

FCC PART 15.249

EMI MEASUREMENT AND TEST REPORT

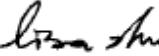
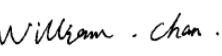
For

Summer Infant Inc.

582 Great Road North Smithfield, Rhode Island 02896 USA

FCC ID: PZK02160T

December 8, 2005

| | |
|--|---|
| This Report Concerns: <input checked="" type="checkbox"/> Original Report | Equipment Type: Transmitter, DUAL VIDEO MONITOR WITH SCAN |
| Test Engineer: Lisa Zhu William Chan |   |
| Report No.: RSZ05112102 | |
| Test Date: November 24-29, 2005 | |
| Reviewed By: Chris Zeng |  |
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Note: The test report is specially limited to the above company and this particular sample only.
It may not be duplicated without prior written consent of Bay Area Compliance Lab Corp.
(ShenZhen). This report must not be used by the client to claim product certification,
approval, or endorsement by NVLAP, NIST or any agency of the US Government.

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GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The Summer Infant Inc. 's product, model number: 02160 or the "EUT" as referred to in this report is a transmitter of DUAL VIDEO MONITOR WITH SCAN. The EUT is measured approximately 12.5 cm L x 10.0 cm W x 4.5 cm H, rated input voltage: DC 9 V.

Adaptor Manufacturer: Shenzhen WanJia Electrical Co., Ltd, model: WJ-AB-1F0045
Input: AC 100~240V-50/60Hz 0.6A, output: DC 9 V--500mA.

** The test data gathered are from production sample, serial number: 0000051212 provided by the manufacturer, we received EUT on 2005-11-21.*

Objective

This Type approval report is prepared on behalf of *Summer Infant Inc.* in accordance with Part 2, Subpart J, and Part 15, Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203,15.205,15.207,15.209 and 15.249 rules.

Related Submittal(s)/Grant(s)

No Related Submittals.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Lab Corp. (ShenZhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Lab Corp. (ShenZhen) to collect radiated and conducted emission measurement data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R.China.

Test site at Bay Area Compliance Lab Corp. (ShenZhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 04, 2004. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Lab Corp. (ShenZhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0). The current scope of accreditations can be found at
<http://ts.nist.gov/ts/htdocs/210/214/scopes/2007070.htm>

SYSTEM TEST CONFIGURATION

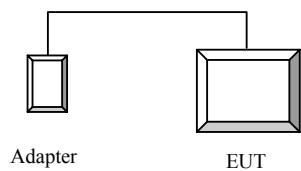
Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

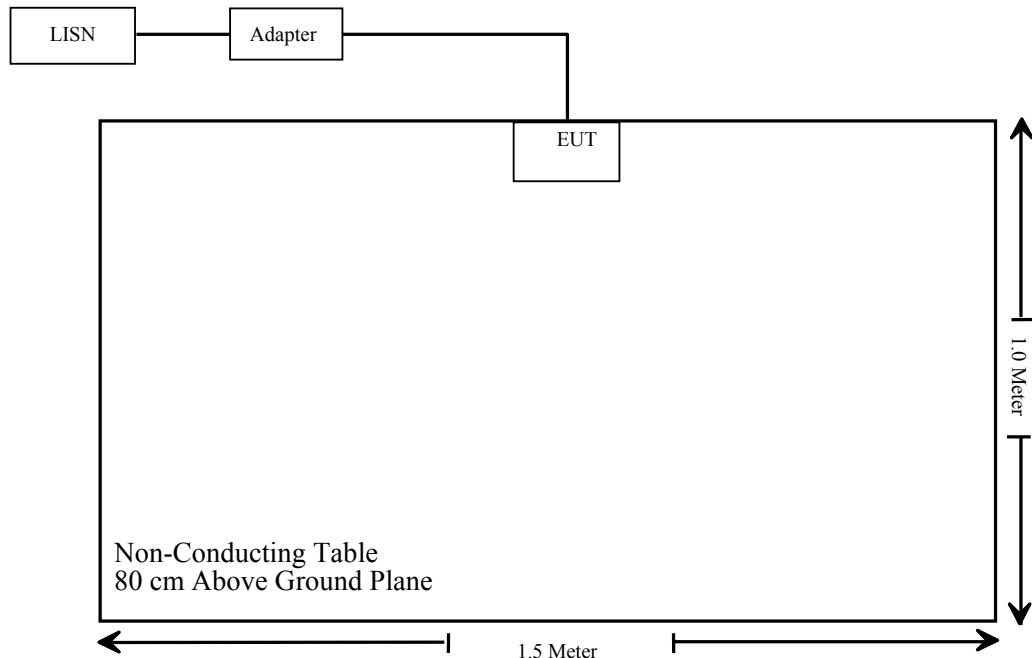
Equipment Modifications

Bay Area Compliance Lab Corp. (ShenZhen) has not done any modification on the EUT.

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

| FCC RULES | DESCRIPTION OF TEST | RESULT |
|------------------------------------|-------------------------------|------------|
| §15.203 | Antenna Requirement | Compliant |
| §15.205 | Restricted Bands of Operation | Compliant |
| §15.207(a) | Conduction Emission | Compliant* |
| §15.209(a), §15.249(a), §15.249(c) | Radiated Emission | Compliant* |
| §15.249(d) | Out of band emission | Compliant |

* Within measurement uncertainty

§15.203 - ANTENNA APPLICATION

Standard Applicable

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

This product has a permanent antenna, fulfill the requirement of this section.

Test Result: Pass

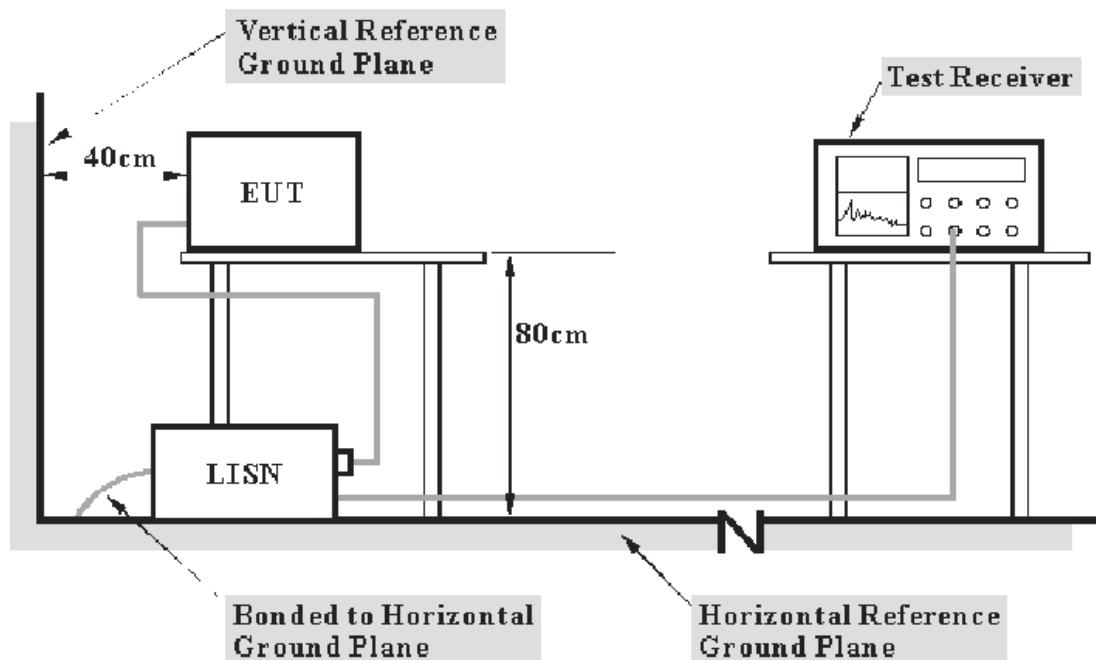
§15.207 - CONDUCTED EMISSION

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Lab Corp. (ShenZhen) is ± 2.4 dB.

EUT Setup



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15 .207 limits.

EMI Test Receiver Setup

The test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| <i>Frequency Range</i> | <i>IFBW</i> |
|-------------------------------|--------------------|
| 150 kHz – 30 MHz | 9 kHz |

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---------------------|--------------------|--------------|----------------------|-------------------------|-----------------------------|
| Com-Power | L.I.S.N. | LI-200 | 12005 | N/A | N/A |
| Com-Power | L.I.S.N. | LI-200 | 12008 | N/A | N/A |
| Rohde & Schwarz | EMI Test Receiver | ESCS30 | 830245/006 | 2005-1-26 | 2006-1-26 |
| Rohde & Schwarz | L.I.S.N. | ESH2-Z5 | 892107/021 | 2005-2-28 | 2006-2-28 |

* Com-Power's LISN were used as the supporting equipment.

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

From the audio generator connect to the speaker, the distance between the EUT and the microphone was 10 cm.

Test Results Summary

According to the recorded data in following table, the EUT complied with the [FCC Part 15.207](#), with the worst margin reading of:

-1.72 dB at 0.175 MHz in the Line conductor mode.

Test Data

Environmental Conditions

| | |
|--------------------|----------|
| Temperature: | 25 ° C |
| Relative Humidity: | 55% |
| ATM Pressure: | 1002mbar |

The testing was performed by Lisa Zhu on 2005-11-29.

Test mode: Transmitting

| LINE CONDUCTED EMISSIONS | | | | FCC PART 15 .207 | |
|--------------------------|-------------------------|-------------------|-----------------------|---------------------|--------------|
| Frequency MHz | Amplitude dB μ V | Detector QP/AV | Phase Line/Neutral | Limit dB μ V | Margin dB |
| 0.175 | 63.00 | QP | Line | 64.72 | -1.72 * |
| 0.175 | 60.40 | QP | Neutral | 64.72 | -4.32 |
| 0.175 | 50.40 | AV | Line | 54.72 | -4.32 |
| 0.350 | 44.60 | AV | Line | 48.96 | -4.36 |
| 0.235 | 57.00 | QP | Line | 62.27 | -5.27 |
| 0.410 | 42.20 | AV | Line | 47.65 | -5.45 |
| 0.465 | 40.80 | AV | Line | 46.60 | -5.80 |
| 0.175 | 48.90 | AV | Neutral | 54.72 | -5.82 |
| 0.235 | 44.50 | AV | Line | 52.27 | -7.77 |
| 0.290 | 52.10 | QP | Line | 60.52 | -8.42 |
| 0.410 | 48.90 | QP | Line | 57.65 | -8.75 |
| 0.230 | 43.40 | AV | Neutral | 52.45 | -9.05 |
| 0.350 | 49.80 | QP | Line | 58.96 | -9.16 |
| 0.230 | 52.80 | QP | Neutral | 62.45 | -9.65 |
| 0.290 | 40.70 | AV | Line | 50.52 | -9.82 |
| 0.465 | 46.00 | QP | Line | 56.60 | -10.60 |
| 0.405 | 36.70 | AV | Neutral | 47.75 | -11.05 |
| 0.290 | 38.70 | AV | Neutral | 50.52 | -11.82 |
| 0.290 | 48.30 | QP | Neutral | 60.52 | -12.22 |
| 0.350 | 35.60 | AV | Neutral | 48.96 | -13.36 |
| 0.525 | 32.30 | AV | Neutral | 46.00 | -13.70 |
| 0.405 | 43.80 | QP | Neutral | 57.75 | -13.95 |
| 0.525 | 39.40 | QP | Neutral | 56.00 | -16.60 |
| 0.350 | 41.90 | QP | Neutral | 58.96 | -17.06 |

* Within measurement uncertainty

Plot(s) of Test Data

Plot(s) of Test Data is presented hereinafter as reference.

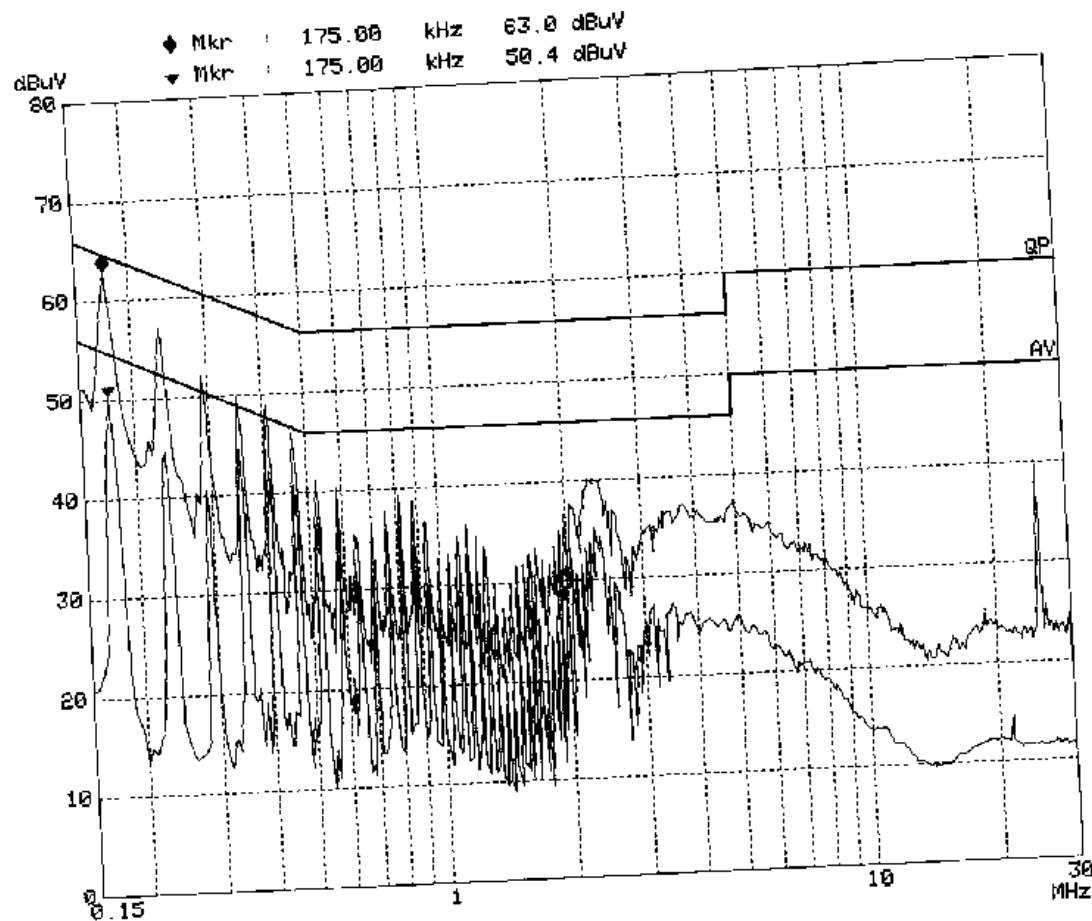
Conducted EMISSION test
FCC Part 15

DUAL VIDEO MONITOR WITH SCAN M/N:02160

EUT: Wanja
Manuf: Wanja
Op Cond: Transmitting
Operator: Lisa
Test Spec: AC 120V/60Hz L
Comment: Temp:25
Humi:55%
Date: 29. Nov 05 15:24

Scan Settings (1 Range)
----- Frequencies ----- | Receiver Settings -----|
| Start Stop Step IF BW Detector M-Time Atten Preamp
| 150k 30M 5k 9k PK+AV 20ms AUTO LN OFF
Transducer No. Start Stop Name
1 9k 30M FACTOR

Final Measurement: x QP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 6dB



**Conducted EMISSION test
FCC Part 15**

EUT: DUAL VIDEO MONITOR WITH SCAN M/N:02160

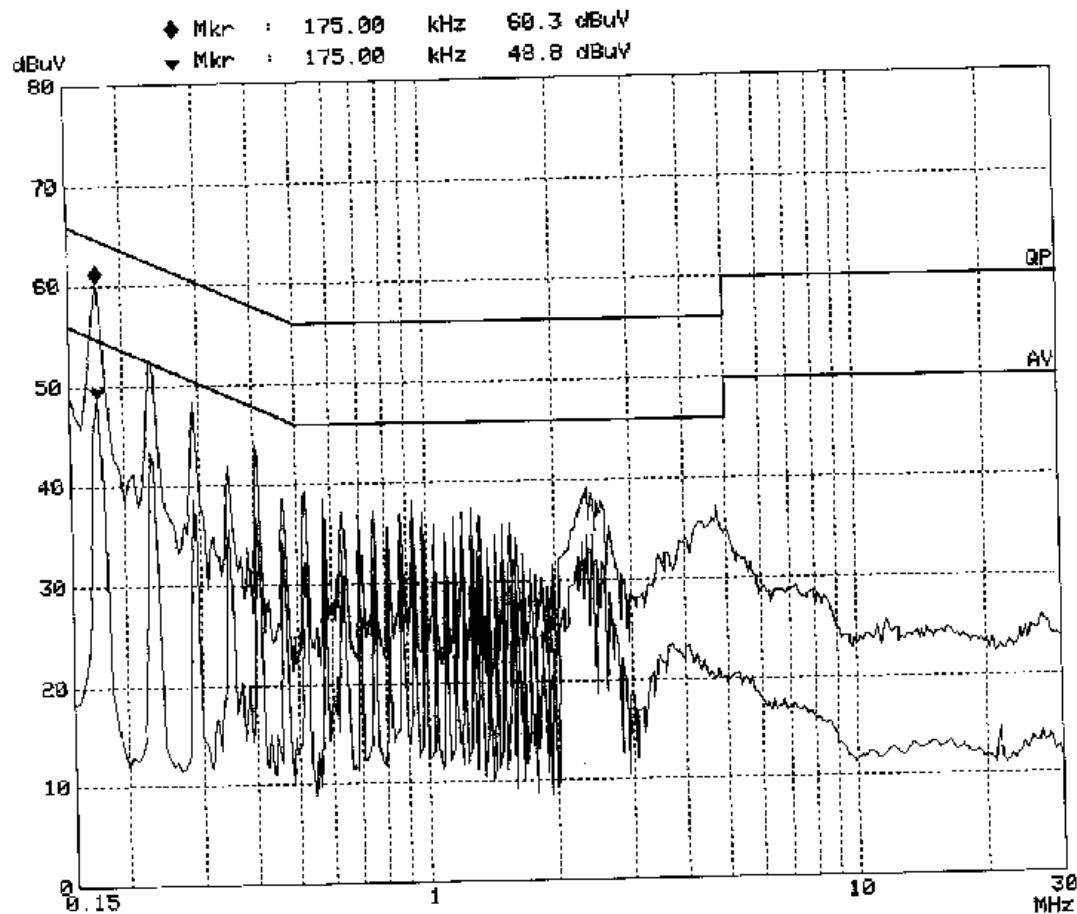
Manuf: Wanjia
Op Cond: Transmitting
Operator: Lisa
Test Spec: AC 120V/60Hz N
Comment: Temp:25
Humi:55%
Date: 29. Nov 05 15:40

scan Settings (1 Range)

| Frequencies | | | Receiver Settings | | | | |
|-------------|------|------|-------------------|----------|--------|-------|--------|
| Start | Stop | Step | IF BW | Detector | M-Time | Atten | Preamp |
| 150k | 30M | 5k | 9k | PK+AV | 20ms | AUTO | LN OFF |

| Transducer No. | Start | Stop | Name |
|----------------|-------|------|--------|
| 1 | 9k | 30M | FACTOR |

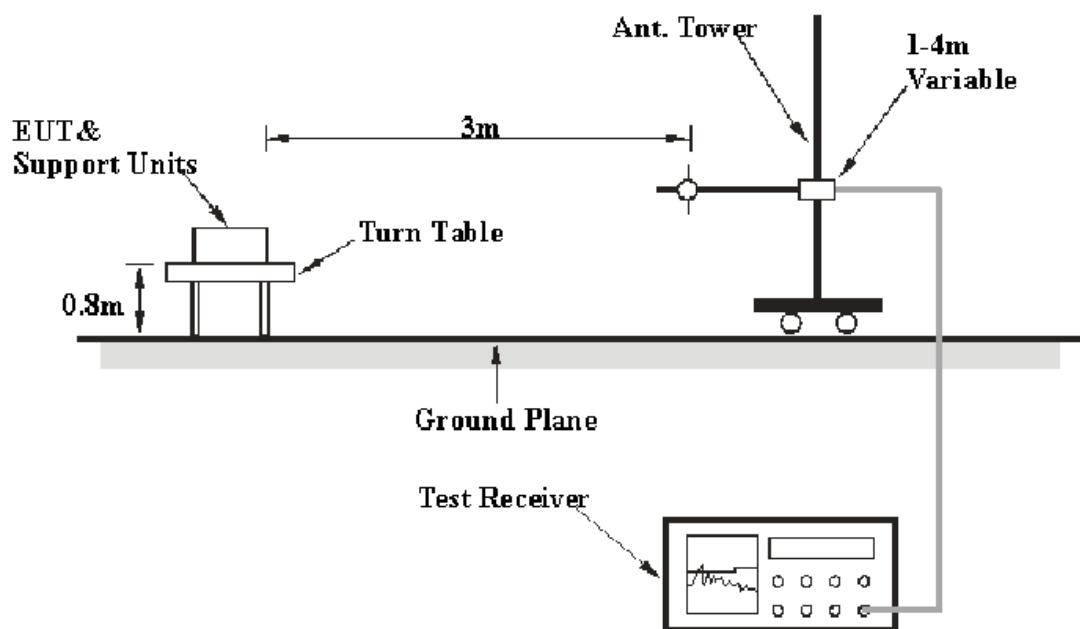
Final Measurement: x QP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 6dB



§15.205 §15.209(a) §15.249(a) - RADIATED EMISSION**Measurement Uncertainty**

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at Bay Area Compliance Lab Corp. (ShenZhen) is ± 4.0 dB.

EUT Setup

The radiated emission tests were performed in the 3-meter Chamber, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209 and FCC 15.249 limits.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 25000 MHz.

During the radiated emission test, the test receiver was set with the following configurations:

| <i>Frequency Range</i> | <i>RBW</i> | <i>Video B/W</i> |
|-------------------------------|-------------------|-------------------------|
| 30 – 1000 MHz | 100 kHz | 300 kHz |
| 1000 MHz – 25000 MHz | 1MHz | 3 MHz |

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---------------------|--------------------|--------------|----------------------|-------------------------|-----------------------------|
| HP | Amplifier | 8447D | 2944A09795 | 2005-8-17 | 2006-8-17 |
| Rohde & Schwarz | EMI Test Receiver | ESCI | 100028 | 2005-8-17 | 2006-8-17 |
| Sunol Sciences | Broadband Antenna | JB1 | A040904-1 | 2005-4-28 | 2006-4-28 |
| HP | Spectrum analyzer | 8593A | 2919A00242 | 2005-2-28 | 2006-2-28 |
| HP | Preamplifier | 8449B | 3008A00277 | 2005-8-17 | 2006-8-17 |
| SUNOL SCIENCES | Horn Antenna | DRH-118 | A052604 | 2005-7-20 | 2006-7-20 |

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

For the radiated emissions test, the adapter power cords were connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the Quasi-peak detection mode.

From the audio generator connect to the speaker, the distance between the EUT and the microphone was 10 cm.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Meter Reading} + \text{Antenna Loss} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Standard Limit}$$

Test Results Summary

According to the data in the following table, the EUT complied with the [FCC Part 15.249](#), with the worst margin reading of:

30-1000MHz: **-6.9 dB** at **30.00 MHz** in the **Vertical** polarization.
 1-25 GHz (Low channel): **-5.0 dB** at **4820 MHz** in the **Vertical** polarization.
 1-25 GHz (Middle channel): **-4.3 dB** at **4882 MHz** in the **Vertical** polarization.
 1-25 GHz (High channel): **-5.0 dB** at **4936 MHz** in the **Vertical** polarization.

Test Data

Environmental Conditions

| | |
|--------------------|----------|
| Temperature: | 27 ° C |
| Relative Humidity: | 55% |
| ATM Pressure: | 1000mbar |

The testing was performed by William Chan on 2005-11-24.

Test mode: Transmitting

| Frequency MHz | Meter Reading dBuV/m | Detector PK/QP/AV | Direction Degree | Height Meter | Polar H / V | Antenna Loss dB | Cable loss dB | Amplifier Gain dB | Corr. Ampl. dBuV/m | FCC Part 15.249 | |
|------------------|----------------------------|----------------------|---------------------|-----------------|----------------|-----------------------|------------------|-------------------------|-----------------------|-----------------|--------------|
| | | | | | | | | | | Limit dBuV/m | Margin dB |
| 30-1000MHz | | | | | | | | | | | |
| 30.00 | 37.3 | PK | 45 | 1.2 | V | 24.1 | 0.6 | 28.8 | 33.1 | 40.0 | -6.9 |
| 32.17 | 37.1 | PK | 60 | 1.0 | V | 24.1 | 0.6 | 28.8 | 33.0 | 40.0 | -7.1 |
| 30.42 | 36.0 | PK | 180 | 1.0 | V | 24.1 | 0.6 | 28.8 | 31.9 | 40.0 | -8.1 |
| 31.50 | 35.8 | PK | 180 | 1.0 | H | 24.1 | 0.6 | 28.8 | 31.6 | 40.0 | -8.4 |
| 31.07 | 35.5 | PK | 45 | 1.0 | H | 24.1 | 0.6 | 28.8 | 31.3 | 40.0 | -8.7 |
| 900.14 | 37.5 | PK | 180 | 1.0 | V | 22.9 | 3.5 | 27.9 | 36.0 | 46.0 | -10.0 |
| 202.10 | 41.2 | PK | 120 | 1.0 | V | 12.6 | 1.3 | 28.0 | 27.1 | 43.5 | -16.4 |
| 52.20 | 42.1 | PK | 270 | 1.2 | H | 8.5 | 0.7 | 28.7 | 22.6 | 40.0 | -17.4 |
| 202.10 | 37.3 | PK | 270 | 1.0 | H | 12.6 | 1.3 | 28.0 | 23.2 | 43.5 | -20.4 |
| 207.85 | 37.3 | PK | 45 | 1.2 | H | 11.9 | 1.3 | 27.9 | 22.6 | 43.5 | -20.9 |
| 191.07 | 37.4 | PK | 360 | 1.2 | H | 11.8 | 1.3 | 28.0 | 22.5 | 43.5 | -21.0 |
| 251.18 | 37.5 | PK | 60 | 1.0 | V | 12.3 | 1.3 | 27.6 | 23.5 | 46.0 | -22.5 |

Summer Infant Inc.

FCC ID: PZK02160T

| Frequency MHz | Meter Reading dBuV/m | Detector PK/QP/AV | Direction Degree | Height Meter | Polar H / V | Antenna Loss dB | Cable loss dB | Amplifier Gain dB | Corr. Ampl. dBuV/m | FCC Part 15.249 | | |
|------------------------|----------------------------|----------------------|---------------------|-----------------|----------------|-----------------------|---------------------|-------------------------|--------------------------|-----------------|--------------|--------------|
| | | | | | | | | | | Limit dBuV/m | Margin dB | Comment |
| 1-25 GHz (Low Channel) | | | | | | | | | | | | |
| 4820 | 43.02 | AV | 60 | 1.0 | V | 33.8 | 5.2 | 33.00 | 49.0 | 54 | -5.0 | AV(harmonic) |
| 4820 | 60.62 | PK | 45 | 1.0 | V | 33.8 | 5.2 | 33.00 | 66.6 | 74 | -7.4 | PK(harmonic) |
| 7230 | 36.54 | AV | 180 | 1.2 | V | 36.8 | 6.1 | 33.50 | 45.9 | 54 | -8.1 | AV(harmonic) |
| 9640 | 35.41 | AV | 60 | 1.0 | V | 38.0 | 7.1 | 34.72 | 45.8 | 54 | -8.2 | AV(harmonic) |
| 4820 | 37.46 | AV | 60 | 1.0 | H | 33.8 | 5.2 | 33.00 | 43.5 | 54 | -10.5 | AV(harmonic) |
| 2410 | 86.72 | AV | 180 | 1.2 | V | 28.1 | 3.7 | 35.16 | 83.4 | 94 | -10.6 | AV(fund) |
| 2410 | 106.70 | PK | 45 | 1.0 | V | 28.1 | 3.7 | 35.16 | 103.4 | 114 | -10.7 | PK(fund) |
| 7230 | 33.71 | AV | 180 | 1.2 | H | 36.8 | 6.1 | 33.50 | 43.1 | 54 | -10.9 | AV(harmonic) |
| 4820 | 55.52 | PK | 45 | 1.0 | H | 33.8 | 5.2 | 33.00 | 61.5 | 74 | -12.5 | PK(harmonic) |
| 9640 | 30.52 | AV | 60 | 1.0 | H | 38.0 | 7.1 | 34.72 | 40.9 | 54 | -13.1 | AV(harmonic) |
| 7230 | 51.43 | PK | 45 | 1.2 | V | 36.8 | 6.1 | 33.50 | 60.8 | 74 | -13.2 | PK(harmonic) |
| 9640 | 50.12 | PK | 45 | 1.2 | V | 38.0 | 7.1 | 34.72 | 60.5 | 74 | -13.5 | PK(harmonic) |
| 7230 | 49.60 | PK | 45 | 1.2 | H | 36.8 | 6.1 | 33.50 | 59.0 | 74 | -15.0 | PK(harmonic) |
| 9640 | 45.59 | PK | 45 | 1.2 | H | 38.0 | 7.1 | 34.72 | 56.0 | 74 | -18.0 | PK(harmonic) |
| 2410 | 96.02 | PK | 45 | 1.0 | H | 28.1 | 3.7 | 35.16 | 92.7 | 114 | -21.3 | PK(fund) |
| 2410 | 75.71 | AV | 180 | 1.2 | H | 28.1 | 3.7 | 35.16 | 72.4 | 94 | -21.7 | AV(fund) |

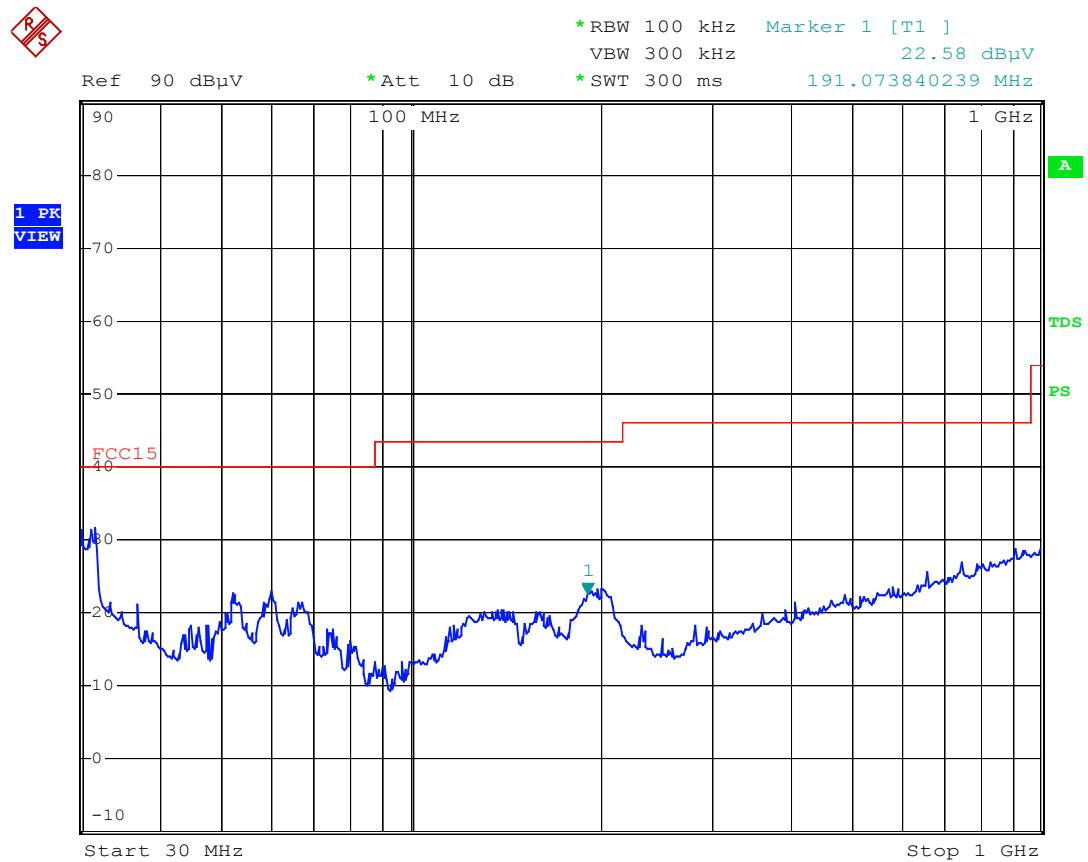
| Frequency MHz | Meter Reading dBuV/m | Detector PK/QP/AV | Direction Degree | Height Meter | Polar H / V | Antenna Loss dB | Cable loss dB | Amplifier Gain dB | Corr. Ampl. dBuV/m | FCC Part 15.249 | | |
|---------------------------|----------------------------|----------------------|---------------------|-----------------|----------------|-----------------------|---------------------|-------------------------|--------------------------|-----------------|--------------|--------------|
| | | | | | | | | | | Limit dBuV/m | Margin dB | Comment |
| 1-25 GHz (Middle Channel) | | | | | | | | | | | | |
| 4882 | 43.71 | AV | 60 | 1.0 | V | 33.8 | 5.2 | 33.00 | 49.7 | 54 | -4.3 | AV(harmonic) |
| 4882 | 61.94 | PK | 45 | 1.0 | V | 33.8 | 5.2 | 33.00 | 67.9 | 74 | -6.1 | PK(harmonic) |
| 9764 | 35.41 | AV | 60 | 1.0 | H | 38.0 | 7.1 | 34.72 | 45.8 | 54 | -8.2 | AV(harmonic) |
| 9764 | 35.41 | AV | 60 | 1.0 | V | 38.0 | 7.1 | 34.72 | 45.8 | 54 | -8.2 | AV(harmonic) |
| 4882 | 39.05 | AV | 60 | 1.0 | H | 33.8 | 5.2 | 33.00 | 45.1 | 54 | -9.0 | AV(harmonic) |
| 7323 | 35.41 | AV | 180 | 1.2 | H | 36.8 | 6.1 | 33.50 | 44.8 | 54 | -9.2 | AV(harmonic) |
| 7323 | 35.41 | AV | 180 | 1.2 | V | 36.8 | 6.1 | 33.50 | 44.8 | 54 | -9.2 | AV(harmonic) |
| 4882 | 56.55 | PK | 45 | 1.0 | H | 33.8 | 5.2 | 33.00 | 62.6 | 74 | -11.5 | PK(harmonic) |
| 7323 | 51.54 | PK | 45 | 1.2 | H | 36.8 | 6.1 | 33.50 | 60.9 | 74 | -13.1 | PK(harmonic) |
| 9764 | 50.38 | PK | 45 | 1.2 | V | 38.0 | 7.1 | 34.72 | 60.8 | 74 | -13.2 | PK(harmonic) |
| 9764 | 50.06 | PK | 45 | 1.2 | H | 38.0 | 7.1 | 34.72 | 60.4 | 74 | -13.6 | PK(harmonic) |
| 2441 | 103.80 | PK | 45 | 1.0 | V | 28.1 | 3.7 | 35.16 | 100.4 | 114 | -13.6 | PK(fund) |
| 7323 | 50.06 | PK | 45 | 1.2 | V | 36.8 | 6.1 | 33.50 | 59.5 | 74 | -14.5 | PK(harmonic) |
| 2441 | 81.99 | AV | 180 | 1.2 | V | 28.1 | 3.7 | 35.16 | 78.6 | 94 | -15.4 | AV(fund) |
| 2441 | 93.12 | PK | 45 | 1.0 | H | 28.1 | 3.7 | 35.16 | 89.8 | 114 | -24.2 | PK(fund) |
| 2441 | 72.06 | AV | 180 | 1.2 | H | 28.1 | 3.7 | 35.16 | 68.7 | 94 | -25.3 | AV(fund) |

Summer Infant Inc.

FCC ID: PZK02160T

| Frequency MHz | Meter Reading dBuV/m | Detector PK/QP/AV | Direction Degree | Height Meter | Polar H / V | Antenna Loss dB | Cable loss dB | Amplifier Gain dB | Corr. Ampl. dBuV/m | FCC Part 15.249 | | |
|-------------------------|----------------------------|----------------------|---------------------|-----------------|----------------|-----------------------|---------------------|-------------------------|--------------------------|-----------------|--------------|--------------|
| | | | | | | | | | | Limit dBuV/m | Margin dB | Comment |
| 1-25 GHz (High Channel) | | | | | | | | | | | | |
| 4936 | 43.02 | AV | 60 | 1.0 | V | 33.8 | 5.2 | 33.00 | 49.0 | 54 | -5.0 | AV(harmonic) |
| 4936 | 60.71 | PK | 45 | 1.0 | V | 33.8 | 5.2 | 33.00 | 66.7 | 74 | -7.3 | PK(harmonic) |
| 4936 | 40.52 | AV | 60 | 1.0 | H | 33.8 | 5.2 | 33.00 | 46.5 | 54 | -7.5 | AV(harmonic) |
| 9872 | 35.41 | AV | 60 | 1.0 | H | 37.6 | 7.3 | 34.50 | 45.8 | 54 | -8.2 | AV(harmonic) |
| 9872 | 34.51 | AV | 60 | 1.0 | V | 37.6 | 7.3 | 34.50 | 44.9 | 54 | -9.1 | AV(harmonic) |
| 4936 | 57.00 | PK | 45 | 1.0 | H | 33.8 | 5.2 | 33.00 | 63.0 | 74 | -11.0 | PK(harmonic) |
| 7404 | 34.51 | AV | 180 | 1.2 | H | 35.8 | 6.1 | 34.11 | 42.3 | 54 | -11.7 | AV(harmonic) |
| 7404 | 33.48 | AV | 180 | 1.2 | V | 35.8 | 6.1 | 34.11 | 41.3 | 54 | -12.7 | AV(harmonic) |
| 2468 | 84.57 | AV | 180 | 1.2 | V | 28.1 | 3.7 | 35.16 | 81.2 | 94 | -12.8 | AV(fund) |
| 9872 | 50.06 | PK | 45 | 1.2 | V | 37.6 | 7.3 | 34.50 | 60.5 | 74 | -13.5 | PK(harmonic) |
| 9872 | 48.67 | PK | 45 | 1.2 | H | 37.6 | 7.3 | 34.50 | 59.1 | 74 | -14.9 | PK(harmonic) |
| 2468 | 102.40 | PK | 45 | 1.0 | V | 28.1 | 3.7 | 35.16 | 99.1 | 114 | -15.0 | PK(fund) |
| 7404 | 50.06 | PK | 45 | 1.2 | V | 35.8 | 6.1 | 34.11 | 57.9 | 74 | -16.2 | PK(harmonic) |
| 7404 | 49.39 | PK | 45 | 1.2 | H | 35.8 | 6.1 | 34.11 | 57.2 | 74 | -16.8 | PK(harmonic) |
| 2468 | 75.80 | AV | 180 | 1.2 | H | 28.1 | 3.7 | 35.16 | 72.4 | 94 | -21.6 | AV(fund) |
| 2468 | 93.30 | PK | 45 | 1.0 | H | 28.1 | 3.7 | 35.16 | 89.9 | 114 | -24.1 | PK(fund) |

* Within measurement uncertainty

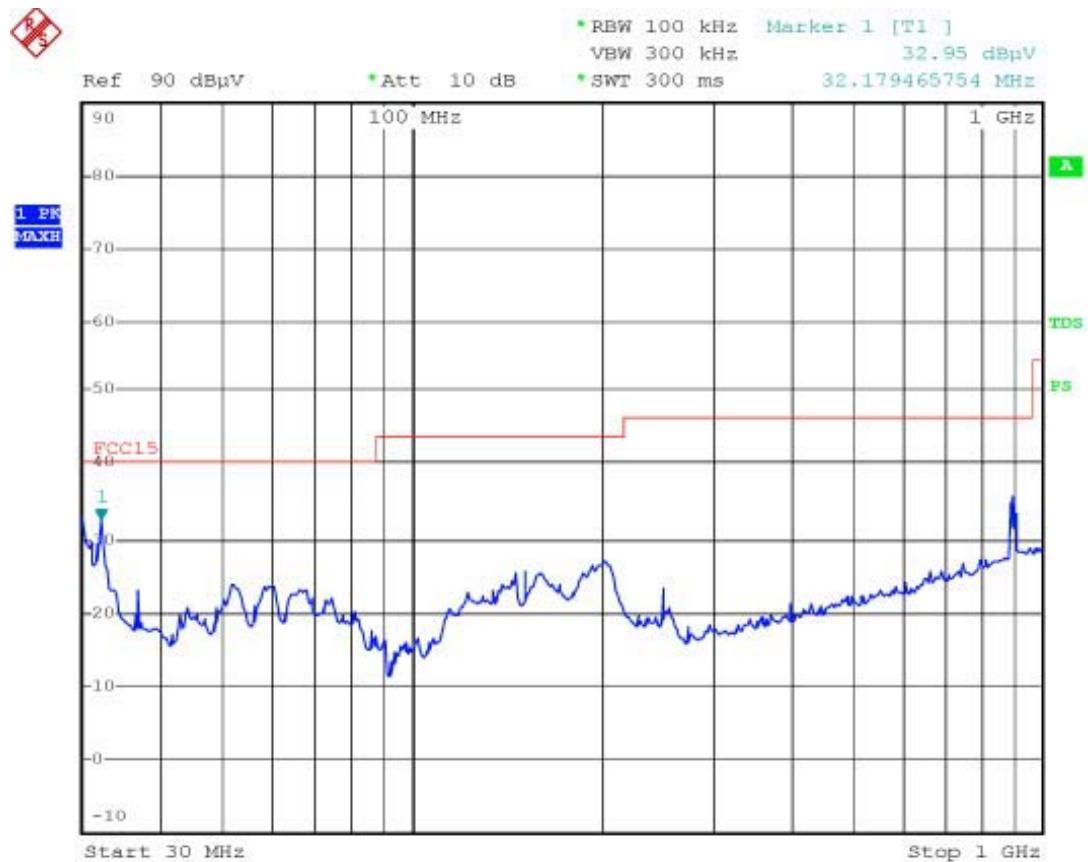


Wanjia Dual video monitor with scan 02160- Transmitting - Horizontal

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Summer Infant Inc.

FCC ID: PZK02160T



Wanjia Dual video monitor with scan 02160- Transmitting - Ve

rtical

Date: 24.NOV.2005 17:16:16

§15.249(d) – OUT OF BAND EMISSION

Standard Applicable

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

Test Procedure

With the EUT's antenna attached, the EUT's radiated emission power was received by the test antenna which was connected to the spectrum analyzer with the START and STOP frequencies set to the EUT's operation band.

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|-------------------|-------|---------------|------------------|----------------------|
| HP | Amplifier | 8447E | 1937A01046 | 2005-8-17 | 2006-8-17 |
| Rohde & Schwarz | EMI Test Receiver | ESCI | 100035 | 2005-8-17 | 2006-8-17 |
| Sunol Sciences | Broadband Antenna | JB1 | A040904-2 | 2005-4-28 | 2006-4-28 |
| HP | Amplifier | 8447D | 2994A09795 | 2005-8-17 | 2006-8-17 |
| Rohde & Schwarz | EMI Test Receiver | ESCI | 100028 | 2005-8-17 | 2006-8-17 |
| Sunol Sciences | Broadband Antenna | JB1 | A040904-1 | 2005-4-28 | 2006-4-28 |

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) Corp. attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

| | |
|--------------------|----------|
| Temperature: | 25 °C |
| Relative Humidity: | 55% |
| ATM Pressure: | 1016mbar |

The testing was performed by Lisa Zhu on 2005-11-24.

The result has been complied with the 15.249(d), see the following plot:

| Frequency MHz | Emission dB μ V/m | Limit dB μ V/m |
|------------------|--------------------------|-----------------------|
| 2483.5 | 20.98 | 54 |
| 2400.0 | 23.48 | 54 |

Test Result: Pass

Summer Infant Inc.

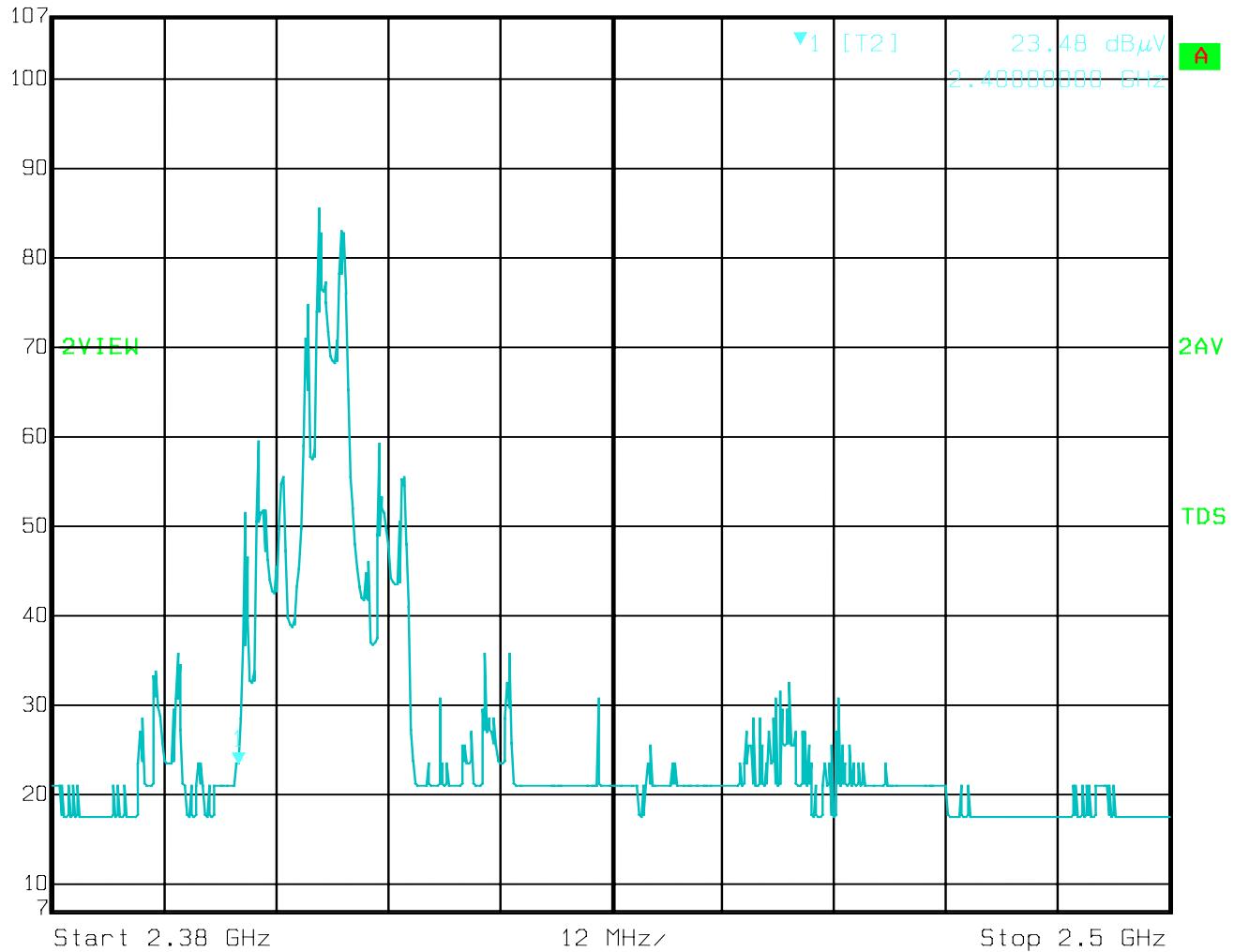
FCC ID: PZK02160T



Ref Lvl
107 dB μ V

Marker 1 [T2]
23.48 dB μ V
2.40000000 GHz

RBW 100 kHz RF Att 10 dB
VBW 300 kHz
SWT 500 ms Unit dB μ V



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Summer Infant Inc.

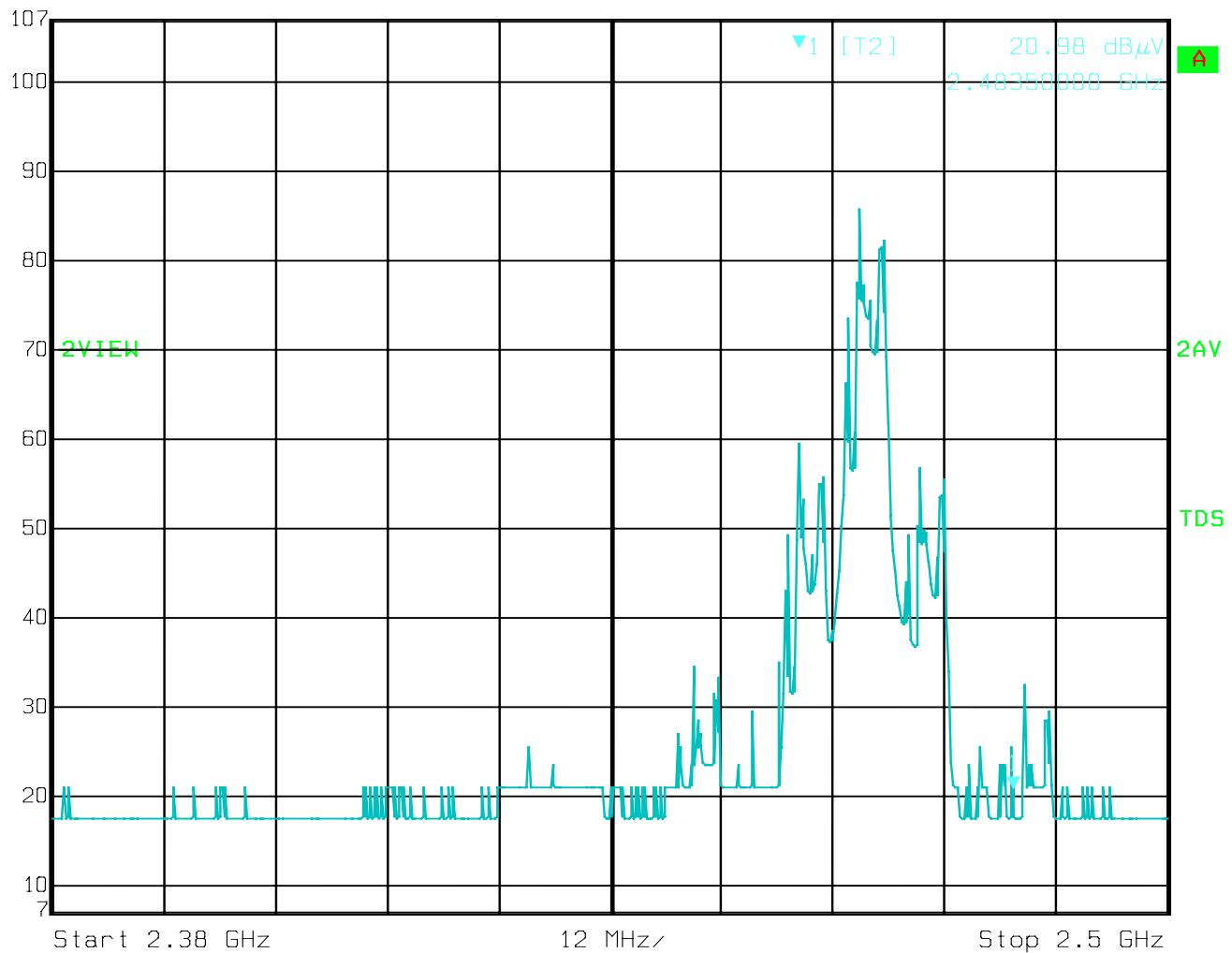
FCC ID: PZK02160T



Ref Lvl
107 dB μ V

Marker 1 [T2]
20.98 dB μ V
2.48350000 GHz

RBW 100 kHz RF Att 10 dB
VBW 300 kHz
SWT 500 ms Unit dB μ V



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