5.6. Test of Radiated Emission

Radiated emissions from 30 MHz to 24.62 GHz were measured according to the methods defines in ANSI C63.4-2001. The EUT was placed on a nonmetallic stand, 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

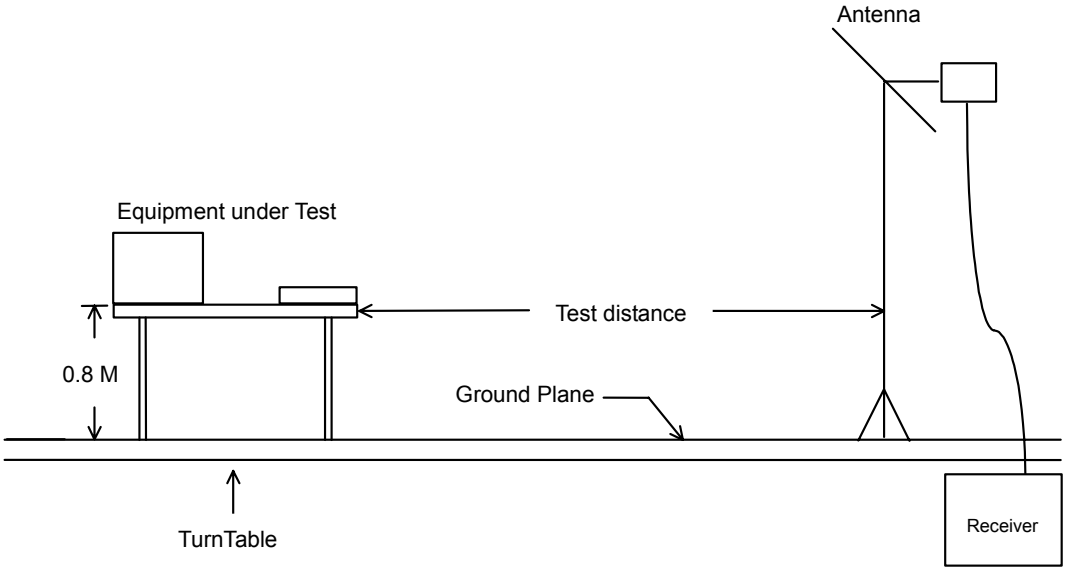
5.6.1. Major Measuring Instruments

● Amplifier	(MITEQ AFS44)
RF Gain	40 dB
Signal Input	100 MHz to 26.5 GHz
● Amplifier	(HP 8447D)
RF Gain	30 dB
Signal Input	100 KHz to 1.3 GHz
● Spectrum analyzer	(R&S FSP40)
Attenuation	10 dB
Start Frequency	1 GHz
Stop Frequency	24 GHz
Resolution Bandwidth	1 MHz
Video Bandwidth	1 MHz
Signal Input	9 KHz to 40 GHz
● Test Receiver	(SCHAFFNER SCR3501)
Resolution Bandwidth	120 KHz
Frequency Band	9 K – 1 GHz
Quasi-Peak Detector	ON for Quasi-Peak Mode
	OFF for Peak Mode

5.6.2. Test Procedures

1. The EUT was placed on a rotatable table top 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. 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.
5. 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.
6. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. 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.
8. 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.

5.6.3. Typical Test Setup Layout of Radiated Emission

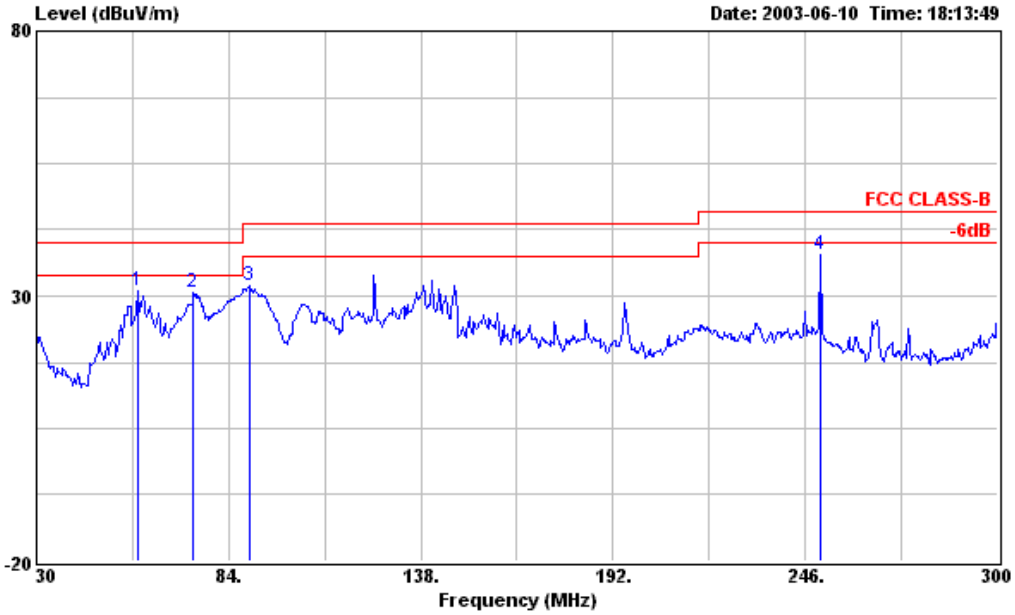


5.6.4. Test Result of Radiated Emission

- Test Mode: Mode 1
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

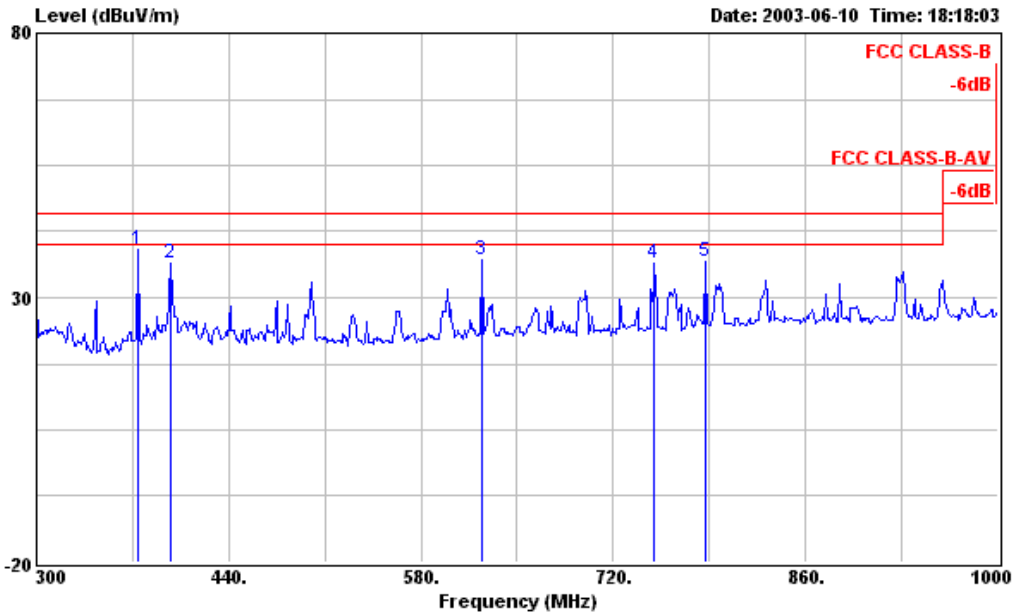
■ **The test was passed at the minimum margin that marked by the frame in the following test record**

■ Spurious Emission



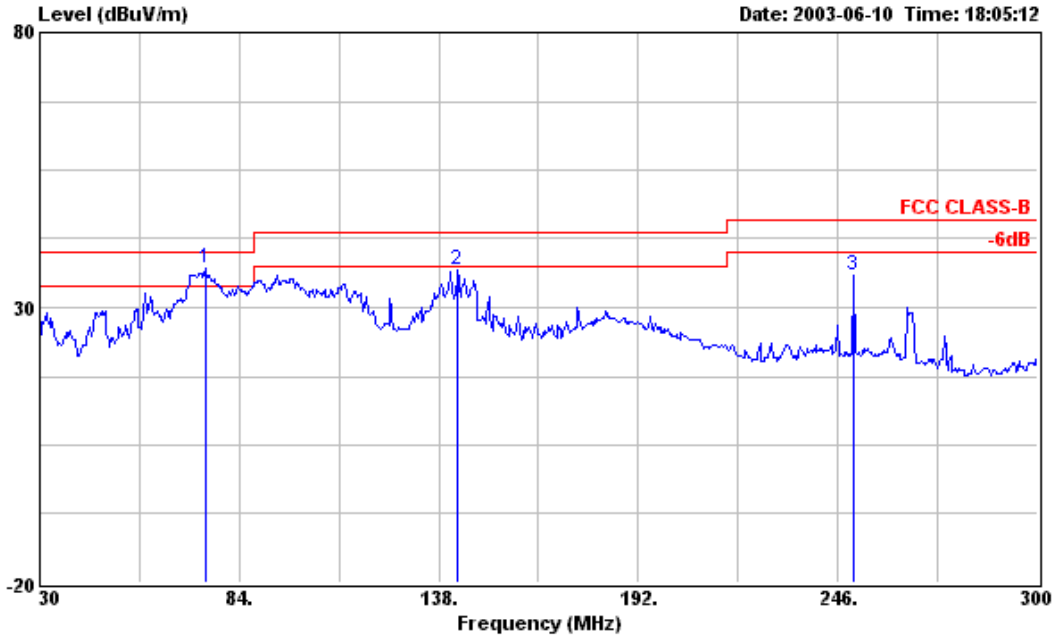

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	58.620	30.84	-9.16	40.00	51.15	5.34	1.43	27.08	Peak	---	---
2	74.010	30.67	-9.33	40.00	50.95	5.10	1.67	27.05	Peak	---	---
3	89.940	31.95	-11.55	43.50	48.36	8.78	1.83	27.02	Peak	---	---
4	250.050	37.81	-8.19	46.00	49.93	11.34	3.14	26.60	Peak	---	---



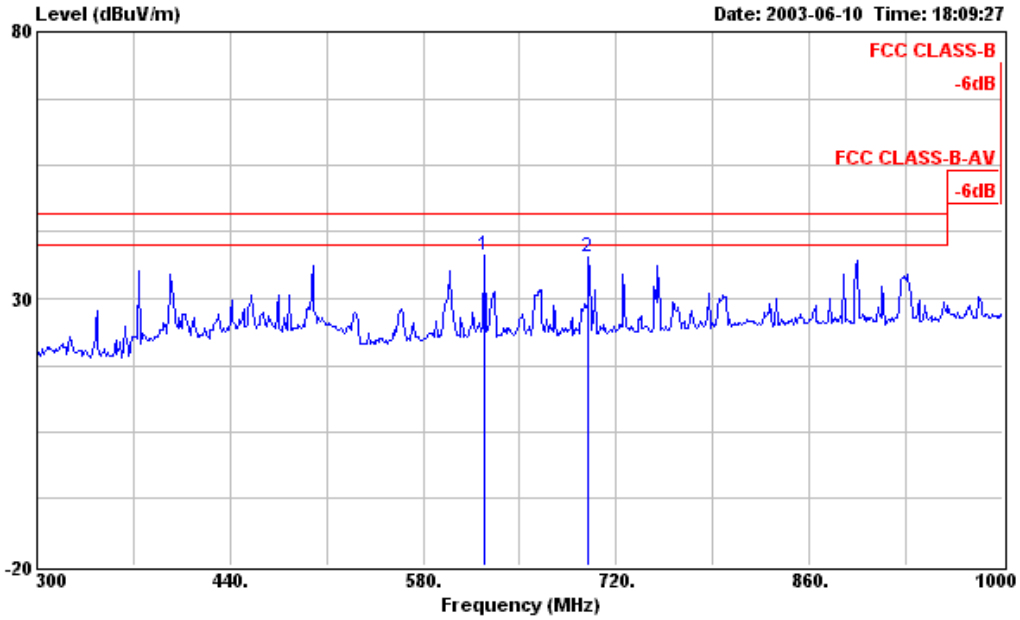
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	39.01	-6.99	46.00	48.24	13.82	3.99	27.04	Peak	---	---
2	397.300	36.48	-9.52	46.00	45.05	14.54	4.07	27.18	Peak	---	---
3	624.100	37.04	-8.96	46.00	41.96	17.46	5.62	28.00	Peak	---	---
4	750.100	36.34	-9.66	46.00	39.78	18.40	6.16	28.00	Peak	---	---
5	786.500	36.97	-9.03	46.00	39.95	18.68	6.34	28.00	Peak	---	---



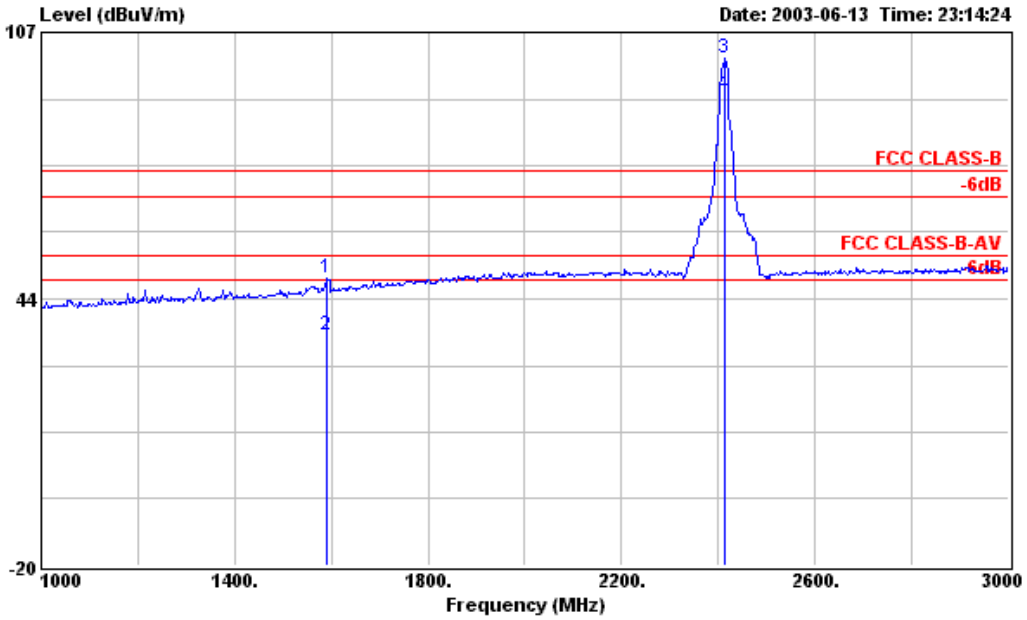
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	74.820	37.18	-2.82	40.00	57.33	5.21	1.69	27.05	Peak	200	169
2	143.130	36.79	-6.71	43.50	51.36	9.99	2.27	26.83	Peak	---	---
3	250.050	35.96	-10.04	46.00	48.08	11.34	3.14	26.60	Peak	---	---



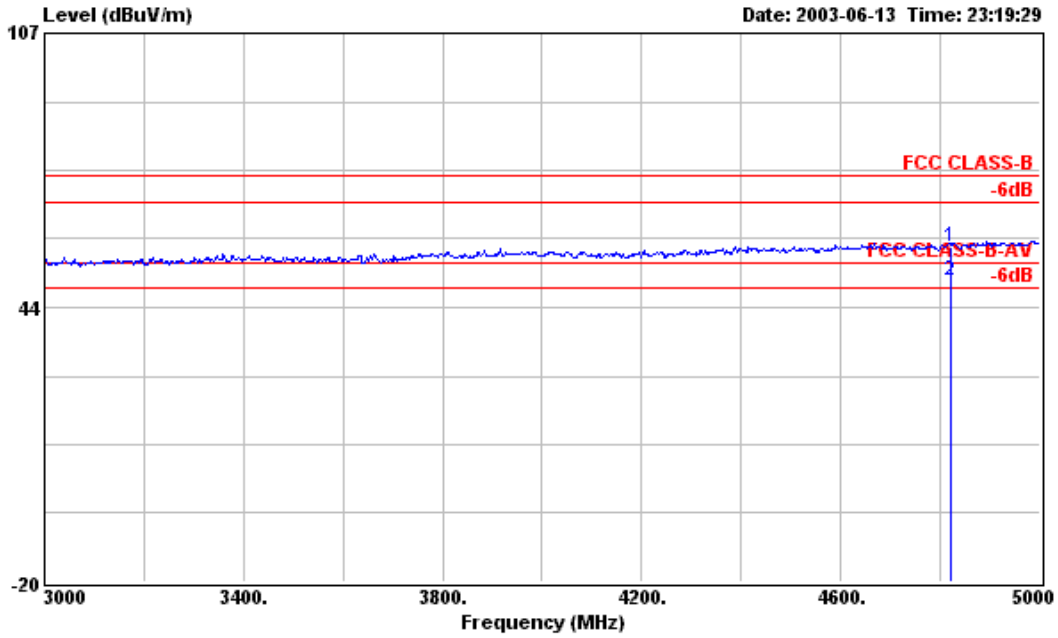
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	624.100	38.25	-7.75	46.00	43.17	17.46	5.62	28.00	Peak	---	---
2	699.700	37.70	-8.30	46.00	41.76	18.00	5.94	28.00	Peak	---	---

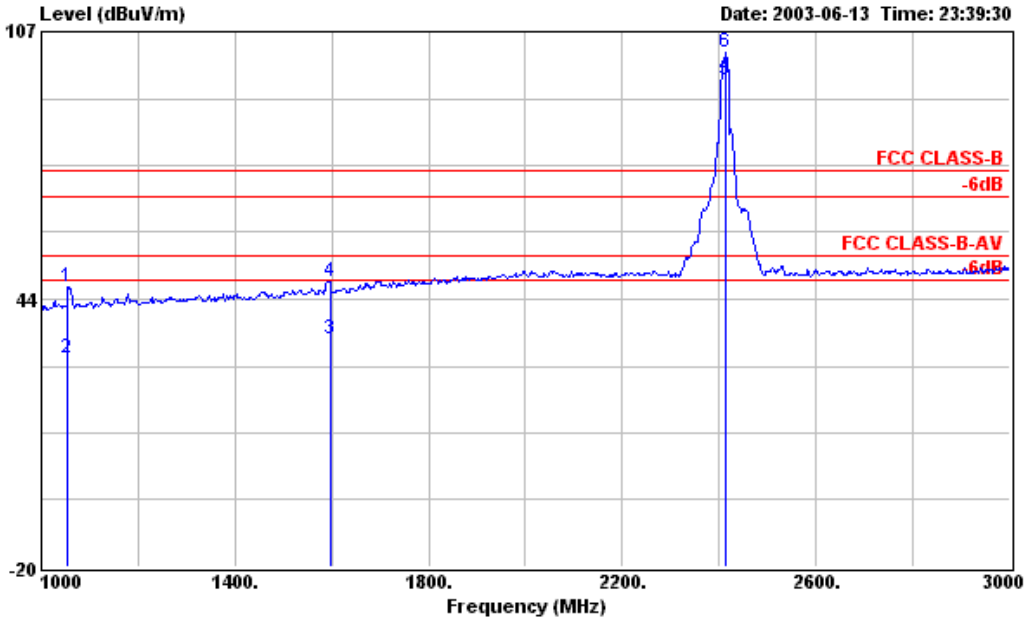


Site : 03CH03-HY
Condition : 3m HORN-ANT-10094-0417 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1590.000	48.35	-25.65	74.00	54.02	27.58	4.80	38.05	Peak	---	---
2	1590.000	34.68	-19.32	54.00	40.35	27.58	4.80	38.05	Average	---	---

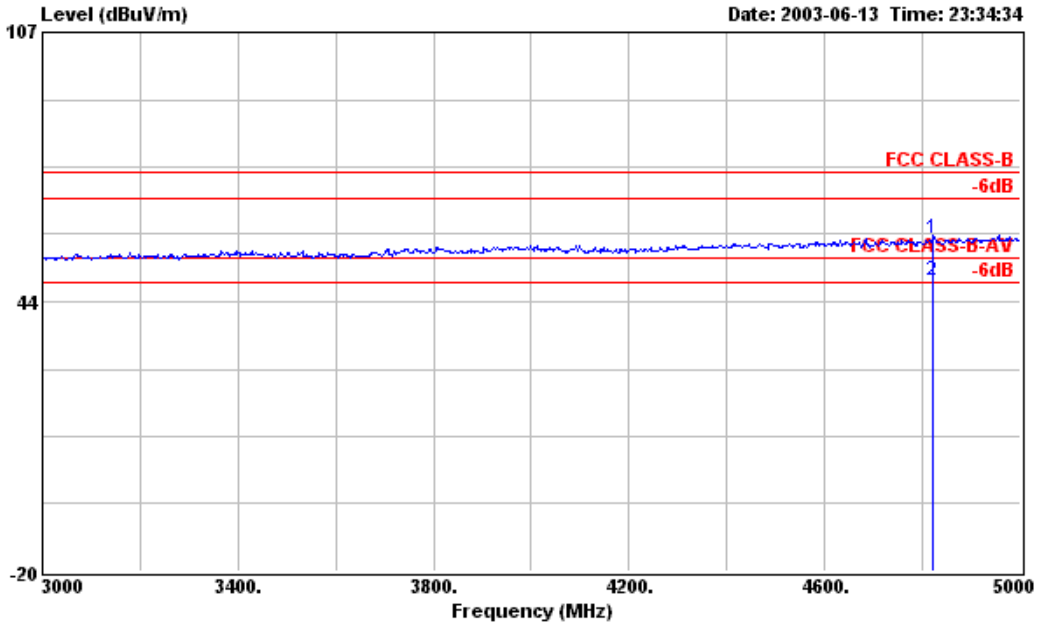



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-10094-0417 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```



Site : 03CH03-HY
Condition : 3m HORN-ANT-10094-0417 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1054.000	46.50	-27.50	74.00	55.40	25.05	3.99	37.94	Peak	---	---
2	1054.000	29.35	-24.65	54.00	38.25	25.05	3.99	37.94	Average	---	---
3	1596.000	34.07	-19.93	54.00	39.69	27.62	4.81	38.05	Average	---	---
4	1596.000	47.73	-26.27	74.00	53.35	27.62	4.81	38.05	Peak	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-10094-0417 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2414.000	H	30.18	5.98	64.66	-	-	100.82	109900.58		Peak
2414.000	H	30.18	5.98	56.08	-	-	92.24	40926.07		A.V.
4820.000	H	33.26	9.16	14.97	74.00	5011.87	57.39	740.46	-16.61	Peak
4820.000	H	33.26	9.16	7.42	54.00	501.19	49.84	310.46	-4.16	A.V.
2414.000	V	30.18	5.98	59.38	-	-	95.54	59841.16		A.V.
2414.000	V	30.18	5.98	65.76	-	-	101.92	124738.35		Peak
4822.000	V	33.26	9.16	15.78	74.00	5011.87	58.20	812.83	-15.80	Peak
4822.000	V	33.26	9.16	5.95	54.00	501.19	48.37	262.12	-5.63	A.V.
7236.000	V/H						-			Peak, A.V.
9648.000	V/H						-			Peak, A.V.
12060.000	V/H						-			Peak, A.V.
14472.000	V/H						-			Peak, A.V.
16884.000	V/H						-			Peak, A.V.
19296.000	V/H						-			Peak, A.V.
21708.000	V/H						-			Peak, A.V.
24120.000	V/H						-			Peak, A.V.

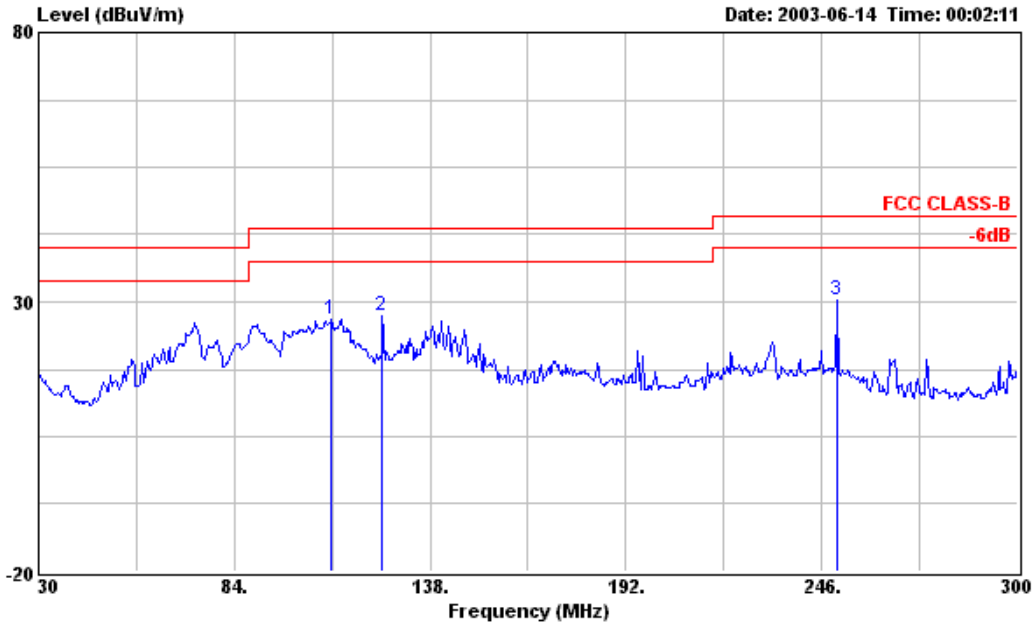
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 2
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

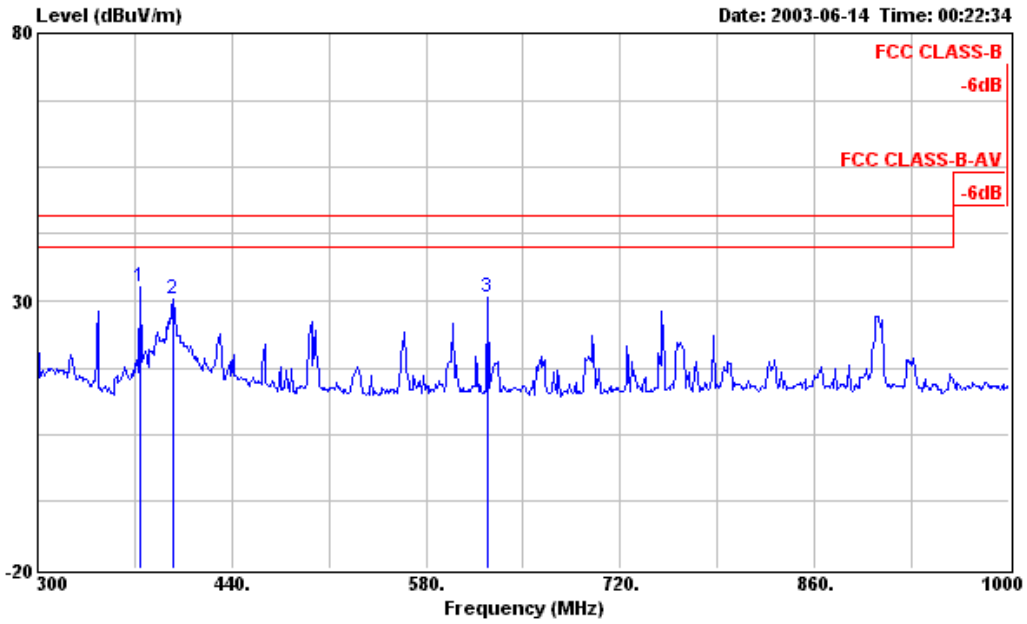
■ **The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 2 m, turn table degree is 251°**

■ Spurious Emission



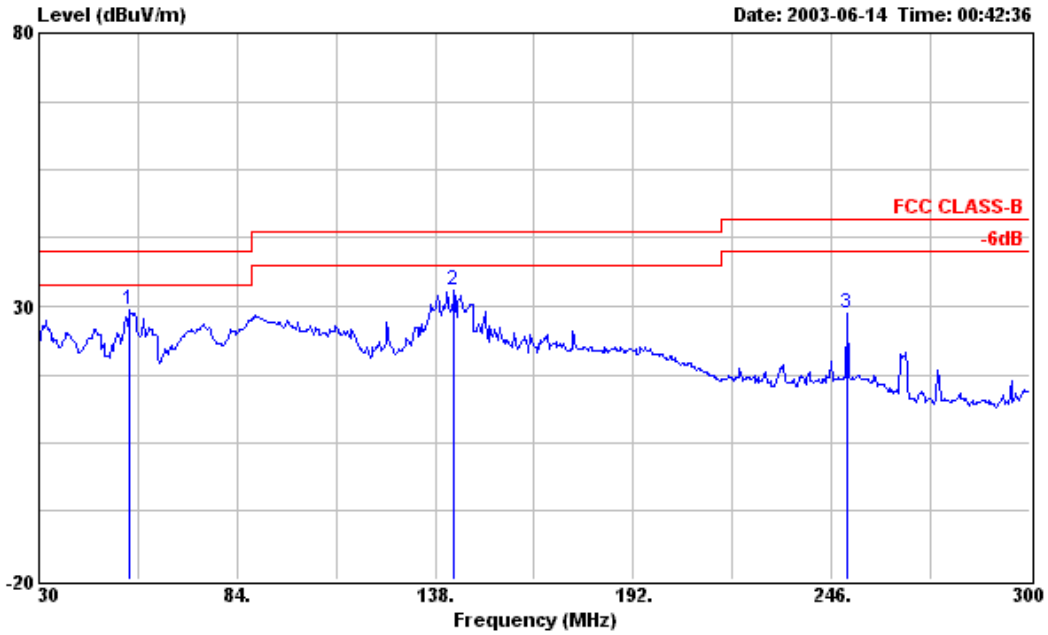

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	110.730	26.89	-16.61	43.50	45.91	9.68	-1.74	26.96	Peak	---	---
2	124.770	27.40	-16.10	43.50	45.91	10.25	-1.86	26.90	Peak	---	---
3	250.050	30.24	-15.76	46.00	48.11	11.34	-2.61	26.60	Peak	---	---



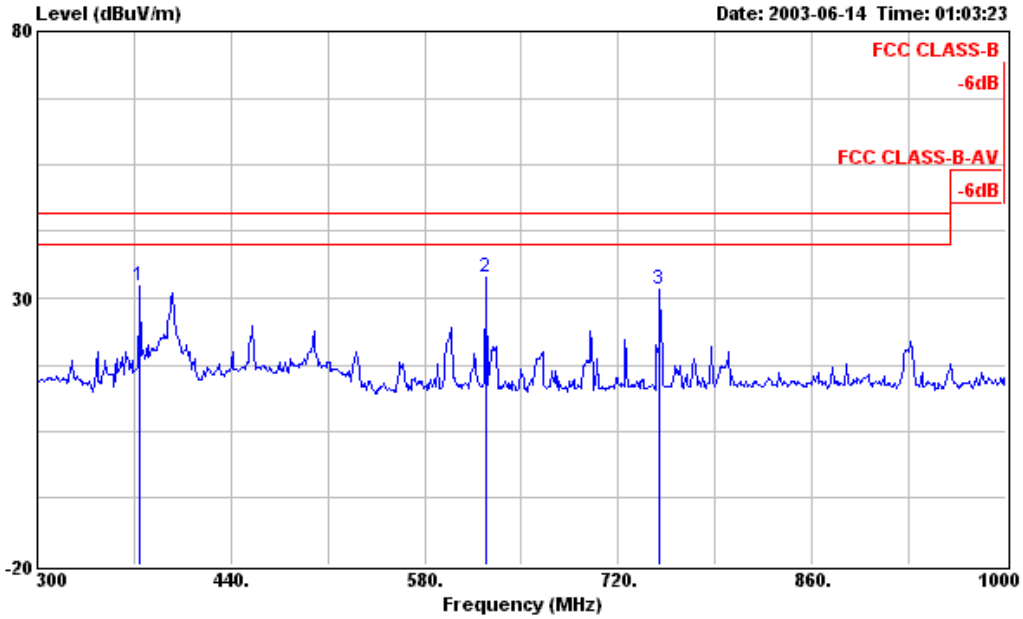
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	32.68	-13.32	46.00	49.40	13.82	-3.50	27.04	Peak	---	---
2	397.300	30.37	-15.63	46.00	46.52	14.54	-3.51	27.18	Peak	---	---
3	624.100	30.53	-15.47	46.00	45.49	17.46	-4.42	28.00	Peak	---	---



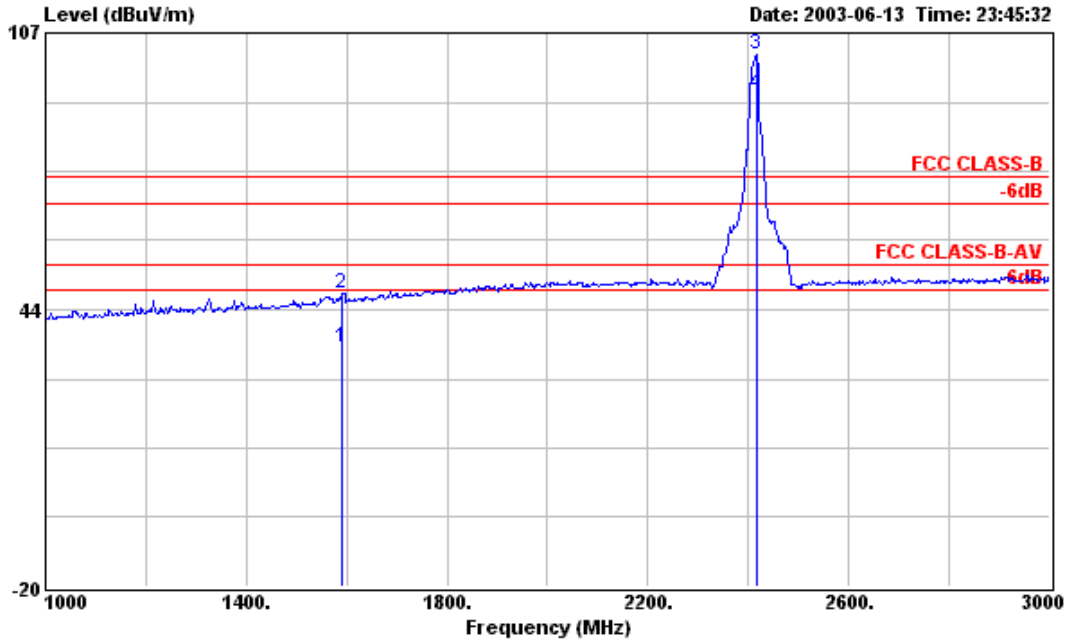

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	54.570	29.51	-10.49	40.00	52.12	5.87	-1.39	27.09	Peak	---	---
2	143.130	32.84	-10.66	43.50	51.75	9.99	-2.07	26.83	Peak	---	---
3	250.050	28.69	-17.31	46.00	46.56	11.34	-2.61	26.60	Peak	---	---



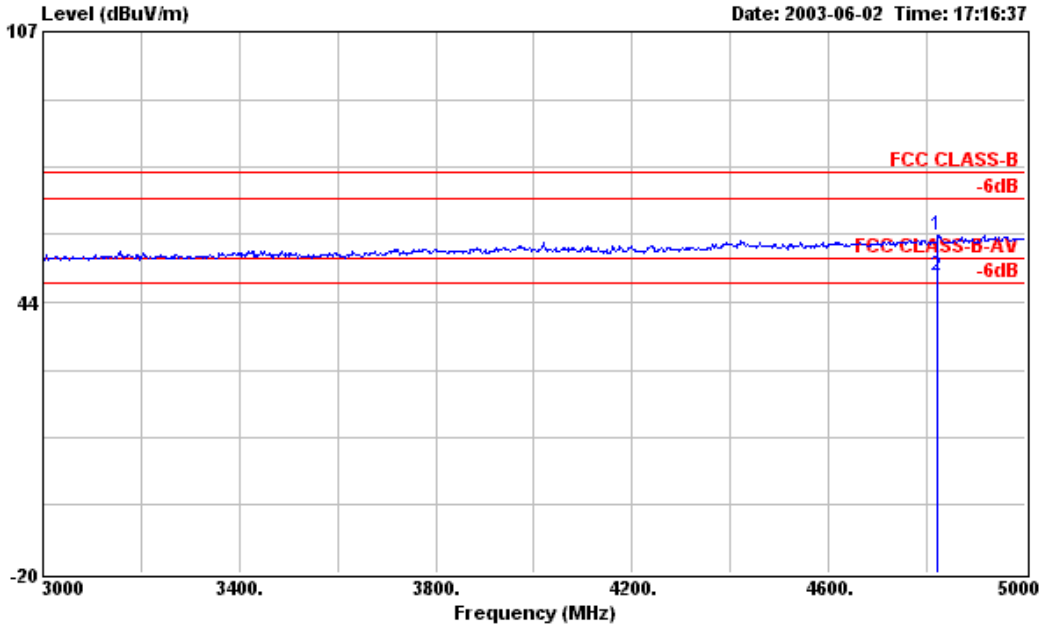
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	32.41	-13.59	46.00	49.13	13.82	-3.50	27.04	Peak	---	---
2	624.100	33.85	-12.15	46.00	48.81	17.46	-4.42	28.00	Peak	---	---
3	750.100	31.67	-14.33	46.00	46.22	18.40	-4.95	28.00	Peak	---	---

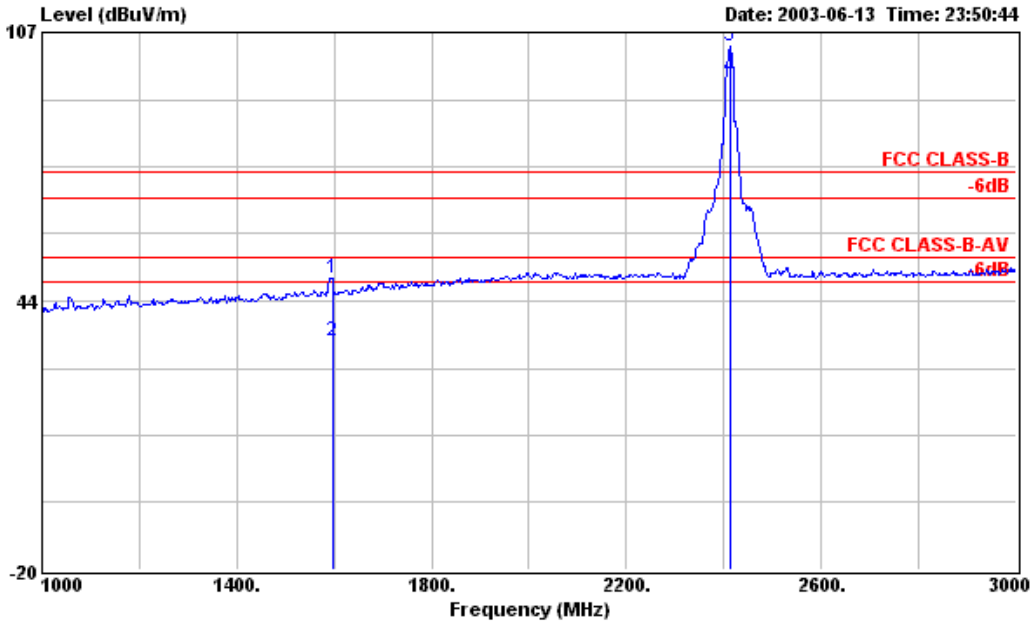


Site : 03CH03-HY
Condition : 3m HORN-ANT-10094-0417 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1590.000	34.66	-19.34	54.00	40.33	27.58	4.80	38.05	Average	---	---
2	1590.000	47.35	-26.65	74.00	53.02	27.58	4.80	38.05	Peak	---	---

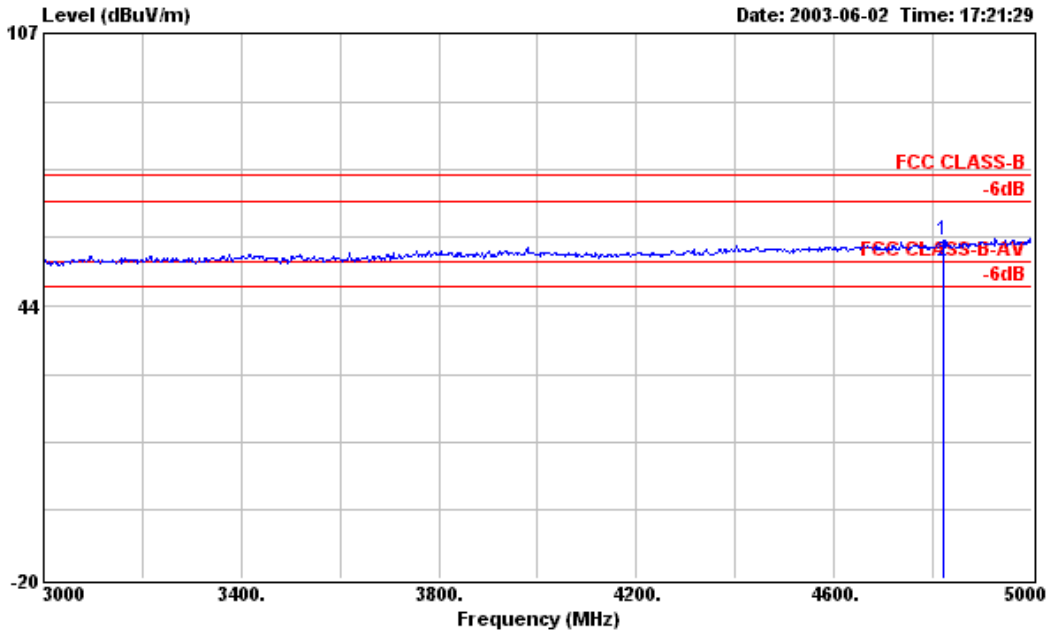



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-10094-0417 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```



Site : 03CH03-HY
Condition : 3m HORN-ANT-10094-0417 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1596.000	48.73	-25.27	74.00	54.35	27.62	4.81	38.05	Peak	---	---
2	1596.000	33.93	-20.07	54.00	39.55	27.62	4.81	38.05	Average	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-10094-0417 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2416.000	H	30.17	5.98	65.90	-	-	102.05	126619.33		Peak
2416.000	H	30.17	5.98	56.96	-	-	93.11	45237.65		A.V.
4822.000	H	33.26	9.16	16.74	74.00	5011.87	59.16	907.82	-14.84	Peak
4822.000	H	33.26	9.16	7.39	54.00	501.19	49.81	309.39	-4.19	A.V.
2412.000	V	30.18	5.98	67.48	-	-	103.64	152054.75		Peak
2412.000	V	30.18	5.98	60.15	-	-	96.31	65388.29		A.V.
4822.000	V	33.26	9.16	16.42	74.00	5011.87	58.84	874.98	-15.16	Peak
4822.000	V	33.26	9.16	11.27	54.00	501.19	53.69	483.62	-0.31	A.V.
7236.000	V/H						-			Peak, A.V.
9648.000	V/H						-			Peak, A.V.
12060.000	V/H						-			Peak, A.V.
14472.000	V/H						-			Peak, A.V.
16884.000	V/H						-			Peak, A.V.
19296.000	V/H						-			Peak, A.V.
21708.000	V/H						-			Peak, A.V.
24120.000	V/H						-			Peak, A.V.

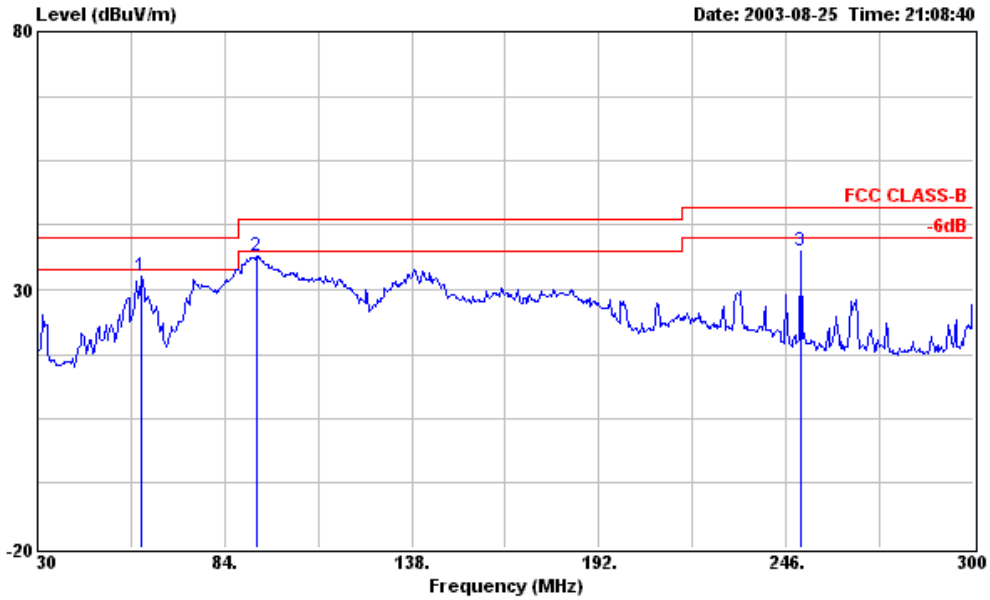
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 3
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

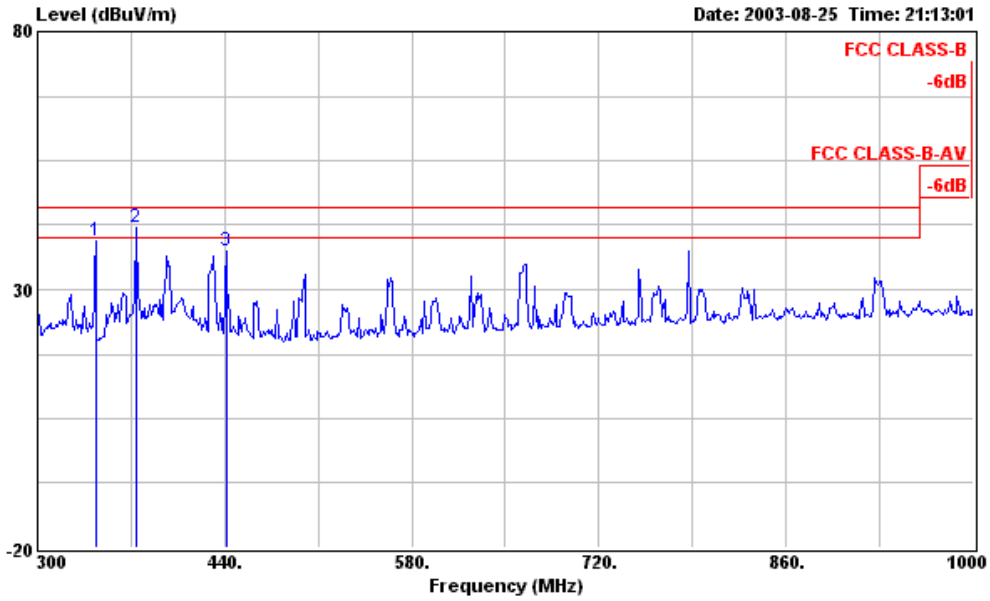
■ The test was passed at the minimum margin that marked by the frame in the following table

■ Spurious Emission



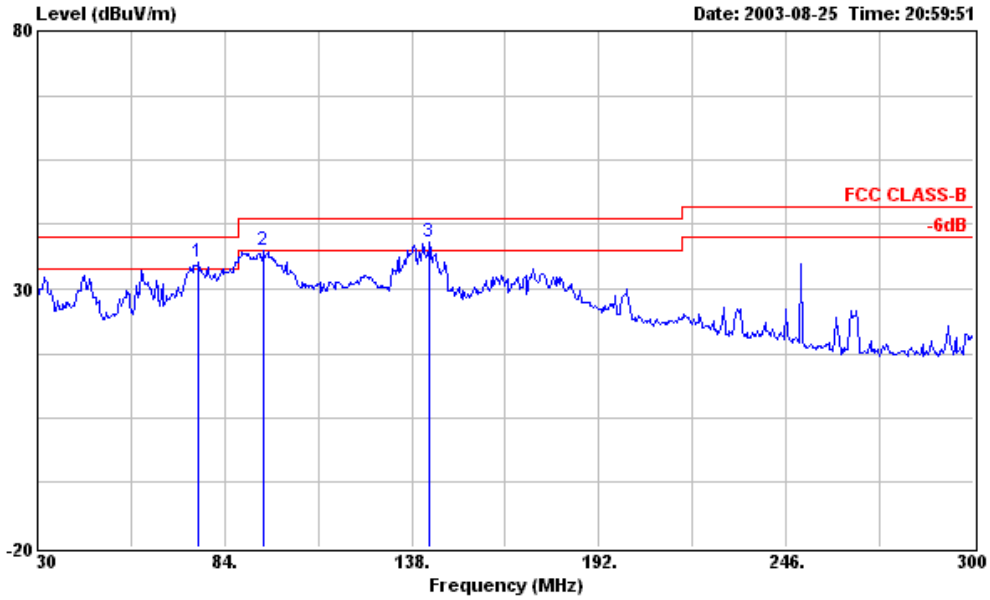

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	59.970	32.48	-7.52	40.00	52.82	5.16	1.58	27.08	Peak	---	---
2	93.450	36.49	-7.01	43.50	52.81	8.98	1.71	27.01	Peak	---	---
3	250.050	37.39	-8.61	46.00	50.04	11.34	2.61	26.60	Peak	---	---



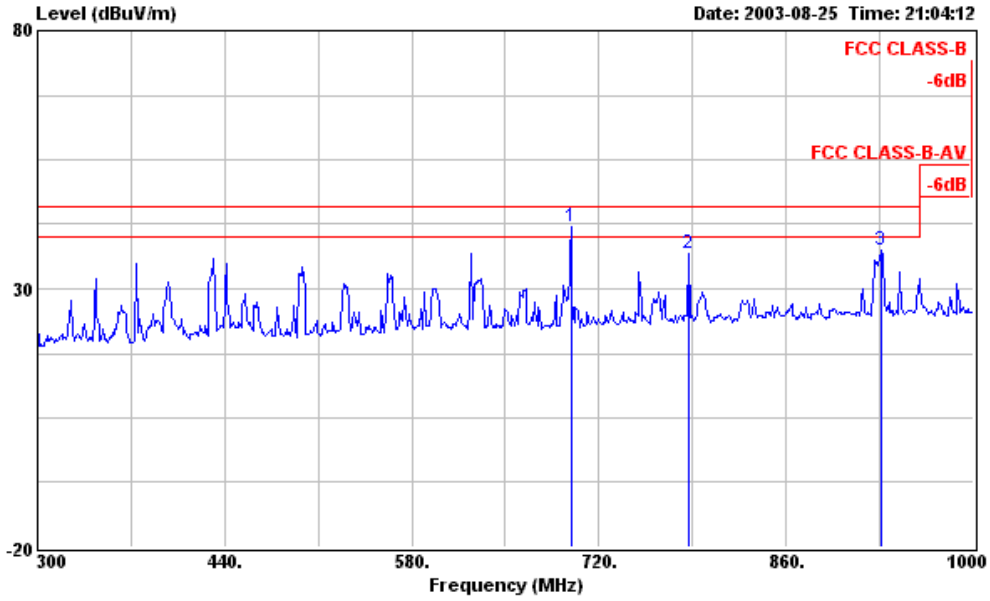
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
: F341402
: 49

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	343.400	39.52	-6.48	46.00	50.19	12.79	3.40	26.86	Peak	---	---
2 !	374.200	41.98	-4.02	46.00	51.70	13.82	3.50	27.04	Peak	---	---
3	441.400	37.54	-8.46	46.00	46.20	15.21	3.54	27.41	Peak	---	---



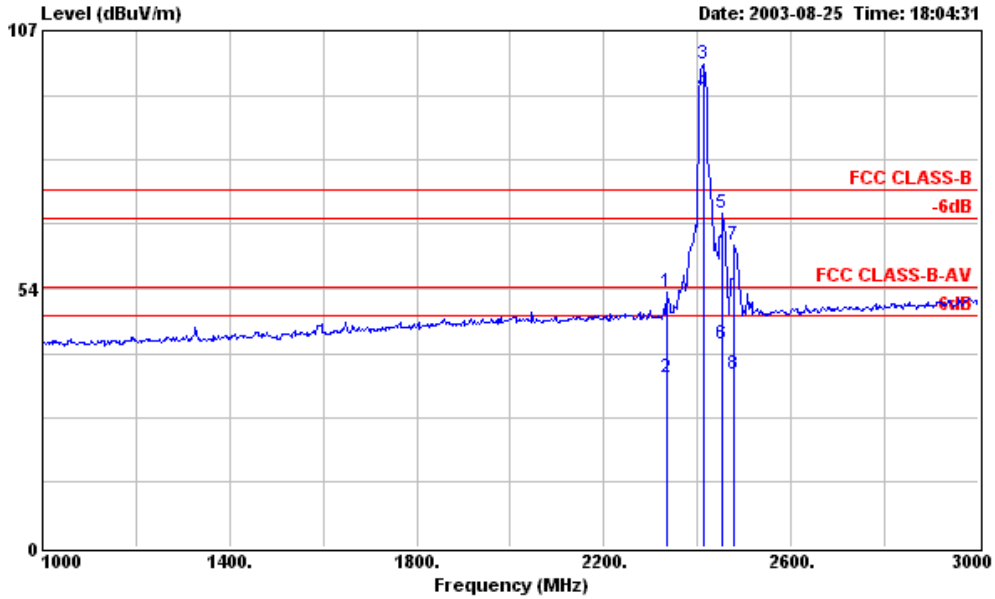

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	76.170	35.31	-4.69	40.00	55.39	5.42	1.55	27.05	Peak	---	---
2 !	95.340	37.59	-5.91	43.50	53.72	9.09	1.79	27.01	Peak	---	---
3 !	143.130	39.05	-4.45	43.50	53.82	9.99	2.07	26.83	Peak	---	---



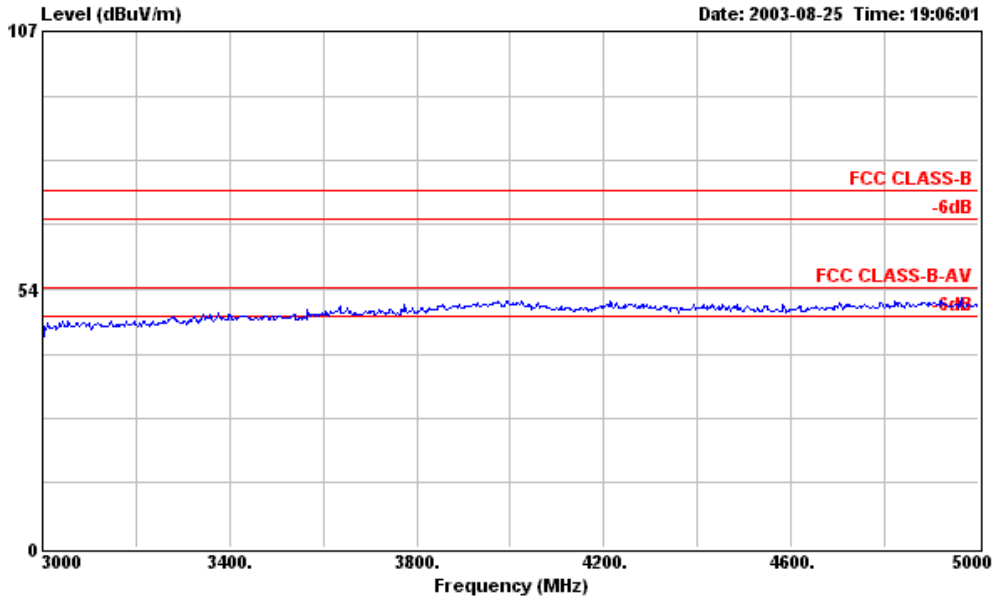
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
: F341402
: 49

		Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	!	699.000	41.99	-4.01	46.00	47.26	17.99	4.74	28.00	Peak	126	63
2		786.500	36.97	-9.03	46.00	41.26	18.68	5.03	28.00	Peak	---	---
3		931.400	37.32	-8.68	46.00	39.78	19.52	5.73	27.71	Peak	---	---

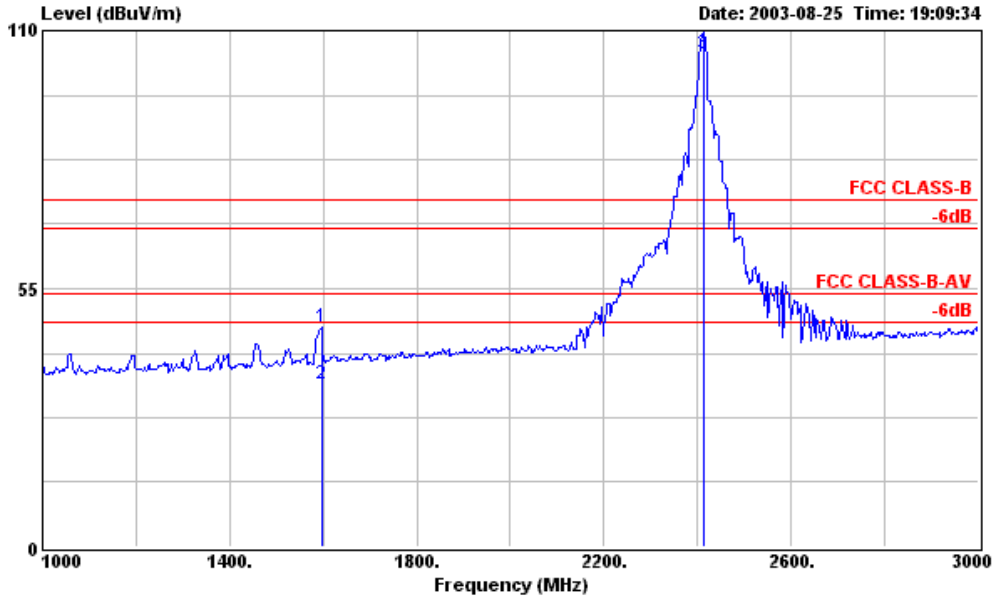



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

		Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1		2334.000	52.96	-21.04	74.00	59.86	28.09	6.12	41.11	Peak	---	---
2		2334.000	35.10	-18.90	54.00	42.00	28.09	6.12	41.11	Average	---	---
5	!	2454.000	69.23	-4.77	74.00	75.80	28.33	6.28	41.18	Peak	---	---
6		2454.000	42.00	-12.00	54.00	48.57	28.33	6.28	41.18	Average	---	---
7		2478.000	62.63	-11.37	74.00	69.13	28.38	6.31	41.19	Peak	---	---
8		2478.000	35.88	-18.12	54.00	42.38	28.38	6.31	41.19	Average	---	---

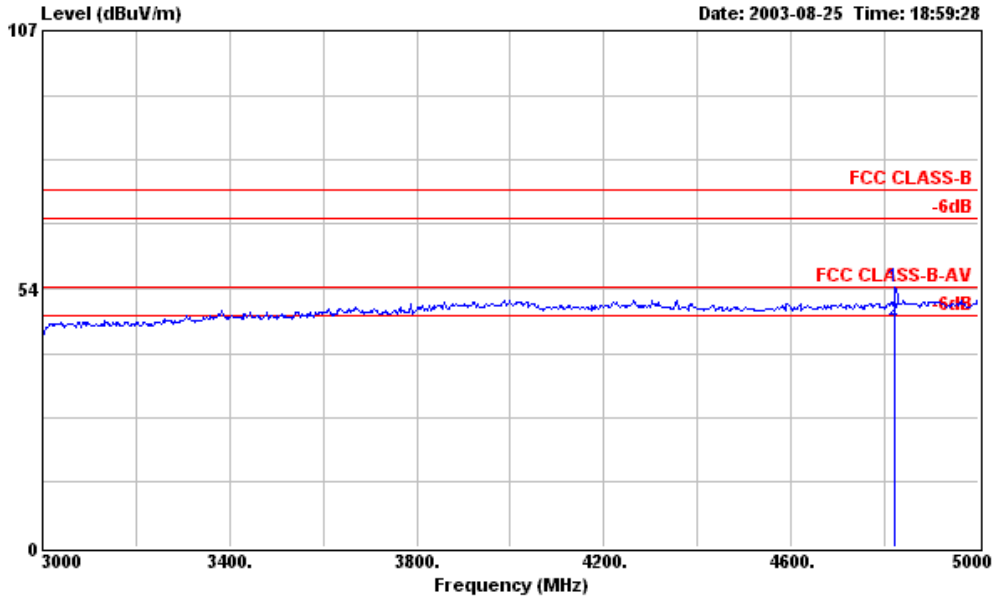



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1596.000	46.67	-27.33	74.00	56.69	25.75	4.89	40.66	Peak	---	---
2	1596.000	34.51	-19.49	54.00	44.53	25.75	4.89	40.66	Average	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2412.000	H	28.24	6.22	65.75	-	-	100.21	102447.18		Peak
2412.000	H	28.24	6.22	59.60	-	-	94.06	50466.13		A.V.
4822.000	H	33.06	9.06	11.73	74.00	5011.87	53.85	492.61	-20.15	Peak
4822.000	H	33.06	9.06	4.72	54.00	501.19	46.84	219.79	-7.16	A.V.
2412.000	V	28.24	6.22	70.41	-	-	104.87	175186.24		A.V.
2412.000	V	28.24	6.22	75.09	-	-	109.55	300261.74		Peak
4822.000	V						-			Peak, A.V.
7236.000	V/H						-			Peak, A.V.
9648.000	V/H						-			Peak, A.V.
12060.000	V/H						-			Peak, A.V.
14472.000	V/H						-			Peak, A.V.
16884.000	V/H						-			Peak, A.V.
19296.000	V/H						-			Peak, A.V.
21708.000	V/H						-			Peak, A.V.
24120.000	V/H						-			Peak, A.V.

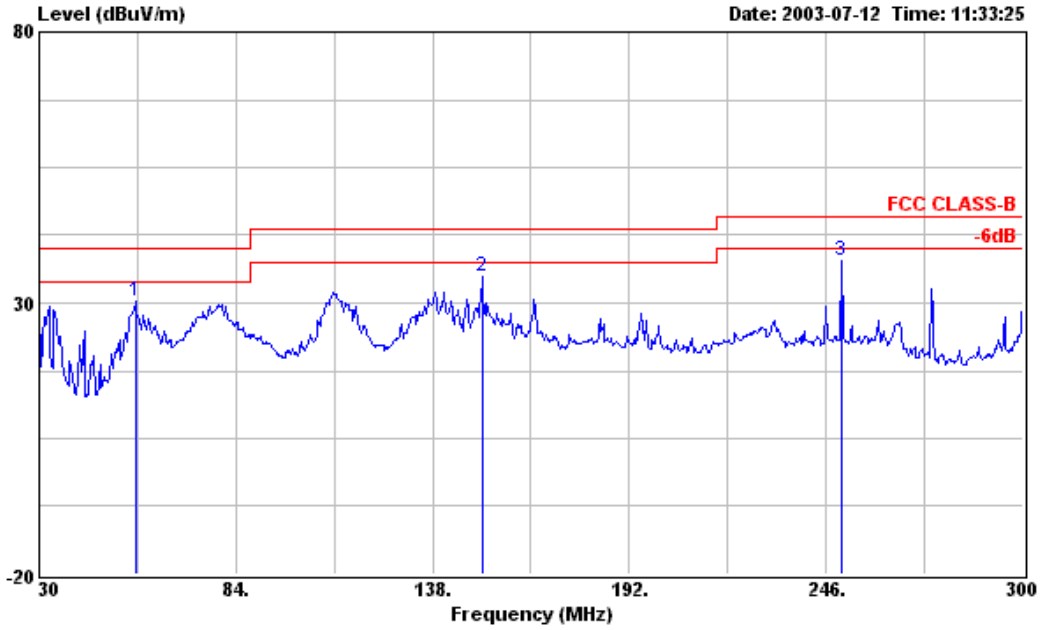
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 4
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

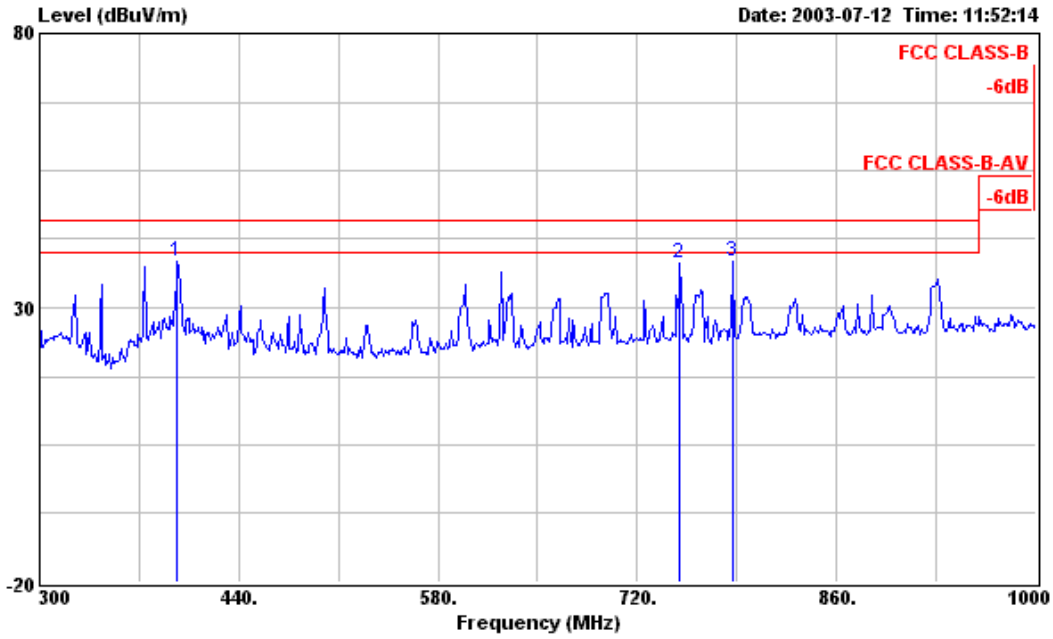
■ **The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 2 m, turn table degree is 168°**

■ Spurious Emission



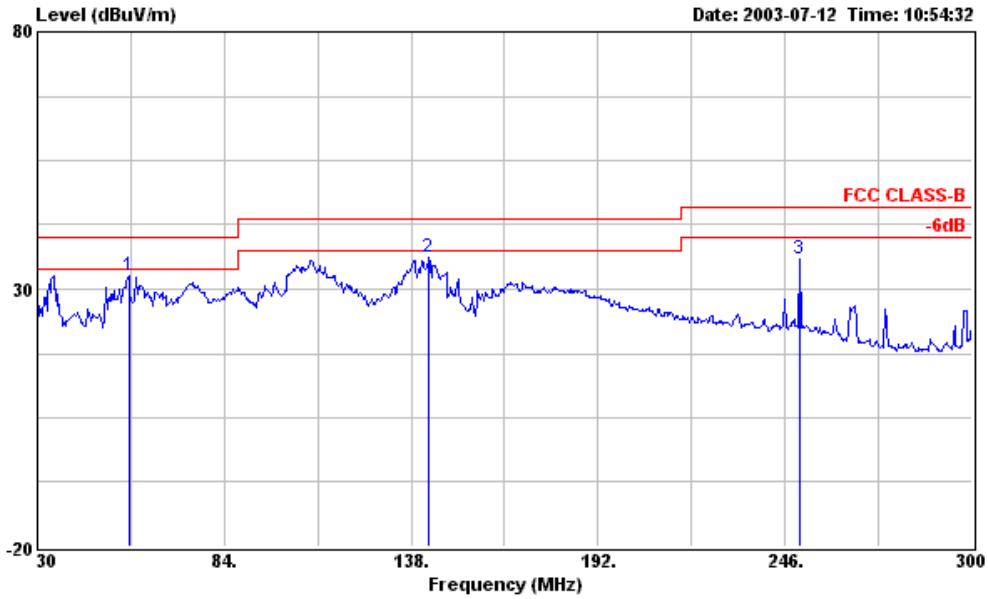

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	56.460	30.38	-9.62	40.00	50.44	5.63	1.40	27.09	Peak	---	---
2	151.500	34.92	-8.58	43.50	50.14	9.22	2.35	26.79	Peak	---	---
3	250.050	37.81	-8.19	46.00	49.93	11.34	3.14	26.60	Peak	---	---



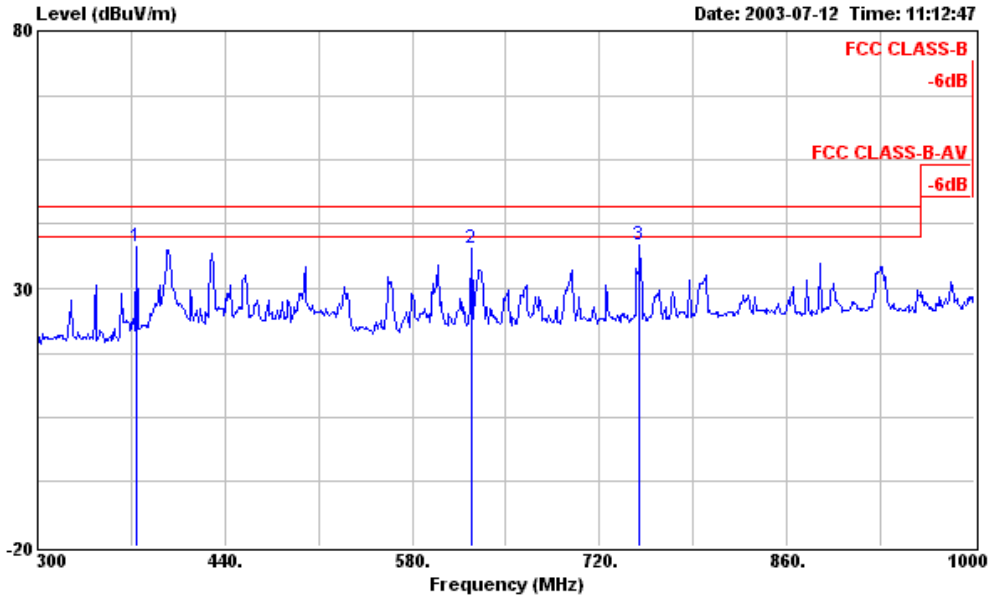
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	396.600	38.36	-7.64	46.00	46.95	14.52	4.07	27.18	Peak	---	---
2	750.100	38.25	-7.75	46.00	41.69	18.40	6.16	28.00	Peak	---	---
3	786.500	38.41	-7.59	46.00	41.39	18.68	6.34	28.00	Peak	---	---



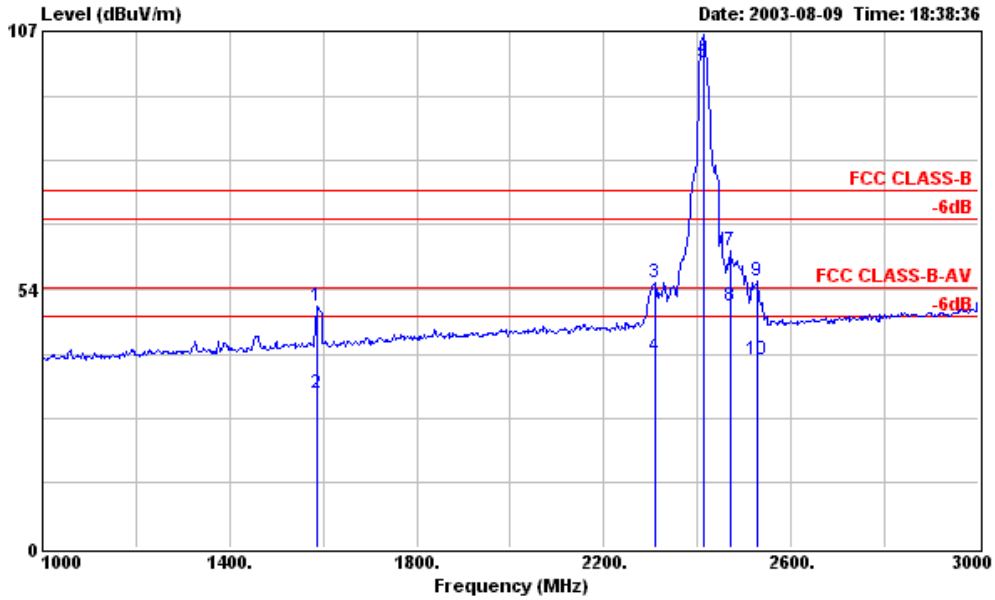
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	56.460	32.49	-7.51	40.00	52.55	5.63	1.40	27.09	Peak	---	---
2	143.130	36.01	-7.49	43.50	50.58	9.99	2.27	26.83	Peak	100	50
3	250.050	35.78	-10.22	46.00	47.90	11.34	3.14	26.60	Peak	---	---



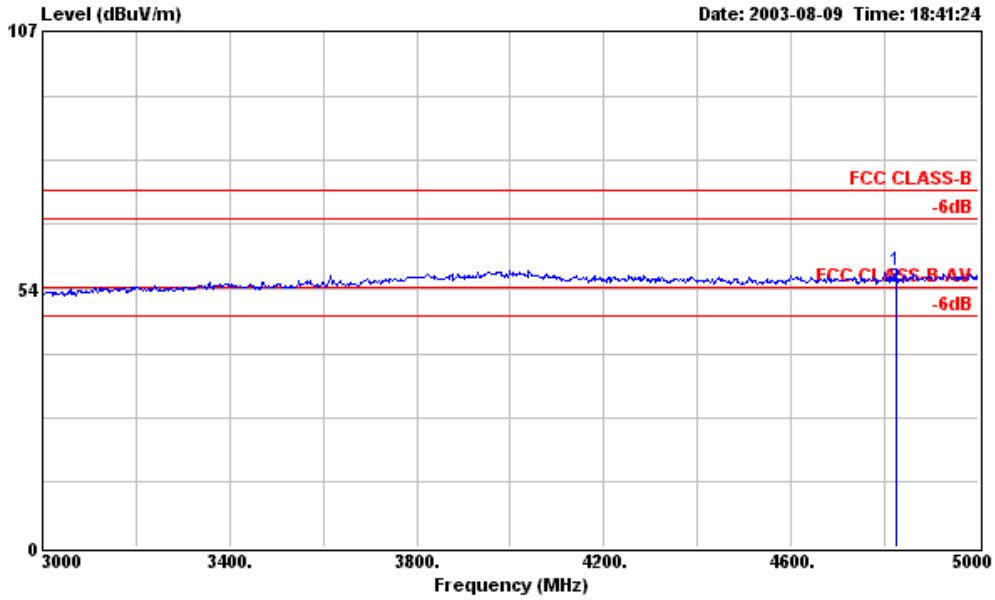
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	38.22	-7.78	46.00	47.45	13.82	3.99	27.04	Peak	---	---
2	624.100	37.85	-8.15	46.00	42.77	17.46	5.62	28.00	Peak	---	---
3	750.100	38.51	-7.49	46.00	41.95	18.40	6.16	28.00	Peak	---	---

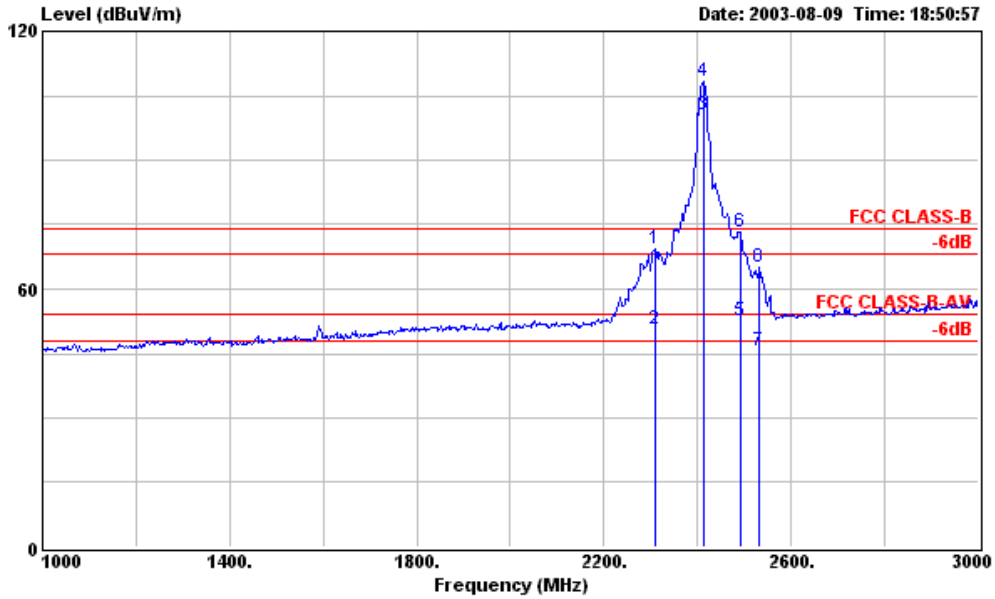


Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1588.000	50.07	-23.93	74.00	46.52	25.72	4.88	27.05	Peak	---	---
2	1588.000	32.01	-21.99	54.00	28.46	25.72	4.88	27.05	Average	---	---
3	2308.000	54.99	-19.01	74.00	48.02	28.03	6.09	27.15	Peak	---	---
4	2308.000	39.48	-14.52	54.00	32.51	28.03	6.09	27.15	Average	---	---
7	2470.000	61.39	-12.61	74.00	53.90	28.36	6.30	27.17	Peak	---	---
8 !	2470.000	49.93	-4.07	54.00	42.44	28.36	6.30	27.17	Average	---	---
9	2526.000	55.30	-18.70	74.00	47.57	28.52	6.39	27.18	Peak	---	---
10	2526.000	39.00	-15.00	54.00	31.27	28.52	6.39	27.18	Average	---	---

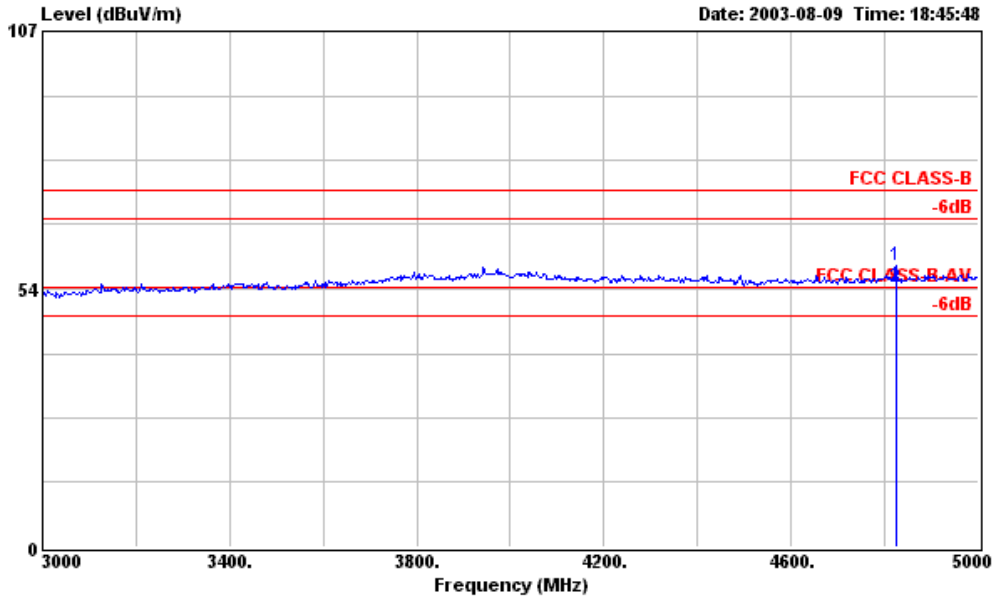



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol
```



Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH01 2412MHz
: 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	2308.000	69.49	-4.51	74.00	62.52	28.03	6.09	27.15	Peak	---	---
2 !	2308.000	50.69	-3.31	54.00	43.72	28.03	6.09	27.15	Average	---	---
5 !	2492.000	52.47	-1.53	54.00	44.91	28.41	6.33	27.18	Average	---	---
6 !	2492.000	73.23	-0.77	74.00	65.67	28.41	6.33	27.18	Peak	---	---
7	2532.000	45.58	-8.42	54.00	37.82	28.54	6.40	27.18	Average	---	---
8	2532.000	65.17	-8.83	74.00	57.41	28.54	6.40	27.18	Peak	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH01 2412MHz
          : 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2412.000	H	28.24	6.22	65.87	-	-	100.33	103872.36		A.V.
2412.000	H	28.24	6.22	71.82	-	-	106.28	206062.99		Peak
4824.000	H	33.07	9.06	15.20	74.00	5011.87	57.33	735.36	-16.67	Peak
4824.000	H	33.07	9.06	11.55	54.00	501.19	53.68	483.06	-0.32	A.V.
2412.000	V	28.24	6.22	65.96	-	-	100.42	104954.24		A.V.
2412.000	V	28.24	6.22	73.89	-	-	108.35	261517.04		Peak
4824.000	V	33.07	9.06	16.34	74.00	5011.87	58.47	838.49	-15.53	Peak
4824.000	V	33.07	9.06	11.69	54.00	501.19	53.82	490.91	-0.18	A.V.
7236.000	V/H						-			Peak, A.V.
9648.000	V/H						-			Peak, A.V.
12060.000	V/H						-			Peak, A.V.
14472.000	V/H						-			Peak, A.V.
16884.000	V/H						-			Peak, A.V.
19296.000	V/H						-			Peak, A.V.
21708.000	V/H						-			Peak, A.V.
24120.000	V/H						-			Peak, A.V.

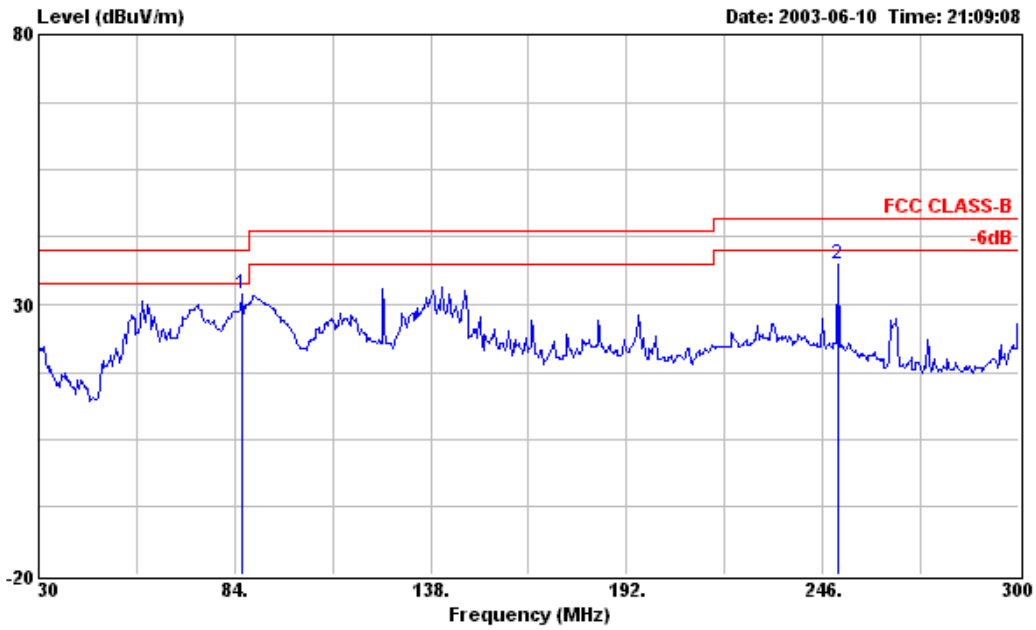
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 5
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

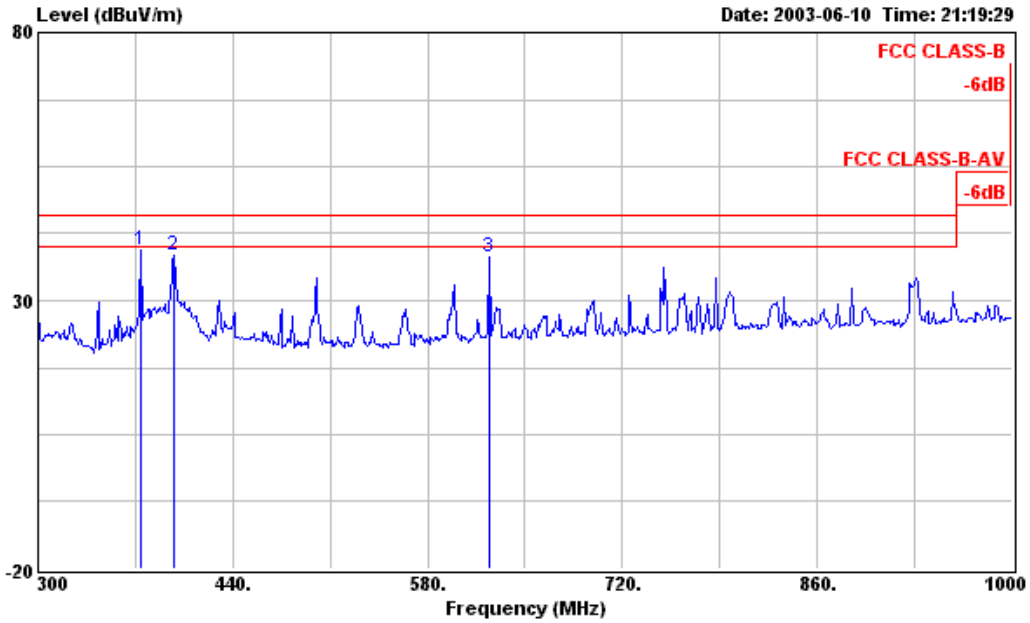
■ **The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 1 m, turn table degree is 126°**

■ Spurious Emission



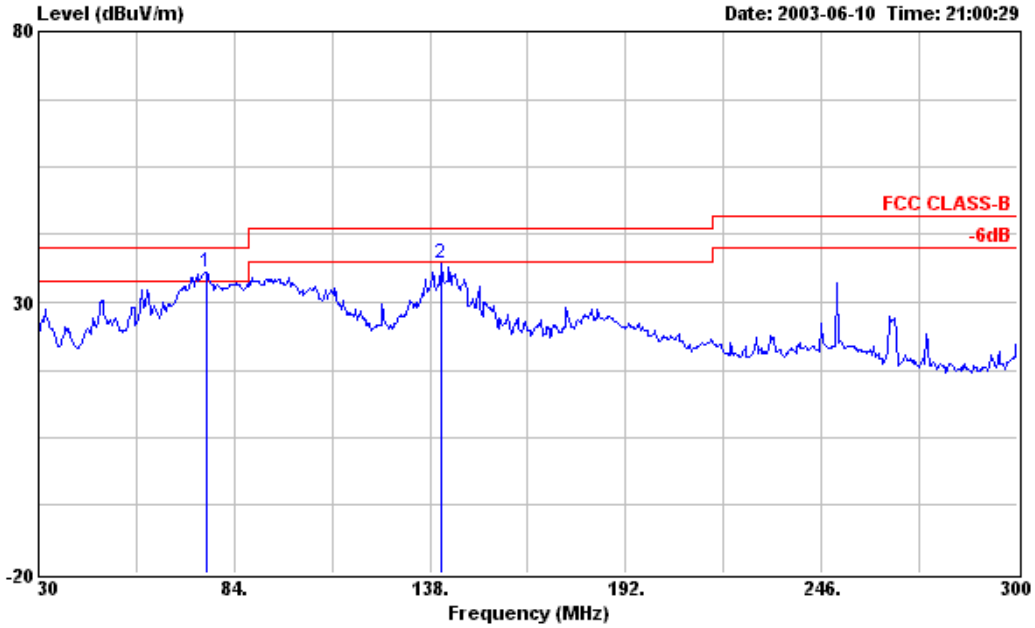

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	85.890	31.91	-8.09	40.00	49.36	7.80	1.78	27.03	Peak	---	---
2	250.050	37.44	-8.56	46.00	49.56	11.34	3.14	26.60	Peak	---	---



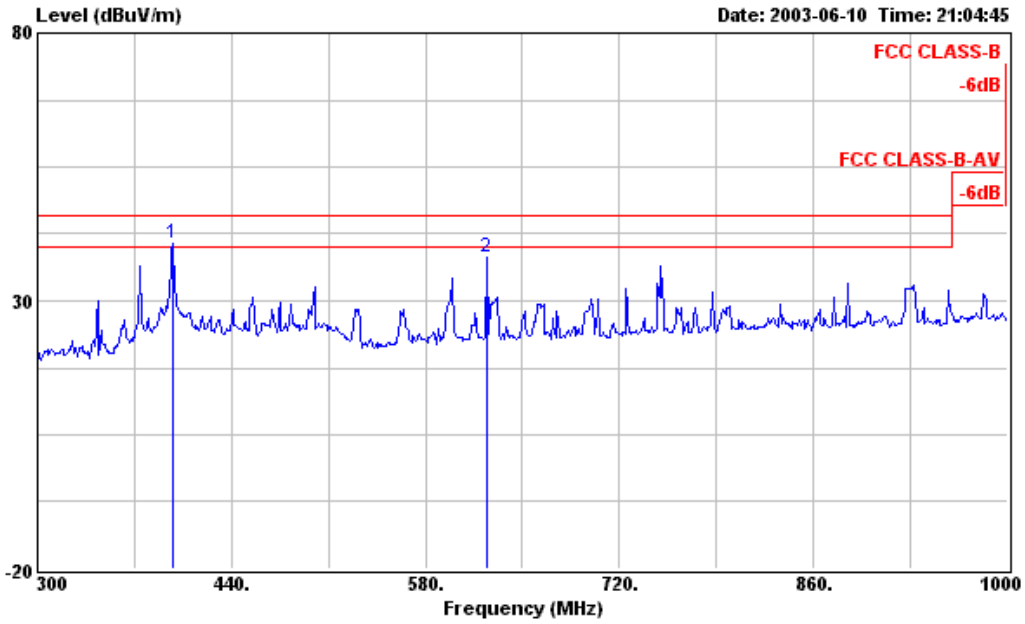
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	39.35	-6.65	46.00	48.58	13.82	3.99	27.04	Peak	---	---
2	397.300	38.44	-7.56	46.00	47.01	14.54	4.07	27.18	Peak	---	---
3	624.100	38.26	-7.74	46.00	43.18	17.46	5.62	28.00	Peak	---	---



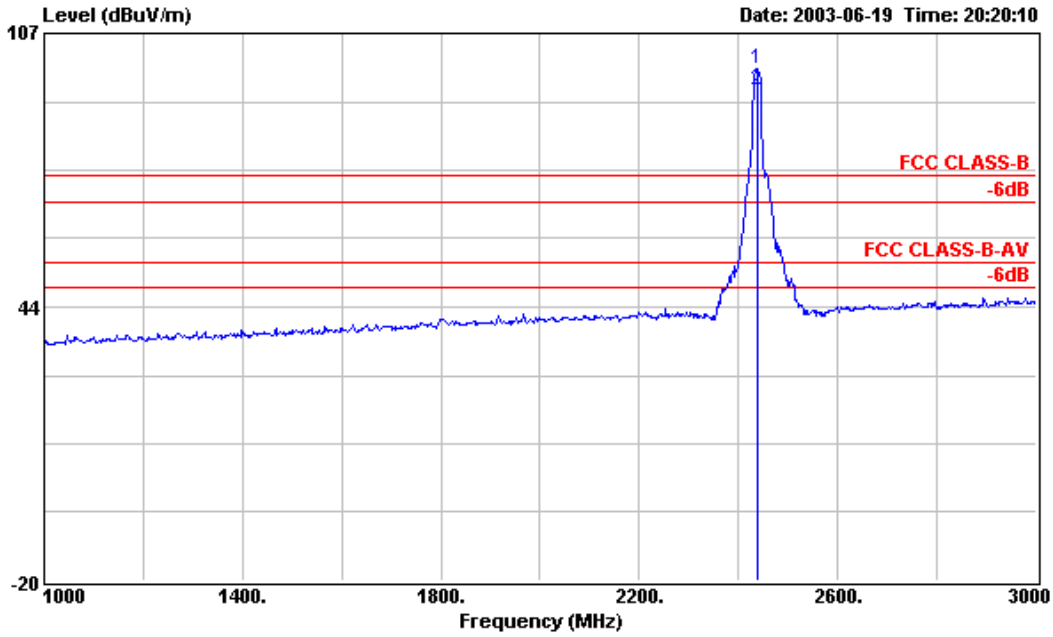
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	76.170	35.55	-4.45	40.00	55.48	5.42	1.70	27.05	Peak	---	---
2	140.970	37.24	-6.26	43.50	51.65	10.18	2.25	26.84	Peak	---	---

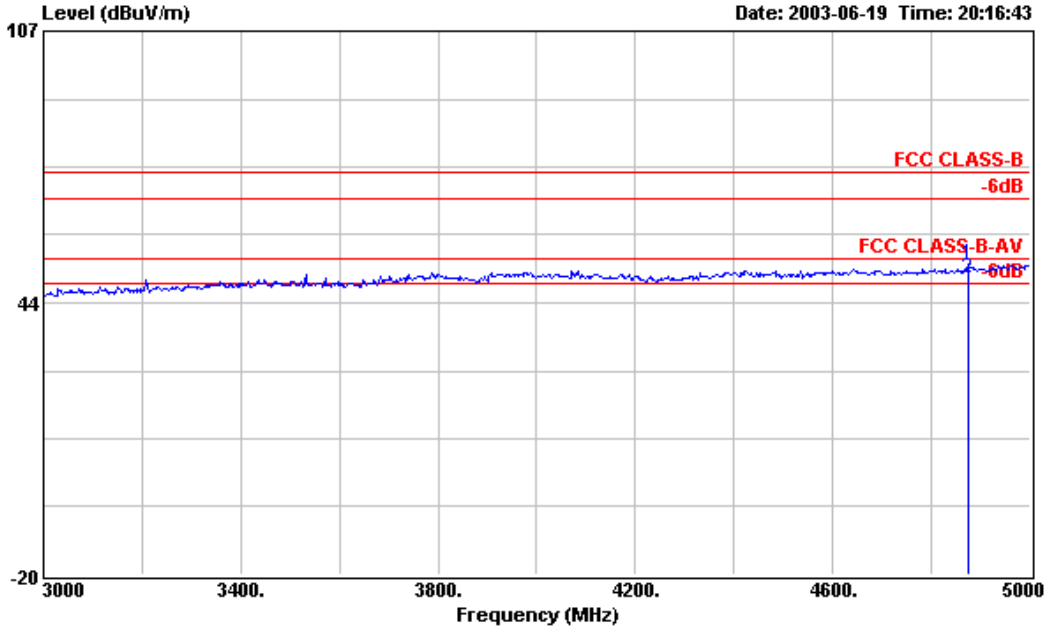


Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

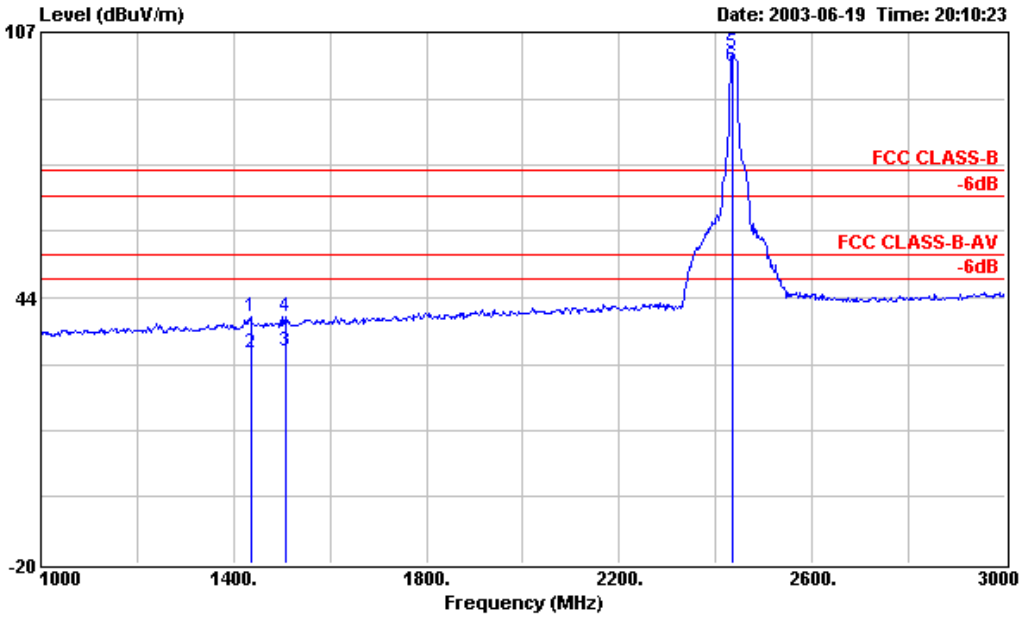
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	397.300	40.62	-5.38	46.00	49.19	14.54	4.07	27.18	Peak	---	---
2	624.100	38.15	-7.85	46.00	43.07	17.46	5.62	28.00	Peak	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```

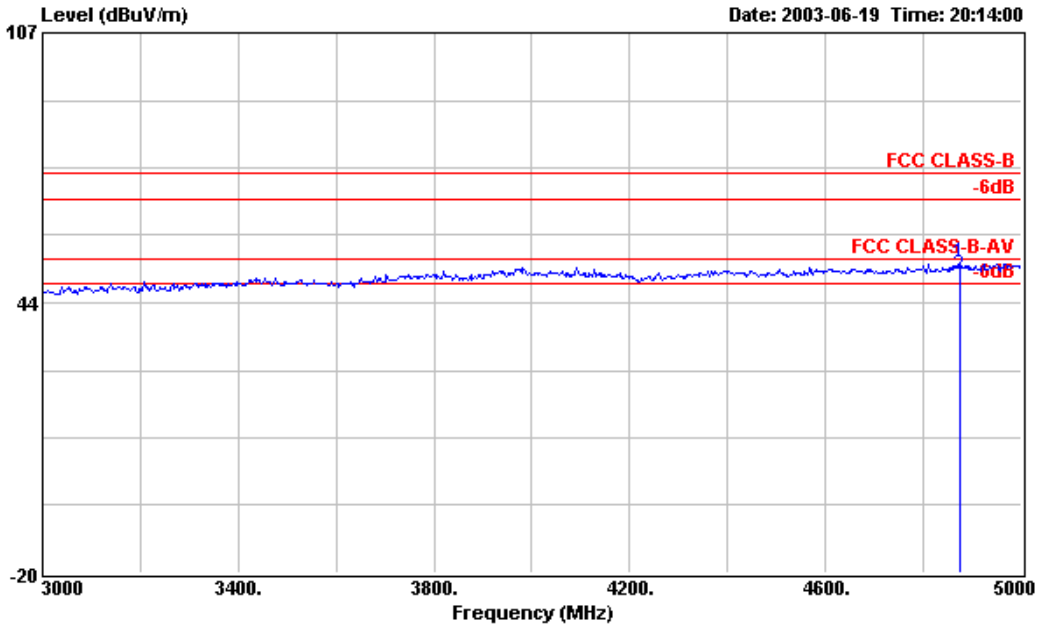



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```



Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1436.000	38.84	-35.16	74.00	47.11	25.18	4.57	38.02	Peak	---	---
2	1436.000	30.25	-23.75	54.00	38.52	25.18	4.57	38.02	Average	---	---
3	1508.000	30.91	-43.09	74.00	38.88	25.39	4.67	38.03	Peak	---	---
4	1508.000	39.01	-34.99	74.00	46.98	25.39	4.67	38.03	Peak	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2438.000	H	28.30	6.01	64.46	-	-	98.77	86796.06		Peak
2438.000	H	28.30	6.01	59.45	-	-	93.76	48752.85		A.V.
4876.000	H	33.17	9.18	10.16	74.00	5011.87	52.51	422.18	-21.49	Peak
4876.000	H	33.17	9.18	6.90	54.00	501.19	49.25	290.07	-4.75	A.V.
2436.000	V	28.29	6.01	67.92	-	-	102.22	129121.93		Peak
2436.000	V	28.29	6.01	64.66	-	-	98.96	88715.60		A.V.
4874.000	V	33.17	9.18	10.51	74.00	5011.87	52.86	439.54	-21.14	Peak
4874.000	V	33.17	9.18	7.59	54.00	501.19	49.94	314.05	-4.06	A.V.
7311.000	V/H						-			Peak, A.V.
9748.000	V/H						-			Peak, A.V.
12185.000	V/H						-			Peak, A.V.
14622.000	V/H						-			Peak, A.V.
17059.000	V/H						-			Peak, A.V.
19496.000	V/H						-			Peak, A.V.
21933.000	V/H						-			Peak, A.V.
24370.000	V/H						-			Peak, A.V.

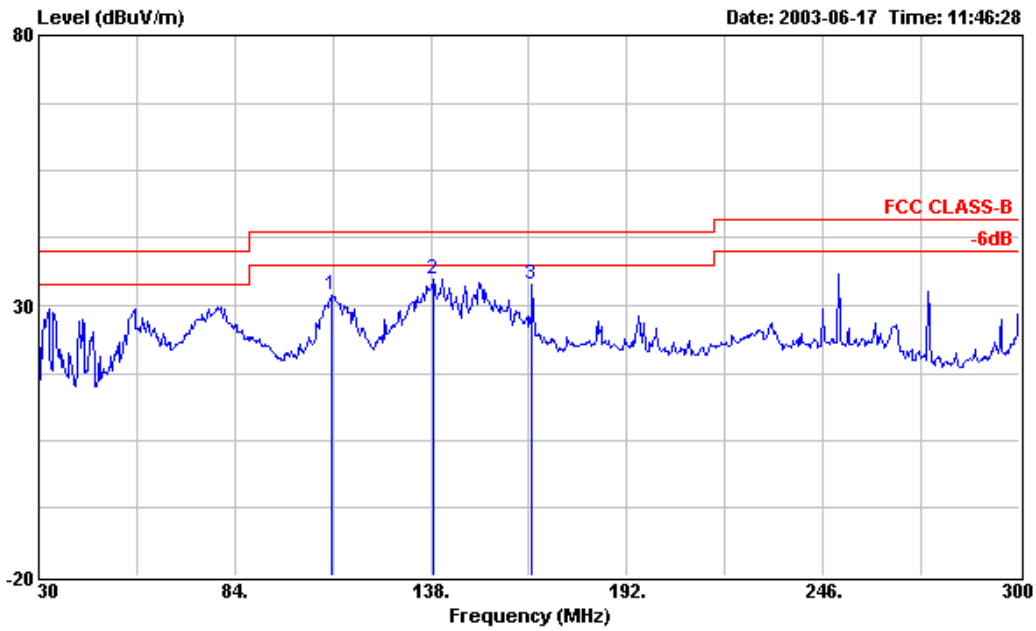
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 6
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

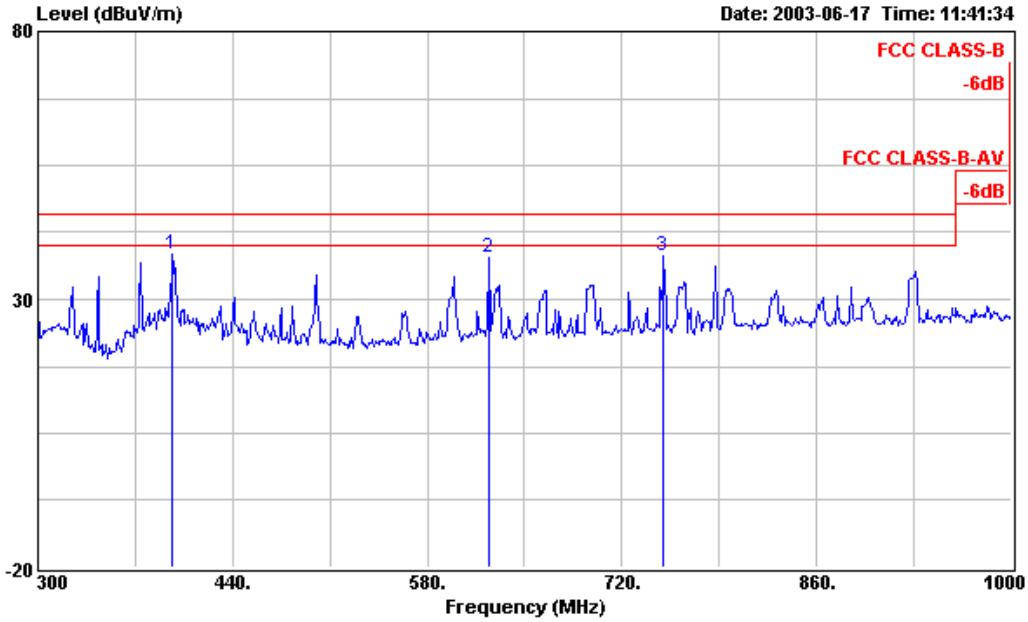
■ **The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 2 m, turn table degree is 50°**

■ Spurious Emission



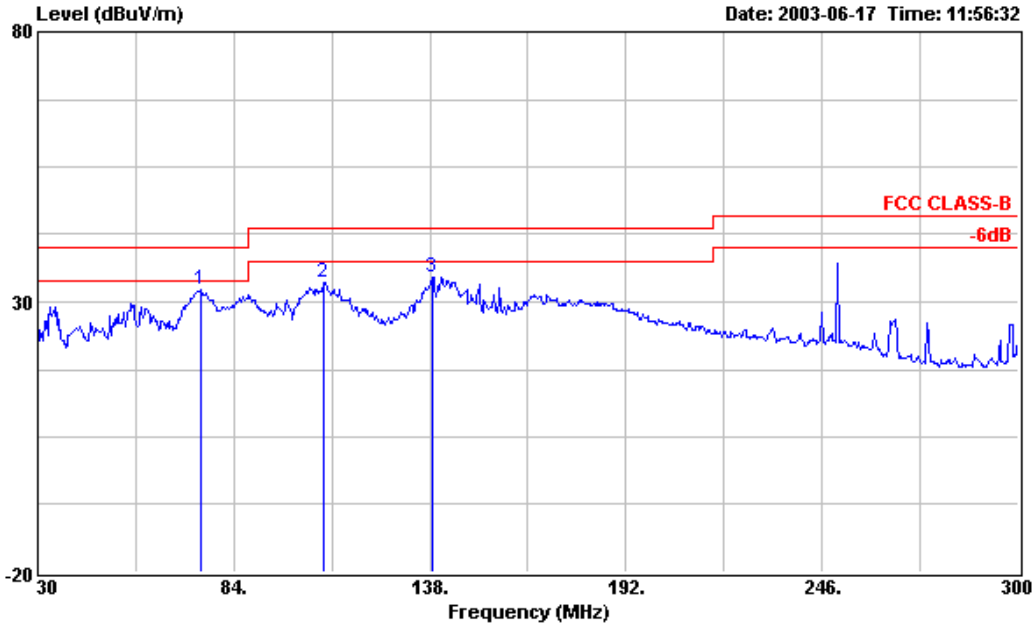

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	110.460	31.96	-11.54	43.50	47.23	9.67	2.02	26.96	Peak	---	---
2	138.810	34.90	-8.60	43.50	49.18	10.33	2.23	26.84	Peak	---	---
3	165.810	33.80	-9.70	43.50	50.37	7.68	2.49	26.74	Peak	---	---



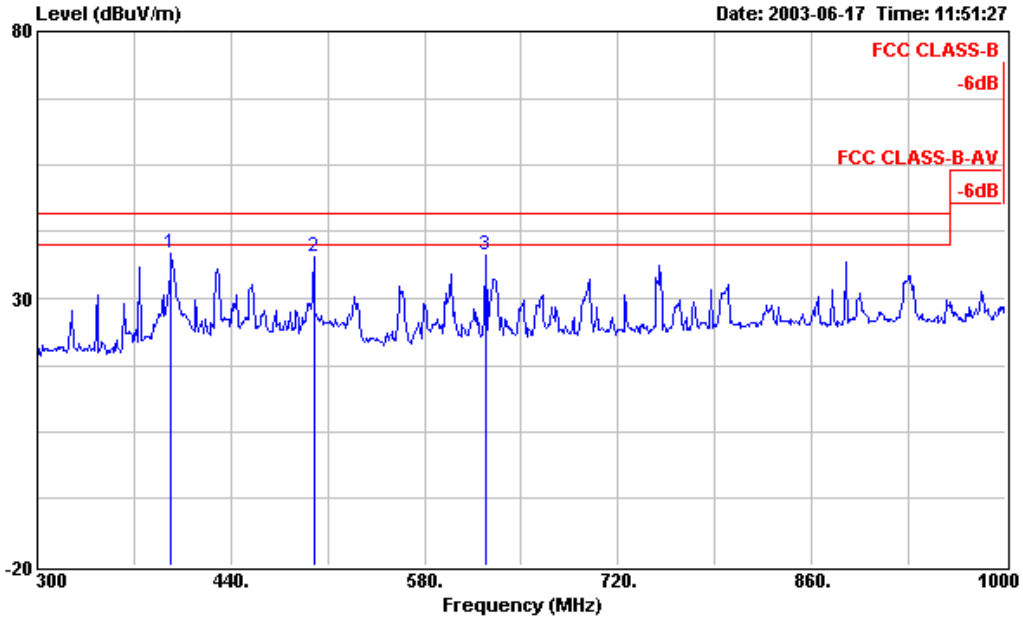
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	396.600	38.52	-7.48	46.00	47.11	14.52	4.07	27.18	Peak	---	---
2	624.100	37.86	-8.14	46.00	42.78	17.46	5.62	28.00	Peak	---	---
3	750.100	38.13	-7.87	46.00	41.57	18.40	6.16	28.00	Peak	---	---



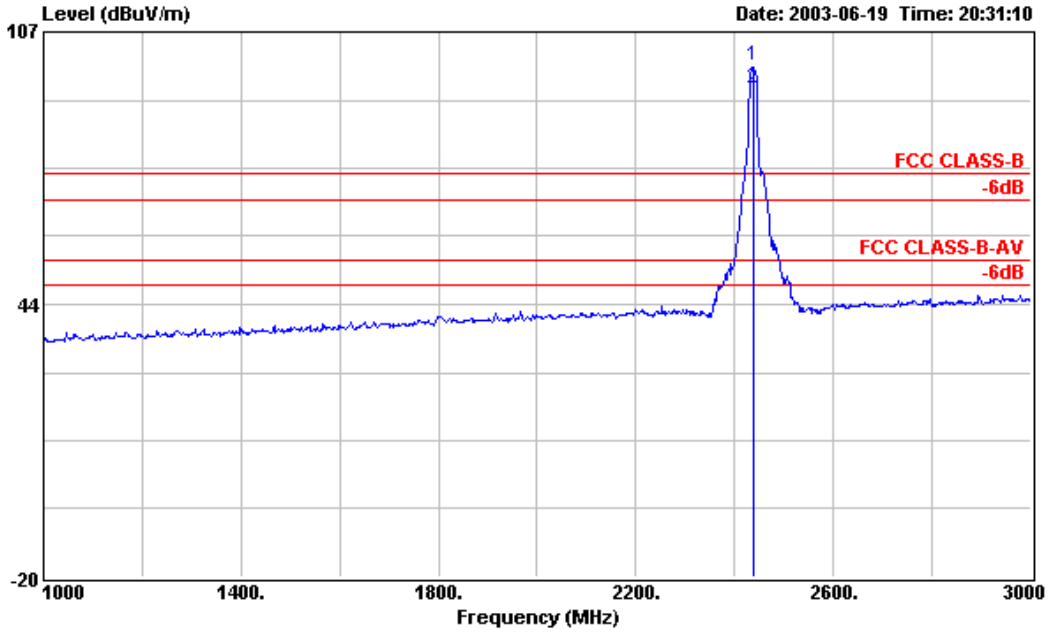
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	74.820	32.20	-7.80	40.00	52.35	5.21	1.69	27.05	Peak	---	---
2	108.570	33.50	-10.00	43.50	48.86	9.61	2.00	26.97	Peak	---	---
3	138.540	34.59	-8.91	43.50	48.88	10.33	2.23	26.85	Peak	---	---

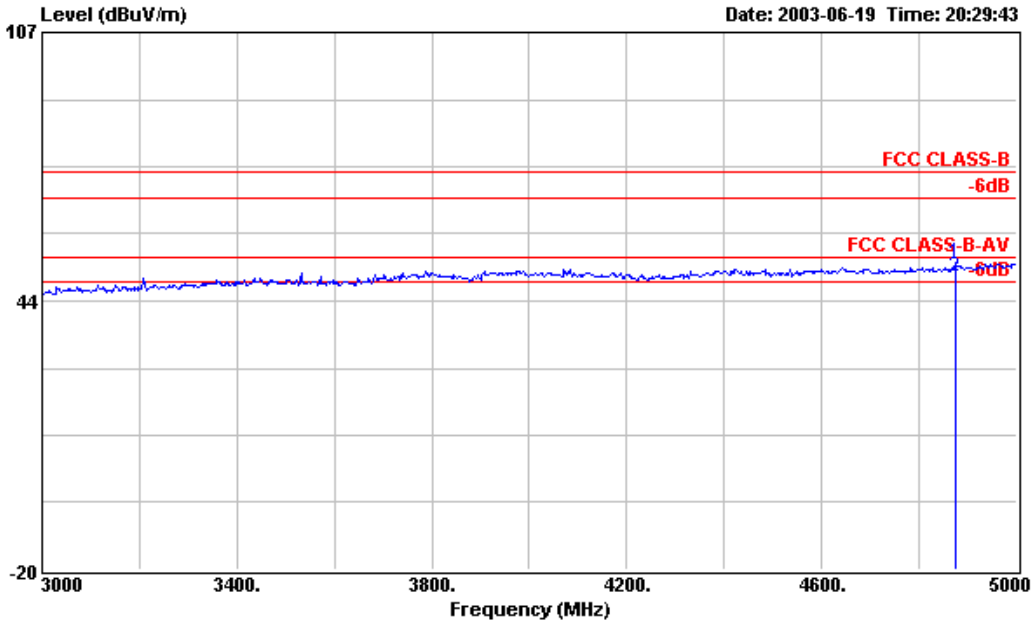


Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

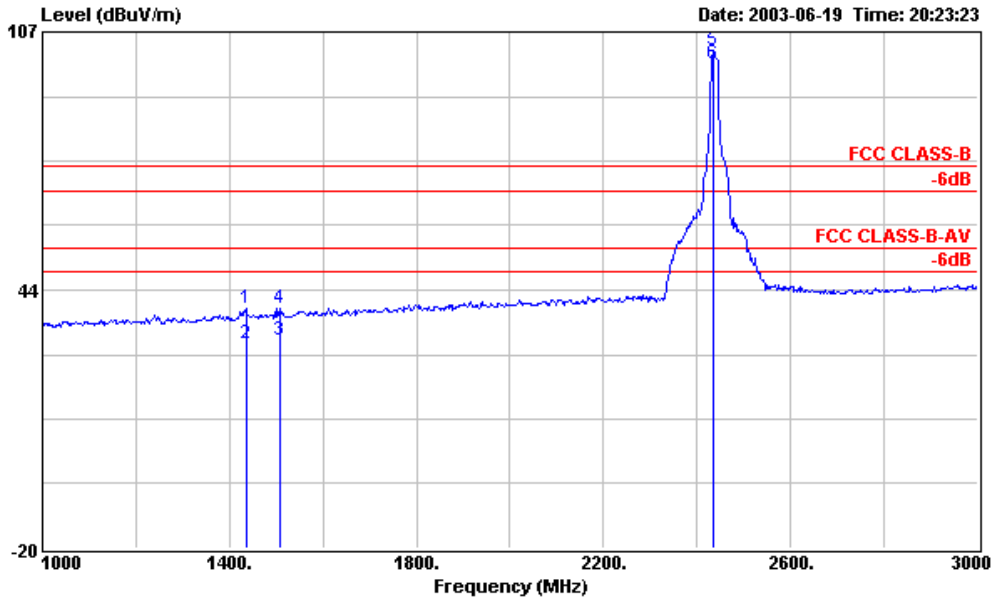
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	396.600	38.53	-7.47	46.00	47.12	14.52	4.07	27.18	Peak	---	---
2	500.200	37.68	-8.32	46.00	44.71	16.03	4.64	27.70	Peak	---	---
3	624.100	38.21	-7.79	46.00	43.13	17.46	5.62	28.00	Peak	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

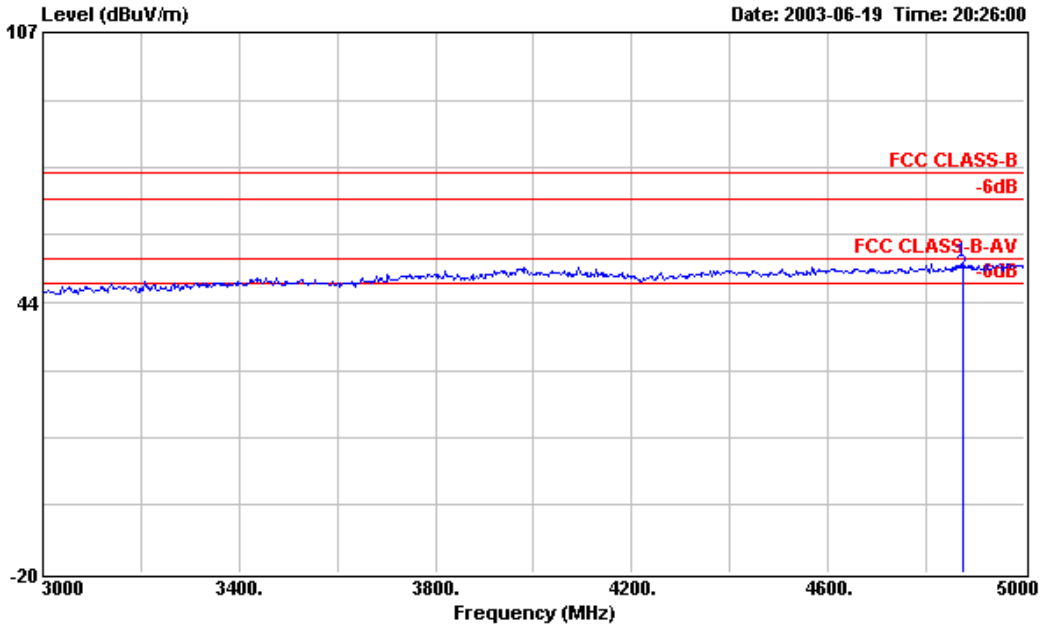



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```



Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1436.000	38.96	-35.04	74.00	47.23	25.18	4.57	38.02	Peak	---	---
2	1436.000	30.39	-23.61	54.00	38.66	25.18	4.57	38.02	Average	---	---
3	1508.000	30.97	-43.03	74.00	38.94	25.39	4.67	38.03	Peak	---	---
4	1508.000	39.09	-34.91	74.00	47.06	25.39	4.67	38.03	Peak	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2438.000	H	28.30	6.01	64.70	-	-	99.01	89227.76		Peak
2438.000	H	28.30	6.01	59.60	-	-	93.91	49602.09		A.V.
4876.000	H	33.17	9.18	10.25	74.00	5011.87	52.60	426.58	-21.40	Peak
4876.000	H	33.17	9.18	7.01	54.00	501.19	49.36	293.76	-4.64	A.V.
2436.000	V	28.29	6.01	68.04	-	-	102.34	130918.19		Peak
2436.000	V	28.29	6.01	64.79	-	-	99.09	90053.38		A.V.
4874.000	V	33.17	9.18	10.63	74.00	5011.87	52.98	445.66	-21.02	Peak
4874.000	V	33.17	9.18	7.78	54.00	501.19	50.13	321.00	-3.87	A.V.
7311.000	V/H						-			Peak, A.V.
9748.000	V/H						-			Peak, A.V.
12185.000	V/H						-			Peak, A.V.
14622.000	V/H						-			Peak, A.V.
17059.000	V/H						-			Peak, A.V.
19496.000	V/H						-			Peak, A.V.
21933.000	V/H						-			Peak, A.V.
24370.000	V/H						-			Peak, A.V.

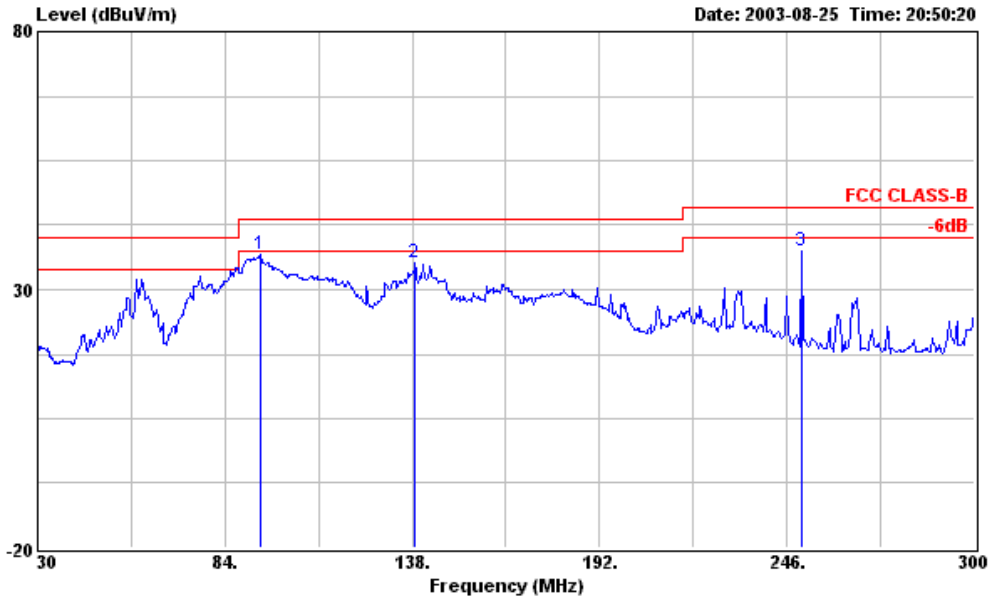
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 7
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

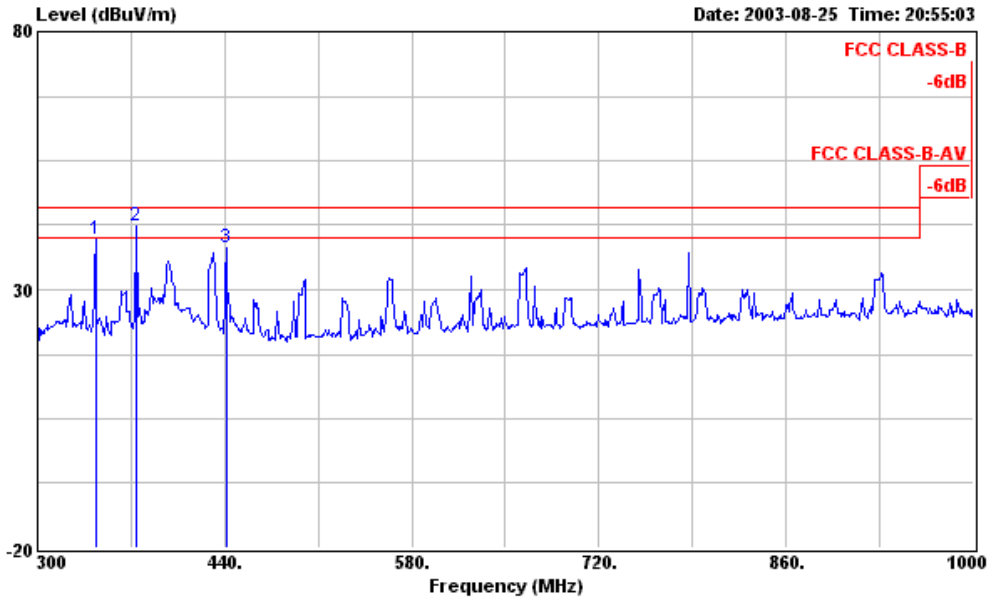
■ The test was passed at the minimum margin that marked by the frame in the following table

■ Spurious Emission



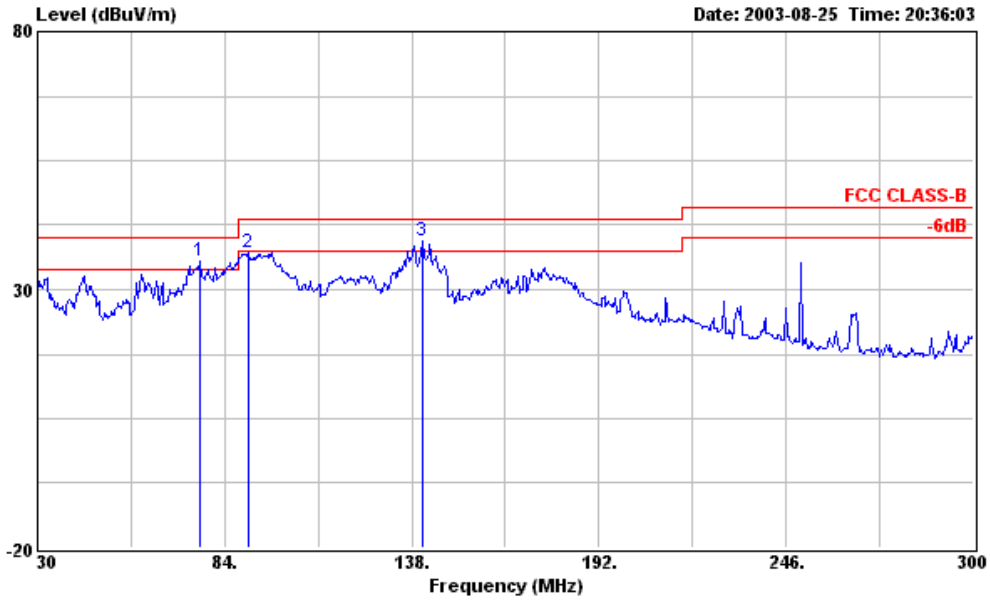

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	94.260	36.83	-6.67	43.50	53.02	9.04	1.78	27.01	Peak	---	---
2	138.810	35.25	-8.25	43.50	49.71	10.33	2.05	26.84	Peak	---	---
3	250.050	37.58	-8.42	46.00	50.23	11.34	2.61	26.60	Peak	---	---



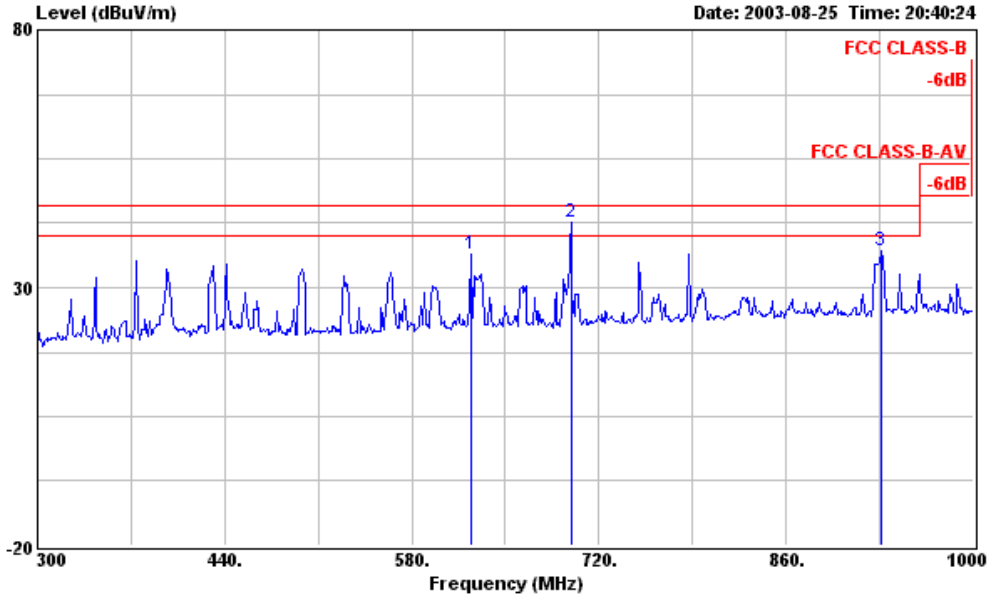
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
: F341402
: 49

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	343.400	39.83	-6.17	46.00	50.50	12.79	3.40	26.86	Peak	---	---
2 !	374.200	42.26	-3.74	46.00	51.98	13.82	3.50	27.04	Peak	---	---
3	441.400	38.24	-7.76	46.00	46.90	15.21	3.54	27.41	Peak	---	---



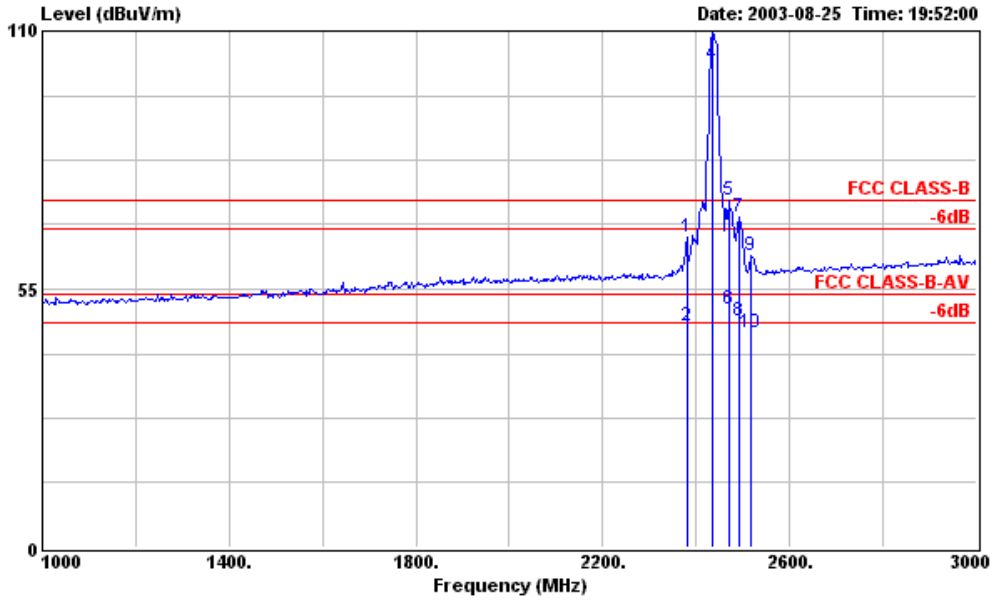

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	76.980	35.51	-4.49	40.00	55.47	5.54	1.55	27.05	Peak	---	---
2	91.020	37.14	-6.36	43.50	53.81	8.84	1.51	27.02	Peak	---	---
3 !	140.970	39.26	-4.24	43.50	53.85	10.18	2.07	26.84	Peak	---	---



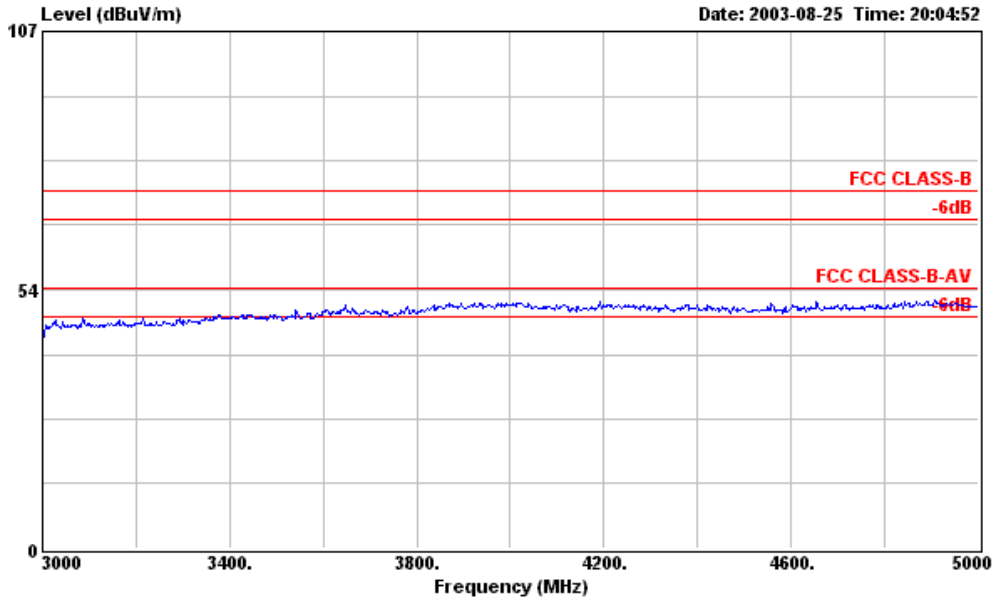

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	624.100	36.35	-9.65	46.00	42.47	17.46	4.42	28.00	Peak	---	---
2 !	699.000	42.64	-3.36	46.00	47.91	17.99	4.74	28.00	Peak	---	---
3	931.400	37.16	-8.84	46.00	39.62	19.52	5.73	27.71	Peak	---	---

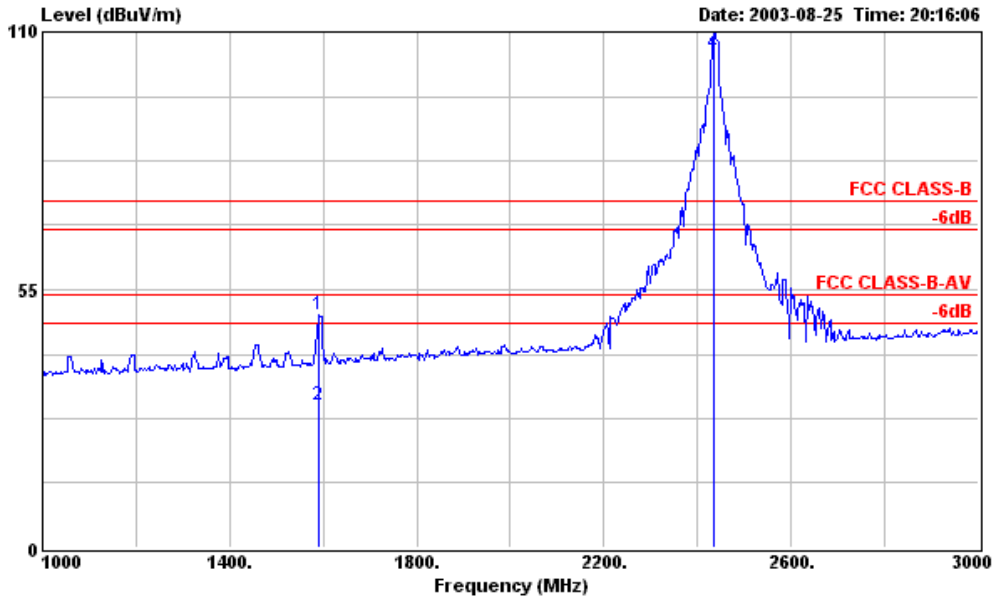


Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
: F341402
: 49

		Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1		2380.000	65.99	-8.01	74.00	72.76	28.18	6.18	41.13	Peak	---	---
2		2380.000	47.20	-6.80	54.00	53.97	28.18	6.18	41.13	Average	---	---
5	!	2470.000	73.77	-0.23	74.00	80.30	28.36	6.30	41.19	Peak	100	116
6	!	2470.000	50.84	-3.16	54.00	57.37	28.36	6.30	41.19	Average	100	253
7	!	2492.000	70.28	-3.72	74.00	76.74	28.41	6.33	41.20	Peak	---	---
8	!	2492.000	48.11	-5.89	54.00	54.57	28.41	6.33	41.20	Average	---	---
9		2518.000	62.20	-11.80	74.00	68.53	28.49	6.38	41.20	Peak	---	---
10		2518.000	45.83	-8.17	54.00	52.16	28.49	6.38	41.20	Average	---	---

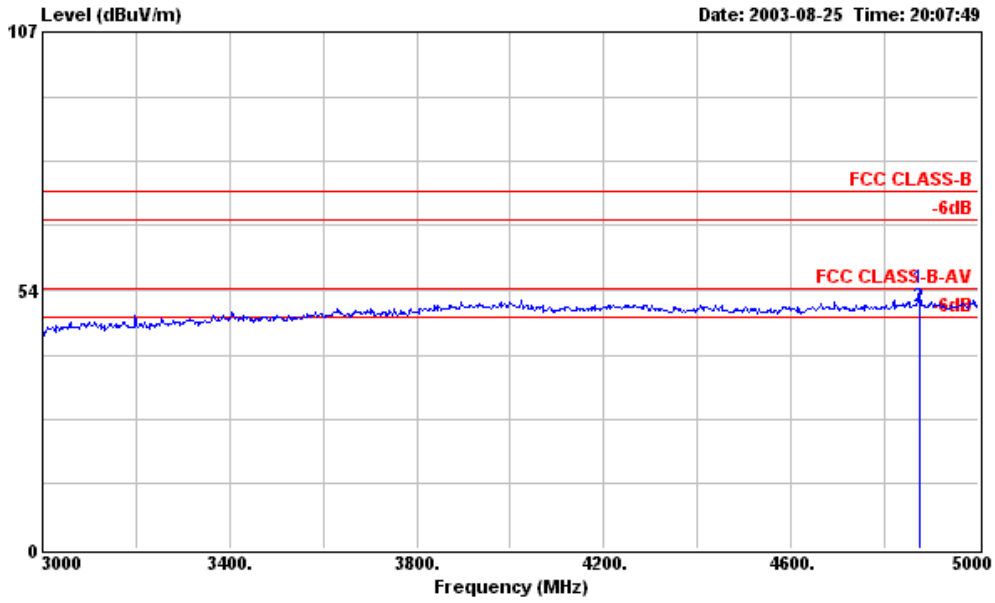



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1590.000	49.47	-24.53	74.00	59.52	25.73	4.88	40.66	Peak	---	---
2	1590.000	30.48	-23.52	54.00	40.53	25.73	4.88	40.66	Average	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2436.000	H	28.29	6.26	75.28	-	-	109.83	310098.74		Peak
2436.000	H	28.29	6.26	68.28	-	-	102.83	138516.02		A.V.
2436.000	H	28.29	6.26	75.11	-	-	109.66	304088.50		Peak
2436.000	H	28.29	6.26	70.85	-	-	105.40	186208.71		A.V.
4874.000	V	33.17	9.09	11.53	74.00	5011.87	53.79	489.22	-20.21	Peak
4874.000	V	33.17	9.09	7.68	54.00	501.19	49.94	314.05	-4.06	A.V.
4876.000	H						-			Peak, A.V.
7311.000	V/H						-			Peak, A.V.
9748.000	V/H						-			Peak, A.V.
12185.000	V/H						-			Peak, A.V.
14622.000	V/H						-			Peak, A.V.
17059.000	V/H						-			Peak, A.V.
19496.000	V/H						-			Peak, A.V.
21933.000	V/H						-			Peak, A.V.
24370.000	V/H						-			Peak, A.V.

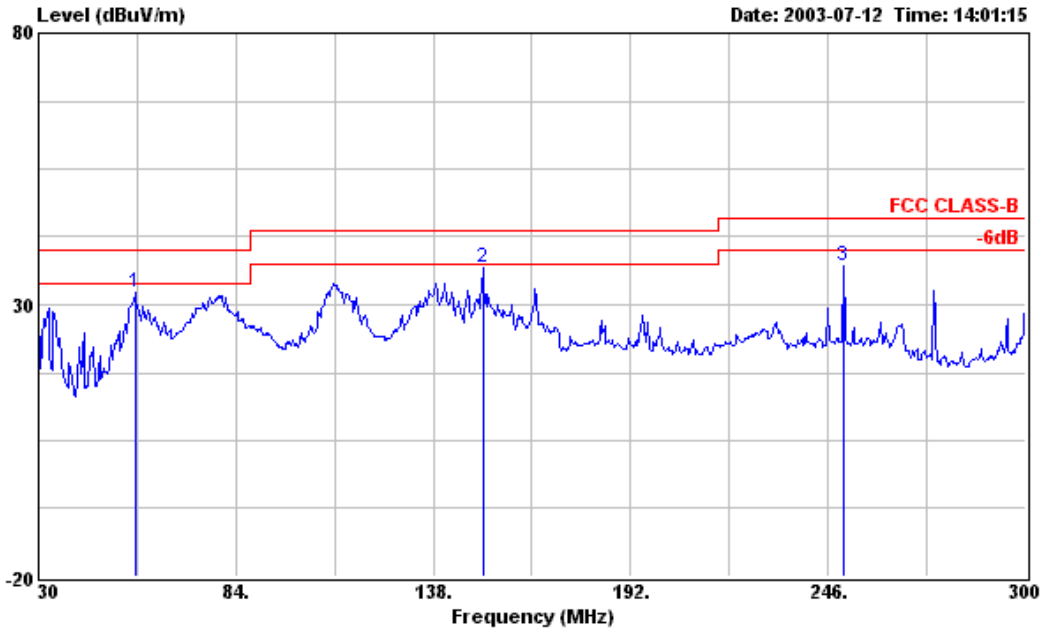
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 8
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

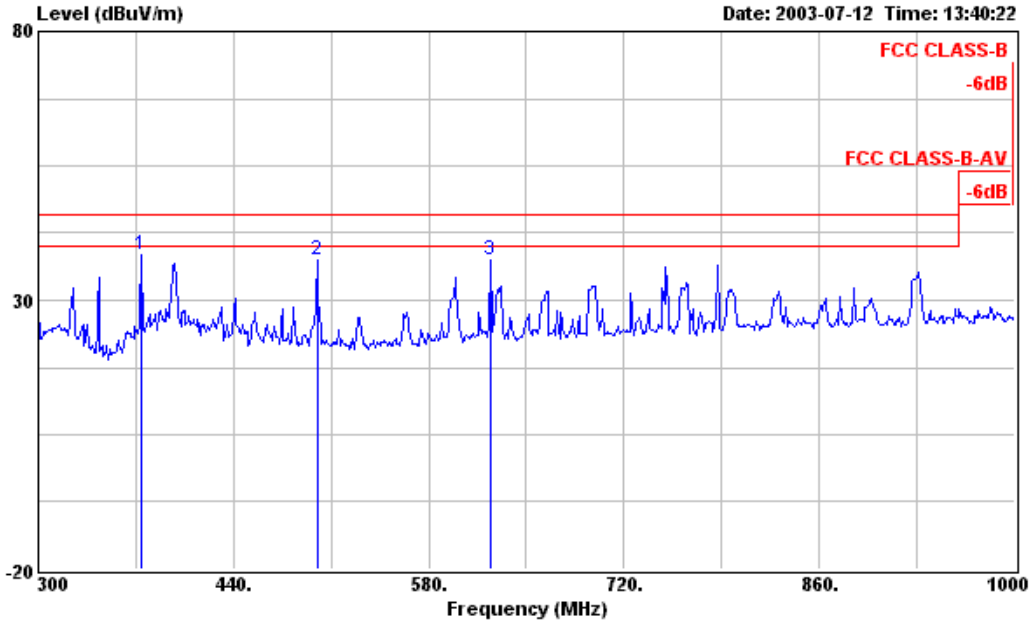
■ **The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 2 m, turn table degree is 125°**

■ Spurious Emission



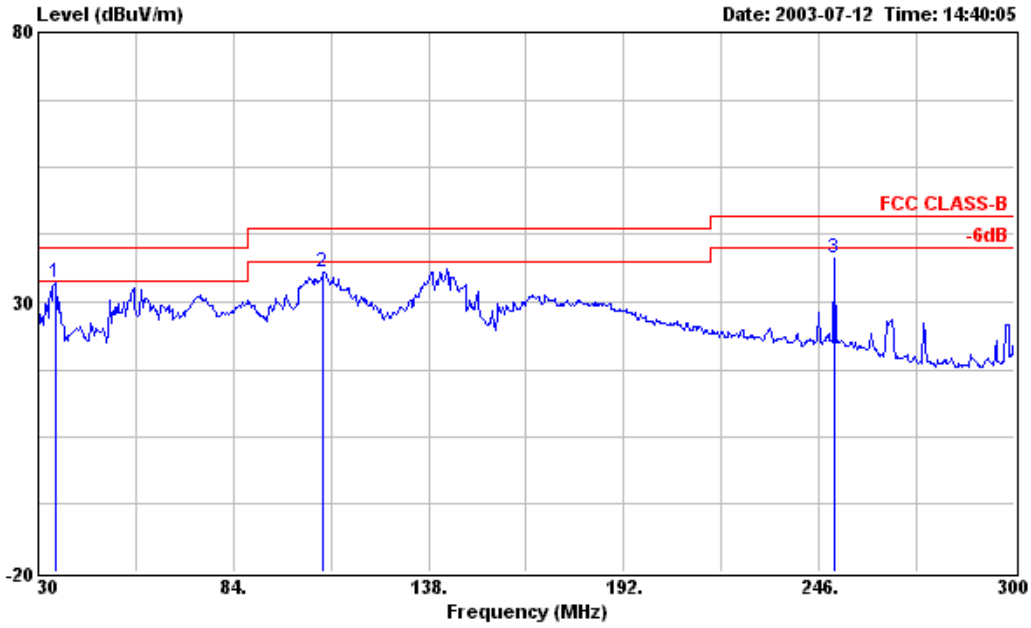

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	56.460	32.38	-7.62	40.00	52.44	5.63	1.40	27.09	Peak	---	---
2	151.500	36.92	-6.58	43.50	52.14	9.22	2.35	26.79	Peak	---	---
3	250.050	37.24	-8.76	46.00	49.36	11.34	3.14	26.60	Peak	---	---



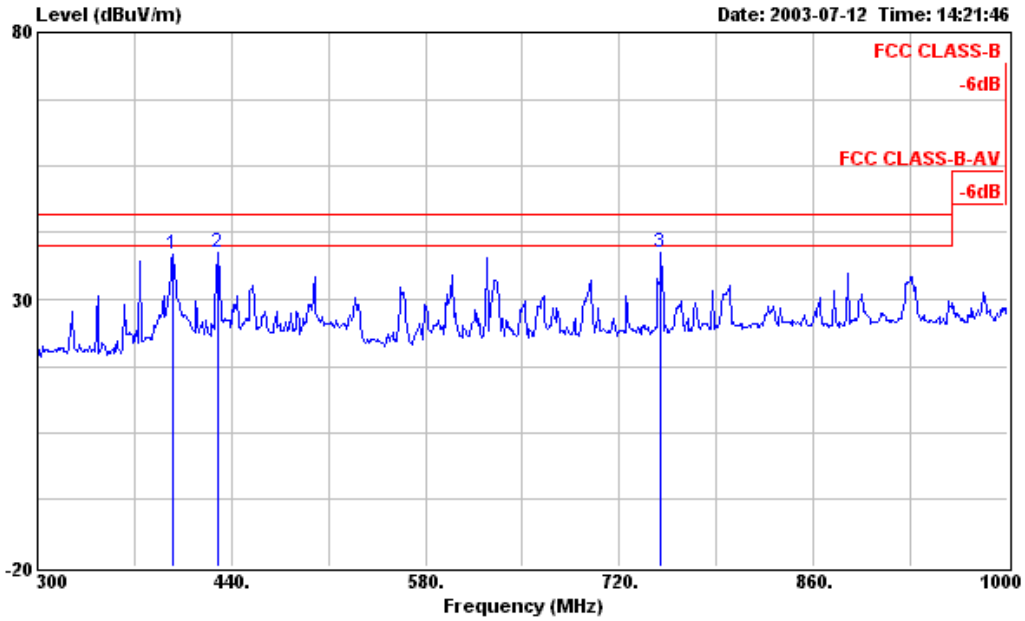
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	38.34	-7.66	46.00	47.57	13.82	3.99	27.04	Peak	---	---
2	500.200	37.60	-8.40	46.00	44.63	16.03	4.64	27.70	Peak	---	---
3	624.100	37.42	-8.58	46.00	42.34	17.46	5.62	28.00	Peak	---	---



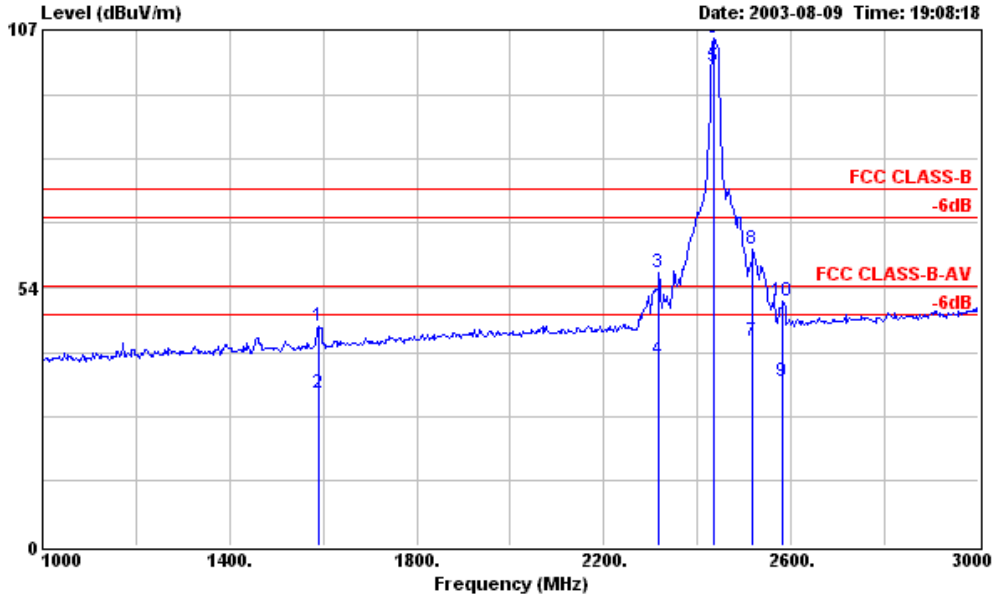
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	34.590	33.66	-6.34	40.00	46.55	13.12	1.09	27.10	Peak	100	46
2	108.570	35.50	-8.00	43.50	50.86	9.61	2.00	26.97	Peak	---	---
3	250.050	38.23	-7.77	46.00	50.35	11.34	3.14	26.60	Peak	---	---



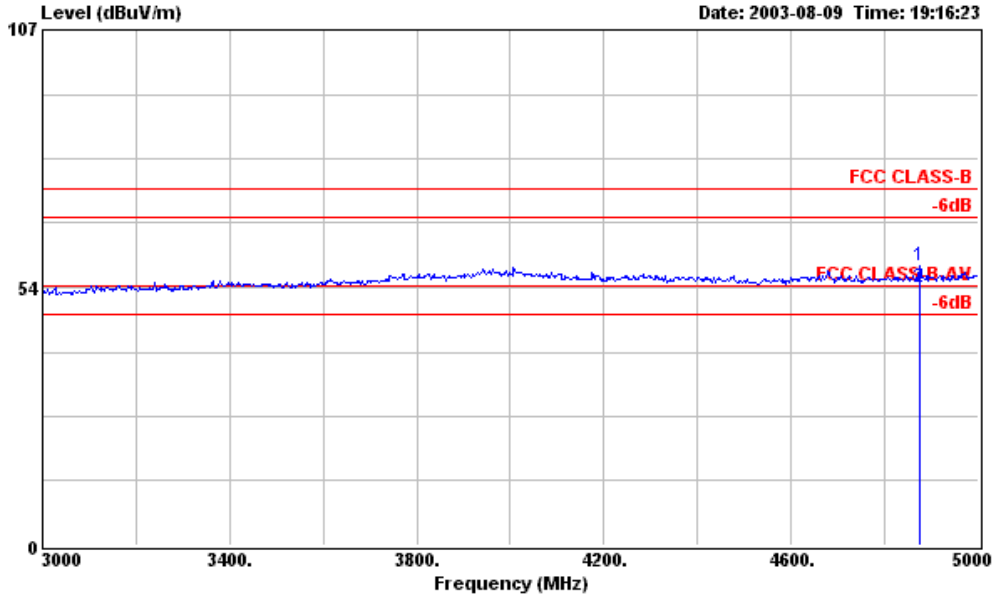
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	397.300	38.48	-7.52	46.00	47.05	14.54	4.07	27.18	Peak	---	---
2	430.200	38.82	-7.18	46.00	46.84	15.06	4.27	27.35	Peak	---	---
3	750.100	38.67	-7.33	46.00	42.11	18.40	6.16	28.00	Peak	---	---

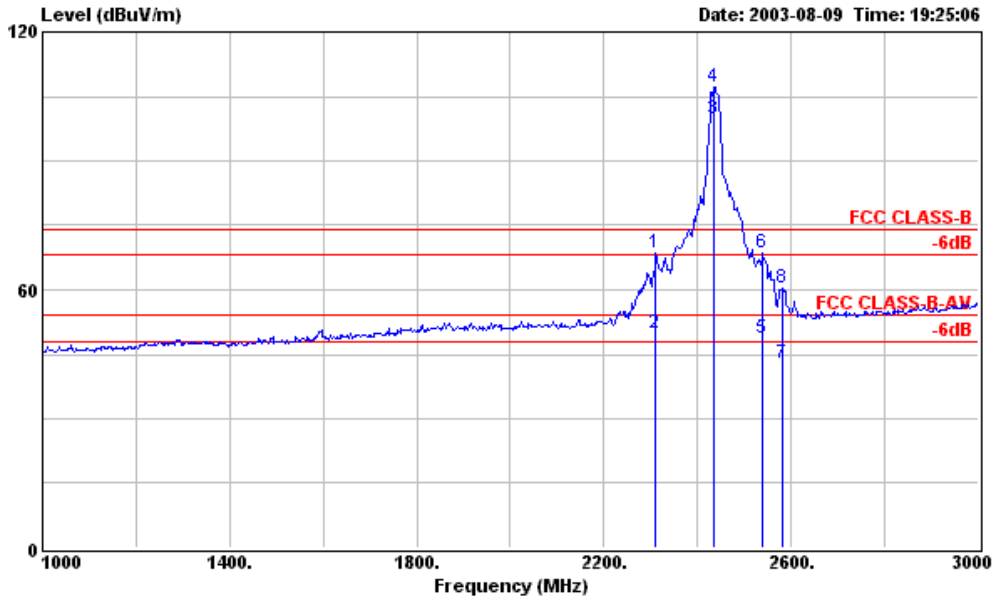


Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1590.000	45.54	-28.46	74.00	41.98	25.73	4.88	27.05	Peak	---	---
2	1590.000	31.52	-22.48	54.00	27.96	25.73	4.88	27.05	Average	---	---
3	2318.000	56.46	-17.54	74.00	49.45	28.06	6.10	27.15	Peak	---	---
4	2318.000	38.58	-15.42	54.00	31.57	28.06	6.10	27.15	Average	---	---
7	2518.000	42.53	-11.47	54.00	34.84	28.49	6.38	27.18	Average	---	---
8	2518.000	61.44	-12.56	74.00	53.75	28.49	6.38	27.18	Peak	---	---
9	2582.000	34.10	-19.90	54.00	26.11	28.69	6.49	27.19	Average	---	---
10	2582.000	50.78	-23.22	74.00	42.79	28.69	6.49	27.19	Peak	---	---

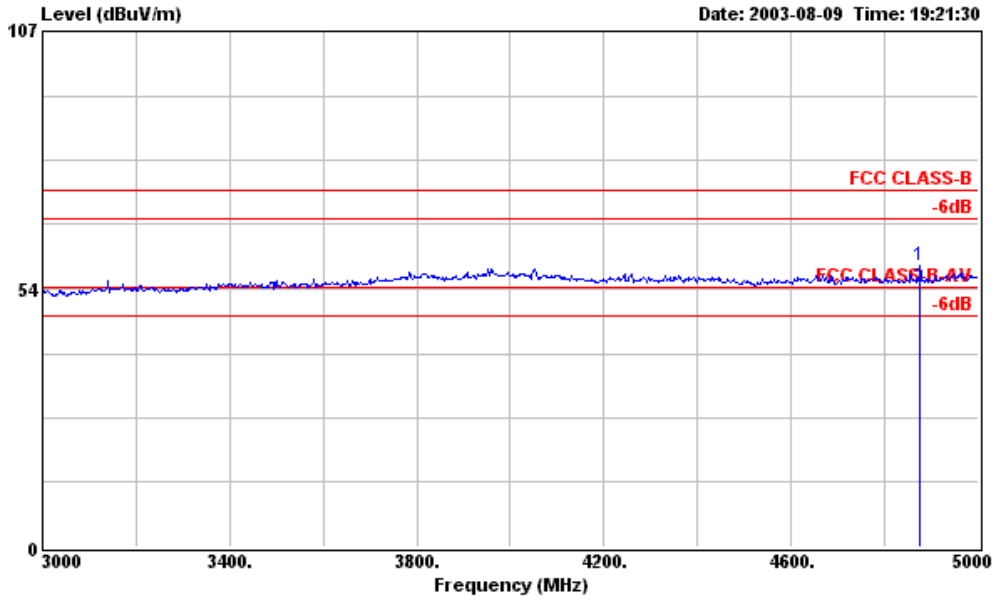



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol
```



Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH06 2437MHz
: 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	2310.000	68.66	-5.34	74.00	61.68	28.04	6.09	27.15	Peak	---	---
2 !	2310.000	49.75	-4.25	54.00	42.77	28.04	6.09	27.15	Average	---	---
5 !	2540.000	48.56	-5.44	54.00	40.77	28.56	6.41	27.18	Average	---	---
6 !	2540.000	68.40	-5.60	74.00	60.61	28.56	6.41	27.18	Peak	---	---
7	2580.000	42.76	-11.24	54.00	34.77	28.69	6.49	27.19	Average	---	---
8	2580.000	60.40	-13.60	74.00	52.41	28.69	6.49	27.19	Peak	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH06 2437MHz
          : 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2436.000	H	28.29	6.26	64.66	-	-	99.21	91306.14		A.V.
2436.000	H	28.29	6.26	70.87	-	-	105.42	186637.97		Peak
4876.000	H	33.17	9.09	15.68	74.00	5011.87	57.94	788.86	-16.06	Peak
4876.000	H	33.17	9.09	11.31	54.00	501.19	53.57	476.98	-0.43	A.V.
2436.000	V	6.26	6.26	87.08	-	-	99.60	95499.26		A.V.
2436.000	V	6.26	6.26	94.77	-	-	107.29	231472.82		Peak
4876.000	V	33.17	9.09	16.09	74.00	5011.87	58.35	826.99	-15.65	Peak
4876.000	V	33.17	9.09	11.63	54.00	501.19	53.89	494.88	-0.11	A.V.
7311.000	V/H						-			Peak, A.V.
9748.000	V/H						-			Peak, A.V.
12185.000	V/H						-			Peak, A.V.
14622.000	V/H						-			Peak, A.V.
17059.000	V/H						-			Peak, A.V.
19496.000	V/H						-			Peak, A.V.
21933.000	V/H						-			Peak, A.V.
24370.000	V/H						-			Peak, A.V.

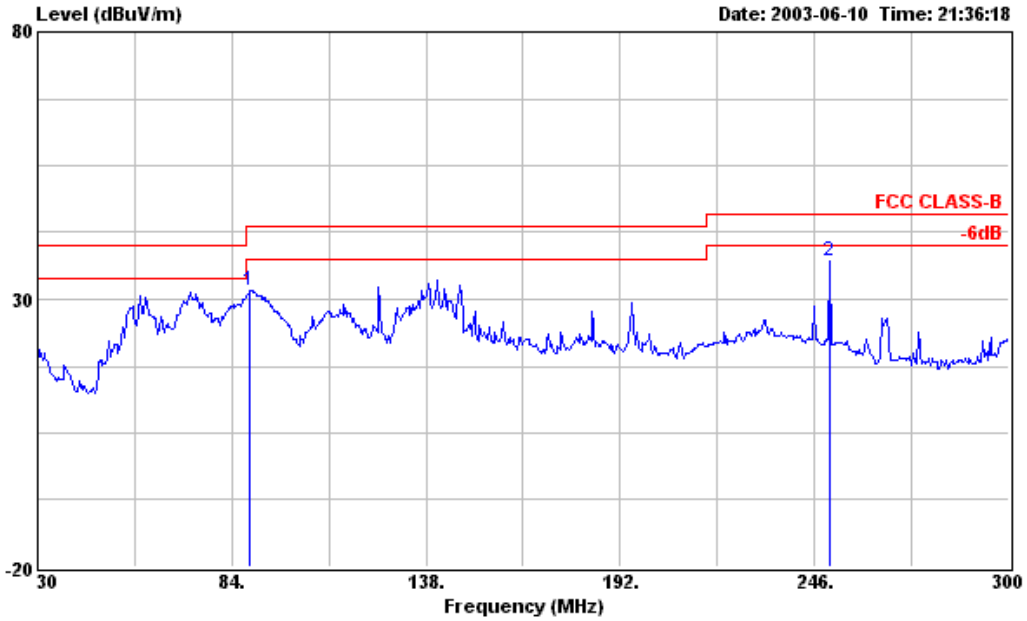
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 9
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

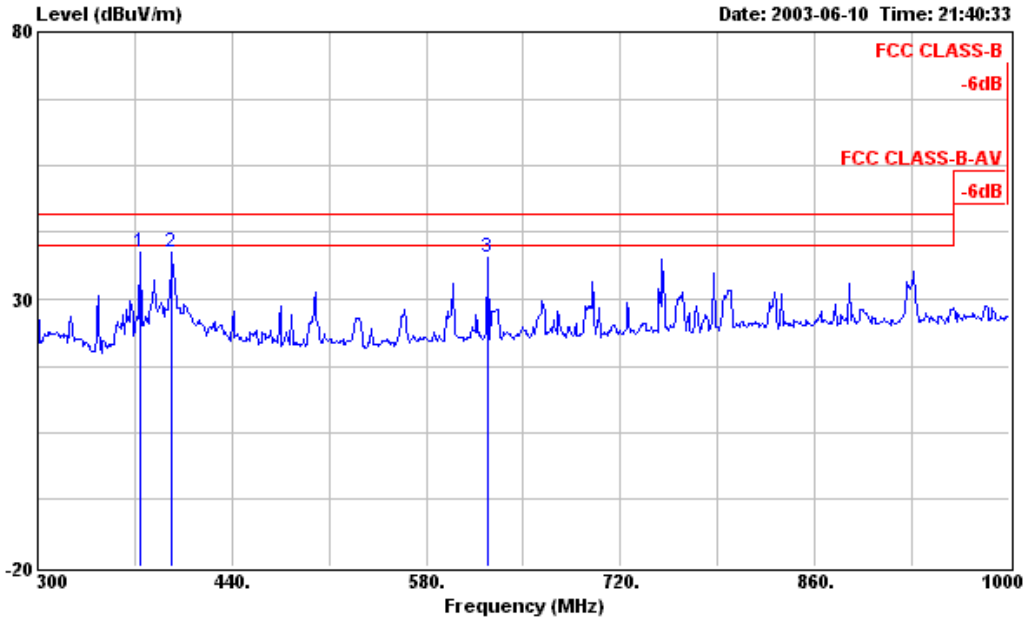
■ The test was passed at the minimum margin that marked by the frame in the following test record

■ Spurious Emission



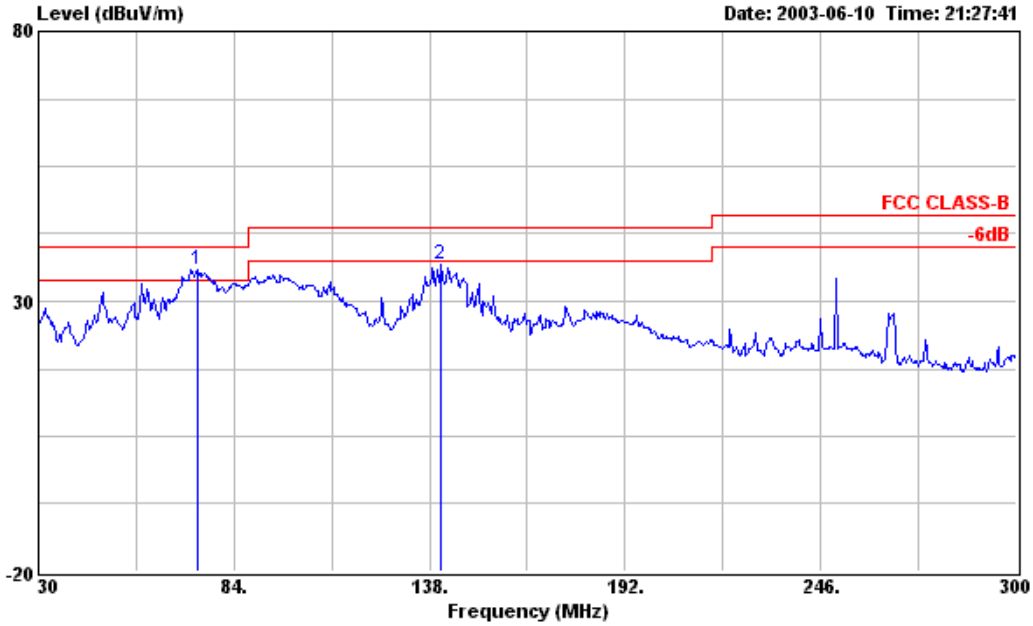

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	89.130	31.74	-11.76	43.50	48.20	8.74	1.82	27.02	Peak	---	---
2	250.050	37.24	-8.76	46.00	49.36	11.34	3.14	26.60	Peak	---	---



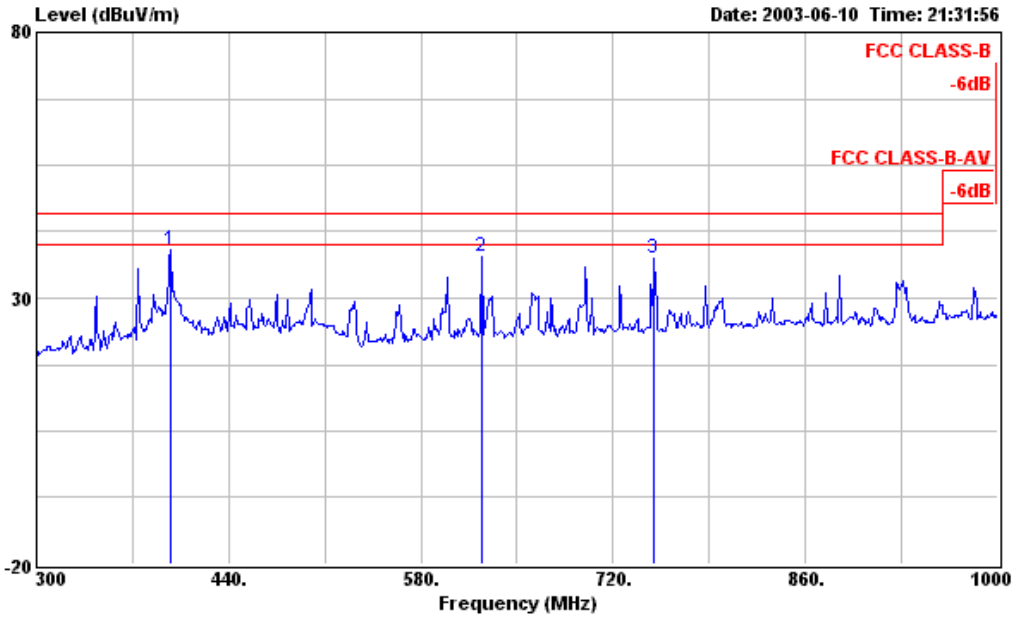
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	38.92	-7.08	46.00	48.15	13.82	3.99	27.04	Peak	---	---
2	396.600	38.62	-7.38	46.00	47.21	14.52	4.07	27.18	Peak	---	---
3	624.100	37.85	-8.15	46.00	42.77	17.46	5.62	28.00	Peak	---	---



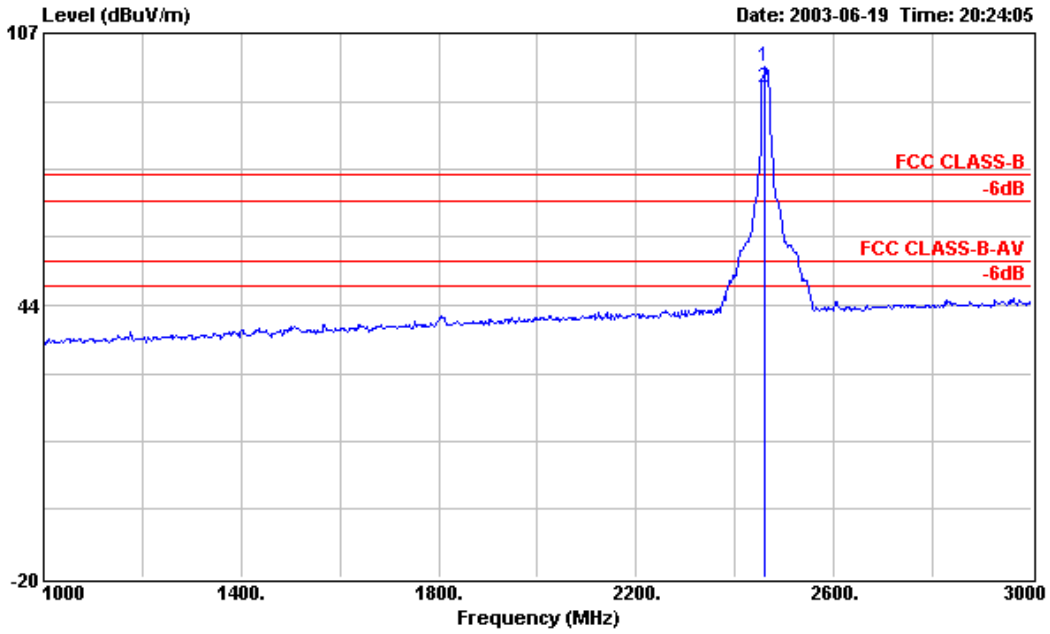
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	73.740	35.97	-4.03	40.00	56.29	5.06	1.67	27.05	Peak	200	169
2	140.970	36.86	-6.64	43.50	51.27	10.18	2.25	26.84	Peak	---	---

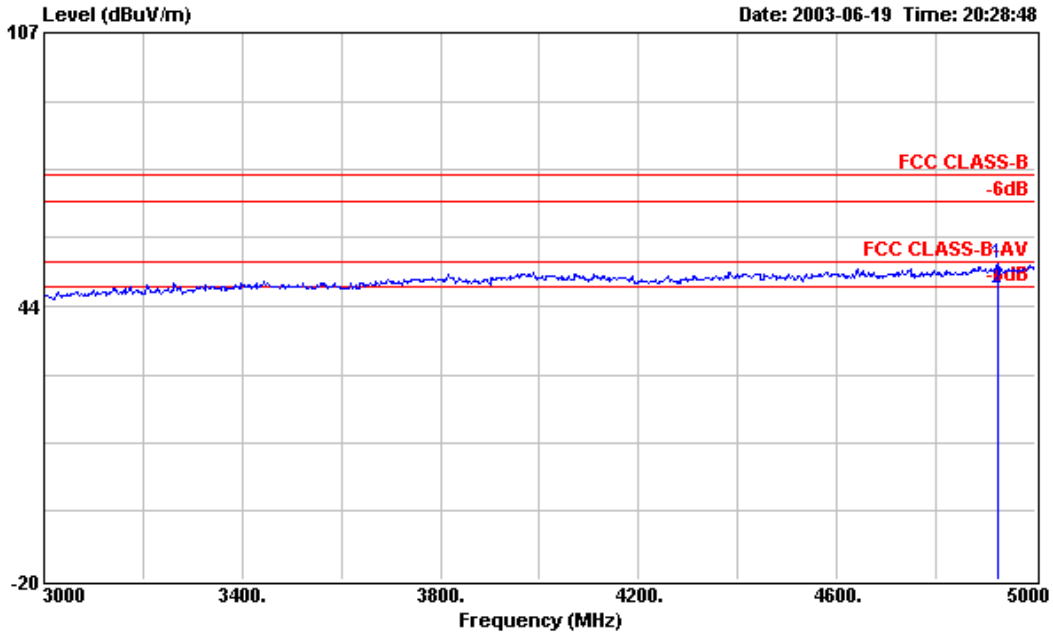


Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 1.5m+inject+5m+booster+1.5m+5dBi Ceili
: F341402

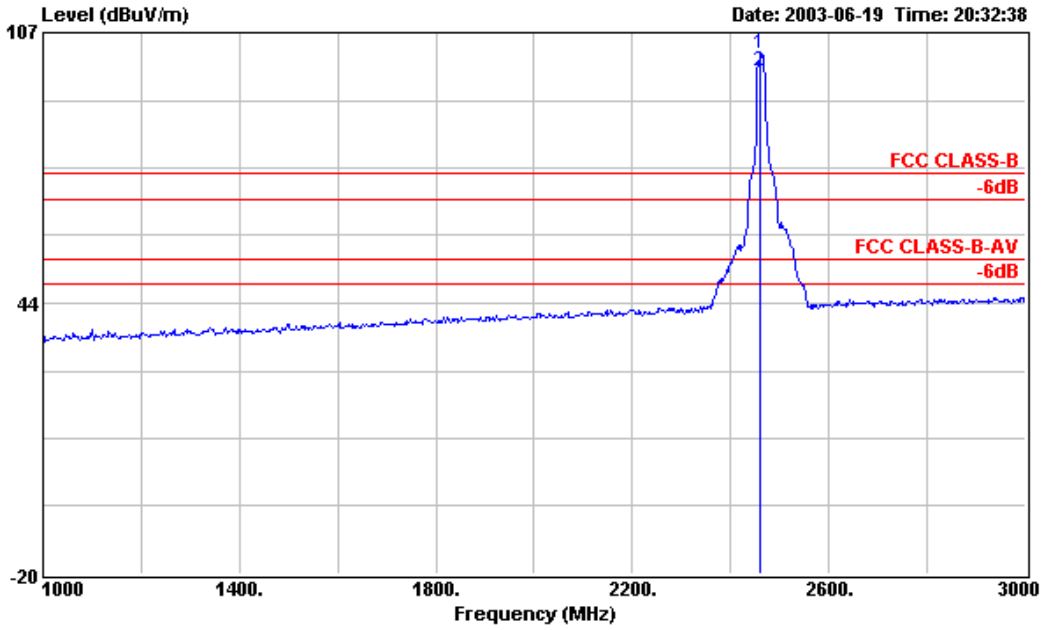
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	397.300	38.97	-7.03	46.00	47.54	14.54	4.07	27.18	Peak	---	---
2	624.100	37.82	-8.18	46.00	42.74	17.46	5.62	28.00	Peak	---	---
3	750.100	37.58	-8.42	46.00	41.02	18.40	6.16	28.00	Peak	---	---



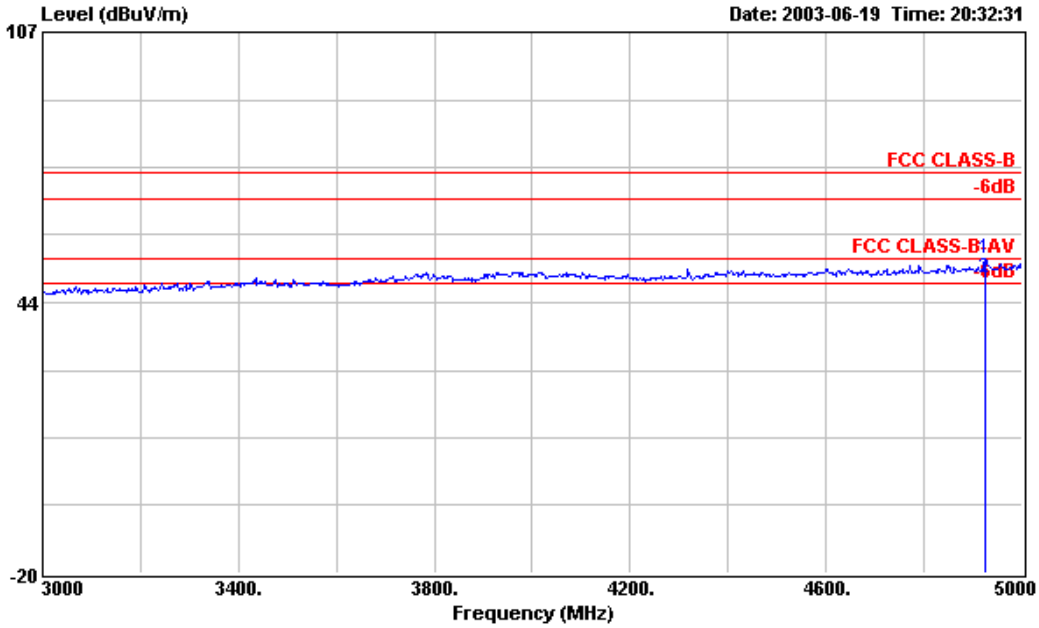

```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 1.5m+inject+5m+booster+1.5m+5dBi Ceili
          : F341402
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2460.000	H	28.34	6.04	64.59	-	-	98.97	88817.80		Peak
2460.000	H	28.34	6.04	59.65	-	-	94.03	50292.13		A.V.
4924.000	H	33.27	9.20	11.11	74.00	5011.87	53.58	477.53	-20.42	Peak
4924.000	H	33.27	9.20	5.32	54.00	501.19	47.79	245.19	-6.21	A.V.
2460.000	V	28.34	6.04	67.83	-	-	102.21	128973.36		Peak
2460.000	V	28.34	6.04	63.66	-	-	98.04	79799.47		A.V.
4924.000	V	33.27	9.20	11.47	74.00	5011.87	53.94	497.74	-20.06	Peak
4924.000	V	33.27	9.20	6.71	54.00	501.19	49.18	287.74	-4.82	A.V.
7386.000	V/H						-			Peak, A.V.
9848.000	V/H						-			Peak, A.V.
12310.000	V/H						-			Peak, A.V.
14772.000	V/H						-			Peak, A.V.
17234.000	V/H						-			Peak, A.V.
19696.000	V/H						-			Peak, A.V.
22158.000	V/H						-			Peak, A.V.
24620.000	V/H						-			Peak, A.V.

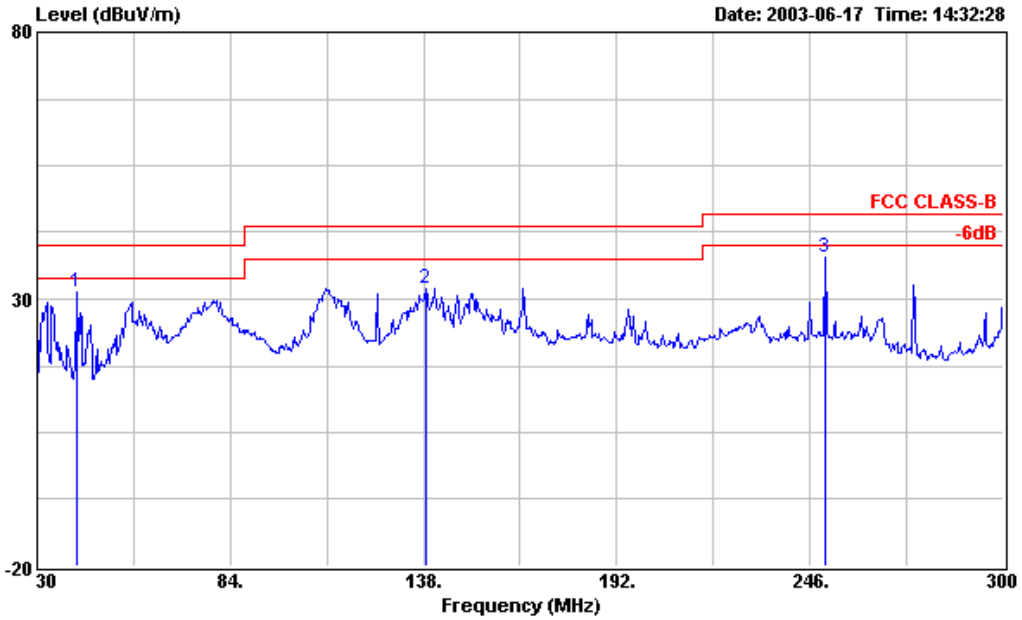
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 10
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

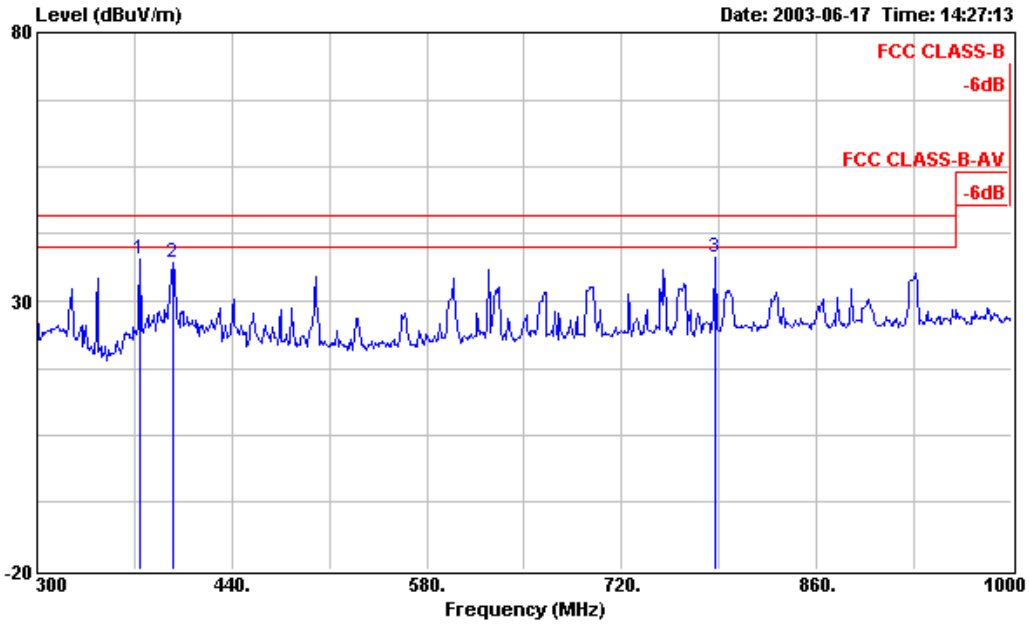
■ **The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 2 m, turn table degree is 115°**

■ Spurious Emission



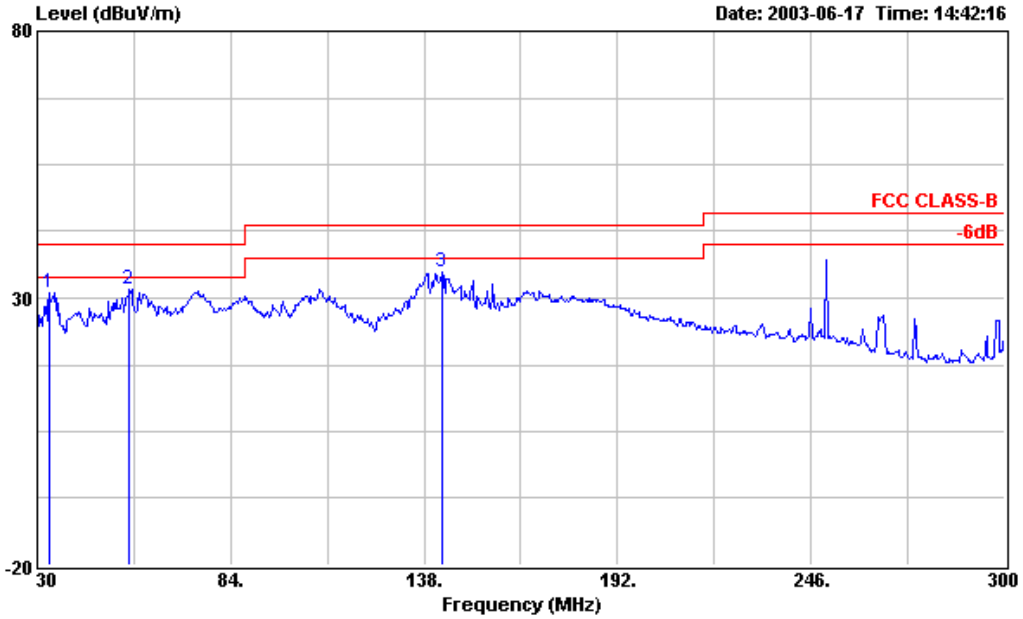

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	41.340	31.17	-8.83	40.00	46.91	10.16	1.20	27.10	Peak	---	---
2	138.810	31.90	-11.60	43.50	46.18	10.33	2.23	26.84	Peak	---	---
3	250.050	37.76	-8.24	46.00	49.88	11.34	3.14	26.60	Peak	---	---



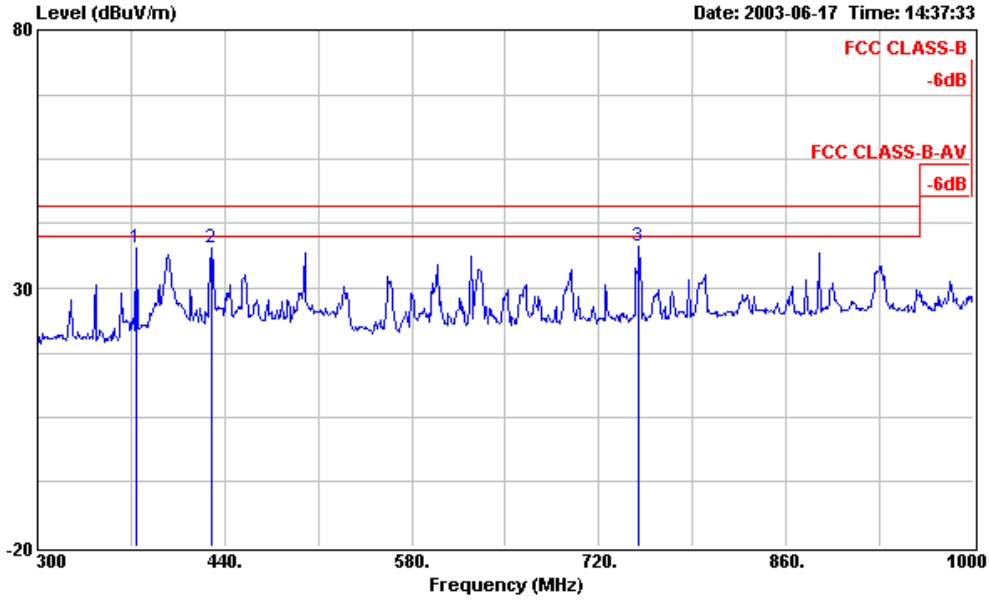
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	37.69	-8.31	46.00	46.92	13.82	3.99	27.04	Peak	---	---
2	398.000	37.30	-8.70	46.00	45.84	14.57	4.08	27.19	Peak	---	---
3	786.500	38.03	-7.97	46.00	41.01	18.68	6.34	28.00	Peak	---	---



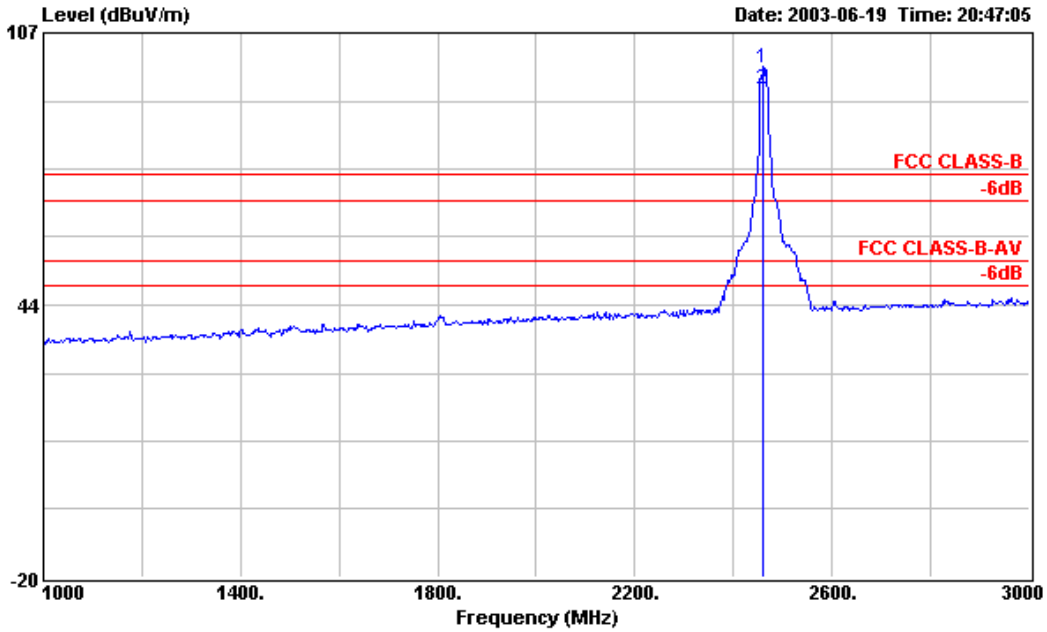

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	33.240	31.11	-8.89	40.00	43.50	13.65	1.06	27.10	Peak	---	---
2	55.650	31.67	-8.33	40.00	51.64	5.73	1.39	27.09	Peak	---	---
3	143.130	35.01	-8.49	43.50	49.58	9.99	2.27	26.83	Peak	---	---

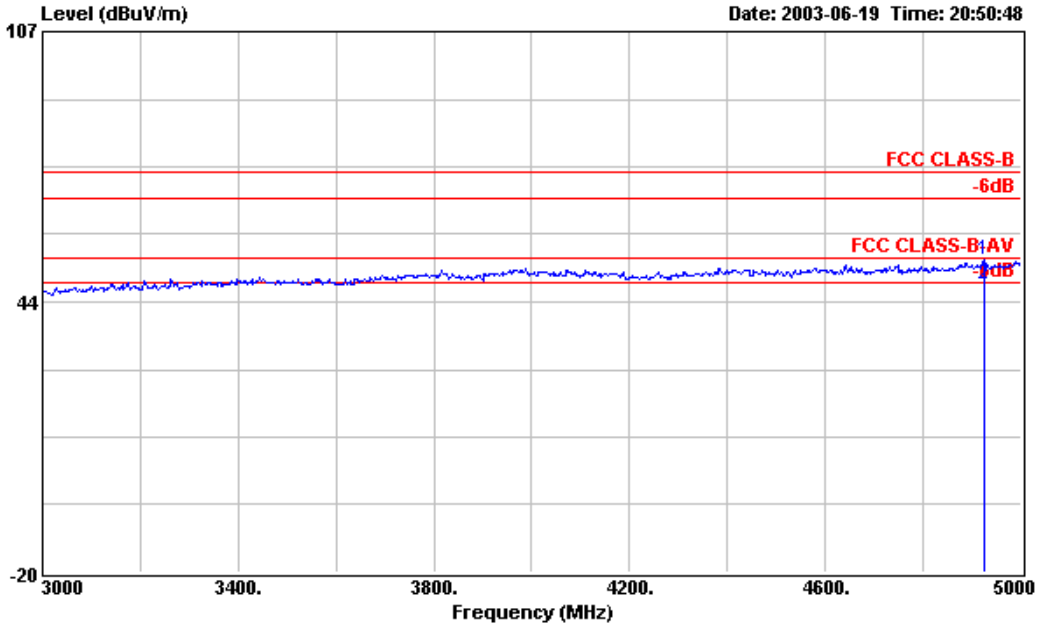



```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

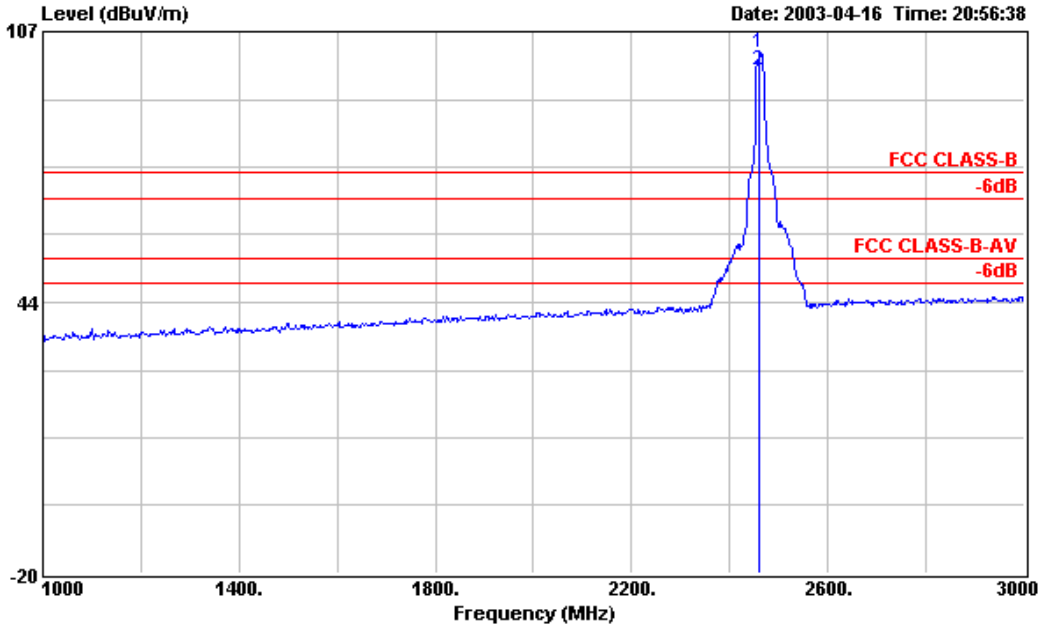
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	37.83	-8.17	46.00	47.06	13.82	3.99	27.04	Peak	---	---
2	430.200	37.65	-8.35	46.00	45.67	15.06	4.27	27.35	Peak	---	---
3	750.100	38.16	-7.84	46.00	41.60	18.40	6.16	28.00	Peak	---	---



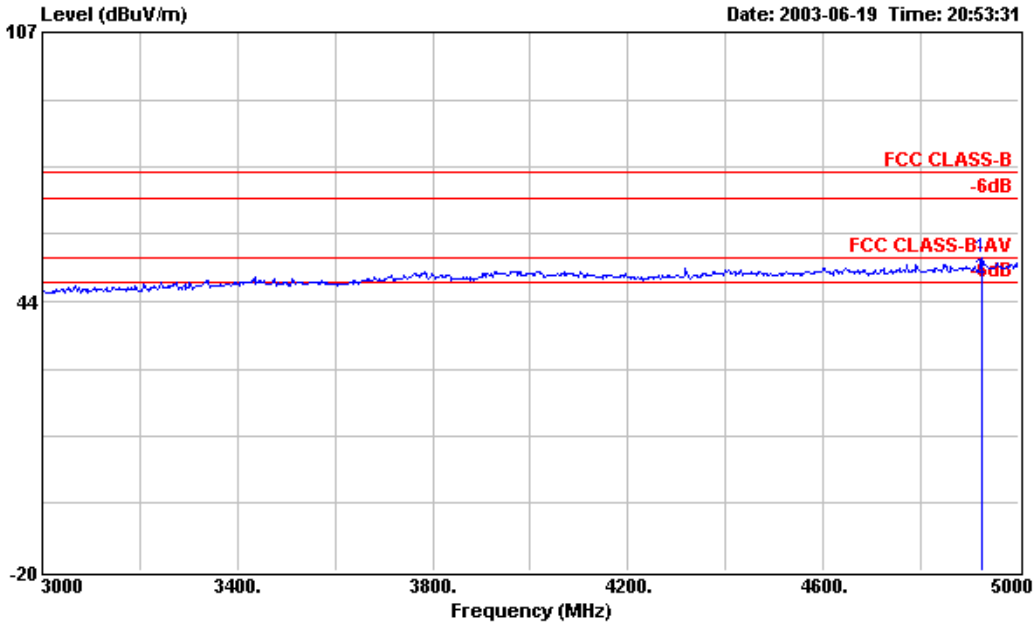

```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+booster+1.5m+5dBi Ceili
          : F341402
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2460.000	H	28.34	6.04	64.50	-	-	98.88	87902.25		Peak
2460.000	H	28.34	6.04	59.48	-	-	93.86	49317.38		A.V.
4924.000	H	33.27	9.20	10.87	74.00	5011.87	53.34	464.52	-20.66	Peak
4924.000	H	33.27	9.20	5.13	54.00	501.19	47.60	239.88	-6.40	A.V.
2460.000	V	28.34	6.04	67.67	-	-	102.05	126619.33		Peak
2460.000	V	28.34	6.04	63.49	-	-	97.87	78252.82		A.V.
4924.000	V	33.27	9.20	11.32	74.00	5011.87	53.79	489.22	-20.21	Peak
4924.000	V	33.27	9.20	6.52	54.00	501.19	48.99	281.51	-5.01	A.V.
7386.000	V/H						-			Peak, A.V.
9848.000	V/H						-			Peak, A.V.
12310.000	V/H						-			Peak, A.V.
14772.000	V/H						-			Peak, A.V.
17234.000	V/H						-			Peak, A.V.
19696.000	V/H						-			Peak, A.V.
22158.000	V/H						-			Peak, A.V.
24620.000	V/H						-			Peak, A.V.

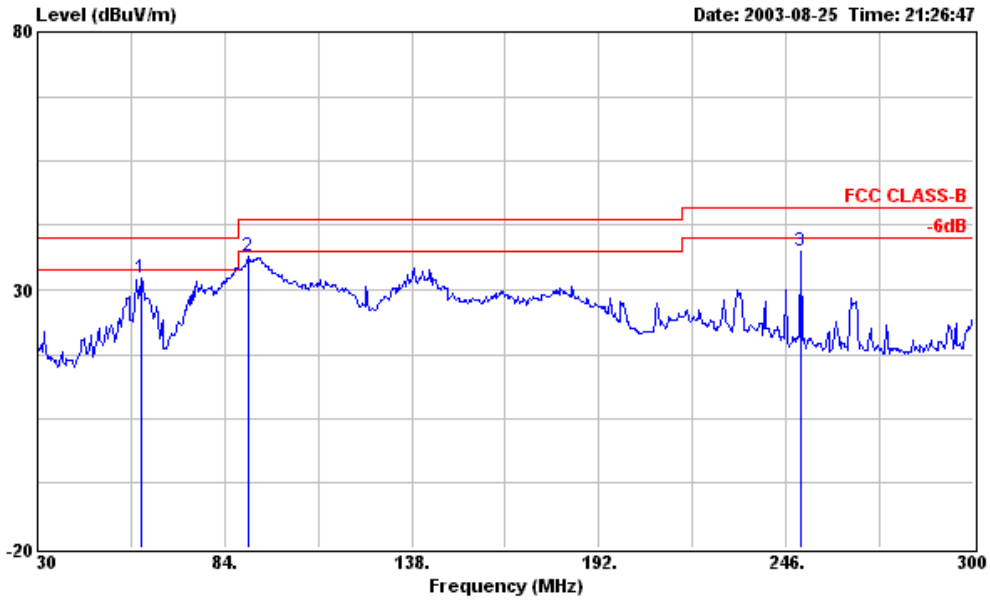
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 11
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

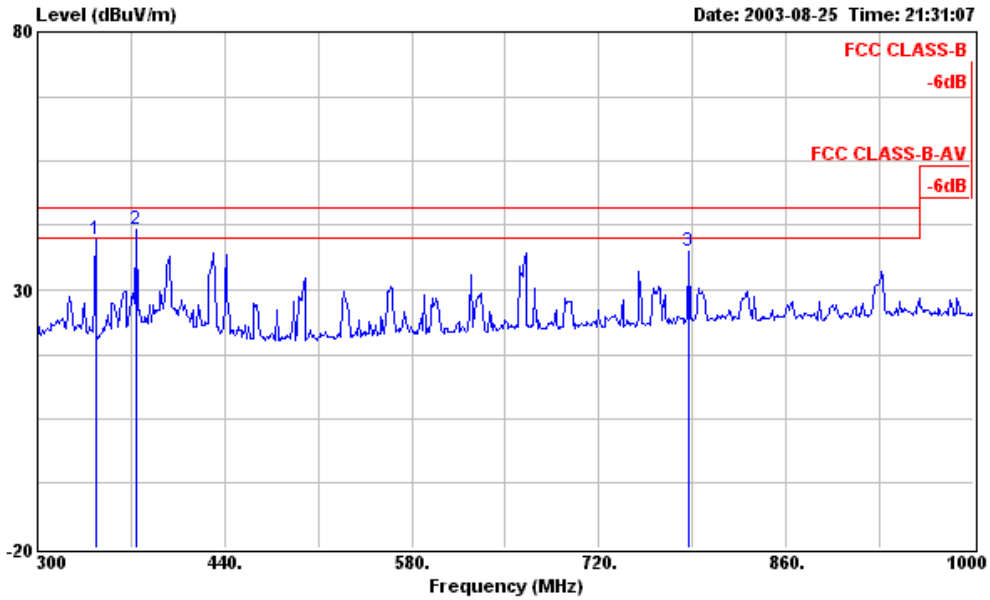
■ The test was passed at the minimum margin that marked by the frame in the following table

■ Spurious Emission



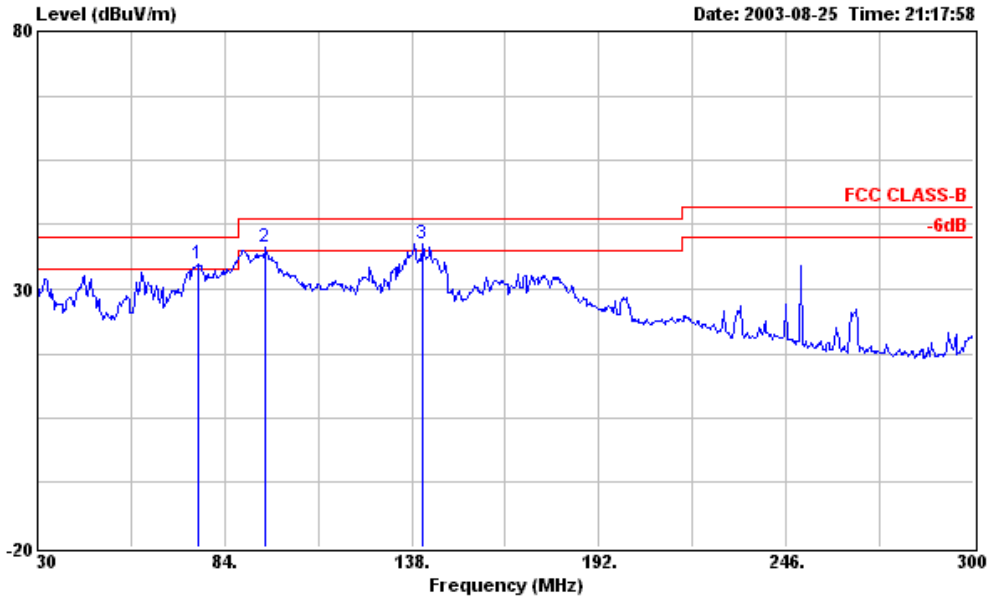

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	59.970	32.20	-7.80	40.00	52.54	5.16	1.58	27.08	Peak	---	---
2	91.020	36.37	-7.13	43.50	53.04	8.84	1.51	27.02	Peak	---	---
3	250.050	37.33	-8.67	46.00	49.98	11.34	2.61	26.60	Peak	---	---



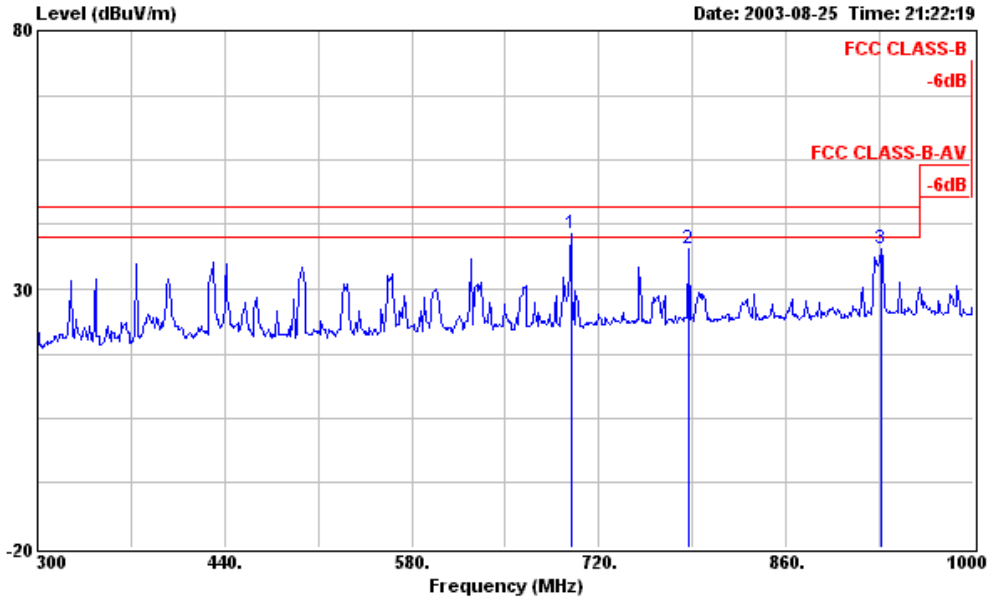

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	343.400	39.80	-6.20	46.00	50.47	12.79	3.40	26.86	Peak	---	---
2 !	374.200	41.64	-4.36	46.00	51.36	13.82	3.50	27.04	Peak	---	---
3	786.500	37.58	-8.42	46.00	41.87	18.68	5.03	28.00	Peak	---	---



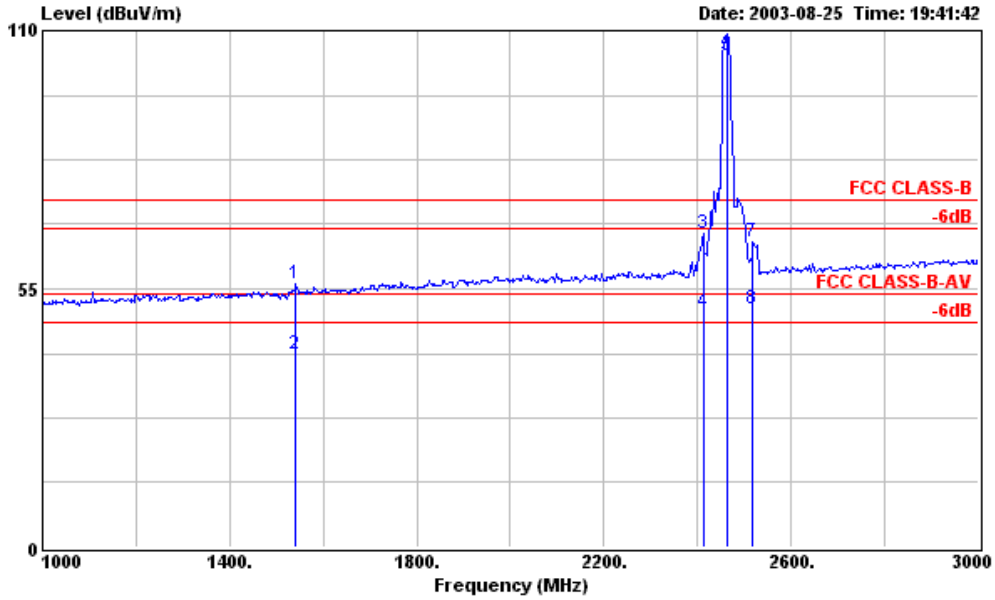

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	76.170	34.87	-5.13	40.00	54.95	5.42	1.55	27.05	Peak	---	---
2 !	95.610	38.27	-5.23	43.50	54.39	9.11	1.78	27.01	Peak	---	---
3 !	140.970	38.64	-4.86	43.50	53.23	10.18	2.07	26.84	Peak	---	---



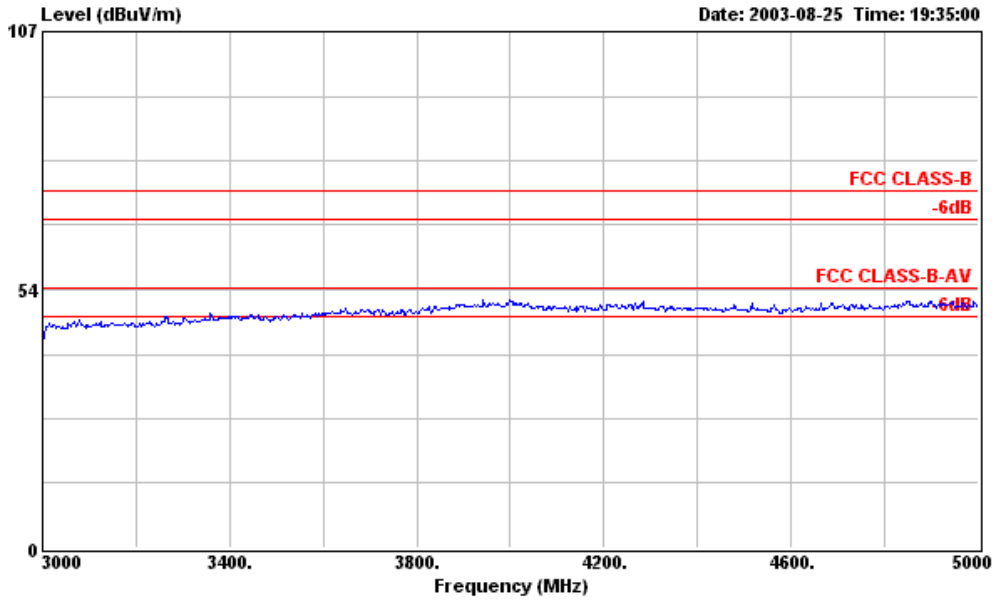

```
Site      : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	699.000	40.57	-5.43	46.00	45.84	17.99	4.74	28.00	Peak	---	---
2	786.500	37.68	-8.32	46.00	41.97	18.68	5.03	28.00	Peak	---	---
3	931.400	37.92	-8.08	46.00	40.38	19.52	5.73	27.71	Peak	---	---

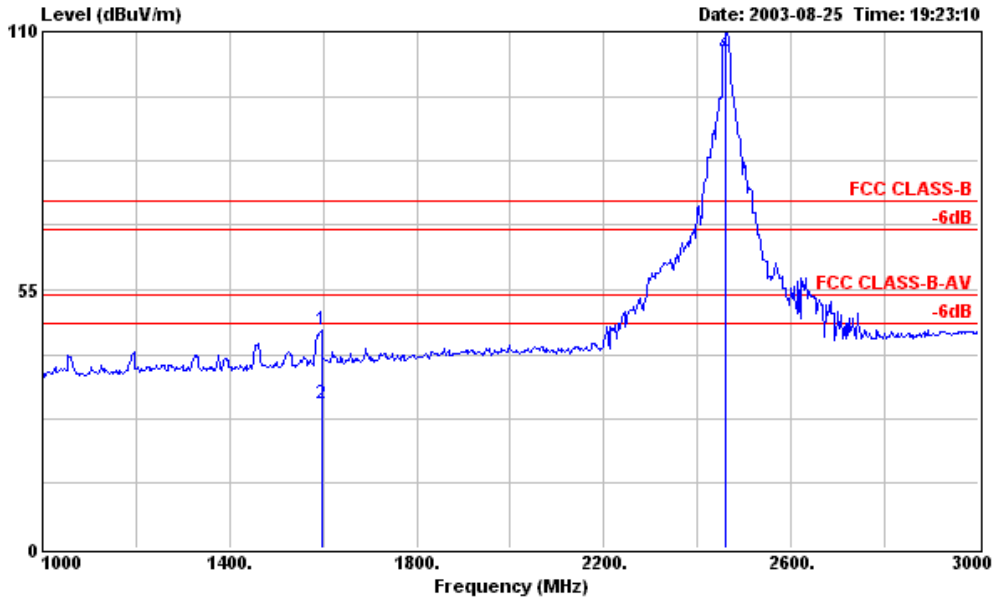


Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
: F341402
: 49

		Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1		1542.000	55.99	-18.01	74.00	66.30	25.53	4.79	40.63	Peak	---	---
2		1542.000	41.21	-12.79	54.00	51.52	25.53	4.79	40.63	Average	---	---
3		2412.000	66.90	-7.10	74.00	73.59	28.24	6.22	41.15	Peak	---	---
4	!	2412.000	50.05	-3.95	54.00	56.74	28.24	6.22	41.15	Average	---	---
7		2518.000	65.13	-8.87	74.00	71.46	28.49	6.38	41.20	Peak	---	---
8	!	2518.000	50.61	-3.39	54.00	56.94	28.49	6.38	41.20	Average	100	272

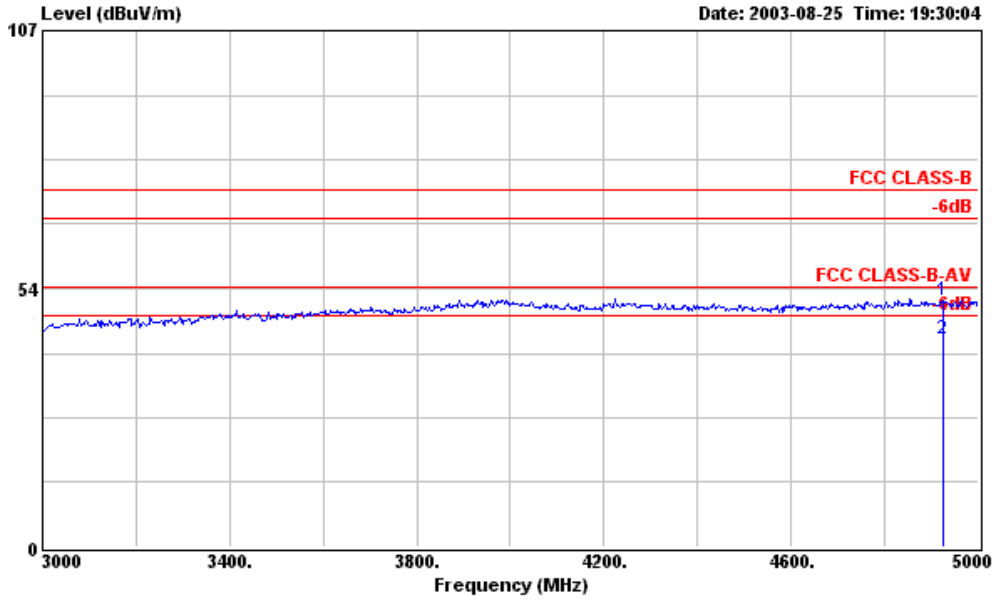



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1596.000	46.35	-27.65	74.00	56.37	25.75	4.89	40.66	Peak	---	---
2	1596.000	30.57	-23.43	54.00	40.59	25.75	4.89	40.66	Average	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+18dBi Patc
          : F341402
          : 49
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2462.000	H	28.35	6.29	70.12	-	-	104.76	172981.64		A.V.
2462.000	H	28.35	6.29	74.65	-	-	109.29	291407.01		Peak
2460.000	V	28.34	6.29	75.04	-	-	109.67	304438.80		Peak
2460.000	V	28.34	6.29	70.35	-	-	104.98	177418.95		A.V.
4923.000	V	33.27	9.12	8.62	74.00	5011.87	51.01	355.22	-22.99	Peak
4923.000	V	33.27	9.12	0.85	54.00	501.19	43.24	145.21	-10.76	A.V.
4924.000	H						-			Peak, A.V.
7386.000	V/H						-			Peak, A.V.
9848.000	V/H						-			Peak, A.V.
12310.000	V/H						-			Peak, A.V.
14772.000	V/H						-			Peak, A.V.
17234.000	V/H						-			Peak, A.V.
19696.000	V/H						-			Peak, A.V.
22158.000	V/H						-			Peak, A.V.
24620.000	V/H						-			Peak, A.V.

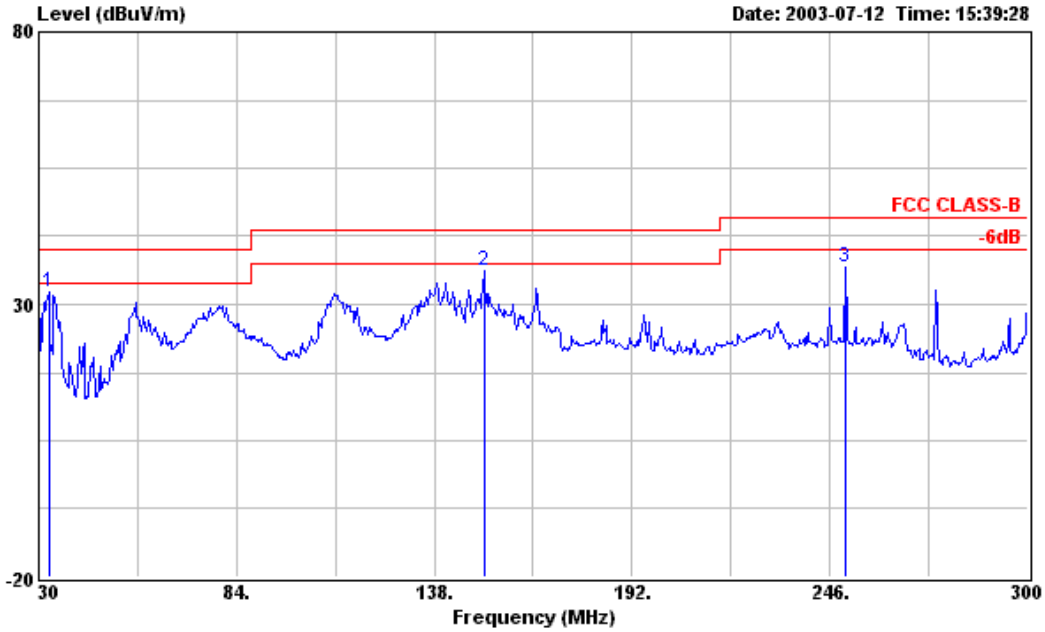
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

- Test Mode: Mode 12
- Test Distance: 3 M
- Temperature: 26 °C
- Relative Humidity: 68 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

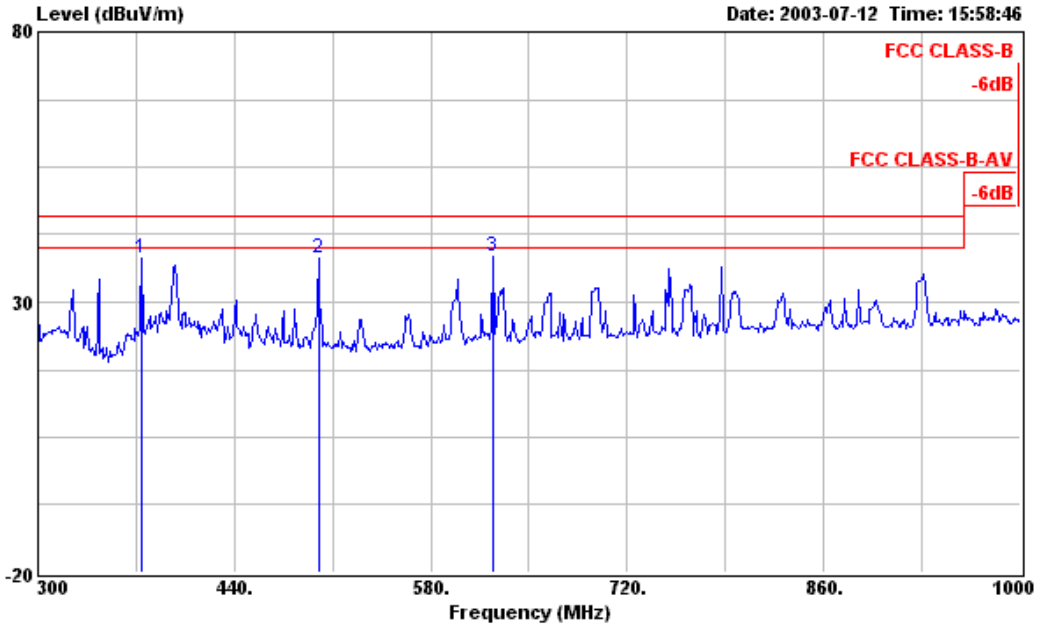
■ The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 2 m, turn table degree is 161°

■ Spurious Emission



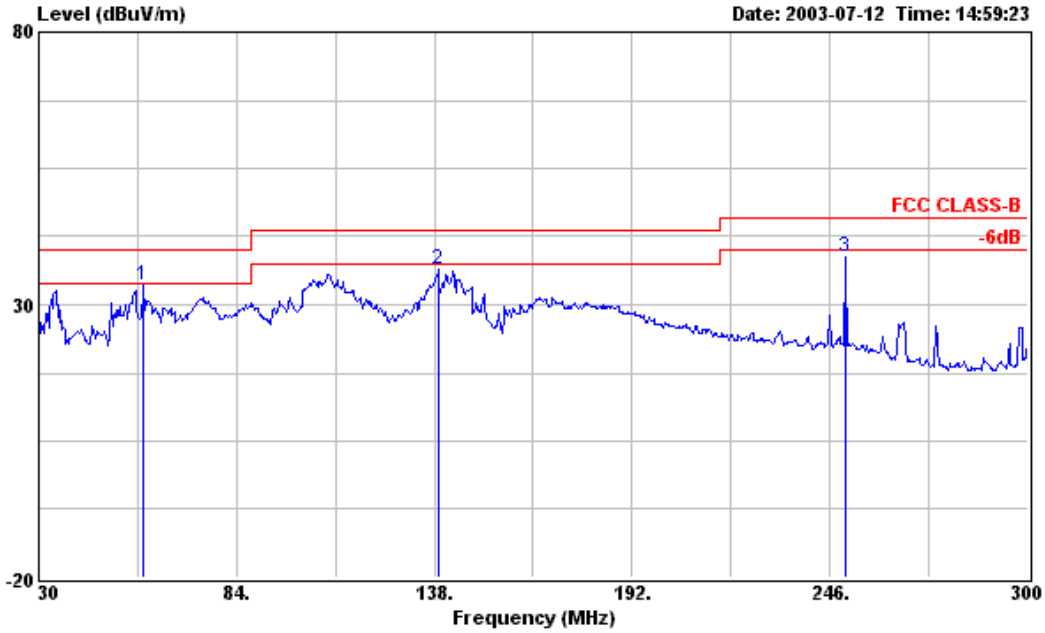
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	32.700	32.22	-7.78	40.00	44.33	13.94	1.05	27.10	Peak	---	---
2	151.500	36.27	-7.23	43.50	51.49	9.22	2.35	26.79	Peak	---	---
3	250.050	36.88	-9.12	46.00	49.00	11.34	3.14	26.60	Peak	---	---



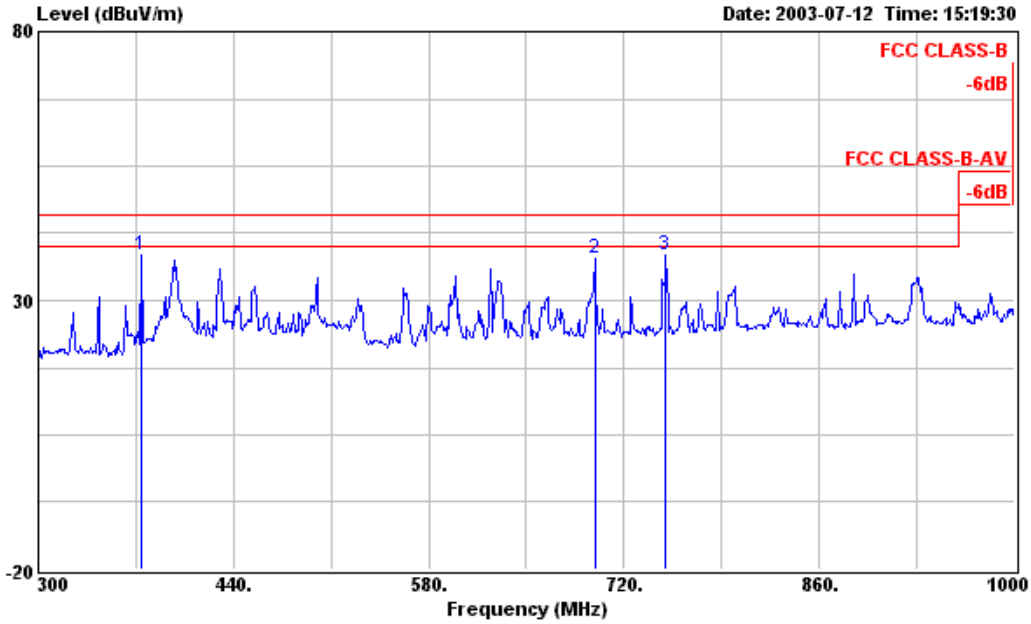
Site : 03CH03-HY
Condition : 3m 03CH03-MAT HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	38.10	-7.90	46.00	47.33	13.82	3.99	27.04	Peak	---	---
2	500.200	38.24	-7.76	46.00	45.27	16.03	4.64	27.70	Peak	---	---
3	624.100	38.32	-7.68	46.00	43.24	17.46	5.62	28.00	Peak	---	---



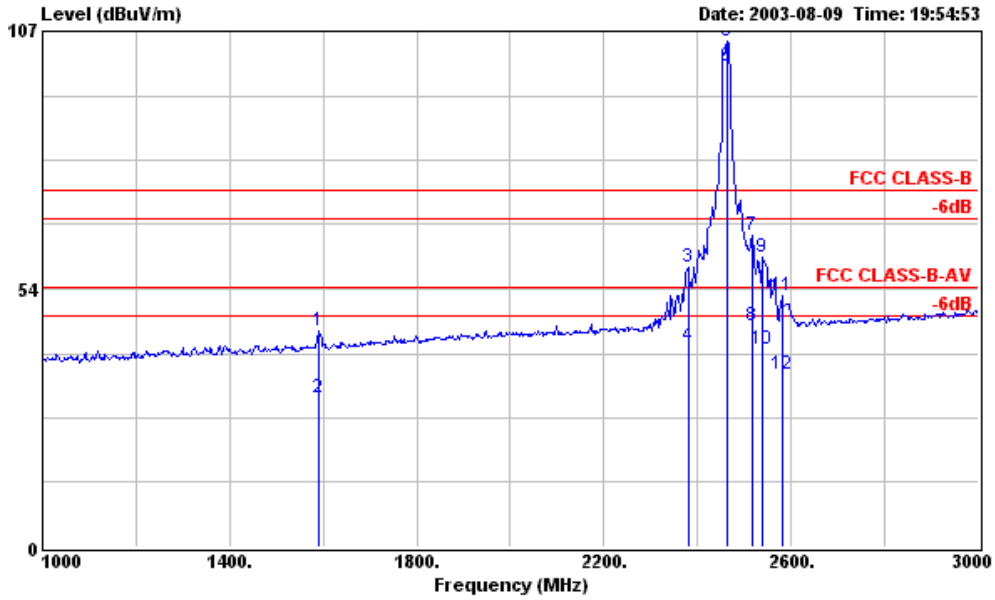
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	58.620	33.42	-6.58	40.00	53.73	5.34	1.43	27.08	Peak	100	42
2	139.080	36.42	-7.08	43.50	50.71	10.32	2.23	26.84	Peak	---	---
3	250.050	38.64	-7.36	46.00	50.76	11.34	3.14	26.60	Peak	---	---



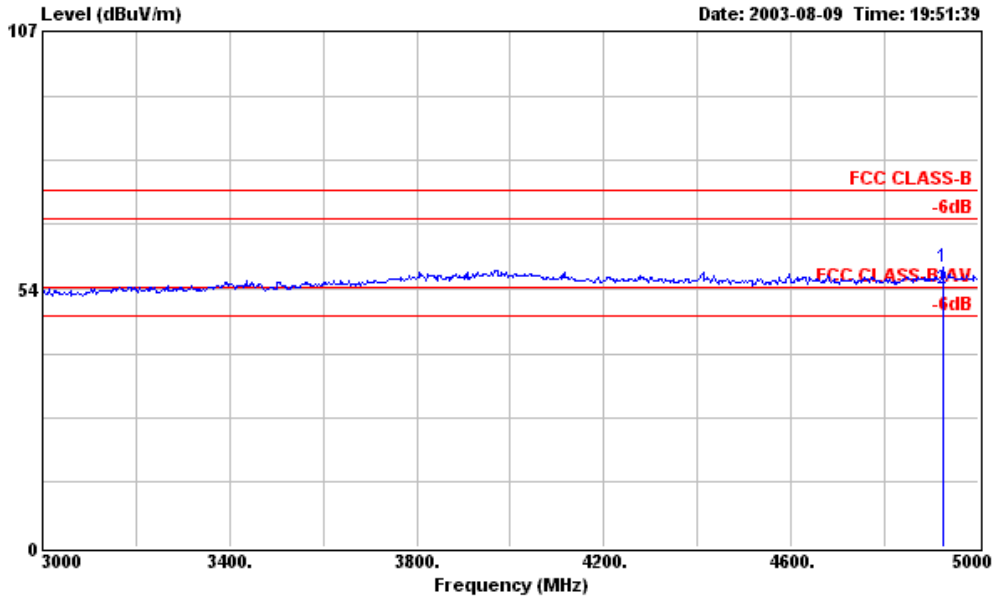
Site : 03CH03-HY
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 0.5m+inject+1.5m+booster+1.5m+9dBi Dipol
: F341402

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	374.200	38.31	-7.69	46.00	47.54	13.82	3.99	27.04	Peak	---	---
2	699.000	37.68	-8.32	46.00	41.75	17.99	5.94	28.00	Peak	---	---
3	750.100	38.43	-7.57	46.00	41.87	18.40	6.16	28.00	Peak	---	---

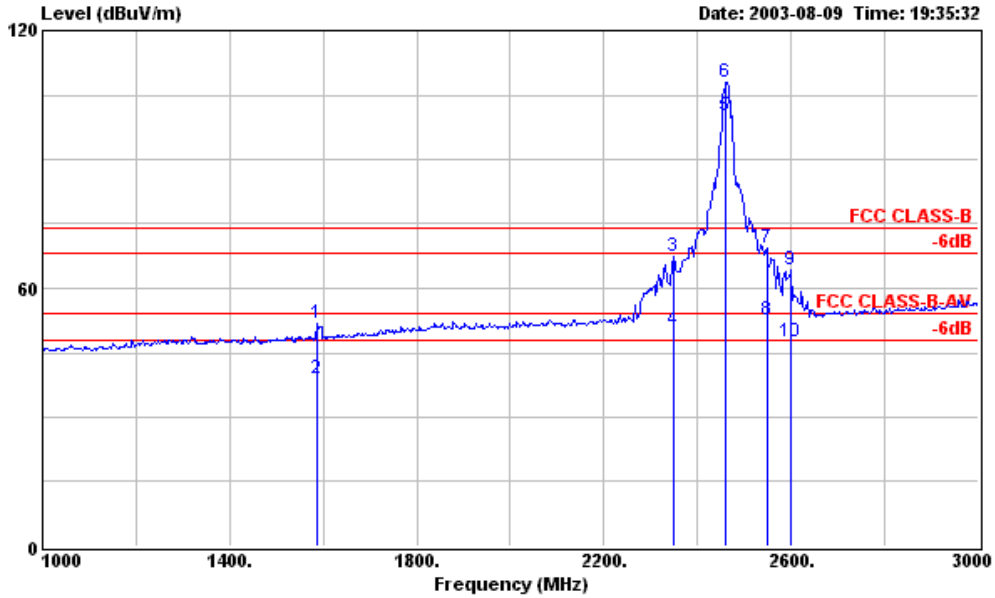


Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1590.000	44.92	-29.08	74.00	41.36	25.73	4.88	27.05	Peak	---	---
2	1590.000	30.98	-23.02	54.00	27.42	25.73	4.88	27.05	Average	---	---
3	2380.000	57.85	-16.15	74.00	50.65	28.18	6.18	27.16	Peak	---	---
4	2380.000	41.73	-12.27	54.00	34.53	28.18	6.18	27.16	Average	---	---
7	2516.000	64.59	-9.41	74.00	56.91	28.49	6.37	27.18	Peak	---	---
8	2516.000	45.95	-8.05	54.00	38.27	28.49	6.37	27.18	Average	---	---
9	2540.000	60.09	-13.91	74.00	52.30	28.56	6.41	27.18	Peak	---	---
10	2540.000	41.00	-13.00	54.00	33.21	28.56	6.41	27.18	Average	---	---
11	2580.000	52.05	-21.95	74.00	44.06	28.69	6.49	27.19	Peak	---	---
12	2580.000	35.64	-18.36	54.00	27.65	28.69	6.49	27.19	Average	---	---

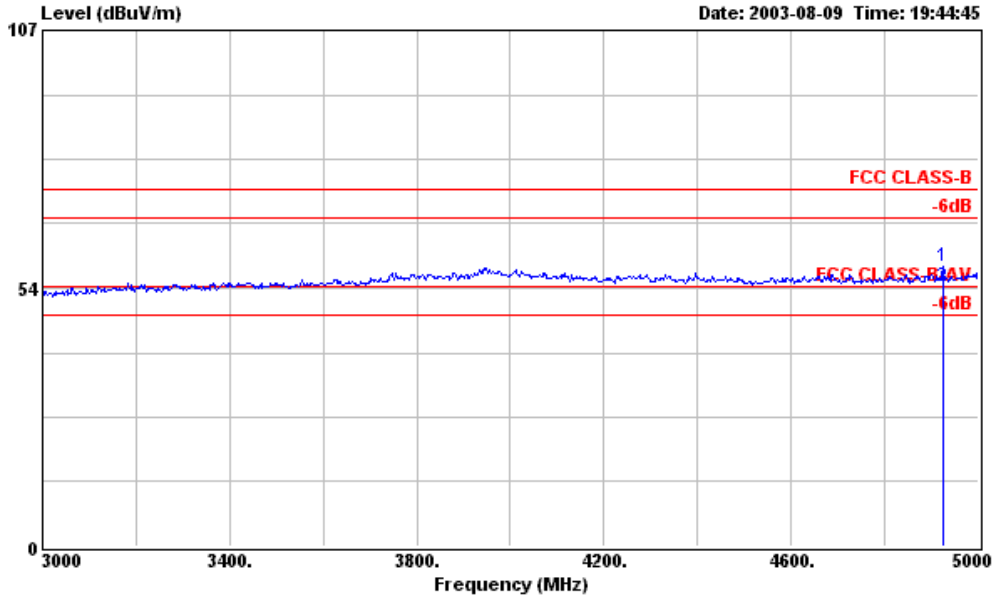



```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol
```



Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103+Booster
MEMO : TX CH11 2462MHz
: 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol

		Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1		1588.000	51.68	-22.32	74.00	48.13	25.72	4.88	27.05	Peak	---	---
2		1588.000	38.79	-15.21	54.00	35.24	25.72	4.88	27.05	Average	---	---
3		2348.000	67.31	-6.69	74.00	60.20	28.12	6.14	27.15	Peak	---	---
4	!	2348.000	50.18	-3.82	54.00	43.07	28.12	6.14	27.15	Average	---	---
7	!	2548.000	69.49	-4.51	74.00	61.65	28.59	6.43	27.18	Peak	---	---
8	!	2548.000	52.65	-1.35	54.00	44.81	28.59	6.43	27.18	Average	---	---
9		2598.000	64.31	-9.69	74.00	56.24	28.74	6.52	27.19	Peak	---	---
10		2598.000	47.49	-6.51	74.00	39.42	28.74	6.52	27.19	Average	---	---




```
Site      : 03CH03-HY
Condition : 3m HORN-ANT-6741 VERTICAL
EUT       : Wireless 2.4G AP
Power     : 110V/60Hz
MODEL     : ME-103+Booster
MEMO      : TX CH11 2462MHz
          : 0.5m+inject+1.5m+Booster+1.5m+9dBi Dipol
```

■ Field strength of fundamental and harmonics

Frequency (MHz)	Polarity	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Limits (dBuV/m)	Limits (uV/m)	Emission (dBuV/m)	Level (uV/m)	Margin (dB)	Detect Mode
2462.000	H	28.35	6.29	70.22	-	-	104.86	174984.67		Peak
2462.000	H	28.35	6.29	65.23	-	-	99.87	98514.46		A.V.
4924.000	H	33.27	9.12	15.65	74.00	5011.87	58.04	797.99	-15.96	Peak
4924.000	H	33.27	9.12	11.21	54.00	501.19	53.60	478.63	-0.40	A.V.
2460.000	V	28.34	6.29	65.47	-	-	100.10	101157.95		A.V.
2460.000	V	28.34	6.29	73.47	-	-	108.10	254097.27		Peak
4924.000	V	33.27	9.12	15.58	74.00	5011.87	57.97	791.59	-16.03	Peak
4924.000	V	33.27	9.12	11.49	54.00	501.19	53.88	494.31	-0.12	A.V.
7386.000	V/H						-			Peak, A.V.
9848.000	V/H						-			Peak, A.V.
12310.000	V/H						-			Peak, A.V.
14772.000	V/H						-			Peak, A.V.
17234.000	V/H						-			Peak, A.V.
19696.000	V/H						-			Peak, A.V.
22158.000	V/H						-			Peak, A.V.
24620.000	V/H						-			Peak, A.V.

Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: Jay
Jay Zhong

5.7. Band Edges Measurement

5.7.1. Measuring Instruments

As described in chapter 7 of this test report.

5.7.2. Test Procedure

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set both RBW and VBW of spectrum analyzer to 100KHz with convenient frequency span including 100 KHz bandwidth from band edge.
3. The band edges was measured and recorded.

5.7.3. Test Result

- Test Result in lower band (Channel 1) PASS (Plot Ref. No.: 1)
- Test Result in higher band(Channel 11) PASS (Plot Ref. No.: 2)

5.7.4. Note on Band edge Emission

The band edge emission plot1 on page 154. shows 52.15dB delta between carrier maximum power and local maximum emission in the restricted band (2.310~2.390 GHz).

The band edge emission plot2 on page 155. shows 51.05dB delta between carrier maximum power and local maximum emission in the restricted band (2.4835~2.5 GHz).

Antenna: 5dBi Ceiling

Polarity	Channel	The emission of carrier power strength (dBμV/m)	The maximum field strength in restrict band (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
H	01	102.05	49.90	74.00	-24.10	Peak
H	01	93.11	40.96	54.00	-13.04	Average
V	01	103.64	51.49	74.00	-22.51	Peak
V	01	96.31	44.16	54.00	-9.84	Average
H	11	98.97	47.92	74.00	-26.08	Peak
H	11	94.03	42.98	54.00	-11.02	Average
V	11	102.21	51.16	74.00	-22.84	Peak
V	11	98.04	46.99	54.00	-7.01	Average

Antenna: 9dBi Dipole

Polarity	Channel	The emission of carrier power strength (dBμV/m)	The maximum field strength in restrict band (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
H	01	106.28	54.13	74.00	-19.87	Peak
H	01	100.33	48.18	54.00	-5.82	Average
V	01	108.35	56.20	74.00	-17.80	Peak
V	01	100.42	48.27	54.00	-5.73	Average
H	11	104.86	53.81	74.00	-20.19	Peak
H	11	99.87	48.82	54.00	-5.18	Average
V	11	108.10	57.05	74.00	-16.95	Peak
V	11	100.10	49.05	54.00	-4.95	Average

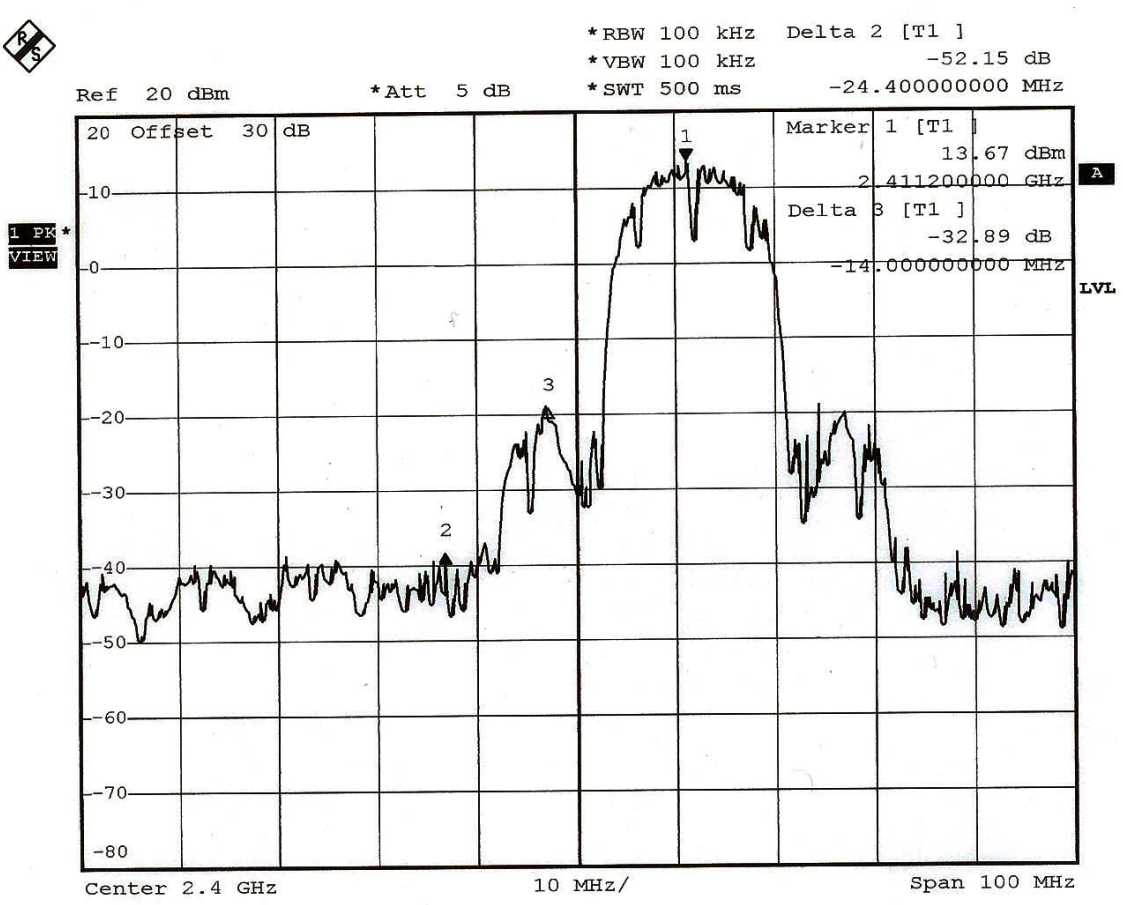
Antenna: 18dBi Patch

Polarity	Channel	The emission of carrier power strength (dBμV/m)	The maximum field strength in restrict band (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
H	01	100.21	48.06	74.00	-25.94	Peak
H	01	94.06	41.91	54.00	-12.09	Average
V	01	109.55	57.40	74.00	-16.60	Peak
V	01	104.87	52.72	54.00	-1.28	Average
H	11	109.29	58.24	74.00	-15.76	Peak
H	11	104.76	53.71	54.00	-0.29	Average
V	11	109.67	58.62	74.00	-15.38	Peak
V	11	104.98	53.93	54.00	-0.07	Average

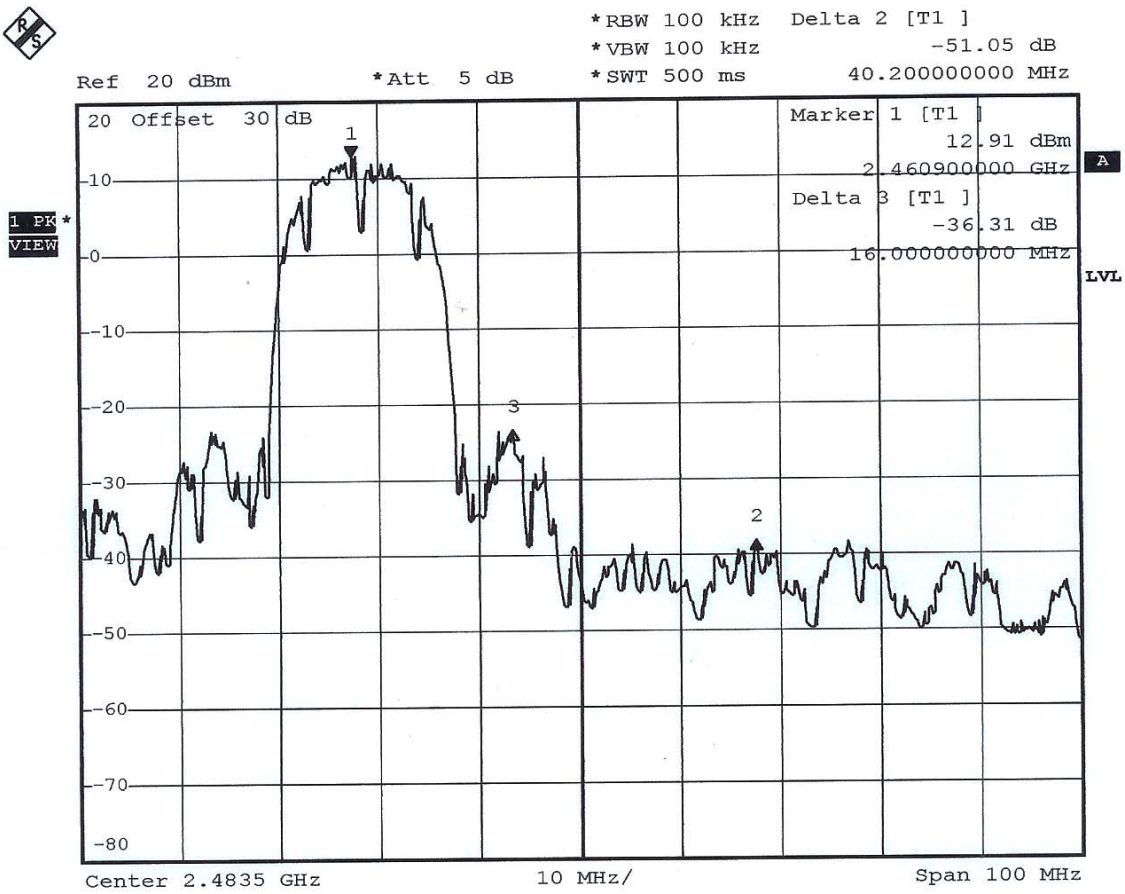
□The maximum field strength in restricted band is the emission of carrier power strength subtract to the delta between carrier maximum power and local maximum emission in the restricted band.

The spectrum analyzer plots are attached as below

Plot1 (Channel 1)



Plot2 (Channel 11)



Comments: All emissions in any 100kHz bandwidth outside the band edge are attenuated more then 20dB from the carrier.

5.8. Antenna Requirements

The EUT use a detachable antenna via SMA-reversed external connector. It is considered meet antenna requirement of FCC.

5.8.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no 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.

5.8.2. Antenna Connected Construction

The maximum Gain antenna used in this product is:

- ANT24D18: 18dBi Patch Antenna
- ANT24D12: 12dBi Patch Antenna
- ANT24P5: 5dBi Dipole Antenna
- ANT2405: 5dBi Ceiling Antenna
- ANT24P7: 7dBi Dipole Antenna
- ANT24P2: 2dBi Dipole Antenna
- ANT24S4: 4dBi Triband Stand Antenna
- ANT24S5: 5dBi Stand Antenna
- ANT24P9: 9dBi Dipole Antenna

6. Antenna Factor & Cable Loss

<Mode 1, 2, 4, 5, 6, 8, 9, 10, 12>

Frequency (MHz)	Antenna Factor (dB)	Cable Loss (dB)	Frequency (MHz)	Antenna Factor (dB)	Cable Loss (dB)
30	15.35	1.00	1000	24.30	3.89
35	13.63	1.08	2000	31.10	5.41
40	11.11	1.18	3000	29.60	6.92
45	10.59	1.24	4000	30.80	8.24
50	6.47	1.30	5000	34.20	9.22
55	5.83	1.38	6000	33.30	10.25
60	5.18	1.44	7000	37.80	11.61
65	4.81	1.52	8000	39.40	11.78
70	4.43	1.59	9000	38.40	12.59
75	5.10	1.68	10000	38.90	13.84
80	5.91	1.75	11000	41.10	14.64
85	7.33	1.77	12000	42.70	14.12
90	8.74	1.83	13000	43.90	16.01
95	9.05	1.85	14000	43.70	13.76
100	9.36	1.90	15000	43.40	14.30
110	9.65	2.01	16000	40.90	15.16
120	9.97	2.06	17000	44.40	15.88
130	10.51	2.16	18000	47.10	16.09
140	10.32	2.24	19000	37.60	16.98
150	9.42	2.34	20000	37.30	16.21
160	8.09	2.42	21000	37.00	20.13
170	7.43	2.56	22000	38.00	19.24
180	7.60	2.62	23000	38.70	19.64
190	7.43	2.67	24000	38.60	20.54
200	7.26	2.76	25000	38.90	20.14
220	9.11	2.92	14000	43.70	13.76
240	10.88	3.09	15000	43.40	14.30
260	11.75	3.23	16000	40.90	15.16
280	11.55	3.38	17000	44.40	15.88
300	11.36	3.51	18000	47.10	16.09
320	12.03	3.63	19000	37.60	16.98
340	12.69	3.73	20000	37.30	16.21
360	13.33	4.03	21000	37.00	20.13
380	14.00	4.00	22000	38.00	19.24
400	14.63	4.09	23000	38.70	19.64
450	15.33	4.31	24000	38.60	20.54
500	16.03	4.64	25000	38.90	20.14
550	16.65	5.09			
600	17.29	5.49			
650	17.64	5.82			
700	18.00	5.94			
750	18.39	6.16			
800	18.79	6.58			
850	19.10	6.72			
900	19.42	6.81			
950	19.58	7.10			
1000	19.75	7.41			

<Mode 3, 7, 11>

Frequency (MHz)	Antenna Factor (dB)	Cable Loss (dB)	Frequency (MHz)	Antenna Factor (dB)	Cable Loss (dB)
30	15.35	1.01	1000	24.10	3.92
35	13.63	1.04	2000	27.40	5.66
40	11.11	1.09	3000	30.00	7.20
45	10.59	1.24	4000	32.60	9.36
50	6.47	1.43	5000	33.40	9.16
55	5.83	1.39	6000	34.20	10.70
60	5.18	1.59	7000	35.30	12.16
65	4.81	1.41	8000	36.90	13.12
70	4.43	1.43	9000	38.10	13.81
75	5.10	1.55	10000	39.00	14.83
80	5.91	1.56	11000	38.60	15.83
85	7.33	1.62	12000	39.50	17.11
90	8.74	1.41	13000	39.30	17.62
95	9.05	1.81	14000	41.60	18.37
100	9.36	1.68	15000	40.60	19.10
110	9.65	1.73	16000	37.20	19.72
120	9.97	1.79	17000	40.20	21.98
130	10.51	1.93	18000	48.90	21.22
140	10.32	2.06	19000	37.60	23.90
150	9.42	2.09	20000	37.30	24.07
160	8.09	2.12	21000	37.00	25.49
170	7.43	2.12	22000	38.00	24.92
180	7.60	2.12	23000	38.70	25.60
190	7.43	2.21	24000	38.60	25.70
200	7.26	2.29	25000	38.90	26.54
220	9.11	2.42			
240	10.88	2.54			
260	11.75	2.66			
280	11.55	2.76			
300	11.36	2.85			
320	12.03	3.10			
340	12.69	3.36			
360	13.33	3.49			
380	14.00	3.50			
400	14.63	3.51			
450	15.33	3.55			
500	16.03	3.81			
550	16.65	4.05			
600	17.29	4.23			
650	17.64	4.63			
700	18.00	4.74			
750	18.39	4.95			
800	18.79	5.06			
850	19.10	5.18			
900	19.42	5.40			
950	19.58	5.91			
1000	19.75	5.58			

7. 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. 03, 2002	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001-008	9 KHz – 30 MHz	Apr. 29, 2003	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001-009	9 KHz – 30 MHz	Apr. 29, 2003	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	Jan. 07, 2003	Conduction (CO01-HY)
50 ohm BNC type Terminal	NOBLE	50ohm	TM013	50 ohm	Apr. 24, 2003	Conduction (CO01-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	Jun. 22, 2002 (for Mode 1,2,5,6,9,10)	Radiation (03CH03-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	Jun. 21, 2003 (for Mode 3,4,7,8,11,12)	Radiation (03CH03-HY)
Spectrum analyzer	R&S	FSP30	100004/040	9KHZ~40GHz	Aug. 06, 2003	Radiation (03CH03-HY)
Receiver	SCHAFFNER	SCR 3501	417	9 KHz –1GHz	Feb. 20, 2003	Radiation (03CH03-HY)
Amplifier	HP	8447D	2944A09072	100KHz – 1.3GHz	Oct. 21, 2002	Radiation (03CH03-HY)
Amplifier	MITEQ	AFS44	879981	100MHz~26.5GHz	Aug. 12, 2002 (for Mode 1,2,5,6,9,10)	Radiation (03CH03-HY)
Amplifier	MITEQ	AFS44	879981	100MHz~26.5GHz	Jul. 10, 2003 (for Mode 3,4,7,8,11,12)	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2687	30MHz –2GHz	Dec. 21, 2002	Radiation (03CH03-HY)
Horn Antenna	COM-POWER	AH-118	10094	1GHz – 18GHz	Apr. 10, 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)
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz~1GHz	Jan. 02, 2003	Radiation (03CH03-HY)
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170154	15GHz~40GHz	May 09, 2003	Radiation (03CH03-HY)
RF Cable-HIGH	Jye Bao	RG142	CB030-HIGH	1GHz~29.5GHz	Mar. 14, 2003	Radiation
Power meter	R&S	NRVS	100444	DC~40GHz	May 28, 2003	Conducted
Power sensor	R&S	NRV-Z55	100049	DC~40GHz	May 28, 2003	Conducted
Power Sensor	R&S	NRV-Z32	100057	30MHz-6GHz	May 28, 2003	Conducted
AC power source	HPC	HPA-500W	HPA-9100024	AC 0~300V	May 27, 2003	Conducted
Temp. and Humidity Chamber	KSON	THS-C3L	612	N/A	Oct. 02, 2002	Conducted

- Calibration Interval of instruments listed above is one year.

8. Uncertainty of Test Site

Uncertainty of Radiated Emission Measurement

Contribution	Probability Distribution	3m
Antenna factor calibration	normal(k=2)	±1
cable loss calibration	normal(k=2)	±0.3
RCV/SPA specification	rectangular	±2
Antenna Directivity	rectangular	±3
Antenna Factor V.S. Height	rectangular	±2
Antenna Factor Interpolation for Frequency	rectangular	±0.25
site imperfection	rectangular	±2
Mismatch Receiver VSWR $\Gamma 1=0.09$ Antenna VSWR $\Gamma 2=0.67$ Uncertainty=20log(1-$\Gamma 1*\Gamma 2$)	U-shaped	±0.54
combined standard uncertainty Ue(y)	normal	±2.7
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	normal (k=2)	±5.4

$U=\sqrt{\{(1/2)^2+(0.3/2)^2+(2^2+0.5^2+2^2+0.25^2+2^2)/3+(0.54)^2/2\}}=2.2$ for 10m test distance

$U=\sqrt{\{(1/2)^2+(0.3/2)^2+(2^2+3^2+2^2+0.25^2+2^2)/3+(0.54)^2/2\}}=2.7$ for 3m test distance

Uncertainty of Conducted Emission Measurement

Contribution	Probability Distribution	150KHz – 30MHz
Cable and I/P attenuator calibration	normal(k=2)	±0.3
RCV/SPA specification	rectangular	±2
LISN coupling specification	rectangular	±1.5
Transducer factor frequency interpolation	rectangular	±0.2
Mismatch Receiver VSWR $\Gamma 1=0.09$ LISN VSWR $\Gamma 2=0.33$ Uncertainty=20log(1-$\Gamma 1*\Gamma 2$)	U-shaped	0.2
combined standard uncertainty Ue(y)	normal	±1.66
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	normal (k=2)	±3.32

$U=\sqrt{\{(0.3/2)^2+(2^2+1.5^2+0.2^2)/3+(0.2)^2/2\}}=1.66$