9 - DWELL TIME

9.1 Standard Applicable

According to §15.247 (a)(1)(i), the average time of occupancy on any channel shall not be greater than 0.4 seconds within a 10 second period.

9.2 Measurement Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3. Adjust the center frequency of SA on any frequency be measured and set SA to zero span mode. And then, set RBW and VBW of spectrum analyzer to proper value.
- 4. Measure the time duration of one transmission on the measured frequency. And then plot the result with time difference of this time duration.
- 5. Repeat above procedures until all frequencies measured were complete.

9.3 Test Equipment

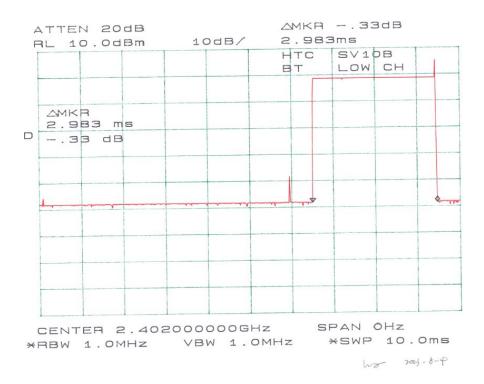
Manufacturer	Model No.	Description	Calibration Due Date
Agilent	8564E	Spectrum Analyzer	2004-08-01

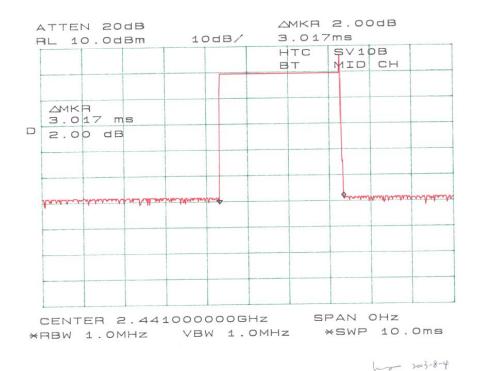
9.4 Measurement Results

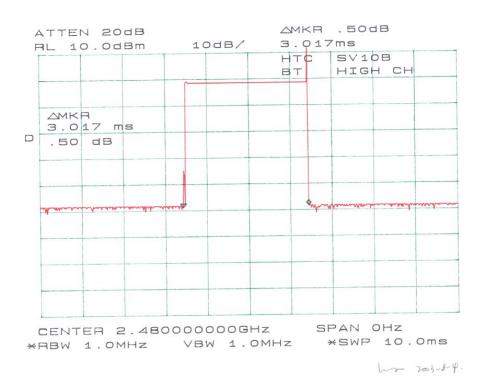
Low Channel: 7×2.983 (ms) $\times [(79 \times 0.4) / 2 \text{ (s)}] = 0.32 \text{ (s)} < 0.4 \text{ (s)}$ Middle Channel: 7×3.017 (ms) $\times [(79 \times 0.4) / 2 \text{ (s)}] = 0.33 \text{ (s)} < 0.4 \text{ (s)}$ High Channel: 7×3.017 (ms) $\times [(79 \times 0.4) / 2 \text{ (s)}] = 0.33 \text{ (s)} < 0.4 \text{ (s)}$

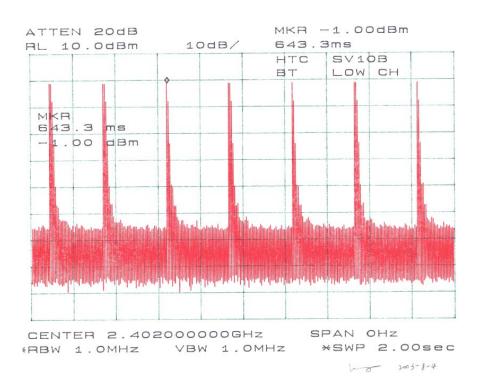
9.5 Plots of Dwell Time

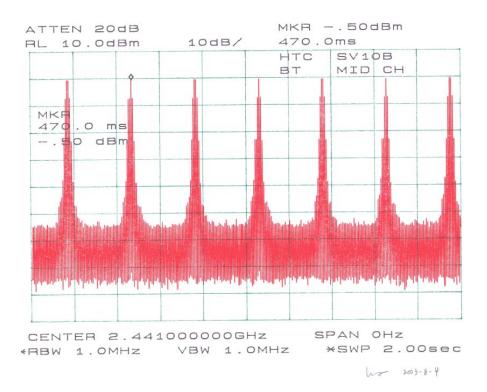
Please refer the following plots.

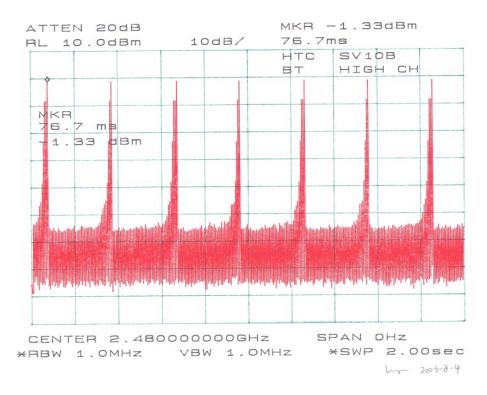












10 - SPURIOUS EMISSION AT ANTENNA PORT

10.1 Standard Applicable

According to §15.209 (f) and §15.33(a), in some cases the emissions from an intentional radiator must be measured to beyond the tenth harmonic of the highest fundamental frequency designed to be emitted by the intentional radiator because of the incorporation f a digital device. If measurements above the tenth harmonic are so required, the radiated emissions above the tenth harmonic shall comply with the general radiated emission limits applicable to the incorporated digital device, as shown in §15.109 and as based on the frequency of the emission being measured, or, except for emissions contained in the restricted frequency bands shown in §15.205, the limit on spurious emissions specified for the intentional radiator, whichever is the higher limit.

10.2 Measurement Procedure

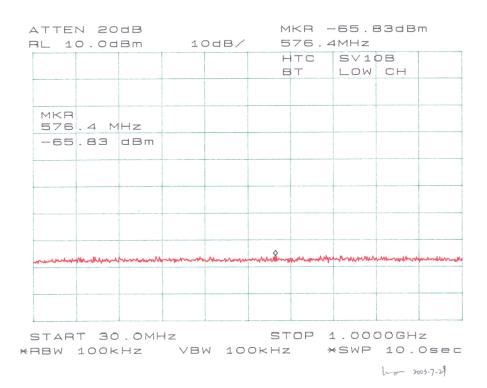
- 1. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT on a bench without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set the SA on Max-Hold Mode, and then keep the EUT in transmitting mode. Record all the signals from each channel until each one has been recorded.
- 4. Set the SA on View mode and then plot the result on SA screen.
- 5. Repeat above procedures until all frequencies measured were complete.

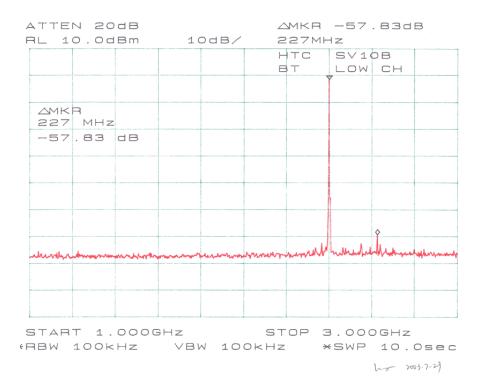
10.3 Test Equipment

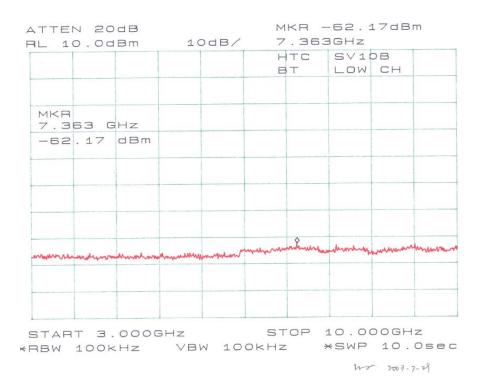
Manufacturer	Manufacturer Model No.		Calibration Due Date
Agilent	8564E	Spectrum Analyzer	2004-08-01
Com-Power	AL-100	Log Periodic Antenna	2004-05-01
Com-Power	AB-100	Biconical Antenna	2004-05-01
Com-Power	AB-900	Log Periodic Antenna	2004-05-01
A.H. System	SAS-200/571	Horn Antenna	2004-05-31

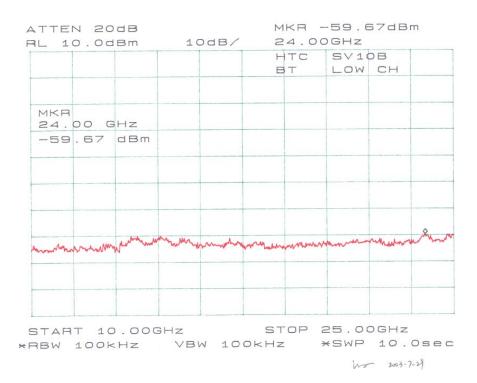
10.4 Measurement Results

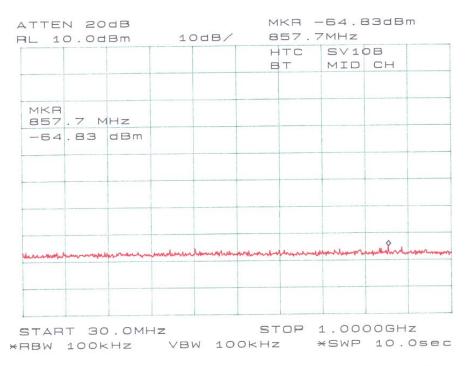
Please refer to the following plots.



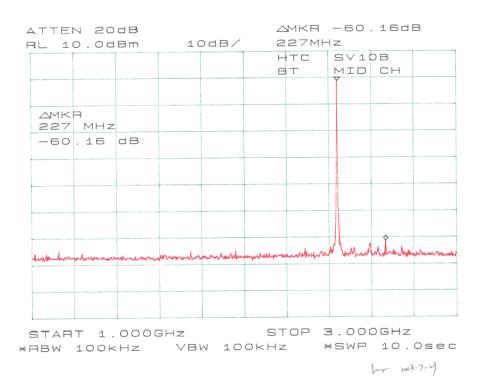


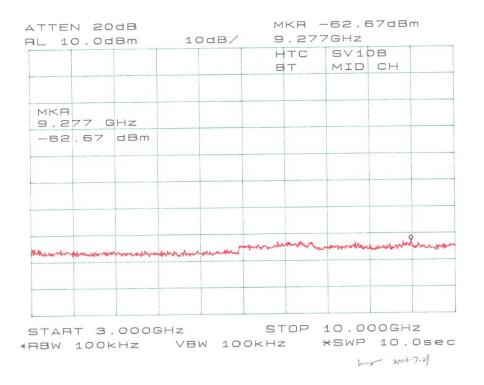


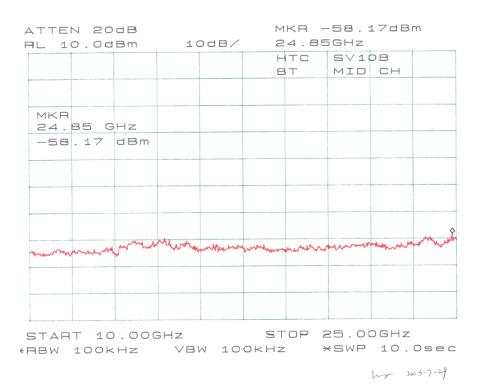


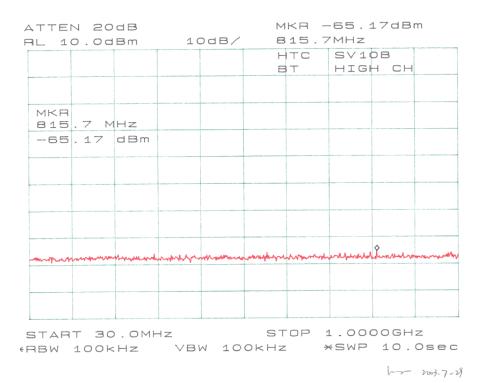


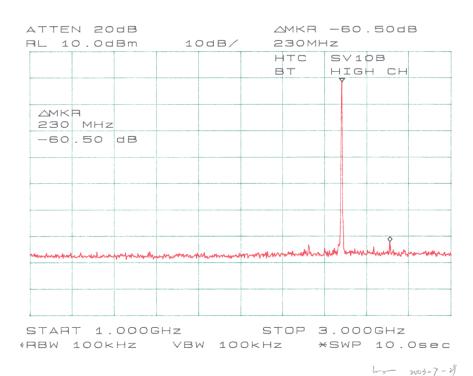
Wo 2003-7-29

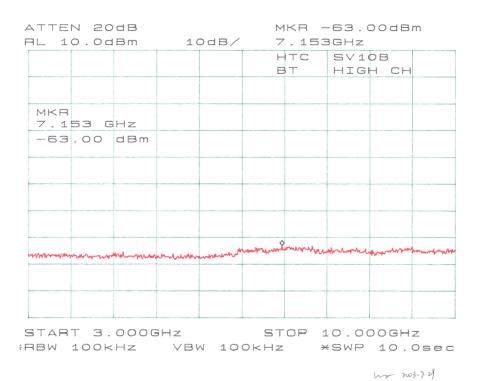


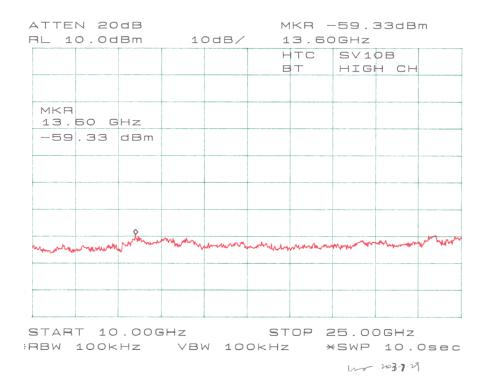












11 - RADIATED EMISSION

11.1 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at BACL is ±4.0 dB.

11.2 Test Setup

The radiated emission tests were performed in the open area 3-meter test site, using the setup in accordance with the ANSI C63.4-1992. The specification used was the FCC 15 Subpart C limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundle when necessary.

The EUT was connected with 120Vac/60Hz power source.

11.3 Spectrum Analyzer Setup

According to FCC Rules, 47 CFR §15.33 (a) (1), the system was tested to 10000 MHz.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

Start Frequency	. 30 MHz
Stop Frequency	. 10000 MHz
Sweep Speed	. Auto
IF Bandwidth	. 1 MHz
Video Bandwidth	. 1 MHz
Quasi-Peak Adapter Bandwidth	. 120 kHz
Quasi-Peak Adapter Mode	. Normal
Resolution Bandwidth	. 1MHz

11.4 Test Procedure

For the radiated emissions test, both the laptop and all peripheral power cords were connected to the AC floor outlet since the power supply used in the laptop did not provide an accessory power outlet.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations.

All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB μ V of specification limits), and are distinguished with a "**Qp**" in the data table.

11.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of $-7dB\mu V$ means the emission is $7dB\mu V$ below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Corr. Ampl. - Class B Limit

11.6 Test Equipment

Manufacturer	Model No.	Description	Calibration Due Date
Agilent	8564E	Spectrum Analyzer	2004-08-01

11.7 Summary of Test Results

According to the data in section 11.8, the EUT <u>complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.207, and 15.247</u>, and had the worst margin of:

For Model: SV10B

- -10.3 dB at 7206.00 MHz in the Vertical polarization, Low Channel.
- -9.6 dB at 7323.00 MHz in the Vertical polarization, Middle Channel.
- -9.8 dB at 7440.00 MHz in the Vertical polarization, High Channel.
- -12.2 dB at 110.76 MHz in the Horizontal polarization, Unintentional Emission

For Model: SV10A

- -11.4 dB at 7206.00 MHz in the Horizontal polarization, Low Channel.
- -11.3 dB at 7323.00 MHz in the Vertical polarization, Middle Channel.
- -11.5 dB at 7440.00 MHz in the Vertical polarization, High Channel.
- -13.0 dB at 576.12 MHz in the Vertical polarization, Unintentional Emission

11.8 Radiated Emission Test Data

11.8.1 Test Data for model: SV10B

	Indicated		Table	An	tenna		rrection Fa	ctor		FCC 15 S	ubpart C
Frequency	Ampl.	Direction	Height	Polar	Antenna	Cable Loss	Amp.	Corr. Ampl.	Limit	Margin	Mode
						dBμV/		•	dBμV/		
MHz	dBμV/m	Degree	Meter	H/V	dBμV/m	m	dB	dBμV/m	m	dB	
Low Channel											
2402.00	83.2	150	1.6	V	28.1	3.4	35.2	79.4			FUND/PEAK
2402.00	80.7	300	1.8	Н	28.1	3.4	35.2	76.9			FUND/PEAK
2402.00	51.8	150	1.6	V	28.1	3.4	35.2	48.1			FUND/AVE
2402.00	50.2	300	1.8	Н	28.1	3.4	35.2	46.5			FUND/AVE
7206.00	36.5	180	1.5	V	35.1	5.6	33.5	43.7	54	-10.3	AVE
7206.00	36.5	250	1.3	Н	35.1	5.6	33.5	43.7	54	-10.3	AVE
4804.00	33.8	120	1.5	V	32.5	4.9	33.0	38.2	54	-15.8	AVE
4804.00	33.7	15	1.6	Н	32.5	4.9	33.0	38.1	54	-15.9	AVE
7206.00	50.2	180	1.5	V	35.1	5.6	33.5	57.4	74	-16.6	PEAK
7206.00	49.5	250	1.3	Н	35.1	5.6	33.5	56.7	74	-17.3	PEAK
4804.00	46.2	120	1.5	V	32.5	4.9	33.0	50.6	74	-23.4	PEAK
4804.00	45.7	15	1.6	Н	32.5	4.9	33.0	50.1	74	-23.9	PEAK
Middle Channel											
2441.00	81.0	0	1.0	V	28.1	3.4	35.2	77.3			FUND/PEAK
2441.00	78.8	200	1.4	Н	28.1	3.4	35.2	75.1			FUND/PEAK
2441.00	50.8	0	1.0	V	28.1	3.4	35.2	47.1			FUND/AVE
2441.00	49.3	200	1.4	Н	28.1	3.4	35.2	45.6			FUND/AVE
7323.00	37.2	90	1.3	V	35.1	5.6	33.5	44.4	54	-9.6	AVE
7323.00	37.0	60	1.2	Н	35.1	5.6	33.5	44.2	54	-9.8	AVE
4882.00	34.0	30	1.2	V	32.5	4.9	33.0	38.4	54	-15.6	AVE
4882.00	33.8	270	1.4	Н	32.5	4.9	33.0	38.2	54	-15.8	AVE
7323.00	49.7	60	1.2	Н	35.1	5.6	33.5	56.9	74	-17.1	PEAK
7323.00	49.5	90	1.3	V	35.1	5.6	33.5	56.7	74	-17.3	PEAK
4882.00	46.3	30	1.2	V	32.5	4.9	33.0	50.7	74	-23.3	PEAK
4882.00	46.0	270	1.4	Н	32.5	4.9	33.0	50.4	74	-23.6	PEAK
					High	Channel					
2480.00	80.2	180	1.5	V	28.1	3.4	35.2	76.4			FUND/PEAK
2480.00	77.7	180	1.8	Н	28.1	3.4	35.2	73.9			FUND/PEAK
2480.00	50.2	180	1.5	V	28.1	3.4	35.2	46.5			FUND/AVE
2480.00	49.0	180	1.8	Н	28.1	3.4	35.2	45.3			FUND/AVE
7440.00	37.0	30	1.6	V	35.1	5.6	33.5	44.2	54	-9.8	AVE
7440.00	36.8	330	1.5	Н	35.1	5.6	33.5	44.0	54	-10.0	AVE
4960.00	33.8	0	1.4	V	32.5	4.9	33.0	38.2	54	-15.8	AVE
4960.00	33.7	150	1.4	Н	32.5	4.9	33.0	38.1	54	-15.9	AVE
7440.00	49.8	30	1.6	V	35.1	5.6	33.5	57.1	74	-16.9	PEAK
7440.00	49.7	330	1.5	Н	35.1	5.6	33.5	56.9	74	-17.1	PEAK
4960.00	45.8	0	1.4	V	32.5	4.9	33.0	50.2	74	-23.8	PEAK
4960.00	45.5	150	1.4	Н	32.5	4.9	33.0	49.9	74	-24.1	PEAK

Unintentional Emission

	Indicated		Table	Antenna		Correction Factor			FCC 15 Subpart B	
Frequency	Ampl.	Direction	Height	Polar	Antenna	Cable Loss	Amp.	Corr. Ampl.	Limit	Margin
MHz	dBμV/m	Degree	Meter	H/V	dBμV/m	dBμV/m	dB	dBμV/m	dBμV/m	dB
110.76	43.5	150	1.5	Н	11.3	1.5	25.0	31.3	43.5	-12.2
572.40	36.5	0	1.6	V	19.3	3.0	25.0	33.8	46	-12.2
228.00	42.3	180	1.5	V	11.8	2.2	25.0	31.3	46	-14.7
357.92	38.5	60	1.3	V	15.5	2.3	25.0	31.3	46	-14.7
328.50	38.2	330	1.2	V	15.5	2.3	25.0	31.0	46	-15.0
167.13	39.8	90	1.8	Н	13.0	1.8	25.0	29.6	46	-16.4

11.8.2 Test Data for model: SV10A

	Indicated		Table	An	tenna	Сс	rrection Fa	ctor	F	FCC 15 S	Subpart C
Frequency	Ampl.	Direction	Height	Polar	Antenna	Cable Loss	Amp.	Corr. Ampl.	Limit	Margin	Mode
MHz	dBμV/m	Degree	Meter	H/V	dBμV/m	dBμV/ m	dB	dBμV/m	dBμV/ m	dB	
Low Channel											
2402.00	82.8	0	1.6	V	28.1	3.4	35.2	79.1			FUND/PEAK
2402.00	78.0	30	1.5	Н	28.1	3.4	35.2	74.3			FUND/PEAK
2402.00	51.0	0	1.6	V	28.1	3.4	35.2	47.3			FUND/AVE
2402.00	49.3	30	1.5	Н	28.1	3.4	35.2	45.6			FUND/AVE
7206.00	35.3	45	1.4	V	35.1	5.6	33.5	42.6	54	-11.4	AVE
7206.00	35.2	220	1.5	Н	35.1	5.6	33.5	42.4	54	-11.6	AVE
4804.00	31.8	60	1.2	V	32.5	4.9	33.0	36.2	54	-17.8	AVE
4804.00	31.5	180	1.0	Н	32.5	4.9	33.0	35.9	54	-18.1	AVE
7206.00	46.5	220	1.5	Н	35.1	5.6	33.5	53.7	74	-20.3	PEAK
7206.00	46.0	45	1.4	V	35.1	5.6	33.5	53.2	74	-20.8	PEAK
4804.00	44.0	60	1.2	V	32.5	4.9	33.0	48.4	74	-25.6	PEAK
4804.00	43.2	180	1.0	Н	32.5	4.9	33.0	47.6	74	-26.4	PEAK
Middle Channel											
2441.00	81.5	180	1.4	V	28.1	3.4	35.2	77.8			FUND/PEAK
2441.00	79.3	30	1.4	Н	28.1	3.4	35.2	75.6			FUND/PEAK
2441.00	50.5	180	1.4	V	28.1	3.4	35.2	46.8			FUND/AVE
2441.00	49.3	30	1.4	Н	28.1	3.4	35.2	45.6			FUND/AVE
7323.00	35.5	180	1.5	V	35.1	5.6	33.5	42.7	54	-11.3	AVE
7323.00	35.3	330	1.4	Н	35.1	5.6	33.5	42.5	54	-11.5	AVE
4882.00	31.7	150	1.6	V	32.5	4.9	33.0	36.1	54	-17.9	AVE
4882.00	31.6	0	1.3	Н	32.5	4.9	33.0	36.0	54	-18.0	AVE
7323.00	46.8	180	1.5	V	35.1	5.6	33.5	54.0	74	-20.0	PEAK
7323.00	46.0	330	1.4	Н	35.1	5.6	33.5	53.2	74	-20.8	PEAK
4882.00	44.5	150	1.6	V	32.5	4.9	33.0	48.9	74	-25.1	PEAK
4882.00	43.8	0	1.3	Н	32.5	4.9	33.0	48.2	74	-25.8	PEAK
					High	Channel					
2480.00	81.5	330	1.4	V	28.1	3.4	35.2	77.8			FUND/PEAK
2480.00	76.0	0	1.2	Н	28.1	3.4	35.2	72.3			FUND/PEAK
2480.00	49.8	330	1.4	V	28.1	3.4	35.2	46.1			FUND/AVE
2480.00	47.5	0	1.2	Н	28.1	3.4	35.2	43.8			FUND/AVE
7440.00	35.3	0	1.4	V	35.1	5.6	33.5	42.5	54	-11.5	AVE
7440.00	35.1	45	1.0	Н	35.1	5.6	33.5	42.3	54	-11.7	AVE
4960.00	31.5	30	1.5	V	32.5	4.9	33.0	35.9	54	-18.1	AVE
4960.00	31.2	180	1.6	Н	32.5	4.9	33.0	35.6	54	-18.4	AVE
7440.00	46.3	0	1.4	V	35.1	5.6	33.5	53.5	74	-20.5	PEAK
7440.00	45.7	45	1.0	Н	35.1	5.6	33.5	52.9	74	-21.1	PEAK
4960.00	44.2	30	1.5	V	32.5	4.9	33.0	48.6	74	-25.4	PEAK
4960.00	43.5	180	1.6	Н	32.5	4.9	33.0	47.9	74	-26.1	PEAK

Unintentional Emission

	Indicated			Antenna		Correction Factor			FCC 15 Subpart B	
Frequency	Ampl.	Direction	Height	Polar	Antenna	Cable Loss	Amp.	Corr. Ampl.	Limit	Margin
MHz	dBμV/m	Degree	Meter	H/V	dBμV/m	$dB\mu V/m$	dB	dBμV/m	dBμV/m	dB
576.12	35.7	30	1.8	V	19.3	3.0	25.0	33.0	46	-13.0
110.50	41.8	150	1.5	Н	11.3	1.5	25.0	29.7	43.5	-13.8
170.17	39.0	90	1.8	Н	13.0	1.9	25.0	28.9	43.5	-14.6
328.07	37.8	180	1.3	V	15.5	2.3	25.0	30.7	46	-15.3
228.31	40.8	30	1.2	V	11.8	2.2	25.0	29.8	46	-16.2
357.69	35.0	0	1.5	V	15.5	2.3	25.0	27.8	46	-18.2

12 - CONDUCTED EMISSION

12.1 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at BACL is ± 2.4 dB.

12.2 Test Setup

The measurement was performed at shield room, using the same setup per ANSI C63.4 – 1992 measurement procedure. The specification used was FCC Class B limits.

External I/O cables were draped along the edge of the test table and bundle when necessary.

The EUT was connected with 120Vac/60Hz power source.

12.3 Spectrum Analyzer Setup

The spectrum analyzer was set with the following configurations during the conduction test:

Start Frequency	. 150 kHz
Stop Frequency	
Sweep Speed	
IF Bandwidth	10 kHz
Video Bandwidth	. 10 kHz
Quasi-Peak Adapter Bandwidth	. 9 kHz
Quasi-Peak Adapter Mode	

12.4 Test Procedure

During the conducted emission test, the power cord of the host system was connected to the auxiliary outlet of the first LISN.

Maximizing procedure was performed on the six (6) highest emissions of each modes tested to ensure EUT is compliant with all installation combination.

All data was recorded in the peak detection mode. Quasi-peak readings were only performed when an emission was found to be marginal (within -4 dB μ V of specification limits). Quasi-peak readings are distinguished with a "Qp".

12.5 Summary of Test Results

According to the data in section 12.6, the EUT <u>complied with the FCC</u> Conducted margin for a Class B device, with the *worst* margin reading of:

-0.6 dB μ V at 0.520 MHz in the Neutral mode, with PHIHONG AC Adapter

-9.6 dB μV at 0.375 MHz in the Neutral mode, with DELTA AC Adapter

12.6 Conducted Emissions Test Data

PHIHONG AC Adapter:

	LINE CO		FCC C	LASS B	
Frequency	Amplitude	Detector	Phase Limit		Margin
MHz	dΒμV	Qp/Ave/Peak	Line/Neutral	dΒμV	dB
0.520	45.4	AVG	Neutral	46	-0.6
0.520	51.4	QP	Neutral	56	-4.6
2.200	36.2	AVG	Neutral	46	-9.8
0.555	35.6	AVG	Line	46	-10.4
0.905	35.1	AVG	Neutral	46	-10.9
2.200	45.0	QP	Neutral	56	-11.0
0.905	44.4	QP	Neutral	56	-11.6
0.555	40.5	QP	Line	56	-15.5
1.040	19.0	AVG	Line	46	-27.0
1.640	17.5	AVG	Line	46	-28.5
1.040	26.1	QP	Line	56	-29.9
1.640	25.5	QP	Line	56	-30.5

DELTA AC Adapter:

TA AC Adapter:									
	LINE CON	NDUCTED EMISSIONS		FCC C	FCC CLASS B				
Frequency	Amplitude	Detector	Phase	Limit	Margin				
MHz	dΒμV	Qp/Ave/Peak	Line/Neutral	dΒμV	dB				
0.375	36.4	AVG	Neutral	46	-9.6				
0.450	38.3	AVG	Line	48	-9.7				
0.185	42.2	AVG	Neutral	52	-9.8				
0.195	41.1	AVG	Line	54	-12.9				
0.375	42.1	QP	Neutral	56	-13.9				
0.450	44.0	QP	Line	58	-14.0				
0.945	39.0	QP	Neutral	56	-17.0				
0.185	44.9	QP	Neutral	62	-17.1				
1.600	28.9	AVG	Line	46	-17.1				
0.195	45.0	QP	Line	64	-19.0				
0.945	26.9	AVG	Neutral	46	-19.1				
1.600	36.1	QP	Line	56	-19.9				

12.7 Plot of Conducted Emissions Test Data

Plot(s) of Conducted Emissions Test Data is presented in the following page as reference.

Plots for PHIHONG AC Adapter

Bay Area Compliance Laboratory Corp 04. Aug 03 10: 47 Class B

EUT: Manuf: Op Cond: Operator:

SV10B HTC Normal ling

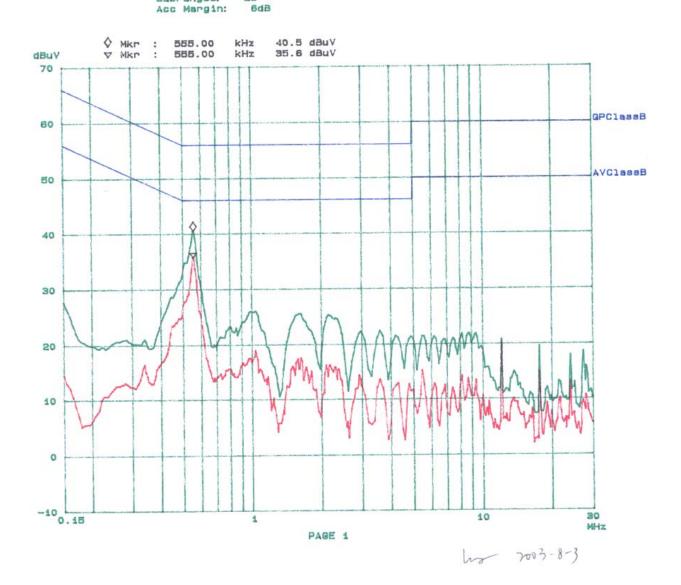
Comment:

L (PHIHONG)

Scan Setti	nga (3 Range	3)			The American Company			
	Frequencies				Receiv	er Sett:	ings	
Start	Stop	Step	IF	BW	Detector			
150k	114	5k	9	3ic	QP+AY	20ms	10dBLN	OFF
1M	ЗМ	10k	9	9k	GP+AV	ime	10dBLN	OFF
ЗM	MOE	100k	9	9k	GP+AV	1me	10dBLN	OFF

1 8

Final Measurement: x QP / + AV Meas Time: Subranges: 25



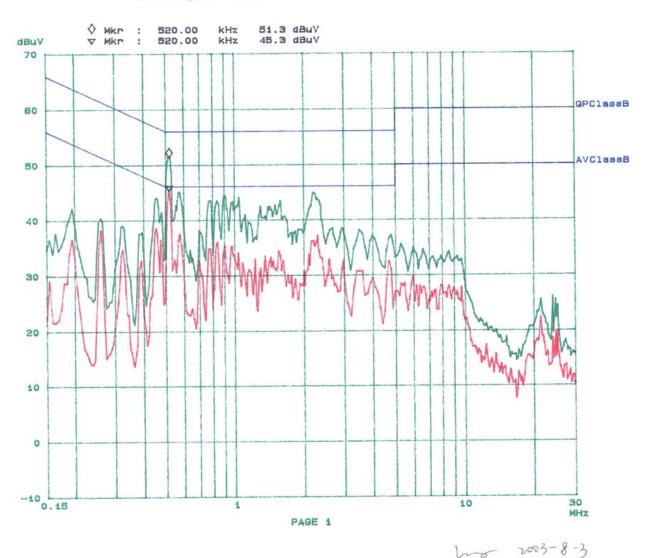
Bay Area Compliance Laboratory Corp 04. Aug 03 10: 22 Class B

9V108 EUT: Manuf: HTC Op Cond: Operator: Normal ling N (PHIHONG) Comment:

Scan Setti	ngs (3 Ranges	3)				E 21 (0 - 22 C + 1)		
	Frequencies		1		Acceiv	er Sett	ings	
Start	Stop	Step		BW	Detector	M-Time	Atten	Preamp
150k	1M	5k		9k	QP+AV	20ms	10dBLN	OFF
1M	ME	10k		9k	QP+AV	1me	10dBLN	OFF
ME	MOE	100k		9k	QP+AV	ims	10dBLN	OFF

Final Measurement: x QP / + AV Meas Time:

Subranges: 25 6dB Acc Margin:

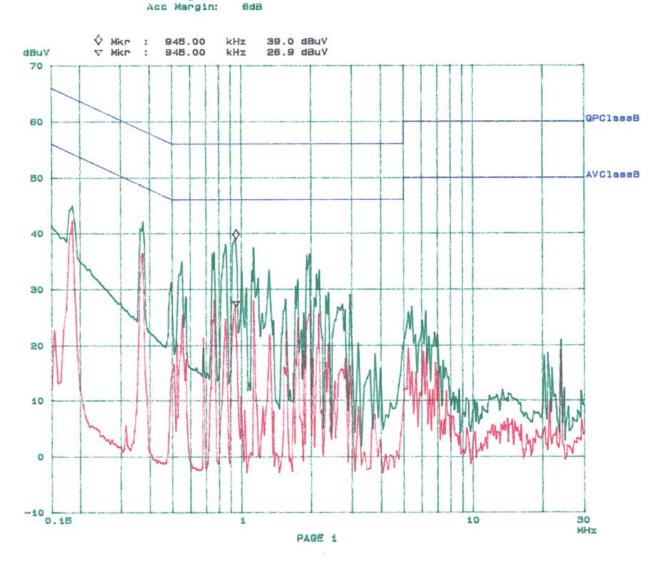


1ay Area Compliance Laboratory Corp 04. Aug 03 15: 54 Class B

9V10B EUT: HTC Manuf: Op Cond: Operator: Normal LING L (DELTA) Comment:

Scan Settin	ngs (3 Ranges	9)					
	Frequencies		l	Receiv	er Sett	ings	
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp
150k	1M	5k	9k	QP+AV	20ms	10dBLN	OFF
1M	ME	10k	9k	QP+AV	1ms	10dBLN	OFF
3M	MOE	100k	9k	GP+AV	ims	10dBLN	OFF

Final Measurement: x QP / + AV Meas Time: 1 8 Subranges: 25 Acc Margin:

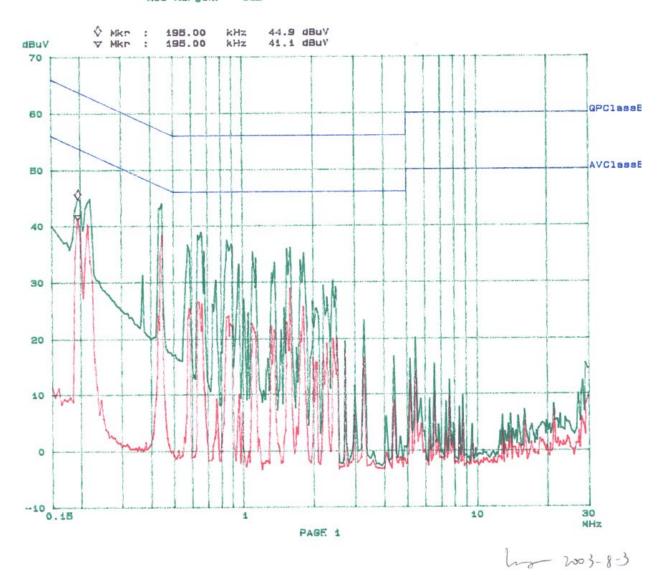


1ay Area Compliance Laboratory Corp 04. Aug 03 18: 13 Class B

EUT: SV10B Manuf: HTC Normal Op Cond: LING Operator: N (DELTA) Comment:

Scan Setti	ngs (3 Ranges	9)					
	Frequencies			Receiv	er Satt	ings	
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp
150k	2 M	5k	9k	QP+AV	20ms	10dBLN	OFF
1M	ME	10k	9k	QP+AV	1me	10dBLN	OFF
ЗM	HOE	100k	96	GP+AV	ims	10dBLN	OFF

Final Measurement: x QP / + AV Meas Time: 1 3 25 Subranges: 6dB Acc Margin:



13 - ANTENNA REQUIREMENT

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to § 15.247 (1), if transmitting antennas of directional gain greater than 6 dBi are used the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The gain of the integrated antenna used for transmitting is -1.2 dBi and is complied with 15.203. Please see EUT photo for details.

14 – RF EXPOSURE REQUIREMENT

According to the TCB Exclusions List, the limit for general population of portable transmitters that are used less than 2.5 cm from a person's body is:

Low threshold :($60/f_{GHZ}$) mW, d < 2.5 cm => (60/2.4) mW = 25mW

The maximum output power for the device is 0.0012 W (1.2 mW) which is less than the limit listed in the TCB exclusions lists (25mW). Therefore, SAR test is not required for the Part15 portion of this device.