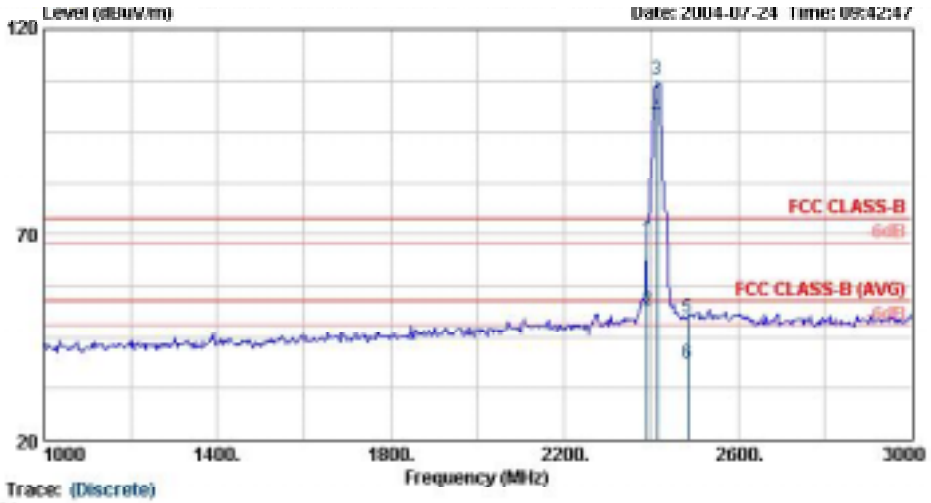
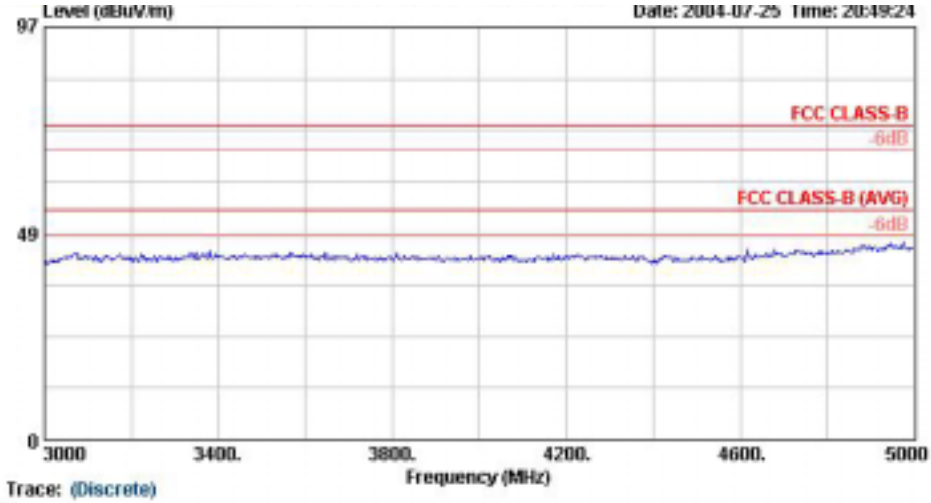


Trace: (Discrete)

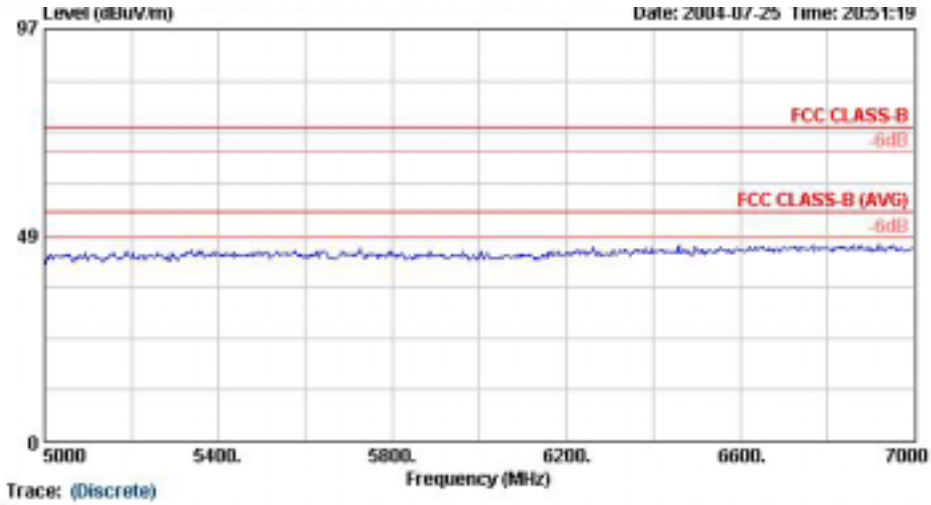
Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH01 2412MHz
: Omini Directional Antenna , Gain:4.6dBi

		Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	@	2390.00	68.71	-5.29	74.00	28.40	44.34	3.33	Peak	0	0
2	@	2390.00	51.57	-2.43	54.00	28.40	44.34	3.33	Average	100	331
3	@ X	2414.24	107.82			28.41	44.34	3.35	Peak	0	0
4	@ X	2414.24	98.26			28.41	44.34	3.35	Average	0	0
5	@	2483.50	49.81	-24.19	74.00	28.48	44.31	3.40	Peak	---	---
6	@	2483.50	38.48	-15.52	54.00	28.48	44.31	3.40	Average	0	0

Remark: The “X” represent a fundamental frequency.



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH01 2412MHz
: Omini Directional Antenna , Gain:4.6dBi



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH01 2412MHz
: Omini Directional Antenna , Gain:4.6dBi

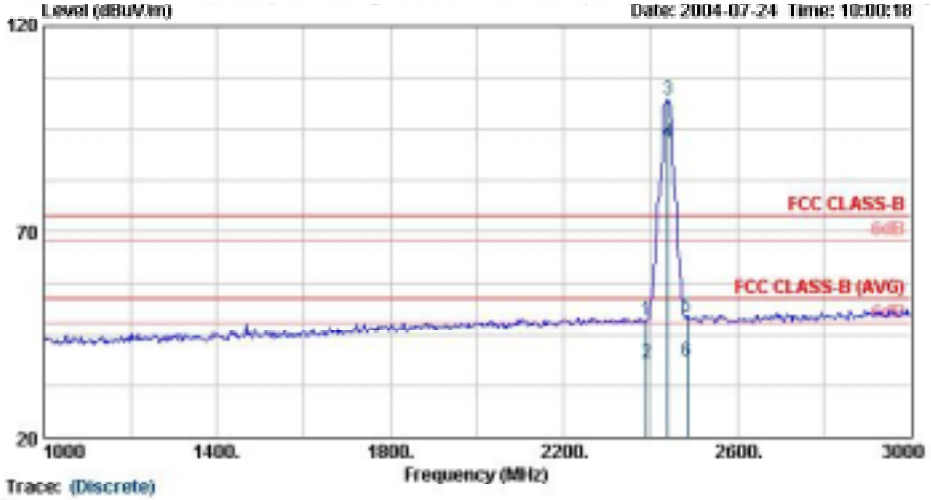
Remark:

Frequency from 7GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

Test Mode: 802.11g TX CH06

- Test Distance : 3 m
- Temperature : 25.3 °C
- Relative Humidity :53.5 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

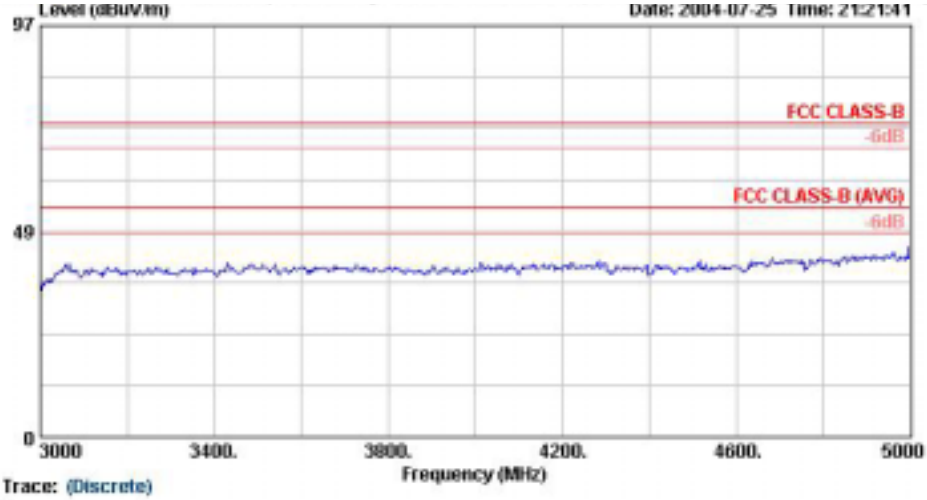
■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Omini Directional Antenna , Gain 4.6dBi

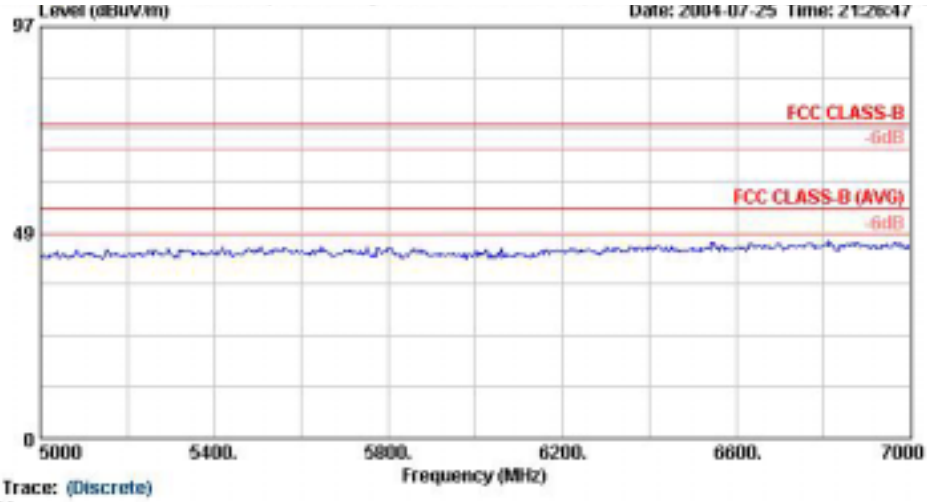
		Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	@	2390.00	48.60	-25.40	74.00	28.40	44.34	3.33	Peak	---	---
2	@	2390.00	38.12	-15.88	54.00	28.40	44.34	3.33	Average	---	---
3	@ X	2439.32	102.24			28.45	44.32	3.37	Peak	---	---
4	@ X	2439.32	91.77			28.45	44.32	3.37	Average	---	---
5	@	2483.50	49.31	-24.69	74.00	28.48	44.31	3.40	Peak	---	---
6	@	2483.50	38.58	-15.42	54.00	28.48	44.31	3.40	Average	---	---

Remark: The “X” represent a fundamental frequency.



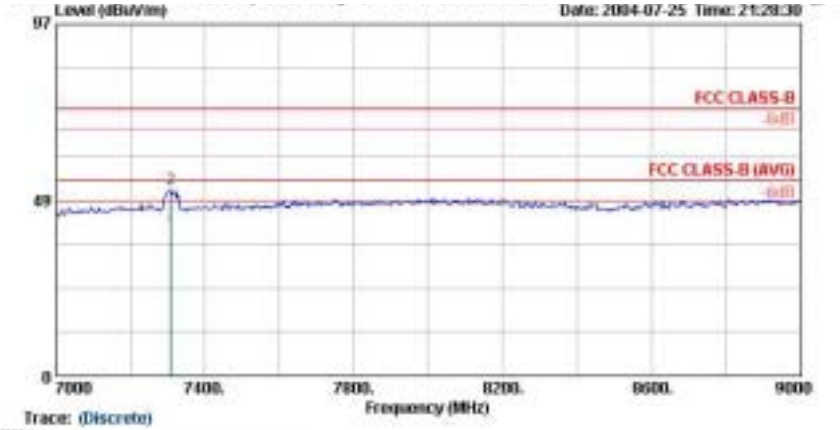
Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Omini Directional Antenna , Gain 4.6dBi



Trace: (Discrete)

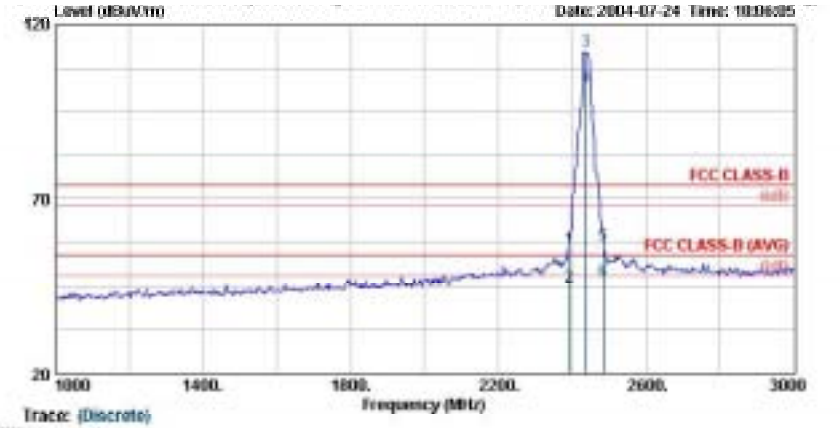
Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Omini Directional Antenna , Gain 4.6dBi



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V/60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Omni Directional Antenna, Gain:4.6dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1 @	7308.00	39.79	-14.21	54.00	35.51	46.24	6.21	Average	---	---
2 @	7308.00	51.67	-22.33	74.00	35.51	46.24	6.21	Peak	---	---

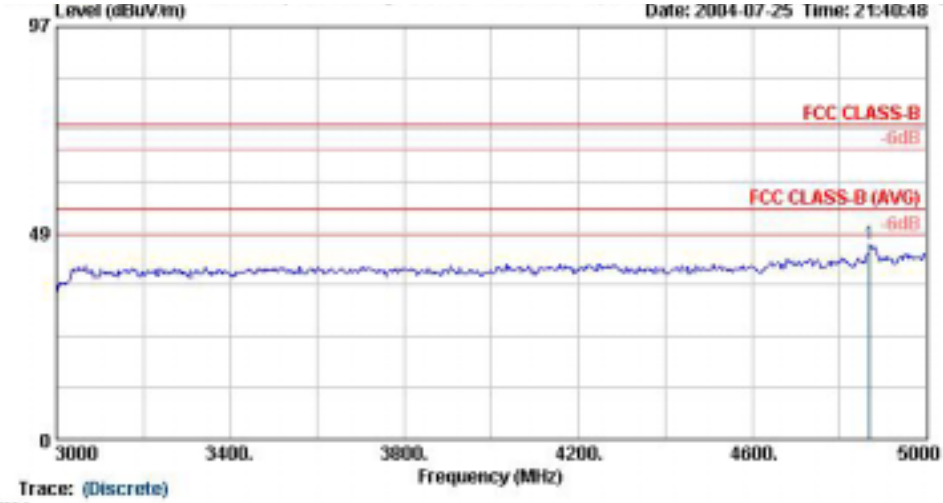


Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V/60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Omni Directional Antenna, Gain:4.6dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1 @	2390.00	55.52	-18.48	74.00	28.40	44.34	3.33	Peak	---	---
2 @	2390.00	45.04	-8.96	54.00	28.40	44.34	3.33	Average	---	---
3 @ X	2437.00	112.70			28.45	44.32	3.37	Peak	---	---
4 @ X	2437.00	102.33			28.45	44.32	3.37	Average	---	---
5 @	2483.50	56.86	-17.14	74.00	28.48	44.31	3.40	Peak	---	---
6 @	2483.50	46.32	-7.68	54.00	28.48	44.31	3.40	Average	---	---

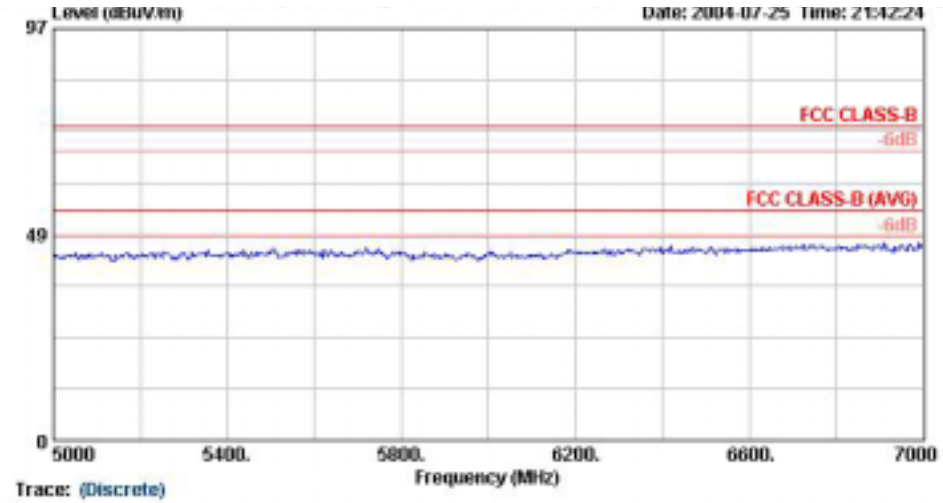
Remark: The “X” represent a fundamental frequency.



Trace: (Discrete)

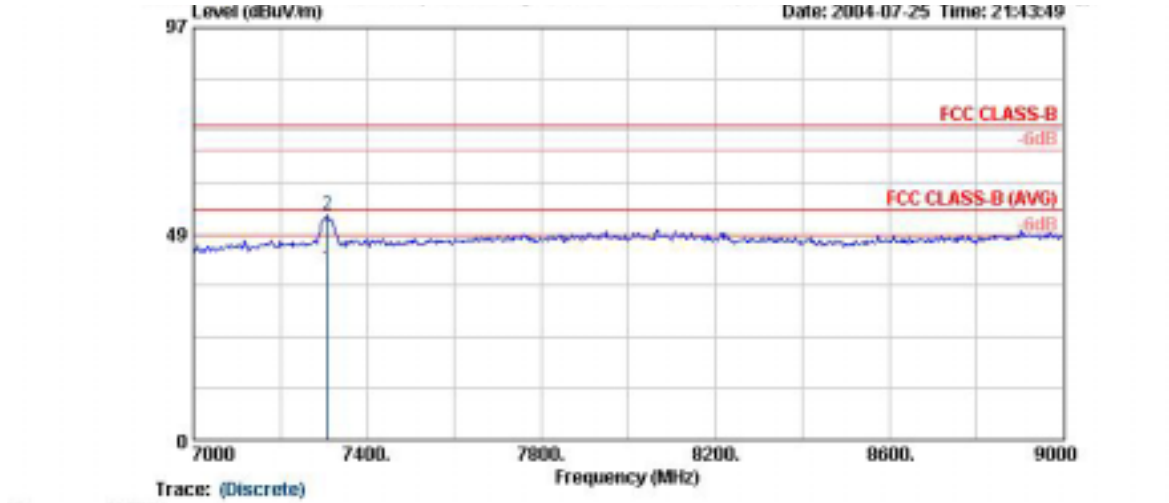
Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Omini Directional Antenna , Gain 4.6dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1 @	4870.00	45.79	-28.21	74.00	32.70	45.60	4.80	Peak	---	---



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Omini Directional Antenna , Gain 4.6dBi



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Omini Directional Antenna , Gain:4.6dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1 @	7308.00	40.30	-13.70	54.00	35.51	46.24	6.21	Average	---	---
2 @	7308.00	52.98	-21.02	74.00	35.51	46.24	6.21	Peak	---	---

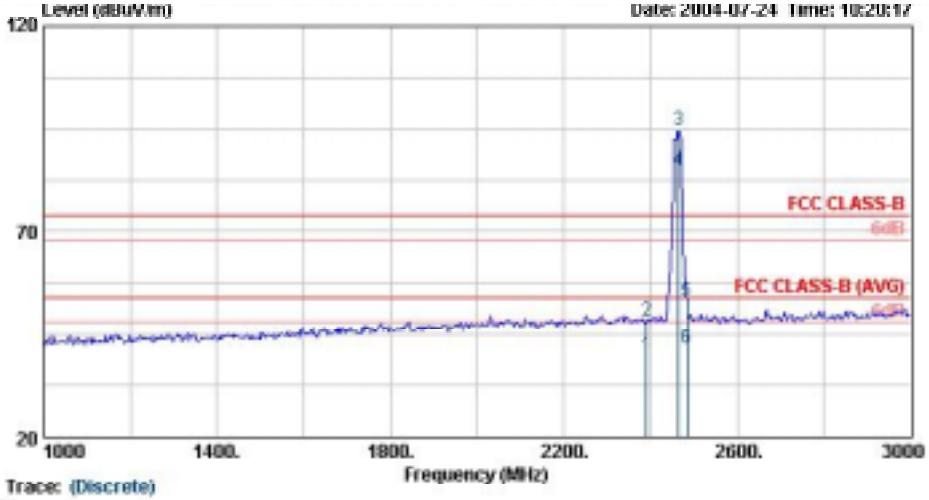
Remark:

Frequency from 9GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

Test Mode: 802.11g 11b TX CH11

- Test Distance : 3 m
- Temperature : 25.3 °C
- Relative Humidity :53.5 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

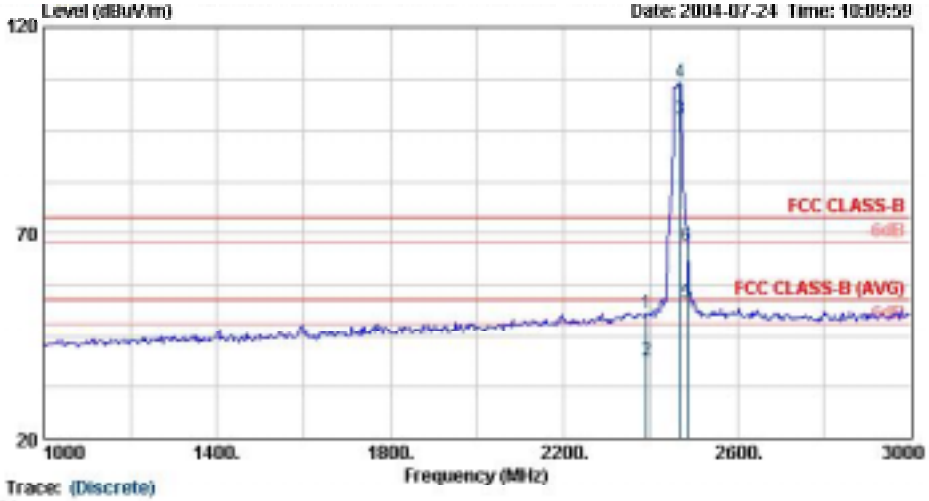
■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH11 2462MHz
: Omini Directional Antenna , Gain:4.6dBi

		Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	@	2390.00	39.54	-14.46	54.00	28.40	44.34	3.33	Average	---	---
2	@	2390.00	48.08	-25.92	74.00	28.40	44.34	3.33	Peak	---	---
3	@X	2464.24	94.90			28.47	44.32	3.38	Peak	---	---
4	@X	2464.24	85.15			28.47	44.32	3.38	Average	---	---
5	@	2483.50	52.98	-21.02	74.00	28.48	44.31	3.40	Peak	---	---
6	@	2483.50	41.54	-12.46	54.00	28.48	44.31	3.40	Average	---	---

Remark: The “X” represent a fundamental frequency.



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH11 2462MHz
: Omini Directional Antenna , Gain:4.6dBi

		Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	@	2390.00	50.59	-23.41	74.00	28.40	44.34	3.33	Peak	---	---
2	@	2390.00	38.87	-15.13	54.00	28.40	44.34	3.33	Average	0	0
3	@ X	2468.49	97.73			28.47	44.32	3.38	Average	0	0
4	@ X	2468.49	106.77			28.47	44.32	3.38	Peak	0	0
5	@	2483.50	53.11	-0.89	54.00	28.48	44.31	3.40	Average	0	0
6	@	2483.50	66.93	-7.07	74.00	28.48	44.31	3.40	Peak	0	0

Remark: The “X” represent a fundamental frequency.

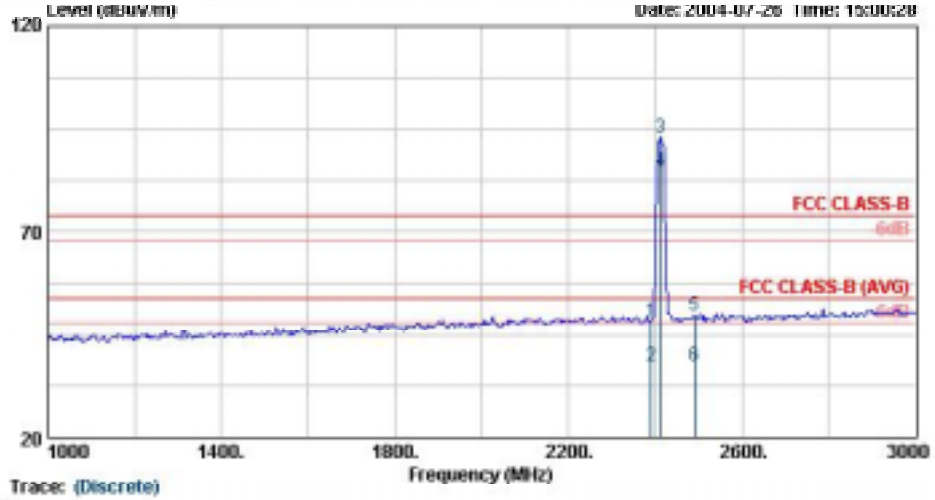
Frequency from 3GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

7.4.5 Antenna 5

Test Mode: 802.11b TX CH01

- Test Distance : 3 m
- Temperature : 25.3 °C
- Relative Humidity :53.5 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

■ The test that passed at minimum margin was marked by the frame in the following table.

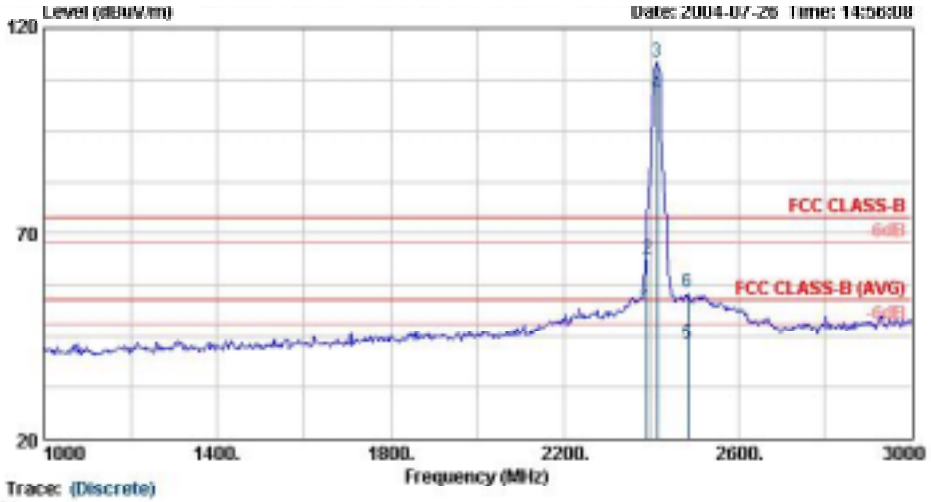


Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH01 2412MHz
: Yagi Antenna , Gain 14.2dBi

	Freq	Over Limit	Level	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dB	dBuV/m	dBuV/m	dB/m	dB	dB		cm	deg
1	2390.00	-25.89	48.11	74.00	28.40	44.34	3.33	Peak	---	---
2	2390.00	-16.55	37.45	54.00	28.40	44.34	3.33	Average	---	---
3 @	2412.00		92.98		28.41	44.34	3.35	Peak	---	---
4 X	2412.00		84.54		28.41	44.34	3.35	Average	---	---
5	2492.00	-24.39	49.61	74.00	28.50	44.30	3.39	Peak	---	---
6	2492.00	-16.55	37.45	54.00	28.50	44.30	3.39	Average	---	---

Remark:

The “X” represent a fundamental frequency.



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH01 2412MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1 @	2390.00	51.95	-2.05	54.00	28.40	44.34	3.33	Average	0	0
2 @	2390.00	63.76	-10.24	74.00	28.40	44.34	3.33	Peak	0	0
3 @ X	2414.00	111.82			28.41	44.34	3.35	Peak	---	---
4 @ X	2414.00	104.15			28.41	44.34	3.35	Average	0	0
5 @	2483.50	42.88	-11.12	54.00	28.48	44.31	3.40	Average	0	0
6 @	2483.50	55.68	-18.32	74.00	28.48	44.31	3.40	Peak	0	0

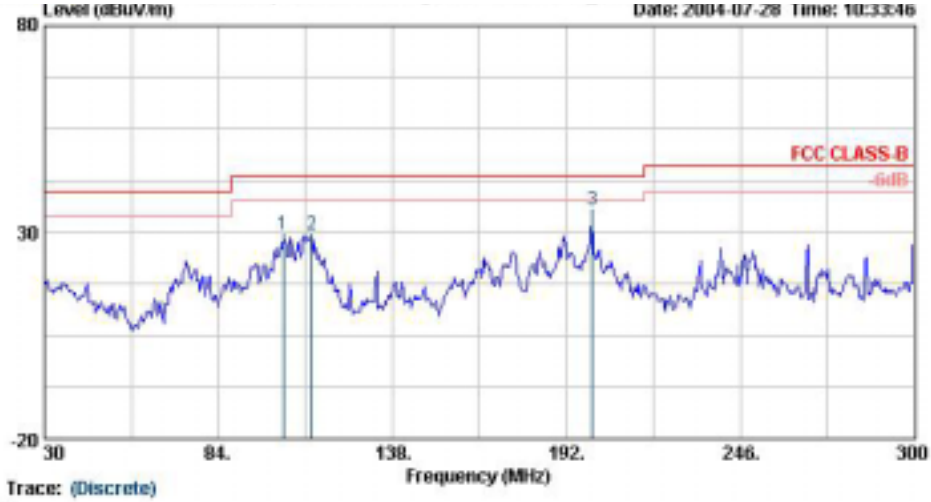
Remark: The “X” represent a fundamental frequency.

Frequency from 3GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

Test Mode: 802.11b TX CH06

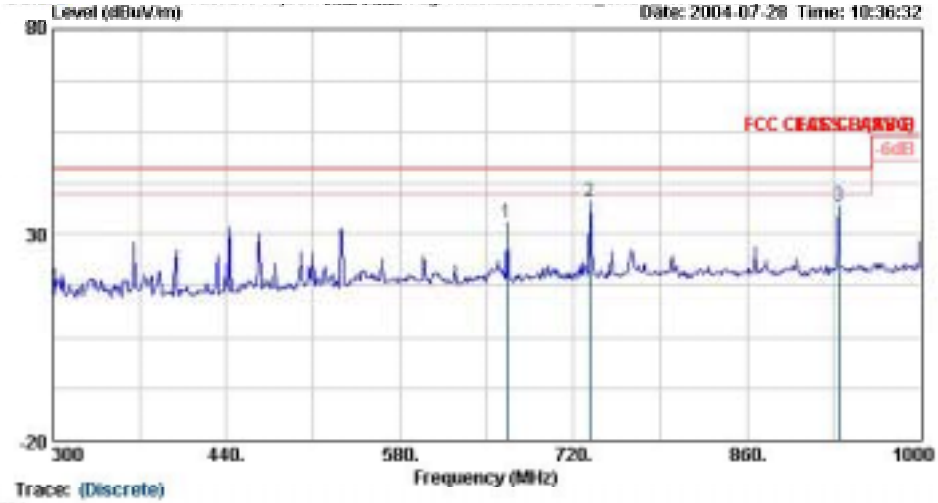
- Test Distance : 3 m
- Temperature : 25.3 °C
- Relative Humidity :53.5 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06
Condition : FCC CLASS-B 3m BI LOG 2004 0629 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

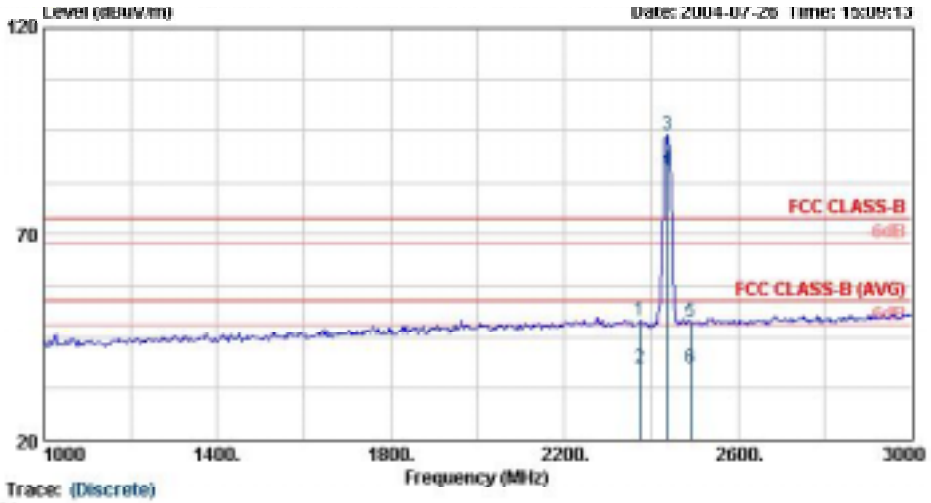
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	104.25	29.51	-13.99	43.50	10.84	32.23	0.90	Peak	---	---
2	112.89	29.41	-14.09	43.50	11.56	32.05	0.94	Peak	---	---
3 @	200.10	35.24	-8.26	43.50	8.70	32.05	1.24	Peak	---	---



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m BI LOG 2004 0629 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	666.10	32.81	-13.19	46.00	18.88	31.57	2.49	Peak	---	---
2 @	733.30	37.94	-8.06	46.00	19.60	31.38	2.60	Peak	---	---
3 @	934.20	36.70	-9.30	46.00	20.76	31.05	3.08	Peak	---	---

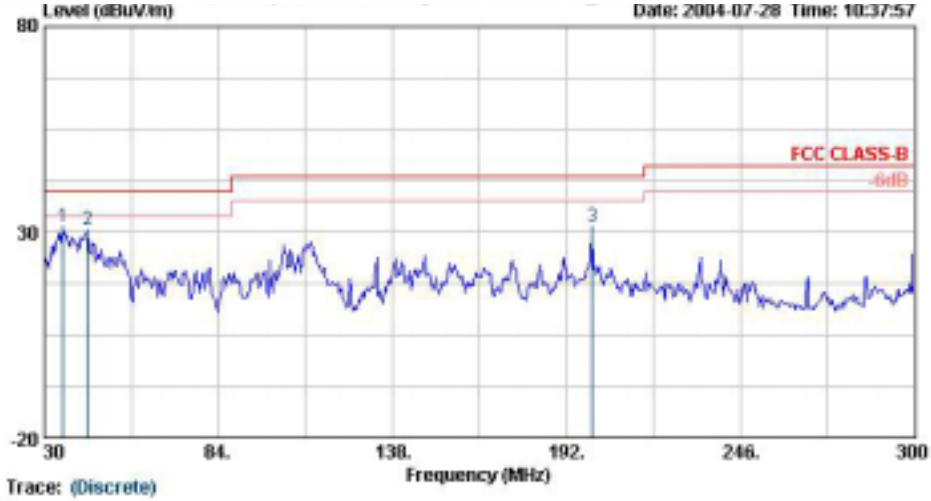


Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

		Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	@	2374.00	48.83	-25.17	74.00	28.38	44.35	3.32	Peak	---	---
2	@	2374.00	37.45	-16.55	54.00	28.38	44.35	3.32	Average	---	---
3	@ X	2436.00	93.99			28.43	44.33	3.36	Peak	---	---
4	@ X	2437.00	85.47			28.45	44.32	3.37	Average	---	---
5	@	2492.00	48.69	-25.31	74.00	28.50	44.30	3.39	Peak	---	---
6	@	2492.00	37.45	-16.55	54.00	28.50	44.30	3.39	Average	---	---

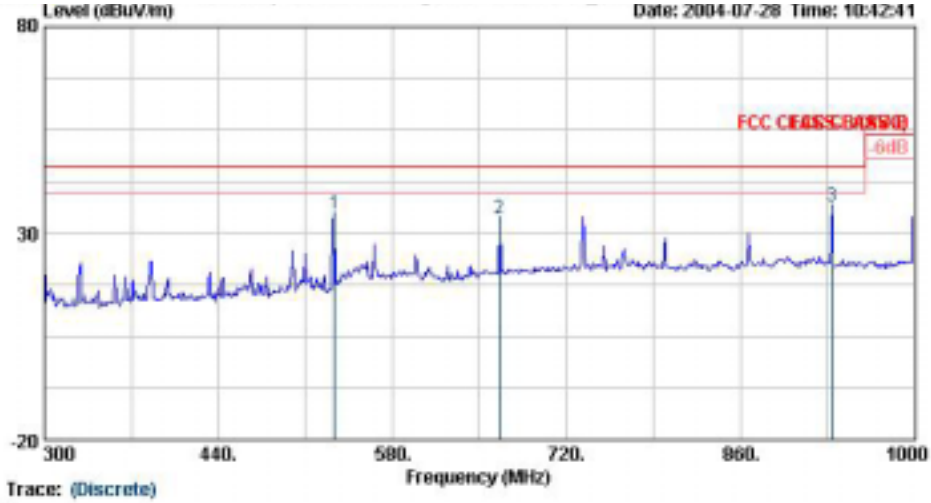
Remark: The “X” represent a fundamental frequency.



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m BI LOG 2004 0629 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

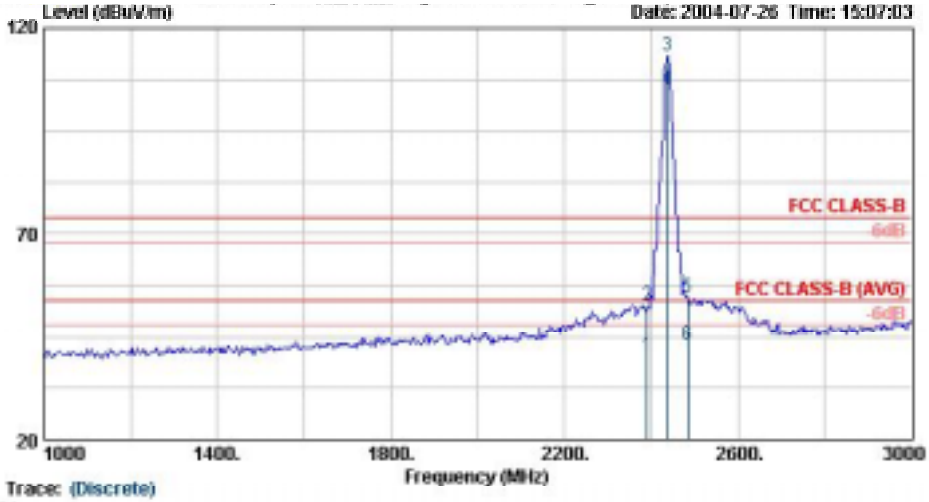
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1 @	35.94	31.44	-8.56	40.00	14.50	32.15	0.53	Peak	---	---
2 @	43.50	30.72	-9.28	40.00	10.57	32.28	0.57	Peak	---	---
3	200.10	31.46	-12.04	43.50	8.70	32.05	1.24	Peak	---	---



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m BI LOG 2004 0629 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	533.80	34.66	-11.34	46.00	16.72	31.37	2.16	Peak	---	---
2	666.10	33.72	-12.28	46.00	18.93	31.57	2.49	Peak	---	---
3 @	934.20	36.66	-9.34	46.00	20.76	31.05	3.08	Peak	---	---



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

		Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	@	2390.00	40.45	-13.55	54.00	28.40	44.34	3.33	Average	0	0
2	@	2390.00	52.73	-21.27	74.00	28.40	44.34	3.33	Peak	---	---
3	@ X	2437.00	113.44			28.45	44.32	3.37	Peak	0	0
4	@ X	2437.00	105.26			28.45	44.32	3.37	Average	0	0
5	@	2483.50	54.63	-19.37	74.00	28.48	44.31	3.40	Peak	---	---
6	@	2483.50	42.87	-11.13	54.00	28.48	44.31	3.40	Average	0	0

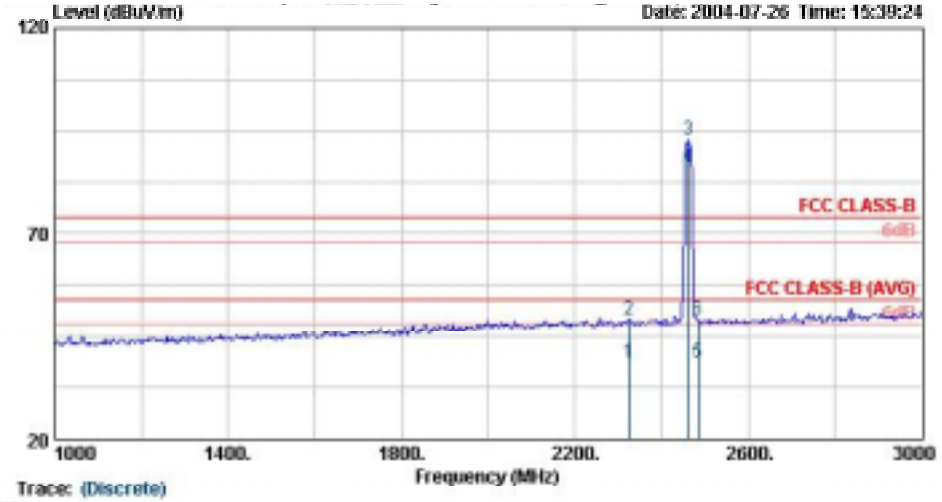
Remark: The “X” represent a fundamental frequency.

Frequency from 3GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

Test Mode: 802.11b TX CH11

- Test Distance : 3 m
- Temperature : 25.3 °C
- Relative Humidity :53.5 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

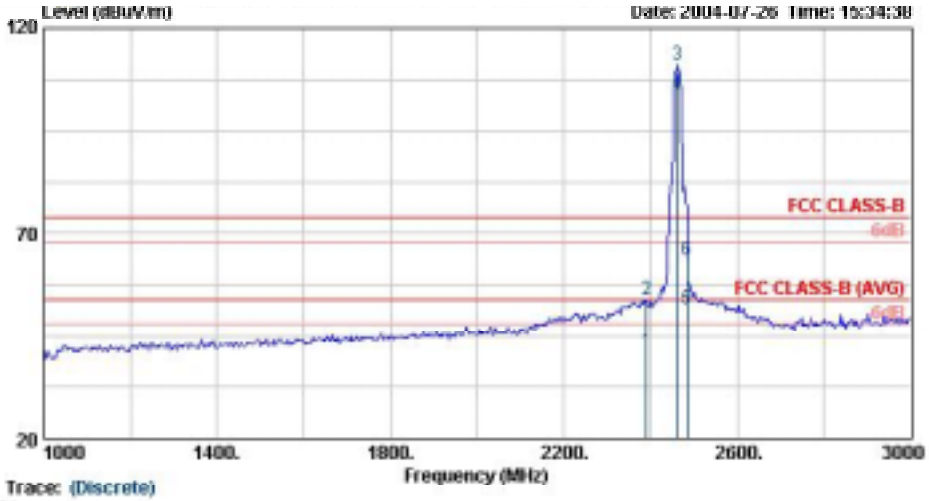
■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH11 2462MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Over Limit	Level	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dB	dBuV/m	dBuV/m	dB/m	dB	dB		cm	deg
1	2326.00	-15.56	38.44	54.00	28.33	44.37	3.27	Average	---	---
2	2326.00	-24.90	49.10	74.00	28.33	44.37	3.27	Peak	---	---
3 X	2462.00		92.96		28.47	44.32	3.36	Peak	---	---
4 @	2462.00		86.09		28.47	44.32	3.36	Average	---	---
5	2483.50	-15.57	38.43	54.00	28.48	44.31	3.38	Average	---	---
6	2483.50	-25.18	48.82	74.00	28.48	44.31	3.38	Peak	---	---

Remark: The “X” represent a fundamental frequency.



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11b TX CH11 2462MHz
: Yagi Antenna , Gain:14.2dBi

		Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	@	2390.00	41.00	-13.00	54.00	28.40	44.34	3.33	Average	0	0
2	@	2390.00	53.75	-20.25	74.00	28.40	44.34	3.33	Peak	0	0
3	@ X	2462.00	111.16			28.47	44.32	3.38	Peak	---	---
4	@ X	2462.00	104.01			28.47	44.32	3.38	Average	0	0
5	@	2483.50	51.62	-2.38	54.00	28.48	44.31	3.40	Average	0	0
6	@	2483.50	63.67	-10.33	74.00	28.48	44.31	3.40	Peak	0	0

Remark:

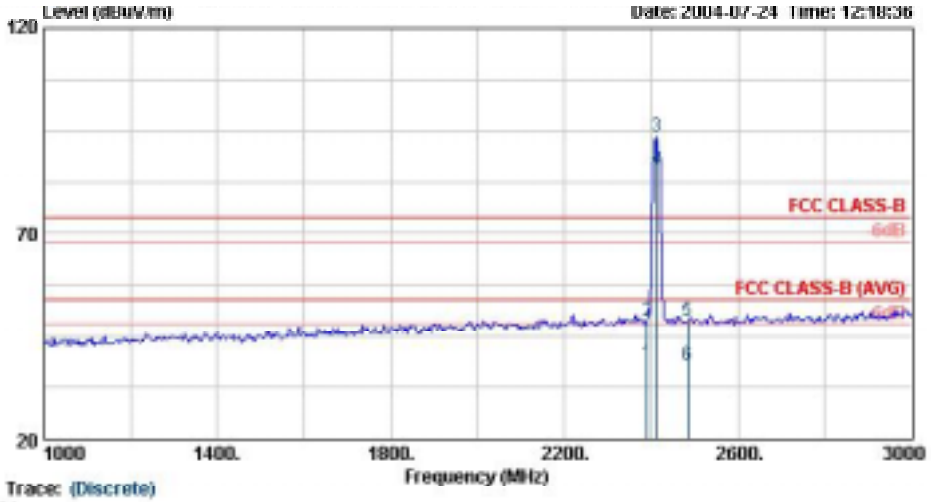
The “X” represent a fundamental frequency.

Frequency from 3GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

Test Mode: 802.11g TX CH01

- Test Distance : 3 m
- Temperature : 25.3 °C
- Relative Humidity :53.5 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

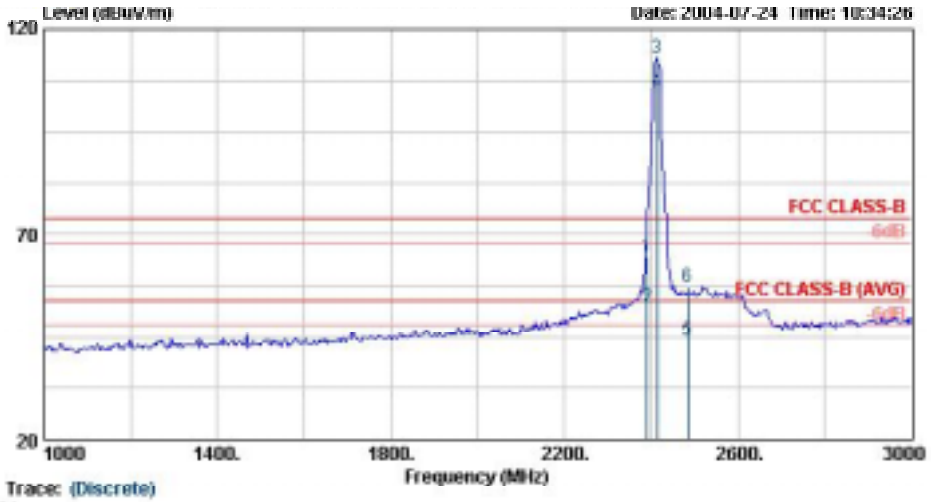
■ **The test that passed at minimum margin was marked by the frame in the following table.**



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH01 2412MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	2390.00	38.15	-15.85	54.00	28.40	44.34	3.33	Average	0	0
2	2390.00	48.71	-25.29	74.00	28.40	44.34	3.33	Peak	---	---
3 X	2411.24	93.74			28.41	44.34	3.35	Peak	0	0
4 X	2411.24	85.85			28.41	44.34	3.35	Average	0	0
5	2483.50	48.48	-25.52	74.00	28.48	44.31	3.40	Peak	---	---
6	2483.50	37.84	-16.16	54.00	28.48	44.31	3.40	Average	0	0

Remark: The “X” represent a fundamental frequency.



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH01 2412MHz
: Yagi Antenna , Gain:14.2dBi

		Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1		2390.00	64.71	-9.29	74.00	28.40	44.34	3.33	Peak	0	0
2	!	2390.00	52.52	-1.48	54.00	28.40	44.34	3.33	Average	100	0
3	X	2413.32	113.05			28.41	44.34	3.35	Peak	0	0
4	@	2413.32	104.89			28.41	44.34	3.35	Average	0	0
5		2483.50	44.19	-9.81	54.00	28.48	44.31	3.40	Average	0	0
6		2483.50	57.12	-16.88	74.00	28.48	44.31	3.40	Peak	0	0

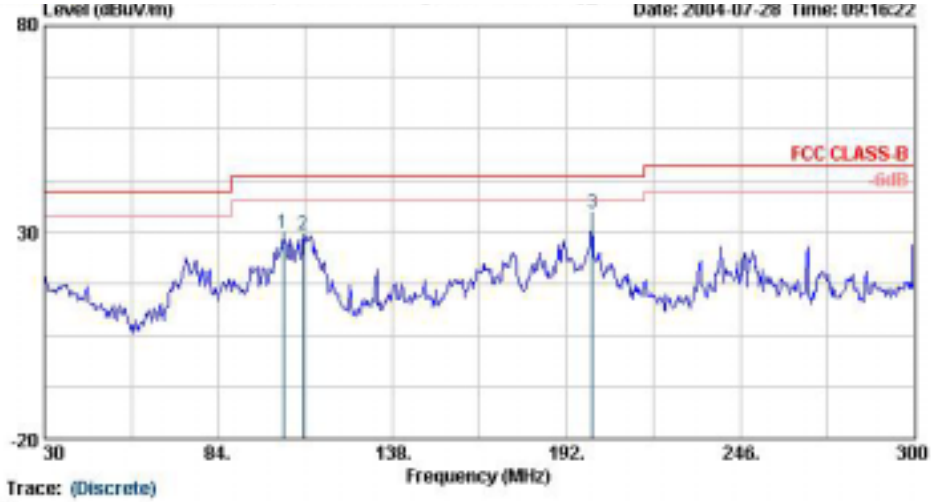
Remark: The “X” represent a fundamental frequency.

Frequency from 3GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

Test Mode: 802.11g TX CH06

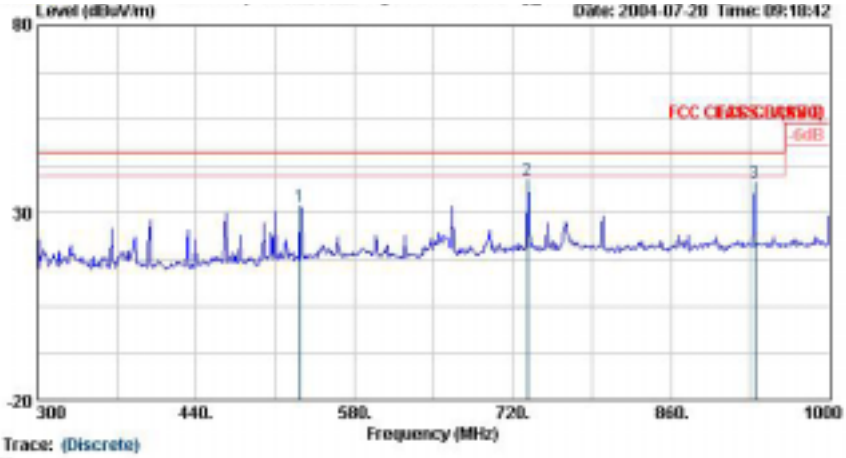
- Test Distance : 3 m
- Temperature : 25.3 °C
- Relative Humidity :53.5 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06
Condition : FCC CLASS-B 3m BI LOG 2004 0629 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

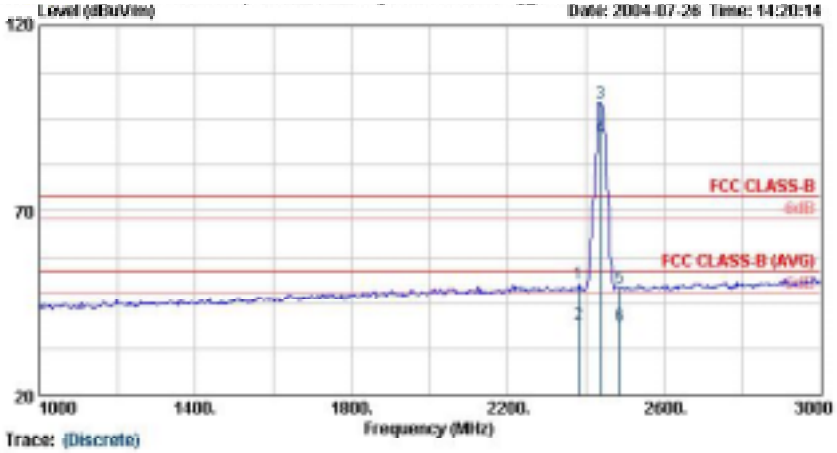
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	104.25	29.67	-13.83	43.50	10.84	32.23	0.90	Peak	---	---
2	110.46	29.36	-14.14	43.50	11.50	32.09	0.93	Peak	---	---
3 @	200.10	34.47	-9.03	43.50	8.70	32.05	1.24	Peak	---	---



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m RE LOG 2004 0629 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	531.70	31.70	-14.30	46.00	16.75	31.40	2.16	Peak	---	---
2 @	733.30	38.89	-7.11	46.00	19.60	31.38	2.60	Peak	---	---
3 @	934.20	37.91	-8.09	46.00	20.76	31.05	3.08	Peak	---	---

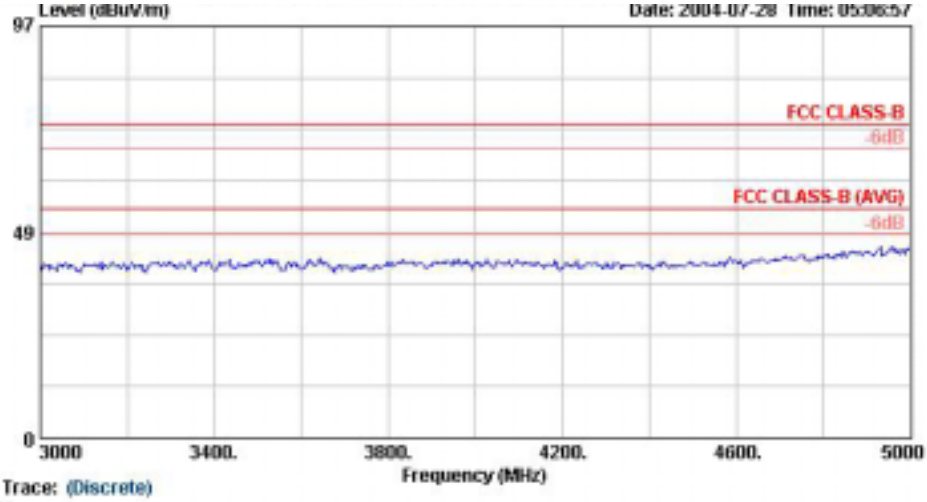


Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

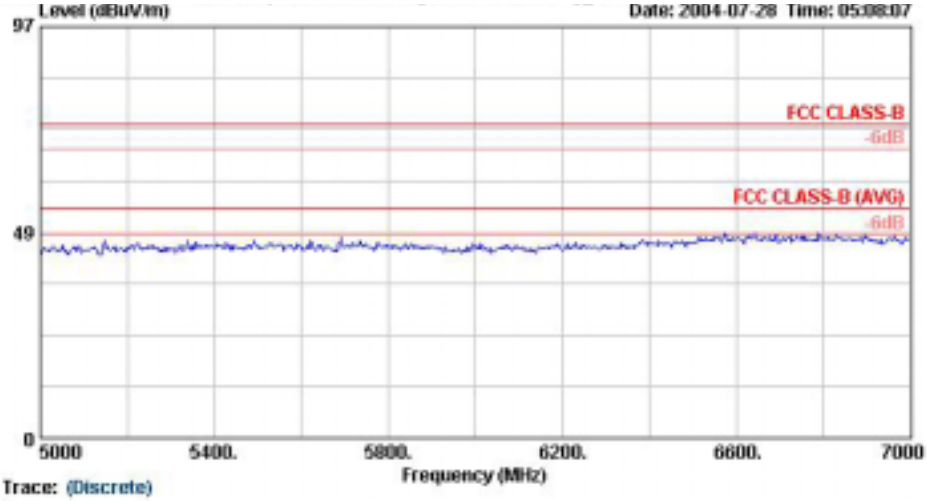
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	2382.00	50.64	-23.36	74.00	28.38	44.35	3.32	Peak	---	---
2	2382.00	39.47	-14.53	54.00	28.38	44.35	3.32	Average	---	---
3 X	2438.00	99.00			28.45	44.32	3.37	Peak	---	---
4 X	2438.00	89.78			28.45	44.32	3.37	Average	---	---
5	2486.00	49.49	-24.51	74.00	28.48	44.31	3.40	Peak	---	---
6	2486.00	39.12	-14.88	54.00	28.48	44.31	3.40	Average	---	---

Remark: The “X” represent a fundamental frequency.



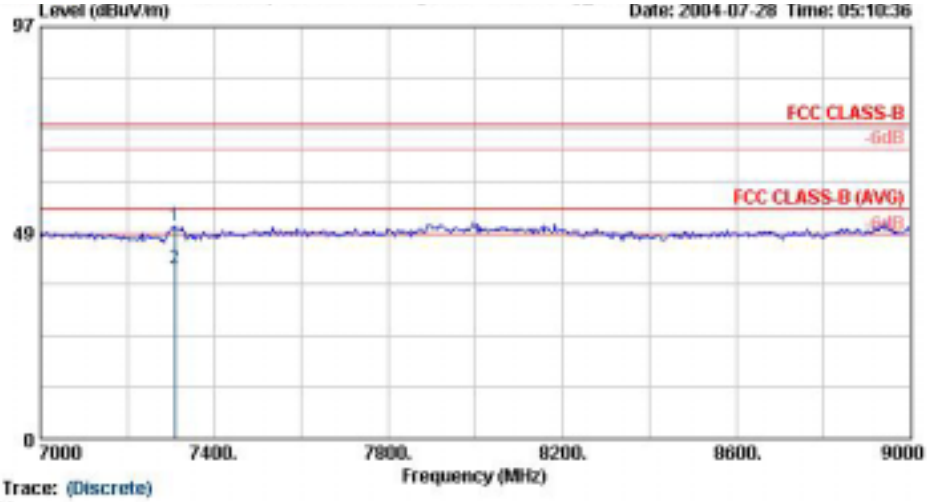
Trace: (Discrete)

Site	: 03CH06
Condition	: FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT	: 802.11a/b/g Access Point
Power	: AC 120V / 60Hz
Model	: WASP5100
Memo	: 802.11g TX CH06 2437MHz
	: Yagi Antenna , Gain:14.2dBi



Trace: (Discrete)

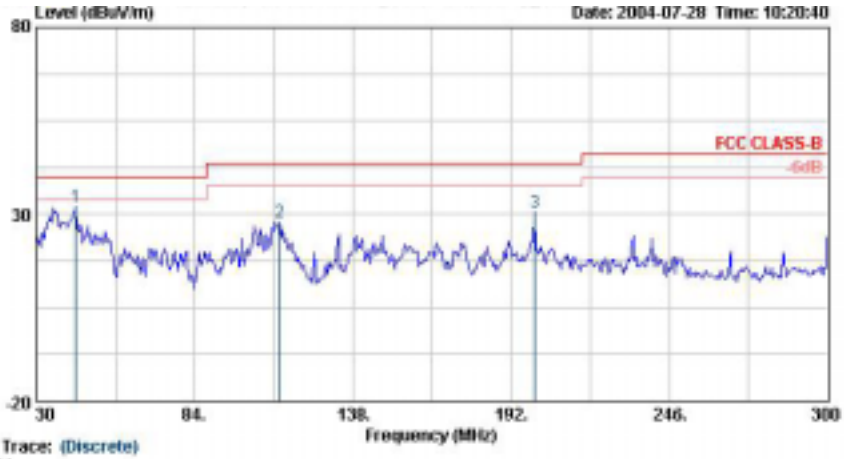
Site	: 03CH06
Condition	: FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT	: 802.11a/b/g Access Point
Power	: AC 120V / 60Hz
Model	: WASP5100
Memo	: 802.11g TX CH06 2437MHz
	: Yagi Antenna , Gain:14.2dBi



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

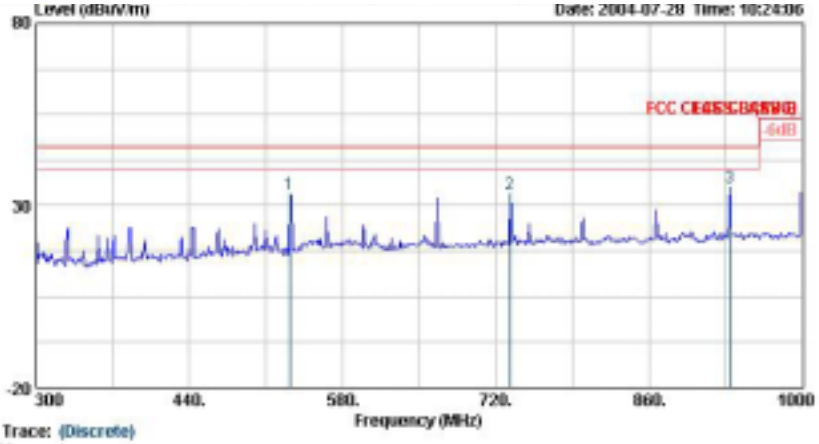
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	7310.00	49.97	-24.03	74.00	35.51	46.24	6.21	Peak	---	---
2	7310.00	40.12	-13.88	54.00	35.51	46.24	6.21	Average	---	---



Trace: (Discrete)

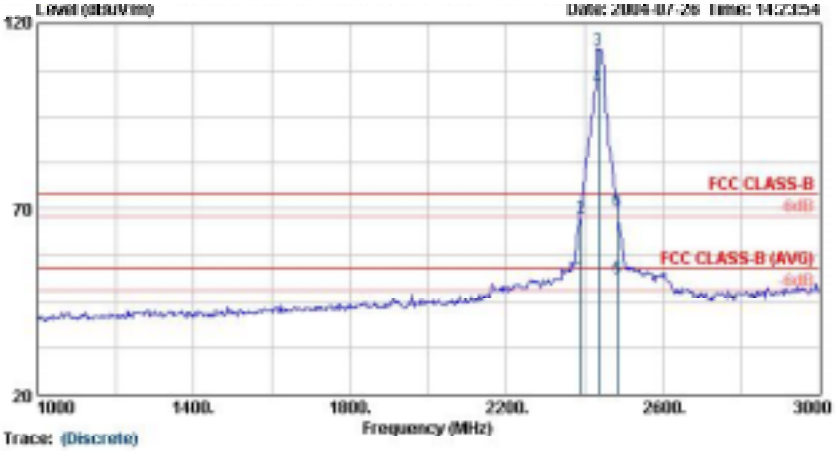
Site : 03CH06
Condition : FCC CLASS-B 3m RE LOG 2004 0629 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1 @	43.50	32.09	-7.91	40.00	10.57	32.28	0.57	Peak	---	---
2	112.89	28.07	-15.43	43.50	11.56	32.05	0.94	Peak	---	---
3	200.10	30.44	-13.06	43.50	8.70	32.05	1.24	Peak	---	---



Site : 03CH06
Condition : FCC CLASS-B 3m BI LOG 2004 0629 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

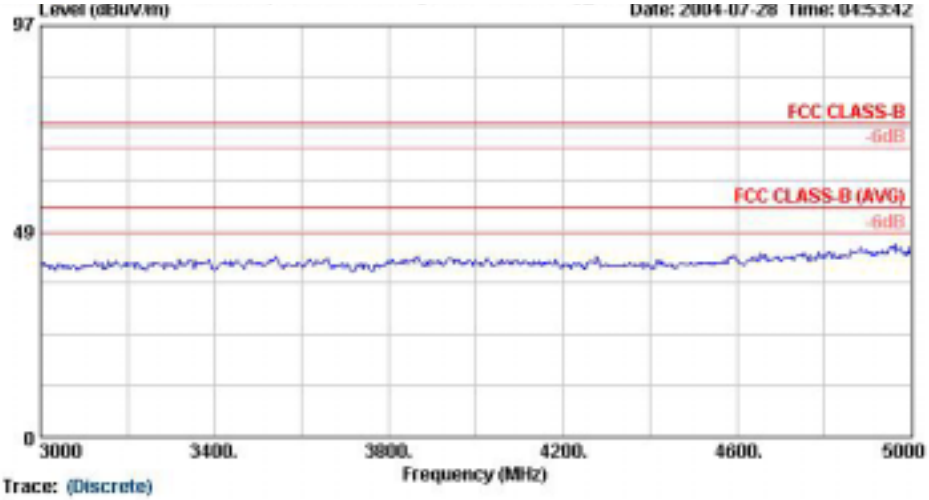
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	531.70	33.01	-12.99	46.00	16.75	31.40	2.16	Peak	---	---
2	733.30	33.14	-12.86	46.00	19.60	31.38	2.60	Peak	---	---
3 @	934.20	35.08	-10.92	46.00	20.76	31.05	3.08	Peak	---	---



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

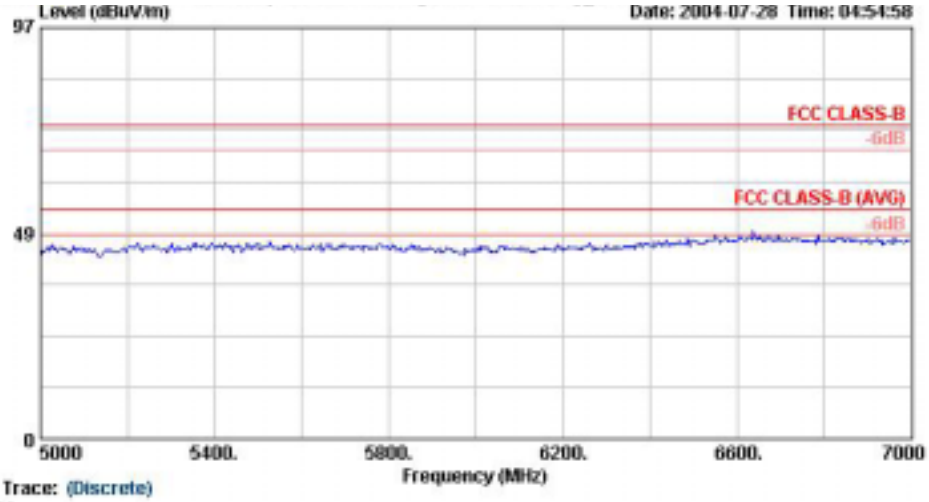
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1 !	2390.00	51.73	-2.27	54.00	28.40	44.34	3.33	Average	0	0
2	2390.00	67.62	-6.38	74.00	28.40	44.34	3.33	Peak	0	0
3 X	2435.28	112.93			28.43	44.33	3.36	Peak	0	0
4 X	2435.28	102.74			28.43	44.33	3.36	Average	0	0
5 !	2483.50	51.31	-2.69	54.00	28.48	44.31	3.40	Average	0	0
6 !	2483.50	69.62	-4.38	74.00	28.48	44.31	3.40	Peak	0	0

Remark: The “X” represent a fundamental frequency.



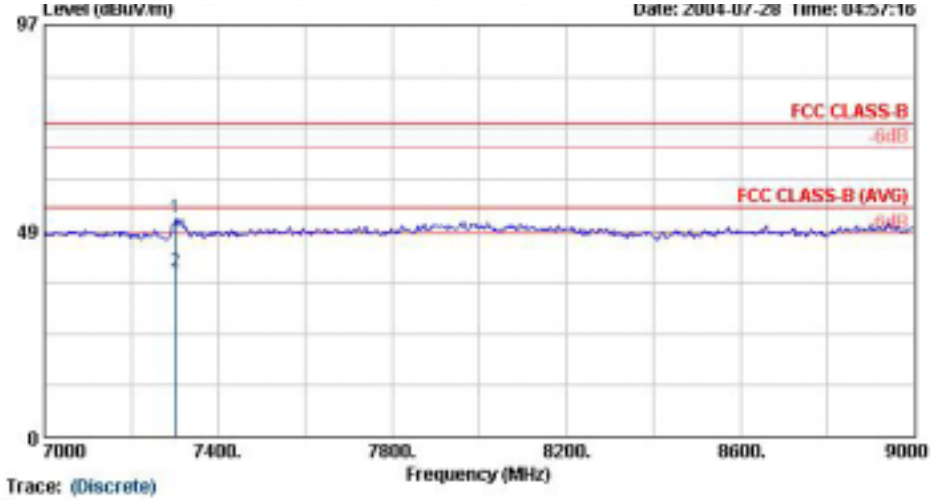
Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi



Trace: (Discrete)

Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH06 2437MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	7302.00	51.63	-22.37	74.00	35.51	46.24	6.21	Peak	---	---
2	7302.00	38.79	-15.21	54.00	35.51	46.24	6.21	Average	---	---

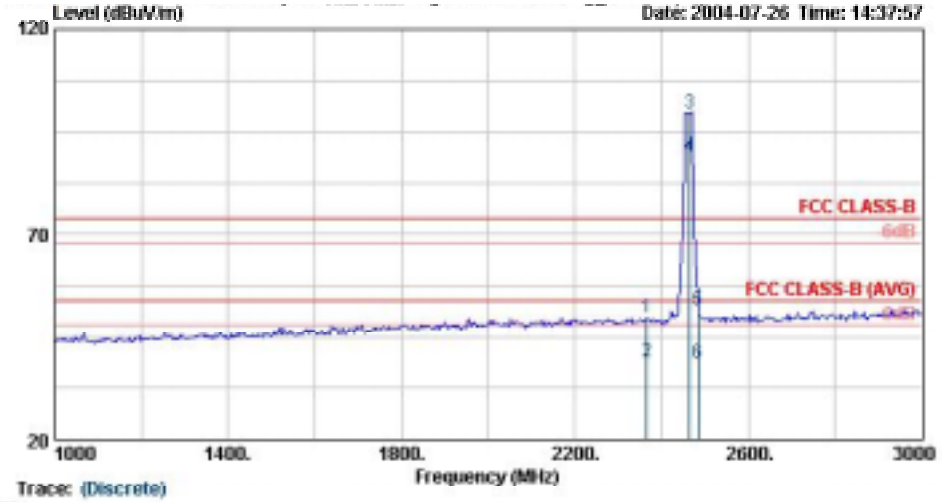
Remark:

Frequency from 9GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

Test Mode: 802.11g 11b TX CH11

- Test Distance : 3 m
- Temperature : 25.3 °C
- Relative Humidity :53.5 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

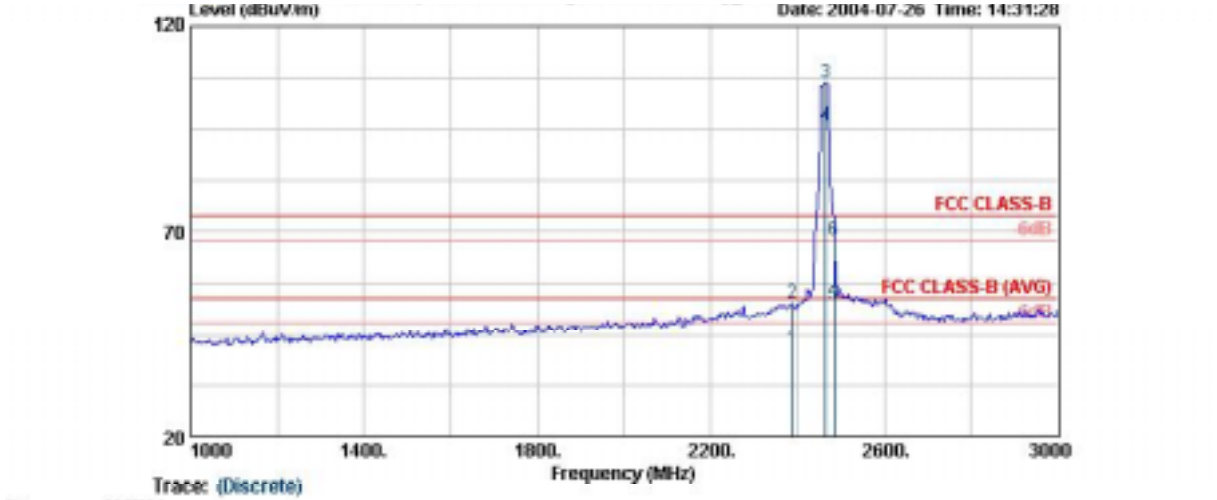
■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH11 2462MHz
: Yagi Antenna , Gain:14.2dBi

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB		cm	deg
1	2366.00	49.60	-24.40	74.00	28.36	44.36	3.31	Peak	---	---
2	2366.00	39.12	-14.88	54.00	28.36	44.36	3.31	Average	---	---
3 X	2464.00	99.49			28.47	44.32	3.38	Peak	---	---
4 X	2464.00	89.15			28.47	44.32	3.38	Average	---	---
5	2483.50	51.77	-22.23	74.00	28.48	44.31	3.40	Peak	---	---
6	2483.50	38.74	-15.26	54.00	28.48	44.31	3.40	Average	---	---

Remark: The “X” represent a fundamental frequency.



Site : 03CH06
Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL
EUT : 802.11a/b/g Access Point
Power : AC 120V / 60Hz
Model : WASP5100
Memo : 802.11g TX CH11 2462MHz
: Yagi Antenna , Gain:14.2dBi

		Freq	Over Limit	Level	Limit Line	Antenna Factor	Preamp Factor	Cable Loss	Remark	Ant Pos	Table Pos
		MHz	dB	dBuV/m	dBuV/m	dB/m	dB	dB		cm	deg
1		2388.00	-12.52	41.48	54.00	28.40	44.34	3.31	Average	0	0
2		2388.00	-21.19	52.81	74.00	28.40	44.34	3.31	Peak	---	---
3	X	2464.00		106.08		28.47	44.31	3.36	Peak	---	---
4	@	2464.00		95.89		28.47	44.31	3.36	Average	0	0
5	!	2483.50	-1.65	52.35	54.00	28.48	44.31	3.38	Average	0	0
6		2483.50	-6.19	67.81	74.00	28.48	44.31	3.38	Peak	0	0

Remark: The “X” represent a fundamental frequency.

Frequency from 3GHz to 25GHz, the emission emitted by the EUT is too low to be measured.

8. Antenna Requirements

8.1. Standard Applicable

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

And according to FCC 47 CFR Section 15.247 (b), if directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

8.2. Antenna Connected Construction

The antennas and their connectors used in this product are listed in section 1.5. Antenna 1 is an integral antenna, and antennas 2/3/4 use RP-BNC. These antennas, which use unique antenna connector or without connector are considered to meet the antenna requirement. The antenna 5, which use N-type connector must be professionally installed to meet the antenna requirement.

9. RF Exposure

FCC Rules and Regulations Part 1.1307,1.1310,2.1091,2.1093:

RF Exposure Compliance

9.1. Limit For Maximum Permissible Exposure (MPE)

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm^2)	Averaging Time $\|E\|^2$,$\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$,$\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

F=frequency in MHz *Plane-wave equivalent power density

9.2. MPE Calculations

Power Density =Pd (mW/cm2) = EIRP/4 π d2

EIRP = P. G

P＝Peak output power (mW)

G＝Antenna numeric gain (numeric)

d＝Separation distance (cm)

Because the EUT belongs to General Population/ Uncontrolled Exposure, the limit of power density is 1.0 mW/cm2.

WSAP-5110:

Channel NO.	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated RF Exposure at d=20 (cm)	Limit(mW/cm^2)
Channel 1	2	1.58	19.47	88.51	0.027	1.00
Channel 6	2	1.58	21.52	141.91	0.044	1.00
Channel 11	2	1.58	20.39	109.40	0.034	1.00

WSAP-5100:

Channel NO.	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated RF Exposure at d=20 (cm)	Limit(mW/cm^2)
Channel 1	12.9	19.50	16.26	42.27	0.16	1.00
Channel 6	12.9	19.50	19.73	93.97	0.36	1.00
Channel 11	12.9	19.50	10.72	11.80	0.05	1.00

- The worst case of MPE is 802.11b with Antenna 5.

9.3. FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.List

of Measuring Equipments Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100132	9 KHz – 2.75 GHz	Jun. 23, 2004	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/008	9 KHz – 30 MHz	May 03, 2004	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/009	9 KHz – 30 MHz	Apr. 19, 2004	Conduction (CO01-HY)
EMI Filter	LINDGREN	LRE-2060	1004	< 450 Hz	N/A	Conduction (CO01-HY)
EMI Filter	LINDGREN	N6006	201052	0 ~ 60 Hz	N/A	Conduction (CO01-HY)
RF Cable-CON	Suhner Switzerland	RG223/U	CB029	9KHz~30MHz	Dec. 24, 2003	Conduction (CO01-HY)

※ Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	Jun. 21, 2004	Radiation (03CH03-HY)
Spectrum analyzer	R&S	FSP40	100004	9KHZ~40GHz	Aug. 23, 2003	Radiation (03CH03-HY)
Amplifier	HP	8447D	2944A09072	100KHz – 1.3GHz	Nov. 05, 2003	Radiation (03CH03-HY)
Biconical Antenna	SCHWARZBECK	VHBB 9124	301	30MHz –200MHz	Jul. 28, 2004	Radiation (03CH03-HY)
Log Antenna	SCHWARZBECK	VUSLP 9111	221	200MHz -1GHz	Jul. 28, 2004	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz~1GHz	Dec. 03, 2003	Radiation (03CH03-HY)
Amplifier	MITEQ	AFS44	849984	100MHz~26.5GHz	Mar. 26, 2004	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6821	1GHz – 18GHz	Sep. 12, 2003	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)
Horn Antenna	Schwarzbeck	BBHA9170	154	15GHz~40GHz	Jun. 09, 2004	Radiation (03CH03-HY)
RF Cable-HIGH	Jye Bao	RG142	CB030-HIGH	1GHz~29.5GHz	Dec. 05, 2003	Radiation (03CH03-HY)
Spectrum analyzer	R&S	FSP40	100057	9KHz-40GHz	Feb. 26, 2004	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Dec. 18, 2003	Radiation (03CH06-HY)
Horn Antenna	Com-Power	AH118	071025	1G-18G	Feb. 11, 2004	Radiation (03CH06-HY)
PreAmplifier	Com-Power	PA-103	161055	1MHz - 1000MHz	Apr. 26, 2004	Radiation (03CH06-HY)
HF Amplifier	MITEQ	AFS44	973248	0.1G - 26.5G	May. 20, 2004	Radiation (03CH06-HY)

※ Calibration Interval of instruments listed above is one year, except for Horn Antenna, BBHA9170.

※ Calibration Interval of Horn Antenna, BBHA9170, is three years.

10. Uncertainty Measurement

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch **Receiver VSWR Γ1=** **LISN VSWR Γ2=** **Uncertainty=20log(1-Γ1*Γ2)**	+0.34/-0.35	U-shape	0.24
combined standard uncertainty Uc(y)	**1.13**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.26**		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch Receiver VSWR Γ1= 0.20 Antenna VSWR Γ2= 0.23 Uncertainty=20log(1-Γ1*Γ2)	+0.39/-0.41	U-shaped	0.28
combined standard uncertainty Uc(y)	**1.27**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.54**		

Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncertainty of x_i		$u(x_i)$	Ci	$Ci * u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR Γ1= 0.197 Antenna VSWR Γ2= 0.194 Uncertainty=20log(1-Γ1*Γ2*Γ3)	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty Uc(y)	**2.36**				
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	**4.72**				

U= √{(0.3/2)² +(2²+1.5²+0.2²)/3+(0.2)²/2}=1.66