| <b>Elliott</b> |                       | EMC Test Data |            |  |
|----------------|-----------------------|---------------|------------|--|
| Client:        | TOA Corporation       | Job Number:   | J41857     |  |
| Model:         | WM-3210 & WM-3220     | T-Log Number: | T42291     |  |
|                |                       | Proj Eng:     | David Bare |  |
| Contact:       | Hisayuki Okuoka       |               |            |  |
| Spec:          | FCC 74, 90, & RSS-123 | Class:        | N/A        |  |

# Frequency Stability (Section 2.1055)

## **Test Specifics**

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the

specification listed above.

Date of Test: 7/7/01 Config. Used: 1
Test Engineer: jmartinez Config Change: None
Test Location: Environmental Chamber EUT Voltage: 9Vdc

#### **General Test Configuration**

A spectrum analyzer, a combiner, and support equipment were all place on top of a table. The EUT was connected directly to the spectrum analyzer by a low loss coaxial cable, so as to measure the frequency drift. The EUT was placed inside the temperature

Ambient Conditions: Temperature: N/A

Rel. Humidity: N/A

#### **Summary of Results**

| Run # | Test Performed            | Limit      | Result | Comments |
|-------|---------------------------|------------|--------|----------|
| 1     | Temperature Vs. Frequency | FCC 90.265 | Pass   |          |
|       |                           |            |        |          |

### Modifications Made During Testing: None

| <b>Elliott</b> |                       | EMC Test Data |            |  |
|----------------|-----------------------|---------------|------------|--|
| Client:        | TOA Corporation       | Job Number:   | J41857     |  |
| Model:         | WM-3210 & WM-3220     | T-Log Number: | T42291     |  |
|                |                       | Proj Eng:     | David Bare |  |
| Contact:       | Hisayuki Okuoka       |               |            |  |
| Spec:          | FCC 74, 90, & RSS-123 | Class:        | N/A        |  |

## Run# 1: Temperature Vs. Frequency

Frequency: 171.04 MHz

Note:

| Temperature    | <u>Drift</u> | 99% Occupied BW | <u>Limit</u> |
|----------------|--------------|-----------------|--------------|
| <u>Celsius</u> | <u>(Hz)</u>  | <u>(kHz)</u>    | <u>(kHz)</u> |
| -30            | 2620         | 29.8            | +/-32.5      |
| -20            | 1320         | 28.6            | +/-32.5      |
| -10            | 620          | 29.2            | +/-32.5      |
| 0              | 100          | 26.5            | +/-32.5      |
| 10             | 20           | 27.6            | +/-32.5      |
| 20             | 30           | 25.3            | +/-32.5      |
| 30             | 2            | 25.1            | +/-32.5      |
| 40             | -48          | 25.4            | +/-32.5      |
| 50             | 120          | 25.3            | +/-32.5      |

For this test the modulation test tone (2.5 kHz) was injected directy into the handheld microphone (Max input was - 25.8 dBm). The Occupied Bandwidth was measured for each temperature change.