

**Nemko Test Report:** 1L0269RUS2

**Applicant:** Grayson Wireless  
140 Vista Center Drive  
Forest, Virginia 24551

**Equipment Under Test:  
(E.U.T.)** GMWT 0820

**FCC ID:**

**In Accordance With:** **FCC Part 90, Subpart I**  
Base Station Transmitter

**Tested By:** Nemko Dallas Inc.  
802 N. Kealy  
Lewisville, TX 75057-3136

**Authorized By:**



Tom Tidwell, Wireless Group Manager

**Date:** 7/16/01

**Total Number of Pages:** 31

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**Section 1. Summary of Test Results**

Manufacturer: Grayson Wireless

Model No.: GMWT 0820

Serial No.: None

General: **All measurements are traceable to national standards.**

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 90, Subpart I.

- |                                     |                            |                                     |                     |
|-------------------------------------|----------------------------|-------------------------------------|---------------------|
| <input checked="" type="checkbox"/> | New Submission             | <input checked="" type="checkbox"/> | Production Unit     |
| <input type="checkbox"/>            | Class II Permissive Change | <input type="checkbox"/>            | Pre-Production Unit |

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.

See " Summary of Test Data".



**NVLAP LAB CODE: 100351-0**

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## Summary Of Test Data

| NAME OF TEST                            | PARA. NO.         | SPEC.   | MEAS.     | RESULT   |
|---|-------------------|---------|-----------|----------|
| RF Power Output                         | 90.205            | 500 W   | <500 W    | Complies |
| Audio Frequency Response                | TIA EIA-603.3.2.6 | N/A     | N/A       | N/A      |
| Audio Low-Pass Filter Response          | TIA EIA-603.3.2.6 | N/A     | N/A       | N/A      |
| Modulation Limiting                     | TIA EIA-603.3.2.6 | N/A     | N/A       | N/A      |
| Occupied Bandwidth                      | 90.210            | Plots   | Plots     | Complies |
| Spurious Emissions at Antenna Terminals | 90.210            | Plots   | Plots     | Complies |
| Field Strength of Spurious Emissions    | 90.210            | -13 dBm | < -13 dBm | Complies |
| Frequency Stability                     | 90.213            | 1 ppm   | < 1 ppm   | Complies |
| Transient Frequency Behavior            | 90.214            |         | Plots     | Complies |

### Footnotes For N/A's:

- (1) Since the E.U.T. does not contain modulation circuitry modulation testing was not performed.

## Section 2. General Equipment Specification

### Transmitter

**Supply Voltage Input:** 115 VAC / 13 VDC

**Frequency Range:** 851.01 –868.98 MHz

**Tunable Bands:** Single Channel

**20 dB Passband:**

**Type(s) of Modulation:**

| F3E<br>(Voice)           | F1D                      | F2D                      | D7W<br>(QAM)             | Other<br>(CW)                       |
|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Output Impedance:** 50 ohms

**RF Power Output (rated):**      **Single:** 20 Watts  
   **Composite:** N/A

**Channel Spacing(s):** 30 kHz

**Operator Selection of Operating Frequency:** Manual

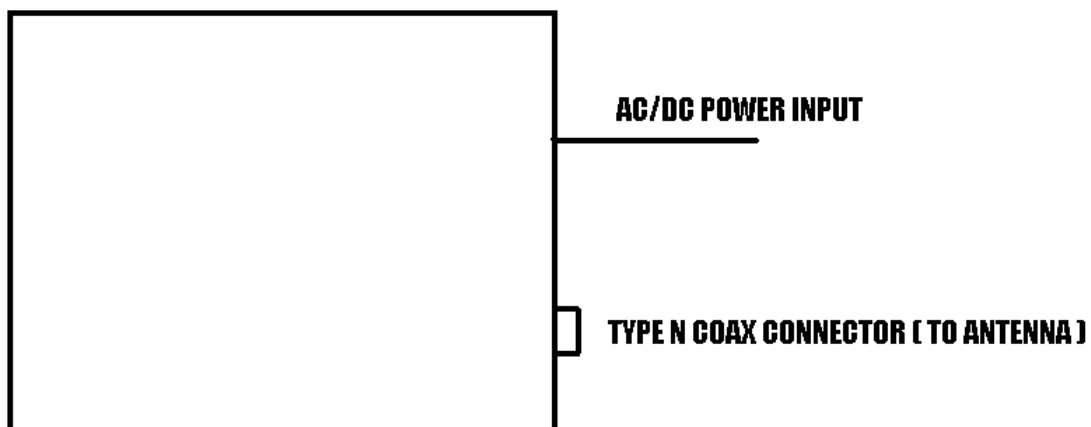
**The device operates over the frequency band of 824.01 to 894.98 MHz. Cellular band will be approved for Part 22 operation. Manufacturer prohibits operation in the unlicensed band from 849 to 851 MHz through the use of firmware.**

**Power Output Adjustment Capability:** Manual

## Theory of Operation

The GWMT 0802 is a self-contained CW transmitter operating in the SMR band.

## System Diagram



### Section 3. RF Power Output

|                               |                  |
|-------------------------------|------------------|
| NAME OF TEST: RF Power Output | PARA. NO.: 2.985 |
| TESTED BY: David Light        | DATE: 6/8/2001   |

**Test Results:** Complies.

**Measurement Data:**

| Frequency (MHz) | Supply Voltage | Measured Power (dBm) | Rated Power (dBm) | Measured/Rated (dB) |
|-----------------|----------------|----------------------|-------------------|---------------------|
| 859.98          | 115 VAC        | 42.7                 | 43.0              | 0.99/1              |
| 859.98          | 98 VAC         | 42.7                 | 43.0              | 0.99/1              |
| 859.98          | 132 VAC        | 42.7                 | 43.0              | 0.99/1              |
| 859.98          | 13 VDC         | 42.7                 | 43.0              | 0.99/1              |
| 859.98          | 11 VDC         | Ceased Operation     | 43.0              | N/A                 |
| 859.98          | 15 VDC         | 42.6                 | 43.0              | 0.99/1              |

**Equipment Used:** 1604-1065-1046-1036

## Section 4. Occupied Bandwidth

|                                  |                  |
|----------------------------------|------------------|
| NAME OF TEST: Occupied Bandwidth | PARA. NO.: 2.989 |
| TESTED BY: David Light           | DATE:5/4/2001    |

**Test Results:** Complies.

**Test Data:** See attached graph(s).



# Test Plots – Occupied Bandwidth



Dallas Headquarters:  
 802 N. Kealy  
 Lewisville, TX 75057  
 Tel: (972) 436-9600  
 Fax: (972) 436-2667

Nemko Dallas, Inc.

**Data Plot**

Page 1 of 1

Job No.: 1L0269R Date: 6/4/2001 Complete X  
 Preliminary \_\_\_\_\_

Specification: PART 22 Temperature(°C): 22  
 Tested By: David Light Relative Humidity(%) 50

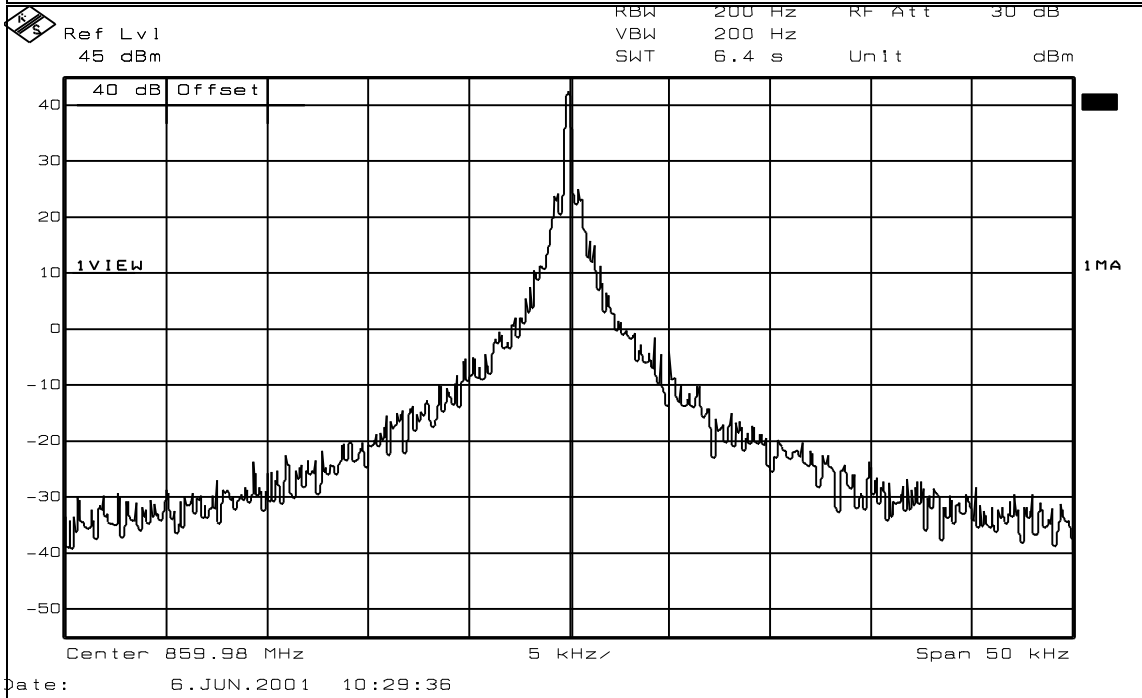
E.U.T.: GWMT 0802  
 Configuration: TX FULL POWER  
 Sample Number: S01

Location: Lab 1 RBW: Refer to plots Measurement \_\_\_\_\_  
 Detector Type: Peak VBW: Refer to plots Distance: N/A m

**Test Equipment Used**

Antenna: \_\_\_\_\_ Directional Coupler: \_\_\_\_\_  
 Pre-Amp: \_\_\_\_\_ Cable #1: 1046  
 Filter: \_\_\_\_\_ Cable #2: \_\_\_\_\_  
 Receiver: 1036 Cable #3: \_\_\_\_\_  
 Attenuator #1: 1065 Cable #4: \_\_\_\_\_  
 Attenuator #2: 1604 Mixer: \_\_\_\_\_

Additional equipment used: \_\_\_\_\_  
 Measurement Uncertainty: +/-3.6 dB



Notes:

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## Section 5. Spurious Emissions at Antenna Terminals

|  |                  |
|--|------------------|
| NAME OF TEST: Spurious Emissions @ Antenna Terminals | PARA. NO.: 2.991 |
| TESTED BY: David Light                               | DATE:6/4/2001    |

**Test Results:** Complies.

**Test Data:** See attached graph(s).

# Test Plots – Spurious Emissions at Antenna Terminals



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 802 N. Kealy  
 Lewisville, TX 75057  
 Tel: (972) 436-9600  
 Fax: (972) 436-2667

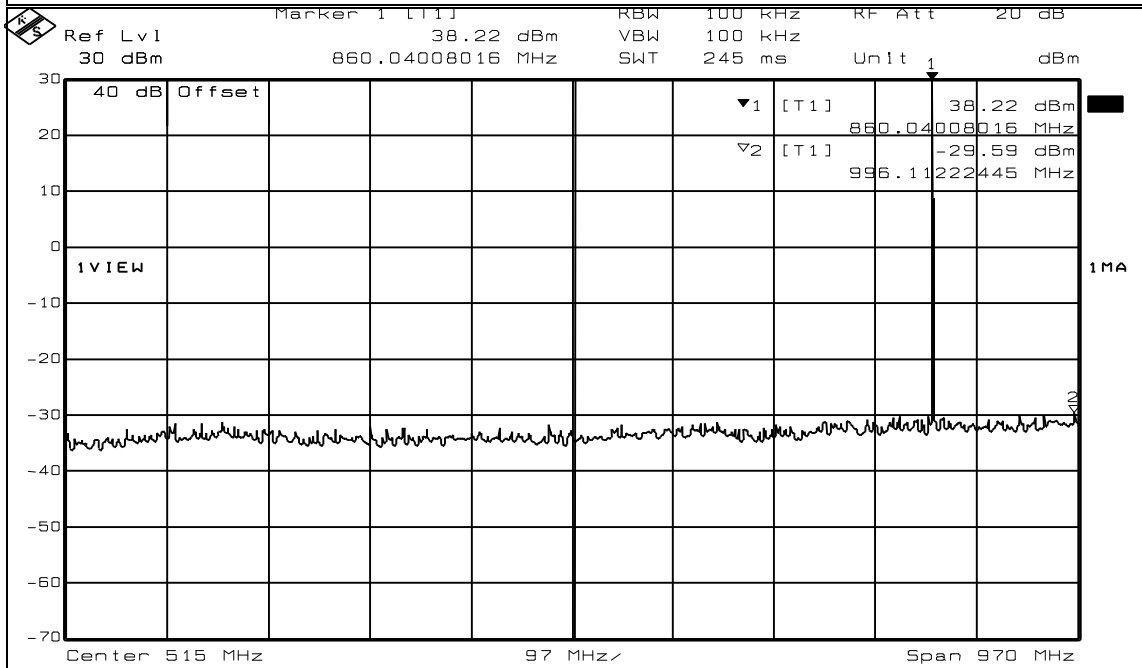
Nemko Dallas, Inc.

## Data Plot

Page 1 of 2 Complete X  
 Preliminary \_\_\_\_\_  
 Job No.: 1L0269R Date: 6/6/2001  
 Specification: PART 22 Temperature(°C): 22  
 Tested By: David Light Relative Humidity(%) 50  
 E.U.T.: GWMT 0820  
 Configuration: TX FULL POWER  
 Sample Number: \_\_\_\_\_  
 Location: Lab 1 RBW: Refer to plots Measurement  
 Detector Type: Peak VBW: Refer to plots Distance: N/A m

## Test Equipment Used

Antenna: \_\_\_\_\_ Directional Coupler: \_\_\_\_\_  
 Pre-Amp: \_\_\_\_\_ Cable #1: 1046  
 Filter: 1060 Cable #2: 1081  
 Receiver: 1036 Cable #3: \_\_\_\_\_  
 Attenuator #1: 1065 Cable #4: \_\_\_\_\_  
 Attenuator #2: 1604 Mixer: \_\_\_\_\_  
 Additional equipment used: \_\_\_\_\_  
 Measurement Uncertainty: +/-3.6 dB



Date: 6.JUN.2001 9:42:52

Notes: **MARKER 1 INDICATES CARRIER**  
**MARKER 2 INDICATES HIGHEST EMISSION (Noise Floor)**

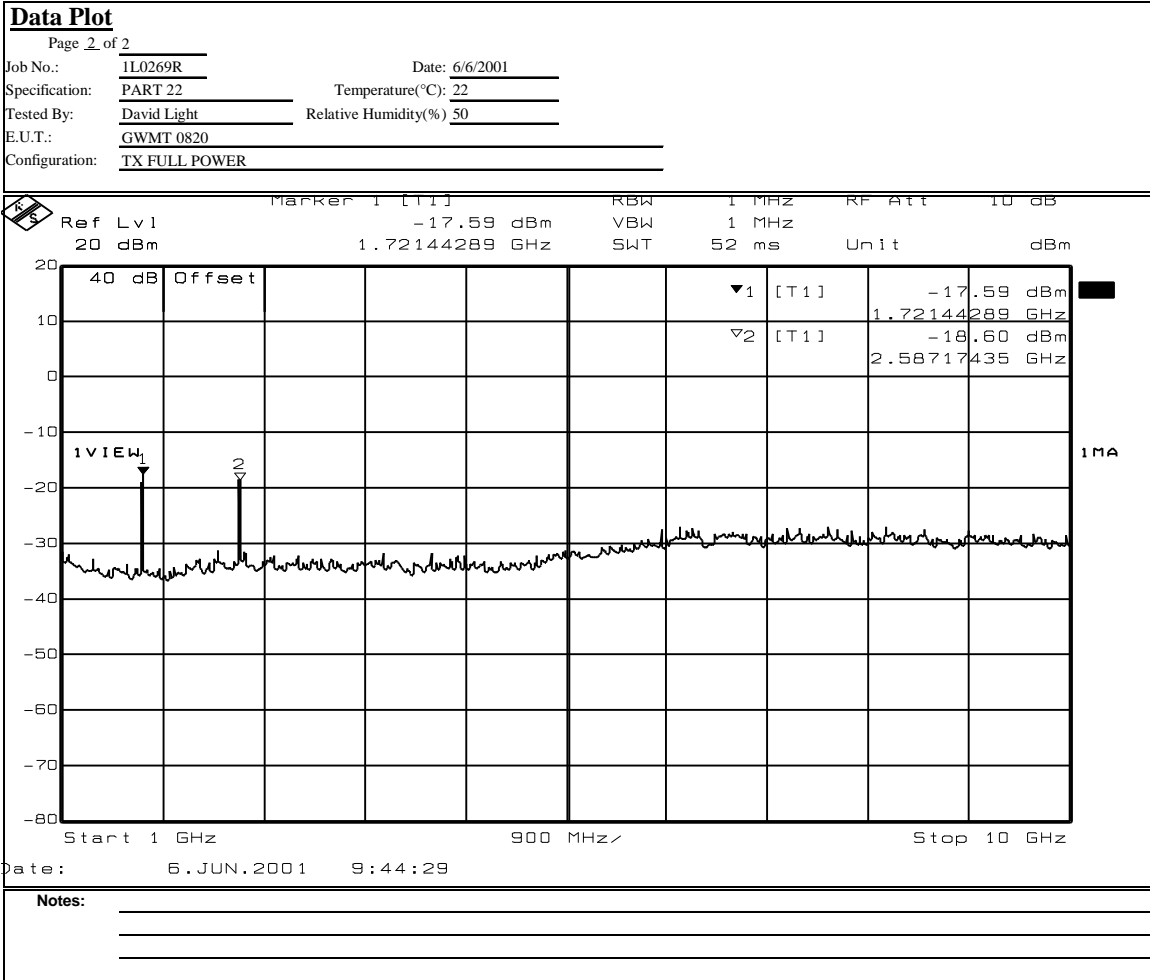
# Test Plots – Spurious Emissions at Antenna Terminals



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802 N. Kealy  
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 Tel: (972) 436-9600  
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**Nemko Dallas, Inc.**



## Section 6. Field Strength of Spurious Emissions

|  |                  |
|--|------------------|
| NAME OF TEST: Field Strength of Spurious Emissions | PARA. NO.: 2.993 |
| TESTED BY: David Light                             | DATE:6/12/2001   |

**Test Results:** Complies.

**Test Data:** See attached table.

**Note:** See page A5 for applicable limit.

# Test Data - Radiated Emissions



Nemko Dallas, Inc.

Dallas Headquarters:  
802 N. Kealy  
Lewisville, TX 75057  
Tel: (972) 436-9600  
Fax: (972) 436-2667

## Field Strength of Spurious Emissions

Page 1 of 1

Job No.: 1L0269R Date: 6/12/01 Complete X  
Preliminary \_\_\_\_\_

Specification: Temperature(°C): 22  
Tested By: Tom Tidwell Relative Humidity(%) 50

E.U.T.: GWMT 0820

Configuration: TRANSMIT FULL POWER

Sample No: 1

Location: AC 3 RBW: 300 kHz Measurement  
Detector Type: Peak VBW: 500 kHz Distance: 3 m

**Test Equipment Used**

Antenna: 993 Directional Coupler: \_\_\_\_\_  
Pre-Amp: 1016 Cable #1: 1484  
Filter: \_\_\_\_\_ Cable #2: 1485  
Receiver: 1464 Cable #3: \_\_\_\_\_  
Attenuator #1: \_\_\_\_\_ Cable #4: \_\_\_\_\_  
Attenuator #2: \_\_\_\_\_ Mixer: \_\_\_\_\_

Additional equipment used: \_\_\_\_\_  
Measurement Uncertainty: +/-3.6 dB

| Frequency (MHz) | Meter Reading (dBm) | Correction Factor (dB) | Pre-Amp Gain (dB) | Substitution Antenna Gain (dBd) | ERP (dBm) | ERP (mW) | Polarity | Comments    |
|-----------------|---------------------|------------------------|-------------------|---------------------------------|-----------|----------|----------|-------------|
| 1704            | -55.6               | 29.9                   | 33.3              | 6.4                             | -52.7     | 0.000005 | V        |             |
| 2556            | -64.5               | 35.6                   | 33.8              | 8.0                             | -54.8     | 0.000003 | V        |             |
| 3408            | -69.0               | 37.1                   | 33.6              | 8.1                             | -57.4     | 0.000002 | V        | Noise floor |
| 4260            | -70.0               | 42.8                   | 33.5              | 7.9                             | -52.8     | 0.000005 | V        | Noise floor |
| 8520            | -73.0               | 40.3                   | 34.3              | 9.9                             | -57.1     | 0.000002 | V        | Noise floor |
| 1704            | -57.8               | 32.7                   | 33.3              | 6.4                             | -52.1     | 0.000006 | H        |             |
| 2556            | -66.0               | 34.6                   | 33.8              | 8.0                             | -57.2     | 0.000002 | H        |             |
| 3408            | -69.0               | 35.8                   | 33.6              | 8.1                             | -58.7     | 0.000001 | H        | Noise floor |
| 4260            | -70.0               | 35.2                   | 33.5              | 7.9                             | -60.4     | 0.000001 | H        | Noise floor |
| 8520            | -73.0               | 41.8                   | 34.3              | 9.9                             | -55.5     | 0.000003 | H        | Noise floor |

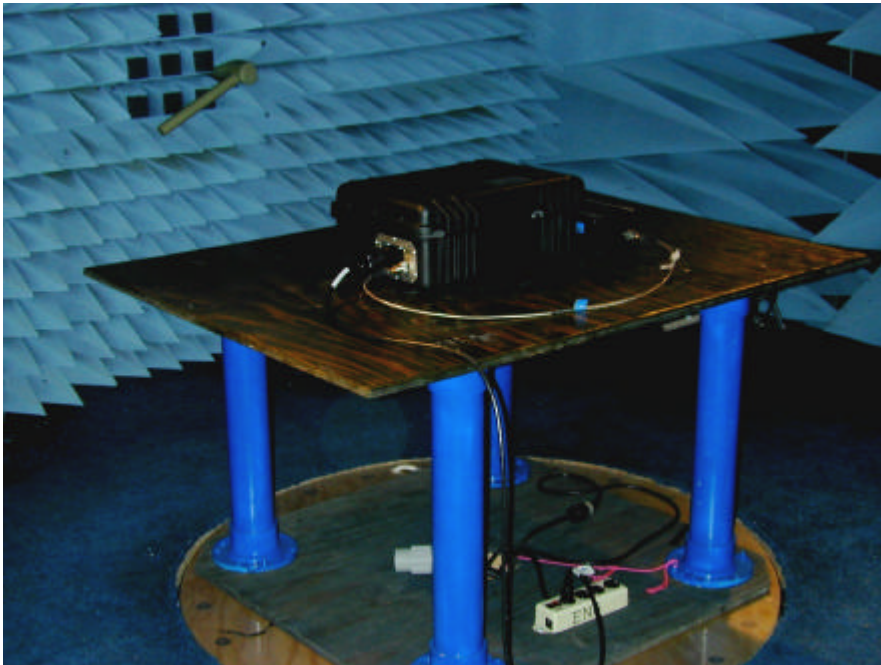
Notes: SCANNED SPECTRUM TO THE 10TH HARMONIC OF CARRIER FREQUENCY

## Photographs of Test Setup

FRONT VIEW



REAR VIEW



## Section 7. Frequency Stability

|                                   |                  |
|-----------------------------------|------------------|
| NAME OF TEST: Frequency Stability | PARA. NO.: 2.995 |
| TESTED BY: David Light            | DATE: 06/01/2001 |

**Test Results:** Complies.

**Measurement Data:** See attached tables.



**Test Data – Frequency Stability**



**Dallas Headquarters:**  
 802 N. Kealy  
 Lewisville, TX 75057  
 Tel: (972) 436-9600  
 Fax: (972) 436-2667

**Frequency Stability**

Client: GRAYSON WIRELESS

W.O.# 1L0269R

EUT: GMWT 0820

S/N: NONE

Date: 6/1/01

Tech: LIGHT

Test Equipment used: 283-1026

| Temperature | Voltage | Frequency Error (Hz) |
|-------------|---------|----------------------|
| 20 °C       | 115 VAC | -86.000000           |
| 20 °C       | 92 VAC  | -90                  |
| 20 °C       | 132 VAC | -75                  |
| 20 °C       | 13 VDC  | +24                  |
| 20 °C       | 11 VDC  | Stopped Operation    |
| 20 °C       | 15 VDC  | -13                  |
|             |         |                      |
| 10 °C       | 115 VAC | -223                 |
| 0 °C        | 115 VAC | -232                 |
| -10 °C      | 115 VAC | -78                  |
| -20 °C      | 115 VAC | +168                 |
| -30 °C      | 115 VAC | +256                 |
|             |         |                      |
| 30 °C       | 115 VAC | -165                 |
| 40 °C       | 115 VAC | -380                 |
| 50 °C       | 115 VAC | -510                 |
|             |         |                      |

## Section 8 - Transient Frequency Behaviour

|   |                   |
|---|-------------------|
| NAME OF TEST: Transient Frequency Behaviour | PARA. NO.: 90.214 |
| TESTED BY: David Light                      | DATE: 06/12/2001  |

**Test Results:** Complies.

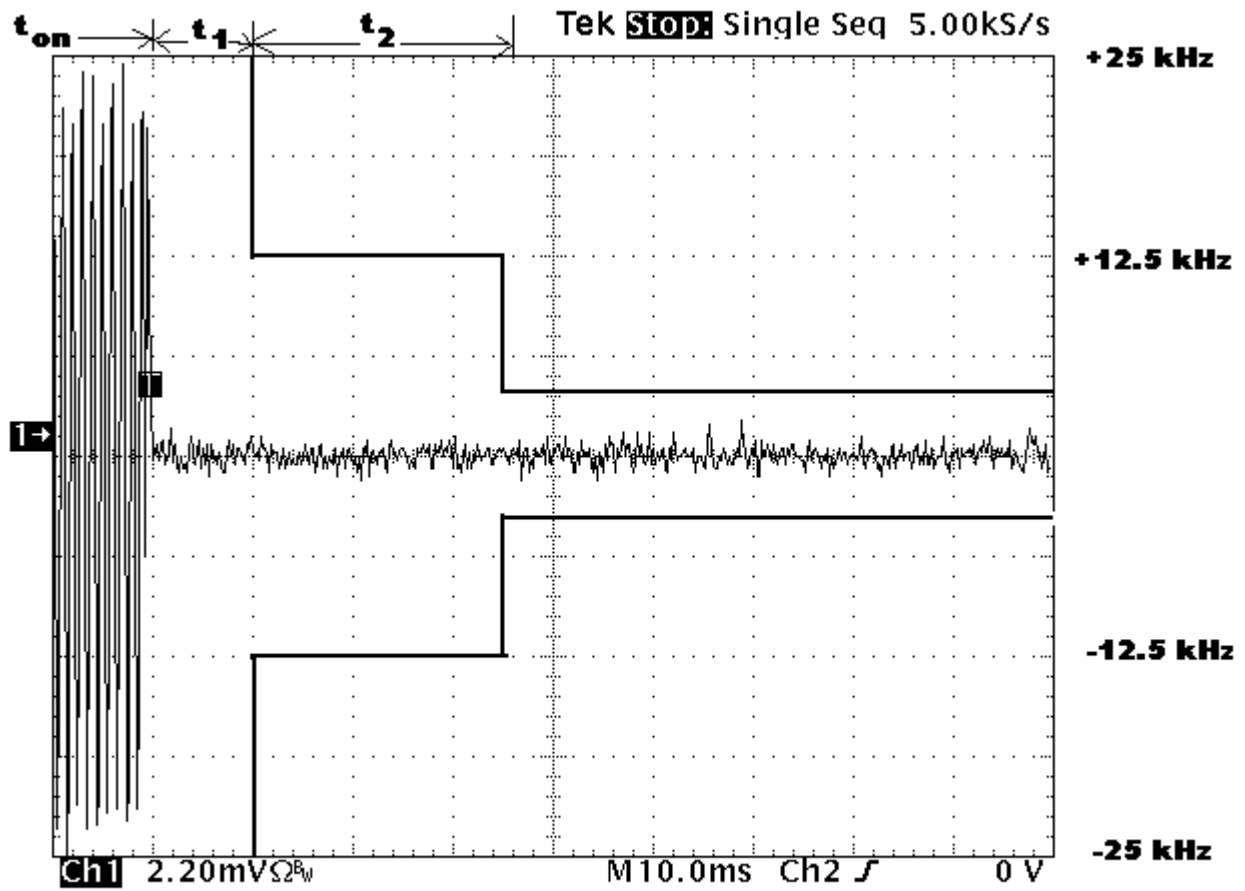
**Measurement Data:** See attached plots

| Time Intervals | Frequency Ranges (MHz) |            |             |
|----------------|------------------------|------------|-------------|
|                | 30 to 300              | 300 to 500 | 500 to 1000 |
| t <sub>1</sub> | 5.0 ms                 | 10.0 ms    | 20.0 ms     |
| t <sub>2</sub> | 20.0 ms                | 25.0 ms    | 50.0 ms     |
| t <sub>3</sub> | 5.0 ms                 | 10.0 ms    | 10.0 ms     |

|                      |  |
|----------------------|--|
| Test Equipment Used: | 1043-1082-1081-1054-1089-1463-1065-1064-1046-1083-1573-1051-1341 |
|----------------------|--|

# Test Plots – Transient Frequency Behaviour

Switch ON condition

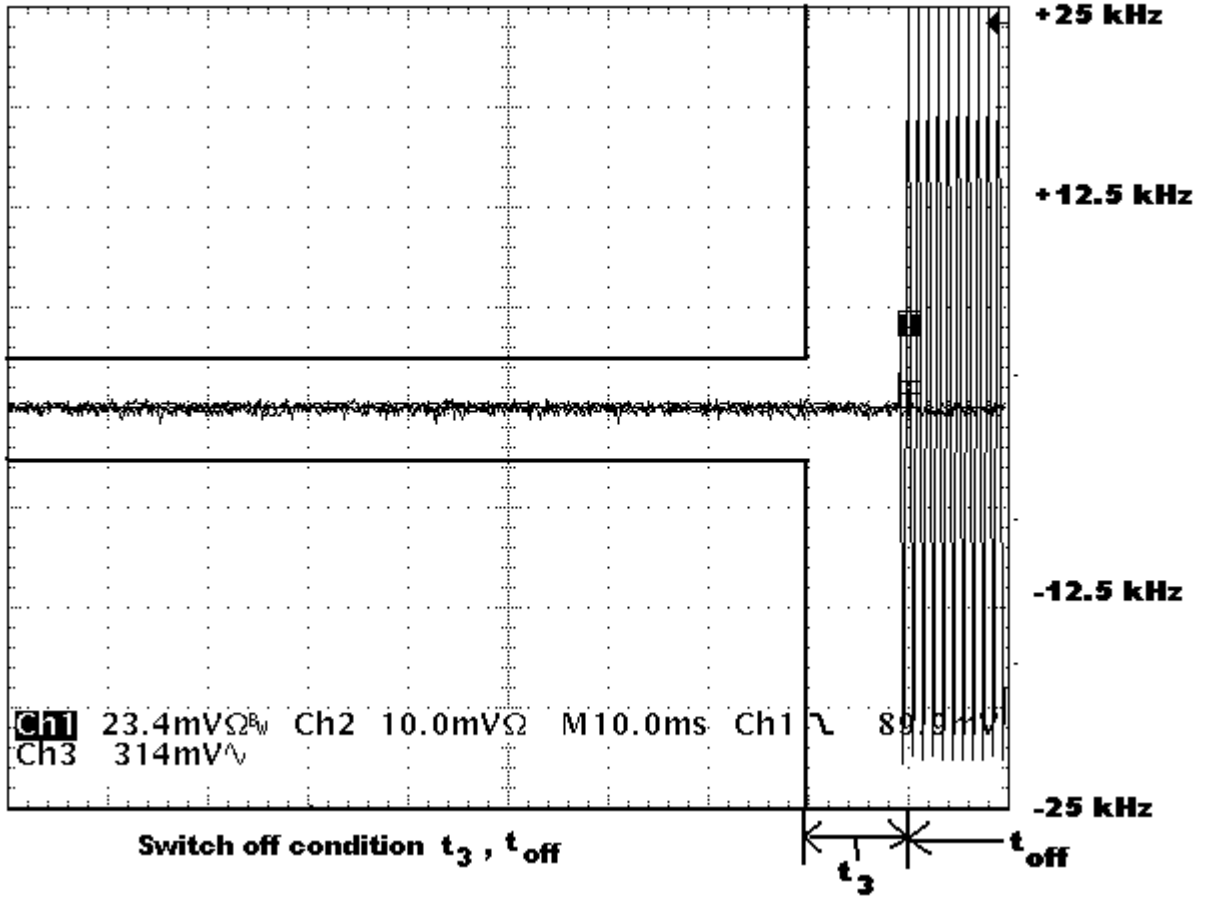


Switch on condition  $t_{on}$ ,  $t_1$ ,  $t_2$

# Test Plots – Transient Frequency Behaviour

Switch OFF condition

Tek **Stop** Single Seq 5.00kS/s



## Section 9.

## Test Equipment List

| ASSET | Description                        | Manufacturer<br>Model Number       | Serial Number | Cal.<br>Date | Cal.<br>Due |
|-------|------------------------------------|------------------------------------|---------------|--------------|-------------|
| 1036  | SPECTRUM ANALYZER                  | ROHDE & SCHWARZ<br>FSEK30          | 830844/006    | 06/14/99     | 06/14/01    |
| 1065  | ATTENUATOR                         | NARDA<br>776B-10                   | NONE          | CBU          | N/A         |
| 1604  | ATTENUATOR                         | NARDA<br>776B-20                   | NONE          | CBU          | N/A         |
| 1046  | Flex cable 1m                      | Astrolab Inc.<br>32022-2-29094K-1M | N/A           | 01/29/01     | 01/29/02    |
| 1060  | TUNABLE NOTCH FILTER               | K&L<br>3TNF-500/1000-N/N           | 162           | CBU          | N/A         |
| 1081  | CABLE 2m                           | Astrolab<br>32027-2-29094-72TC     | N/A           | 06/04/01     | 06/04/02    |
| 993   | Horn antenna                       | A.H. Systems<br>SAS-200/571        | XXX           | 07/16/99     | 07/16/01    |
| 1016  | Pre-Amp                            | HEWLETT PACKARD<br>8449A           | 2749A00159    | 05/30/01     | 05/30/02    |
| 1464  | Spectrum analyzer                  | Hewlett Packard<br>8563E           | 3551A04428    | 01/02/01     | 01/02/02    |
| 1484  | Cable 2.0-18.0 Ghz                 | Storm<br>PR90-010-072              | N/A           | 05/25/00     | 05/25/01    |
| 1485  | Cable 2.0-18.0 Ghz                 | Storm<br>PR90-010-216              | N/A           | 06/01/01     | 06/01/02    |
| 283   | ENVIROMENTAL CHAMBER               | ENVIROTRONICS<br>SH27              | 129010083     | 05/02/01     | 05/02/02    |
| 1026  | FREQUENCY COUNTER                  | HEWLETT PACKARD<br>5350B           | 8232A01493    | 08/17/00     | 08/17/01    |
| 1043  | Flexible cable 1m                  | Astrolab Inc.<br>32027-2-29094K-1M | 0             | 01/29/01     | 01/29/02    |
| 1082  | CABLE 2m                           | Astrolab<br>32027-2-29094-72TC     | N/A           | 06/01/01     | 06/01/02    |
| 1081  | CABLE 2m                           | Astrolab<br>32027-2-29094-72TC     | N/A           | 06/04/01     | 06/04/02    |
| 1054  | DUAL DIRECTIONAL COUPLER           | NARDA<br>3020A                     | 34366         | Cal Not Req  | N/A         |
| 1089  | COMBINER                           | MINI-CIRCUITS<br>ZA3PD-1           | NONE          | CBU          | N/A         |
| 1463  | Color 4 Ch Digitizing Oscilloscope | Tektronix<br>TDS684A               | B010460       | 04/13/01     | 04/13/02    |
| 1064  | ATTENUATOR                         | NARDA<br>776B-20                   | NONE          | CBU          | N/A         |
| 1083  | Cable 2m                           | Astrolab<br>32027-2-29094-72TC     | N/A           | 06/01/01     | 06/01/02    |
| 1573  | Zero-Bias Schottky Diode Detector  | HEROTEK<br>DZR400KA                | 222276        | CalNotReq    | N/A         |
| 1051  | Radio Communication Analyzer       | Rhode & Schwarz<br>CMTA-54         | 835875/002    | 03/17/01     | 03/17/02    |
| 1341  | COMMUNICATION SERVICE MO           | ROHDE & SCHWARZ<br>CMS53           | 883832/018    | CNR          | N/A         |

## **ANNEX A - TEST METHODOLOGIES**

**Minimum Standard:** Para. No. 90.205(a). The maximum allowable station ERP is dependent upon the stations HAAT and required service area and will be authorized in accordance with Table 1 of 90.205(d).

**Method Of Measurement:**

Detachable Antenna:

The peak power at antenna terminals is measured using an in-line peak power meter. Power output is measured with the maximum rated input level.

Integral Antenna:

If the antenna is not detachable from the circuit then the Peak Power Output is derived from the peak radiated field strength of the fundamental emission by using the plane wave relation  $GP/4\pi R^2 = E^2/120\pi$  and proceeding as follows:

$$P = \frac{E^2 R^2}{30G} = \frac{E^2 3^2}{30G}$$

where,

P = the equivalent isotropic radiated power in watts

E = the maximum measured field strength in V/m

R = the measurement range (3 meters)

G = the numeric gain of the transmit antenna in relation to an isotropic radiator

**Test Method:** RBW: 1% of emission bandwidth in the 0 - 1 GHz range.  
1 MHz at frequencies above 1 GHz.

VBW:  $\Rightarrow$  RBW

The spectrum is searched up to 10 times the fundamental frequency.



**Minimum Standard:** Para. No. 90.210, see table 1 below for applicable mask.

**Table 1**

| <b>Frequency Band (MHz)</b> | <b>Mask for equipment with Low Pass Filter</b> | <b>Mask for equipment without Low Pass Filter</b> |
|-----------------------------|--|---|
| Below 25                    | A or B   | A or C  |
| 25 - 50                     | B  | C   |
| 72 - 76                     | B  | C   |
| 150 - 174                   | B, D or E                                      | C, D or E   |
| 150 Paging only             | B  | C   |
| 220 - 222                   | F  | F   |
| 421 - 512                   | B, D or E                                      | C, D or E   |
| 450 paging only             | B  | H   |
| 806 - 821/ 851 - 866        | B  | G   |
| 821 - 824/ 866 - 869        | B  | H   |
| 896 - 901/ 935 - 940        | I  | J   |
| 902 - 928                   | K  | K   |
| 929 - 930                   | B  | G   |
| Above 940                   | B  | C   |
| All other bands             | B  | C   |

**Minimum Standard:** Para. No. 90.210, see table 1 for applicable mask.

**Calculation of Field Strength Limit**

An example of attenuation requirement of  $50 + 10 \text{ Log } P$  is equivalent to  $-20 \text{ dBm}$  ( $1 \times 10^{-5}$  Watts) at the antenna terminal. We determine the field strength limit by using the plane wave relation.

$$GP/4\pi R^2 = E^2/120\pi$$

For emissions  $\leq 1 \text{ GHz}$ :

$G = 1.64$  (Dipole Gain)

$P = 10^{-5}$  Watts (Maximum spurious output power)

$R = 3\text{m}$  (Measurement Distance)

$$E = \frac{\sqrt{30GP}}{R} = E = \frac{\sqrt{30 \times 1.64 \times 10^{-5}}}{3} = 0.00739 \text{ V / m} = 77.4 \text{ dB}\mu\text{V} / \text{m}$$

For emissions  $> 1 \text{ GHz}$ :

$G = 1$  (Isotropic Gain)

$P = 1 \times 10^{-5}$  Watts (Maximum spurious output power)

$R = 3\text{m}$  (Measurement Distance)

$$E = 77.4 - 20 \text{ Log} \sqrt{1.64} = 75.2 \text{ dB}\mu\text{V} / \text{m}@3\text{m}$$

| <b>MASK</b> | <b>Spurious Limit</b> | <b>FS Limit Below 1 GHz</b> | <b>FS Limit Above 1 GHz</b> |
|-------------|-----------------------|-----------------------------|-----------------------------|
| A,B,C,G,H,I | -13dBm                | 84.4 dB $\mu$ V/m@3m        | 82.2 dB $\mu$ V/m@3m        |
| D,J         | -20dBm                | 77.4 dB $\mu$ V/m@3m        | 75.2 dB $\mu$ V/m@3m        |
| E,F,K       | -25dBm                | 72.4 dB $\mu$ V/m@3m        | 70.2 dB $\mu$ V/m@3m        |

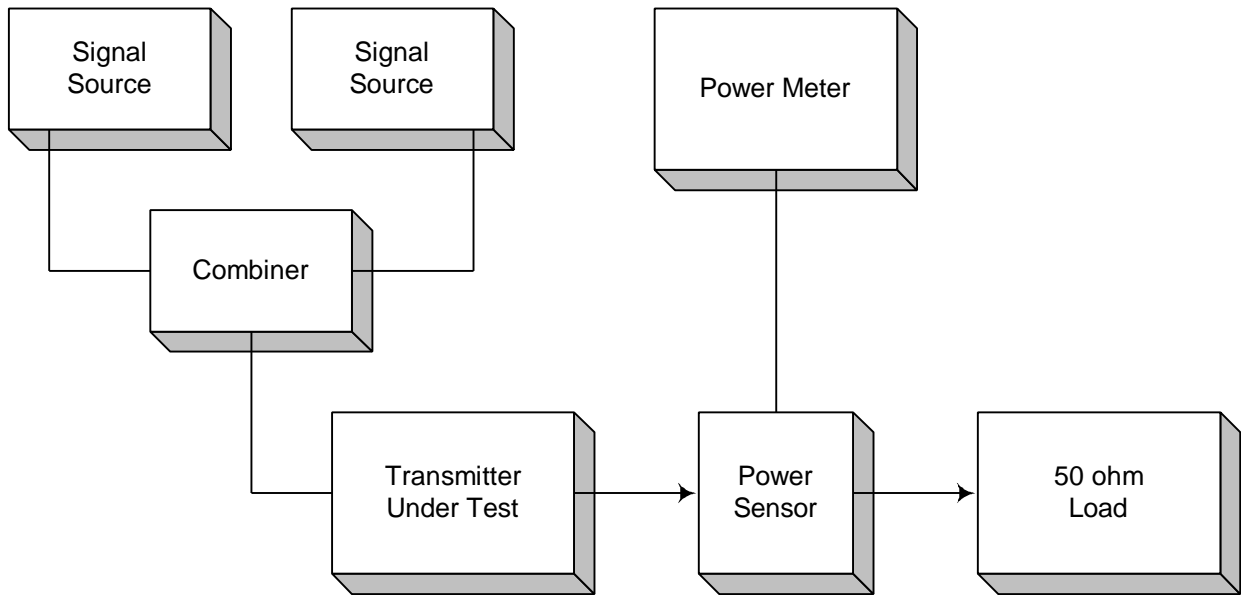
**Minimum Standard:** Para. No. 990.213. The transmitter carrier frequency shall remain within the assigned frequency below in ppm.

**Table 2**

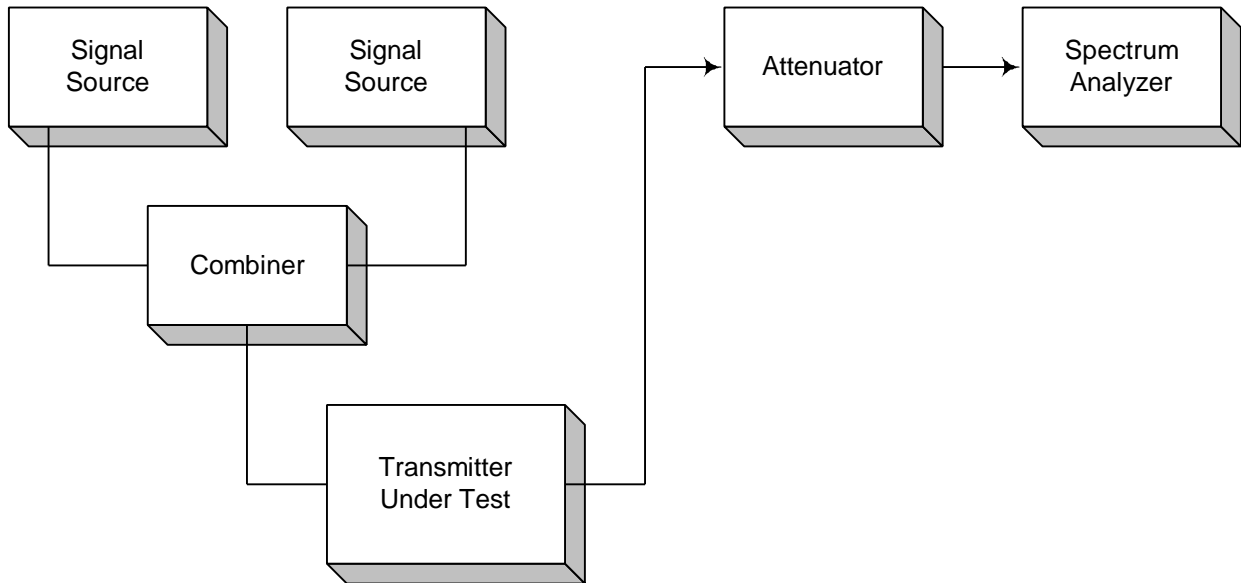
| Frequency Band (MHz) | Fixed And Base Stations | Mobile Stations   |                   |
|----------------------|-------------------------|-------------------|-------------------|
|                      |                         | > 2 Watts o/p pwr | < 2 Watts o/p pwr |
| Below 25             | 100                     | 100               | 200               |
| 25 - 50              | 20                      | 20                | 50                |
| 72 - 76              | 5                       | -                 | 50                |
| 150 - 174            | 5                       | 5                 | 5                 |
| 220 - 222            | 0.1                     | 1.5               | 1.5               |
| 421 - 512            | 2.5                     | 5                 | 5                 |
| 806 - 821            | 1.5                     | 2.5               | 2.5               |
| 821 - 824            | 1.0                     | 1.5               | 15                |
| 851 - 866            | 1.5                     | 2.5               | 2.5               |
| 866 - 869            | 1.0                     | 1.5               | 1.5               |
| 869 - 901            | 0.1                     | 1.5               | 1.5               |
| 902 - 928            | 2.5                     | 2.5               | 2.5               |
| 929 - 930            | 1.5                     | -                 | -                 |
| 935 - 940            | 0.1                     | 1.5               | 1.5               |
| 1427 - 1435          | 300                     | 300               | 300               |
| Above 2450           | -                       | -                 | -                 |

## **ANNEX B - TEST DIAGRAMS**

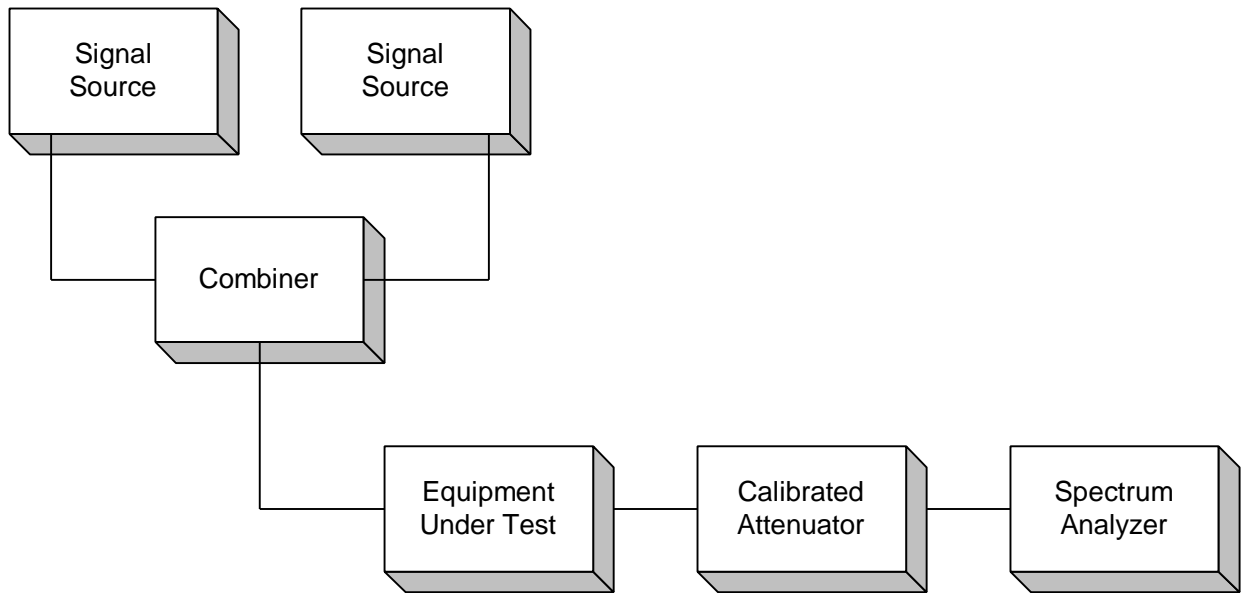
**Para. No. 2.985 - R.F. Power Output**



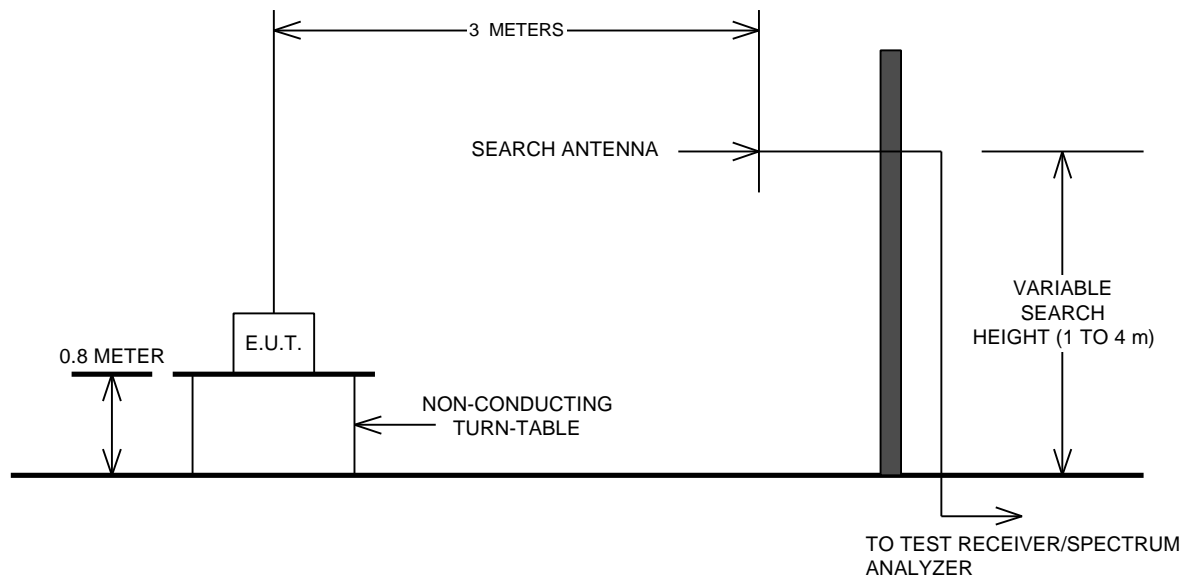
**Para. No. 2.989 - Occupied Bandwidth**



**Para. No. 2.991 - Spurious Emissions at Antenna Terminals**



**Para. No. 2.993 - Field Strength of Spurious Radiation**



**Para. No. 2.995 - Frequency Stability**

