

PCTEST Engineering Laboratory, Inc.



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CERTIFICATE OF COMPLIANCE

SAFETY 1st, INC.
Canton Commerce Center,
45 Dan Road, Canton, MA 02021
Attn: Paul Ware, V.P. Quality Assurance

Dates of Tests: November 22-23, 1999 Test Report S/N: TX.991115605.MNJ Test Site: PCTEST Lab, MD U.S.A. Job No.: CHANEY #9018A

FCC ID

MNJ48016T

APPLICANT

SAFETY 1ST, INC.

FCC Rule Part(s): § 15.249 Subpart C – Intentional Radiator
Classification: Low Power Communications Transmitter (DXX)
EUT Type: 3-Channel Wireless Camera Transmitter

Freq. Range: 2.434 GHz ~ 2.473 GHz

Channel Freq.: Ch.1: 2.434GHz, Ch.2: 2.473GHz, Ch.3: 2.453GHz

Trade Name: 2.4GHz Child View Monitor/TV

Model: 48016

This device has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified is ANSI C63.4-1992 with the following remarks (Note Codes):

• (#37) This device has shown to be in compliance with the new rules under Docket 87-389 and is not affected by Section 15.37 transition rule.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

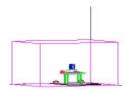
PCTEST certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a).

Randy Ortanez President & Chief Engineer

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MEASUREMENT REPORT





1.1 Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

Company Name: SAFETY 1st, INC.

Address: Canton Commerce Center

45 Dan Road Canton, MA 02021

Attention: Paul Ware, V.P. Quality Assurance

FCC ID: MNJ48016TModel: 48016

• Trade Name: 2.4GHz Child View Monitor/TV

EUT Type: 2.4GHz Wireless Camera Transmitter

• Equipment Class: DXX (Low Power Communications Transmitter)

Application Type: Certification
 Frequency Range: 2.434 – 2.473 GHz

• No. of Channels: 3

Channel Frequencies: Ch.1: 2.434GHz, Ch.2: 2.473GHz, Ch.3: 2.453GHz

FCC Rule Part(s): § 15.249 Subpart C (Intentional Radiator)

Dates of Tests: November 22-23, 1999

Place of Tests: PCTEST Lab, Columbia, MD U.S.A.

Test Report S/N: TX.991115605.MNJ
 Job No.: CHANEY #9018A



2.1 INTRODUCTION

The measurement procedure described in Section 15.249 of FCC Rules, and American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40GHz (ANSI C63.4-1992) was used in determining radiated and conducted emissions emanating from SAFETY 1st, INC. 2.4GHz Wireless Camera Transmitter FCC ID: MNJ48016T.

These measurement tests were conducted at *PCTEST Engineering Laboratory, Inc.* facility in New Concept Business Park, Guilford Industrial Park, Columbia, Maryland. The site address is 6660-B Dobbin Road, Columbia, MD 21045. The test site is one of the highest points in the Columbia area with an elevation of 390 feet above mean sea level. The site coordinates are 39° 11'15" N latitude and 76° 49'38" W longitude. The facility is 1.5 miles North of the FCC laboratory, and the ambient signal and ambient signal strength are approximately equal to those of the FCC laboratory. There are no FM or TV transmitters within 15 miles of the site. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4 on October 19, 1992.

2.2 PCTEST Location

The map at right shows the location of the PCTEST Lab, its proximity to the FCC Lab, the Columbia vicinity area, the Baltimore-Washington International (BWI) airport, and the city of Baltimore, and the Washington, D.C. area. (see Figure 1).

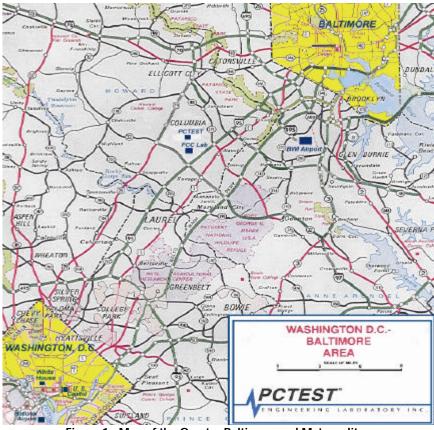


Figure 1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area.

3.1 Product Information

3.2 Equipment Description

The Equipment Under Test (EUT) is the SAFETY 1ST, INC. (Model: 48016) 2.4GHz Low Power Wireless Camera Transmitter FCC ID: MNJ48016T.

* Tx Freq. Range: 2.434 ~ 2.473 GHz

* No. of Channels: 3

* Channel Frequencies: Ch.1: 2.434GHz, Ch.2: 2.473GHz, Ch.3: 2.453GHz

* Modulation: FM

* Antenna: Permanently Attached, Omni-Directional

* Port(s)/Connector(s): DC IN

* AC Power Adapter: Model: AD-0950

Input: 120VAC 60Hz 9W Output: 9V DC 500mA

* Power Cord: Unshielded

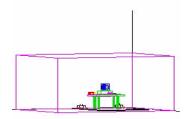


Figure 2. Shielded Enclosure Line-Conducted Test Facility

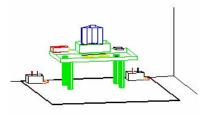


Figure 3. Line Conducted Emission Test Set-Up

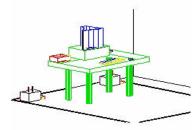


Figure 4. Wooden Table & Bonded LISNs

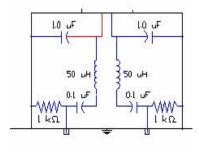


Figure 5. LISN Schematic Diagram

4.1 Description of Tests

4.2 Conducted Emissions

The line-conducted facility is located inside a 16'x20'x10' shielded enclosure. It is manufactured by Ray Proof Series 81 (see Figure 2). The shielding effectiveness of the shielded room is in accordance with MIL-Std-285 or NSA 65-6. A 1m. x 1.5m. wooden table 80cm. high is placed 40cm, away from the vertical wall and 1.5m away from the side wall of the shielded room (see Figure 3). Electronics and EMCO Model 3725/2 (10kHz-30MHz) 50Ω/50μH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room (see Figure 4). The EUT is powered from the Solar LISN and the support equipment is powered from the EMCO LISN. Power to the LISNs are filtered by a high-current high-insertion loss Ray Proof power line filters (100dB 14kHz-10GHz). The purpose of the filter is to attenuate ambient signal interference and this filter is also bonded to the shielded enclosure. All electrical cables are shielded by braided tinned copper zipper tubing, with an inner diameter of 1/2". If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply lines will be connected to the Solar LISN. LISN schematic diagram is shown in Figure 5. All interconnecting cables more than 1 meter were shortened by non-inductive bundling (serpentine fashion) to a 1-meter length. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the spectrum analyzer to determine the frequency producing the maximum EME from the EUT. The spectrum was scanned from 450kHz to 30MHz with 20 msec. sweep The frequency producing the maximum level was time. reexamined using EMI/ Field Intensity Meter and Quasi-Peak adapter. The detector function was set to CISPR quasi-peak mode. The bandwidth of the receiver was set to 10 kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each EME emission. Each emission was maximized by: switching power lines; varying the mode of operation or resolution; clock or data exchange speed; scrolling H pattern to the EUT and/or support equipment, and powering the monitor from the floor mounted outlet box and the computer aux AC outlet, if applicable; whichever determined the worst-case emission. Photographs of the worst-case emission can be seen in Attachment H. Each EME reported was calibrated using the HP8640B signal generator.

Figure 6. 3-Meter Test Site

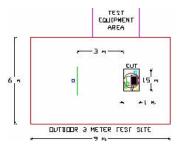


Figure 7. Dimensions of Outdoor Test Site

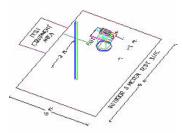


Figure 8. Turntable and System Setup

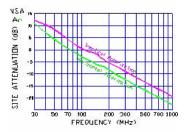


Figure 9. Normalized Site Attenuation Curves (H&V)

4.1 Description of Tests (continued)

4.3 Radiated Emissions

Preliminary measurements were made indoors at 1 meter using broadband antennas, broadband amplifier, and spectrum analyzer to determine the frequency producing the maximum EME. Appropriate precaution was taken to ensure that all EME from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, turntable azimuth with respect to the antenna were noted for each frequency found. The spectrum was scanned from 30 to 200 MHz using biconical antenna and from 200 to 1000 MHz using log-spiral antenna. Above 1 GHz, linearly polarized double ridge horn antennas were used.

Final measurements were made outdoors at 3-meter test range using Roberts™ Dipole antennas or horn antenna (see Figure 6). The test equipment was placed on a wooden and plastic bench situated on a 1.5 x 2 meter area adjacent to the measurement area (see Figure 7). Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. Each frequency found during pre-scan measurements was re-examined and investigated using EMI/Field Intensity Meter and Quasi-Peak Adapter. The detector function was set to CISPR quasi-peak mode and the bandwidth of the receiver was set to 100kHz or 1 MHz depending on the frequency or type of signal.

The half-wave dipole antenna was tuned to the frequency found during preliminary radiated measurements. The EUT, support equipment and interconnecting cables were re-configured to the set-up producing the maximum emission for the frequency and were placed on top of a 0.8meter high non-metallic 1 x 1.5 meter table (see Figure 8). The EUT, support equipment, and interconnecting cables were re-arranged and manipulated to maximize each EME emission. The turntable containing the system was rotated; the antenna height was varied 1 to 4 meters and stopped at the azimuth or height producing the maximum emission. Each emission was maximized by: varying the mode of operation or resolution; clock or data exchange speed; scrolling H pattern to the EUT and/or support equipment; powering the monitor from the floor mounted outlet box and the computer aux AC outlet if applicable, and changing the polarity of the antenna; whichever determined the worstcase emission. Photographs of the worst-case emission can be seen in Attachment H. Each EME reported was calibrated using the HP8640B signal generator. The Theoretical Normalized Site Attenuation Curves for both horizontal and vertical polarization are shown in Figure 9 according to ANSI C63.4.

5.1 §15.203 Antenna Requirement

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the applicant can be used with the device. The use of a permanently attached antenna, or an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with this requirement.

CONCLUSION

The SAFETY 1ST, INC. wireless transmitter complies with the requirement of §15.203 with an omni-directional antenna permanently attached (soldered) to the PCB of the transmitter.

5.2 Applied Modulation

The modulation used was the test procedure specified in ANSI C63.4-1992. For audio modulation we used a 1kHz tone at 100Db SPL (Extech Model: 407740 Digital Sound Level Meter), an audio signal generator (Tenma), and a speaker at 10cm away from the microphone (condensor). Various audio tones were also used to simulate the sounds generated by typical use. For video modulation, various intensity of light and focus of objects were used to determine the worst-case modulation. The worst-case modulation that produces the widest bandwidth was used during final testing.

6.1 Frequency Measurements (Fundamental & Harmonics)

Operating Frequency: 2.434 GHz
Distance of Measurements: 3 meters
Channel: 1 (A)

| FREQ. (MHz) | Level (dBm) | AFCL (dB) | POL (H/V) | F/S (μV/m) | F/S (dBμV/m) | DET. (QP/AVG) | MARGIN (dB) |
|----------------|----------------|--------------|--------------|---------------|-----------------|------------------|----------------|
| 2434 | - 48.2 | 33.7 | Н | 42169.7 | 92.5 | PEAK | - 1.5 |
| 4868* | - 98.0 | 40.2 | Н | 288.4 | 49.2 | PEAK | - 4.8 |
| 7302 | - 104.0 | 44.3 | Н | 231.7 | 47.3 | PEAK | - 6.7 |
| 9736 | - 105.0 | 46.6 | Н | 269.2 | 48.6 | PEAK | - 5.4 |
| 12170* | - 118.0 | 47.6 | Н | 67.6 | 36.6 | PEAK | - 17.4 |
| 14604 | < - 130.0 | ~ | ~ | ~ | ~ | ~ | ~ |

NOTES:

- 1. The limit at fundamental frequency is 50,000 μ V/m @ 3m. using QP detector. The harmonic limit is 500 μ V/m @ 3m.
- 2. The emissions radiated outside of the specified frequency band, except harmonics, are attenuated by at least 50dBc or to the limits in §15.209, whichever is lesser.
- 3. All harmonic emissions in the restricted bands specified in §15.205 are below the limit shown in Fig. 10 (Note: *).
- 4. The antenna is manipulated through typical positions and length during the tests.
- 5. The emissions are maximized by changing polarity of the antenna.
- 6. The EUT is supplied with the nominal AC voltage and/or a new/fully recharged battery.
- 7. All channels were investigated and the worst-case is reported.

* Restricted Band

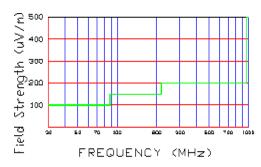


Figure 10. Spurious Radiated Limits at 3 meters

6.2 Frequency Measurements (Fundamental & Harmonics)

Operating Frequency: 2.473 GHz
Distance of Measurements: 3 meters
Channel: 2 (B)

| FREQ. (MHz) | Level (dBm) | AFCL (dB) | POL (H/V) | F/S (μV/m) | F/S (dBμV/m) | DET. (QP/AVG) | MARGIN (dB) |
|----------------|----------------|--------------|--------------|---------------|-----------------|------------------|----------------|
| 2473 | - 49.0 | 33.7 | Н | 38459.2 | 91.7 | PEAK | - 2.3 |
| 4946* | - 97.6 | 40.2 | Н | 302.0 | 49.6 | PEAK | - 4.4 |
| 7419* | - 104.0 | 44.3 | Н | 231.7 | 47.3 | PEAK | - 6.7 |
| 9892 | - 105.0 | 46.7 | Н | 272.3 | 48.7 | PEAK | - 5.3 |
| 12365* | - 118.0 | 47.8 | Н | 69.2 | 36.8 | PEAK | - 17.2 |
| 14838* | < - 130.0 | ~ | ~ | ~ | ~ | ~ | ~ |

NOTES:

- 1. The limit at fundamental frequency is 50,000 μ V/m @ 3m. using QP detector. The harmonic limit is 500 μ V/m @ 3m.
- 2. The emissions radiated outside of the specified frequency band, except harmonics, are attenuated by at least 50dBc or to the limits in §15.209, whichever is lesser.
- 3. All harmonic emissions in the restricted bands specified in §15.205 are below the limit shown in Fig. 11 (Note: *).
- 4. The antenna is manipulated through typical positions and length during the tests.
- 5. The emissions are maximized by changing polarity of the antenna.
- 6. The EUT is supplied with the nominal AC voltage and/or a new/fully recharged battery.
- 7. All channels were investigated and the worst-case is reported.

* Restricted Band

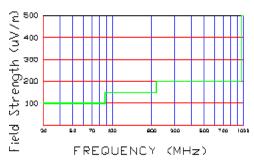


Figure 11. Spurious Radiated Limits at 3 meters

6.3 Frequency Measurements (Fundamental & Harmonics)

Operating Frequency: 2.453 GHz
Distance of Measurements: 3 meters
Channel: 3 (C)

| FREQ. (MHz) | Level (dBm) | AFCL (dB) | POL (H/V) | F/S (μV/m) | F/S (dBμV/m) | DET. (QP/AVG) | MARGIN (dB) |
|----------------|----------------|--------------|--------------|---------------|-----------------|------------------|----------------|
| 2453 | - 48.0 | 33.7 | Н | 43151.9 | 92.7 | PEAK | - 1.3 |
| 4906* | - 97.0 | 40.2 | Н | 323.6 | 50.2 | PEAK | - 3.8 |
| 7359* | - 103.0 | 44.3 | Н | 260.0 | 48.3 | PEAK | - 5.7 |
| 9812 | - 104.2 | 46.7 | Н | 298.5 | 49.5 | PEAK | - 4.5 |
| 12265* | - 118.0 | 47.7 | Н | 68.4 | 36.7 | PEAK | - 17.3 |
| 14700 | < - 130.0 | ~ | ~ | ~ | ~ | ~ | ~ |

NOTES:

- 1. The limit at fundamental frequency is 50,000 μ V/m @ 3m. using QP detector. The harmonic limit is 500 μ V/m @ 3m.
- 2. The emissions radiated outside of the specified frequency band, except harmonics, are attenuated by at least 50dBc or to the limits in §15.209, whichever is lesser.
- 3. All harmonic emissions in the restricted bands specified in §15.205 are below the limit shown in Fig. 12 (Note: *).
- 4. The antenna is manipulated through typical positions and length during the tests.
- 5. The emissions are maximized by changing polarity of the antenna.
- 6. The EUT is supplied with the nominal AC voltage and/or a new/fully recharged battery.
- 7. All channels were investigated and the worst-case is reported.

* Restricted Band

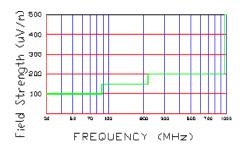


Figure 12. Spurious Radiated Limits at 3 meters

7.1 Frequency Measurements (Fundamental & Spurious)

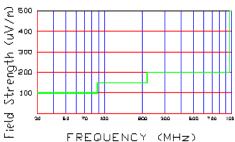
Operating Frequencies: 2.434 – 2.473 GHz

Distance of Measurements: 3 meters Channel(s): 1(A),2(B),3(C)

| Freq. (MHz) | Level* (dBm) | AFCL** (dB) | POL (H/V) | Height (m) | Azimuth (° angle) | F/S (μV/m) | MARGIN*** (dB) |
|----------------|-----------------|----------------|--------------|---------------|-------------------|---------------|-------------------|
| 69.1 | - 77.4 | 6.2 | V | 2.6 | 60 | 61.7 | - 4.2 |
| 86.2 | - 81.0 | 8.2 | Н | 2.4 | 180 | 51.3 | - 5.8 |
| 223.0 | - 84.8 | 17.6 | V | 1.5 | 90 | 97.7 | - 6.2 |
| 446.1 | - 79.8 | 24.8 | Н | 1.3 | 110 | 398.1 | - 6.0 |
| 620.5 | - 95.5 | 28.5 | Н | 1.2 | 160 | 100.0 | - 6.0 |
| 838.0 | - 97.2 | 31.8 | Н | 1.1 | 30 | 120.2 | - 4.4 |

Radiated Measurements at 3-meters.

NOTES:



are maximized by changing polarity of the antenna. 3. The EUT is supplied with the nominal AC voltage and/or a

4. The radiated limits are shown in Fig. 14.

new/fully-charged battery.

5. Peak readings were taken with the resolution bandwidth and video bandwidth set at 1MHz.

All channels were investigated and the worst-case are reported.
 The antenna is fully extended during the tests and the emissions

Figure 14. Spurious Radiated Limits at 3 meters

^{*} All readings are calibrated by HP8640B signal generator with accuracy traceable to the National Institute of Standards and Technology (formerly NBS).

^{**} AFCL = Antenna Factor (Roberts dipole) and Cable Loss (30 ft. RG58C/U).

^{***} Measurements using CISPR quasi-peak mode.

8.1 Line-Conducted Test Data

8.2 Conducted Emissions

(See Data under PLOTS - Attachment D)

NOTES:

- 1. All frequencies, channels, & modes of operation were investigated and the worst-case emissions are reported.
- 2. The limit for Class B device is 250μV from 450kHz to 30MHz.
- 3. Line A = Phase; Line B = Neutral
- 4. Deviations to the Specifications: None

9.1 Plots of Emissions

See Attachment D

10.1 Sample Calculations

 $dB\mu V = 20 log_{10} (\mu V/m)$

 $dB\mu V \ = \ dBm + 107$

10.2 Example 1:

@ 20.3 MHz

Class B limit = $250 \,\mu\text{V} = 47.96 \,d\text{B}\mu\text{V}$ Reading = $-67.8 \,d\text{Bm}$ (calibrated level)

Convert to db μ V = -67.8 + 107 = 39.2 dB μ V

 $10^{(39.2/20)}$ = 91.2 μ V

Margin = 39.2 - 47.96 = -8.76

= 8.8 dB below limit

10.3 Example 2:

@ 66.7 MHz

Class B limit = $100 \,\mu\text{V/m} = 47.96 \,dB\mu\text{V/m}$ Reading = $-76.0 \,dBm$ (calibrated level) Convert to $db\mu\text{V/m}$ = $-76.0 + 107 = 31.0 \,dB\mu\text{V/m}$

Antenna Factor + Cable Loss = 5.8 dB

Total = $36.8 dB\mu V/m$

Margin = 36.8 - 40.0 = -3.2

= 3.2 dB below limit

11.1 Accuracy of Measurement

11.2 Measurement Uncertainty Calculations:

The measurement uncertainties stated were calculated in accordance with the requirements of NIST Technical Note 1297 and NIS 81 (1994).

| Contribution | Probability | Uncertaint | y (± dB) |
|--|----------------|-------------|-----------|
| (Line Conducted) | Distribution | 9kHz-150MHz | 150-30MHz |
| Receiver specification | Rectangular | 1.5 | 1.5 |
| LISN coupling specification | Rectangular | 1.5 | 1.5 |
| Cable and input attenuator calibration | Normal (k=2) | 0.3 | 0.5 |
| Mismatch: Receiver VRC Γ_1 = 0.03 LISN VRC Γ_R = 0.8 (9kHz) 0.2 (30MHz) | U-Shaped | 0.2 | 0.35 |
| Uncertainty limits 20Log(1 \pm Γ_1 Γ_R) | | | |
| System repeatability | Std. deviation | 0.2 | 0.05 |
| Repeatability of EUT | | = | - |
| Combined standard uncertainty | Normal | 1.26 | 1.30 |
| Expanded uncertainty | Normal (k=2) | 2.5 | 2.6 |

Calculations for 150kHz to 30MHz:

$$u_{C}(y) = \sqrt{\sum_{i=1}^{m} u_{i}^{2}(y)} = \pm \sqrt{\frac{1.5^{2} + 1.5^{2}}{3} + (\frac{0.5}{2})^{2} + 0.35} = \pm 1.298dB$$

$$U = 2U_{C}(y) = \pm 2.6dB$$

| Contribution | Probability | Uncertain | ties (± dB) |
|--|----------------|-----------------|-----------------|
| (Radiated Emissions) | Distribution | 3 m | 10 m |
| Ambient Signals | | - | - |
| Antenna factor calibration | Normal (k=2) | ± 1.0 | ± 1.0 |
| Cable loss calibration | Normal (k=2) | ± 0.5 | ± 0.5 |
| Receiver specification | Rectangular | ± 1.5 | ±1.5 |
| Antenna directivity | Rectangular | + 0.5 / - 0 | + 0.5 |
| Antenna factor variation with height | Rectangular | ± 2.0 | ± 0.5 |
| Antenna phase centre variation | Rectangular | 0.0 | ± 0.2 |
| Antenna factor frequency interpolation | Rectangular | ±. 0.25 | ± 0.25 |
| Measurement distance variation | Rectangular | ± 0.6 | ± 0.4 |
| Site imperfections | Rectangular | ± 2.0 | ± 2.0 |
| Mismatch: Receiver VRC Γ_1 = 0.2 Antenna VRC Γ_R = 0.67 (Bi) 0.3 (Lp) Uncertainty limits 20Log(1 ± Γ_1 Γ_R) | U-Shaped | + 1.1 - 1.25 | ± 0.5 |
| System repeatability | Std. Deviation | ± 0.5 | ± 0.5 |
| Repeatability of EUT | | - | - |
| Combined standard uncertainty | Normal | + 2.19 / - 2.21 | + 1.74 / - 1.72 |
| Expanded uncertainty U | Normal (k=2) | + 4.38 / - 4.42 | + 3.48 / - 3.44 |

Calculations for 3m biconical antenna. Coverage factor of k=2 will ensure that the level of confidence will be approximately 95%, therefore:

$$U=2u_{C}(y) = 2 x \pm 2.19 = \pm 4.38dB$$

12.1 Test Equipment

| Type | Model | Cal. Due Date | S/N |
|----------------------------------|-------------------------------|--------------------------|----------------------------|
| Microwave Spectrum Analyzer | HP 8566B (100Hz-22GHz) | 08/15/00 | 3638A08713 |
| Microwave Spectrum Analyzer | HP 8566B (100Hz-22GHz) | 04/17/00 | 2542A11898 |
| Spectrum Analyzer/Tracking Gen. | HP 8591A (100Hz-1.8GHz) | 08/10/00 | 3144A02458 |
| Signal Generator | HP 8640B (500Hz-1GHz) | 08/09/00 | 2232A19558 |
| Signal Generator | HP 8640B (500Hz-1GHz) | 08/09/00 | 1851A09816 |
| Signal Generator | Rohde & Schwarz (0.1-1000MF | tz) 09/11/00 | 894215/012 |
| Ailtech/Eaton Receiver | NM 37/57A-SL (30-1000MH | z) 04/12/00 | 0792-03271 |
| Ailtech/Eaton Receiver | NM 37/57A (30-1000MHz) | 03/11/00 | 0805-03334 |
| Ailtech/Eaton Receiver | NM 17/27A (O.1-32MHz) | 09/17/00 | 0608-03241 |
| Quasi-Peak Adapter | HP 85650A | 08/15/00 | 2043A00301 |
| Ailtech/Eaton Adapter | CCA-7 CISPR/ANSI QP Adapte | er 03/11/00 | 0194-04082 |
| RG58 Coax Test Cable | No. 167 | | n/a |
| Harmonic/Flicker Test System | HP 6841A (IEC 555-2/3) | | 3531A00115 |
| Broadband Amplifier (2) | HP 8447D | | 1145A00470, 1937A03348 |
| Broadband Amplifier | HP 8447F | | 2443A03784 |
| Transient Limiter | HP 11947A (9kHz-200MHz) | | 2820A00300 |
| Horn Antenna | EMCO Model 3115 (1-18GHz) | | 9704-5182 |
| Horn Antenna | EMCO Model 3115 (1-18GHz) | | 9205-3874 |
| Horn Antenna | EMCO Model 3116 (18-40GHz) |) | 9203-2178 |
| Biconical Antenna (4) | Eaton 94455/Eaton 94455-1 | | ce Desian 1295, 1332, 0355 |
| Log-Spiral Antenna (3) | Ailtech/Eaton 93490-1 | 3 | 0608, 1103, 1104 |
| Roberts Dipoles | Compliance Design (1 set) | | |
| Ailtech Dipoles | DM-105A (1 set) | | 33448-111 |
| EMCO LISN | 3816/2 | | 1079 |
| EMCO LISN | 3816/2 | | 1077 |
| EMCO LISN | 3725/2 | | 2009 |
| Microwave Preamplifier 40dB Gain | HP 83017A (0.5-26.5GHz) | | 3123A00181 |
| Microwave Cables | MicroCoax (1.0-26.5GHz) | | |
| Ailtech/Eaton Receiver | NM37/57A-SL | | 0792-03271 |
| Spectrum Analyzer | HP 8594A | | 3051A00187 |
| Spectrum Analyzer (2) | HP 8591A | | 3034A01395, 3108A0205 |
| Modulation Analyzer | HP 8901A | | 2432A03467 |
| NTSC Pattern Generator | Leader 408 | | 0377433 |
| Noise Figure Meter | HP 8970B | | 3106A02189 |
| Noise Figure Meter | Ailtech 7510 | | TE31700 |
| Noise Generator | Ailtech 7010 | | 1473 |
| Microwave Survey Meter | Holaday Model 1501 (2.450GF | ·lz) | 80931 |
| Digital Thermometer | Extech Instruments 421305 | =7 | 426966 |
| Attenuator | HP 8495A (0-70dB) DC-4GH | 7 | , |
| Bi-Directional Coax Coupler | Narda 3020A (50-1000MHz) | | |
| Shielded Screen Room | RF Lindgren Model 26-2/2-0 | | 6710 (PCT270) |
| Shielded Seri-Anechoic Chamber | Ray Proof Model S81 | | R2437 (PCT278) |
| Environmental Chamber | Associated Systems Model 1025 | 5 (Temperature/Humidity) | PCT285 |

^{*} Calibration traceable to the National Institute of Standards and Technology (NIST).

13.1 Recommendation/Conclusion

The data collected shows that the **SAFETY 1ST**, **INC. 2.4GHz Low Power Wireless Camera Transmitter FCC ID: MNJ48016T** complies with Part 15 Subpart C of the FCC Rules.

No modifications were made to the device.