

FCC TEST REPORT

PRODUCT NAME : Remote

FCC ID. : S4LREMOTE

FILING TYPE : Certification

BRAND NAME : TomTom GO

MODEL NAME : Remote

APPLICANT : **TomTom BV.**

Rembrandtplein 35 1017 CT Amsterdam The Netherlands

MANUFACTURER : **Inventec Appliances Corp.**

37, Wugung 5th, Rd., Wugu Shiang, Taipei, Taiwan

ISSUED BY : **SPORTON INTERNATIONAL INC.**

6F, No. 106, Sec. 1, Hsin Tai Wu Rd., His Chih, Taipei Hsien,
Taiwan, R.O.C.

Statements:

The test result in this report refers exclusively to the presented test model / sample.

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Certificate or Test Report could not be used by the applicant to claim the product endorsement by CNLA and any agency of U.S. government.

The test equipments used to perform the test are calibrated and traceable to NML/ROC or NIST/USA.



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ILAC MRA



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HISTORY OF THIS TEST REPORT

Received Date: Apr. 21, 2005

Test Date: May 19, 2005

Original Report Issue Date: May 24, 2005

Report No.: FR542106

No additional attachment.

Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

CERTIFICATE OF COMPLIANCE

with

47 CFR FCC Part 15 Subpart C

PRODUCT NAME : Remote

BRAND NAME : TomTom GO

MODEL NAME : Remote

APPLICANT : **TomTom BV.**


Rembrandtplein 35 1017 CT Amsterdam The Netherlands

MANUFACTURER : **Inventec Appliances Corp.**

37, Wugung 5th, Rd., Wugu Shiang, Taipei, Taiwan

I **HEREBY** CERTIFY THAT:

The measurements shown in this test report were made in accordance with the procedures given in ANSI C63.4-2003 and all test are performed according to 47 CFR FCC Part 15 Subpart C. Testing was carried out on May 19, 2005 at SPORTON International Inc. LAB.



Wayne Hsu / Supervisor
Sporton International Inc.

1. General Description of Equipment under Test

1.1. Applicant

TomTom BV.

Rembrandtplein 35 1017 CT Amsterdam The Netherlands

1.2. Manufacturer

Inventec Appliances Corp.

37, Wugung 5th, Rd., Wugu Shiang, Taipei, Taiwan

1.3. Basic Description of Equipment under Test

This product is a RF 433 MHz remote controller. The technical data has been listed on section "Features of Equipment under Test".

1.4. Features of Equipment under Test

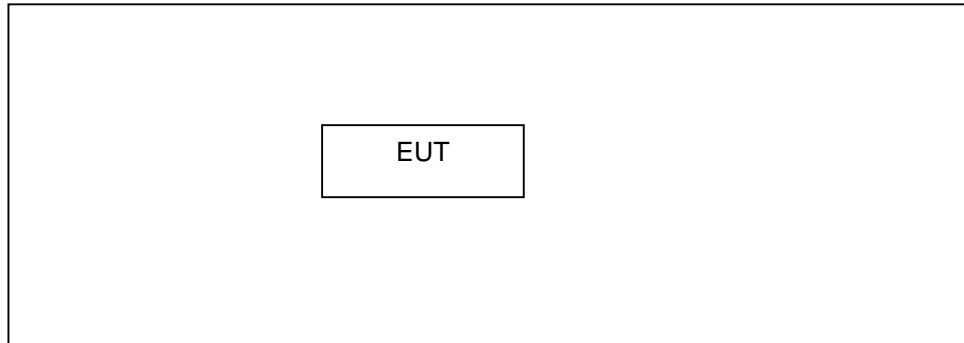
Items	Description
Type of Modulation	FSK
Number of Channels	1
Frequency Band	433.05~434.79MHz
Carrier Frequency	See section 1.5 for details
Antenna Type	Printed Antenna
Communication Type	Simplex
Testing Duty Cycle	100.00%
Test Power Source	DC 3.0V from batteries

1.5. Table for Carrier Frequencies

Channel	Freq. (MHz)
1	433.92MHz

2. Test Configuration of the Equipment under Test

2.1. Connection Diagram of Test System



2.2. The Test Mode Description

1. EUT is continuously transmitting data.
2. According to ANSI C63.4-2003: If frequency range of EUT is less than 1 MHz, we only need to test the middle channel of EUT.

2.3. Description of Test Supporting Units

NA

3. General Information of Test

3.1. Test Facility

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiag, Tao Yuan Hsien, Taiwan, R.O.C.
: TEL 886-3-327-3456
: FAX 886-3-318-0055
Test Site No : 03CH03-HY

3.2. Standards for Methods of Measurement

Here is the list of the standards followed in this test report.

ANSI C63.4-2003

47 CFR FCC Part 15 Subpart C

3.3. DoC Statement

This EUT is also classified as a device of computer peripheral Class B which DoC has to be followed. It has been verified according to the rule of 47 CFR part 15 Subpart B, and found that all the requirements has been fulfilled.

3.4. Frequency Range Investigated

Radiated emission test: from 30 MHz to 10th carrier harmonic

3.5. Test Distance

The test distance of radiated emission (30MHz~1GHz) test from antenna to EUT is 3 M.

The test distance of radiated emission (1GHz~10th carrier harmonic) test from antenna to EUT is 3 M.

3.6. Test Software

During testing, there is no test software for the EUT.

4. List of Measurements

4.1. Summary of the Test Results

Applied Standard: 47 CFR FCC Part 15 Subpart C			
Paragraph	FCC Section	Description of Test	Result
5.1	15.231(a)	Periodic Duration Time	Pass
5.2	15.231(b)/15.231(e)	Maximum Field Strength of Fundamental	Pass
5.3	15.231(c)	20 dB Spectrum Bandwidth	Pass
5.4	15.207	AC Power Line Conducted Emission	Pass
5.5	15.231(b)	Spurious Radiated Emission	Pass
5.6	15.203	Antenna Requirement	Pass

5. Test Result

5.1. Test of Periodic Duration Time

5.1.1. Applicable Standard

Section 15.231(a): (a) The provisions of this Section are restricted to periodic operation within the band 40.66 40.70 MHz and above 70 MHz. Except as shown in paragraph (e) of this Section, the intentional radiator is restricted to the transmission of a control signal such as those used with alarm systems, door openers, remote switches, etc. Continuous transmissions, voice, video and the radio control of toys are not permitted. Data is permitted to be sent with a control signal. The following conditions shall be met to comply with the provisions for this periodic operation:

- (1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.
- (2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.
- (3) Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions, including data, to determine system integrity of transmitters used in security or safety applications are allowed if the total duration of transmissions does not exceed more than two seconds per hour for each transmitter. There is no limit on the number of individual transmissions, provided the total transmission time does not exceed two seconds per hour.
- (4) Intentional radiators which are employed for radio control purposes during emergencies involving fire, security, and safety of life, when activated to signal an alarm, may operate during the pendency of the alarm condition.
- (5) Transmission of set-up information for security systems may exceed the transmission duration limits in paragraphs (a)(1) and (a)(2) of this section, provided such transmission are under the control of a professional installer and do not exceed ten seconds after a manually operated switch is released or a transmitter is activated automatically. Such set-up information may include data.

5.1.2. Measuring Instruments

Please refer to section 6.

5.1.3. Description of Major Test Instruments Setting

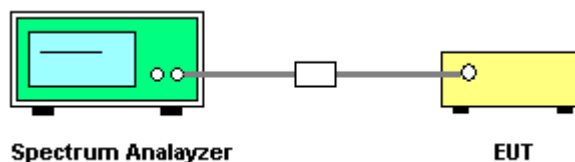
- Spectrum Analyzer : R&S FSP30
- Attenuation : Auto
- Center Frequency : 433.92MHz
- Span Frequency : 0 MHz
- RB : 1000 kHz
- VB : 1000 kHz
- Detector : Peak
- Sweep Time : Auto

5.1.4. Test Procedures

The transmitter output was connected to the spectrum analyzer through an attenuator.

Set RBW of spectrum analyzer to 1000KHz and VBW to 1000KHz. Level trigger mode measure the periodic duration time.

5.1.5. Test Setup Layout



5.1.6. Test Criteria

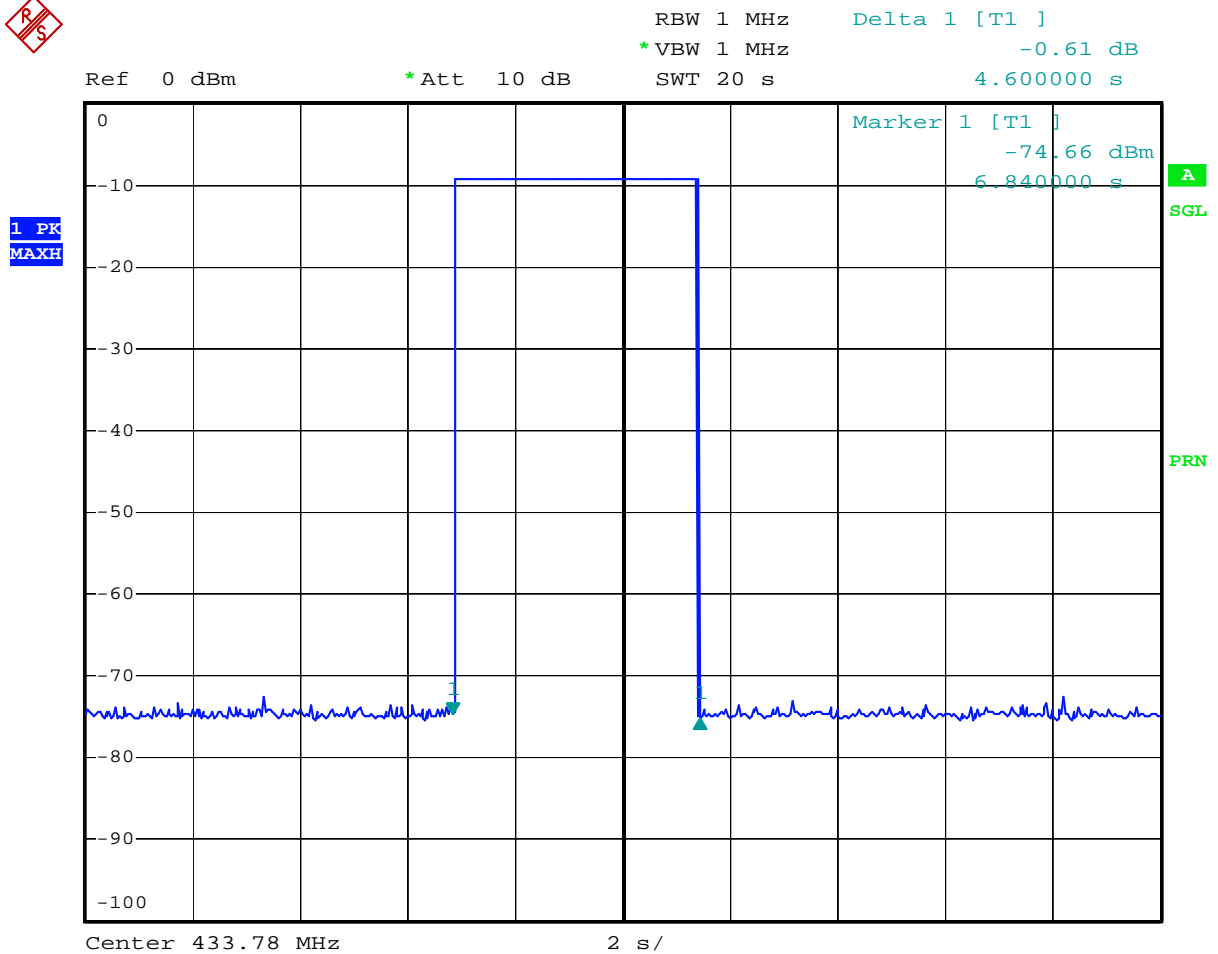
All test results complied with the requirements of 15.231(a). Measurement Uncertainty is 1×10^{-5} .

5.1.7. Test Result of Periodic Duration Time

- Temperature: 25°C
- Relative Humidity: 60%
- Duty Cycle of the Equipment During the Test: 100.00%
- Test Engineer: Eason Lu

Use Conduction	Pulse Duration (s)	Maxi Limit (s)
15.231(a)(1)	4.6	5

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



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5.2. Test of Maximum Field Strength of Fundamental

5.2.1. Applicable Standard

Section 15.231(b)/15.231(e): The devices complying with the provisions of Section 15.231(a), the field strength of emissions from intentional radiators at 3 meters operated under this Section shall not exceed the following:

Fundamental frequency (MHz)	Field strength of fundamental emissions (microvolts/meter)	Unwanted emissions (microvolts/meter)
40.66-40.70	2250	225
70-130(inclusive)	1250	125
130(exclusive)-174(inclusive)	1250-3750(**)	125-375(**)
174(exclusive)-260(inclusive)	3750	375
260(exclusive)-470(inclusive)	3750-12500(**)	375-1250(**)
above 470(exclusive)	12500	1250

**1. Linear interpolations, the formulas for calculating the maximum permitted fundamental field strengths are as follows:

(1) for the band 130 - 174 MHz, $\mu\text{V/m}$ at 3 meters = $56.81818 \times (\text{operating frequency, MHz}) - 6136.3636$;

(2) for the band 260 - 470 MHz, $\mu\text{V/m}$ at 3 meters = $41.6667 \times (\text{operating frequency, MHz}) - 7083.3333$.

The devices Complying with the provisions of Section 15.231(e), the field strength of emissions from intentional radiators at 3 meters operated under this Section shall not exceed the following:

Fundamental frequency (MHz)	Field strength of fundamental emissions (microvolts/meter)	Unwanted emissions (microvolts/meter)
40.66-40.70	1000	100
70-130(inclusive)	500	50
130(exclusive)-174(inclusive)	500-1500(**)	50-150(**)
174(exclusive)-260(inclusive)	1500	150
260(exclusive)-470(inclusive)	1500-5000(**)	150-500(**)
Above 470(exclusive)	5000	500

** 1. Linear interpolations, the formulas for calculating the maximum permitted fundamental field strengths are as follows:

(1) for the band 130 - 174 MHz, $\mu\text{V/m}$ at 3 meters = $22.72727 \times (\text{operating frequency, MHz}) - 2454.545$;

(2) for the band 260 - 470 MHz, $\mu\text{V/m}$ at 3 meters = $16.6667 \times (\text{operating frequency, MHz}) - 2833.3333$.

5.2.2. Measuring Instruments

Item 6~17 of the table on section 6.

5.2.3. Description of Major Test Instruments Setting

- Test Receiver : (R&S ESCS 30)
Attenuation : Auto
Center Frequency : Carrier Frequency of EUT
IF Bandwidth : 9 KHz

5.2.4. Test Procedures and Test Instruments Setting

Configure the EUT according to ANSI C63.4.

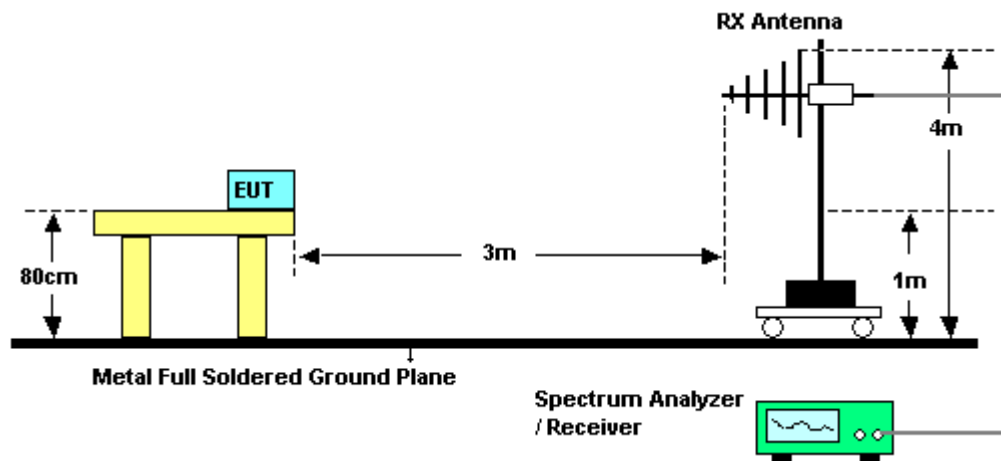
The turntable was rotated by 360 degrees to determine the position of the highest radiation.

The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.

For carrier field strength emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.

For carrier field strength emission, use 9kHz RBW of Receiver for reading under average and peak detector.

5.2.5. Test Setup Layout





5.2.6. Test Criteria

All test results complied with the requirements of 15.231(b)/15.231(e). Measurement Uncertainty is 2.26dB.

5.2.7. Test Result of Maximum Field Strength

- Temperature: 25°C
- Relative Humidity: 60%
- Duty Cycle of the Equipment During the Test: 100.00%
- Test Engineer: Ted Chiou

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Factor (dB)	Detector
433.92	76.15	-4.67	80.82	-12.10	Average
439.92	76.47	-24.35	100.82	-12.10	Peak

Note:

Correct Factor = Antenna Factor + Cable Loss - Preamp Factor.

5.3. Test of 20dB Spectrum Bandwidth

5.3.1. Applicable Standard

Section 15.231(c): The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

5.3.2. Measuring Instruments

Item 18 of the table on section 6.

5.3.3. Description of Major Test Instruments Setting

- Spectrum Analyzer : R&S FSP30
- Attenuation : Auto
- Center Frequency : 433.92MHz
- Span Frequency : > 20dB Bandwidth
- RB : 100 kHz
- VB : 100 kHz
- Detector : Peak
- Trace : Max Hold
- Sweep Time : Auto

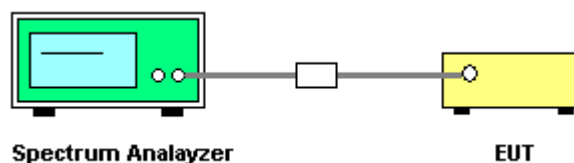
5.3.4. Test Procedures

The transmitter output was connected to the spectrum analyzer through an attenuator.

Set RBW of spectrum analyzer to 100KHz and VBW to 100KHz. Trace to Max hold and Detector PK.

The 6dB spectrum width is the spectrum with level higher than 20dB below the peak level.

5.3.5. Test Setup Layout



5.3.6. Test Criteria

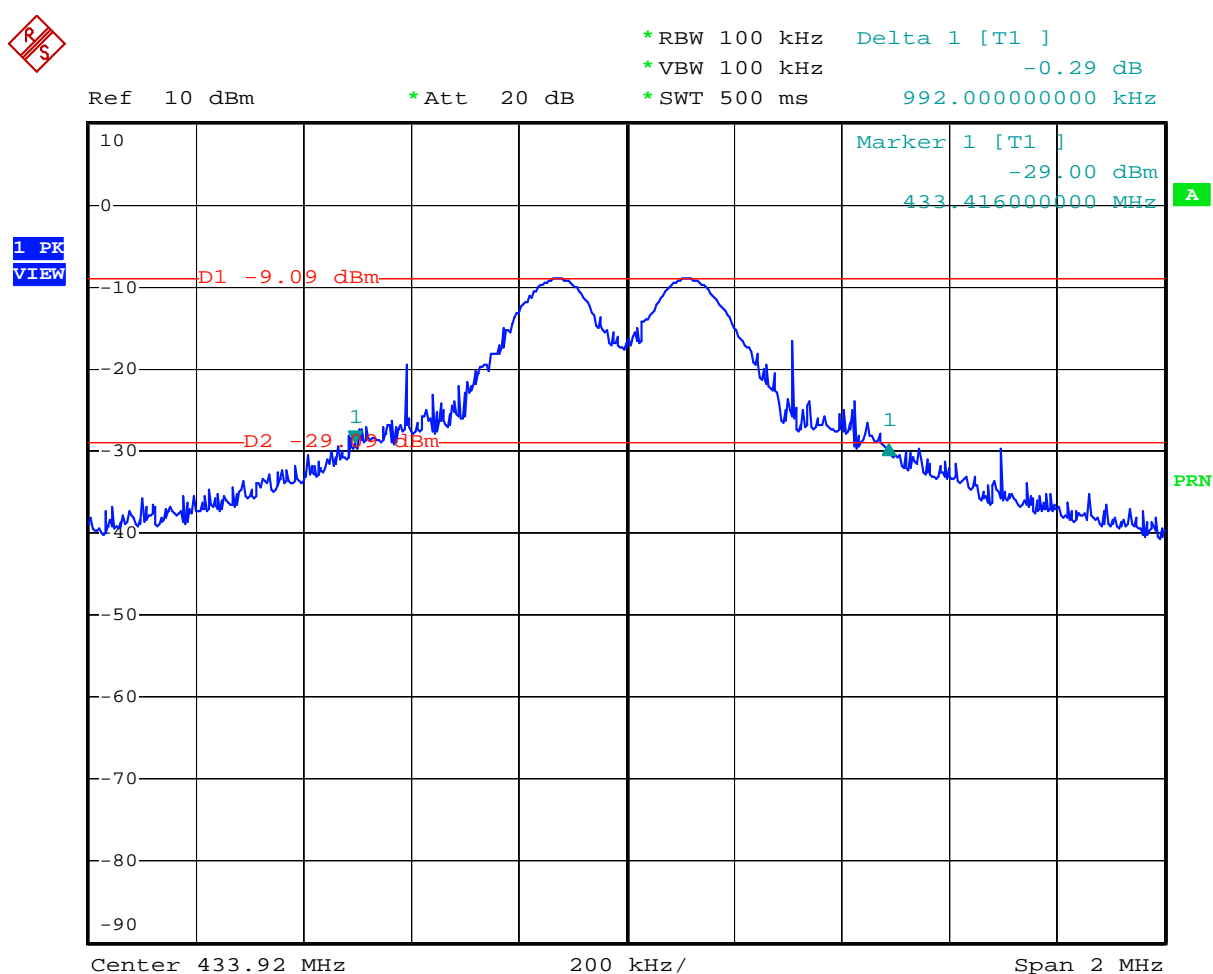
All test results complied with the requirements of 15.231(c). Measurement Uncertainty is 1×10^{-5} .



5.3.7. Test Result

- Temperature: 26°C
- Relative Humidity: 64%
- Duty Cycle of the Equipment During the Test: 100.00%
- Test Engineer: Bunny Yao

Frequency (MHz)	20dB Bandwidth (kHz)	Max. Limit (MHz)
433.92	992.00	1.08



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5.4. Test of AC Power Line Conducted Emission

5.4.1. Applicable Standard

Section 15.207: For a Low-power Radio-frequency Device is designed to be connected to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency (MHz)	QP Limit (dBuV)	AV Limit (dBuV)
0.15~0.5	66~56	56~46
0.5~5	56	46
5~30	60	50

5.4.2. Measuring Instruments

Please refer to section 6.

5.4.3. Description of Major Test Instruments Setting

- Test Receiver : R&S ESCS 30
- Attenuation : 10 dB
- Start Frequency : 0.15 MHz
- Stop Frequency : 30 MHz
- IF Bandwidth : 9 KHz

5.4.4. Test Procedures

Configure the EUT according to ANSI C63.4.

The EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.

Connect EUT to the power mains through a line impedance stabilization network (LISN)

All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.

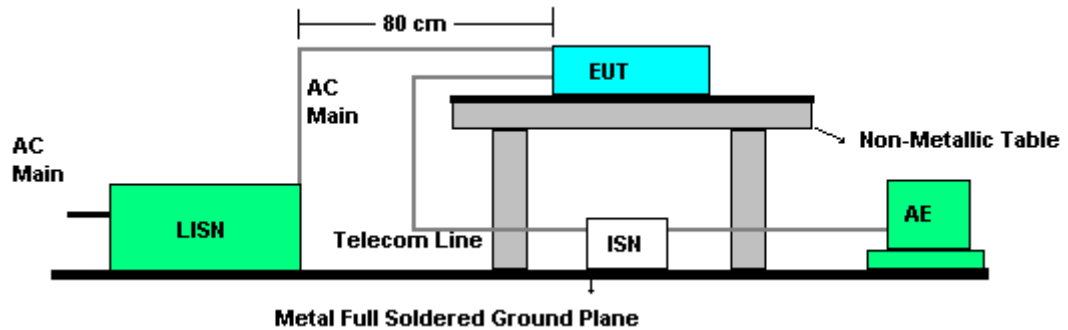
The frequency range from 150 KHz to 30 MHz was searched.

Use the Channel & Power Controlling software to make the EUT working on selected channel and expected output power, then use the "H" Patter Generator software to make the supporting equipments stay on working condition.

Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

The measurement has to be done between each power line and ground at the power terminal for each RF channel. Only one RF channel has to be investigated since this test is independent with the RF channel selection.

5.4.5. Test Setup Layout



5.4.6. Test Criteria

All test results complied with the requirements of 15.207. Measurement Uncertainty is 2.54dB.

5.4.7. Test Result of Conducted Emission

NA

5.5. Test of Spurious Radiated Emission

5.5.1. Applicable Standard

Section 15.231(b): The field strength of any emissions which appear outside of this band shall not exceed the general radiated emission limits in Section 15.209 or unwanted emission level is 20 dB below the maximum permitted fundamental level, whichever limit permits a higher field strength.

5.5.2. Measuring Instruments

Please refer to section 6.

5.5.3. Description of Major Test Instruments Setting

- Test Receiver : R&S ESCS 30
- Attenuation : Auto
- Start Frequency : 30 MHz
- Stop Frequency : 10th carrier harmonic
- RB : 120 KHz for QP or PK

5.5.4. Test Procedures

Configure the EUT according to ANSI C63.4.

The EUT was placed on the top of the turntable 0.8 meter above ground.

The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.

Power on the EUT and all the supporting units.

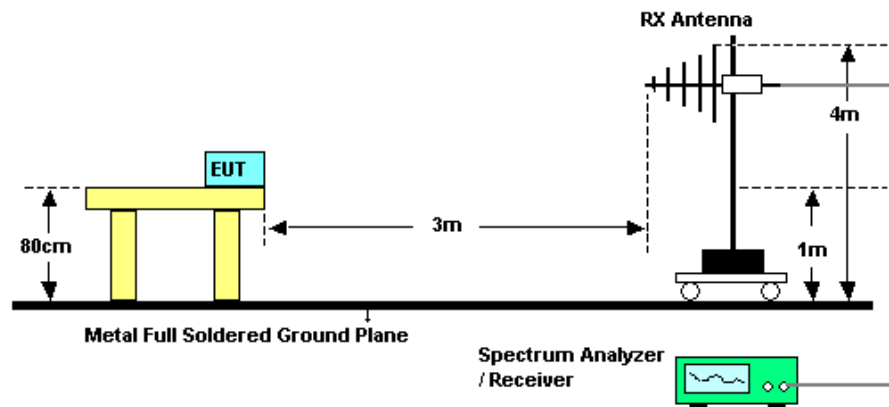
The turntable was rotated by 360 degrees to determine the position of the highest radiation.

The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.

For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.

Set the test-receiver system to peak or quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.

5.5.5. Test Setup Layout





5.5.6. Test Criteria

All test results complied with the requirements of 15.231(b). Measurement Uncertainty is 2.26dB.

5.5.7. Test Results (Spurious Emission below 1GHz)

- Temperature: 25°C
- Relative Humidity: 60%
- Duty Cycle of the Equipment During the Test: 100.00%
- Test Engineer: Carl Chiou

(A) Polarization: Horizontal

Freq	Level	Over Limit	Read Level	Limit Line	Factor	Cable Loss	Preamp Factor	Remark
MHz	dBuV/m	dB	dBuV	dBuV/m	dB	dB	dB	
41.390	16.90	-23.10	34.11	40.00	-17.21	0.64	30.40	Peak
62.980	10.59	-29.41	30.00	40.00	-19.41	0.79	30.49	Peak
133.020	15.81	-27.69	32.96	43.50	-17.15	1.15	30.72	Peak
393.600	25.24	-20.76	37.87	46.00	-12.63	1.95	31.18	Peak
452.000	21.44	-32.56	33.98	54.00	-12.54	2.13	31.04	Peak
868.000	53.04	-7.75	58.42	60.79	-5.38	3.00	30.15	Peak

(B) Polarization: Vertical

Freq	Level	Over Limit	Read Level	Limit Line	Factor	Cable Loss	Preamp Factor	Remark
MHz	dBuV/m	dB	dBuV	dBuV/m	dB	dB	dB	
40.540	21.79	-18.21	39.00	40.00	-17.21	0.64	30.42	Peak
46.660	17.32	-22.68	34.83	40.00	-17.51	0.66	30.23	Peak
62.980	18.03	-21.97	37.44	40.00	-19.41	0.79	30.49	Peak
397.600	17.45	-28.55	29.93	46.00	-12.48	1.97	31.17	Peak
666.400	21.33	-32.67	28.76	54.00	-7.43	2.52	30.54	Peak
868.000	42.31	-18.48	47.69	60.79	-5.38	3.00	30.15	Peak

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m)

Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level



5.5.8. Test Results (Spurious Emission above 1GHz)

- Temperature: 25°C
- Relative Humidity: 60%
- Duty Cycle of the Equipment During the Test: 100.00%
- Test Engineer: Carl Chiou

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Read Level	Limit Line	Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV	dBuV/m	dB	dB	dB	
1	1300.000	40.96	-19.83	54.79	60.79	-13.83	1.37	40.12	Peak
2	1948.000	37.49	-16.51	49.24	54.00	-11.75	1.70	40.73	Peak
3	2108.000	38.79	-15.21	50.17	54.00	-11.38	1.77	40.83	Peak

(B) Polarization: Vertical

	Freq	Level	Over Limit	Read Level	Limit Line	Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV	dBuV/m	dB	dB	dB	
1	1300.000	39.28	-21.51	53.11	60.79	-13.83	1.37	40.12	Peak
2	1716.000	36.68	-17.32	49.29	54.00	-12.61	1.58	40.44	Peak
3	2214.000	37.96	-16.04	49.15	54.00	-11.19	1.83	40.89	Peak

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m)

Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

5.5.9. Photographs of Radiated Emission Test Configuration

FRONT VIEW



REAR VIEW





5.6. Antenna Requirements

5.6.1. Standard Applicable

Section 15.203: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

5.6.2. Antenna Connected Construction

There is no antenna connector for the printed antenna. So there is need to fulfill the unique antenna connector requirement.

5.6.3. Test Criteria

All test results complied with the requirements of 15.203.

6. List of Measuring Equipments Used

Items	Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
1	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	Jun. 21, 2004	Radiation (03CH03-HY)
2	Spectrum Analyzer	R&S	FSP40	100004	9KHZ~4GHz	Aug. 31, 2004	Radiation (03CH03-HY)
3	Amplifier	Schaffner	CPA9231A	18667	9KHz – 2GHz	Jan. 04, 2005	Radiation (03CH03-HY)
4	Biconical Antenna	SCHWARZBECK	VHBB 9124	301	30MHz –200MHz	Jul. 23, 2004	Radiation (03CH03-HY)
5	Log Antenna	SCHWARZBECK	VUSLP 9111	221	200MHz -1GHz	Jul. 23, 2004	Radiation (03CH03-HY)
6	RF Cable-R03m	Jye Bao	RG142	CB021	30MHz~1GHz	Dec. 02, 2004	Radiation (03CH03-HY)
7	Amplifier	MITEQ	AFS44	879984	1GHz~26.5GHz	Mar. 25, 2005	Radiation (03CH03-HY)
8	Horn Antenna	COMPOWER	AH-118	10092	1GHz – 18GHz	Feb. 18, 2005	Radiation (03CH03-HY)
9	Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
10	Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)
11	Horn Antenna	Schwarzbeck	BBHA9170	154	15GHz~40GHz	Jun. 09, 2004	Radiation (03CH03-HY)
12	RF Cable-HIGH	SUHNER	SUCOFLES 106	SN30094/6	1GHz~26.5GHz	Mar. 05, 2005	Radiation (03CH03-HY)

Calibration Interval of instruments listed above is one year.

7. Company Profile

SPORTON Lab. was established in 1986 with one shielded room: the first private EMI test facility, offering local manufacturers an alternative EMI test facility apart from ERSO. In 1988, one 3M and 10M/3M open area test site were setup and also obtained official accreditation from FCC, VCCI and NEMKO. In 1993, a Safety laboratory was founded and obtained accreditation from UL of USA, CSA of Canada and TUV (Rhineland & PS) of Germany. In 1995, one EMC lab, including EMI and EMS test facilities was setup. In 1997, SPORTON Group has provided financial expense to relocate the headquarter to Orient Scientific Park in Taipei Hsien to offer more comprehensive, more qualified and better service to local suppliers and manufactures. In 1999, Safety Group and Component Group were setup. In 2001, SPORTON has established 3M/10M chamber in Hwa Ya Technology Park.

7.1. Certificate of Accreditation


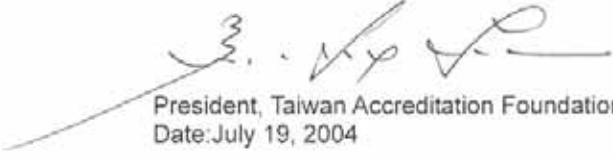
Taiwan	BSMI, CNLA, DGT
USA	FCC, NVLAP, UL
EU	Nemko, TUV
Japan	VCCI
Canada	Industry Canada

7.2. Test Location

SHIJR	ADD : 6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C. TEL : 02-2696-2468 FAX : 02-2696-2255
HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 03-327-3456 FAX : 03-318-0055
LINKOU	ADD : No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C TEL : 02-2601-1640 FAX : 02-2601-1695
DUNGHU	ADD : No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C. TEL : 02-2631-4739 FAX : 02-2631-9740
JUNGHE	ADD : 7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C. TEL : 02-8227-2020 FAX : 02-8227-2626
NEIHU	ADD : 4Fl., No. 339, Hsin Hu 2 nd Rd., Taipei 114, Taiwan, R.O.C. TEL : 02-2794-8886 FAX : 02-2794-9777

8. CNLA Certificate of Accreditation

Test Lab. : Sporton International Inc.
Accreditation Number : 1190
Originally Accredited : 2003/12/15
Effective Period : 2003/12/15~2006/12/14
Accredited Scope : 47 CFR FCC Part 15 Subpart C (9kHz~40GHz)

	
Taiwan Accreditation Foundation Chinese National Laboratory Accreditation Certificate of Accreditation	
Accreditation Criteria:	ISO 17025
Accreditation Number:	1190
Organization/Laboratory:	EMC & Wireless Communications Laboratory, Sporton International Inc.
Originally Accredited:	December 15, 2003
Effective Period:	December 15, 2003 To December 14, 2006
Accredited Scope:	Electrical Testing Field, 7 items, details shown in the following pages.
Specific Accreditation Program:	Recognition and Approval of Designated Laboratory for Commodities Inspection
 President, Taiwan Accreditation Foundation Date: July 19, 2004	
(This document is invalid unless accompanied by all 4 pages)	
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