

Nemko Test Report: 1L0435RUS2

Applicant: Enfora, Inc.
661 East 18th Street
Plano, TX 75074-5601

**Equipment Under Test:
(E.U.T.)** Enabler-A

FCC ID: MIVCDP10EAM

In Accordance With: **FCC Part 22, Subpart H**
800 MHz Cellular Subscriber Units

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

Authorized By:



Tom Tidwell, EMC/Wireless Manager

Date: 9/10/01

Total Number of Pages: 43

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EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Section 1. Summary of Test Results

Manufacturer: Enfora

Model No.: Enabler-A

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 22, Subpart H.

New Submission

Production Unit

Class II Permissive Change

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: 100426-0

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Summary Of Test Data

| NAME OF TEST | PARA. NO. | SPEC. | RESULT |
|---|-----------|-------------------|----------|
| RF Power Output | 2.1046 | 7W ERP | Complies |
| Audio Frequency Response | 2.1047 | 6dB/Octave | N/A |
| Audio Low Pass Filter Response | 2.1047 | Graph | N/A |
| Modulation Limiting | 2.1047 | Graph | N/A |
| Occupied Bandwidth (Voice & SAT) | 2.1049 | Mask | N/A |
| Occupies Bandwidth (WB Data & SAT) | 2.1049 | Mask | N/A |
| Occupied Bandwidth (ST) | 2.1049 | Mask | Complies |
| Occupied Bandwidth (SAT) | 2.1049 | Mask | N/A |
| Occupied Bandwidth (SAT) | 2.1049 | Not Specified | N/A |
| Spurious Emissions at Antenna Terminals | 2.1051 | -13 dBm | Complies |
| Field Strength of Spurious Emissions | 2.1053 | 82.3 dB μ V/m | Complies |
| Frequency Stability | 2.1055 | 2.5 ppm | Complies |

This transmitter does not support analogue voice modulation.

Section 2. General Equipment Specification

| | |
|--|--------------------------|
| Frequency Range: | 824.04 MHz to 848.97 MHz |
| Tunable Bands: | 824.04 MHz to 848.97 MHz |
| Necessary Bandwidth: | 30 kHz |
| Type of Modulation and Designator: | DXW |
| Output Impedance: | 50 ohms |
| RF Power Output (rated): | 700 mW |
| Number of Channels: | 832 |
| Duty Cycle: | Continuous |
| Channel Spacing: | 30 kHz |
| Operator Selection of Frequency: | Software Controlled |
| Power Output Adjustment Capability: | Software Controlled |

Description of Modifications For Class II Permissive Change

Not Applicable

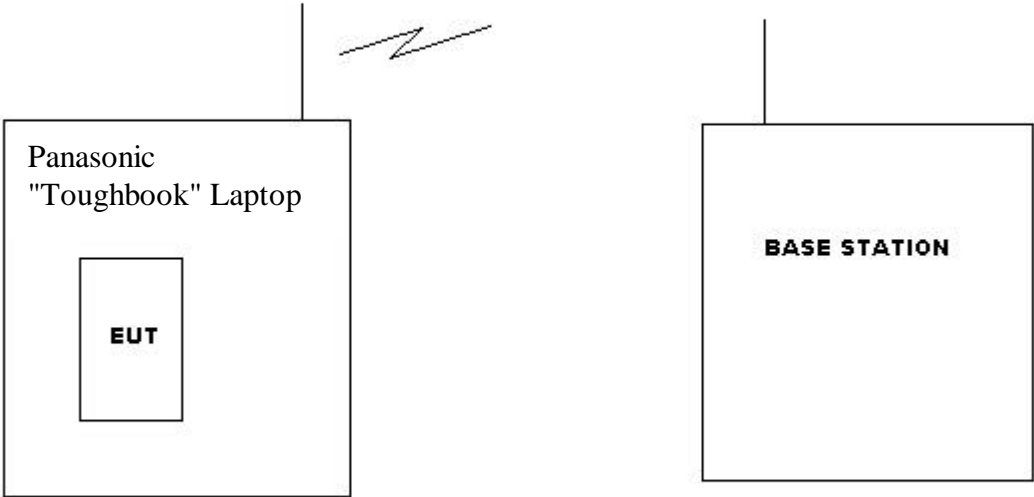
Modifications Made During Testing

Not Applicable

Operational Description

The Enabler_A CDPD modem is a full duplex wireless modem for embedded applications. The host supplies DC power and the antenna. The modem provides wide area access using the AMPS frequency band. The modulation used is a 0.5 GMSK format.

System Diagram



EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Section 3. RF Power Output

| | |
|-------------------------------|-------------------|
| NAME OF TEST: RF Power Output | PARA. NO.: 2.1046 |
| TESTED BY: David Light | DATE: 8/9/2001 |

Test Results: Complies.

Measurement Data:

| Channel | Power at Antenna Terminal (dBm) | Antenna Gain (dBi) | Output Power (EIRP) (dBm) |
|---------|---------------------------------|--------------------|---------------------------|
| 991 | 28.5 | 0 | 28.5 |
| 367 | 28.0 | 0 | 28.0 |
| 799 | 27.6 | 0 | 27.6 |

Note – The device was tested at Nominal voltage (115 Vac), 98 Vac and 132 Vac (+/- 15%) with no change in output power. The AC adapter supplied with the host operates from 100-240 Vac.

Equipment Used: 1029-1030-1474-1082

Measurement Uncertainty: +/- 0.6 dB

Temperature: 22 °C

Relative Humidity: 50 %

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Section 4. Occupied Bandwidth

| | |
|----------------------------------|-------------------|
| NAME OF TEST: Occupied Bandwidth | PARA. NO.: 2.1047 |
| TESTED BY: David Light | DATE:8/9/2001 |

Test Results: Complies.

Measurement Data: See attached graph.

Measurement Uncertainty: +/- 1.7 dB
1x10⁻⁷ ppm

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FCC PART 22, SUBPART H
800 MHz CELLULAR SUBSCRIBER
UNITS

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Test Data – Occupied Bandwidth – Wideband Data

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

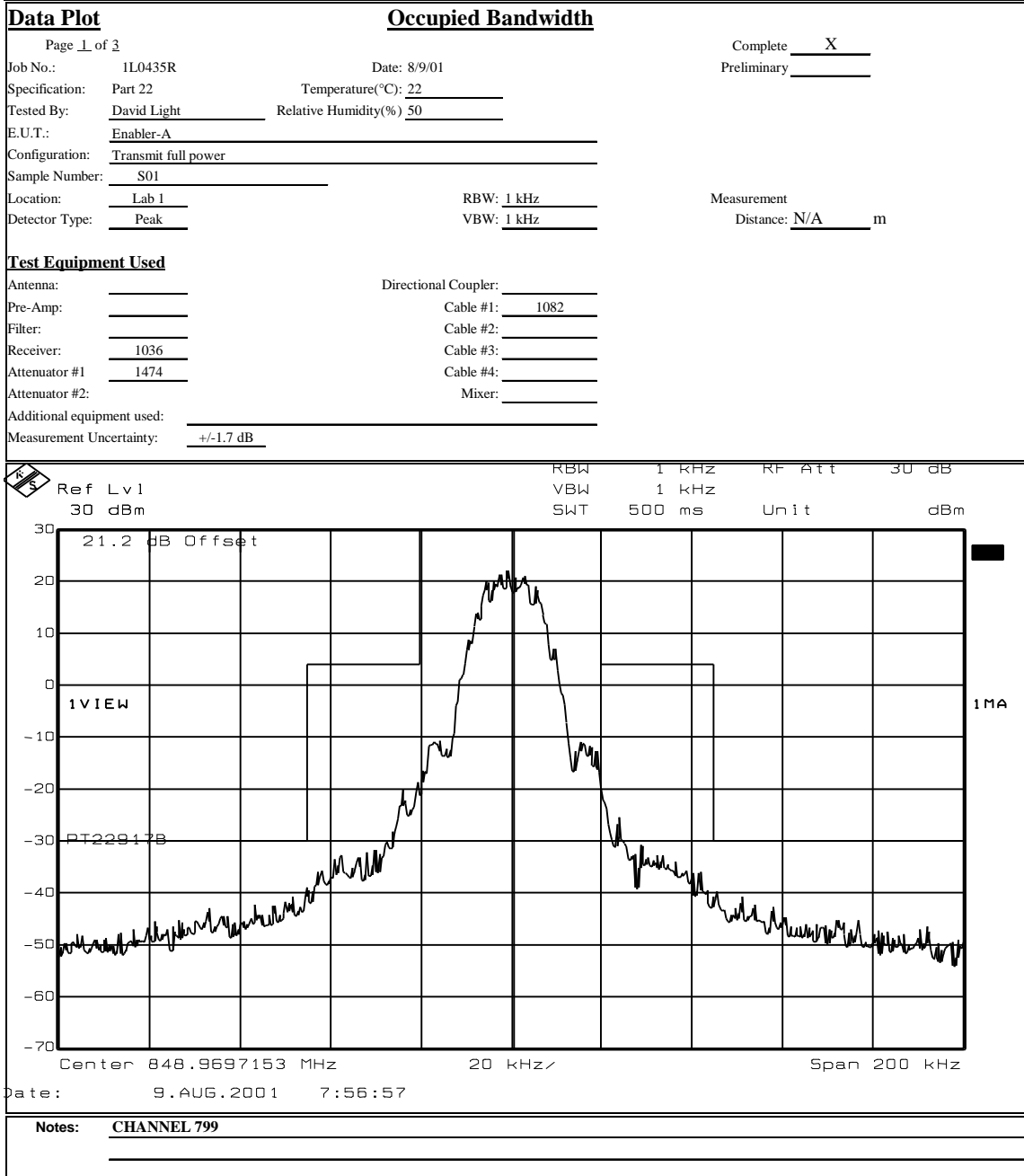
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Fax: (972) 436-2667



EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

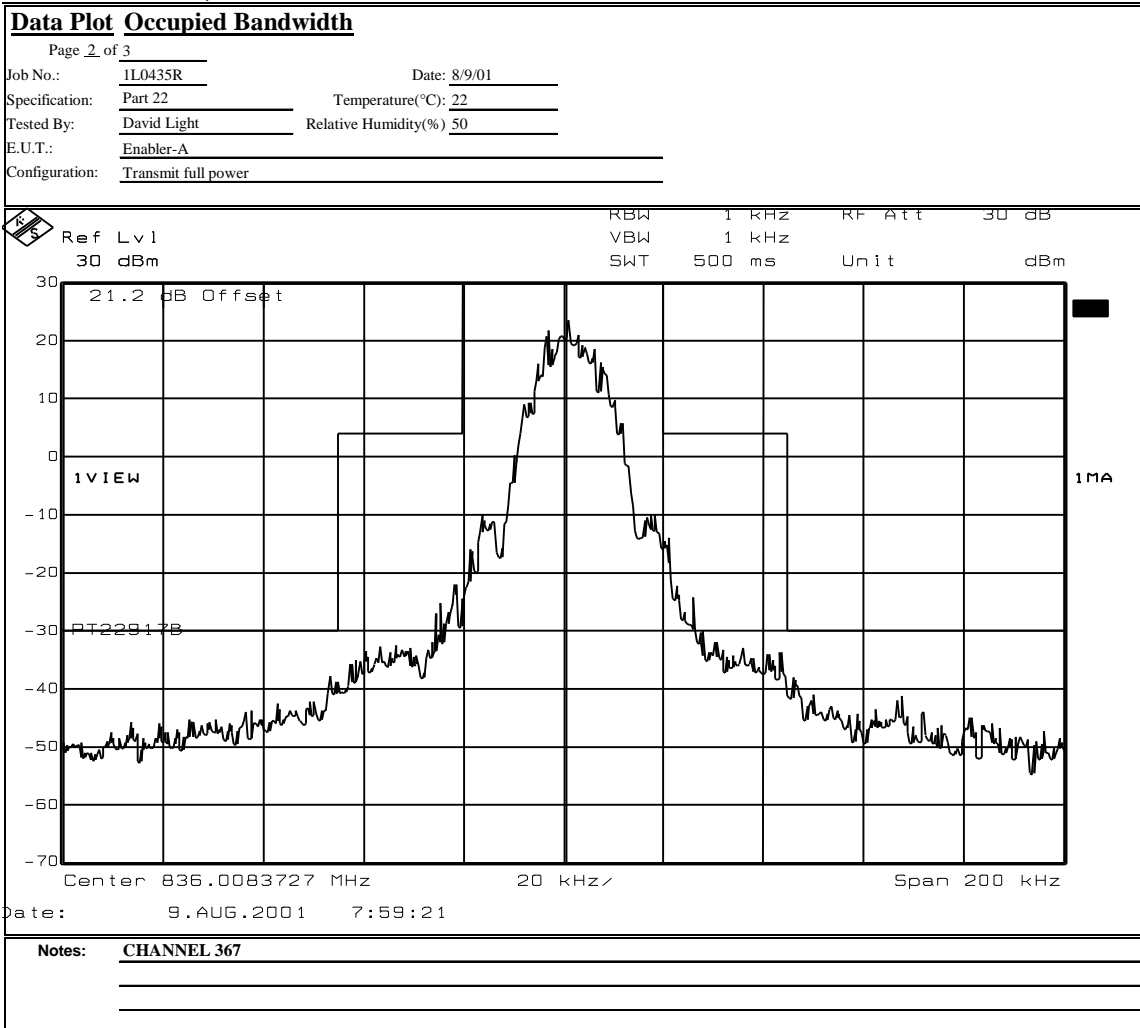
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Test Data – Occupied Bandwidth – Wideband Data



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EQUIPMENT: *Enabler-A*
FCC ID: *MIVCDP10EAM*

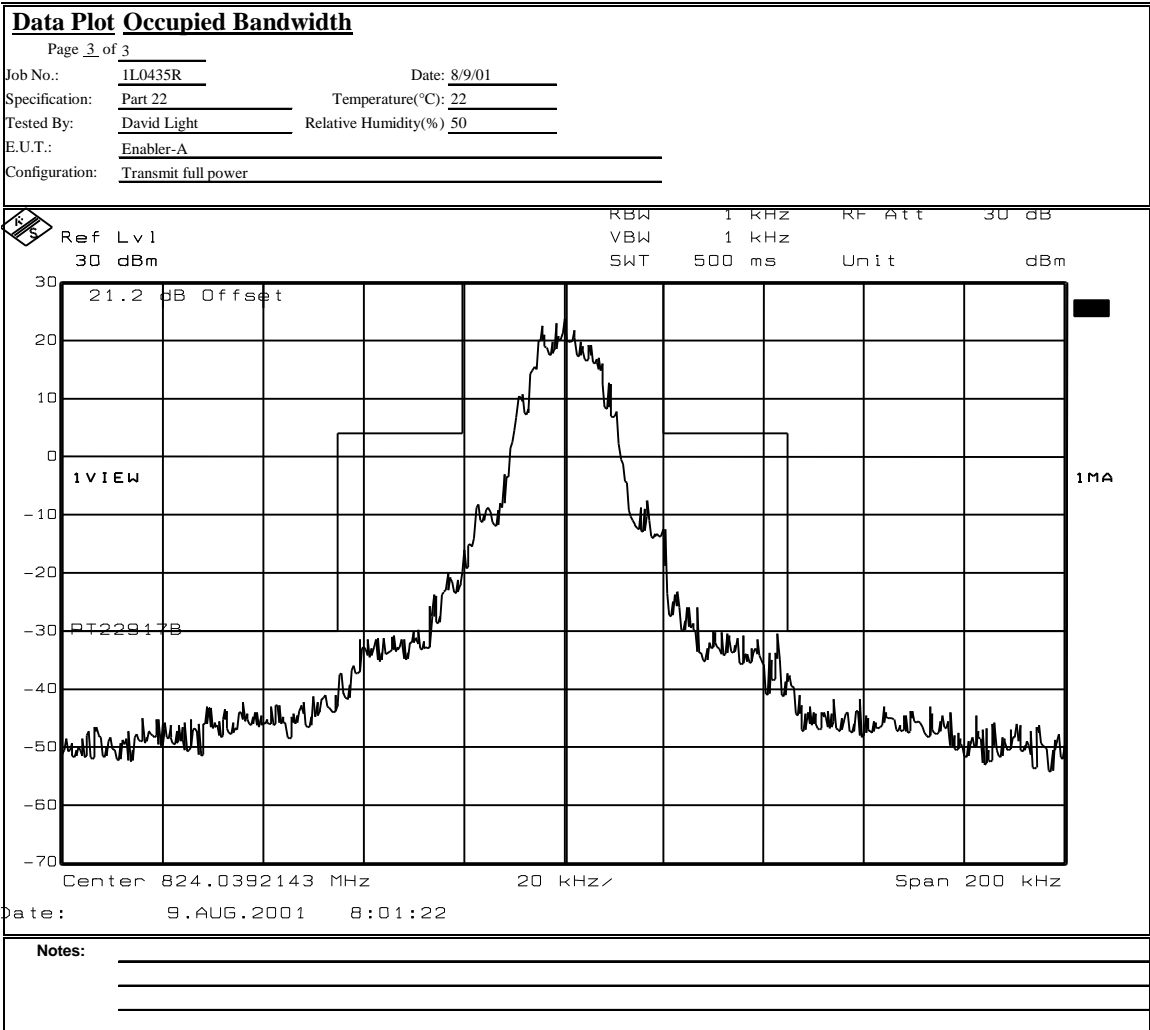
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Test Data – Occupied Bandwidth – Wideband Data



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PROJECT NO.: 1L0435RUS2

Section 5. Spurious Emissions at Antenna Terminals

| | |
|---|-------------------|
| NAME OF TEST: Spurious Emissions At Antenna Terminals | PARA. NO.: 2.1051 |
| TESTED BY: David Light | DATE: 8/9/2001 |

Test Results: Complies.

Measurement Data: See attached graph.

Measurement Uncertainty: +/- 1.7 dB

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EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

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Test Data – Spurious Emissions at Antenna Terminals

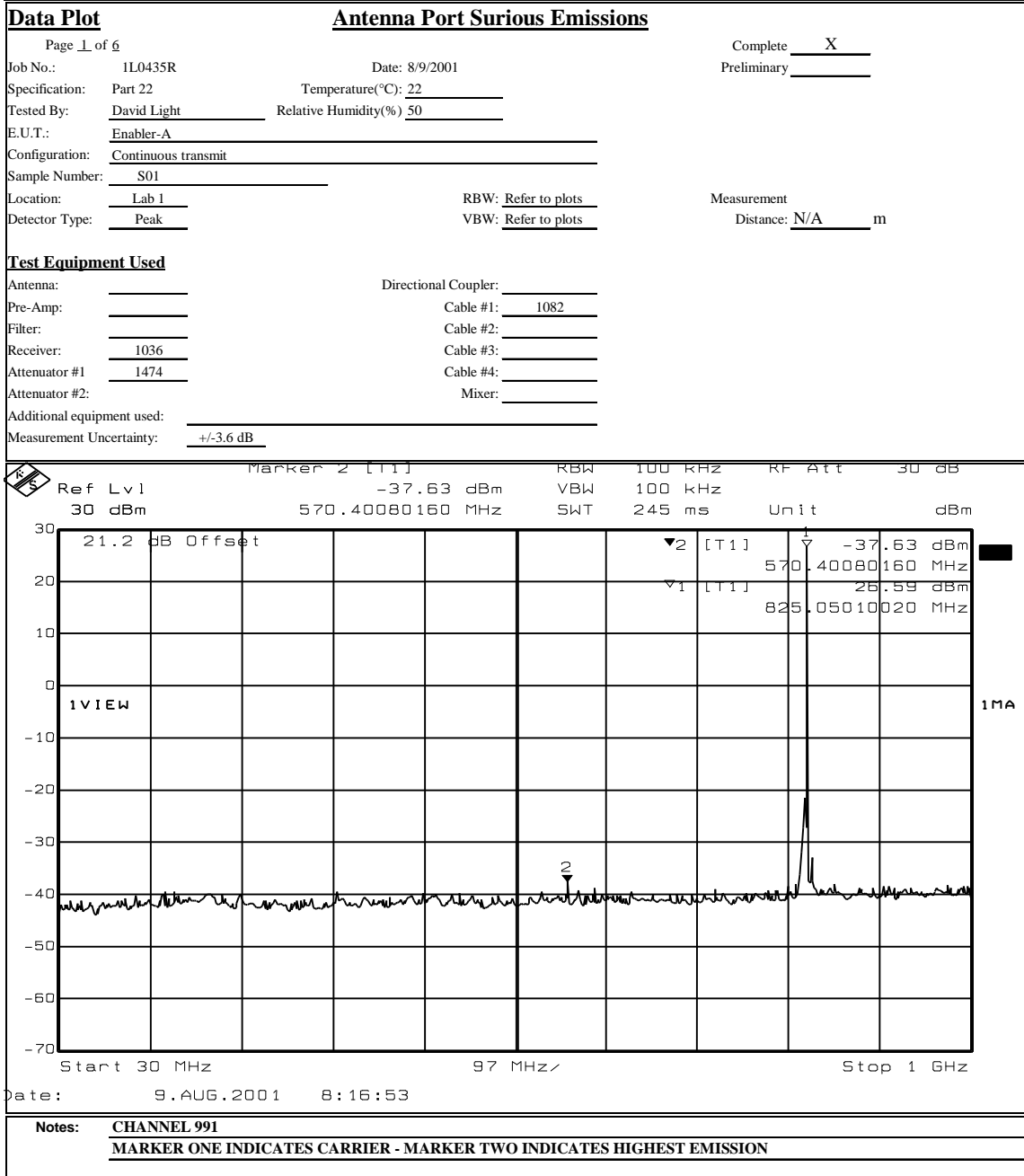
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FCC ID: *MIVCDP10EAM*

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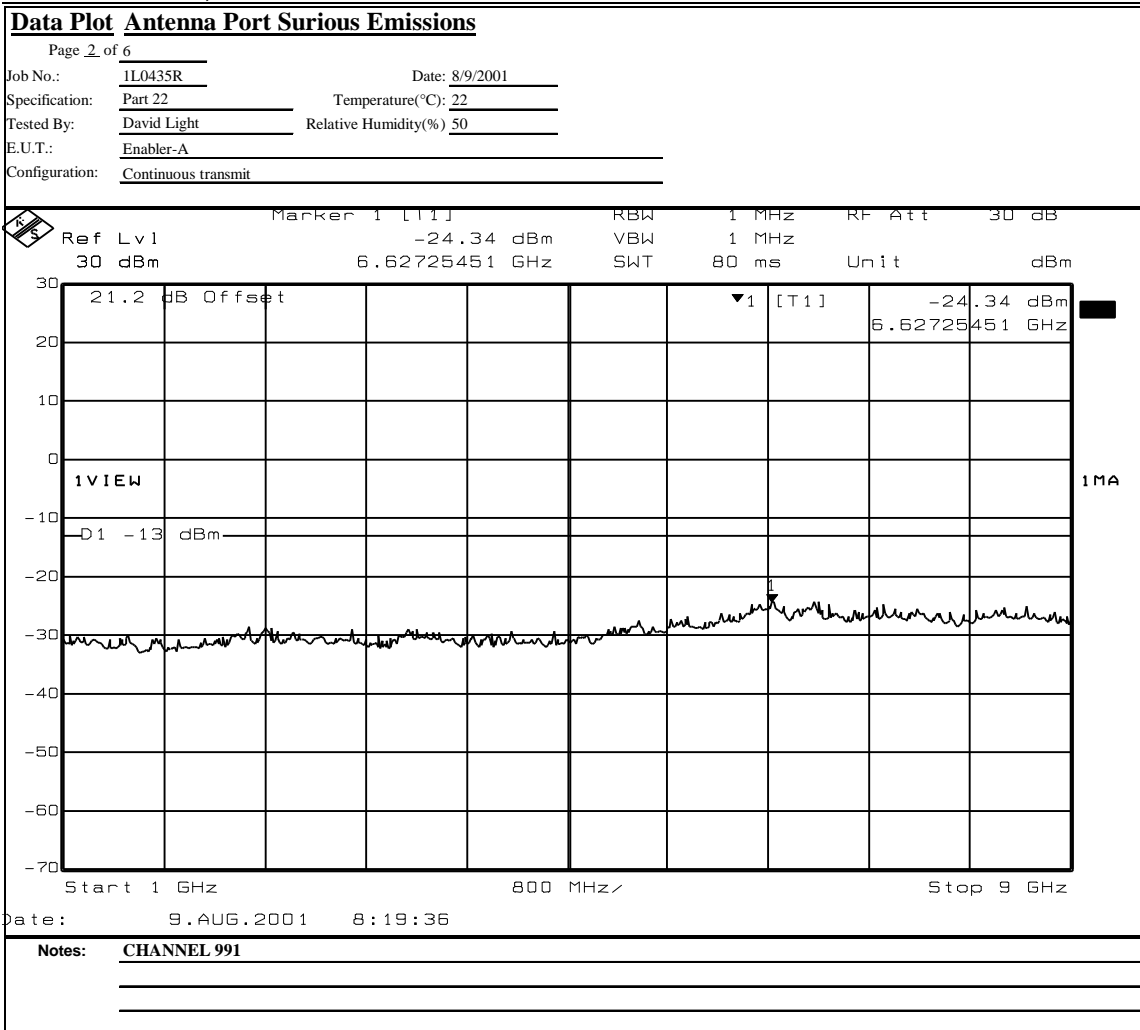


Test Data – Spurious Emissions at Antenna Terminals



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FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Test Data – Spurious Emissions at Antenna Terminals



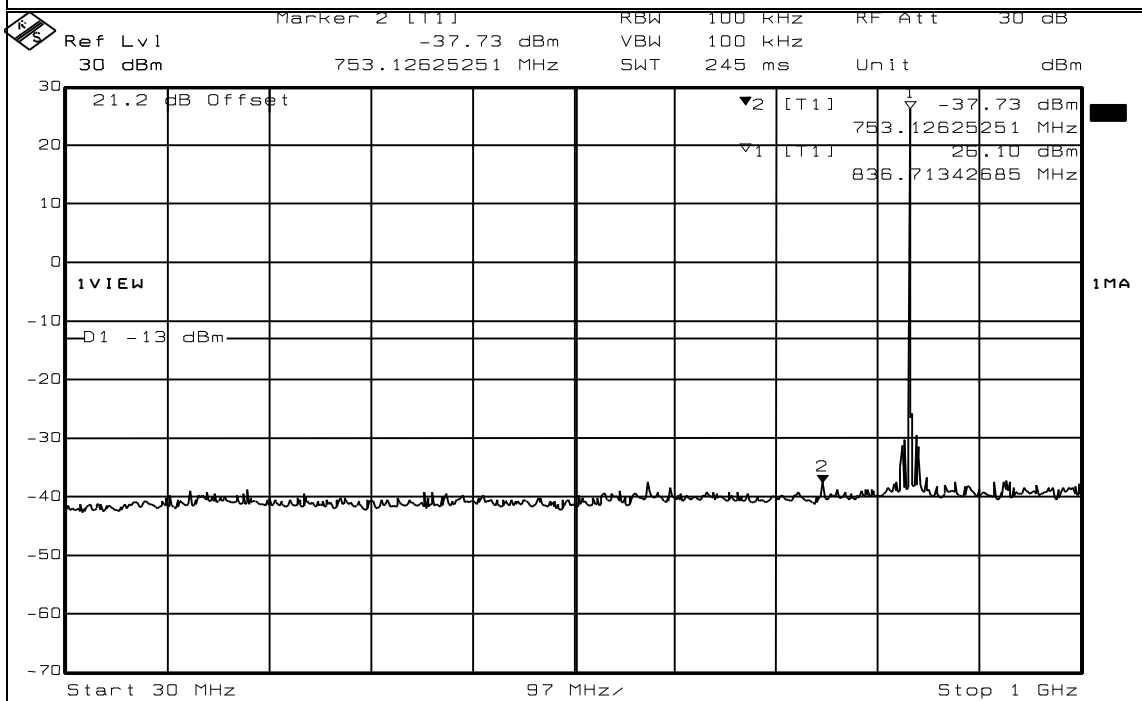
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Data Plot Antenna Port Surious Emissions

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Job No.: 1L0435R Date: 8/9/2001
Specification: Part 22 Temperature(°C): 22
Tested By: David Light Relative Humidity(%) 50
E.U.T.: Enabler-A
Configuration: Continuous transmit



Date: 9.AUG.2001 8:26:07

Notes: CHANNEL 367
MARKER ONE INDICATES CARRIER - MARKER TWO INDICATES HIGHEST EMISSION

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

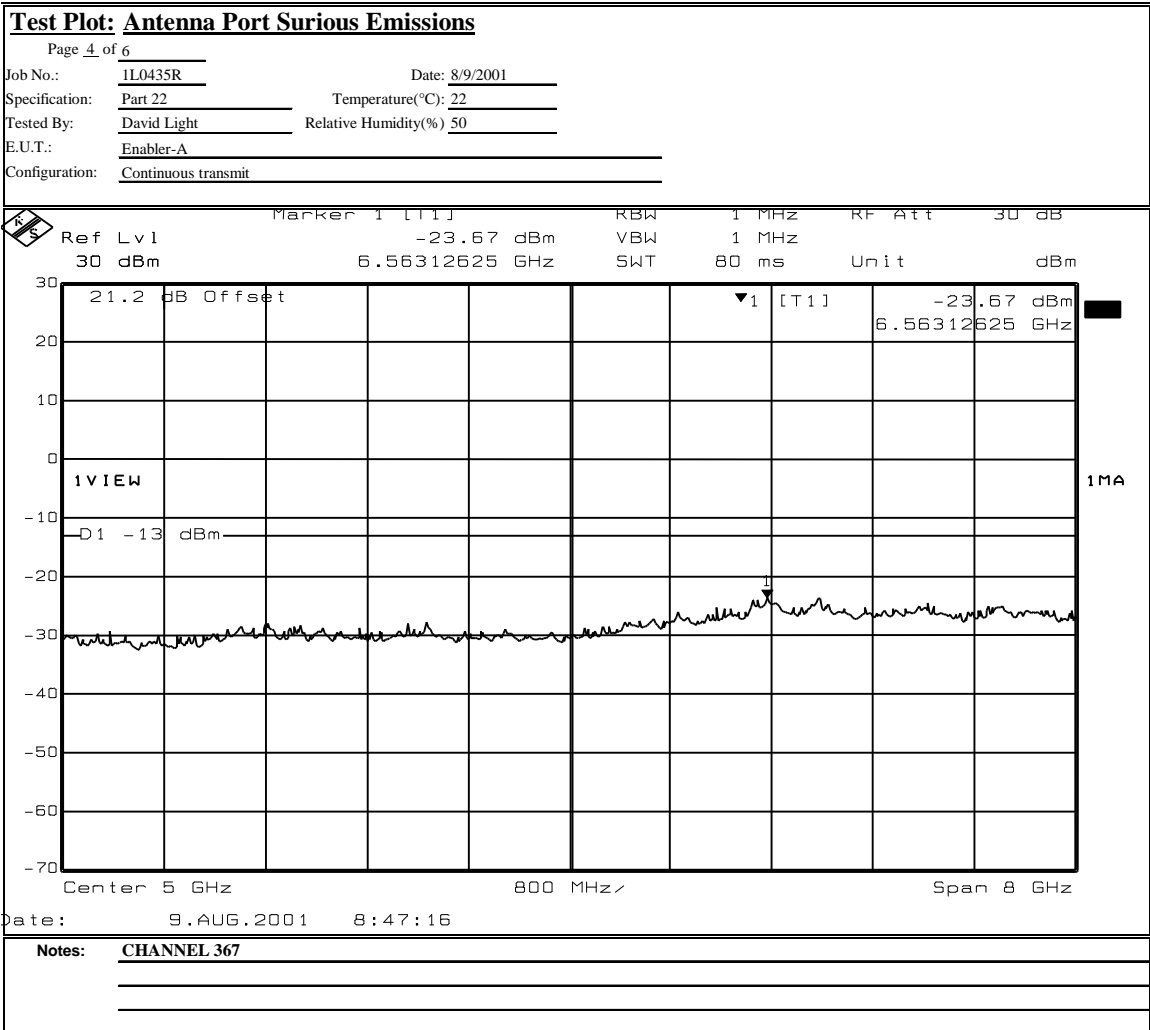
PROJECT NO.: 1L0435RUS2

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EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

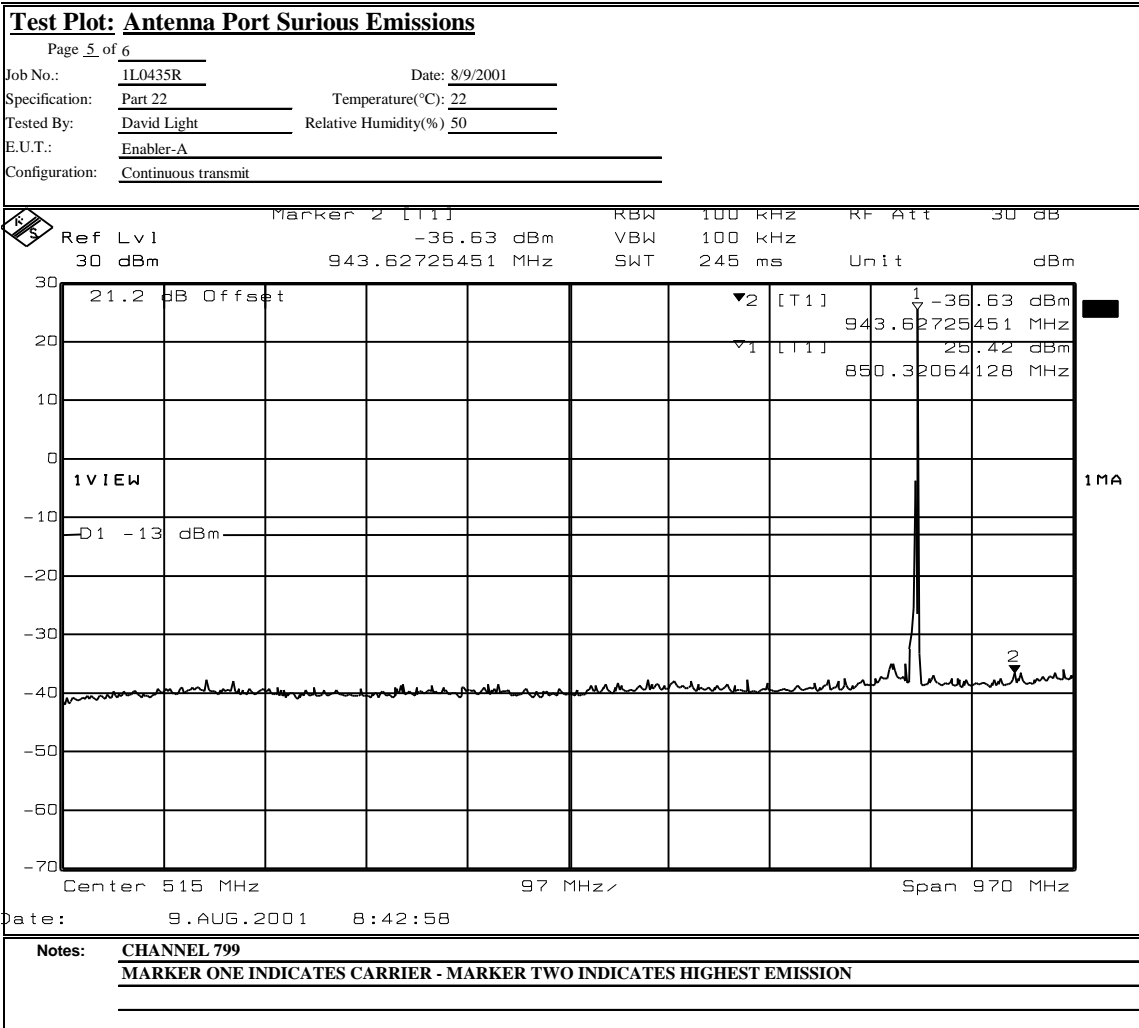
PROJECT NO.: 1L0435RUS2

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EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

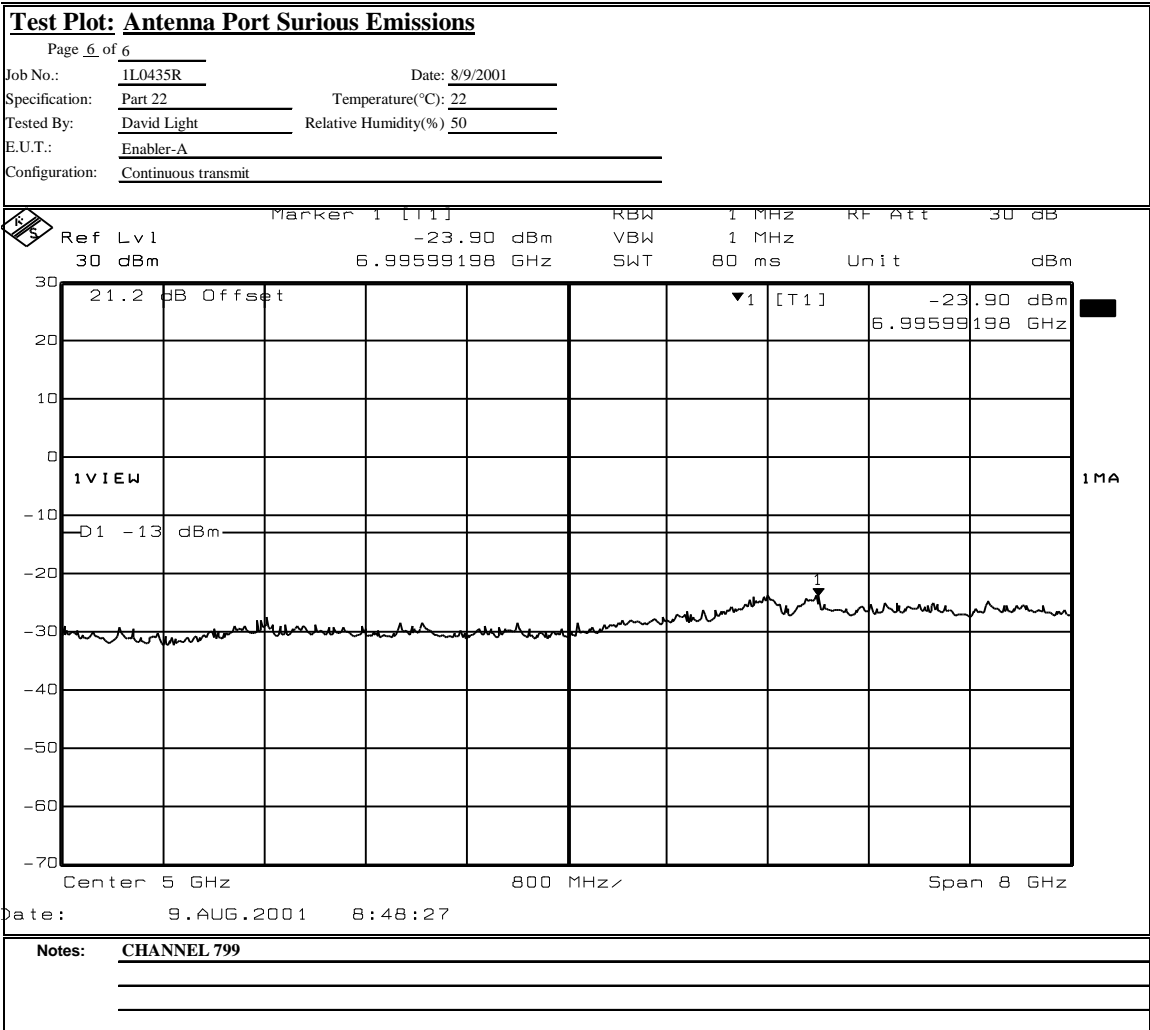
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FCC PART 22, SUBPART H
800 MHz CELLULAR SUBSCRIBER
UNITS

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Test Data – Spurious Emissions at Antenna Terminals

EQUIPMENT: *Enabler-A*
FCC ID: *MIVCDP10EAM*

PROJECT NO.: 1L0435RUS2



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| Data Plot | | Spurious Emissions in Receive Band | | | | | | | | | | | | | | | | | | | |
|---|----------------------------|--|--------|---------|---------------|-----|--------|--------|-------|---------|------------|-----|--------|--|--|--|------------------|-----|-------|------|-----|
| Page 1 of 1 | | Complete <input checked="" type="checkbox"/> | | | | | | | | | | | | | | | | | | | |
| Job No.: 1L0435R | Date: 8/9/2001 | Preliminary <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | |
| Specification: Part 22 | Temperature(°C): 22 | | | | | | | | | | | | | | | | | | | | |
| Tested By: David Light | Relative Humidity(%): 50 | | | | | | | | | | | | | | | | | | | | |
| E.U.T.: Enabler_A | | | | | | | | | | | | | | | | | | | | | |
| Configuration: Continuous Transmit | | | | | | | | | | | | | | | | | | | | | |
| 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: 1082 | | | | | | | | | | | | | | | | | | | | |
| Filter: 1060 | Cable #2: 1043 | | | | | | | | | | | | | | | | | | | | |
| Receiver: 1036 | Cable #3: _____ | | | | | | | | | | | | | | | | | | | | |
| Attenuator #1: _____ | Cable #4: _____ | | | | | | | | | | | | | | | | | | | | |
| Attenuator #2: _____ | Mixer: _____ | | | | | | | | | | | | | | | | | | | | |
| Additional equipment used: _____ | | | | | | | | | | | | | | | | | | | | | |
| Measurement Uncertainty: +/-3.6 dB | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Ref Lvl</th> <th>Marker 1 [T1]</th> <th>RBW</th> <th>30 kHz</th> <th>RF Att</th> <th>10 dB</th> </tr> </thead> <tbody> <tr> <td>-10 dBm</td> <td>-84.90 dBm</td> <td>VBW</td> <td>30 kHz</td> <td></td> <td></td> </tr> <tr> <td></td> <td>878.31863727 MHz</td> <td>SWT</td> <td>70 ms</td> <td>Unit</td> <td>dBm</td> </tr> </tbody> </table> | | | | Ref Lvl | Marker 1 [T1] | RBW | 30 kHz | RF Att | 10 dB | -10 dBm | -84.90 dBm | VBW | 30 kHz | | | | 878.31863727 MHz | SWT | 70 ms | Unit | dBm |
| Ref Lvl | Marker 1 [T1] | RBW | 30 kHz | RF Att | 10 dB | | | | | | | | | | | | | | | | |
| -10 dBm | -84.90 dBm | VBW | 30 kHz | | | | | | | | | | | | | | | | | | |
| | 878.31863727 MHz | SWT | 70 ms | Unit | dBm | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Date: 9.AUG.2001 9:08:29 | | | | | | | | | | | | | | | | | | | | | |
| Notes: | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Section 6. Field Strength of Spurious

| | |
|--|-------------------|
| NAME OF TEST: Field Strength of Spurious | PARA. NO.: 2.1053 |
| TESTED BY: Lance Walker | DATE: 10/18/2001 |

Test Results: Complies.

Measurement Data: See attached table.

Measurement Uncertainty: +/- 3.6 dB

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

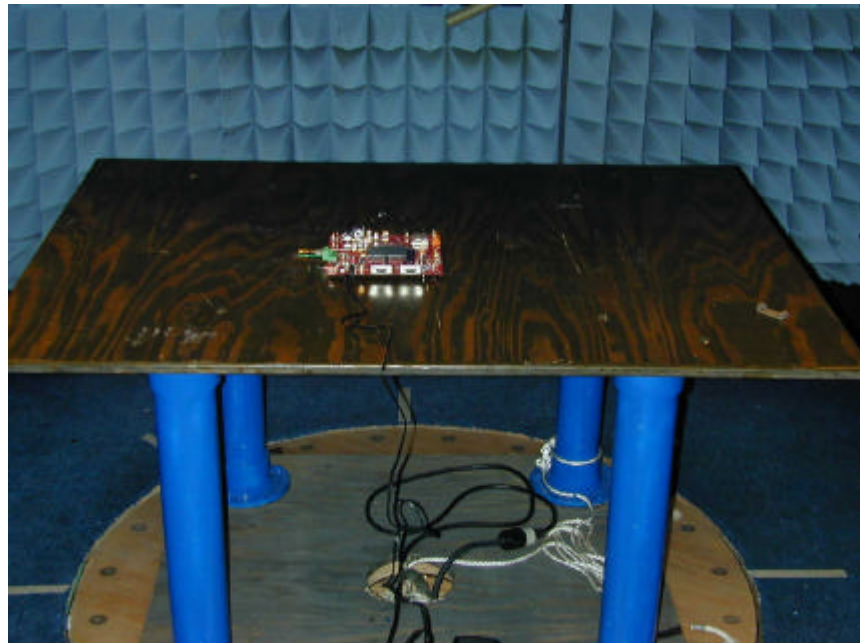
PROJECT NO.: 1L0435RUS2

Photographs of Test Setup

FRONT VIEW



REAR VIEW



EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Section 7. Frequency Stability

| | |
|-----------------------------------|-------------------|
| NAME OF TEST: Frequency Stability | PARA. NO.: 2.1055 |
| TESTED BY: David Light | DATE: 8/9/2001 |

Test Results: Complies.

Measurement Data: See attached table.

Standard Test Frequency: 836.01 MHz
Standard Test Voltage: 115 Vac

Equipment Used:

Measurement Uncertainty: 1×10^{-12} ppm

Temperature: 22 °C

Relative Humidity: 50 %

EQUIPMENT: *Enabler-A*
FCC ID: *MIVCDP10EAM*

PROJECT NO.: 1L0435RUS2

Test Data – Frequency Stability



Dallas Headquarters:
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Tel: (972) 436-9600
Fax: (972) 436-2667

Frequency Stability

Client: Enfora W.O.# 1L0435R
EUT: Enabler-A S/N: None
Date: 8/9/2001 Tech: Light

Test Equipment used: 1026-283

| Temperature | Voltage | Frequency Error |
|-------------|---------|-----------------|
| 20 °C | 115 VAC | -180 Hz |
| 20 °C | 98 VAC | -180 Hz |
| 20 °C | 132 VAC | -180 Hz |
| | | |
| 10 °C | 115 Vac | +74 Hz |
| 0 °C | 115 Vac | +203 Hz |
| -10 °C | 115 Vac | +84 Hz |
| -20 °C | 115 Vac | -84 Hz |
| -30 °C | 115 Vac | -95 Hz |
| | | |
| 30 °C | 115 Vac | -177 Hz |
| 40 °C | 115 Vac | -166 Hz |
| 50 °C | 115 Vac | -175 Hz |
| | | |

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

Section 8. Test Equipment List

| ASSET | Description | Manufacturer Model Number | Serial Number | Cal. Date | Cal. Due |
|-------|---------------------------|-----------------------------|---------------|-----------|----------|
| 1464 | Spectrum analyzer | Hewlett Packard 8563E | 3551A04428 | 01/02/01 | 01/02/02 |
| 1485 | Cable 2.0-18.0 Ghz | Storm PR90-010-216 | N/A | 06/01/01 | 06/01/02 |
| 1484 | Cable 2.0-18.0 Ghz | Storm PR90-010-072 | N/A | 06/01/01 | 06/01/02 |
| 1016 | Pre-Amp | HEWLETT PACKARD 8449A | 2749A00159 | 05/30/01 | 05/30/02 |
| 1029 | PEAK POWER METER | HP 8900D | 3303U0012 | 03/12/01 | 03/12/02 |
| 1030 | PEAK POWER SENSOR | HP 84811A | 2539A03573 | 03/12/01 | 03/12/02 |
| 1474 | 20db Attenuator DC 18 Ghz | MCL Inc. BW-S20W2 | NONE | CBU | N/A |
| 1082 | CABLE 2m | Astrolab 32027-2-29094-72TC | N/A | 06/01/01 | 06/01/02 |
| 1036 | SPECTRUM ANALYZER | ROHDE & SCHWARZ FSEK30 | 830844/006 | 09/17/01 | 09/18/03 |
| 1474 | 20db Attenuator DC 18 Ghz | MCL Inc. BW-S20W2 | NONE | CBU | N/A |
| 1026 | FREQUENCY COUNTER | HEWLETT PACKARD 5350B | 8232A01493 | 08/17/01 | 08/17/02 |
| 283 | ENVIROMENTAL CHAMBER | ENVIROTRONICS SH27 | 129010083 | 05/02/01 | 05/02/02 |

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FCC PART 22, SUBPART H
800 MHz CELLULAR SUBSCRIBER
UNITS

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

ANNEX A - TEST DETAILS

| | |
|--------------------------------------|--------------------------|
| NAME OF TEST: RF Power Output | PARA. NO.: 1.1046 |
|--------------------------------------|--------------------------|

Minimum Standard: Para. No. 22.913(a). The E.R.P. of mobile transmitter and auxiliary test transmitter must not exceed 7 watts.

EIA is 19B Para. No. 3.2.1.3. The transmitter shall be compiled of 8 distinct power levels.

The output power shown above shall be maintained within the range of +2 dB, -4 dB of nominal dBW value

| PL | I | II | III |
|----|-----|-----|-----|
| 0 | +6 | +2 | -2 |
| 1 | +2 | +2 | -2 |
| 2 | -2 | -2 | -2 |
| 3 | -6 | -6 | -6 |
| 4 | -10 | -10 | -10 |
| 5 | -14 | -14 | -14 |
| 6 | -18 | -18 | -18 |
| 7 | -22 | -22 | -22 |

Method Of Measurement:

Detachable Antenna:

The power at antenna terminals is measured using an in-line power meter.

Integral Antenna:

If the antenna is not detachable from the circuit then the Power Output is derived from the 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 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 a halfwave dipole antenna

| | |
|---|--------------------------|
| NAME OF TEST: Audio Frequency Response | PARA. NO.: 2.1047 |
|---|--------------------------|

Minimum Standard: Para. No. 15-19-B. From 300 to 3000 Hz the audio frequency response shall not vary more than +1 to -3 dB from a true 6dB octave pre-emphasis characteristic as referred to 1000 Hz level (with the exception of a permissible 6dB per octave roll-off from 2500 to 3000 Hz).

Method Of Measurement:

Operate the transmitter with the compressor disabled, and monitor the output with a frequency deviation meter or standard test receiver without standard 750-microsecond de-emphasis, with expander disabled, and without C-message weighted filter (see 6.6.2). Apply a sine wave audio input to the transmitter external audio input port, vary the modulating frequency from 300 to 3000 Hz and observe the input levels necessary to maintain a constant ± 2.9 kHz system deviation.

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

| | |
|---|--------------------------|
| NAME OF TEST: Audio Low Pass Filter Response | PARA. NO.: 2.1047 |
|---|--------------------------|

Minimum Standard: Para. No. 22.915 (d). For mobile stations, signals must be attenuated as a function of frequency as follows:

- i. In the frequency ranges 3.0 to 5.9 Hz and 6.1 to 15 kHz, 40 log (f/3) dB.
- ii. In the frequency range 5.9 to 6.1 kHz, 35 dB
- iii. In the frequency range above 15 kHz, 28 dB.

Method Of Measurement:

Adjust the audio input frequency to 1000 Hz and adjust the input level to 20 dB greater than that required to produce ± 8 kHz deviation. Note the output level on the frequency deviation meter or standard test receiver. Using the output level as reference (0dB), vary the modulating frequency from 3000 Hz to 30,000 Hz and observe the change in output while maintaining a constant audio input level.

| | |
|--|--------------------------|
| NAME OF TEST: Modulation Limiting | PARA. NO.: 2.1047 |
|--|--------------------------|

Minimum Standard: Para. No. 22.915(b)

The levels of the modulating signals must be set to the values specified below and must be maintained within $\pm 10\%$ of these values.

- Voice: ± 12 kHz
- SAT: ± 2 kHz
- Wideband Data: ± 8 kHz
- ST: ± 8 kHz

Method Of Measurement:

Voice: A 1 kHz audio tone is injected at levels between -45 and +20 dBVrms. The peak deviation is noted. This is repeated with a 300 Hz tone and a 3 kHz tone.

SAT: A SAT tone is generated by the mobile station and the peak deviation is measured.

Wideband Data: Wideband data is generated by the mobile station and the peak deviation is measured.

ST: ST data is generated by the mobile station and the peak deviation is measured.

| | |
|---|--------------------------|
| NAME OF TEST: Occupied Bandwidth (Voice & SAT) | PARA. NO.: 2.1049 |
|---|--------------------------|

Minimum Standard: 22.917(b) The mean power of any emission removed from the carrier frequency by a displacement frequency (f_d in kHz) must be attenuated below the mean power of the unmodulated carrier (P) as follows:

- (i) On any frequency removed from the carrier frequency by more than 20 kHz but not more than 45 kHz: at least 26 dB
- (ii) On any frequency removed from the carrier frequency by more than 45 kHz, up to the first multiple of the carrier frequency:

at least 60 dB or $43 + 10 \log (P)$ dB, whichever is the lesser attenuation.

Method Of Measurement:

Spectrum Analyzer Settings:

RBW: 300 Hz
VBW: \geq RBW
Span: 100 kHz
Sweep: Auto
Mask: CELLF3E

Input Signal Characteristics (F3E/F3D):

AF1 frequency: 2.5 kHz
AF1 level: 16 dB above the level sufficient to produce ± 6 kHz deviation with a 1 kHz tone.
SAT: 6000 Hz SAT
SAT level: sufficient to produce ± 2 kHz deviation.

| | |
|---|--------------------------|
| NAME OF TEST: Occupied Bandwidth (WBD & SAT) | PARA. NO.: 2.1049 |
|---|--------------------------|

Minimum Standard: 22.917(d) The mean power of any emission removed from the carrier frequency by a displacement frequency (f_d in kHz) must be attenuated below the mean power of the unmodulated carrier (P) as follows:

(1) On any frequency removed from the carrier frequency by more than 20 kHz but not more than 45 kHz:

at least 26 dB

(2) On any frequency removed from the carrier frequency by more than 45 kHz but not more than 90 kHz:

at least 45 dB

(3) On any frequency removed from the carrier frequency by more than 90 kHz, up to the first multiple of the carrier frequency:

at least 60 dB or $43 + 10 \log (P)$ dB, whichever is the lesser attenuation.

Method Of Measurement:

Spectrum Analyzer Settings:

RBW: 300 Hz

VBW: \geq RBW

Span: 200 kHz

Sweep: Auto

Mask: CELLF1D

Input Signal Characteristics:

RF level: Maximum recommended by manufacturer

10 kbps WBD + DAT

ST

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

PROJECT NO.: 1L0435RUS2

| | |
|---|--------------------------|
| NAME OF TEST: Spurious Emission at Antenna Terminals | PARA. NO.: 2.1051 |
|---|--------------------------|

Minimum Standard: Para. No. 22.917(b). The mean power of emissions must be attenuated below the mean power of the unmodulated carrier on any frequency twice or more than twice the fundamental emission by at least $43 + 10 \log P$. This is equivalent to -13 dBm absolute power.

Method Of Measurement:

Spectrum Analyzer Settings:

RBW: 30 kHz (AMPS). As required for digital modulations.

VBW: \geq RBW

Start Frequency: 0 MHz

Stop Frequency: 10 GHz

Sweep: Auto

| | |
|---|--------------------------|
| NAME OF TEST: Field Strength of Spurious Radiation | PARA. NO.: 2.1053 |
|---|--------------------------|

Minimum Standard: Para. No. 22.917(b). The mean power of emissions must be attenuated below the mean power of the unmodulated carrier on any frequency twice or more than twice the fundamental emission by at least $43 + 10 \log P$. This is equivalent to -13 dBm absolute power.

Test Method: TIA/EIA-603-1992, Section 2.2.12

The antenna substitution method was used to determine the equivalent radiated power at spurious frequencies. The spurious emissions were measured at a distance of 3 meters. The EUT was then replaced with a reference substitution antenna with a known gain referenced to a dipole. This antenna was fed with a signal at the spurious frequency. The level of the signal was adjusted to repeat the previously measured level. The resulting erp is the signal level fed to the reference antenna corrected for gain referenced to a dipole.

The spectrum is searched to 10 GHz.

| | |
|--|--------------------------|
| NAME OF TEST: Frequency Stability | PARA. NO.: 2.1055 |
|--|--------------------------|

Minimum Standard: Para. No. 22.355. The transmitter carrier frequency shall remain within the tolerances given in Table C-1.

| Freq. Range (MHz) | Mobile > 3 W | Mobile ≤ 3 W |
|-------------------|--------------|--------------|
| 821 to 896 | 2.5 | 2.5 |

Table C-1

Method Of Measurement:

Frequency Stability With Voltage Variation:

The E.U.T. is placed in an environmental chamber and allowed to stabilize at +20 degrees Celsius for at least 15 minutes. The frequency counter and signal generator are phase locked with the same 10 MHz reference frequency by connecting the 10 MHz ref. out of the counter to the 10 MHz ref, in of the signal generator. With the voltage input to the E.U.T. set to 85% S.T.V., the frequency is measured in 30 second intervals for a period of 5 minutes. This procedure is repeated at 100% S.T.V. and 115% S.T.V.

Frequency Stability With Temperature Variation:

The input voltage to the E.U.T. is set to S.T.V. and the temperature of the environmental chamber is varied in 10 degree steps from -30 degrees C to +50 degrees C. The E.U.T. is allowed to stabilize at each temperature and the frequency is measured in 30 second intervals for a period of 5 minutes.

Nemko Dallas

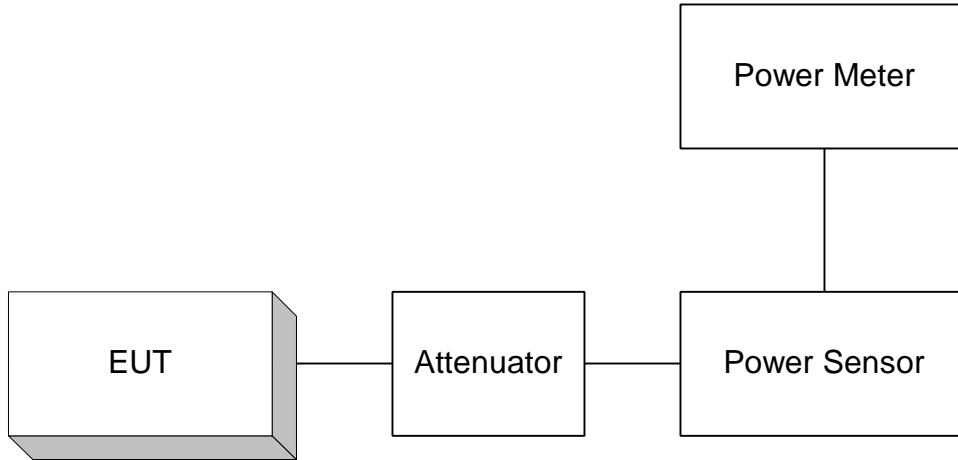
FCC PART 22, SUBPART H
800 MHz CELLULAR SUBSCRIBER
UNITS

EQUIPMENT: Enabler-A
FCC ID: MIVCDP10EAM

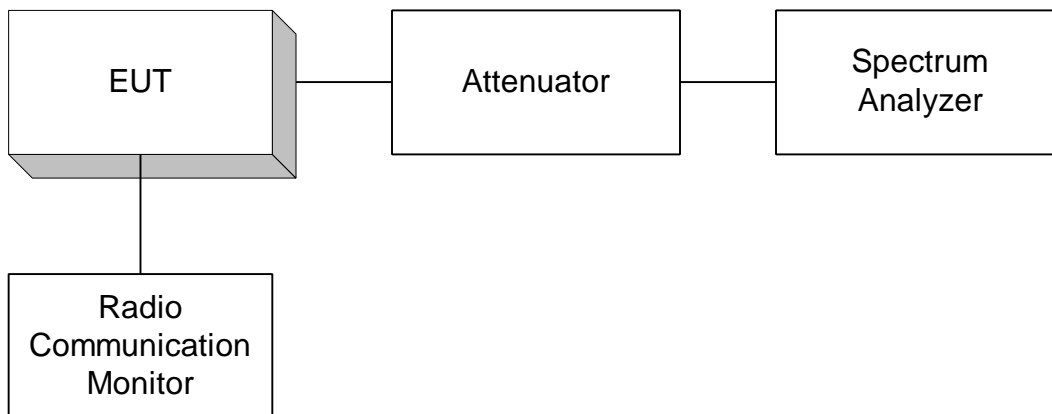
PROJECT NO.: 1L0435RUS2

ANNEX B - TEST DIAGRAMS

Para. No. 2.1046 - R.F. Power Output

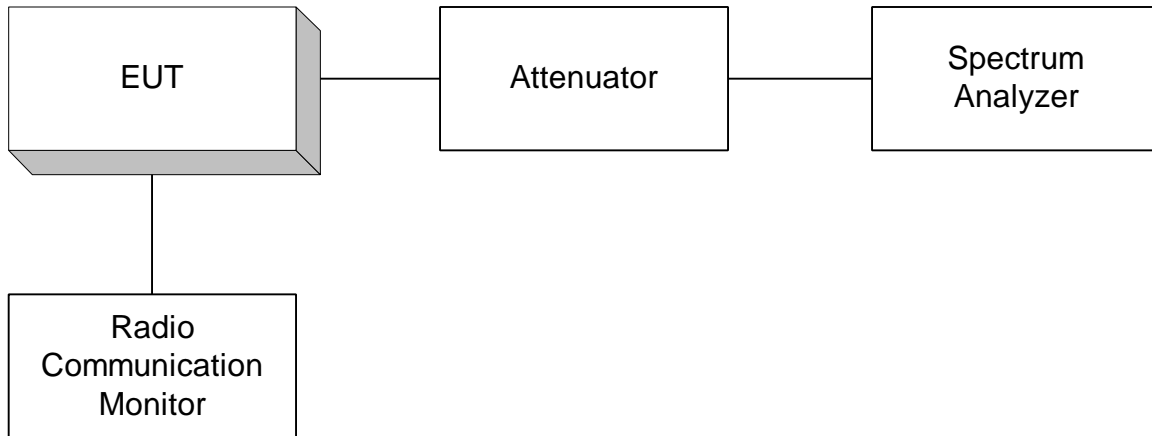


Para. No. 2.1049 - Occupied Bandwidth



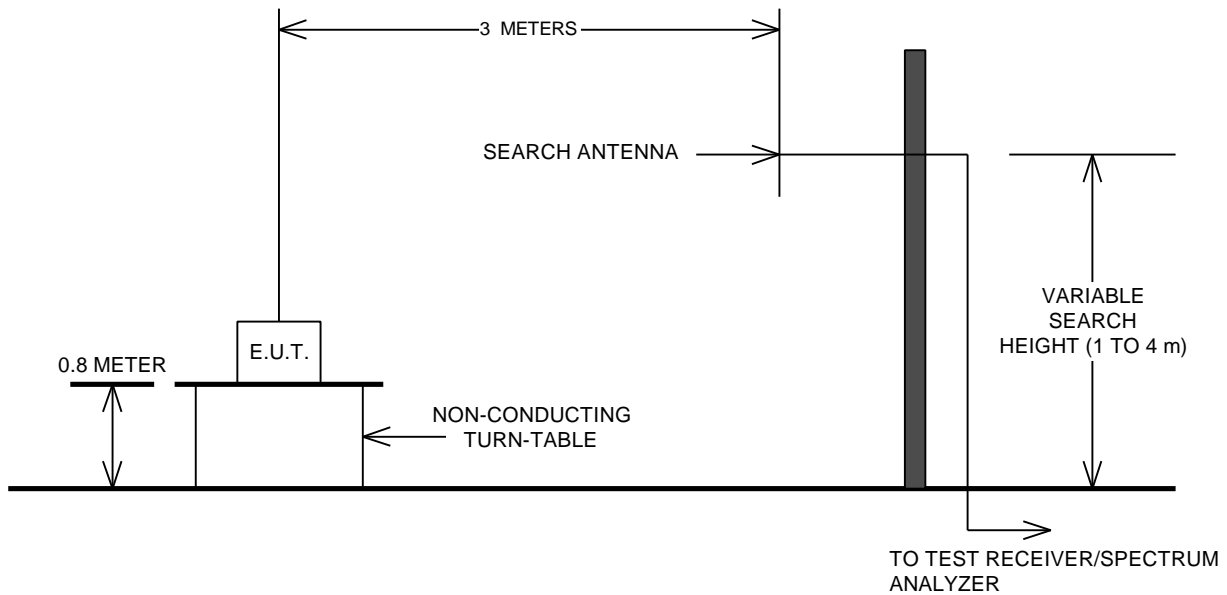
The Radio Communication Monitor is used only to provide modulation input for external modulation.

Para. No. 2.1051 Spurious Emissions at Antenna Terminals

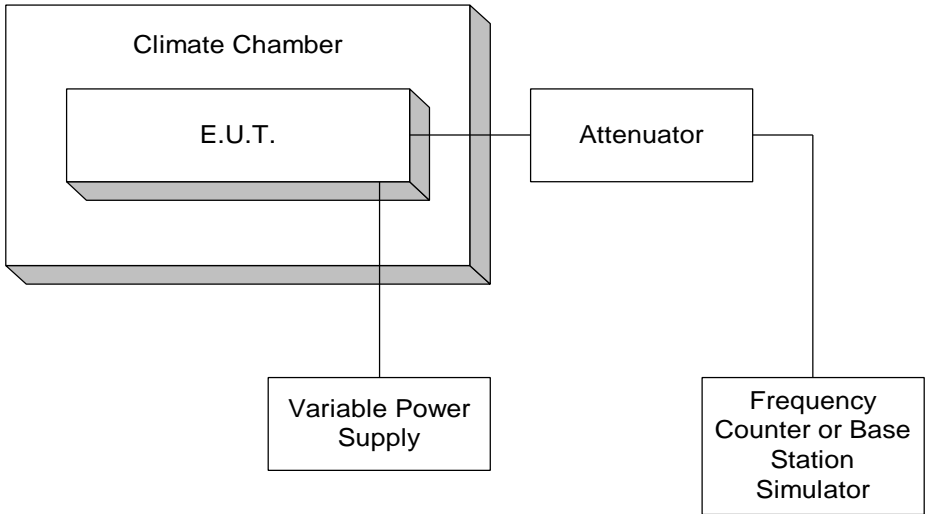


The Radio Communication Monitor is used only to provide modulation input for external modulation.

Para. No. 2.1053 - Field Strength of Spurious Radiation



Para. No. 2.1055 - Frequency Stability



Para. No. 2.1045 – Audio Frequency Response, Audio Low Pass Filter Response And Modulation Limiting

