ELECTROMAGNETIC EMISSION COMPLIANCE REPORT
FOR SUPERHETRODYNE RECEIVER

Test Report No.	**: E04OR-009**
Applicant	**: Cybertree Co., Ltd.**
Address	**: 546-9, Sang2-Dong, Wonmi-Gu, Bucheon-Si, Gyeonggi-Do, Korea**
Manufacturer	**: Cybertree Co., Ltd.**
Address	**: 546-9, Sang2-Dong, Wonmi-Gu, Bucheon-Si, Gyeonggi-Do, Korea**
Type of Equipment	**: BREAST LINEAR**
FCC ID	**: RLRCWM300XBL3150B**
Model Name	**: CWM-300B**
Serial number	**: N/A**
Total page of Report	**: 12 pages (including this page)**
Date of Incoming	**: September 20, 2004**
Date of issuing	**: October 6, 2004**

SUMMARY

The equipment complies with the regulation; **FCC PART 15 SUBPART B §15.101**

This test report contains only the result of a single test of the sample supplied for the examination. It is not a general valid assessment of the features of the respective products of the mass-production.

Prepared by:
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EMC Div.
ONETECH Corp.

Reviewed by:
Y. K. Kwon/ Director
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ONETECH Corp.

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EMC Testing Dept : 426-1 Daessangryung-Ri, Chowol-Myun, Kwangju-Kun, Kyunggi-Do 464-860 Korea. (TEL: 82-31-765-8289 FAX: 82-31-766-2904)

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1. VERIFICATION OF COMPLIANCE

APPLICANT	: Cybertree Co., Ltd.
ADDRESS	: 546-9, Sang2-Dong, Wonmi-Gu, Bucheon-Si, Gyeonggi-Do, Korea
CONTACT PERSON	: Beom Mo, Jung / Director in R&D
TELEPHONE NO	: 82-32-347-4534
FCC ID	: RLRCWM300XBL3150B
MODEL NO/NAME	: CWM-300B
SERIAL NUMBER	: N/A
DATE	: October 6, 2004

DEVICE TYPE	UNINTENTIONAL RADIATOR
E.U.T. DESCRIPTION	BREAST LINEAR -SUPERHETRODYNE RECEIVER
THIS REPORT CONCERNS	ORIGINAL GRANT
MEASUREMENT PROCEDURES	ANSI C63.4: 2001
TYPE OF EQUIPMENT TESTED	PRE-PRODUCTION
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	CERTIFICATION
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 §15.101
MODIFICATIONS ON THE EQUIPMENT TO ACHIEVE COMPLIANCE	No
FINAL TEST WAS CONDUCTED ON	3 METER OPEN AREA TEST SITE

-. This device has shown compliance with the conducted emissions limits in 15.207 adopted under FCC 02-107 (ET Docket 98-80). The device may be marketed after July 11, 2005 and is not affected by the 15.37(j) transition provisions.

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

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2. GENERAL INFORMATION

2.1 Product Description

The Cybertree Co., Ltd., Model CWM-300B (referred to as the EUT in this report) is a receiver that enables user to massage user's breasts with a remote controller anytime anywhere. The EUT receives the signal from the remote controller, Model: CWM-300R, FCC ID: RLRCWM300XBL3150R which was manufactured by Cybertree Co., Ltd and then decide one of 6 massage modes harmonizing with the human bio-rhythm and vibrate user's breasts using small motor. The EUT is consisted of receiver and battery charger. The product specification described herein was obtained from product data sheet or user's manual.

CHASSIS TYPE		Plastic
RECEIVING FREQUENCY		315.00 MHz
LIST OF EACH OSC. OR CRY. FREQ.(FREQ.>=1MHz)		4.0 MHz and 23.26429MHz
RATED SUPPLY VOLTAGE	Receiver	Input: 3.7V, 250mA (Li-Polymer Battery)
	Charger	Input: DC 9V, 300mA, Output : DC 4.2V
	AC/DC Adapter	Input: AC120V 60Hz 6VA, Output: DC 9V, 300mA
NUMBER OF LAYERS	Receiver	4 Layers
	Charger	2 Layers

Model Differences:

-. No other model differences have been mentioned.

2.2 Related Submittal(s) / Grant(s)

Original submittal only.

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2.3 Test System Details

The EUT was tested with the following all equipment used in the tested systems are:

Model	Manufacturer	FCC ID	Description	Connected to
CWM-300B	Cybertree Co., Ltd.	RLRCWM300XBL3150B	RECEIVER	BATTERY
CWM-300C	Cybertree Co., Ktd.	N/A	Battery Charger	EUT
KSA-0930U	Ki Seung Co., Ltd	N/A	AC/DC Adapter	Battery Charger
8657A	HP	N/A	Signal Generator	N/A

2.4 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4: 2001. Radiated testing was performed at a distance of 3 meters from EUT to the antenna.

2.5 Test Facility

The open area test site and conducted measurement facilities are located on at 426-1 Daessangryung-Ri, Chowol-Myun, Kwangju-City, Kyunggi-Do, 464-080, Korea. Description details of test facilities were submitted to the Commission on October 02, 2002. (Registration Number: 529838)

3. SYSTEM TEST CONFIGURATION

3.1 Justification

This device was configured for testing in a typical way as a normal customer is supposed to be used. During the test, the following components were installed inside of the EUT.

DEVICE TYPE	MANUFACTURER	MODEL/PART NUMBER	FCC ID
MAIN BOARD	Cybertree Co., Ltd.	CWM-300B Receiver	N/A

3.2 EUT exercise Software

Set the signal generator to transmit at 315MHz and then the EUT receives the signal.
Used battery for the EUT was fully charged.
To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.
Also the EUT was tested at battery charging mode.

3.3 Equipment Modifications

None

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3.4 Configuration of Test System

Line Conducted Emission Test:

The power cord of the AC/DC Adapter was connected to LISN. All supporting equipments were connected to another LISN. Preliminary Power lines Conducted Emission tests were performed by using the procedure in ANSI C63.4: 2001 7.2.3 to determine the worse operating conditions.

Radiated Emission Test:

Preliminary radiated emissions tests were conducted using the procedure in ANSI C63.4: 2001, 8.3.1.1 to determine the worse operating conditions. Final radiated emission tests were conducted at 3 meters open area test site.

Coherent Test:

During Radiated Emission Tests, H.P. signal generator model no: 8657A was used to radiate an unmodulated CW signal to EUT at 315.00 MHz in order to cohere the individual components of the characteristic broadband emissions from EUT.

Antenna Power Conduction Test:

This equipment was only with a permanently attached antenna, so the radiated emission measurement was performed with the antenna attached.

4. PRELIMINARY TEST

4.1 AC Power line Conducted Emissions Tests

During Preliminary Tests, the following operating mode was investigated

Operation Mode	The Worse operating condition (Please check one only)
Battery Charging Mode	X

4.2 Radiated Emissions Tests

During Preliminary Tests, the following operating modes were investigated

Operation Mode	The Worse operating condition (Please check one only)
RX and Vibration Mode	X
Battery Charging Mode	

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5. FINAL RESULT OF MEASURMENT

Preliminary test was done in normal operation mode. And the final measurement was selected for the maximized emission level.

5.1 Conducted Emission Test

Humidity Level : 45 % Temperature : 21°C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.207(a)

Result : PASSED BY –38.05 dB at 6.345 MHz at Peak Mode

EUT : BREAST LINEAR Date: September 23, 2004

Operating Condition : Battery charging mode for the battery of the receiver

Used AC/DC Adaptor : KSA-0930 manufactured by Ki Seung Co., Ltd.

Frequency (MHz)	Line	Quasi-Peak (dBuV)			Margin (dB)	Average (dBuV)		Margin (dB)
		Emission Level	Detector Mode	Limits		Emission level	Limits	
6.100	H	20.75	P	60.00	-39.25	-	-	-
6.250	H	20.58	P	60.00	-39.42	-	-	-
6.345	N	21.95	P	60.00	-38.05	-	-	-

Line Conducted Emission Tabulated Data

Remark: “H”: Hot Line, “N”: Neutral Line, “P”: Peak Detector mode.

Average mode was not tested, because peak measurement values were under the average limit.

See next page for an overview sweep performed with peak detector.

남기홍

Tested by: Gi-Hong, Nam / Test Engineer

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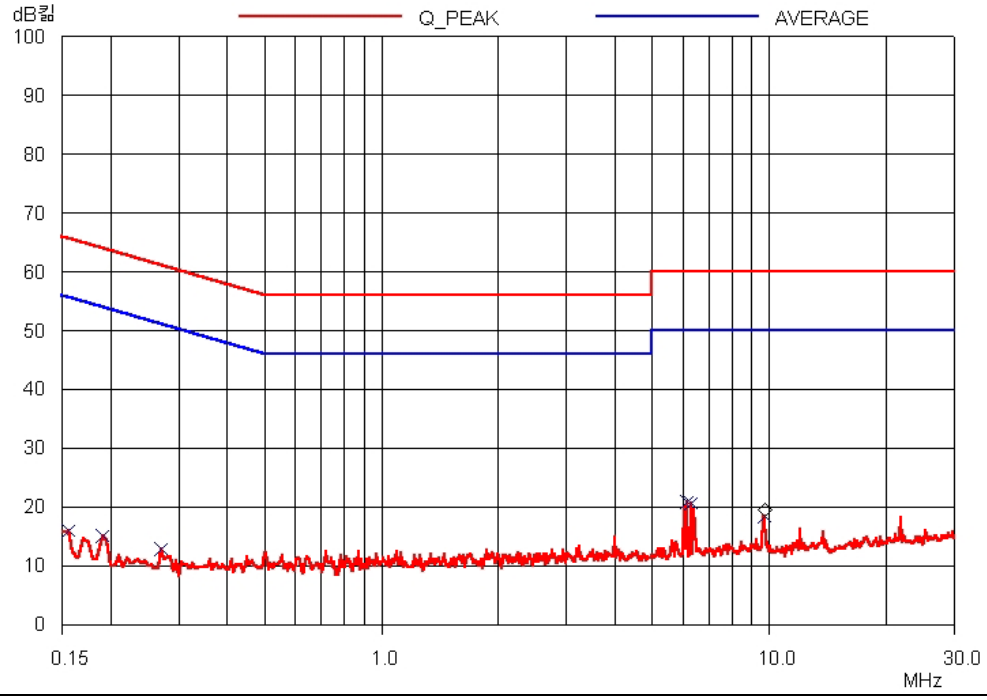
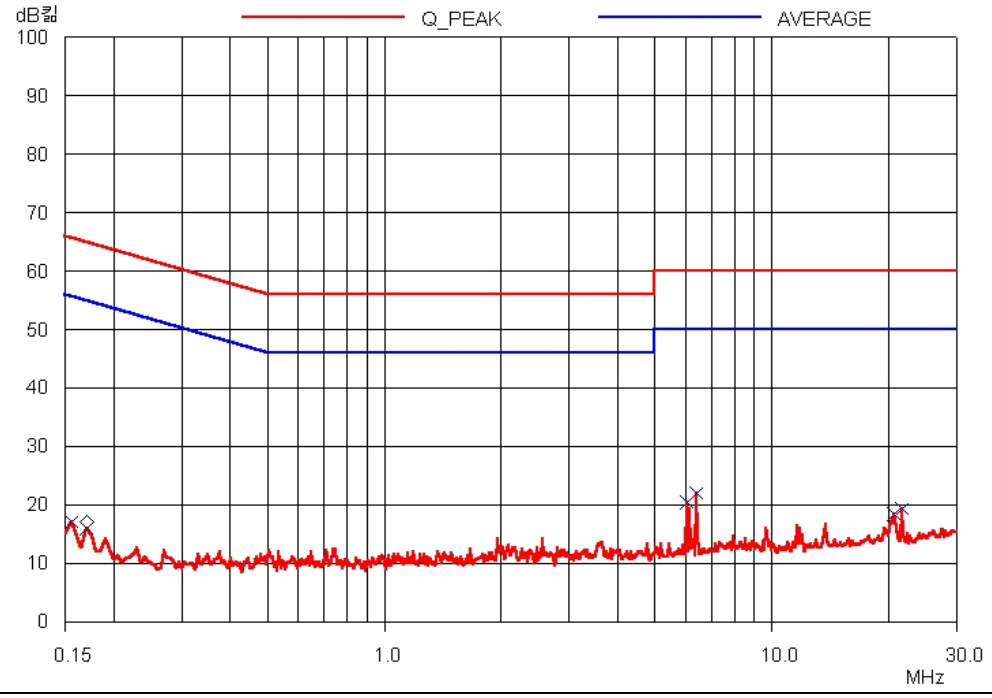


HOT LINE



NEUTRAL LINE

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5.2 Radiated Emission Test_Receiving Mode

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

Humidity Level : 51 % Temperature : 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART B (Section: 15.109)

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

Type of Test : Unintentional Radiator

Result : PASSED BY –6.64 dB at 805.22 MHz

EUT : BREAST LINEAR Date: September 20, 2004

Operating Condition : RX mode

Distance : 3 Meter

Radiated Emission		Ant	Correction Factors		Total	FCC LIMIT	
Freq. (MHz)	Amp. (dBuV)	Pol.	Ant. (dB/m)	Cable (dB)	Amp. (dBuV/m)	Limit (dBuV/m)	Margin (dB)
270.32	13.70	V	17.48	2.68	33.86	46.02	-12.16
307.14	15.32	V	13.68	2.92	31.92	46.02	-14.10
756.77	12.45	V	22.13	4.41	38.99	46.02	-7.03
805.22	12.70	V	22.14	4.54	39.38	46.02	-6.64
Other frequencies are more than 20dB below the limit up to 2GHz.							

Radiated Emission Tabulated Data

Tested by: Gi-Hong, Nam / Test Engineer

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5.3 Radiated Emission Test_Battery Charging Mode

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

Humidity Level : 51 % Temperature : 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART B (Section: 15.109)

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

Type of Test : Unintentional Radiator

Result : PASSED BY –10.95 dB at 270.32 MHz

EUT : BREAST LINEAR Date: September 20, 2004

Operating Condition : Battery charging mode for the battery of the receiver

Distance : 3 Meter

Radiated Emission		Ant	Correction Factors		Total	FCC LIMIT	
Freq. (MHz)	Amp. (dBuV)	Pol.	Ant. (dB/m)	Cable (dB)	Amp. (dBuV/m)	Limit (dBuV/m)	Margin (dB)
53.26	15.10	V	9.74	1.33	26.17	40.00	-13.83
86.20	16.90	V	7.46	1.75	26.11	40.00	-13.89
270.32	14.91	V	17.48	2.68	35.07	46.02	-10.95
324.59	13.50	V	14.01	2.97	30.48	46.02	-15.54
Other frequencies are more than 20dB below the limit up to 2GHz.							

Radiated Emission Tabulated Data

Tested by: Gi-Hong, Nam / Test Engineer

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6. FIELD STRENGTH CALCULATION

Meter readings are compared to the specification limit correcting for antenna and cable losses

+	Meter reading	(dBuV)
+	Cable Loss	(dB)
+	Antenna Factor (Loss)	(dB/meter)
=	Corrected Reading	(dBuV/meter)
-	Specification Limit	(dBuV/meter)
=	dB Relative to Spec	(+/- dB)

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7. LIST OF TEST EQUIPMENT

No.	EQUIPMENTS	MFR.	MODEL	SER. NO.	LAST CAL	DUE CAL	USE
1.	Test receiver	R/S	ESVS 10	827864/005	NOV/03	12MONTH	■
2.	Test receiver	R/S	ESHS10	834467/007	APR/04	12MONTH	■
3.	Spectrum analyzer	HP	8567A	3021A00773	JUL/04	12MONTH	■
4.	RF preselector	HP	85685A	3107A01268	JUL/04	12MONTH	■
5.	Quasi-Peak Adapter	HP	85650A	3107A01550	JUL/04	12MONTH	■
6.	Biconical antenna	EMCO	3104C	9109-4443	MAY/04	12MONTH	
7.				9109-4444	JUL/04		
8.		Schwarzbeck	VHA9103	91031852	JAN/04		■
9.	Log Periodic antenna	EMCO	3146	9109-3213	AUG/04	12MONTH	
10.				9109-3214	JUL/04		
11				9109-3217	MAY/04		
12.		Schwarzbeck	9108-A(494)	62281001	JAN/04		■
13.	Plotter	HP	7475A	30052 22986	N/A	N/A	■
14.	Position Controller	HD	HD100	100/788	N/A	N/A	■
15.	Turn Table	HD	DS420S	N/A	N/A	N/A	■
16.	Antenna Master	HD	HD240	N/A	N/A	N/A	■
17.	Isolation Transformer	Digitek Power	DPT	DPF-22027	N/A	N/A	■
18.	Isolation Transformer	Digitek Power	DPT	DPF-22028	N/A	N/A	■
19.	Frequency Converter	Digitek Power	VFS/DEFC	N/A	N/A	N/A	■

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