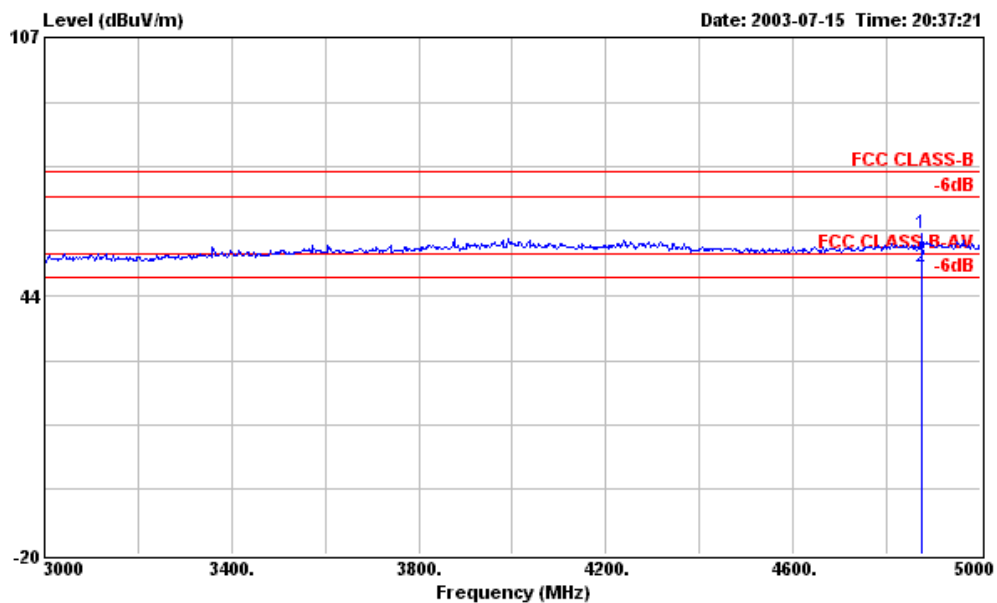




Site : site
Condition : 3m HORN-ANT-6741 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103
MEMO : TX CH06 2437MHz
: 1.5m+5dBi Ceiling

➤ For 5GHz ~ 25GHz

Remark: Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Limits	Emission	Level	Margin	Detect		
	Polarity	Factor	Loss							
(MHz)		(dB/m)	(dB)	(dBuV)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dB)	Mode
2438.000	H	28.30	6.26	64.00	-	-	98.56	84722.74		Peak
2438.000	H	28.30	6.26	57.52	-	-	92.08	40179.08		A.V.
4876.000	H	33.17	9.06	16.28	74.00	5011.87	58.51	842.36	-15.49	Peak
4876.000	H	33.17	9.09	11.00	54.00	501.19	53.26	460.26	-0.74	A.V.
2436.000	V	28.29	6.26	71.30	-	-	105.85	196110.12		Peak
2436.000	V	28.29	6.26	65.83	-	-	100.38	104472.02		A.V.
4876.000	V	33.17	9.09	16.39	74.00	5011.87	58.65	856.05	-15.35	Peak
4876.000	V	33.17	9.09	8.37	54.00	501.19	50.63	340.02	-3.37	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.

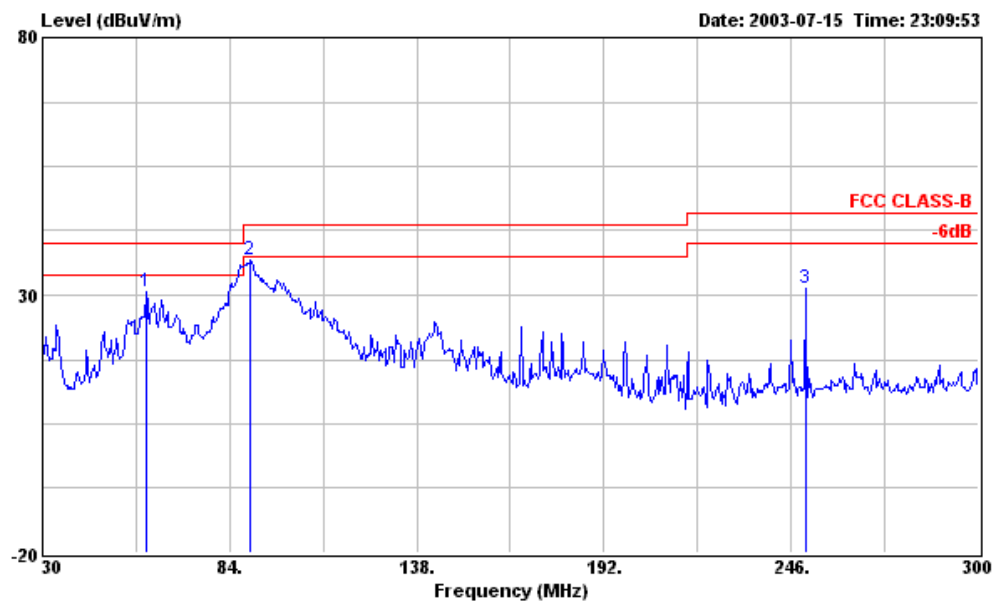
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: 
Jay Zhong

- Test Mode: Mode 6
- Test Distance: 3 M
- Temperature: 29.9 °C
- Relative Humidity: 72 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

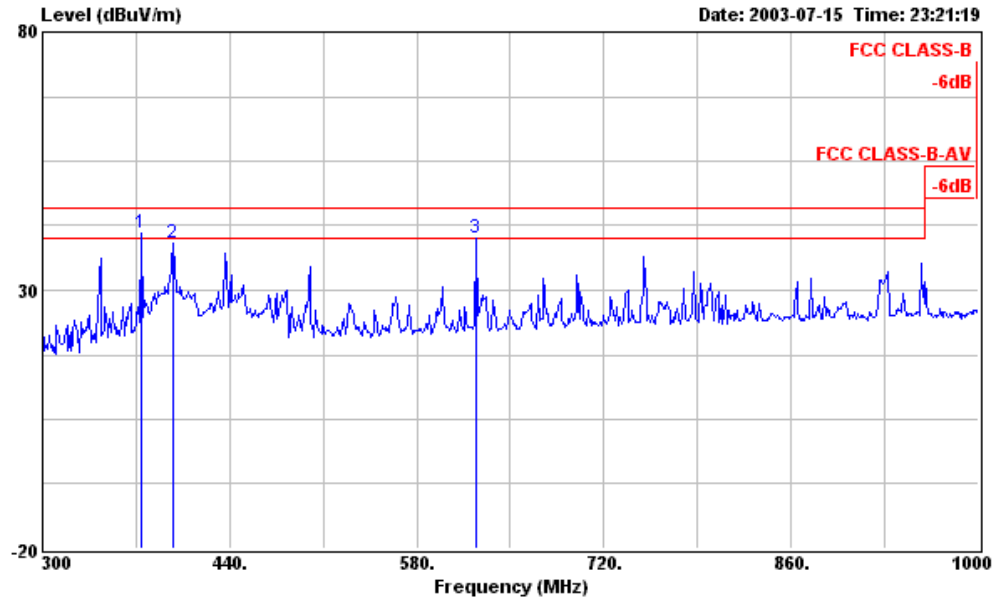
■ The test was passed at the minimum margin that marked by the frame in the following test record

■ Spurious Emission



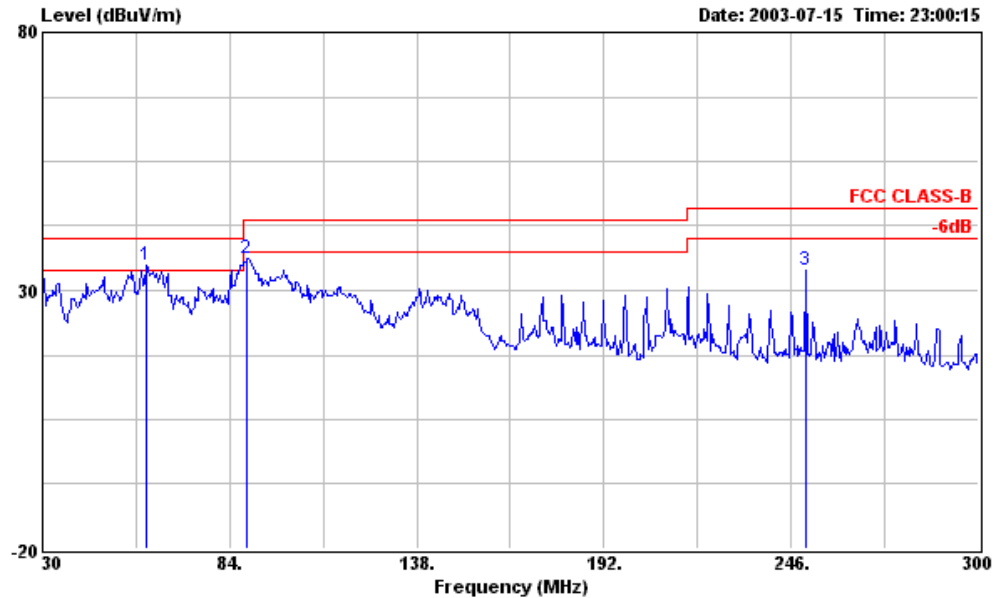
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+5dBi Ceiling

	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	30.54	-9.46	40.00	50.88	5.16	1.58	27.08	Peak	---	---
2	89.940	36.72	-6.78	43.50	53.53	8.78	1.43	27.02	Peak	---	---
3	250.050	31.20	-14.80	46.00	43.85	11.34	2.61	26.60	Peak	---	---



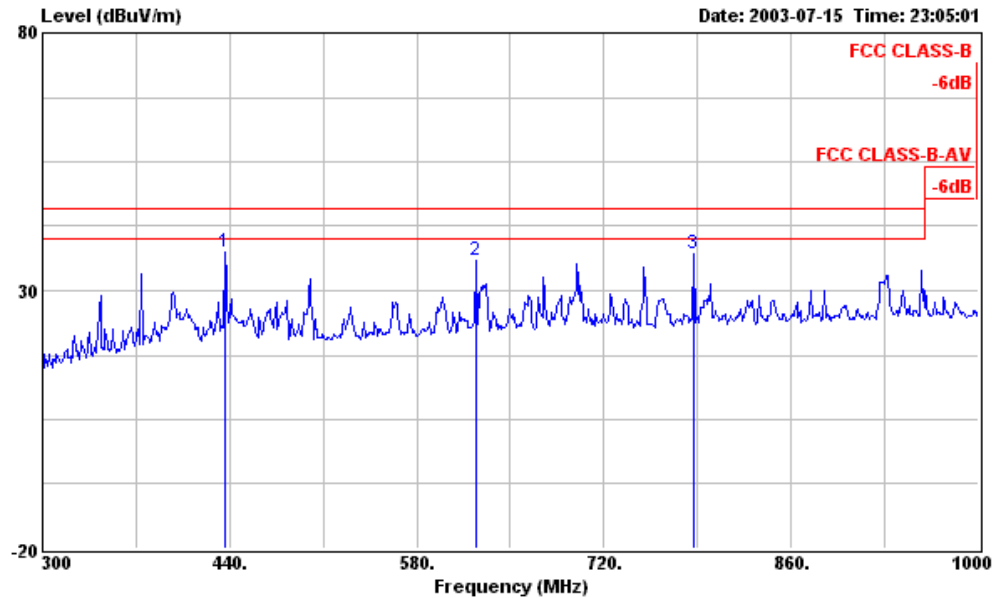
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+5dBi Ceiling

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	374.200	40.98	-5.02	46.00	50.70	13.82	3.50	27.04	Peak	---	---
2	397.300	38.98	-7.02	46.00	48.11	14.54	3.51	27.18	Peak	---	---
3	624.100	39.96	-6.04	46.00	46.08	17.46	4.42	28.00	Peak	---	---



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

	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	35.03	-4.97	40.00	55.37	5.16	1.58	27.08	Peak	---	---
2	89.130	36.17	-7.33	43.50	53.01	8.74	1.44	27.02	Peak	---	---
3	250.050	33.75	-12.25	46.00	46.40	11.34	2.61	26.60	Peak	---	---

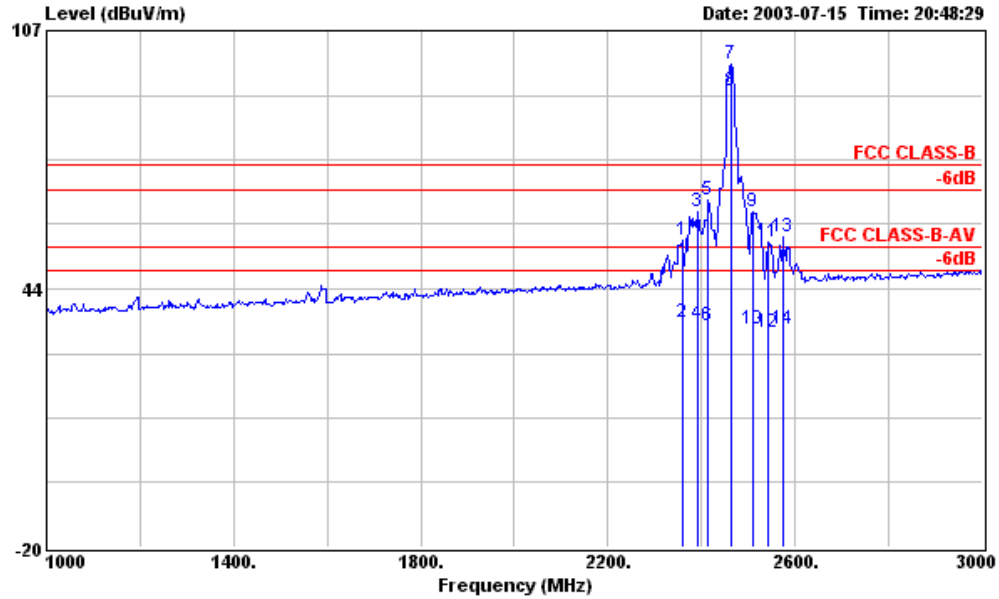


Site : site
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103
MEMO : TX CH11 2462MHz
: 1.5m+5dBi Ceiling

Freq	Level	Over	Limit	Read	Probe	Cable	Preamp	Remark	Ant	Table
		Limit	Line							
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	436.500	37.32	-8.68	46.00	46.02	15.14	3.54	27.38 Peak	---	---
2	624.100	35.82	-10.18	46.00	41.94	17.46	4.42	28.00 Peak	---	---
3	786.500	37.13	-8.87	46.00	41.42	18.68	5.03	28.00 Peak	---	---

FCC TEST REPORT

Report No. : F341403-01



Site : site
 Condition : 3m HORN-ANT-6741 HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+5dBi Ceiling

	Freq	Level	Over Limit	Limit	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	2358.000	55.57	-18.43	74.00	48.44	28.14	6.15	27.16	Peak	---	---
2	2358.000	35.16	-18.84	54.00	28.03	28.14	6.15	27.16	Average	---	---
3	2390.000	62.30	-11.70	74.00	55.06	28.20	6.20	27.16	Peak	---	---
4	2390.000	34.75	-19.25	54.00	27.51	28.20	6.20	27.16	Average	---	---
5	2414.000	65.19	-8.81	74.00	57.87	28.25	6.23	27.16	Peak	---	---
6	2414.000	34.38	-19.62	54.00	27.06	28.25	6.23	27.16	Average	---	---
9	2510.000	62.43	-11.57	74.00	54.78	28.47	6.36	27.18	Peak	---	---
10	2510.000	33.69	-20.31	54.00	26.04	28.47	6.36	27.18	Average	---	---
11	2542.000	54.92	-19.08	74.00	47.11	28.57	6.42	27.18	Peak	---	---
12	2542.000	32.84	-21.16	54.00	25.03	28.57	6.42	27.18	Average	---	---
13	2574.000	56.24	-17.76	74.00	48.29	28.67	6.47	27.19	Peak	---	---
14	2574.000	33.78	-20.22	54.00	25.83	28.67	6.47	27.19	Average	---	---

SPORTON International Inc.

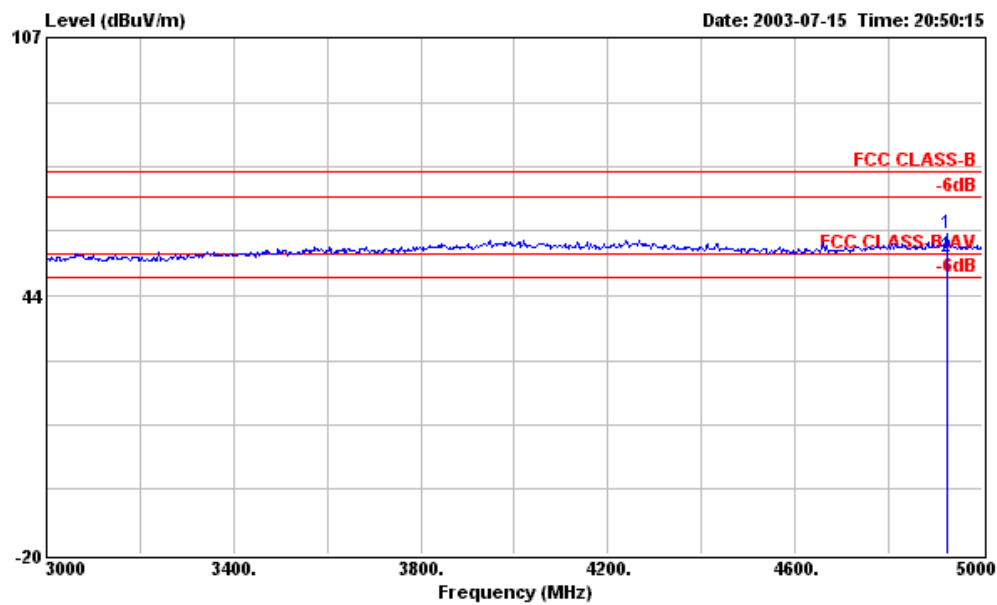
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 81 of 154

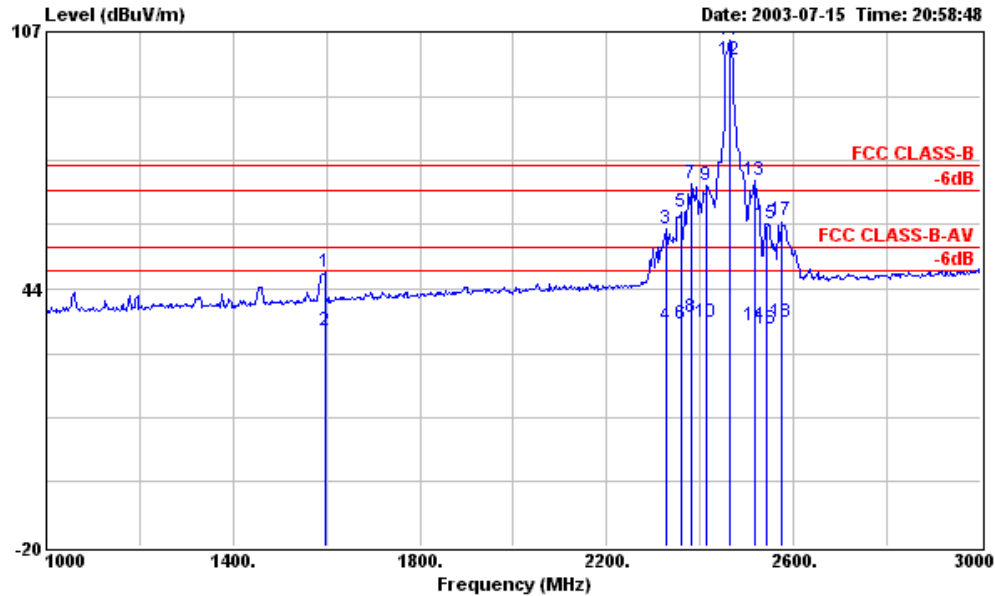
Issued Date : Aug. 12, 2003



Site : site
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103
MEMO : TX CH11 2462MHz
: 1.5m+5dBi Ceiling

FCC TEST REPORT

Report No. : F341403-01



Site : site
 Condition : 3m HORN-ANT-6741 VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+5dBi Ceiling

	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	47.42	-26.58	74.00	43.83	25.75	4.89	27.05	Peak	---	---
2	1596.000	33.04	-20.96	54.00	29.45	25.75	4.89	27.05	Average	---	---
3	2326.000	58.55	-15.45	74.00	51.52	28.07	6.11	27.15	Peak	---	---
4	2326.000	34.61	-19.39	54.00	27.58	28.07	6.11	27.15	Average	---	---
5	2358.000	62.39	-11.61	74.00	55.26	28.14	6.15	27.16	Peak	---	---
6	2358.000	34.85	-19.15	54.00	27.72	28.14	6.15	27.16	Average	---	---
7 !	2382.000	69.34	-4.66	74.00	62.14	28.18	6.18	27.16	Peak	100	28
8	2382.000	36.48	-17.52	54.00	29.28	28.18	6.18	27.16	Average	---	---
9 !	2414.000	69.07	-4.93	74.00	61.75	28.25	6.23	27.16	Peak	---	---
10	2414.000	35.27	-18.73	54.00	27.95	28.25	6.23	27.16	Average	---	---
13 !	2516.000	70.10	-3.90	74.00	62.42	28.49	6.37	27.18	Peak	---	---
14	2516.000	34.62	-19.38	54.00	26.94	28.49	6.37	27.18	Average	---	---
15	2542.000	59.64	-14.36	74.00	51.83	28.57	6.42	27.18	Peak	---	---
16	2542.000	33.80	-20.20	54.00	25.99	28.57	6.42	27.18	Average	---	---
17	2574.000	60.20	-13.80	74.00	52.25	28.67	6.47	27.19	Peak	---	---
18	2574.000	35.06	-18.94	54.00	27.11	28.67	6.47	27.19	Average	---	---

SPORTON International Inc.

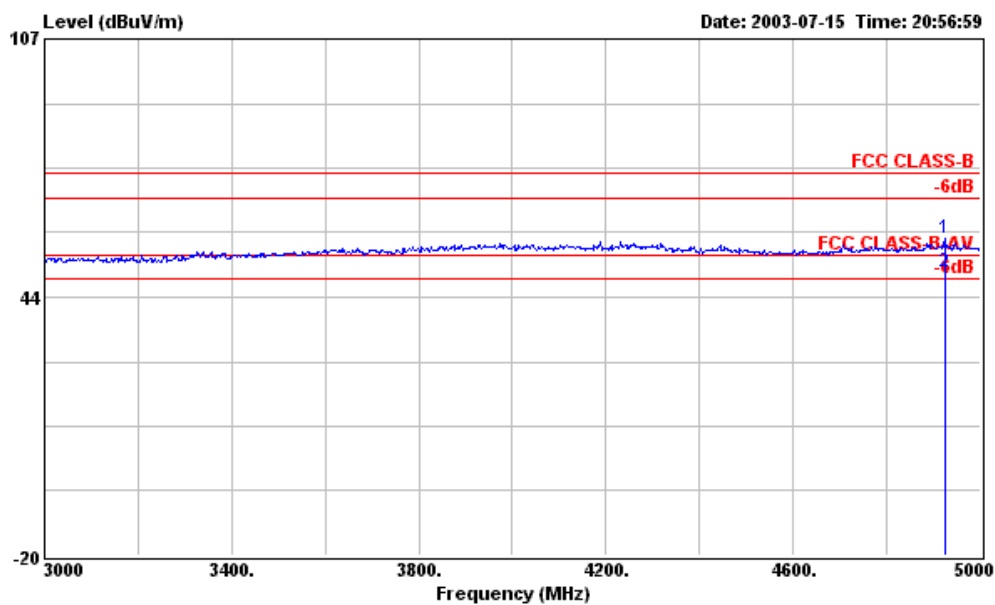
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 83 of 154

Issued Date : Aug. 12, 2003



Site : site
Condition : 3m HORN-ANT-6741 VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103
MEMO : TX CH11 2462MHz
: 1.5m+5dBi Ceiling

➤ For 5GHz ~ 25GHz

Remark: Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Limits	Emission	Level	Margin	Detect		
	Polarity	Factor	Loss							
(MHz)		(dB/m)	(dB)	(dBuV)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dB)	Mode
2462.000	H	28.35	6.29	64.25	-	-	98.89	88003.51		Peak
2462.000	H	28.35	6.29	57.49	-	-	92.13	40411.04		A.V.
4924.000	H	33.27	9.12	16.24	74.00	5011.87	58.63	854.08	-15.37	Peak
4924.000	H	33.27	9.12	10.75	54.00	501.19	53.14	453.94	-0.86	A.V.
2462.000	V	28.35	6.29	70.50	-	-	105.14	180717.41		Peak
2462.000	V	28.35	6.29	65.53	-	-	100.17	101976.48		A.V.
4924.000	V	33.27	9.12	15.64	74.00	5011.87	58.03	797.08	-15.97	Peak
4924.000	V	33.27	9.12	7.48	54.00	501.19	49.87	311.53	-4.13	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.

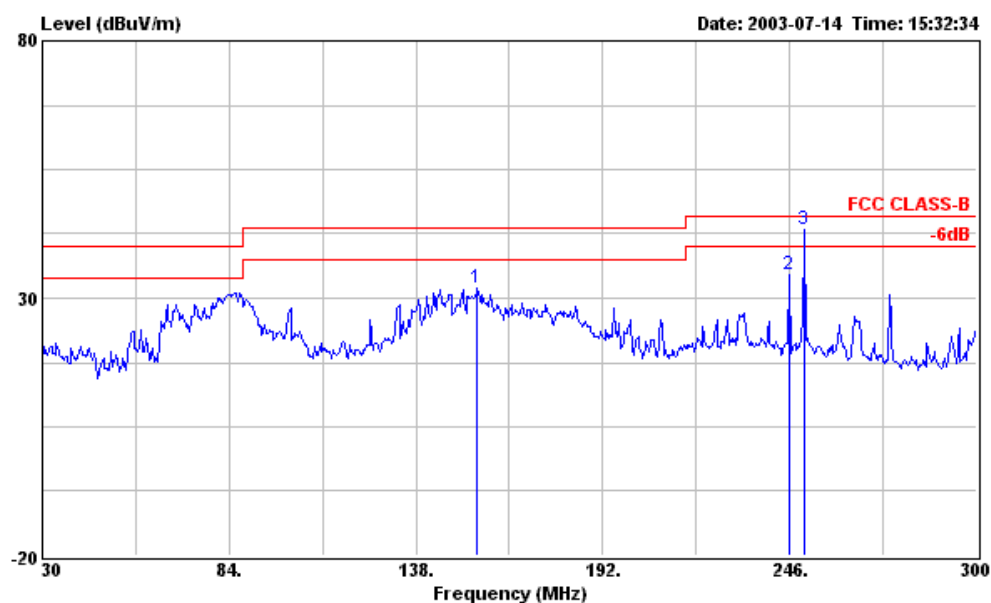
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: 
Jay Zhong

- Test Mode: Mode 7
- Test Distance: 3 M
- Temperature: 29.9 °C
- Relative Humidity: 72 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

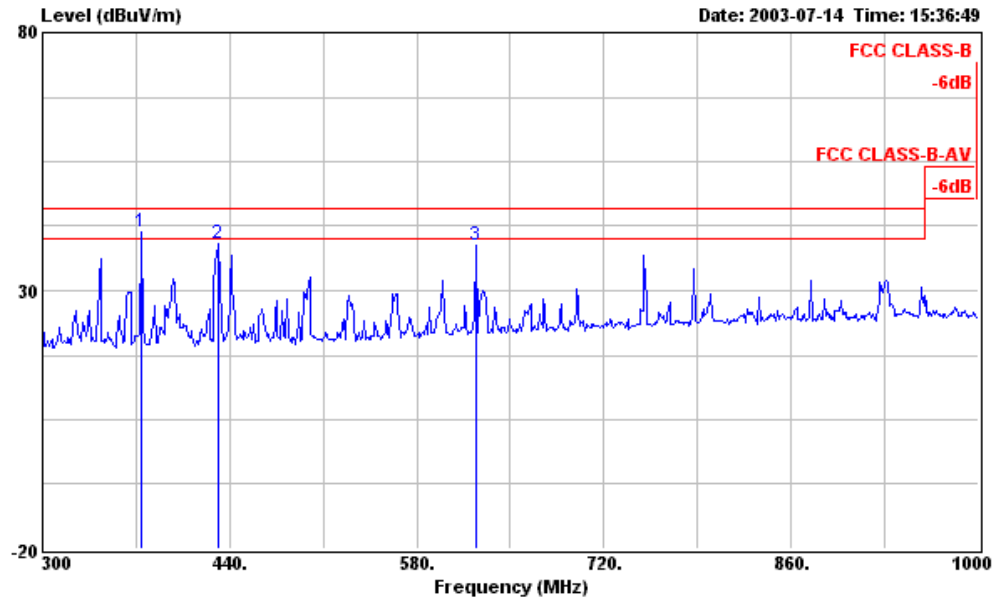
■ The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 1 m, turn table degree is 74°

■ Spurious Emission



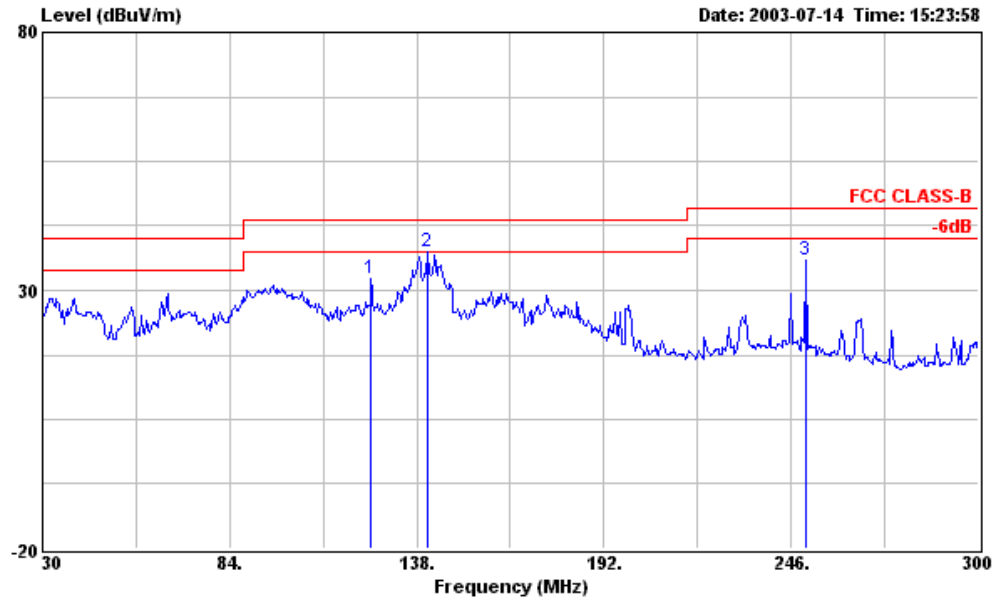
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+9dBi Dipole

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	155.820	31.84	-11.66	43.50	47.88	8.62	2.11	26.77	Peak	---	---
2	245.730	34.49	-11.51	46.00	47.35	11.16	2.58	26.60	Peak	---	---
3 !	250.050	43.27	-2.73	46.00	55.92	11.34	2.61	26.60	Peak	100	55



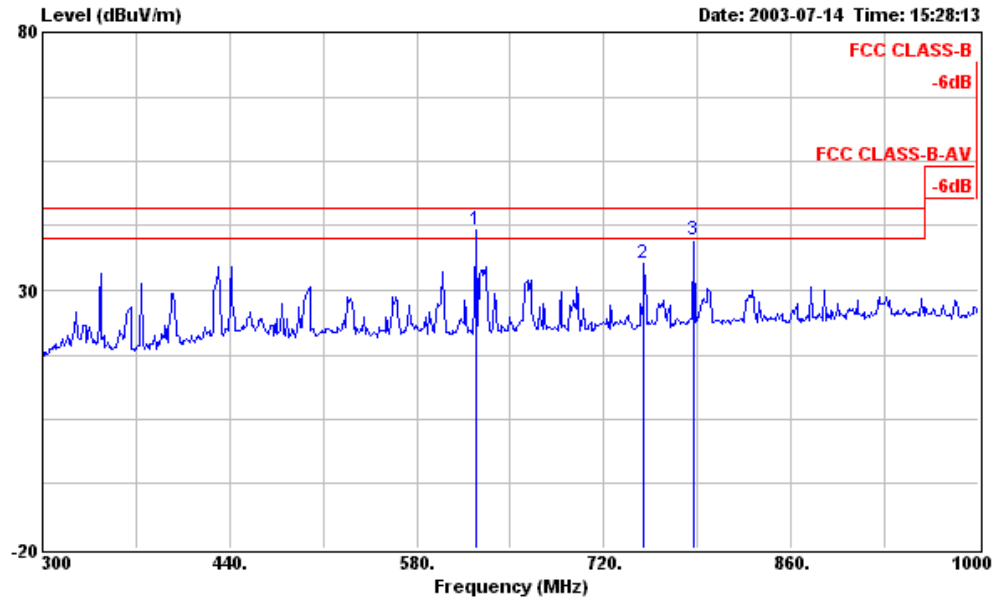
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+9dBi Dipole

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	374.200	41.48	-4.52	46.00	51.20	13.82	3.50	27.04	Peak	---	---
2	430.900	39.13	-6.87	46.00	47.87	15.07	3.54	27.35	Peak	---	---
3	624.100	38.77	-7.23	46.00	44.89	17.46	4.42	28.00	Peak	---	---



Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+9dBi Dipole

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	124.770	32.17	-11.33	43.50	46.96	10.25	1.86	26.90	Peak	---	---
2	140.970	37.51	-5.99	43.50	52.10	10.18	2.07	26.84	Peak	---	---
3	250.050	35.73	-10.27	46.00	48.38	11.34	2.61	26.60	Peak	---	---

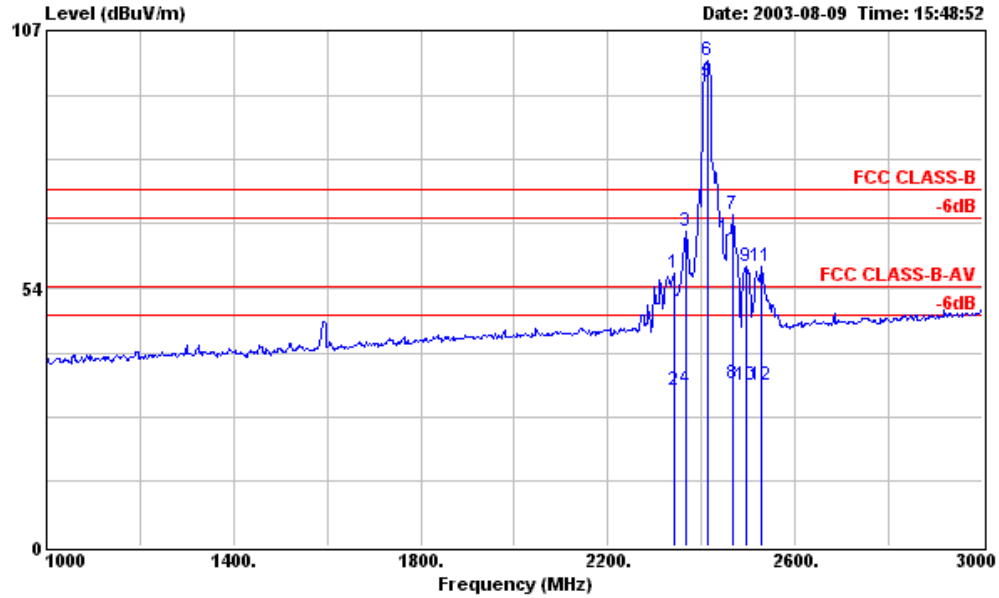


Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+9dBi Dipole

	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	41.74	-4.26	46.00	47.86	17.46	4.42	28.00	Peak	---	---
2	750.100	35.17	-10.83	46.00	39.82	18.40	4.95	28.00	Peak	---	---
3	786.500	39.58	-6.42	46.00	43.87	18.68	5.03	28.00	Peak	---	---

FCC TEST REPORT

Report No. : F341403-01



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

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	2340.000	56.51	-17.49	74.00	49.43	28.10	6.13	27.15	Peak	---	---
2	2340.000	32.14	-21.86	54.00	25.06	28.10	6.13	27.15	Average	---	---
3	2366.000	65.18	-8.82	74.00	58.03	28.15	6.16	27.16	Peak	---	---
4	2366.000	32.65	-21.35	54.00	25.50	28.15	6.16	27.16	Average	---	---
7	2468.000	68.90	-5.10	74.00	61.41	28.36	6.30	27.17	Peak	---	---
8	2468.000	33.81	-20.19	54.00	26.32	28.36	6.30	27.17	Average	---	---
9	2494.000	57.94	-16.06	74.00	50.37	28.42	6.33	27.18	Peak	---	---
10	2494.000	33.52	-20.48	54.00	25.95	28.42	6.33	27.18	Average	---	---
11	2526.000	58.00	-16.00	74.00	50.27	28.52	6.39	27.18	Peak	---	---
12	2526.000	33.28	-20.72	54.00	25.55	28.52	6.39	27.18	Average	---	---

SPORTON International Inc.

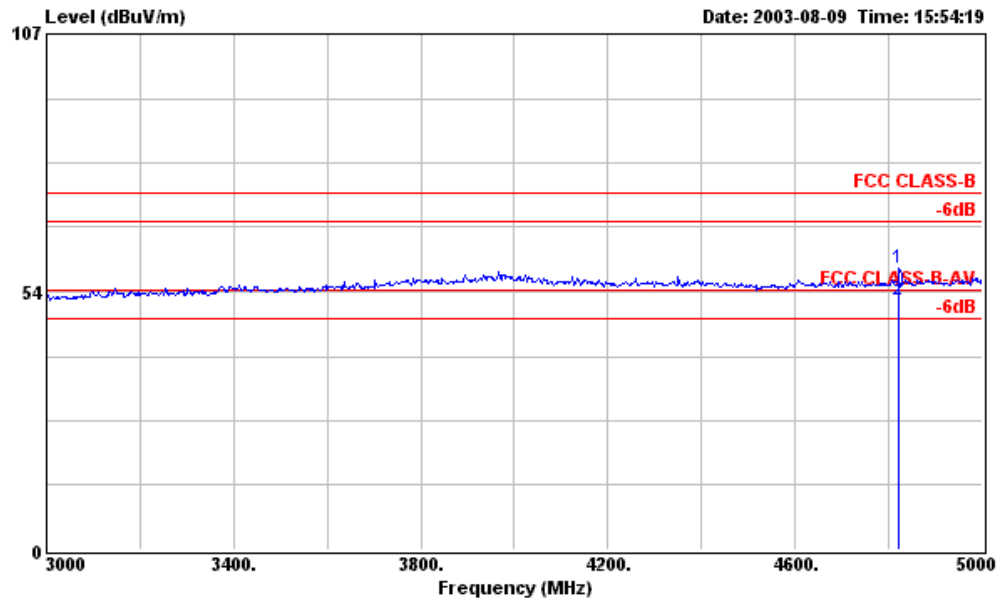
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

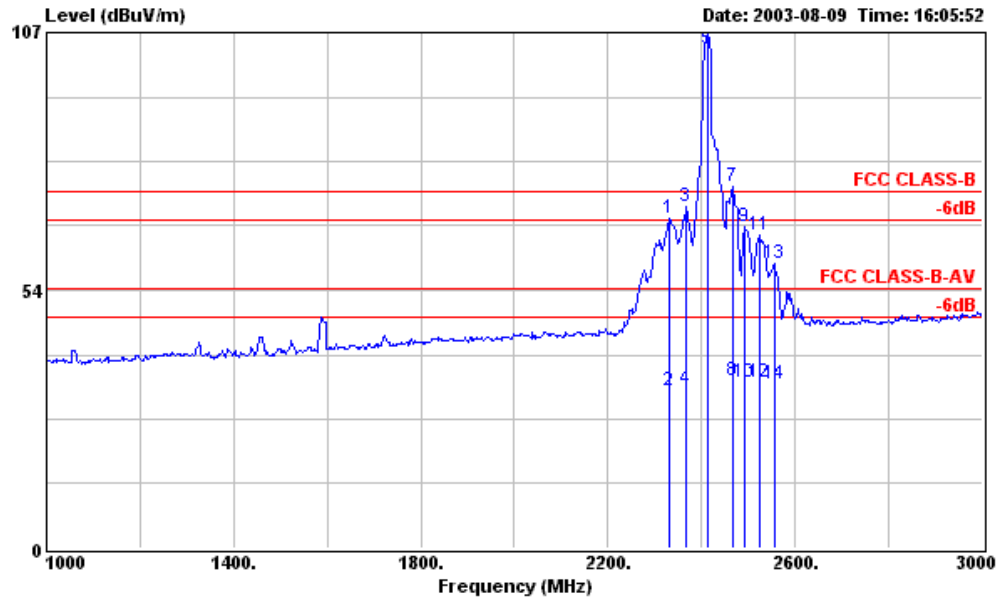
FCC ID. : PY3ME103

Page No. : 90 of 154

Issued Date : Aug. 12, 2003

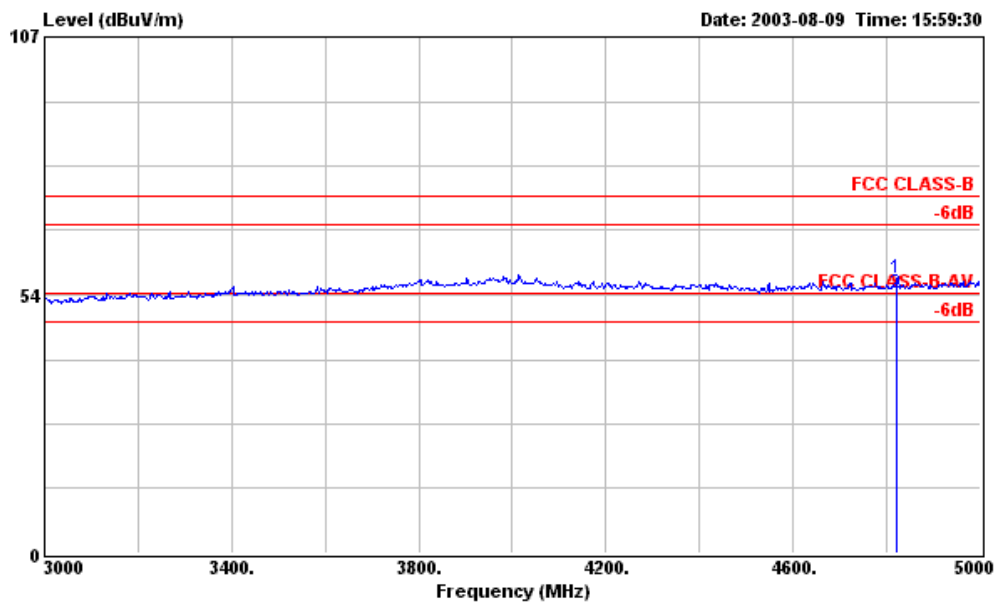


Site : 03CH03-HY
Condition : 3m HORN-ANT-6741 HORIZONTAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103
MEMO : TX CH01 2412MHz
: 1.5m+9dBi Dipole



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

	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 !	2332.000	68.54	-5.46	74.00	61.49	28.08	6.12	27.15	Peak	---	---
2	2332.000	32.58	-21.42	54.00	25.53	28.08	6.12	27.15	Average	---	---
3 !	2366.000	70.74	-3.26	74.00	63.59	28.15	6.16	27.16	Peak	---	---
4	2366.000	32.83	-21.17	54.00	25.68	28.15	6.16	27.16	Average	---	---
7 X	2468.000	74.90	0.90	74.00	67.41	28.36	6.30	27.17	Peak	---	---
8	2468.000	34.71	-19.29	54.00	27.22	28.36	6.30	27.17	Average	---	---
9	2492.000	66.65	-7.35	74.00	59.09	28.41	6.33	27.18	Peak	---	---
10	2492.000	34.56	-19.44	54.00	27.00	28.41	6.33	27.18	Average	---	---
11	2524.000	64.80	-9.20	74.00	57.08	28.51	6.39	27.18	Peak	---	---
12	2524.000	34.35	-19.65	54.00	26.63	28.51	6.39	27.18	Average	---	---
13	2556.000	58.97	-15.03	74.00	51.10	28.61	6.44	27.18	Peak	---	---
14	2556.000	34.21	-19.79	54.00	26.34	28.61	6.44	27.18	Average	---	---



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

➤ For 5GHz ~ 25GHz

Remark: Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Limits	Emission	Level	Margin	Detect		
	Polarity	Factor	Loss							
(MHz)		(dB/m)	(dB)	(dBuV)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dB)	Mode
2412.000	H	28.24	6.22	61.63	-	-	96.09	63752.91		A.V.
2412.000	H	28.24	6.22	66.28	-	-	100.74	108893.01		Peak
4822.000	H	33.06	9.06	16.11	74.00	5011.87	58.23	815.64	-15.77	Peak
4822.000	H	33.06	9.06	9.76	54.00	501.19	51.88	392.64	-2.12	A.V.
2412.000	V	28.24	6.22	69.01	-	-	103.47	149107.68		A.V.
2412.000	V	28.24	6.22	72.05	-	-	106.51	211592.37		Peak
4822.000	V	33.06	9.06	14.99	74.00	5011.87	57.11	716.97	-16.89	Peak
4822.000	V	33.06	9.06	11.58	54.00	501.19	53.70	484.17	-0.30	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.

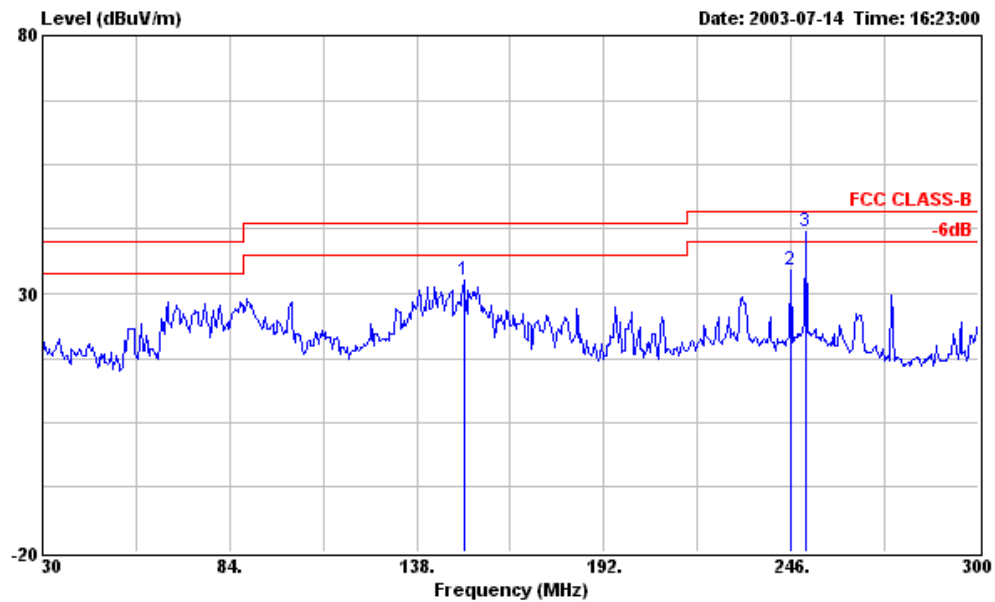
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: 
Jay Zhong

- Test Mode: Mode 8
- Test Distance: 3 M
- Temperature: 29.9 °C
- Relative Humidity: 72 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

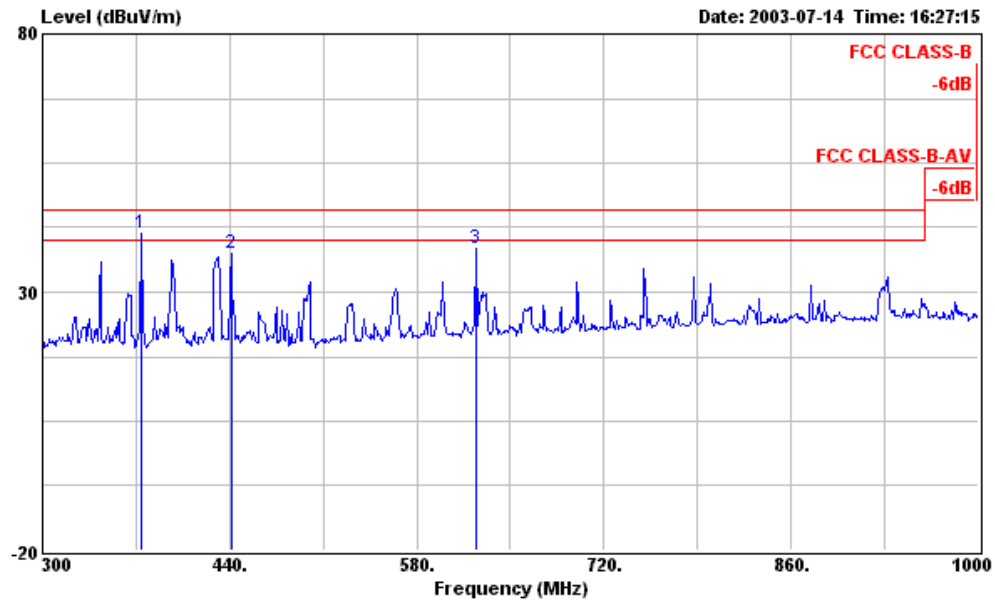
■ The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 1 m, turn table degree is 74°

■ Spurious Emission



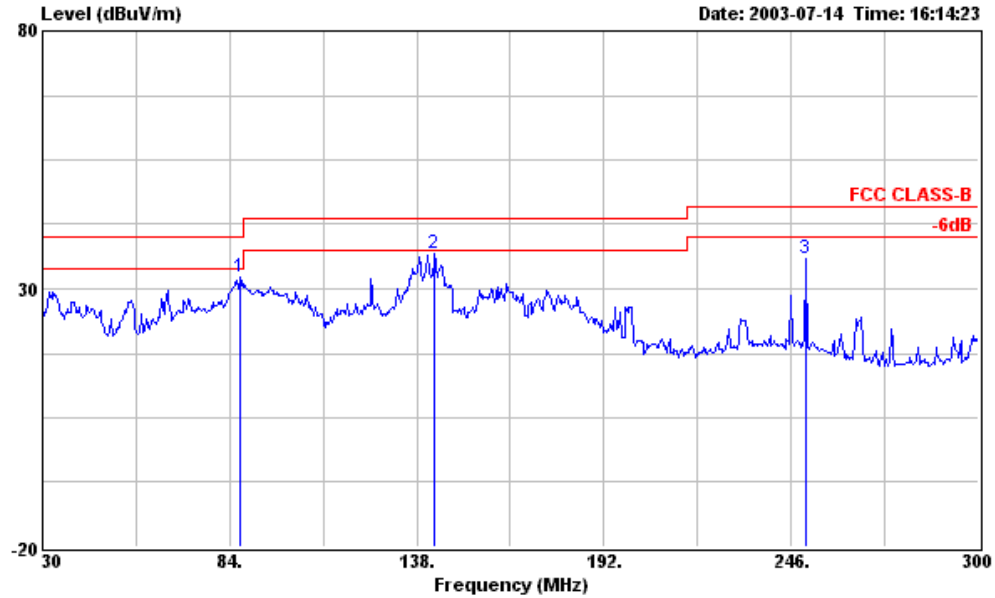
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH06 2437MHz
 : 1.5m+9dBi Dipole

	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	151.500	32.60	-10.90	43.50	48.07	9.22	2.10	26.79	Peak	---	---
2	245.730	34.60	-11.40	46.00	47.46	11.16	2.58	26.60	Peak	---	---
3 !	250.050	42.12	-3.88	46.00	54.77	11.34	2.61	26.60	Peak	---	---



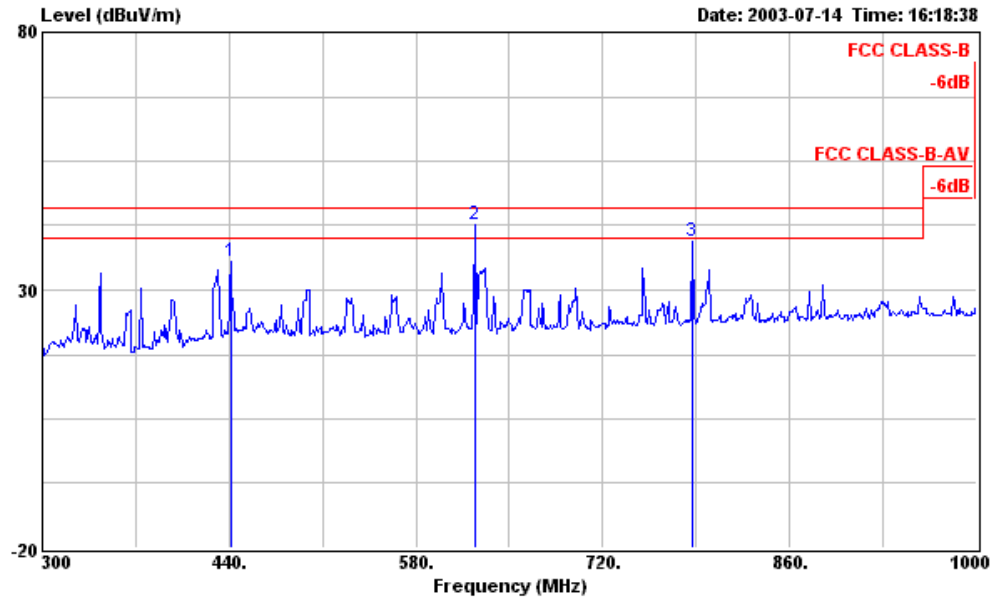
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH06 2437MHz
 : 1.5m+9dBi Dipole

	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	41.27	-4.73	46.00	50.99	13.82	3.50	27.04	Peak	---	---
2	441.400	37.56	-8.44	46.00	46.22	15.21	3.54	27.41	Peak	---	---
3	624.100	38.39	-7.61	46.00	44.51	17.46	4.42	28.00	Peak	---	---



Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH06 2437MHz
 : 1.5m+9dBi Dipole

Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
		dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	86.970	32.25	-7.75	40.00	49.64	8.10	1.54	27.03 Peak	---	---
2	143.130	36.72	-6.78	43.50	51.49	9.99	2.07	26.83 Peak	---	---
3	250.050	35.92	-10.08	46.00	48.57	11.34	2.61	26.60 Peak	---	---

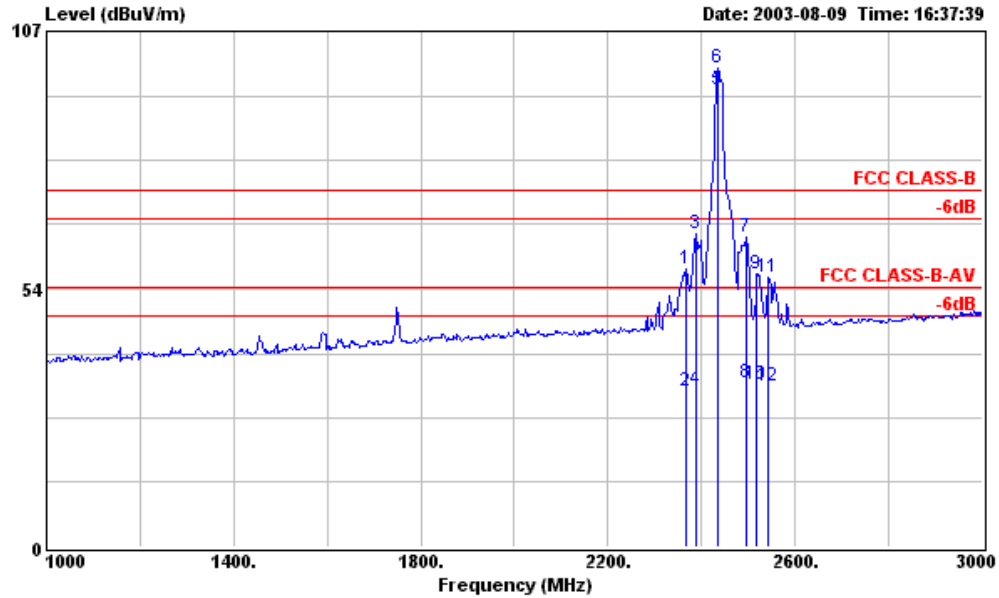


Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH06 2437MHz
 : 1.5m+9dBi Dipole

	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	441.400	35.52	-10.48	46.00	44.18	15.21	3.54	27.41	Peak	---	---
2	624.100	42.78	-3.22	46.00	48.90	17.46	4.42	28.00	Peak	100	39
3	786.500	39.51	-6.49	46.00	43.80	18.68	5.03	28.00	Peak	---	---

FCC TEST REPORT

Report No. : F341403-01



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

	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	2366.000	57.55	-16.45	74.00	50.40	28.15	6.16	27.16	Peak	---	---
2	2366.000	32.31	-21.69	54.00	25.16	28.15	6.16	27.16	Average	---	---
3	2388.000	64.90	-9.10	74.00	57.67	28.20	6.19	27.16	Peak	---	---
4	2388.000	32.67	-21.33	54.00	25.44	28.20	6.19	27.16	Average	---	---
7	2494.000	64.34	-9.66	74.00	56.77	28.42	6.33	27.18	Peak	---	---
8	2494.000	33.95	-20.05	54.00	26.38	28.42	6.33	27.18	Average	---	---
9	2518.000	56.66	-17.34	74.00	48.97	28.49	6.38	27.18	Peak	---	---
10	2518.000	33.76	-20.24	54.00	26.07	28.49	6.38	27.18	Average	---	---
11	2542.000	55.98	-18.02	74.00	48.17	28.57	6.42	27.18	Peak	---	---
12	2542.000	33.42	-20.58	54.00	25.61	28.57	6.42	27.18	Average	---	---

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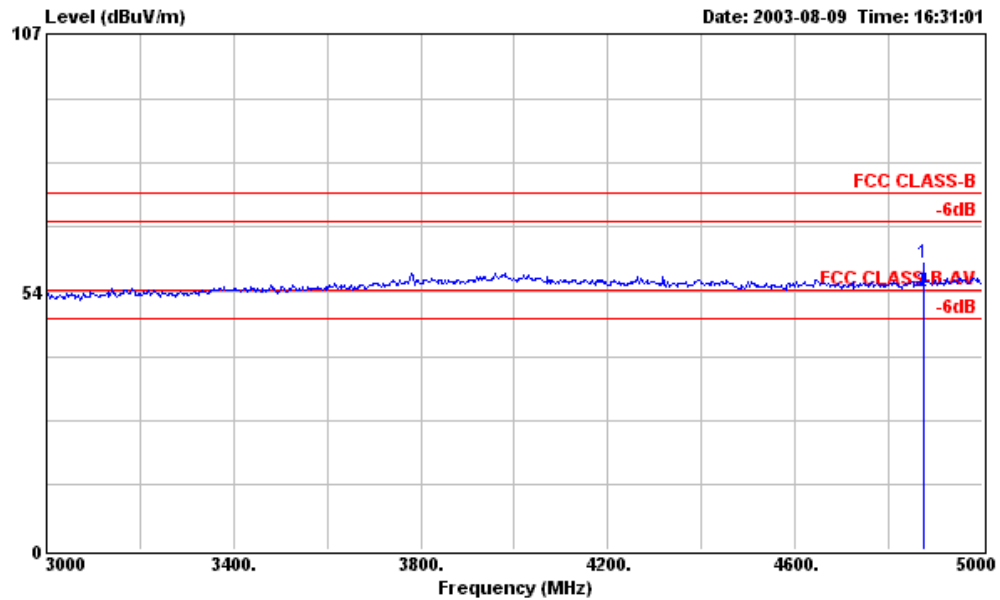
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

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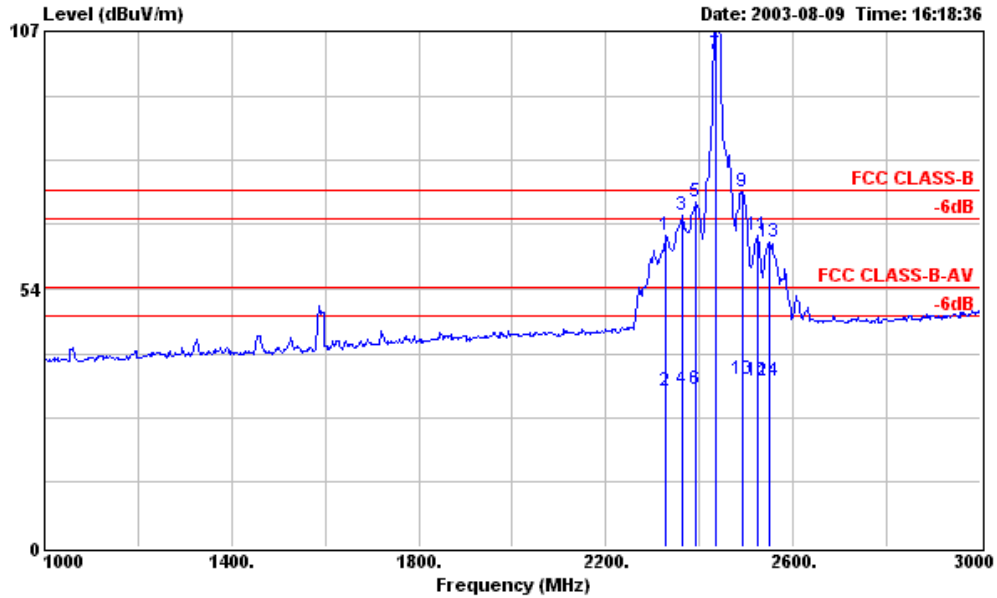
Issued Date : Aug. 12, 2003



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

FCC TEST REPORT

Report No. : F341403-01



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

			Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	2326.000	64.50	-9.50	74.00	57.47	28.07	6.11	27.15	Peak	---	---
2	2326.000	32.28	-21.72	54.00	25.25	28.07	6.11	27.15	Average	---	---
3 !	2364.000	68.76	-5.24	74.00	61.61	28.15	6.16	27.16	Peak	---	---
4	2364.000	32.50	-21.50	54.00	25.35	28.15	6.16	27.16	Average	---	---
5 !	2390.000	71.44	-2.56	74.00	64.20	28.20	6.20	27.16	Peak	---	---
6	2390.000	32.71	-21.29	54.00	25.47	28.20	6.20	27.16	Average	---	---
9 !	2492.000	73.75	-0.25	74.00	66.19	28.41	6.33	27.18	Peak	---	---
10	2492.000	34.65	-19.35	54.00	27.09	28.41	6.33	27.18	Average	---	---
11	2524.000	64.53	-9.47	74.00	56.81	28.51	6.39	27.18	Peak	---	---
12	2524.000	34.51	-19.49	54.00	26.79	28.51	6.39	27.18	Average	---	---
13	2548.000	63.29	-10.71	74.00	55.45	28.59	6.43	27.18	Peak	---	---
14	2548.000	34.38	-19.62	54.00	26.54	28.59	6.43	27.18	Average	---	---

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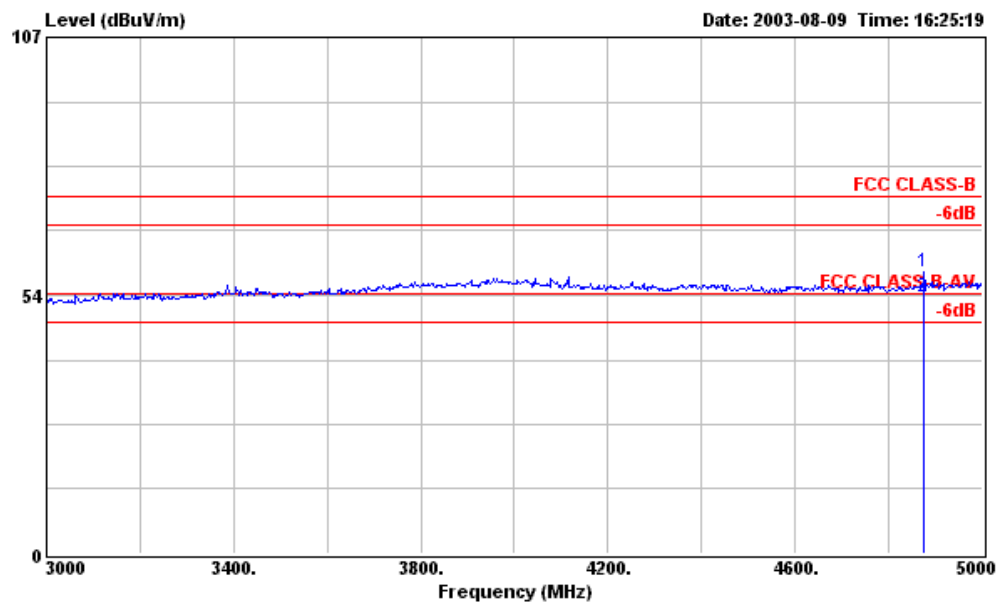
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

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Issued Date : Aug. 12, 2003



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

➤ For 5GHz ~ 25GHz

Remark: Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Limits	Emission	Level	Margin	Detect		
	Polarity	Factor	Loss							
(MHz)		(dB/m)	(dB)	(dBuV)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dB)	Mode
2436.000	H	28.29	6.26	60.33	-	-	94.88	55462.57		A.V.
2436.000	H	28.29	6.26	64.66	-	-	99.21	91306.14		Peak
4876.000	H	33.17	9.09	17.28	74.00	5011.87	59.54	948.42	-14.46	Peak
4876.000	H	33.17	9.09	11.35	54.00	501.19	53.61	479.18	-0.39	A.V.
2436.000	V	28.29	6.26	67.51	-	-	102.06	126765.19		A.V.
2436.000	V	28.29	6.26	73.91	-	-	108.46	264850.01		Peak
4876.000	V	33.17	9.09	16.00	74.00	5011.87	58.26	818.46	-15.74	Peak
4876.000	V	33.17	9.09	10.78	54.00	501.19	53.04	448.75	-0.96	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.

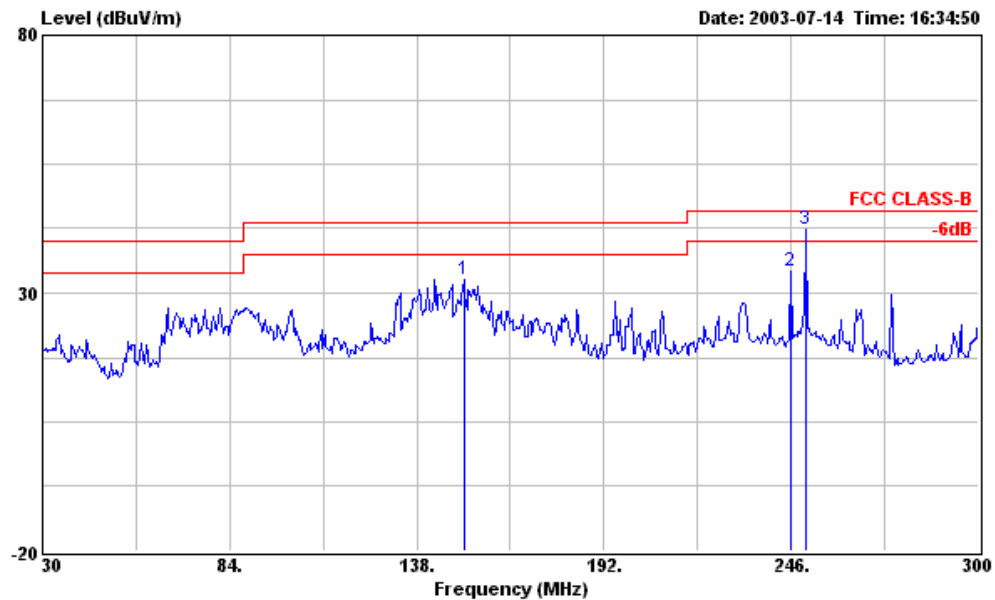
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: 
Jay Zhong

- Test Mode: Mode 9
- Test Distance: 3 M
- Temperature: 29.9 °C
- Relative Humidity: 72 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

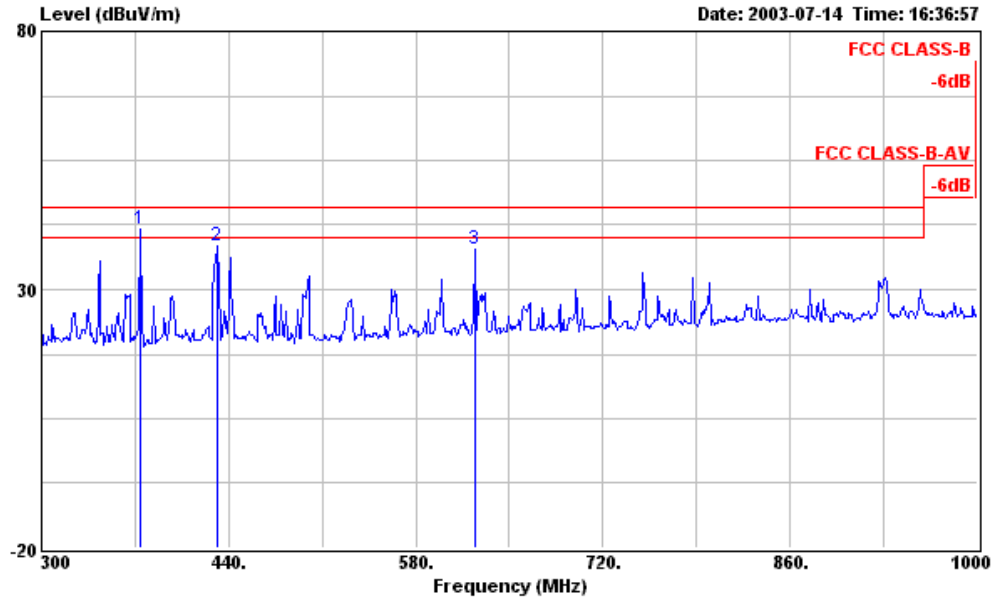
■ The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 1.02 m, turn table degree is 27°

■ Spurious Emission



Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+9dBi Dipole

	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	151.500	32.56	-10.94	43.50	48.03	9.22	2.10	26.79	Peak	---	---
2	245.730	34.34	-11.66	46.00	47.20	11.16	2.58	26.60	Peak	---	---
3 !	250.050	42.39	-3.61	46.00	55.04	11.34	2.61	26.60	Peak	---	---

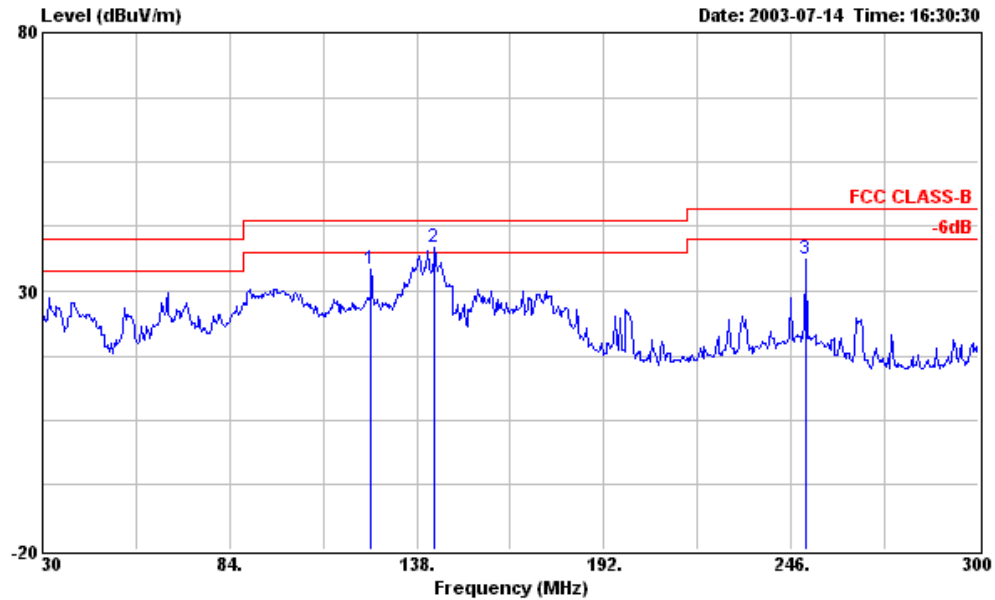


Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+9dBi Dipole

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	374.200	41.53	-4.47	46.00	51.25	13.82	3.50	27.04	Peak	---	---
2	430.900	38.56	-7.44	46.00	47.30	15.07	3.54	27.35	Peak	---	---
3	624.100	37.74	-8.26	46.00	43.86	17.46	4.42	28.00	Peak	---	---

FCC TEST REPORT

Report No. : F341403-01



Site : site
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103
MEMO : TX CH11 2462MHz
: 1.5m+9dBi Dipole

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	124.770	34.11	-9.39	43.50	48.90	10.25	1.86	26.90	Peak	---	---
2	143.130	38.34	-5.16	43.50	53.11	9.99	2.07	26.83	Peak	---	---
3	250.050	36.29	-9.71	46.00	48.94	11.34	2.61	26.60	Peak	---	---

SPORTON International Inc.

TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

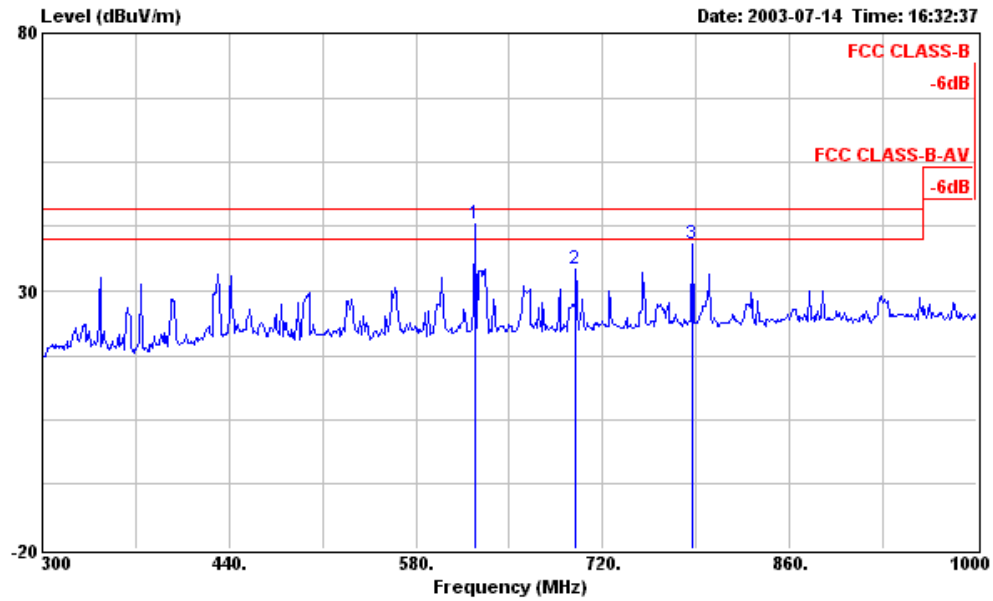
FCC ID. : PY3ME103

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Issued Date : Aug. 12, 2003

FCC TEST REPORT

Report No. : F341403-01



Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+9dBi Dipole

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	624.100	42.83	-3.17	46.00	48.95	17.46	4.42	28.00	Peak	100	48
2	699.700	34.34	-11.66	46.00	39.60	18.00	4.74	28.00	Peak	---	---
3	786.500	39.08	-6.92	46.00	43.37	18.68	5.03	28.00	Peak	---	---

SPORTON International Inc.

TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

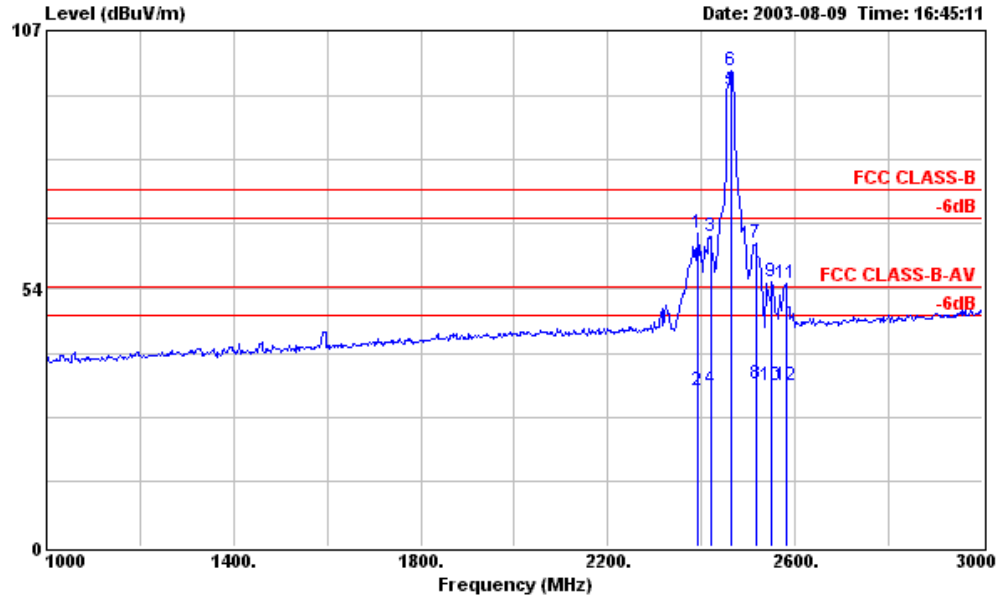
FCC ID. : PY3ME103

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Issued Date : Aug. 12, 2003

FCC TEST REPORT

Report No. : F341403-01



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

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	2390.000	65.00	-9.00	74.00	57.76	28.20	6.20	27.16	Peak	---	---
2	2390.000	32.35	-21.65	54.00	25.11	28.20	6.20	27.16	Average	---	---
3	2420.000	64.25	-9.75	74.00	56.92	28.26	6.23	27.16	Peak	---	---
4	2420.000	32.73	-21.27	54.00	25.40	28.26	6.23	27.16	Average	---	---
7	2516.000	62.83	-11.17	74.00	55.15	28.49	6.37	27.18	Peak	---	---
8	2516.000	33.64	-20.36	54.00	25.96	28.49	6.37	27.18	Average	---	---
9	2550.000	54.91	-19.09	74.00	47.07	28.59	6.43	27.18	Peak	---	---
10	2550.000	33.51	-20.49	54.00	25.67	28.59	6.43	27.18	Average	---	---
11	2580.000	54.63	-19.37	74.00	46.64	28.69	6.49	27.19	Peak	---	---
12	2580.000	33.26	-20.74	54.00	25.27	28.69	6.49	27.19	Average	---	---

SPORTON International Inc.

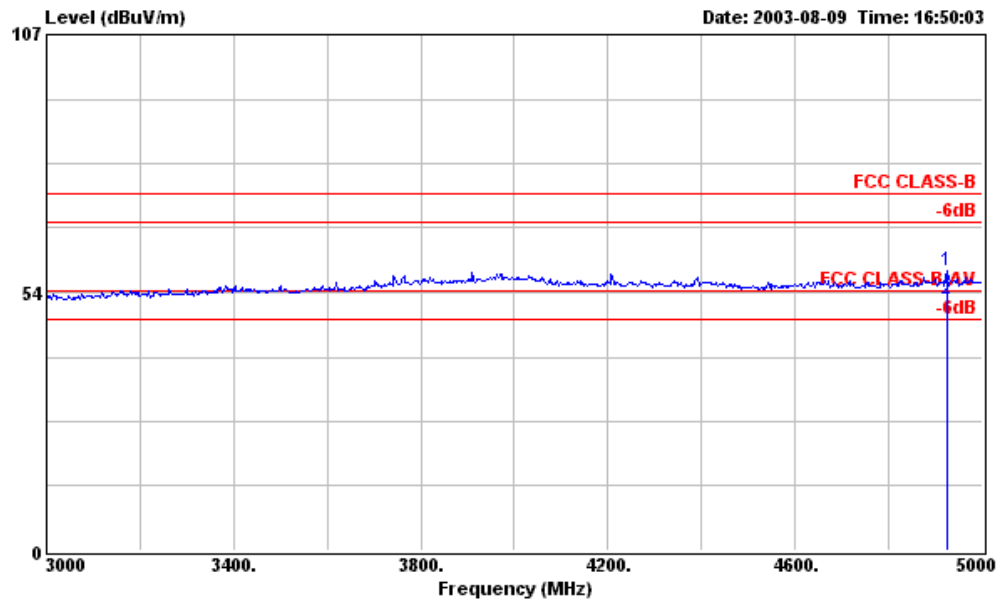
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 108 of 154

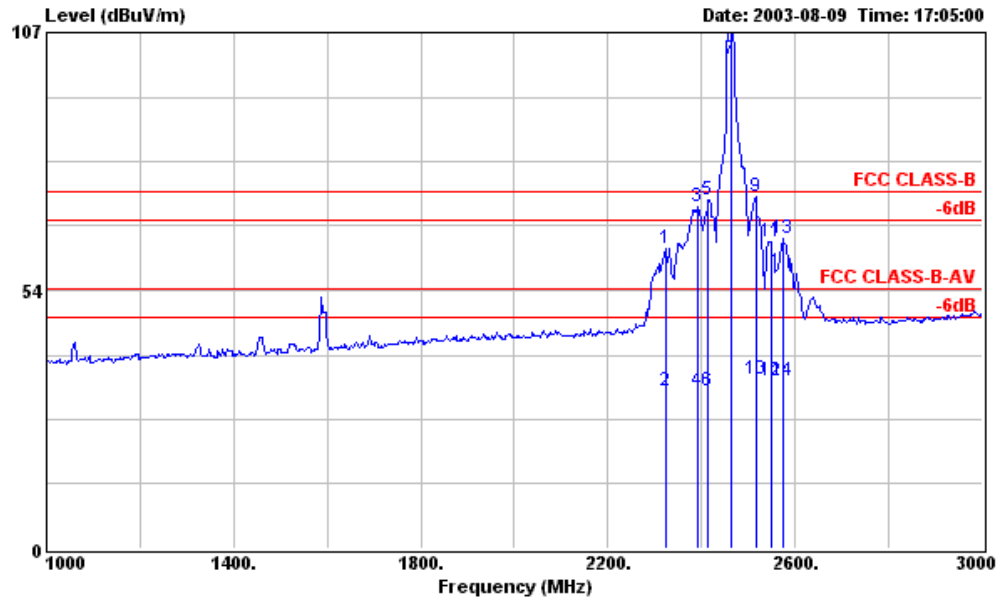
Issued Date : Aug. 12, 2003



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

FCC TEST REPORT

Report No. : F341403-01



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

	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		deg
1	2324.000	62.08	-11.92	74.00	55.05	28.07	6.11	27.15	Peak
2	2324.000	32.66	-21.34	54.00	25.63	28.07	6.11	27.15	Average
3	2390.000	70.77	-3.23	74.00	63.53	28.20	6.20	27.16	Peak
4	2390.000	32.73	-21.27	54.00	25.49	28.20	6.20	27.16	Average
5	2414.000	72.30	-1.70	74.00	64.98	28.25	6.23	27.16	Peak
6	2414.000	32.81	-21.19	54.00	25.49	28.25	6.23	27.16	Average
9	2516.000	72.85	-1.15	74.00	65.17	28.49	6.37	27.18	Peak
10	2516.000	34.94	-19.06	54.00	27.26	28.49	6.37	27.18	Average
11	2548.000	63.67	-10.33	74.00	55.83	28.59	6.43	27.18	Peak
12	2548.000	34.75	-19.25	54.00	26.91	28.59	6.43	27.18	Average
13	2574.000	64.15	-9.85	74.00	56.20	28.67	6.47	27.19	Peak
14	2574.000	34.66	-19.34	54.00	26.71	28.67	6.47	27.19	Average

SPORTON International Inc.

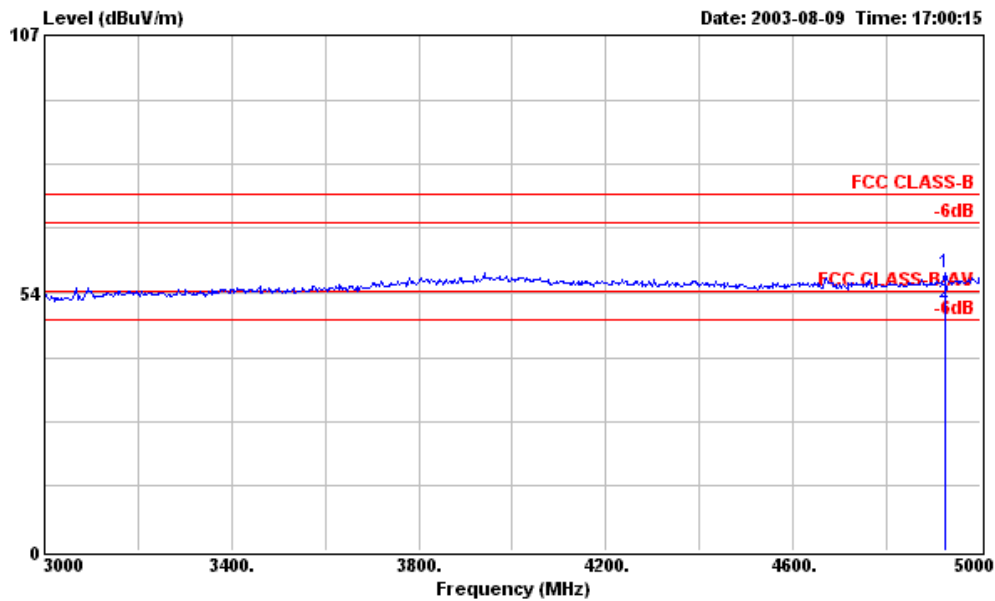
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 110 of 154

Issued Date : Aug. 12, 2003



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

➤ For 5GHz ~ 25GHz

Remark: Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Limits	Emission	Level	Margin	Detect		
	Polarity	Factor	Loss							
(MHz)		(dB/m)	(dB)	(dBuV)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dB)	Mode
2462.000	H	28.35	6.29	59.74	-	-	94.38	52360.04		A.V.
2462.000	H	28.35	6.29	63.92	-	-	98.56	84722.74		Peak
4924.000	H	33.27	9.12	15.76	74.00	5011.87	58.15	808.16	-15.85	Peak
4924.000	H	33.27	9.12	9.77	54.00	501.19	52.16	405.51	-1.84	A.V.
2462.000	V	28.35	6.29	66.73	-	-	101.37	117084.66		A.V.
2462.000	V	28.35	6.29	75.05	-	-	109.69	305140.60		Peak
4924.000	V	33.27	9.12	15.23	74.00	5011.87	57.62	760.33	-16.38	Peak
4924.000	V	33.27	9.12	8.88	54.00	501.19	51.27	366.02	-2.73	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 Zhong

- Test Mode: Mode 10
- Test Distance: 3 M
- Temperature: 29.9 °C
- Relative Humidity: 72 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

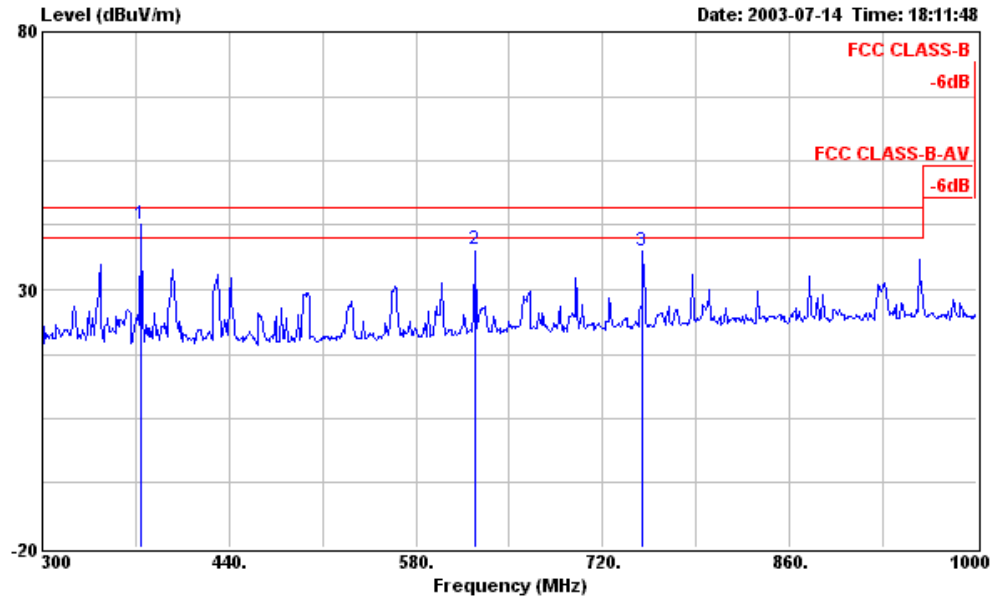
■ The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 1.02 m, turn table degree is 68°

■ Spurious Emission



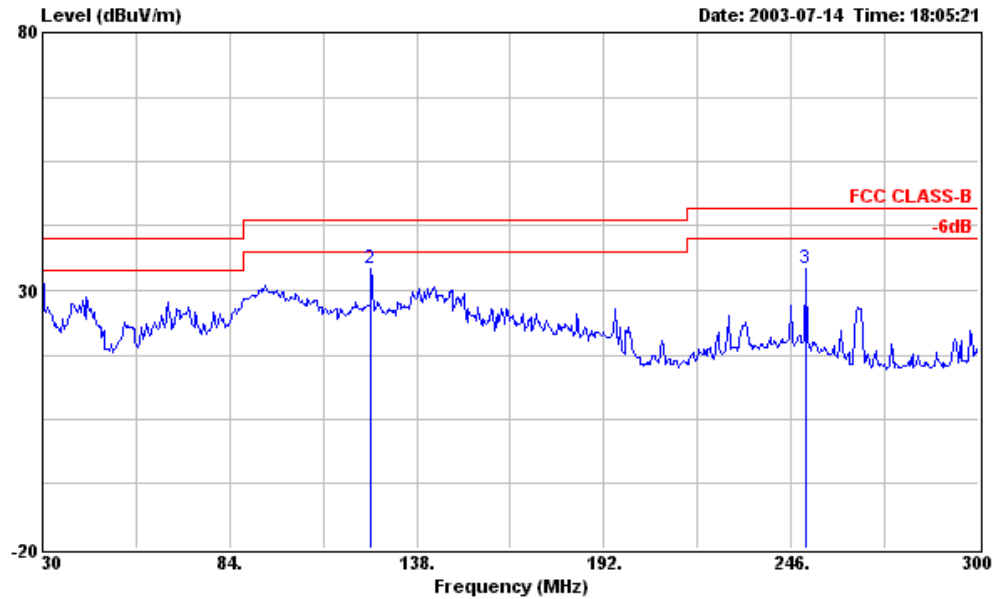
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+18dBi Patch

	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	124.770	35.65	-7.85	43.50	50.44	10.25	1.86	26.90	Peak	---	---
2	245.730	33.42	-12.58	46.00	46.28	11.16	2.58	26.60	Peak	---	---
3 !	250.050	40.20	-5.80	46.00	52.85	11.34	2.61	26.60	Peak	---	---



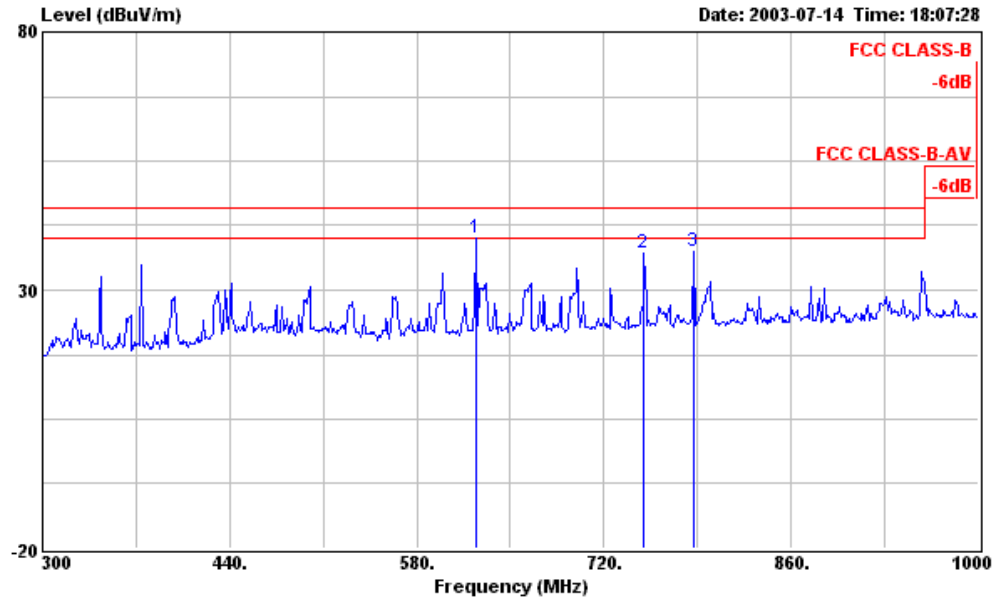
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+18dBi Patch

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	374.200	42.73	-3.27	46.00	52.45	13.82	3.50	27.04	Peak	100	52
2	624.100	37.63	-8.37	46.00	43.75	17.46	4.42	28.00	Peak	---	---
3	750.100	37.45	-8.55	46.00	42.10	18.40	4.95	28.00	Peak	---	---



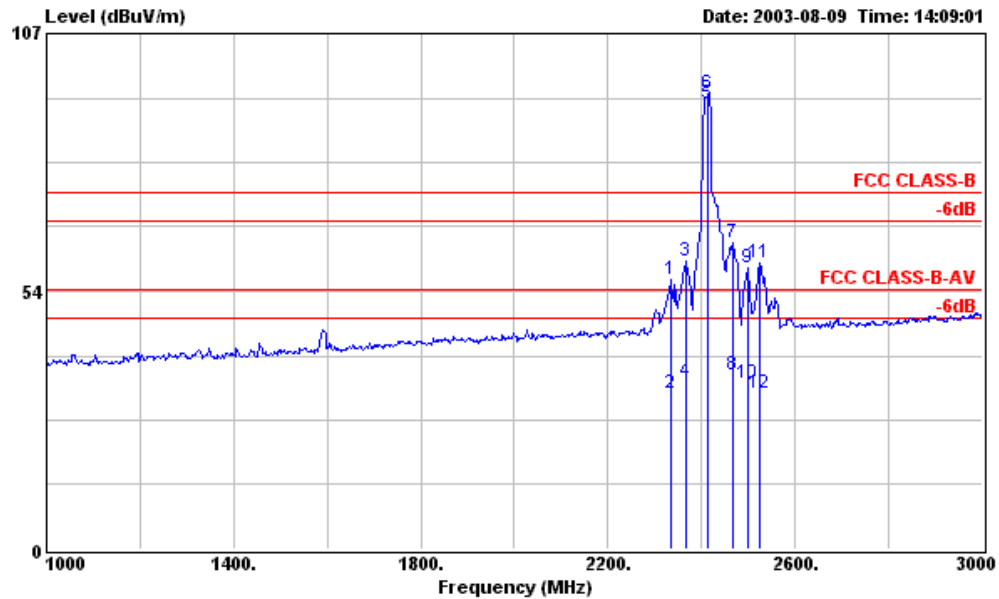
Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+18dBi Patch

	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	30.000	33.35	-6.65	40.00	44.09	15.35	1.01	27.10	Peak	---	---
2	124.770	34.23	-9.27	43.50	49.02	10.25	1.86	26.90	Peak	---	---
3	250.050	34.12	-11.88	46.00	46.77	11.34	2.61	26.60	Peak	---	---



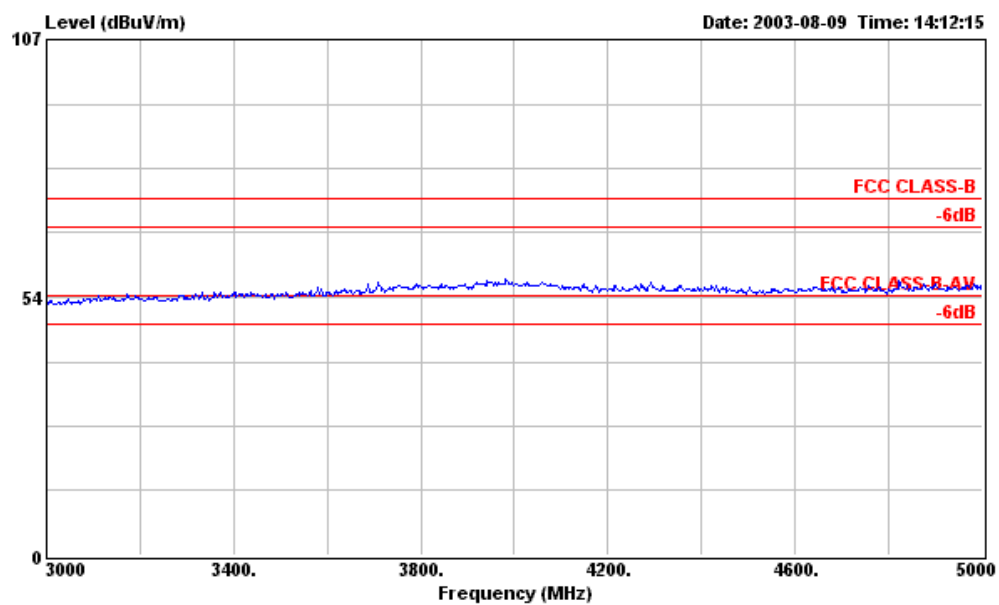
Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+18dBi Patch

	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	39.93	-6.07	46.00	46.05	17.46	4.42	28.00	Peak	---	---
2	750.100	37.20	-8.80	46.00	41.85	18.40	4.95	28.00	Peak	---	---
3	786.500	37.57	-8.43	46.00	41.86	18.68	5.03	28.00	Peak	---	---



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

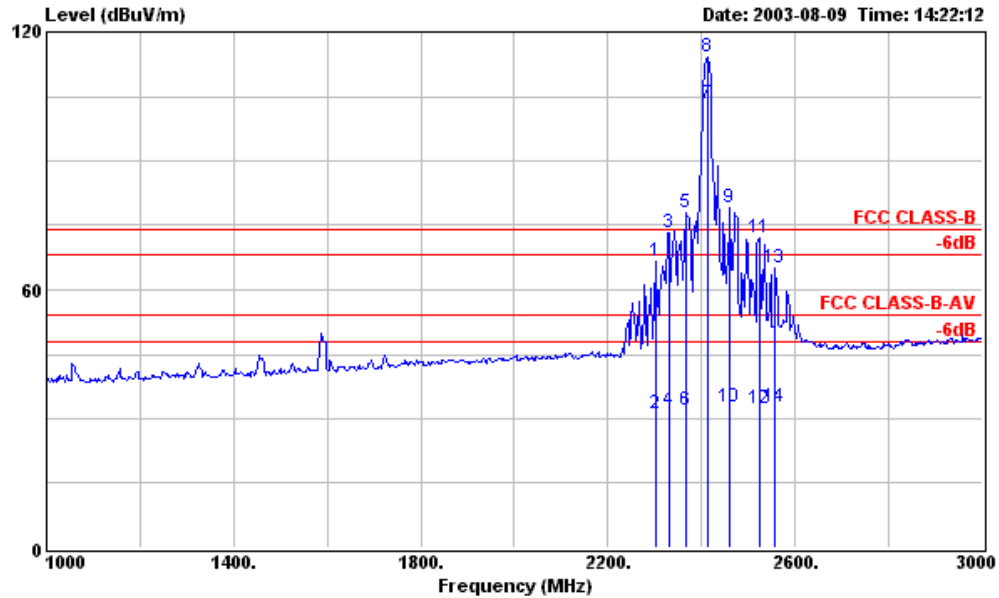
	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	2334.000	55.93	-18.07	74.00	48.87	28.09	6.12	27.15	Peak	---	---
2	2334.000	32.41	-21.59	54.00	25.35	28.09	6.12	27.15	Average	---	---
3	2366.000	59.63	-14.37	74.00	52.48	28.15	6.16	27.16	Peak	---	---
4	2366.000	34.73	-19.27	54.00	27.58	28.15	6.16	27.16	Average	---	---
7	2468.000	63.74	-10.26	74.00	56.25	28.36	6.30	27.17	Peak	---	---
8	2468.000	36.18	-17.82	54.00	28.69	28.36	6.30	27.17	Average	---	---
9	2500.000	58.30	-15.70	74.00	50.70	28.44	6.34	27.18	Peak	---	---
10	2500.000	34.22	-19.78	54.00	26.62	28.44	6.34	27.18	Average	---	---
11	2524.000	59.30	-14.70	74.00	51.58	28.51	6.39	27.18	Peak	---	---
12	2524.000	32.35	-21.65	54.00	24.63	28.51	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
MEMO : TX CH01 2412MHz
: 1.5m+18dBi Patch

FCC TEST REPORT

Report No. : F341403-01



Site : 03CH03-HY
 Condition : 3m HORN-ANT-6741 VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH01 2412MHz
 : 1.5m+18dB Patch

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	2302.000	66.46	-7.54	74.00	59.51	28.02	6.08	27.15	Peak	---	---
2	2302.000	31.28	-22.72	54.00	24.33	28.02	6.08	27.15	Average	---	---
3 !	2332.000	73.39	-0.61	74.00	66.34	28.08	6.12	27.15	Peak	---	---
4	2332.000	32.13	-21.87	54.00	25.08	28.08	6.12	27.15	Average	---	---
5 X	2366.000	77.80	3.80	74.00	70.65	28.15	6.16	27.16	Peak	---	---
6	2366.000	32.05	-21.95	54.00	24.90	28.15	6.16	27.16	Average	---	---
9 X	2460.000	78.96	4.96	74.00	71.50	28.34	6.29	27.17	Peak	---	---
10	2460.000	32.71	-21.29	54.00	25.25	28.34	6.29	27.17	Average	---	---
11 !	2524.000	72.27	-1.73	74.00	64.55	28.51	6.39	27.18	Peak	---	---
12	2524.000	32.30	-21.70	54.00	24.58	28.51	6.39	27.18	Average	---	---
13	2558.000	65.24	-8.76	74.00	57.36	28.62	6.45	27.19	Peak	---	---
14	2558.000	32.62	-21.38	54.00	24.74	28.62	6.45	27.19	Average	---	---

SPORTON International Inc.

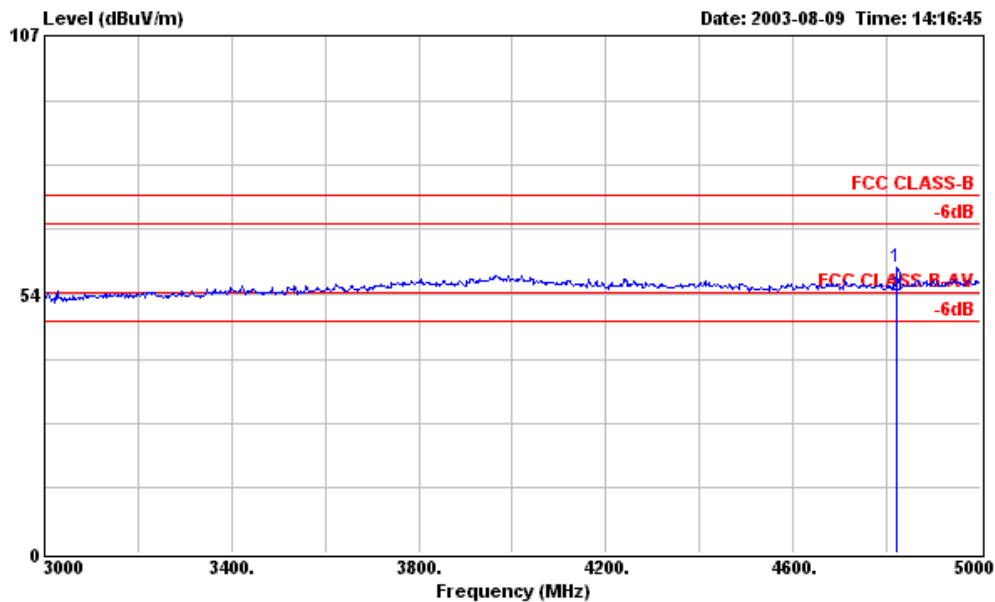
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 119 of 154

Issued Date : Aug. 12, 2003



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

➤ For 5GHz ~ 25GHz

Remark: Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Limits	Emission	Level	Margin	Detect		
	Polarity	Factor	Loss							
(MHz)		(dB/m)	(dB)	(dBuV)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dB)	Mode
2414.000	H	28.25	6.23	57.86	-	-	92.34	41399.97		Peak
2414.000	H	28.25	6.23	59.96	-	-	94.44	52722.99		A.V.
2412.000	V	28.24	6.22	68.96	-	-	103.42	148251.81		Peak
2412.000	V	28.24	6.22	79.65	-	-	114.11	507574.74		A.V.
4822.000	V	33.06	9.06	16.99	74.00	5011.87	59.11	902.61	-14.89	Peak
4822.000	V	33.06	9.06	10.95	54.00	501.19	53.07	450.30	-0.93	A.V.
4822.000	H						-			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 11
- Test Distance: 3 M
- Temperature: 29.9 °C
- Relative Humidity: 72 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

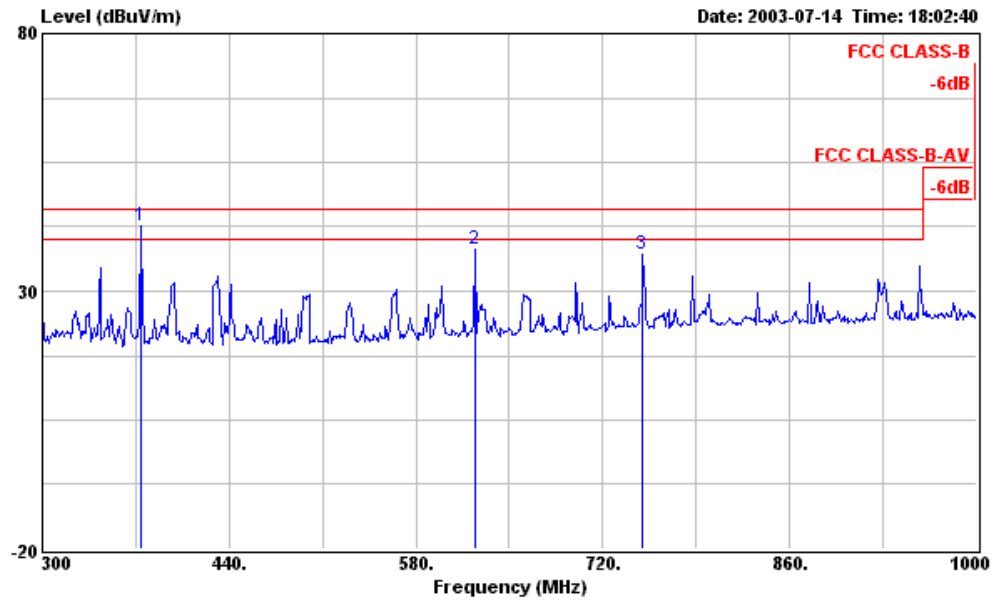
■ The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 1 m, turn table degree is 70°

■ Spurious Emission



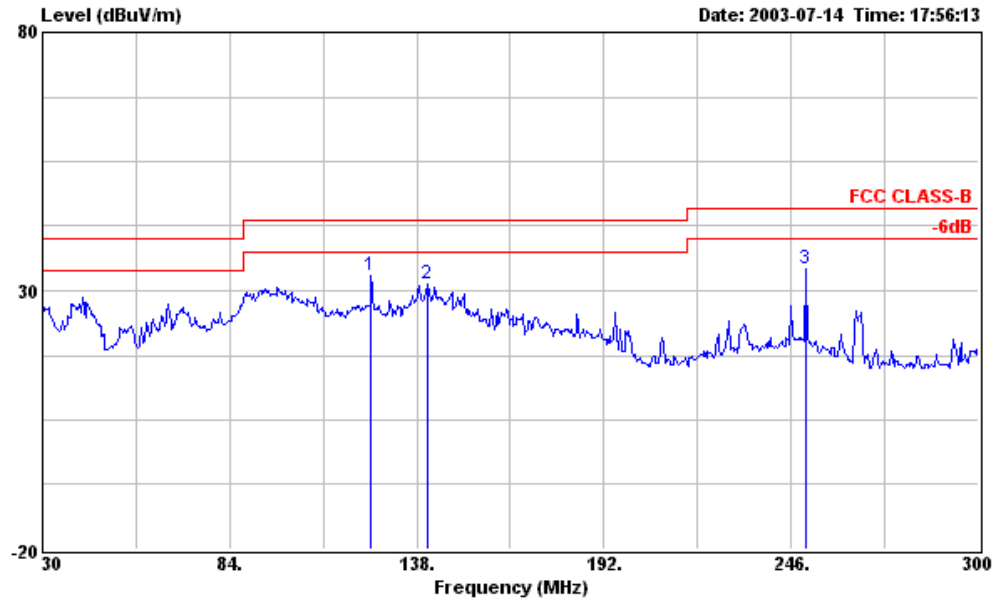
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH06 2437MHz
 : 1.5m+18dBi Patch

	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	124.770	35.59	-7.91	43.50	50.38	10.25	1.86	26.90	Peak	---	---
2	245.730	33.71	-12.29	46.00	46.57	11.16	2.58	26.60	Peak	---	---
3 !	250.050	40.66	-5.34	46.00	53.31	11.34	2.61	26.60	Peak	---	---



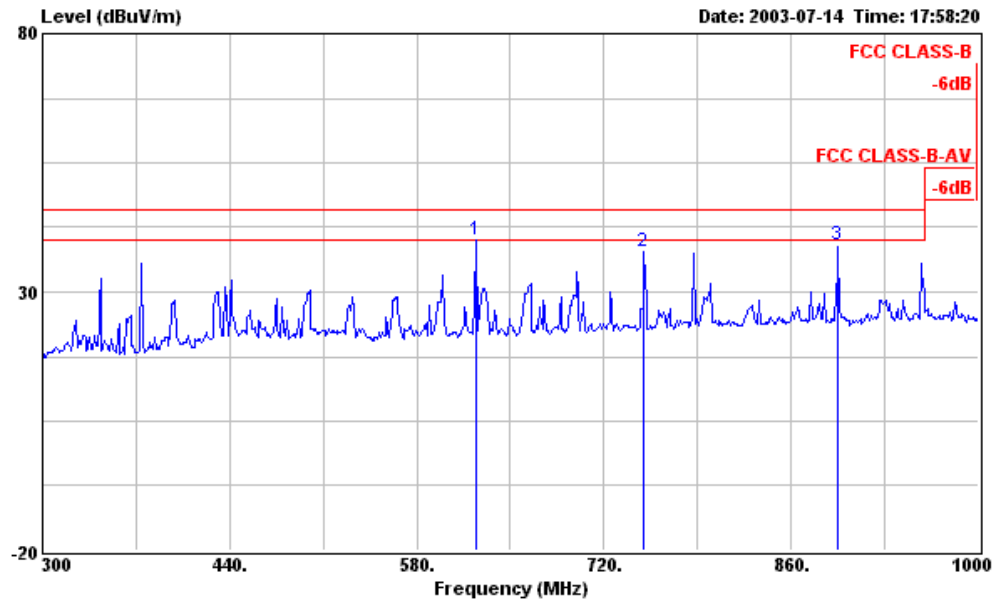
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH06 2437MHz
 : 1.5m+18dBi Patch

	Over	Limit	Read	Probe	Cable	Preamp			Ant	Table
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 ! 374.200	42.60	-3.40	46.00	52.32	13.82	3.50	27.04	Peak	100	52
2 624.100	38.01	-7.99	46.00	44.13	17.46	4.42	28.00	Peak	---	---
3 750.100	37.11	-8.89	46.00	41.76	18.40	4.95	28.00	Peak	---	---



Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH06 2437MHz
 : 1.5m+18dBi Patch

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	124.770	33.02	-10.48	43.50	47.81	10.25	1.86	26.90	Peak	---	---
2	140.970	31.30	-12.20	43.50	45.89	10.18	2.07	26.84	Peak	---	---
3	250.050	34.24	-11.76	46.00	46.89	11.34	2.61	26.60	Peak	---	---

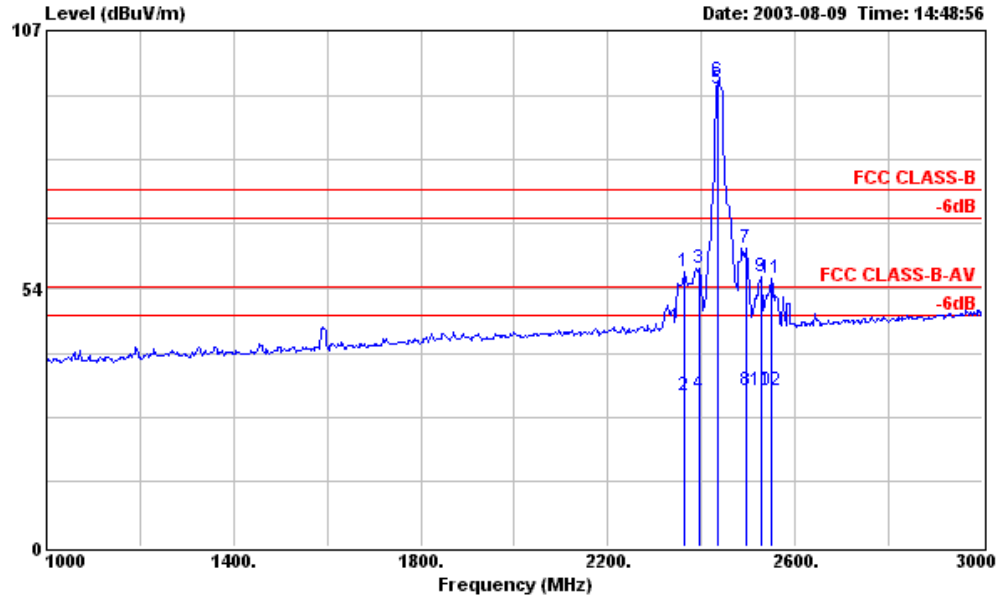


Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH06 2437MHz
 : 1.5m+18dBi Patch

	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	39.98	-6.02	46.00	46.10	17.46	4.42	28.00	Peak	---	---
2	750.100	37.77	-8.23	46.00	42.42	18.40	4.95	28.00	Peak	---	---
3	895.000	38.93	-7.07	46.00	41.97	19.39	5.38	27.81	Peak	---	---

FCC TEST REPORT

Report No. : F341403-01



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

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	2364.000	57.07	-16.93	74.00	49.92	28.15	6.16	27.16	Peak	---	---
2	2364.000	31.23	-22.77	54.00	24.08	28.15	6.16	27.16	Average	---	---
3	2396.000	57.76	-16.24	74.00	50.51	28.21	6.20	27.16	Peak	---	---
4	2396.000	31.54	-22.46	54.00	24.29	28.21	6.20	27.16	Average	---	---
7	2494.000	61.93	-12.07	74.00	54.36	28.42	6.33	27.18	Peak	---	---
8	2494.000	32.31	-21.69	54.00	24.74	28.42	6.33	27.18	Average	---	---
9	2526.000	55.80	-18.20	74.00	48.07	28.52	6.39	27.18	Peak	---	---
10	2526.000	32.28	-21.72	54.00	24.55	28.52	6.39	27.18	Average	---	---
11	2550.000	55.45	-18.55	74.00	47.61	28.59	6.43	27.18	Peak	---	---
12	2550.000	32.17	-21.83	54.00	24.33	28.59	6.43	27.18	Average	---	---

SPORTON International Inc.

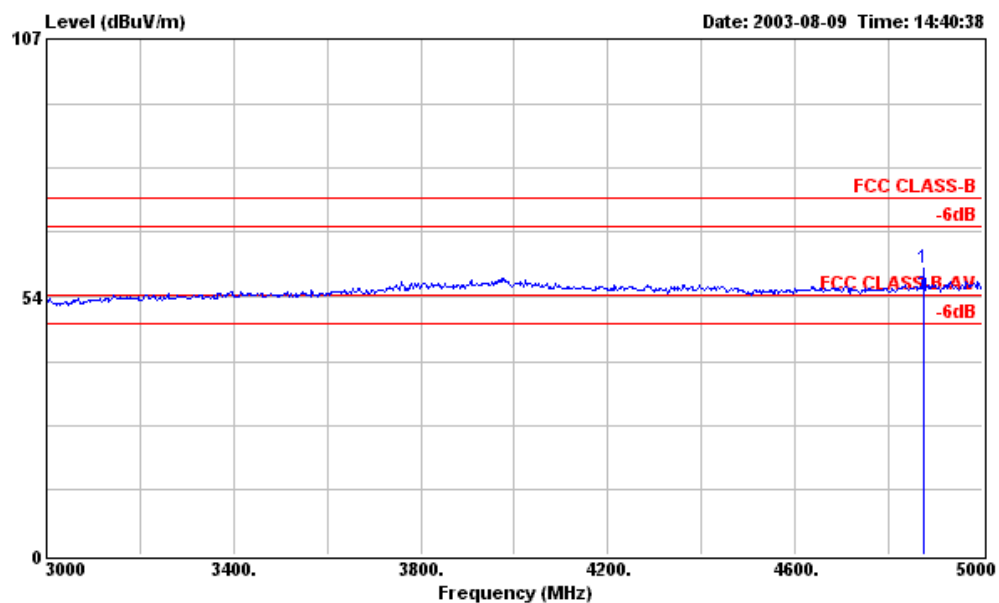
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 126 of 154

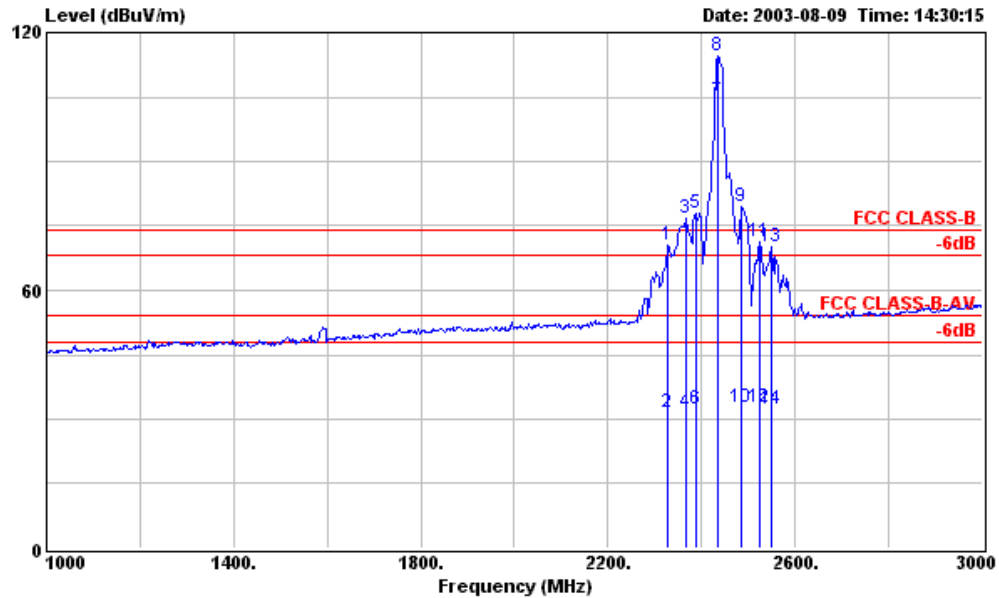
Issued Date : Aug. 12, 2003



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

FCC TEST REPORT

Report No. : F341403-01



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

	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 !	2326.000	70.56	-3.44	74.00	63.53	28.07	6.11	27.15	Peak	---	---
2	2326.000	31.55	-22.45	54.00	24.52	28.07	6.11	27.15	Average	---	---
3 X	2366.000	76.91	2.91	74.00	69.76	28.15	6.16	27.16	Peak	---	---
4	2366.000	31.63	-22.37	54.00	24.48	28.15	6.16	27.16	Average	---	---
5 X	2388.000	78.02	4.02	74.00	70.79	28.20	6.19	27.16	Peak	---	---
6	2388.000	32.15	-21.85	54.00	24.92	28.20	6.19	27.16	Average	---	---
9 X	2486.000	79.37	5.37	74.00	71.82	28.40	6.32	27.17	Peak	---	---
10	2486.000	32.77	-21.23	54.00	25.22	28.40	6.32	27.17	Average	---	---
11 !	2524.000	71.46	-2.54	74.00	63.74	28.51	6.39	27.18	Peak	---	---
12	2524.000	32.68	-21.32	54.00	24.96	28.51	6.39	27.18	Average	---	---
13 !	2548.000	70.10	-3.90	74.00	62.26	28.59	6.43	27.18	Peak	---	---
14	2548.000	32.33	-21.67	54.00	24.49	28.59	6.43	27.18	Average	---	---

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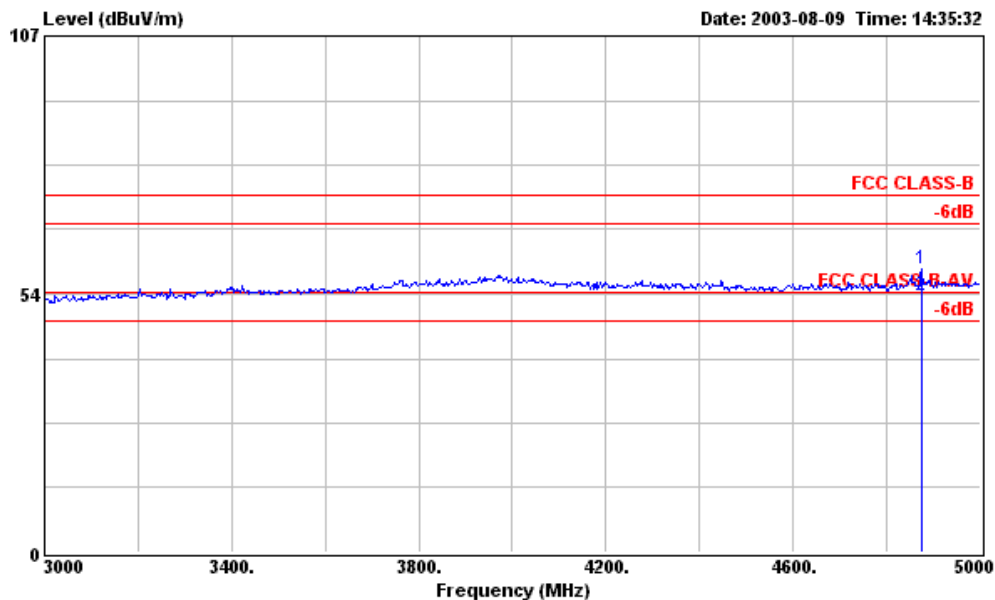
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 128 of 154

Issued Date : Aug. 12, 2003



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

➤ For 5GHz ~ 25GHz

Remark: Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Limits	Emission	Level	Margin	Detect		
	Polarity	Factor	Loss							
(MHz)		(dB/m)	(dB)	(dBuV)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dB)	Mode
2436.000	H	28.29	6.26	60.24	-	-	94.79	54890.86		A.V.
2436.000	H	28.29	6.26	62.19	-	-	96.74	68706.84		Peak
4876.000	H	33.17	9.09	17.21	74.00	5011.87	59.47	940.81	-14.53	Peak
4876.000	H	33.17	9.09	11.62	54.00	501.19	53.88	494.31	-0.12	A.V.
2436.000	V	28.29	6.26	69.57	-	-	104.12	160694.13		A.V.
2436.000	V	28.29	6.26	80.04	-	-	114.59	536413.87		Peak
4876.000	V	33.17	9.09	16.62	74.00	5011.87	58.88	879.02	-15.12	Peak
4876.000	V	33.17	9.09	10.97	54.00	501.19	53.23	458.67	-0.77	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.

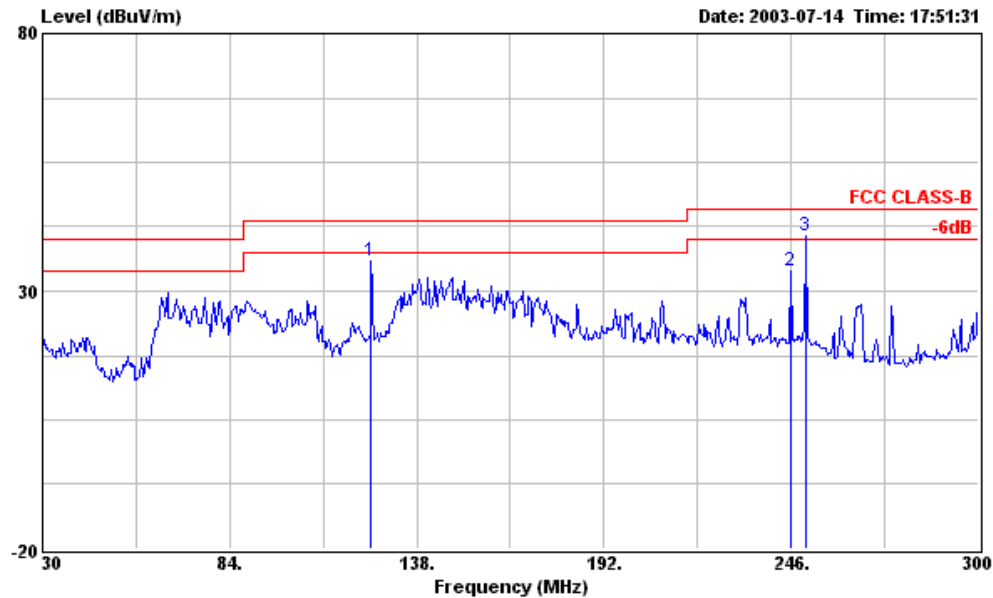
Remark: The emission emitted by the EUT is too low to be measured except the emission listed above

Test Engineer: 
Jay Zhong

- Test Mode: Mode 12
- Test Distance: 3 M
- Temperature: 29.9 °C
- Relative Humidity: 72 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

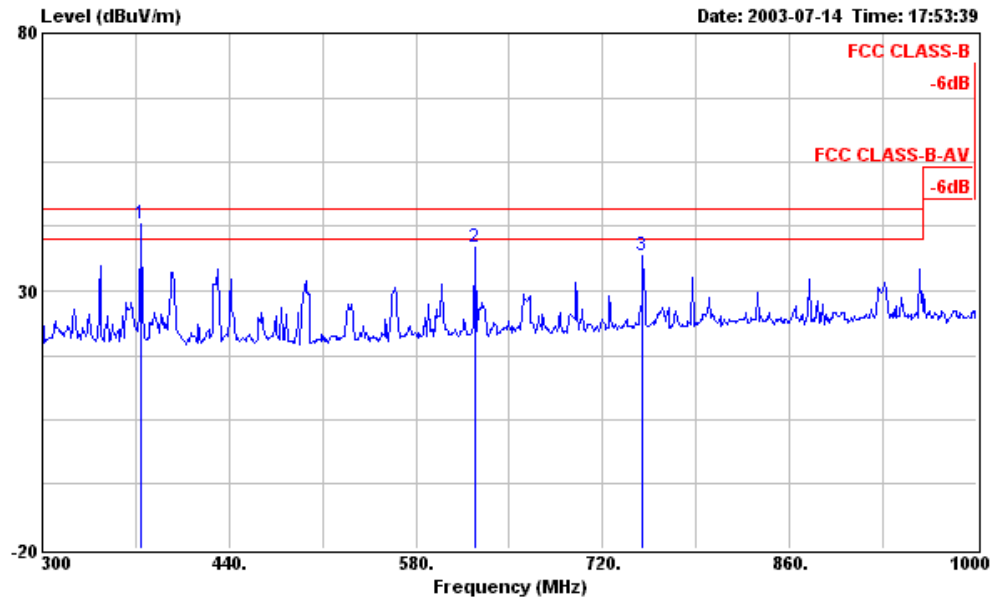
■ The test was passed at the minimum margin that marked under gray area in the following table, and its antenna height is 1.03 m, turn table degree is 82°

■ Spurious Emission



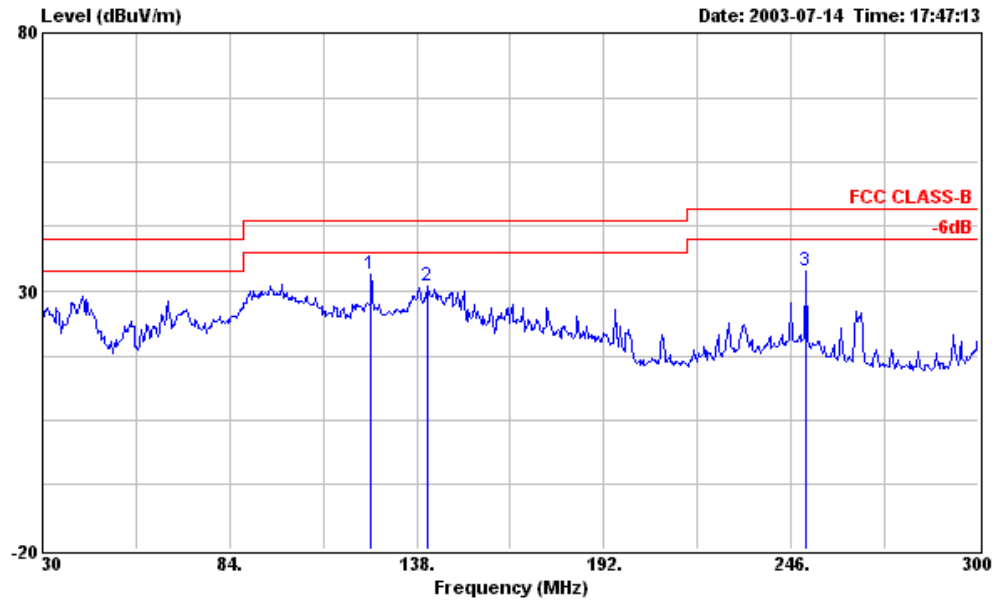
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+18dBi Patch

	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB	cm	deg
1	124.770	35.81	-7.69	43.50	50.60	10.25	1.86	26.90	Peak
2	245.730	34.04	-11.96	46.00	46.90	11.16	2.58	26.60	Peak
3	250.050	40.60	-5.40	46.00	53.25	11.34	2.61	26.60	Peak



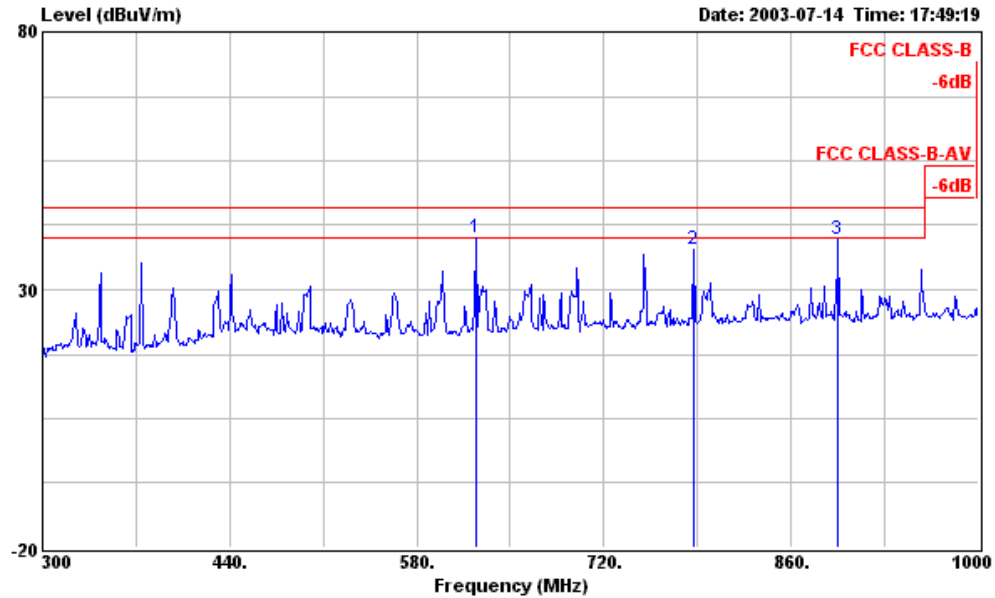
Site : site
 Condition : 3m 03CH03-MAT HORIZONTAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+18dBi Patch

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	374.200	42.91	-3.09	46.00	52.63	13.82	3.50	27.04	Peak	100	63
2	624.100	38.31	-7.69	46.00	44.43	17.46	4.42	28.00	Peak	---	---
3	750.100	36.83	-9.17	46.00	41.48	18.40	4.95	28.00	Peak	---	---



Site : site
 Condition : 3m 03CH03-MAT VERTICAL
 EUT : Wireless 2.4G AP
 Power : 110V/60Hz
 MODEL : ME-103
 MEMO : TX CH11 2462MHz
 : 1.5m+18dBi Patch

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	124.770	33.14	-10.36	43.50	47.93	10.25	1.86	26.90	Peak	---	---
2	140.970	30.97	-12.53	43.50	45.56	10.18	2.07	26.84	Peak	---	---
3	250.050	33.94	-12.06	46.00	46.59	11.34	2.61	26.60	Peak	---	---

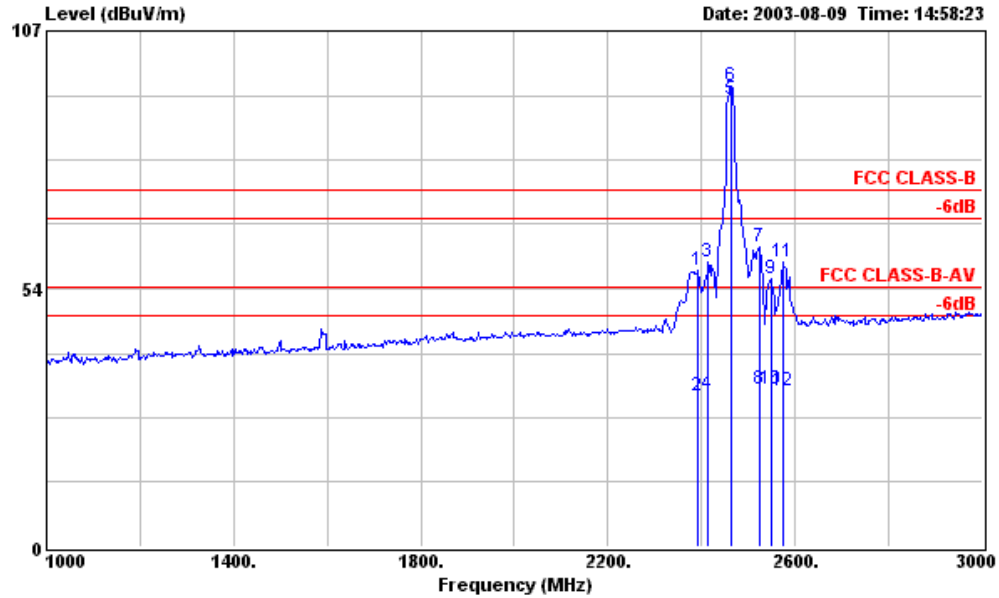


Site : site
Condition : 3m 03CH03-MAT VERTICAL
EUT : Wireless 2.4G AP
Power : 110V/60Hz
MODEL : ME-103
MEMO : TX CH11 2462MHz
: 1.5m+18dBi Patch

Freq	Level	Over	Limit	Read	Probe	Cable	Preamp	Remark	Ant	Table
		Limit	Line	Level	Factor	Loss	Factor		Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	624.100	39.98	-6.02	46.00	46.10	17.46	4.42	28.00 Peak	---	---
2	786.500	37.66	-8.34	46.00	41.95	18.68	5.03	28.00 Peak	---	---
3	895.000	39.73	-6.27	46.00	42.77	19.39	5.38	27.81 Peak	---	---

FCC TEST REPORT

Report No. : F341403-01



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

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	2390.000	57.41	-16.59	74.00	50.17	28.20	6.20	27.16	Peak	---	---
2	2390.000	31.42	-22.58	54.00	24.18	28.20	6.20	27.16	Average	---	---
3	2414.000	58.97	-15.03	74.00	51.65	28.25	6.23	27.16	Peak	---	---
4	2414.000	31.51	-22.49	54.00	24.19	28.25	6.23	27.16	Average	---	---
7	2524.000	62.05	-11.95	74.00	54.33	28.51	6.39	27.18	Peak	---	---
8	2524.000	32.68	-21.32	54.00	24.96	28.51	6.39	27.18	Average	---	---
9	2548.000	55.58	-18.42	74.00	47.74	28.59	6.43	27.18	Peak	---	---
10	2548.000	32.52	-21.48	54.00	24.68	28.59	6.43	27.18	Average	---	---
11	2574.000	58.96	-15.04	74.00	51.01	28.67	6.47	27.19	Peak	---	---
12	2574.000	32.40	-21.60	54.00	24.45	28.67	6.47	27.19	Average	---	---

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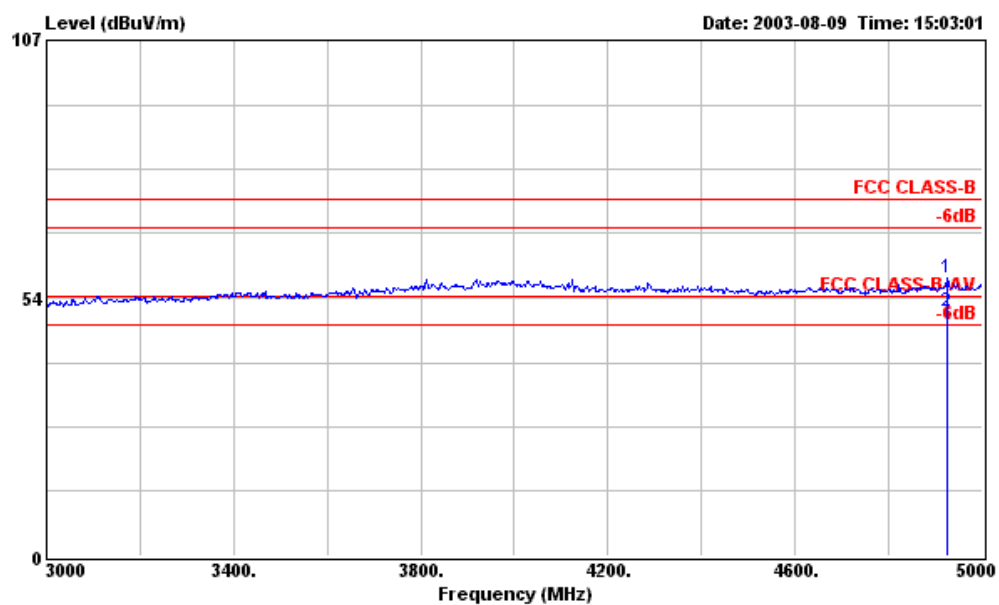
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 135 of 154

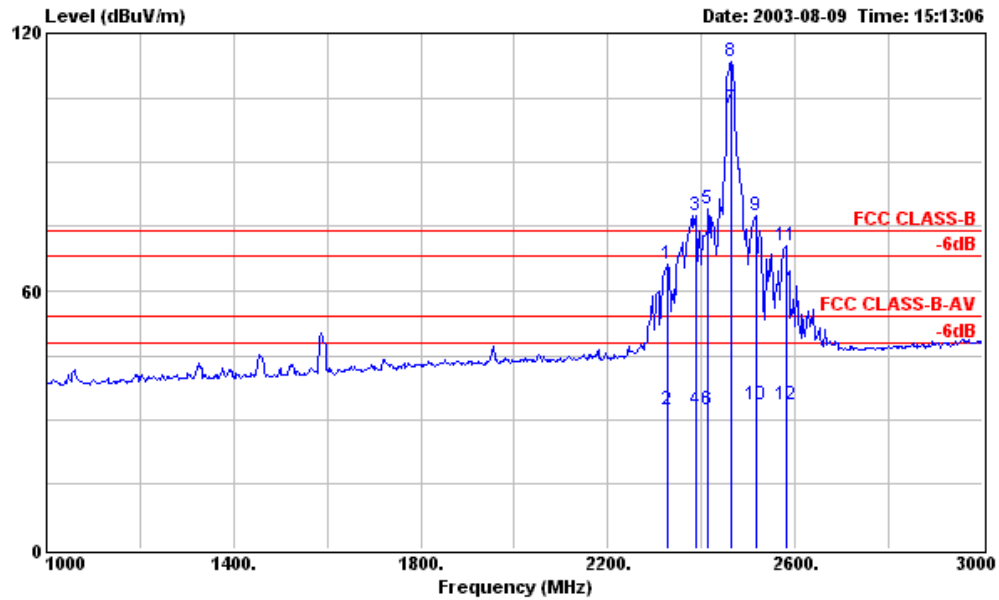
Issued Date : Aug. 12, 2003



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

FCC TEST REPORT

Report No. : F341403-01



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

	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	2326.000	66.11	-7.89	74.00	59.08	28.07	6.11	27.15	Peak	---	---
2	2326.000	32.25	-21.75	54.00	25.22	28.07	6.11	27.15	Average	---	---
3 X	2388.000	77.54	3.54	74.00	70.31	28.20	6.19	27.16	Peak	---	---
4	2388.000	32.31	-21.69	54.00	25.08	28.20	6.19	27.16	Average	---	---
5 X	2414.000	78.92	4.92	74.00	71.60	28.25	6.23	27.16	Peak	---	---
6	2414.000	32.53	-21.47	54.00	25.21	28.25	6.23	27.16	Average	---	---
9 X	2516.000	77.57	3.57	74.00	69.89	28.49	6.37	27.18	Peak	---	---
10	2516.000	33.42	-20.58	54.00	25.74	28.49	6.37	27.18	Average	---	---
11 !	2580.000	70.46	-3.54	74.00	62.47	28.69	6.49	27.19	Peak	---	---
12	2580.000	33.36	-20.64	54.00	25.37	28.69	6.49	27.19	Average	---	---

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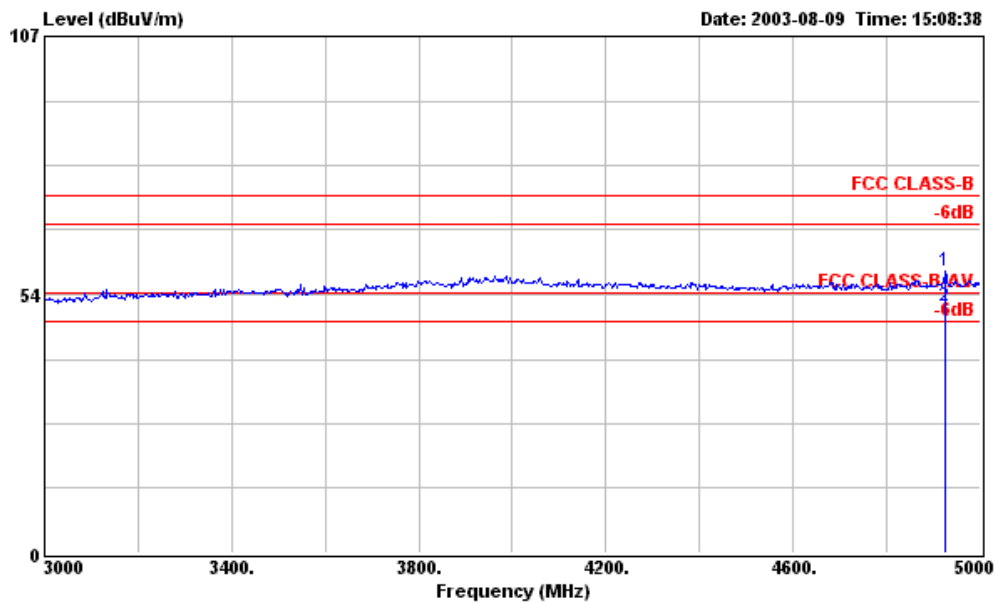
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID. : PY3ME103

Page No. : 137 of 154

Issued Date : Aug. 12, 2003



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

➤ For 5GHz ~ 25GHz

Remark: Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Limits	Emission	Level	Margin	Detect		
	Polarity	Factor	Loss							
(MHz)		(dB/m)	(dB)	(dBuV)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dB)	Mode
2462.000	H	28.35	6.29	57.98	-	-	92.62	42756.29		A.V.
2462.000	H	28.35	6.29	60.87	-	-	95.51	59634.83		Peak
4926.000	H	33.28	9.12	15.16	74.00	5011.87	57.56	755.09	-16.44	Peak
4926.000	H	33.28	9.12	8.28	54.00	501.19	50.68	341.98	-3.32	A.V.
2462.000	V	28.35	6.29	67.70	-	-	102.34	130918.19		A.V.
2462.000	V	28.35	6.29	78.55	-	-	113.19	456562.25		Peak
4926.000	V	33.28	9.12	15.87	74.00	5011.87	58.27	819.41	-15.73	Peak
4926.000	V	33.28	9.12	8.57	54.00	501.19	50.97	353.59	-3.03	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 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 (PLOT1)
- Test Result in higher band(Channel 11) ☐ PASS (PLOT2)

5.7.4. Note on Band edge Emission

Antenna: 4dBi Triband

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	101.81	52.21	74.00	-21.79	Peak
H	01	96.74	47.14	54.00	-6.86	Average
V	01	103.91	54.31	74.00	-19.69	Peak
V	01	99.83	50.23	54.00	-3.77	Average
H	11	98.97	44.91	74.00	-29.09	Peak
H	11	93.89	39.83	54.00	-14.17	Average
V	11	102.21	48.15	74.00	-25.85	Peak
V	11	98.15	44.09	54.00	-9.91	Average

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	101.36	51.76	74.00	-22.24	Peak
H	01	95.02	45.42	54.00	-8.58	Average
V	01	105.12	55.52	74.00	-18.48	Peak
V	01	100.30	50.70	54.00	-3.30	Average
H	11	98.89	44.83	74.00	-29.17	Peak
H	11	92.13	38.07	54.00	-15.93	Average
V	11	105.14	51.08	74.00	-22.92	Peak
V	11	100.17	46.11	54.00	-7.89	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	100.74	51.14	74.00	-22.86	Peak
H	01	96.09	46.49	54.00	-7.51	Average
V	01	106.51	56.91	74.00	-17.09	Peak
V	01	103.47	53.87	54.00	-0.13	Average
H	11	98.56	44.50	74.00	-29.50	Peak
H	11	94.38	40.32	54.00	-13.68	Average
V	11	109.69	55.63	74.00	-18.37	Peak
V	11	101.37	47.31	54.00	-6.69	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	94.44	44.84	74.00	-29.16	Peak
H	01	92.34	42.74	54.00	-11.26	Average
V	01	114.11	64.51	74.00	-9.49	Peak
V	01	103.42	53.82	54.00	-0.18	Average
H	11	95.51	41.45	74.00	-32.55	Peak
H	11	92.62	38.56	54.00	-15.44	Average
V	11	113.19	59.13	74.00	-14.87	Peak
V	11	102.34	48.28	54.00	-5.72	Average

The band edge emission plot1 on page 147 shows 49.60dB delta between carrier maximum power and local maximum emission in the restricted band (2.310~2.390 GHz).

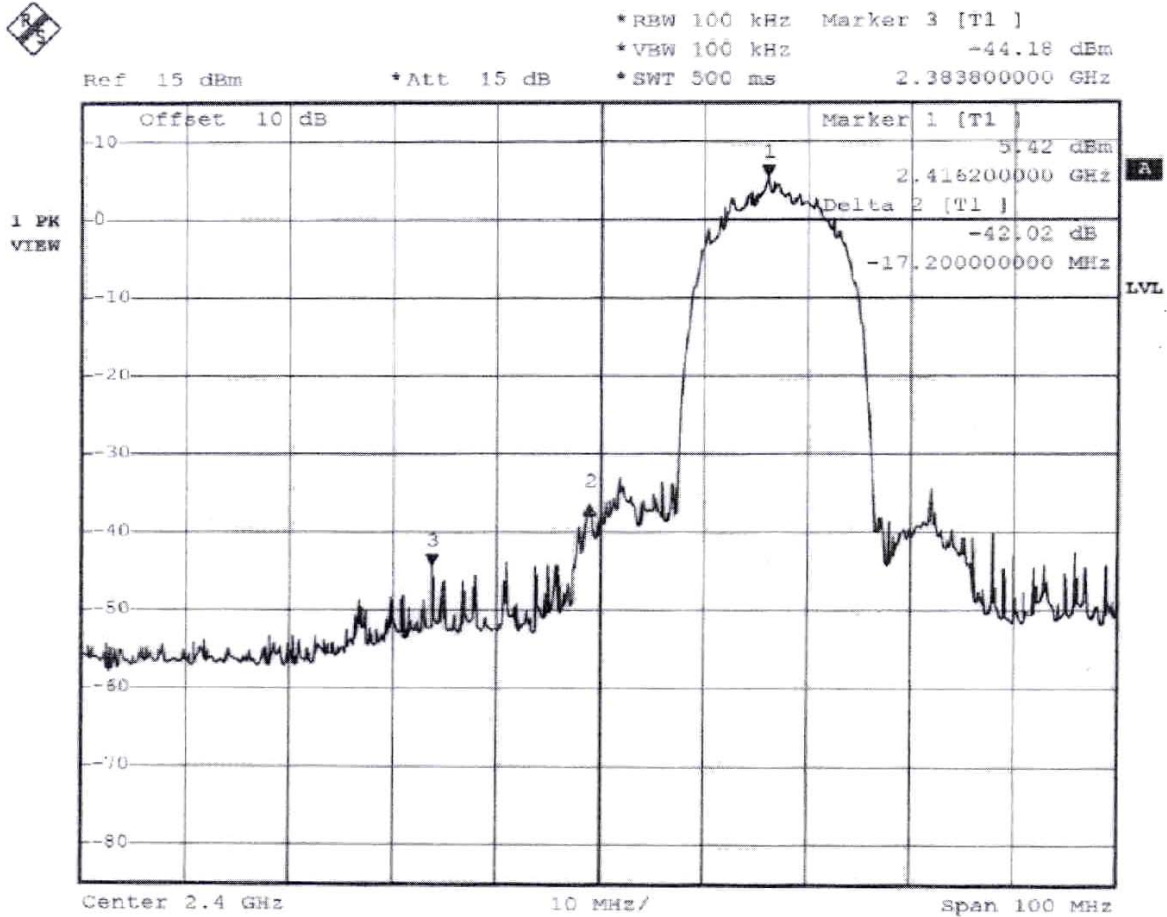
The band edge emission plot2 on page 148 shows 54.06dB delta between carrier maximum power and local maximum emission in the restricted band (2.4835~2.5 GHz).

FCC TEST REPORT

Report No. : F341403-01

The spectrum analyzer plots are attached as below□

Plot1 (Channel 1)□



SPORTON International Inc.

TEL : 886-2-2696-2468

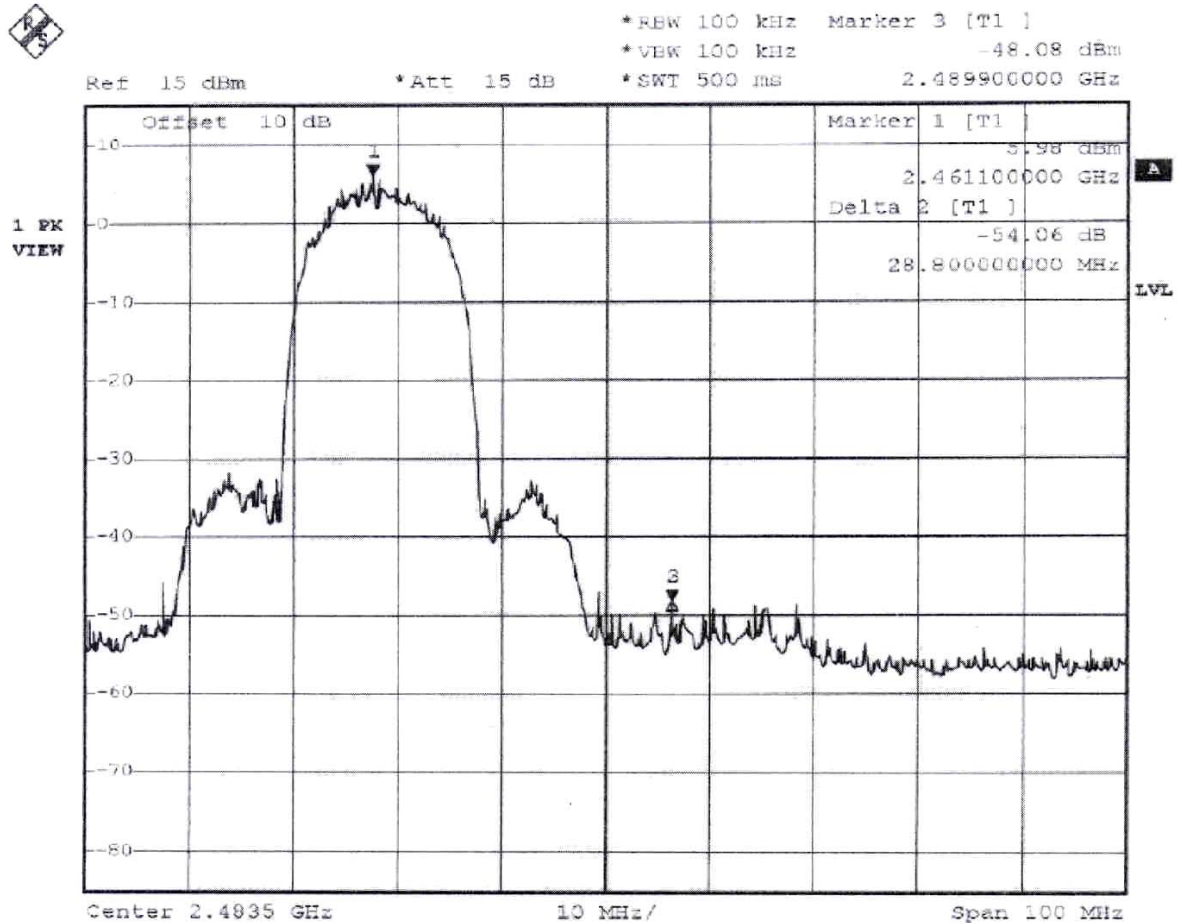
FAX : 886-2-2696-2255

FCC ID. : PY3ME103

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Plot2 (Channel 11) □



Comments □ All emissions in any 100kHz bandwidth outside the band edge are attenuated more than 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.
3Q¹⁰⁰

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:

- ANT24P2: Dipole Antenna.
- ANT24P5: Dipole Antenna
- ANT24P7: Dipole Antenna
- ANT24P9: Dipole Antenna
- ANT24O5: Ceiling Antenna
- ANT24S5: Style Patch Antenna
- ANT24S4: Style Triband Antenna
- ANT24D12: Patch Antenna
- ANT24D18: Patch Antenna

The antenna connector type is SMA-reversed The coaxial cable of the antenna is fixed to the antenna.

6. Antenna Factor & Cable Loss

<Mode 1~3>

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			

FCC TEST REPORT

Report No. : F341403-01

<Mode 4~12>

Frequency (MHz)	Antenna Factor (dB)	Cable Loss (dB)	Frequency (MHz)	Antenna Factor (dB)	Cable Loss (dB)
30	15.35	1.01	1000	24.30	3.89
35	13.63	1.04	2000	31.10	5.41
40	11.11	1.09	3000	29.60	6.92
45	10.59	1.24	4000	30.80	8.24
50	6.47	1.43	5000	34.20	9.22
55	5.83	1.39	6000	33.30	10.25
60	5.18	1.59	7000	37.80	11.61
65	4.81	1.41	8000	39.40	11.78
70	4.43	1.43	9000	38.40	12.59
75	5.10	1.55	10000	38.90	13.84
80	5.91	1.56	11000	41.10	14.64
85	7.33	1.62	12000	42.70	14.12
90	8.74	1.41	13000	43.90	16.01
95	9.05	1.81	14000	43.70	13.76
100	9.36	1.68	15000	43.40	14.30
110	9.65	1.73	16000	40.90	15.16
120	9.97	1.79	17000	44.40	15.88
130	10.51	1.93	18000	47.10	16.09
140	10.32	2.06	19000	37.60	16.98
150	9.42	2.09	20000	37.30	16.21
160	8.09	2.12	21000	37.00	20.13
170	7.43	2.12	22000	38.00	19.24
180	7.60	2.12	23000	38.70	19.64
190	7.43	2.21	24000	38.60	20.54
200	7.26	2.29	25000	38.90	20.14
220	9.11	2.42	14000	43.70	13.76
240	10.88	2.54	15000	43.40	14.30
260	11.75	2.66	16000	40.90	15.16
280	11.55	2.76	17000	44.40	15.88
300	11.36	2.85	18000	47.10	16.09
320	12.03	3.10	19000	37.60	16.98
340	12.69	3.36	20000	37.30	16.21
360	13.33	3.49	21000	37.00	20.13
380	14.00	3.50	22000	38.00	19.24
400	14.63	3.51	23000	38.70	19.64
450	15.33	3.55	24000	38.60	20.54
500	16.03	3.81	25000	38.90	20.14
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

<Mode 1~3>

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. 30, 2002	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001-009	9 KHz – 30 MHz	Apr. 30, 2002	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)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	Jun. 22, 2002	Radiation (03CH03-HY)
Spectrum analyzer	R&S	FSP40	100004/040	9KHZ~40GHz	Aug. 07, 2002	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	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, 2001	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.
- ☐ Calibration Interval of Horn Antenna, BBHA9170, is three years.

<Mode 4~12>

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. 30, 2002	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001-009	9 KHz – 30 MHz	Apr. 30, 2002	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)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	Jun. 21, 2003	Radiation (03CH03-HY)
Spectrum analyzer	R&S	FSP40	100004/040	9KHZ~40GHz	Aug. 07, 2002	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)
Bilog Antenna	SCHAFFNER	CBL6112B	2687	30MHz – 2GHz	Dec. 21, 2002	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz~1GHz	Jan. 02, 2003	Radiation (03CH03-HY)
Amplifier	MITEQ	AFS44	879981	100MHz~26.5GHz	Aug. 12, 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)
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170154	15GHz~40GHz	Jun. 02, 2003	Radiation (03CH03-HY)
RF Cable-HIGH	Jye Bao	RG142	CB030-HIGH	1GHz~29.5GHz	Mar. 14, 2003	Radiation (03CH03-HY)
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	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= $20\log(1-\Gamma_1\Gamma_2)$	U-shaped	±0.54
combined standard uncertainty $U_e(y)$	normal	±2.7
Measuring uncertainty for a level of confidence of 95% $U=2U_e(y)$	normal (k=2)	±5.4

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

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

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= $20\log(1-\Gamma_1\Gamma_2)$	U-shaped	0.2
combined standard uncertainty $U_e(y)$	normal	±1.66
Measuring uncertainty for a level of confidence of 95% $U=2U_e(y)$	normal (k=2)	±3.32

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