

Marstech Limited

11 Kelfield Street, Etobicoke, Ontario, Canada, M9W 5A1

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TEST REPORT

REPORT DATE:	16 April 1999	REPORT NO:	99096D
CONTENTS:	See Table of Contents		
SUBMITTOR:	THOMSON CONSUMER ELECTRONICS, INC. Audio & Communications Product Dev. 101 West 103rd Street Indianapolis, IN 46290-1102 USA		
SUBJECT:	Model No: 26990XXX-A (New Version of 26920XXX-M) FCC ID: G9H2-6920M		
TEST SPECIFICATION	FCC CFR 47 15.233 AND 2.989 Sections: 15.35, 15.107, 15.109, 15.207 and 15.209 NOTE: Tests Conducted Are "Type" Tests.		
DATE SAMPLE RECEIVED:	16 March 1999	DATE TESTED:	7 April 1999
RESULTS:	Equipment tested complies with referenced specification.		
ALTERATIONS	The following alterations are required for compliance with referenced specification: Capacitors rated 0.01 uF were added on base unit U1 between pins 4, 5, 6, 7, 8, 9, 10, 11 and ground.		
Tested by:	Original signed by: Jim Sims <i>Ed. Chang</i> Edward Chang	Approved by:	<i>Ed. Chang</i> for Robert G. Marshall, P. Eng. Date: 28 April 1999.
THIS REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF MARSTECH LIMITED. This report was prepared by Marstech Limited for the account of the "Submitter". The material in it reflects Marstech's judgement in light of the information available to it at the time of preparation. Any use which a Third Party makes of this report, or any reliance on decisions to be made based on it, are the responsibility of such Third Parties. Marstech accepts no responsibility for damages, if any, suffered by any Third Party as a result of decisions made or actions based on this report.			

Authorized by:
Professional Engineer
Ontario

Engineering &
Administrative



Testing For FCC
Submissions/Verifications

Approved Test Facility



TECHNICAL REPORT - FCC 2.1033(b)

Applicant

Thomson Consumer Electronics, Inc.
Audio & Communications Product Dev.
101 West 103rd Street
Indianapolis, IN
46290-1102 USA

FCC Identifier

G9H2-6920M

Manufacturer

Dongguan CCT Telecommunications Products Co. Ltd.
No. 13 - 16, Hong Yie Dong San Road
Hong Yie Economic Development Zone, Tang Xia Zhen
Dongguan, Guangdong Province, The PRC

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EXHIBIT D

[FCC Ref. 2.1033(b)(6)]

"Report of Measurements"

EXHIBIT D(1)

DEVICE MEASURED

(FCC Ref. 2.1033(b)(6))

APPLICANT:

Thomson Consumer Electronics, Inc.
Audio & Communications Product Dev.
101 West 103rd Street
Indianapolis, IN
46290-1102 USA

MANUFACTURER:

Dongguan CCT Telecommunications Products Co. Ltd.
No. 13 - 16, Hong Yie Dong San Road
Hong Yie Economic Development Zone, Tang Xia Zhen
Dongguan, Guangdong Province, The PRC

FCC IDENTIFIER:

G9H2-6920M

MODEL NUMBER:

26990XXX-A [New Version of 26920XXX-M]

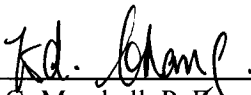
SERIAL NO.:

R&D9900359

Marstech Limited
11 Kelfield Street
Etobicoke, Ontario
M9W 5A1 CANADA

TECHNICIANS:

Jim Sims - Com-Serve Corp.
Edward Chang - Marstech Limited


for Robert G. Marshall, P. Eng.

Date: 28 April 1999.

EXHIBIT D(2)

TEST FACILITY AND EQUIPMENT LIST

FACILITIES

- Radiated ANSI C63.4 (FCC OET/55) open field 3 meter test range. This test range is protected from the cold and moisture by a non-conductive enclosure.
- Conducted 2.5m Anechoic Chamber

EQUIPMENT

Anritsu 2601 A spectrum analyzer.
Hewlett-Packard RF generator # 8640 B with an 002 doubler
Hewlett-Packard 8449B Preamp. (30 dB) .. 1.0 MHz to 26.5 GHz
A.H. Systems biconical antenna; 20 MHz to 330 Mhz
A.H. Systems log periodic antenna; 300 MHz to 1.8 GHz
A.H. Systems log periodic antenna; 1.0 GHz to 12.4 GHz
Eaton dipole antennas; T1, T2, T3 25 MHz to 1.0 GHz
Roberts dipole antennas; T1, T2, T3 & T4 25 MHz to 1.0 GHz
Compliance Design P950 Preamp (16 dB) ... 25 MHz to 1.0 GHz
Notch Filter; Model FIL01605001 30 dB at 920 MHz
M/A-COM High Frequency Cable Assembly; No. 2026-0600

NOTE:

The Anritsu 2601 A spectrum analyzer, the Hewlett-Packard spectrum analyzer and the Advantest R3261A spectrum analyzer are calibrated annually, and that calibration is directly traceable to the National Research Council of Canada (NRC). This equipment is only used by qualified technicians and only for the purpose of EMI measurements. The three meter test range has been carefully evaluated to the ANSI document C63.4 and will be remeasured for reflections and losses every three years.

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21046
Telephone: 301-725-1585 (ext-218)
Facsimile: 301-344-2050

September 23, 1997

IN REPLY REFER TO
31040/SIT
1300F2

Electrohome Electronics Ltd
809 Wellington Street, North
Kitchener, Ontario N2G 4J6, Canada

Attention: Gerry Gallagher

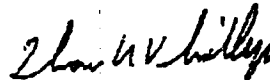
Re: Measurement facility located at Roseville
(3 meter site)

Gentlemen:

Your submission of the description of the subject measurement facility has been reviewed and found to be in compliance with the requirements of Section 2.948 of the FCC Rules. The description has, therefore, been placed on file and the name of your organization added to the Commission's list of facilities whose measurement data will be accepted in conjunction with applications for certification or notification under Parts 15 or 18 of the Commission's Rules. Our list will also indicate that the facility complies with the radiated and AC line conducted test site criteria in ANSI C63.4-1992. Please note that this filing must be updated for any changes made to the facility, and at least every three years the data on file must be certified as current.

Per your request, the above mentioned facility has been also added to our list of those who perform these measurement services for the public on a fee basis. This list is published periodically and is also available on the Laboratory's Public Access Link as described in the enclosed Public Notice.

Sincerely,



Thomas W. Phillips
Electronics Engineer
Customer Service Branch

SUMMARY OF RESULTS

COMPLIANCE
(yes) (no)

FIELD STRENGTH OF THE CARRIER FREQUENCIES - NOT TESTED

OCCUPIED BANDWIDTH - NOT TESTED

SPURIOUS RADIATED EMISSIONS

Handset	(N/T)	()
Base Station	(x)	()
Base Station - High Frequency Harmonics	(N/T)	()

LINE CONDUCTED SPURIOUS EMISSIONS - NOT TESTED

TRANSMITTER ENVIRONMENTAL TESTS - NOT TESTED

EQUIPMENT REQUIREMENTS AND IDENTIFICATION

a) Manufacturers or applicants name:	(x)	()
b) FCC ID:	(x)	()
c) Serial number:	(x)	()
d) Antenna:	(x)	()
e) Operator controls:	(x)	()
f) Security Coding	(x)	()
g) Equipment/Packaging Marking	(x)	()

SPURIOUS RADIATED EMISSIONS

RESULTS

The maximum field strength of any harmonic or spurious emission with respect to the applicable limit, while transmitting or receiving was:

Handset: **NOT TESTED**

Base Station: **Maximum field strength of 86.9 μ V/M at 58.71 MHz.**

TEST CONDITIONS

Equipment Positioning:

Handset:	N/A
Handset, above 1 GHz	N/A
Base Station:	Standing on its back with the antenna extended in the vertical plane.

Antenna Polarization:

Handset:	N/A
Base Station:	Vertical and horizontal
Base Station, Receive:	Vertical

Measurement Bandwidth: 100/120 KHz(IF)

Supply Voltages:

Handset:	3.6 VDC from an internal battery.
Base Station:	120 VAC/60 Hz to 09 VDC (adapter)

METHODS OF MEASUREMENT

The cordless phone base station was placed on a one metre high, non-metallic turntable. Measurements were made in a minimum of 2 positions for the base station. If adjustable, the whip antenna was fully extended.

For each of the above conditions the turntable was rotated through 360 degrees while the receiving antenna, at three (3) metres from the EUT, was varied in height from 1 to 4 metres and set in both planes of polarization to find the maximum signal strength. The level was measured using a spectrum analyzer. The measured level was converted to a field strength using the antenna correction factors and cable losses.

All base station measurements were made with the equipment under test connected to an artificial telephone line network, with 48 VDC applied.

RADIATED EMISSION RESULTS

BW: 100/120 KHz

Span: 5 to 50 MHz

BASE STATION

TEST # MODE	FREQ MHz BAND	LEVEL μ V	ANT. TYPE (PZ)	ANT. FACT.	F.S. μ V/M	LIMIT μ V/M	DIFF. TO LIMIT; dB
01 RX	58.71	20.2	B/C V	4.3	86.9	100	-1.22
02 RX	117.96	10.2	B/C V	4.9	50.0	150	-9.55
03 RX	176.84	11.3	B/C H	7.6	85.9	150	-4.84
04 RX	235.94	09.6	B/C H	9.4	90.2	200	-6.91
05 RX	294.55	05.7	B/C H	18.0	102.6	200	-5.80
06 RX	353.80	11.7	L/P H	9.0	105.3	200	-5.57
07 RX	468.72	05.0	L/P H	10.5	52.5	200	-11.62
08 RX	648.60	07.0	L/P H	15.0	105.0	200	-5.60
09 RX	766.80	05.0	L/P H	24.0	120.0	200	-4.44
10 RX	938.14	02.1	L/P H	37.2	78.1	200	-8.17