



MET Laboratories, Inc. *Safety Certification - EMI - Telecom Environmental Simulation*
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May 29, 2002

Shirley Tsang
Hong Kong Standards and Testing Center
10 Dai Wang Street
Taipo Industrial Estate
Hong Kong

Reference: Com-Talk, CT2002-9, Transceiver Base Unit
FCC ID: PPGCPI900T

Dear Ms. Tsang:

Enclosed is the EMC Test Report for the CyberPacific (Hong Kong) Ltd. Com-Talk CT2002-9, Transceiver Base Unit. The Com-Talk CT2002-9 was tested to the requirements of the FCC Rules and Regulations, Section 15.249, of Title 47 of the CFR, for a Part 15 Transceiver.

Thank you for using the testing services of MET Laboratories. If you have any questions regarding these results or if MET can be of further assistance to you, please feel free to contact me. We appreciate your business and look forward to working with you again soon.

Kindest Regards,
MET LABORATORIES, INC.

Marianne T. Bosley
Documentation Department

Enclosures: (\\CyberPacific\\EMC12241-FCC249 Draft 1.rpt)
DOCTEM-23 Jan 02

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Electro-Magnetic Compatibility

Test Report

for the

**CyberPacific (Hong Kong) Ltd.
Com-Talk, CT2002-9 /Base Unit**

Tested Under

FCC Part 15 Subpart C
Section 15.249
Title 47 of the CFR
for Intentional Radiators

MET REPORT: EMC12241-FCC249

May 29, 2002

PREPARED FOR:

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PREPARED FOR:

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Room 3808, 38/FI, West Tower, Shun Tak Centre
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Hong Kong

Christopher R. Harvey, Director
Electromagnetic Compatibility Testing

Marianne T. Bosley
Report Writer

Engineering Statement: The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Part 15, Section 15.249, of the FCC Rules under normal use and maintenance.

Liming Xu
Project Engineer



Table of Contents

I.	Executive Summary	6
A.	Purpose of Test	7
B.	Executive Summary	7
II.	General	8
A.	Test Site	9
B.	Description of Test Sample	9
C.	General Test Setup	9
D.	Mode of Operation	9
E.	Modifications	11
F.	Disposition of Test Sample	11
III.	Electromagnetic Compatibility Antenna Requirements	12
A.	Antenna Evaluation Criteria	13
IV.	Electromagnetic Compatibility Emissions Requirements	14
A.	Radiated Emissions - General	15
B.	Radiated Emissions - Spurious	18
C.	Radiated Emissions - Harmonics	19
D.	Radiated Emissions - Fundamental	20
V.	Electromagnetic Compatibility Band Edge Requirements	21
A.	Band Edge Compliance	22
VI.	Test Equipment	27
VII.	Certification Label & User's Manual Information	29
A.	Certification Information	30
B.	Label and User's Manual Information	34



List of Tables

Table 1.	EUT Compliance	7
Table 2.	References	7
Table 3.	Limits for Spurious Emissions from Intentional Radiators	15
Table 4.	Limits for Fundamental and Harmonics Radiated Emissions at 3m from Section 15.249(b)	15
Table 5.	Radiated Emissions (Spurious) Results - 30MHz - 1GHz	18
Table 6.	Radiated Emissions Results - Average Measurements	19
Table 7.	Radiated Emissions Results - Peak Measurements	19
Table 8.	Radiated Emissions Results - Fundamental Measurements	20
Table 9.	Test Equipment for Intentional Radiators - §15.249	28

List of Figures

Figure 1.	Test Configuration	10
Figure 2.	FCC Intentional Radiators Tests Setup Photo	17



List of Terms and Abbreviations

AC	Alternating Current
Cal	Calibration
<i>d</i>	Measurement Distance
dB	Decibels
dBFA	Decibels above one microamp
dBV	Decibels above one microvolt
dBFA/m	Decibels above one microamp per meter
dBV/m	Decibels above one microvolt per meter
DC	Direct Current
E	Electric Field
DSL	Digital Subscriber Line
ESD	Electrostatic Discharge
EUT	Equipment Under Test
<i>f</i>	Frequency
FCC	Federal Communications Commission
CISPR	Comite International Special des Perturbations Radioelectriques (International Special Committee on Radio Interference)
GRP	Ground Reference Plane
H	Magnetic Field
HCP	Horizontal Coupling Plane
Hz	Hertz
IEC	International Electrotechnical Commission
kHz	kilohertz
kPa	kilopascal
kV	kilovolt
LISN	Line Impedance Stabilization Network
MHz	Megahertz
FH	microhenry
FF	microfarad
Fs	microseconds
NEBS	Network Equipment-Building System
OATS	Open Area Test Site
PRF	Pulse Repetition Frequency
RF	Radio Frequency
RMS	Root-Mean-Square
TWT	Traveling Wave Tube
V/m	Volts per meter
VCP	Vertical Coupling Plane



I. Executive Summary



I. Executive Summary

A. Purpose of Test

An EMC evaluation to determine compliance of the Com-Talk, CT2002-9 Transceiver Base Unit with the requirements of Part 15, Section 15.249, was conducted. (All references are to the most current version of Title 47 of the Code of Federal Regulations in effect). In accordance with §2.1033, the following data is presented in support of the Certification of the EUT. CyberPacific (Hong Kong) Ltd., should retain a copy of this document, and it should be kept on file for at least five years after the manufacturing of the Com-Talk, CT2002-9 has been **permanently** discontinued.

B. Executive Summary

The following tests were performed in accordance with HKSTC Purchase Order Number MET04/001:

Specifications	Description	Compliance
Title 47 of the CFR, Part 15, Subpart C, §15.207(a)	Electromagnetic Compatibility - Conducted Emissions for an Intentional Radiator	Not Applicable
Title 47 of the CFR, Part 15, Subpart C, §15.209(a); §15.249(a) and (b)	Electromagnetic Compatibility - Radiated Emissions for an Intentional Radiator	Complies
Title 47 of the CFR, Part 15, Subpart C, §15.249(c)	Electromagnetic Compatibility - Band Edge Requirements	Complies
Title 47 of the CFR, Part 15, Subpart C, §15.249(d)	Electromagnetic Compatibility - Peak and Average Measurement	Complies

Table 1. EUT Compliance

The EUT, as supplied to MET Laboratories, complied with the requirements stated in this test report.

References	Description
Purchase Order # MET04/001	HKSTC Purchase Order for the Com-Talk CT 2002-9 Testing
ANSI-C63.4:1992	Methods and Measurements of Radio-Noise Emissions from Low-Voltage Electrical And Electronic Equipment in the Range of 9 kHz to 40 GHz
FCC 47CFR, Chapter 1, Part 2	Title 47 Code of Federal Regulations Part 2 - Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
FCC 47CFR, Chapter 1, Part 15	Title 47 Code of Federal Regulations Part 15 - Radio Frequency Devices

Table 2. References



II. General



II. General

A. Test Site

All testing was conducted at MET Laboratories, Inc., 914 West Patapsco Avenue, Baltimore, Maryland 21230-3432. Radiated Emissions measurements were performed inside of a Semi Anechoic Chamber. In accordance with §2.948(a)(2), a complete site description is filed with the Commission's Laboratory in Columbia, Maryland. MET Laboratories has been accredited by the National Voluntary Laboratory Accreditation Program (Lab Code: 100273-0)

B. Description of Test Sample

The EUT is a 900 MHz wireless base unit.

C. General Test Setup

There is only one EUT configuration: the EUT was powered by a self-contained battery.

D. Mode of Operation

The CyberPacific (Hong Kong) Ltd. Com-Talk, CT2002-9 was configured in accordance with the manufacturer's instructions and was operated as follows for all testing contained in this report unless stated otherwise:

EUT is a wireless earphone that communicates with a transceiver device wirelessly which is connected to a mobile phone.



II. General



Figure 1. Test Configuration

**II. General****EUT**

Reference to Test Configuration	Description/ Nomenclature	Model #	Serial #	Revision
B	Base Unit			

Support Equipment

Reference to Test Configuration	Description/ Nomenclature	Model #	Serial #	Revision
C	Mobile Phone			
A	Headphone			

E. Modifications

No modifications were made during testing.

F. Disposition of Test Sample:

Hong Kong Standards and Testing Centre
10 Dai Wang Street
Taipo Industrial Estate
Hong Kong



III. Electromagnetic Compatibility Antenna Requirements



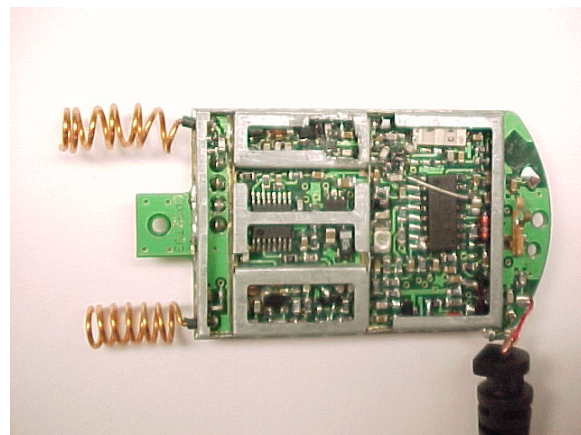
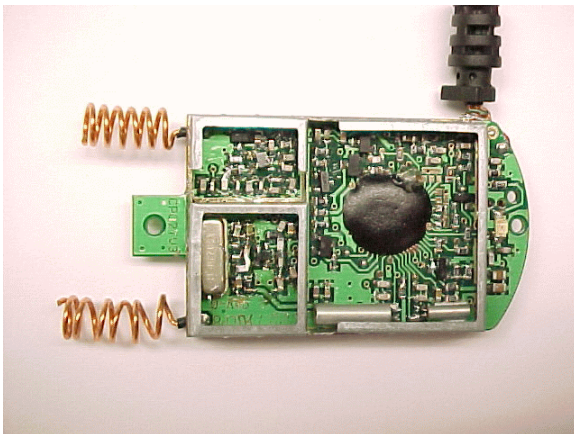
III. Electromagnetic Compatibility Antenna Requirements

A. Antenna Evaluation Criteria

Requirements: The structure and application of the EUT were analyzed to determine compliance with Section 15.203 of the Rules. Section 15.203 states that the subject device must meet at least one of the following criteria:

- (a) Antenna be permanently attached to the unit.
- (b) Antenna must use a unique type of connector to attach to the EUT.
- (c) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

Results: The CyberPacific Com-Talk CT2002-9 base unit meets the criteria of this rule by virtue of having a permanently attached internal antenna soldered onto the EUT and is not accessible by the user. The EUT is therefore compliant with §15.203. See detailed photos below:





IV. Electromagnetic Compatibility Emissions Requirements



IV. Electromagnetic Compatibility Emission Requirements

A. Radiated Emissions - General

Requirements: The EUT shall meet the limits shown below:

Frequency (MHz)	Limit (dB μ V) @ 3 m
30 - 88	40
88 - 216	43.5
216 - 960	46
Above 960	54

Table 3. Limits for Spurious Emissions from Intentional Radiators from FCC Part 15 § 15.209(a)

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter) @ 3m	Field Strength of Fundamental (dB μ V/m) @ 3m	Field Strength of Harmonics (microvolts/meter) @ 3m	Field Strength of Harmonics (dB μ V/m) @ 3m
902-928 MHz	50 (QP)	94.0	500	54.0
2400-2483.5 MHz	50 (Avg.)	94.0	500	54.0
5725-5875 MHz	50 (Avg.)	94.0	500	54.0
24.0-24.25 GHz	250 (Avg.)	108.0	2500	68.0

Table 4. Limits for Fundamental and Harmonics Radiated Emissions at 3m from Section 15.249(b)

Test Equipment: Test equipment for FCC Part 15 §15.209 Radiated Emissions is in Section VI of this report.



IV. Electromagnetic Compatibility Emission Requirements

Test Conditions:

The EUT was placed on a 0.8 m high wooden table inside a shielded enclosure. An antenna was placed near the EUT and measurements of frequencies and amplitudes of field strengths were recorded for reference during final measurements. For final radiated testing, measurements were performed in a semi-anechoic chamber or OATS. Measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst case orientation for maximum emissions.

For frequencies from 30 MHz to 1 GHz, measurements were made using a quasi-peak detector with a 120 kHz bandwidth. For frequencies above 1 GHz, peak measurements were made with a resolution bandwidth of 1 MHz and a video bandwidth of 1MHz and average measurements were made with RBW = 1MHz and VBW = 10 Hz.

For intentional radiators with a digital device portion which operates below 10 GHz, the spectrum was investigated as per §15.33(a)(1) and §15.33(a)(4); i.e., the lowest RF signal generated or used in the device up to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

In accordance with §15.35(b) the limit on the radio frequency emissions as measured using instrumentation with a peak detector function shall be 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

IV. Electromagnetic Compatibility Emission Requirements

Photograph:



Figure 2. FCC Intentional Radiators Test Setup Photo

Procedure: For pre-scanning, the EMI receiver scanned the frequency range from 30 MHz to 10 GHz, per §15.33(a)(4) to obtain an Emission profile of the EUT. For each point of measurement, the turntable was rotated, the positions of the interface cables were varied, and the antenna height was varied between 1 m and 4 m, in order to find the maximum radiated Emissions. Measurements were taken using this technique with the antenna in two polarizations: horizontal and vertical.

Results: The EUT complied with the radiated emissions limits of Section 15.209(a) and harmonics limits of Section 15.249(a).

Test Engineer: Liming Xu

Test Date: 2/5/2002



IV. Electromagnetic Compatibility Emission Requirements

B. Radiated Emissions - Spurious

Subject: Radiated Emissions - (Spurious) Electric Field Test Results

Specification: FCC Part 15 Subpart C, §15.209(a)

FREQ. (MHZ)	EUT Azimuth (Degrees)	Antenna Polarity (H/V)	Antenna Height (m)	Amplitude (dBuv)	A.C.F. (dB) (+)	Cable Loss (dB) (-)	Distance Corr. (dB) (-)	Corrected Amplitude (dBuv)	Limit (dBuv)	Margin (dB)
902.796	326	H	1.3	60.6	22.76	5.02	0.00	88.38	94.00	-5.62
902.796	15	V	1	57	22.30	5.02	0.00	84.32	94.00	-9.68
914.495	309	H	1.32	20.02	23.36	5.09	0.00	48.47	54.00	-5.53
914.495	327	V	1.2	13.64	22.39	5.09	0.00	41.12	54.00	-12.88
926.189	319	H	1.23	16.43	23.50	5.15	0.00	45.08	54.00	-8.92
926.189	350	V	1.19	9.42	22.42	5.15	0.00	36.99	54.00	-17.01
891.095	260	H	1	11.95	22.44	4.97	0.00	39.36	46.00	-6.64
891.095	340	V	1	6.34	22.20	4.97	0.00	33.51	46.00	-12.49
184.3	0	H	1	-0.69	9.43	2.20	0.00	10.94	43.50	-32.56
184.3	0	V	1	-0.54	9.19	2.20	0.00	10.84	43.50	-32.66
171.999	0	H	1	-0.75	8.58	2.11	0.00	9.94	43.50	-33.56
171.999	0	V	1	-0.78	8.78	2.11	0.00	10.11	43.50	-33.39
245.11	0	H	1	-0.3	11.81	2.64	0.00	14.15	46.00	-31.85
245.11	0	V	1	-0.28	12.21	2.64	0.00	14.57	46.00	-31.43

Table 5. Radiated Emissions (spurious) Results - 30 MHz - 1 GHz

**IV. Electromagnetic Compatibility Emission Requirements****C. Radiated Emissions - Harmonics****Subject:** 1GHz to 10 GHz Radiated Emissions - Electric Field Test Results**Specification:** FCC Part 15 Subpart C, §15.209(a)

FREQ. (GHz)	EUT Azimuth (Degrees)	Antenna Polarity (H/V)	Antenna Height (m)	Amplitude (dBuv)	A.C.F. (dB) (+)	Preamp/ Cable (dB) (-)	Distance Corr. (dB) (-)	Corrected Amplitude (dBuv)	Limit (dBuv)	Margin (dB)
1.8056	0	H	1	64	26.03	33.64	0.00	56.39	64	-7.61
1.8056	0	V	1	55	26.01	33.64	0.00	47.36	64	-16.64

Table 6. Radiated Emissions Results - Average measurements at 1 meter.

FREQ. (GHz)	EUT Azimuth (Degrees)	Antenna Polarity (H/V)	Antenna Height (m)	Amplitude (dBuv)	A.C.F. (dB) (+)	Preamp/ Cable (dB) (-)	Distance Corr. (dB) (-)	Corrected Amplitude (dBuv)	Limit (dBuv)	Margin (dB)
1.8056	0	H	1	74	26.03	33.64	0.00	66.39	83.50	-17.11
1.8056	0	V	1	65	26.01	33.64	0.00	57.36	83.50	-26.14

Table 7. Radiated Emissions Results - Peak measurements at 1 meter.**** There is no detectable emissions between 1.8056 GHz and 10 GHz,**

**IV. Electromagnetic Compatibility Emission Requirements****D. Radiated Emissions - Fundamental****Subject:** Radiated Emissions - (Fundamental) Electric Field Test Results**Specification:** FCC Part 15 Subpart C, §15.249(a)

FREQ. (MHZ)	EUT Azimuth (Degrees)	Antenna POL. (H/V)	Antenna HEIGHT (m)	Amplitude (dBuv) @3m QP	A.C.F. (dB) (+)	Cable Loss (dB) (-)	Distance Corr. (dB) (-)	Corrected Amplitude (dBuv) QP	Limit (dBuv) @ 3m QP	Margin (dB)
902.796	326	H	1.3	60.6	22.76	5.02	0.00	88.38	94.00	-5.62
902.796	15	V	1	57	22.30	5.02	0.00	84.32	94.00	-9.68

Table 8. FCC Intentional Radiators Fundamental Radiated Emissions Test Results**Remarks:** Equipment meets the specifications of Section 15.249(a).



V. Electromagnetic Compatibility Band Edge Requirements



V. Electromagnetic Compatibility Band Edge Requirements

A. Band Edge Compliance

Requirements: As required by §15.249(c), emissions shall be contained wholly within the allotted frequency band. The EUT shall be configured to transmit a maximum modulated carrier signal. Using a measurement resolution bandwidth of 3kHz to 100 kHz, measurements of the occupied bandwidth at the frequency band edges shall be performed.

Procedure: The EUT was configured to transmit a continuous signal with maximum modulation. Using a bandwidth of 3 kHz to 100 kHz, we determined the occupied bandwidth of the emission at the frequency within its operating range.

Results: Equipment complies with § 15.249(c). Plots of the band edge measurements follow.
The delta mark on the plot is the Occupied bandwidth = 290KHz..
The low side of the fundamental is $902.796 - 0.29/2 = 902.796 - 0.145 = 902.651$ MHz.

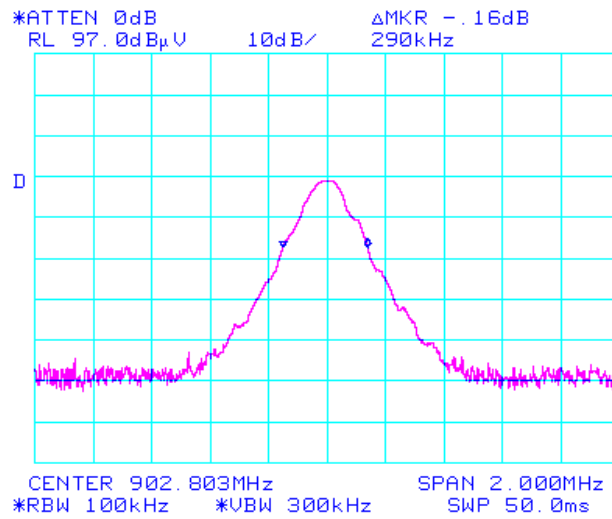
Test Engineer: Liming Xu

Test Date: 2/13/2002



V. Electromagnetic Compatibility Band Edge Requirements

Occupied B/W with loud voice Base unit Met12241





VI. Test Equipment

**VI. Test Equipment**

Test Equipment	Manufacturer	Model #	Met Asset #	Cal Date	Cal Due
Receiver	HP	8546A	1T4302	08/11/01	08/11/02
Antenna	SCHAFFNER	1155	1T4303	08/26/01	08/26/02
Antenna	EMCO	3115	1T2511	06/03/01	06/03/02
Test Room	ETS	CH1	1T4300	08/17/01	08/17/02
Spectrum A	HP	8563A	1T4288	09/14/01	09/14/02
Pre-Amp	HP	83017A	1T4102	See Note	

Table 9. Test Equipment for Intentional Radiators - §15.249

Note: Functionally verified test equipment is verified at the time of testing.



VII. Certification Label & User's Manual Information



VII. Certification Label & User's Manual Information

A. Certification Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 2, Subpart I — Marketing of Radio frequency devices:

§ 2.801 Radio-frequency device defined.

As used in this part, a radio-frequency device is any device which in its operation is capable of Emitting radio-frequency energy by radiation, conduction, or other means. Radio- frequency devices include, but are not limited to:

- (a) The various types of radio communication transmitting devices described throughout this chapter.
- (b) The incidental, unintentional and intentional radiators defined in Part 15 of this chapter.
- (c) The industrial, scientific, and medical equipment described in Part 18 of this chapter.
- (d) Any part or component thereof which in use emits radio-frequency energy by radiation, conduction, or other means.

§ 2.803 Marketing of radio frequency devices prior to equipment authorization.

- (a) Except as provided elsewhere in this chapter, no person shall sell or lease, or offer for sale or lease (including advertising for sale or lease), or import, ship or distribute for the purpose of selling or leasing or offering for sale or lease, any radio frequency device unless:
 - (1) In the case of a device subject to certification, such device has been authorized by the Commission in accordance with the rules in this chapter and is properly identified and labeled as required by §2.925 and other relevant sections in this chapter; or
 - (2) In the case of a device that is not required to have a grant of equipment authorization issued by the Commission, but which must comply with the specified technical standards prior to use, such device also complies with all applicable administrative (including verification of the equipment or authorization under a Declaration of Conformity, where required), technical, labeling and identification requirements specified in this chapter.
- (d) Notwithstanding the provisions of paragraph (a) of this section, the offer for sale solely to business, commercial, industrial, scientific or medical users (but not an offer for sale to other parties or to end users located in a residential environment) of a radio frequency device that is in the conceptual, developmental, design or pre-production stage is permitted prior to equipment authorization or, for devices not subject to the equipment authorization requirements, prior to a determination of compliance with the applicable technical requirements *provided* that the prospective buyer is advised in writing at the time of the offer for sale that the equipment is subject to the FCC rules and that the equipment will comply with the appropriate rules before delivery to the buyer or to centers of distribution.



VII. Certification Label & User's Manual Information

- (e)(1) Notwithstanding the provisions of paragraph (a) of this section, prior to equipment authorization or determination of compliance with the applicable technical requirements any radio frequency device may be operated, but not marketed, for the following purposes and under the following conditions:
- (i) Compliance testing;
 - (ii) Demonstrations at a trade show provided the notice contained in paragraph (c) of this section is displayed in a conspicuous location on, or immediately adjacent to, the device;
 - (iii) Demonstrations at an exhibition conducted at a business, commercial, industrial, scientific or medical location, but excluding locations in a residential environment, provided the notice contained in paragraphs (c) or (d) of this section, as appropriate, is displayed in a conspicuous location on, or immediately adjacent to, the device;
 - (iv) Evaluation of product performance and determination of customer acceptability, provided such operation takes place at the manufacturer's facilities during developmental, design or pre-production states; or
 - (v) Evaluation of product performance and determination of customer acceptability where customer acceptability of a radio frequency device cannot be determined at the manufacturer's facilities because of size or unique capability of the device, provided the device is operated at a business, commercial, industrial, scientific or medical user's site, but not at a residential site, during the development, design or pre-production stages.
- (e)(2) For the purpose of paragraphs (e)(1)(iv) and (e)(1)(v) of this section, the term *manufacturer's facilities* includes the facilities of the party responsible for compliance with the regulations and the manufacturer's premises, as well as the facilities of other entities working under the authorization of the responsible party in connection with the development and manufacture, but not the marketing, of the equipment.
- (f) For radio frequency devices subject to verification and sold solely to business, commercial, industrial, scientific and medical users (excluding products sold to other parties or for operation in a residential environment), parties responsible for verification of the devices shall have the option of ensuring compliance with the applicable technical specifications of this chapter at each end user's location after installation, provided that the purchase or lease agreement includes a proviso that such a determination of compliance be made and is the responsibility of the party responsible for verification of the equipment.



VII. Certification Label & User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 2, Subpart J — Equipment Authorization Procedures:

§ 2.901 Basis and Purpose

- (a) In order to carry out its responsibilities under the Communications Act and the various treaties and international regulations, and in order to promote efficient use of the radio spectrum, the Commission has developed technical standards for radio frequency equipment and parts or components thereof. The technical standards applicable to individual types of equipment are found in that part of the rules governing the service wherein the equipment is to be operated.¹ In addition to the technical standards provided, the rules governing the service may require that such equipment be verified by the manufacturer or importer, be authorized under a Declaration of Conformity, or receive an equipment authorization from the Commission by one of the following procedures: certification or registration.
- (b) The following sections describe the verification procedure, the procedure for a Declaration of Conformity, or the procedures to be followed in obtaining certification from the Commission and the conditions attendant to such a grant, whichever is applicable.

¹In this case, the equipment is subject to the rules of Part 15. More specifically, the equipment falls under Subpart C (of Part 15), which deals with intentional radiators.



VII. Certification Label & User's Manual Information

§ 2.907 Certification.

- (a) Certification is an equipment authorization issued by the Commission, based on representation and test data submitted by the applicant.
- (b) Certification attaches to all units subsequently marketed by the grantee which are identical (see Section 2.908) to the sample tested except for permissive changes or other variations authorized by the Commission pursuant to Section 2.1043.

§ 2.948 Description of measurement facilities.

- (a) Each party making measurements of equipment that is subject to an equipment authorization under Part 15 or Part 18 of this chapter, regardless of whether the measurements are filed with the Commission or kept on file by the party responsible for compliance of equipment marketed within the U.S. or its possessions, shall compile a description of the measurement facilities employed.
 - (1) If the measured equipment is subject to the verification procedure, the description of the measurement facilities shall be retained by the party responsible for verification of the equipment.
 - (i) If the equipment is verified through measurements performed by an independent laboratory, it is acceptable for the party responsible for verification of the equipment to rely upon the description of the measurement facilities retained by or placed on file with the Commission by that laboratory. In this situation, the party responsible for the verification of the equipment is not required to retain a duplicate copy of the description of the measurement facilities.
 - (ii) If the equipment is verified based on measurements performed at the installation site of the equipment, no specific site calibration data is required. It is acceptable to retain the description of the measurement facilities at the site at which the measurements were performed.
 - (2) If the equipment is to be authorized by the Commission under the certification procedure, the description of the measurement facilities shall be filed with the Commission's Laboratory in Columbia, Maryland. The data describing the measurement facilities need only be filed once but must be updated as changes are made to the measurement facilities or as otherwise described in this section. At least every three years, the organization responsible for filing the data with the Commission shall certify that the data on file is current.



VIII. Certification Label & User's Manual Information

B. Label and User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 15, Subpart A — General:

§ 15.19 Labeling requirements.

- (a) In addition to the requirements in Part 2 of this chapter, a device subject to certification or verification shall be labeled as follows:

- (1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under Part 73 of this chapter, land mobile operation under Part 90, etc., shall bear the following statement in a conspicuous location on the device:

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

- (2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

This device is verified to comply with Part 15 of the FCC Rules for use with cable television service.

- (3) All other devices shall bear the following statement in a conspicuous location on the device:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- (4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.



VIII. Certification Label & User's Manual Information

- (5) When the device is so small or for such use that it is not practicable to place the statement specified under paragraph (a) of this section on it, the information required by this paragraph shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.

§ 15.21 Information to user.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment



VIII. Certification Label & User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 15, Subpart B — Unintentional Radiators:

§ 15.105 Information to the user.

- (a) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help



END OF REPORT
