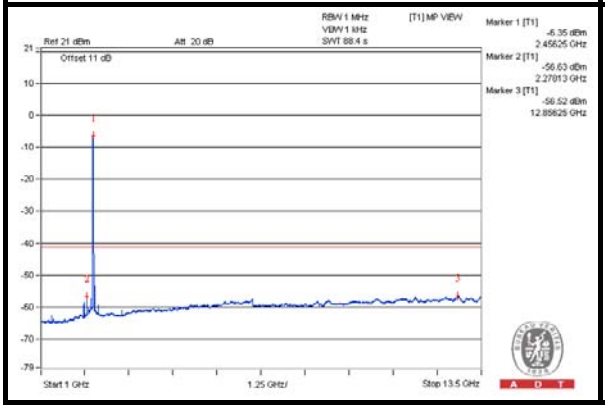


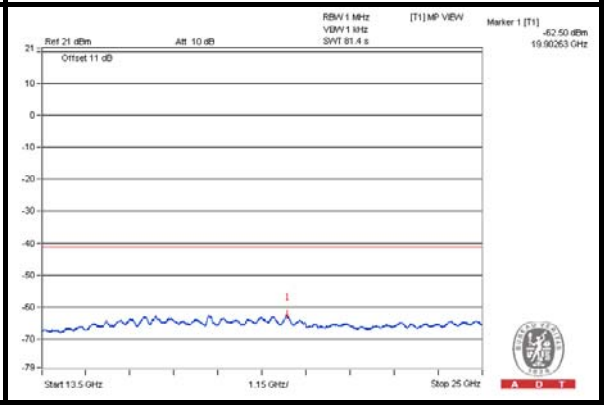


Chain (1)







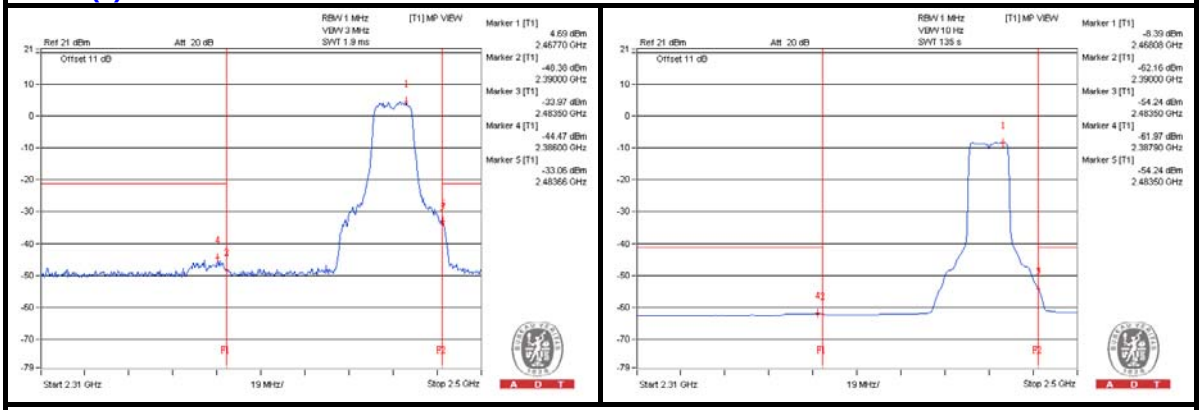


Bandedge table

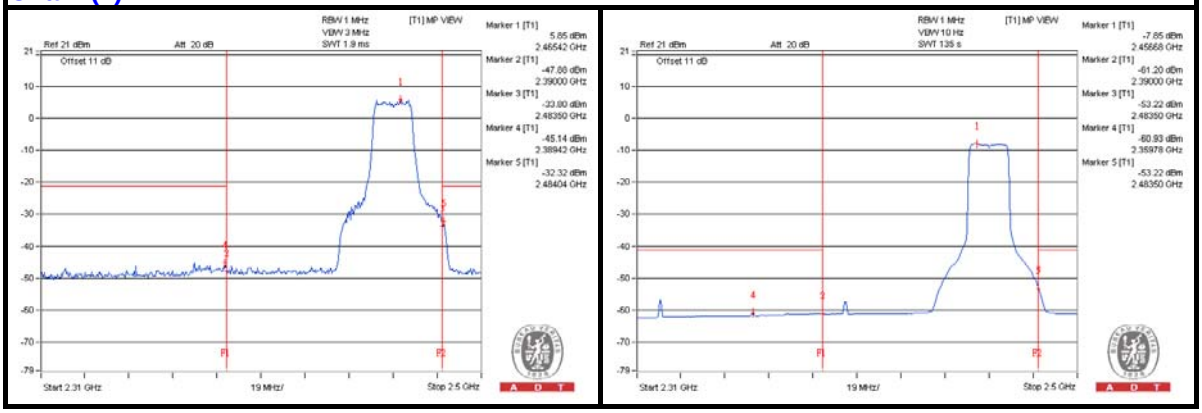
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2386 PK	57.5	74	-16.5	-44.47	-47.66	5.01	-37.76
2	2319.88 AV	44.39	54	-9.61	-62.62	-56.91	5.01	-50.87
3	2484.04 PK	70.18	74	-3.82	-34.06	-32.32	5.01	-25.08
4	2483.66 AV	49.28	54	-4.72	-54.47	-53.57	5.01	-45.98

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



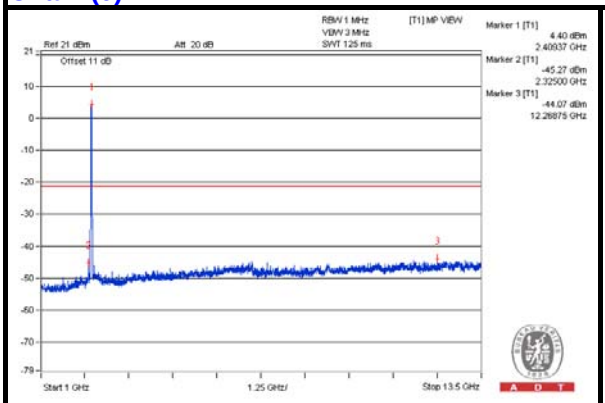
802.11n(HT20) - Channel 1

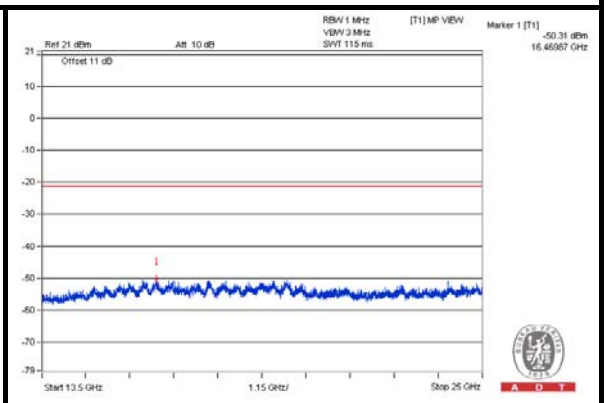
Conducted spurious emission table

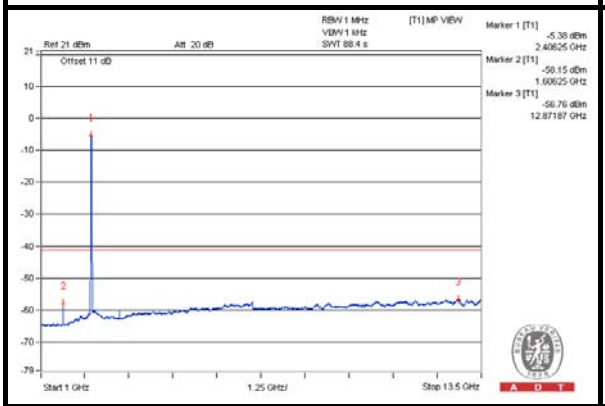
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1606.25 PK	52.01	74	-21.99	-49.89	-53.29	5.01	-43.25
2	1606.25 AV	43.12	54	-10.88	-58.15	-64.02	5.01	-52.14
3	4825 PK	54.44	74	-19.56	-48.21	-49.57	5.01	-40.82
4	4821.875 AV	42.84	54	-11.16	-60.23	-60.67	5.01	-52.42

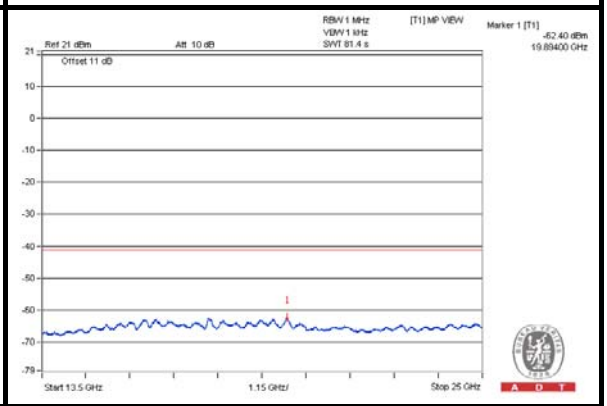
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

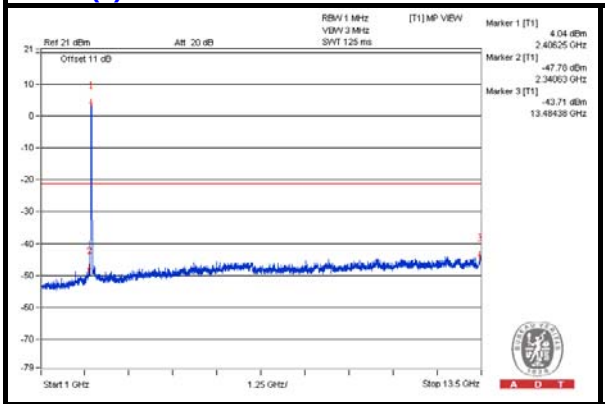


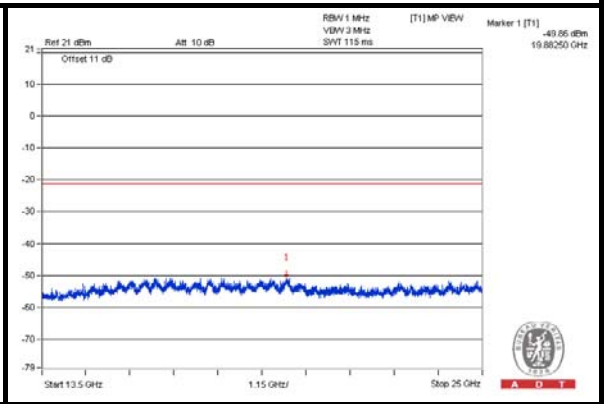


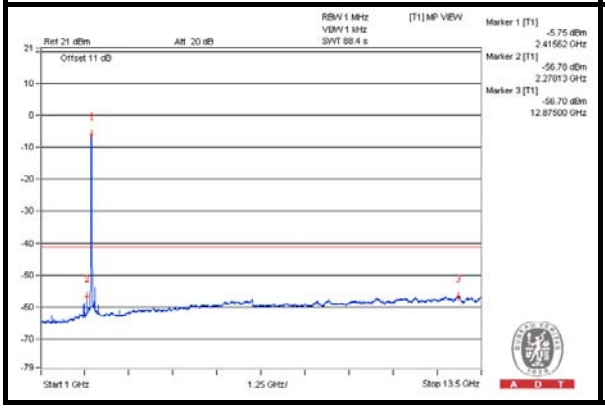


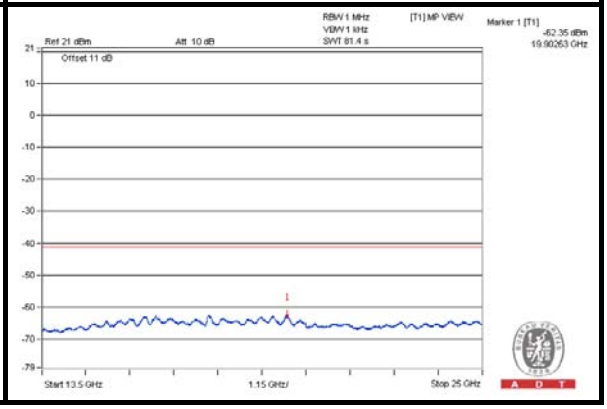


Chain (1)







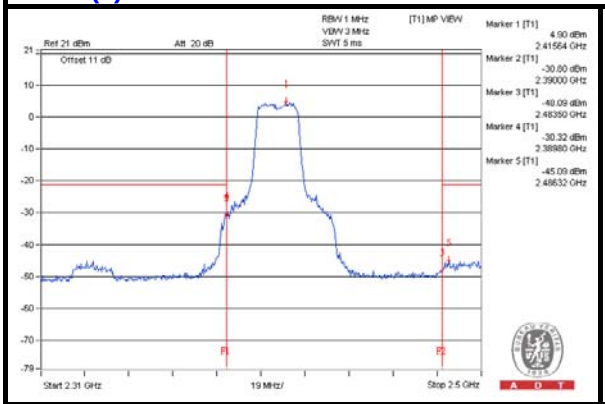


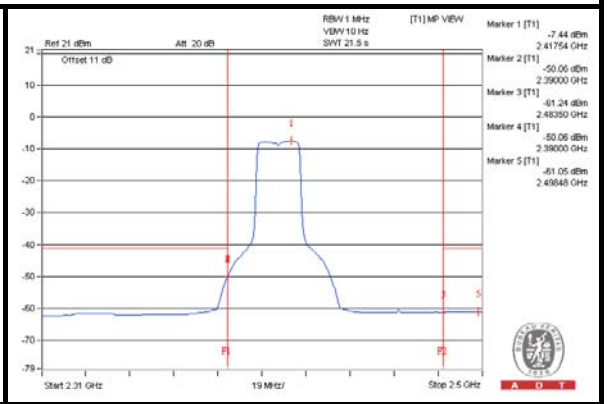
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2389.8 PK	70.97	74	-3.03	-30.32	-36.08	5.01	-24.29
2	2389.8 AV	51.86	54	-2.14	-50.42	-52.73	5.01	-43.4
3	2491.26 PK	57.22	74	-16.78	-45.43	-46.8	5.01	-38.04
4	2485.94 AV	42.53	54	-11.47	-61.16	-60.37	5.01	-52.73

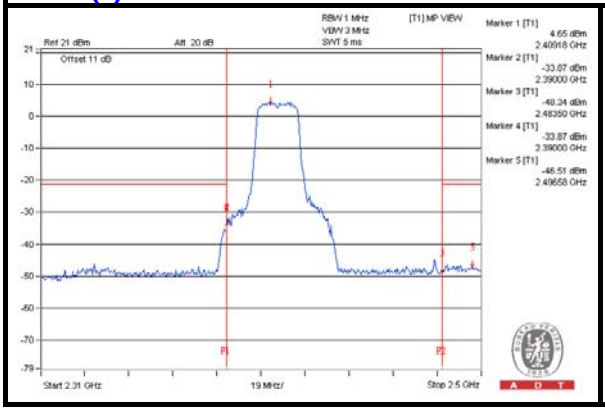
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

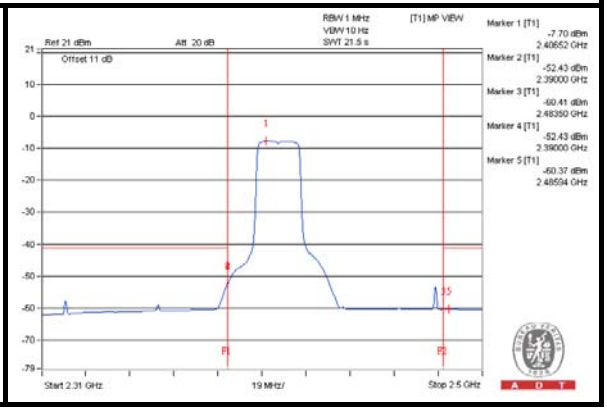
Chain (0)





Chain (1)





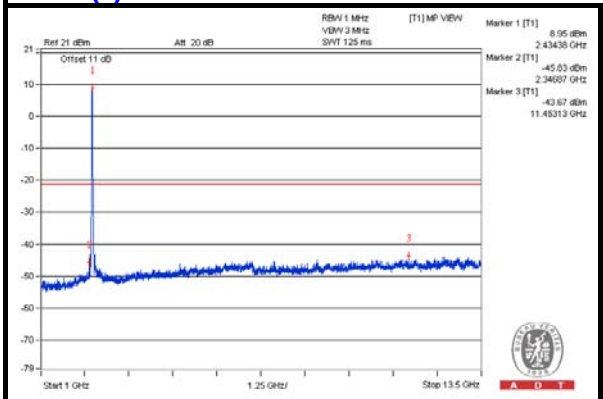
802.11n(HT20) - Channel 6

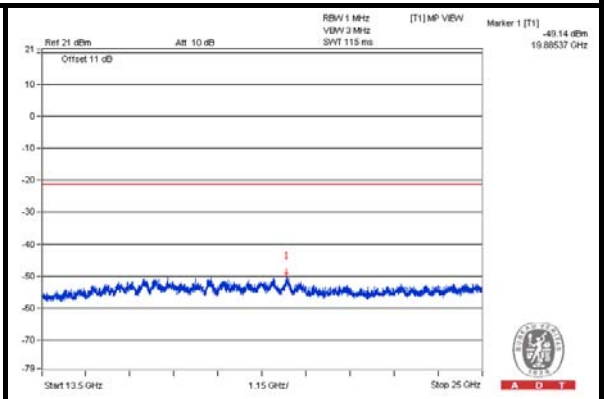
Conducted spurious emission table

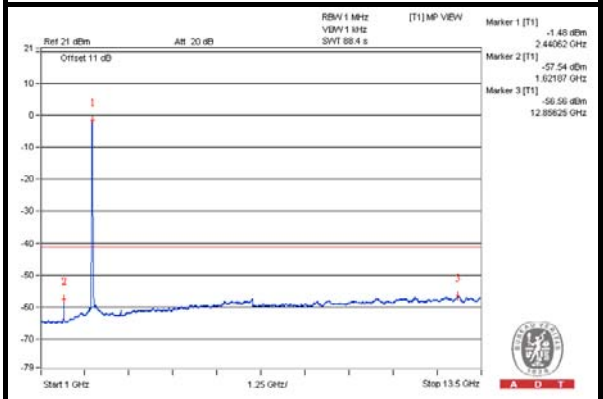
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1621.875 PK	52.29	74	-21.71	-50.19	-51.98	5.01	-42.97
2	1621.875 AV	43.89	54	-10.11	-57.54	-62.69	5.01	-51.37
3	4878.125 PK	54.48	74	-19.52	-48.28	-49.39	5.01	-40.78
4	4871.875 AV	42.99	54	-11.01	-60.09	-60.51	5.01	-52.27
5	7303.125 PK	56.15	74	-17.85	-47.1	-47.16	5.01	-39.11
6	7312.5 AV	44.16	54	-9.84	-58.92	-59.32	5.01	-51.1

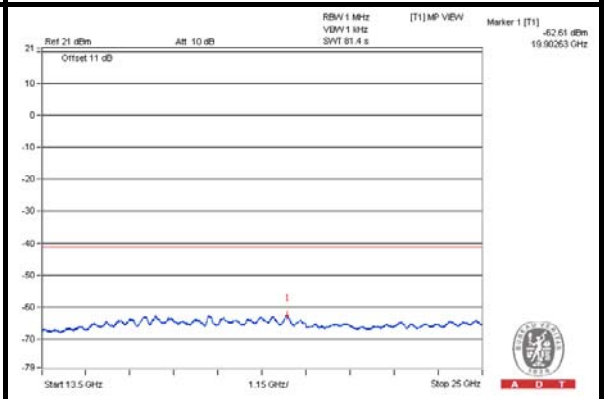
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

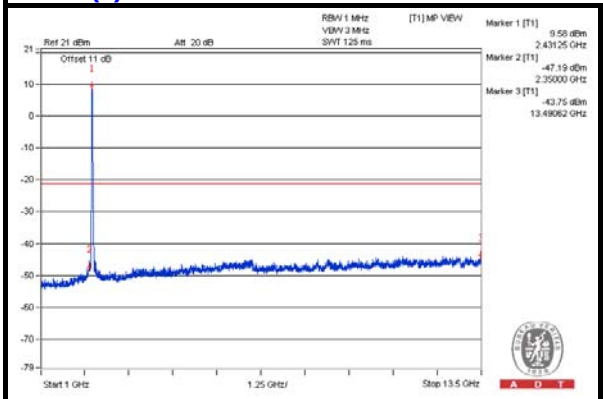


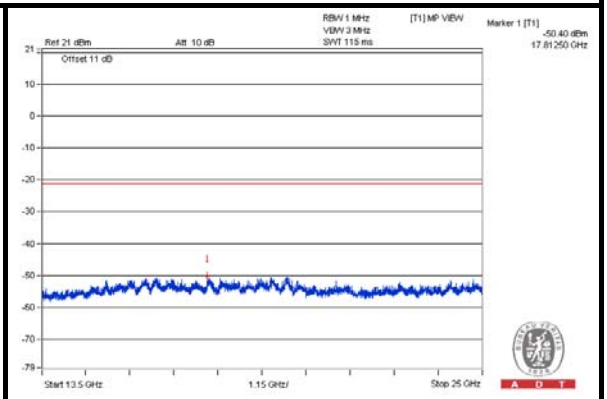


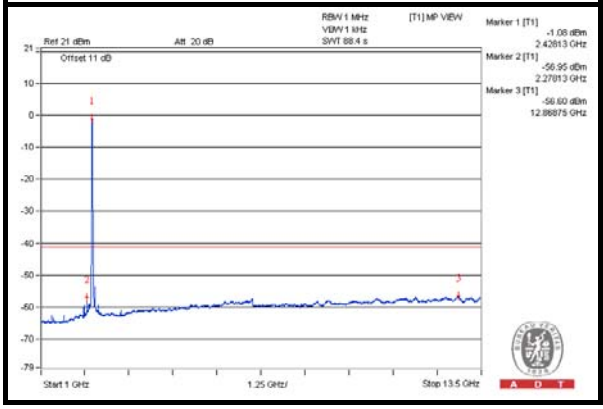


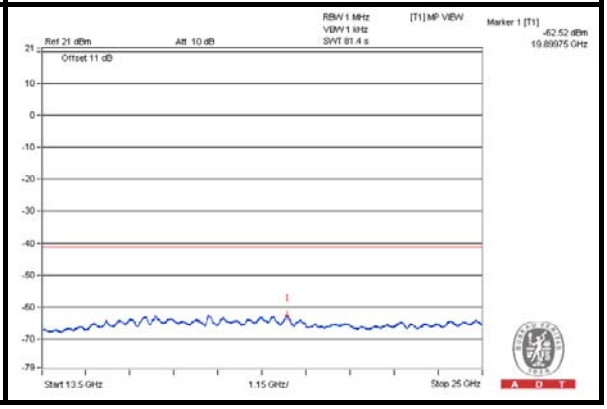


Chain (1)







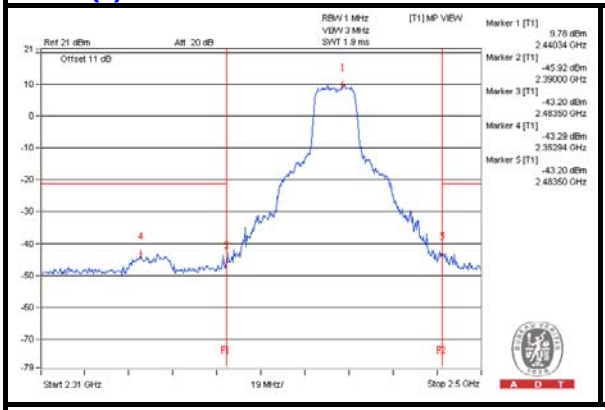


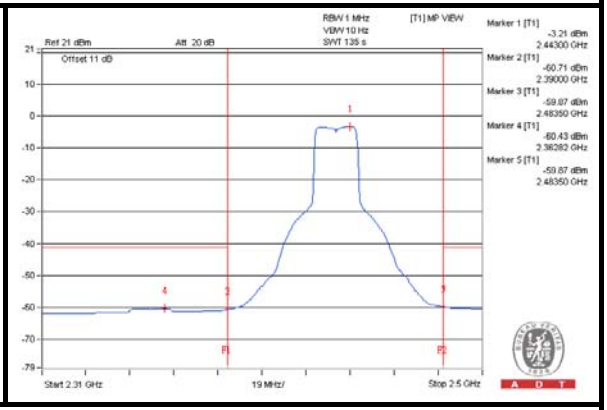
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2360.16 PK	59.54	74	-14.46	-43.48	-44.01	5.01	-35.72
2	2319.88 AV	44.88	54	-9.12	-61.77	-56.53	5.01	-50.38
3	2483.66 PK	59.51	74	-14.49	-43.49	-44.06	5.01	-35.75
4	2483.66 AV	43.66	54	-10.34	-59.89	-59.37	5.01	-51.6

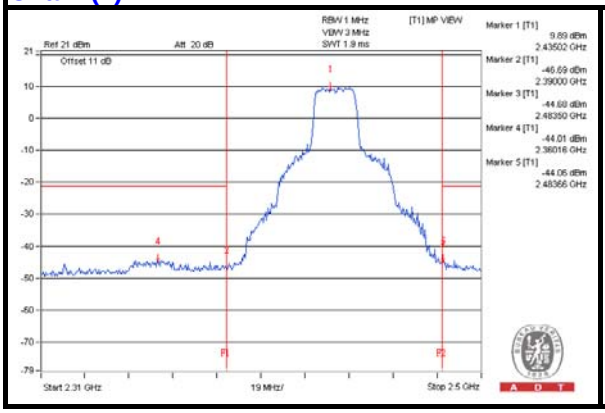
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

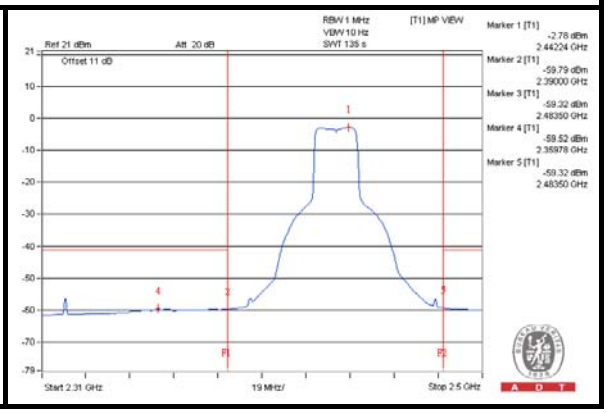
Chain (0)





Chain (1)





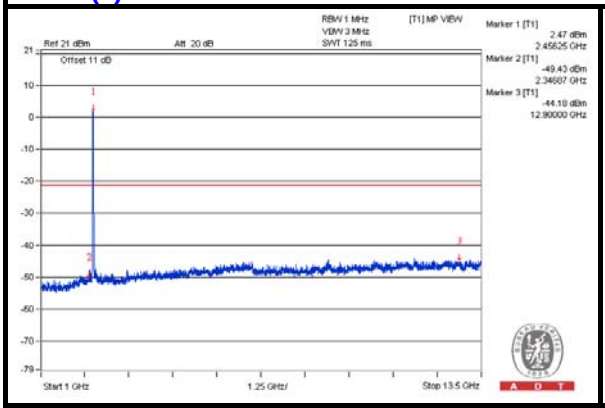
802.11n(HT20) - Channel 11

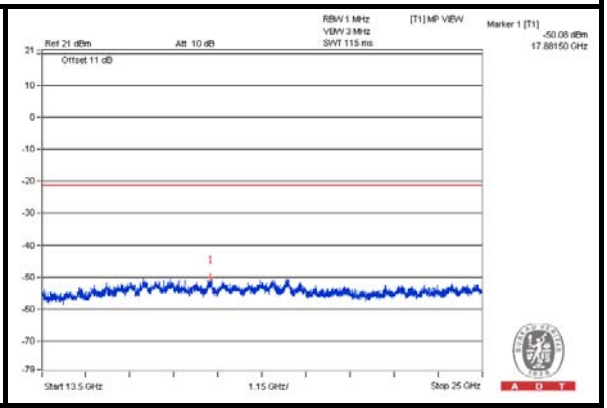
Conducted spurious emission table

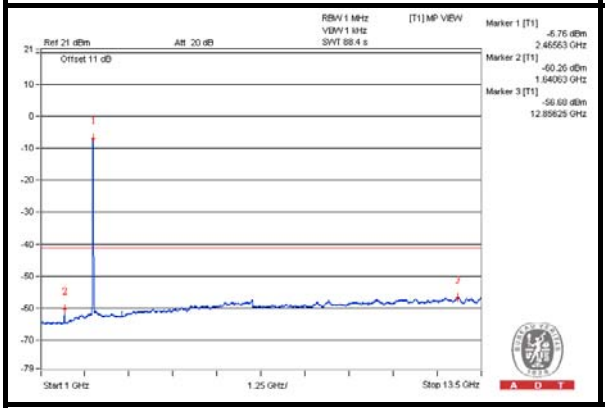
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	4921.875 PK	55.11	74	-18.89	-48.7	-47.7	5.01	-40.15
2	4928.125 AV	42.9	54	-11.1	-60.49	-60.28	5.01	-52.36
3	7390.625 PK	55.52	74	-18.48	-48.13	-47.42	5.01	-39.74
4	7393.75 AV	43.66	54	-10.34	-59.61	-59.63	5.01	-51.6

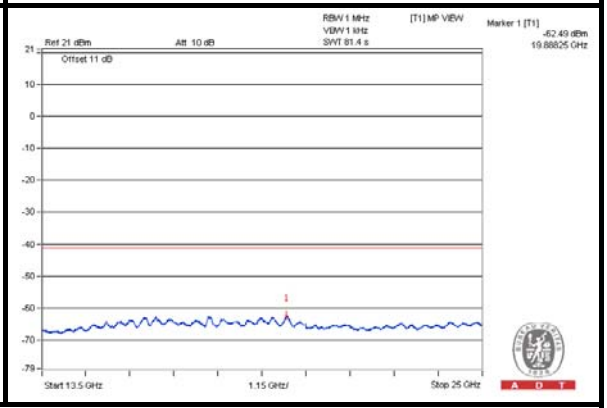
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

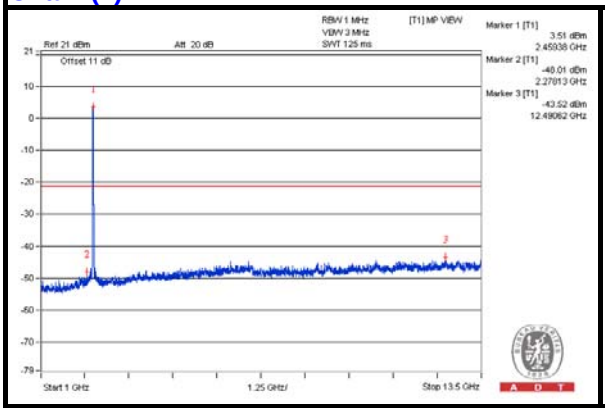


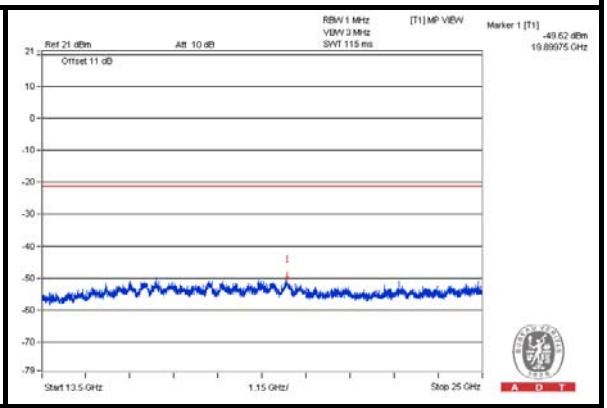


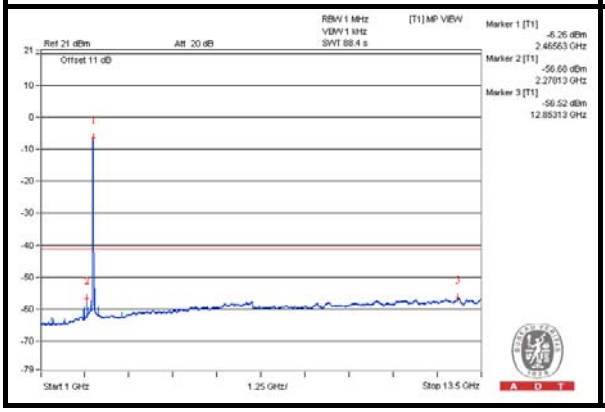


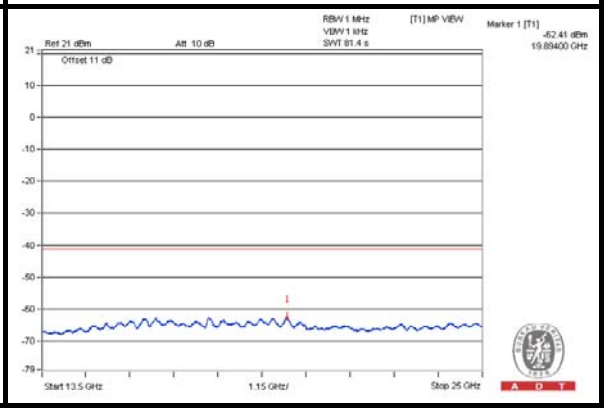


Chain (1)







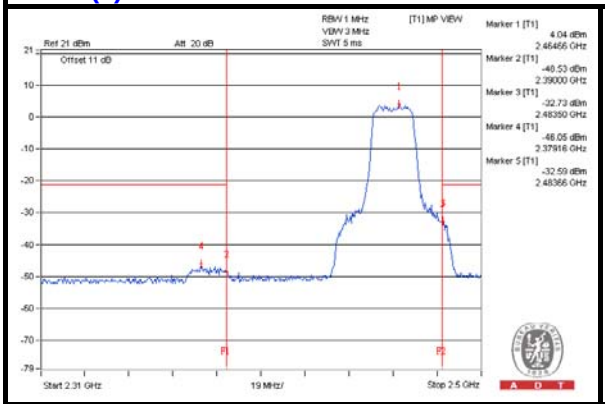


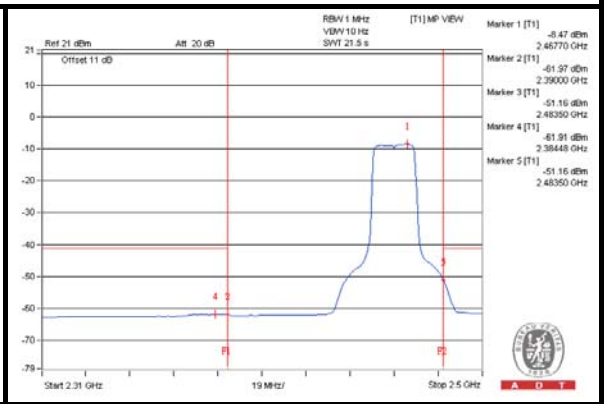
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2379.16 PK	56.28	74	-17.72	-46.05	-48.22	5.01	-38.98
2	2319.88 AV	44.43	54	-9.57	-62.65	-56.85	5.01	-50.83
3	2484.04 PK	71.47	74	-2.53	-32.6	-31.14	5.01	-23.79
4	2483.66 AV	51.69	54	-2.31	-51.39	-51.8	5.01	-43.57

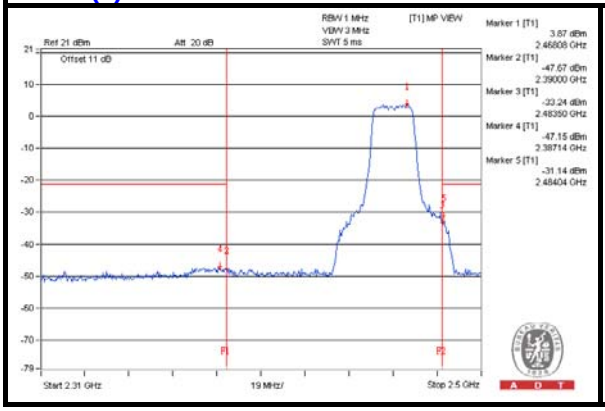
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

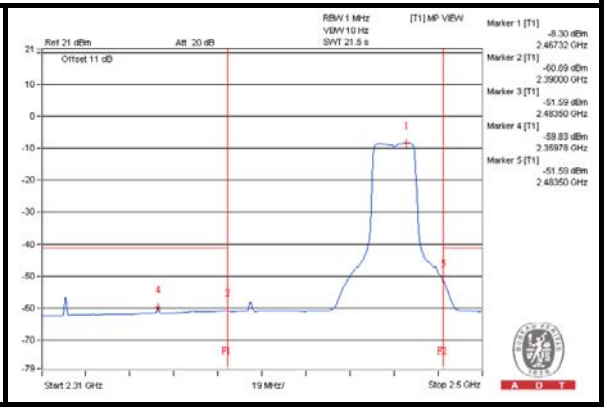
Chain (0)





Chain (1)





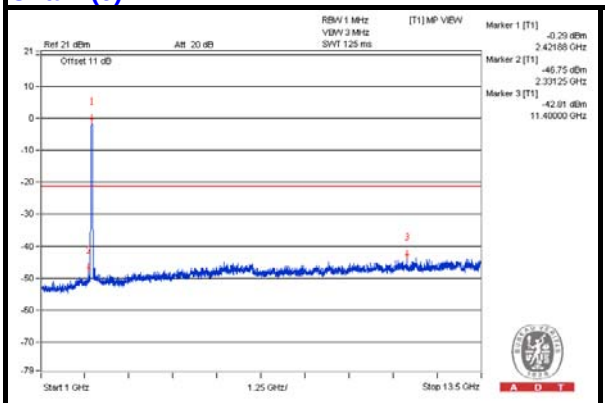
802.11n(HT40) - Channel 3

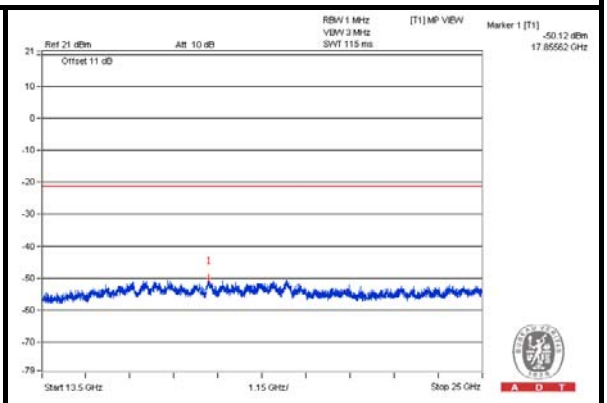
Conducted spurious emission table

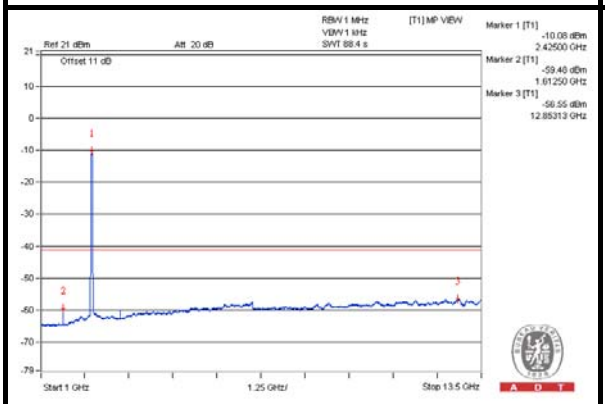
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1612.5 PK	51.07	74	-22.93	-51.79	-52.68	5.01	-44.19
2	1612.5 AV	41.95	54	-12.05	-59.48	-64.61	5.01	-53.31
3	4850 PK	54.64	74	-19.36	-47.91	-49.53	5.01	-40.62
4	4837.5 AV	42.62	54	-11.38	-60.6	-60.73	5.01	-52.64
5	7275 PK	55.33	74	-18.67	-48.9	-47.17	5.01	-39.93
6	7275 AV	43.68	54	-10.32	-59.5	-59.71	5.01	-51.58

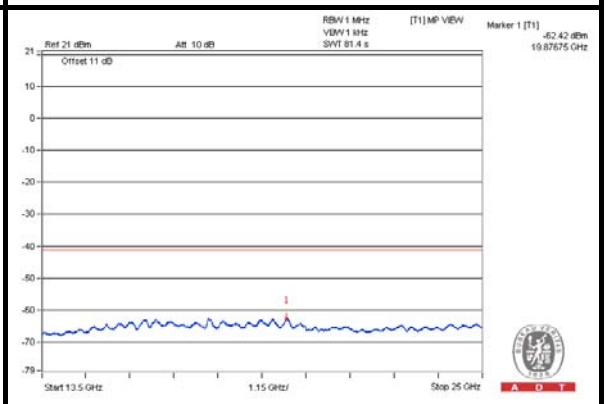
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

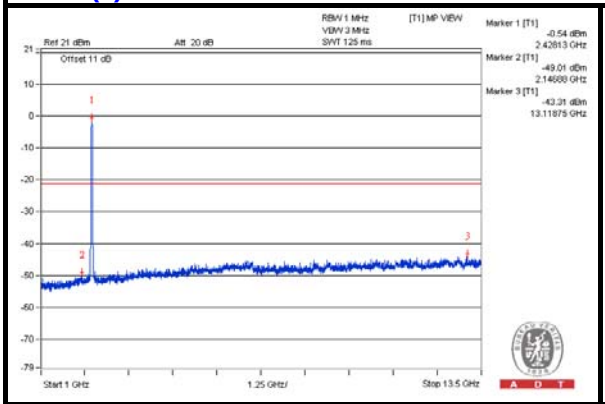


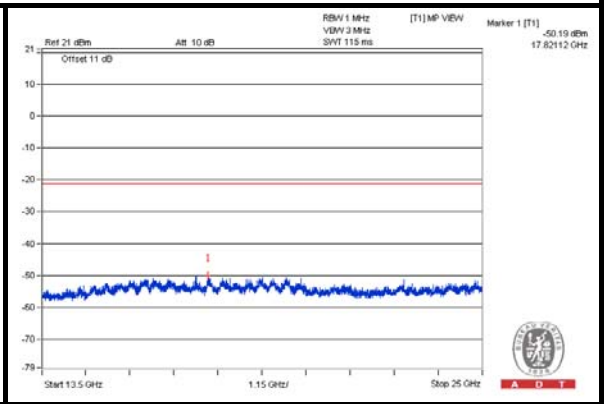


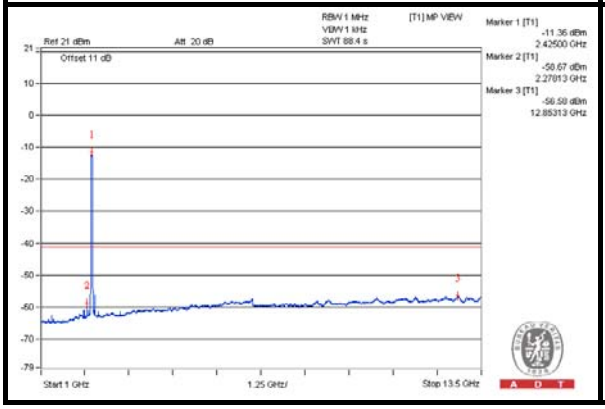


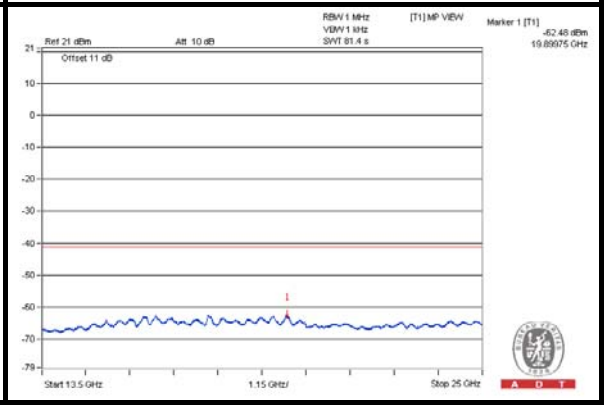


Chain (1)







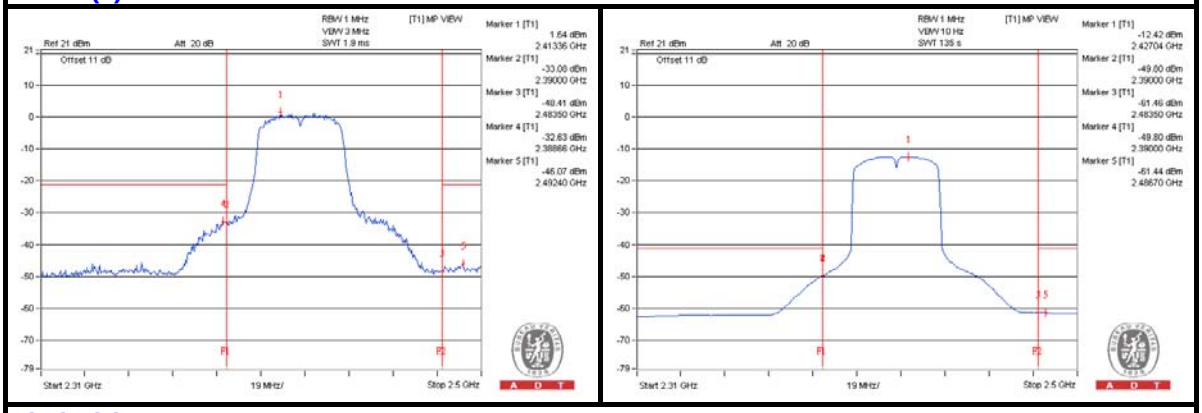


Bandedge table

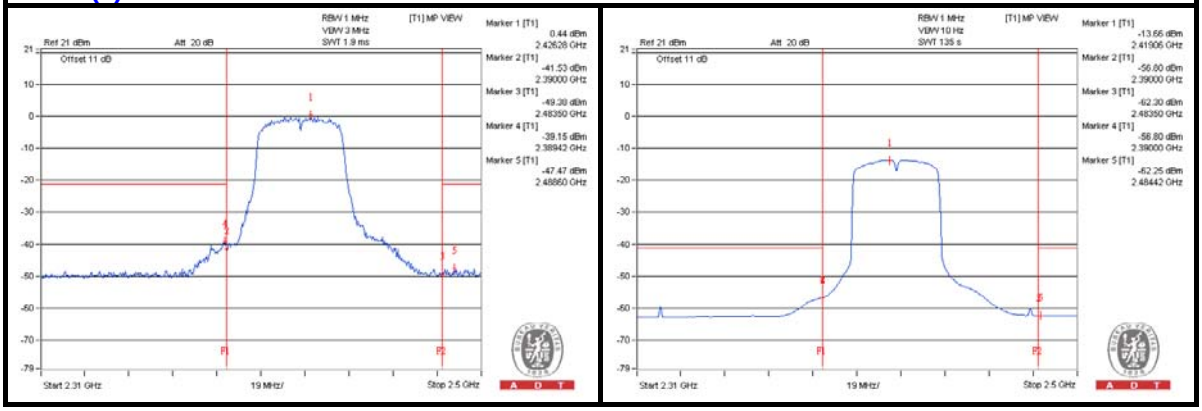
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2388.66 PK	68.42	74	-5.58	-32.63	-39.71	5.01	-26.84
2	2389.8 AV	51.12	54	-2.88	-49.95	-56.88	5.01	-44.14
3	2484.42 PK	56	74	-18	-46.85	-47.75	5.01	-39.26
4	2484.8 AV	41.43	54	-12.57	-61.46	-62.27	5.01	-53.83

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



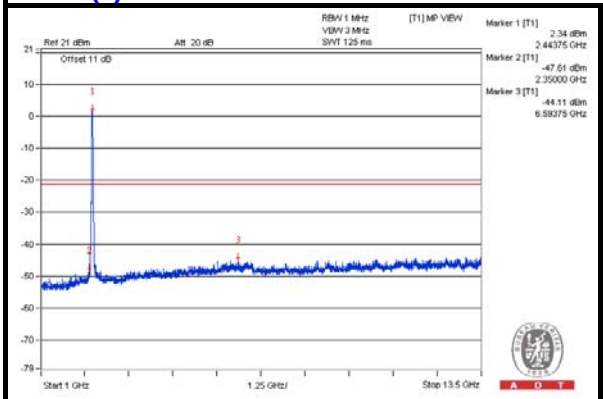
802.11n(HT40) - Channel 6

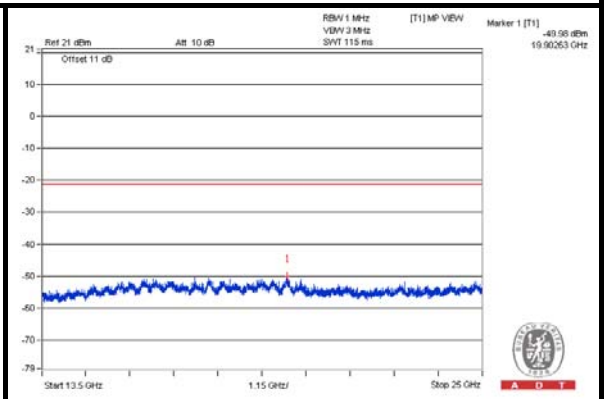
Conducted spurious emission table

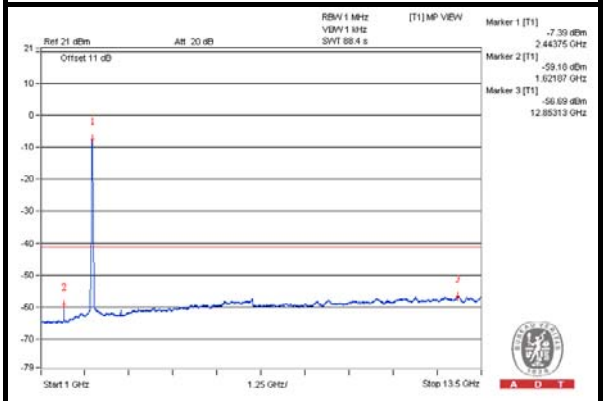
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1621.875 PK	51.17	74	-22.83	-51.84	-52.39	5.01	-44.09
2	1621.875 AV	42.36	54	-11.64	-59.18	-63.88	5.01	-52.9
3	4868.75 PK	54.61	74	-19.39	-48.48	-48.87	5.01	-40.65
4	4881.25 AV	42.64	54	-11.36	-60.63	-60.65	5.01	-52.62
5	7315.625 PK	55.62	74	-18.38	-46.92	-48.56	5.01	-39.64
6	7315.625 AV	43.77	54	-10.23	-59.67	-59.36	5.01	-51.49

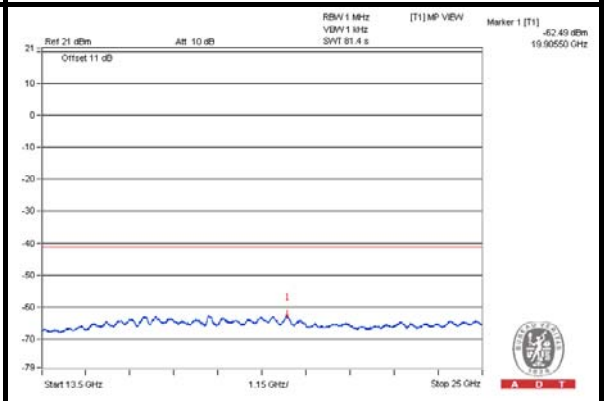
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

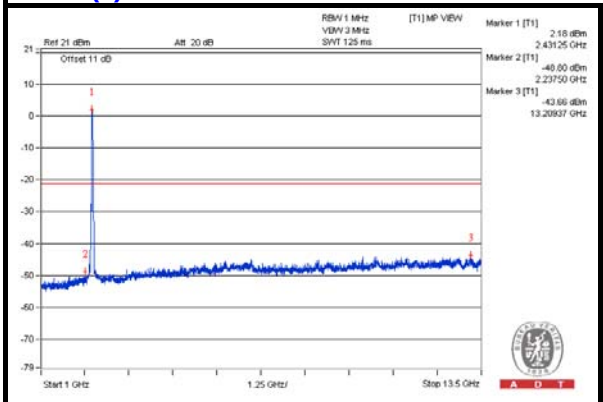


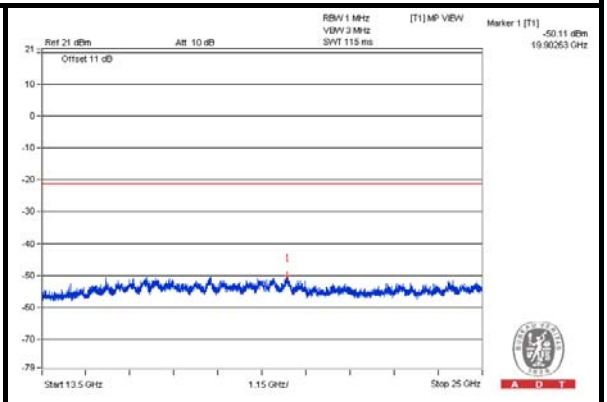


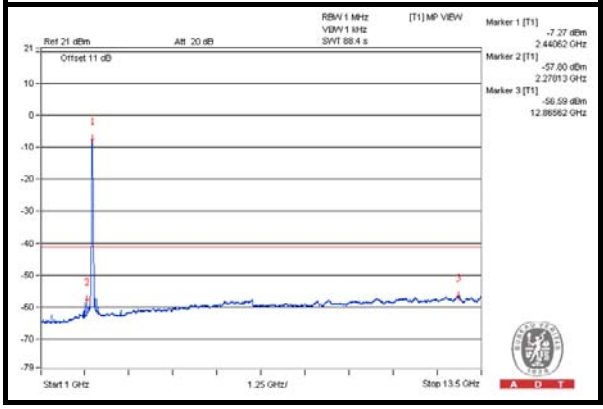


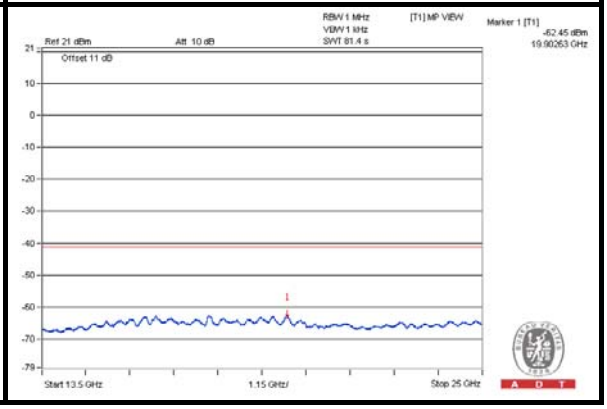


Chain (1)







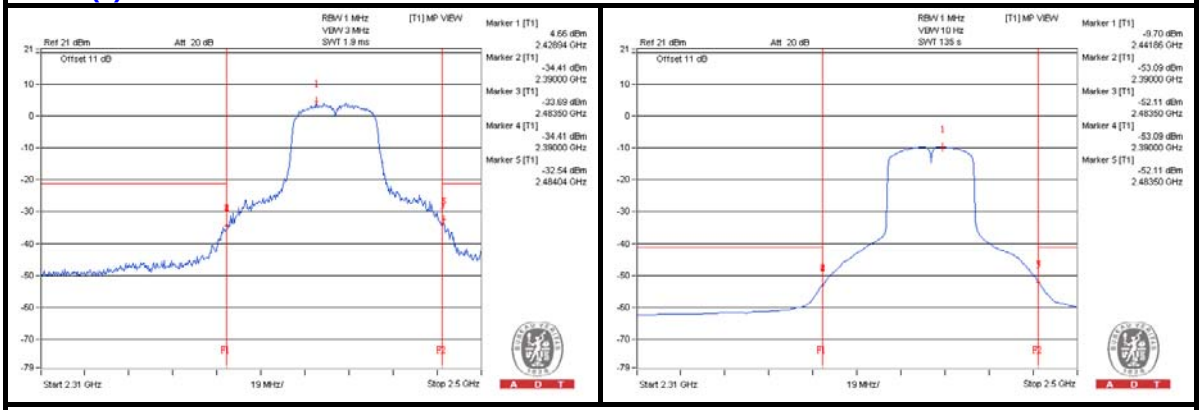


Bandedge table

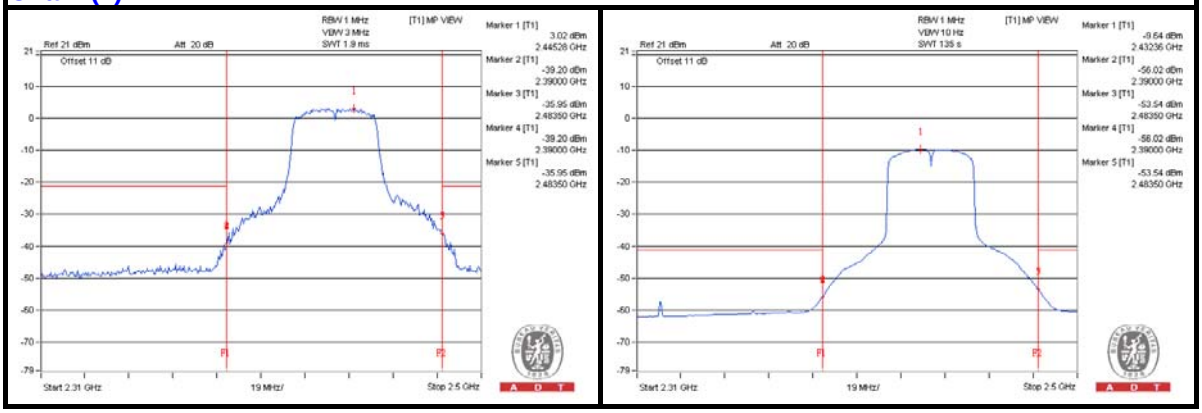
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2389.8 PK	66.33	74	-7.67	-34.98	-40.66	5.01	-28.93
2	2389.8 AV	48.74	54	-5.26	-53.33	-56.22	5.01	-46.52
3	2484.04 PK	69.35	74	-4.65	-32.54	-36	5.01	-25.91
4	2483.66 AV	50.37	54	-3.63	-52.24	-53.71	5.01	-44.89

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



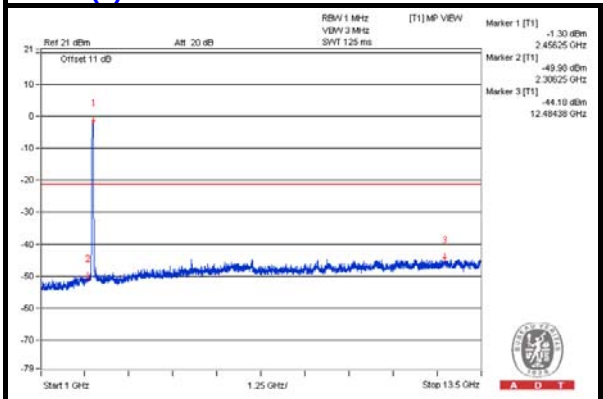
802.11n(HT40) - Channel 9

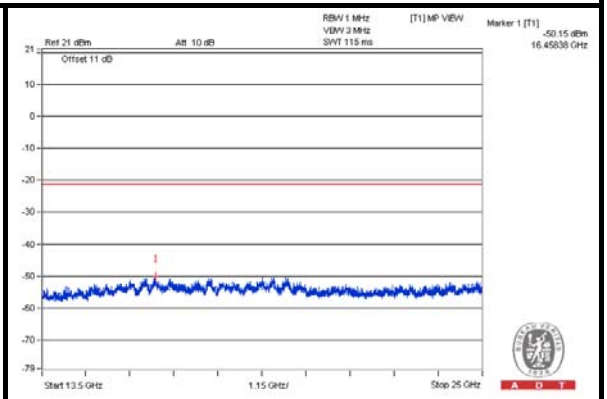
Conducted spurious emission table

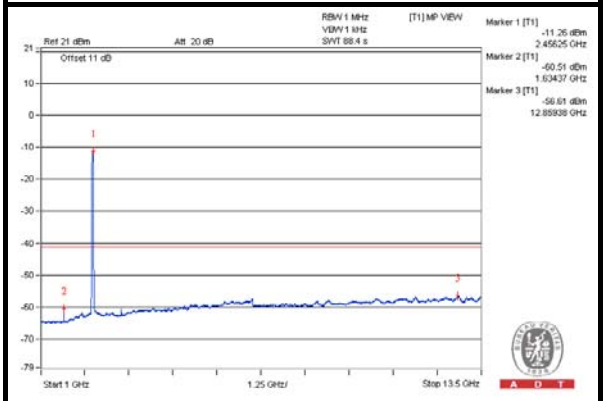
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	4912.5 PK	55.13	74	-18.87	-47.4	-49.05	5.01	-40.13
2	4900 AV	42.76	54	-11.24	-60.55	-60.5	5.01	-52.5
3	7353.125 PK	55.41	74	-18.59	-47.24	-48.61	5.01	-39.85
4	7365.625 AV	43.47	54	-10.53	-59.76	-59.87	5.01	-51.79

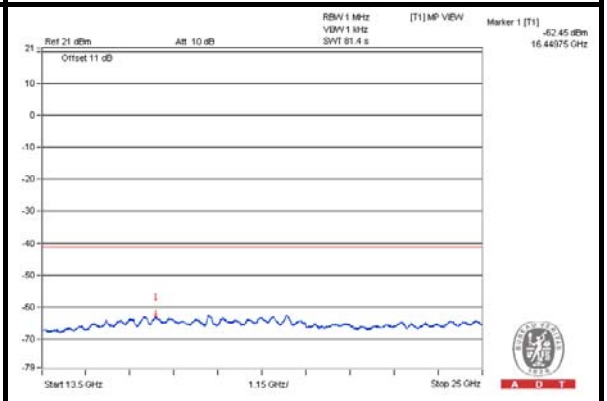
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

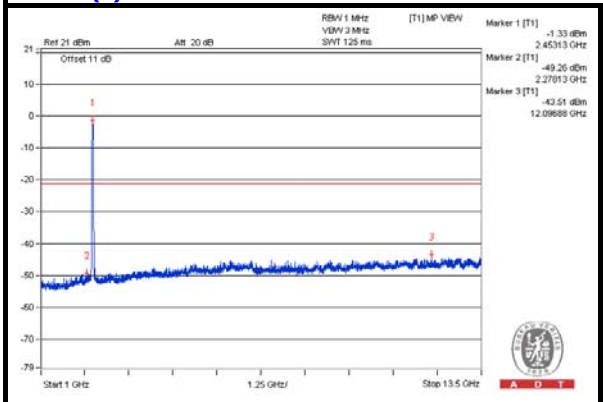


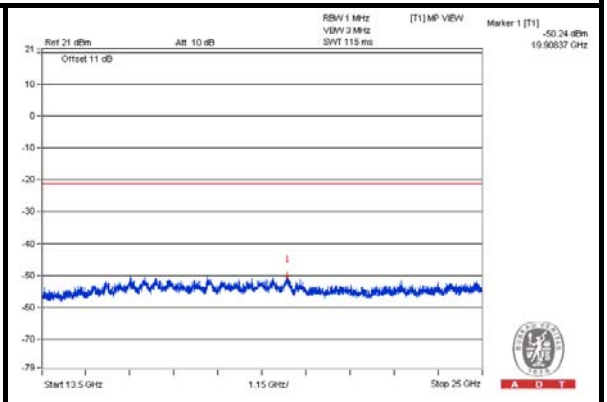


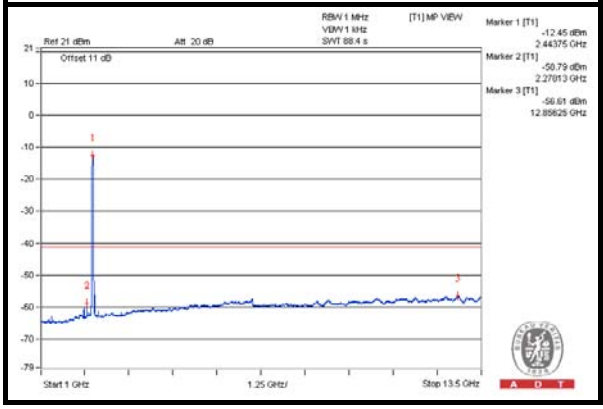


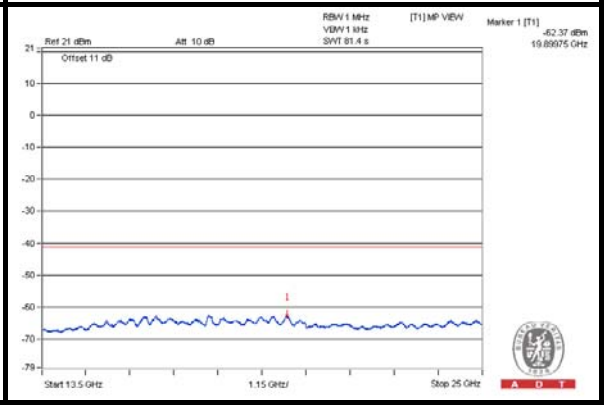


Chain (1)







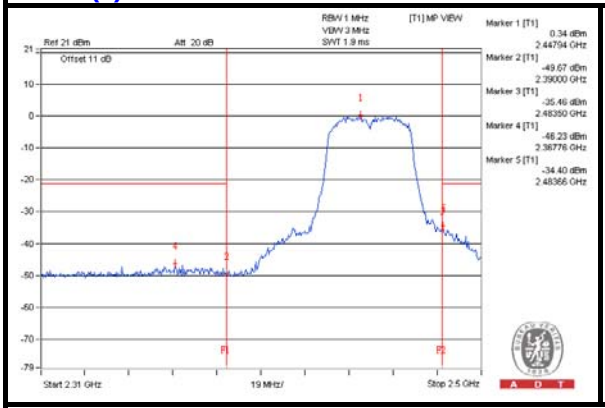


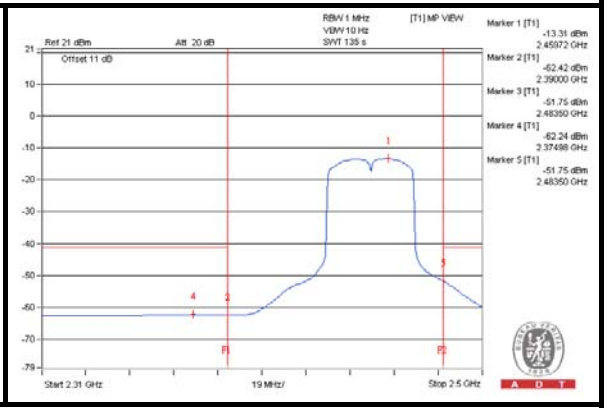
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2367.76 PK	55.61	74	-18.39	-46.23	-49.83	5.01	-39.65
2	2319.88 AV	42.51	54	-11.49	-62.6	-59.49	5.01	-52.75
3	2483.66 PK	66.86	74	-7.14	-34.4	-40.34	5.01	-28.4
4	2483.66 AV	50.23	54	-3.77	-51.78	-54.86	5.01	-45.03

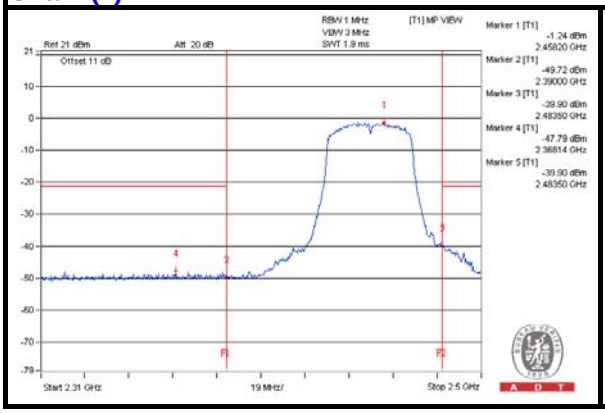
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

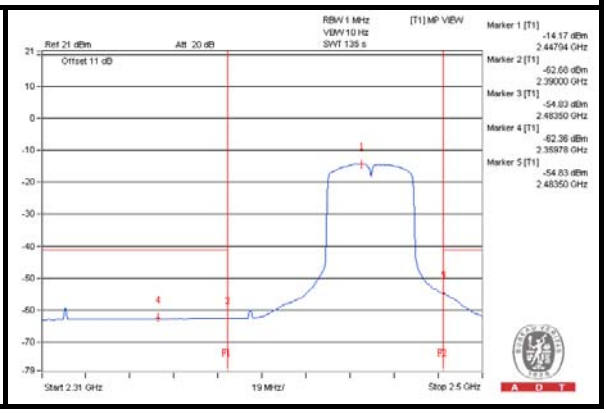
Chain (0)





Chain (1)





MODE 2

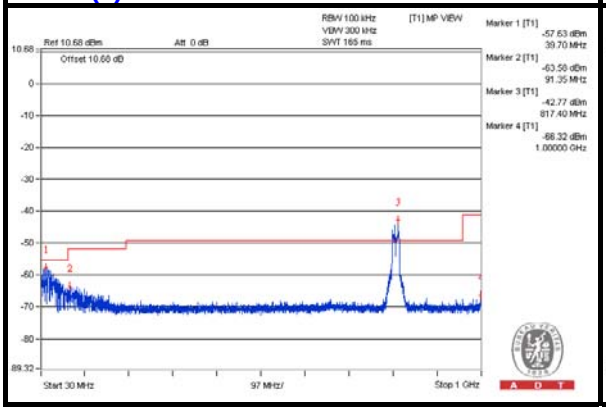
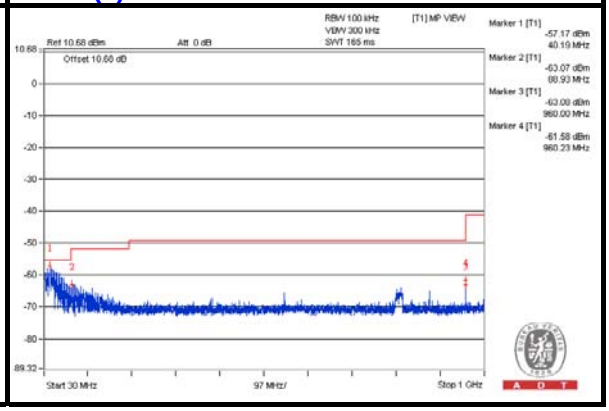
BELOW 1GHz WORST-CASE DATA

802.11g – Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	85.5325	38.99	40	-1.01	-64.88	-66.32	6.26	-56.27
2	98.87	40.37	43.5	-3.13	-65.45	-63.16	6.26	-54.89
3	395.9325	35.9	46	-10.1	-69.79	-67.71	6.26	-59.36
4	560.105	37.23	46	-8.77	-70.54	-65.47	6.26	-58.03
5	798.9675	42.04	46	-3.96	-59.76	-71.58	6.26	-53.22
6	960.23	40.91	54	-13.09	-67.6	-61.58	6.26	-54.35

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)	Chain (1)
	

ABOVE 1GHz DATA

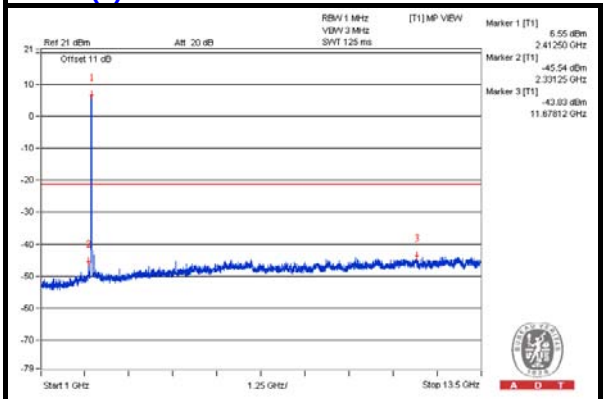
802.11b - Channel 1

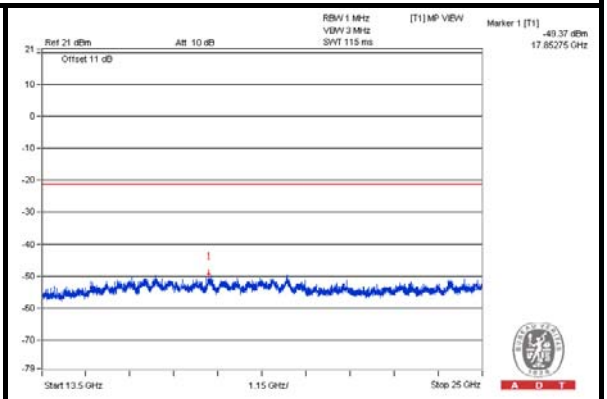
Conducted spurious emission table

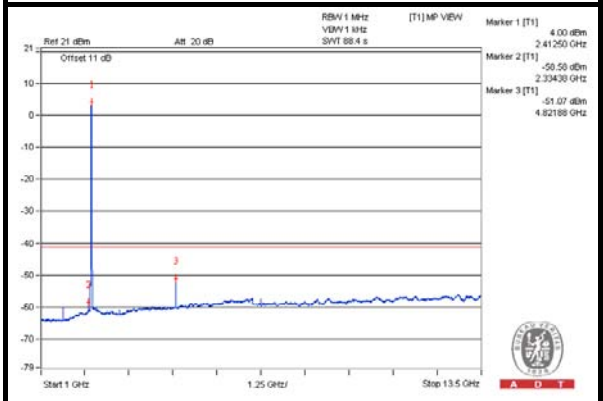
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1606.25 PK	52.52	74	-21.48	-51.37	-52.76	6.26	-42.74
2	1606.25 AV	42.86	54	-11.14	-60.46	-63.35	6.26	-52.4
3	4821.875 PK	57.44	74	-16.56	-45.56	-49.49	6.26	-37.82
4	4821.875 AV	51.15	54	-2.85	-51.07	-58.62	6.26	-44.11

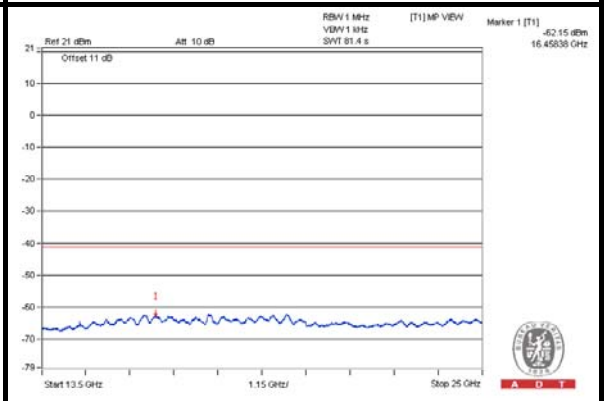
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

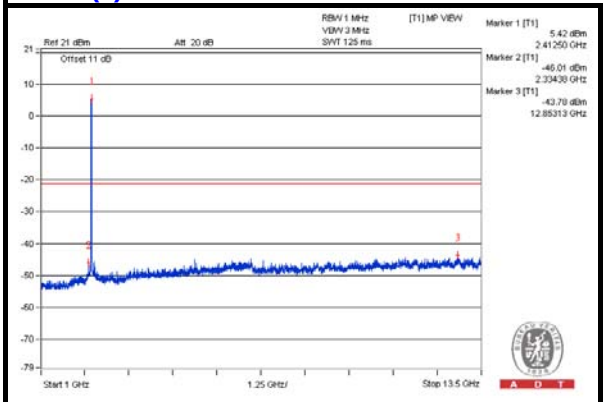


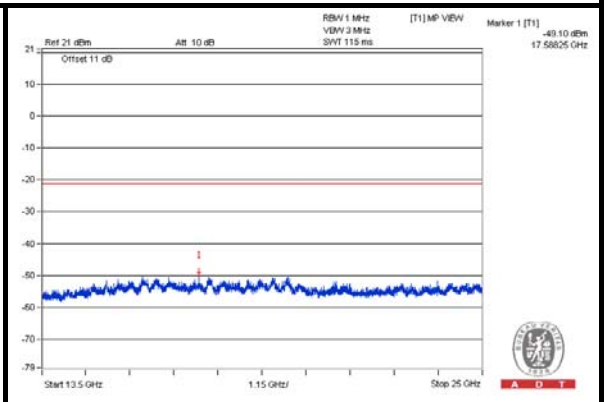


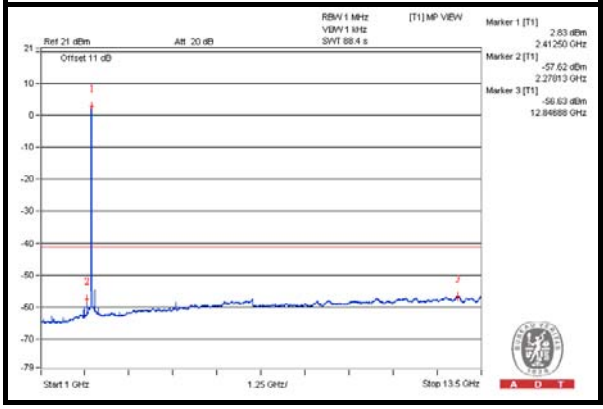


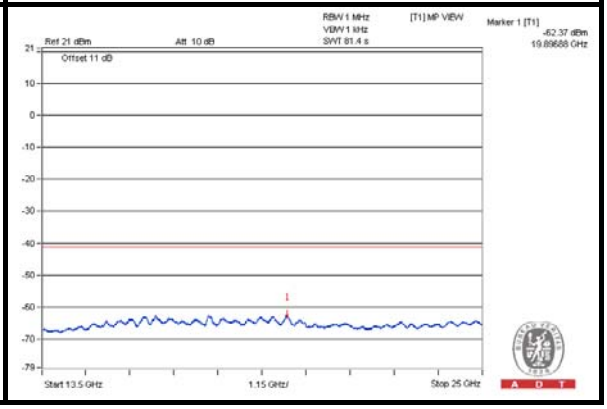


Chain (1)







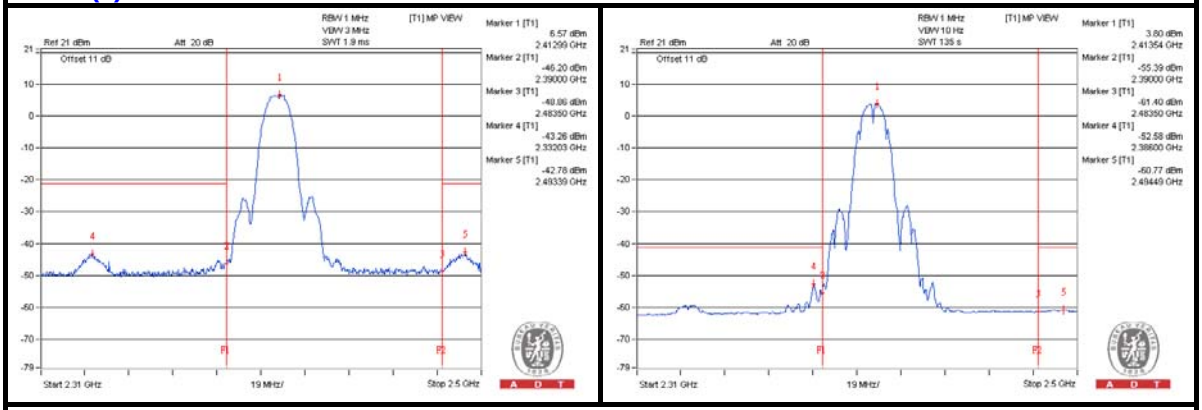


Bandedge table

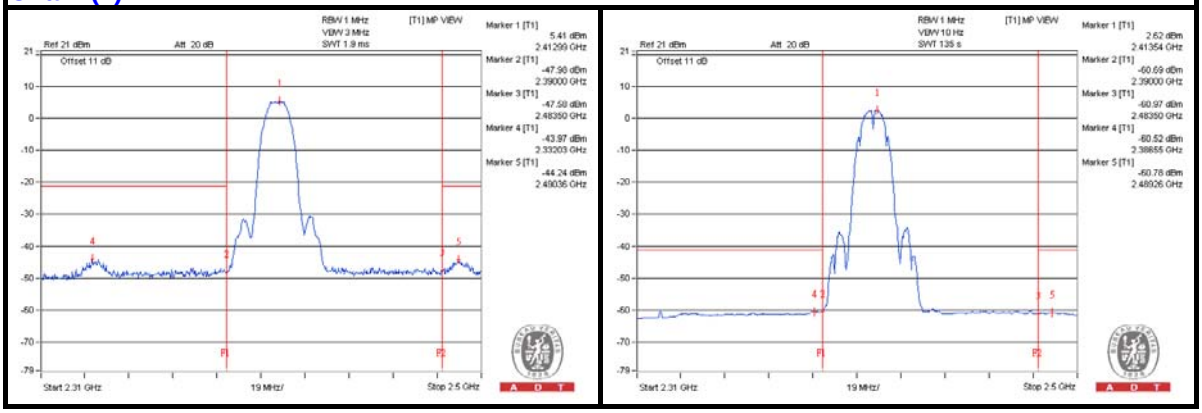
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2332.029 PK	60.93	74	-13.07	-43.26	-43.97	6.26	-34.33
2	2386 AV	49.59	54	-4.41	-52.58	-60.53	6.26	-45.67
3	2493.391 PK	60.53	74	-13.47	-42.78	-45.71	6.26	-34.73
4	2489.261 AV	43.72	54	-10.28	-60.84	-60.78	6.26	-51.54

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



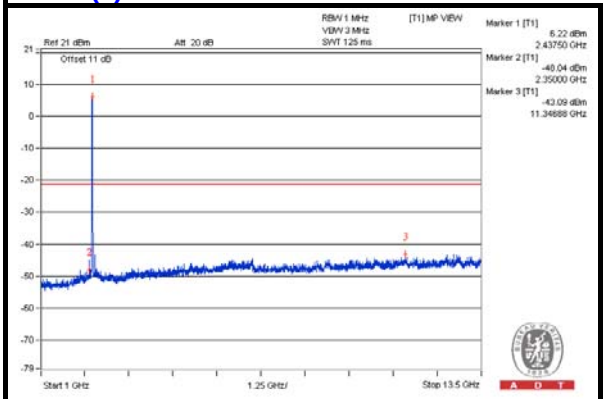
802.11b - Channel 6

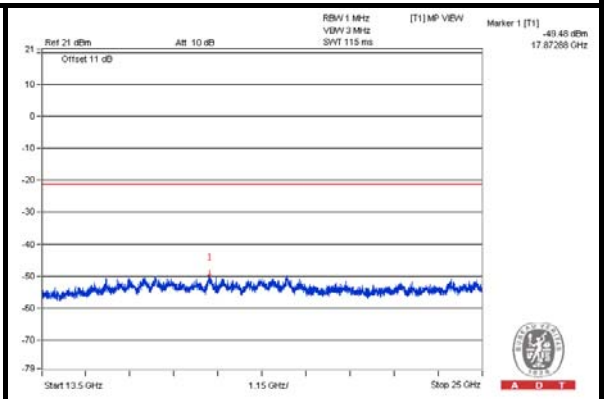
Conducted spurious emission table

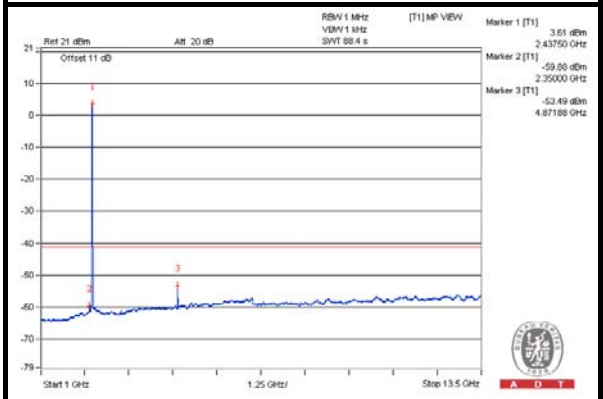
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1615.625 PK	52.06	74	-21.94	-52.06	-52.93	6.26	-43.2
2	1621.875 AV	40.81	54	-13.19	-63.57	-63.87	6.26	-54.45
3	4875 PK	57.08	74	-16.92	-46.94	-48.02	6.26	-38.18
4	4871.875 AV	49.42	54	-4.58	-53.49	-57.73	6.26	-45.84
5	7312.5 PK	57.57	74	-16.43	-47.67	-46.35	6.26	-37.69
6	7309.375 AV	45.76	54	-8.24	-58.17	-59.47	6.26	-49.5

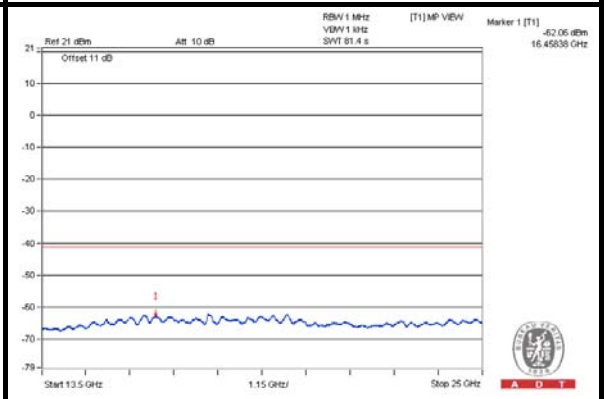
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

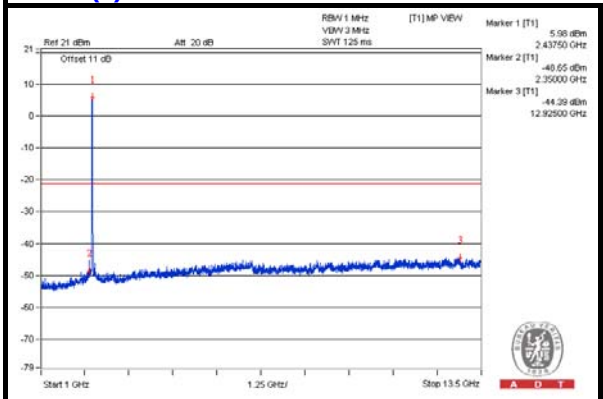


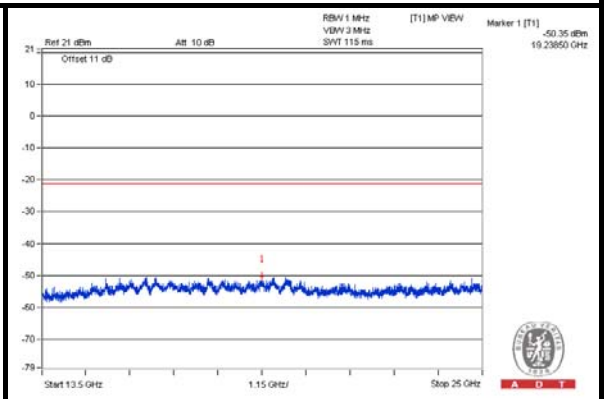


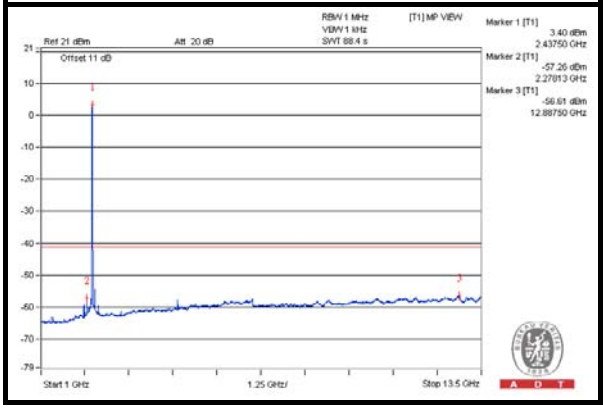


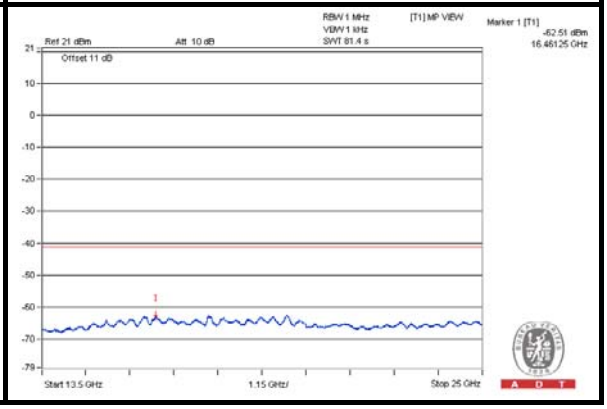


Chain (1)







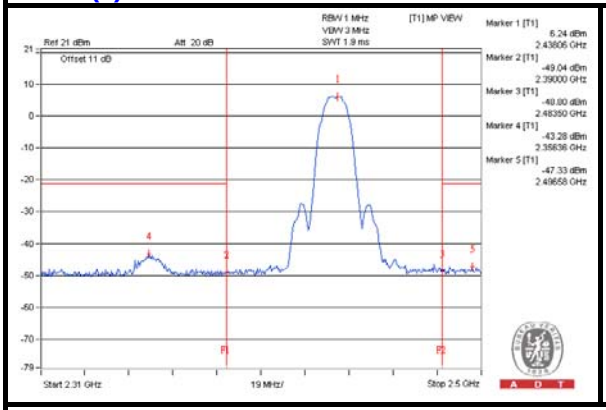


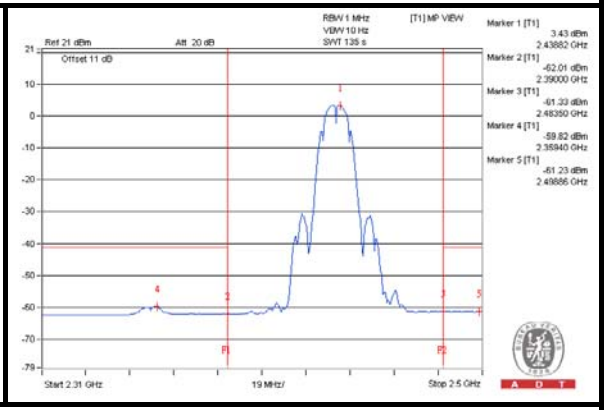
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2360.16 PK	60.65	74	-13.35	-44.99	-43	6.26	-34.61
2	2359.4 AV	44.65	54	-9.35	-59.82	-59.95	6.26	-50.61
3	2496.58 PK	57.07	74	-16.93	-47.33	-47.6	6.26	-38.19
4	2484.42 AV	43.6	54	-10.4	-61.26	-60.62	6.26	-51.66

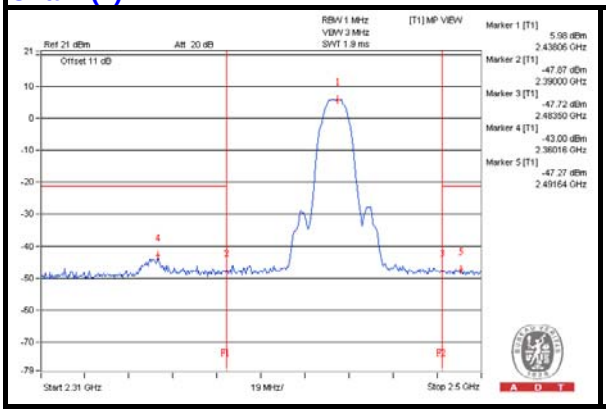
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

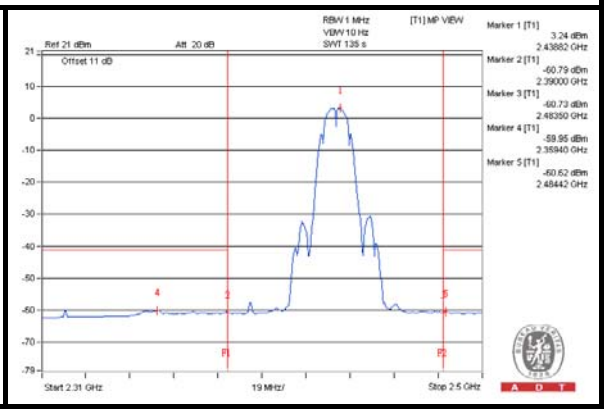
Chain (0)





Chain (1)





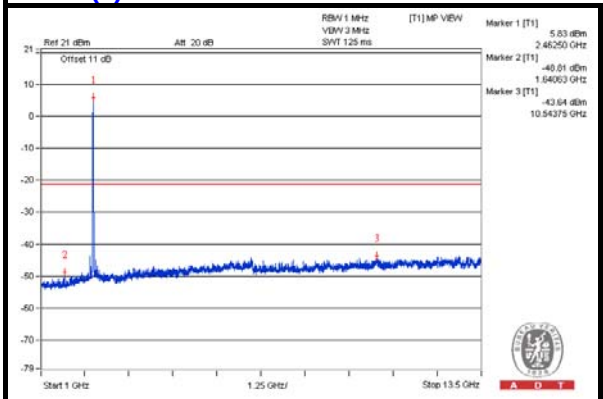
802.11b - Channel 11

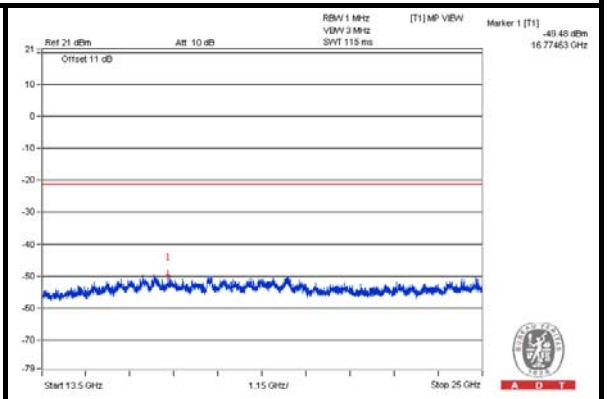
Conducted spurious emission table

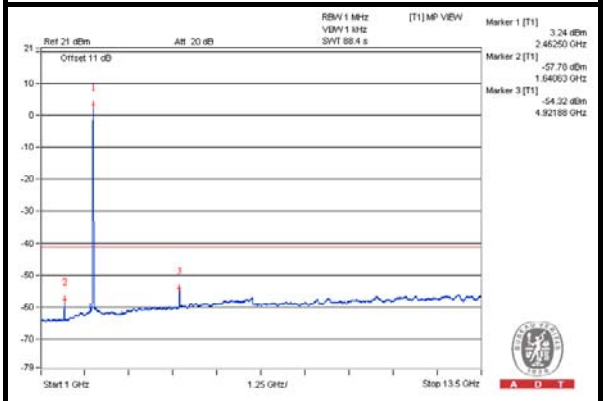
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	4921.875 PK	56.89	74	-17.11	-47.09	-48.28	6.26	-38.37
2	4921.875 AV	49.24	54	-4.76	-54.32	-56.53	6.26	-46.02
3	7378.125 PK	57	74	-17	-46.81	-48.4	6.26	-38.26
4	7384.375 AV	45.33	54	-8.67	-58.84	-59.6	6.26	-49.93

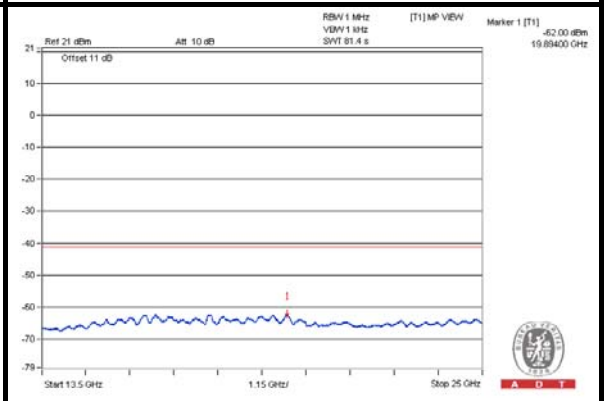
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

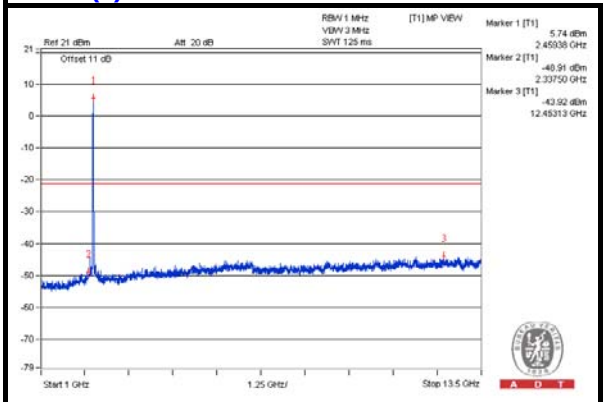


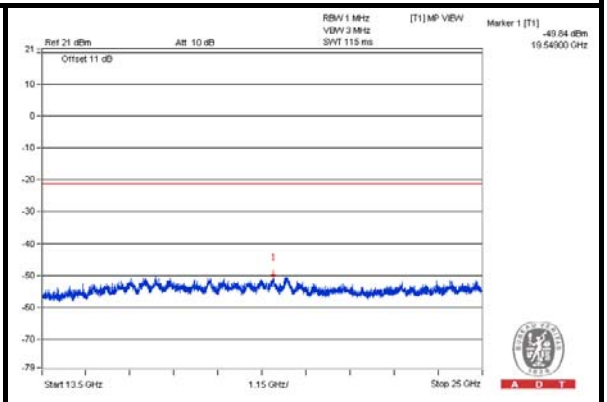


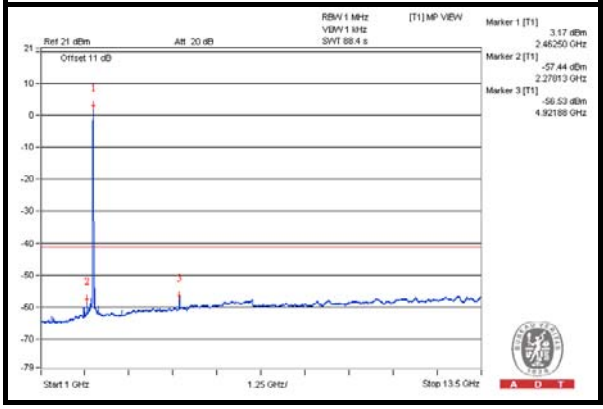


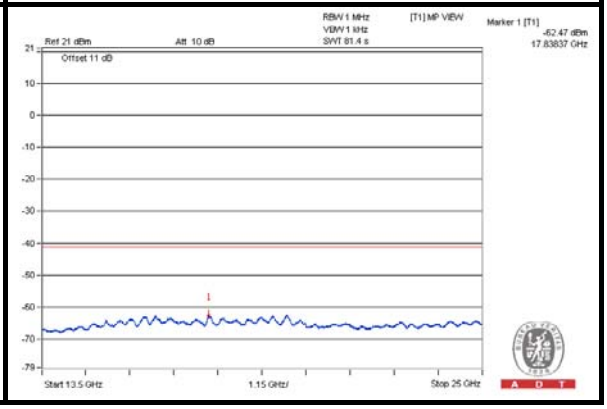


Chain (1)







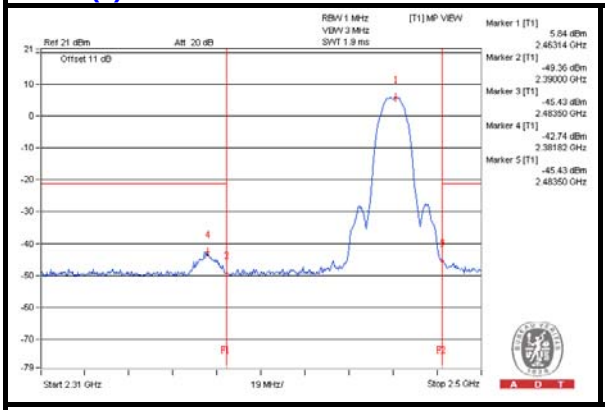


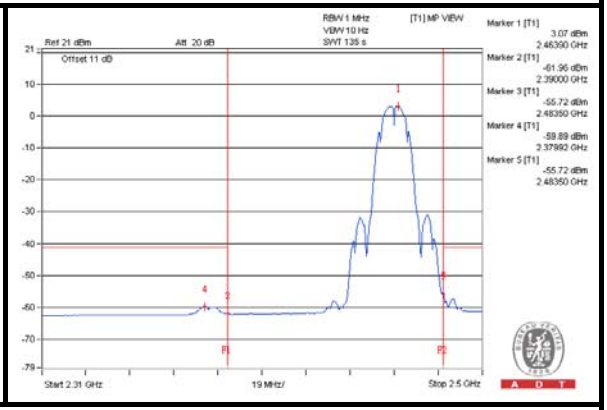
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2381.82 PK	61.18	74	-12.82	-42.74	-44.05	6.26	-34.08
2	2379.92 AV	44.55	54	-9.45	-59.89	-60.08	6.26	-50.71
3	2483.66 PK	58.89	74	-15.11	-45.74	-45.54	6.26	-36.37
4	2483.66 AV	47.37	54	-6.63	-56.12	-58.54	6.26	-47.89

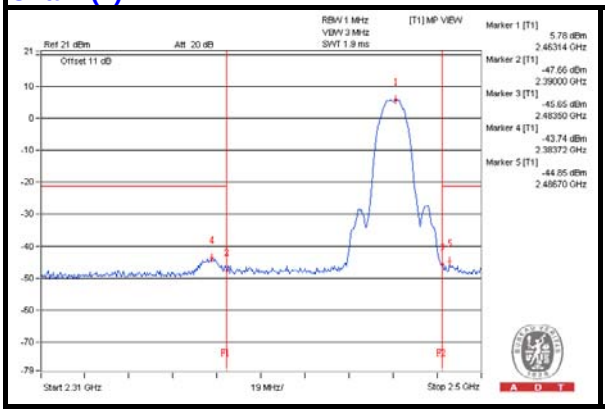
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

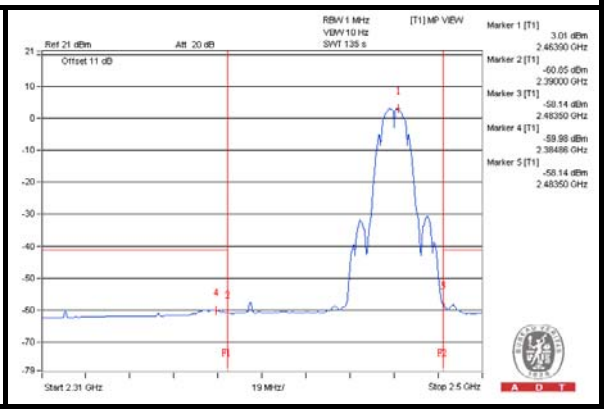
Chain (0)





Chain (1)





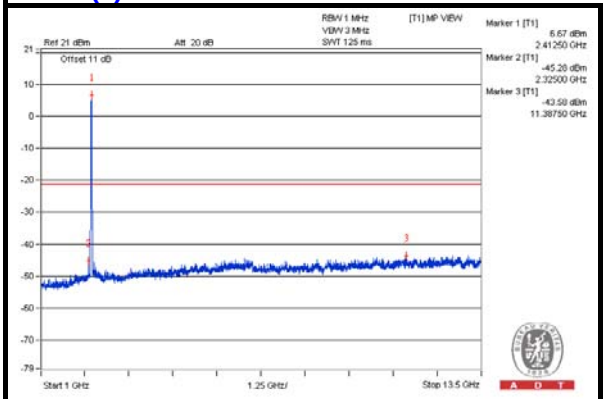
802.11g - Channel 1

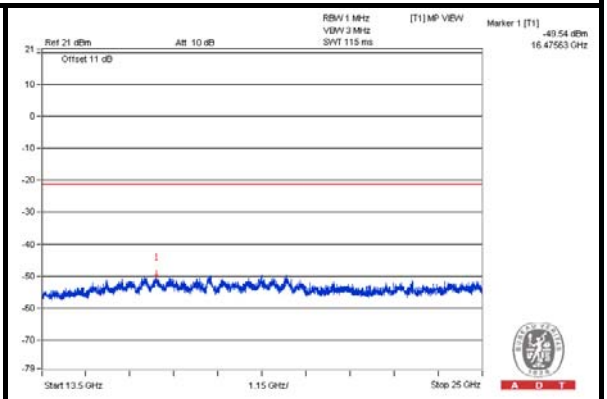
Conducted spurious emission table

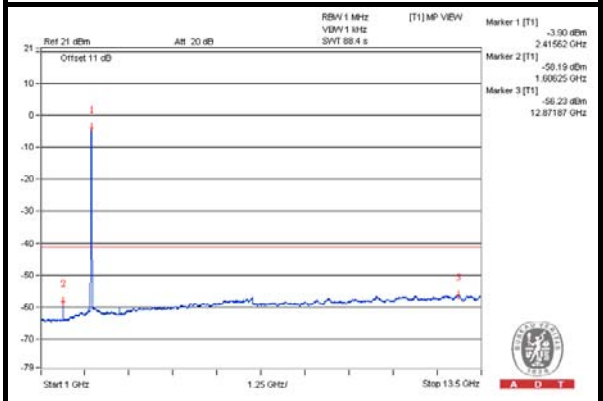
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1606.25 PK	52.51	74	-21.49	-50.83	-53.66	6.26	-42.75
2	1606.25 AV	44.26	54	-9.74	-58.19	-64.4	6.26	-51
3	4825 PK	56.03	74	-17.97	-48.53	-48.47	6.26	-39.23
4	4821.875 AV	44.31	54	-9.69	-59.96	-60.49	6.26	-50.95

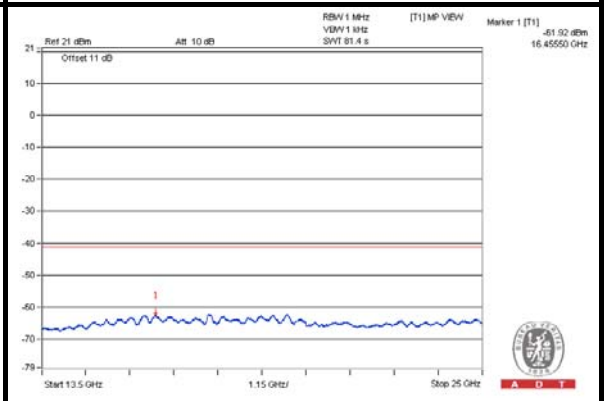
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

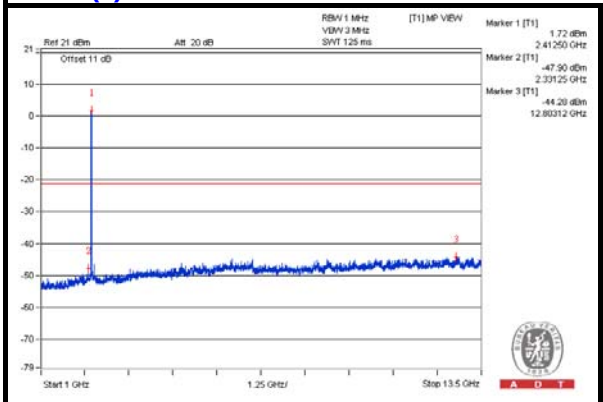


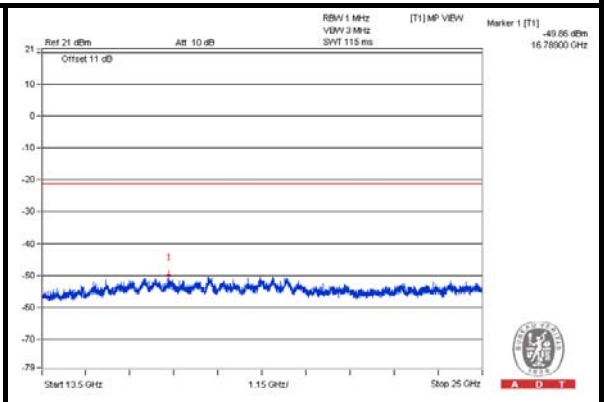


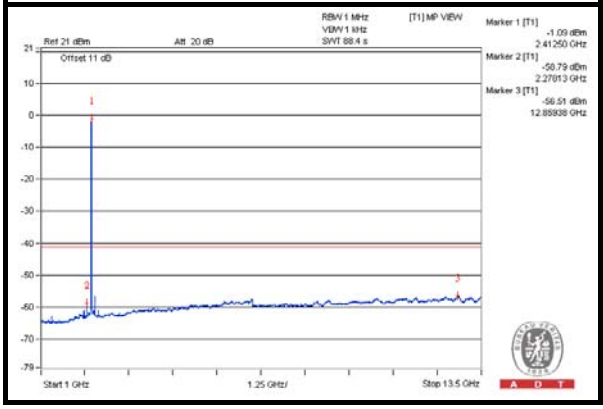


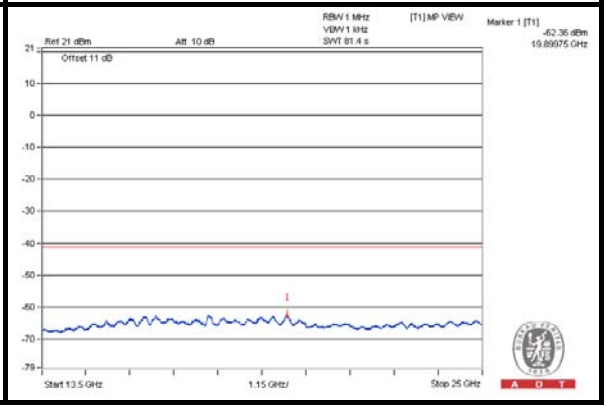


Chain (1)







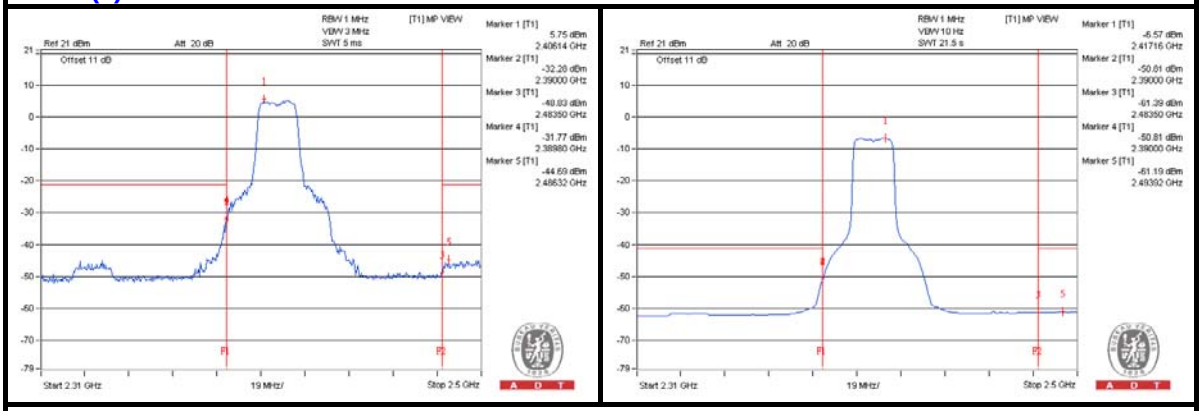


Bandedge table

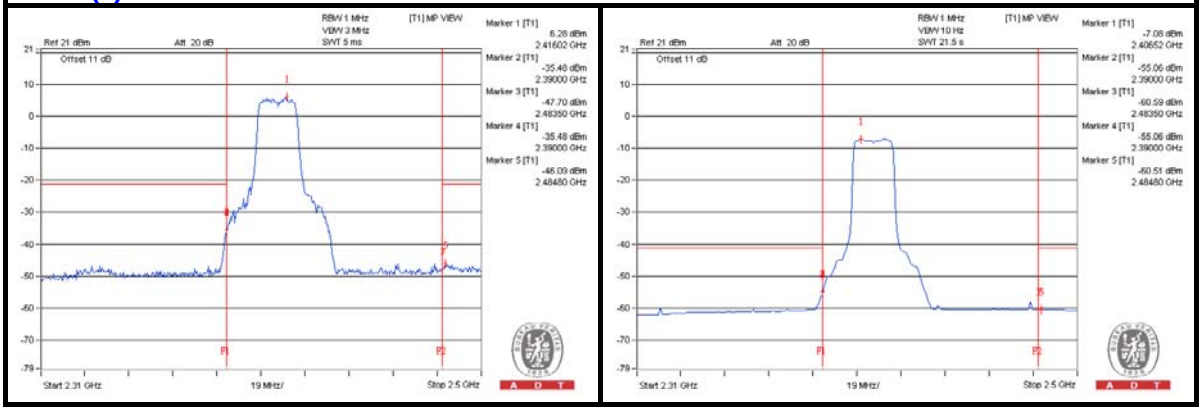
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2389.8 PK	71.11	74	-2.89	-31.77	-36.11	6.26	-24.15
2	2389.8 AV	51.6	54	-2.4	-51.27	-55.65	6.26	-43.66
3	2486.32 PK	58.82	74	-15.18	-44.69	-47.05	6.26	-36.44
4	2484.42 AV	43.64	54	-10.36	-61.31	-60.51	6.26	-51.62

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



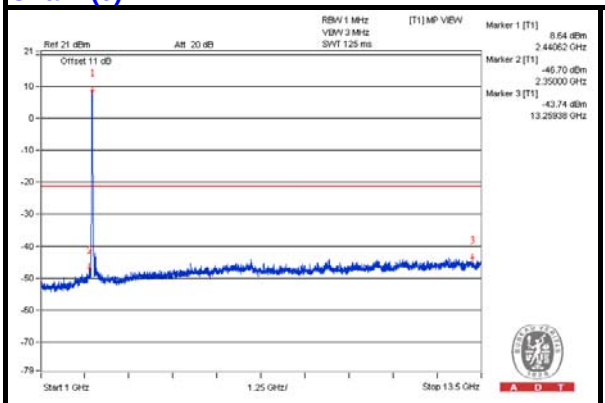
802.11g - Channel 6

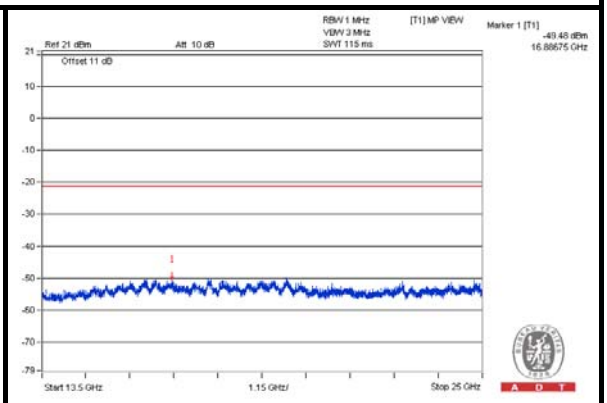
Conducted spurious emission table

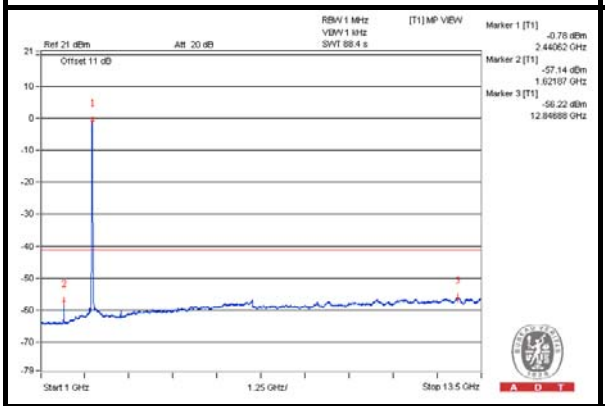
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1621.875 PK	53.55	74	-20.45	-49.94	-52.34	6.26	-41.71
2	1621.875 AV	45.45	54	-8.55	-57.14	-62.69	6.26	-49.81
3	4871.875 PK	56.03	74	-17.97	-47.52	-49.76	6.26	-39.23
4	4871.875 AV	44.5	54	-9.5	-59.54	-60.58	6.26	-50.76
5	7306.25 PK	57.91	74	-16.09	-45.83	-47.58	6.26	-37.35
6	7306.25 AV	45.59	54	-8.41	-58.49	-59.44	6.26	-49.67

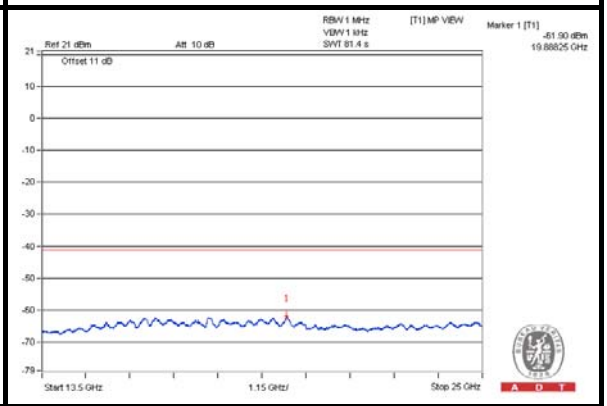
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

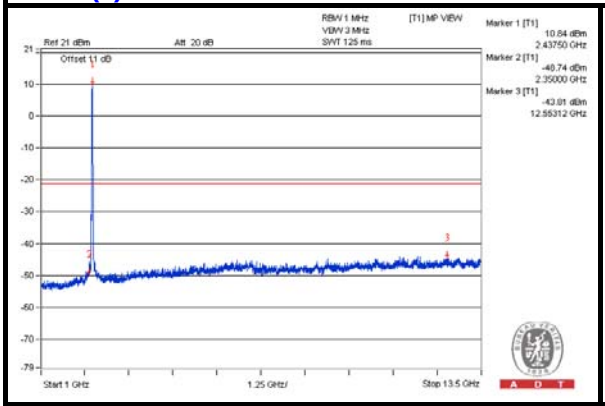


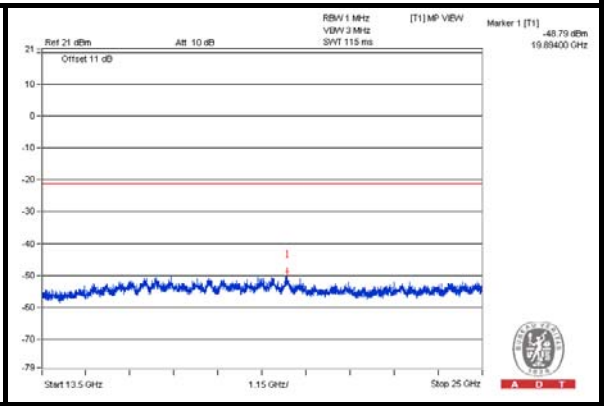


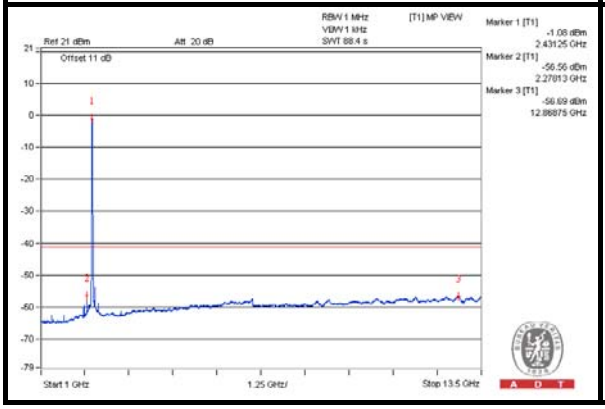


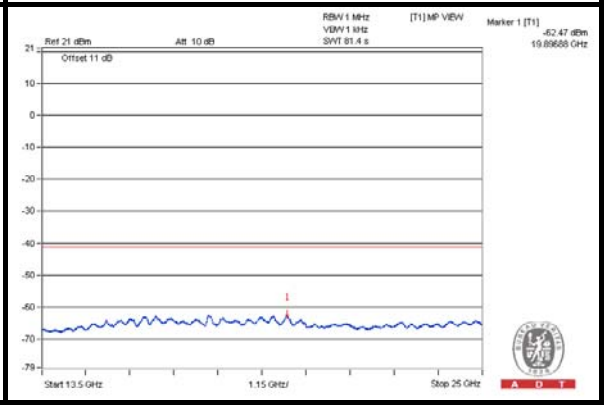


Chain (1)







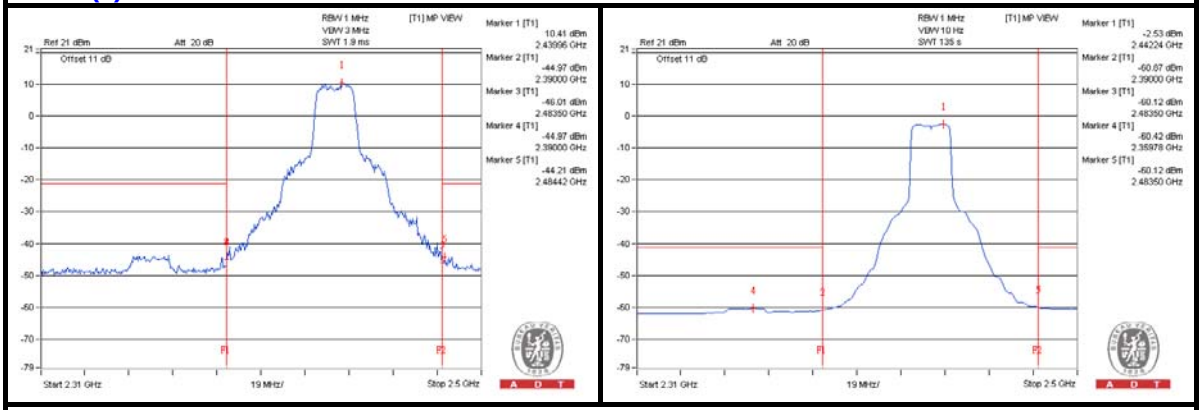


Bandedge table

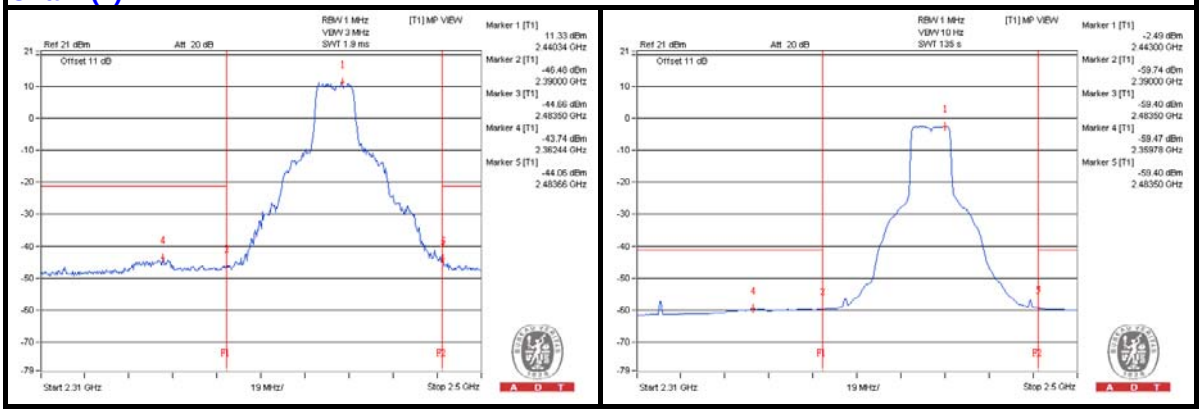
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2364.72 PK	60.46	74	-13.54	-43.61	-44.58	6.26	-34.8
2	2319.88 AV	45.54	54	-8.46	-61.82	-57.29	6.26	-49.72
3	2483.66 PK	59.57	74	-14.43	-46.09	-44.06	6.26	-35.69
4	2483.66 AV	44.73	54	-9.27	-60.18	-59.45	6.26	-50.53

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



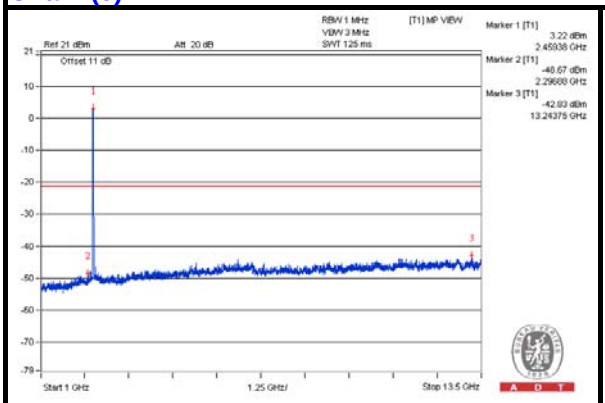
802.11g - Channel 11

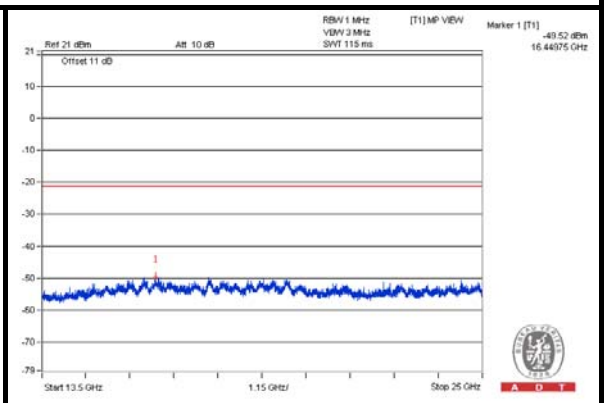
Conducted spurious emission table

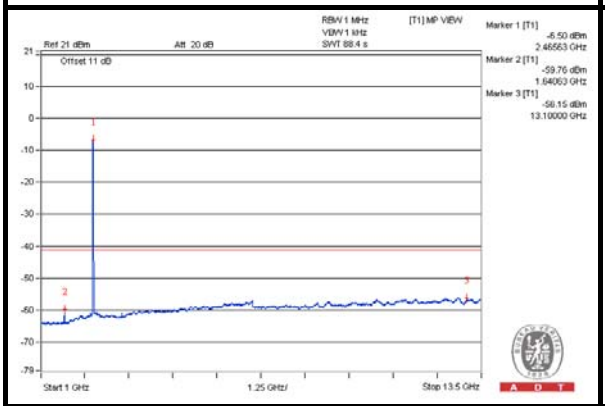
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	4918.75 PK	56.11	74	-17.89	-48.43	-48.41	6.26	-39.15
2	4921.875 AV	44.46	54	-9.54	-59.78	-60.39	6.26	-50.8
3	7390.625 PK	57.28	74	-16.72	-48.05	-46.57	6.26	-37.98
4	7390.625 AV	45.15	54	-8.85	-59.1	-59.68	6.26	-50.11

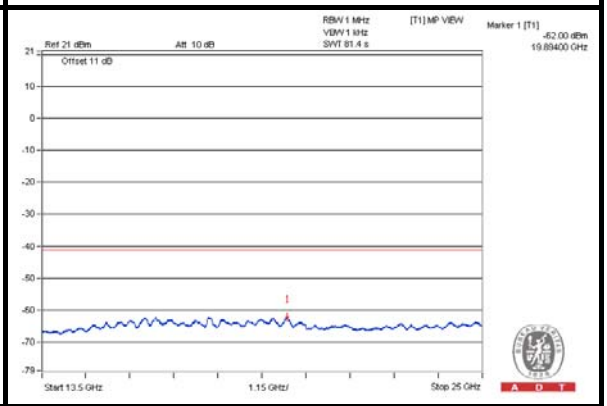
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

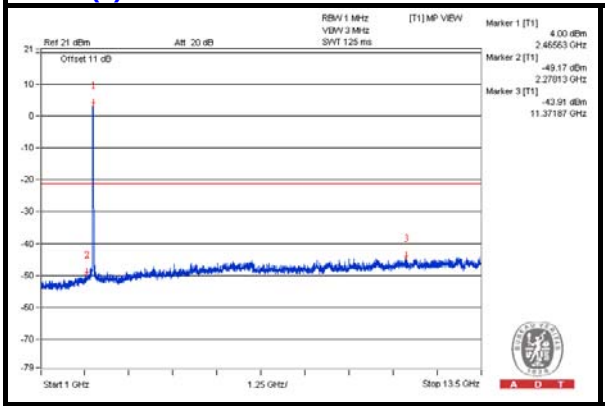


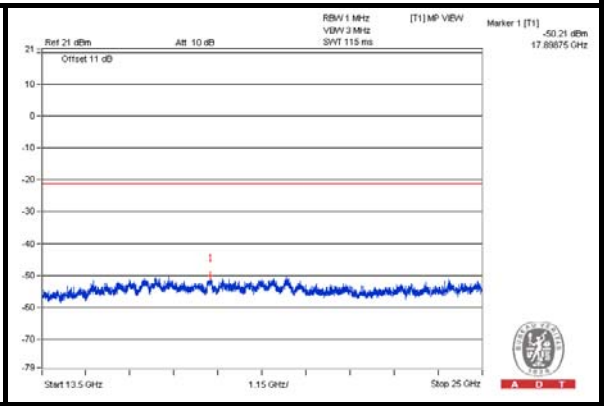


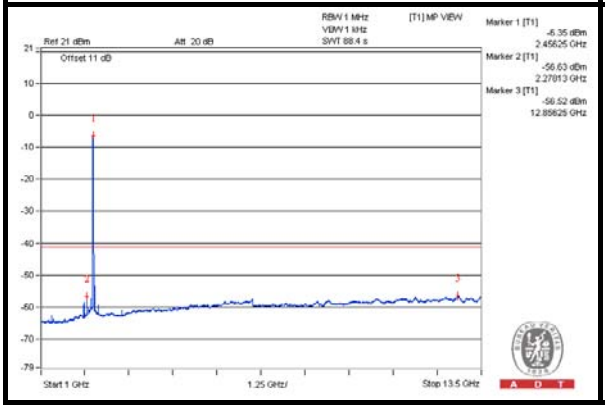


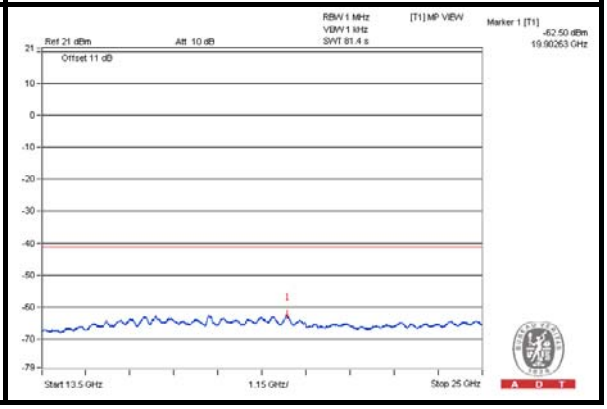


Chain (1)







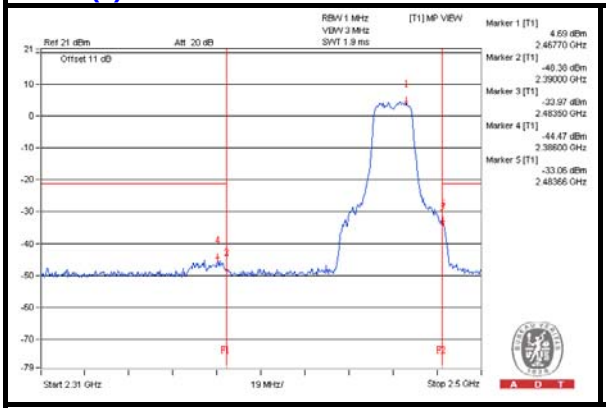


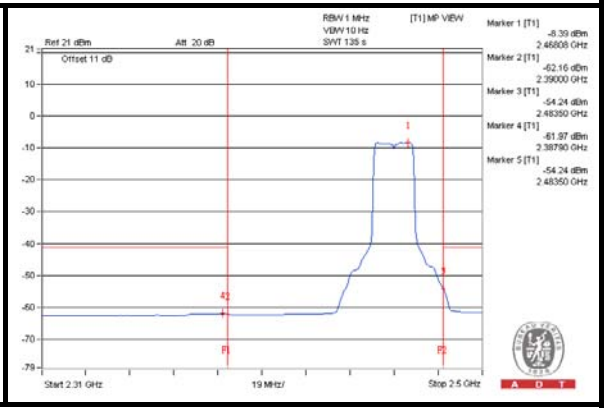
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2386 PK	58.75	74	-15.25	-44.47	-47.66	6.26	-36.51
2	2319.88 AV	45.64	54	-8.36	-62.62	-56.91	6.26	-49.62
3	2484.04 PK	71.43	74	-2.57	-34.06	-32.32	6.26	-23.83
4	2483.66 AV	50.53	54	-3.47	-54.47	-53.57	6.26	-44.73

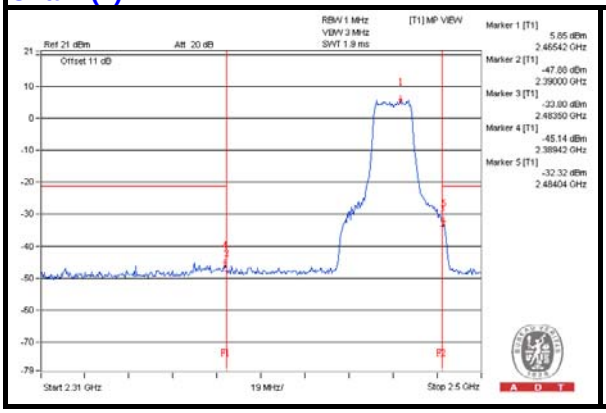
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

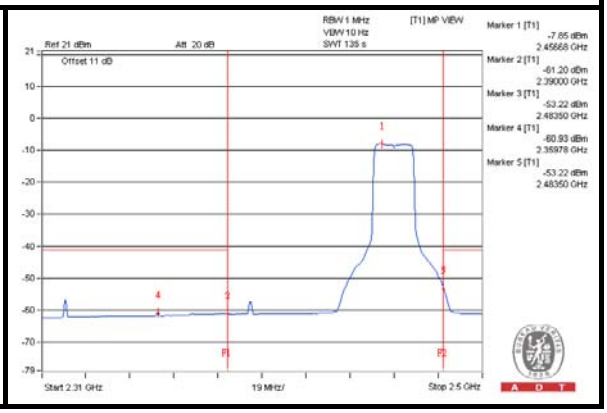
Chain (0)





Chain (1)





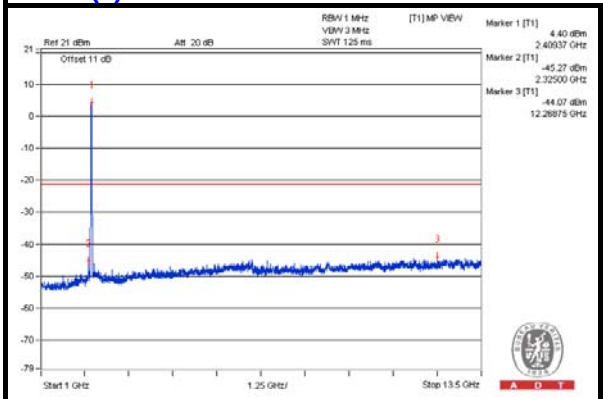
802.11n(HT20) - Channel 1

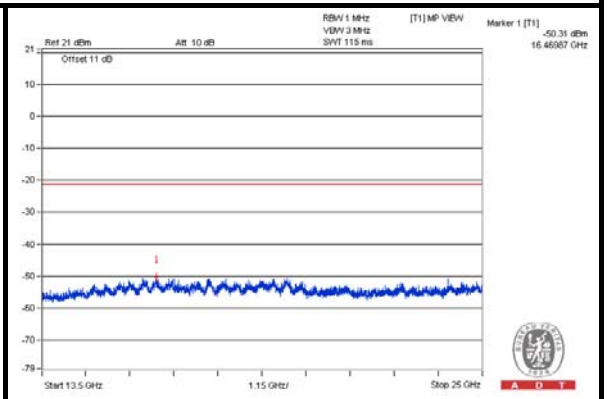
Conducted spurious emission table

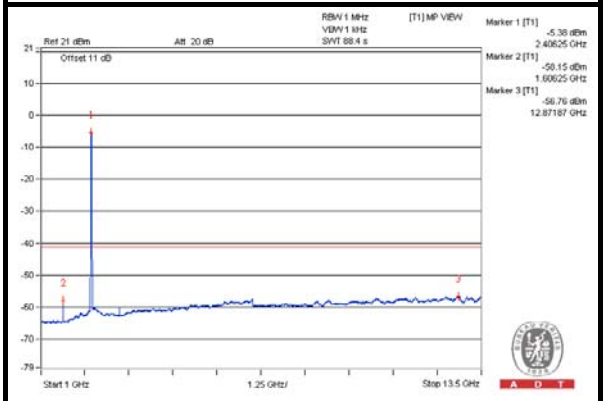
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1606.25 PK	53.26	74	-20.74	-49.89	-53.29	6.26	-42
2	1606.25 AV	44.37	54	-9.63	-58.15	-64.02	6.26	-50.89
3	4825 PK	55.69	74	-18.31	-48.21	-49.57	6.26	-39.57
4	4821.875 AV	44.09	54	-9.91	-60.23	-60.67	6.26	-51.17

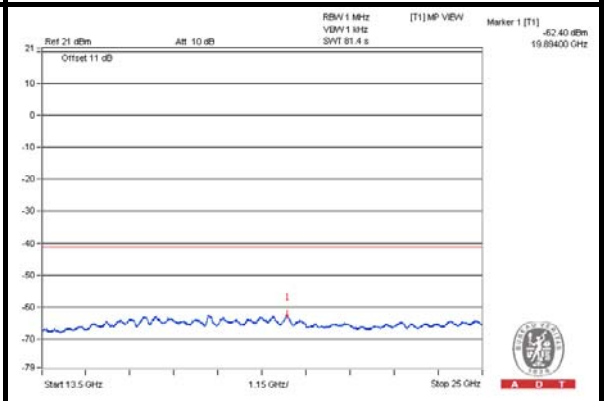
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

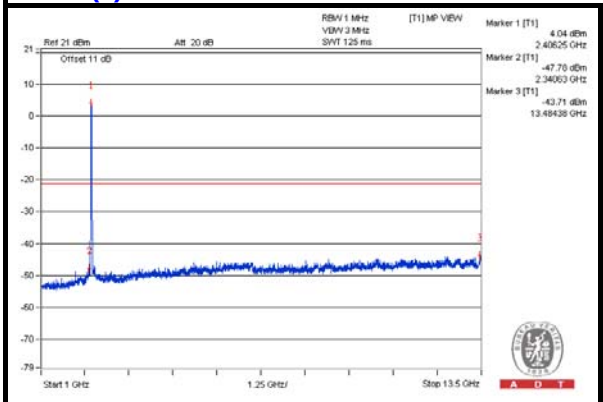


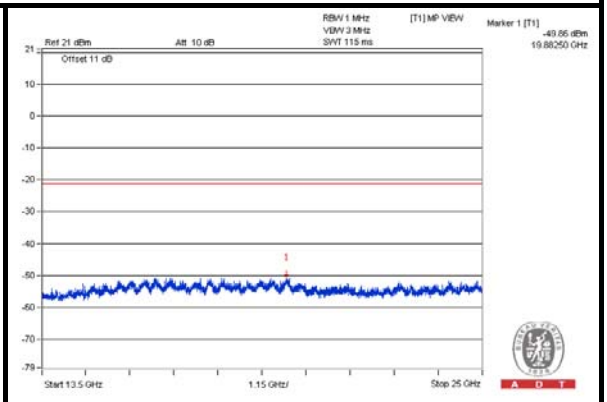


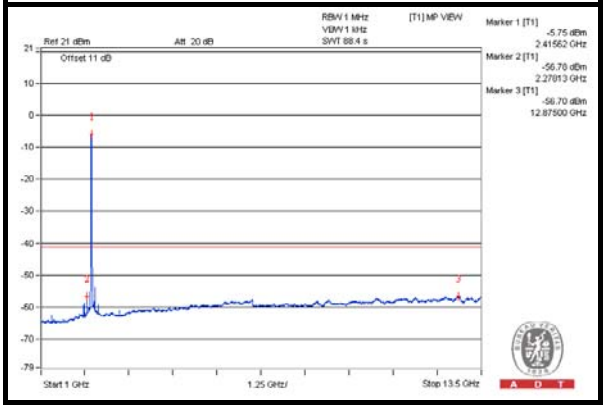


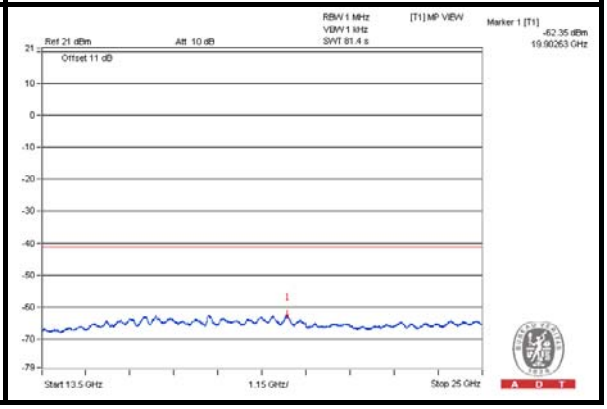


Chain (1)







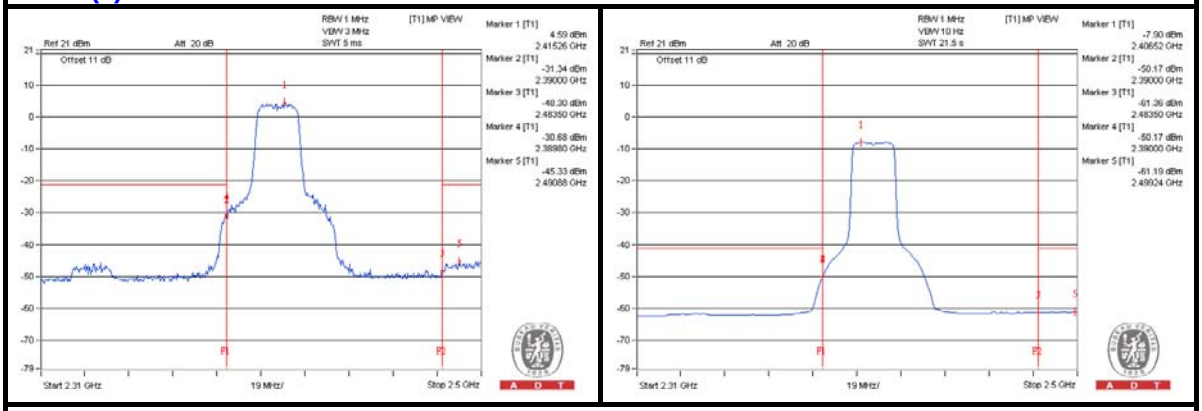


Bandedge table

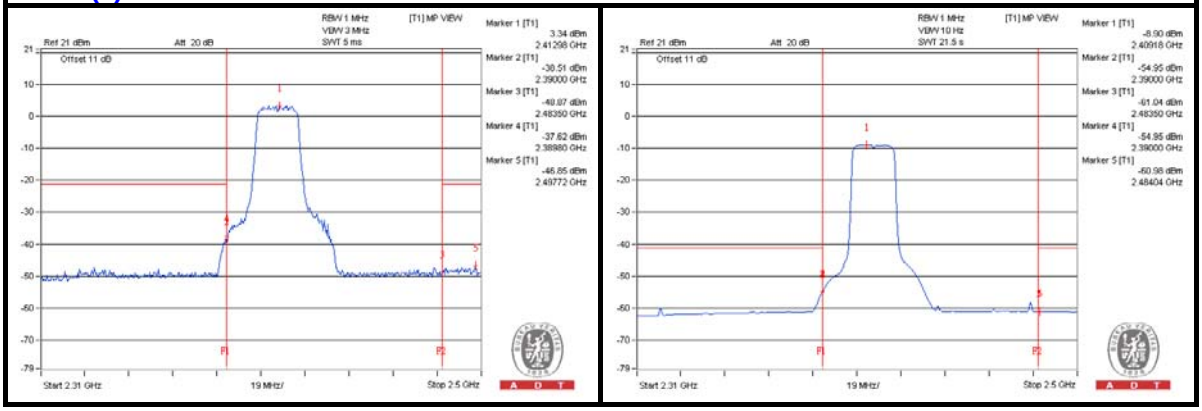
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2389.8 PK	71.64	74	-2.36	-30.68	-37.62	6.26	-23.62
2	2389.8 AV	52.29	54	-1.71	-50.49	-55.21	6.26	-42.97
3	2497.72 PK	58.37	74	-15.63	-45.56	-46.85	6.26	-36.89
4	2489.36 AV	43.39	54	-10.61	-61.21	-61.07	6.26	-51.87

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



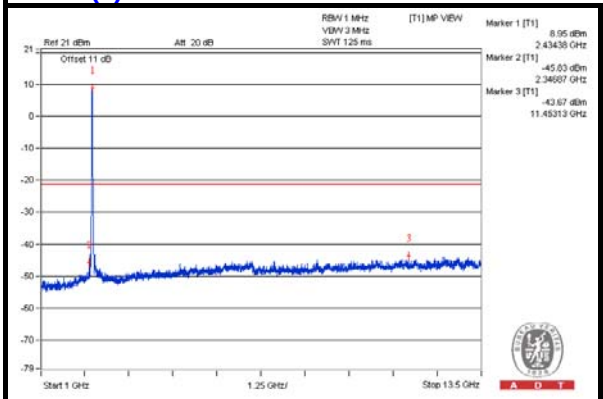
802.11n(HT20) - Channel 6

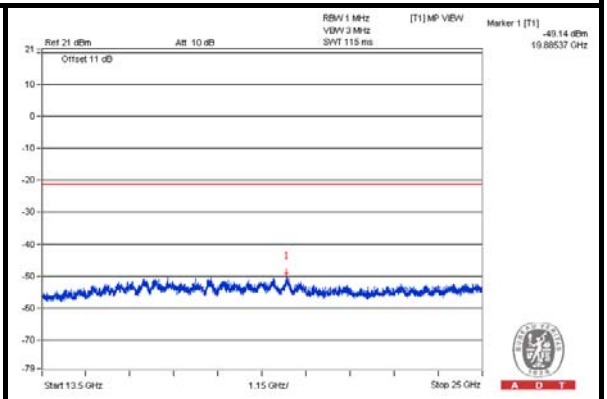
Conducted spurious emission table

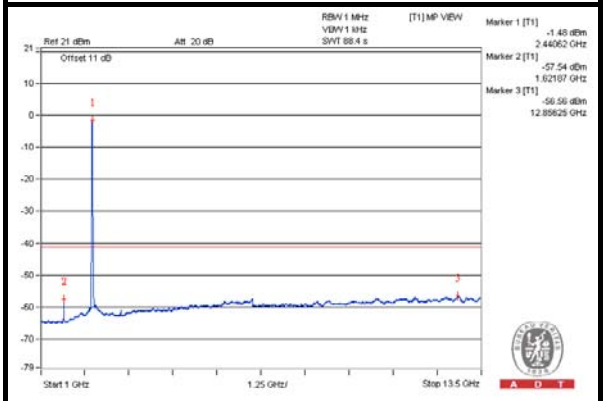
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1621.875 PK	53.54	74	-20.46	-50.19	-51.98	6.26	-41.72
2	1621.875 AV	45.14	54	-8.86	-57.54	-62.69	6.26	-50.12
3	4878.125 PK	55.73	74	-18.27	-48.28	-49.39	6.26	-39.53
4	4871.875 AV	44.24	54	-9.76	-60.09	-60.51	6.26	-51.02
5	7303.125 PK	57.4	74	-16.6	-47.1	-47.16	6.26	-37.86
6	7312.5 AV	45.41	54	-8.59	-58.92	-59.32	6.26	-49.85

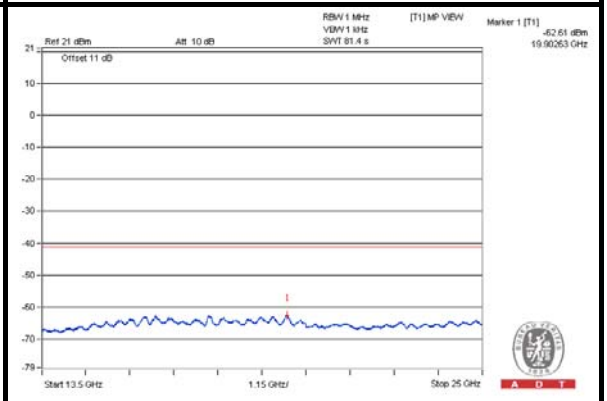
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

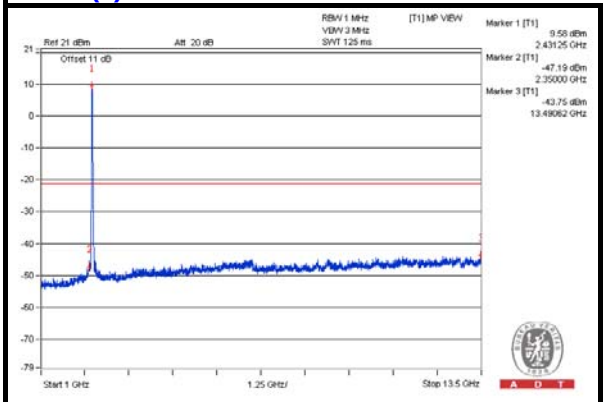


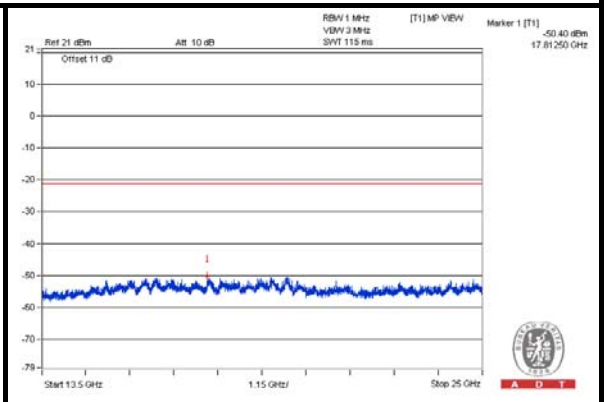


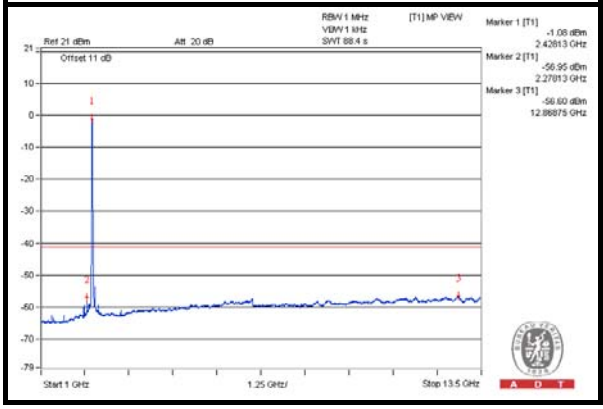


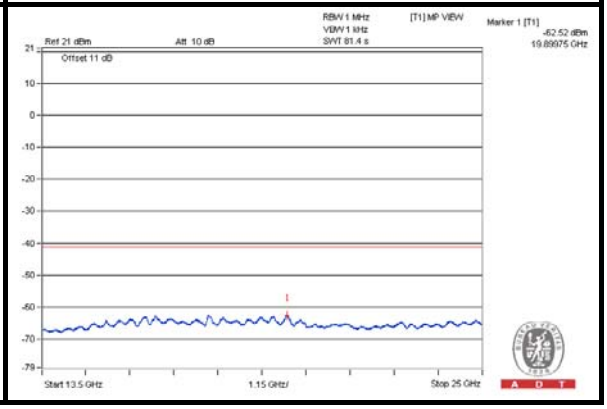


Chain (1)







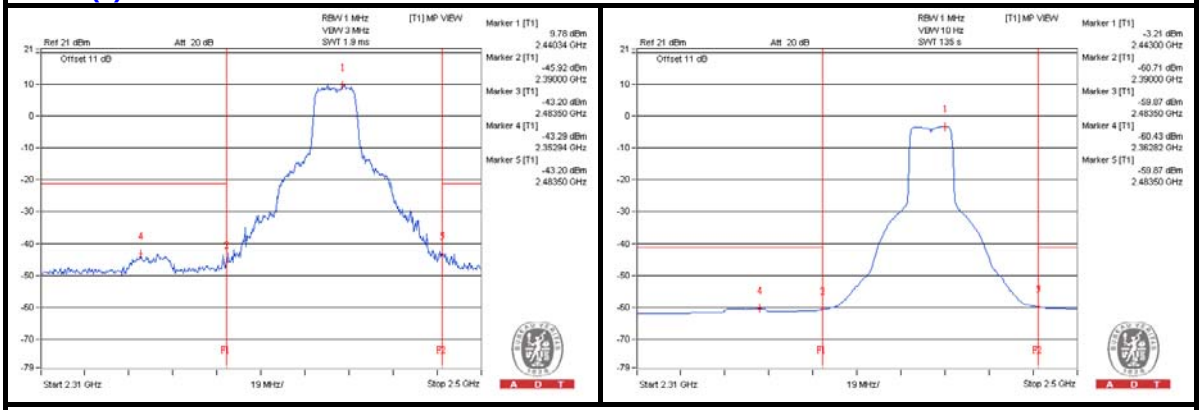


Bandedge table

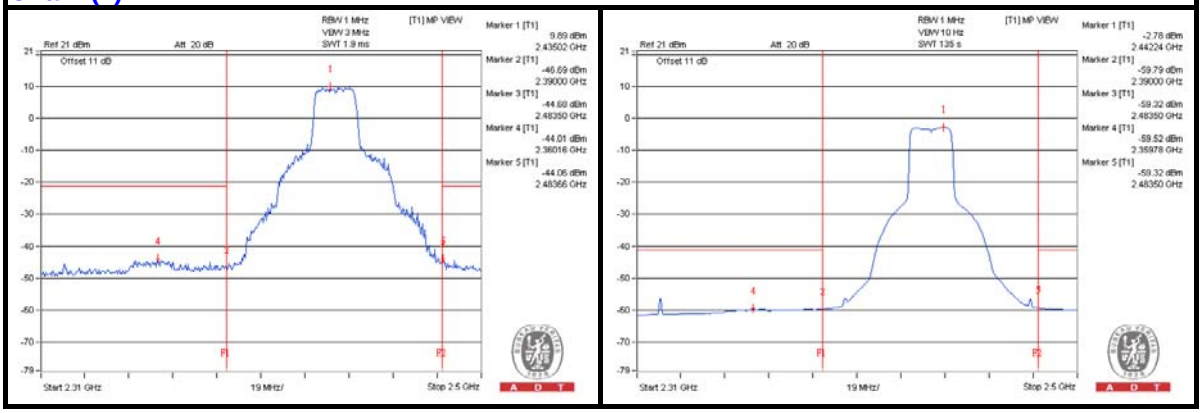
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2360.16 PK	60.79	74	-13.21	-43.48	-44.01	6.26	-34.47
2	2319.88 AV	46.13	54	-7.87	-61.77	-56.53	6.26	-49.13
3	2483.66 PK	60.76	74	-13.24	-43.49	-44.06	6.26	-34.5
4	2483.66 AV	44.91	54	-9.09	-59.89	-59.37	6.26	-50.35

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)



Chain (1)



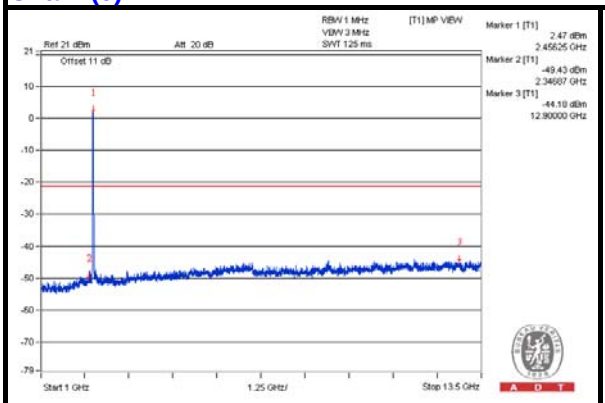
802.11n(HT20) - Channel 11

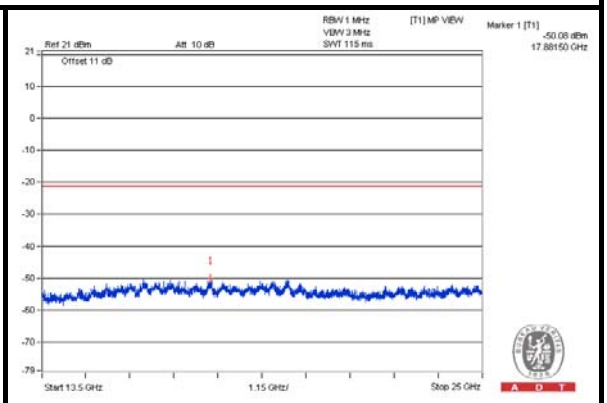
Conducted spurious emission table

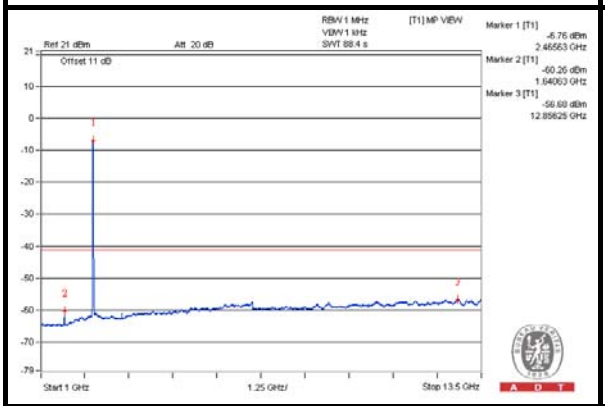
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	4921.875 PK	56.36	74	-17.64	-48.7	-47.7	6.26	-38.9
2	4928.125 AV	44.15	54	-9.85	-60.49	-60.28	6.26	-51.11
3	7390.625 PK	56.77	74	-17.23	-48.13	-47.42	6.26	-38.49
4	7393.75 AV	44.91	54	-9.09	-59.61	-59.63	6.26	-50.35

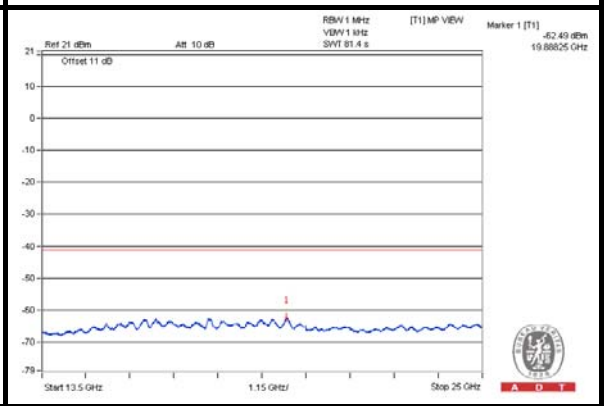
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

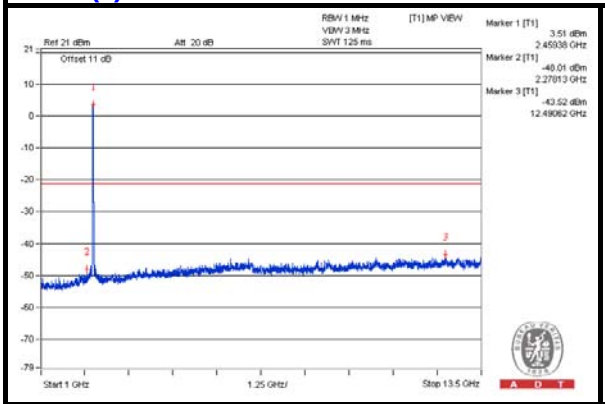


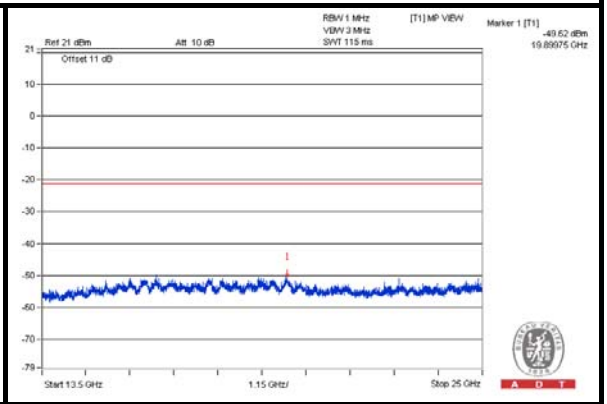


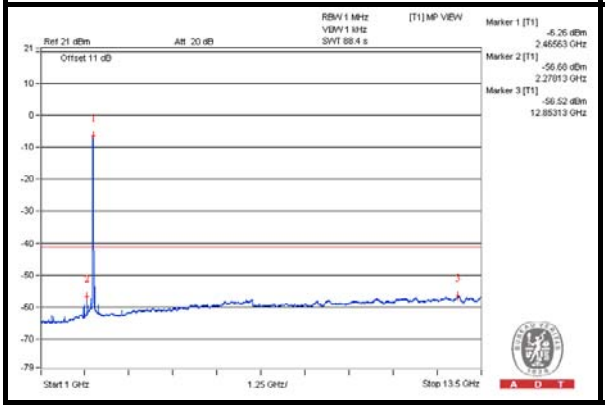


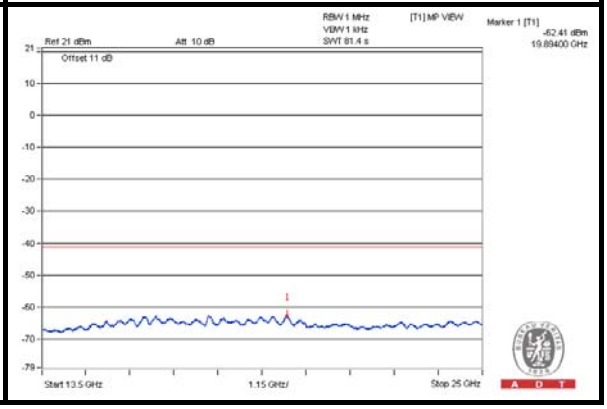


Chain (1)







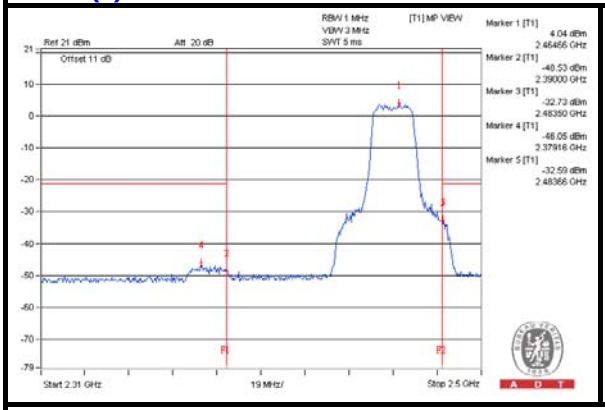


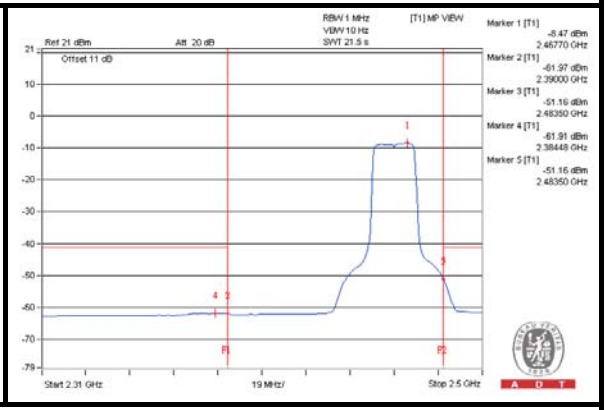
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2380.68 PK	57.56	74	-16.44	-47.57	-46.44	6.26	-37.7
2	2319.88 AV	43.35	54	-10.65	-62.65	-60.08	6.26	-51.91
3	2484.04 PK	71.13	74	-2.87	-32.6	-34.38	6.26	-24.13
4	2483.66 AV	52.46	54	-1.54	-51.39	-52.88	6.26	-42.8

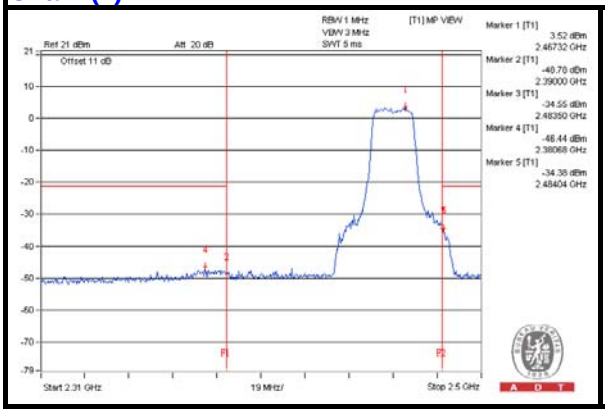
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

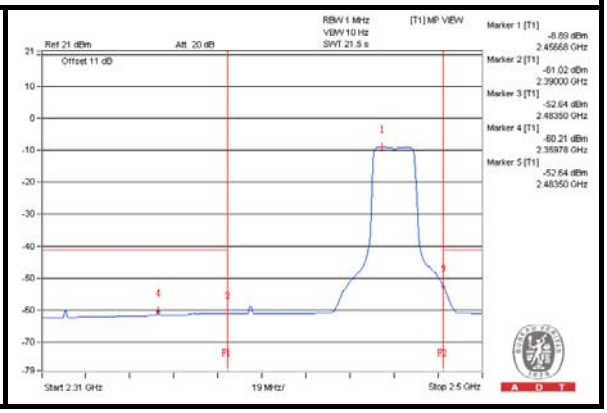
Chain (0)





Chain (1)





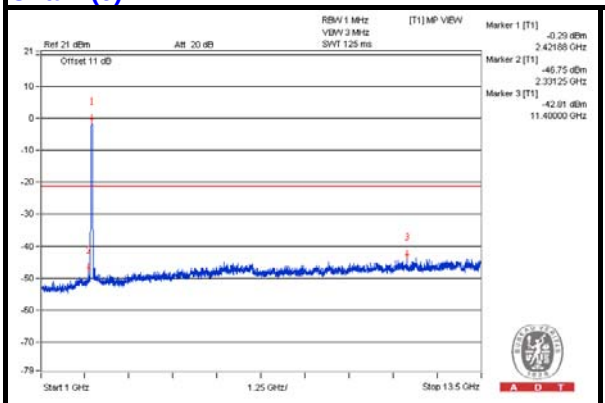
802.11n(HT40) - Channel 3

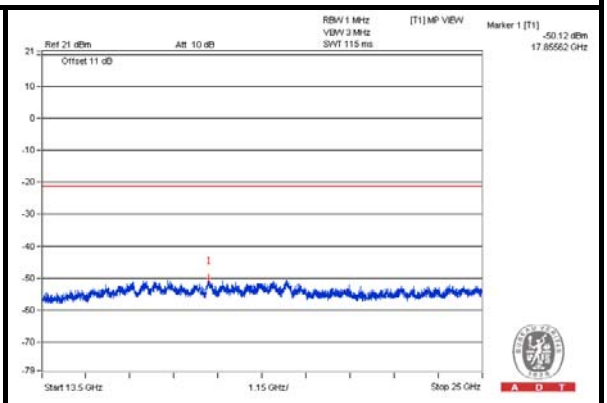
Conducted spurious emission table

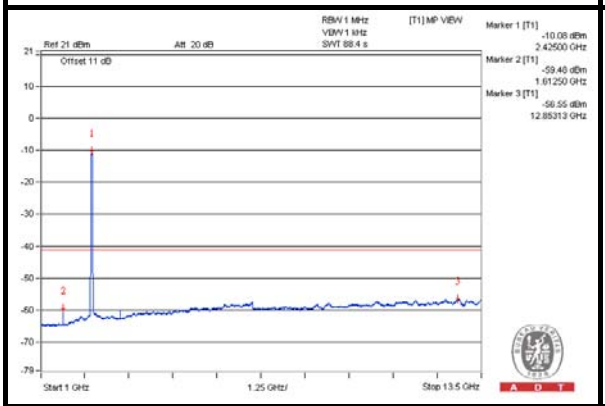
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1612.5 PK	52.32	74	-21.68	-51.79	-52.68	6.26	-42.94
2	1612.5 AV	43.2	54	-10.8	-59.48	-64.61	6.26	-52.06
3	4850 PK	55.89	74	-18.11	-47.91	-49.53	6.26	-39.37
4	4837.5 AV	43.87	54	-10.13	-60.6	-60.73	6.26	-51.39
5	7275 PK	56.58	74	-17.42	-48.9	-47.17	6.26	-38.68
6	7275 AV	44.93	54	-9.07	-59.5	-59.71	6.26	-50.33

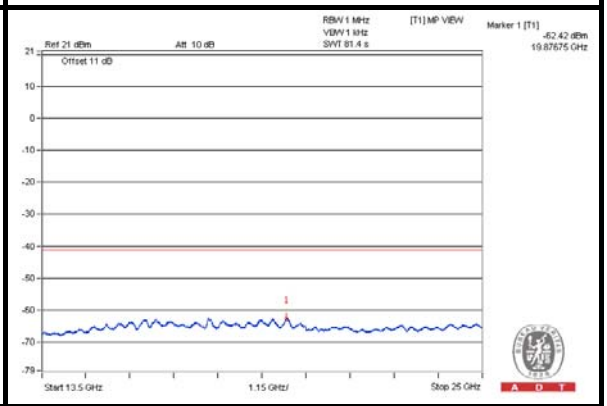
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

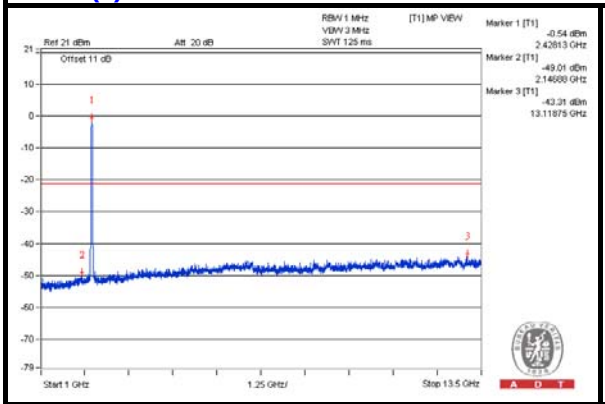


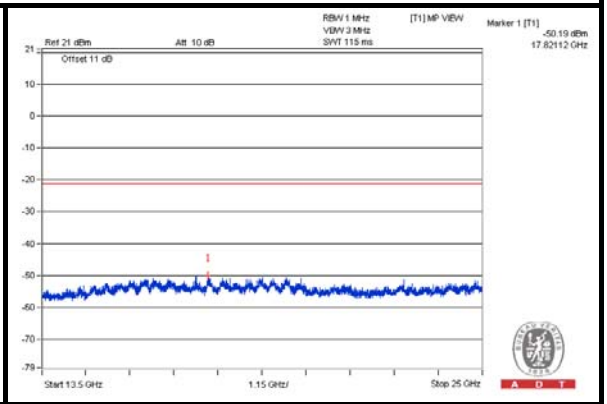


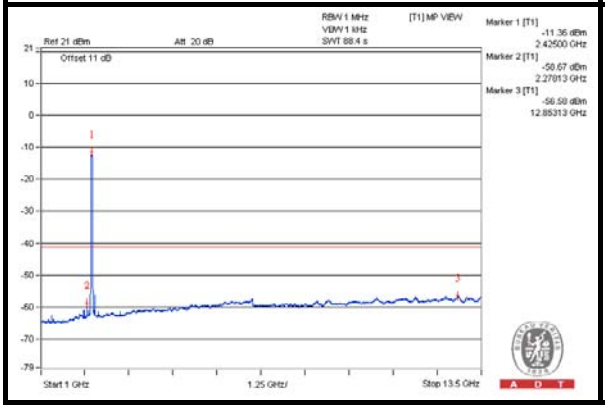


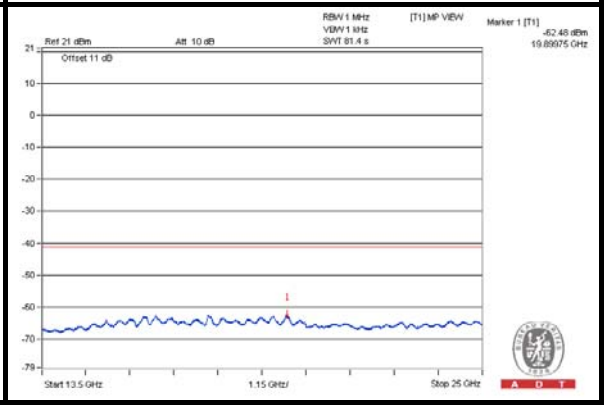


Chain (1)







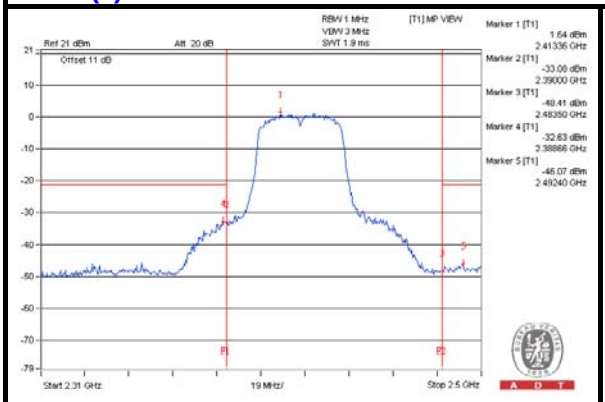


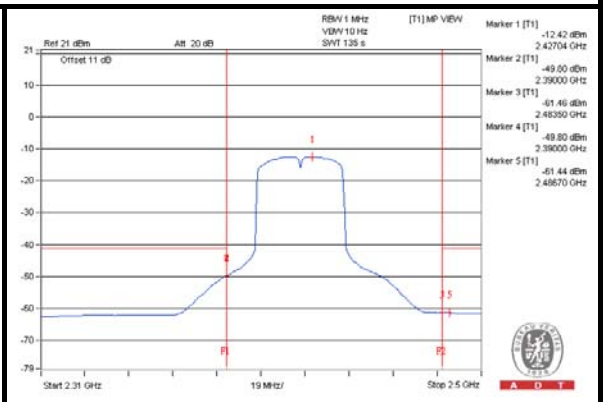
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2388.66 PK	69.67	74	-4.33	-32.63	-39.71	6.26	-25.59
2	2389.8 AV	52.37	54	-1.63	-49.95	-56.88	6.26	-42.89
3	2484.42 PK	57.25	74	-16.75	-46.85	-47.75	6.26	-38.01
4	2484.8 AV	42.68	54	-11.32	-61.46	-62.27	6.26	-52.58

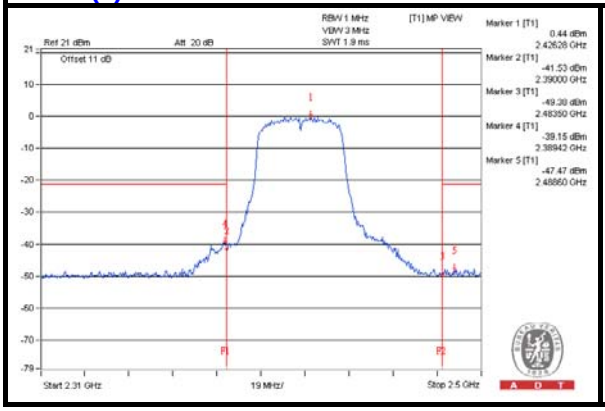
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

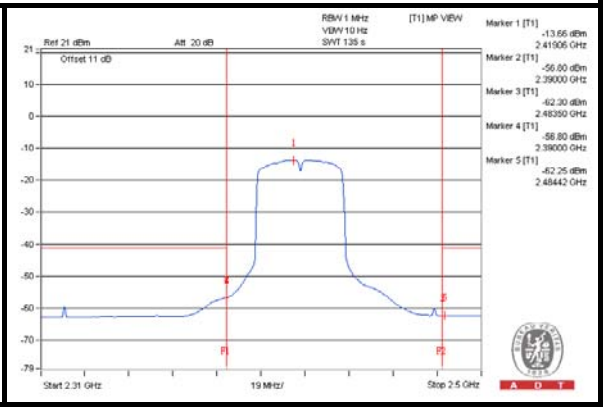
Chain (0)





Chain (1)





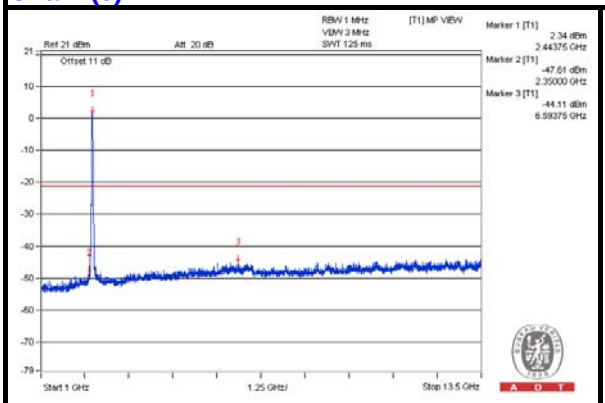
802.11n(HT40) - Channel 6

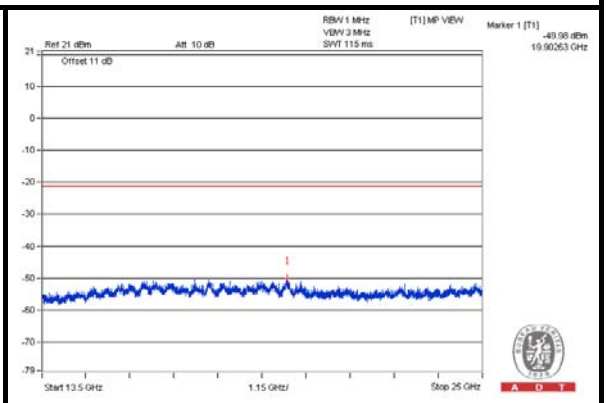
Conducted spurious emission table

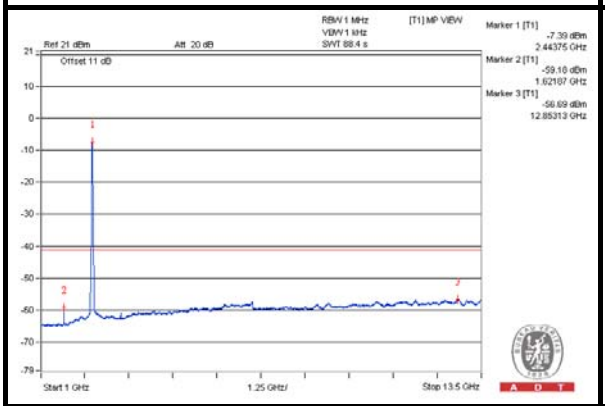
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	1621.875 PK	52.42	74	-21.58	-51.84	-52.39	6.26	-42.84
2	1621.875 AV	43.61	54	-10.39	-59.18	-63.88	6.26	-51.65
3	4868.75 PK	55.86	74	-18.14	-48.48	-48.87	6.26	-39.4
4	4881.25 AV	43.89	54	-10.11	-60.63	-60.65	6.26	-51.37
5	7315.625 PK	56.87	74	-17.13	-46.92	-48.56	6.26	-38.39
6	7315.625 AV	45.02	54	-8.98	-59.67	-59.36	6.26	-50.24

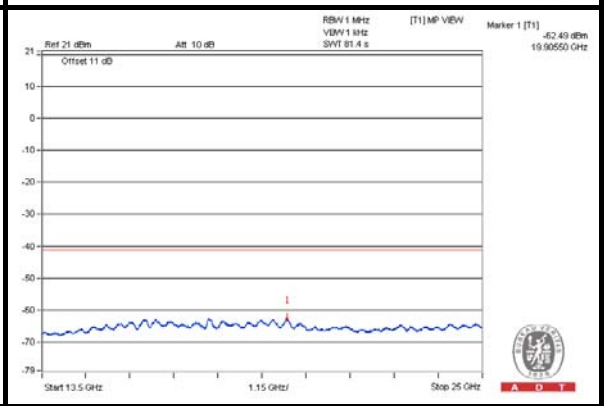
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

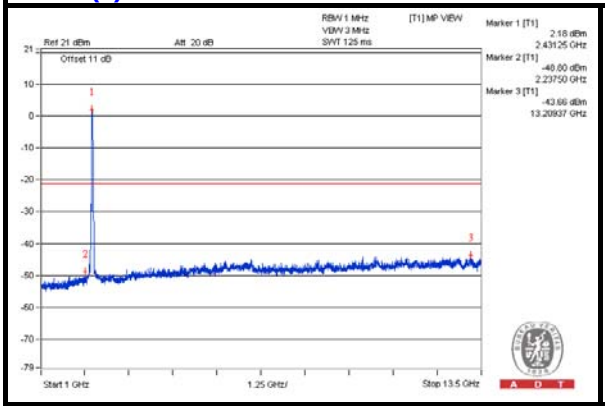


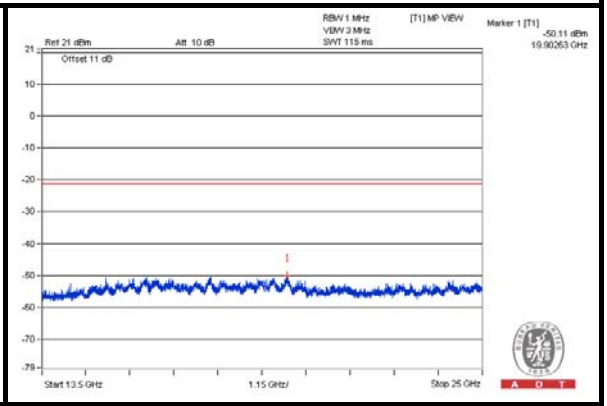


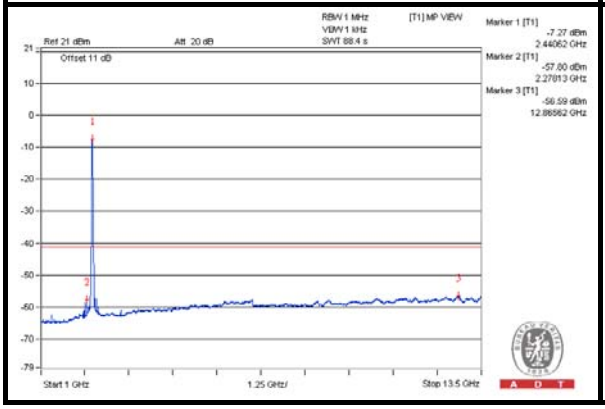


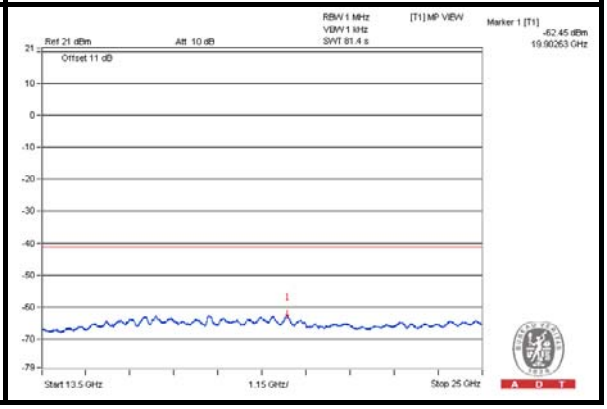


Chain (1)







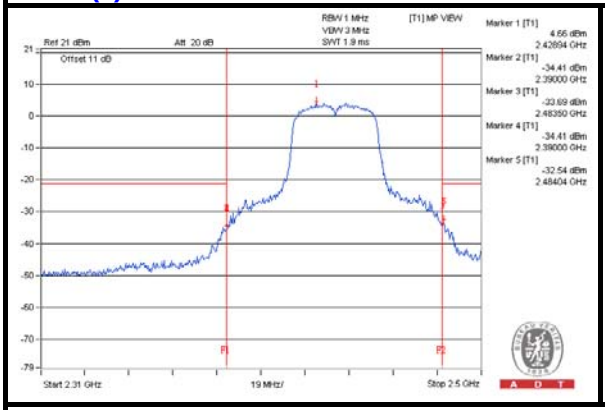


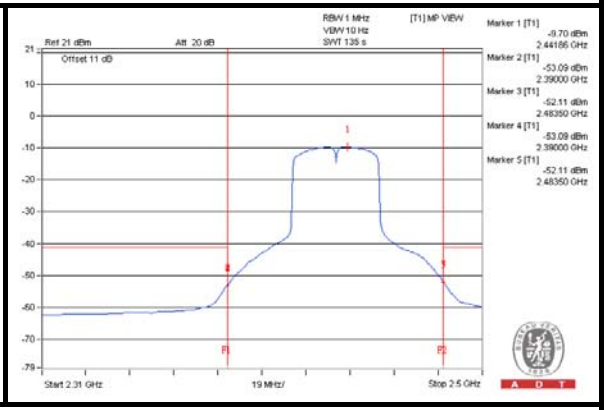
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2389.8 PK	67.58	74	-6.42	-34.98	-40.66	6.26	-27.68
2	2389.8 AV	49.99	54	-4.01	-53.33	-56.22	6.26	-45.27
3	2484.04 PK	70.6	74	-3.4	-32.54	-36	6.26	-24.66
4	2483.66 AV	51.62	54	-2.38	-52.24	-53.71	6.26	-43.64

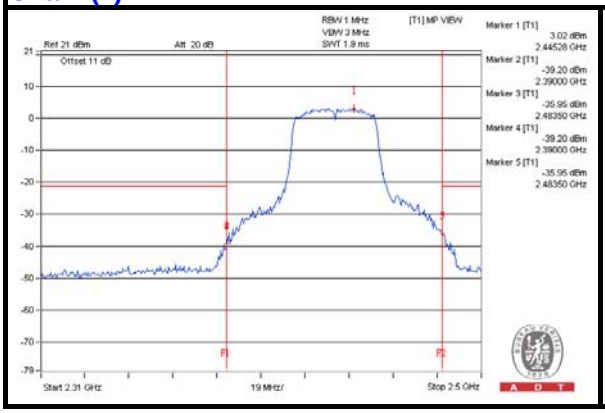
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

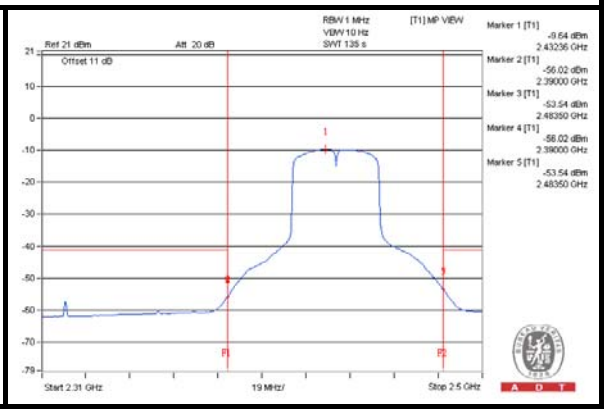
Chain (0)





Chain (1)





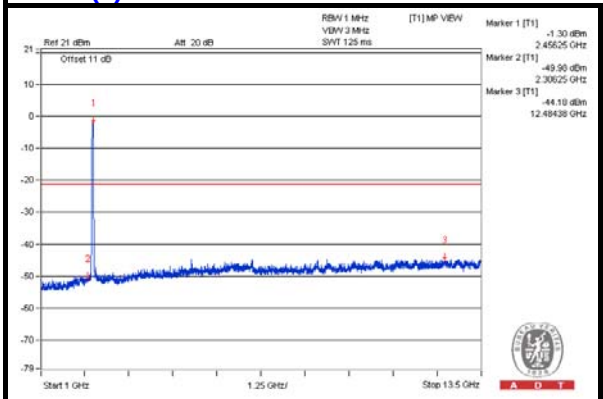
802.11n(HT40) - Channel 9

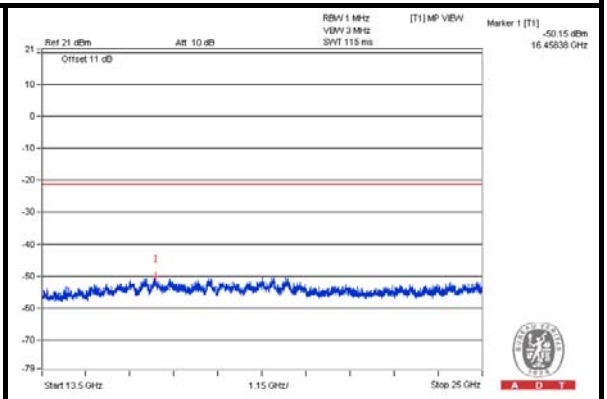
Conducted spurious emission table

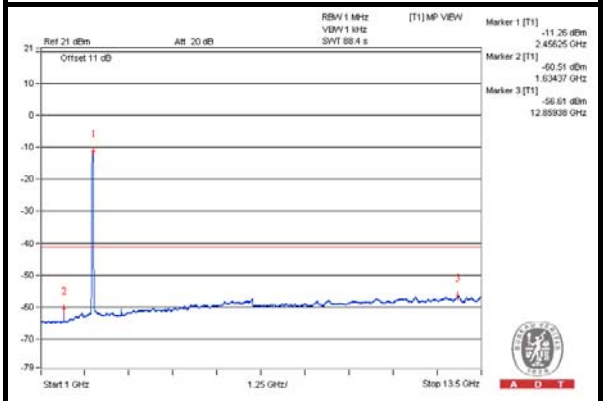
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	4912.5 PK	56.38	74	-17.62	-47.4	-49.05	6.26	-38.88
2	4900 AV	44.01	54	-9.99	-60.55	-60.5	6.26	-51.25
3	7353.125 PK	56.66	74	-17.34	-47.24	-48.61	6.26	-38.6
4	7365.625 AV	44.72	54	-9.28	-59.76	-59.87	6.26	-50.54

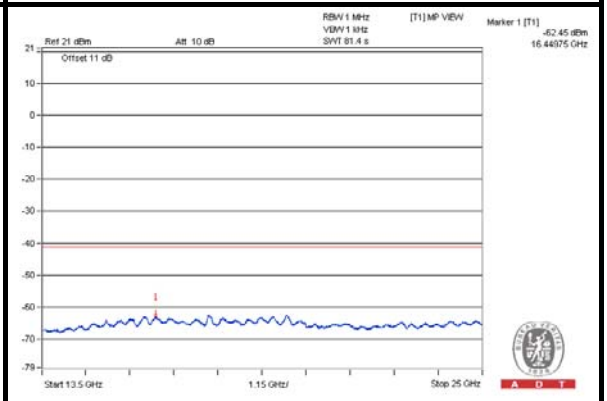
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)

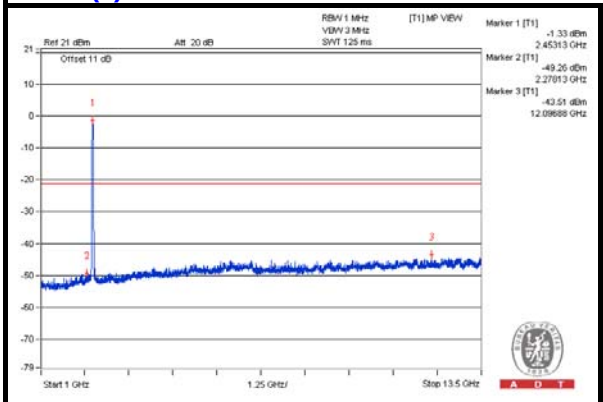


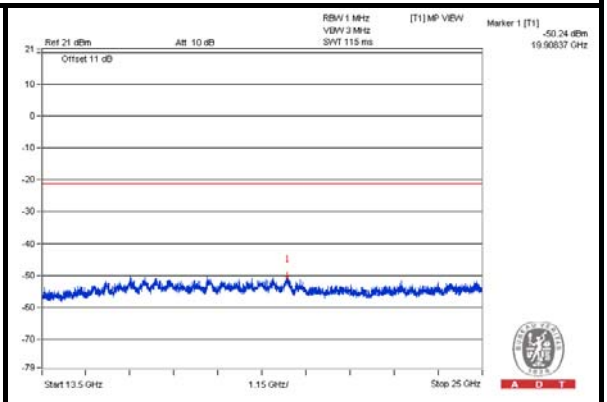


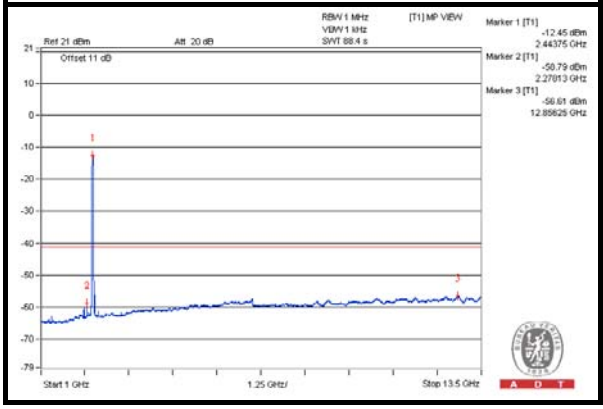


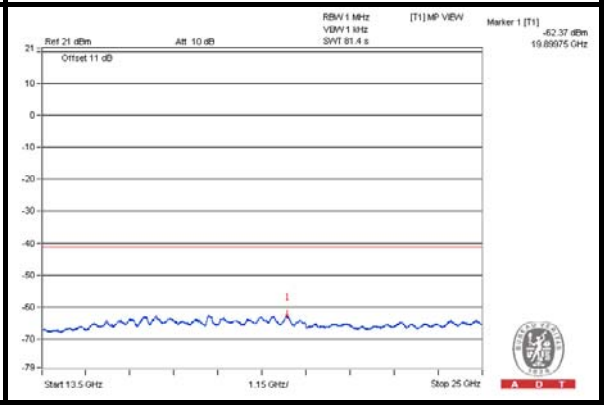


Chain (1)







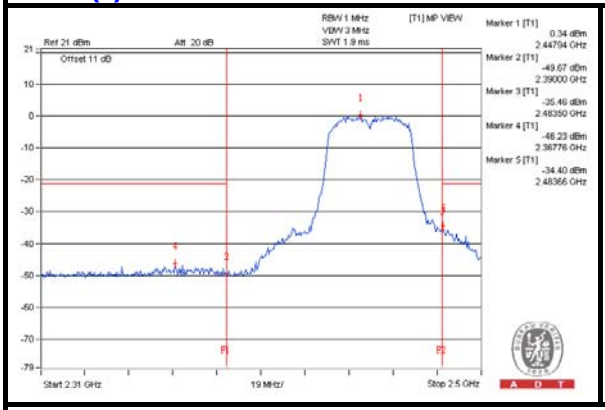


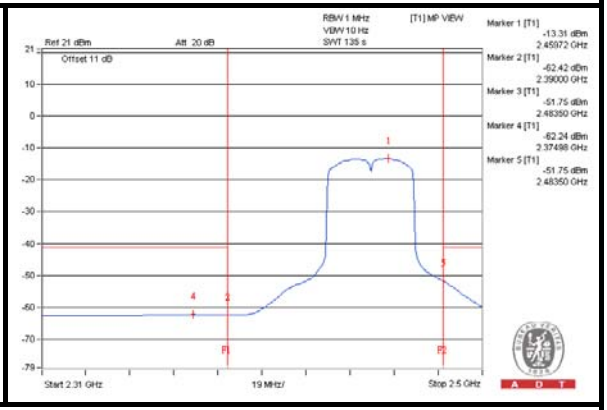
Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	2367.76 PK	56.86	74	-17.14	-46.23	-49.83	6.26	-38.4
2	2319.88 AV	43.76	54	-10.24	-62.6	-59.49	6.26	-51.5
3	2483.66 PK	68.11	74	-5.89	-34.4	-40.34	6.26	-27.15
4	2483.66 AV	51.48	54	-2.52	-51.78	-54.86	6.26	-43.78

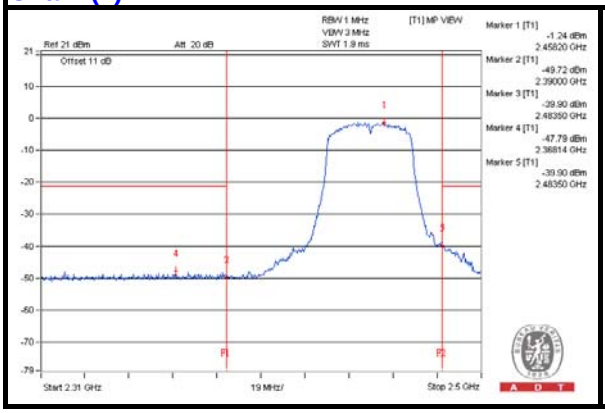
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

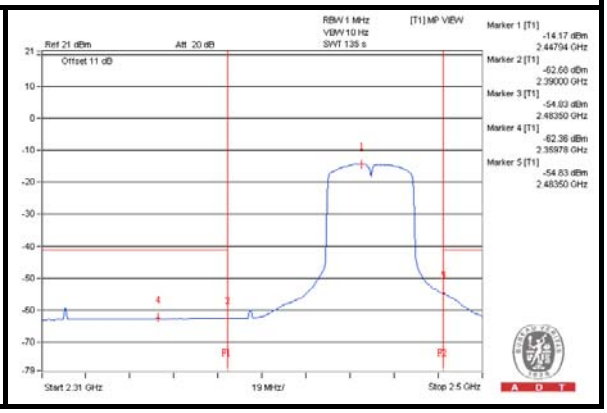
Chain (0)





Chain (1)





5. TEST TYPES AND RESULTS (FOR 5GHz, 5725~5850MHz Band)

5.1 CONDUCTED OUTPUT POWER MEASUREMENT

5.1.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 5725 –5850 MHz band: 1 Watt (30dBm)

Per KDB 662911 D01 Multiple Transmitter Output v02 Method of conducted output power measurement on IEEE 802.11 devices,

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

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

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

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

5.1.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	0824006	May 20, 2013	May 19, 2014
Power sensor Anritsu	MA2411B	0738172	May 20, 2013	May 19, 2014

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 10, 2014

5.1.3 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the peak power level.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP

5.1.6 EUT OPERATING CONDITIONS

Same as Item 4.1.6

5.1.7 TEST RESULTS (MODE 1)

802.11a

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
149	5745	22.63	22.69	369.011	25.67	29.99	PASS
157	5785	22.59	22.53	360.613	25.57	29.99	PASS
165	5825	22.38	23.02	373.429	25.72	29.99	PASS

NOTE: Directional gain = 3dBi + 10log(2) = 6.01dBi > 6dBi , so the power limit shall be reduced to 30-(6.01-6) = 29.99dBm.

802.11n (HT20)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
149	5745	22.67	22.77	374.161	25.73	29.99	PASS
157	5785	22.58	22.79	371.242	25.70	29.99	PASS
165	5825	22.65	22.71	370.715	25.69	29.99	PASS

NOTE: Directional gain = 3dBi + 10log(2) = 6.01dBi > 6dBi , so the power limit shall be reduced to 30-(6.01-6) = 29.99dBm.

802.11n (HT40)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
151	5755	22.07	22.31	331.281	25.20	29.99	PASS
159	5795	22.01	22.27	327.510	25.15	29.99	PASS

NOTE: Directional gain = 3dBi + 10log(2) = 6.01dBi > 6dBi , so the power limit shall be reduced to 30-(6.01-6) = 29.99dBm.

5.1.8 TEST RESULTS (MODE 2)

802.11a

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
149	5745	22.63	22.69	369.011	25.67	28.21	PASS
157	5785	22.59	22.53	360.613	25.57	28.21	PASS
165	5825	22.38	23.02	373.429	25.72	28.21	PASS

NOTE: Directional gain = 4.78dBi + 10log(2) = 7.79dBi > 6dBi , so the power limit shall be reduced to 30-(7.79-6) = 28.21dBm.

802.11n (HT20)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
149	5745	22.67	22.77	374.161	25.73	28.21	PASS
157	5785	22.58	22.79	371.242	25.70	28.21	PASS
165	5825	22.65	22.71	370.715	25.69	28.21	PASS

NOTE: Directional gain = 4.78dBi + 10log(2) = 7.79dBi > 6dBi , so the power limit shall be reduced to 30-(7.79-6) = 28.21dBm.

802.11n (HT40)

CHAN.	FREQUENCY (MHz)	PEAK POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
151	5755	22.07	22.31	331.281	25.20	28.21	PASS
159	5795	22.01	22.27	327.510	25.15	28.21	PASS

NOTE: Directional gain = 4.78dBi + 10log(2) = 7.79dBi > 6dBi , so the power limit shall be reduced to 30-(7.79-6) = 28.21dBm.

5.2 AVERAGE OUTPUT POWER

5.2.1 For REFERENCE.

5.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	0824006	May 20, 2013	May 19, 2014
Power sensor Anritsu	MA2411B	0738172	May 20, 2013	May 19, 2014

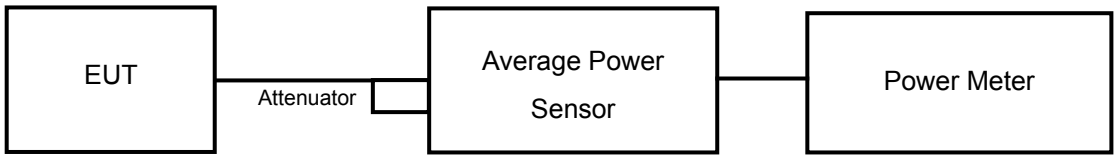
Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 10, 2014

5.2.3 TEST PROCEDURES

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

5.2.4 TEST SETUP



5.2.5 EUT OPERATING CONDITIONS

Same as Item 4.1.6

5.2.6 TEST RESULTS (MODE 1)

802.11a

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
149	5745	19.73	19.83	190.133	22.79
157	5785	19.11	19.19	164.455	22.16
165	5825	19.28	18.95	163.247	22.13

802.11n (HT20)

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
149	5745	19.62	19.45	179.727	22.55
157	5785	19.45	19.51	177.436	22.49
165	5825	19.42	19.35	173.597	22.40

802.11n (HT40)

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
151	5755	17.21	17.01	102.836	20.12
159	5795	16.91	16.85	97.508	19.89

5.2.7 TEST RESULTS (MODE 2)

802.11a

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
149	5745	18.65	18.74	148.099	21.71
157	5785	19.11	19.19	164.455	22.16
165	5825	19.28	18.95	163.247	22.13

802.11n (HT20)

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
149	5745	18.72	18.94	152.816	21.84
157	5785	18.87	18.91	154.894	21.90
165	5825	18.91	18.93	155.967	21.93

802.11n (HT40)

CHAN.	FREQUENCY (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
151	5755	17.21	17.01	102.836	20.12
159	5795	16.91	16.85	97.508	19.89

5.3 UNWANTED EMISSION MEASUREMENT (RADIATED VERSUS CONDUCTED)

5.3.1 LIMITS OF UNWANTED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

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

5.3.2 TEST INSTRUMENTS

Below 1GHz test

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY50010156	Jan. 16, 2013	Jan. 15, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-04	Nov. 13, 2013	Nov. 12, 2014
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Mar. 25, 2013	Mar. 24, 2014
RF Cable	NA	CHHCAB_001	Oct. 06, 2013	Oct. 05, 2014
Spectrum Analyzer R&S	FSV40	100964	July 15, 2013	July 14, 2014
Horn_Antenna AISI	AIH.8018	0000220091110	Dec. 06, 2013	Dec. 05, 2014
Pre-Amplifier Agilent	8449B	3008A01923	Oct. 29, 2013	Oct. 28, 2014
RF Cable	NA	RF104-205 RF104-207 RF104-202	Dec. 12, 2013	Dec. 11, 2014
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 13, 2013	Nov. 12, 2014
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 08, 2013	Oct. 07, 2014
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The 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. H.
4. The FCC Site Registration No. is 797305.
5 The CANADA Site Registration No. is IC 7450H-3.
6 Tested Date: Jan. 15, 2014

Above 1GHz test

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY51210105	Jan. 29, 2013	Jan. 28, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 13, 2013	Nov. 12, 2014
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Mar. 19, 2013	Mar. 18, 2014
RF Cable	NA	CHGCAB_001	Oct. 05, 2013	Oct. 04, 2014
Spectrum Analyzer R&S	FSV40	100964	July 15, 2013	July 14, 2014
Horn_Antenna AISI	AIH.8018	0000320091110	Nov. 18, 2013	Nov. 17, 2014
Pre-Amplifier Agilent	8449B	3008A02578	June 25, 2013	June 24, 2014
RF Cable	NA	RF104-201 RF104-203 RF104-204	Dec. 12, 2013	Dec. 11, 2014
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 13, 2013	Nov. 12, 2014
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 08, 2013	Oct. 07, 2014
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The 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. G.
4. The FCC Site Registration No. is 966073.
5 The VCCI Site Registration No. is G-137.
6 The CANADA Site Registration No. is IC 7450H-2.
7 Tested Date: Jan. 14, 2014

5.3.3 TEST PROCEDURES

Following FCC KDB 558074 D01 DTS Meas. Guidance :
Radiated versus Conducted Measurements.

The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.

b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT

c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater

d. EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)

e. For all of Radiation emission test

e-1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

e-2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

e-3. 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.

e-4. 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-5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

e-6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (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 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

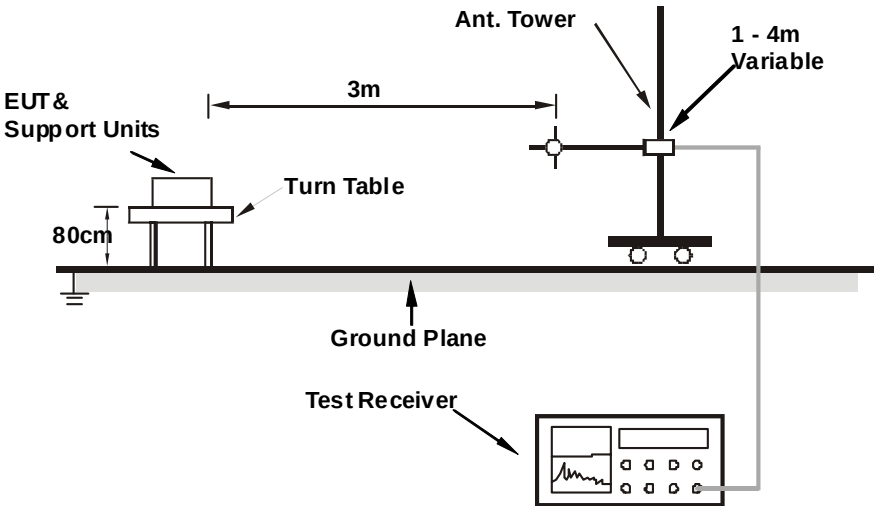
5.3.4 DEVIATION FROM TEST STANDARD

No deviation

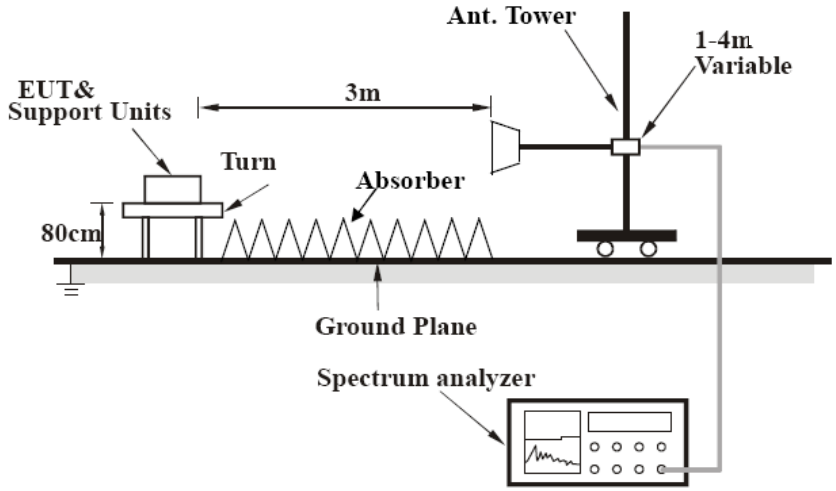
5.3.5 TEST SETUP

Radiation configuration:

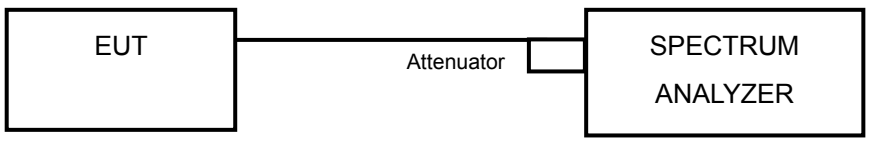
<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



Conducted configuration:



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.3.6 EUT OPERATING CONDITIONS

Same as the 4.7.6

5.3.7 TEST RESULTS (RADIATED MEASUREMENT)

Radiated versus Conducted Measurement	
☐ Conducted measurement	☒ Radiated measurement
For Radiated measurement: The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation) For Conducted measurement: The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).	

MODE 1

BELOW 1GHz WORST-CASE DATA

802.11a

CHANNEL	TX Channel 165	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	Below 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	64.81	31.8 QP	40.0	-8.2	1.50 H	93	45.80	-14.03
2	201.59	34.6 QP	43.5	-9.0	1.50 H	78	50.52	-15.97
3	625.10	37.9 QP	46.0	-8.1	1.50 H	339	41.98	-4.07
4	749.93	41.6 QP	46.0	-4.4	1.00 H	53	43.25	-1.68
5	**875.52**	**41.9 QP**	**46.0**	**-4.1**	**1.50 H**	**32**	**41.88**	**0.04**
6	1000.00	38.5 QP	54.0	-15.5	1.50 H	59	36.39	2.14
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	37.51	34.7 QP	40.0	-5.3	1.00 V	4	48.15	-13.48
2	103.22	32.7 QP	43.5	-10.8	1.00 V	152	49.19	-16.48
3	624.70	37.8 QP	46.0	-8.2	1.50 V	318	41.89	-4.08
4	750.18	40.3 QP	46.0	-5.7	1.50 V	329	41.96	-1.67
5	874.92	40.6 QP	46.0	-5.4	1.00 V	3	40.52	0.04
6	1000.00	38.9 QP	54.0	-15.1	1.50 V	33	36.76	2.14

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

ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 149	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	11490.00	61.7 PK	74.0	-12.3	1.00 H	105	45.80	15.90
2	11490.00	49.2 AV	54.0	-4.8	1.00 H	105	33.30	15.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	11490.00	61.4 PK	74.0	-12.6	1.00 V	205	45.50	15.90
2	11490.00	48.8 AV	54.0	-5.2	1.00 V	205	32.90	15.90

REMARKS:

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

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	11570.00	60.8 PK	74.0	-13.2	1.00 H	102	44.90	15.90
2	11570.00	49.0 AV	54.0	-5.0	1.00 H	102	33.10	15.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	61.6 PK	74.0	-12.4	1.04 V	190	45.70	15.90
2	11570.00	48.7 AV	54.0	-5.3	1.04 V	190	32.80	15.90

REMARKS:

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

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	11650.00	61.4 PK	74.0	-12.6	1.00 H	115	45.20	16.20
2	11650.00	49.1 AV	54.0	-4.9	1.00 H	115	32.90	16.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	61.4 PK	74.0	-12.6	1.03 V	194	45.20	16.20
2	11650.00	49.0 AV	54.0	-5.0	1.03 V	194	32.80	16.20

REMARKS:

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

802.11n (HT20)

CHANNEL	TX Channel 149	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	11490.00	61.9 PK	74.0	-12.1	1.00 H	104	46.00	15.90
2	11490.00	49.6 AV	54.0	-4.4	1.00 H	104	33.70	15.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	11490.00	61.5 PK	74.0	-12.5	1.00 V	179	45.60	15.90
2	11490.00	48.9 AV	54.0	-5.1	1.00 V	179	33.00	15.90

REMARKS:

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

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	11570.00	62.4 PK	74.0	-11.6	1.03 H	91	46.50	15.90
2	11570.00	49.8 AV	54.0	-4.2	1.03 H	91	33.90	15.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	61.3 PK	74.0	-12.7	1.04 V	178	45.40	15.90
2	11570.00	48.6 AV	54.0	-5.4	1.04 V	178	32.70	15.90

REMARKS:

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

CHANNEL	TX Channel 165	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	11650.00	62.7 PK	74.0	-11.3	1.06 H	96	46.50	16.20
2	11650.00	49.6 AV	54.0	-4.4	1.06 H	96	33.40	16.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	11650.00	60.6 PK	74.0	-13.4	1.05 V	192	44.40	16.20
2	11650.00	48.1 AV	54.0	-5.9	1.05 V	192	31.90	16.20

REMARKS:

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

802.11n (HT40)

CHANNEL	TX Channel 151	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	11510.00	62.6 PK	74.0	-11.4	1.03 H	102	46.70	15.90
2	11510.00	49.5 AV	54.0	-4.5	1.03 H	102	33.60	15.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	11510.00	60.5 PK	74.0	-13.5	1.09 V	184	44.60	15.90
2	11510.00	48.0 AV	54.0	-6.0	1.09 V	184	32.10	15.90

REMARKS:

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

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	11590.00	61.2 PK	74.0	-12.8	1.00 H	221	45.30	15.90
2	11590.00	49.1 AV	54.0	-4.9	1.00 H	221	33.20	15.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11590.00	60.0 PK	74.0	-14.0	1.13 V	200	44.10	15.90
2	11590.00	47.7 AV	54.0	-6.3	1.13 V	200	31.80	15.90

REMARKS:

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

5.3.8 TEST RESULTS (CONDUCTED MEASUREMENT)

Radiated versus Conducted Measurement	
☒ Conducted measurement	☐ Radiated measurement

For Radiated measurement:

The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation)

For Conducted measurement:

The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).

Conducted Measurement Factor
a. The composite gain will be used when signal support the correlated signal. (Composite gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 6.01dBi for MODE 1 & 7.79dBi for MODE 2)
b. For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands.
c. For the band edge the gain for the specific band may have been used.
d. In restricted bands below 1000 MHz, add upper bound on ground plane reflection: For f = 30 – 1000 MHz, add 4.7 dB.
Note: The conducted emission test was considered some factor to compute test result.

MODE 1

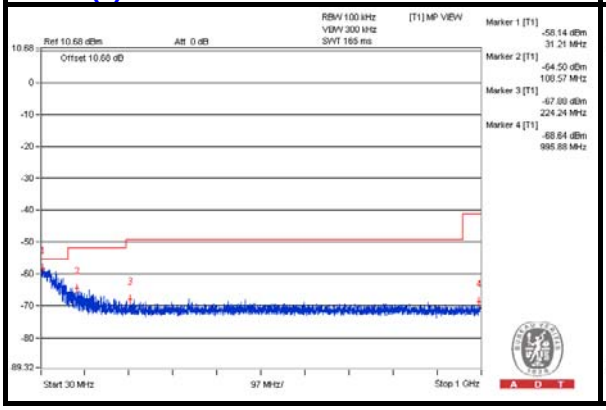
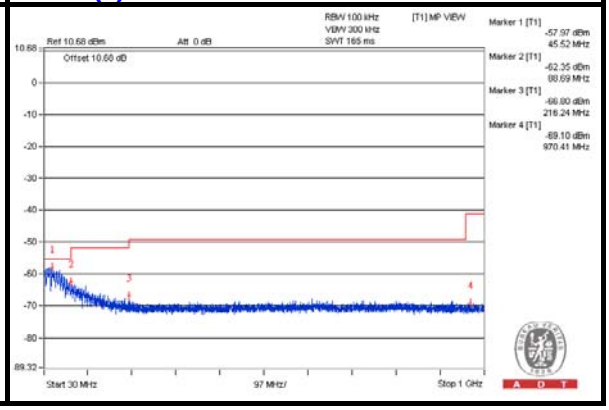
BELOW 1GHz WORST-CASE DATA

802.11a – Channel 165

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	88.443	39.83	43.5	-3.67	-66.06	-63.28	6.01	-55.43
2	108.57	39.2	43.5	-4.3	-64.5	-65.74	6.01	-56.06
3	216.483	36.08	46	-9.92	-69.8	-67.04	6.01	-59.18
4	448.313	35.11	46	-10.89	-69.38	-68.97	6.01	-60.15
5	610.303	34.89	46	-11.11	-68.95	-69.89	6.01	-60.37
6	842.86	34.76	46	-11.24	-69.32	-69.74	6.01	-60.5

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)	Chain (1)
	

ABOVE 1GHz DATA

802.11a – Channel 149

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3828.125 PK	61.5	74	-12.5	-41.04	-45.71	6.01	-33.76
2	3828.125 AV	55.45	54	* 1.45	-46.31	-55.52	6.01	-39.81
3	7659.375 PK	58.28	74	-15.72	-45.98	-46.02	6.01	-36.98
4	7659.375 AV	51.36	54	-2.64	-53.62	-52.32	6.01	-43.9
5	11487.5 PK	61.06	74	-12.94	-41.62	-45.77	6.01	-34.2
6	11490.625 AV	50.4	54	-3.6	-52.26	-56.49	6.01	-44.86

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
15.10 dBm
5.74375 GHz
Marker 2 [T1]
-37.26 dBm
5.66250 GHz
Marker 3 [T1]
-41.62 dBm
11.48750 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-43.53 dBm
24.54575 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-45.51 dBm
37.27000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
6.55 dBm
5.73750 GHz
Marker 2 [T1]
-46.31 dBm
3.82013 GHz
Marker 3 [T1]
-52.26 dBm
11.48062 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.56 dBm
24.55150 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-54.97 dBm
37.27000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Marker 1 [T1]
15.30 dBm
5.74062 GHz
Marker 2 [T1]
-36.90 dBm
5.66250 GHz
Marker 3 [T1]
-41.62 dBm
12.71250 GHz
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Marker 1 [T1]
-42.79 dBm
21.74263 GHz
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Marker 1 [T1]
-41.91 dBm
37.32625 GHz
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Marker 1 [T1]
5.90 dBm
5.74062 GHz
Marker 2 [T1]
-46.79 dBm
5.66875 GHz
Marker 3 [T1]
-50.95 dBm
12.70000 GHz
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Marker 1 [T1]
-54.51 dBm
17.22887 GHz
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Marker 1 [T1]
-51.17 dBm
37.27000 GHz
Start 25 GHz
1.5 GHz/
Stop 40 GHz

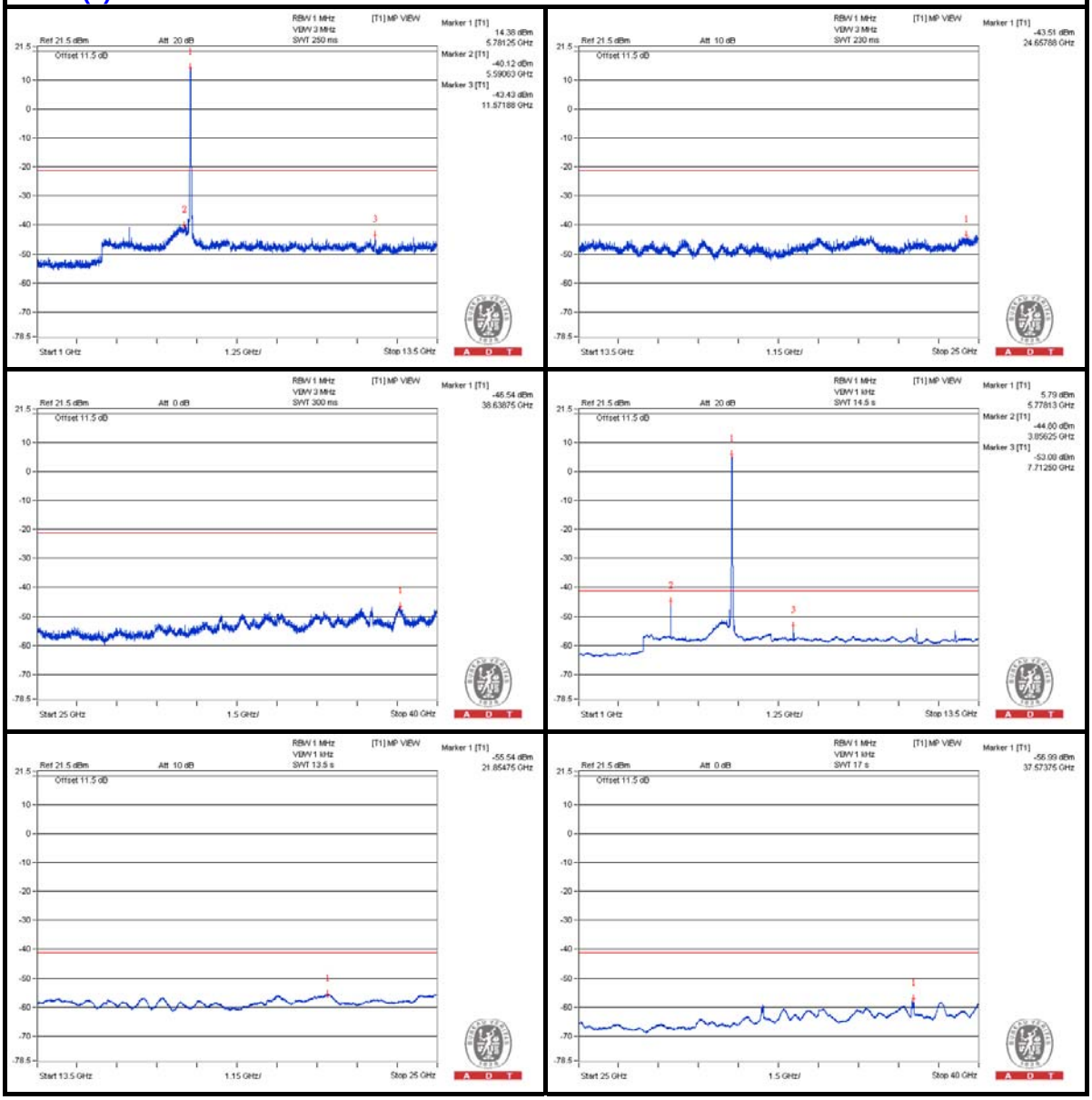
802.11a – Channel 157

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3856.25 PK	61.74	74	-12.26	-40.65	-45.97	6.01	-33.52
2	3856.25 AV	56.8	54	* 2.8	-44.8	-55.81	6.01	-38.46
3	7712.5 PK	58.42	74	-15.58	-45.91	-45.81	6.01	-36.84
4	7712.5 AV	51.64	54	-2.36	-53.08	-52.25	6.01	-43.62
5	11571.875 PK	60.06	74	-13.94	-43.43	-45.19	6.01	-35.2
6	11571.875 AV	49.15	54	-4.85	-54.28	-56.2	6.01	-46.11

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.38 dBm
5.78125 GHz
Marker 2 [T1]
-40.12 dBm
5.59063 GHz
Marker 3 [T1]
-43.43 dBm
11.57188 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.51 dBm
24.65788 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-46.54 dBm
38.63875 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 MHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.79 dBm
5.77813 GHz
Marker 2 [T1]
-44.60 dBm
3.85625 GHz
Marker 3 [T1]
-53.00 dBm
7.71250 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.54 dBm
21.85475 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-56.99 dBm
37.57375 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

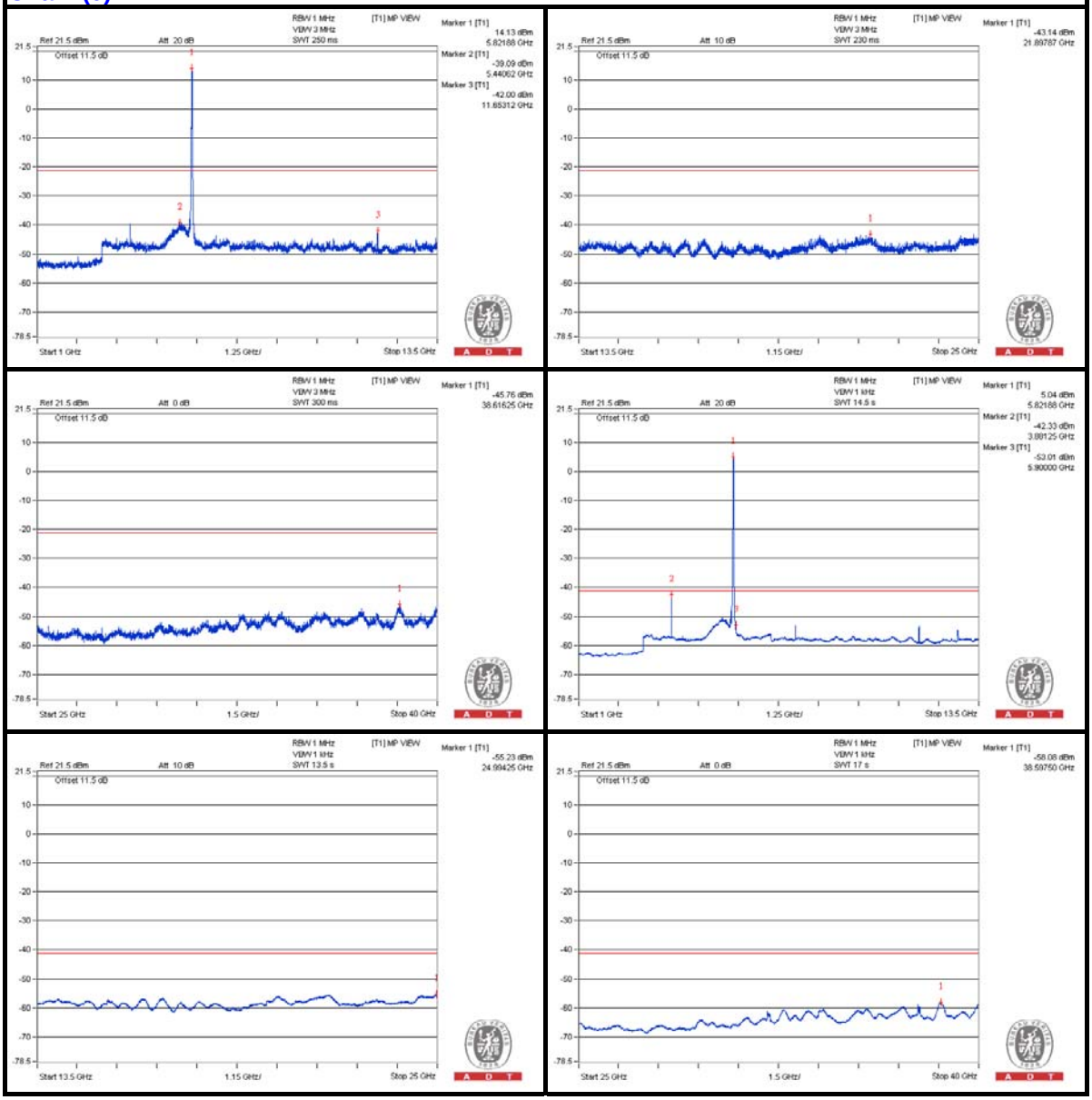
802.11a – Channel 165

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3884.375 PK	62.49	74	-11.51	-39.71	-45.91	6.01	-32.77
2	3881.25 AV	59.15	54	* 5.15	-42.33	-55.45	6.01	-36.11
3	11653.125 PK	61.14	74	-12.86	-42	-44.68	6.01	-34.12
4	11653.125 AV	49.63	54	-4.37	-53.4	-56.42	6.01	-45.63

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.13 dBm
5.82188 GHz
Marker 2 [T1]
-39.09 dBm
5.44062 GHz
Marker 3 [T1]
-42.00 dBm
11.85312 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-43.14 dBm
21.89787 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-45.76 dBm
38.61625 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.04 dBm
5.82188 GHz
Marker 2 [T1]
-42.33 dBm
3.80125 GHz
Marker 3 [T1]
-52.01 dBm
5.90000 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.23 dBm
24.99425 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-58.08 dBm
38.59750 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.52 dBm
5.81875 GHz
Marker 2 [T1]
-37.66 dBm
5.60000 GHz
Marker 3 [T1]
-40.43 dBm
12.85938 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-42.95 dBm
24.55438 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-43.90 dBm
37.81375 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
4.61 dBm
5.82500 GHz
Marker 2 [T1]
-44.42 dBm
5.60000 GHz
Marker 3 [T1]
-50.13 dBm
12.87813 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.49 dBm
21.90363 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-53.83 dBm
37.82500 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

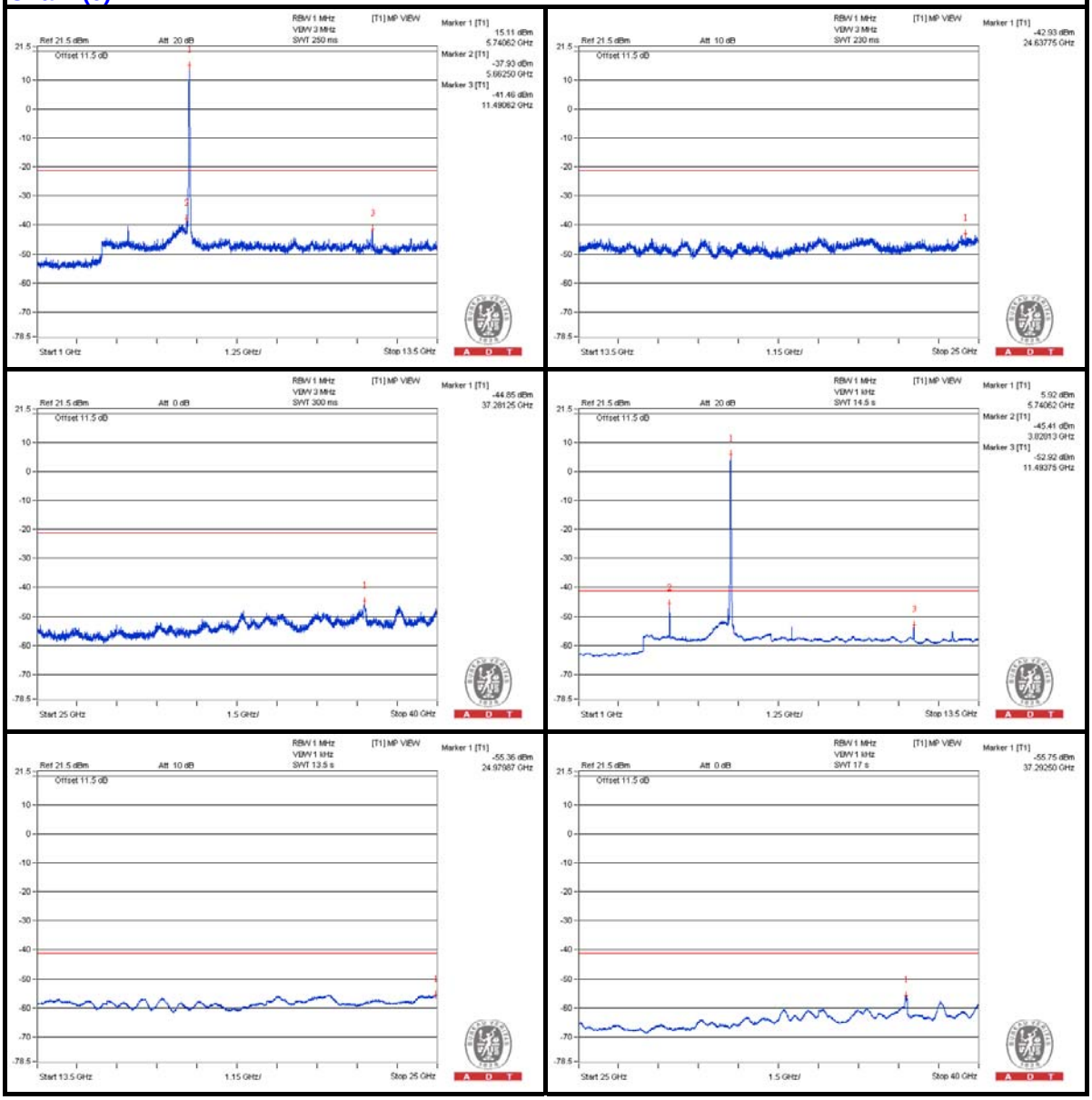
802.11n(HT20) – Channel 149

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3828.125 PK	61.89	74	-12.11	-40.38	-46.26	6.01	-33.37
2	3828.125 AV	56.25	54	* 2.25	-45.41	-55.67	6.01	-39.01
3	7659.375 PK	57.93	74	-16.07	-45.86	-46.9	6.01	-37.33
4	7659.375 AV	50.83	54	-3.17	-53.77	-53.15	6.01	-44.43
5	11490.625 PK	61.37	74	-12.63	-41.46	-45.1	6.01	-33.89
6	11493.75 AV	49.98	54	-4.02	-52.92	-56.34	6.01	-45.28

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
15.11 dBm
5.74062 GHz
Marker 2 [T1]
-37.90 dBm
5.66250 GHz
Marker 3 [T1]
-41.46 dBm
11.49062 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-42.93 dBm
24.63775 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-44.85 dBm
37.28125 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 MHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.92 dBm
5.74062 GHz
Marker 2 [T1]
-45.41 dBm
3.82813 GHz
Marker 3 [T1]
-52.92 dBm
11.49375 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.36 dBm
24.97987 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-55.75 dBm
37.29250 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.81 dBm
5.74375 GHz
Marker 2 [T1]
-35.95 dBm
5.65937 GHz
Marker 3 [T1]
-41.93 dBm
12.71250 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-42.45 dBm
17.23175 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-41.55 dBm
37.33000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.50 dBm
5.74062 GHz
Marker 2 [T1]
-46.01 dBm
5.65937 GHz
Marker 3 [T1]
-51.51 dBm
12.70937 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-54.71 dBm
17.22887 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-52.08 dBm
37.31875 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

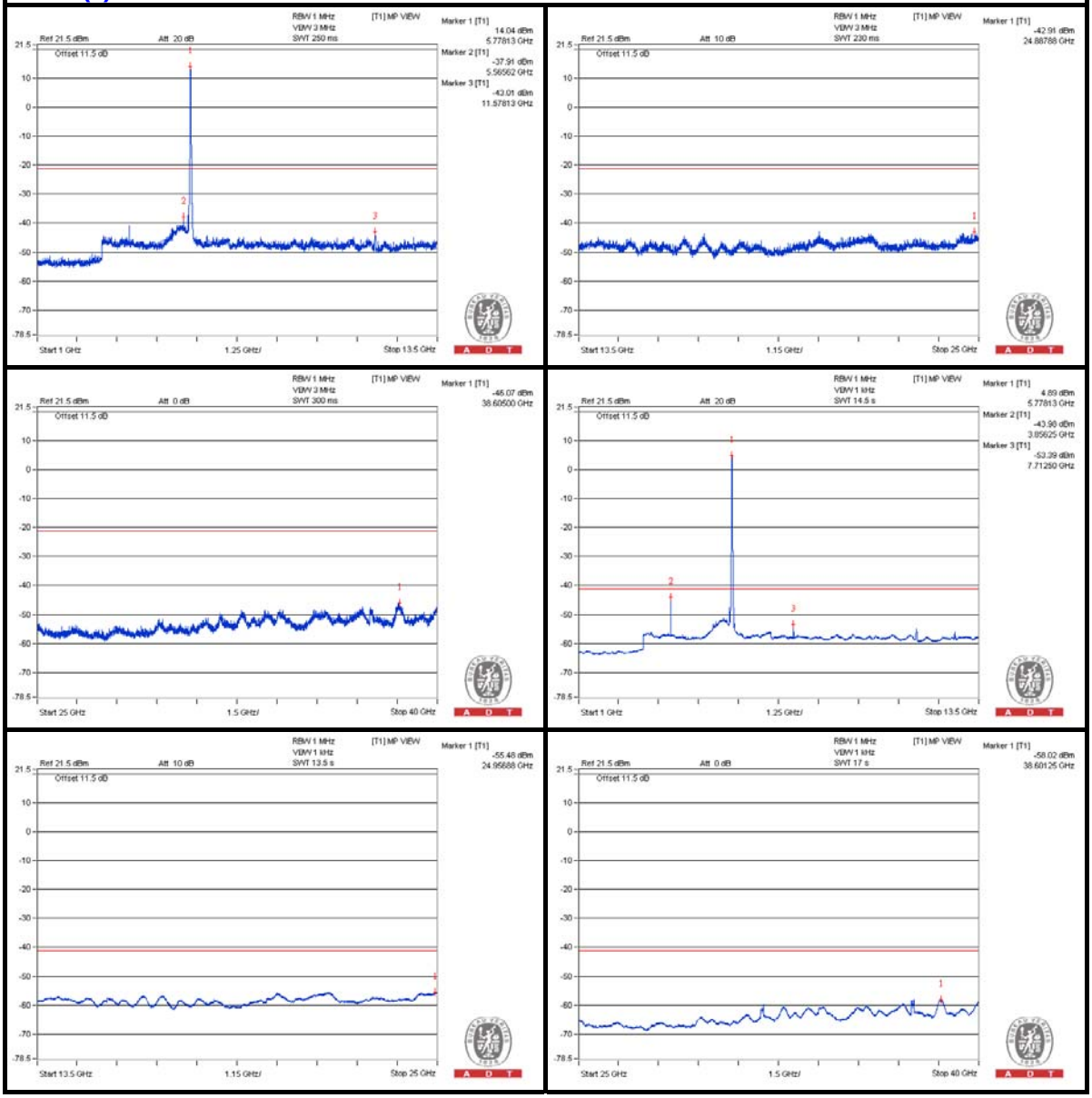
802.11n(HT20) – Channel 157

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3856.25 PK	61.61	74	-12.39	-40.81	-46	6.01	-33.65
2	3856.25 AV	57.57	54	* 3.57	-43.98	-55.71	6.01	-37.69
3	7712.5 PK	58.05	74	-15.95	-46.42	-46.05	6.01	-37.21
4	7712.5 AV	51.69	54	-2.31	-53.39	-51.92	6.01	-43.57
5	11568.75 PK	60.18	74	-13.82	-43.61	-44.66	6.01	-35.08
6	11571.875 AV	48.59	54	-5.41	-54.85	-56.73	6.01	-46.67

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.04 dBm
5.77813 GHz
Marker 2 [T1]
-37.91 dBm
5.56562 GHz
Marker 3 [T1]
-43.01 dBm
11.57813 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-42.91 dBm
24.88788 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-46.07 dBm
38.60500 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 3 MHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
4.89 dBm
5.77813 GHz
Marker 2 [T1]
-43.96 dBm
3.85625 GHz
Marker 3 [T1]
-53.39 dBm
7.71250 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.48 dBm
24.95688 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-58.02 dBm
38.60125 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.68 dBm
5.77813 GHz
Marker 2 [T1]
-37.76 dBm
5.60000 GHz
Marker 3 [T1]
-41.27 dBm
12.77187 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.09 dBm
24.97700 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-41.32 dBm
37.57375 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
4.66 dBm
5.78125 GHz
Marker 2 [T1]
-45.36 dBm
5.60000 GHz
Marker 3 [T1]
-51.32 dBm
12.77187 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-54.96 dBm
16.56762 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-50.35 dBm
37.57750 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

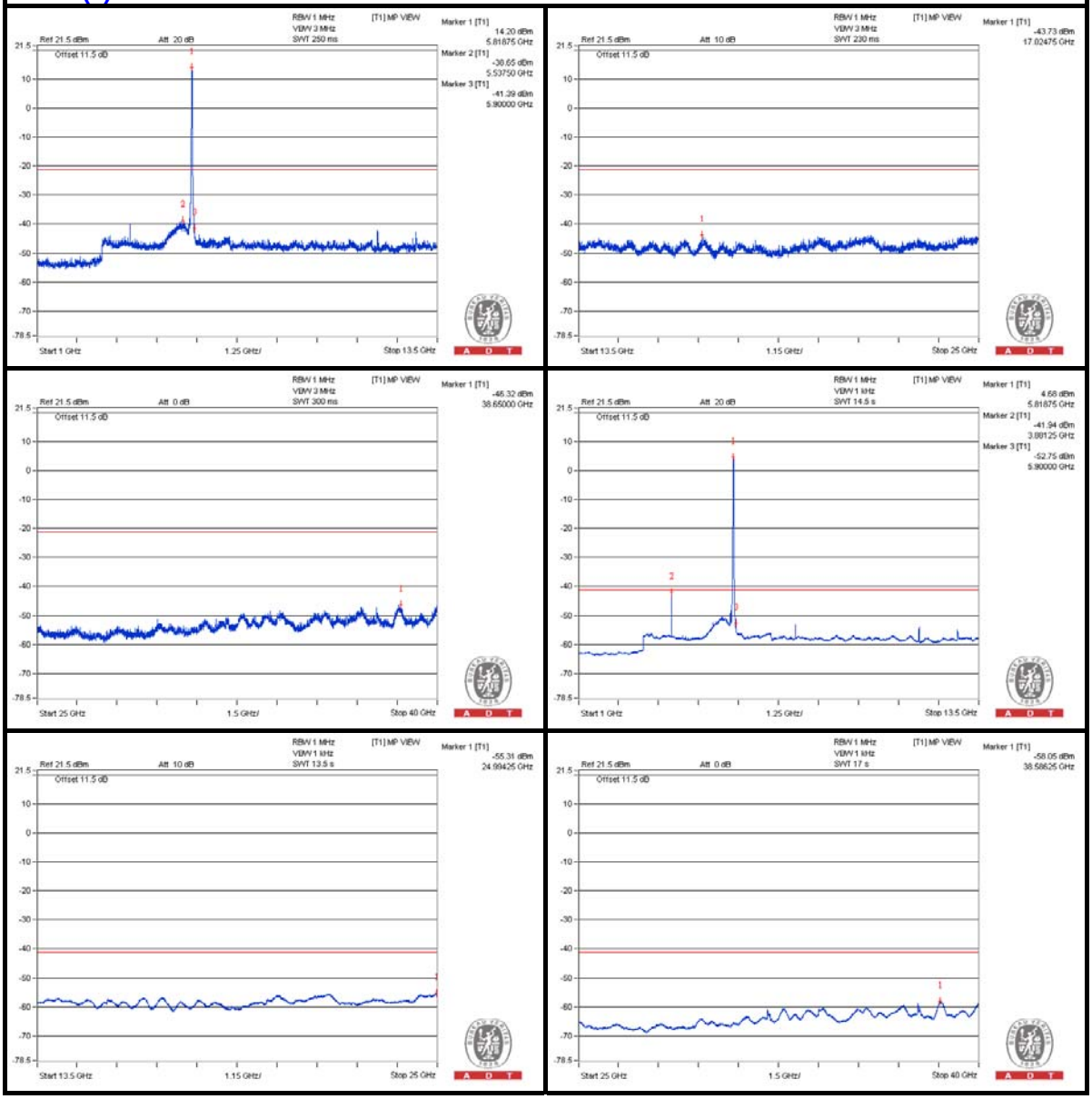
802.11n(HT20) – Channel 165

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3884.375 PK	61.99	74	-12.01	-40.1	-46.94	6.01	-33.27
2	3881.25 AV	59.51	54	* 5.51	-41.94	-55.75	6.01	-35.75
3	11653.125 PK	60.79	74	-13.21	-42.6	-44.62	6.01	-34.47
4	11653.125 AV	49.15	54	-4.85	-53.99	-56.67	6.01	-46.11

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Marker 1 [T1]
14.20 dBm
5.81875 GHz
Marker 2 [T1]
-30.65 dBm
5.53750 GHz
Marker 3 [T1]
-41.39 dBm
5.90000 GHz
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Marker 1 [T1]
-43.73 dBm
17.02475 GHz
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Marker 1 [T1]
-46.32 dBm
38.65000 GHz
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Marker 1 [T1]
4.68 dBm
5.81875 GHz
Marker 2 [T1]
-41.94 dBm
3.80125 GHz
Marker 3 [T1]
-52.75 dBm
5.90000 GHz
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Marker 1 [T1]
-55.31 dBm
24.99425 GHz
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Marker 1 [T1]
-58.05 dBm
38.58625 GHz
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.11 dBm
5.82188 GHz
Marker 2 [T1]
-36.69 dBm
5.60000 GHz
Marker 3 [T1]
-40.35 dBm
12.87500 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.54 dBm
21.79437 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-43.95 dBm
37.75750 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
4.43 dBm
5.83125 GHz
Marker 2 [T1]
-44.35 dBm
5.60000 GHz
Marker 3 [T1]
-50.77 dBm
12.87813 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.47 dBm
24.98275 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-54.23 dBm
37.81750 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

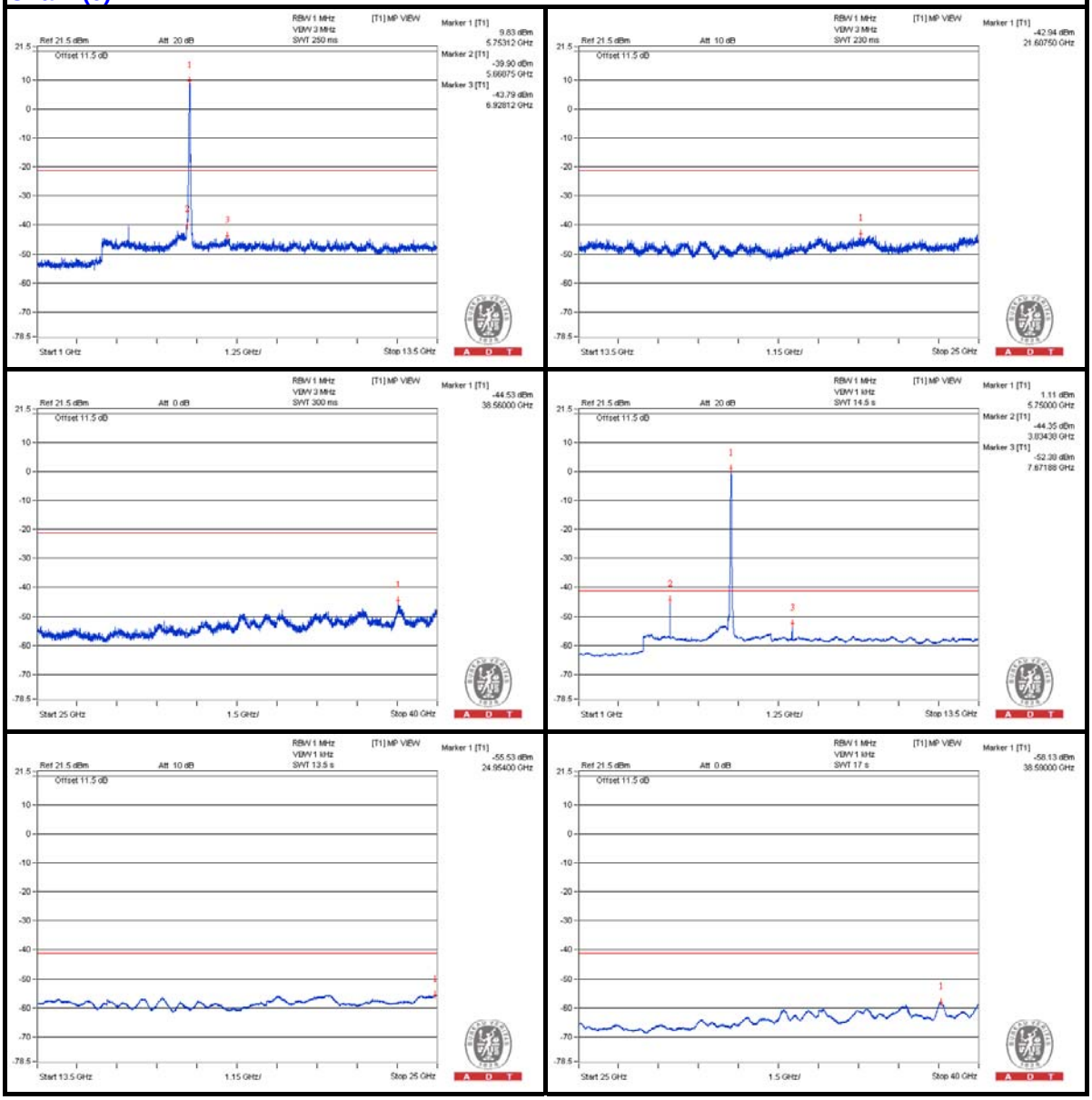
802.11n(HT40) – Channel 151

Conducted spurious emission table

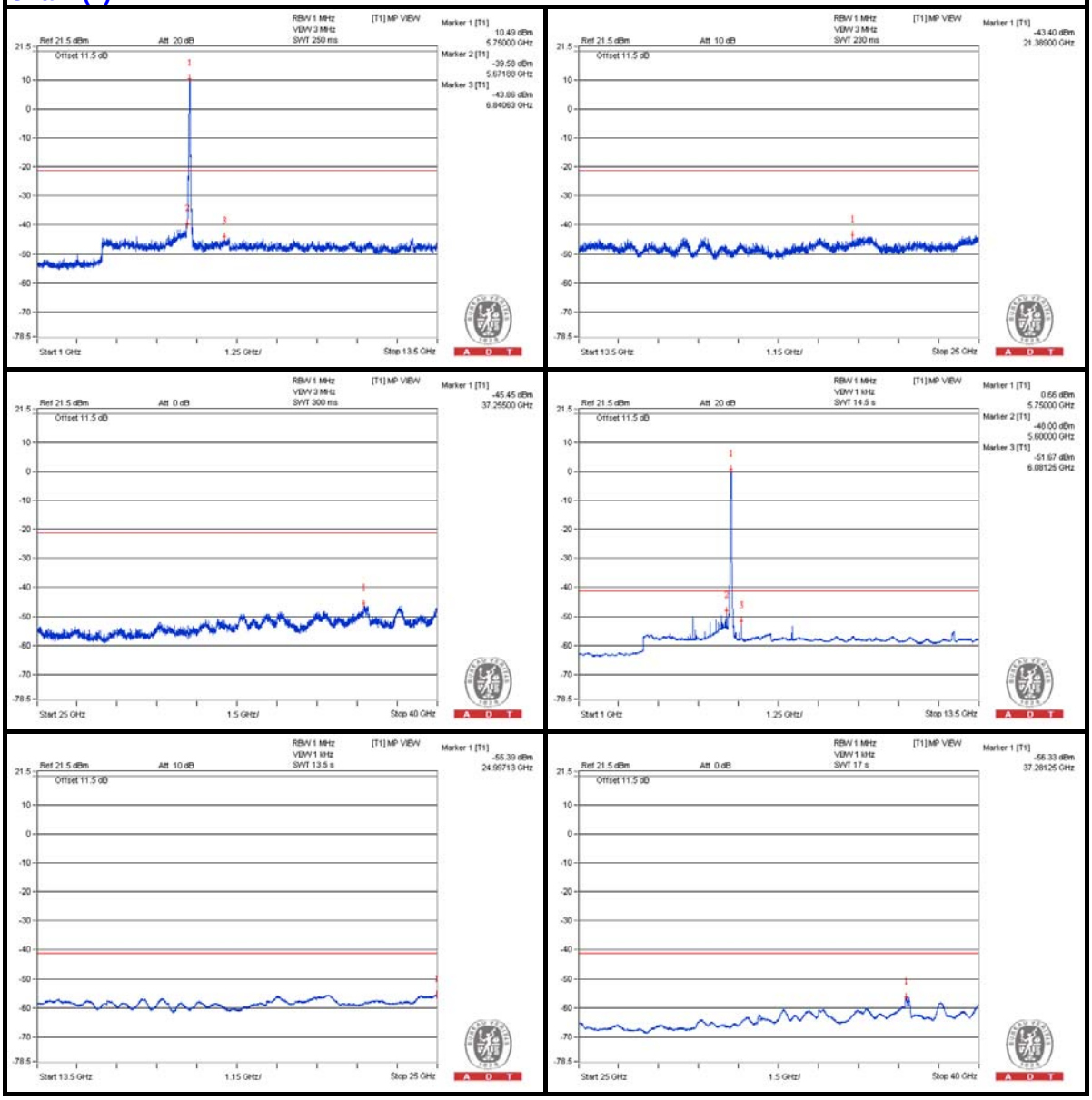
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3837.5 PK	61.9	74	-12.1	-40.29	-46.56	6.01	-33.36
2	3834.375 AV	57.21	54	* 3.21	-44.35	-55.94	6.01	-38.05
3	7675 PK	57.46	74	-16.54	-46.18	-47.58	6.01	-37.8
4	7671.875 AV	51.42	54	-2.58	-52.38	-53.41	6.01	-43.84
5	11509.375 PK	57.42	74	-16.58	-45.94	-48.02	6.01	-37.84
6	11518.75 AV	46.31	54	-7.69	-57.75	-58.21	6.01	-48.95

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
9.83 dBm
5.75312 GHz
Marker 2 [T1]
-39.90 dBm
5.66875 GHz
Marker 3 [T1]
-43.79 dBm
6.92812 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-42.94 dBm
21.60750 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-44.53 dBm
38.56000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
1.11 dBm
5.75000 GHz
Marker 2 [T1]
-44.35 dBm
3.80430 GHz
Marker 3 [T1]
-52.38 dBm
7.87188 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.53 dBm
24.95400 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-58.13 dBm
38.59000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
10.49 dBm
5.75000 GHz
Marker 2 [T1]
-39.58 dBm
5.67188 GHz
Marker 3 [T1]
-43.06 dBm
6.84063 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.40 dBm
21.38900 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-45.45 dBm
37.25500 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
0.66 dBm
5.75000 GHz
Marker 2 [T1]
-40.00 dBm
5.60000 GHz
Marker 3 [T1]
-51.67 dBm
6.08125 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.39 dBm
24.99713 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-56.33 dBm
37.28125 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

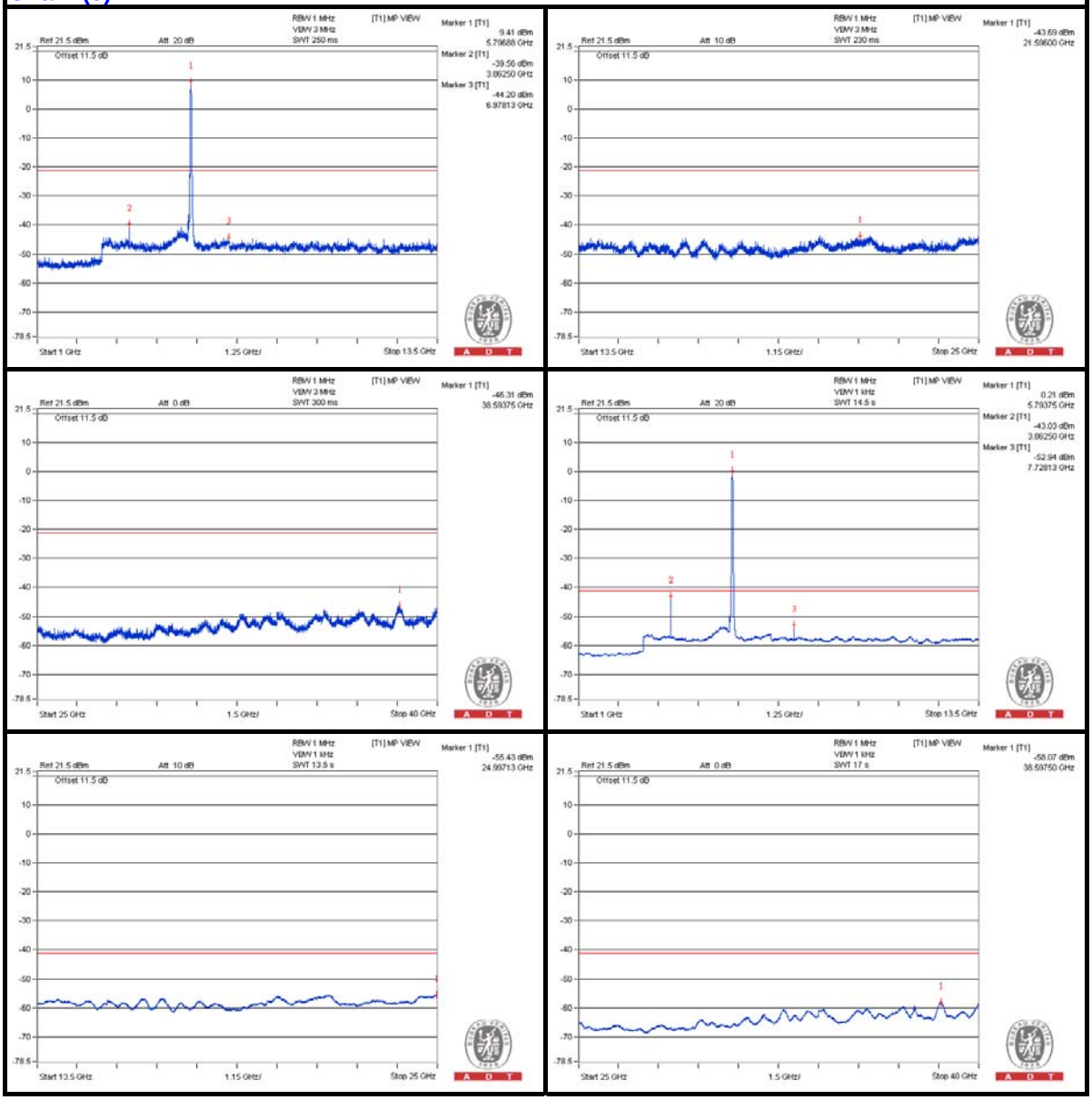
802.11n(HT40) – Channel 159

Conducted spurious emission table

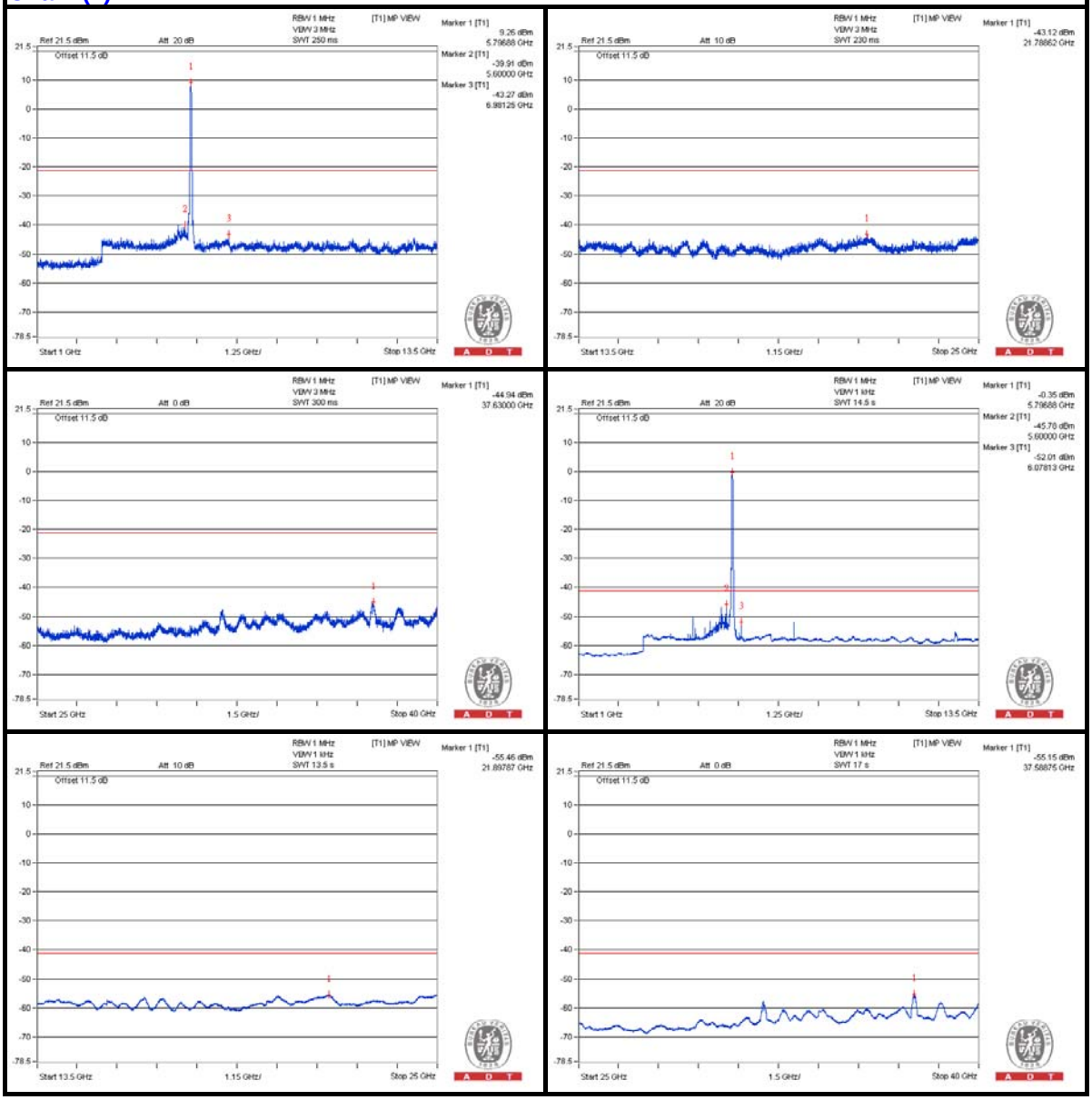
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3862.5 PK	62.5	74	-11.5	-39.56	-46.56	6.01	-32.76
2	3862.5 AV	58.45	54	* 4.45	-43.03	-56.04	6.01	-36.81
3	7728.125 PK	58.9	74	-15.1	-44.75	-46.12	6.01	-36.36
4	7728.125 AV	51.82	54	-2.18	-52.94	-52.02	6.01	-43.44
5	11584.375 PK	57.15	74	-16.85	-46.64	-47.69	6.01	-38.11
6	11587.5 AV	45.88	54	-8.12	-58.32	-58.48	6.01	-49.38

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
9.26 dBm
5.79688 GHz
Marker 2 [T1]
-39.91 dBm
5.60000 GHz
Marker 3 [T1]
-43.27 dBm
6.88125 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.12 dBm
21.78862 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-44.94 dBm
37.63000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
-0.35 dBm
5.79688 GHz
Marker 2 [T1]
-45.70 dBm
5.60000 GHz
Marker 3 [T1]
-52.01 dBm
6.07813 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.46 dBm
21.89787 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-55.15 dBm
37.58875 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

MODE 2

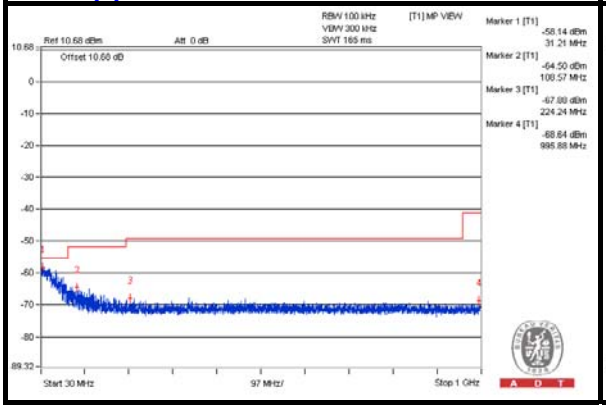
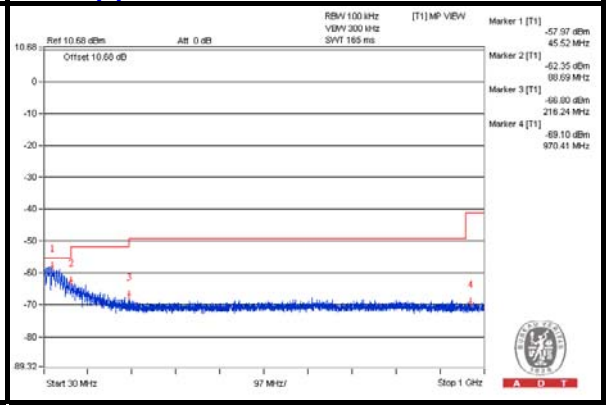
BELOW 1GHz WORST-CASE DATA

802.11a – Channel 165

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	88.443	41.61	43.5	-1.89	-66.06	-63.28	7.79	-53.65
2	108.57	40.98	43.5	-2.52	-64.5	-65.74	7.79	-54.28
3	216.483	37.86	46	-8.14	-69.8	-67.04	7.79	-57.4
4	448.313	36.89	46	-9.11	-69.38	-68.97	7.79	-58.37
5	610.303	36.67	46	-9.33	-68.95	-69.89	7.79	-58.59
6	842.86	36.54	46	-9.46	-69.32	-69.74	7.79	-58.72

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.

Chain (0)	Chain (1)
	

ABOVE 1GHz DATA

802.11a – Channel 149

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3828.125 PK	63.28	74	-10.72	-41.04	-45.71	7.79	-31.98
2	3828.125 AV	57.23	54	* 3.23	-46.31	-55.52	7.79	-38.03
3	7659.375 PK	60.06	74	-13.94	-45.98	-46.02	7.79	-35.2
4	7659.375 AV	53.14	54	-0.86	-53.62	-52.32	7.79	-42.12
5	11487.5 PK	62.84	74	-11.16	-41.62	-45.77	7.79	-32.42
6	11490.625 AV	52.18	54	-1.82	-52.26	-56.49	7.79	-43.08

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
15.10 dBm
5.74375 GHz
Marker 2 [T1]
-37.26 dBm
5.66250 GHz
Marker 3 [T1]
-41.62 dBm
11.48750 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-43.53 dBm
24.54575 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-45.51 dBm
37.27000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
6.55 dBm
5.73750 GHz
Marker 2 [T1]
-46.31 dBm
3.82013 GHz
Marker 3 [T1]
-52.26 dBm
11.48062 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.56 dBm
24.55150 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-54.97 dBm
37.27000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
15.30 dBm
5.74062 GHz
Marker 2 [T1]
-36.90 dBm
5.66250 GHz
Marker 3 [T1]
-41.62 dBm
12.71250 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-42.79 dBm
21.74263 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-41.91 dBm
37.32625 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.90 dBm
5.74062 GHz
Marker 2 [T1]
-46.79 dBm
5.66875 GHz
Marker 3 [T1]
-50.95 dBm
12.70000 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-54.51 dBm
17.22887 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-51.17 dBm
37.27000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

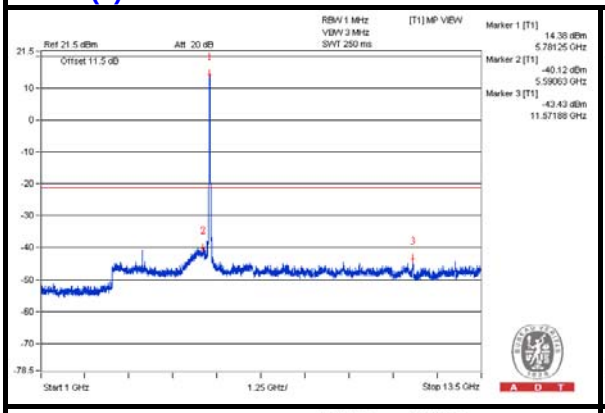
802.11a – Channel 157

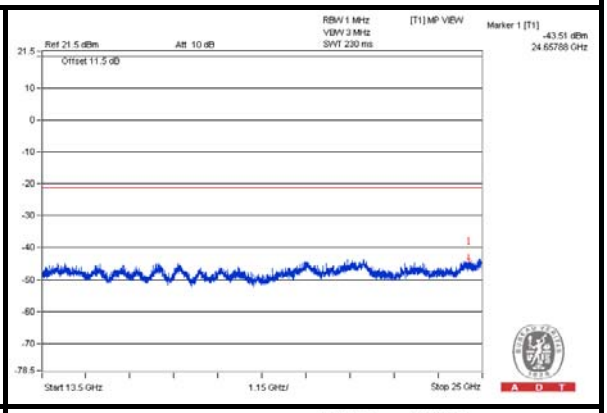
Conducted spurious emission table

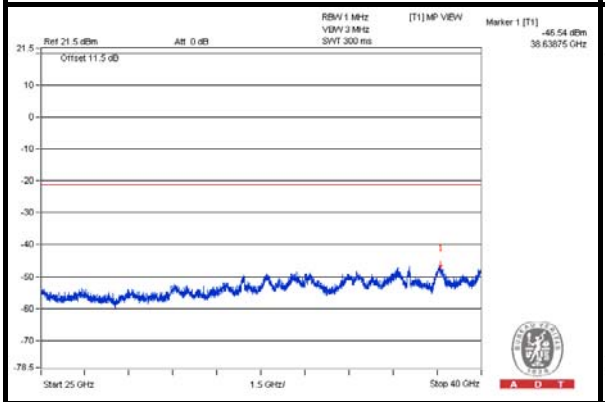
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3856.25 PK	63.52	74	-10.48	-40.65	-45.97	7.79	-31.74
2	3856.25 AV	58.58	54	* 4.58	-44.8	-55.81	7.79	-36.68
3	7712.5 PK	60.2	74	-13.8	-45.91	-45.81	7.79	-35.06
4	7712.5 AV	53.42	54	-0.58	-53.08	-52.25	7.79	-41.84
5	11571.875 PK	61.84	74	-12.16	-43.43	-45.19	7.79	-33.42
6	11571.875 AV	50.93	54	-3.07	-54.28	-56.2	7.79	-44.33

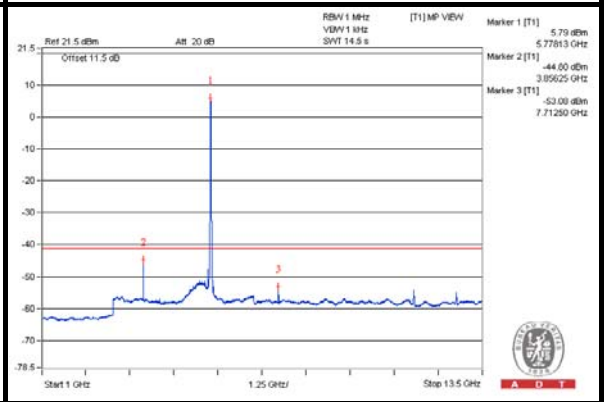
Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

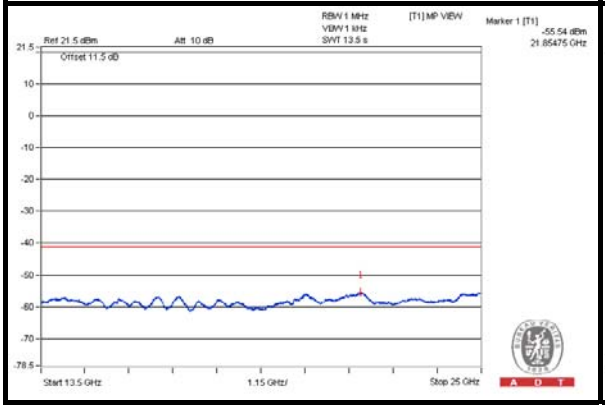
Chain (0)

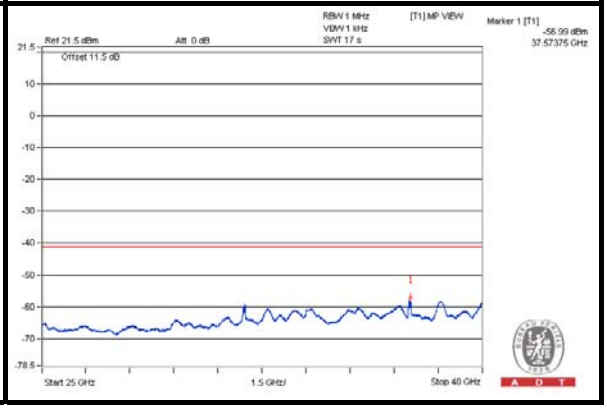

RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.38 dBm
5.78125 GHz
Marker 2 [T1]
-40.12 dBm
5.59063 GHz
Marker 3 [T1]
-43.43 dBm
11.57188 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz


RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.51 dBm
24.65788 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz


RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-46.54 dBm
38.63875 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.79 dBm
5.77813 GHz
Marker 2 [T1]
-44.60 dBm
3.85625 GHz
Marker 3 [T1]
-53.00 dBm
7.71250 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz


RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.54 dBm
21.85475 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz


RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-56.99 dBm
37.57375 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.86 dBm
5.78750 GHz
Marker 2 [T1]
-30.24 dBm
5.54063 GHz
Marker 3 [T1]
-41.50 dBm
12.77500 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.04 dBm
24.60325 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-39.47 dBm
37.56625 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.42 dBm
5.78125 GHz
Marker 2 [T1]
-47.29 dBm
5.45625 GHz
Marker 3 [T1]
-50.38 dBm
12.77500 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.32 dBm
16.56475 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-50.75 dBm
37.58500 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

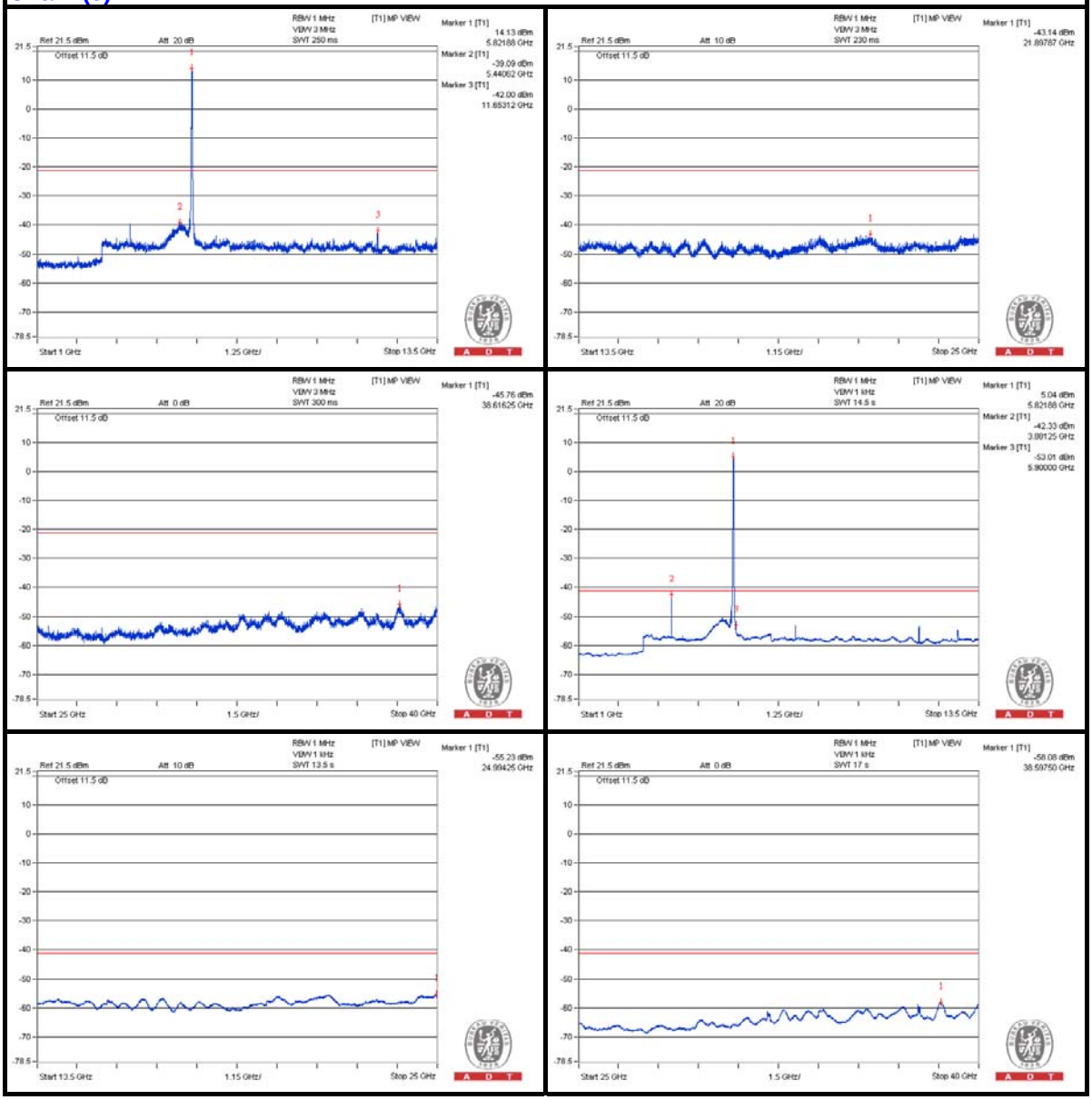
802.11a – Channel 165

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3884.375 PK	64.27	74	-9.73	-39.71	-45.91	7.79	-30.99
2	3881.25 AV	60.93	54	* 6.93	-42.33	-55.45	7.79	-34.33
3	11653.125 PK	62.92	74	-11.08	-42	-44.68	7.79	-32.34
4	11653.125 AV	51.41	54	-2.59	-53.4	-56.42	7.79	-43.85

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.13 dBm
5.82188 GHz
Marker 2 [T1]
-39.09 dBm
5.44062 GHz
Marker 3 [T1]
-42.00 dBm
11.85312 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-43.14 dBm
21.89787 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-45.76 dBm
38.61625 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.04 dBm
5.82188 GHz
Marker 2 [T1]
-42.33 dBm
3.80125 GHz
Marker 3 [T1]
-52.01 dBm
5.80000 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.23 dBm
24.99425 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-58.08 dBm
38.59750 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.52 dBm
5.81875 GHz
Marker 2 [T1]
-37.66 dBm
5.60000 GHz
Marker 3 [T1]
-40.43 dBm
12.85938 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-42.95 dBm
24.55438 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-43.90 dBm
37.81375 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
4.61 dBm
5.82500 GHz
Marker 2 [T1]
-44.42 dBm
5.60000 GHz
Marker 3 [T1]
-50.13 dBm
12.87813 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.49 dBm
21.90363 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-53.83 dBm
37.82500 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

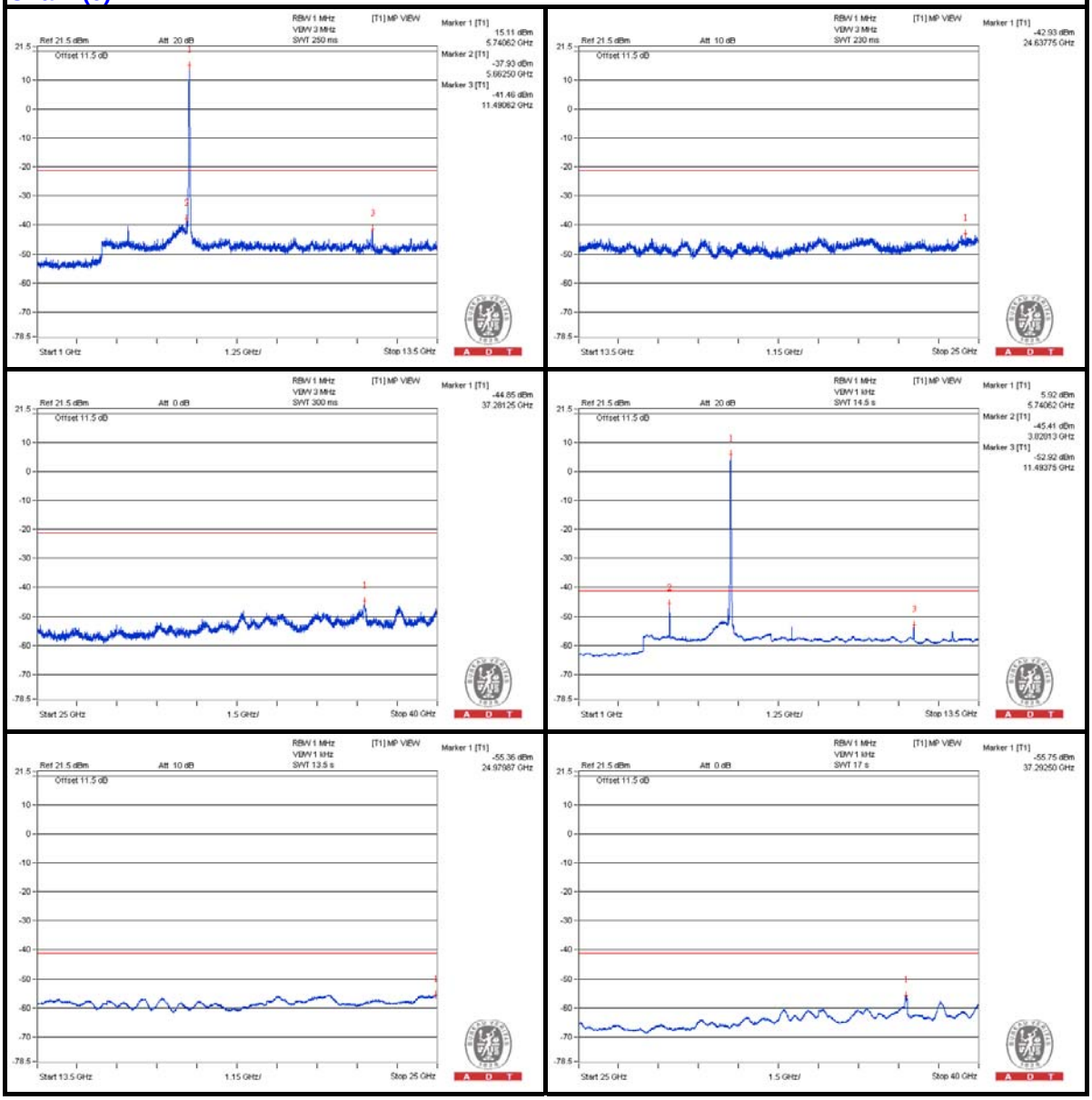
802.11n(HT20) – Channel 149

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3828.125 PK	63.67	74	-10.33	-40.38	-46.26	7.79	-31.59
2	3828.125 AV	58.03	54	* 4.03	-45.41	-55.67	7.79	-37.23
3	7659.375 PK	59.71	74	-14.29	-45.86	-46.9	7.79	-35.55
4	7659.375 AV	52.61	54	-1.39	-53.77	-53.15	7.79	-42.65
5	11490.625 PK	63.15	74	-10.85	-41.46	-45.1	7.79	-32.11
6	11493.75 AV	51.76	54	-2.24	-52.92	-56.34	7.79	-43.5

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
15.11 dBm
5.74062 GHz
Marker 2 [T1]
-37.90 dBm
5.66250 GHz
Marker 3 [T1]
-41.46 dBm
11.49062 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-42.93 dBm
24.63775 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-44.85 dBm
37.28125 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 MHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.92 dBm
5.74062 GHz
Marker 2 [T1]
-45.41 dBm
3.82813 GHz
Marker 3 [T1]
-52.92 dBm
11.49375 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.36 dBm
24.97987 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-55.75 dBm
37.29250 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.81 dBm
5.74375 GHz
Marker 2 [T1]
-35.95 dBm
5.65937 GHz
Marker 3 [T1]
-41.93 dBm
12.71250 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-42.45 dBm
17.23175 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-41.55 dBm
37.33000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
5.50 dBm
5.74062 GHz
Marker 2 [T1]
-46.01 dBm
5.65937 GHz
Marker 3 [T1]
-51.51 dBm
12.70937 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-54.71 dBm
17.22887 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-52.08 dBm
37.31875 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

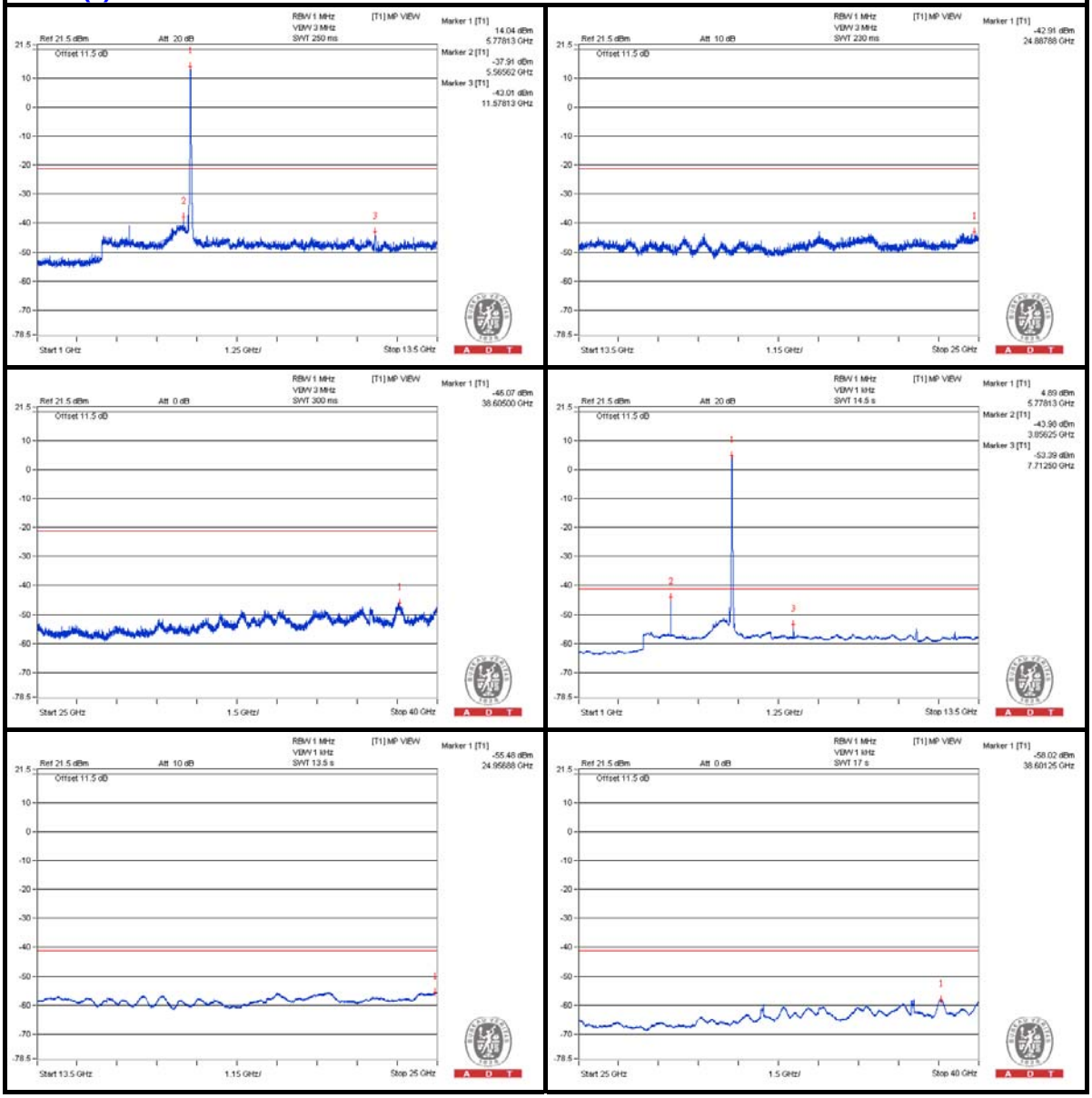
802.11n(HT20) – Channel 157

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3856.25 PK	63.39	74	-10.61	-40.81	-46	7.79	-31.87
2	3856.25 AV	59.35	54	* 5.35	-43.98	-55.71	7.79	-35.91
3	7712.5 PK	59.83	74	-14.17	-46.42	-46.05	7.79	-35.43
4	7712.5 AV	53.47	54	-0.53	-53.39	-51.92	7.79	-41.79
5	11568.75 PK	61.96	74	-12.04	-43.61	-44.66	7.79	-33.3
6	11571.875 AV	50.37	54	-3.63	-54.85	-56.73	7.79	-44.89

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.04 dBm
5.77813 GHz
Marker 2 [T1]
-37.91 dBm
5.56562 GHz
Marker 3 [T1]
-43.01 dBm
11.57813 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-42.91 dBm
24.88788 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-46.07 dBm
38.60500 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 3 MHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
4.89 dBm
5.77813 GHz
Marker 2 [T1]
-43.96 dBm
3.85625 GHz
Marker 3 [T1]
-53.39 dBm
7.71250 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.48 dBm
24.95688 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-58.02 dBm
38.60125 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.68 dBm
5.77813 GHz
Marker 2 [T1]
-37.76 dBm
5.60000 GHz
Marker 3 [T1]
-41.27 dBm
12.77187 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.09 dBm
24.97700 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-41.32 dBm
37.57375 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
4.66 dBm
5.78125 GHz
Marker 2 [T1]
-45.36 dBm
5.60000 GHz
Marker 3 [T1]
-51.32 dBm
12.77187 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-54.96 dBm
16.56762 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-50.35 dBm
37.57750 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

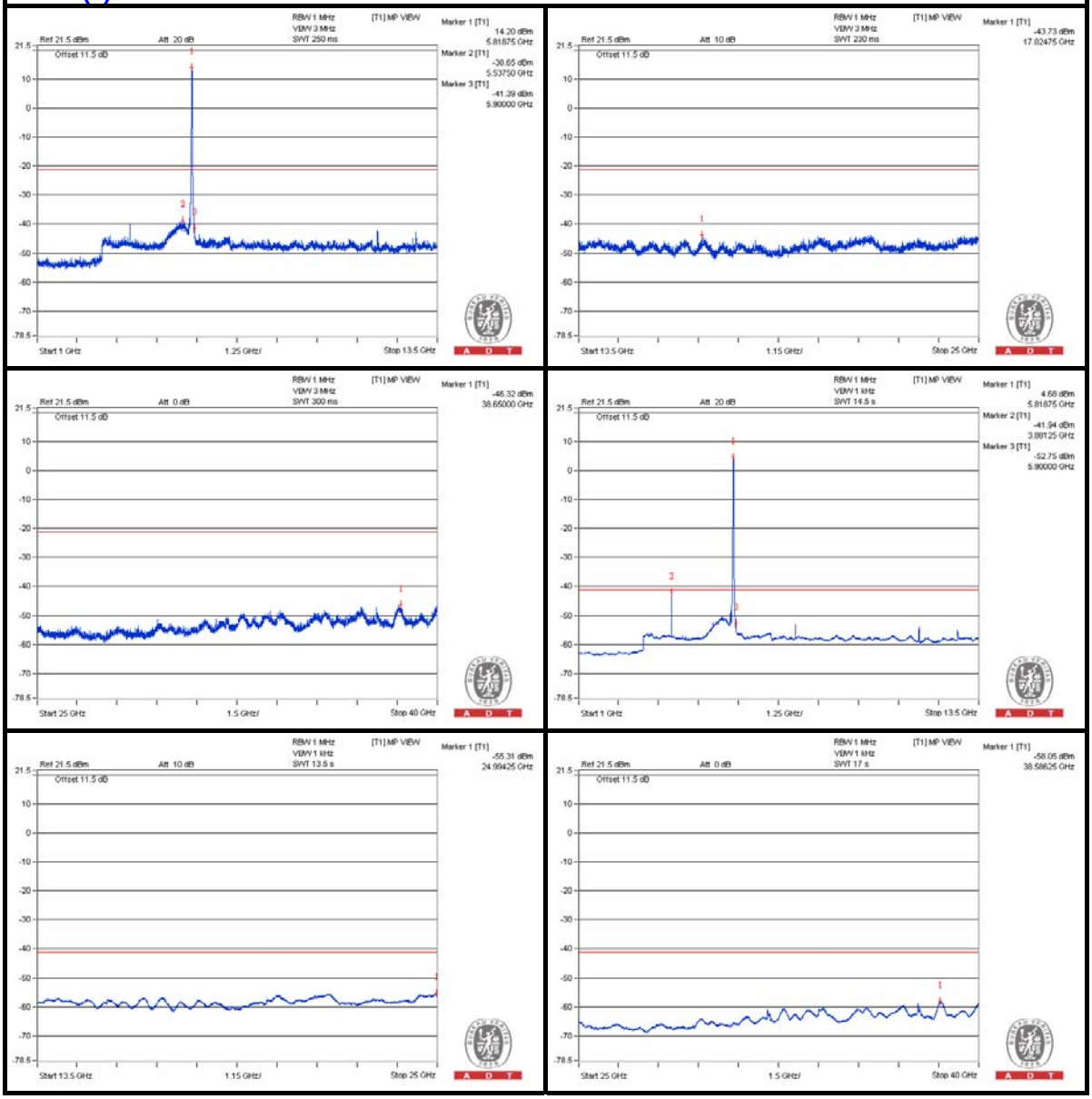
802.11n(HT20) – Channel 165

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3884.375 PK	63.77	74	-10.23	-40.1	-46.94	7.79	-31.49
2	3881.25 AV	61.29	54	* 7.29	-41.94	-55.75	7.79	-33.97
3	11653.125 PK	62.57	74	-11.43	-42.6	-44.62	7.79	-32.69
4	11653.125 AV	50.93	54	-3.07	-53.99	-56.67	7.79	-44.33

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
14.20 dBm
5.81875 GHz
Marker 2 [T1]
-30.65 dBm
5.53750 GHz
Marker 3 [T1]
-41.39 dBm
5.90000 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.73 dBm
17.02475 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-46.32 dBm
38.65000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
4.68 dBm
5.81875 GHz
Marker 2 [T1]
-41.94 dBm
3.80125 GHz
Marker 3 [T1]
-52.75 dBm
5.90000 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.31 dBm
24.99425 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-58.05 dBm
38.58625 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Marker 1 [T1]
14.11 dBm
5.82188 GHz
Marker 2 [T1]
-36.69 dBm
5.60000 GHz
Marker 3 [T1]
-40.35 dBm
12.87500 GHz
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Marker 1 [T1]
-43.54 dBm
21.79437 GHz
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Marker 1 [T1]
-43.95 dBm
37.75750 GHz
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Marker 1 [T1]
4.43 dBm
5.83125 GHz
Marker 2 [T1]
-44.35 dBm
5.60000 GHz
Marker 3 [T1]
-50.77 dBm
12.87813 GHz
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Marker 1 [T1]
-55.47 dBm
24.98275 GHz
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Marker 1 [T1]
-54.23 dBm
37.81750 GHz
Start 25 GHz
1.5 GHz/
Stop 40 GHz

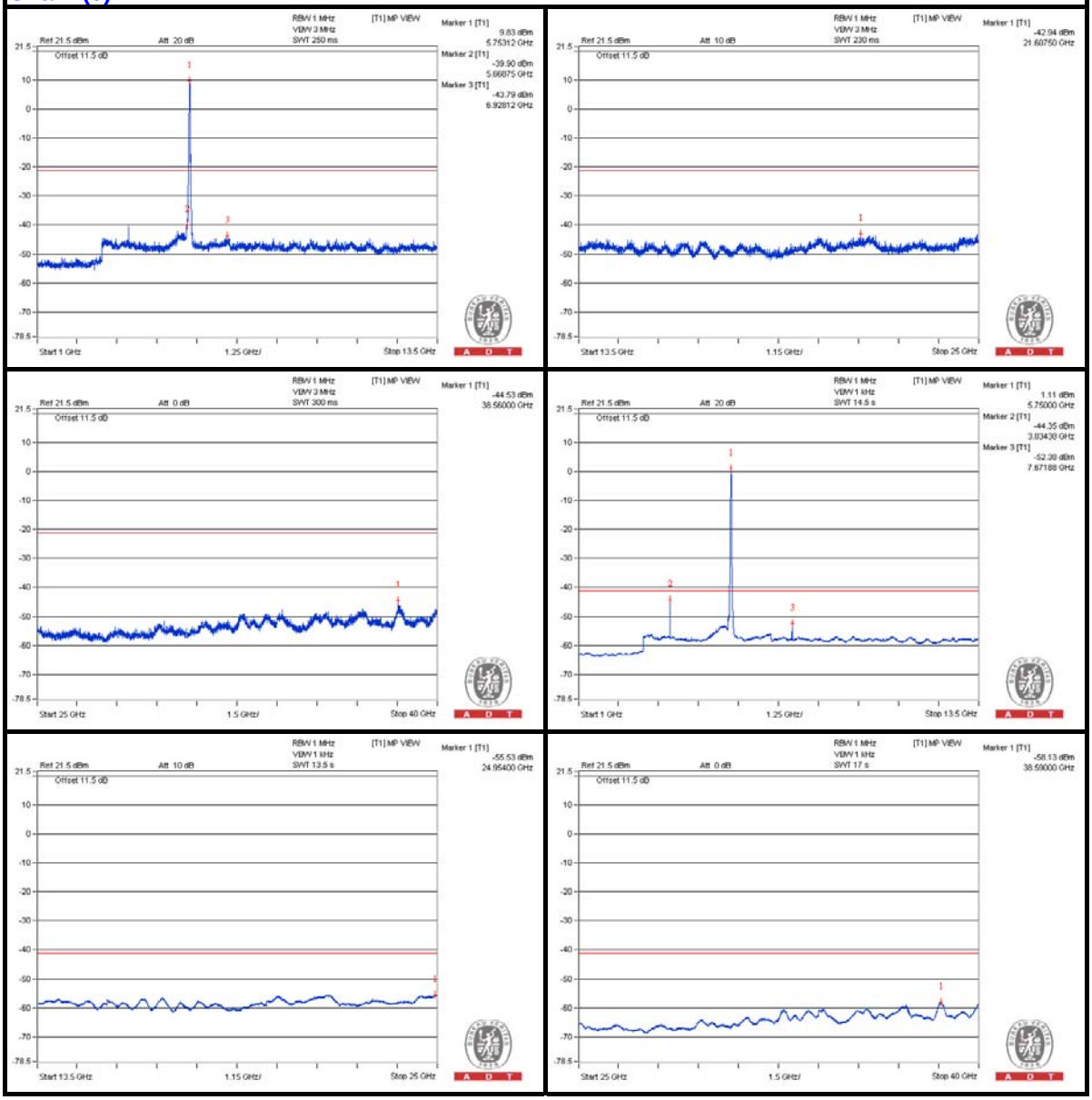
802.11n(HT40) – Channel 151

Conducted spurious emission table

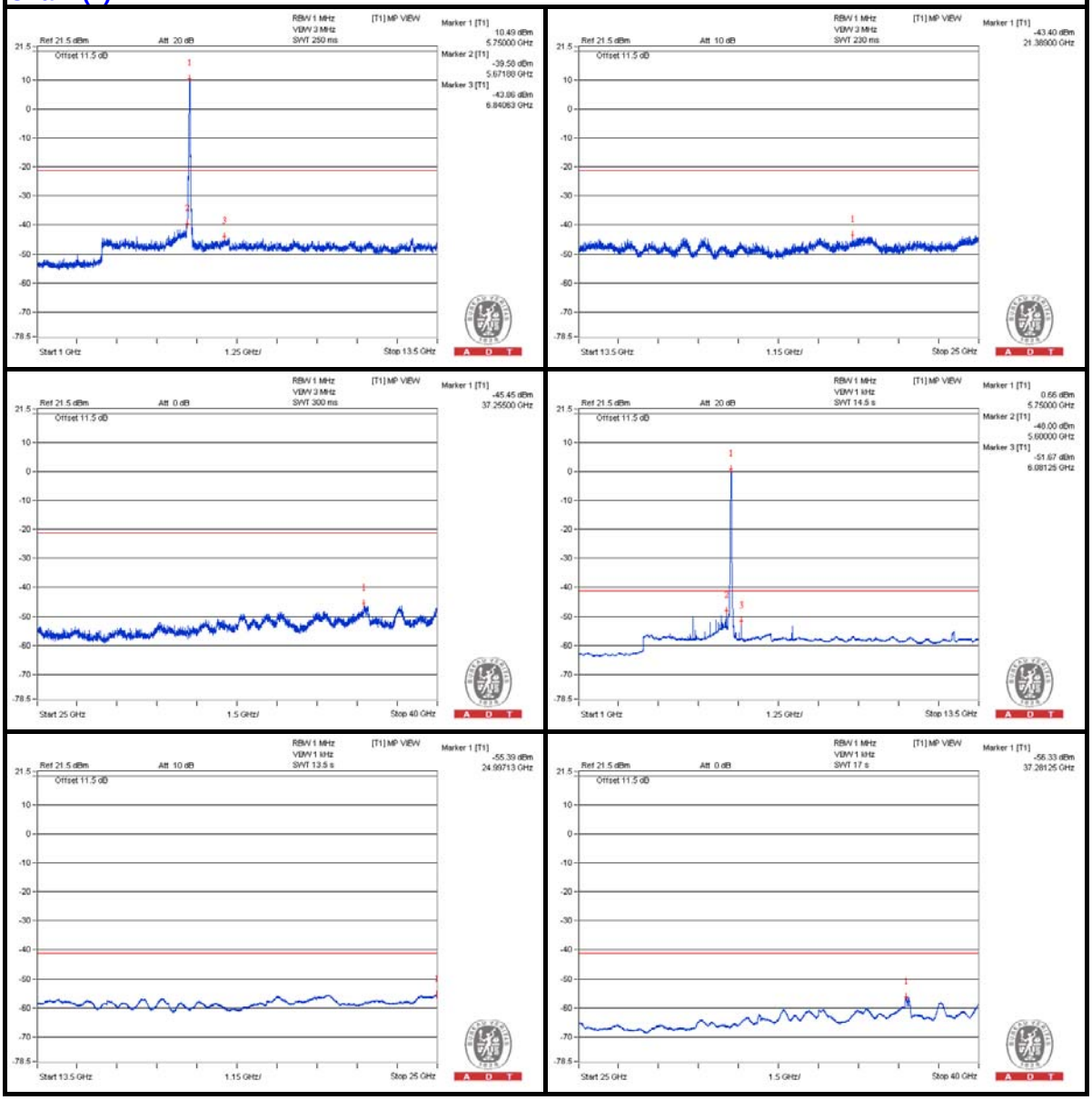
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3837.5 PK	63.68	74	-10.32	-40.29	-46.56	7.79	-31.58
2	3834.375 AV	58.99	54	* 4.99	-44.35	-55.94	7.79	-36.27
3	7675 PK	59.24	74	-14.76	-46.18	-47.58	7.79	-36.02
4	7671.875 AV	53.2	54	-0.8	-52.38	-53.41	7.79	-42.06
5	11509.375 PK	59.2	74	-14.8	-45.94	-48.02	7.79	-36.06
6	11518.75 AV	48.09	54	-5.91	-57.75	-58.21	7.79	-47.17

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
9.83 dBm
5.75312 GHz
Marker 2 [T1]
-39.90 dBm
5.66875 GHz
Marker 3 [T1]
-43.79 dBm
6.92812 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-42.94 dBm
21.60750 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-44.53 dBm
38.56000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
1.11 dBm
5.75000 GHz
Marker 2 [T1]
-44.35 dBm
3.80430 GHz
Marker 3 [T1]
-52.38 dBm
7.67188 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.53 dBm
24.95400 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-58.13 dBm
38.59000 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
10.49 dBm
5.75000 GHz
Marker 2 [T1]
-39.58 dBm
5.67188 GHz
Marker 3 [T1]
-43.06 dBm
6.84063 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Marker 1 [T1]
-43.40 dBm
21.38900 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-45.45 dBm
37.25500 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
0.66 dBm
5.75000 GHz
Marker 2 [T1]
-40.00 dBm
5.60000 GHz
Marker 3 [T1]
-51.67 dBm
6.08125 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.39 dBm
24.99713 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-56.33 dBm
37.28125 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

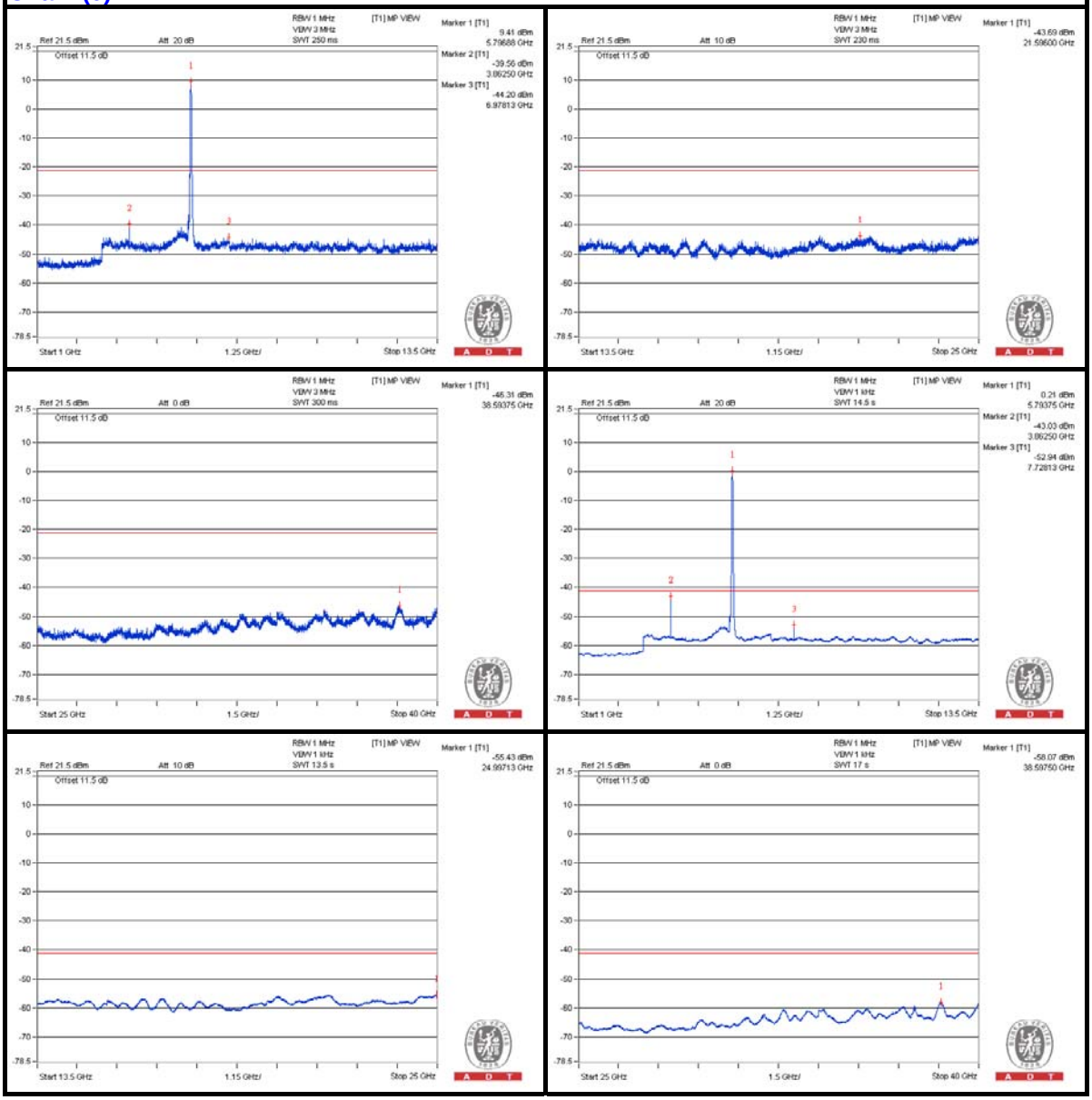
802.11n(HT40) – Channel 159

Conducted spurious emission table

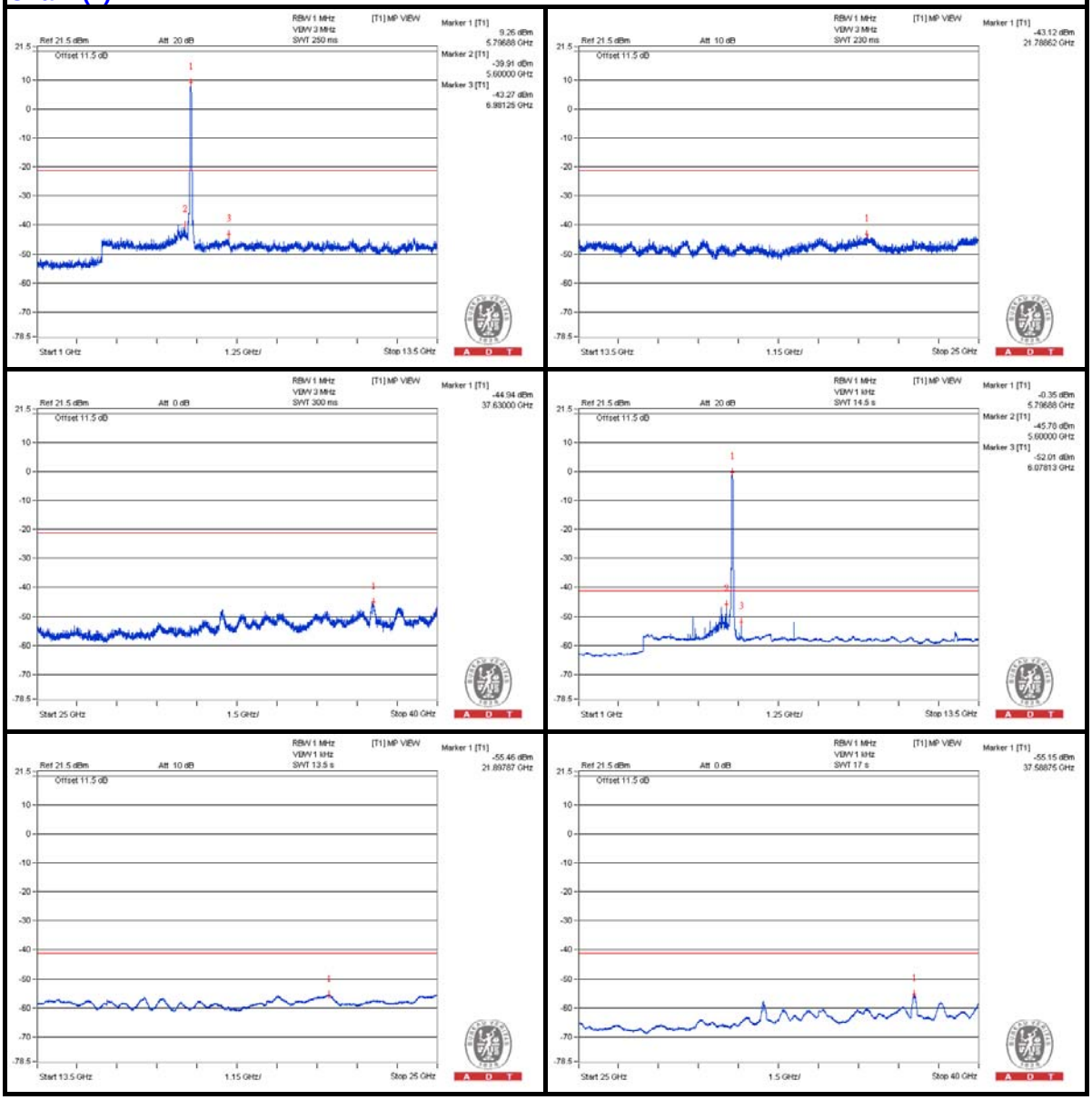
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3862.5 PK	64.28	74	-9.72	-39.56	-46.56	7.79	-30.98
2	3862.5 AV	60.23	54	* 6.23	-43.03	-56.04	7.79	-35.03
3	7728.125 PK	60.68	74	-13.32	-44.75	-46.12	7.79	-34.58
4	7728.125 AV	53.6	54	-0.4	-52.94	-52.02	7.79	-41.66
5	11584.375 PK	58.93	74	-15.07	-46.64	-47.69	7.79	-36.33
6	11587.5 AV	47.66	54	-6.34	-58.32	-58.48	7.79	-47.6

Note :
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
* The unwanted emission was verified and the test result was passed by radiated measurement. (Please refer APPENDIX A)

Chain (0)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Marker 1 [T1]
9.41 dBm
5.79688 GHz
Marker 2 [T1]
-39.56 dBm
3.86250 GHz
Marker 3 [T1]
-44.20 dBm
6.97813 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 220 ms
[T1] MP VIEW
Marker 1 [T1]
-43.69 dBm
21.59600 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Marker 1 [T1]
-46.31 dBm
38.59375 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Marker 1 [T1]
0.21 dBm
5.79375 GHz
Marker 2 [T1]
-43.03 dBm
3.86250 GHz
Marker 3 [T1]
-52.94 dBm
7.72813 GHz
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Marker 1 [T1]
-55.43 dBm
24.99713 GHz
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Marker 1 [T1]
-58.07 dBm
38.59750 GHz
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Start 25 GHz
1.5 GHz/
Stop 40 GHz

Chain (1)


RBW 1 MHz
VBW 3 MHz
SWT 250 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Marker 1 [T1]
9.26 dBm
5.79688 GHz
Marker 2 [T1]
-39.91 dBm
5.60000 GHz
Marker 3 [T1]
-43.27 dBm
6.88125 GHz
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 3 MHz
SWT 230 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Marker 1 [T1]
-43.12 dBm
21.78862 GHz
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 3 MHz
SWT 300 ms
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Marker 1 [T1]
-44.94 dBm
37.63000 GHz
Start 25 GHz
1.5 GHz/
Stop 40 GHz
RBW 1 MHz
VBW 1 kHz
SWT 14.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 20 dB
Offset 11.5 dB
Marker 1 [T1]
-0.35 dBm
5.79688 GHz
Marker 2 [T1]
-45.70 dBm
5.60000 GHz
Marker 3 [T1]
-52.01 dBm
6.07813 GHz
Start 1 GHz
1.25 GHz/
Stop 13.5 GHz
RBW 1 MHz
VBW 1 kHz
SWT 13.5 s
[T1] MP VIEW
Ref 21.5 dBm
Att 10 dB
Offset 11.5 dB
Marker 1 [T1]
-55.46 dBm
21.89787 GHz
Start 13.5 GHz
1.15 GHz/
Stop 25 GHz
RBW 1 MHz
VBW 1 kHz
SWT 17 s
[T1] MP VIEW
Ref 21.5 dBm
Att 0 dB
Offset 11.5 dB
Marker 1 [T1]
-55.15 dBm
37.58875 GHz
Start 25 GHz
1.5 GHz/
Stop 40 GHz

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

7. 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.

8. APPENDIX A - RADIATED EMISSION MEASUREMENT(FOR 5GHZ, 5725~5850MHZ BAND)

8.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

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

8.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY51210105	Jan. 29, 2013	Jan. 28, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 13, 2013	Nov. 12, 2014
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Mar. 19, 2013	Mar. 18, 2014
RF Cable	NA	CHGCAB_001	Oct. 05, 2013	Oct. 04, 2014
Spectrum Analyzer R&S	FSV40	100964	July 15, 2013	July 14, 2014
Horn_Antenna AISI	AIH.8018	0000320091110	Nov. 18, 2013	Nov. 17, 2014
Pre-Amplifier Agilent	8449B	3008A02578	June 25, 2013	June 24, 2014
RF Cable	NA	RF104-201 RF104-203 RF104-204	Dec. 12, 2013	Dec. 11, 2014
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 13, 2013	Nov. 12, 2014
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 08, 2013	Oct. 07, 2014
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The 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. G.
4. The FCC Site Registration No. is 966073.
5 The VCCI Site Registration No. is G-137.
6 The CANADA Site Registration No. is IC 7450H-2.
7 Tested Date: Jan. 13, 2014

8.1.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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.

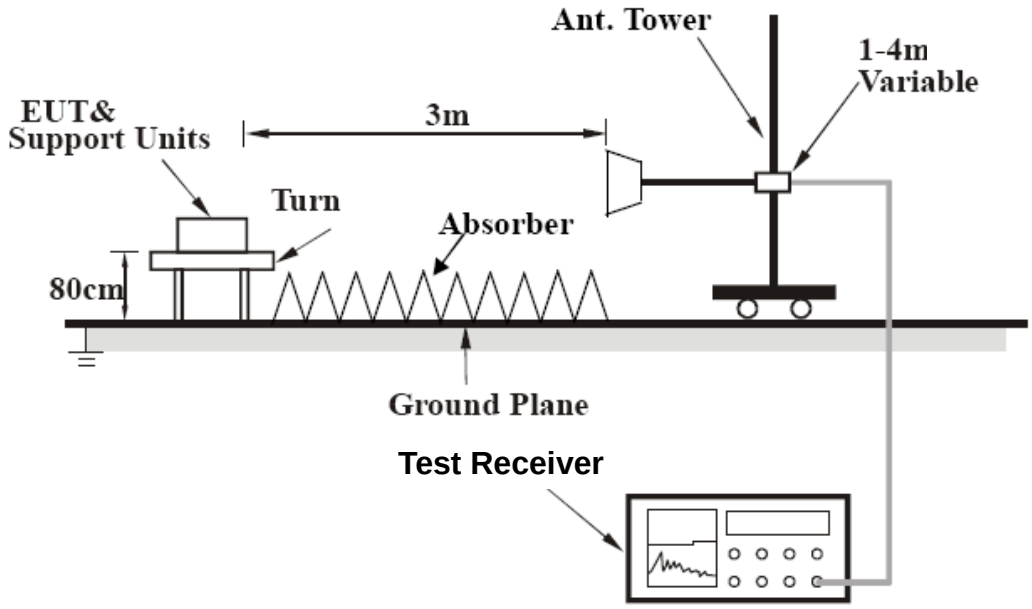
NOTE:

1. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

8.1.4 DEVIATION FROM TEST STANDARD

No deviation

8.1.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

8.1.6 EUT OPERATING CONDITIONS

1. Connect the EUT with the support unit 1 (Notebook Computer) which is placed on a testing table.
2. The communication partner run test program “artgui.exe [art2 ver 4 4 2g CUS227]” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

8.1.7 TEST RESULTS (MODE 1)

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) 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	3830.00	47.8 PK	74.0	-26.2	1.04 H	46	45.10	2.70
2	3830.00	38.4 AV	54.0	-15.6	1.04 H	46	35.70	2.70
3	7660.00	57.5 PK	74.0	-16.5	1.24 H	72	43.30	14.20
4	7660.00	47.0 AV	54.0	-7.0	1.24 H	72	32.80	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	48.7 PK	74.0	-25.3	1.62 V	263	46.00	2.70
2	3830.00	39.2 AV	54.0	-14.8	1.62 V	263	36.50	2.70
3	7660.00	49.6 PK	74.0	-24.4	1.37 V	314	35.40	14.20
4	7660.00	40.4 AV	54.0	-13.6	1.37 V	314	26.20	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) 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	3856.67	48.0 PK	74.0	-26.0	1.02 H	43	45.20	2.80
2	3856.67	38.7 AV	54.0	-15.3	1.02 H	43	35.90	2.80
3	7713.33	57.6 PK	74.0	-16.4	1.28 H	66	43.50	14.10
4	7713.33	47.3 AV	54.0	-6.7	1.28 H	66	33.20	14.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3856.67	49.0 PK	74.0	-25.0	1.64 V	252	46.20	2.80
2	3856.67	39.2 AV	54.0	-14.8	1.64 V	252	36.40	2.80
3	7713.33	49.3 PK	74.0	-24.7	1.40 V	309	35.20	14.10
4	7713.33	40.3 AV	54.0	-13.7	1.40 V	309	26.20	14.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) 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	3883.33	47.6 PK	74.0	-26.4	1.05 H	54	44.60	3.00
2	3883.33	38.4 AV	54.0	-15.6	1.05 H	54	35.40	3.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3883.33	48.4 PK	74.0	-25.6	1.57 V	250	45.40	3.00
2	3883.33	39.1 AV	54.0	-14.9	1.57 V	250	36.10	3.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

802.11n (HT20)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) 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	3830.00	48.2 PK	74.0	-25.8	1.09 H	36	45.50	2.70
2	3830.00	38.6 AV	54.0	-15.4	1.09 H	36	35.90	2.70
3	7660.00	57.9 PK	74.0	-16.1	1.28 H	62	43.70	14.20
4	7660.00	47.4 AV	54.0	-6.6	1.28 H	62	33.20	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	49.0 PK	74.0	-25.0	1.64 V	275	46.30	2.70
2	3830.00	39.6 AV	54.0	-14.4	1.64 V	275	36.90	2.70
3	7660.00	49.7 PK	74.0	-24.3	1.34 V	301	35.50	14.20
4	7660.00	40.5 AV	54.0	-13.5	1.34 V	301	26.30	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) 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	3856.67	47.5 PK	74.0	-26.5	1.02 H	49	44.70	2.80
2	3856.67	38.4 AV	54.0	-15.6	1.02 H	49	35.60	2.80
3	7713.33	57.3 PK	74.0	-16.7	1.21 H	87	43.20	14.10
4	7713.33	46.9 AV	54.0	-7.1	1.21 H	87	32.80	14.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3856.67	49.2 PK	74.0	-24.8	1.62 V	248	46.40	2.80
2	3856.67	39.6 AV	54.0	-14.4	1.62 V	248	36.80	2.80
3	7713.33	49.4 PK	74.0	-24.6	1.37 V	311	35.30	14.10
4	7713.33	40.1 AV	54.0	-13.9	1.37 V	311	26.00	14.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) 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	3883.33	48.3 PK	74.0	-25.7	1.00 H	52	45.30	3.00
2	3883.33	38.9 AV	54.0	-15.1	1.00 H	52	35.90	3.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3883.33	48.8 PK	74.0	-25.2	1.57 V	275	45.80	3.00
2	3883.33	39.1 AV	54.0	-14.9	1.57 V	275	36.10	3.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

802.11n (HT40)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) 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	3836.67	48.5 PK	74.0	-25.5	1.04 H	34	45.80	2.70
2	3836.67	38.9 AV	54.0	-15.1	1.04 H	34	36.20	2.70
3	7673.30	57.9 PK	74.0	-16.1	1.21 H	57	43.70	14.20
4	7673.30	47.4 AV	54.0	-6.6	1.21 H	57	33.20	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3836.67	48.1 PK	74.0	-25.9	1.58 V	250	45.40	2.70
2	3836.67	38.8 AV	54.0	-15.2	1.58 V	250	36.10	2.70
3	7673.30	48.9 PK	74.0	-25.1	1.37 V	303	34.70	14.20
4	7673.30	40.0 AV	54.0	-14.0	1.37 V	303	25.80	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) 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	3863.30	48.1 PK	74.0	-25.9	1.01 H	59	45.30	2.80
2	3863.30	38.7 AV	54.0	-15.3	1.01 H	59	35.90	2.80
3	7726.60	57.7 PK	74.0	-16.3	1.30 H	65	43.70	14.00
4	7726.60	47.0 AV	54.0	-7.0	1.30 H	65	33.00	14.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3863.30	48.1 PK	74.0	-25.9	1.62 V	265	45.30	2.80
2	3863.30	38.8 AV	54.0	-15.2	1.62 V	265	36.00	2.80
3	7726.60	50.2 PK	74.0	-23.8	1.36 V	298	36.20	14.00
4	7726.60	40.9 AV	54.0	-13.1	1.36 V	298	26.90	14.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

8.1.8 TEST RESULTS (MODE 2)

PIFA Antenna

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) 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	3830.00	50.6 PK	74.0	-23.4	1.34 H	94	47.90	2.70
2	3830.00	43.6 AV	54.0	-10.4	1.34 H	94	40.90	2.70
3	7660.00	59.4 PK	74.0	-14.6	1.00 H	301	45.20	14.20
4	7660.00	48.6 AV	54.0	-5.4	1.00 H	301	34.40	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	48.5 PK	74.0	-25.5	1.60 V	267	45.80	2.70
2	3830.00	39.1 AV	54.0	-14.9	1.60 V	267	36.40	2.70
3	7660.00	58.1 PK	74.0	-15.9	1.36 V	186	43.90	14.20
4	7660.00	45.7 AV	54.0	-8.3	1.36 V	186	31.50	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) 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	3856.67	50.1 PK	74.0	-23.9	1.39 H	100	47.30	2.80
2	3856.67	43.2 AV	54.0	-10.8	1.39 H	100	40.40	2.80
3	7713.33	59.3 PK	74.0	-14.7	1.00 H	289	45.20	14.10
4	7713.33	48.2 AV	54.0	-5.8	1.00 H	289	34.10	14.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3856.67	48.6 PK	74.0	-25.4	1.61 V	262	45.80	2.80
2	3856.67	39.5 AV	54.0	-14.5	1.61 V	262	36.70	2.80
3	7713.33	58.1 PK	74.0	-15.9	1.41 V	201	44.00	14.10
4	7713.33	46.0 AV	54.0	-8.0	1.41 V	201	31.90	14.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) 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	3883.33	50.9 PK	74.0	-23.1	1.30 H	84	47.90	3.00
2	3883.33	43.9 AV	54.0	-10.1	1.30 H	84	40.90	3.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3883.33	47.8 PK	74.0	-26.2	1.64 V	272	44.80	3.00
2	3883.33	38.7 AV	54.0	-15.3	1.64 V	272	35.70	3.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

802.11n (HT20)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) 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	3830.00	51.2 PK	74.0	-22.8	1.32 H	100	48.50	2.70
2	3830.00	44.0 AV	54.0	-10.0	1.32 H	100	41.30	2.70
3	7660.00	59.6 PK	74.0	-14.4	1.05 H	314	45.40	14.20
4	7660.00	49.1 AV	54.0	-4.9	1.05 H	314	34.90	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	48.9 PK	74.0	-25.1	1.56 V	262	46.20	2.70
2	3830.00	39.3 AV	54.0	-14.7	1.56 V	262	36.60	2.70
3	7660.00	58.3 PK	74.0	-15.7	1.31 V	185	44.10	14.20
4	7660.00	45.7 AV	54.0	-8.3	1.31 V	185	31.50	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) 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	3856.67	51.1 PK	74.0	-22.9	1.30 H	105	48.30	2.80
2	3856.67	43.9 AV	54.0	-10.1	1.30 H	105	41.10	2.80
3	7713.33	59.3 PK	74.0	-14.7	1.00 H	300	45.20	14.10
4	7713.33	48.4 AV	54.0	-5.6	1.00 H	300	34.30	14.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3856.67	48.8 PK	74.0	-25.2	1.56 V	269	46.00	2.80
2	3856.67	39.5 AV	54.0	-14.5	1.56 V	269	36.70	2.80
3	7713.33	58.0 PK	74.0	-16.0	1.38 V	193	43.90	14.10
4	7713.33	45.6 AV	54.0	-8.4	1.38 V	193	31.50	14.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) 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	3883.33	51.1 PK	74.0	-22.9	1.39 H	109	48.10	3.00
2	3883.33	44.0 AV	54.0	-10.0	1.39 H	109	41.00	3.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3883.33	47.9 PK	74.0	-26.1	1.62 V	273	44.90	3.00
2	3883.33	38.7 AV	54.0	-15.3	1.62 V	273	35.70	3.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

802.11n (HT40)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) 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	3836.67	50.1 PK	74.0	-23.9	1.39 H	98	47.40	2.70
2	3836.67	43.3 AV	54.0	-10.7	1.39 H	98	40.60	2.70
3	7673.30	59.6 PK	74.0	-14.4	1.01 H	294	45.40	14.20
4	7673.30	49.1 AV	54.0	-4.9	1.01 H	294	34.90	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3836.67	48.7 PK	74.0	-25.3	1.63 V	263	46.00	2.70
2	3836.67	39.3 AV	54.0	-14.7	1.63 V	263	36.60	2.70
3	7673.30	58.6 PK	74.0	-15.4	1.36 V	198	44.40	14.20
4	7673.30	46.2 AV	54.0	-7.8	1.36 V	198	32.00	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) 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	3863.30	50.8 PK	74.0	-23.2	1.38 H	84	48.00	2.80
2	3863.30	44.0 AV	54.0	-10.0	1.38 H	84	41.20	2.80
3	7726.60	59.9 PK	74.0	-14.1	1.04 H	298	45.90	14.00
4	7726.60	49.0 AV	54.0	-5.0	1.04 H	298	35.00	14.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3863.30	48.8 PK	74.0	-25.2	1.59 V	281	46.00	2.80
2	3863.30	39.4 AV	54.0	-14.6	1.59 V	281	36.60	2.80
3	7726.60	58.8 PK	74.0	-15.2	1.39 V	198	44.80	14.00
4	7726.60	46.1 AV	54.0	-7.9	1.39 V	198	32.10	14.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

MONOPOLE Antenna

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) 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	3830.00	48.3 PK	74.0	-25.7	1.00 H	69	45.60	2.70
2	3830.00	39.0 AV	54.0	-15.0	1.00 H	69	36.30	2.70
3	7660.00	58.0 PK	74.0	-16.0	1.32 H	57	43.80	14.20
4	7660.00	46.9 AV	54.0	-7.1	1.32 H	57	32.70	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	48.2 PK	74.0	-25.8	1.63 V	264	45.50	2.70
2	3830.00	38.9 AV	54.0	-15.1	1.63 V	264	36.20	2.70
3	7660.00	48.8 PK	74.0	-25.2	1.39 V	304	34.60	14.20
4	7660.00	39.9 AV	54.0	-14.1	1.39 V	304	25.70	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) 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	3856.67	48.0 PK	74.0	-26.0	1.00 H	66	45.20	2.80
2	3856.67	38.6 AV	54.0	-15.4	1.00 H	66	35.80	2.80
3	7713.33	57.9 PK	74.0	-16.1	1.34 H	73	43.80	14.10
4	7713.33	46.7 AV	54.0	-7.3	1.34 H	73	32.60	14.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3856.67	48.4 PK	74.0	-25.6	1.66 V	253	45.60	2.80
2	3856.67	38.9 AV	54.0	-15.1	1.66 V	253	36.10	2.80
3	7713.33	48.2 PK	74.0	-25.8	1.42 V	314	34.10	14.10
4	7713.33	39.5 AV	54.0	-14.5	1.42 V	314	25.40	14.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) 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	3883.33	48.0 PK	74.0	-26.0	1.01 H	83	45.00	3.00
2	3883.33	38.8 AV	54.0	-15.2	1.01 H	83	35.80	3.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3883.33	48.5 PK	74.0	-25.5	1.65 V	252	45.50	3.00
2	3883.33	39.2 AV	54.0	-14.8	1.65 V	252	36.20	3.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

802.11n (HT20)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) 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	3830.00	48.5 PK	74.0	-25.5	1.02 H	67	45.80	2.70
2	3830.00	39.2 AV	54.0	-14.8	1.02 H	67	36.50	2.70
3	7660.00	58.1 PK	74.0	-15.9	1.26 H	49	43.90	14.20
4	7660.00	46.8 AV	54.0	-7.2	1.26 H	49	32.60	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	47.7 PK	74.0	-26.3	1.65 V	275	45.00	2.70
2	3830.00	38.5 AV	54.0	-15.5	1.65 V	275	35.80	2.70
3	7660.00	48.6 PK	74.0	-25.4	1.45 V	316	34.40	14.20
4	7660.00	39.5 AV	54.0	-14.5	1.45 V	316	25.30	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) 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	3856.67	48.6 PK	74.0	-25.4	1.00 H	79	45.80	2.80
2	3856.67	39.1 AV	54.0	-14.9	1.00 H	79	36.30	2.80
3	7713.33	57.8 PK	74.0	-16.2	1.31 H	44	43.70	14.10
4	7713.33	47.0 AV	54.0	-7.0	1.31 H	44	32.90	14.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3856.67	48.2 PK	74.0	-25.8	1.63 V	267	45.40	2.80
2	3856.67	39.2 AV	54.0	-14.8	1.63 V	267	36.40	2.80
3	7713.33	48.0 PK	74.0	-26.0	1.39 V	318	33.90	14.10
4	7713.33	39.4 AV	54.0	-14.6	1.39 V	318	25.30	14.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) 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	3883.33	47.8 PK	74.0	-26.2	1.01 H	65	44.80	3.00
2	3883.33	38.6 AV	54.0	-15.4	1.01 H	65	35.60	3.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3883.33	47.9 PK	74.0	-26.1	1.59 V	271	44.90	3.00
2	3883.33	38.4 AV	54.0	-15.6	1.59 V	271	35.40	3.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

802.11n (HT40)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) 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	3836.67	48.3 PK	74.0	-25.7	1.00 H	72	45.60	2.70
2	3836.67	38.8 AV	54.0	-15.2	1.00 H	72	36.10	2.70
3	7673.30	58.1 PK	74.0	-15.9	1.30 H	42	43.90	14.20
4	7673.30	46.8 AV	54.0	-7.2	1.30 H	42	32.60	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3836.67	47.9 PK	74.0	-26.1	1.58 V	257	45.20	2.70
2	3836.67	38.8 AV	54.0	-15.2	1.58 V	257	36.10	2.70
3	7673.30	48.9 PK	74.0	-25.1	1.41 V	295	34.70	14.20
4	7673.30	40.1 AV	54.0	-13.9	1.41 V	295	25.90	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) 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	3863.30	48.4 PK	74.0	-25.6	1.03 H	73	45.60	2.80
2	3863.30	39.1 AV	54.0	-14.9	1.03 H	73	36.30	2.80
3	7726.60	58.1 PK	74.0	-15.9	1.28 H	49	44.10	14.00
4	7726.60	46.7 AV	54.0	-7.3	1.28 H	49	32.70	14.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3863.30	48.6 PK	74.0	-25.4	1.64 V	263	45.80	2.80
2	3863.30	39.3 AV	54.0	-14.7	1.64 V	263	36.50	2.80
3	7726.60	48.8 PK	74.0	-25.2	1.34 V	310	34.80	14.00
4	7726.60	39.8 AV	54.0	-14.2	1.34 V	310	25.80	14.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

DIPOLE Antenna

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) 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	3830.00	50.2 PK	74.0	-23.8	1.34 H	78	47.50	2.70
2	3830.00	43.6 AV	54.0	-10.4	1.34 H	78	40.90	2.70
3	7660.00	57.4 PK	74.0	-16.6	1.00 H	301	43.20	14.20
4	7660.00	45.0 AV	54.0	-9.0	1.00 H	301	30.80	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	52.0 PK	74.0	-22.0	1.41 V	57	49.30	2.70
2	3830.00	46.7 AV	54.0	-7.3	1.41 V	57	44.00	2.70
3	7660.00	58.0 PK	74.0	-16.0	1.00 V	97	43.80	14.20
4	7660.00	46.0 AV	54.0	-8.0	1.00 V	97	31.80	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) 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	3856.67	50.0 PK	74.0	-24.0	1.33 H	66	47.20	2.80
2	3856.67	43.3 AV	54.0	-10.7	1.33 H	66	40.50	2.80
3	7713.33	57.5 PK	74.0	-16.5	1.03 H	289	43.40	14.10
4	7713.33	45.4 AV	54.0	-8.6	1.03 H	289	31.30	14.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3856.67	52.1 PK	74.0	-21.9	1.41 V	56	49.30	2.80
2	3856.67	47.1 AV	54.0	-6.9	1.41 V	56	44.30	2.80
3	7713.33	57.9 PK	74.0	-16.1	1.00 V	90	43.80	14.10
4	7713.33	45.7 AV	54.0	-8.3	1.00 V	90	31.60	14.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) 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	3883.33	49.5 PK	74.0	-24.5	1.33 H	83	46.50	3.00
2	3883.33	43.2 AV	54.0	-10.8	1.33 H	83	40.20	3.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3883.33	53.0 PK	74.0	-21.0	1.41 V	56	50.00	3.00
2	3883.33	47.9 AV	54.0	-6.1	1.41 V	56	44.90	3.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

802.11n (HT20)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) 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	3830.00	50.0 PK	74.0	-24.0	1.39 H	93	47.30	2.70
2	3830.00	43.6 AV	54.0	-10.4	1.39 H	93	40.90	2.70
3	7660.00	57.6 PK	74.0	-16.4	1.05 H	287	43.40	14.20
4	7660.00	45.5 AV	54.0	-8.5	1.05 H	287	31.30	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	51.8 PK	74.0	-22.2	1.45 V	66	49.10	2.70
2	3830.00	46.4 AV	54.0	-7.6	1.45 V	66	43.70	2.70
3	7660.00	58.4 PK	74.0	-15.6	1.00 V	99	44.20	14.20
4	7660.00	46.4 AV	54.0	-7.6	1.00 V	99	32.20	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) 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	3856.67	50.4 PK	74.0	-23.6	1.37 H	66	47.60	2.80
2	3856.67	43.7 AV	54.0	-10.3	1.37 H	66	40.90	2.80
3	7713.33	57.5 PK	74.0	-16.5	1.00 H	308	43.40	14.10
4	7713.33	45.3 AV	54.0	-8.7	1.00 H	308	31.20	14.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3856.67	51.9 PK	74.0	-22.1	1.48 V	62	49.10	2.80
2	3856.67	46.6 AV	54.0	-7.4	1.48 V	62	43.80	2.80
3	7713.33	58.5 PK	74.0	-15.5	1.00 V	85	44.40	14.10
4	7713.33	46.4 AV	54.0	-7.6	1.00 V	85	32.30	14.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) 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	3883.33	49.8 PK	74.0	-24.2	1.34 H	81	46.80	3.00
2	3883.33	43.2 AV	54.0	-10.8	1.34 H	81	40.20	3.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3883.33	51.7 PK	74.0	-22.3	1.41 V	52	48.70	3.00
2	3883.33	46.3 AV	54.0	-7.7	1.41 V	52	43.30	3.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

802.11n (HT40)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) 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	3836.67	50.5 PK	74.0	-23.5	1.29 H	74	47.80	2.70
2	3836.67	43.7 AV	54.0	-10.3	1.29 H	74	41.00	2.70
3	7673.30	57.4 PK	74.0	-16.6	1.02 H	295	43.20	14.20
4	7673.30	44.8 AV	54.0	-9.2	1.02 H	295	30.60	14.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3836.67	52.5 PK	74.0	-21.5	1.39 V	54	49.80	2.70
2	3836.67	47.2 AV	54.0	-6.8	1.39 V	54	44.50	2.70
3	7673.30	59.2 PK	74.0	-14.8	1.54 V	74	45.00	14.20
4	7673.30	48.2 AV	54.0	-5.8	1.54 V	74	34.00	14.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) 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	3863.30	50.0 PK	74.0	-24.0	1.32 H	89	47.20	2.80
2	3863.30	43.5 AV	54.0	-10.5	1.32 H	89	40.70	2.80
3	7726.60	57.3 PK	74.0	-16.7	1.00 H	305	43.30	14.00
4	7726.60	45.0 AV	54.0	-9.0	1.00 H	305	31.00	14.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3863.30	51.6 PK	74.0	-22.4	1.45 V	62	48.80	2.80
2	3863.30	46.3 AV	54.0	-7.7	1.45 V	62	43.50	2.80
3	7726.60	57.8 PK	74.0	-16.2	1.00 V	96	43.80	14.00
4	7726.60	46.0 AV	54.0	-8.0	1.00 V	96	32.00	14.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value

9.APPENDIX B - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

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

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