

Intertek Testing Services

APPLICATION FOR FCC CERTIFICATION

Casil Technology Taiwan Ltd.

900 MHz Cordless Telephone

Model: CTT-900AC

FCC ID: NSJCTT-900AC

Report # J98025571

Number of Pages:

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Table of Contents

0.0 **Summary of Test Results** 1

1.0 **General Description** 2

 1.1 Product Description 2

 1.2 Related Submittal(s) Grants 3

 1.3 Test Methodology 3

 1.4 Test Facility 3

2.0 **System Test Configuration** 4

 2.1 Justification 4

 2.2 EUT Exercising Software 4

 2.3 System Test Configuration 5

 2.3.1 Support Equipment 5

 2.3.2 Block Diagram of Test Setup 5

 2.4 Equipment Modification 6

 2.5 Additions, deviations and exclusions from standards 6

3.0 **Emission Results** 7

 3.1 Field Strength Calculation 8

 3.3 Radiated Emission Data 9

 3.5 Conducted Emission Data 10

4.0 **Out of Band Emission Plot** 11

5.0 **Antenna Requirement** 12

6.0 **List of Exhibits** 13

0.0 Summary of Test Results

**Casil Technology Taiwan Ltd. - Model No.: CTT-900AC
FCC ID: NSJCTT-900AC**

| TEST | REFERENCE | RESULTS |
|---------------------|-----------|----------|
| Radiated Emission | 15.249 | Complies |
| Conducted Emission | 15.207 | Complies |
| Antenna Requirement | 15.203 | Complies |

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Test Engineer:

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Date: November 6, 1998

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EMC Site Mgr.:

David Chernomordik

Date: November 6, 1998

1.0 **General Description**

1.1 Product Description

The Casil Technology Model CTT-900AC is a 900 MHz cordless telephone.

| Frequency (MHz) | |
|--------------------|-------------------|
| Base | Handset |
| 902.025 - 903.975 | 926.025 - 927.975 |

1.2 Related Submittal(s) Grants

This is an Application for Certification of a cordless telephone system. The Part 68 application has already been submitted.

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (1992). All measurements 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 for maximizing emissions in Appendices D and E were followed. All Radiated tests were performed at an antenna to 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 radiated data is Site 1. This test facility and site measurement data have been fully placed on file with the FCC and NVLAP accredited.

2.0 System Test Configuration

2.1 Justification

For emission testing, the equipment under test (EUT) was configured for testing in a typical fashion (as a customer would normally use it). During testing, all cables were manipulated to produce worst case emissions.

For the measurements, the EUT is attached to a cardboard box (if necessary) and placed on the wooden turntable. If the EUT attaches to peripherals, they are connected and operational (as typical as possible). The EUT is wired to transmit full power without modulation.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Detector function is in peak mode. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance.

2.2 EUT Exercising Software

The EUT exercise program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use.

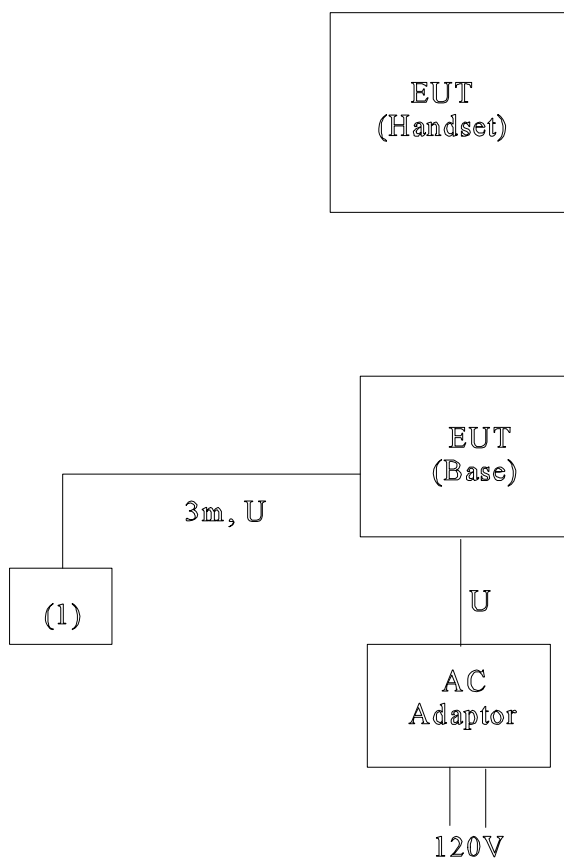
For emissions testing, the units were setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing.

2.3 System Test Configuration

2.3.1 Support Equipment

| Item # | Description | Model No. | Serial No. | FCC ID |
|--------|------------------------|-----------|------------|--------|
| 1 | Teltone Line Simulator | N/A | N/A | N/A |

2.3.2 Block Diagram of Test Setup



* = EUT

** = No ferrites on video cable

S = Shielded;

U = Unshielded

F = With Ferrite

2.4 Equipment Modification

Any modifications installed previous to testing by Casil Technology Taiwan Ltd. will be incorporated in each production model sold/leased in the United States.

No modifications were installed by Intertek Testing Services.

2.5 Additions, deviations and exclusions from standards

No additions, deviations or exclusion have been made from standard.

3.0 Emission Results

AC line conducted emission measurements were performed from 0.45 MHz to 30 MHz. Analyzer resolution is 10 kHz or greater.

Radiated emission measurements were performed from 30 MHz to 5000 MHz. Analyzer resolution is 100 kHz or greater for 30 MHz to 1000 MHz, 1 MHz for >1000 MHz.

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included. All measurements were performed with peak detection unless otherwise specified.

3.1 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG$$

where FS = Field Strength in dB(μ V/m)

RA = Receiver Amplitude (including preamplifier) in dB(μ V)

CF = Cable Attenuation Factor in dB

AF = Antenna Factor in dB/m

AG = Amplifier Gain in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows:-

$$FS = RR + LF$$

where FS = Field Strength in dB(μ V/m)

RR = RA - AG in dB(μ V)

LF = CF + AF in dB

Assume a receiver reading of 52.0 dB(μ V) is obtained. The antenna factor of 7.4 dB/m and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted, giving a field strength of 32 dB(μ V/m). This value in dB μ V/m was converted to its corresponding level in μ V/m.

$$RA = 52.0 \text{ dB}(\mu\text{V}) \quad AF = 7.4 \text{ dB/m}$$

$$RR = 23.0 \text{ dB}(\mu\text{V}) \quad CF = 1.6 \text{ dB}$$

$$LF = 9.0 \text{ dB} \quad AG = 29.0 \text{ dB}$$

$$FS = RR + LF$$

$$FS = 23 + 9 = 32 \text{ dB}(\mu\text{V/m})$$

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm } \{[32 \text{ dB}(\mu\text{V/m})]/20\} = 39.8 \mu\text{V/m}$$

3.3 Radiated Emission Data

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

| | |
|-----------------|---|
| Results: | Passed by 5.1 dB at 7232.0 MHz (Base) Passed by 6.7 dB at 6482.0 MHz (Handset) |
|-----------------|---|

Note: a) All emissions not reported are at least 20 dB below the limits



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

| | |
|------------------------------------|--------------------------------|
| Company: Casil Technology | Model #: |
| EUT: Cordless phone | S/N or FCC Not labelled |
| Project #: J98025570 | Engineer: Ahmad |
| Test Mode: TX/ Base Unit low CH# 1 | Date of Test: 09/1098 Initial: |

| | Antenna | Pre-Amp | Cable A | Cable B | OCF |
|---------|-----------|---------|---------|---------|------|
| Number: | 7 | 0 | 11 | 0 | 0 |
| Model: | EM LPA-25 | None | Green L | None | None |

| | |
|----------------|-----------------|
| Standard_ | FCC Part 15.249 |
| Limits_ | 12 |
| Test Distance_ | 3 meters |

| Frequency | Reading | Det. | Ant. Pol. | Ant. Factor | Pre-Amp | Insert. Loss | D. F. | Net | Limit @3m | Margin |
|-----------|---------|-------|-----------|-------------|---------|--------------|-------|----------|-----------|--------|
| MHz | dB(uV) | P/A/Q | H/V | dB(1/m) | dB | dB | dB | dB(uV/m) | dB(uV/m) | dB |
| 902.0 | 85.0 | Q | V | 22.7 | 0.0 | 0.0 | 0.0 | 87.7 | 94.0 | -6.3 |
| 902.0 | 67.0 | P | V | 22.7 | 0.0 | 0.0 | 0.0 | 89.7 | 94.0 | -4.3 |

- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

Company: Casil Technology
EUT: Cordless phone
Project #: J98025570
Test Mode: TX/ Base Unit low CH# 1

Model #: _____
S/N or FCC: Not labelled
Engineer: Ahmad
Date of Test: 09/10/98 Initial: _____

| | Antenna | Pre-Amp | Cable A | Cable B | OCF |
|---------|----------|-----------|---------|---------|------|
| Number: | 8 | 8 | 11 | 0 | 0 |
| Model: | EMCO 311 | CDI P1000 | Green L | None | None |

| | |
|----------------|-----------------|
| Standard_ | FCC Part 15.249 |
| Limits_ | 12 |
| Test Distance_ | 3 meters |

| Frequency MHz | Reading dB(uV) | Det. P/A/Q | Ant. Pol. H/V | Ant. Factor dB(1/m) | Pre-Amp dB | Insert. Loss dB | D. F. dB | Net dB(uV/m) | Limit @3m dB(uV/m) | Margin dB |
|------------------|-------------------|---------------|------------------|------------------------|---------------|--------------------|-------------|-----------------|-----------------------|--------------|
| 1804.0 | 40.0 | A | V | 24.9 | 29.3 | 1.4 | 0.0 | 37.0 | 54.0 | -17.0 |
| 2706.0 | 39.0 | P | V | 27.9 | 28.4 | 1.6 | 0.0 | 40.1 | 74.0 | -33.9 |
| 2706.0 | 37.0 | A | V | 27.9 | 28.4 | 1.6 | 0.0 | 38.1 | 54.0 | -15.9 |
| 3608.1 | 43.0 | P | V | 31.3 | 27.8 | 1.8 | 0.0 | 48.3 | 74.0 | -25.7 |
| 3608.1 | 40.0 | A | V | 31.3 | 27.8 | 1.8 | 0.0 | 45.3 | 54.0 | -8.7 |
| 4510.2 | 42.0 | P | V | 32.1 | 27.9 | 2.2 | 0.0 | 48.4 | 74.0 | -25.6 |
| 4510.2 | 39.0 | A | V | 32.1 | 27.9 | 2.2 | 0.0 | 45.4 | 54.0 | -8.6 |
| 5412.0 | 35.0 | P | V | 33.1 | 28.3 | 2.5 | 0.0 | 42.3 | 74.0 | -31.8 |
| 5412.0 | 33.0 | A | V | 33.1 | 28.3 | 2.5 | 0.0 | 40.3 | 54.0 | -13.8 |
| 6314.0 | 38.0 | P | V | 34.4 | 28.0 | 2.8 | 0.0 | 47.2 | 74.0 | -26.8 |
| 6314.0 | 35.0 | A | V | 34.4 | 28.0 | 2.8 | 0.0 | 44.2 | 54.0 | -9.8 |
| 7216.2 | 40.0 | P | H | 35.8 | 28.0 | 3.0 | 0.0 | 50.8 | 74.0 | -23.2 |
| 7216.2 | 38.1 | A | H | 35.8 | 28.0 | 3.0 | 0.0 | 48.9 | 54.0 | -5.1 |

- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

| | | | |
|------------|---------------------------|---------------|-------------------|
| Company: | Casil Technology | Model #: | |
| EUT: | Cordless phone | S/N or FCC: | Not labelled |
| Project #: | J98025570 | Engineer: | Ahmad |
| Test Mode: | TX/ Base Unit High CH# 40 | Date of Test: | 09/10/98 Initial: |

| | | | | | | |
|------------------|---------|---------|---------|------|----------------|-----------------|
| Antenna | Pre-Amp | Cable A | Cable B | OCF | Standard_ | FCC Part 15.249 |
| Number: 7 | 0 | 11 | 0 | 0 | Limits_ | 12 |
| Model: EM LPA-25 | None | Green_L | None | None | Test Distance_ | 3 meters |

| Frequency MHz | Reading dB(uV) | Det. P/A/Q | Ant. Pol. H/V | Ant. Factor dB(1/m) | Pre-Amp dB | Insert. Loss dB | D. F. dB | Net dB(uV/m) | Limit @3m dB(uV/m) | Margin dB |
|------------------|-------------------|---------------|------------------|------------------------|---------------|--------------------|-------------|-----------------|-----------------------|--------------|
| 903.9 | 65.0 | P | V | 22.7 | 0.0 | 0.0 | 0.0 | 87.7 | 94.0 | -6.3 |
| 903.9 | 63.0 | Q | V | 22.7 | 0.0 | 0.0 | 0.0 | 85.7 | 94.0 | -8.3 |

- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

Company: Casil Technology
 EUT: Cordless phone
 Project #: J98025570
 Test Mode: TX/ Base Unit High CH# 40

Model #: _____
 S/N or FCC: Not labelled
 Engineer: Ahmad
 Date of Test: 09/10/98 Initial: _____

| | Antenna | Pre-Amp | Cable A | Cable B | OCF |
|---------|----------|-----------|---------|---------|------|
| Number: | 8 | 8 | 11 | 0 | 0 |
| Model: | EMCO 311 | CDI P1000 | Green_L | None | None |

| | |
|----------------|-----------------|
| Standard_ | FCC Part 15.249 |
| Limits_ | 12 |
| Test Distance_ | 3 meters |

| Frequency MHz | Reading dB(uV) | Det. P/A/Q | Ant. Pol. H/V | Ant. Factor dB(1/m) | Pre-Amp dB | Insert. Loss dB | D. F. dB | Net dB(uV/m) | Limit @3m dB(uV/m) | Margin dB |
|------------------|-------------------|---------------|------------------|------------------------|---------------|--------------------|-------------|-----------------|-----------------------|--------------|
| 1807.8 | 37.0 | A | H | 24.7 | 29.3 | 1.4 | 0.0 | 33.8 | 54.0 | -20.2 |
| 2712.0 | 45.0 | P | H | 28.1 | 28.4 | 1.6 | 0.0 | 46.3 | 74.0 | -27.7 |
| 2712.0 | 43.0 | A | V | 27.9 | 28.4 | 1.6 | 0.0 | 44.1 | 54.0 | -9.9 |
| 3616.0 | 43.0 | P | V | 31.3 | 27.8 | 1.8 | 0.0 | 48.3 | 74.0 | -25.7 |
| 3616.0 | 40.0 | A | V | 31.3 | 27.8 | 1.8 | 0.0 | 45.3 | 54.0 | -8.7 |
| 4520.0 | 42.0 | P | V | 32.1 | 27.9 | 2.2 | 0.0 | 48.4 | 74.0 | -25.6 |
| 4520.0 | 39.0 | A | V | 32.1 | 27.9 | 2.2 | 0.0 | 45.4 | 54.0 | -8.6 |
| 5423.4 | 45.0 | P | V | 33.1 | 28.3 | 2.5 | 0.0 | 52.3 | 74.0 | -21.8 |
| 5423.4 | 40.0 | A | V | 33.1 | 28.3 | 2.5 | 0.0 | 47.3 | 54.0 | -6.8 |
| 6327.0 | 42.0 | P | V | 34.4 | 28.0 | 2.8 | 0.0 | 51.2 | 74.0 | -22.8 |
| 6327.0 | 37.0 | A | V | 34.4 | 28.0 | 2.8 | 0.0 | 46.2 | 54.0 | -7.8 |
| 7232.0 | 40.0 | P | H | 35.8 | 28.0 | 3.0 | 0.0 | 50.8 | 74.0 | -23.2 |
| 7232.0 | 38.1 | A | H | 35.8 | 28.0 | 3.0 | 0.0 | 48.9 | 54.0 | -5.1 |

- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

Company: Casil Technology
 EUT: Cordless phone
 Project #: J98025570
 Test Mode: TX/Hand Set low CH# 1

Model #:
 S/N or FCC: Not labelled
 Engineer: Ahmad
 Date of Test: 09/10/98 Initial:

| | | | | | |
|---------|-----------|---------|---------|---------|------|
| | Antenna | Pre-Amp | Cable A | Cable B | OCF |
| Number: | 7 | 0 | 11 | 0 | 0 |
| Model: | EM LPA-25 | None | Green L | None | None |

| | |
|---------------|-----------------|
| Standard_ | FCC Part 15.249 |
| Limits_ | 12 |
| Test Distance | 3 meters |

| Frequency | Reading | Det. | Ant. Pol. | Ant. Factor | Pre-Amp | Insert. Loss | D. F. | Net | Limit @3m | Margin |
|-----------|---------|-------|-----------|-------------|---------|--------------|-------|----------|-----------|--------|
| MHz | dB(µV) | P/A/Q | H/V | dB(1/m) | dB | dB | dB | dB(µV/m) | dB(µV/m) | dB |
| 926.0 | 62.0 | P | V | 23.0 | 0.0 | 0.0 | 0.0 | 85.0 | 94.0 | -9.0 |
| 926.0 | 61.0 | Q | V | 23.0 | 0.0 | 0.0 | 0.0 | 84.0 | 94.0 | -10.0 |

- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

| | |
|-----------------------------------|--------------------------|
| Company: Casil Technology | Model #: |
| EUT: Cordless phone | S/N or FCC: Not labelled |
| Project #: J98025570 | Engineer: Ahmad |
| Test Mode: TX/ Hand Set low CH# 1 | Date of Test: 09/10/98 |
| | Initial: |

| | | | | | |
|---------|----------|-----------|---------|---------|------|
| | Antenna | Pre-Amp | Cable A | Cable B | OCF |
| Number: | 8 | 8 | 11 | 0 | 0 |
| Model: | EMCO 311 | CDI P1000 | Green L | None | None |

| | |
|----------------|-----------------|
| Standard_ | FCC Part 15.249 |
| Limits_ | 12 |
| Test Distance_ | 3 meters |

| Frequency MHz | Reading dB(uV) | Det. P/A/Q | Ant. Pol. H/V | Ant. Factor dB(1/m) | Pre-Amp dB | Insert. Loss dB | D. F. dB | Net dB(uV/m) | Limit @3m dB(uV/m) | Margin dB |
|------------------|-------------------|---------------|------------------|------------------------|---------------|--------------------|-------------|-----------------|-----------------------|--------------|
| 1852.0 | 44.0 | A | H | 24.7 | 29.3 | 1.4 | 0.0 | 40.8 | 54.0 | -13.2 |
| 2778.0 | 32.0 | P | H | 28.1 | 28.4 | 1.6 | 0.0 | 33.3 | 74.0 | -40.7 |
| 2778.0 | 30.0 | A | H | 28.1 | 28.4 | 1.6 | 0.0 | 31.3 | 54.0 | -22.7 |
| 3704.0 | 31.0 | P | V | 31.3 | 27.8 | 1.8 | 0.0 | 36.3 | 74.0 | -37.7 |
| 3704.0 | 29.0 | A | V | 31.3 | 27.8 | 1.8 | 0.0 | 34.3 | 54.0 | -19.7 |
| 4630.0 | 30.0 | P | V | 32.1 | 28.0 | 2.2 | 0.0 | 36.3 | 74.0 | -37.7 |
| 4630.0 | 28.0 | A | V | 32.1 | 28.0 | 2.2 | 0.0 | 34.3 | 54.0 | -19.7 |
| 5556.0 | 33.0 | P | V | 34.4 | 28.3 | 2.6 | 0.0 | 41.7 | 74.0 | -32.3 |
| 5556.0 | 31.5 | A | V | 34.4 | 28.3 | 2.6 | 0.0 | 40.2 | 54.0 | -13.8 |
| 6482.0 | 39.0 | P | H | 34.7 | 28.0 | 2.8 | 0.0 | 48.5 | 74.0 | -25.5 |
| 6482.0 | 37.8 | A | H | 34.7 | 28.0 | 2.8 | 0.0 | 47.3 | 54.0 | -6.7 |
| 7408.0 | 32.0 | P | V | 36.3 | 28.0 | 3.0 | 0.0 | 43.3 | 74.0 | -30.7 |
| 7408.0 | 30.0 | A | V | 36.3 | 28.0 | 3.0 | 0.0 | 41.3 | 54.0 | -12.7 |

- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

Company: Casil Technology
 EUT: Cordless phone
 Project #: J98025570
 Test Mode: TX/ Hand set High: CH# 40

Model #: _____
 S/N or FCC: Not labelled
 Engineer: Ahmad
 Date of Test: 09/1098 Initial: _____

| | Antenna | Pre-Amp | Cable A | Cable B | OCF |
|---------|-----------|---------|---------|---------|------|
| Number: | 7 | 0 | 11 | 0 | 0 |
| Model: | EM LPA-25 | None | Green_L | None | None |

| | |
|----------------|-----------------|
| Standard_ | FCC Part 15.249 |
| Limits_ | 12 |
| Test Distance_ | 3 meters |

| Frequency | Reading | Det. | Ant. Pol. | Ant. Factor | Pre-Amp | Insert. Loss | D. F. | Net | Limit @3m | Margin |
|-----------|---------|-------|-----------|-------------|---------|--------------|-------|----------|-----------|--------|
| MHz | dB(uV) | P/A/Q | H/V | dB(1/m) | dB | dB | dB | dB(uV/m) | dB(uV/m) | dB |
| 927.9 | 60.0 | P | H | 23.5 | 0.0 | 0.0 | 0.0 | 83.5 | 94.0 | -10.5 |
| 927.9 | 58.0 | Q | H | 23.5 | 0.0 | 0.0 | 0.0 | 81.5 | 94.0 | -12.5 |

- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

Company: Casil Technology
EUT: Cordless phone
Project #: J98025570
Test Mode: TX/ Hand set High CH# 40

Model #:
S/N or FCC: Not labelled
Engineer: Ahmad
Date of Test: 09/10/98 Initial:

| | Antenna | Pre-Amp | Cable A | Cable B | OCF |
|---------|----------|-----------|---------|---------|------|
| Number: | 8 | 8 | 11 | 0 | 0 |
| Model: | EMCO 311 | CDI P1000 | Green L | None | None |

| | |
|----------------|-----------------|
| Standard_ | FCC Part 15.249 |
| Limits_ | 12 |
| Test Distance_ | 3 meters |

| Frequency MHz | Reading dB(µV) | Det. P/A/Q | Ant. Pol. H/V | Ant. Factor dB(1/m) | Pre-Amp dB | Insert. Loss dB | D. F. dB | Net dB(µV/m) | Limit @3m dB(µV/m) | Margin dB |
|------------------|-------------------|---------------|------------------|------------------------|---------------|--------------------|-------------|-----------------|-----------------------|--------------|
| 1855.8 | 35.0 | P | V | 24.9 | 29.3 | 1.4 | 0.0 | 32.0 | 54.0 | -22.0 |
| 2783.0 | 35.0 | P | V | 27.9 | 28.4 | 1.6 | 0.0 | 36.1 | 74.0 | -37.9 |
| 2783.0 | 33.0 | A | V | 27.9 | 28.4 | 1.6 | 0.0 | 34.1 | 54.0 | -19.9 |
| 3711.9 | 30.0 | P | V | 31.3 | 27.8 | 1.8 | 0.0 | 35.3 | 74.0 | -38.7 |
| 3711.9 | 30.0 | P | V | 31.3 | 27.8 | 1.8 | 0.0 | 35.3 | 74.0 | -38.7 |
| 4639.0 | 34.0 | P | V | 32.1 | 28.0 | 2.2 | 0.0 | 40.3 | 74.0 | -33.7 |
| 4639.0 | 31.0 | A | V | 32.1 | 28.0 | 2.2 | 0.0 | 37.3 | 54.0 | -16.7 |
| 5567.4 | 35.0 | P | V | 34.4 | 28.3 | 2.6 | 0.0 | 43.7 | 74.0 | -30.3 |
| 5567.4 | 32.0 | A | V | 34.4 | 28.3 | 2.6 | 0.0 | 40.7 | 54.0 | -13.3 |
| 6495.3 | 36.0 | P | V | 34.4 | 28.0 | 2.8 | 0.0 | 45.2 | 74.0 | -28.8 |
| 6495.3 | 32.0 | A | V | 34.4 | 28.0 | 2.8 | 0.0 | 41.2 | 54.0 | -12.8 |
| 7412.9 | 34.0 | P | V | 36.3 | 28.0 | 3.0 | 0.0 | 45.3 | 74.0 | -28.7 |
| 7412.9 | 30.0 | A | V | 36.3 | 28.0 | 3.0 | 0.0 | 41.3 | 54.0 | -12.7 |

- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.



1365 Adams Court, Menlo Park CA 94025

Radiated Emissions Test Data

| | |
|-----------------------------|---------------------------------|
| Company: Casil | Model #: |
| EUT: 900 MHz cordless phone | S/N or FCC: Not labelled |
| Project #: | Engineer: Ahmad |
| Test Mode: Standby mode | Date of Test: 09/09/98 Initial: |

| | | | | | | |
|-----------------|----------|---------|---------|------|----------------|--------------|
| Antenna | Pre-Amp | Cable A | Cable B | OCF | Standard_ | FCC Part 15B |
| Number: 2 | 5 | 2 | 0 | 0 | Limits_ | 2 |
| Model: EMCO 314 | CDJ_P950 | RG214 | None | None | Test Distance_ | 3 meters |

| Frequency | Reading | Det. | Ant. Pol. | Ant. Factor | Pre-Amp | Insert. Loss | D. F. | Net | Limit @3m | Margin |
|-----------|---------|-------|-----------|-------------|---------|--------------|-------|----------|-----------|--------|
| MHz | dB(uV) | P/A/Q | H/V | dB(1/m) | dB | dB | dB | dB(uV/m) | dB(uV/m) | dB |
| 37.0 | 30.0 | P | H | 12.2 | 18.6 | 0.2 | 0.0 | 23.8 | 40.0 | -16.2 |
| 156.0 | 35.0 | P | H | 9.9 | 18.9 | 0.6 | 0.0 | 26.6 | 43.5 | -16.9 |
| 225.9 | 39.0 | P | H | 11.5 | 18.4 | 0.9 | 0.0 | 33.0 | 46.0 | -13.1 |
| 443.0 | 33.0 | P | H | 17.2 | 16.9 | 1.2 | 0.0 | 34.5 | 46.0 | -11.5 |
| 735.0 | 27.0 | P | H | 21.7 | 14.7 | 1.8 | 0.0 | 35.8 | 46.0 | -10.2 |
| 225.0 | 35.0 | P | V | 11.5 | 18.4 | 0.9 | 0.0 | 29.0 | 46.0 | -17.1 |
| 74.9 | 38.0 | P | V | 5.6 | 18.9 | 0.3 | 0.0 | 25.0 | 40.0 | -15.0 |
| 191.0 | 35.0 | P | V | 9.5 | 18.7 | 0.8 | 0.0 | 26.6 | 43.5 | -16.9 |
| 443.9 | 32.0 | P | V | 17.2 | 16.9 | 1.2 | 0.0 | 33.5 | 46.0 | -12.5 |
| 594.5 | 27.0 | P | V | 18.7 | 15.8 | 1.5 | 0.0 | 31.4 | 46.0 | -14.6 |
| 735.0 | 23.0 | P | V | 20.5 | 14.7 | 1.8 | 0.0 | 30.6 | 46.0 | -15.4 |
| 337.0 | 33.0 | P | V | 14.5 | 17.9 | 1.1 | 0.0 | 30.7 | 46.0 | -15.3 |

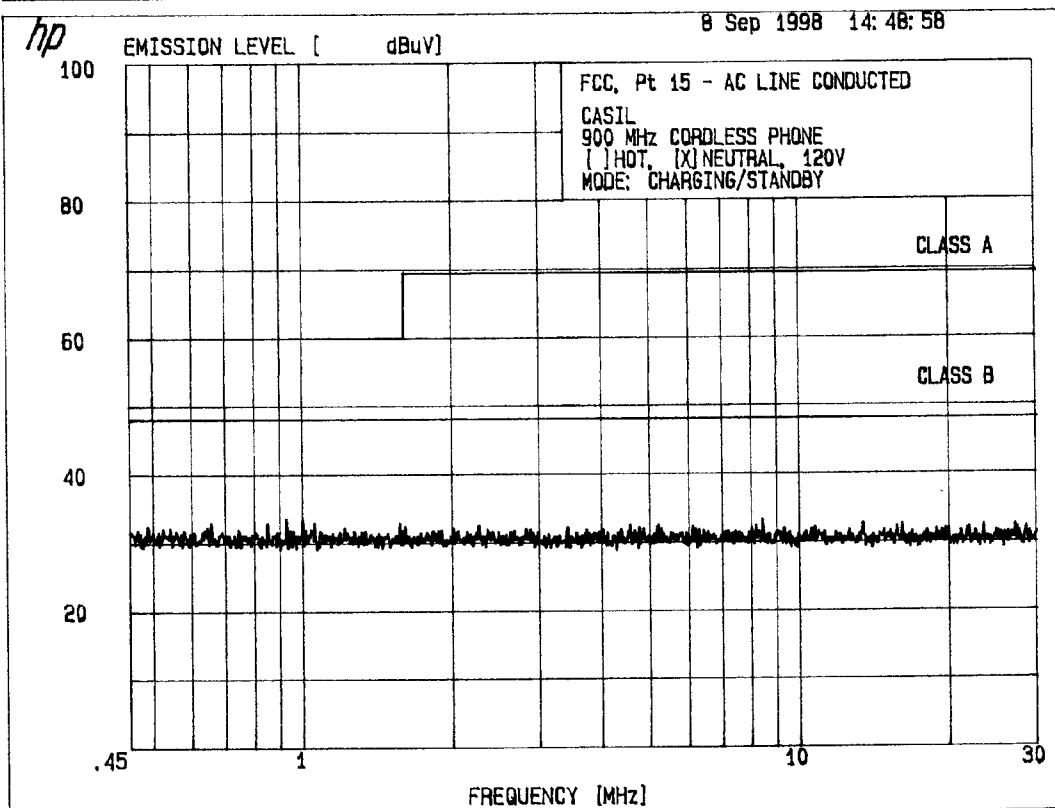
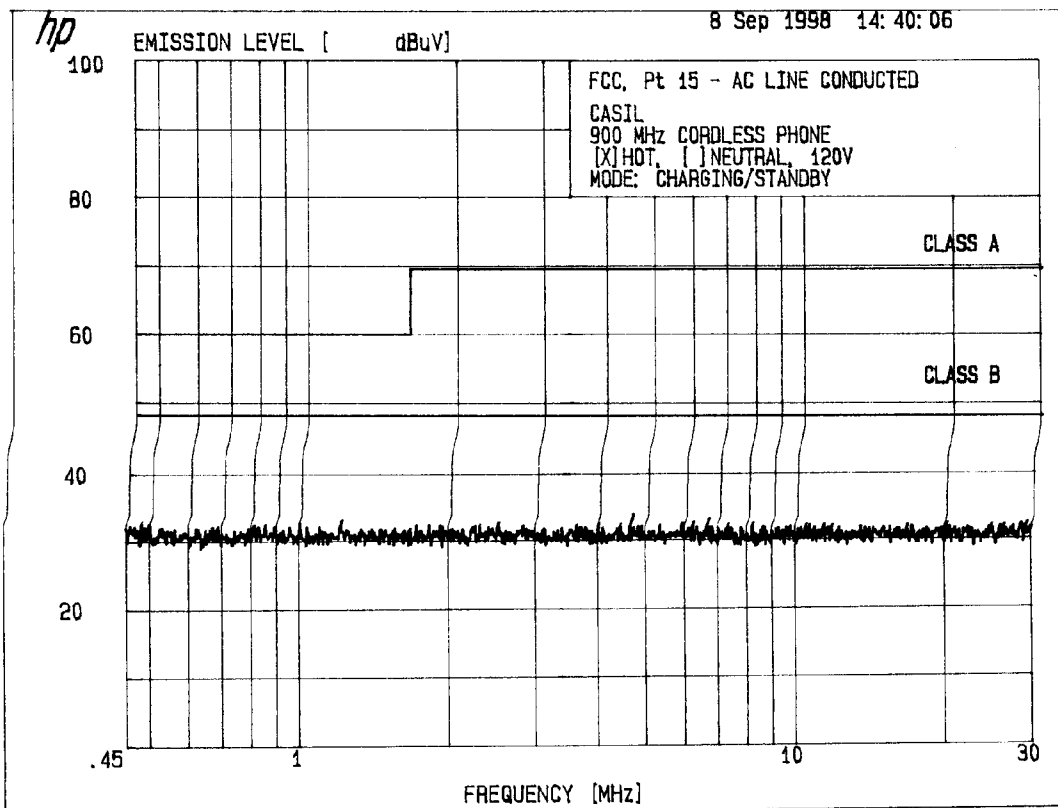
- Notes:**
- a) P: Peak; A: Average; Q: Quasi Peak; H: Horizontal; V: Vertical; OCF: Other Correction Factor; DF: Distance Factor
 - b) Insert. Loss = Cable A + Cable B + OCF.
 - c) Negative signs (-) in Margin column signify levels below the limits.
 - d) All other emissions not reported are below the equipment noise floor which is at least 20 dB below the limits.

3.5 Conducted Emission Data

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

| |
|--|
| Results: Passed by 13.5 dB at 5.194 MHz |
|--|

Note: a) A complete scan from 0.45 - 30 MHz was made.



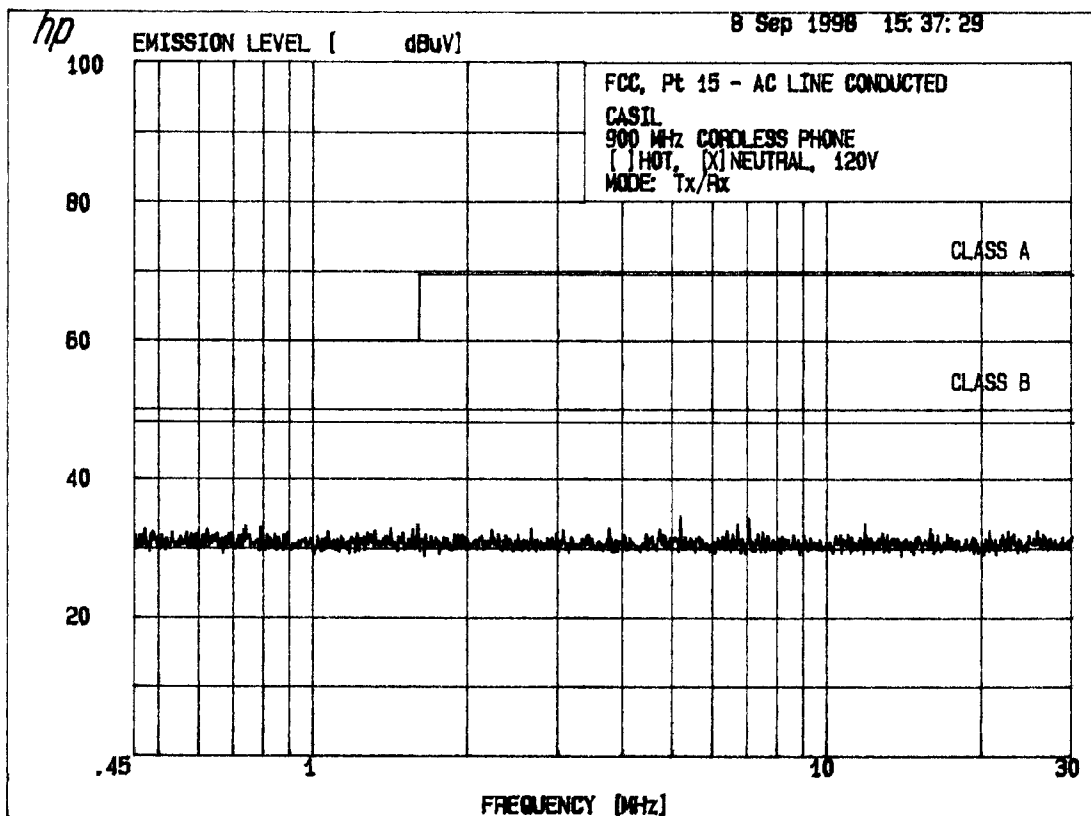
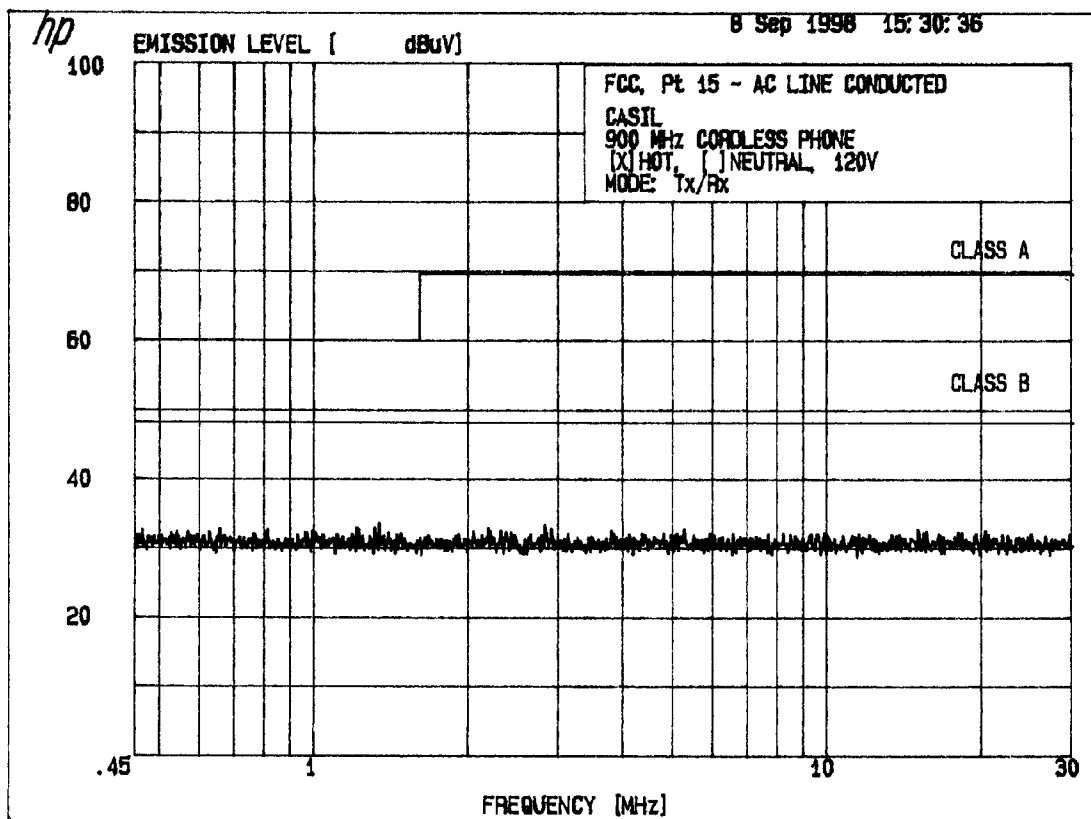
=====
8 Sep 1998 14:40:06
=====

3. FCC CFR 47, Pt 15
3.1 FCC, Pt 15 - AC LINE CONDUCTED
=====

CASIL
900 MHz CORDLESS PHONE
[X]HOT, []NEUTRAL, 120V
MODE: CHARGING/STANDBY

PEAKS FOUND ABOVE 32 dBuV

| PEAK# | FREQ (MHz) | AMPL (dBuV) |
|-------|------------|-------------|
| 1 | .4853 | 32.9 |
| 2 | 1.011 | 32.6 |
| 3 | 1.221 | 33.2 |
| 4 | 1.737 | 32.3 |
| 5 | 1.938 | 32.3 |
| 6 | 2.535 | 32.7 |
| 7 | 4.038 | 32.6 |
| 8 | 4.677 | 34.1 |
| 9 | 6.247 | 32.8 |
| 10 | 6.681 | 33.3 |
| 11 | 7.357 | 32.4 |
| 12 | 8.240 | 32.6 |
| 13 | 10.55 | 32.2 |
| 14 | 20.22 | 32.5 |
| 15 | 24.94 | 32.2 |



Intertek Testing Services

1365 Adams Court, Menlo Park, CA 94025

Casil Technology Taiwan Ltd., 900 MHz Cordless Telephone
FCC ID: NSJCTT-900AC

Date of Test: Sept. 8, 9, & 10, 1998

```
=====
                        8 Sep 1998 15:37:29
=====
3. FCC CFR 47, Pt 15
   3.1 FCC, Pt 15 - AC LINE CONDUCTED
=====
CASIL
900 MHz CORDLESS PHONE
[ ]HOT, [X]NEUTRAL, 120V
MODE: Tx/Rx
```

PEAKS FOUND ABOVE 32 dBuV

| PEAK# | FREQ (MHz) | AMPL (dBuV) |
|-------|------------|-------------|
| 1 | .6242 | 32.6 |
| 2 | .7414 | 33.1 |
| 3 | .7929 | 32.9 |
| 4 | 1.072 | 32.3 |
| 5 | 1.421 | 32.8 |
| 6 | 1.604 | 33.3 |
| 7 | 2.235 | 32.5 |
| 8 | 2.685 | 32.8 |
| 9 | 3.074 | 32.5 |
| 10 | 3.776 | 32.9 |
| 11 | 4.736 | 32.6 |
| 12 | 5.194 | 34.5 |
| 13 | 6.709 | 33.4 |
| 14 | 7.055 | 34.3 |
| 15 | 11.87 | 33.5 |
| 16 | 15.92 | 32.8 |
| 17 | 20.74 | 32.5 |
| 18 | 22.55 | 32.4 |

Intertek Testing Services

1365 Adams Court, Menlo Park, CA 94025

Casil Technology Taiwan Ltd., 900 MHz Cordless Telephone
FCC ID: NSJCTT-900AC

Date of Test: Sept. 8, 9, & 10, 1998

```
=====
                        8 Sep 1998 15:30:38
=====
3. FCC CFR 47, Pt 15
   3.1 FCC, Pt 15 - AC LINE CONDUCTED
=====
CASIL
900 MHz CORDLESS PHONE
LX HOT, L NEUTRAL, 120V
MODE: Tx/Rx
```

PEAKS FOUND ABOVE 32 dBuV

| PEAK# | FREQ (MHz) | AMPL(dBuV) |
|-------|------------|------------|
| 1 | .6592 | 32.7 |
| 2 | .8155 | 32.6 |
| 3 | .9986 | 32.3 |
| 4 | 1.216 | 32.9 |
| 5 | 1.317 | 32.9 |
| 6 | 1.345 | 33.6 |
| 7 | 1.481 | 32.0 |
| 8 | 2.198 | 32.8 |
| 9 | 2.321 | 32.4 |
| 10 | 2.380 | 32.2 |
| 11 | 2.827 | 33.3 |
| 12 | 3.808 | 32.5 |
| 13 | 5.282 | 32.7 |
| 14 | 6.569 | 32.1 |
| 15 | 8.240 | 32.1 |
| 16 | 9.910 | 32.1 |
| 17 | 15.08 | 32.7 |
| 18 | 18.06 | 32.2 |
| 19 | 20.39 | 32.5 |

4.0 Out of Band Emission Plot

The following plots show the relative spurious emission level of the transmitter.

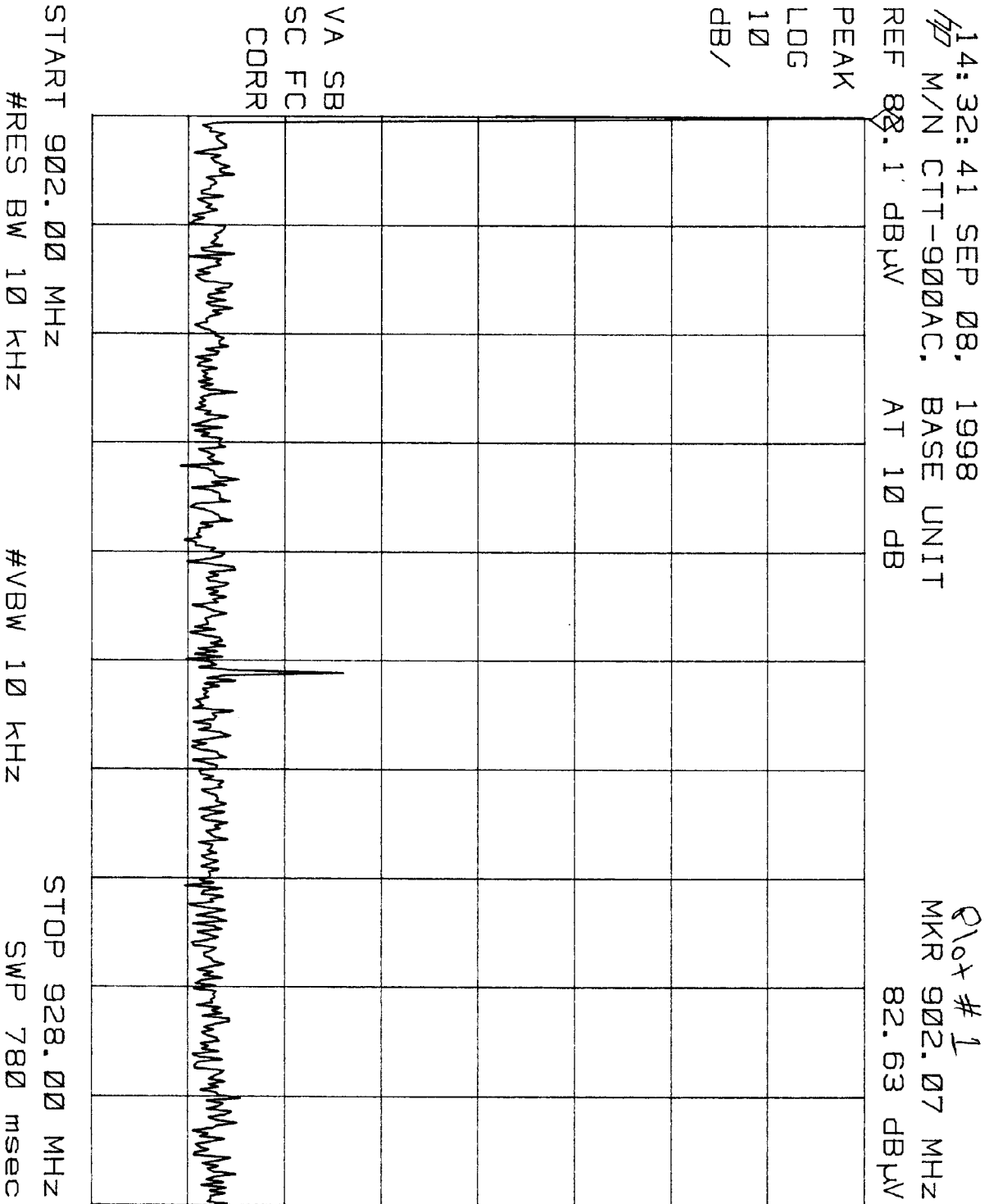
| Plot # | Description |
|---------------|--|
| 1 | Base TX Low Channel, 902 MHz - 928 MHz |
| 2 | Base TX Low Channel, 902 MHz - 902.5 MHz |
| 3 | Handset TX High Channel, 902 MHz - 928 MHz |
| 4 | Handset TX High Channel, 927.5 MHz - 928 MHz |

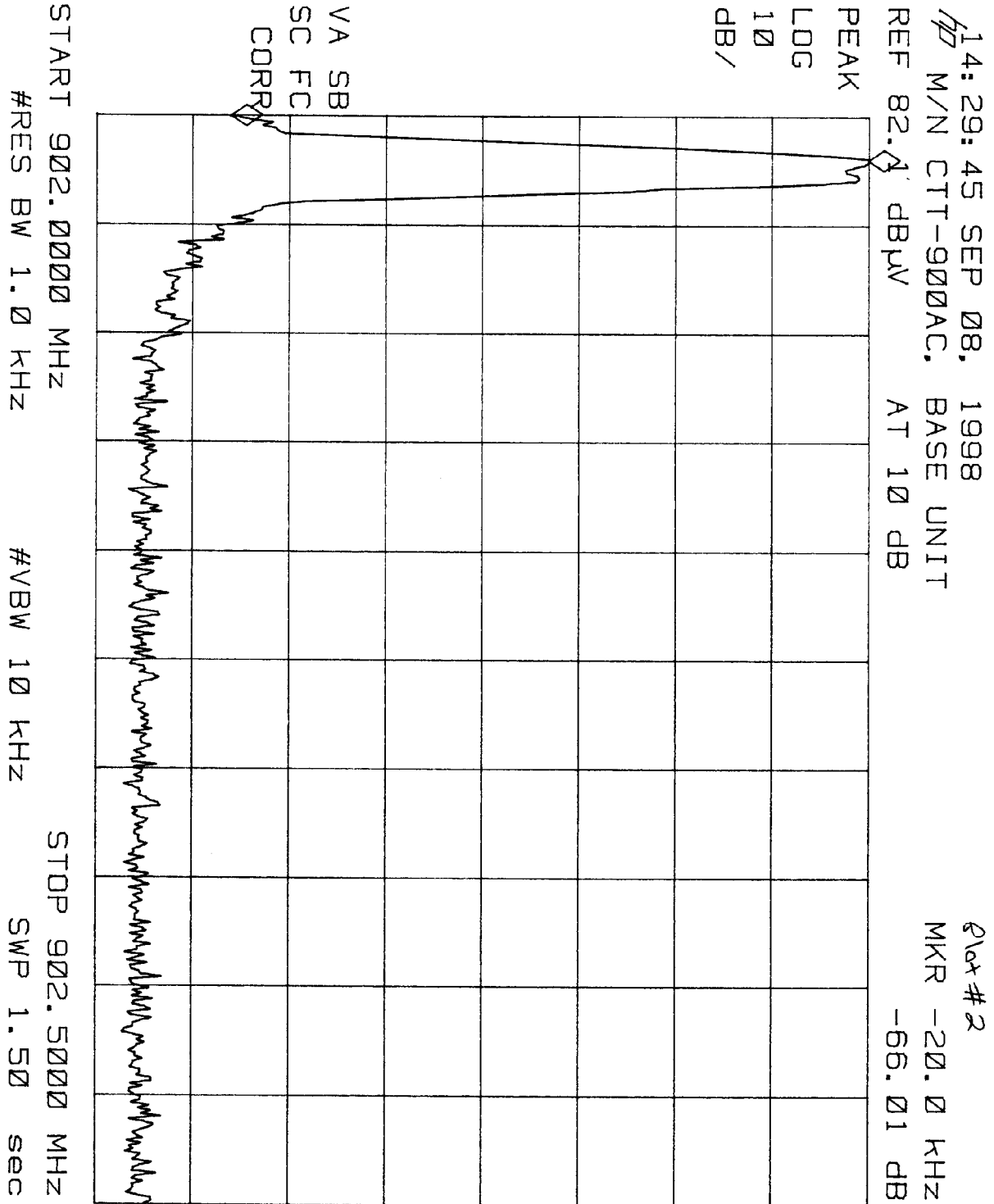
Intertek Testing Services

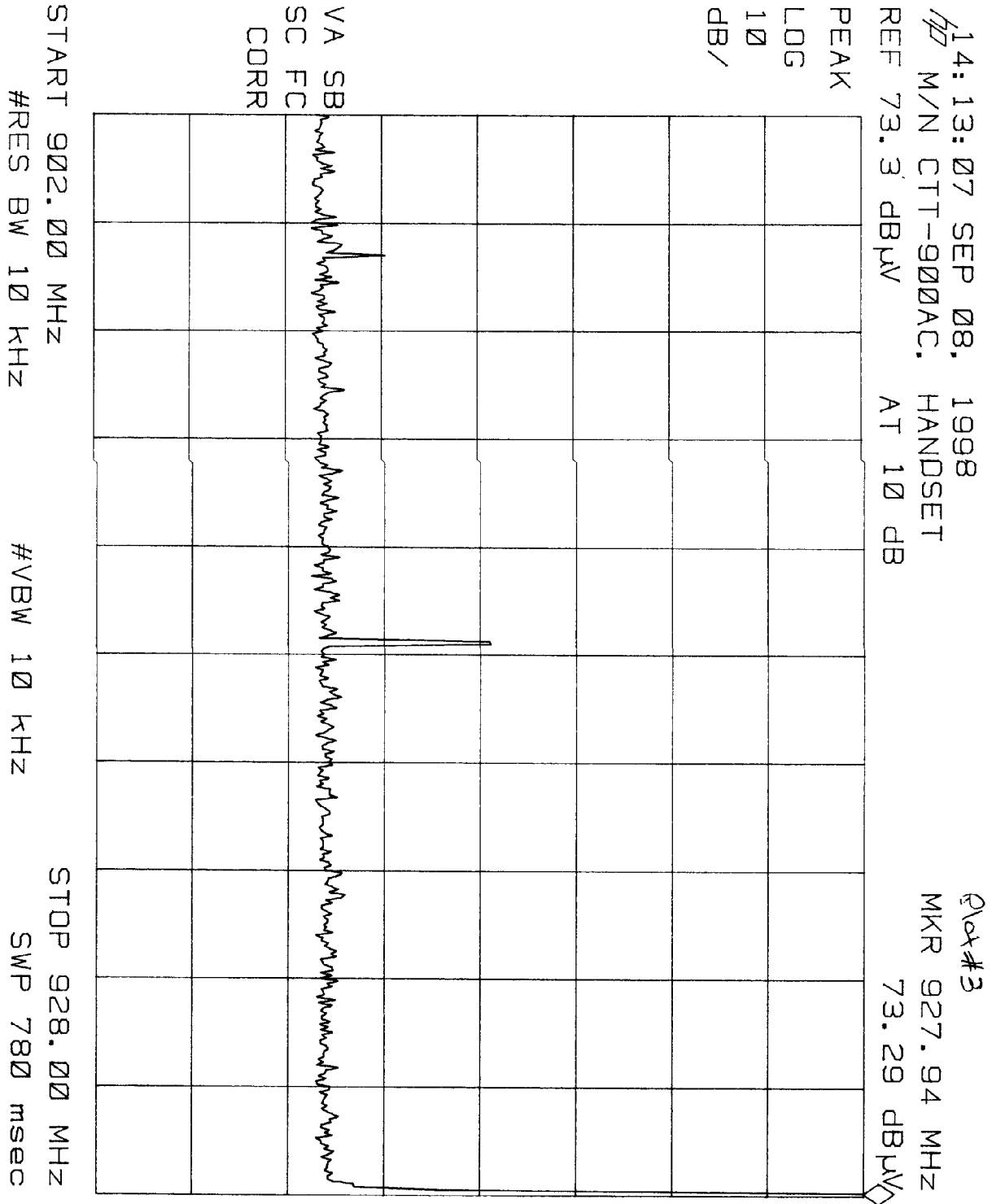
1365 Adams Court, Menlo Park, CA 94025

Casil Technology Taiwan Ltd., 900 MHz Cordless Telephone
FCC ID: NSJCTT-900AC

Date of Test: Sept. 8, 9, & 10, 1998





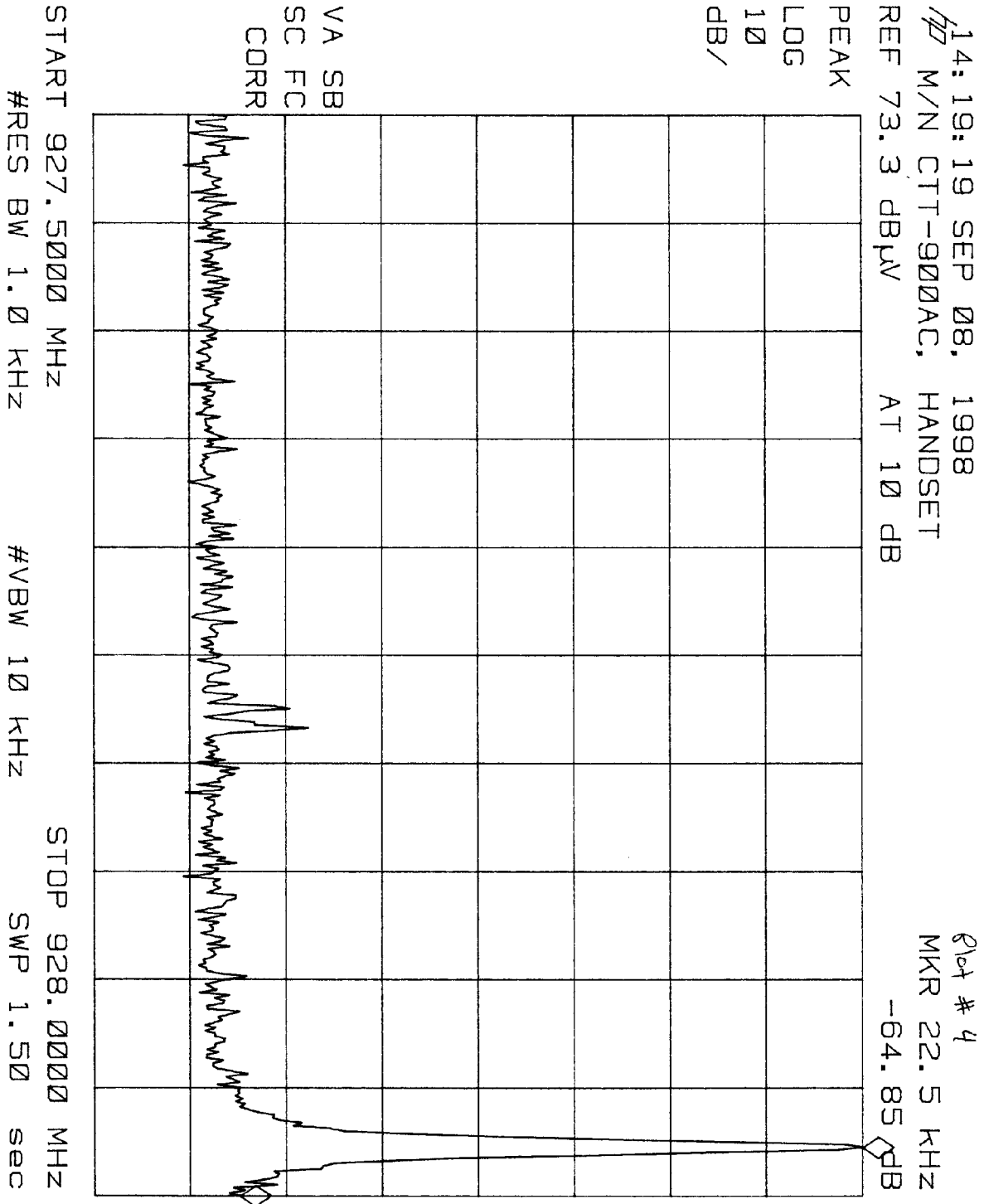


Intertek Testing Services

1365 Adams Court, Menlo Park, CA 94025

Casil Technology Taiwan Ltd., 900 MHz Cordless Telephone
FCC ID: NSJCTT-900AC

Date of Test: Sept. 8, 9, & 10, 1998



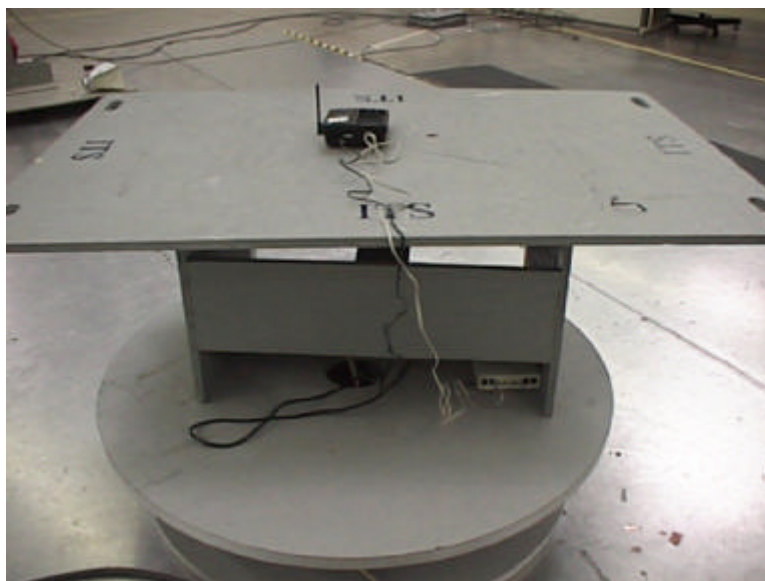
5.0 Antenna Requirement

| | |
|---|--|
| U | The transmitter uses a permanently connected antenna. |
| | The antenna is affixed to the EUT using a unique connector which allows for replacement of a broken antenna, but does NOT use a standard antenna jack or electrical connector. |
| | The EUT requires professional installation. Please refer to the attached documentation for details). |
| | |

6.0 List of Exhibits

- Exhibit 1* **ID Label Format**
- Exhibit 2* **ID Label Location**
- Exhibit 3* **Equipment Photographs**
- Exhibit 4* **Block Diagram**
- Exhibit 5* **Circuit Diagram**
- Exhibit 6* **This Test Report**
- Exhibit 7* **Test Setup Photos**
- Exhibit 8* **Instruction Manual**

**Test Setup Photos
(Radiated)**



**Test Setup Photos - Continuation
(Line Conducted)**

