



FCC TEST REPORT

According to

FCC Rules and Regulations Part 15 Subpart C

Applicant	: Belkin International Inc.
Address	: 501 West Walnut Street, Compton CA 90220, USA
Equipment	: G+ Wireless Router
Model No.	: F5D9231-4 v2
Series No.	: F6D4230-4 v1
FCC ID	: K7S-F5D9231V2
Trade Name	: Belkin

Laboratory Accreditation



- The test result refers exclusively to the test presented test model / sample.,
- Without written approval of **Exclusive Certification Corp.** the test report shall not be reproduced except in full.
- The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.



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CERTIFICATE OF COMPLIANCE

According to

FCC Rules and Regulations Part 15 Subpart C

Applicant : Belkin International Inc.
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Model No. : F5D9231-4 v2
Series No. : F6D4230-4 v1
FCC ID : K7S-F5D9231V2

I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4** The equipment was ***passed*** the test performed according to **FCC Rules and Regulations Part 15 Subpart C (2007)**.

The test was carried out on Oct. 31, 2008 at ***Exclusive Certification Corp.***

Signature


Arson Chou /
EMC/RF B.U. Vice General Manager



1. Report of Measurements and Examinations

1.1 List of Measurements and Examinations

FCC Rule	Description of Test	Result
15.203	. Antenna Requirement	Pass
15.207	. Conducted Emission	Pass
15.209 15.247(d)	. Radiated Emission	Pass
15.247(a)(2)	. 6dB Bandwidth	Pass
15.247(b)	. Maximum Peak Output Power	Pass
15.247(d)	. 100kHz Bandwidth of Frequency Band Edges	Pass
15.247(e)	. Power Spectral Density	Pass
1.1307 1.1310 2.1091 2.1093	. RF Exposure Compliance	Pass



2. Test Configuration of Equipment under Test

2.1 Feature of Equipment under Test

Spreading	802.11b: DSSS, CCK(QPSK, BPSK) 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Frequency Range	802.11b/g/n: 2.412 ~ 2.483GHz
Number of Channels	USA, Canada and Taiwan: 1 ~ 11 Japan: 1 ~ 14 Most European Countries: 1 ~ 13 France: 10 ~ 13
Data Rate	802.11b: 11, 5.5, 2, 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: HT40 mode: 270/15, 243/14, 216/13, 162/12, 108/11, 81/10, 54/9, 27/8, 135/7, 121.5/6, 108/5, 81/4, 54/3, 40.5/2, 27/1, 13.5/0Mbps HT20 mode: 130/15, 117/14, 104/13, 78/12, 52/11, 39/10, 26/9, 13/8, 65/7, 58.5/6, 52/5, 39/4, 26/3, 19.5/2, 13/1, 6.5/0Mbps
Modulation	802.11n: OFDM 802.11g: OFDM 802.11b: CCK, DQPSK, DBPSK
Antenna	1/2 Dipole Peak gain: 1.8dBi, 5dBi
Security	IEEE 802.1x and WPA (available in the future) WEP 64 bit, 128 bit
Transmit Power	FCC: 802.11b: 17 ~ 18 dBm (Average) 802.11g: 54M = 13 ~ 15dBm (Average) 36M ~ 48M = 13dBm ~ 16dBm (Average) 6M ~ 24M = 13dBm ~ 16dBm (Average) 802.11n: HT40 mode: 13.5M, 27M, 40.5M, 54M, 81M, 108M, 162M, 216M = 13dBm ~ 16dBm (Average) 121.5M, 135M, 243M, 270M = 13dBm (Average) HT20 mode: 6.5M, 13M, 19.5M, 26M, 39M, 52M, 78M, 104M = 13dBm ~ 16dBm (Average) 58.5M, 65M, 117M, 130M = 13dBm (Average)



ETSI	802.11b: 17 ~ 18dBm (Average) EIRP = 20dBm (Ave + antenna gain) 802.11g: 48M ~ 54M = 13dBm ~ 14dBm (Average) 6M ~ 36M = 12dBm ~ 15dBm (Average) EIRP = 20dBm (Ave + antenna gain) 802.11n: HT40 mode: 13.5M, 27M, 40.5M, 54M, 81M, 108M, 162M, 216M = 13dBm ~ 16dBm (Average) 121.5M, 135M, 243M, 270M = 13dBm (Average) HT20 mode: 6.5M, 13M, 19.5M, 26M, 39M, 52M, 78M, 104M = 13dBm ~ 16dBm (Average) 58.5M, 65M, 117M, 130M = 13dBm (Average)
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2.2 Carrier Frequency of Channels

802.11b, 802.11g, 802.11n, HT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	11	2462
06	2437	12	---

802.11n, HT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
---	---	07	2442
---	---	08	2447
03	2422	09	2452
04	2427	---	---
05	2432	---	---
06	2437	---	---



2.3 Test Mode and Test Software

- a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- b. The complete test system included remote workstation, PC, Monitor, Keyboard, Mouse, Printer, Modem and EUT for EMI test. The remote workstation included Notebook.
- c. An executive program, "PING.EXE" under WIN XP, which transmits and receives data to the remote workstation through LAN(100M) and Wireless(270M).
- d. The following test mode and test software was performed for conduction and radiation test:
 - 802.11b/g/n HT20: CH01: 2412MHz, CH06: 2437MHz, CH11: 2462MHz
 - 802.11n HT40: CH03: 2422MHz, CH06: 2437MHz, CH09: 2452MHz
- e. The following test modes included two kinds of antenna and two kinds of power adapter:

Test Mode	Modulation Type	Antenna	Adapter Model
Test Mode 1	802.11b	1.8dBi	Leader \ MT12-Y120100-A1
Test Mode 2	802.11g	1.8dBi	Leader \ MT12-Y120100-A1
Test Mode 3	802.11n HT20	1.8dBi	Leader \ MT12-Y120100-A1
Test Mode 4	802.11n HT40	1.8dBi	Leader \ MT12-Y120100-A1
Test Mode 5	802.11b	1.8dBi	DVE \ DSA-12G-12 AUS
Test Mode 6	802.11g	1.8dBi	DVE \ DSA-12G-12 AUS
Test Mode 7	802.11n HT20	1.8dBi	DVE \ DSA-12G-12 AUS
Test Mode 8	802.11n HT40	1.8dBi	DVE \ DSA-12G-12 AUS
Test Mode 9	802.11b	5dBi	Leader \ MT12-Y120100-A1
Test Mode 10	802.11g	5dBi	Leader \ MT12-Y120100-A1
Test Mode 11	802.11n HT20	5dBi	Leader \ MT12-Y120100-A1
Test Mode 12	802.11n HT40	5dBi	Leader \ MT12-Y120100-A1
Test Mode 13	802.11b	5dBi	DVE \ DSA-12G-12 AUS
Test Mode 14	802.11g	5dBi	DVE \ DSA-12G-12 AUS
Test Mode 15	802.11n HT20	5dBi	DVE \ DSA-12G-12 AUS
Test Mode 16	802.11n HT40	5dBi	DVE \ DSA-12G-12 AUS

- f. For Conducted and Radiated emission test, Test Mode 2, 3, 4, 6, 7, 8, 10, 11, 12, 14, 15, 16 would be chosen to do final test.



2.4 Description of Test System

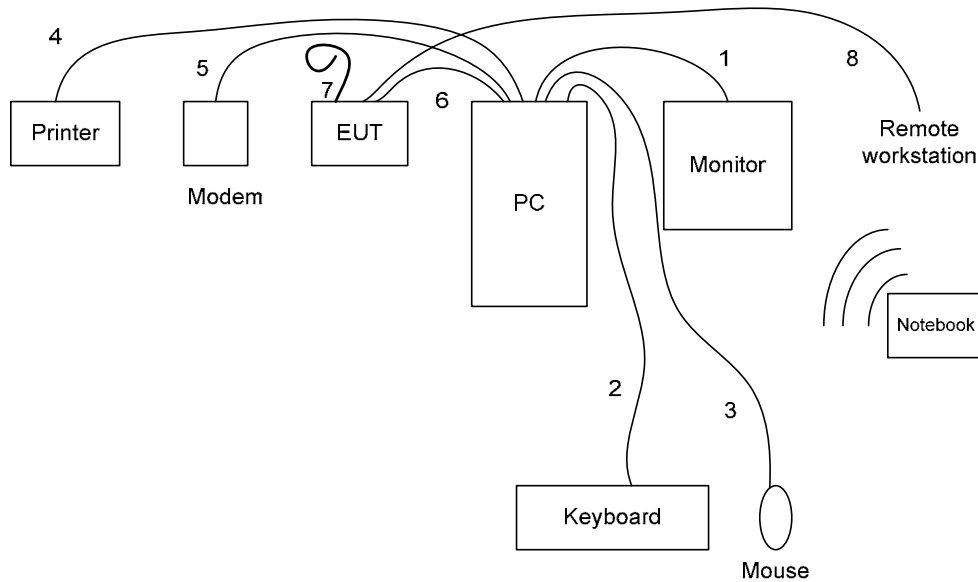
Device	Manufacturer	Model No.	Description
PC	IBM	IGV	Data Cable, Unshielding 1.8m
Monitor	SlimAGE	510A	Power Cable, Adapter Unshielding 1.8 m Data Cable, VGA Shielding 1.35 m
Keyboard	IBM	KB-0225	Data Cable, PS/2 Shielding 1.85 m
Mouse	IBM	MO28VO	Data Cable, USB Shielding 1.85 m
Printer	hp	Desk Jet400	Power Cable, Adapter Unshielding 1.8 m Data Cable, Print Shielding 1.6 m
Modem	ACEXX	DM-1414	Power Cable, Adapter Unshielding 1.8 m Data Cable, RS232 Shielding 1.35 m
Notebook (Remote Workstation)	DELL	PP10L	Power Cable, Unshielding 1.8 m
Notebook (Remote Workstation)	TOSHIBA	PSA50T- 05M00C	Power Cable, Unshielding 1.8 m

Use Cable:

Cable	Quantity	Description
RJ45	1	Unshielding, 5.0m
RJ45	1	Unshielding, 1.5m
RJ45	3	Unshielding, 3.0m



2.5 Connection Diagram of Test System



1. The VGA cable is connected from PC to Monitor.
2. The PS/2 cable is connected from PC to Keyboard.
3. The USB cable is connected from PC to Mouse.
4. The Print cable is connected from PC to the Printer.
5. The RS232 cable is connected from PC to the Modem.
6. The RJ45 cable is connected from PC to the EUT.
7. These RJ45 cables (x3) are floating.
8. The RJ45 cable is connected from EUT to the remote workstation.



2.6 General Information of Test

Test Site :	Cerpass Technology Corporation 4F-2, No. 28, Lane 78, Xing-Ai Rd. Nei-hu, Taipei City 114 Taiwan R.O.C.
Test Site Location (OATS1-SD):	7-2, Moshihkeng, Fongtian Village, Shihding Township, Taipei County, Taiwan, R.O.C. Registration Number: 632249.
FCC Registration Number :	632249
IC Registration Number :	4934B-1
VCCI Registration Number :	T-182 for Telecommunication Test C-2188 for Conducted emission test R-1902 for Radiated emission test
Test Voltage:	AC 120V
Test in Compliance with:	ANSI C63.4-2003 FCC Part 15 Subpart C
Frequency Range Investigated:	Conducted: from 150kHz to 30MHz Radiation: from 30MHz to 24620MHz
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.

2.7 Measurement Uncertainty

Measurement Item	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9 kHz ~ 30 MHz	LINE/NEUTRAL	2.71 dB
Radiated Emission	30 MHz ~ 25GHz	Vertical	4.11 dB
		Horizontal	4.10 dB
6 dB Bandwidth	---	---	7500 Hz
Maximum Peak Output Power	---	---	1.4 dB
100kHz Bandwidth of Frequency Band Edges	---	---	2.2 dB
Power Spectral Density	---	---	2.2 dB



☐ Additional attachment as following record:

[illegible]



3. Antenna Requirements

3.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

3.2 Antenna Construction and Directional Gain

Antenna type: Integral Dipole Antenna
Antenna Gain: 1.8 dBi

Antenna type: Integral Dipole Antenna
Antenna Gain: 5 dBi



4. Test of Conducted Emission

4.1 Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2003 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

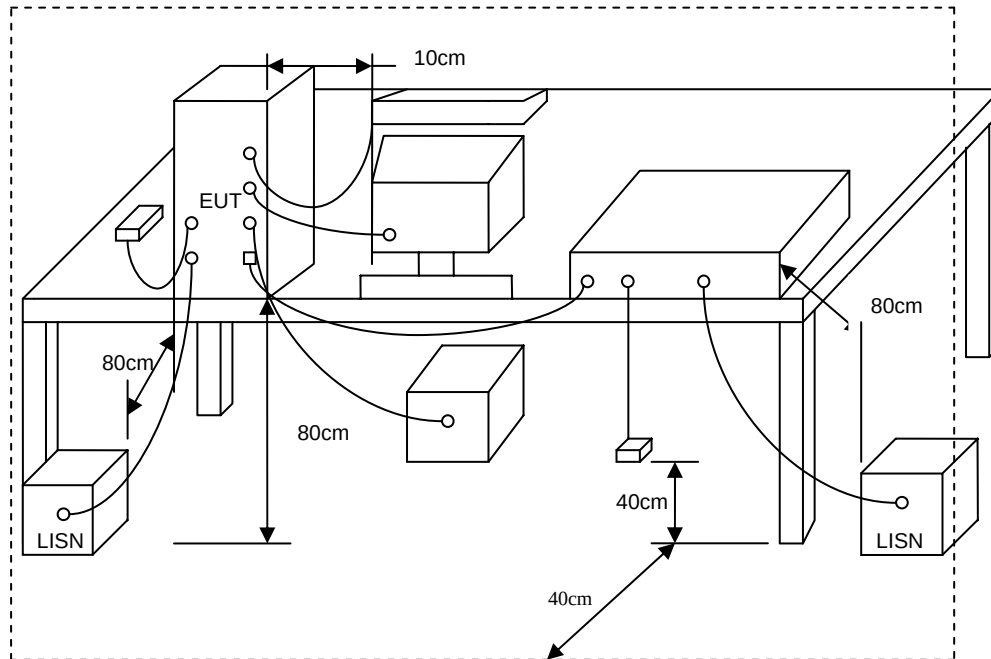
*Decreases with the logarithm of the frequency.

4.2 Test Procedures

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



4.3 Typical Test Setup



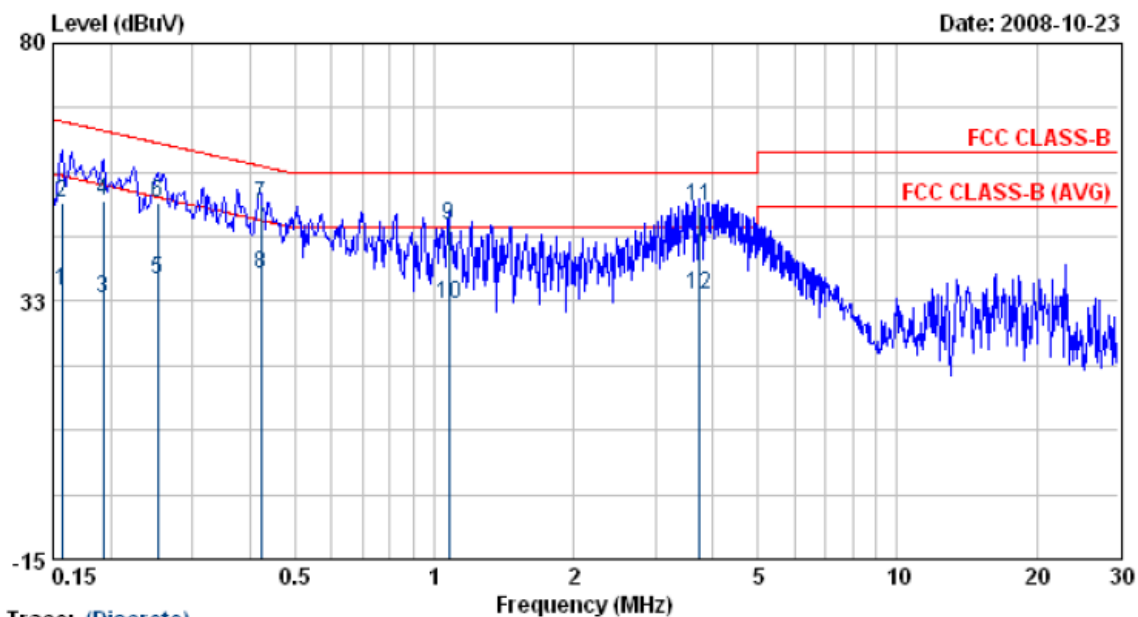
4.4 Measurement equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date.
EMI Receiver	SCHAFFNER	SCR-3501	437	2007/11/26	2008/11/25
LISN	NNB-2/16Z	MESS TEC	02/10191	2008/06/03	2009/06/02
LISN	NNB-2/16Z	ROLF HEINE	03/10058	2008/04/19	2009/04/18



4.5 Test Result and Data

Power	: AC 120V	Pol/Phase	: LINE
Test Mode 2	: 802.11g CH1	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Humidity	: 52 %



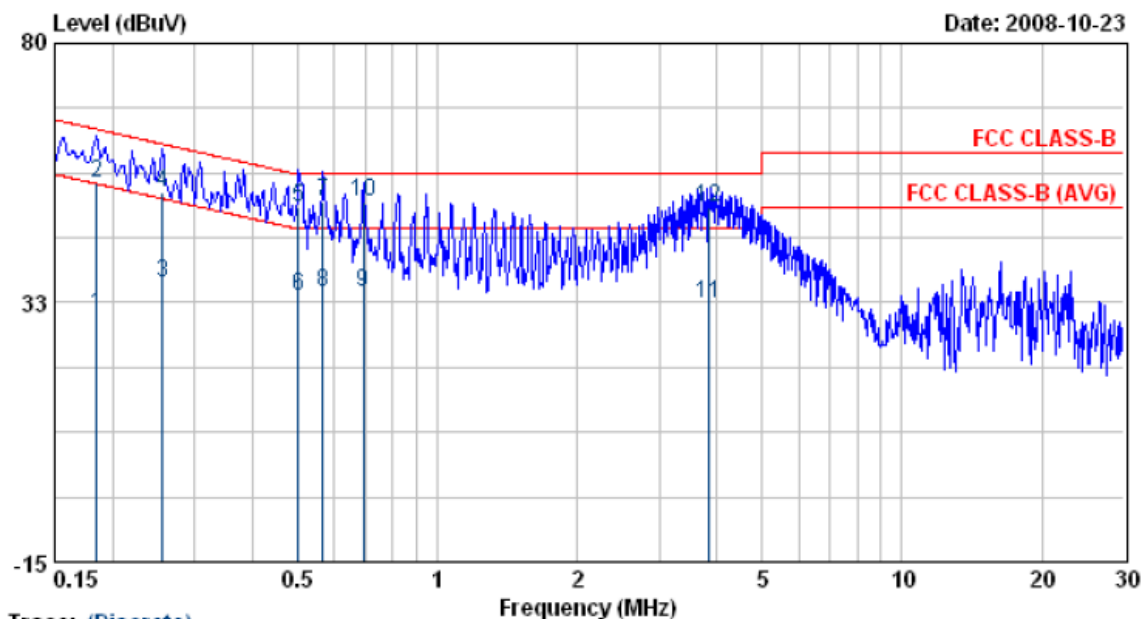
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.16	34.42	0.11	34.53	55.65	-21.12	AVERAGE
2	0.16	50.63	0.11	50.74	65.65	-14.90	QP
3	0.19	32.98	0.11	33.09	53.93	-20.84	AVERAGE
4	0.19	50.90	0.11	51.01	63.93	-12.92	QP
5	0.25	36.53	0.11	36.64	51.69	-15.05	AVERAGE
6	0.25	50.40	0.11	50.51	61.69	-11.18	QP
7	0.42	50.04	0.11	50.16	57.42	-7.26	QP
8	0.42	37.41	0.11	37.52	47.42	-9.89	AVERAGE
9	1.08	46.48	0.17	46.65	56.00	-9.35	QP
10	1.08	31.75	0.17	31.92	46.00	-14.08	AVERAGE
11	3.73	49.46	0.31	49.77	56.00	-6.23	QP
12	3.73	33.52	0.31	33.83	46.00	-12.17	AVERAGE

- Remarks:
1. Level = Read Level + Factor
 2. Factor = LISN(15N) Factor + Cable Loss
 3. All emission below 1GHz at 802.11g mode are all the same,so the 802.11g mode chosen as representative in final test.
 4. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
 5. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 2	: 802.11g CH1	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Humidity	: 52 %

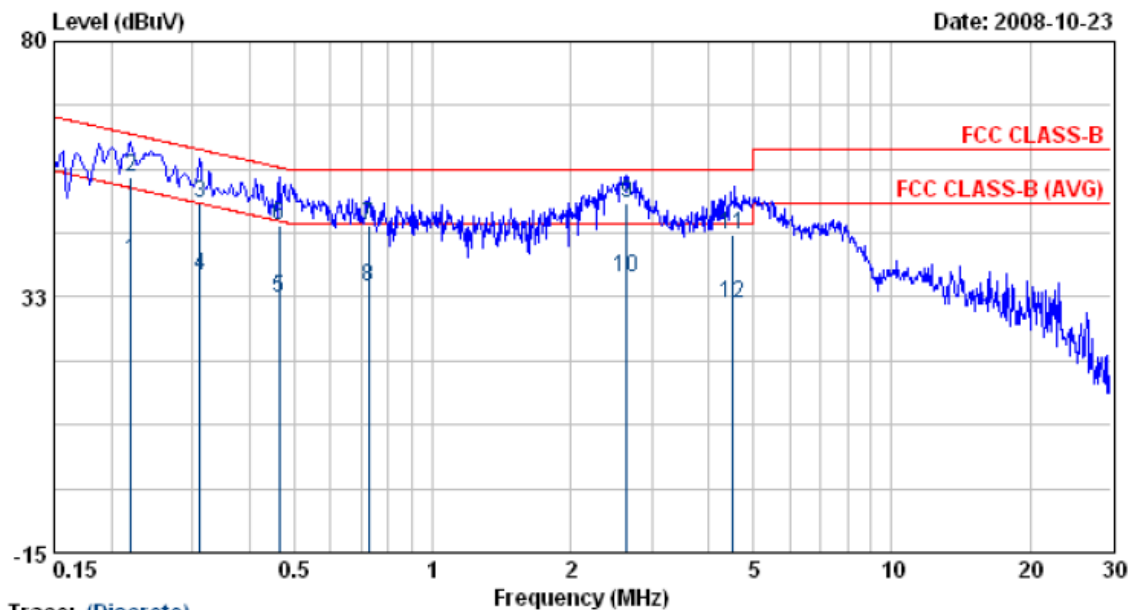


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.18	30.05	0.14	30.19	54.28	-24.10	AVERAGE
2	0.18	54.15	0.14	54.29	64.28	-9.99	QP
3	0.26	36.05	0.14	36.19	51.56	-15.37	AVERAGE
4	0.26	52.68	0.14	52.82	61.56	-8.73	QP
5	0.50	49.71	0.15	49.86	56.00	-6.14	QP
6	0.50	33.61	0.15	33.76	46.00	-12.24	AVERAGE
7	0.57	50.69	0.16	50.85	56.00	-5.15	QP
8	0.57	34.38	0.16	34.54	46.00	-11.46	AVERAGE
9	0.69	34.29	0.16	34.45	46.00	-11.55	AVERAGE
10	0.69	50.71	0.16	50.88	56.00	-5.12	QP
11	3.85	31.94	0.30	32.24	46.00	-13.76	AVERAGE
12	3.85	49.49	0.30	49.79	56.00	-6.21	QP

- Remarks:
1. Level = Read Level + Factor
 2. Factor = LISN(ISN) Factor + Cable Loss
 3. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
 4. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
 5. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 3	: 802.11n HT20 CH1	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Humidity	: 52 %



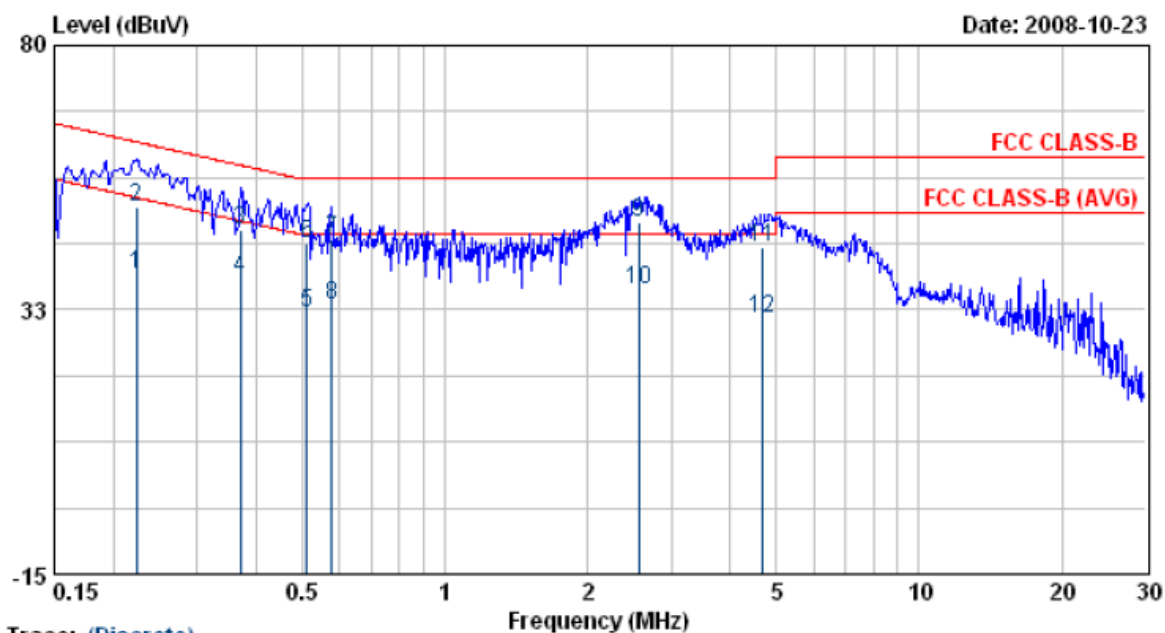
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.22	39.18	0.11	39.29	52.79	-13.50	AVERAGE
2	0.22	54.62	0.11	54.73	62.79	-8.06	QP
3	0.31	49.86	0.12	49.97	59.93	-9.95	QP
4	0.31	36.33	0.12	36.44	49.93	-13.48	AVERAGE
5	0.46	32.27	0.12	32.39	46.63	-14.23	AVERAGE
6	0.46	45.77	0.12	45.89	56.63	-10.74	QP
7	0.73	45.67	0.14	45.82	56.00	-10.18	QP
8	0.73	34.39	0.14	34.53	46.00	-11.47	AVERAGE
9	2.65	49.58	0.27	49.85	56.00	-6.15	QP
10	2.65	35.90	0.27	36.17	46.00	-9.83	AVERAGE
11	4.49	43.82	0.33	44.14	56.00	-11.86	QP
12	4.49	31.06	0.33	31.39	46.00	-14.61	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 3	: 802.11n HT20 CH1	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Humidity	: 52 %



Trace: (Discrete)

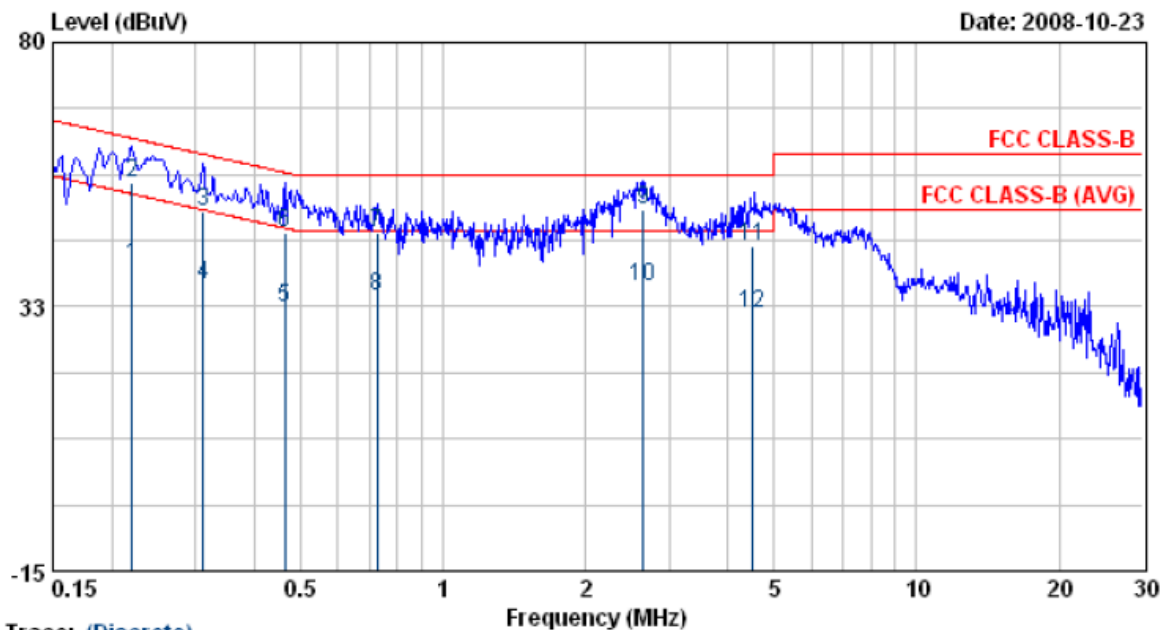
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.22	38.91	0.14	39.05	52.70	-13.65	AVERAGE
2	0.22	51.02	0.14	51.15	62.70	-11.55	QP
3	0.37	46.68	0.14	46.82	58.47	-11.66	QP
4	0.37	37.99	0.14	38.13	48.47	-10.35	AVERAGE
5	0.51	31.69	0.15	31.84	46.00	-14.16	AVERAGE
6	0.51	44.23	0.15	44.38	56.00	-11.62	QP
7	0.58	44.85	0.16	45.00	56.00	-11.00	QP
8	0.58	33.18	0.16	33.34	46.00	-12.66	AVERAGE
9	2.57	48.08	0.26	48.34	56.00	-7.66	QP
10	2.57	35.95	0.26	36.20	46.00	-9.80	AVERAGE
11	4.69	43.31	0.32	43.63	56.00	-12.37	QP
12	4.69	30.77	0.32	31.09	46.00	-14.91	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 4	: 802.11n HT40 CH3	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Humidity	: 52 %



Trace: (Discrete)

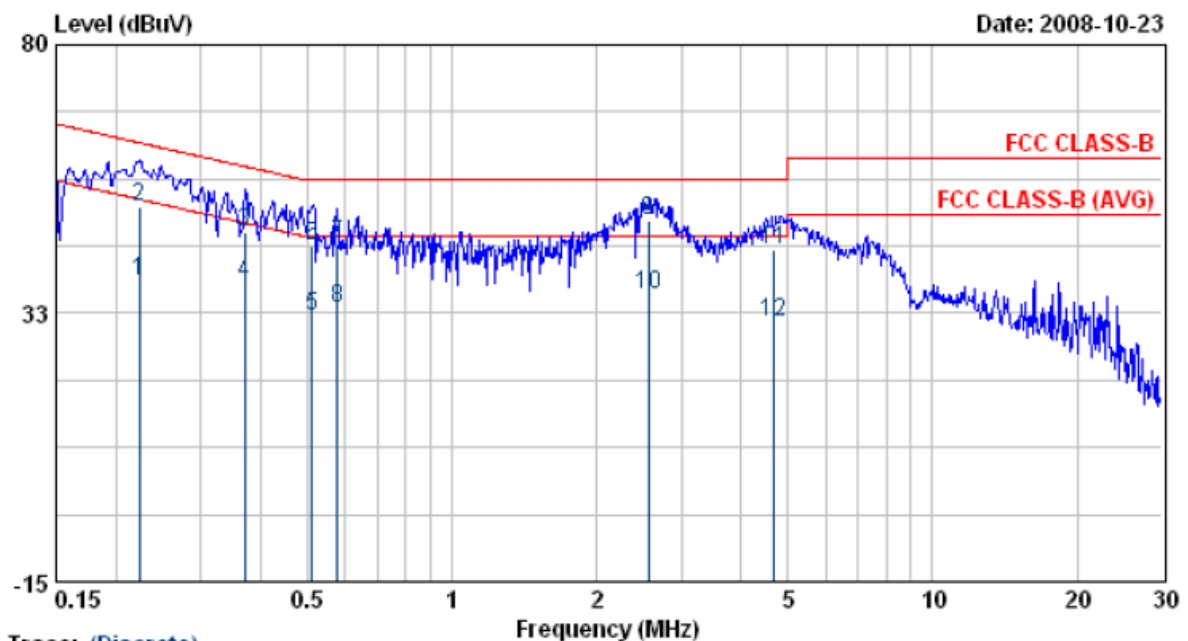
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.22	39.81	0.11	39.92	52.79	-12.87	AVERAGE
2	0.22	54.62	0.11	54.73	62.79	-8.06	QP
3	0.31	49.58	0.12	49.70	59.93	-10.23	QP
4	0.31	36.28	0.12	36.39	49.93	-13.53	AVERAGE
5	0.46	32.37	0.12	32.49	46.63	-14.14	AVERAGE
6	0.46	45.70	0.12	45.82	56.63	-10.81	QP
7	0.73	45.64	0.14	45.79	56.00	-10.21	QP
8	0.73	34.31	0.14	34.45	46.00	-11.55	AVERAGE
9	2.65	49.83	0.27	50.10	56.00	-5.90	QP
10	2.65	35.94	0.27	36.21	46.00	-9.79	AVERAGE
11	4.49	43.15	0.33	43.48	56.00	-12.52	QP
12	4.49	31.04	0.33	31.37	46.00	-14.63	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 4	: 802.11n HT40 CH3	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Humidity	: 52 %



Trace: (Discrete)

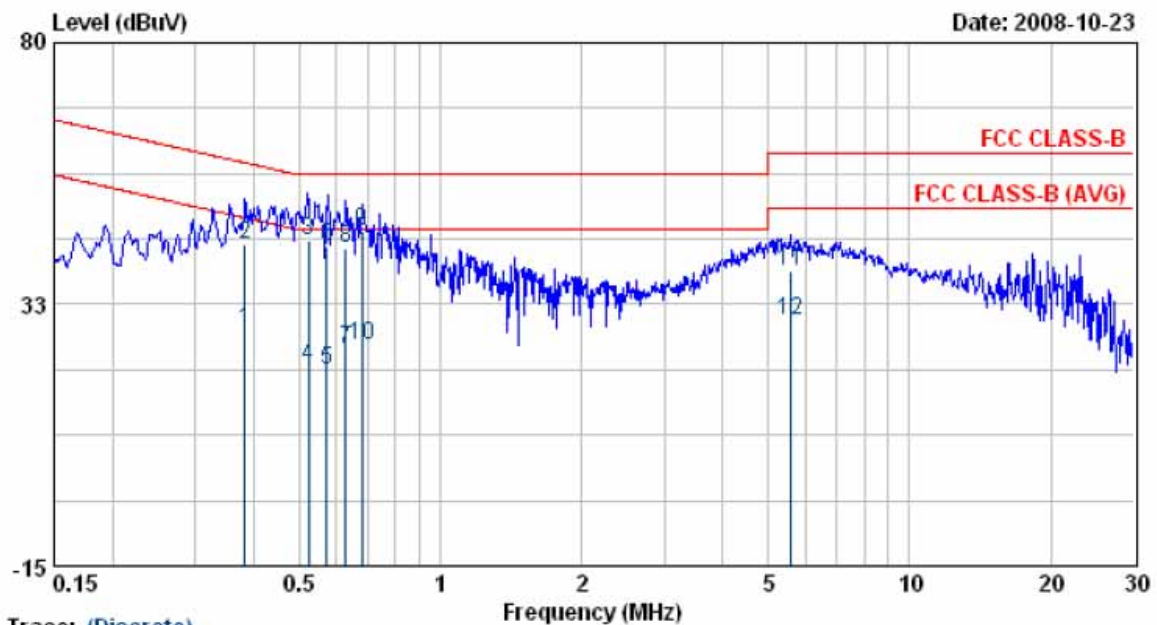
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.22	38.14	0.14	38.27	52.70	-14.43	AVERAGE
2	0.22	51.07	0.14	51.21	62.70	-11.49	QP
3	0.37	46.77	0.14	46.91	58.47	-11.57	QP
4	0.37	37.87	0.14	38.01	48.47	-10.46	AVERAGE
5	0.51	31.69	0.15	31.84	46.00	-14.16	AVERAGE
6	0.51	44.32	0.15	44.47	56.00	-11.53	QP
7	0.58	44.49	0.16	44.64	56.00	-11.36	QP
8	0.58	33.10	0.16	33.26	46.00	-12.74	AVERAGE
9	2.57	48.82	0.26	49.07	56.00	-6.93	QP
10	2.57	35.48	0.26	35.74	46.00	-10.26	AVERAGE
11	4.69	43.33	0.32	43.65	56.00	-12.35	QP
12	4.69	30.73	0.32	31.05	46.00	-14.95	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 6	: 802.11g CH1	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 1.8dBi	Humidity	: 52 %

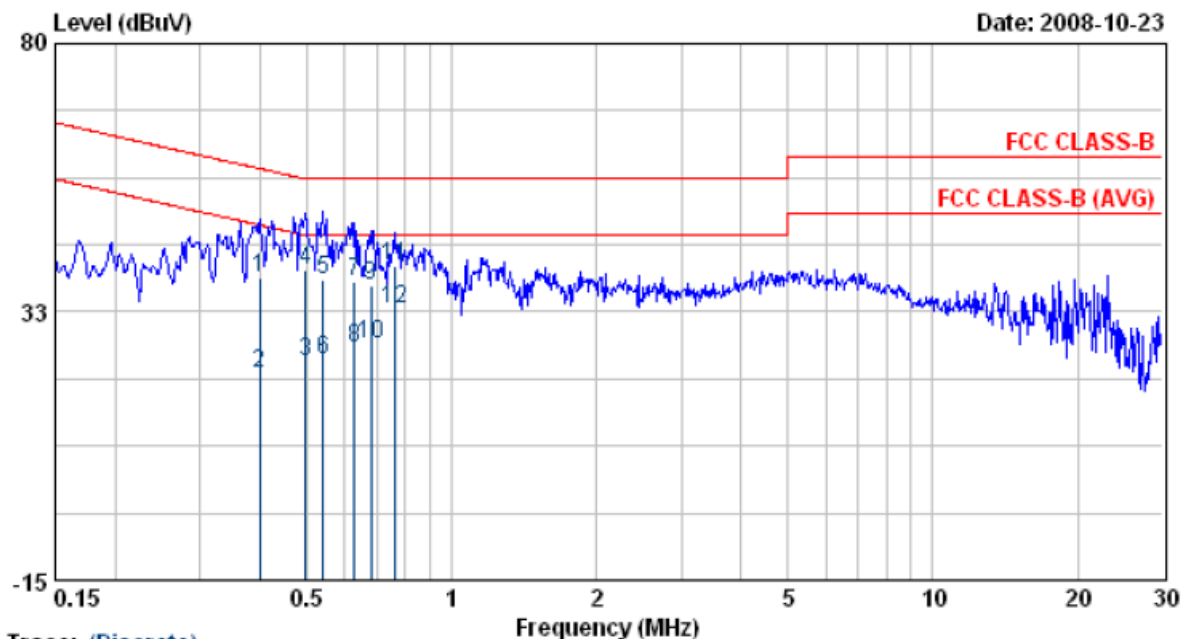


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.38	27.61	0.11	27.72	48.21	-20.49	AVERAGE
2	0.38	43.10	0.11	43.21	58.21	-15.00	QP
3	0.52	43.85	0.12	43.97	56.00	-12.03	QP
4	0.52	21.06	0.12	21.19	46.00	-24.81	AVERAGE
5	0.57	20.32	0.13	20.45	46.00	-25.55	AVERAGE
6	0.57	42.85	0.13	42.98	56.00	-13.02	QP
7	0.63	24.22	0.13	24.35	46.00	-21.65	AVERAGE
8	0.63	42.40	0.13	42.53	56.00	-13.47	QP
9	0.68	45.72	0.14	45.86	56.00	-10.14	QP
10	0.68	25.00	0.14	25.14	46.00	-20.86	AVERAGE
11	5.56	38.25	0.34	38.59	60.00	-21.41	QP
12	5.56	29.21	0.34	29.54	50.00	-20.46	AVERAGE

- Remarks:
1. Level = Read Level + Factor
 2. Factor = LISN(ISN) Factor + Cable Loss
 3. All emission below 1GHz at 802.11g mode are all the same,so the 802.11g mode chosen as representative in final test.
 4. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
 5. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 6	: 802.11g CH1	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 1.8dBi	Humidity	: 52 %



Trace: (Discrete)

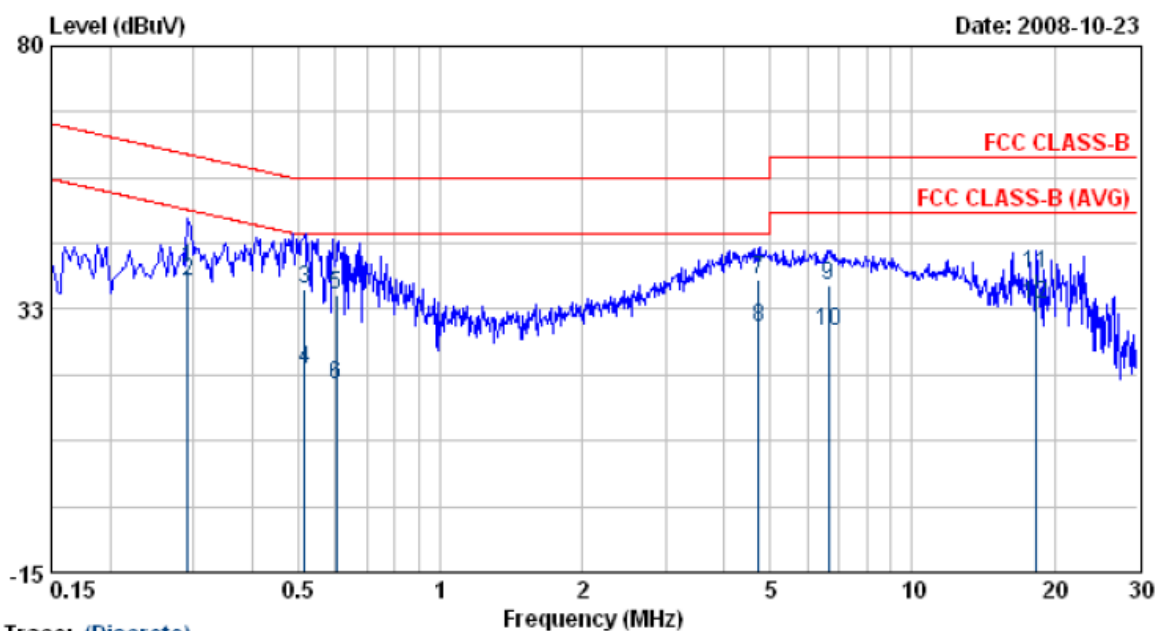
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.40	38.40	0.14	38.54	57.86	-19.32	QP
2	0.40	21.50	0.14	21.64	47.86	-26.22	AVERAGE
3	0.50	23.68	0.15	23.83	46.05	-22.22	AVERAGE
4	0.50	39.88	0.15	40.03	56.05	-16.03	QP
5	0.54	38.00	0.15	38.15	56.00	-17.85	QP
6	0.54	23.98	0.15	24.13	46.00	-21.87	AVERAGE
7	0.63	37.78	0.16	37.94	56.00	-18.06	QP
8	0.63	26.07	0.16	26.23	46.00	-19.77	AVERAGE
9	0.68	36.99	0.16	37.16	56.00	-18.84	QP
10	0.68	26.65	0.16	26.82	46.00	-19.18	AVERAGE
11	0.76	40.56	0.17	40.73	56.00	-15.27	QP
12	0.76	32.84	0.17	33.01	46.00	-12.99	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
4. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 7	: 802.11n HT20 CH1	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 1.8dBi	Humidity	: 52 %



Trace: (Discrete)

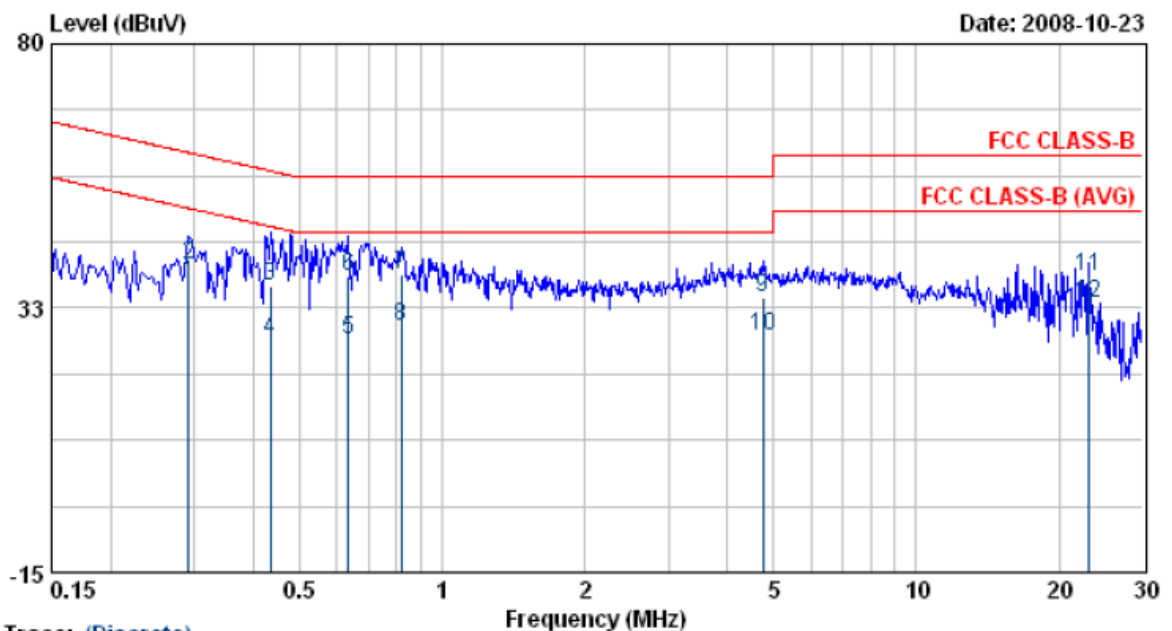
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.29	39.93	0.12	40.04	60.46	-20.41	QP
2	0.29	37.31	0.12	37.42	50.46	-13.03	AVERAGE
3	0.52	36.17	0.12	36.29	56.00	-19.71	QP
4	0.52	21.37	0.12	21.49	46.00	-24.51	AVERAGE
5	0.60	34.91	0.13	35.04	56.00	-20.96	QP
6	0.60	18.83	0.13	18.96	46.00	-27.04	AVERAGE
7	4.73	37.37	0.33	37.69	56.00	-18.31	QP
8	4.73	28.77	0.33	29.10	46.00	-16.90	AVERAGE
9	6.66	36.44	0.35	36.79	60.00	-23.21	QP
10	6.66	28.07	0.35	28.41	50.00	-21.59	AVERAGE
11	18.30	38.60	0.45	39.05	60.00	-20.95	QP
12	18.30	32.93	0.45	33.38	50.00	-16.62	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 7	: 802.11n HT20 CH1	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 1.8dBi	Humidity	: 52 %



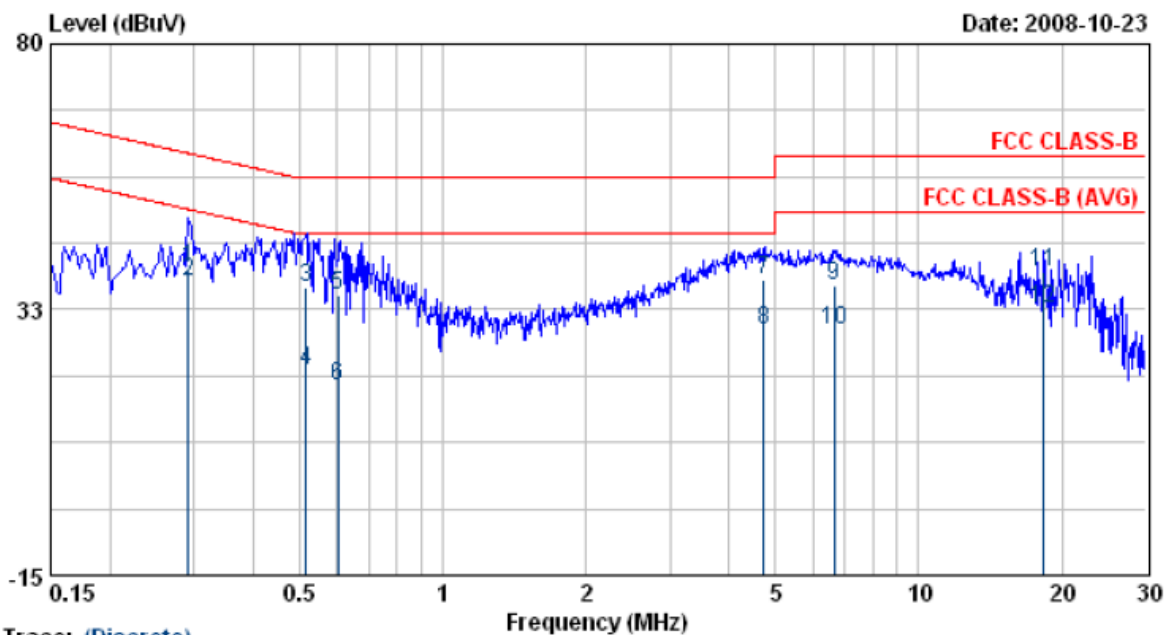
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.29	36.65	0.14	36.79	50.46	-13.67	AVERAGE
2	0.29	40.10	0.14	40.23	60.46	-20.22	QP
3	0.44	36.42	0.14	36.56	57.16	-20.59	QP
4	0.44	26.79	0.14	26.93	47.16	-20.23	AVERAGE
5	0.63	26.71	0.16	26.87	46.00	-19.13	AVERAGE
6	0.63	38.05	0.16	38.21	56.00	-17.79	QP
7	0.82	38.32	0.17	38.49	56.00	-17.51	QP
8	0.82	28.92	0.17	29.09	46.00	-16.91	AVERAGE
9	4.74	33.96	0.32	34.28	56.00	-21.72	QP
10	4.74	27.03	0.32	27.35	46.00	-18.65	AVERAGE
11	23.13	37.47	0.62	38.10	60.00	-21.90	QP
12	23.13	32.68	0.62	33.31	50.00	-16.69	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 8	: 802.11n HT40 CH3	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 1.8dBi	Humidity	: 52 %



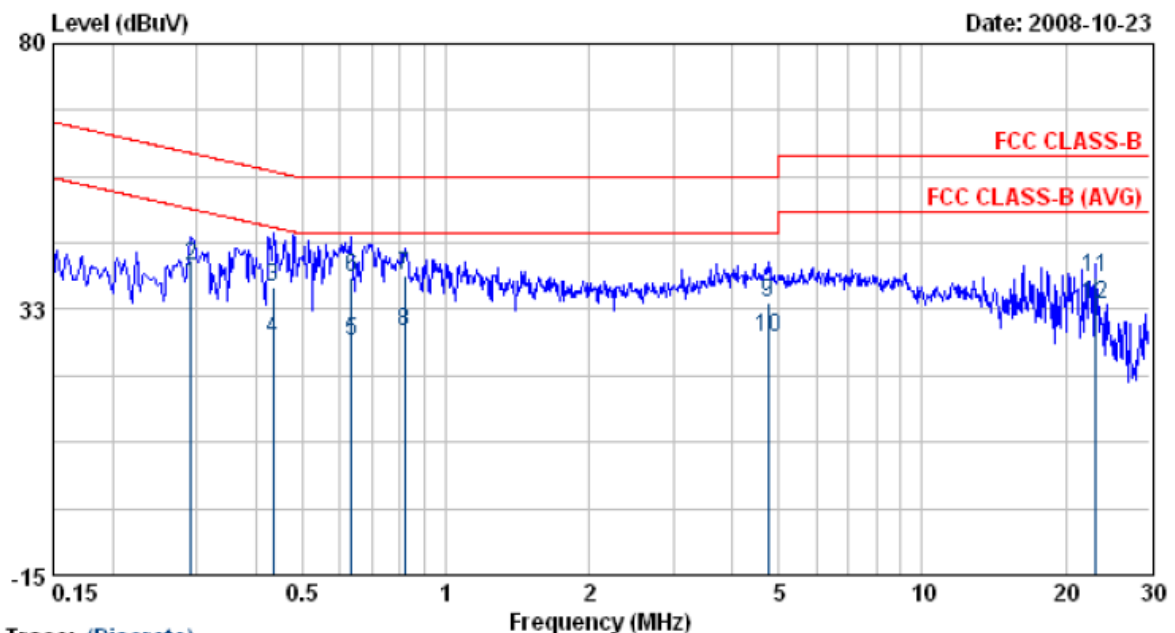
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.29	39.96	0.12	40.08	60.46	-20.38	QP
2	0.29	37.37	0.12	37.49	50.46	-12.97	AVERAGE
3	0.52	36.52	0.12	36.64	56.00	-19.36	QP
4	0.52	21.39	0.12	21.52	46.00	-24.48	AVERAGE
5	0.60	34.91	0.13	35.04	56.00	-20.96	QP
6	0.60	18.88	0.13	19.02	46.00	-26.99	AVERAGE
7	4.73	37.36	0.33	37.69	56.00	-18.31	QP
8	4.73	28.66	0.33	28.99	46.00	-17.01	AVERAGE
9	6.66	36.43	0.35	36.78	60.00	-23.22	QP
10	6.66	28.67	0.35	29.02	50.00	-20.98	AVERAGE
11	18.30	38.64	0.45	39.09	60.00	-20.91	QP
12	18.30	32.33	0.45	32.78	50.00	-17.22	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 8	: 802.11n HT40 CH3	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 1.8dBi	Humidity	: 52 %



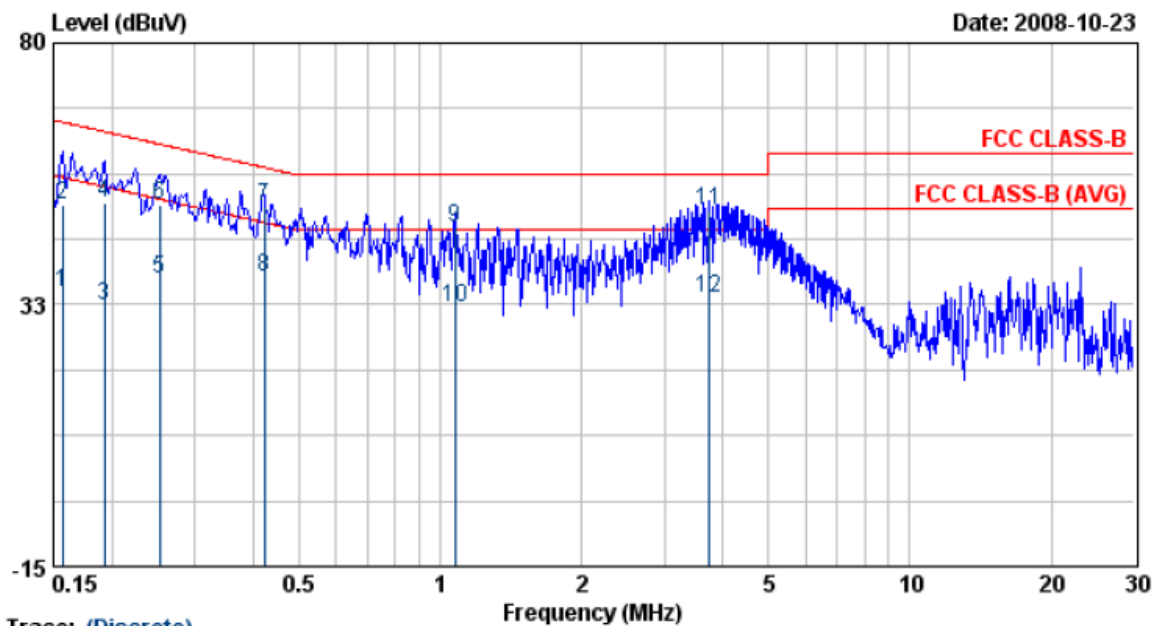
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.29	36.62	0.14	36.76	50.46	-13.70	AVERAGE
2	0.29	40.07	0.14	40.20	60.46	-20.25	QP
3	0.44	36.41	0.14	36.56	57.16	-20.60	QP
4	0.44	26.85	0.14	26.99	47.16	-20.16	AVERAGE
5	0.63	26.77	0.16	26.93	46.00	-19.07	AVERAGE
6	0.63	38.08	0.16	38.24	56.00	-17.76	QP
7	0.82	38.32	0.17	38.49	56.00	-17.51	QP
8	0.82	28.22	0.17	28.39	46.00	-17.61	AVERAGE
9	4.74	33.56	0.32	33.88	56.00	-22.12	QP
10	4.74	27.31	0.32	27.63	46.00	-18.37	AVERAGE
11	23.13	37.41	0.62	38.03	60.00	-21.97	QP
12	23.13	32.83	0.62	33.45	50.00	-16.55	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 10	: 802.11g CH1	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 5dBi	Humidity	: 52 %

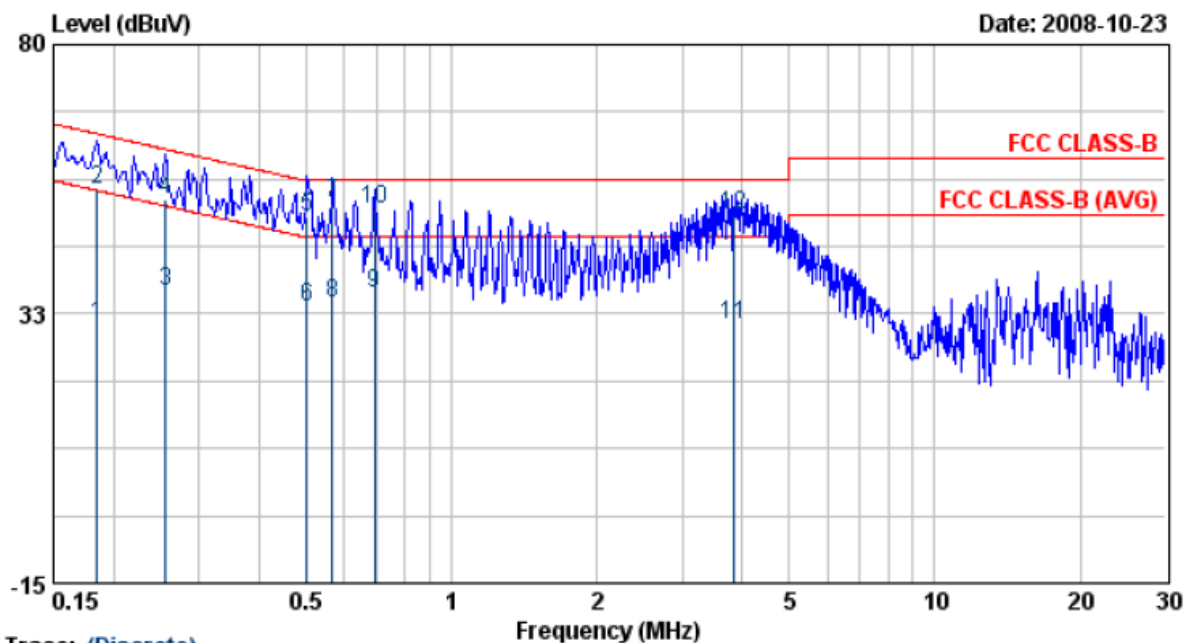


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.16	34.62	0.11	34.73	55.65	-20.92	AVERAGE
2	0.16	50.63	0.11	50.74	65.65	-14.90	QP
3	0.19	32.34	0.11	32.45	53.93	-21.48	AVERAGE
4	0.19	50.90	0.11	51.01	63.93	-12.92	QP
5	0.25	36.88	0.11	36.99	51.69	-14.70	AVERAGE
6	0.25	50.40	0.11	50.51	61.69	-11.18	QP
7	0.42	50.26	0.11	50.37	57.42	-7.05	QP
8	0.42	37.41	0.11	37.52	47.42	-9.89	AVERAGE
9	1.08	46.45	0.17	46.62	56.00	-9.38	QP
10	1.08	31.75	0.17	31.92	46.00	-14.08	AVERAGE
11	3.73	49.33	0.31	49.64	56.00	-6.36	QP
12	3.73	33.52	0.31	33.83	46.00	-12.17	AVERAGE

- Remarks:
1. Level = Read Level + Factor
 2. Factor = LISN(ISN) Factor + Cable Loss
 3. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
 4. According to technical experiences, all spurious emission of 802.11g mode at channel 1, 6, 11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
 5. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 10	: 802.11g CH1	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 5dBi	Humidity	: 52 %



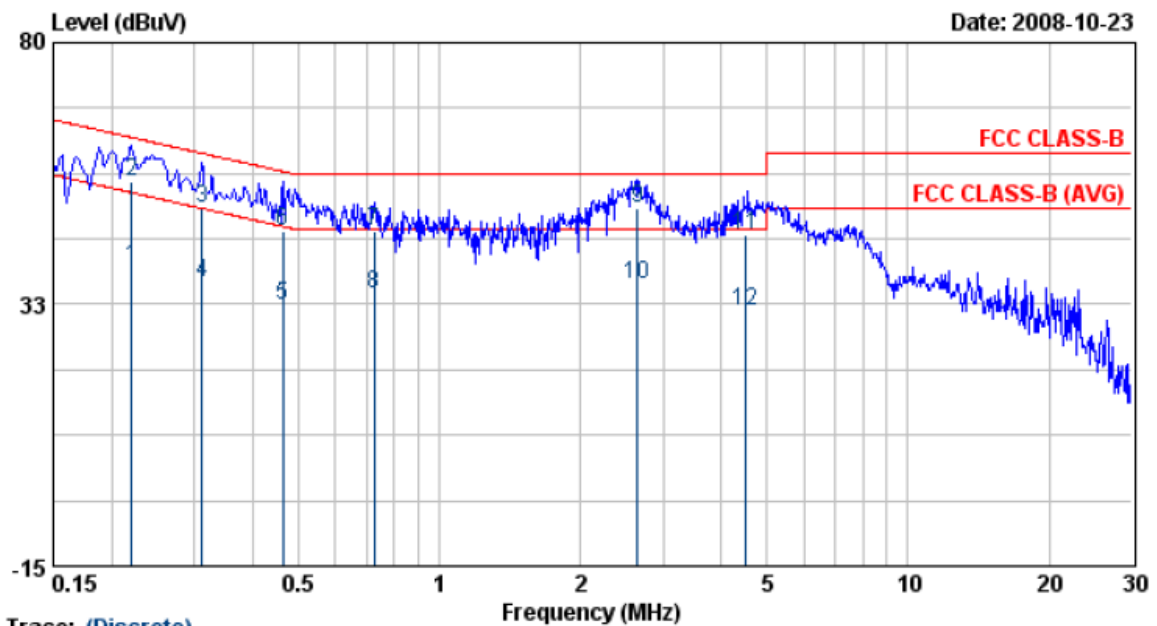
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.18	30.48	0.14	30.62	54.28	-23.67	AVERAGE
2	0.18	54.15	0.14	54.29	64.28	-9.99	QP
3	0.26	36.24	0.14	36.38	51.56	-15.18	AVERAGE
4	0.26	52.68	0.14	52.82	61.56	-8.73	QP
5	0.50	49.42	0.15	49.57	56.00	-6.43	QP
6	0.50	33.61	0.15	33.76	46.00	-12.24	AVERAGE
7	0.57	51.92	0.16	52.07	56.00	-3.93	QP
8	0.57	34.38	0.16	34.54	46.00	-11.46	AVERAGE
9	0.69	35.89	0.16	36.05	46.00	-9.95	AVERAGE
10	0.69	50.71	0.16	50.88	56.00	-5.12	QP
11	3.85	30.39	0.30	30.69	46.00	-15.31	AVERAGE
12	3.85	49.49	0.30	49.79	56.00	-6.21	QP

Remarks: 1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. All emission below 1GHz at 802.11g mode are all the same,so the 802.11g mode chosen as representative in final test.
4. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 11	: 802.11n HT20 CH1	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 5dBi	Humidity	: 52 %



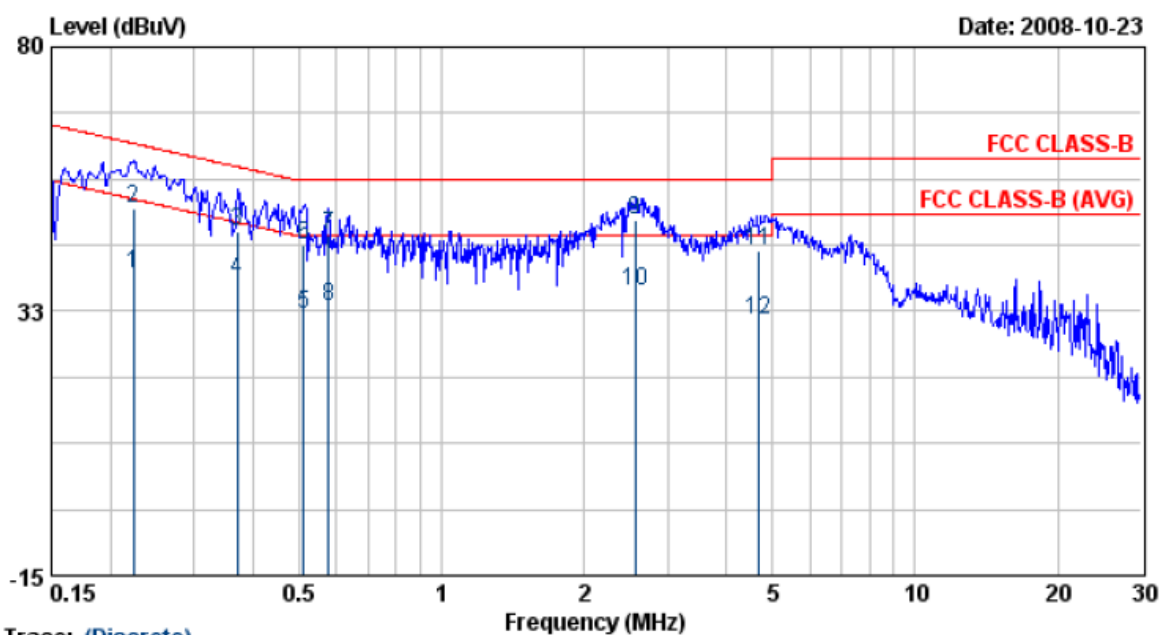
Item	Freq	Read	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.22	39.11	0.11	39.22	52.79	-13.57	AVERAGE
2	0.22	54.62	0.11	54.73	62.79	-8.06	QP
3	0.31	49.88	0.12	50.00	59.93	-9.93	QP
4	0.31	36.33	0.12	36.44	49.93	-13.48	AVERAGE
5	0.46	32.37	0.12	32.49	46.63	-14.14	AVERAGE
6	0.46	45.77	0.12	45.89	56.63	-10.74	QP
7	0.73	45.74	0.14	45.89	56.00	-10.11	QP
8	0.73	34.39	0.14	34.53	46.00	-11.47	AVERAGE
9	2.65	49.53	0.27	49.80	56.00	-6.20	QP
10	2.65	35.90	0.27	36.17	46.00	-9.83	AVERAGE
11	4.49	44.82	0.33	45.14	56.00	-10.86	QP
12	4.49	31.06	0.33	31.39	46.00	-14.61	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 11	: 802.11n HT20 CH1	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 5dBi	Humidity	: 52 %



Trace: (Discrete)

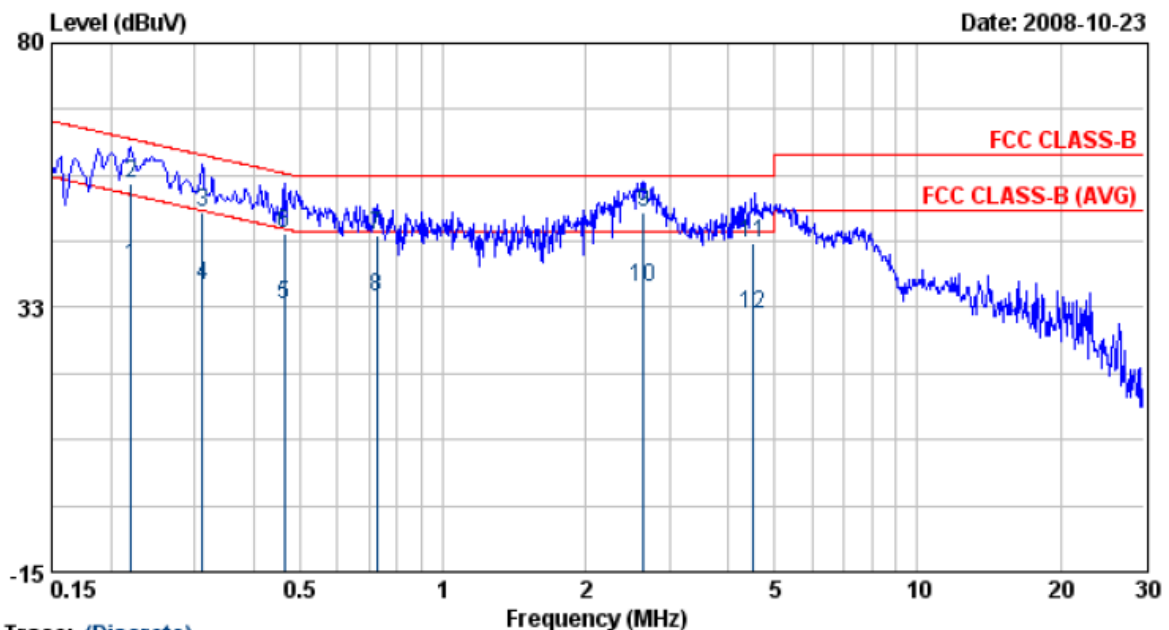
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.22	38.94	0.14	39.07	52.70	-13.63	AVERAGE
2	0.22	51.02	0.14	51.15	62.70	-11.55	QP
3	0.37	46.77	0.14	46.91	58.47	-11.57	QP
4	0.37	37.99	0.14	38.13	48.47	-10.35	AVERAGE
5	0.51	31.89	0.15	32.04	46.00	-13.96	AVERAGE
6	0.51	44.23	0.15	44.38	56.00	-11.62	QP
7	0.58	45.85	0.16	46.00	56.00	-10.00	QP
8	0.58	33.18	0.16	33.34	46.00	-12.66	AVERAGE
9	2.57	48.82	0.26	49.07	56.00	-6.93	QP
10	2.57	35.95	0.26	36.20	46.00	-9.80	AVERAGE
11	4.69	43.13	0.32	43.45	56.00	-12.55	QP
12	4.69	30.77	0.32	31.09	46.00	-14.91	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 12	: 802.11n HT40 CH3	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 5dBi	Humidity	: 52 %



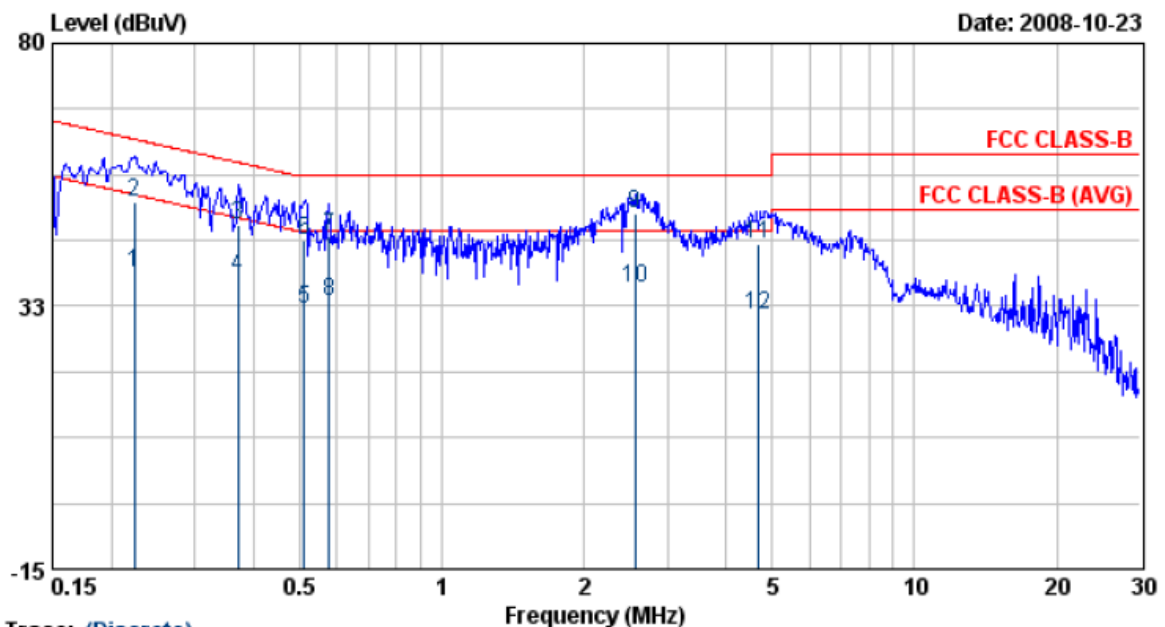
Item	Freq	Read	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.22	39.87	0.11	39.98	52.79	-12.81	AVERAGE
2	0.22	54.62	0.11	54.73	62.79	-8.06	QP
3	0.31	49.51	0.12	49.63	59.93	-10.30	QP
4	0.31	36.28	0.12	36.39	49.93	-13.53	AVERAGE
5	0.46	32.78	0.12	32.90	46.63	-13.73	AVERAGE
6	0.46	45.70	0.12	45.82	56.63	-10.81	QP
7	0.73	45.44	0.14	45.58	56.00	-10.42	QP
8	0.73	34.31	0.14	34.45	46.00	-11.55	AVERAGE
9	2.65	49.33	0.27	49.60	56.00	-6.40	QP
10	2.65	35.94	0.27	36.21	46.00	-9.79	AVERAGE
11	4.49	43.58	0.33	43.91	56.00	-12.09	QP
12	4.49	31.04	0.33	31.37	46.00	-14.63	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3, 6, 9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 12	: 802.11n HT40 CH3	Temperature	: 26 °C
Memo	: Leader \ MT12-Y120100-A1, Antenna 5dBi	Humidity	: 52 %



Trace: (Discrete)

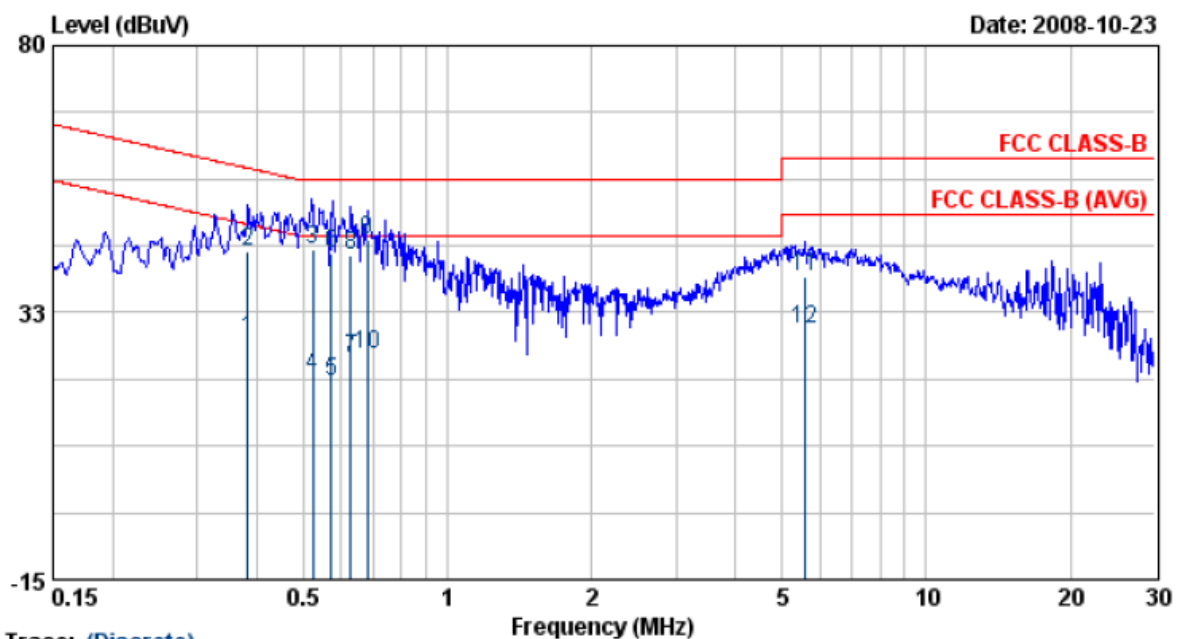
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.22	38.37	0.14	38.50	52.70	-14.20	AVERAGE
2	0.22	51.07	0.14	51.21	62.70	-11.49	QP
3	0.37	46.89	0.14	47.03	58.47	-11.45	QP
4	0.37	37.87	0.14	38.01	48.47	-10.46	AVERAGE
5	0.51	31.78	0.15	31.93	46.00	-14.07	AVERAGE
6	0.51	44.32	0.15	44.47	56.00	-11.53	QP
7	0.58	44.86	0.16	45.01	56.00	-10.99	QP
8	0.58	33.10	0.16	33.26	46.00	-12.74	AVERAGE
9	2.57	48.87	0.26	49.12	56.00	-6.88	QP
10	2.57	35.48	0.26	35.74	46.00	-10.26	AVERAGE
11	4.69	43.38	0.32	43.70	56.00	-12.30	QP
12	4.69	30.73	0.32	31.05	46.00	-14.95	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 14	: 802.11g CH1	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 5dBi	Humidity	: 52 %



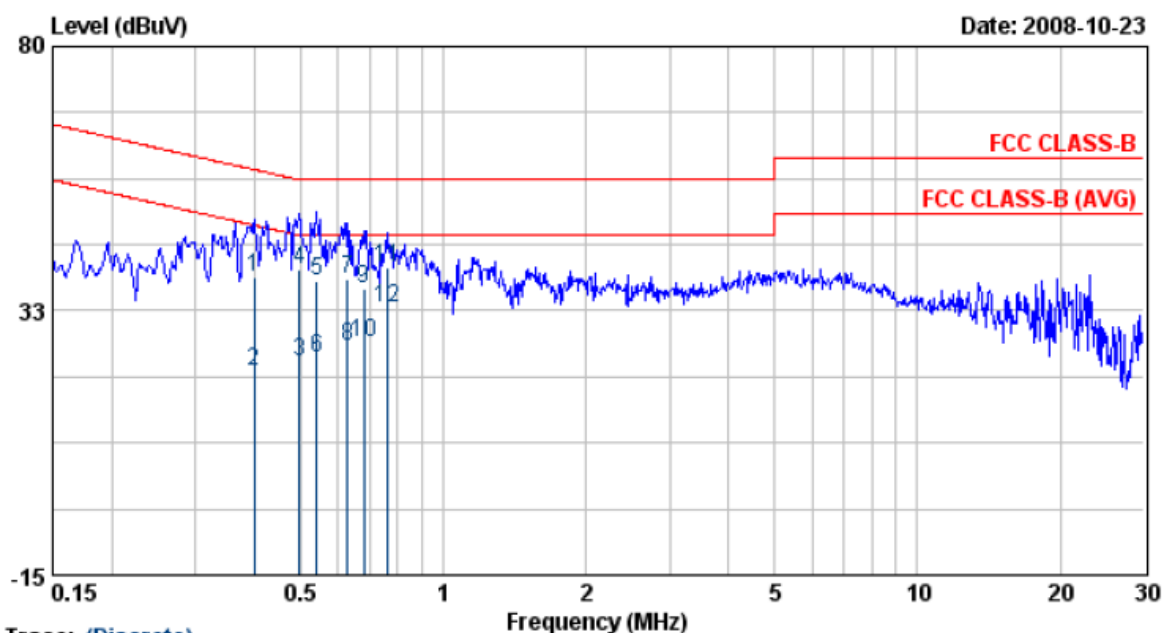
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.38	27.66	0.11	27.77	48.21	-20.44	AVERAGE
2	0.38	43.10	0.11	43.21	58.21	-15.00	QP
3	0.52	43.47	0.12	43.59	56.00	-12.41	QP
4	0.52	21.06	0.12	21.19	46.00	-24.81	AVERAGE
5	0.57	20.19	0.13	20.32	46.00	-25.68	AVERAGE
6	0.57	42.85	0.13	42.98	56.00	-13.02	QP
7	0.63	24.27	0.13	24.41	46.00	-21.59	AVERAGE
8	0.63	42.40	0.13	42.53	56.00	-13.47	QP
9	0.68	45.40	0.14	45.54	56.00	-10.46	QP
10	0.68	25.00	0.14	25.14	46.00	-20.86	AVERAGE
11	5.56	38.54	0.34	38.88	60.00	-21.12	QP
12	5.56	29.21	0.34	29.54	50.00	-20.46	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
4. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 14	: 802.11g CH1	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 5dBi	Humidity	: 52 %

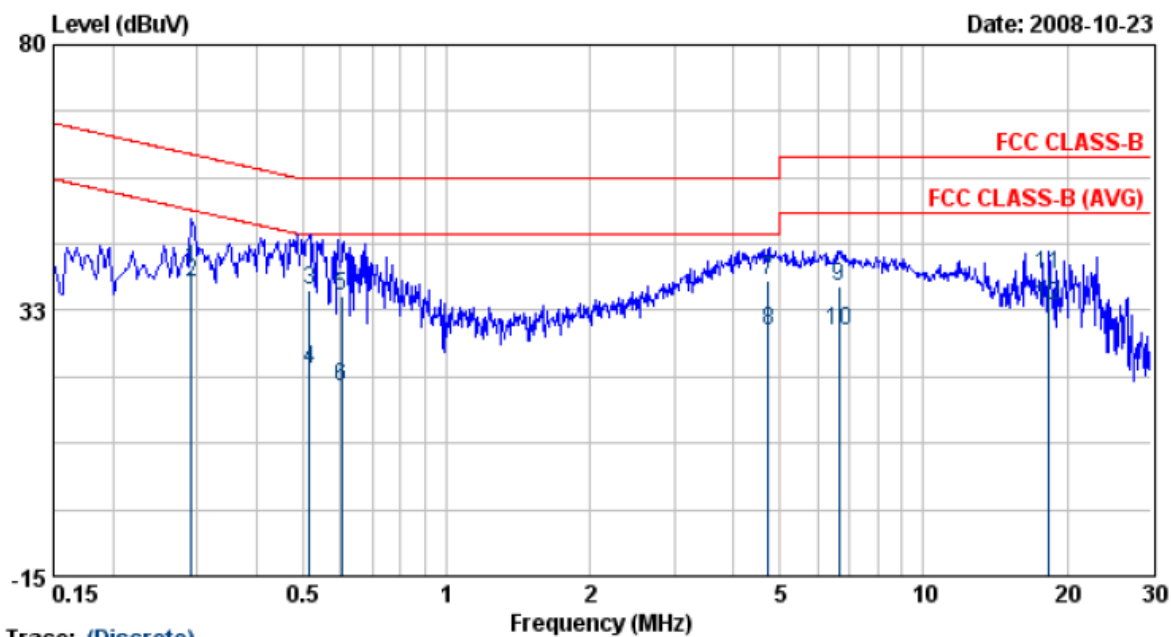


Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.40	38.35	0.14	38.49	57.86	-19.37	QP
2	0.40	21.50	0.14	21.64	47.86	-26.22	AVERAGE
3	0.50	23.34	0.15	23.49	46.05	-22.56	AVERAGE
4	0.50	39.88	0.15	40.03	56.05	-16.03	QP
5	0.54	37.86	0.15	38.01	56.00	-17.99	QP
6	0.54	23.98	0.15	24.13	46.00	-21.87	AVERAGE
7	0.63	37.94	0.16	38.10	56.00	-17.90	QP
8	0.63	26.07	0.16	26.23	46.00	-19.77	AVERAGE
9	0.68	36.43	0.16	36.59	56.00	-19.41	QP
10	0.68	26.65	0.16	26.82	46.00	-19.18	AVERAGE
11	0.76	40.27	0.17	40.44	56.00	-15.56	QP
12	0.76	32.84	0.17	33.01	46.00	-12.99	AVERAGE

- Remarks:
1. Level = Read Level + Factor
 2. Factor = LISN(ISN) Factor + Cable Loss
 3. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
 4. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
 5. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 15	: 802.11n HT20 CH1	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 5dBi	Humidity	: 52 %



Trace: (Discrete)

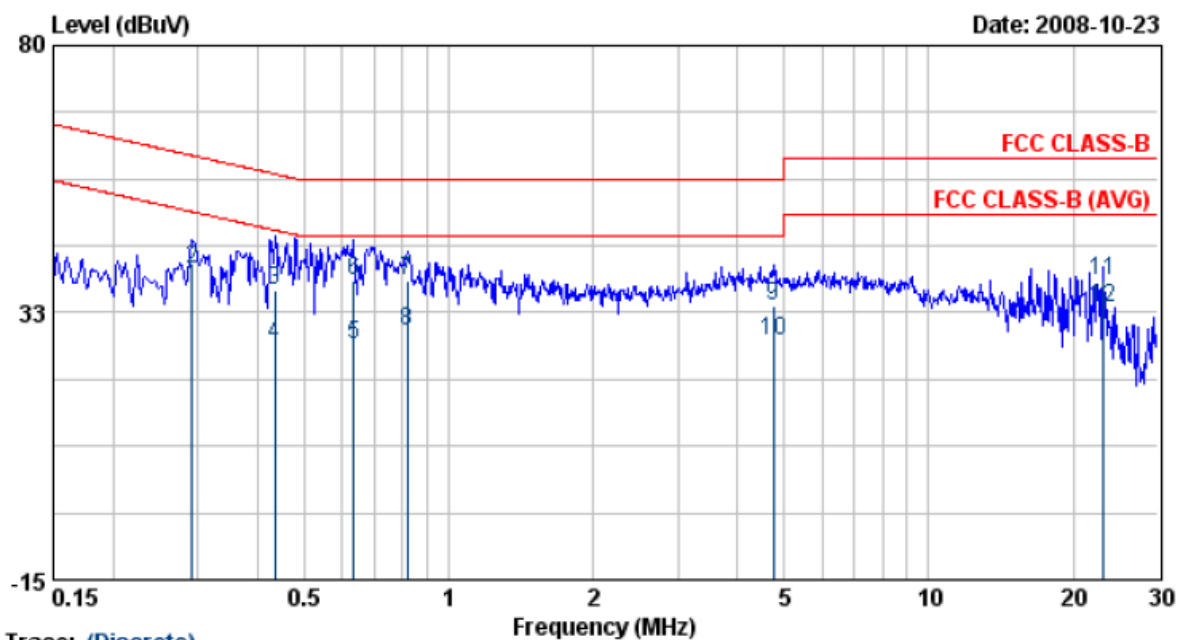
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.29	39.93	0.12	40.04	60.46	-20.41	QP
2	0.29	37.37	0.12	37.49	50.46	-12.97	AVERAGE
3	0.52	36.17	0.12	36.29	56.00	-19.71	QP
4	0.52	21.95	0.12	22.07	46.00	-23.93	AVERAGE
5	0.60	34.91	0.13	35.04	56.00	-20.96	QP
6	0.60	18.78	0.13	18.92	46.00	-27.09	AVERAGE
7	4.73	37.37	0.33	37.69	56.00	-18.31	QP
8	4.73	28.61	0.33	28.94	46.00	-17.06	AVERAGE
9	6.66	36.44	0.35	36.79	60.00	-23.21	QP
10	6.66	28.67	0.35	29.02	50.00	-20.98	AVERAGE
11	18.30	38.60	0.45	39.05	60.00	-20.95	QP
12	18.30	32.93	0.45	33.38	50.00	-16.62	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 15	: 802.11n HT20 CH1	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 5dBi	Humidity	: 52 %



Trace: (Discrete)

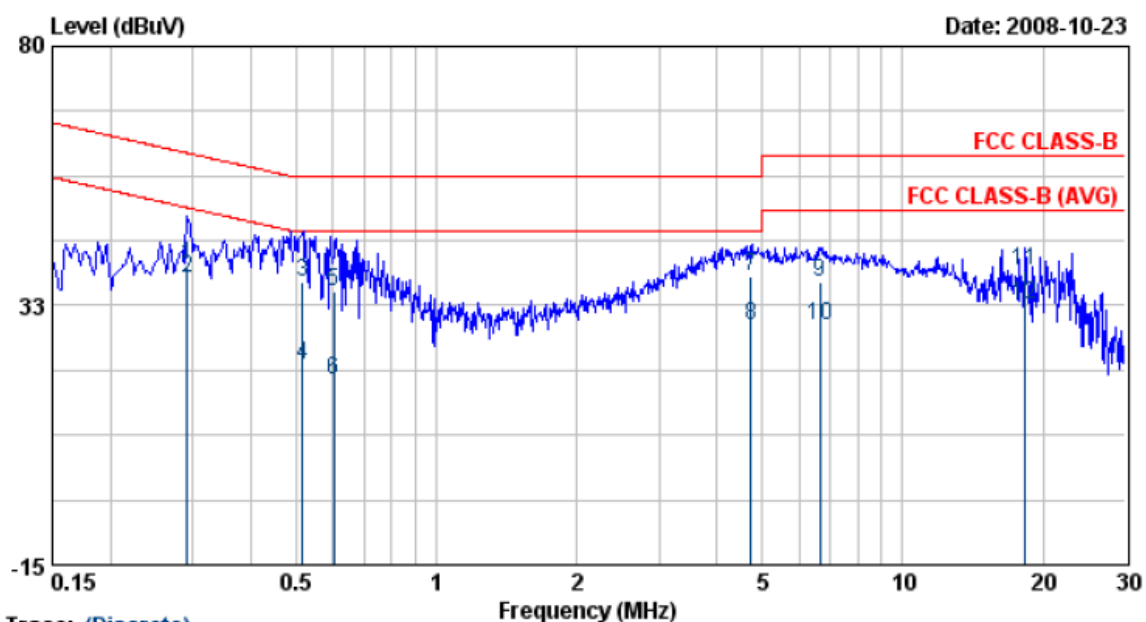
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.29	36.52	0.14	36.66	50.46	-13.80	AVERAGE
2	0.29	40.10	0.14	40.23	60.46	-20.22	QP
3	0.44	36.41	0.14	36.56	57.16	-20.60	QP
4	0.44	26.79	0.14	26.93	47.16	-20.23	AVERAGE
5	0.63	26.72	0.16	26.88	46.00	-19.12	AVERAGE
6	0.63	38.05	0.16	38.21	56.00	-17.79	QP
7	0.82	38.17	0.17	38.34	56.00	-17.66	QP
8	0.82	28.92	0.17	29.09	46.00	-16.91	AVERAGE
9	4.74	33.56	0.32	33.88	56.00	-22.12	QP
10	4.74	27.03	0.32	27.35	46.00	-18.65	AVERAGE
11	23.13	37.41	0.62	38.03	60.00	-21.97	QP
12	23.13	32.68	0.62	33.31	50.00	-16.69	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 16	: 802.11n HT40 CH3	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 5dBi	Humidity	: 52 %



Trace: (Discrete)

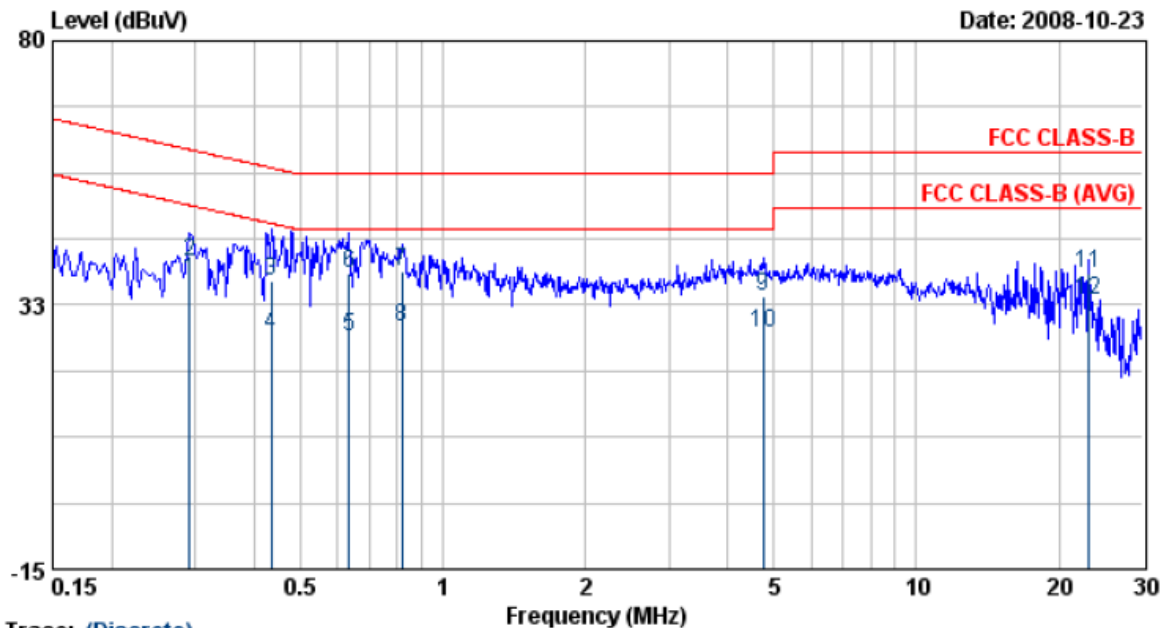
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.29	39.91	0.12	40.03	60.46	-20.43	QP
2	0.29	37.37	0.12	37.49	50.46	-12.97	AVERAGE
3	0.52	36.74	0.12	36.86	56.00	-19.14	QP
4	0.52	21.39	0.12	21.52	46.00	-24.48	AVERAGE
5	0.60	34.95	0.13	35.08	56.00	-20.92	QP
6	0.60	18.88	0.13	19.02	46.00	-26.99	AVERAGE
7	4.73	37.57	0.33	37.90	56.00	-18.10	QP
8	4.73	28.66	0.33	28.99	46.00	-17.01	AVERAGE
9	6.66	36.35	0.35	36.69	60.00	-23.31	QP
10	6.66	28.67	0.35	29.02	50.00	-20.98	AVERAGE
11	18.30	38.43	0.45	38.88	60.00	-21.12	QP
12	18.30	32.33	0.45	32.78	50.00	-17.22	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3, 6, 9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 16	: 802.11n HT40 CH3	Temperature	: 26 °C
Memo	: DVE \ DSA-12G-12 AUS, Antenna 5dBi	Humidity	: 52 %



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.29	36.63	0.14	36.77	50.46	-13.69	AVERAGE
2	0.29	40.07	0.14	40.20	60.46	-20.25	QP
3	0.44	36.55	0.14	36.70	57.16	-20.46	QP
4	0.44	26.85	0.14	26.99	47.16	-20.16	AVERAGE
5	0.63	26.72	0.16	26.88	46.00	-19.12	AVERAGE
6	0.63	38.08	0.16	38.24	56.00	-17.76	QP
7	0.82	38.37	0.17	38.54	56.00	-17.46	QP
8	0.82	28.22	0.17	28.39	46.00	-17.61	AVERAGE
9	4.74	33.79	0.32	34.11	56.00	-21.89	QP
10	4.74	27.31	0.32	27.63	46.00	-18.37	AVERAGE
11	23.13	37.48	0.62	38.11	60.00	-21.89	QP
12	23.13	32.83	0.62	33.45	50.00	-16.55	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.

Test engineer: Ben



5. Test of Radiated Emission

5.1 Test Limit

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defines in ANSI C63.4-2003. The EUT was placed, 0.8 meter above the ground plane, as shown in section 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions

For unintentional device, according to § 15.109(a), 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 (MHz)	Distance Meters	Radiated (μ V / M)	Radiated (dB μ V/ M)
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

For unintentional device, according to CISPR PUB.22, for Class B digital devices, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 10 meters shall not exceed the below table.

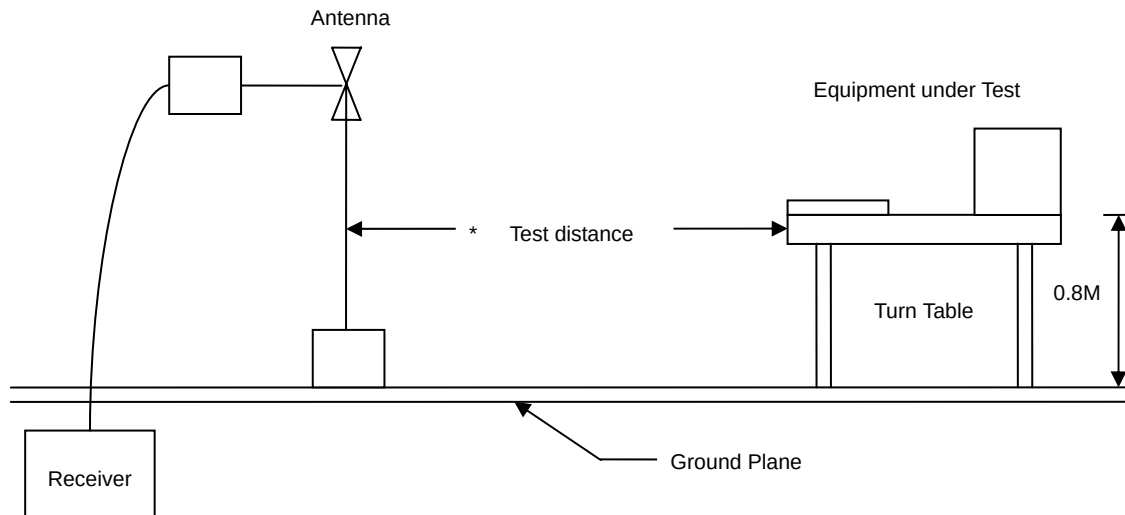
Frequency (MHz)	Distance Meters	Radiated (dB μ V/ M)
30-230	10	30
230-1000	10	37

5.2 Test Procedures

- The EUT was placed on a rotatable table top 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The table was rotated 360 degrees to determine the position of the highest radiation.
- The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- "Cone of radiation" has been considered to be 3dB beamwidth of the measurement antenna.



5.3 Typical Test Setup



5.4 Measurement equipment

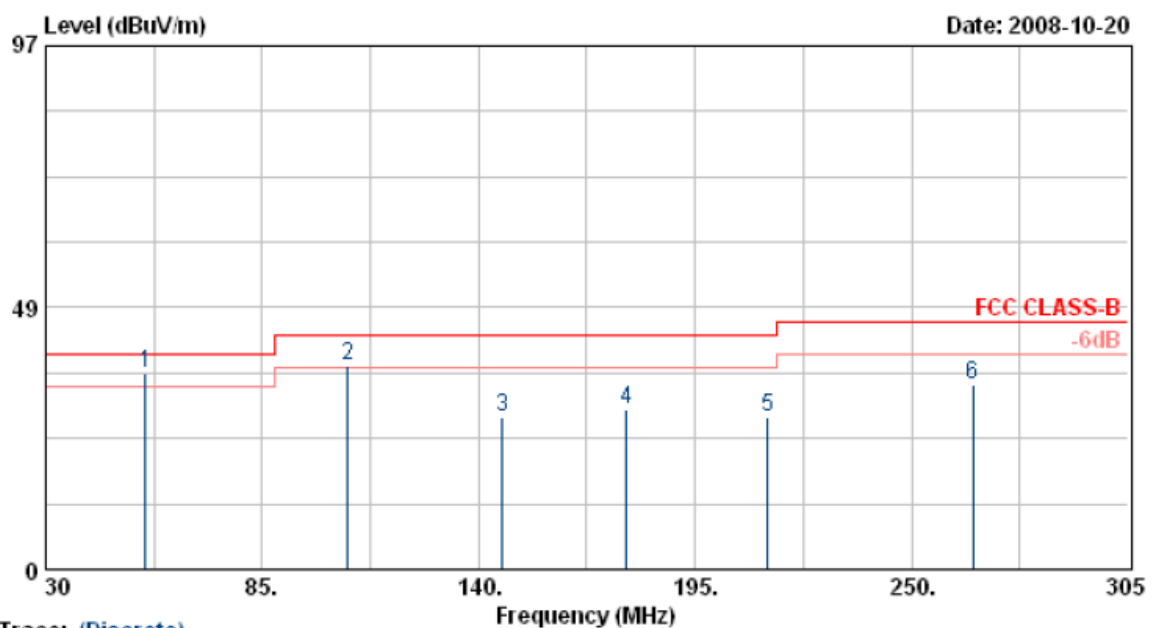
Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Bilog Antenna	CBL6112B	Schaffner	2840	2008/05/15	2009/05/14
Signal Generator	8648B	HP	3629U00612	2008/10/08	2009/10/07
Amplifier	8447D	Agilent	2944A10593	2008/05/26	2009/05/25
EMI Receiver	SCR-3501	SCHAFFNER	437	2007/11/26	2008/11/25
Spectrum	FSP40	R&S	100047	2008/02/22	2009/02/21
Horn Antenna	3115	EMCO	31589	2008/04/01	2009/03/30
Amplifier	8449B	Agilent	3008A01954	2008/01/24	2009/01/23



5.5 Test Result and Data

Test Mode: 2

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps



Trace: (Discrete)

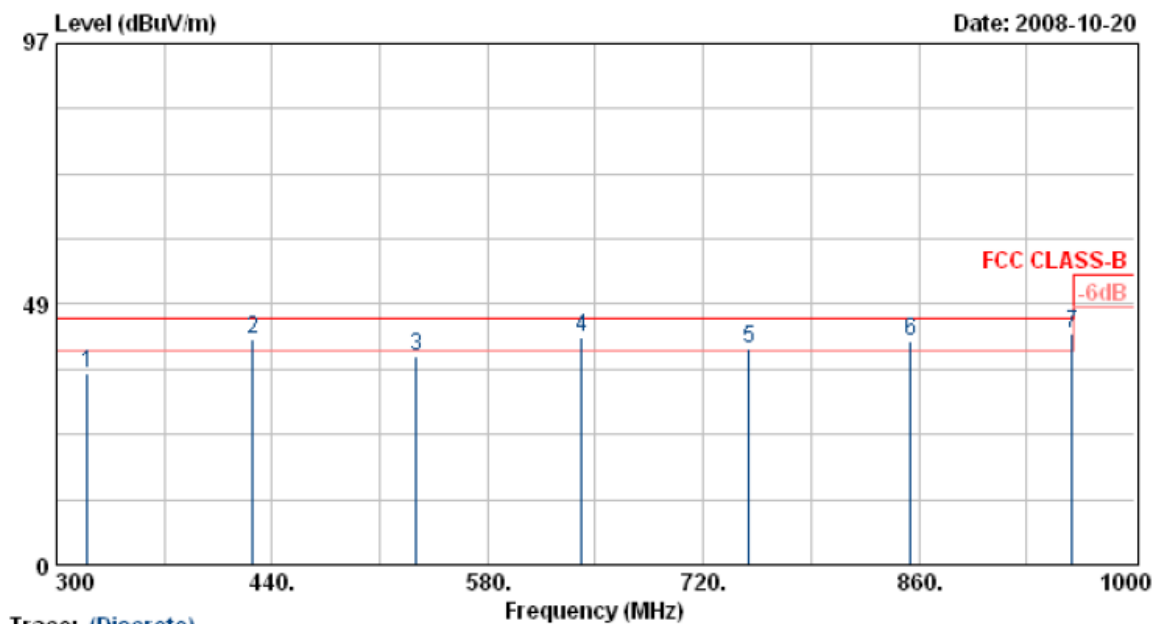
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	55.30	52.14	-15.95	36.19	40.00	-3.81	QP	100	154
2	106.73	51.31	-13.69	37.62	43.50	-5.88	QP	100	156
3	146.05	41.04	-12.92	28.13	43.50	-15.37	Peak	100	167
4	177.68	39.18	-9.51	29.67	43.50	-13.83	Peak	100	211
5	213.43	40.05	-11.78	28.27	43.50	-15.23	Peak	100	184
6	265.68	42.42	-8.30	34.12	46.00	-11.88	Peak	100	221

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
5. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps



Trace: (Discrete)

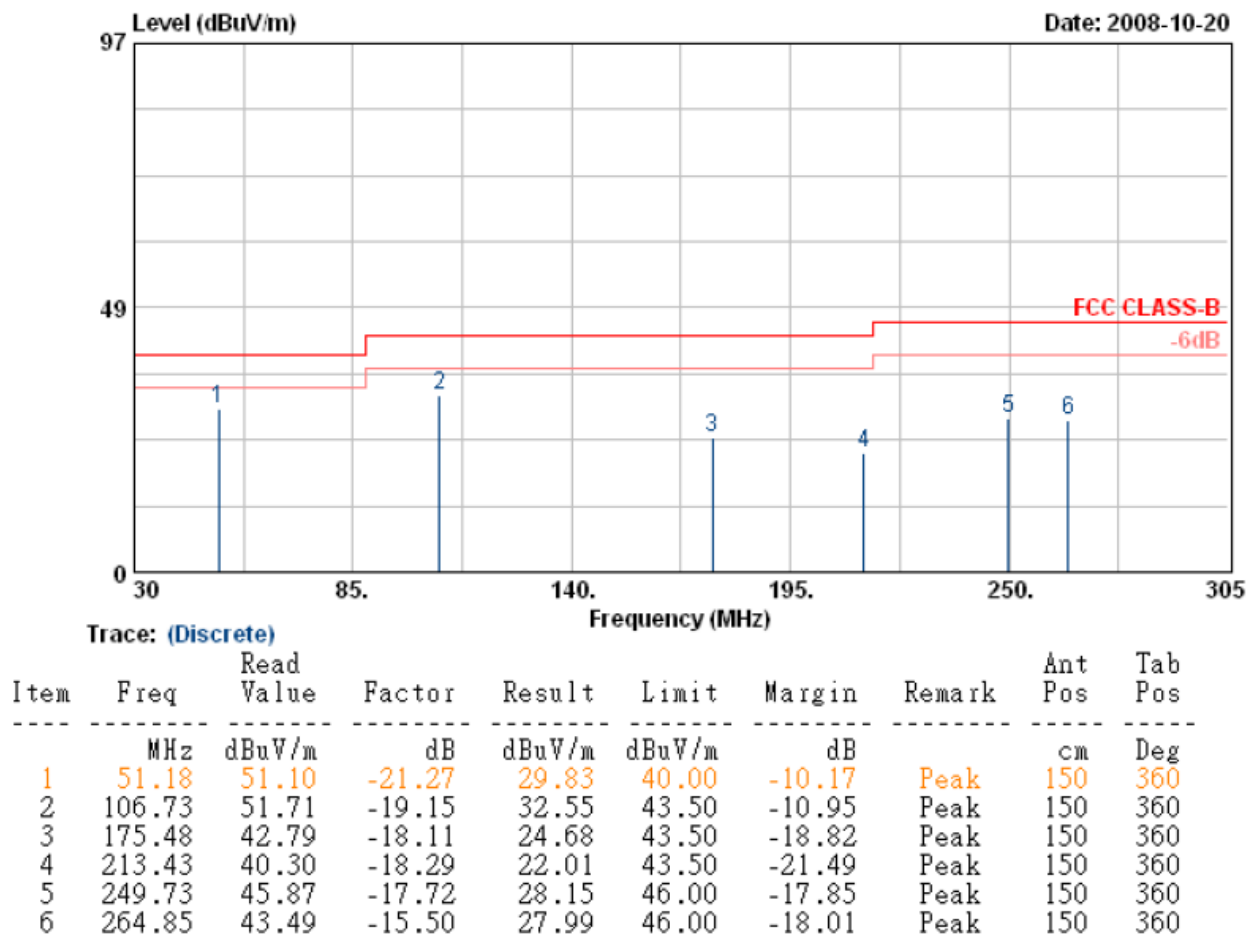
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	320.30	45.96	-10.38	35.59	46.00	-10.41	Peak	100	360
2	427.40	46.78	-4.84	41.94	46.00	-4.06	QP	100	360
3	533.80	42.74	-3.83	38.90	46.00	-7.10	Peak	100	360
4	640.90	46.54	-4.12	42.41	46.00	-3.59	QP	100	360
5	749.40	39.01	1.28	40.29	46.00	-5.71	QP	100	360
6	854.40	41.43	0.07	41.50	46.00	-4.50	QP	100	360
7	959.40	39.76	3.13	42.89	46.00	-3.11	QP	100	360

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
5. According to technical experiences, all spurious emission of 802.11g mode at channel 1, 6, 11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps

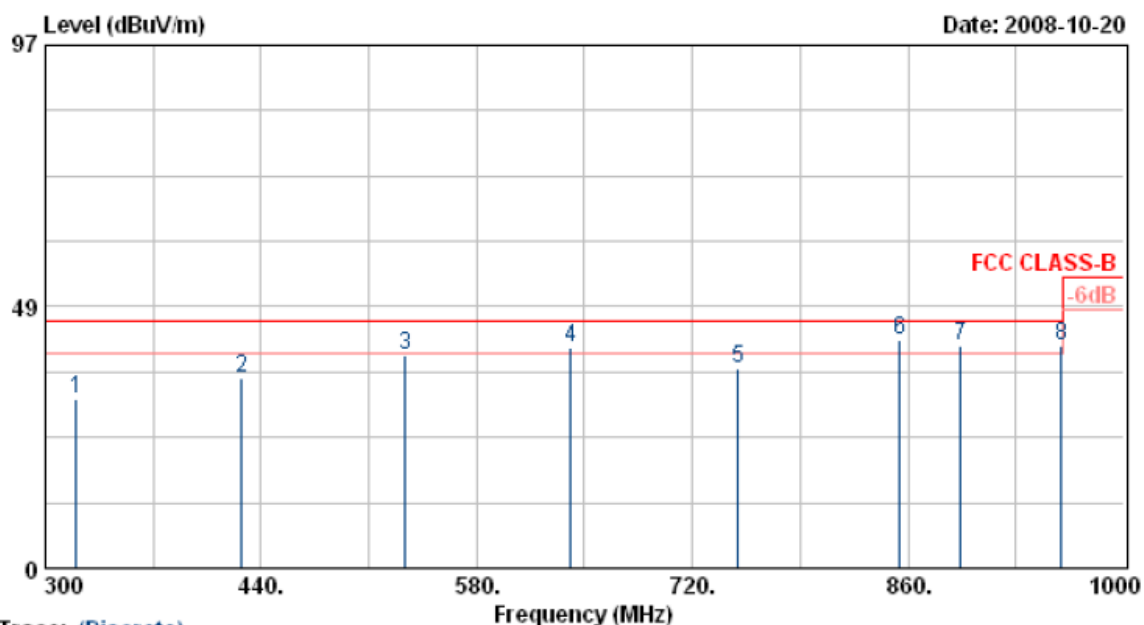


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
5. According to technical experiences, all spurious emission of 802.11g mode at channel 1, 6, 11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	320.30	45.42	-14.15	31.27	46.00	-14.73	Peak	100	154
2	427.40	45.88	-10.47	35.40	46.00	-10.60	Peak	100	102
3	533.80	42.55	-2.88	39.67	46.00	-6.33	Peak	100	135
4	640.90	44.03	-2.97	41.06	46.00	-4.94	QP	100	187
5	749.40	36.67	0.34	37.00	46.00	-9.00	Peak	100	154
6	854.40	39.15	3.33	42.48	46.00	-3.52	QP	100	164
7	894.30	37.78	3.35	41.13	46.00	-4.87	QP	100	147
8	959.40	34.98	6.26	41.24	46.00	-4.76	QP	100	155

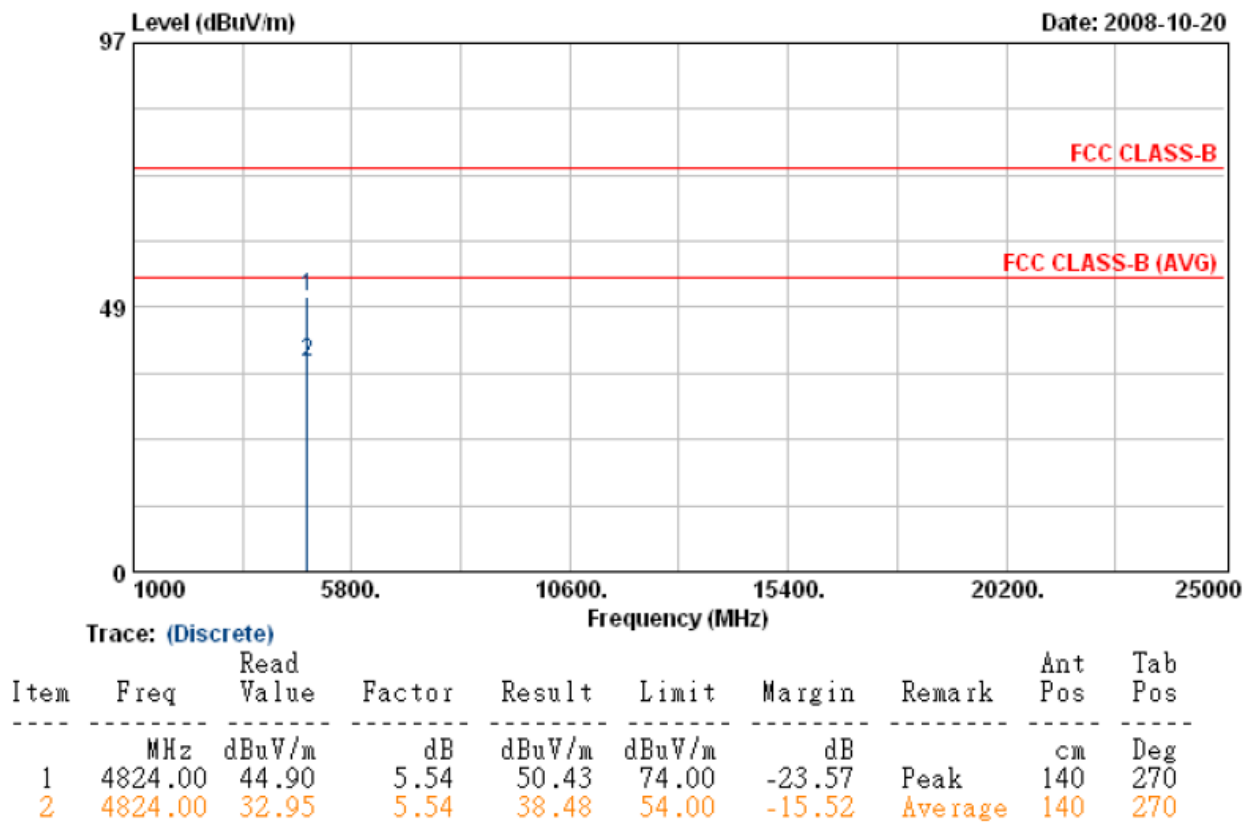
Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
5. According to technical experiences, all spurious emission of 802.11g mode at channel 1, 6, 11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Test Mode: 1

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 11 Mbps

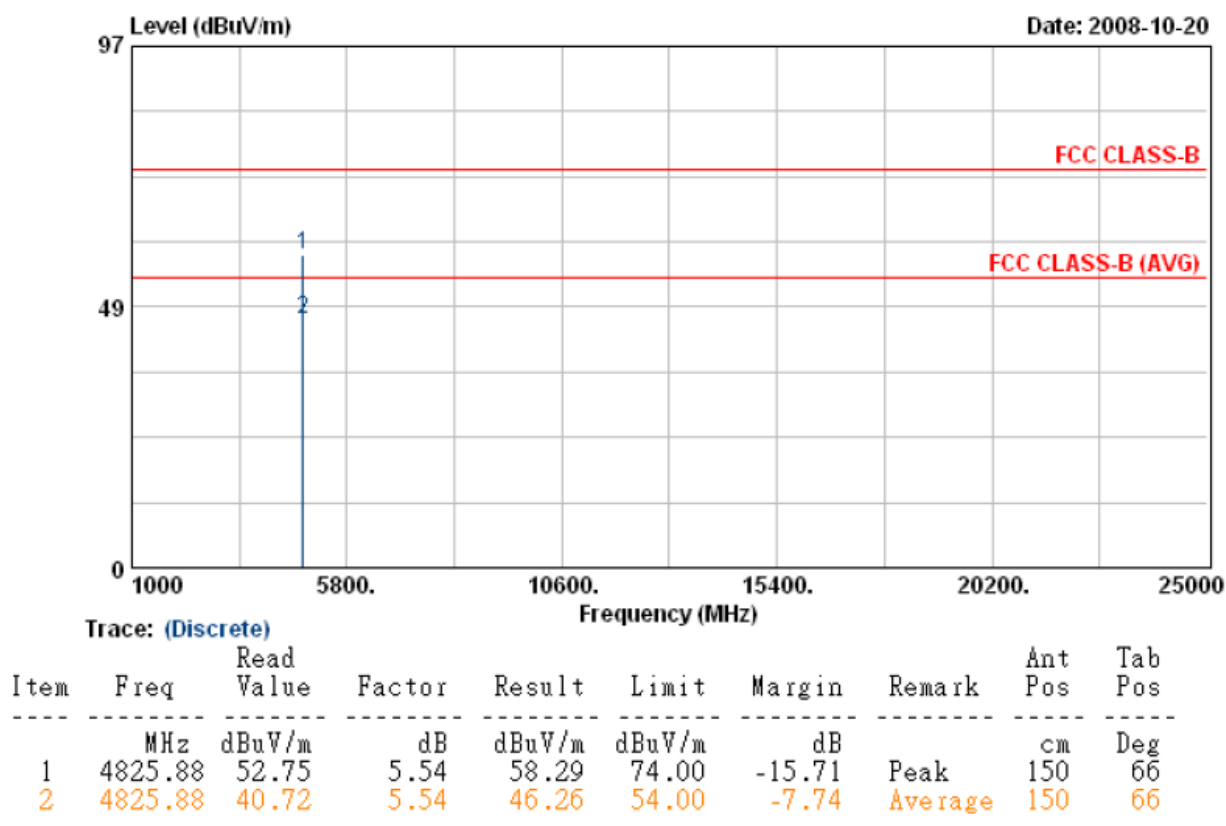


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 11 Mbps

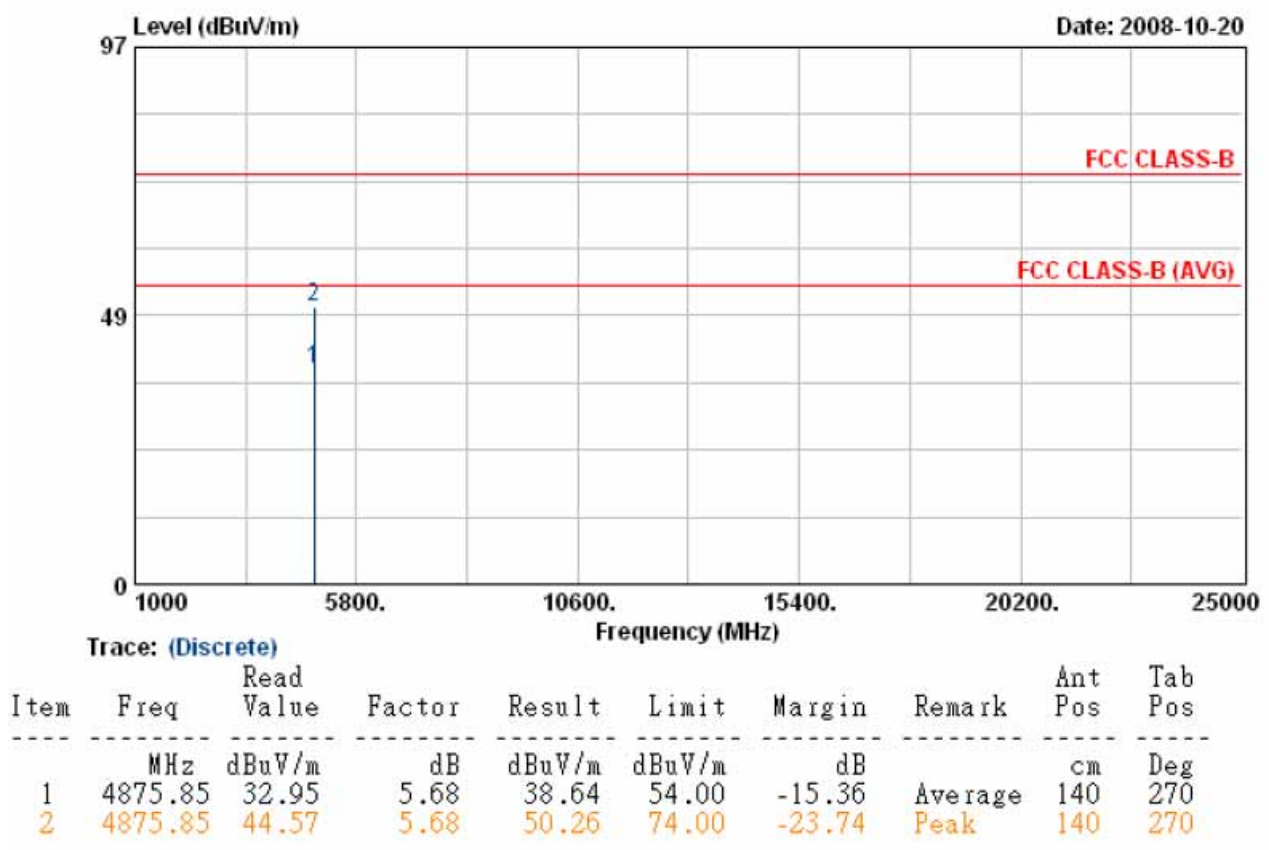


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 6	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 11 Mbps

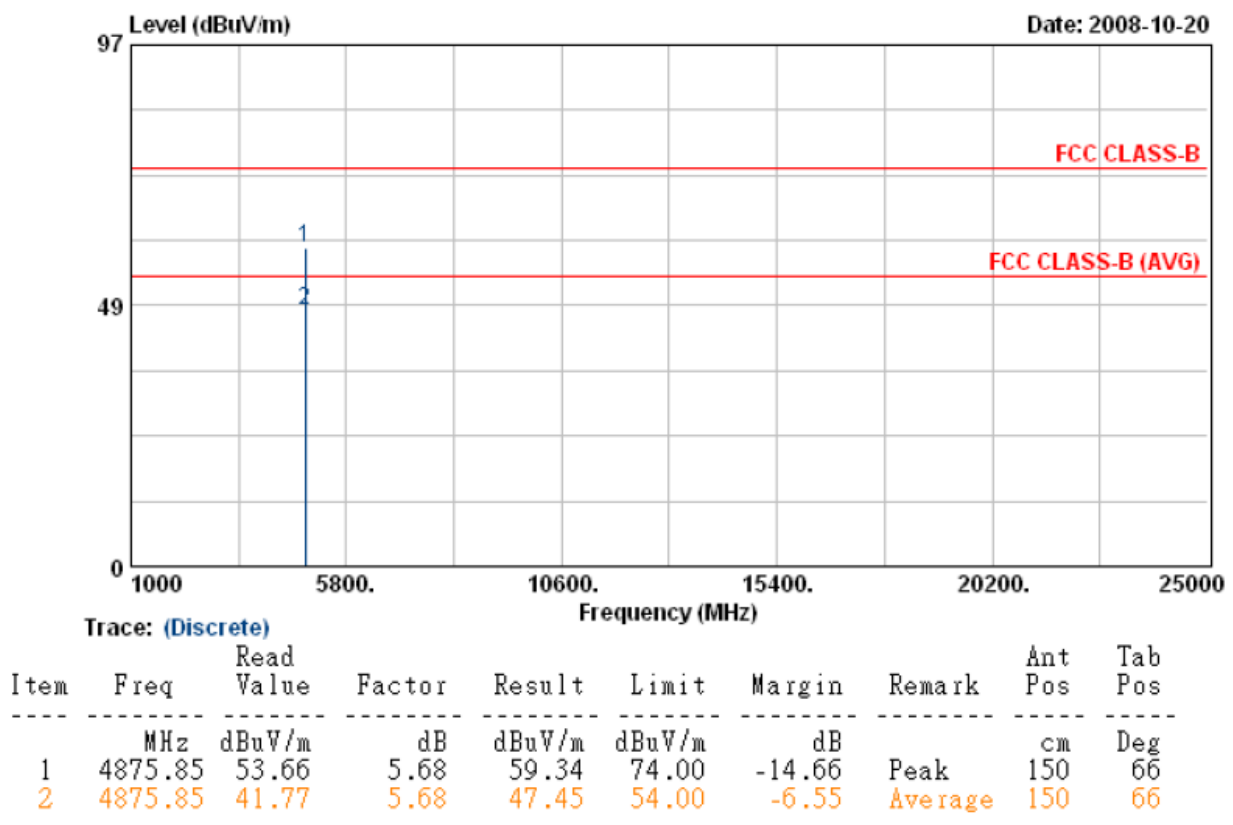


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 6	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 11 Mbps

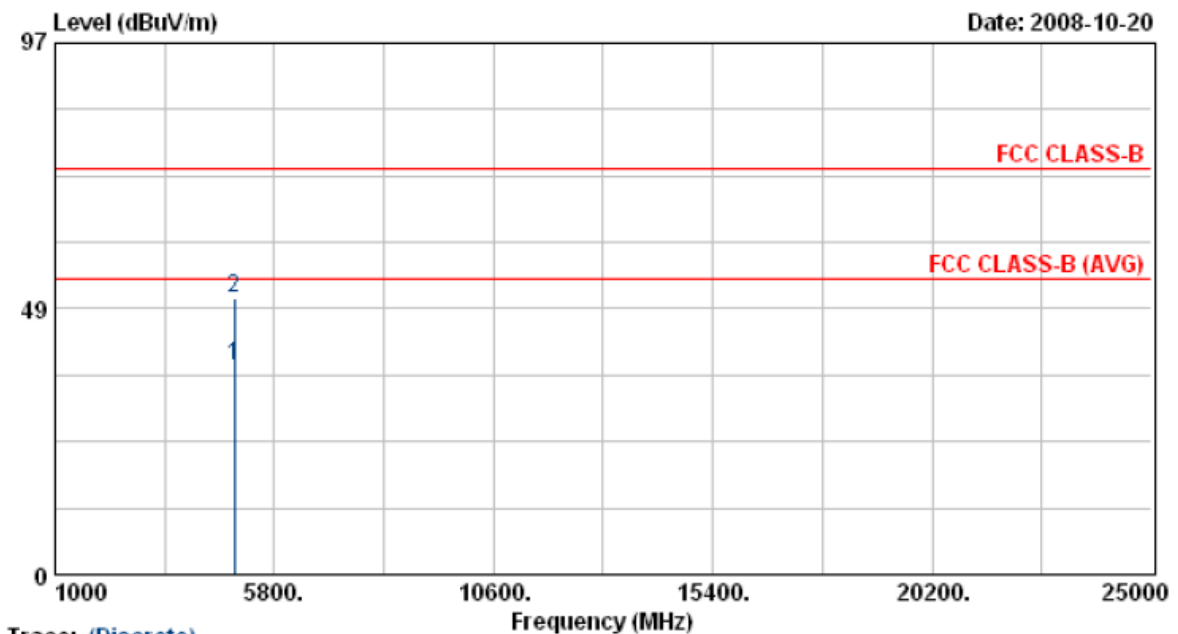


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 11	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 11 Mbps



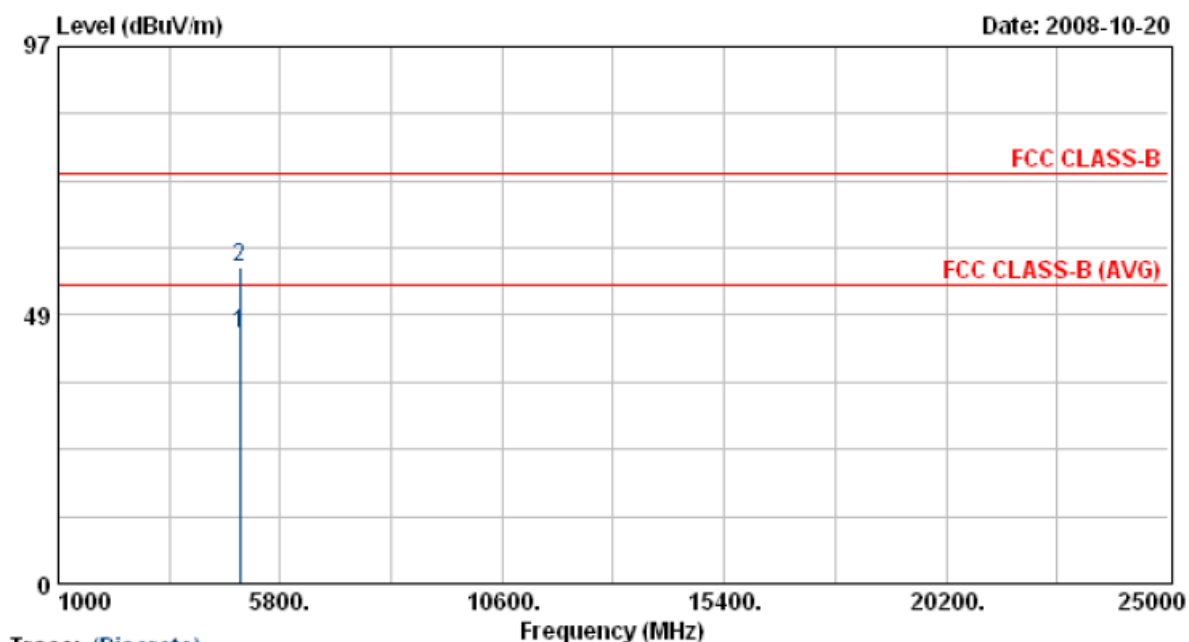
Trace: (Discrete)									
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4921.85	32.36	5.81	38.17	54.00	-15.83	Average	140	270
2	4921.85	44.78	5.81	50.59	74.00	-23.41	Peak	140	270

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 11	Humidity	: 70 %
Modulation Type	: 802.11b	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 11 Mbps



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4921.93	39.34	5.81	45.15	54.00	-8.85	Average	150	66
2	4921.93	51.49	5.81	57.30	74.00	-16.70	Peak	150	66

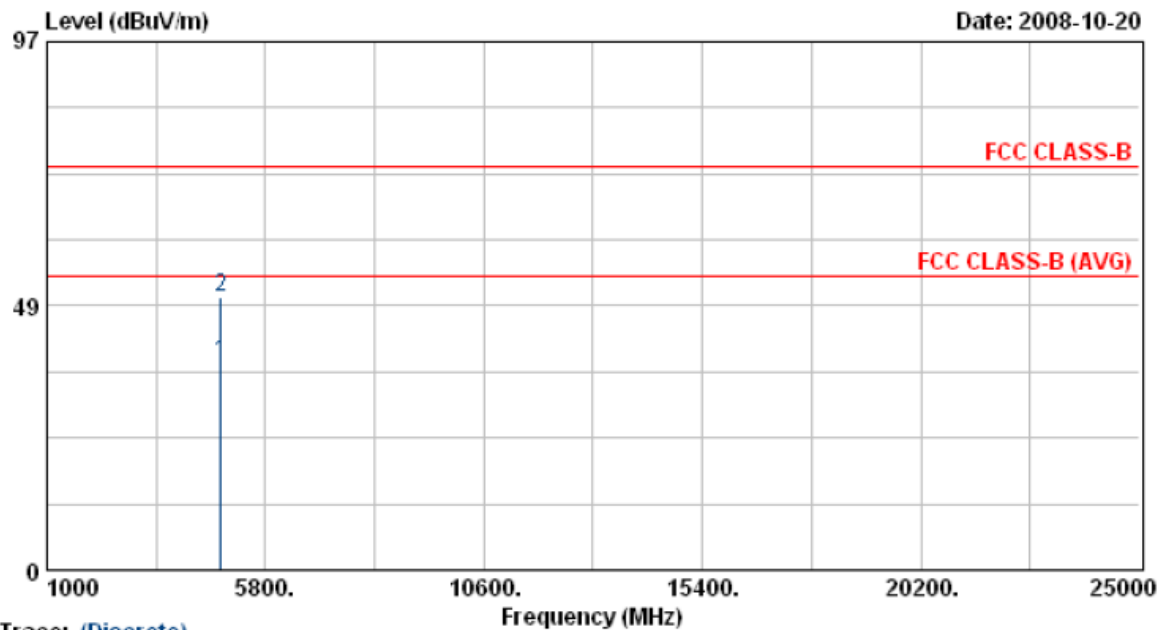
Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Test Mode: 2

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps



Trace: (Discrete)

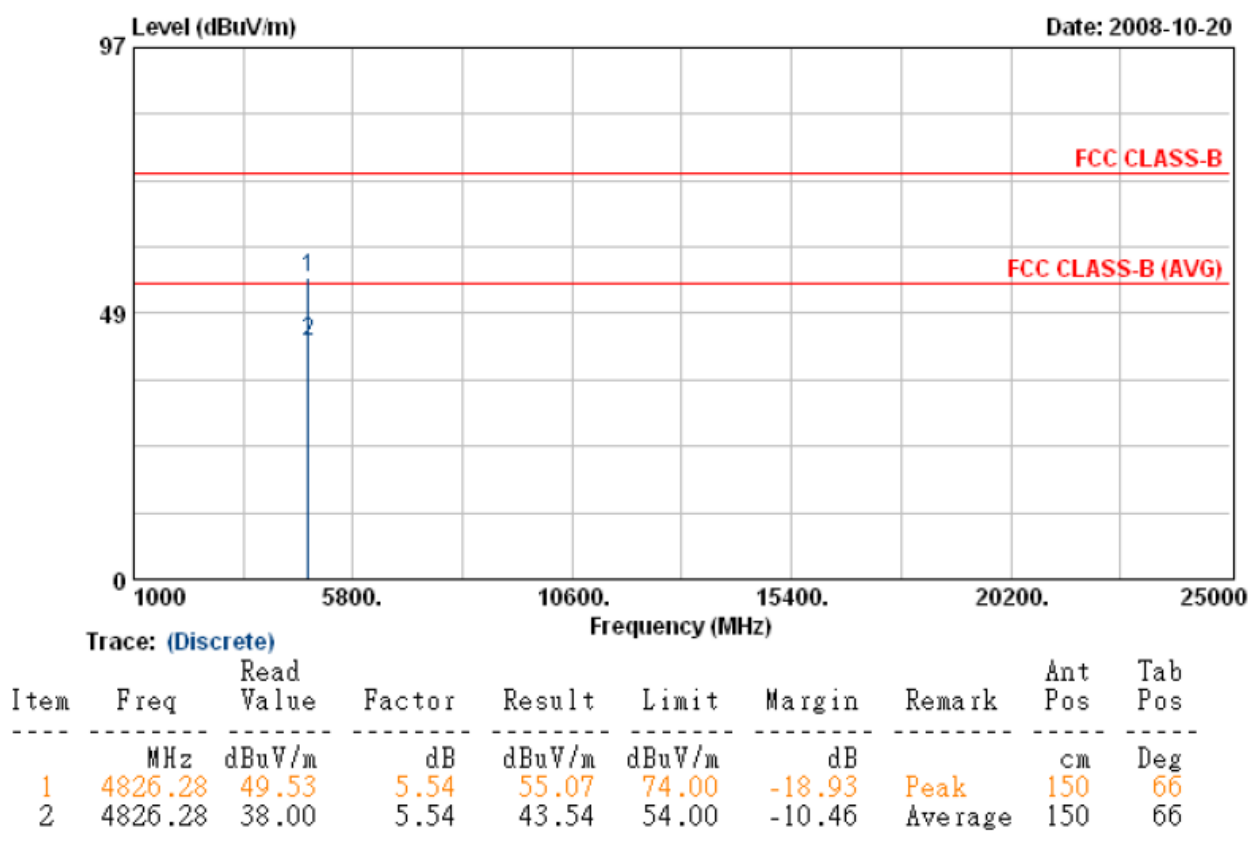
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4820.63	32.71	5.53	38.23	54.00	-15.77	Average	100	259
2	4820.63	44.56	5.53	50.09	74.00	-23.91	Peak	100	259

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps

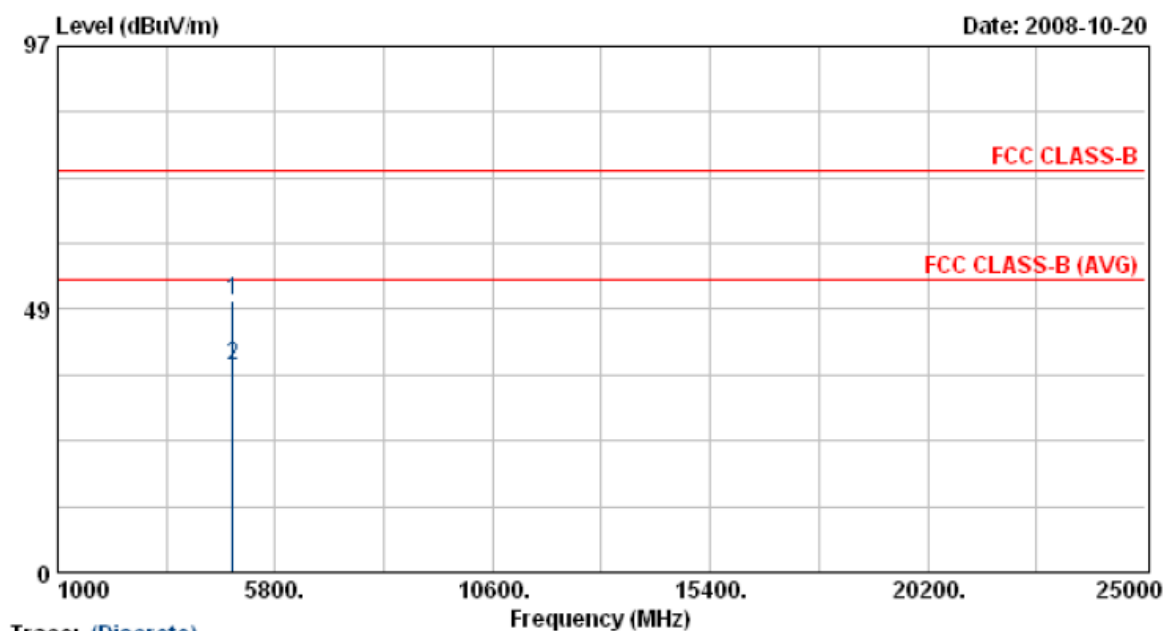


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 6	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps



Trace: (Discrete)

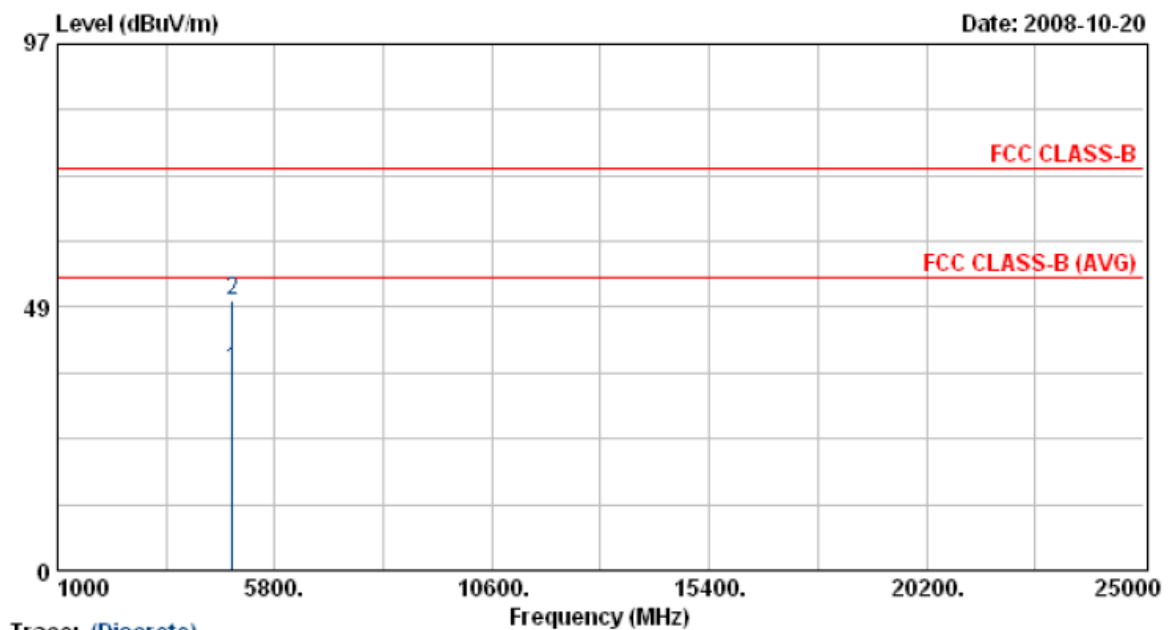
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4870.20	44.54	5.67	50.20	74.00	-23.80	Peak	100	259
2	4870.20	32.38	5.67	38.04	54.00	-15.96	Average	100	259

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 6	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps



Trace: (Discrete)

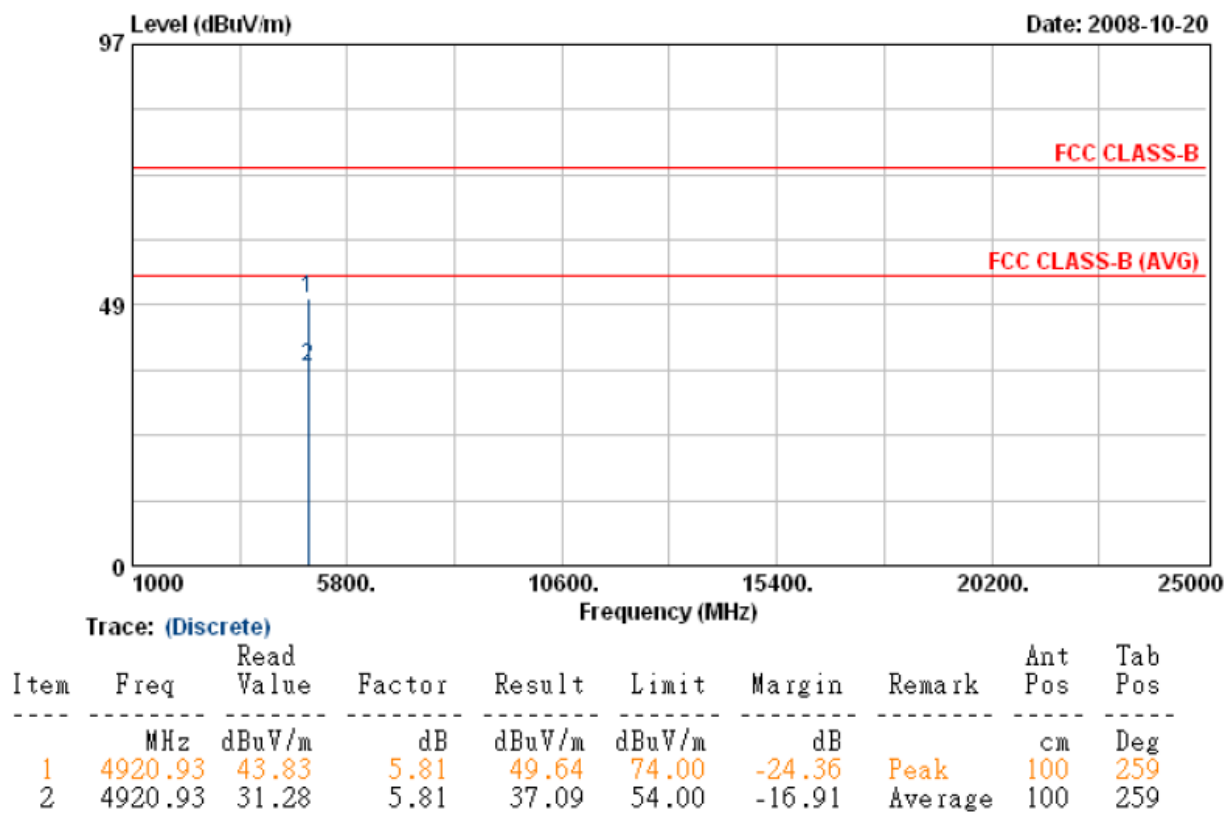
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4872.08	31.32	5.67	36.99	54.00	-17.01	Average	150	66
2	4872.08	43.91	5.67	49.58	74.00	-24.42	Peak	150	66

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 11	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps

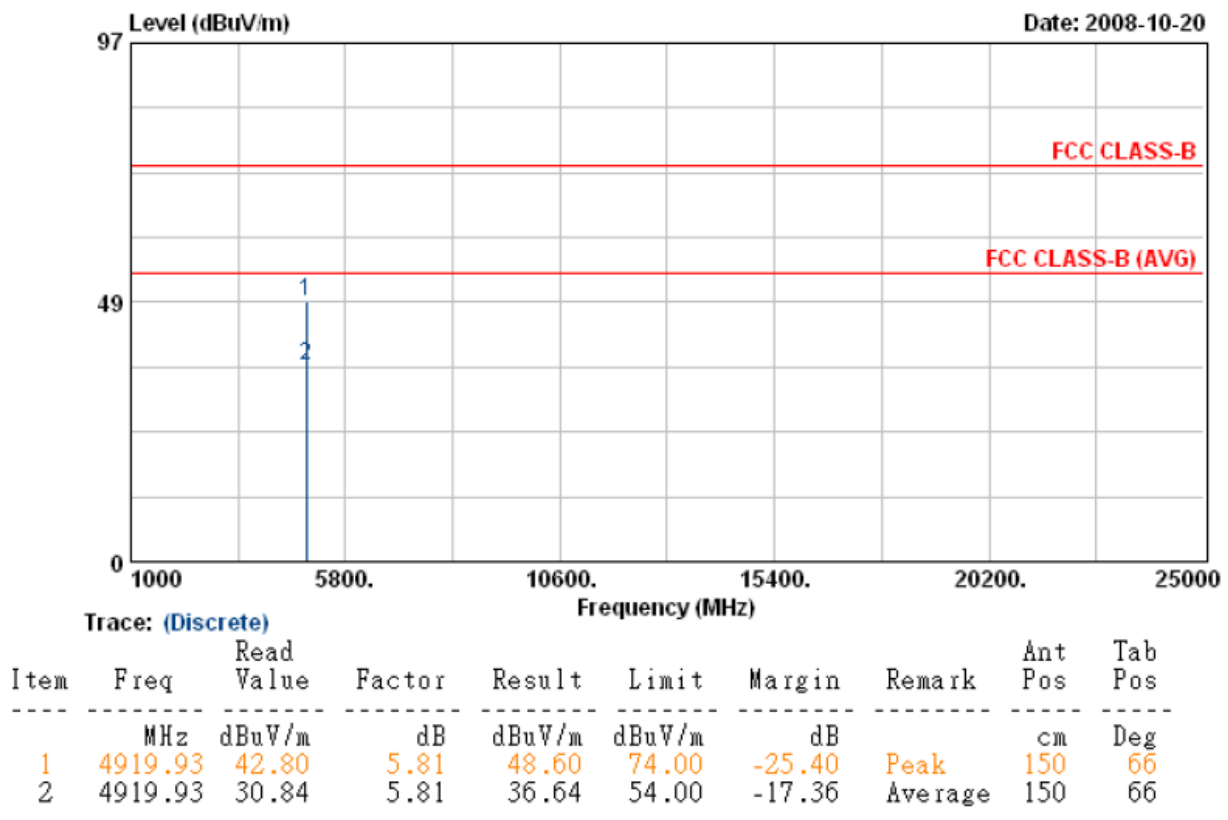


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 11	Humidity	: 70 %
Modulation Type	: 802.11g	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 54 Mbps



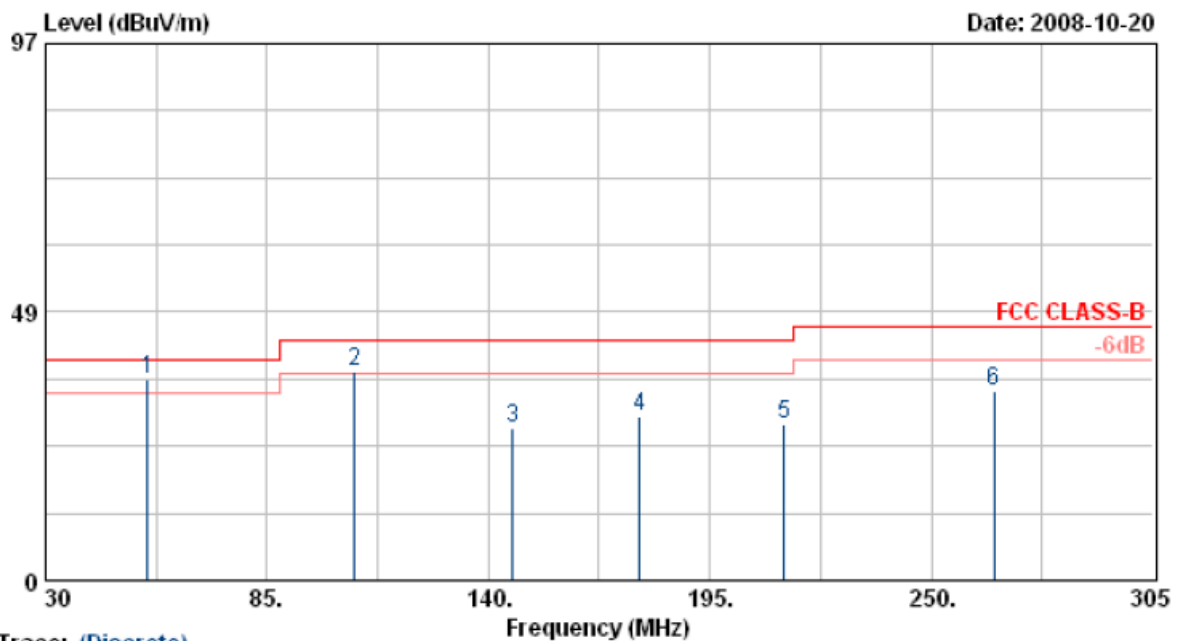
Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Test Mode: 3

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11n HT20	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 130 Mbps



Trace: (Discrete)

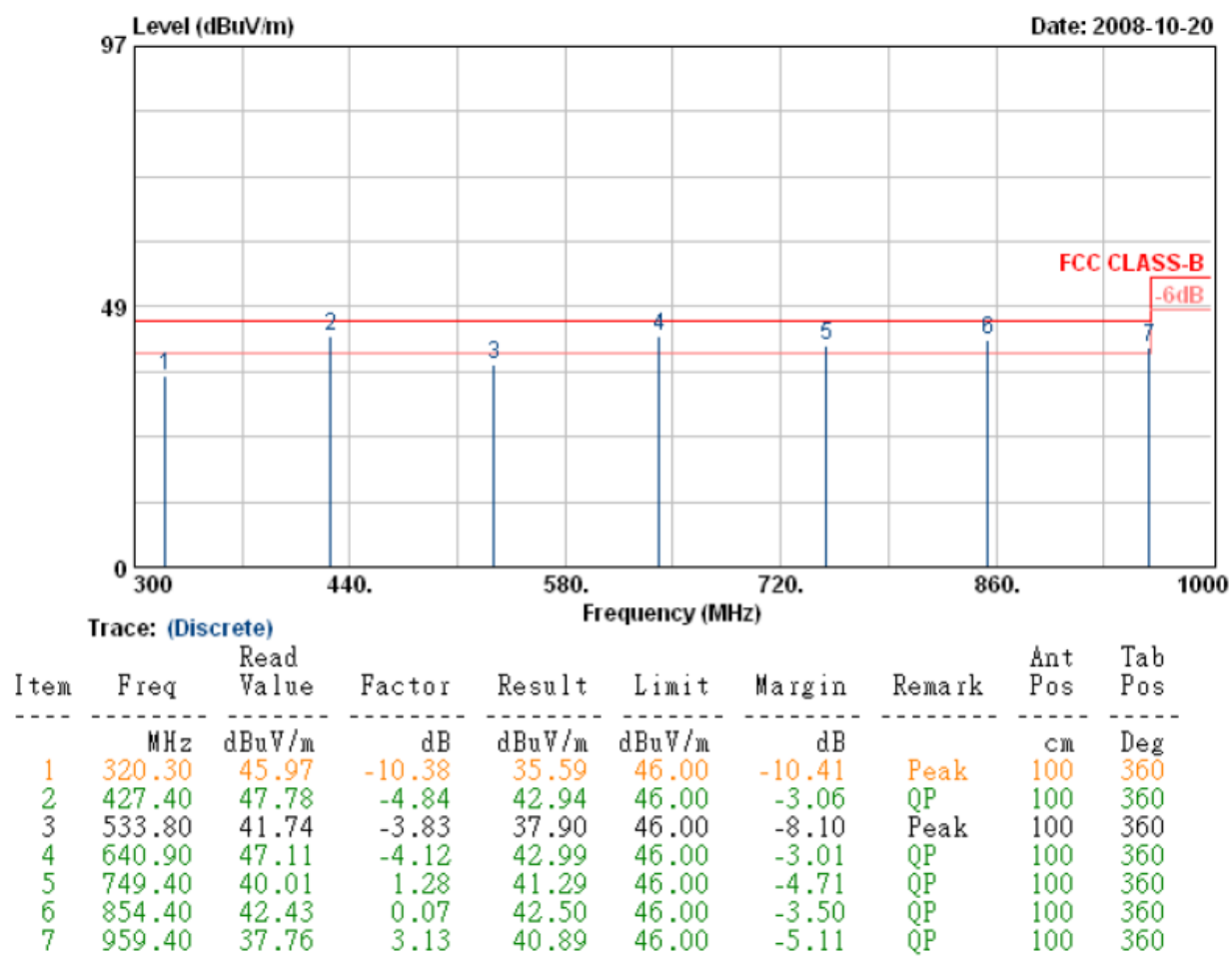
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	55.30	52.14	-15.95	36.19	40.00	-3.81	QP	100	154
2	106.73	51.31	-13.69	37.62	43.50	-5.88	QP	100	156
3	146.05	40.33	-12.92	27.41	43.50	-16.09	Peak	100	167
4	177.68	39.18	-9.51	29.67	43.50	-13.83	Peak	100	211
5	213.43	40.00	-11.78	28.23	43.50	-15.27	Peak	100	184
6	265.68	42.42	-8.30	34.12	46.00	-11.88	Peak	100	221

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
5. According to technical experiences, all spurious emission of 802.11g mode at channel 1, 6, 11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11n HT20	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 130 Mbps

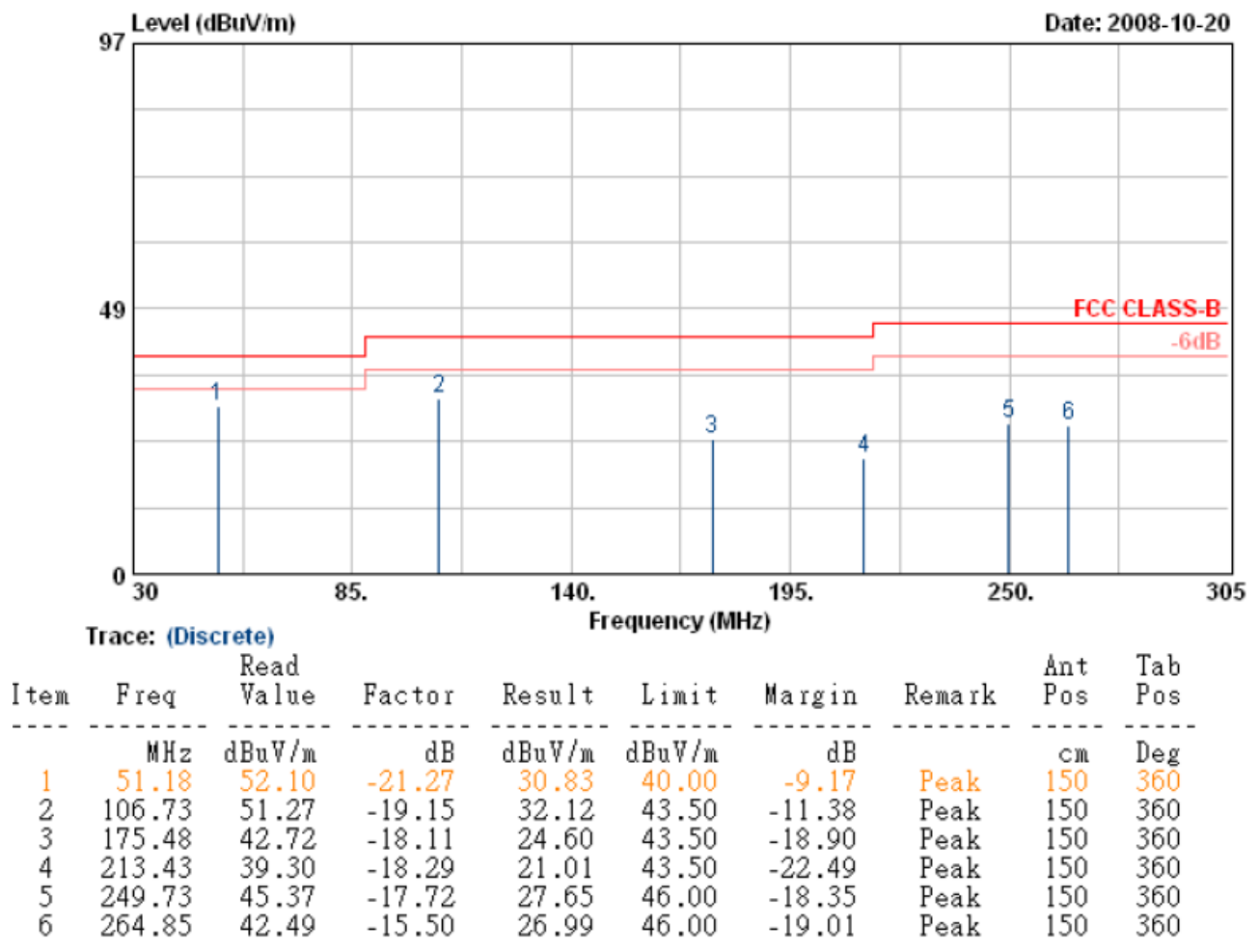


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
5. According to technical experiences, all spurious emission of 802.11g mode at channel 1, 6, 11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11n HT20	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 130 Mbps

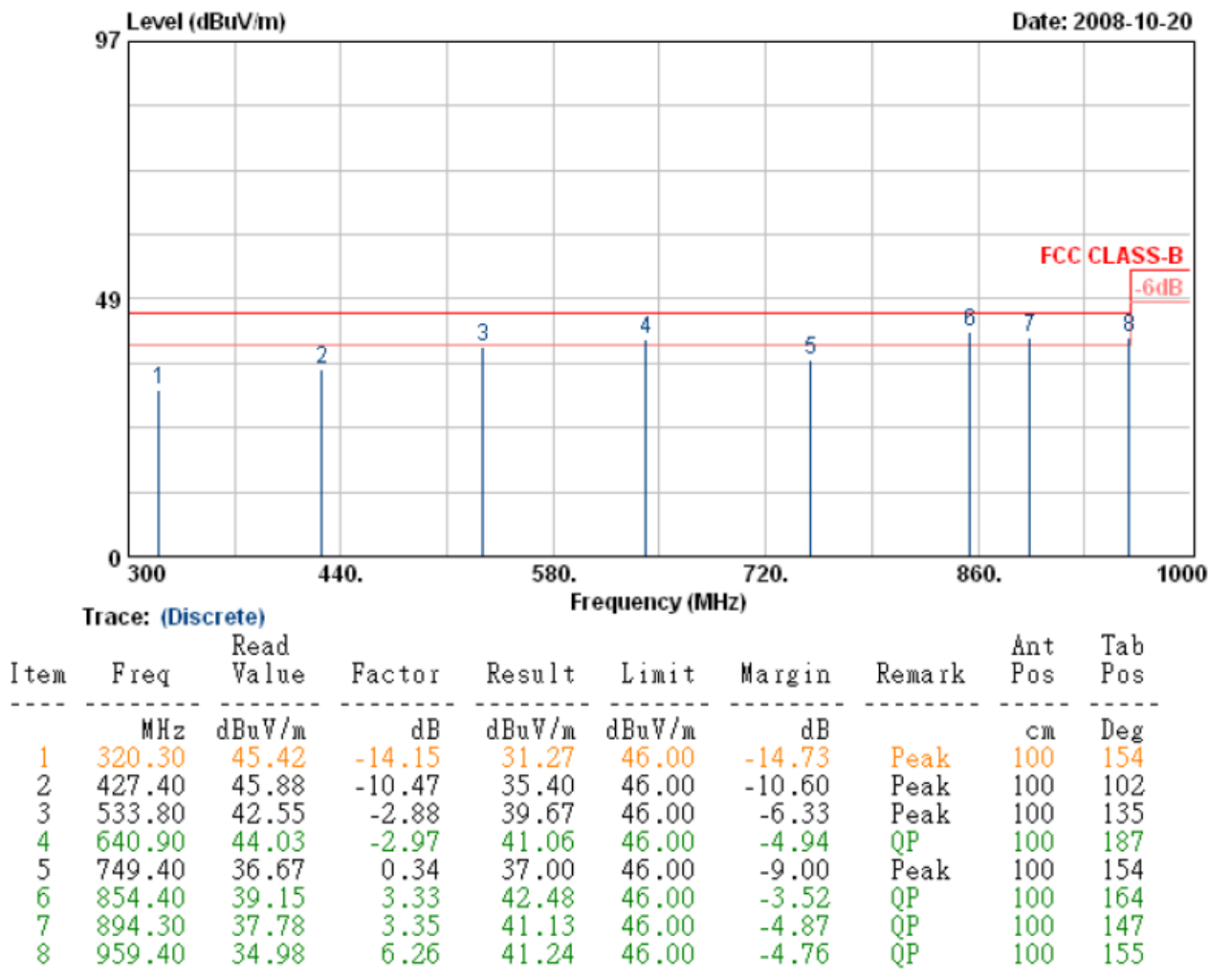


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
5. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11n HT20	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 130 Mbps

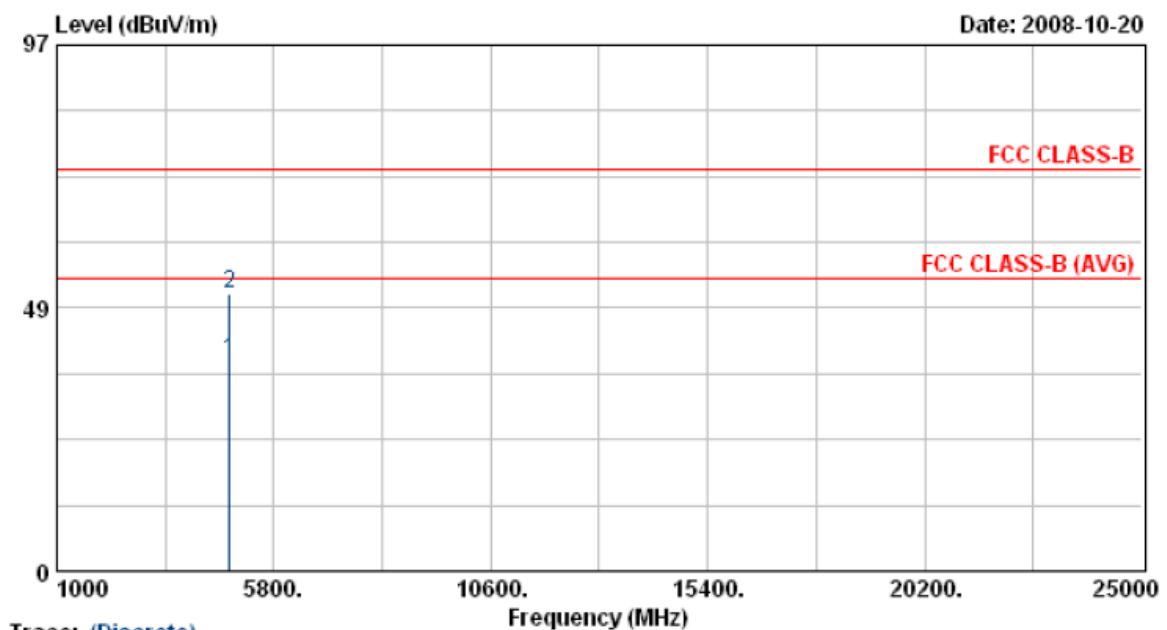


Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. All emission below 1GHz at 802.11b/g mode are all the same, so the 802.11g mode chosen as representative in final test.
5. According to technical experiences, all spurious emission of 802.11g mode at channel 1, 6, 11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11n HT20	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 130 Mbps



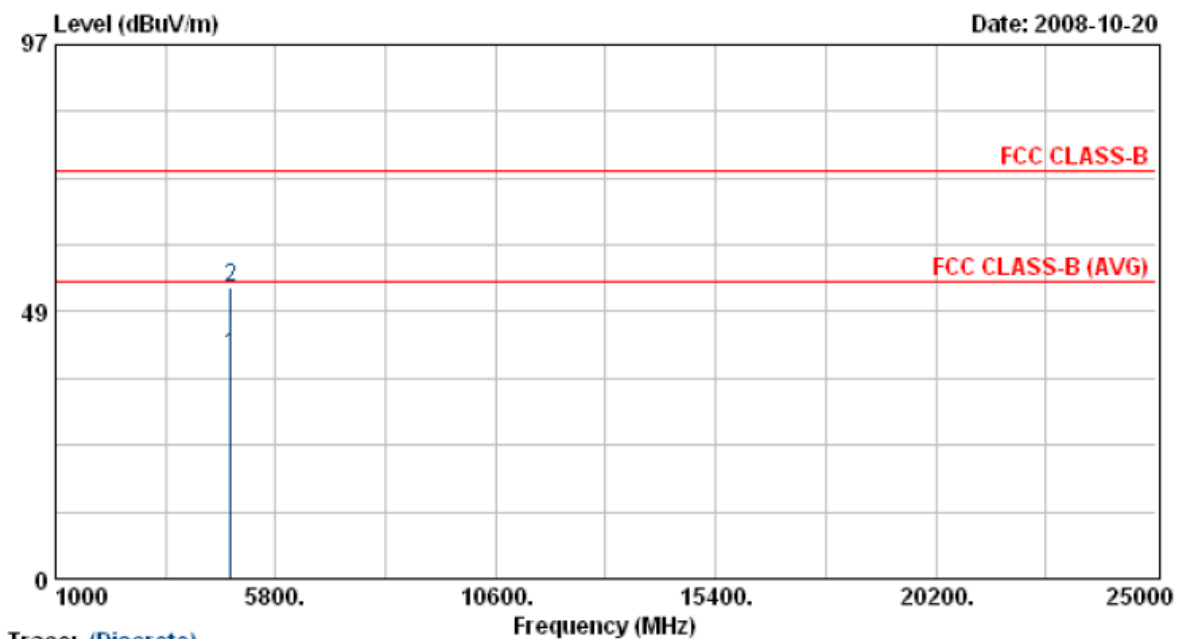
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4820.38	33.26	5.53	38.78	54.00	-15.22	Average	100	120
2	4820.38	45.49	5.53	51.02	74.00	-22.98	Peak	100	120

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 1	Humidity	: 70 %
Modulation Type	: 802.11n HT20	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 130 Mbps



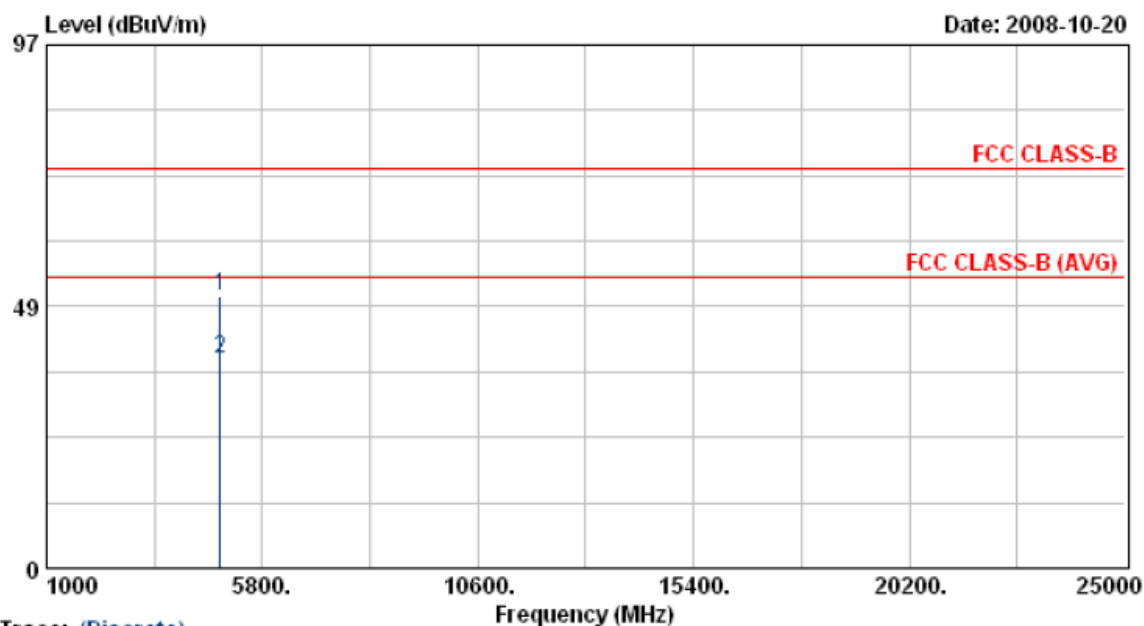
Trace: (Discrete)									
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4822.23	35.20	5.53	40.73	54.00	-13.27	Average	138	120
2	4822.23	47.43	5.53	52.96	74.00	-21.04	Peak	138	120

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 6	Humidity	: 70 %
Modulation Type	: 802.11n HT20	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 130 Mbps



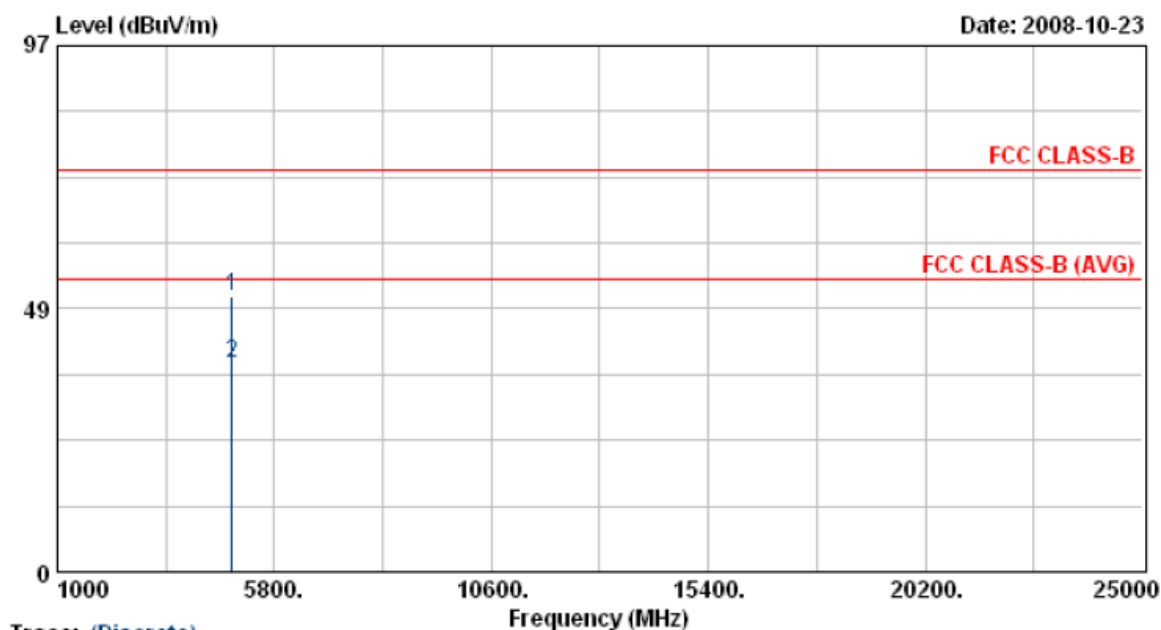
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4870.15	44.87	5.67	50.54	74.00	-23.46	Peak	100	120
2	4870.15	33.11	5.67	38.77	54.00	-15.23	Average	100	120

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Transmit / Receive	Temperature	: 26 °C
Operation Channel	: 6	Humidity	: 70 %
Modulation Type	: 802.11n HT20	Atmospheric Pressure	: 1007 hPa
Memo	: Leader \ MT12-Y120100-A1, Antenna 1.8dBi	Rate	: 130 Mbps



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4872.28	44.97	5.67	50.64	74.00	-23.36	Peak	138	120
2	4872.28	32.93	5.67	38.60	54.00	-15.40	Average	138	120

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.