RadioShack Corporation

Application
For
Certification
(FCC ID: AAO2101706)

January 15, 2002

WO# 0113899
WL/at
January 15, 2002

SUMMARY OF CONTENTS

LIST OF EXHIBITS

MEASUREMENT/TECHNICAL REPORT

Application: **RadioShack Corporation**
Model No.: **RadioShack 21-1706**
Date: **January 15, 2002**

This report concerns (check one:)Original Grant X Class II Change ____

Equipment Type: CB Radio Station (example: computer, printer, modem. etc.)

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes ___ No X
If yes, defer until: _____
date

Company Name agrees to notify the Commission by: _____
date

of the intended date of announcement of the product so that the grant can be issued on that date.

_____

Report prepared by:

Tommy Leung
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Fax: 852-2741-1693

Table of Contents

List of attached file

Exhibit type	File Description	Filename
Operation Description	Technical Description	descri.pdf
Test Report	Bandwidth Plot	bw.pdf
Test Report	Modulation Frequency Response	mfr.pdf
Test Report	Modulation Limit Characteristic	mlc.pdf
Test Report	Over Modulation Transient Response	mtr.pdf
Test Report	Spurious Emission	spurious.pdf
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
Test Report	Test Report	report.doc
Test Setup Photo	Radiated Emission	Rconfig photos.doc
Internal Photo	Internal Photo	internal photos.doc
External Photo	External Photo	external photos.doc
Parts List/Tune-up Info	Tune Up Procedure	tuneup.pdf
Parts List/Tune-up Info	Part List	partlist.pdf
Parts List/Tune-up Info	Power Amplifier Specification	power.pdf

EXHIBIT 1

GENERAL DESCRIPTION

1.0 General Description

1.1 Product Description

The Equipment Under Test (EUT) is a 40 Channel Mobile Citizen Band (CB) transceiver with digital compass operating between 26.965 and 27.405 MHz. The unit is powered from 13.8V d.c. The input current to final r.f. stage at 13.8V d.c. is 0.8A.

Transmitter Portion:
i) Type of emission: 6K00A3E
ii) Frequency Range: 26.965 MHz to 27.405 MHz
iii) Maximum Power Rating: 3.7 W
iv) With antenna terminal

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

1.2 Related Submittal(s) Grants

This is an application for certification of the transmitter portion of a CB Transceiver. The receiver section of this product is subject to verification process.

1.3 Test Methodology

Radiated emission measurements were performed according to the procedures in ANSI C63.4 (1992). All measurement were performed in Open Area Test Sites. Preliminary scans were performed in the Open Area Test Sites only to determine worst case modes. For each scan, the procedure of maximizing emissions in Appendices D and E were followed. All Radiated tests were performed at an antenna the EUT distance of 3 meters, unless stated otherwise in the **"Justification Section"** of this Application.

1.4 Test Facility

The open area test site and conducted measurement facility used to collect the emission data is located at Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong. The test facility and site measurement data have been fully placed on file with the FCC.

EXHIBIT 2

SYSTEM TEST CONFIGURATION

2.0 System Test Configuration

2.1 Justification

The device was configured for testing in a typical fashion (as a customer would normally use it). The device was placed on a turntable, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes. When the radiated emissions are measured.

The device was powered by a DC power supply adjusted to give 13.8 V d.c.

For measuring spurious and harmonic emissions of the transmitter, a 50Ω load was connected to the antenna terminal.

The frequency range from 25 MHz to 1 GHz was searched for radiated emissions from the device. Only those emissions reported were detected. All other emissions were at least 20 dB below the applicable limits.

2.2 EUT Exercising Software

There was no special software to exercise the device. Once the unit is powered on, a signal is transmitted.

2.3 Special Accessories

There are no special accessories necessary for compliance of this product.

2.4 Equipment Modification

Any modification installed previous to testing by RadioShack Corporation will be incorporated in each production model sold/leased in the United States.

No modification were installed by Intertek Testing Services.

2.5 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

2.6 Support Equipment List & Description

Refer List:
1. Microphone with 1 m long cable
2. Headphone with 1 m long cable
3. 8 ohm load with 1 m long cable x 2

Confirmed by:

Tommy Leung
Assistant Supervisor
Intertek Testing Services
Agent for RadioShack Corporation

_____ Signature

January 15, 2002 Date

EXHIBIT 3

RF POWER OUTPUT

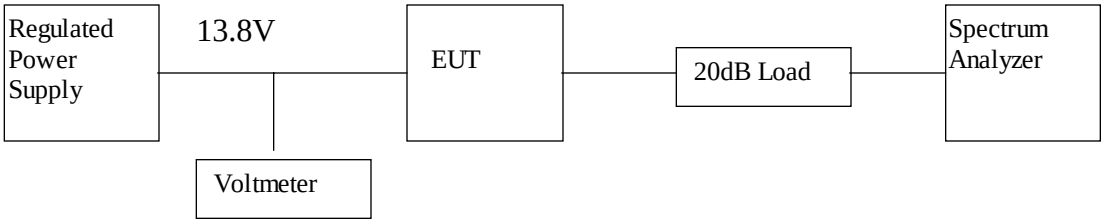
3.0 **RF Power Output (Section 2.1046(a))**

A. Equipment Used

Equipment	**Brand Name**	**Model No.**
Regulated Power Supply	PAD	35-30L
Voltmeter	Fluke	87
Spectrum Analyzer	Hewlett Packard	8591EM
20dB RF Load	Bird	8304-200-N

B. Testing Procedure

1) Setup the test equipment in the following configuration:



2) Measure the power of all channels (40 channels) by Spectrum Analyzer in Watt.
3) Calculate the actual power by times the measured power with a correction factor, 104.7#
   i.e. Actual Power = measured Power * 104.7

The Correction Factor is included the 20dB Load and cable loss between EUT and 20dB load.

Table 1

RadioShack Corporation
RadioShack 21-1706

Transmission Power

Channel	Frequency (MHz)	Measured Power (mW)	Net Power (W)	Limit (W)	Margin (W)
1	26.965	35.5	3.7	4	-0.3
2	26.975	35.5	3.7	4	-0.3
3	26.985	35.5	3.7	4	-0.3
4	27.005	35.5	3.7	4	-0.3
5	27.015	35.5	3.7	4	-0.3
6	27.025	35.5	3.7	4	-0.3
7	27.035	35.5	3.7	4	-0.3
8	27.055	35.5	3.7	4	-0.3
9	27.065	35.5	3.7	4	-0.3
10	27.075	35.5	3.7	4	-0.3
11	27.085	35.5	3.7	4	-0.3
12	27.105	35.5	3.7	4	-0.3
13	27.115	35.5	3.7	4	-0.3
14	27.125	35.5	3.7	4	-0.3
15	27.135	35.5	3.7	4	-0.3

Notes: Negative sign in the margin column shows the value below limits.

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

Table 1 (Cont'd...)

RadioShack Corporation
RadioShack 21-1706

Transmission Power

Channel	Frequency (MHz)	Measured Power (mW)	Net Power (W)	Limit (W)	Margin (W)
16	27.155	35.5	3.7	4	-0.3
17	27.165	35.5	3.7	4	-0.3
18	27.175	35.5	3.7	4	-0.3
19	27.185	35.5	3.7	4	-0.3
20	27.205	35.5	3.7	4	-0.3
21	27.215	35.5	3.7	4	-0.3
22	27.225	35.5	3.7	4	-0.3
23	27.255	35.5	3.7	4	-0.3
24	27.235	35.5	3.7	4	-0.3
25	27.245	35.5	3.7	4	-0.3
24	27.265	35.5	3.7	4	-0.3
27	27.275	35.5	3.7	4	-0.3
28	27.285	35.5	3.7	4	-0.3
29	27.295	35.5	3.7	4	-0.3
30	27.305	35.5	3.7	4	-0.3

Notes: Negative sign in the margin column shows the value below limits.

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

Table 1 (Cont'd...)

RadioShack Corporation
RadioShack 21-1706

Transmission Power

Channel	Frequency (MHz)	Measured Power (mW)	Net Power (W)	Limit (W)	Margin (W)
31	27.315	35.5	3.7	4	-0.3
32	27.325	35.5	3.7	4	-0.3
33	27.335	35.5	3.7	4	-0.3
34	27.345	35.5	3.7	4	-0.3
35	27.355	35.5	3.7	4	-0.3
36	27.365	35.5	3.7	4	-0.3
37	27.375	35.5	3.7	4	-0.3
38	27.385	35.5	3.7	4	-0.3
39	27.395	35.5	3.7	4	-0.3
40	27.405	35.5	3.7	4	-0.3

Notes: Negative sign in the margin column shows the value below limits.

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

EXHIBIT 4

MODULATION CHARACTERISTICS

4.0 **Modulation Characteristics**

In order to satisfy the 2.1047 requirement, Modulation Frequency Response, Modulation Limit Characteristics and Over Modulation Transient Response, are tested and result are saved with filenames: mfr.pdf, mlc.pdf and mtr.pdf respectively.

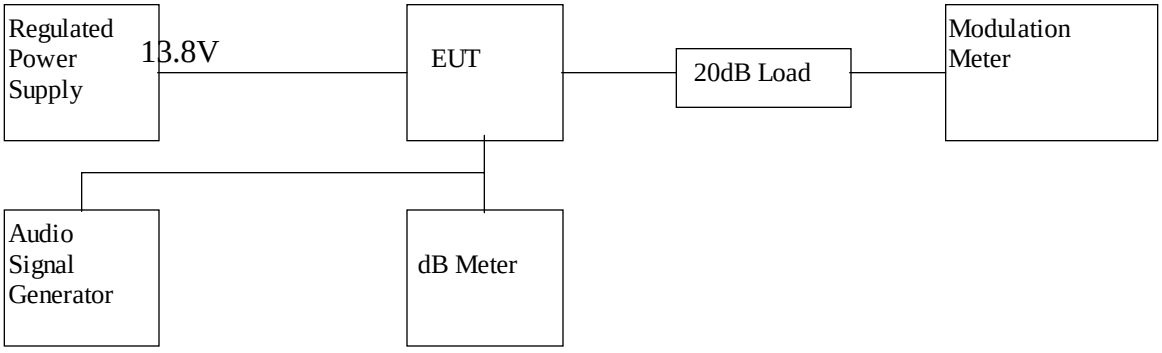
4.1 Modulation Frequency Response

A. Test Equipment

Equipment	Brand Name	Model No.
Regulated Power Supply	PAD	30-35L
Audio Signal Generator	Leader	LFG-1300S
dB meter	Leader	LMV-182A
20 dB RF Load	Bird	8304-200-N
Modulation Meter	Marconi Instrument	2945

B. Testing Procedure

1) Set-up the test equipment in the following configuration:



2) Set the audio signal generator frequency to 2kHz and adjust level to obtain 50% modulation. And then adjust the frequency to obtain the maximum audio frequency response of the EUT.
3) Adjust the level of audio signal generator to give 50% modulation at the maximum audio frequency response and take this level as the 0dB reference level.
4) The frequency of the audio signal generator is changed from 200Hz to 5kHz and adjust the level to obtain the 50% modulation at each frequency.
5) Record the level at each frequency reference to 0dB Level.

C. Test Result

Table 2

RadioShack Corporation
RadioShack 21-1706

Modulation Frequency Response (Section 2.1047(a))

Test Channel : 19
0 dB Level : -50.6 dBm
Modulation Output : 50%

Modulation Frequency (Hz)	Modulation input relative to max. output. (dB)
200	21.5
300	14.4
400	7.8
500	4.6
600	2.6
700	1.5
800	0.9
900	0.5
1000	0.3
1250	0.0
1500	0.0
1750	0.6
2000	1.1
2250	1.2
2500	1.3
2750	1.4
3000	1.9
3125	2.1
3250	3.9
3500	5.6
4000	13.5
5000	24.0

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

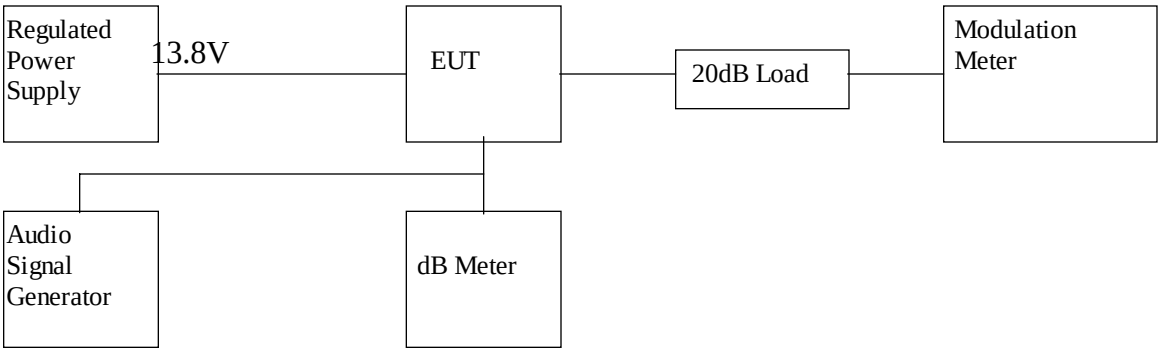
4.2 Modulation Limiting Characteristics (Section 2.1047(b))

A. Test Equipment

Equipment	Brand Name	Model No.
Regulated Power Supply	PAD	30-35L
Audio Signal Generator	Leader	LFG-1300S
dB meter	Leader	LMV-182A
20 dB RF Load	Bird	8304-200-N
Modulation Meter	Marconi	2950

B. Testing Procedure

1) Set-up the test equipment in the following configuration:



2) Set the frequency of the audio signal generator to 500Hz and adjust the level from -80dBm to -20dBm. Record the output modulation index.
3) Repeat the above procedure with frequency 1000Hz, 2500Hz & 3125Hz.

C. Test Result

Table 3

RadioShack Corporation
RadioShack 21-1706

Modulation Limiting Characteristics

Test Channel : 19

Modulation Input (dBm)	Modulation Index(%) at 500Hz	Modulation Index(%) at 1000Hz	Modulation Index(%) at 2500Hz	Modulation Index(%) at 3125Hz
-80	2	2	2	2
-70	6	10	5	4
-60	20	32	16	10
-50	67	78	54	33
-40	78	79	75	63
-30	80	81	77	64
-20	83	86	80	66

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

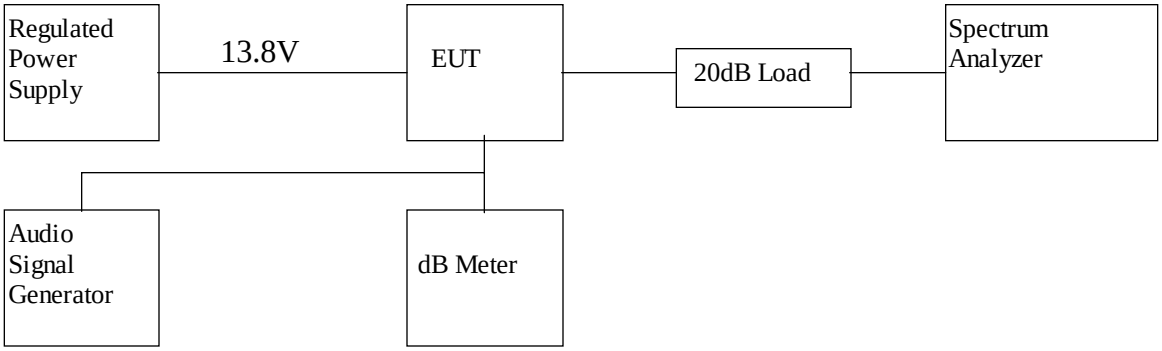
4.3 Over Modulation Transient Response (Section 2.1047(b))

A. Test Equipment

Equipment	Brand Name	Model No.
Regulated Power Supply	PAD	30-35L
Audio Signal Generator	Leader	LFG-1300S
dB meter	Leader	LMV-182A
20 dB RF Load	Bird	8304-200-N
Spectrum Analyzer	Hewlett Packard	8951EM

B. Testing Procedure

1) Set-up the test equipment in the following configuration:



2) Set the frequency of the audio signal generator to 2.5kHz at level 16dB greater than required for 50% modulation.
3) Use the other audio signal generator pulse the previous signal at one P.P.S. with pulse width of 0.5 second.
4) Tune the spectrum analyzer to the channel on which the transmitter is set and adjust the setting as for the measurement of occupied bandwidth.
5) And then tune the spectrum analyser to adjacent channel(+/-10kHz) and use "Zero-scan" to observe the transients caused by the pulsed modulation.

C. Test Result

Table 4

RadioShack Corporation
RadioShack 21-1706

Over modulation Transient Response

Channel	Adjacent Frequency (MHz)	Transient Level with respect to TP in (dB)	Transient Duration (ms)
1	26.955	-38.7	25
1	26.975	-43.1	25
19	27.175	-39.5	23
19	27.195	-42.2	23
40	27.395	-41.6	25
40	27.415	-41.6	23

Remark: '-' sign in the Transient Level respect to the carrier Level column mean below the carrier level.

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

EXHIBIT 5

OCCUPIED BANDWIDTH

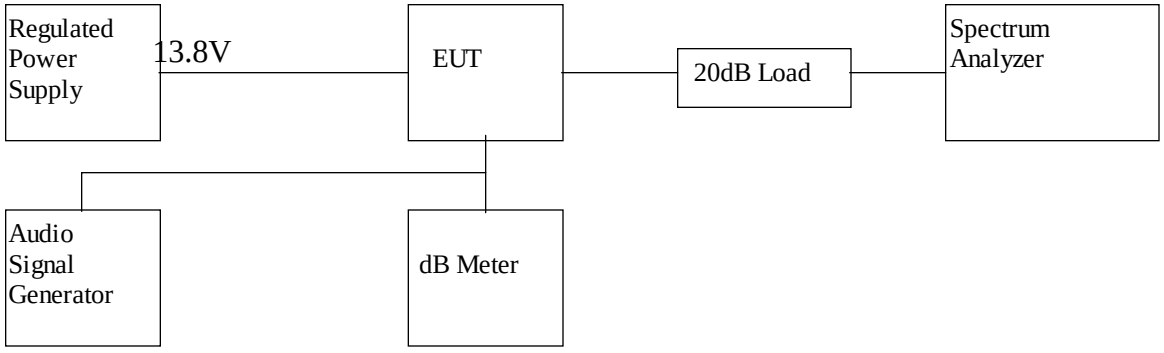
5.0 Occupied Bandwidth (Section 2.1049 & Section 95.633)

A. Test Equipment

Equipment	Brand Name	Model No.
Regulated Power Supply	PAD	30-35L
Audio Signal Generator	Leader	LFG-1300S
dB meter	Leader	LMV-182A
20 dB RF Load	Bird	8304-200-N
Spectrum Analyzer	Hewlett Packard	8951EM

B. Testing Procedure

1) Set-up the test equipment in the following configuration:



2) Set the level of audio signal generator to obtain 16 dB greater than required for 50% modulation.
3) The occupied bandwidth is measured with the spectrum analyzer set at 2kHz/div scan and 10dB/div.

C. Test Result

The occupied Bandwidth is measured to be 6 kHz.

For the electronic filing, the bandwidth plot is saved with filename: bw.pdf

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

EXHIBIT 6

SPURIOUS EMISSION

6.0 **Spurious Emission**

In order to satisfy the 2.1051 & 2.1053 requirement, the spurious emission from the antenna terminal and from the EUT are measured and shown in the Exhibit 6.1 & 6.2

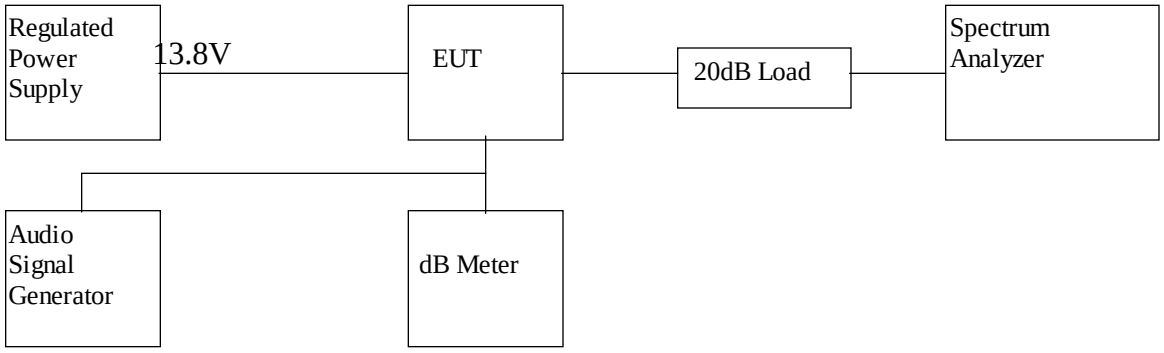
6.1 **Spurious emission at the antenna terminal (Section 2.1051 & Section 95.631)**

A. Test Equipment

Equipment	Brand Name	Model No.
Regulated Power Supply	PAD	30-35L
Audio Signal Generator	Leader	LFG-1300S
dB meter	Leader	LMV-182A
20 dB RF Load	Bird	8304-200-N
RF Filter	Tailithic	3VF
Spectrum Analyzer	Hewlett Packard	8951EM

B. Testing Procedure

1) Set-up the test equipment in the following configuration:



2) Set the level of audio signal generator to obtain 16 dB greater than required for 50% modulation.
3) Plot the graph of emissions with 50kHz span.
4) Measure the emissions relative to TP in region CARRIER ± 4kHz to CARRIER ± 20kHz from the plot.
5) Record the emissions relative to TP from region CARRIER ± 20kHz to 1000MHz.

C. Test Result

RadioShack Corporation
RadioShack 21-1706
Table 5(a)

1) Unwanted emission from CARRIER ± 4kHz to CARRIER ± 20kHz (Refer to the plots which are saved with filename: spurious.pdf)

Region	Unwanted emission		
	Channel 1	Channel 19	Channel 40
CARRIER ± 4kHz to ± 8kHz	< 25dB	< 25dB	< 25dB
CARRIER ± 8kHz to ± 20kHz	< 35dB	< 35dB	< 35dB

2) Unwanted emission from CARRIER ± 20kHz to 1000MHz

Table 5(b): Channel 1

Frequency (MHz)	Emission relative to TP (dB)	Limit (dB)	Margin (dB)
53.930	-60.8	-60	-0.8
80.895	-71.2	-60	-11.2
107.860	-91.2	-60	-31.2
134.825	-96.7	-60	-36.7
161.790	-105.9	-60	-45.9
188.755	-112.6	-60	-52.6
215.720	-119.5	-60	-59.5
242.685	-131.0	-60	-71.0
269.650	-123.7	-60	-63.7
296.615	-116.6	-60	-56.6
323.580	-123.5	-60	-63.5

Remark: '-' sign in margin column shows the value below the limits.

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

RadioShack Corporation
RadioShack 21-1706

Table 5(c): Channel 19

Frequency (MHz)	Emission relative to TP (dB)	Limit (dB)	Margin (dB)
54.370	-60.7	-60	-0.7
81.555	-70.6	-60	-10.6
108.740	-90.7	-60	-30.7
135.925	-96.1	-60	-36.1
163.110	-105.0	-60	-45.0
190.295	-112.3	-60	-52.3
217.480	-118.5	-60	-58.5
244.665	-129.0	-60	-69.0
271.850	-122.0	-60	-62.0
299.035	-116.0	-60	-56.0
326.220	-123.0	-60	-63.0

Remark: '-' sign in margin column shows the value below the limits.

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

Table 5(d): Channel 40

Frequency (MHz)	Emission relative to TP (dB)	Limit (dB)	Margin (dB)
54.810	-60.5	-60	-0.5
82.215	-70.7	-60	-10.7
109.620	-92.2	-60	-32.2
137.025	-96.9	-60	-36.9
164.430	-107.1	-60	-47.1
191.835	-114.0	-60	-54.0
219.240	-121.6	-60	-61.6
246.645	-124.5	-60	-64.5
274.050	-120.7	-60	-60.7
301.455	-121.1	-60	-61.1
328.860	-119.7	-60	-59.7

Remark: '-' sign in margin column shows the value below the limits.

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

6.2 Spurious Emission by Substitution Method (Section 2.1053)

A. Test Equipment

Equipment	Brand Name	Model No.
Antenna	CDI	B100, B200, B300
Test receiver	Rohde & Schwarz	ESVS30
RF Filter	Tailithic	3VF
Tuned Dipole Antenna	CDI	Robert Antenna 4
Signal Generator	Maconi	2024

B. Testing Procedure

Radiated emission measurements were performed according to the procedures in ANSI C63.4(1992) and ANSI/TIA/EIA-603-1992. All measurements were performed in Open Area Test Sites located at Roof Top of Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.

C. Radiated Emission Configuration Photograph

Worst Case Radiated Emission

For electronic filing, the radiated emission configurations photograph is saved with filename: Rconfig photos.doc

D. Test Result

Table 6

RadioShack Corporation
RadioShack 21-1706
Radiated Spurious Emissions

Channel : 1
The output power of transmitter is 35.7 dBm

Frequency (MHz)	ERP (dBm)	ERP relative to TOP*
53.885	-52.6	-88.3
80.859	-51.8	-87.5
107.833	-41.8	-77.5
134.807	-48.8	-84.5
161.781	-46.1	-81.8
188.755	-44.2	-79.9
215.729	-49.0	-84.7
242.703	-33.9	-69.6
269.677	-42.8	-78.5
296.638	-31.8	-67.5
323.684	-31.7	-67.4
350.578	-44.4	-80.1
377.526	-41.0	-76.7
404.493	-37.7	-73.4
431.467	-47.9	-83.6
458.441	-51.5	-87.2
485.415	-48.7	-84.4
512.356	-53.8	-89.5
539.330	-53.2	-88.9
566.293	-53.5	-89.2
593.259	-52.9	-88.6
620.234	-54.6	-90.3

* "TOP" is Transmitter Output Power

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

D. Test Result

Table 7

RadioShack Corporation
RadioShack 21-1706
Radiated Spurious Emissions

Channel : 19
The output power of transmitter is 35.7 dBm

Frequency (MHz)	ERP (dBm)	ERP relative to TOP*
54.354	-51.1	-86.8
81.531	-57.1	-92.8
108.708	-40.0	-75.7
135.885	-46.8	-82.5
169.098	-47.1	-82.8
190.275	-57.8	-93.5
217.485	-44.2	-79.9
244.664	-37.0	-72.7
271.841	-36.9	-72.6
299.661	-30.0	-65.7
326.238	-31.0	-66.7
353.415	-41.6	-77.3
380.592	-40.8	-76.5
407.769	-45.0	-80.7
434.980	-54.4	-90.1
462.160	-51.4	-87.1
516.514	-57.7	-93.4
543.691	-59.8	-95.5
570.891	-54.6	-90.3
598.114	-53.1	-88.8
625.291	-55.0	-90.7

* "TOP" is Transmitter Output Power

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

D. Test Result

Table 8

RadioShack Corporation
RadioShack 21-1706
Radiated Spurious Emissions

Channel : 40
The output power of transmitter is 35.7 dBm

Frequency (MHz)	ERP (dBm)	ERP relative to TOP*
54.828	-51.5	-87.2
82.219	-50.1	-85.8
109.633	-40.6	-76.3
137.027	-48.9	-84.6
164.441	-32.2	-67.9
191.838	-34.4	-70.1
219.252	-35.2	-70.9
246.666	-35.7	-71.4
274.063	-41.9	-77.6
301.466	-31.1	-66.8
328.877	-30.4	-66.1
356.274	-43.3	-79.0
383.688	-39.5	-75.2
411.087	-36.6	-72.3
438.501	-46.3	-82.0
465.918	-50.2	-85.9
493.281	-48.0	-83.7
520.695	-51.8	-87.5
548.117	-51.3	-87.0
575.531	-53.2	-88.9
602.945	-51.4	-87.1
630.348	-53.2	-88.9

* "TOP" is Transmitter Output Power

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

EXHIBIT 7

FREQUENCY STABILITY

7.0 **Frequency Stability**

The frequency tolerance was tested in normal condition & over extreme ambient conditions with respect to voltage and temperature variation.

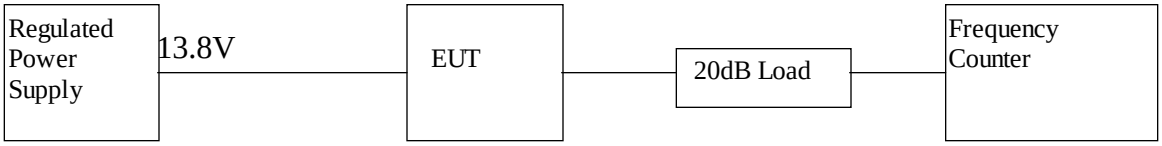
7.1 Frequency Tolerance (Section 95.625)

A. Test Equipment

Equipment	Brand Name	Model No.
Regulated Power Supply	PAD	30-35L
20 dB RF Load	Bird	8304-200-N
Frequency Counter	Phillips	PM6668

B. Testing Procedure

1) Set-up the test equipment in the following configuration:



2) Measure all transmit channel frequencies in MHz.

C. Test Result

Table 9

RadioShack Corporation
RadioShack 21-1706
Frequency Tolerance

Channel	Frequency (MHz)	Measured Frequency (MHz)	Tolerance (%)
1	26.96500	26.96505	0.000185
2	26.97500	26.97505	0.000185
3	26.98500	26398510	0.000371
4	27.00500	27.00505	0.000185
5	27.01500	27.01505	0.000185
6	27.02500	27.02505	0.000185
7	27.03500	27.03505	0.000185
8	27.05500	27.05510	0.000370
9	27.06500	27.06505	0.000185
10	27.07500	27.07505	0.000185
11	27.08500	27.08505	0.000185
12	27.10500	27.10510	0.000369
13	27.11500	27.11505	0.000184
14	27.12500	27.12505	0.000184
15	27.13500	27.13505	0.000184
16	27.15500	27.15505	0.000184
17	27.16500	27.16510	0.000368
18	27.17500	27.17505	0.000184
19	27.18500	27.18505	0.000184
20	27.20500	27.20505	0.000184
21	27.21500	27.21505	0.000184
22	27.22500	27.22505	0.000184
23	27.25500	27.25505	0.000184
24	27.23500	27.23505	0.000184
25	27.24500	27.24505	0.000184
26	27.26500	27.26505	0.000184

C. Test Result

Table 9 (Cont'd...)

RadioShack Corporation
RadioShack 21-1706
Frequency Tolerance

Channel	Frequency (MHz)	Measured Frequency (MHz)	Tolerance (%)
27	27.27500	27.27505	0.000183
28	27.28500	27.28505	0.000183
29	27.29500	27.29505	0.000183
30	27.30500	27.30505	0.000183
31	27.31500	27.31505	0.000183
32	27.32500	27.32505	0.000183
33	27.33500	27.33505	0.000183
34	27.34500	27.34505	0.000183
35	27.35500	27.35505	0.000183
36	27.36500	27.36505	0.000183
37	27.37500	27.37505	0.000183
38	27.38500	27.38505	0.000183
39	27.39500	27.38505	0.000183
40	27.40500	27.40505	0.000182

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

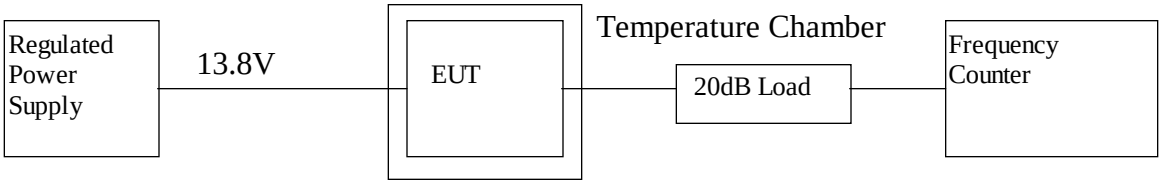
7.2 Frequency Stability - Temperature (Section 2.1055)

A. Test Equipment

Equipment	Brand Name	Model No.
Regulated Power Supply	PAD	30-35L
20 dB RF Load	Bird	8304-200-N
Frequency Counter	Phillips	PM6668

B. Testing Procedure

1) Set-up the test equipment in the following configuration:



2) Set the Temperature Chamber to -30°C and stabilize the EUT temperature for one hour. Apply standard input voltage of 13.8 volts with transmitter ON for two minutes.
3) Measure the channel frequency of channel 19 in MHz.
4) Turn the EUT OFF
5) Repeat the above procedure with 10°C intervals form -30°C to 50°C

C. Test Result

Table 10

RadioShack Corporation
RadioShack 21-1706

Frequency Deviation with Temperature Variation

Channel : 19

Temperature (°C)	Assigned Frequency (MHz)	Measured Frequency (MHz)	% Deviation
-30	27.18500	27.18455	-0.001655
-20	27.18500	27.18480	-0.000736
-10	27.18500	27.18485	-0.000552
0	27.18500	27.18490	-0.000368
10	27.18500	27.18495	-0.000184
20	27.18500	27.18505	0.000184
30	27.18500	27.18495	-0.000184
40	27.18500	27.18495	-0.000184
50	27.18500	27.18510	0.000368

Test Engineer: Ben W.K. Ho Date of Test: December 12, 2001

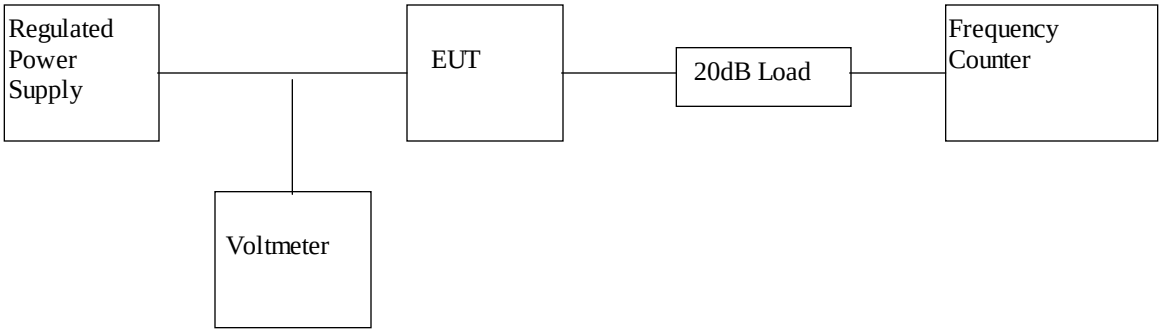
7.3 Frequency Stability - Voltage (Section 2.1055)

A. Test Equipment

Equipment	Brand Name	Model No.
Regulated Power Supply	PAD	30-35L
20 dB RF Load	Bird	8304-200-N
Voltage meter	Fluke	87
Frequency Counter	Phillips	PM6668

B. Testing Procedure

1) Set-up the test equipment in the following configuration:



2) Vary the level of regulated power supply from 85% to 115% of the rated voltage and the manufacturer specified battery end point of the EUT.
3) Measure the channel frequency of channel 19 in MHz at each input power level.

C. Test Result

Table 13

RadioShack Corporation
RadioShack 21-1706

Frequency Deviation with Voltage Variation

The manufacturer specified battery end point 9V

Channel : 19

Voltage (V)	Assigned Frequency (MHz)	Measured Frequency (MHz)	% Deviation
15.9	27.18500	27.18505	0.000184
13.8	27.18500	27.18505	0.000184
11.7	27.18500	27.18505	0.000184
9.0	27.18500	27.18505	0.000184

EXHIBIT 8

TECHNICAL SPECIFICATIONS

8.0 **Technical Specifications**

8.1 Block Diagram

For electronic filing, the block diagram of the EUT is saved with filename: block.pdf.

8.2 Schematic Diagram

For electronic filing, the circuit diagram of the EUT is saved with filename: circuit.pdf.

EXHIBIT 9

PRODUCT LABELLING

9.0 **Product Labelling**

For electronic filing, the label artwork and location of the EUT is saved with filename: label.pdf.

EXHIBIT 10

PHOTOGRAPHS

10.0 Equipment Photographs

For electronic filing, photographs of the tested EUT are saved with filename: external photos.doc and internal photos.doc

EXHIBIT 11

INSTRUCTION MANUAL

11.0 Instruction Manual

For electronic filing, the user manual of the EUT is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States.

EXHIBIT 12

CB TRANSMITTER POWER

12.0 **CB Transmitter Power**

The dissipation rating of all the semiconductors or electron tubes which supply RF power to the antenna terminals of each CB transmitter does not exceed 10W. The specification is saved with filename: power.pdf.

EXHIBIT 13

TUNE UP PROCEDURE

13.0 **Tune Up Procedure**

For electronic filing, a preliminary copy of the Tune Up Procedure is saved with filename: tuneup.pdf

EXHIBIT 14

PART LIST

14.0 **Part List**

For electronic filing, a preliminary copy of the Part List is saved with filename: partlist.pdf