

FCC TEST REPORT

REPORT NO.: RF940203L03

MODEL NO.: SKY-4001

(refer to page 5 for other models)

RECEIVED: Feb. 03, 2005

TESTED: Feb. 14 ~ Feb. 18, 2005

ISSUED Feb. 21, 2005

APPLICANT: Skytech II, Inc.

ADDRESS: 9230 Conservation Way Fort Wayne, Indiana
46809

ISSUED BY: Advance Data Technology Corporation

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang
244, Taipei Hsien, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd., Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This test report consists of 27 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CNLA, A2LA or any government agencies. The test results in the report only apply to the tested sample.



0528
ILAC MRA



No. 2177-01

Table of Contents

1.	CERTIFICATION	3
2.	SUMMARY OF TEST RESULTS	4
2.1	MEASUREMENT UNCERTAINTY	4
3.	GENERAL INFORMATION.....	5
3.1	GENERAL DESCRIPTION OF EUT	5
3.2	DESCRIPTION OF TEST MODES.....	6
3.2.1	CONFIGURATION OF SYSTEM UNDER TEST	6
3.2.2	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:	7
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	8
3.4	DESCRIPTION OF SUPPORT UNITS	8
4.	TEST TYPES AND RESULTS	9
4.1	CONDUCTED EMISSION MEASUREMENT	9
4.2	DEACTIVATION TIME	9
4.2.1	LIMITS OF DEACTIVATION TIME MEASUREMENT.....	9
4.2.2	TEST INSTRUMENTS.....	9
4.2.3	TEST PROCEDURES	9
4.2.4	DEVIATION FROM TEST STANDARD	9
4.2.5	TEST SETUP	10
4.2.6	TEST RESULTS	10
4.3	RADIATED EMISSION MEASUREMENT	13
4.3.1	LIMITS OF RADIATED EMISSION MEASUREMENT.....	13
4.3.2	TEST INSTRUMENTS.....	15
4.3.3	TEST PROCEDURES	16
4.3.4	DEVIATION FROM TEST STANDARD	16
4.3.5	TEST SETUP	17
4.3.6	EUT OPERATING CONDITIONS	17
4.3.7	TEST RESULTS	18
4.4	20dB OCCUPIED BANDWIDTH MEASUREMENT.....	23
4.4.1	LIMITS OF BAND EDGES MEASUREMENT	23
4.4.2	TEST INSTRUMENTS.....	23
4.4.3	TEST PROCEDURES	23
4.4.4	DEVIATION FROM TEST STANDARD	23
4.4.5	TEST SETUP	24
4.4.6	TEST RESULTS	24
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	26
6.	INFORMATION ON THE TESTING LABORATORIES	27



1. CERTIFICATION

PRODUCT: Remote control transmitter
MODEL NO.: SKY-4001
(refer to page 5 for other models)
BRAND: ARC
APPLICANT: Skytech II, Inc.
TESTED: Feb. 14 ~ Feb. 18, 2005
TEST SAMPLE: R&D SAMPLE
STANDARDS: FCC Part 15, Subpart C (Section 15.231),
ANSI C63.4-2003

The above equipment (model: SKY-4001) have been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Candice Chen , **DATE:** Feb. 21, 2005
(Candice Chen)

TECHNICAL
ACCEPTANCE : Gary Chang , **DATE:** Feb. 21, 2005
Responsible for RF (Gary Chang)

APPROVED BY : Cody Chang , **DATE:** Feb. 21, 2005
(Cody Chang,
Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD PARAGRAPH	TEST TYPE	RESULT	REMARK
15.207	Conducted Emission Test	NA	3Vdc from battery
15.231(a)	De-activation	PASS	Meet the requirement of limit
15.209 15.231(b)	Radiated Emission Test	PASS	Minimum passing margin is -2.45dB at 1302.00MHz
15.231(c)	20dB Occupied Bandwidth Measurement	PASS	Meet the requirement of limit

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.63 dB
	200MHz ~1000MHz	3.65 dB
	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Remote control transmitter
MODEL NO.	SKY-4001
POWER SUPPLY	3Vdc from battery
MODULATION TYPE	ASK
CARRIER FREQUENCY OF EACH CHANNEL	433.92MHz
NUMBER OF CHANNEL	1
ANTENNA TYPE	Printed antenna
DATA CABLE	NA
I/O PORTS	NA

NOTE:

1. The following models are provided to this EUT, and identical to each other except for their models due to marketing requirement.

BRAND	MODEL NO.	REMARK	DESCRIPTION
SKYTECH	SKY-4001	Two buttons	Same PCB
SKYTECH	SKY-4002	Four buttons	Same PCB

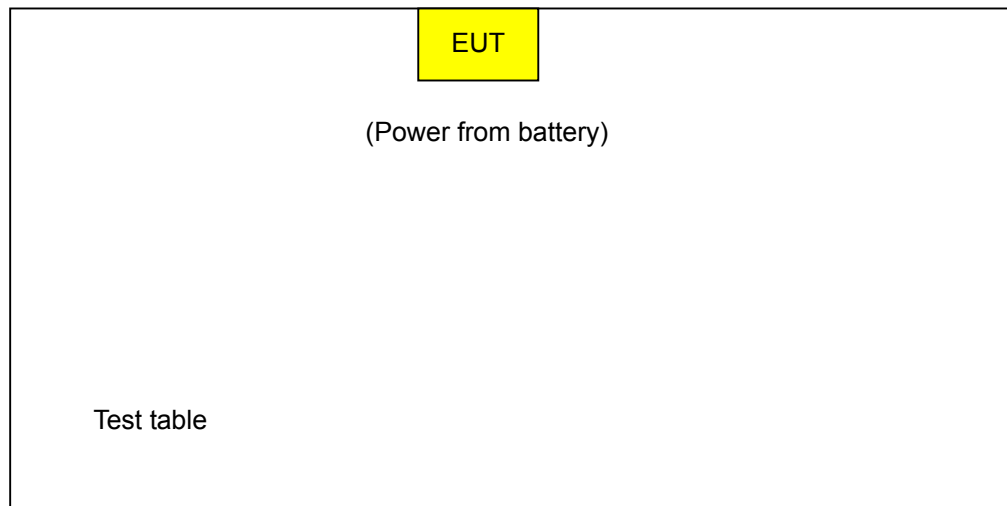
2. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

One channel is provided to this EUT:

Channel	Frequency
1	433.92 MHz

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APM	
-	-	X	X	X	NA

Where PLC: Power Line Conducted Emission

RE<1G RE: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

APM: Antenna Port Measurement

Radiated Emission Test (Below 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, packet types and X.Y.Z. axis.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Available Channel	Tested Channel	Modulation Type	Axis
1	1	ASK	Z

Radiated Emission Test (Above 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, packet types and X.Y.Z. axis.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Available Channel	Tested Channel	Modulation Type	Axis
1	1	ASK	Z

Antenna Port Conducted Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, packet types and X.Y.Z. axis.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Available Channel	Tested Channel	Modulation Type	Axis
1	1	ASK	Z

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Remote control transmitter. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.231)

ANSI C63.4- 2003

All test items have been performed and recorded as per the above standards.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NA	NA	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

NOTE: All power cords of the above support units are non shielded (1.8m).

4. TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

NA

4.2 DEACTIVATION TIME

4.2.1 LIMITS OF DEACTIVATION TIME MEASUREMENT

A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

4.2.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

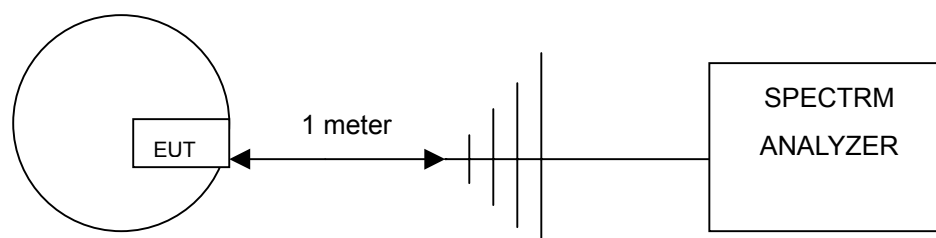
4.2.3 TEST PROCEDURES

- 1 The EUT was placed on the turning table.
- 2 The signal was coupled to the spectrum analyzer through an antenna.
- 3 Set the resolution bandwidth to 1kHz and video bandwidth to 100kHz. The spectrum analyser was turned to the centre frequency of the transmitter's and the analyser's marker function was used to determine the duration of transmission.
- 4 The transmission duration was measured and recorded.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP

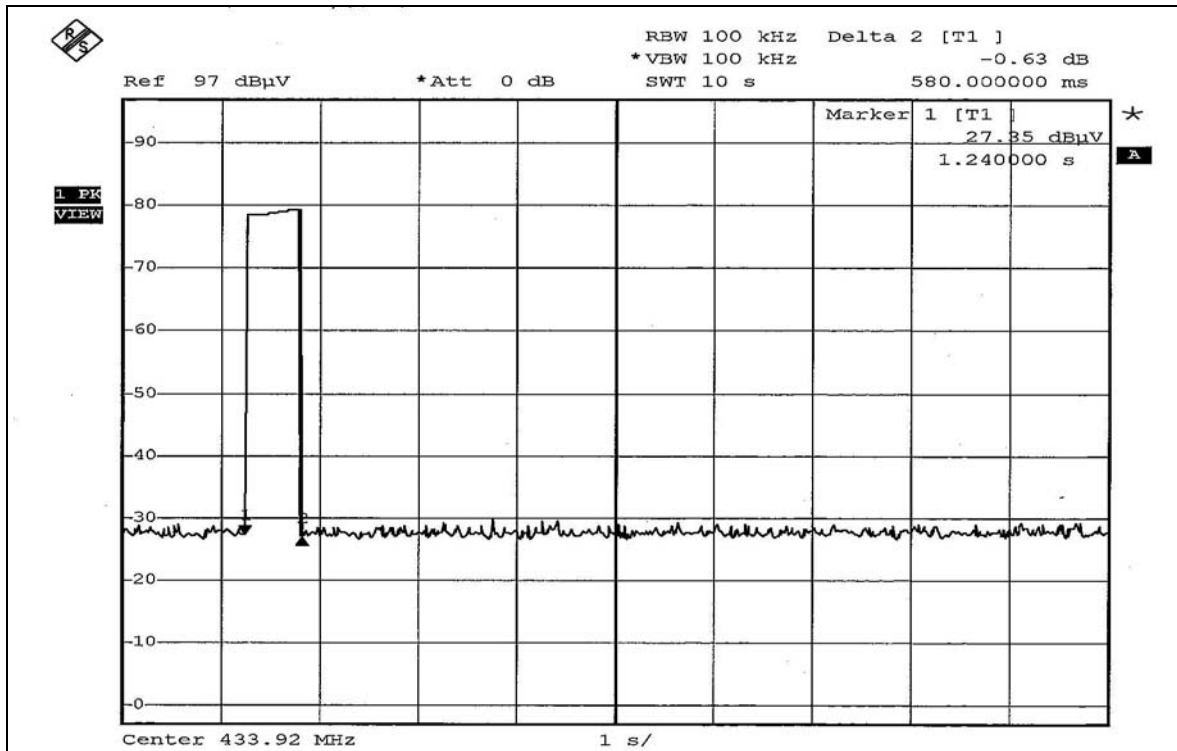


4.2.6 TEST RESULTS

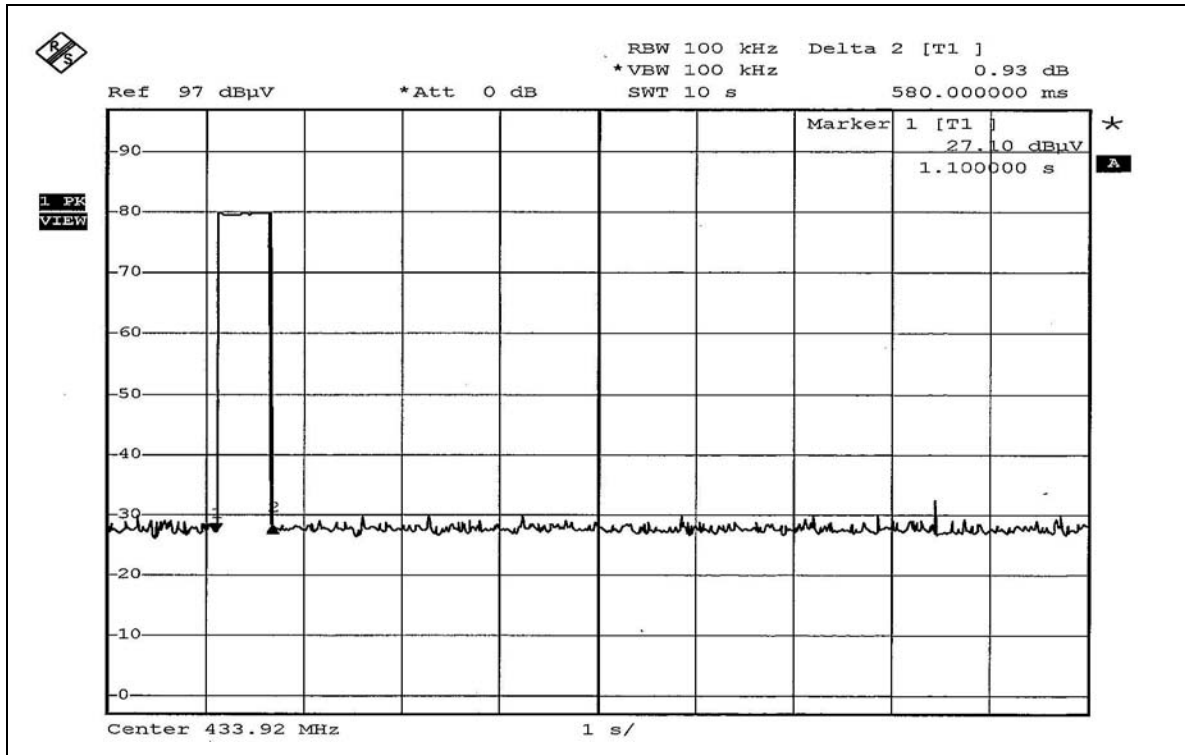
Push button	Frequency (MHz)	Transmission duration (sec)	Maximum limit (sec)	PASS/FAIL
1	433.92	0.580	5	PASS
2	433.92	0.580	5	PASS
3	433.92	0.580	5	PASS
4	433.92	0.580	5	PASS

The plot of test result is attached as below.

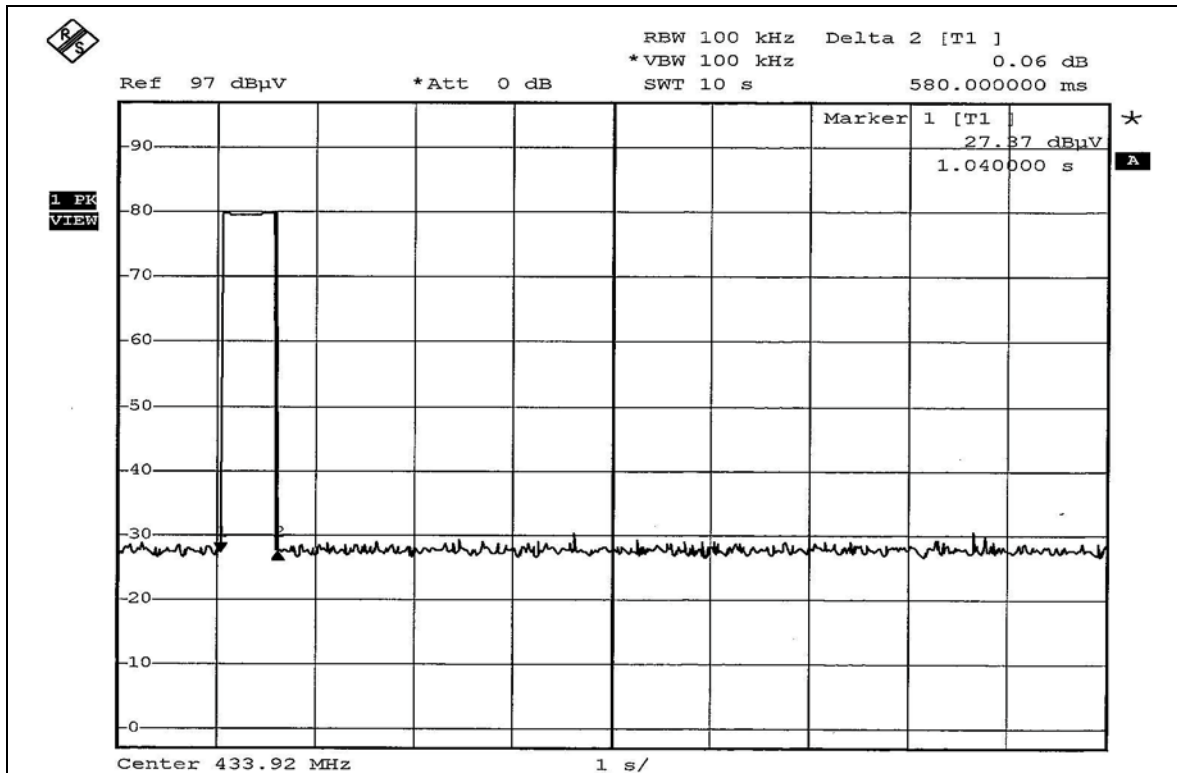
Manual Push – Button 1



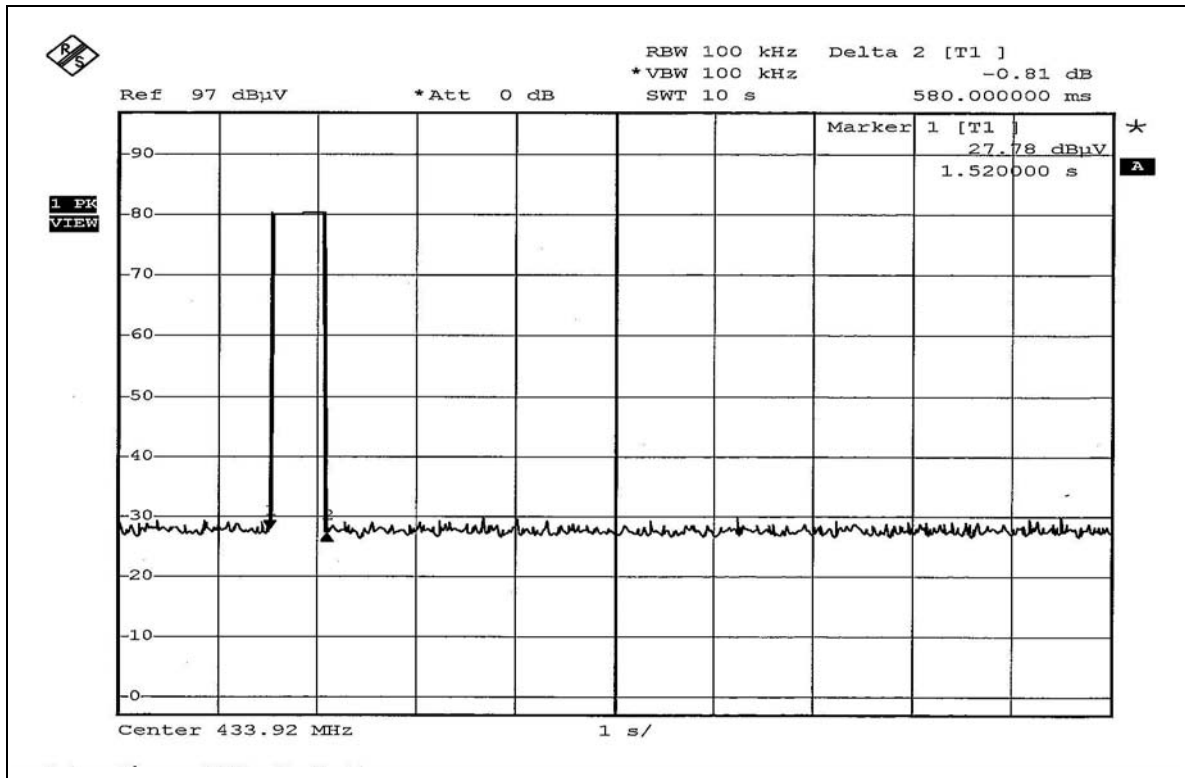
Manual Push – Button 2



Manual Push – Button 3



Manual Push – Button 4



4.3 RADIATED EMISSION MEASUREMENT

4.3.1 LIMITS OF RADIATED EMISSION MEASUREMENT

According to 15.231 the field strength of emissions from intentional radiators operated under these frequencies bands shall not exceed the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental		Field Strength of Spurious	
	uV/meter	dBuV/meter	uV/meter	dBuV/meter
40.66 – 40.70	2250	67.04	225	48.04
70 – 130	1250	61.94	125	41.94
130 – 174	1250 to 3750	61.94 to 71.48	125 to 375	41.94 to 51.48
174 – 260	3750	71.48	75	37.50
260 – 470	3750 to 12500	71.48 to 81.94	375 to 1250	51.48 to 61.94
Above 470	12500	81.94	1250	61.94

NOTE:

- (1) Where F is the frequency in MHz, the formula for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, $\mu\text{V/m}$ at 3 meters = $56.81818(F) - 6136.3636$; for the band 260-470 MHz, $\mu\text{V/m}$ at 3 meters = $41.6667(F) - 7083.3333$. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.
- (2) The above field strength limits are specified at a distance of 3meters. The tighter limits apply at the band edges.

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Jan. 07, 2006
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Nov. 29, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Feb. 03, 2006
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-404	Jan. 05, 2006
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170242	Jan. 23, 2006
Preamplifier Agilent	8447D	2944A10631	Nov. 17, 2005
Preamplifier Agilent	8449B	3008A01960	Nov. 14, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	219272/4	Mar. 04, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	219275/4	Mar. 04, 2005
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA
Turn Table ADT.	TT100.	TT93021704	NA
Turn Table Controller ADT.	SC100.	SC93021704	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 3.
 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The IC Site Registration No. is IC4924-4.

4.3.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

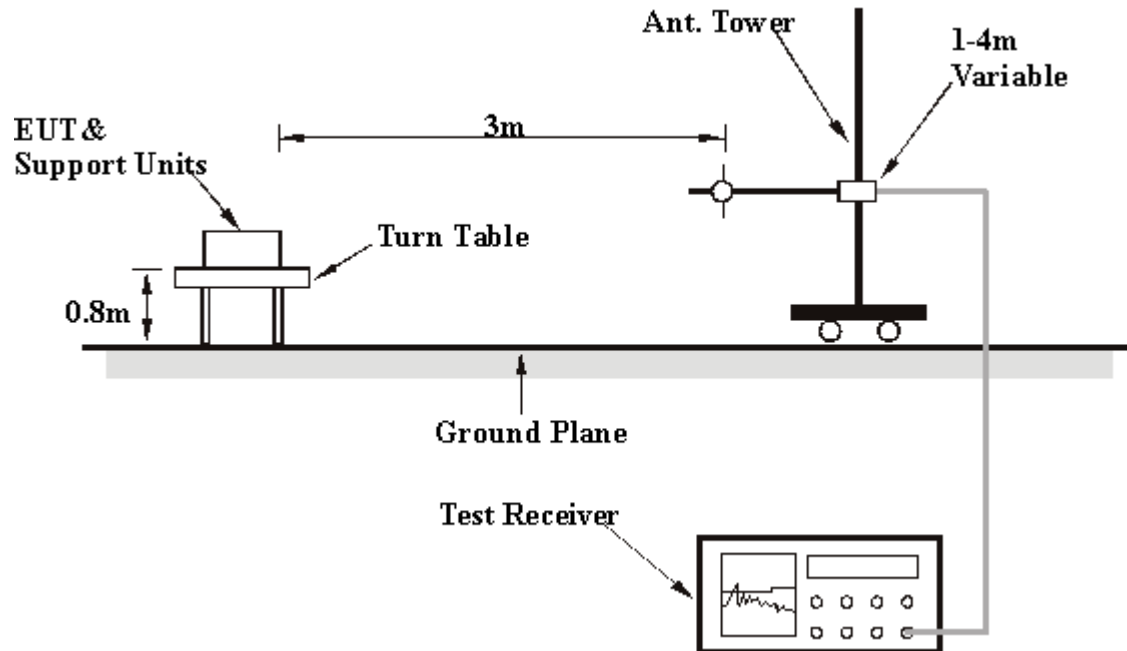
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection (PK) at frequency above 1GHz.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.3.6 EUT OPERATING CONDITIONS

Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.

4.3.7 TEST RESULTS

Below 1GHz Worst-Case Data

EUT	Remote control transmitter	MODEL	SKY-4001
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3Vdc
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	134.00	25.70 QP	43.50	-17.80	1.10 H	33	11.73	13.97
2	234.00	27.40 QP	46.00	-18.60	1.07 H	314	14.81	12.59
3	335.00	27.10 QP	46.00	-18.90	1.17 H	95	11.91	15.19
4	*433.92	83.51 PK	100.83	-17.32	1.75 H	238	65.92	17.59
4	*433.92	65.81 AV	80.83	-15.02	1.75 H	238	48.22	17.59
5	511.00	26.40 QP	46.03	-19.60	1.07 H	11	7.63	18.77
6	867.40	56.70 PK	80.83	-24.13	1.50 H	346	32.48	24.22
6	867.40	39.00 AV	60.83	-21.83	1.50 H	346	14.78	24.22

NOTE: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)

2. Correction Factor(dB) = Antenna Factor (dB) + Cable Factor (dB)

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. “*” = Fundamental frequency

6. The average value of fundamental frequency is: Average = Peak value + 20log(Duty cycle)

Where the duty factor is calculated from following formula:

$$20\log(\text{Duty cycle}) = 20\log \frac{(2+18+6)*0.35\text{ms}}{69.6\text{ms}} = -17.70\text{dB}$$

please see page 21 to 22 for plotted duty

EUT	Remote control transmitter	MODEL	SKY-4001
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3Vdc
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	152.00	26.70 QP	43.50	-16.80	1.24 V	332	11.96	14.74
2	224.00	28.70 QP	46.00	-17.30	1.07 V	81	16.73	11.97
3	335.00	28.40 QP	46.00	-17.60	1.12 V	62	13.21	15.19
4	*433.92	91.65 PK	100.83	-9.18	1.28 V	54	74.06	17.59
4	*433.92	73.95 AV	80.83	-6.88	1.28 V	54	56.36	17.59
5	552.00	27.50 QP	46.00	-18.50	1.04 V	74	7.99	19.51
6	867.99	51.99 PK	80.83	-28.84	1.16 V	102	27.76	24.23
6	867.99	34.29 AV	60.83	-26.54	1.16 V	102	10.06	24.23

NOTE: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)

2. Correction Factor(dB) = Antenna Factor (dB) + Cable Factor (dB)

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. “*” = Fundamental frequency

6. The average value of fundamental frequency is: Average = Peak value + 20log(Duty cycle)

Where the duty factor is calculated from following formula:

$$20\log(\text{Duty cycle}) = 20\log \frac{(2+18+6)*0.35\text{ms}}{69.6\text{ms}} = -17.70\text{dB}$$

please see page 21 to 22 for plotted duty

ASK modulation

EUT	Remote control transmitter	MODEL	SKY-4001
CHANNEL	Channel 1	MODULATION TYPE	ASK
FREQUENCY RANGE	1-5GHz	INPUT POWER (SYSTEM)	3Vdc
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa	DETECTOR FUNCTION	Peak (PK) Average (AV)
TESTED BY	Brad Wu		

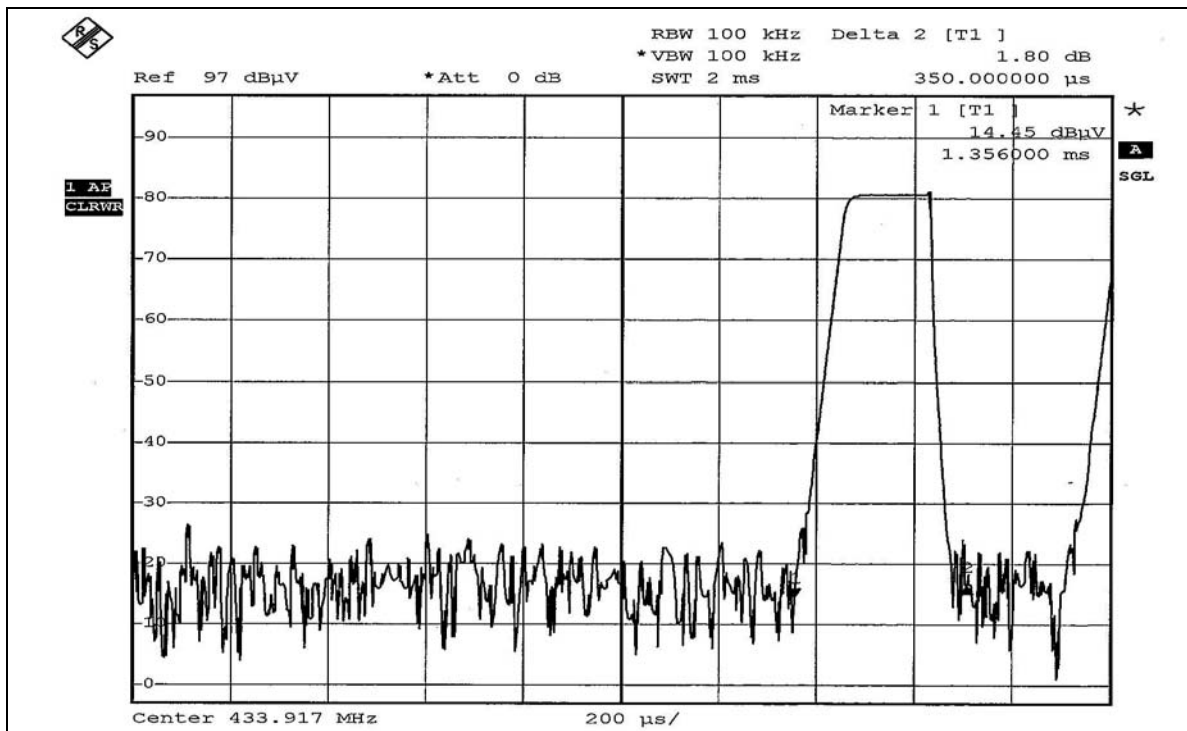
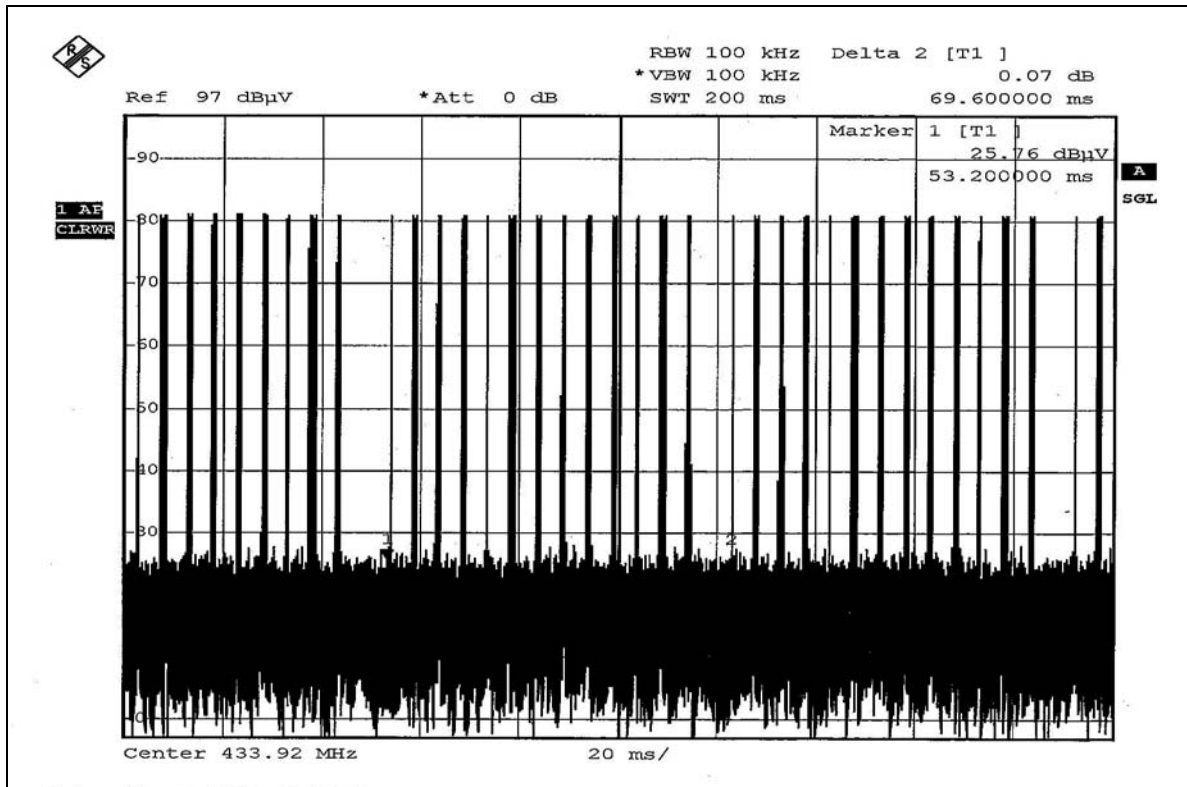
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

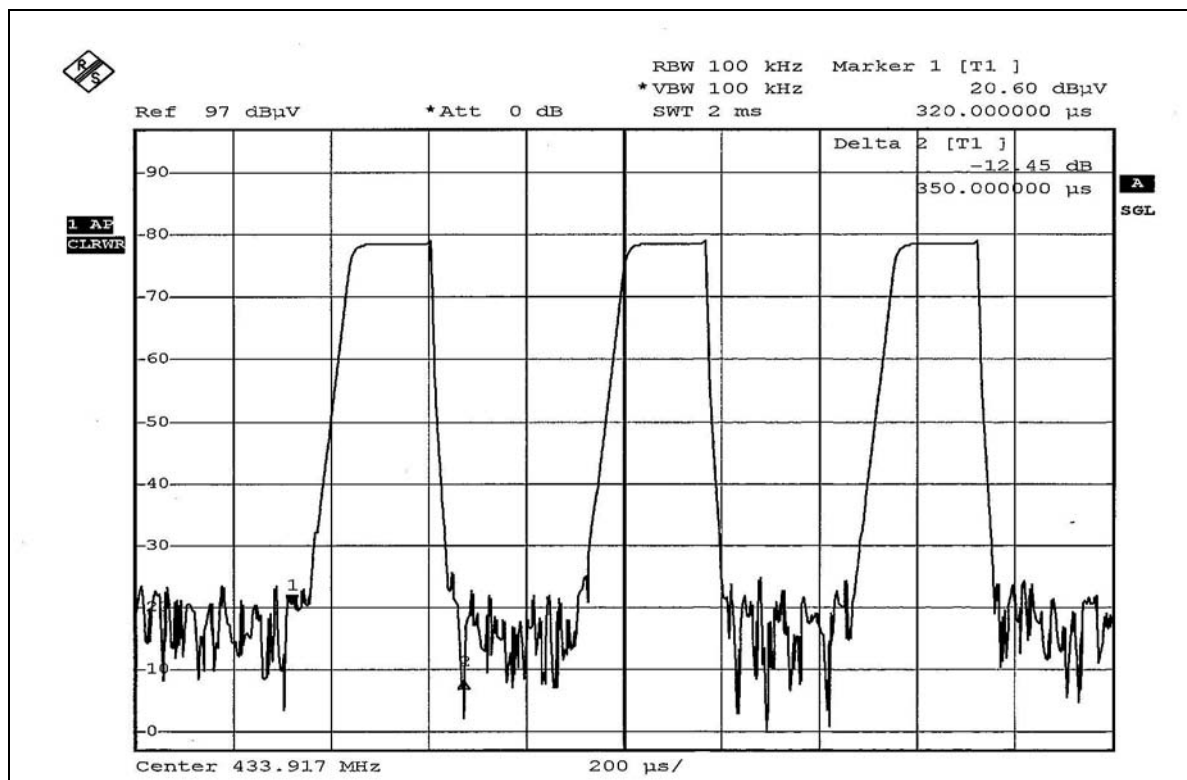
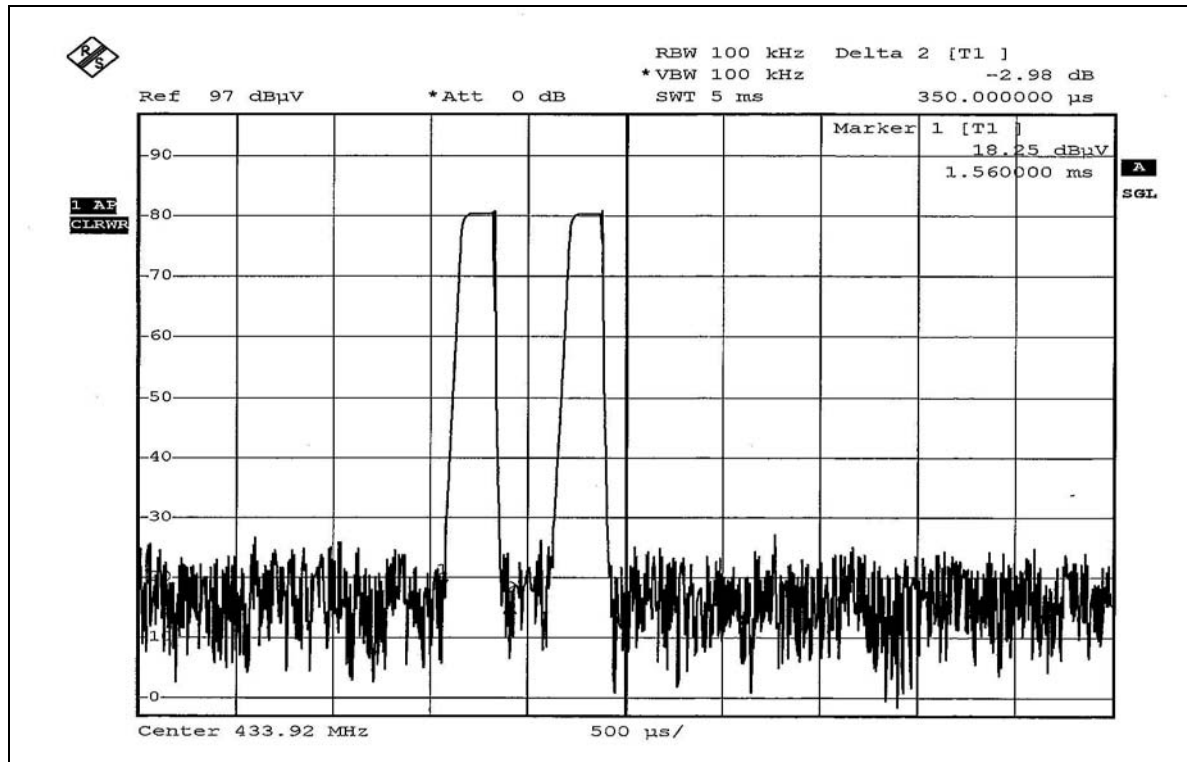
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1301.91	62.13 PK	74.00	-11.87	1.00 H	5	33.74	28.39
1	1301.91	44.43 AV	54.00	-9.57	1.00 H	5	16.04	28.39
2	1735.96	62.03 PK	80.83	-18.80	1.09 H	0	32.34	29.69
2	1735.96	44.33 AV	54.00	-9.67	1.09 H	0	14.64	29.69
3	2170.00	58.63 PK	80.83	-22.20	1.15 H	339	27.63	31.00
3	2170.00	40.93 AV	54.00	-13.07	1.15 H	339	9.93	31.00
4	2603.99	63.80 PK	80.83	-17.03	1.38 H	338	31.18	32.62
4	2603.99	46.10 AV	54.00	-7.90	1.38 H	338	13.48	32.62
5	3037.87	59.78 PK	80.83	-21.05	1.15 H	345	26.04	33.74
5	3037.87	42.08 AV	54.00	-11.92	1.15 H	345	8.34	33.74
6	3471.97	51.89 PK	80.83	-28.94	1.60 H	313	17.60	34.28
7	3905.92	50.19 PK	74.00	-23.81	1.58 H	313	14.80	35.39
7	3905.92	32.49 AV	54.00	-21.51	1.58 H	313	-2.90	35.39
8	4339.58	47.21 PK	74.00	-26.79	1.03 H	304	10.80	36.42
8	4339.58	29.51 AV	54.00	-24.49	1.03 H	304	-6.91	36.42

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1302.00	69.25 PK	74.00	-4.75	1.21 V	356	40.86	28.39
1	1302.00	51.55 AV	54.00	-2.45	1.21 V	356	23.16	28.39
2	1735.94	62.11 PK	80.83	-18.72	1.26 V	8	32.42	29.69
2	1735.94	44.41 AV	54.00	-9.59	1.26 V	8	14.72	29.69
3	2169.95	54.48 PK	80.83	-26.35	1.47 V	336	23.48	31.00
3	2169.95	36.78 AV	54.00	-17.22	1.47 V	336	5.78	31.00
4	2604.07	58.57 PK	80.83	-22.26	1.39 V	293	25.95	32.62
4	2604.07	40.87 AV	54.00	-13.13	1.39 V	293	8.25	32.62
5	3037.95	58.40 PK	80.83	-22.43	1.08 V	301	24.66	33.74
5	3037.95	40.70 AV	54.00	-13.30	1.08 V	301	6.96	33.74
6	3472.00	55.48 PK	80.83	-25.35	1.00 V	195	21.19	34.28
6	3472.00	37.78 AV	54.00	-16.22	1.00 V	195	3.50	34.28
7	3905.72	49.01 PK	74.00	-24.99	1.08 V	254	13.62	35.39
7	3905.72	31.31 AV	54.00	-22.69	1.08 V	254	-4.08	35.39
8	4339.97	48.06 PK	74.00	-25.94	1.19 V	65	11.65	36.42
8	4339.97	30.36 AV	54.00	-23.64	1.19 V	65	-6.06	36.42

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.





4.4 20dB OCCUPIED BANDWIDTH MEASUREMENT

4.4.1 LIMITS OF BAND EDGES MEASUREMENT

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for device operating above 70 MHz and below 900 MHz.

Fundamental Frequency (MHz)	Limit of 20 dB Bandwidth(kHz)
433.92	1084.8

4.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

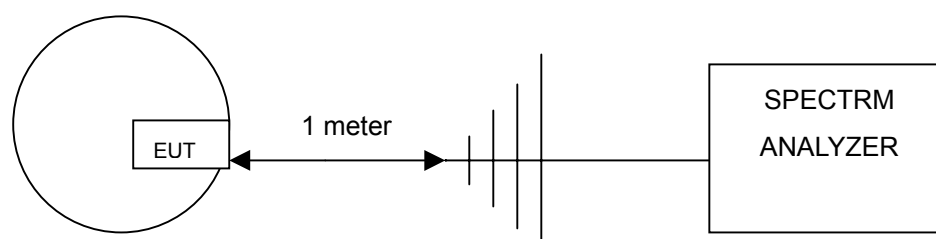
4.4.3 TEST PROCEDURES

- 5 The EUT was placed on the turning table.
- 6 The signal was coupled to the spectrum analyzer through an antenna.
- 7 Set the resolution bandwidth to 10kHz and video bandwidth to 30kHz then select Peak function to scan the channel frequency.
- 8 The 20dB bandwidth was measured and recorded.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

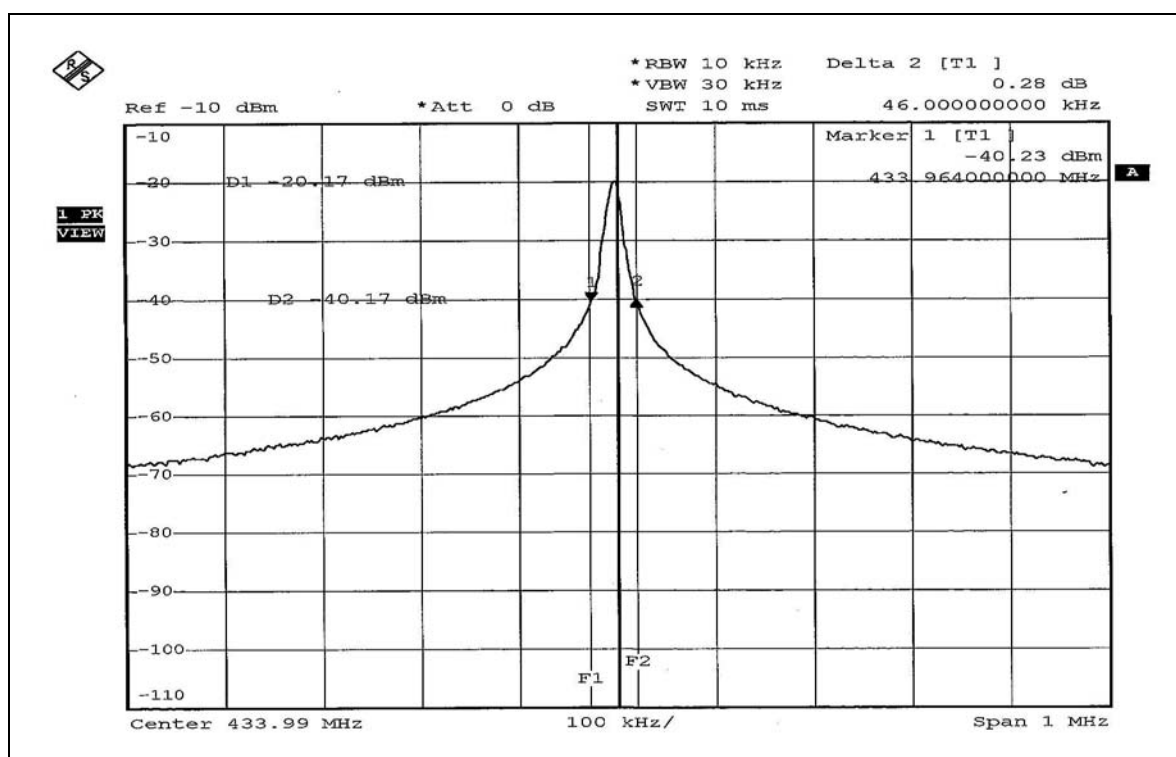
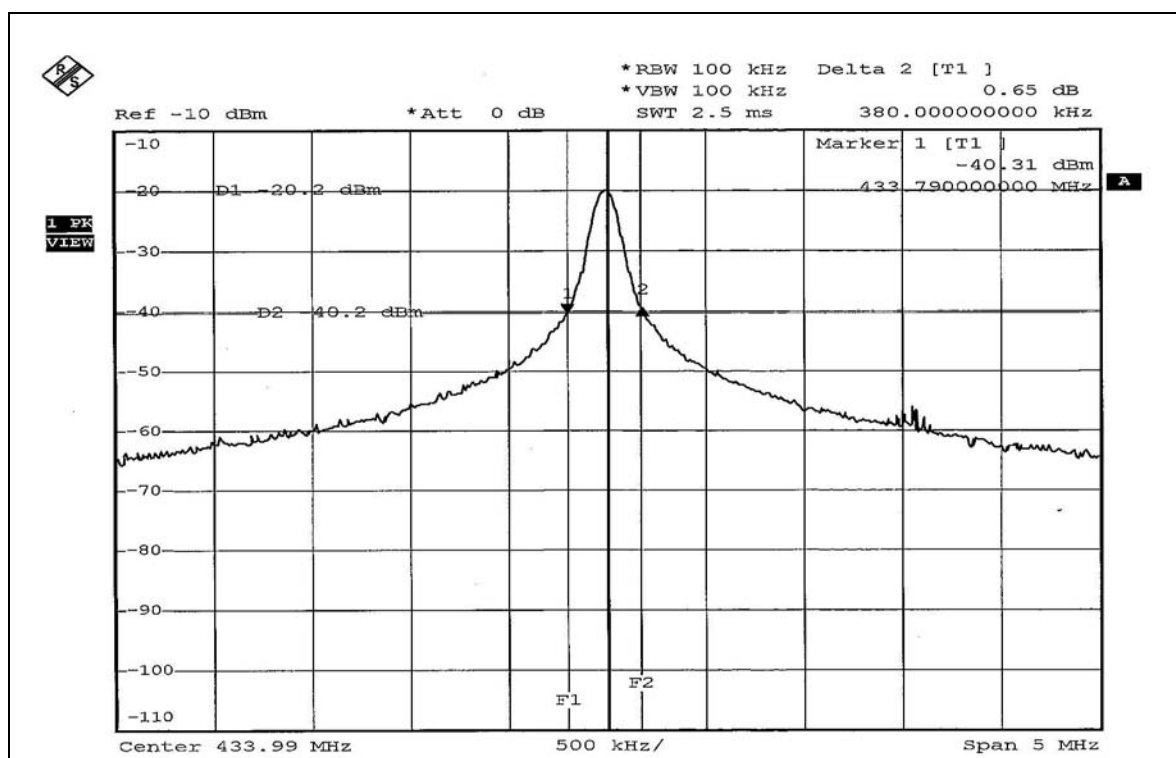
4.4.5 TEST SETUP



4.4.6 TEST RESULTS

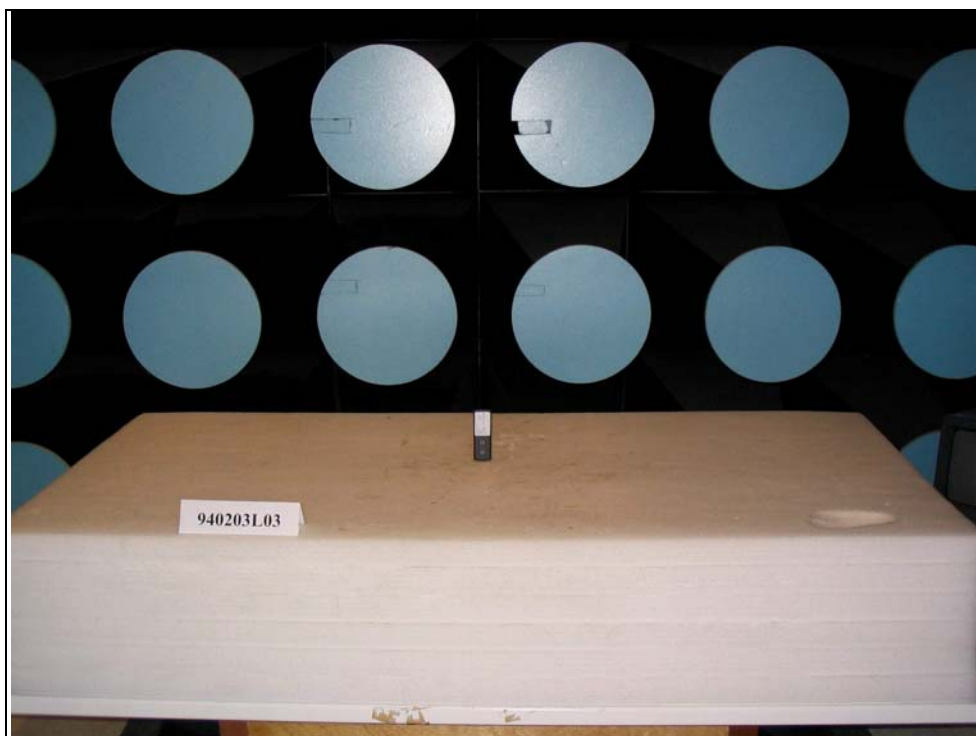
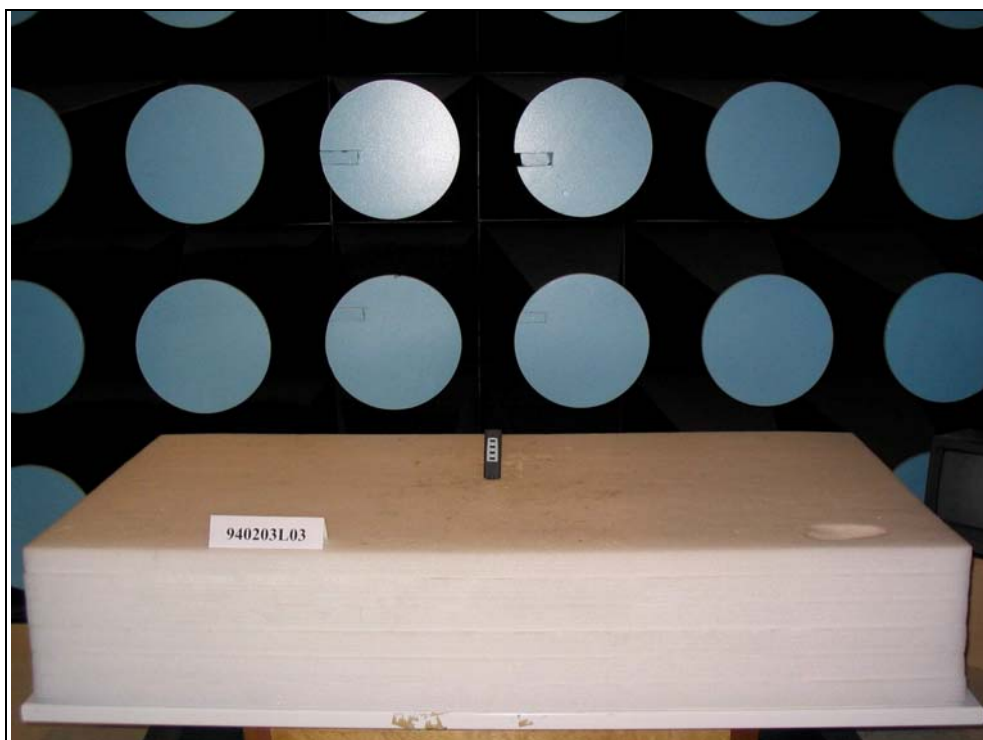
Frequency (MHz)	20 dB bandwidth (kHz)	Maximum limit (kHz)	PASS/FAIL
433.92	46.00	1084.80	PASS

The plot of test result is attached as below.



5. PHOTOGRAPHS OF THE TEST CONFIGURATION

RADIATED EMISSION TEST



6. INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA	FCC, NVLAP, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	CNLA, BSMI, DGT
Netherlands	Telefication
Singapore	PSB , GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232

Fax: 886-3-3185050

Linko RF Lab.

Tel: 886-3-3270910

Fax: 886-3-3270892

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also