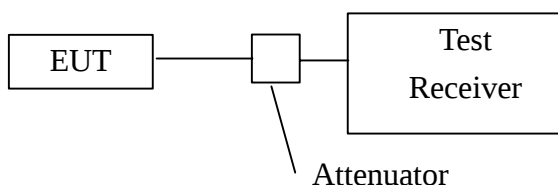


3.6 Radiated Emission on the band edge

According to FCC rules part 15 subpart C §15.247(c) in any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required.

In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.

3.6.1 Test setup



3.6.2 Test results

Mode A

Test conditions		Attenuation at or outside band-edges	
		Lower Band-edge	Upper Band-edge
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	41.84 dB	56.77 dB

Mode B

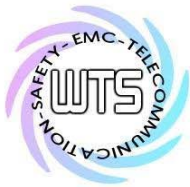
Test conditions		Attenuation at or outside band-edges	
		Lower Band-edge	Upper Band-edge
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	35.04 dB	43.03 dB

Limit:

Frequency Range / MHz	Limit
902 – 928	20 dB
2400 – 2483.5	
5725 - 5850	

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028
ETSTW-RE 030 ETSTW-RE 043 ETSTW-RE 044

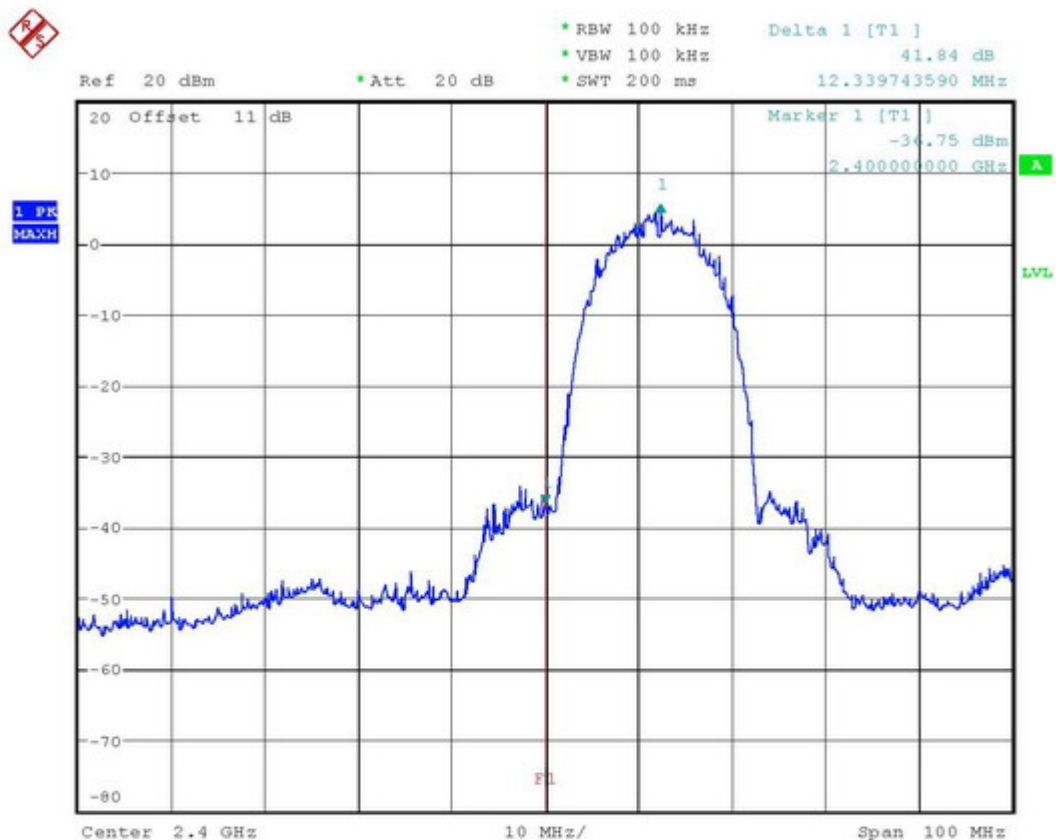
Explanation: Please see attached diagram as appendix.



Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200

3.6.3 Measurement diagrams

Mode A



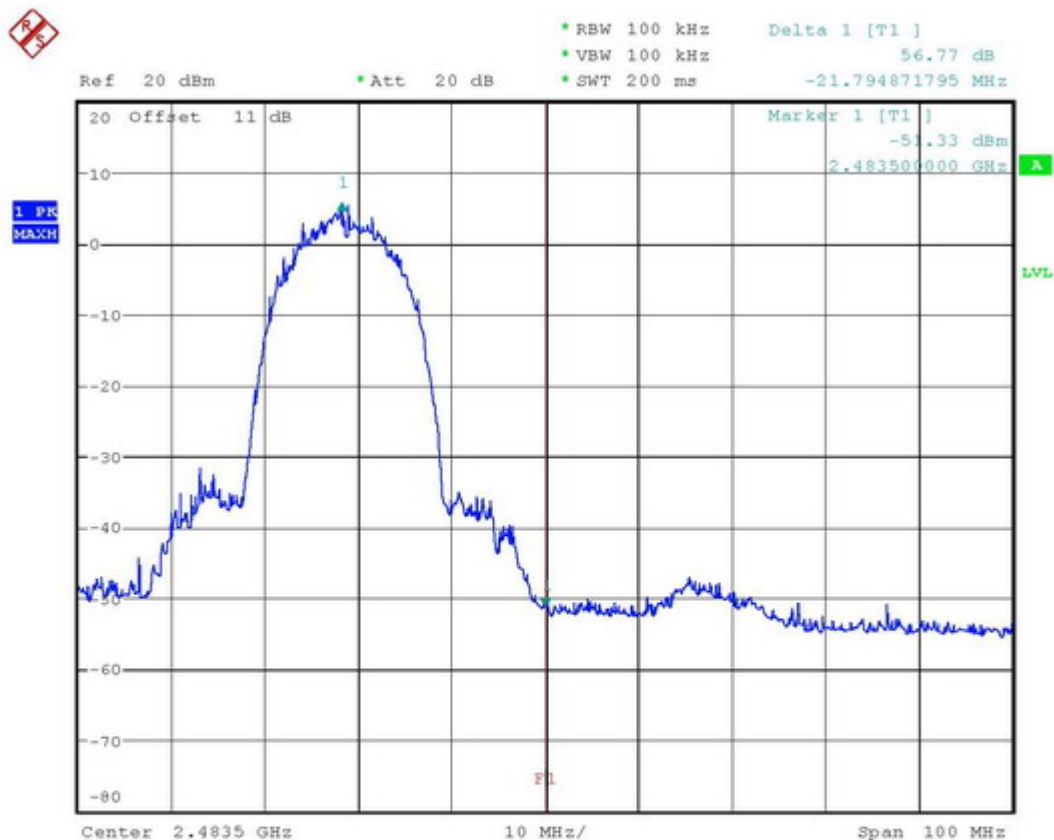
BANDEGE 802.11b CH1
Date: 10.JUL.2008 09:12:40



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1

FCC ID: Q3MMIP200



BANDEDGE #02.11b CH11

Date: 10.JUL.2008 09:11:57

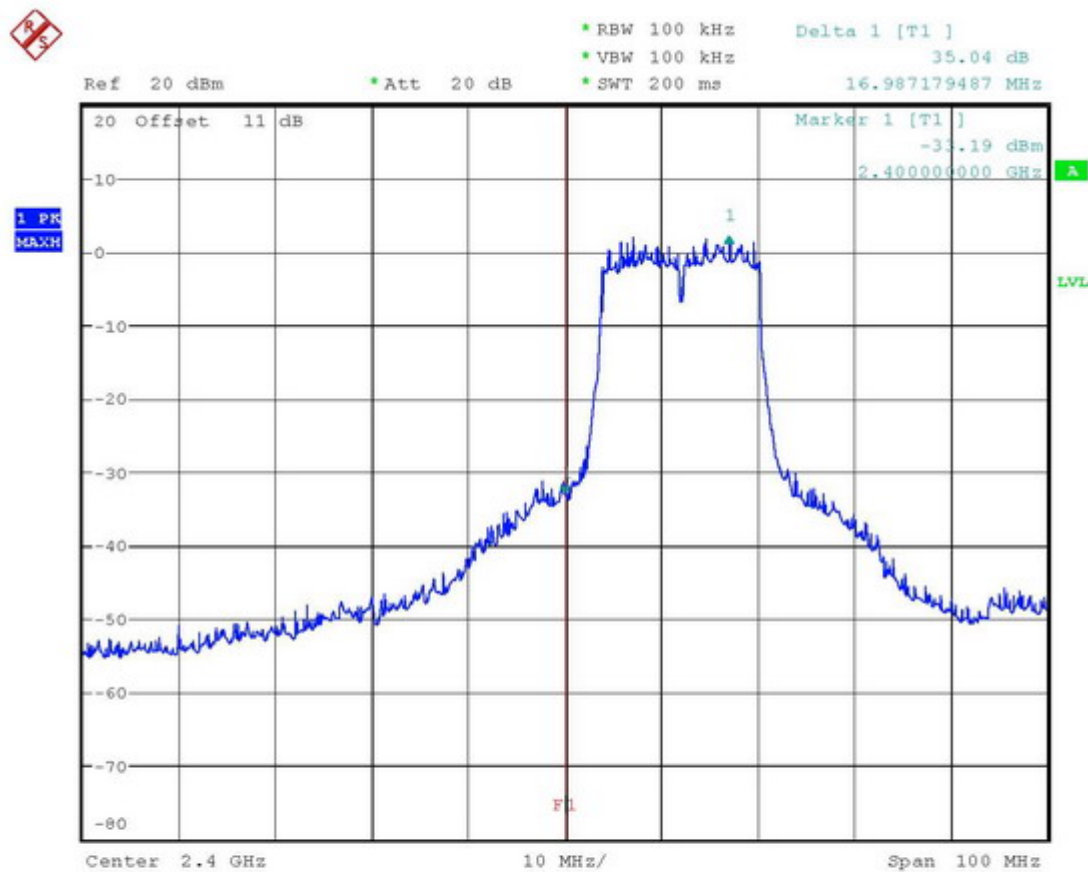


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1

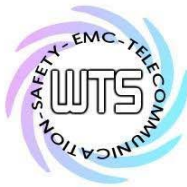
FCC ID: Q3MMIP200

Mode B



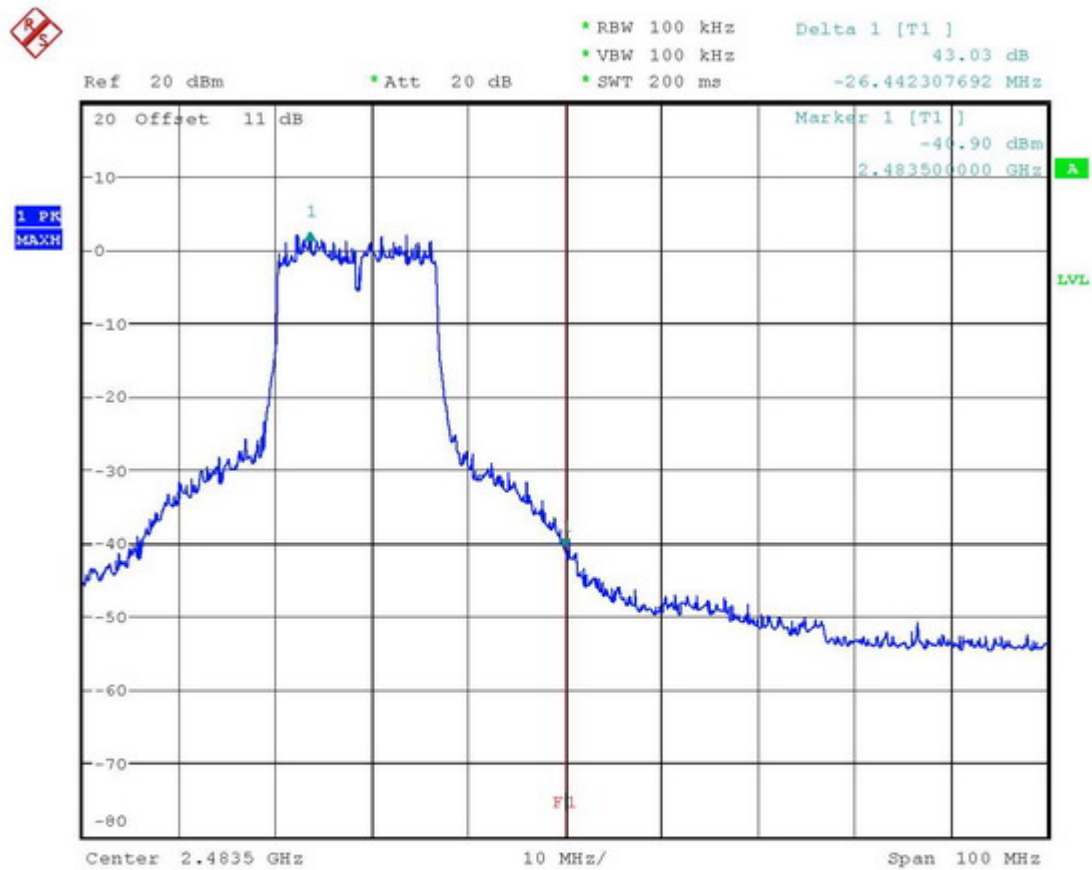
BANDEDGE 802.11g CH1

Date: 10.JUL.2008 09:12:59



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200



BANDEDGE 802.11g CH11
Date: 10.JUL.2008 09:11:26

Registration number: W6M20804-9041-C-1

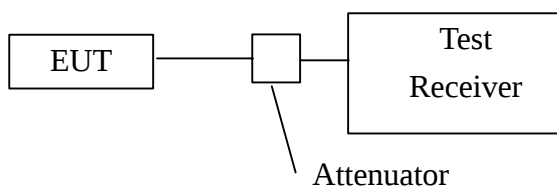
FCC ID: Q3MMIP200

3.7 Minimum 6 dB Bandwidth

The analyzer ResBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK reading was taken, two markers were set 6 dB below the maximum level on the right and the left side of the emission.

The 6 dB bandwidth is the frequency difference between the two markers.

3.7.1 Test setup



3.7.2 Test results

Mode A

Test conditions		6 dB Bandwidth		
		Channel 1	Channel 6	Channel 11
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	9.615384615 MHz	9.615384615 MHz	9.807692308 MHz

Mode B

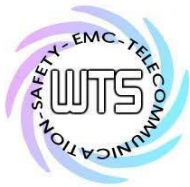
Test conditions		6 dB Bandwidth		
		Channel 1	Channel 6	Channel 11
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120\text{ V}$	16.538461538 MHz	16.538461538 MHz	16.538461538 MHz

Limits:

Frequency Range MHz	Limits
902-928	min 500 kHz
2400-2483.5	min 500 kHz
5725-5850	min 500 kHz

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 055

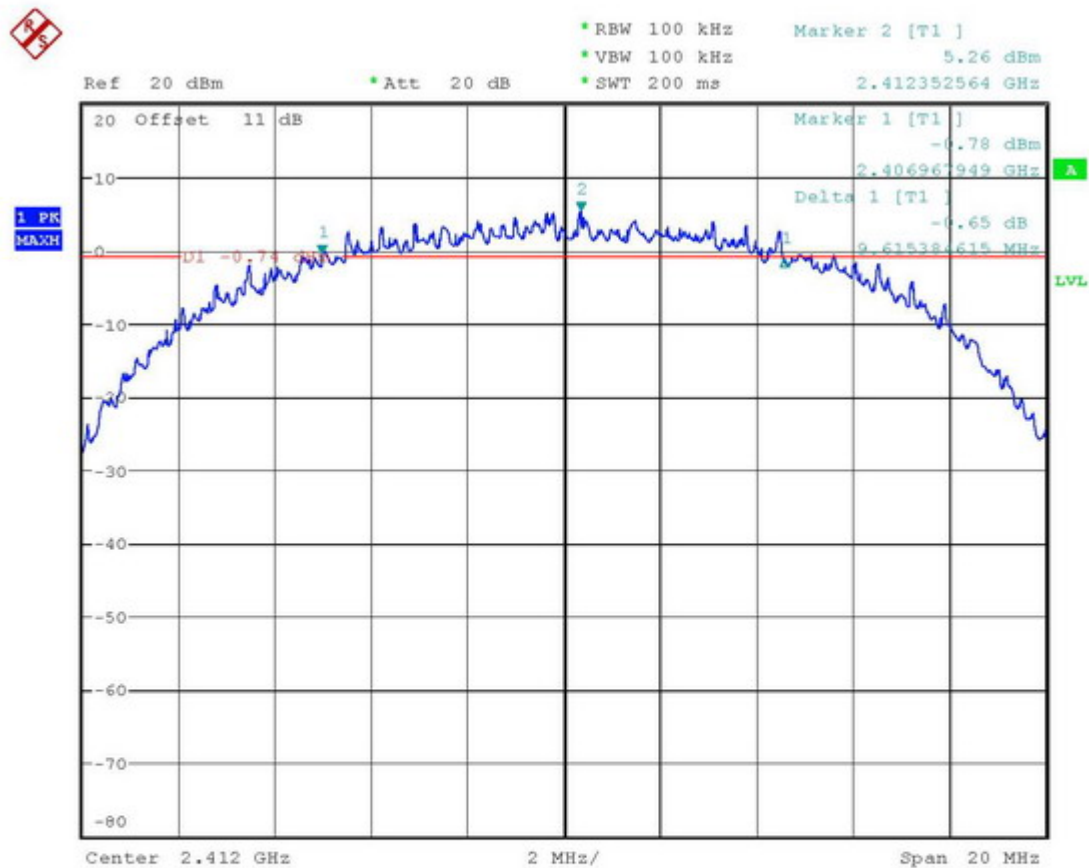
Explanation: See attached diagrams in Appendix.



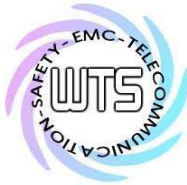
Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200

3.7.3 Measurement diagrams

Mode A

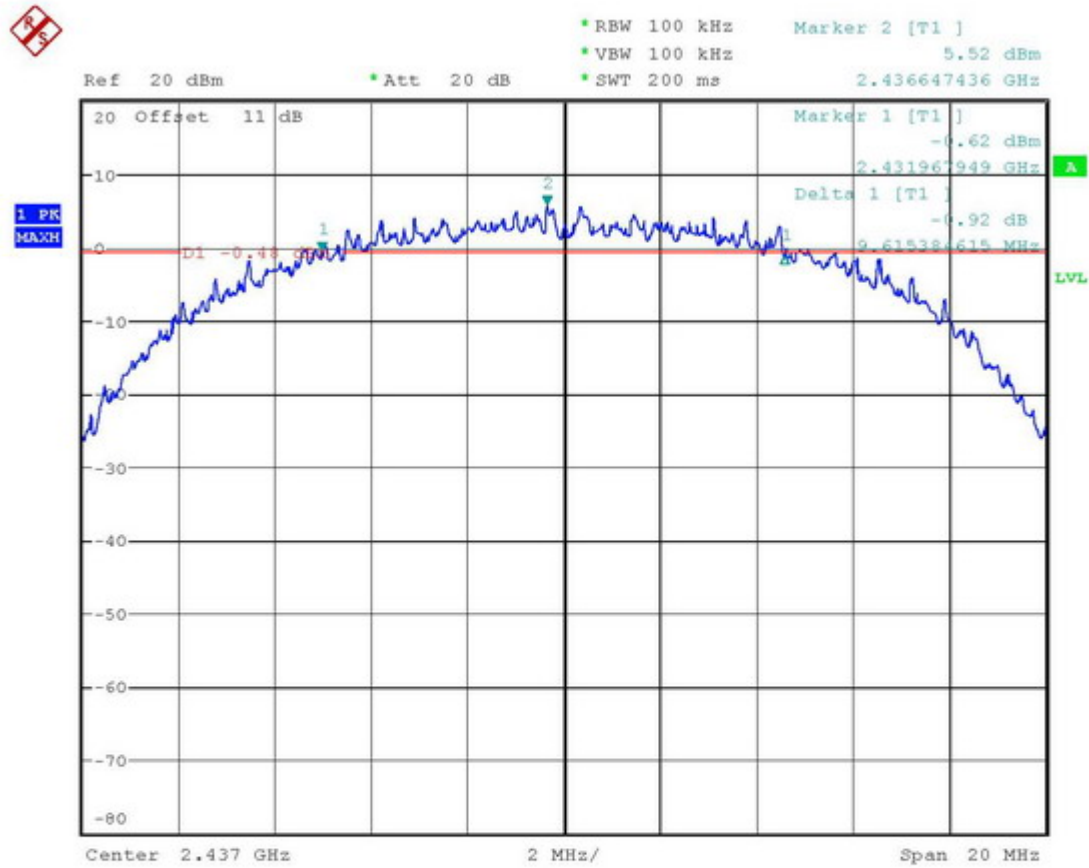


6DB BANDWIDTH 802.11b CH1
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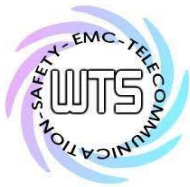


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200

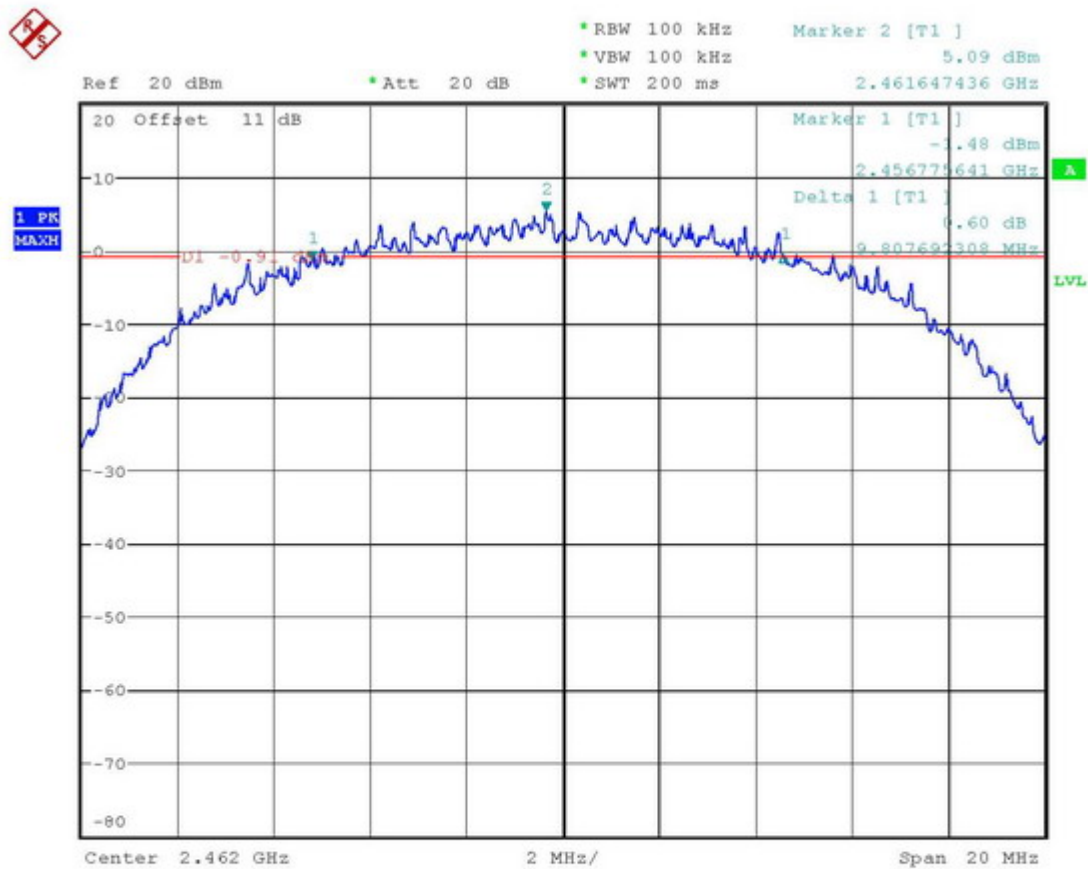


6DB BANDWIDTH 802.11b CH6
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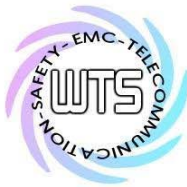


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200



6DB BANDWIDTH 802.11b CH11
Date: 10.JUL.2008 09:21:43

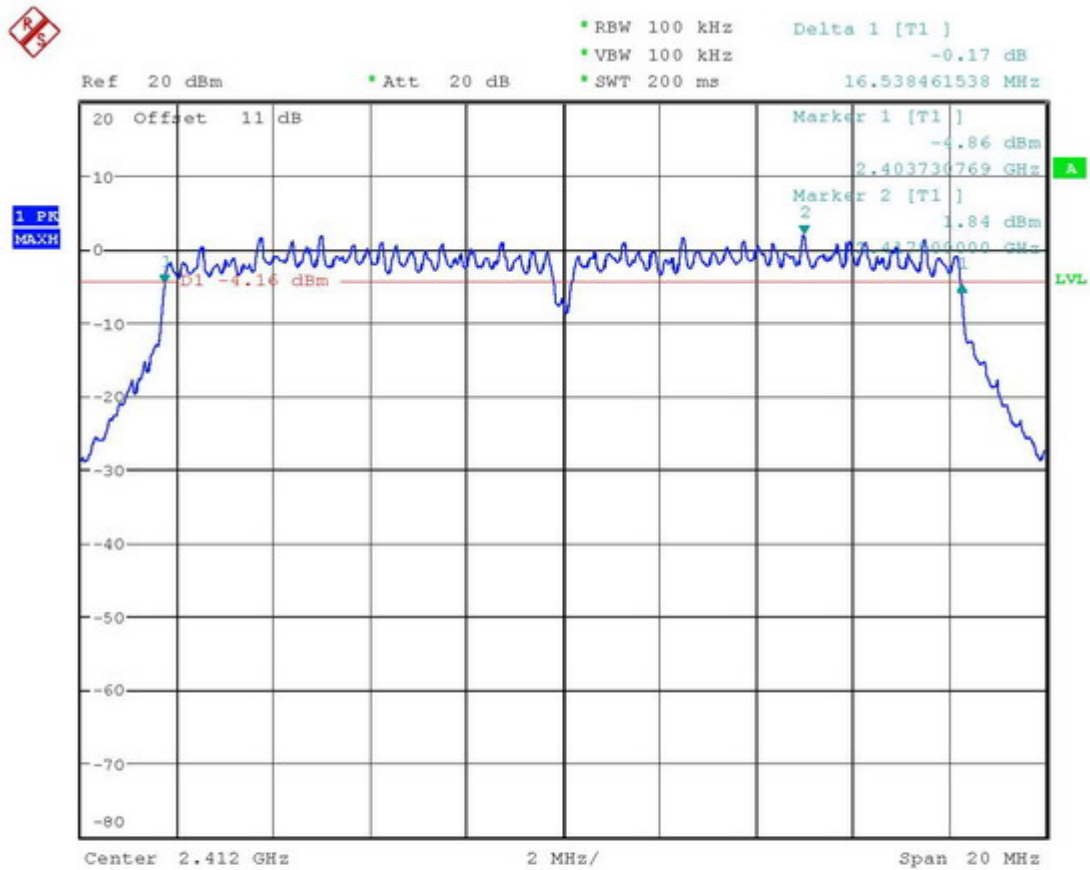


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1

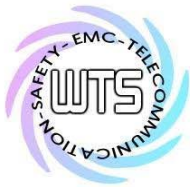
FCC ID: Q3MMIP200

Mode B



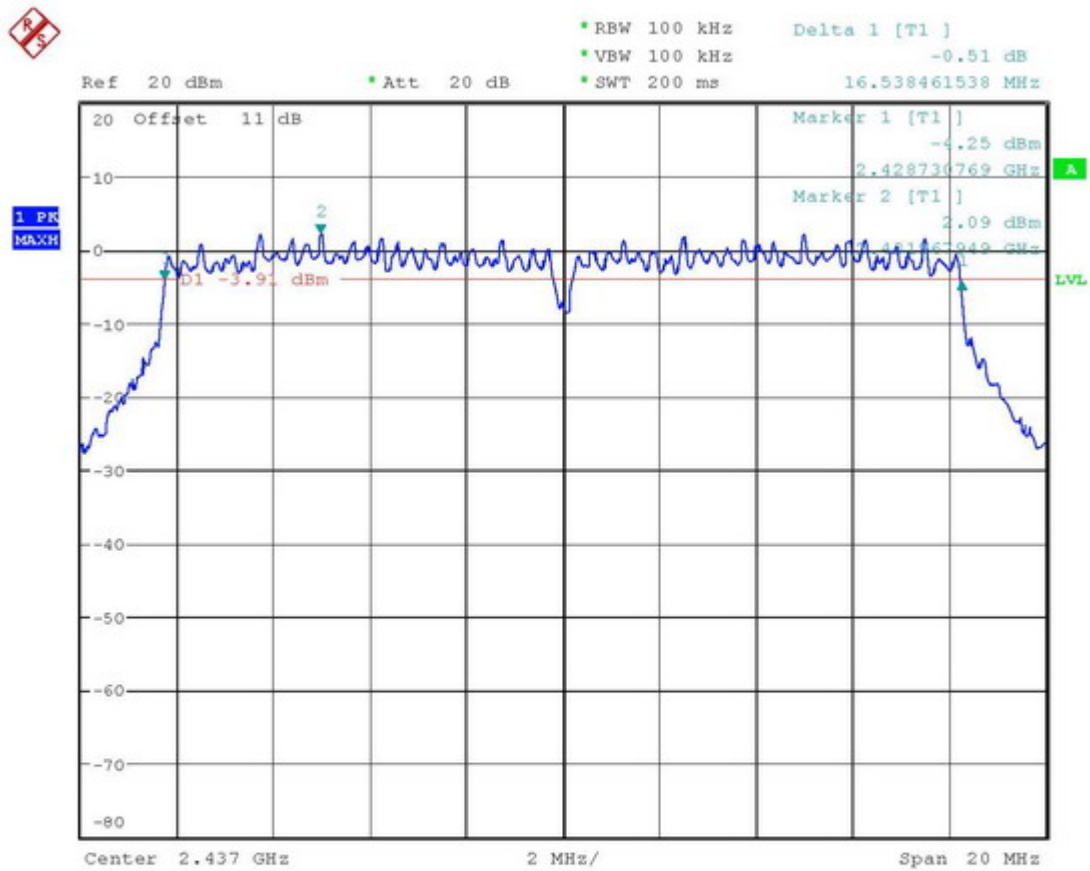
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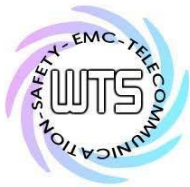


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200

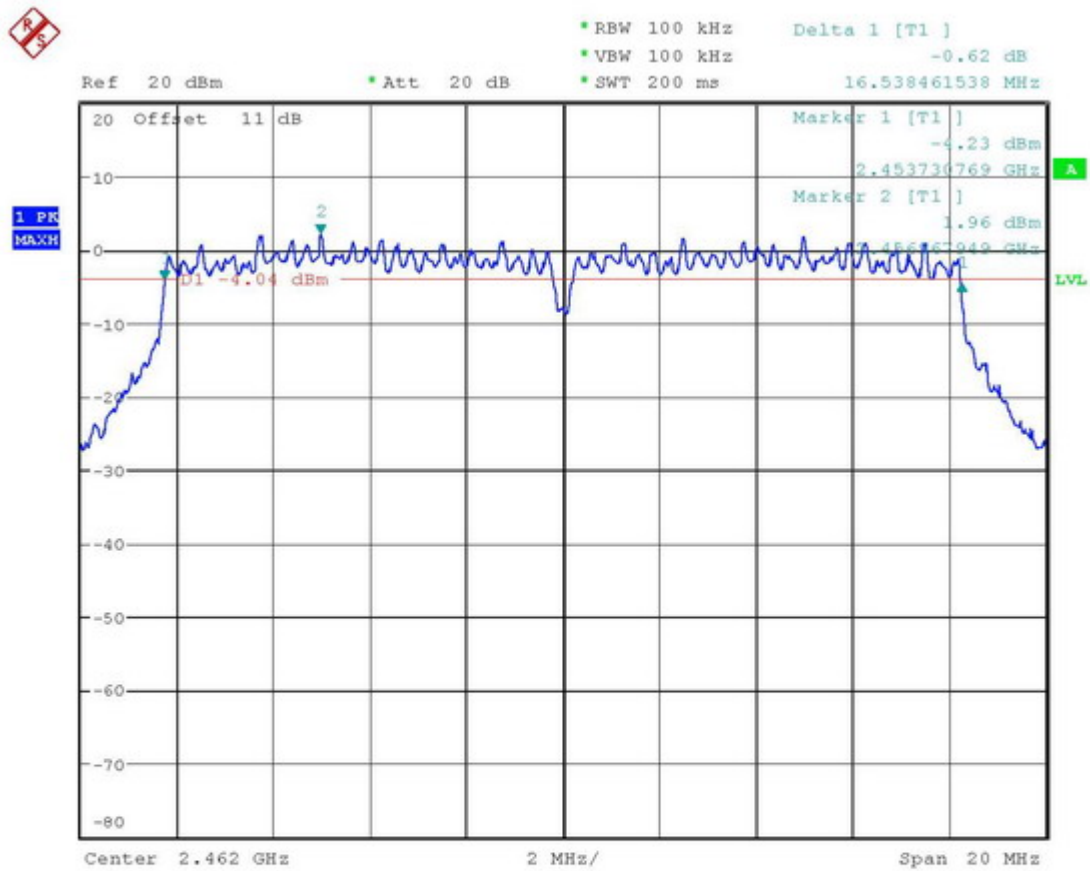


6DB BANDWIDTH 802.11g CH6
Date: 10.JUL.2008 09:24:11



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200



6DB BANDWIDTH 802.11g CH11
Date: 10.JUL.2008 09:23:05

Registration number: W6M20804-9041-C-1

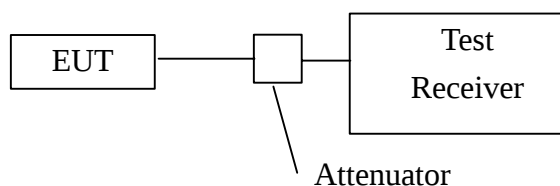
FCC ID: Q3MMIP200

3.8 Peak Power Spectral Density

Peak Power Spectral density is a measured at low, middle and high channel.

The peak output power is measured with a measurement bandwidth of 10 MHz and displayed on diagram together with Peak Power Spectral Density result which was measured with a bandwidth of 3 kHz, appreciate frequency span and sweep time.

3.8.1 Test setup



3.8.2 Test results

Mode A

Test conditions		Peak Power Spectral Density (3 kHz)		
		Channel 1 [dBm]	Channel 6 [dBm]	Channel 11 [dBm]
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	-8.81	0.76	-9.10

Mode B

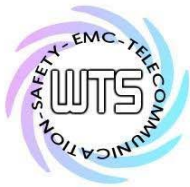
Test conditions		Peak Power Spectral Density (3 kHz)		
		Channel 1 [dBm]	Channel 6 [dBm]	Channel 11 [dBm]
$T_{nom} = 23^{\circ}\text{C}$	$V_{nom} = 120 \text{ V}$	-12.09	-11.51	-11.20

Limits:

Frequency Range MHz	dBm
902-928	8
2400-2483,5	8
5725-5850	8

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 055

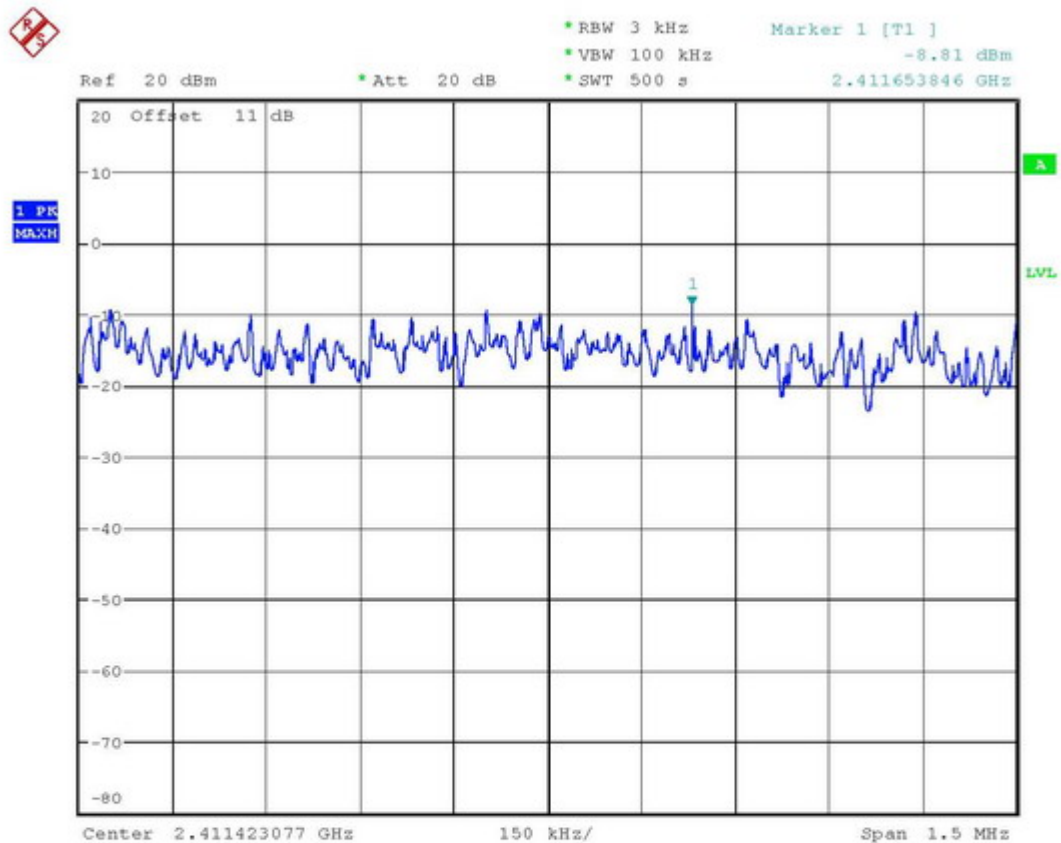
Explanation: See attached diagrams in Appendix.



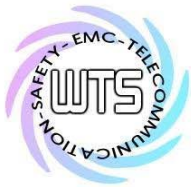
Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200

3.8.3 Measurement diagrams

Mode A

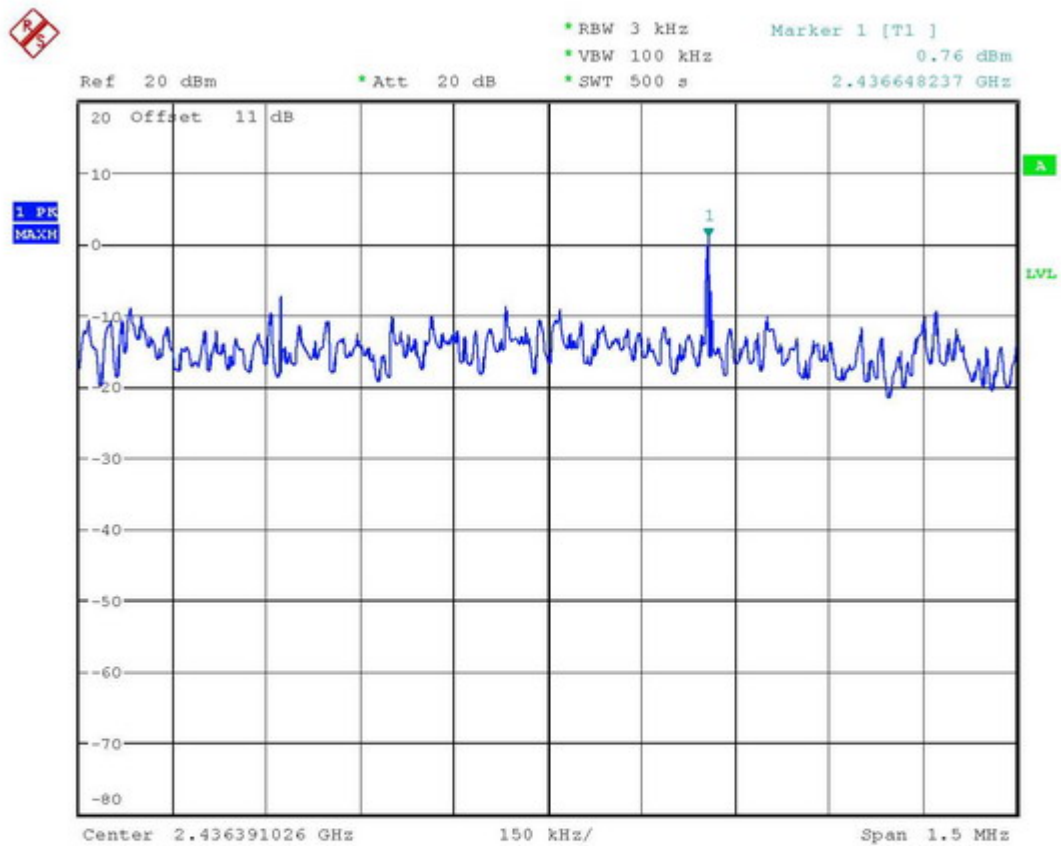


POWER DENSITY 802.11b CH1
Date: 10.JUL.2008 09:07:52

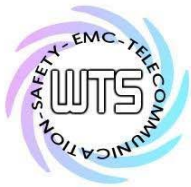


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200

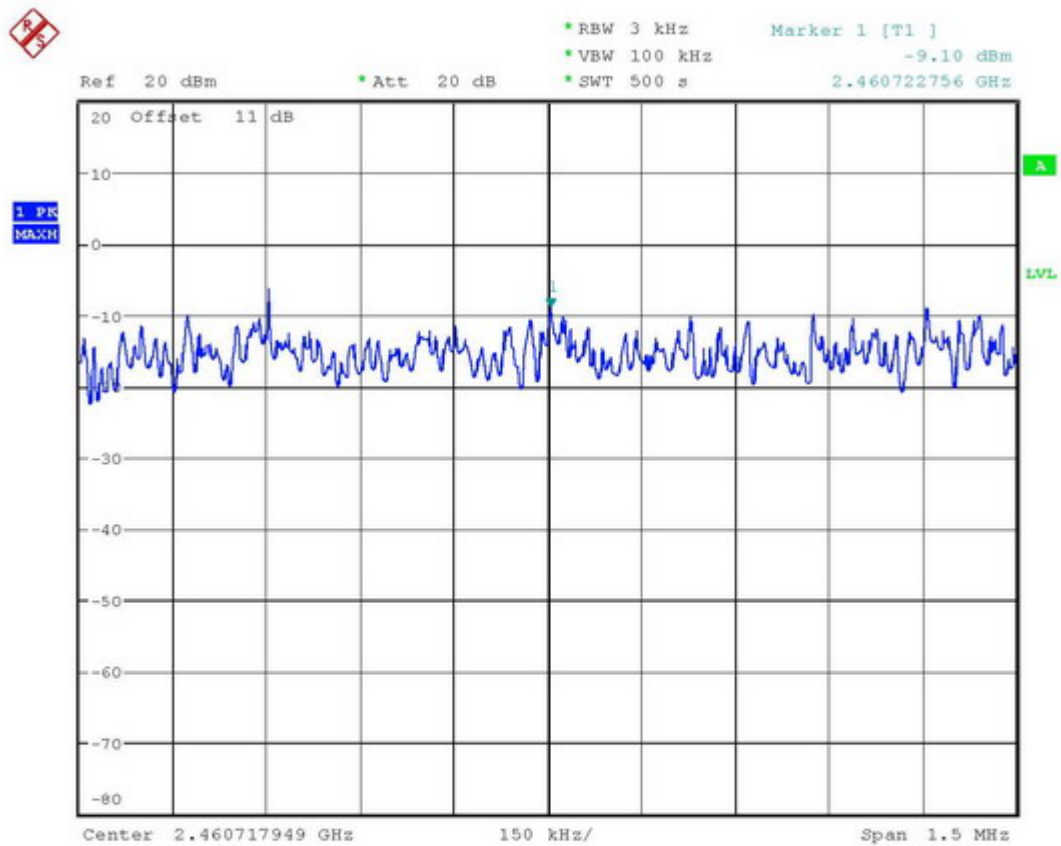


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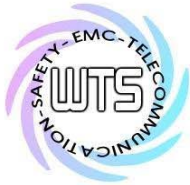


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200



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Date: 10.JUL.2008 09:06:42

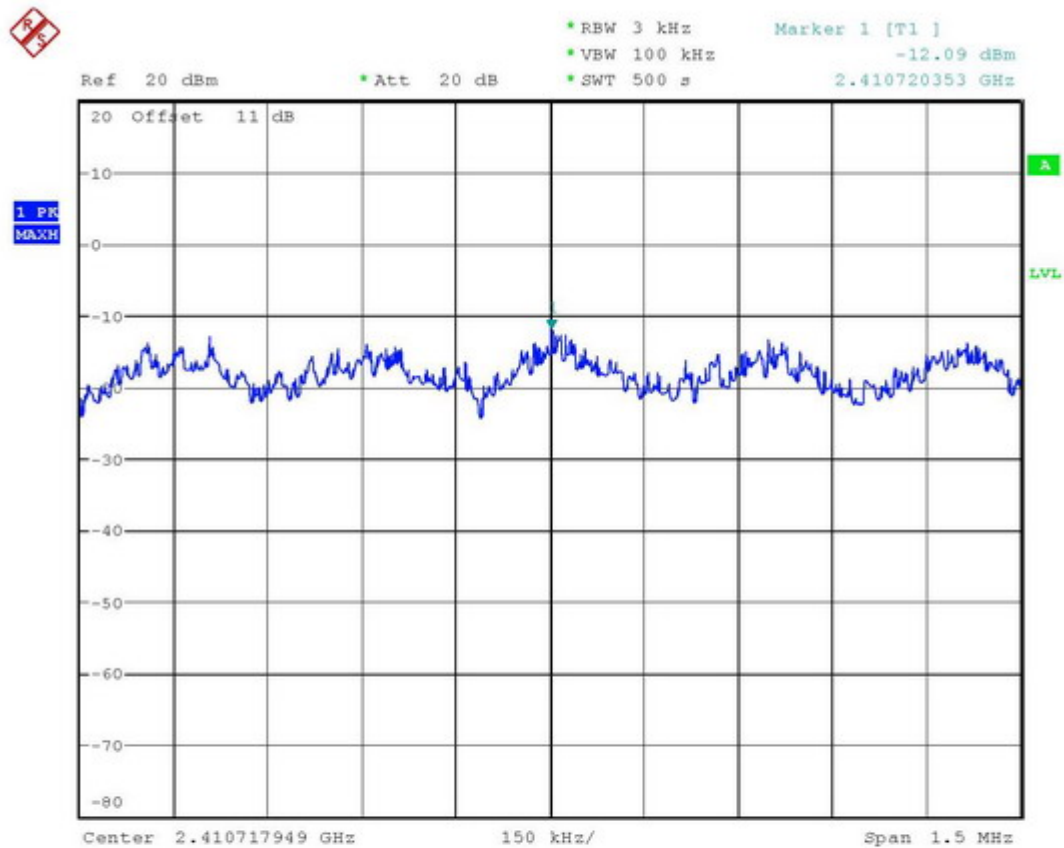


Worldwide Testing Services(Taiwan) Co., Ltd.

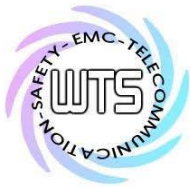
Registration number: W6M20804-9041-C-1

FCC ID: Q3MMIP200

Mode B

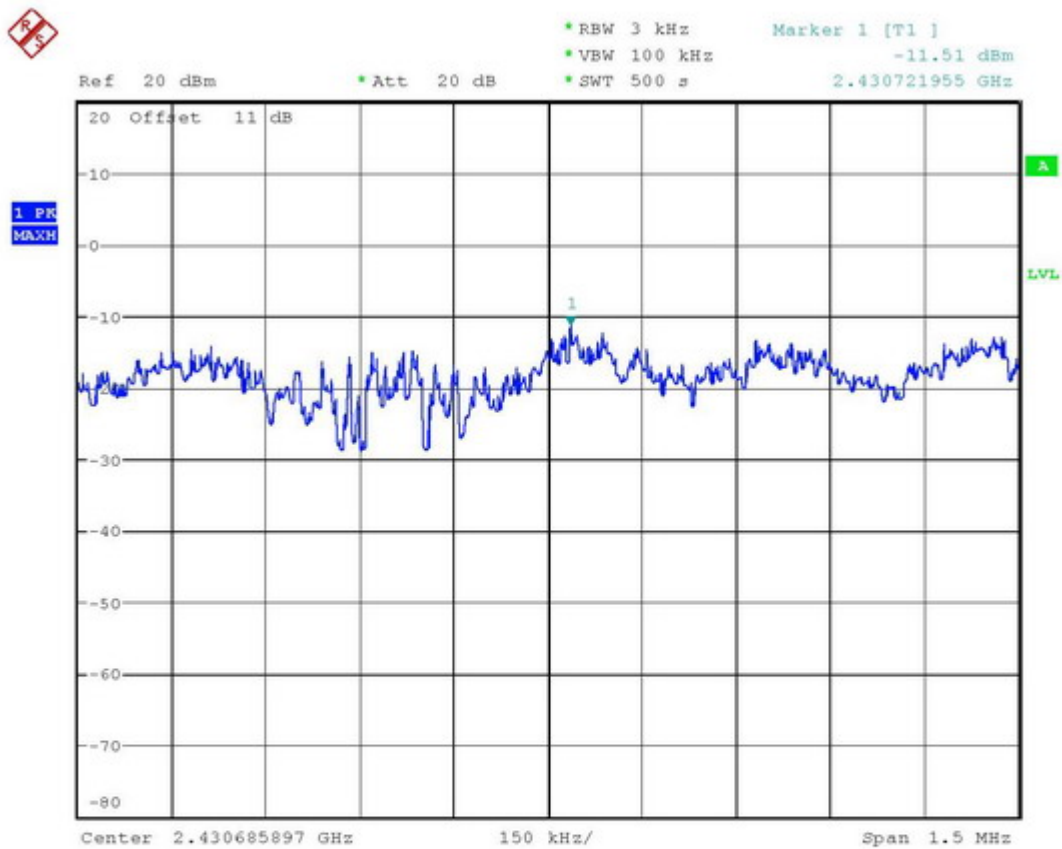


POWER DENSITY 802.11g CH1
Date: 10.JUL.2008 09:08:48

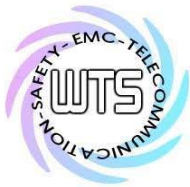


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200

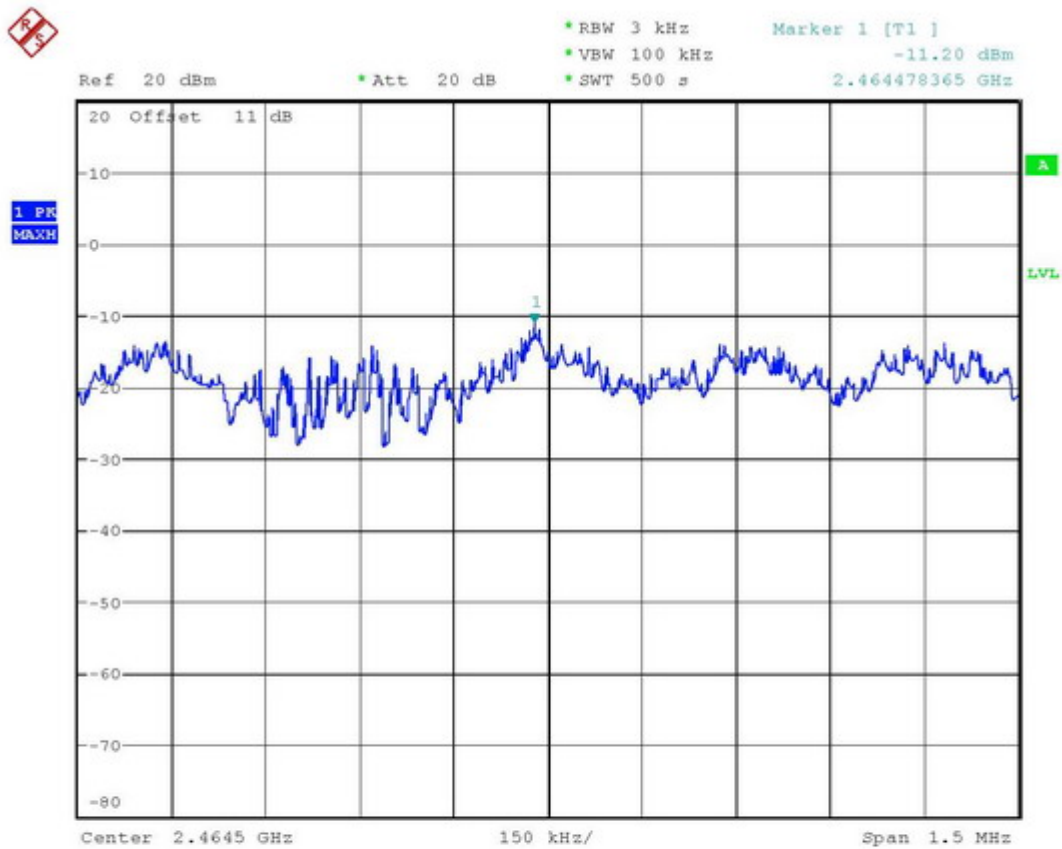


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Date: 10.JUL.2008 09:09:20

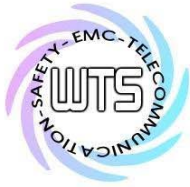


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1
FCC ID: Q3MMIP200



POWER DENSITY 802.11g CH11
Date: 10.JUL.2008 09:09:53



Registration number: W6M20804-9041-C-1

FCC ID: Q3MMIP200

3.9 Radiated Emission from Digital Part

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission (MHz)	Field Strength (microvolts/meter)	Field Strength (dBmicrovolts/meter)
30 – 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.0
Above 960	500	54.0

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028 ETSTW-RE 029
ETSTW-RE 030 ETSTW-RE 042 ETSTW-RE 043 ETSTW-RE 044

Explanation: The test results are listed in the separated test report no. W6M20804-9041-P-15B.

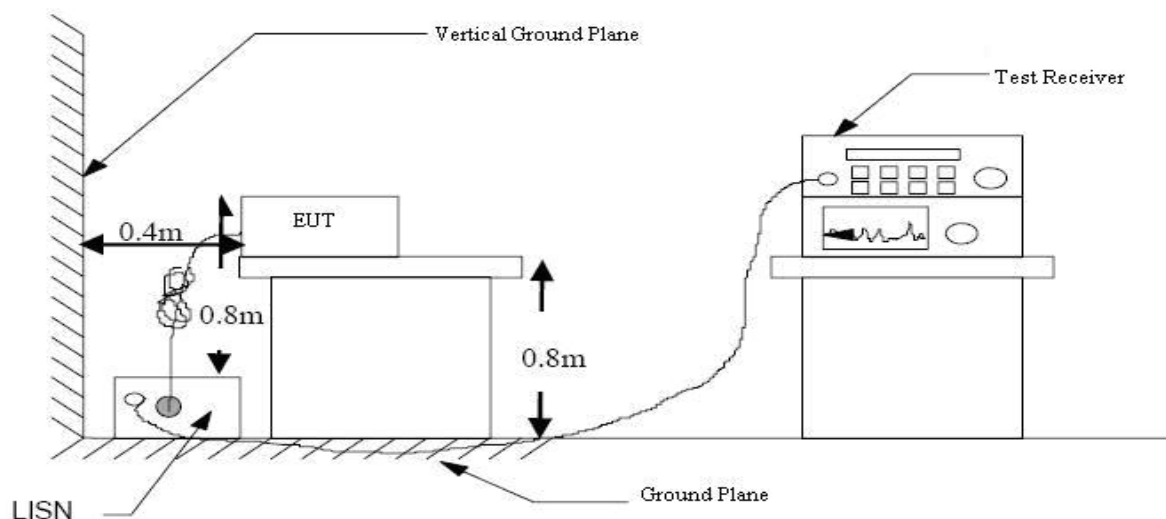
3.10 Power Line Conducted Emission

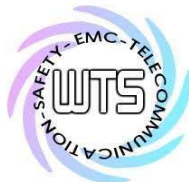
For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

Frequency	Level (dB μ V)	
	quasi-peak	average
150 kHz	lower limit line	Lower limit line

3.10.1 Test setup





Registration number: W6M20804-9041-C-1

FCC ID: Q3MMIP200

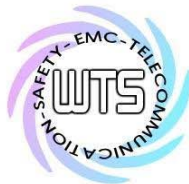
3.10.2 Test results

Model: MIP200 Date: 2008/7/9
Mode: Adaptor Temperature: 26 °C Engineer: Jeff
Polarization: N Humidity: 60 %

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV)		Limit (dBuV)		Margin (dB)
	QP	Ave.		QP	Ave.	QP	Ave.	
0.3215	36.47	28.47	10.10	46.57	38.57	59.67	49.67	-11.10
0.5350	32.77	24.84	10.10	42.87	34.94	56.00	46.00	-11.06
0.9100	31.75	24.33	10.10	41.85	34.43	56.00	46.00	-11.57
1.6050	36.41	28.04	10.10	46.51	38.14	56.00	46.00	-7.86
2.9949	27.93	17.10	10.10	38.03	27.20	56.00	46.00	-17.97
20.2778	19.00	12.30	10.10	29.10	22.40	60.00	50.00	-27.60

Polarization: L1

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV)		Limit (dBuV)		Margin (dB)
	QP	Ave.		QP	Ave.	QP	Ave.	
0.3211	36.96	29.22	10.10	47.06	39.32	59.68	49.68	-10.36
0.6950	34.62	27.38	10.10	44.72	37.48	56.00	46.00	-8.52
1.7100	36.84	29.62	10.10	46.94	39.72	56.00	46.00	-6.28
3.1000	30.96	23.45	10.10	41.06	33.55	56.00	46.00	-12.45
4.9150	31.10	21.74	10.10	41.20	31.84	56.00	46.00	-14.16
15.4444	19.50	13.20	10.10	29.60	23.30	60.00	50.00	-26.70



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1

FCC ID: Q3MMIP200

Mode: Base

Polarization: N

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV)		Limit (dBuV)		Margin (dB)
	QP	Ave.		QP	Ave.	QP	Ave.	
0.3215	36.62	28.19	10.10	46.72	38.29	59.67	49.67	-11.38
0.6950	33.09	25.08	10.10	43.19	35.18	56.00	46.00	-10.82
1.6050	36.88	28.15	10.10	46.98	38.25	56.00	46.00	-7.75
2.9400	28.69	20.62	10.10	38.79	30.72	56.00	46.00	-15.28
4.6000	25.73	15.95	10.10	35.83	26.05	56.00	46.00	-19.95
18.4722	16.90	10.90	10.10	27.00	21.00	60.00	50.00	-29.00

Polarization: L1

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV)		Limit (dBuV)		Margin (dB)
	QP	Ave.		QP	Ave.	QP	Ave.	
0.3207	37.37	29.02	10.10	47.47	39.12	59.69	49.69	-10.57
0.5350	35.29	28.40	10.10	45.39	38.50	56.00	46.00	-7.50
0.9100	35.59	29.57	10.10	45.69	39.67	56.00	46.00	-6.33
1.7100	37.45	29.90	10.10	47.55	40.00	56.00	46.00	-6.00
2.9400	33.66	25.20	10.10	43.76	35.30	56.00	46.00	-10.70
15.4722	20.50	12.10	10.10	30.60	22.20	60.00	50.00	-27.80

- Note:**
1. The formula of measured value as: $\text{Test Result} = \text{Reading} + \text{Correction Factor}$
 2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss
 3. Detector function in the form : PK = Peak, QP = Quasi Peak, AVG = Average
 4. All not in the table noted test results are more than 20 dB below the relevant limits.
 5. See attached diagrams in Appendix.

Limits:

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi Peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

Test equipment used:ETSTW-CE 001 ETSTW-CE 003 ETSTW-CE 004 ETSTW-CE 006 ETSTW-CE 011

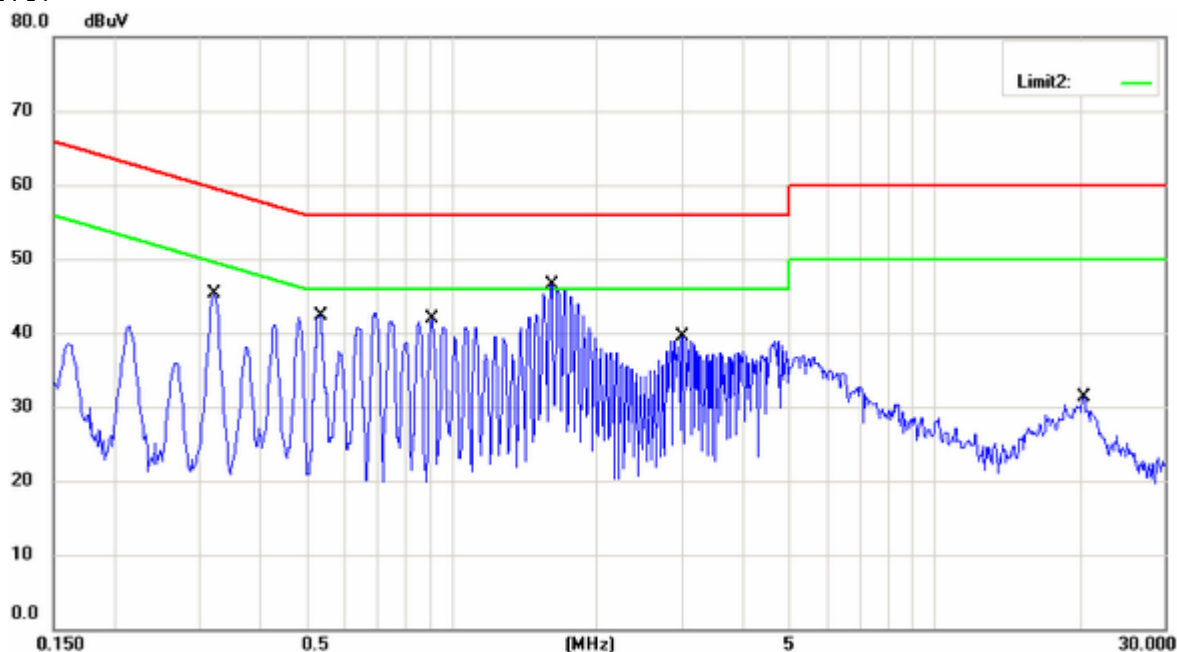
Registration number: W6M20804-9041-C-1

FCC ID: Q3MMIP200

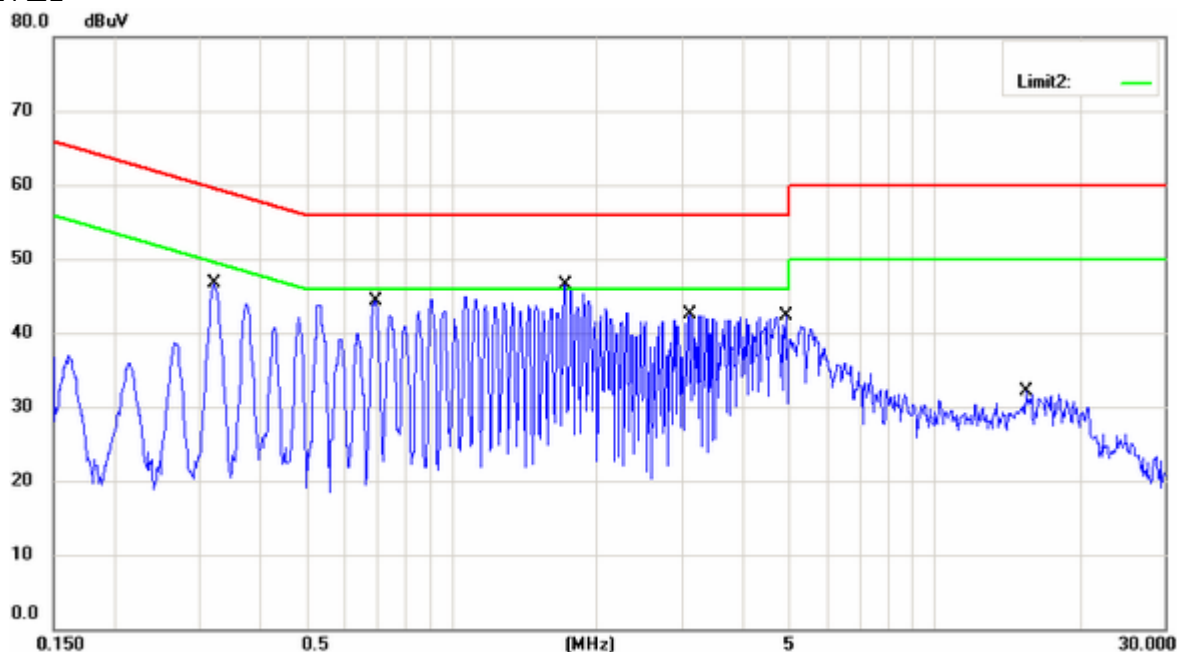
3.10.3 Measurement diagrams

Adaptor Mode

LISN N



LISN L1

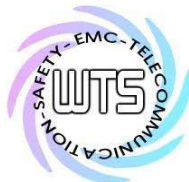


Up Line: QP Limit Line

Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of AC conducted test data of this test report.



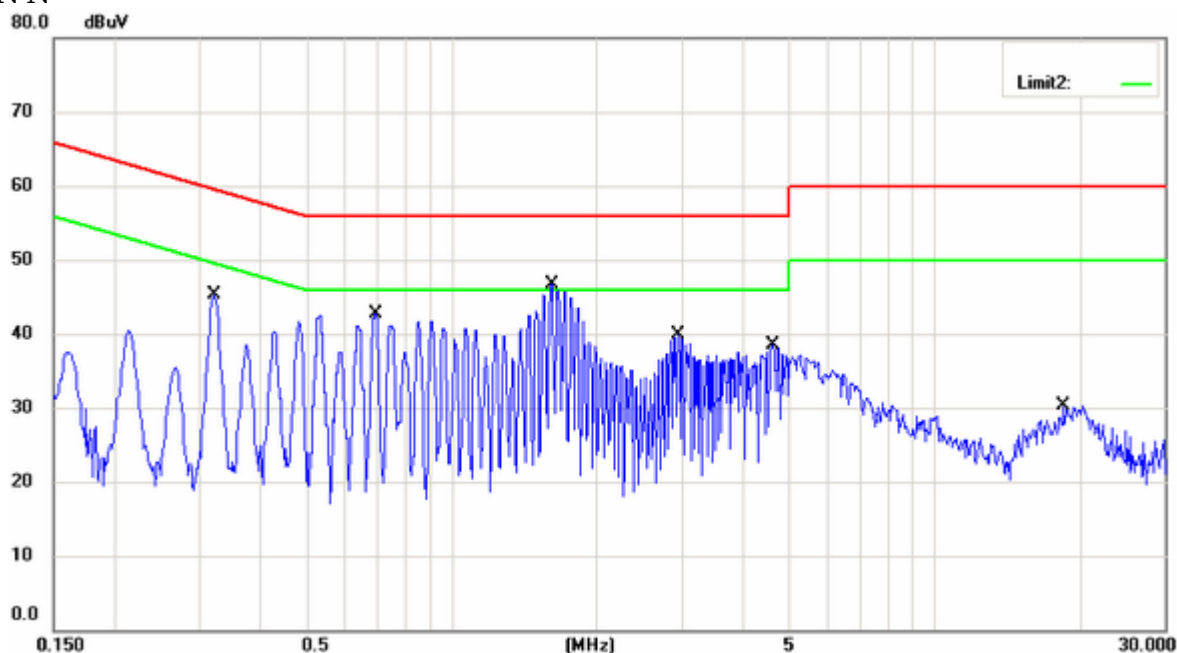
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M20804-9041-C-1

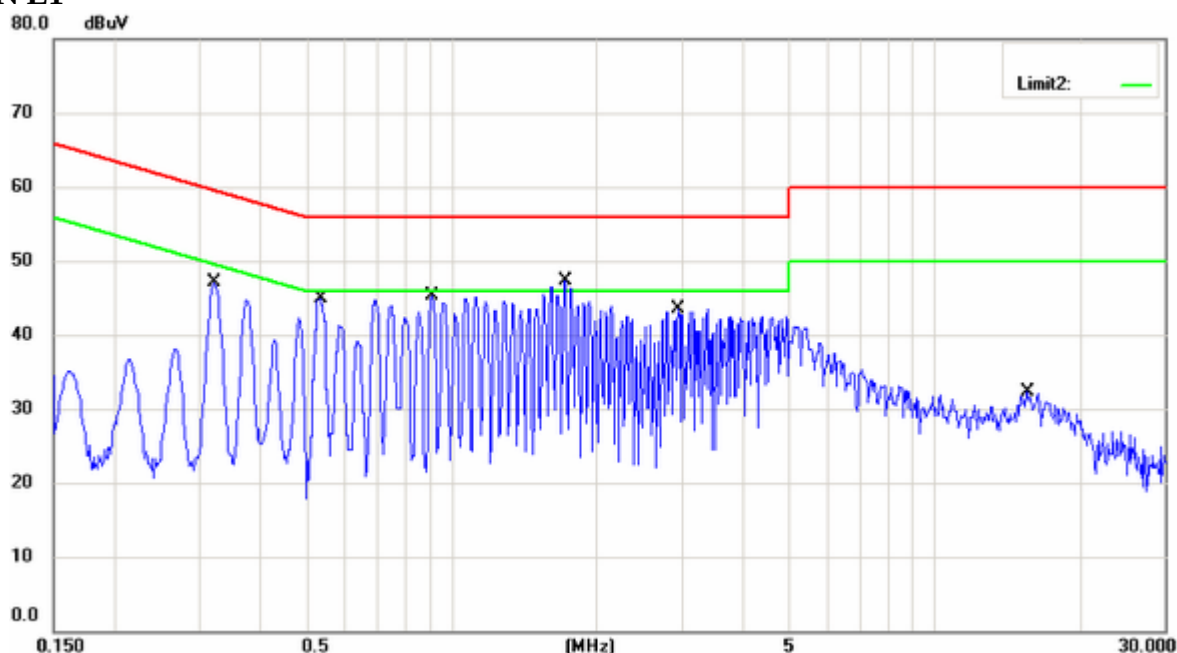
FCC ID: Q3MMIP200

Base Mode

LISN N



LISN L1



Up Line: QP Limit Line

Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of AC conducted test data of this test report.