TEST REPORT

FCC RULES Part 15 Subpart C

FCC ID : SXVFTC1

Report File No.	: STROR-05-024
Date of Issue	: Mar. 18, 2005
Kind of Product	: FM Transmitter
Model Name	: FTC1
Manufacturer	: BKM Co., Ltd.
Serial No.	: -
Test Result	: Complied

SGS Testing Korea Co., Ltd.
18 - 34, Sanbon - dong, Gunpo - si, Gyeonggi - do, Korea, 435 - 041
Tel. +82 31 428 5700 / Fax. +82 31 427 2371
http://www.sgstesting.co.kr

VERIFICATION OF COMPLIANCE

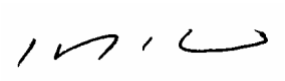
Applicant :	COWON SYSTEMS, Inc.
Kind of Product :	FM Transmitter
Brand Name :	iAudio
Model Name :	FTC1
Model Difference :	-
Report File No. :	STROR-05-024
Date of test :	Feb. 25, 2005 ~ Mar 18, 2005
Receiver EUT :	-

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
Part 15 Subpart C §15.209& §15.239	Compiled

The above equipment was tested by SGS Testing Korea Co., Ltd. for compliance with the requirements set forth in the FCC RULES Part 15 Subpart §15.209& §15.239. The results of testing in this report apply to the product system that was tested only. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Tested By:  *Date* **Mar. 18, 2005**

Feel Jeong

Approved By  *Date* **Mar. 18, 2005**

James Kwon

INDEX

1. General Description of EUT

The COWON SYSTEMS, Inc., Model FTC1 is a FM transmitter. FTC1 Wireless music adapter let you listen to any portable music device over any FM tuner and speaker setup, without clumsy or constricting cable hookup. It is the perfect way to simply and efficiently listen to MP3s, CDs, mini-discs, and other formats in the comfort of you car or living room.

2. General Information of EUT

Transmitter

Power Supply	*DC 12V or DC1.5V(AAA Type Battery)
Operating Frequency	106.7~107.9 MHz
Modulation Type	FM
Operating Temperature	-10℃~ +50℃
Frequency Generation	PLL
Communication method	One-way
Channel Number	7 CH
Antenna Type	Wire Ant

*DC 12V is powered from an automobile DC12V system.

3. Test Procedure

The test procedures are performed following the test stands ANSI C.63.4-2003, if applicable.

3.1 Conducted Emission

Testing was performed according ANSI C.63.4-2003 in a shielded room with peripherals placed on a table, 0.8m high over a metal floor.
It was located more than required distance away from the shield room wall.

3.2 Radiated Emission

Testing was performed according ANSI C.63.4-2003 at open field test site. The EUT was placed in a 0.8m high table along with the peripherals.
The turn table was separated from the antenna distance 3 meters. Cables were placed in a position to produce maximum emissions as determined by experimentation and operation mode was selected for maximum.
The frequencies and amplitudes of maximum emission were measured at vary azimuths, antenna heights and antenna polarities.
Reported are maximized emission levels.

4. Test Condition

4.1 Test Configuration

The device was configured for testing in a typical fashion (as a customer would normally use it). During the tests, the EUT and the supported equipments were installed to meet FCC requirement and operated in a manner, which tends to maximize its emission level in a typical application.

Conducted Emission Test

It's not applicable, because the EUT supplies from a DC battery.

Radiated Emission Test

Preliminary radiated emission tests were conducted using the procedure in ANSI C63.4-2003 clause 8.3.1.1. to determine the worst operating condition. Final radiated emission tests were measured at 3 meter open field test site. To complete the test configuration required by the FCC, the EUT was tested in all three orthogonal planes.

4.2 EUT Operation

EUT was tested according to the following operation modes provided by the specifications given by the manufacturer, and reported the worst emissions.

4.3 Peripherals / Support Equipment Used

Following peripheral devices and interface cables were connected during the measurement.

Type of Peripheral Equipment Used:

Description	Model Name	Serial NO	Manufacturer
MP3 Player	iAudio MP3	N/A	COWON SYSTEMS, Inc.
DC Power Supply	E3631A	MY40021247	Agilent

5. Field Strength of the Carrier FCC Part 15, Subpart C, Section15.239

The following table shows the highest levels of radiated emissions on both polarizations of horizontal and vertical.

Humidity Level : 47% Temperature: 23℃

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Carrier Freq. (MHz)	Amp. (dBuV/m)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Amp. (dBuV/m)	Limit (dBuV/m)	Margin (dB)
106.7	27.5	Peak	H	12.81	1.06	41.37	68	26.63
107.3	27.3	Peak	H	12.87	1.06	41.23	68	26.77
107.9	27.4	Peak	H	12.93	1.06	41.39	68	26.61

* Remark: To get a maximum emission level from the EUT, the EUT was moved throughout the XY,XZ, and YZ planes.

Test Equipment Used

EQUIPMENT	MANUFACTURER	MODEL	CAL DUE.
Spectrum analyzer	H/P	8593E	Aug. 2005
Test Receiver	Rohde & Schwarz	ESVS 10	Jun. 2005
Biconical Antenna	EMCO	3104C	Jun. 2005
DC Power Supply	Agilent	E3631A	May. 2005
Anechoic Chamber	Seo Young EMC	-	-

6. Spurious Emission FCC Part 15, Subpart C, Section15.209

The following table shows the highest levels of radiated emissions on both polarizations of horizontal and vertical.

Humidity Level : 47% Temperature: 23℃

Low Frequency:106.7 MHz

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Freq. (MHz)	Amp. (dBuV/m)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Amp. (dBuV/m)	Limit (dBuV/m)	Margin (dB)
213.4	16.5	Q.P.	H	15.92	1.74	34.16	43.5	9.34
320.1	10.1	Q.P.	H	15.84	2.10	28.04	46.0	17.96
426.8	8.4	Q.P.	V	17.50	2.50	28.40	46.0	17.60
533.6	6.2	Q.P.	H	20.05	2.80	29.05	46.0	16.95
640.2	5.8	Q.P.	V	21.87	3.11	30.78	46.0	15.22
746.9	5.1	Q.P.	V	22.99	3.24	31.33	46.0	14.67

Middle Frequency : 107.3 MHz

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Freq. (MHz)	Amp. (dBuV/m)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Amp. (dBuV/m)	Limit (dBuV/m)	Margin (dB)
214.6	19.4	Q.P.	H	15.88	1.74	37.02	43.5	6.48
321.9	8.1	Q.P.	H	15.86	2.11	26.07	46.0	19.93
429.2	5.4	Q.P.	H	17.58	2.50	25.48	46.0	20.52
536.5	5.7	Q.P.	V	20.18	2.81	28.69	46.0	17.31
643.8	6.2	Q.P.	H	22.10	3.12	31.42	46.0	14.58
751.1	5.9	Q.P.	H	22.98	3.24	32.12	46.0	13.88

High Frequency : 107.9 MHz

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Freq. (MHz)	Amp. (dBuV/m)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Amp. (dBuV/m)	Limit (dBuV/m)	Margin (dB)
215.8	15.3	Q.P.	H	15.83	1.75	32.88	43.5	10.62
323.7	8.1	Q.P.	H	15.88	2.12	26.10	46.0	19.90
421.6	5.4	Q.P.	H	17.68	2.51	25.59	46.0	20.41
539.5	6.3	Q.P.	V	20.32	2.82	29.44	46.0	16.56
647.4	5.7	Q.P.	H	22.34	3.12	31.16	46.0	14.84
755.3	5.0	Q.P.	H	22.97	3.25	31.22	46.0	14.78

Remark: Other spurious frequencies were not found up to 2000 MHz
To get a maximum emission level from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

Notes : 1.H: Horizontal polarization, V: Vertical polarization
2.Emission Level =Reading +Antenna Factor + Cable Loss

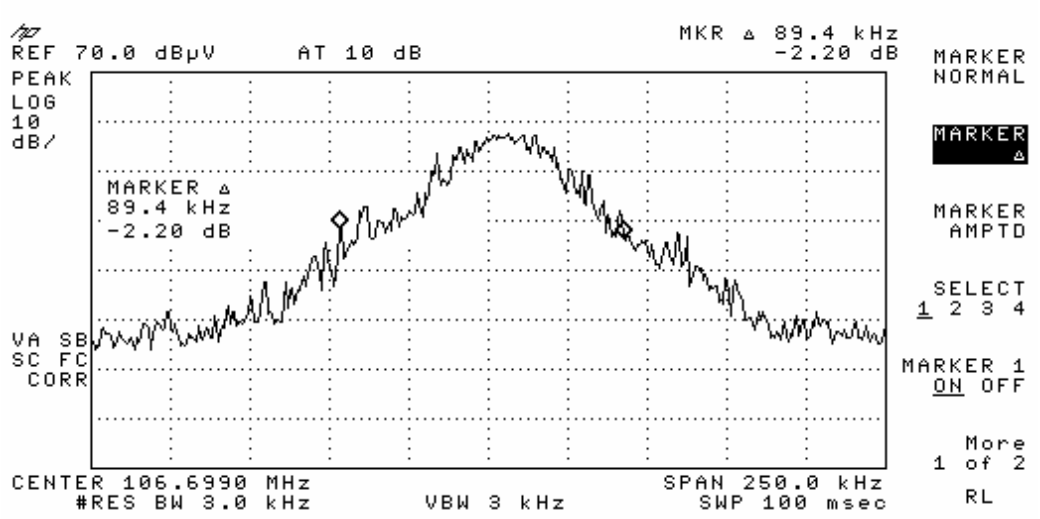
Test Equipment Used

EQUIPMENT	MANUFACTURER	MODEL	CAL DUE.
Spectrum analyzer	H/P	8593E	Aug. 2005
Test Receiver	Rohde & Schwarz	ESVS 10	Jun. 2005
Log-periodic Antenna	Rohde & Schwarz	UHALP9107	Jan. 2006
Horn Antenna	Schwarzbeck	BBHA9120D(0600)	Jul. 2006
DC Power Supply	Agilent	E3631A	May. 2005
Anechoic Chamber	Seo Young EMC	-	-

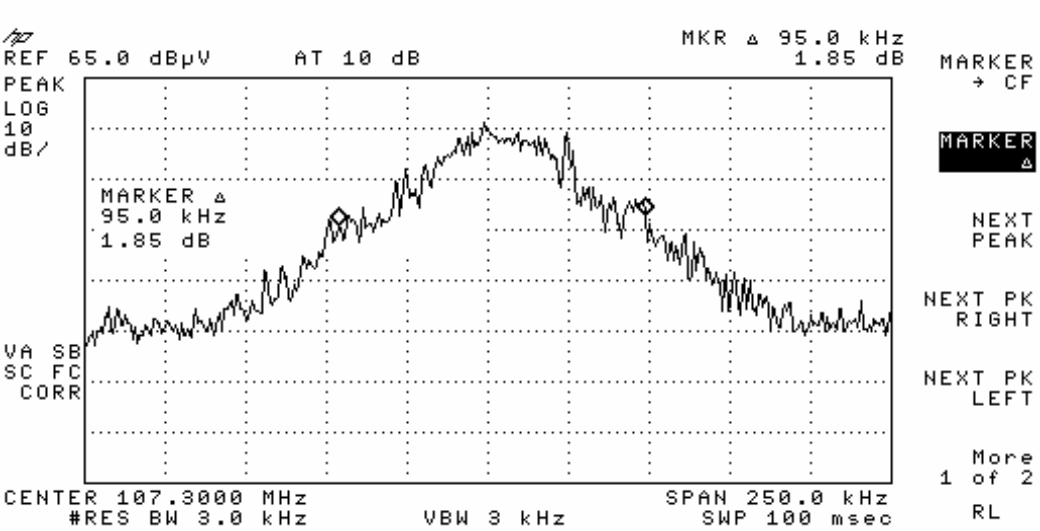
7. Emission Bandwidth FCC Part 15, Subpart C, Section15.239

Emission from the intentional radiator is confined within a band 200 kHz wide centered on the operating frequency. The 200 kHz band lies wholly within the frequency range of 88-108 MHz.

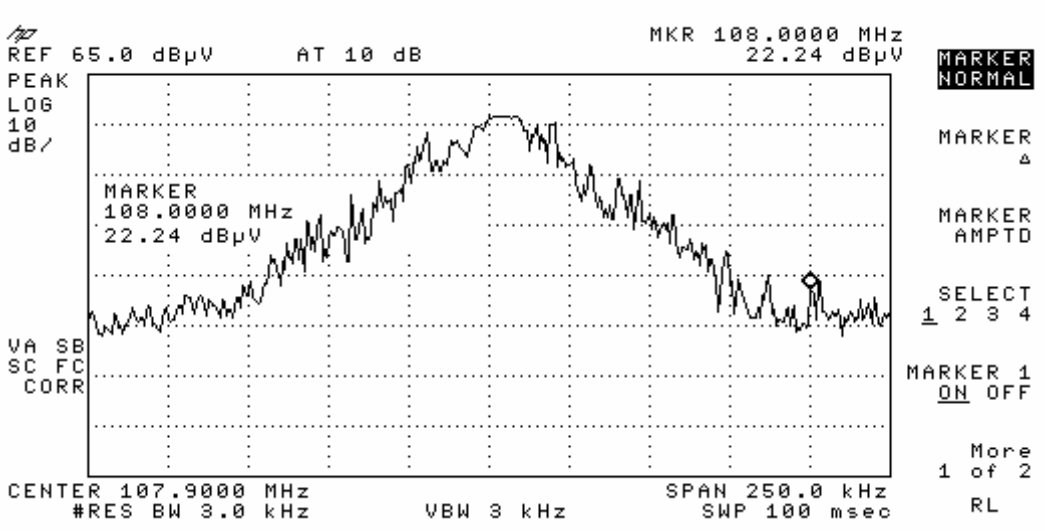
Ch1=106.7 MHz



CH4=107.3 MHz



CH7=107.9 MHz



Test Equipment Used

EQUIPMENT	MANUFACTURER	MODEL	CAL DUE.
Spectrum analyzer	H/P	8593E	Aug.2005
Test Receiver	Rohde & Schwarz	ESVS 10	Jun. 2005
Biconical Antenna	EMCO	3104C	Jun. 2005
DC Power Supply	Agilent	E3631A	May.2005
Anechoic Chamber	Seo Young EMC	-	-

8. Summary of Results

The data collected shows that Model FTC1 complies Part 15.209 and 15.239 of FCC Technical Rules. The highest emis sion level observed was at 107.3 MHz radiated emission with a margin of 6.48 dB.

Emission from the intentional radiator is confined within a band 200 kHz wide centered on the operating frequency. The 200 kHz band lies wholly within the frequency range of 88-108 MHz.

The field strength of any emission within the permitted 200 kHz band is not exceed 200uV/m(48dBuV) at 3 meters

The device was tested with DC 12V input power because field strength with DC 12V was more than field strength with DC 1.5V

9. Attachment A – Photos of the test set up