

EXHIBIT A

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

"Report of Measurements"

LIST OF EXHIBITS

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Exhibit A(3)-2 to -5	15.205(c)/15.209 Spurious Radiated Emissions in Restricted Bands and Field Strength of Emissions
Exhibit A(3)-6	15.247(b)(1) Maximum Peak Output Power [EIRP]
Exhibit A(4)-1 to -3	Test Equipment List and Facility
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PRODUCT DESCRIPTION

The Thomson Inc. (formerly ATLINKS USA, Inc.) Model 25865XXX-A (Base) is a 5.8GHz two-line, frequency hopping spread spectrum, cordless telephone base with caller ID, speakerphone and answering machine that operates from 5760.718964 MHz to 5838.311741 MHz. This model is identical to previous registered Model 25831XXX-A (Base) except for model designation, addition of caller ID, speakerphone and answering machine features, base main pcb layout, minor RF module pcb layout change and antenna change.

The antenna used for the base is permanently attached to the EUT.

Refer to Exhibit A(5) for frequency channel information and frequency list.

NOTE: The base uses **75** channels.

15.107 (a) POWER LINE CONDUCTED INTERFERENCE**Requirements:**

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
0.15-0.5	Quasi-peak	Average
	66 to 56*	56 to 46*
	56	46
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

Test Procedure:

ANSI STANDARD C63.4-2003 using a 50 μ H LISN. Both lines were observed with the EUT transmitting. The bandwidth of the spectrum analyzer was 9KHz QP with an appropriate sweep speed. The ambient temperature of the EUT was 24°C with a humidity of 60%.

The spectrum was scanned from 0.15 to 30MHz.

Test Data:**Base Unit (Phase)**

The highest emission read for PHASE was **28.24 dB μ V@ 0.15 MHz**.

Frequency	Measurements (dB μ V)
150.00 KHz	28.24
7.17 MHz	18.83
15.99 MHz	18.82
29.97 MHz	21.02

Base Unit (Neutral)

The highest emission read for NEUTRAL was **24.28 dB μ V@ 0.15 MHz**.

Frequency	Measurements (dB μ V)
150.00 KHz	24.28
7.23 MHz	18.76
16.05 MHz	17.44
29.67 MHz	22.75

Refer to Appendix 1 and 2 for the plots.

Test Results:

Both lines were observed. The measurements indicate that the unit DOES appear to meet the FCC requirements for this class of equipment.

15.205(c)/15.209

SPURIOUS RADIATED EMISSIONS IN RESTRICTED BANDS

Procedure

The test procedure used was ANSI STANDARD C63.4-2003 and DA-00-705 using an appropriate spectrum analyzer, as listed in the Test Equipment List. The bandwidth (RBW) of the spectrum analyzer was 100KHz/120KHz up to 1GHz with an appropriate sweep speed. The RBW above 1.0GHz was = 1.0MHz. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient temperature of the EUT was 24°C with a humidity of 60%.

Requirements:

Emissions that fall in the restricted bands (15.205) must be less than 54dB μ V/m.

Test Data:

Refer to Exhibits A(3)-3 to -5

15.205(c)/15.209

FIELD STRENGTH OF RADIATED EMISSIONS INCLUDING RESTRICTED BANDS**BASE UNIT**

Frequency Band MHz	Meter Reading (Peak) @3m dBμV/M	Meter Reading (Average) @3m dBμV/M	Antenna and Polarization	Cable & Antenna Factor	Peak F. S. dBμV/M	Average F. S. dBμV/M	FCC Limit dBμV/M	Margin dB
Channel 1								
5760.718	81.00	—	Horn V	39.48	120.48	—	—	—
4803.690	22.00	8.00	Horn V	38.61	60.61	46.61	54	-7.39
5525.880	14.00	—	Horn V	39.43	53.43	—	100.48	-47.05
11521.438	23.00	8.00	Horn V	40.91	63.91	48.91	54	-5.09
17282.157	18.00	—	Horn V	46.84	64.84	—	100.48	-35.64
Channel 44								
5799.069	81.00	—	Horn V	39.57	120.57	—	—	—
4880.200	19.00	7.00	Horn V	38.61	57.61	45.61	54	-8.39
5641.050	23.00	—	Horn V	39.64	62.64	—	100.57	-37.93
11598.138	22.00	8.00	Horn V	40.95	62.95	48.95	54	-5.05
17397.207	17.00	—	Horn V	46.66	63.66	—	100.57	-36.91

1. If the peak meets the average limit, nothing further is required.
2. If the peak exceeds the average limit, then an average measurement is required (may be calculated) and must be below the average limit and also:
3. The peak measurement cannot exceed the average limit +20dB.

15.205(c)/15.209

FIELD STRENGTH OF RADIATED EMISSIONS INCLUDING RESTRICTED BANDS**BASE UNIT**

Emission Frequency MHz	Meter Reading @3m dBμV/M (Peak)	Antenna Polarity	Total Correction Factor dB	Field Strength dBμV/M (Peak)	FCC Limit dB	Margin dB	Detector & BW Khz
Channel 1							
28803.590	30.00	V	61.98	91.98	100.48	-8.50	PK 1000
34564.308	30.00	V	61.42	91.42	100.48	-9.06	PK 1000
Channel 44							
28995.345	30.00	V	62.07	92.07	100.57	-8.50	PK 1000
34794.414	30.00	V	61.51	91.51	100.57	-9.06	PK 1000
Channel 88							
29191.555	30.00	V	62.16	92.16	100.66	-8.50	PK 1000
35029.866	30.00	V	61.60	91.60	100.66	-9.06	PK 1000

15.247(b) (1) MAXIMUM PEAK OUTPUT POWER [EIRP]

Requirements:

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: **1 Watt**. For all other frequency hopping systems in the 2400-2483.5 band: **0.125 Watt**.

Measurement Data

Base Unit:

Channel 1:	Output Peak Power is 0.335 W.	[EIRP]
Channel 71:	Output Peak Power is 0.342 W.	[EIRP]
Channel 139:	Output Peak Power is 0.349 W.	[EIRP]

Results:

The output peak power is less than the original submission for Model 25831XXX-A (Base) which still complies with FCC Part 15 Rules.

TEST FACILITY AND EQUIPMENT LIST

FACILITIES:

Radiated ANSI C63.4-2003 (FCC OET/55) open field 3 metre test range. This test range is protected from the cold and moisture by a non-conductive enclosure.

Conducted 2.5m Anechoic Chamber

EQUIPMENT:

Anritsu 2601A Spectrum Analyzer
Advantest R3261A Spectrum Analyzer
Hewlett-Packard RF generator # 8640 B with an 002 doubler
A.H. Systems biconical antenna; 20 MHz to 330 MHz
A.H. Systems log periodic antenna; 300 MHz to 1.8 GHz
Compliance Design P950 Preamp (16 dB) ... 25 MHz to 1.0 GHz

NOTE:

The Anritsu 2601A 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 metre test range has been carefully evaluated to the ANSI document C63.4-2003 and will be remeasured for reflections and losses every three years.

ADDITIONAL TEST EQUIPMENT LIST

1. Spectrum Analyzer: HP 8591EM, S/N 3639A00995, (9KHz - 1.8GHz), Calibration Due June 2006
2. Spectrum Analyzer: ANRITSU 2601A, S/N MT64544, (10KHz - 2.2GHz), Calibration Due June 2006
3. Spectrum Analyzer: IFR AN940, S/N 635001039, (9KHz - 26.5GHz), Calibration Due April 2006
4. Preamp: HP 8449B, S/N 3008A00378, (1 - 26.5GHz), Calibration Due August 2006
5. Horn Antenna: Q-PAR 6878/24, S/N 1721, (1.5-18GHz)
6. Horn Antenna: A. H. Systems SAS 572, S/N 164 (18 - 26.5GHz)
7. Horn Antenna: Q-PAR WBH218HN, S/N 4171 (2 to 18 GHz Freq.)
8. Horn Antenna: Radar System (Flange 3/4" Square) MIL F 3922/68 (26.5 - 40GHz)
9. Line Impedance Stabilization Network.: Marstech, Calibration Due July 2006
10. OML Mixer: M28HWD, S/N Ka31114-1 (26.5 - 40GHz), Calibration Due November 2006
11. OML Diplexer: DPL.313A (Unit plugs into M28HWD)
12. Semflex Cable: Used with M28HWD and DPL.313A

FEDERAL COMMUNICATIONS COMMISSION

Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046

August 22, 2003

Registration Number: 90578

Electrohome Electronics Ltd.
809 Wellington St. N.
Kitchener, Ontario, N2G 4J6
Canada
Attention: Tuat Huynh

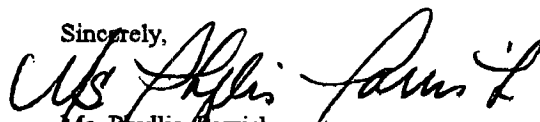
Re: Measurement facility located at Roseville
3 meter site
Date of Renewal: August 22, 2003

Dear Sir or Madam:

Your request for renewal of the registration of the subject measurement facility has been received. The information submitted has been placed in your file and the registration has been renewed. The name of your organization will remain on the list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that the file must be updated for any changes made to the facility and the registration must be renewed at least every three years.

Measurement facilities that have indicated that they are available to the public to perform measurement services on a fee basis may be found on the FCC website www.fcc.gov under E-Filing, OET Equipment Authorization Electronic Filing, Test Firms.

Sincerely,



Ms. Phyllis Parrish
Information Technician

	MODEL : 5865	DWG# :
	TITLE : WDCT Product Spec.	REV. : 0A

5.8GHz Frequency Table (BS TX)

Unit: MHz

Ch	Freq	Ch	Freq	Ch	Freq	Ch	Freq
		34	5780.340126	57	5800.853159	80	5821.366192
12	5760.718964	35	5781.231997	58	5801.74503	81	5822.258063
13	5761.610835	36	5782.123868	59	5802.636901	82	5823.149934
14	5762.502706	37	5783.015739	60	5803.528772	83	5824.041805
15	5763.394577	38	5783.90761	61	5804.420643	84	5824.933676
16	5764.286448	39	5784.799481	62	5805.312514	85	5825.825547
17	5765.178319	40	5785.691352	63	5806.204385	86	5826.717418
18	5766.07019	41	5786.583223	64	5807.096256	87	5827.609289
19	5766.962061	42	5787.475094	65	5807.988127	88	5828.50116
20	5767.853932	43	5788.366965	66	5808.879998	89	5829.393031
21	5768.745803	44	5789.258836	67	5809.771869	90	5830.284902
22	5769.637674	45	5790.150707	68	5810.66374	91	5831.176773
23	5770.529545	46	5791.042578	69	5811.555611	92	5832.068644
24	5771.421416	47	5791.934449	70	5812.447482	93	5832.960515
25	5772.313287	48	5792.82632	71	5813.339353	94	5833.852386
26	5773.205158	49	5793.718191	72	5814.231224	95	5834.744257
27	5774.097029	50	5794.610062	73	5815.123095	96	5835.636128
28	5774.9889	51	5795.501933	74	5816.014966	97	5836.527999
29	5775.880771	52	5796.393804	75	5816.906837	98	5837.41987
30	5776.772642	53	5797.285675	76	5817.798708	99	5838.311741
31	5777.664513	54	5798.177546	77	5818.690579		
32	5778.556384	55	5799.069417	78	5819.58245		
33	5779.448255	56	5799.961288	79	5820.474321		

FCC ID: G9H2-5831A
Marstech Report No. 25280D
EXHIBIT A(5)

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