



## 5.8 Conducted Emission

### 5.8.1 Measuring Instruments

As described in chapter 6 of this test Report.

The receiver setting :

150 KHz ~ 30 MHz	Detector : Quasi – Peak and Average Bandwidth : 9 KHz
------------------	--

### 5.8.2 Test Procedures :

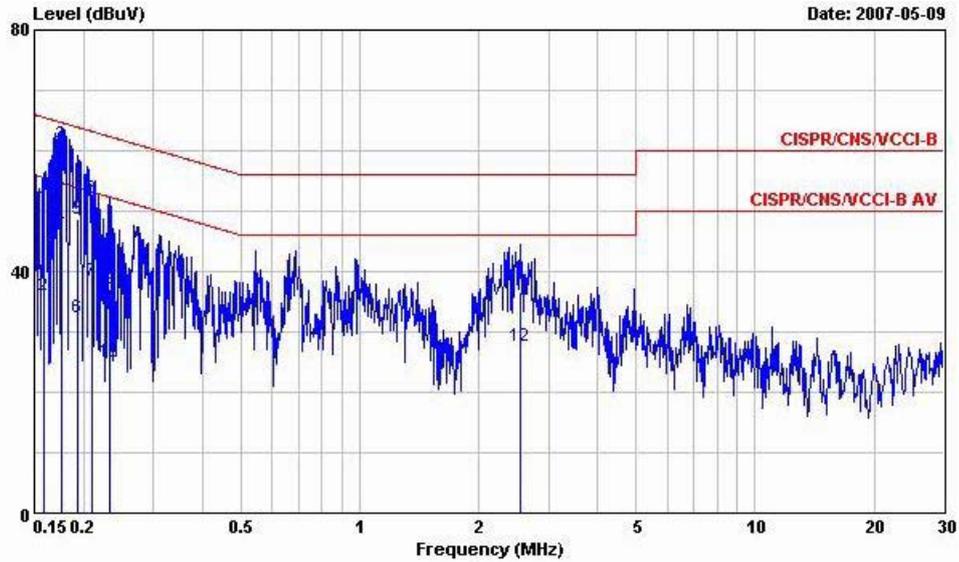
- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power port of a line impedance stabilization network (LISN).
- c. All the support units are connected to the other LISN.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



5.8.3 Test Data

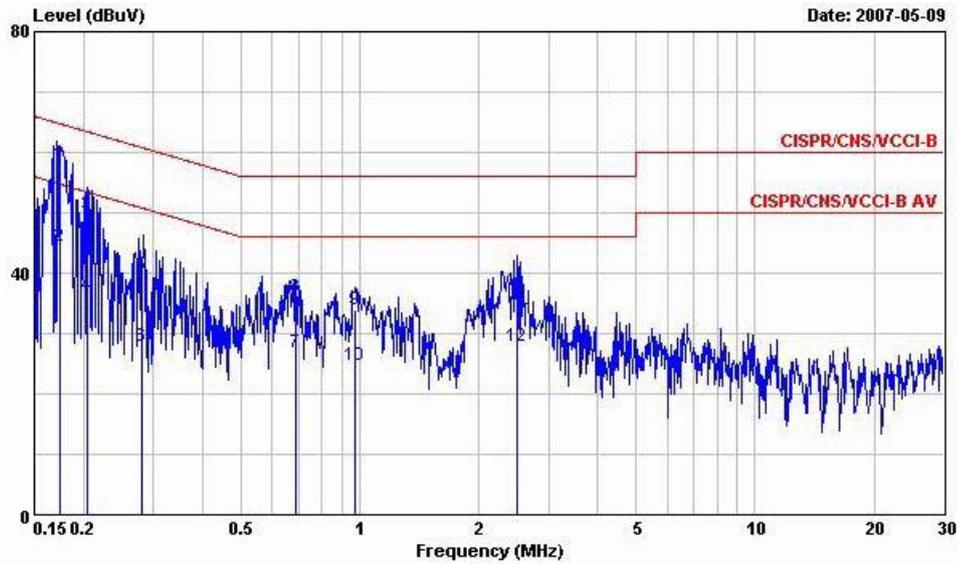
- Temperature : 26
- Relative Humidity : 59%
- Test Engineer : Andy
- Test Mode : Mode 1

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



Site : CO04-HY  
 Condition : CISPR/CNS/VCCI-B LISN 200604 99041 LINE  
 EUT : PDA PHONE  
 POWER: 120V/60Hz  
 Model : FR750203  
 Memo : GSM 850 Idle+BT Link+WLAN Link  
 Memo : +MPEG4+Camera+ADAPTER

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1590020	50.52	-15.00	65.52	50.28	0.10	0.14	QP
2	0.1590020	36.04	-19.48	55.52	35.80	0.10	0.14	Average
3	0.1758420	60.93	-3.75	64.68	60.69	0.10	0.14	QP
4	0.1758420	47.24	-7.44	54.68	47.00	0.10	0.14	Average
5	0.1934380	48.67	-15.22	63.89	48.43	0.10	0.14	QP
6	0.1934380	32.37	-21.52	53.89	32.13	0.10	0.14	Average
7	0.2100040	38.48	-14.73	53.21	38.20	0.10	0.18	Average
8	0.2100040	52.10	-11.11	63.21	51.82	0.10	0.18	QP
9	0.2328500	37.18	-25.17	62.35	36.81	0.10	0.27	QP
10	0.2328500	25.06	-27.29	52.35	24.69	0.10	0.27	Average
11	2.550	36.67	-19.33	56.00	36.18	0.10	0.39	QP
12	2.550	27.55	-18.45	46.00	27.06	0.10	0.39	Average



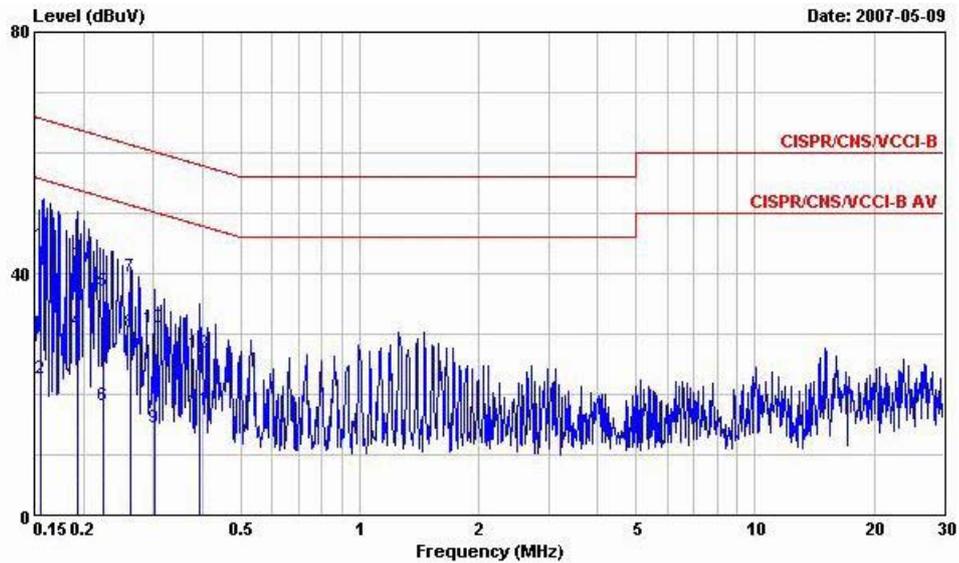
Site : C004-HY  
 Condition : CISPR/CNS/VCCI-B LISN 200604 99041 NEUTRAL  
 EUT : PDA PHONE  
 POWER: 120V/60Hz  
 Model : FR750203  
 Memo : GSM 850 Idle+BT Link+WLAN Link  
 Memo : +MPEG4+Camera+ADAPTER

Freq	Level	Limit	Over	Limit	Read	LISN	Cable	Remark
MHz	dBuV	dB	Line	dBuV	dBuV	dB	dB	
1 @0.1739950	58.22	-6.55	64.77	57.98	0.10	0.14	QP	
2 @0.1739950	44.39	-10.38	54.77	44.15	0.10	0.14	Average	
3 0.2039630	49.66	-13.79	63.45	49.40	0.10	0.16	QP	
4 0.2039630	36.28	-17.17	53.45	36.02	0.10	0.16	Average	
5 0.2794590	39.67	-21.16	60.83	39.14	0.10	0.43	QP	
6 0.2794590	28.01	-22.82	50.83	27.48	0.10	0.43	Average	
7 0.6862570	26.86	-19.14	46.00	26.20	0.10	0.56	Average	
8 0.6862570	36.04	-19.96	56.00	35.38	0.10	0.56	QP	
9 0.9735420	33.88	-22.12	56.00	33.33	0.10	0.45	QP	
10 0.9735420	24.69	-21.31	46.00	24.14	0.10	0.45	Average	
11 2.490	37.07	-18.93	56.00	36.54	0.13	0.40	QP	
12 2.490	27.84	-18.16	46.00	27.31	0.13	0.40	Average	



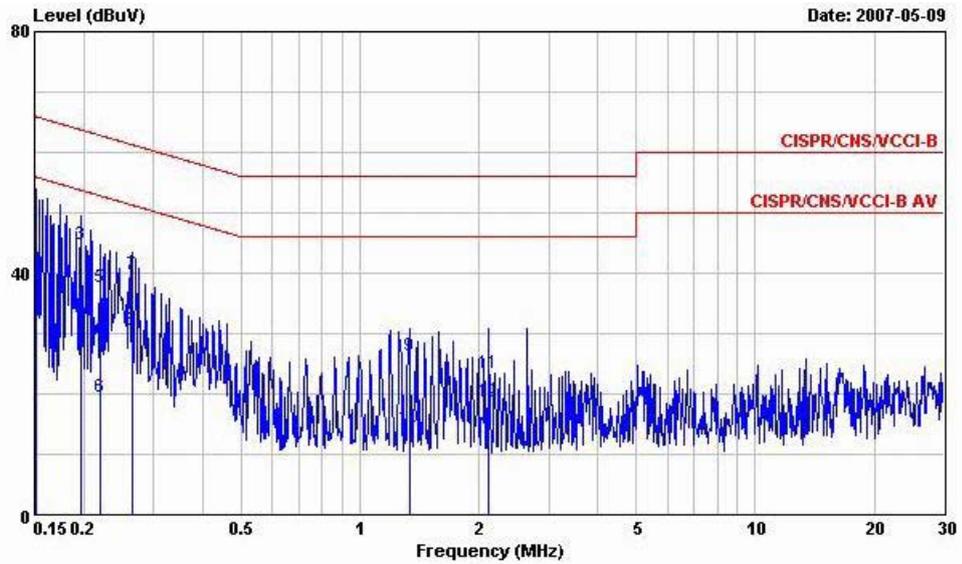
- Temperature : 26
- Relative Humidity : 59%
- Test Enginner : Andy
- Test Mode : Mode 2

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



Site : C004-HY  
 Condition : CISPR/CNS/VCCI-B LISN 200604 99041 LINE  
 EUT : PDA PHONE  
 POWER: 120V/60Hz  
 Model : FR750203  
 Memo : GSM 850 Idle+BT Link+WLAN Link  
 Memo : +MPEG4+Camera+USB Link

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1556020	44.83	-20.87	65.70	44.59	0.10	0.14	QP
2	0.1556020	22.67	-33.03	55.70	22.43	0.10	0.14	Average
3	0.1934380	41.41	-22.48	63.89	41.17	0.10	0.14	QP
4	0.1934380	30.52	-23.37	53.89	30.28	0.10	0.14	Average
5	0.2243730	37.04	-25.62	62.66	36.70	0.10	0.24	QP
6	0.2243730	18.17	-34.49	52.66	17.83	0.10	0.24	Average
7	0.2630270	39.45	-21.89	61.34	38.98	0.10	0.37	QP
8	0.2630270	30.16	-21.18	51.34	29.69	0.10	0.37	Average
9	0.3018750	14.51	-35.68	50.19	13.92	0.10	0.49	Average
10	0.3018750	31.01	-29.18	60.19	30.42	0.10	0.49	QP
11	0.3913610	17.30	-30.73	48.03	16.49	0.10	0.71	Average
12	0.3913610	26.76	-31.27	58.03	25.95	0.10	0.71	QP



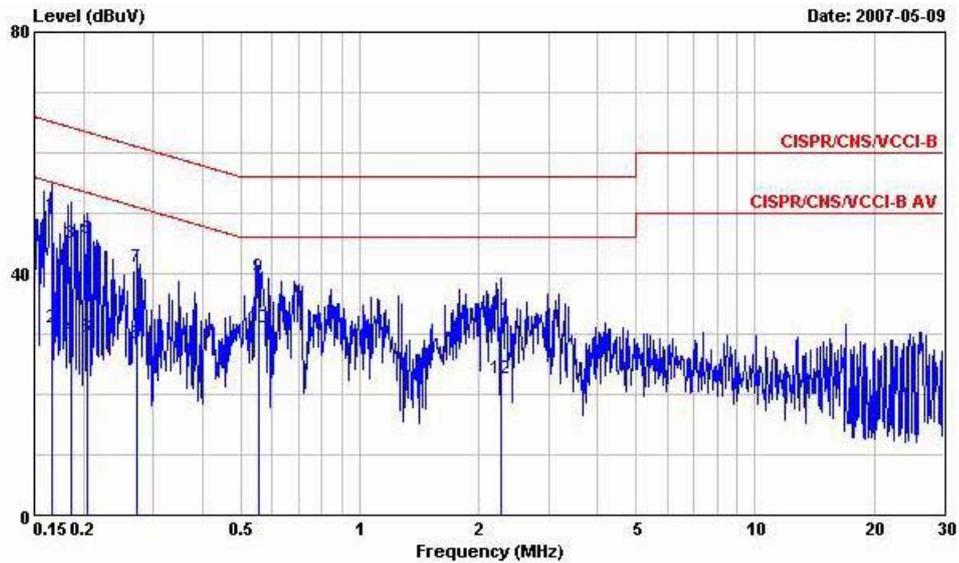
Site : CO04-HY  
 Condition : CISPR/CNS/VCCI-B LISN 200604 99041 NEUTRAL  
 EUT : PDA PHONE  
 POWER: 120V/60Hz  
 Model : FR750203  
 Memo : GSM 850 Idle+BT Link+WLAN Link  
 Memo : +MPEG4+Camera+USB Link

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1515980	45.10	-20.81	65.91	44.86	0.10	0.14	QP
2	0.1515980	33.03	-22.88	55.91	32.79	0.10	0.14	Average
3	0.1965370	44.61	-19.15	63.76	44.37	0.10	0.14	QP
4	0.1965370	32.70	-21.06	53.76	32.46	0.10	0.14	Average
5	0.2208340	37.61	-25.18	62.79	37.28	0.10	0.23	QP
6	0.2208340	19.59	-33.20	52.79	19.26	0.10	0.23	Average
7	0.2644240	39.82	-21.47	61.29	39.34	0.10	0.38	QP
8	0.2644240	30.50	-20.79	51.29	30.02	0.10	0.38	Average
9	1.330	26.33	-29.67	56.00	25.79	0.10	0.44	QP
10	1.330	14.53	-31.47	46.00	13.99	0.10	0.44	Average
11	2.120	23.48	-32.52	56.00	22.95	0.11	0.42	QP
12	2.120	18.61	-27.39	46.00	18.08	0.11	0.42	Average



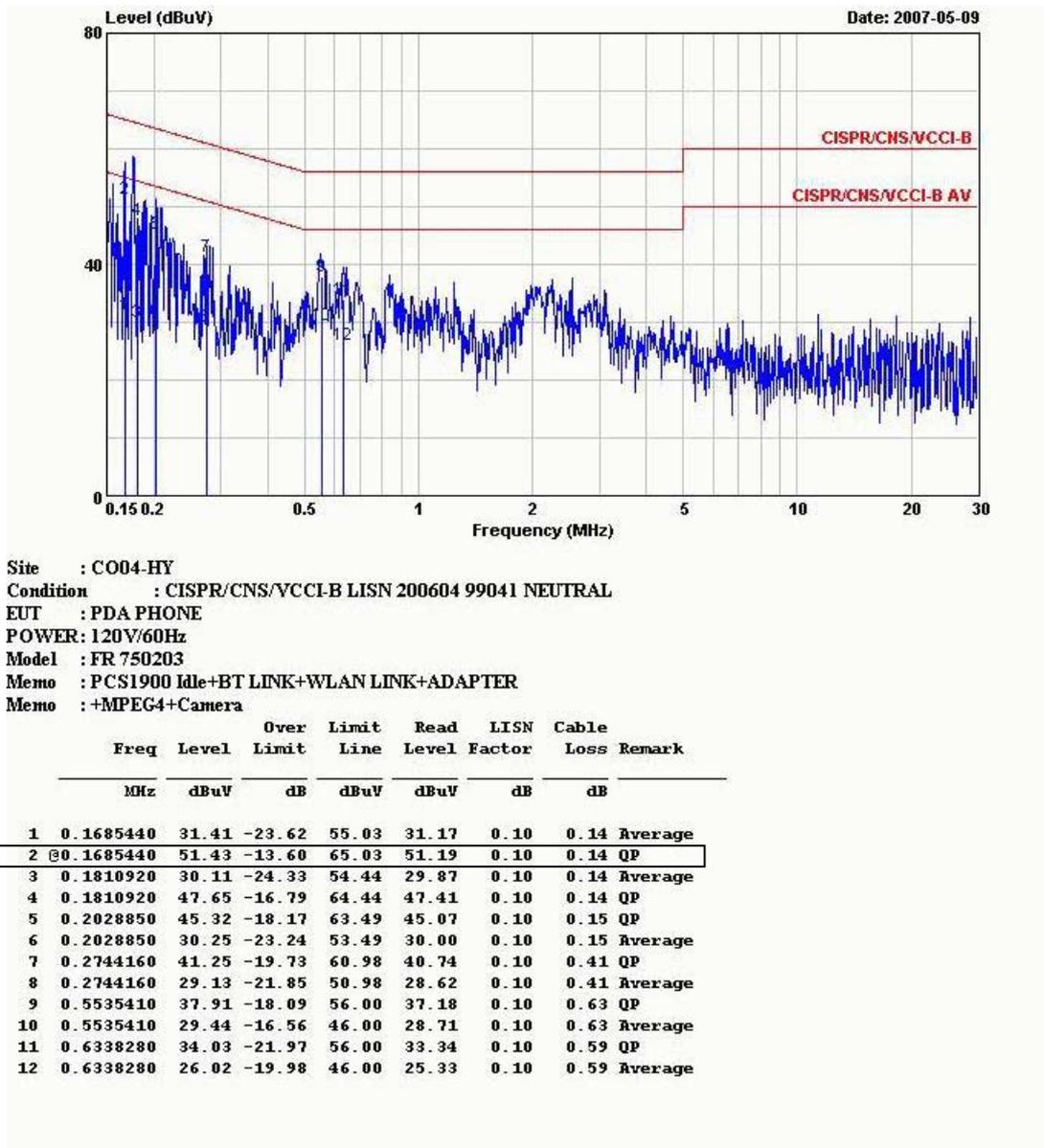
- Temperature : 26
- Relative Humidity : 59%
- Test Enginner : Andy
- Test Mode : Mode 3

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



Site : C004-HY  
 Condition : CISPR/CNS/VCCI-B LISN 200604 99041 LINE  
 EUT : PDA PHONE  
 POWER: 120V/60Hz  
 Model : FR750203  
 Memo : PCS1900 Idle+BT LINK+WLAN LINK+ADAPTER  
 Memo : +MPEG4+Camera

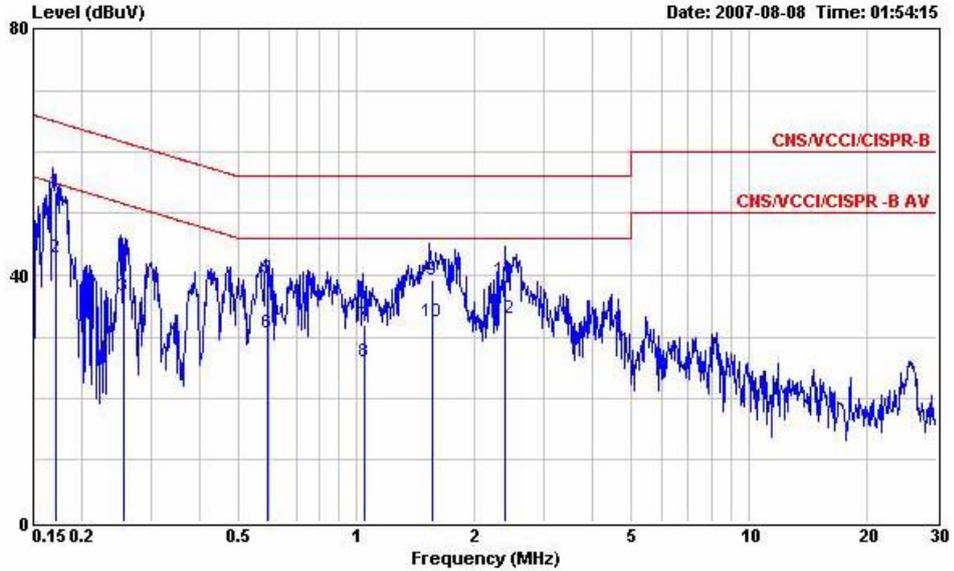
	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	@0.1667680	49.77	-15.35	65.12	49.53	0.10	0.14	QP
2	0.1667680	31.04	-24.08	55.12	30.80	0.10	0.14	Average
3	0.1854100	45.12	-19.12	64.24	44.88	0.10	0.14	QP
4	0.1854100	29.58	-24.66	54.24	29.34	0.10	0.14	Average
5	0.2050460	45.92	-17.48	63.40	45.66	0.10	0.16	QP
6	0.2050460	29.44	-23.96	53.40	29.18	0.10	0.16	Average
7	0.2729650	41.13	-19.90	61.03	40.62	0.10	0.41	QP
8	0.2729650	28.47	-22.56	51.03	27.96	0.10	0.41	Average
9	0.5541400	39.44	-16.56	56.00	38.71	0.10	0.63	QP
10	@0.5541400	31.16	-14.84	46.00	30.43	0.10	0.63	Average
11	2.270	32.41	-23.59	56.00	31.90	0.10	0.41	QP
12	2.270	22.52	-23.48	46.00	22.01	0.10	0.41	Average





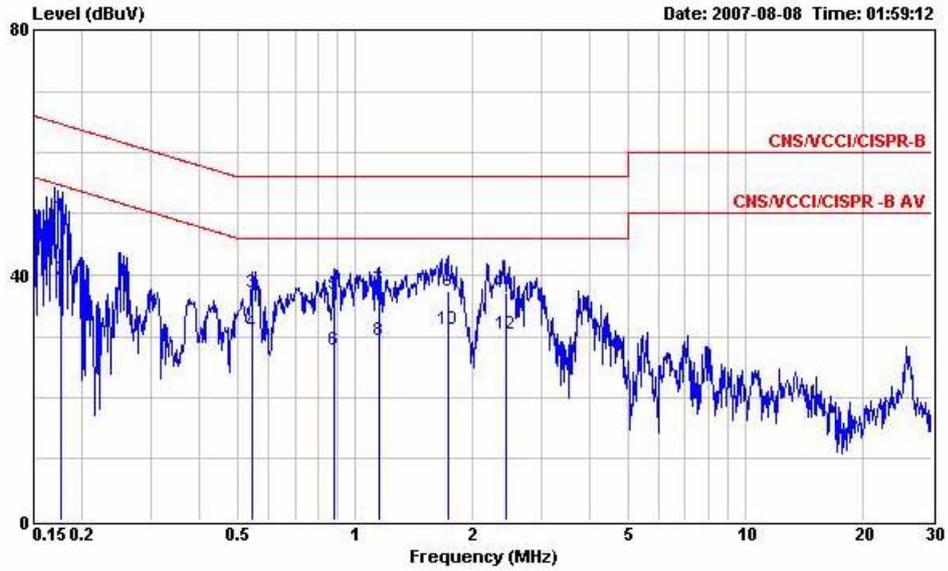
- Temperature : 27~28
- Relative Humidity : 49~50%
- Test Enginner : Sun
- Test Mode : Mode 4

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



Site : CO01-HY  
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203-02  
 Memo : GSM 850 Idle+BT Idle+WLAN Idle+MPEG4  
 Memo : +Camera+Adaptor2+GPS Rx

Freq	Level	Over Limit	Limit Line	Read Level	Cable Loss	Probe Factor	Remark
MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.171	53.50	-11.42	64.92	53.34	0.06	0.10 QP
2	0.171	42.98	-11.94	54.92	42.82	0.06	0.10 Average
3	0.254	36.63	-14.99	51.62	36.46	0.07	0.10 Average
4	0.254	42.18	-19.44	61.62	42.01	0.07	0.10 QP
5	0.593	39.43	-16.57	56.00	39.27	0.06	0.10 QP
6	0.593	30.76	-15.24	46.00	30.60	0.06	0.10 Average
7	1.043	31.96	-24.04	56.00	31.82	0.04	0.10 QP
8	1.043	26.03	-19.97	46.00	25.89	0.04	0.10 Average
9	1.558	39.30	-16.70	56.00	39.11	0.09	0.10 QP
10	1.558	32.35	-13.65	46.00	32.16	0.09	0.10 Average
11	2.385	39.28	-16.72	56.00	39.03	0.12	0.13 QP
12	2.385	32.97	-13.03	46.00	32.72	0.12	0.13 Average



Site : C001-HY  
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203-02  
 Memo : GSM 850 Idle+BT Idle+WLAN Idle+MPEG4  
 Memo : +Camera+Adaptor2+GPS Rx

	Over	Limit	Read	Cable	Probe	
Freq	Level	Limit	Line	Level	Loss	Factor Remark
MHz	dBuV	dB	dBuV	dBuV	dB	dB
1	0.177	49.54	-15.08	64.62	49.38	0.06 0.10 QP
2	0.177	39.15	-15.47	54.62	38.99	0.06 0.10 Average
3	0.546	37.16	-18.84	56.00	36.99	0.07 0.10 QP
4	0.546	30.77	-15.23	46.00	30.60	0.07 0.10 Average
5	0.885	36.85	-19.15	56.00	36.70	0.05 0.10 QP
6	0.885	27.73	-18.27	46.00	27.58	0.05 0.10 Average
7	1.153	37.60	-18.40	56.00	37.44	0.06 0.10 QP
8	1.153	29.31	-16.69	46.00	29.15	0.06 0.10 Average
9	1.736	37.43	-18.57	56.00	37.23	0.10 0.10 QP
10	1.736	31.04	-14.96	46.00	30.84	0.10 0.10 Average
11	2.424	37.06	-18.94	56.00	36.84	0.12 0.10 QP
12	2.424	30.35	-15.65	46.00	30.13	0.12 0.10 Average

## 5.9 Radiated Emission Measurement

### 5.9.1 Measuring Instruments

As described in chapter 6 of this Report.

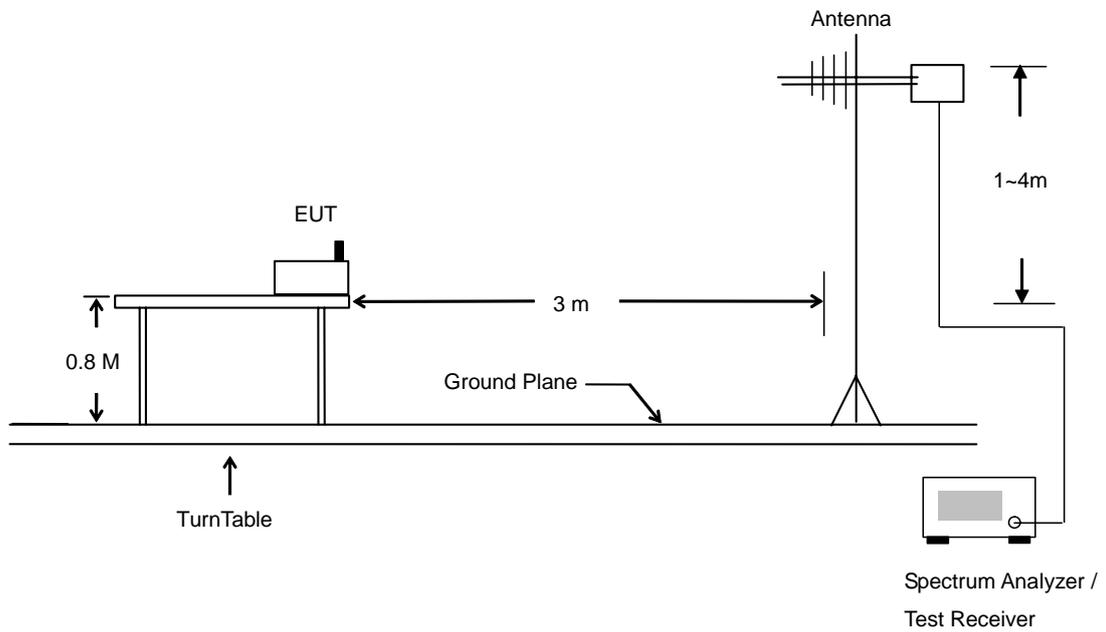
The spectrum analyzer setting :

30 ~ 1000 MHz	Detector : Quasi – Peak Bandwidth : 120 KHz
1 ~ 25 GHz	Detector : Peak and Average Bandwidth : 1 MHz

### 5.9.2 Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. 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 for both horizontal polarization and vertical polarization of the antenna.
- e. 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 turntable (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. For testing below 1GHz, 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 will be repeated one by one using the quasi-peak method and reported.
- h. 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 average 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.

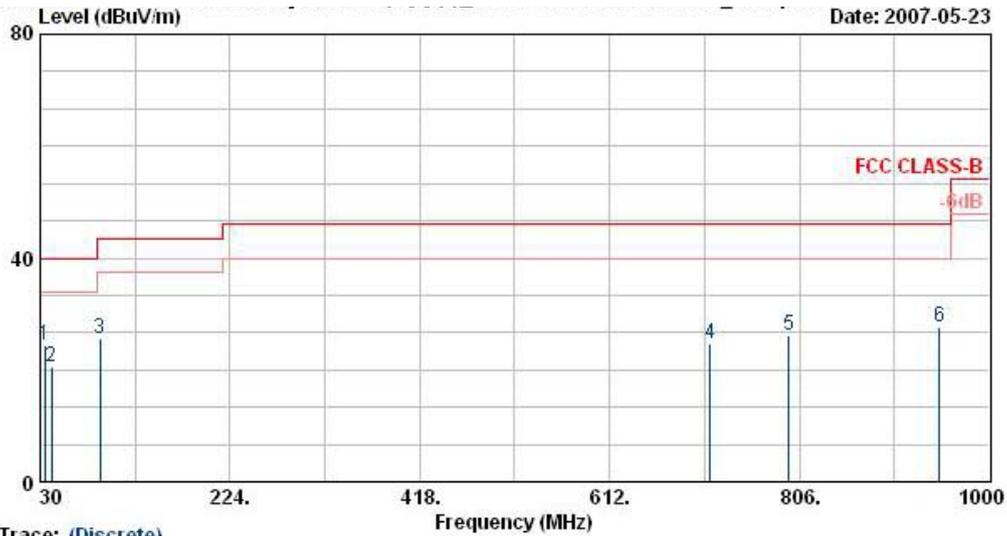
5.9.3 Typical Test Setup Layout of Radiated Emission





5.9.4 Test Data

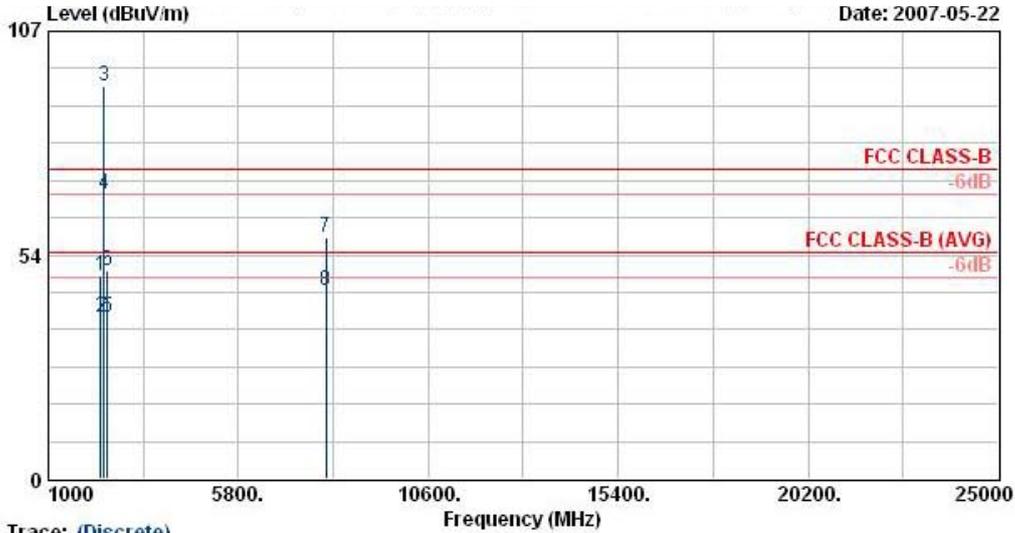
- Temperature : 26
- Relating Humidity : 59%
- Test Enginner : Anderson
- Test Mode : Mode 1
- Polarization : Horizontal
- **The test that passed at minimum margin was marked by the frame in the following table.**



Trace: (Discrete)

Site : 03CH06-HY  
 Condition : LF-ANT(951121) HORIZONTAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch00;2402MHz  
 Plane : E2  
 Rate : DHS

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	34.59	24.35	-15.65	40.00	38.63	16.13	0.88	31.29	100	58	Peak
2	41.34	20.39	-19.61	40.00	38.13	12.51	0.92	31.17	---	---	Peak
3	91.29	25.70	-17.80	43.50	46.26	9.23	1.33	31.12	---	---	Peak
4	714.40	24.68	-21.32	46.00	31.94	19.03	4.29	30.57	---	---	Peak
5	794.90	26.20	-19.80	46.00	32.31	19.77	4.61	30.49	---	---	Peak
6	948.90	27.71	-18.29	46.00	32.16	20.87	4.96	30.28	---	---	Peak



Trace: (Discrete)  
 Site : 03CH06-HY  
 Condition : HF-ANT(8-18)-060918 HORIZONTAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch00;2402MHz  
 Plane : E2  
 Rate : DH5

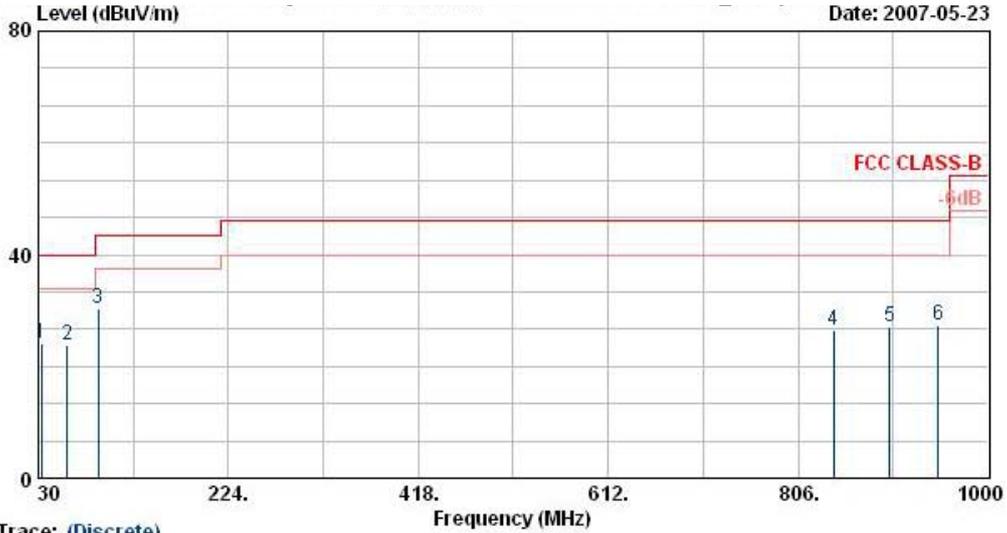
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2326.56	48.33	-25.67	74.00	49.82	30.23	3.69	35.40	100	0	Peak
2	2326.56	38.69	-15.31	54.00	40.18	30.23	3.69	35.40	100	49	Average
3 @	2402.00	93.73			95.15	30.27	3.77	35.46	100	0	Peak
4 X	2402.00	68.04			69.47	30.26	3.77	35.46	100	49	Average
5	2488.00	38.59	-15.41	54.00	39.94	30.30	3.86	35.51	100	49	Average
6	2488.00	49.79	-24.21	74.00	51.15	30.30	3.86	35.51	100	0	Peak
7	8022.00	57.61	-16.39	74.00	46.05	39.59	7.83	35.86	---	---	Peak
8	8022.00	45.03	-8.97	54.00	33.47	39.59	7.83	35.86	100	336	Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

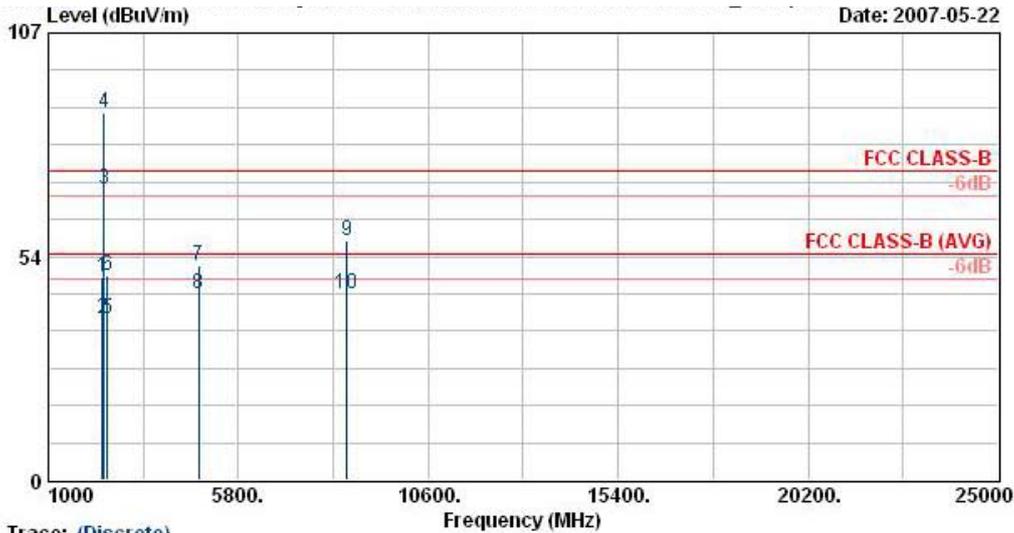
The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY  
 Condition : LF-ANT(951121) VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch00;2402MHz  
 Plane : E2  
 Rate : DHS

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	33.24	24.22	-15.78	40.00	37.17	17.54	0.86	31.36	---	---	Peak
2	59.43	23.89	-16.11	40.00	47.24	6.77	1.11	31.23	---	---	Peak
3	91.29	30.44	-13.06	43.50	51.01	9.23	1.33	31.12	112	209	Peak
4	841.80	26.39	-19.61	46.00	32.06	20.12	4.65	30.44	---	---	Peak
5	899.90	27.12	-18.88	46.00	32.14	20.53	4.82	30.37	---	---	Peak
6	948.90	27.29	-18.71	46.00	31.74	20.87	4.96	30.28	---	---	Peak



Trace: (Discrete)  
 Site : 03CH06-HY  
 Condition : HF-ANT(8-16)-060918 VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch00;2402MHz  
 Plane : E2  
 Rate : DHS

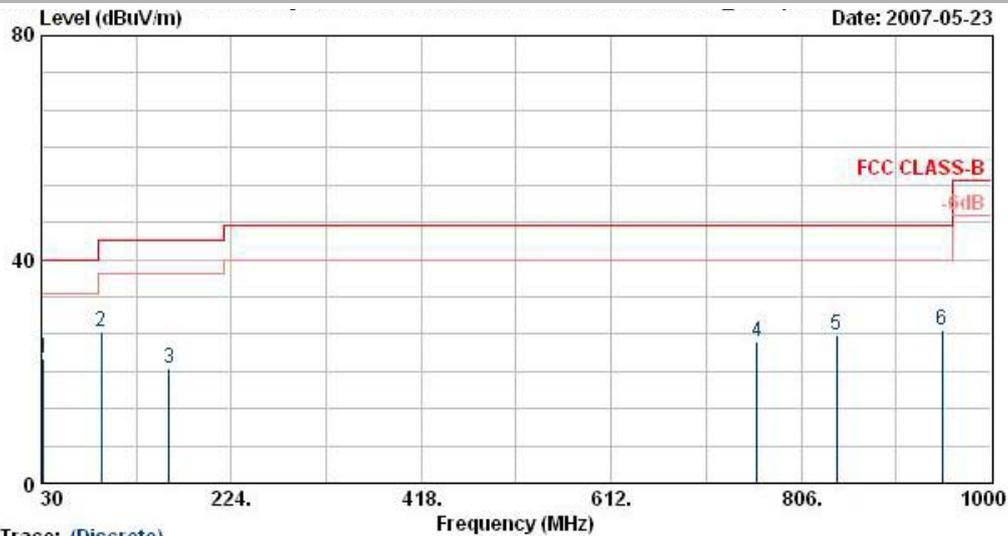
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2357.92	48.35	-25.65	74.00	49.82	30.24	3.71	35.42	100	0	Peak
2	2357.92	38.55	-15.45	54.00	40.02	30.24	3.71	35.42	100	35	Average
3 @	2402.00	69.44			70.87	30.26	3.77	35.46	100	35	Average
4 X	2402.00	87.86			89.27	30.27	3.77	35.46	100	0	Peak
5	2498.00	38.76	-15.24	54.00	40.11	30.30	3.88	35.53	100	35	Average
6	2498.00	48.84	-25.16	74.00	50.19	30.30	3.88	35.53	100	0	Peak
7	4804.00	51.49	-22.51	74.00	48.88	32.88	5.83	36.10	---	---	Peak
8	4804.00	44.50	-9.50	54.00	41.89	32.88	5.83	36.10	100	197	Average
9	8541.00	57.45	-16.55	74.00	46.06	39.13	8.41	36.15	---	---	Peak
10	8541.00	44.68	-9.32	54.00	33.29	39.13	8.41	36.15	100	93	Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 2
- Polarization : Horizontal

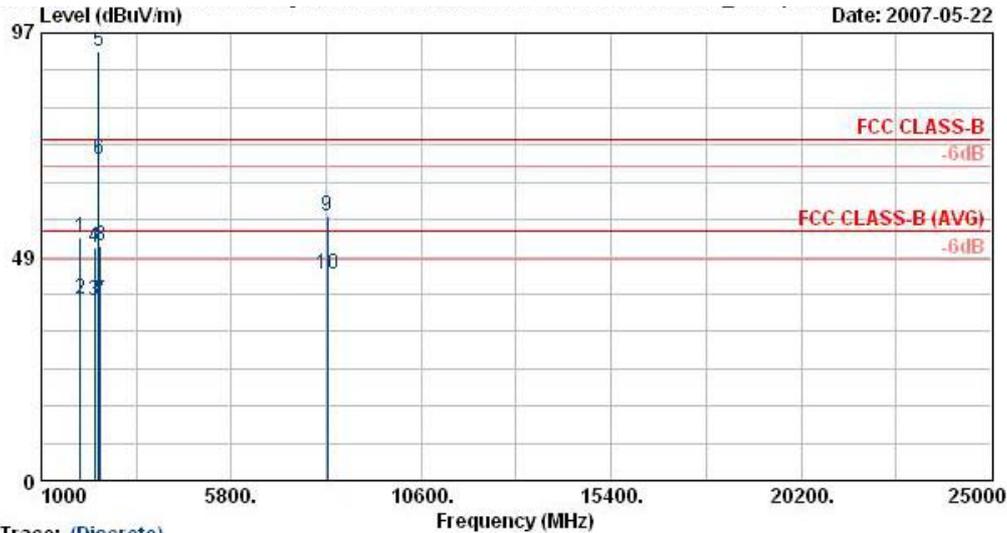
The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY  
 Condition : LF-ANT(951121) HORIZONTAL  
 EDT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch39;2441MHz  
 Plane : E2  
 Rate : DHS

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	32.43	22.42	-17.58	40.00	35.38	17.54	0.86	31.36	---	---	Peak
2 @	91.29	27.13	-16.37	43.50	47.70	9.23	1.33	31.12	100	181	Peak
3	160.14	20.46	-23.04	43.50	39.50	10.13	1.86	31.03	---	---	Peak
4	761.30	25.24	-20.76	46.00	31.87	19.46	4.43	30.52	---	---	Peak
5	841.80	26.45	-19.55	46.00	32.12	20.12	4.65	30.44	---	---	Peak
6	950.30	27.35	-18.65	46.00	31.77	20.89	4.96	30.28	---	---	Peak



Site : 03CH06-HY  
 Condition : SHF-EHF HORN HORIZONTAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch39;2441MHz  
 Plane : E2  
 Rate : DH5

Trace: (Discrete)

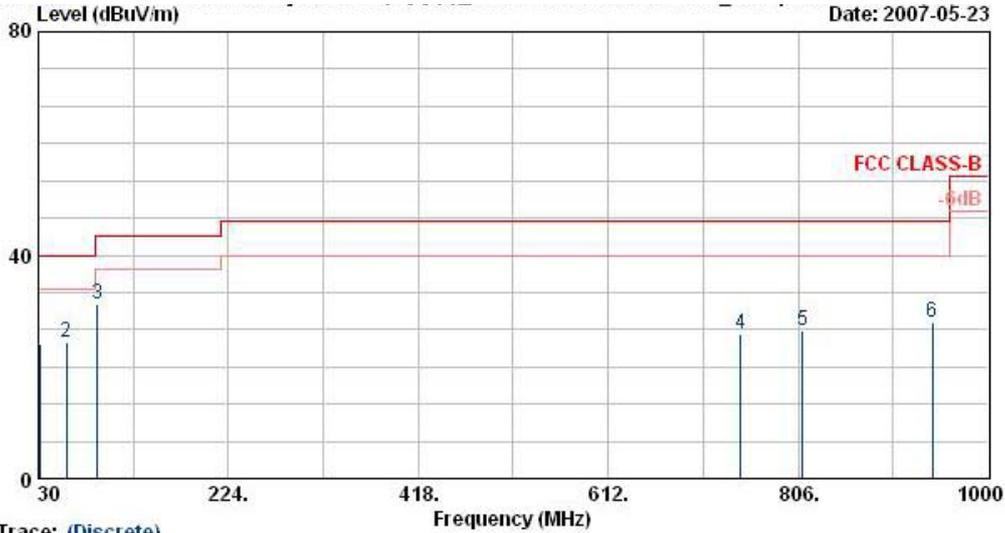
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1988.00	52.48	-21.52	74.00	54.38	29.97	3.30	35.17	100	0	Peak
2 @	1988.00	39.13	-14.87	54.00	41.03	29.97	3.30	35.17	100	72	Average
3 @	2334.00	38.77	-15.23	54.00	40.26	30.23	3.69	35.40	100	48	Average
4	2334.00	50.58	-23.42	74.00	52.07	30.23	3.69	35.40	100	0	Peak
5 @	2441.00	93.03			94.41	30.28	3.82	35.47	100	0	Peak
6 @	2441.00	69.70			71.10	30.28	3.82	35.49	100	48	Average
7 @	2494.00	39.02	-14.98	54.00	40.37	30.30	3.88	35.53	100	48	Average
8	2494.00	50.81	-23.19	74.00	52.15	30.30	3.88	35.53	100	0	Peak
9	8232.00	57.28	-16.72	74.00	45.78	39.42	8.06	35.98	---	---	Peak
10 @	8232.00	44.56	-9.44	54.00	33.06	39.42	8.06	35.98	100	92	Average

Remark: #5 and #6 Fundamental Signal



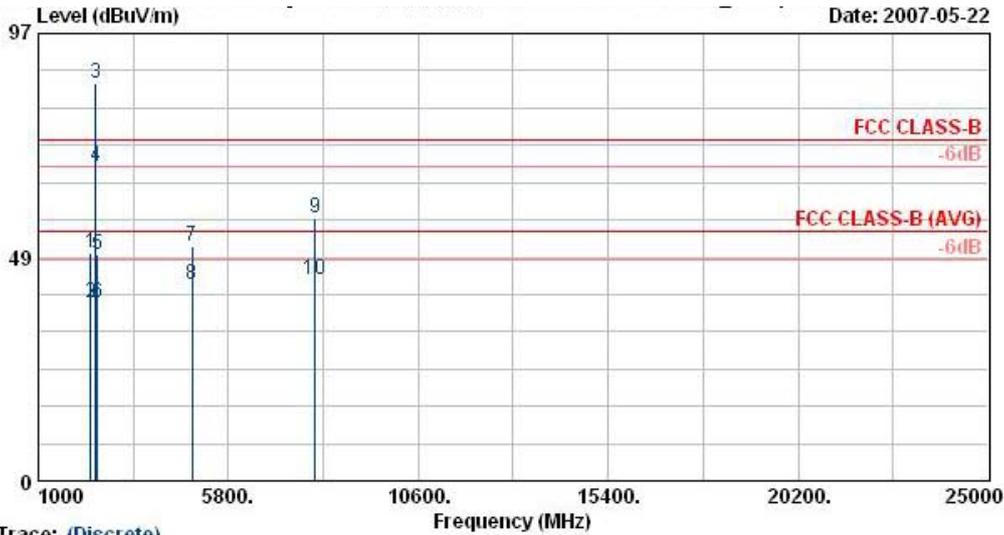
- Polarization : Vertical

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



Site : 03CH06-HY  
 Condition : LP-ANT(951121) VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch39;2441MHz  
 Plane : E2  
 Rate : DH5

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	31.08	24.17	-15.83	40.00	35.79	18.95	0.85	31.43	---	---	Peak
2 @	58.89	24.31	-15.69	40.00	47.67	6.77	1.11	31.23	---	---	Peak
3 @	90.48	31.34	-12.16	43.50	52.13	9.03	1.32	31.14	114	59	Peak
4	747.30	25.88	-20.12	46.00	32.72	19.32	4.36	30.53	---	---	Peak
5	810.30	26.61	-19.39	46.00	32.57	19.89	4.63	30.48	---	---	Peak
6	943.30	27.91	-18.09	46.00	32.42	20.84	4.94	30.29	---	---	Peak



Site : 03CH06-HY  
 Condition : SHF-EHF HORN VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch39;2441MHz  
 Plane : E2  
 Rate : DH5

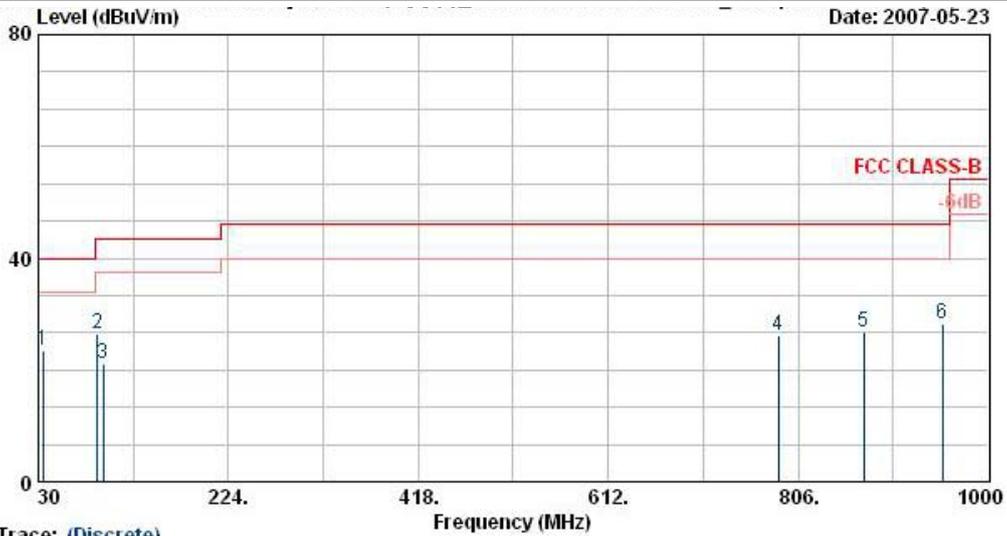
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2328.00	49.52	-24.48	74.00	51.00	30.23	3.69	35.40	100	0	Peak
2 @	2328.00	38.66	-15.34	54.00	40.15	30.23	3.69	35.40	100	34	Average
3 @	2441.00	86.19			87.57	30.28	3.82	35.47	100	0	Peak
4 @	2441.00	68.31			69.71	30.28	3.82	35.49	100	34	Average
5	2488.00	49.15	-24.85	74.00	50.50	30.30	3.86	35.51	100	0	Peak
6 @	2488.00	38.58	-15.42	54.00	39.93	30.30	3.86	35.51	100	34	Average
7	4882.00	50.68	-23.32	74.00	47.83	33.14	5.88	36.16	---	---	Peak
8 @	4882.00	42.44	-11.56	54.00	39.58	33.14	5.88	36.16	100	188	Average
9	8001.00	56.91	-17.09	74.00	45.38	39.60	7.79	35.86	---	---	Peak
10 @	8001.00	43.71	-10.29	54.00	32.18	39.60	7.79	35.86	100	264	Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 3
- Polarization : Horizontal

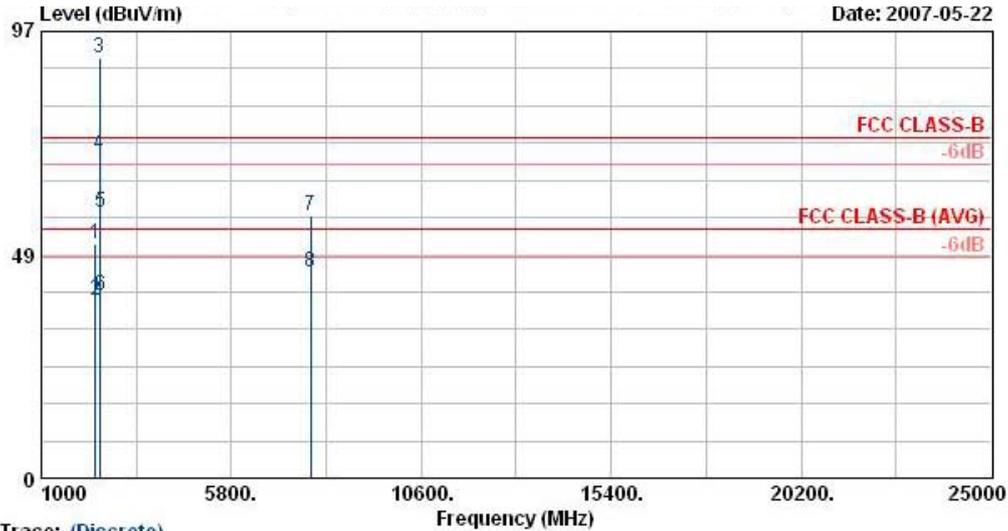
The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY  
 Condition : LF-ANT(051121) HORIZONTAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch78; 2480MHz  
 Plane : E2  
 Rate : DR5

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	34.59	23.58	-16.42	40.00	37.86	16.13	0.88	31.29	105	312	Peak
2	90.48	26.56	-16.94	43.50	47.35	9.03	1.32	31.14	---	---	Peak
3	96.69	21.24	-22.26	43.50	40.55	10.40	1.38	31.10	---	---	Peak
4	785.80	26.07	-19.93	46.00	32.33	19.68	4.56	30.50	---	---	Peak
5	873.30	26.84	-19.16	46.00	32.17	20.34	4.73	30.40	---	---	Peak
6	953.80	28.15	-17.85	46.00	32.54	20.91	4.97	30.28	---	---	Peak



Site : 03CH06-HY  
 Condition : HF-ANT(8-16)-060918 HORIZONTAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_CH78;2460MHz  
 Plane : E2  
 Rate : DHS

Trace: (Discrete)

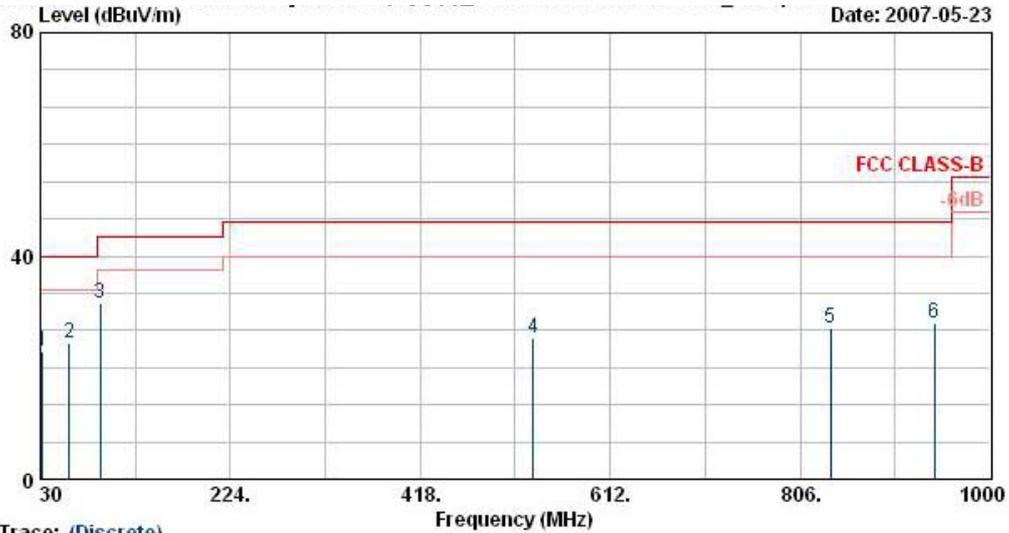
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2374.00	50.86	-23.14	74.00	52.31	30.25	3.73	35.44	100	0	Peak
2	2374.00	38.53	-15.47	54.00	39.99	30.25	3.73	35.44	100	92	Average
3 X	2480.00	91.32			92.68	30.29	3.86	35.51	100	0	Peak
4 X	2480.00	70.22			71.58	30.29	3.86	35.51	100	92	Average
5	2483.50	57.54	-16.46	74.00	58.90	30.29	3.86	35.51	100	0	Peak
6	2483.50	39.69	-14.31	54.00	41.05	30.29	3.86	35.51	100	92	Average
7	7806.00	57.12	-16.88	74.00	46.00	39.32	7.72	35.92	---	---	Peak
8	7806.00	44.86	-9.14	54.00	33.74	39.32	7.72	35.92	100	205	Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

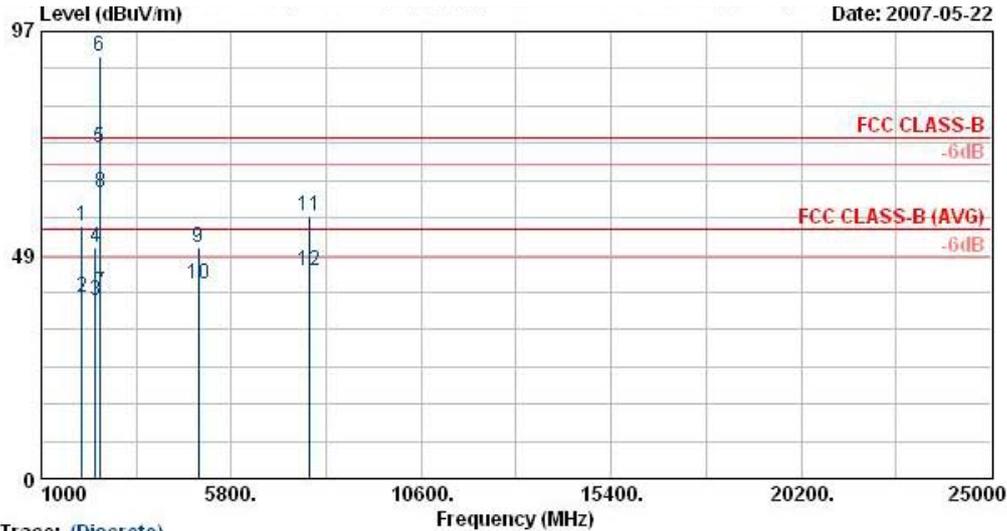
The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY  
 Condition : LF-ANT(951121) VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_CH78;2460MHz  
 Plane : E2  
 Rate : DHS

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	32.43	22.96	-17.04	40.00	35.91	17.54	0.86	31.36	---	---	Peak
2	59.43	24.32	-15.68	40.00	47.67	6.77	1.11	31.23	---	---	Peak
3	91.29	31.41	-12.09	43.50	51.98	9.23	1.33	31.12	110	77	Peak
4	533.80	25.35	-20.65	46.00	34.67	17.77	3.66	30.75	---	---	Peak
5	836.90	27.02	-18.98	46.00	32.74	20.08	4.64	30.45	---	---	Peak
6	943.30	27.81	-18.19	46.00	32.32	20.84	4.94	30.29	---	---	Peak



Trace: (Discrete)

Site : 03CH06-HY  
 Condition : HF-ANT(8-16)-060918 VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tr\_CH78;2460MHz  
 Plane : E2  
 Rate : DH5

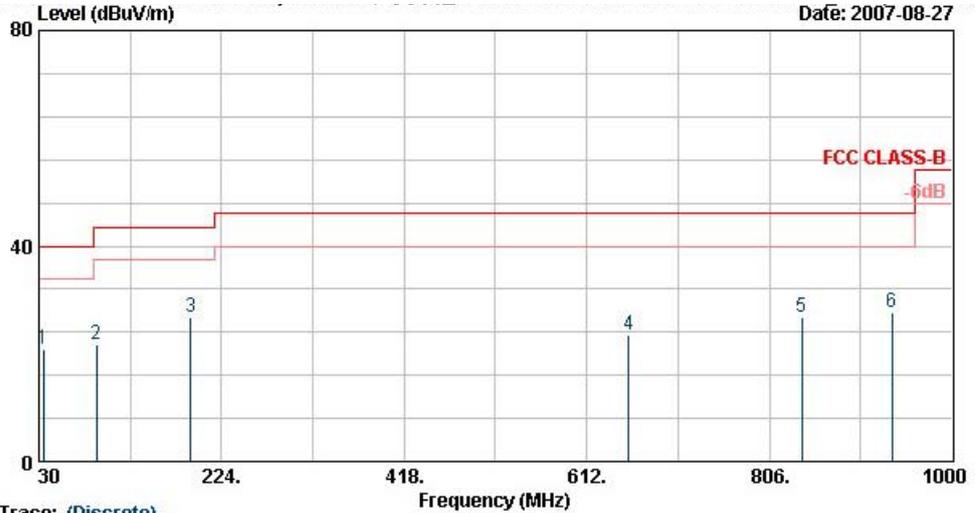
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2028.00	54.69	-19.31	74.00	56.43	30.11	3.34	35.19	100	0	Peak
2	2028.00	39.28	-14.72	54.00	41.02	30.11	3.34	35.19	100	24	Average
3	2374.00	38.55	-15.45	54.00	40.01	30.25	3.73	35.44	100	207	Average
4	2374.00	50.03	-23.97	74.00	51.49	30.25	3.73	35.44	100	0	Peak
5 @	2480.00	71.82			73.18	30.29	3.86	35.51	100	207	Average
6 X	2480.00	91.63			92.99	30.29	3.86	35.51	100	0	Peak
7	2483.53	40.46	-13.54	54.00	41.82	30.29	3.86	35.51	100	207	Average
8	2483.53	62.12	-11.88	74.00	63.48	30.29	3.86	35.51	100	0	Peak
9	4960.00	49.97	-24.03	74.00	46.80	33.47	5.93	36.23	---	---	Peak
10	4960.00	42.25	-11.75	54.00	39.08	33.47	5.93	36.23	100	182	Average
11	7791.00	57.15	-16.85	74.00	46.08	39.30	7.71	35.94	---	---	Peak
12	7791.00	44.93	-9.07	54.00	33.86	39.30	7.71	35.94	100	51	Average

Remark: #5 and #6 Fundamental Signal



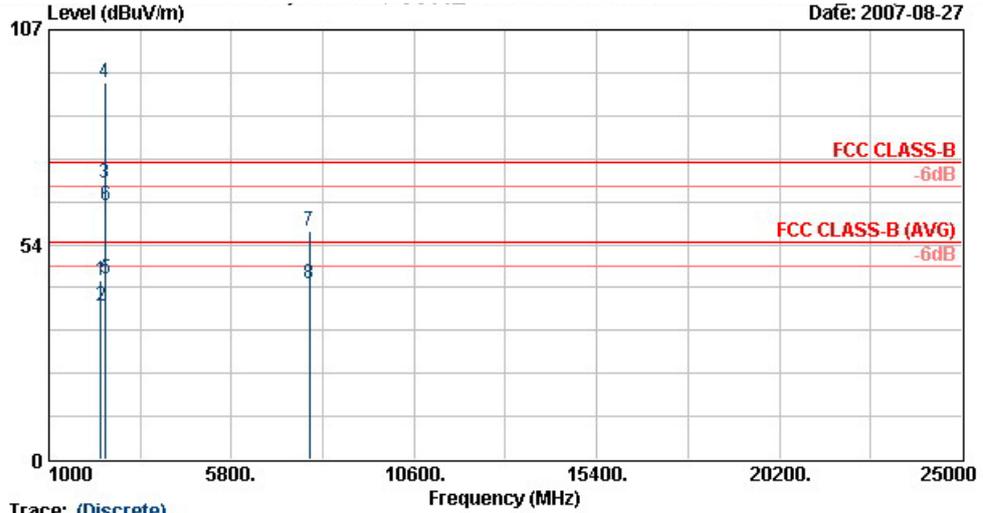
- Test Mode : Mode 4
- Polarization : Horizontal

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



Trace: (Discrete)  
 Site : 08CH06-HY  
 Condition : LF-ANT(951121) HORIZONTAL  
 EUT : PD& Phone  
 Power : 120Vac/80Hz  
 Model : FR 750203-02  
 Memo : BT Tx\_Ch78,2480MHz  
 Plane : E2  
 Rate : 2DH1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	35.1	20.85	-19.15	40.00	35.33	16.13	0.68	31.29	---	---	Peak
2	91.3	21.85	-21.65	43.50	42.71	9.23	1.04	31.12	---	---	Peak
3 @	191.2	26.88	-16.62	43.50	47.02	9.36	1.51	31.01	100	137	Peak
4	656.3	23.41	-22.59	46.00	32.22	18.71	3.12	30.64	---	---	Peak
5	840.4	26.74	-19.26	46.00	33.50	20.10	3.57	30.44	---	---	Peak
6	936.3	27.57	-18.43	46.00	33.20	20.79	3.89	30.30	---	---	Peak



Trace: (Discrete)

Site : 09CH06-HY  
 Condition : SHF-EHF HORN HORIZONTAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203-02  
 Memo : BT Tx\_Ch7&2480MHz  
 Plane : E2  
 Rate : 2DH1

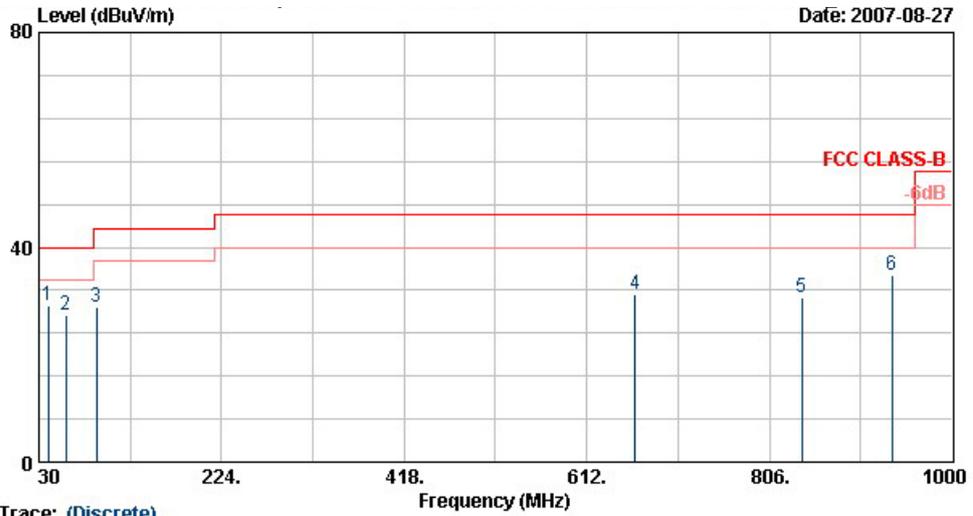
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2364.0	44.46	-29.54	74.00	45.91	30.24	3.73	35.42	100	0 Peak
2 @	2364.0	38.32	-15.68	54.00	39.77	30.24	3.73	35.42	100	99 Average
3 @	2480.0	68.99			70.35	30.29	3.86	35.51	100	99 Average
4 @	2480.0	94.05			95.40	30.29	3.86	35.51	100	0 Peak
5 @	2483.5	45.03	-8.97	54.00	46.39	30.29	3.86	35.51	100	99 Average
6 @	2483.5	63.07	-10.93	74.00	64.43	30.29	3.86	35.51	100	0 Peak
7	7851.0	56.73	-17.27	74.00	45.50	39.39	7.74	35.90	100	0 Peak
8 @	7851.0	43.90	-10.10	54.00	32.67	39.39	7.74	35.90	100	249 Average

Remark: #3 and #4 Fundamental Signal



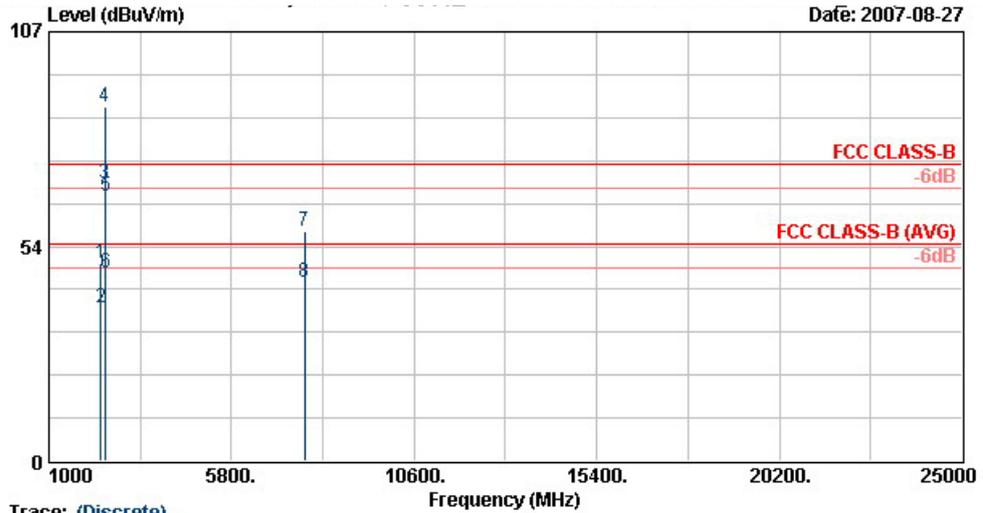
- Polarization : Vertical

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



Trace: (Discrete)  
 Site : 08CH06-HY  
 Condition : LP-ANT(951121) VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203-02  
 Memo : BT Tx\_Ch78;2480MHz  
 Plane : E2  
 Rate : 2DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	40.0	29.07	-10.93	40.00	46.07	13.51	0.70	31.21	100	234	Peak
2 @	58.9	27.22	-12.78	40.00	50.83	6.77	0.85	31.23	---	---	Peak
3 @	91.3	28.79	-14.71	43.50	49.65	9.23	1.04	31.12	---	---	Peak
4 @	663.3	31.31	-14.69	46.00	40.06	18.74	3.14	30.63	---	---	Peak
5 @	840.4	30.57	-15.43	46.00	37.33	20.10	3.57	30.44	---	---	Peak
6 @	936.3	34.89	-11.11	46.00	40.52	20.79	3.89	30.30	---	---	Peak



Trace: (Discrete)  
 Site : 08CH06-HY  
 Condition : SHF-EHF HORN VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203-02  
 Memo : BT Tx\_Ch78;2480MHz  
 Plane : E2  
 Rate : 2DH1

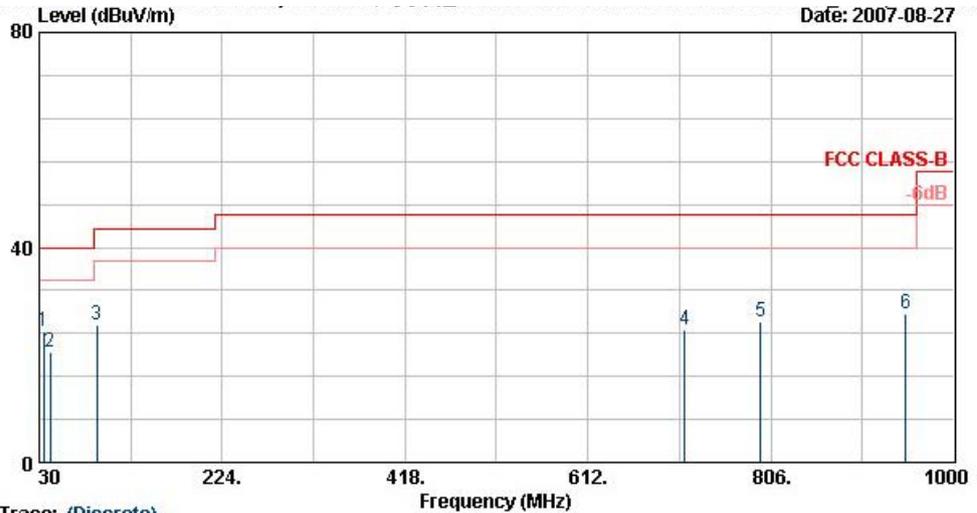
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2364.0	49.22	-24.78	74.00	50.67	30.24	3.73	35.42	100	0 Peak
2 @	2364.0	38.27	-15.73	54.00	39.72	30.24	3.73	35.42	100	204 Average
3 @	2480.0	69.31			70.67	30.29	3.86	35.51	100	204 Average
4 @	2480.0	88.36			89.72	30.29	3.86	35.51	100	0 Peak
5 @	2483.5	65.88	-8.12	74.00	67.33	30.24	3.73	35.42	100	0 Peak
6 @	2483.5	47.03	-6.97	54.00	48.48	30.24	3.73	35.42	100	204 Average
7	7722.0	57.23	-16.77	74.00	46.29	39.20	7.69	35.96	100	0 Peak
8 @	7722.0	44.53	-9.47	54.00	33.59	39.20	7.69	35.96	100	139 Average

Remark: #3 and #4 Fundamental Signal



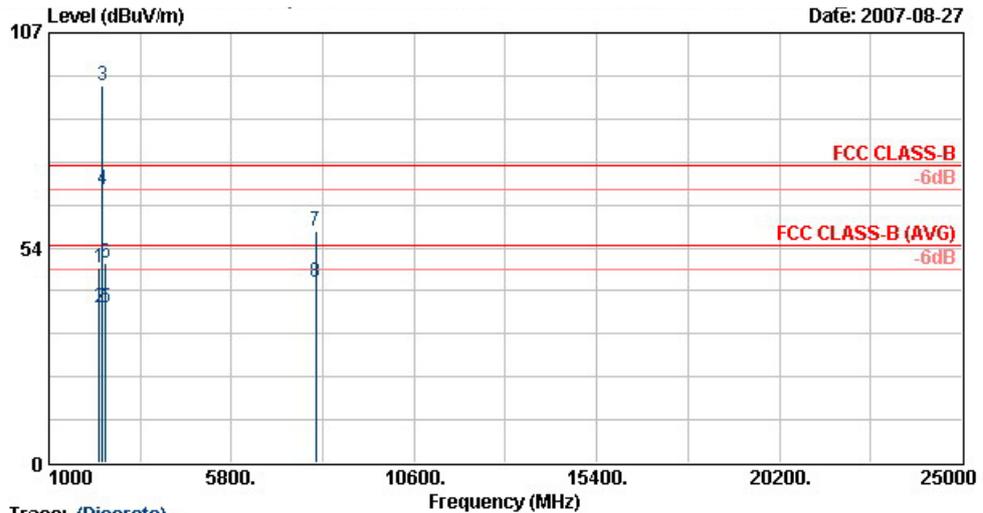
- Test Mode : Mode 5
- Polarization : Horizontal

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



Trace: (Discrete)  
 Site : 08CH06-HY  
 Condition : LP-ANT(951121) HORIZONTAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch00;2402MHz  
 Plane : E2  
 Rate : 3DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	cm	deg	
1 @	34.6	24.35	-15.65	40.00	38.63	16.13	0.88	31.29	100	58 Peak
2	41.3	20.39	-19.61	40.00	38.13	12.51	0.92	31.17	---	---
3	91.3	25.70	-17.80	43.50	46.26	9.23	1.33	31.12	---	---
4	714.4	24.68	-21.32	46.00	31.94	19.03	4.29	30.57	---	---
5	794.9	26.20	-19.80	46.00	32.31	19.77	4.61	30.49	---	---
6	948.9	27.71	-18.29	46.00	32.16	20.87	4.96	30.28	---	---



Trace: (Discrete)

Site : 08CHO6-HY  
 Condition : HF-ANT(8-18)-060918 HORIZONTAL  
 EUT : FDA Phone  
 Power : 120Vac/80Hz  
 Model : FR 750203  
 Memo : BT Tx\_CH00;2402MHz  
 Plane : E2  
 Rate : 3DH1

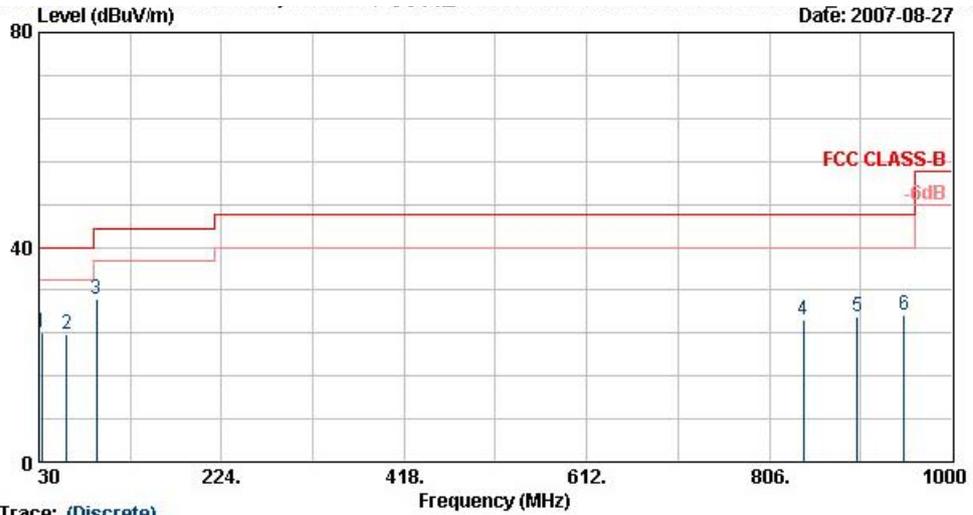
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1	2326.6	48.33	-25.67	74.00	49.82	30.23	3.69	35.40	100	0 Peak
2 @	2326.6	38.69	-15.31	54.00	40.18	30.23	3.69	35.40	100	49 Average
3 @	2402.0	93.73			95.15	30.27	3.77	35.46	100	0 Peak
4 @	2402.0	68.04			69.47	30.26	3.77	35.46	100	49 Average
5 @	2488.0	38.59	-15.41	54.00	39.94	30.30	3.86	35.51	100	49 Average
6	2488.0	49.79	-24.21	74.00	51.15	30.30	3.86	35.51	100	0 Peak
7	8022.0	57.61	-16.39	74.00	46.05	39.59	7.83	35.86	---	---
8 @	8022.0	45.03	-8.97	54.00	33.47	39.59	7.83	35.86	100	336 Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

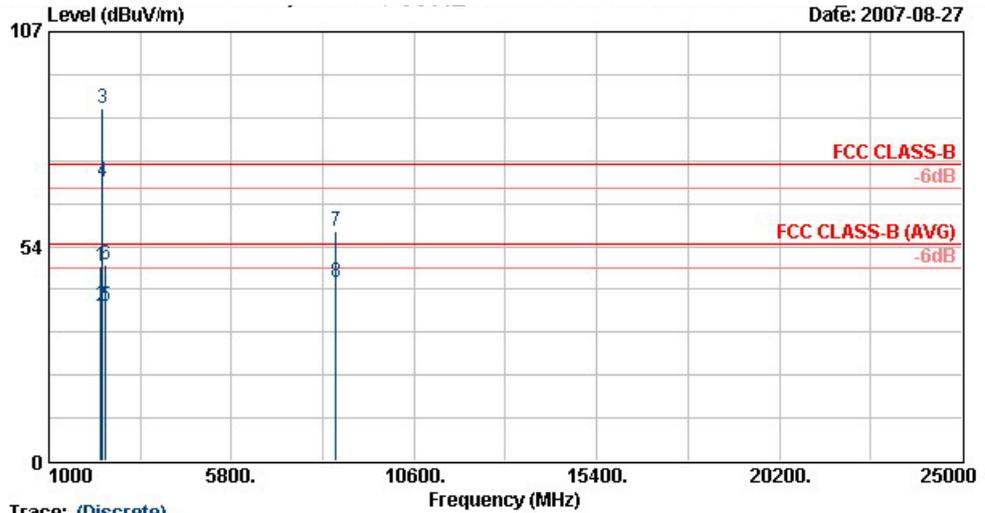
The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 08CH06-HY  
 Condition : LF-ANT(951121) VERTICAL  
 EUT : FDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Channel;2402MHz  
 Plane : E2  
 Rate : 3DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	33.2	24.22	-15.78	40.00	37.17	17.54	0.86	31.36	---	Peak
2	59.4	23.89	-16.11	40.00	47.24	6.77	1.11	31.23	---	Peak
3 @	91.3	30.44	-13.06	43.50	51.01	9.23	1.33	31.12	112	209 Peak
4	841.8	26.39	-19.61	46.00	32.06	20.12	4.65	30.44	---	Peak
5	899.9	27.12	-18.88	46.00	32.14	20.53	4.82	30.37	---	Peak
6	948.9	27.29	-18.71	46.00	31.74	20.87	4.96	30.28	---	Peak



Trace: (Discrete)  
 Site : 03CH06-HY  
 Condition : HF-ANT(8-18)-060918 VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch00;2402MHz  
 Plane : E2  
 Rate : 3DH1

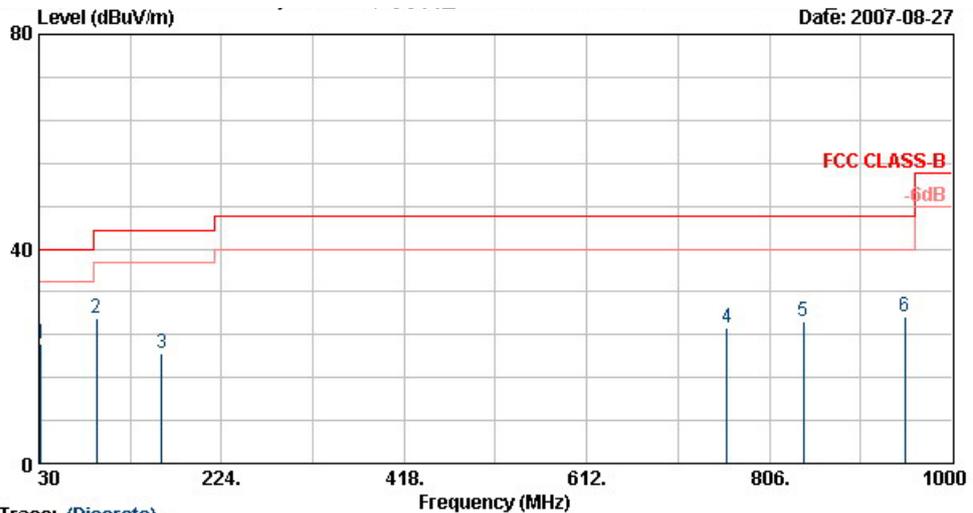
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2357.9	48.35	-25.65	74.00	49.82	30.24	3.71	35.42	100	0 Peak
2 @	2357.9	38.55	-15.45	54.00	40.02	30.24	3.71	35.42	100	35 Average
3 @	2402.0	87.86			89.27	30.27	3.77	35.46	100	0 Peak
4 @	2402.0	69.44			70.87	30.26	3.77	35.46	100	35 Average
5 @	2498.0	38.76	-15.24	54.00	40.11	30.30	3.88	35.53	100	35 Average
6	2498.0	48.84	-25.16	74.00	50.19	30.30	3.88	35.53	100	0 Peak
7	8541.0	57.45	-16.55	74.00	46.06	39.13	8.41	36.15	---	---
8 @	8541.0	44.68	-9.32	54.00	33.29	39.13	8.41	36.15	100	93 Average

Remark: #3 and #4 Fundamental Signal



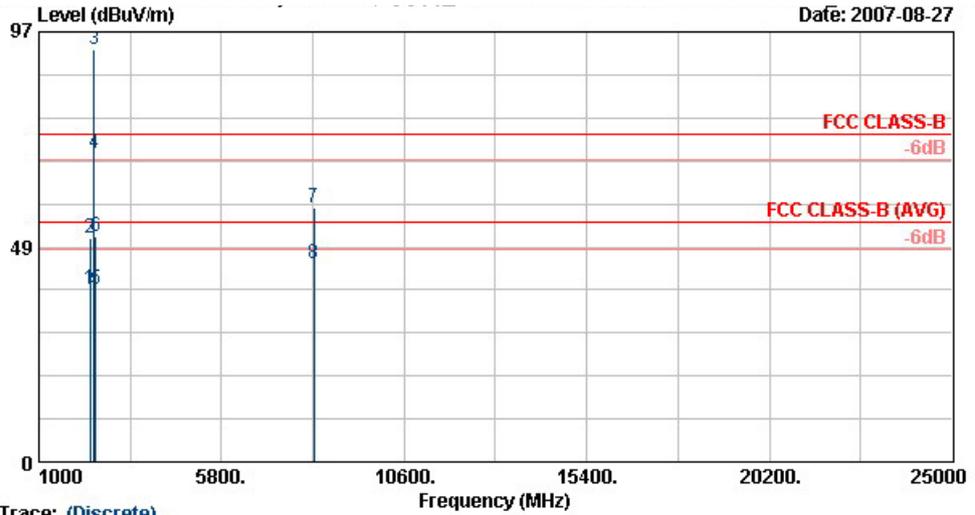
- Test Mode : Mode 6
- Polarization : Horizontal

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



Trace: (Discrete)  
 Site : 08CH06-HY  
 Condition : LF-ANT(951121) HORIZONTAL  
 EUT : FDA Phone  
 Power : 120V<sub>ac</sub>/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_Ch39;2441MHz  
 Plane : E2  
 Rate : 3DH1

	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	32.4	22.42	-17.58	40.00	35.38	17.54	0.86	31.36	---	Peak
2 @	91.3	27.13	-16.37	43.50	47.70	9.23	1.33	31.12	100	181 Peak
3	160.1	20.46	-23.04	43.50	39.50	10.13	1.86	31.03	---	Peak
4	761.3	25.24	-20.76	46.00	31.87	19.46	4.43	30.52	---	Peak
5	841.8	26.45	-19.55	46.00	32.12	20.12	4.65	30.44	---	Peak
6	950.3	27.35	-18.65	46.00	31.77	20.89	4.96	30.28	---	Peak



Trace: (Discrete)

Site : 08CHD6-HY  
 Condition : SHF-EHF HORN HORIZONTAL  
 EUT : FDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_C139;2441MHz  
 Plane : E2  
 Rate : 3DH1

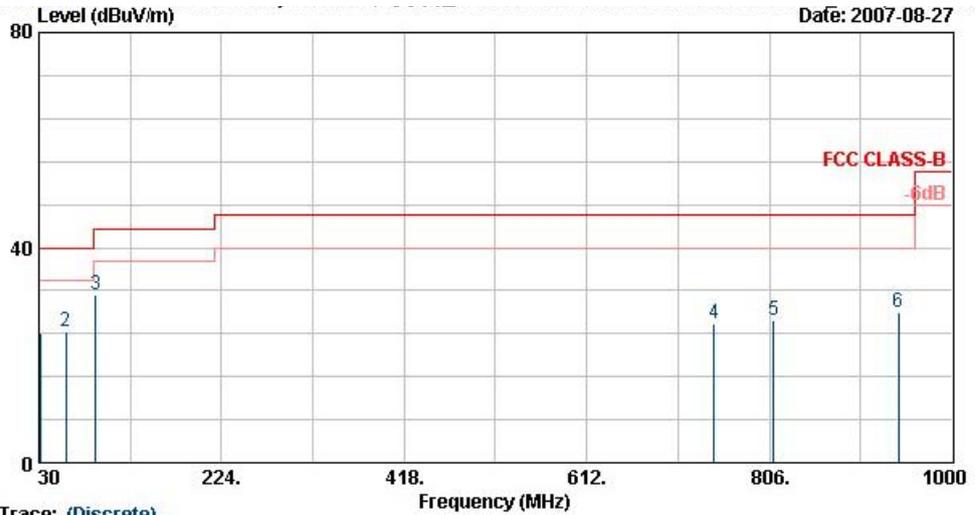
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1 @	2334.0	38.77	-15.23	54.00	40.26	30.23	3.69	35.40	100	48 Average
2	2334.0	50.58	-23.42	74.00	52.07	30.23	3.69	35.40	100	0 Peak
3 @	2441.0	93.03			94.41	30.28	3.82	35.47	100	0 Peak
4 @	2441.0	69.70			71.10	30.28	3.82	35.49	100	48 Average
5 @	2494.0	39.02	-14.98	54.00	40.37	30.30	3.88	35.53	100	48 Average
6	2494.0	50.81	-23.19	74.00	52.15	30.30	3.88	35.53	100	0 Peak
7	8232.0	57.28	-16.72	74.00	45.78	39.42	8.06	35.98	---	---
8 @	8232.0	44.56	-9.44	54.00	33.06	39.42	8.06	35.98	100	92 Average

Remark: #3 and #4 Fundamental Signal



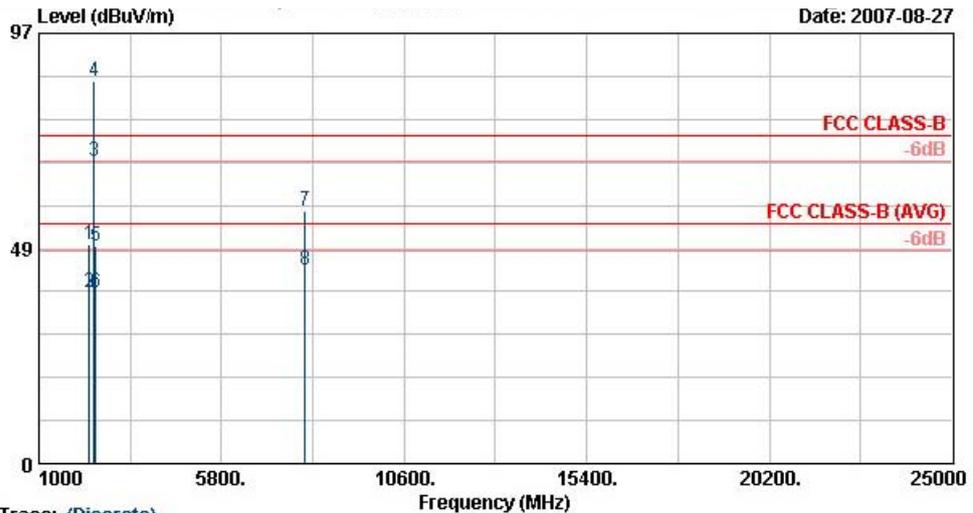
- Polarization : Vertical

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



Trace: (Discrete)  
 Site : 08CH06-HY  
 Condition : LF-ANT(951121) VERTICAL  
 EUT : FDA Phone  
 Power : 120V<sub>ac</sub>/60Hz  
 Model : FR 750203  
 Memo : BT Tx\_C139;2441MHz  
 Plane : E2  
 Rate : 3DH1

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	31.1	24.17	-15.83	40.00	35.79	18.95	0.85	31.43	---	---	Peak
2 @	58.9	24.31	-15.69	40.00	47.67	6.77	1.11	31.23	---	---	Peak
3 @	90.5	31.34	-12.16	43.50	52.13	9.03	1.32	31.14	114	59	Peak
4	747.3	25.88	-20.12	46.00	32.72	19.32	4.36	30.53	---	---	Peak
5	810.3	26.61	-19.39	46.00	32.57	19.89	4.63	30.48	---	---	Peak
6	943.3	27.91	-18.09	46.00	32.42	20.84	4.94	30.29	---	---	Peak



Trace: (Discrete)

Site : 03CHO6-HY  
 Condition : SHF-EHF HORN VERTICAL  
 EUT : PDA Phone  
 Power : 120Vac/80Hz  
 Model : FR 750203  
 Memo : BT Tx\_CN39;2441MHz  
 Plane : E2  
 Rate : 3DH1

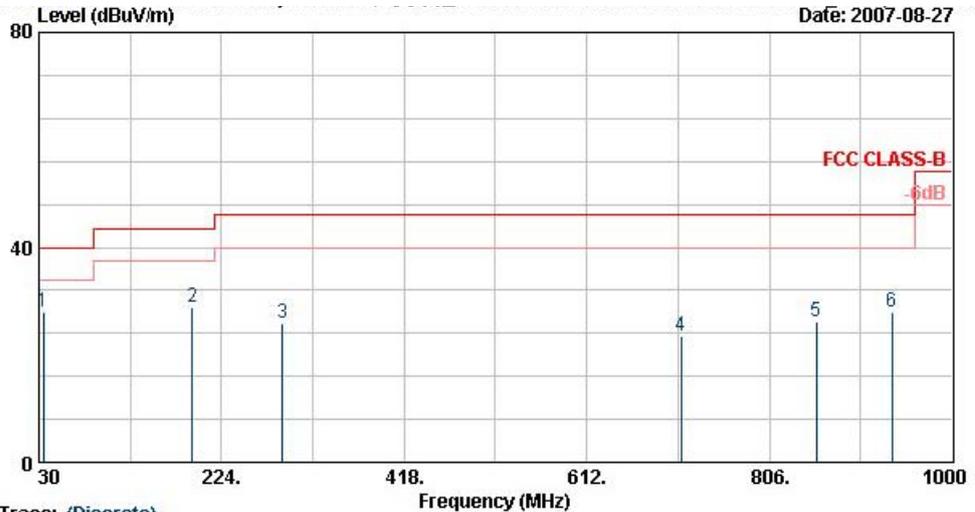
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2328.0	49.52	-24.48	74.00	51.00	30.23	3.69	35.40	100	0 Peak
2 @	2328.0	38.66	-15.34	54.00	40.15	30.23	3.69	35.40	100	34 Average
3 @	2441.0	68.31			69.71	30.28	3.82	35.49	100	34 Average
4 @	2441.0	86.19			87.57	30.28	3.82	35.47	100	0 Peak
5	2488.0	49.15	-24.85	74.00	50.50	30.30	3.86	35.51	100	0 Peak
6 @	2488.0	38.58	-15.42	54.00	39.93	30.30	3.86	35.51	100	34 Average
7	8001.0	56.91	-17.09	74.00	45.38	39.60	7.79	35.86	---	---
8 @	8001.0	43.71	-10.29	54.00	32.18	39.60	7.79	35.86	100	264 Average

Remark: #3 and #4 Fundamental Signal



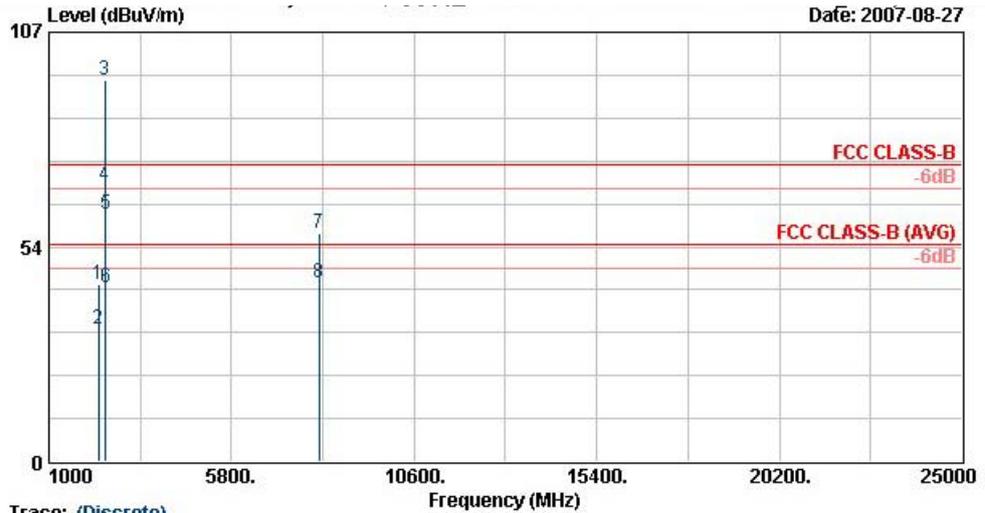
- Test Mode : Mode 7
- Polarization : Horizontal

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



Trace: (Discrete)  
 Site : 03CH06-HY  
 Condition : LF-ANT(951121) HORIZONTAL  
 EUT : FDA Phone  
 Power : 120V<sub>ac</sub>/60Hz  
 Model : FR 750203-02  
 Memo : BT Tx\_Ch78,2480MHz  
 Plane : E2  
 Rate : 3DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	34.6	28.10	-11.90	40.00	42.58	16.13	0.68	31.29	100	217	Peak
2	193.1	28.80	-14.70	43.50	48.95	9.35	1.51	31.01	---	---	Peak
3	288.4	25.83	-20.17	46.00	41.91	12.99	1.89	30.96	---	---	Peak
4	712.3	23.62	-22.38	46.00	31.92	19.00	3.27	30.58	---	---	Peak
5	855.8	26.30	-19.70	46.00	32.87	20.21	3.64	30.42	---	---	Peak
6	936.3	27.86	-18.14	46.00	33.49	20.79	3.89	30.30	---	---	Peak



Date: 2007-08-27

Trace: (Discrete)

Site : 08CHD6-HY  
 Condition : SHF-EHF HORN HORIZONTAL  
 EUT : FDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203-02  
 Memo : BT Tx\_Ch7&2480MHz  
 Plane : E2  
 Rate : 3DH1

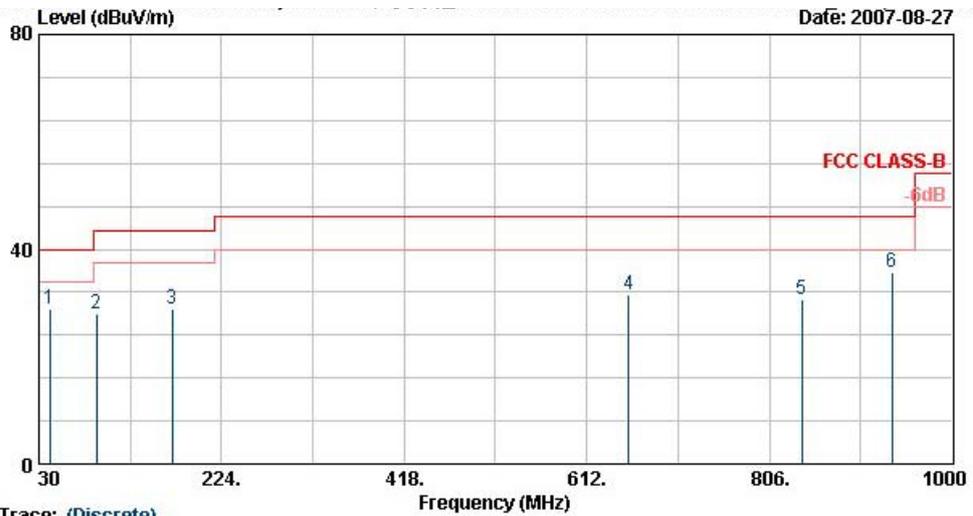
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1	2310.0	44.24	-29.76	74.00	45.74	30.22	3.66	35.39	100	0 Peak
2	2310.0	33.13	-20.87	54.00	34.63	30.22	3.66	35.39	100	154 Average
3 @	2480.0	94.99			96.35	30.29	3.86	35.51	100	0 Peak
4 @	2480.0	68.81			70.17	30.29	3.86	35.51	100	154 Average
5	2483.5	61.75	-12.25	74.00	63.11	30.29	3.86	35.51	100	0 Peak
6 @	2483.5	43.31	-10.69	54.00	44.67	30.29	3.86	35.51	100	154 Average
7	8106.0	56.91	-17.09	74.00	45.40	39.52	7.91	35.91	100	0 Peak
8 @	8106.0	44.41	-9.59	54.00	32.89	39.52	7.91	35.91	100	21 Average

Remark: #3 and #4 Fundamental Signal



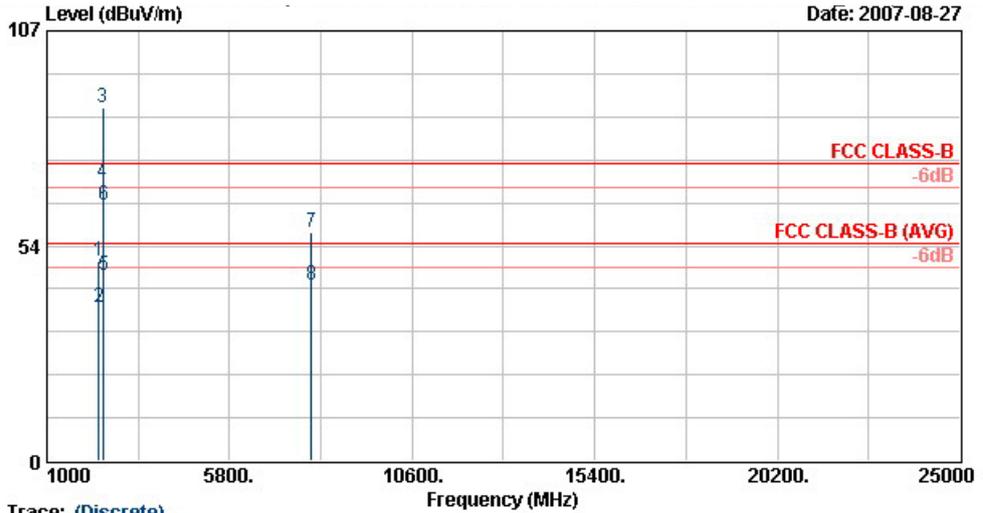
- Polarization : Vertical

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



Trace: (Discrete)  
 Site : 08CH06-HY  
 Condition : LP-ANT(951121) VERTICAL  
 EUT : FDA Phone  
 Power : 120Vac/60Hz  
 Model : FR 750203-02  
 Memo : BT Tx\_Ch78;2480MHz  
 Plane : E2  
 Rate : 3DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	41.9	28.85	-11.15	40.00	46.78	12.51	0.72	31.17	100	169	Peak
2	91.3	27.87	-15.63	43.50	48.72	9.23	1.04	31.12	---	---	Peak
3	171.5	28.79	-14.71	43.50	48.48	9.88	1.43	31.00	---	---	Peak
4	656.3	31.54	-14.46	46.00	40.35	18.71	3.12	30.64	---	---	Peak
5	840.4	30.53	-15.47	46.00	37.29	20.10	3.57	30.44	---	---	Peak
6 @	936.3	35.60	-10.40	46.00	41.23	20.79	3.89	30.30	---	---	Peak



Trace: (Discrete)

Site : 08CH06-HY  
 Condition : SHF-EHF HORN VERTICAL  
 EUT : FDA Phone  
 Power : 120Vac/80Hz  
 Model : FR 750203-02  
 Memo : BT Tx\_CN78\_2480MHz  
 Plane : E2  
 Rate : 3DH1

	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2368.0	49.62	-24.38	74.00	51.08	30.24	3.73	35.44	100	0 Peak
2	2368.0	38.27	-15.73	54.00	39.73	30.24	3.73	35.44	100	100 Average
3 @	2480.0	87.88			89.24	30.29	3.86	35.51	100	0 Peak
4 @	2480.0	69.04			70.40	30.29	3.86	35.51	100	100 Average
5 @	2483.5	46.23	-7.77	54.00	47.59	30.29	3.86	35.51	100	100 Average
6 @	2483.5	63.68	-10.32	74.00	65.04	30.29	3.86	35.51	100	0 Peak
7	7947.0	56.70	-17.30	74.00	45.26	39.53	7.78	35.87	100	0 Peak
8 @	7947.0	43.60	-10.40	54.00	32.16	39.53	7.78	35.87	100	134 Average

Remark: #3 and #4 Fundamental Signal



## **5.10 Antenna Requirements**

### **5.10.1 Standard Applicable**

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

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

### **5.10.2 Antenna Connected Construction**

The antennas used in this product are PIFAs for both WLAN and BT without connector and it is considered to meet antenna requirement of FCC.

### **5.10.3 Antenna Gain**

The antenna gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



## 6. List of Measuring Equipments Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMC Receiver	R&S	ESCS 30	100359	9kHz – 2.75GHz	Mar. 01, 2007	Feb. 29, 2008	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2007	Mar. 30, 2008	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2007	Mar. 21, 2008	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2007	Apr. 19, 2008	Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	N/A	Conduction (CO04-HY)
Isolation Transformer	Erika Fiedler OHG	D-65396 Walluf	58	45MHz-2.15GHz	N/A	N/A	Conduction (CO04-HY)
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Oct. 05, 2006	Oct. 04, 2007	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 13, 2006	Jul. 12, 2007	Radiation (03CH06-HY)
Controller	INN-CO	CO2000	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	10094	1G~18G	Dec. 26, 2006	Dec. 25, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Nov. 20, 2006	Nov. 19, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Pre Amplifier	Mini Circuits	ZKL-2	D092004-1	10~2500MHz	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	INN-CO	MM3000	114/8000604/L	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	106656	WCDMA	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Amplifier	MITEQ	AMF-6F-260400	923364	26.5 GHz - 40 GHz	Jan. 22, 2007	Jan. 22, 2008	Radiation (03CH06-HY)



## 7. Uncertainty Evaluation

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

Contribution	Uncertainty of $x_i$		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
<b>Combined standard uncertainty <math>Uc(y)</math></b>	<b>1.13</b>		
<b>Measuring uncertainty for a level of confidence of 95% <math>U=2Uc(y)</math></b>	<b>2.26</b>		

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

Contribution	Uncertainty of $x_i$		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.11	Normal(k=2)	0.06
Antenna factor calibration	0.91	Normal(k=2)	0.46
Cable loss calibration	0.12	Normal(k=2)	0.06
Pre Amplifier Gain calibration	0.15	Normal(k=2)	0.08
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.52	Rectangular	0.88
Mismatch	+0.45/-0.48	U-shaped	0.33
<b>Combined standard uncertainty <math>Uc(y)</math></b>	<b>1.30</b>		
<b>Measuring uncertainty for a level of confidence of 95% <math>U=2Uc(y)</math></b>	<b>2.60</b>		



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

Contribution	Uncertainty of $x_i$		$u(x_i)$	$C_i$	$C_i * u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20 \log(1 - \Gamma_1 * \Gamma_2 * \Gamma_3)$	+0.34/-0.35	U-shaped	0.244	1	0.244
<b>Combined standard uncertainty <math>U_c(y)</math></b>	<b>2.36</b>				
<b>Measuring uncertainty for a level of confidence of 95% <math>U = 2U_c(y)</math></b>	<b>4.72</b>				

The measured result is :  $y$  dBuV ±  $U$  dB

for a level of confidence of approximately 95% , (  $k = 2$  )