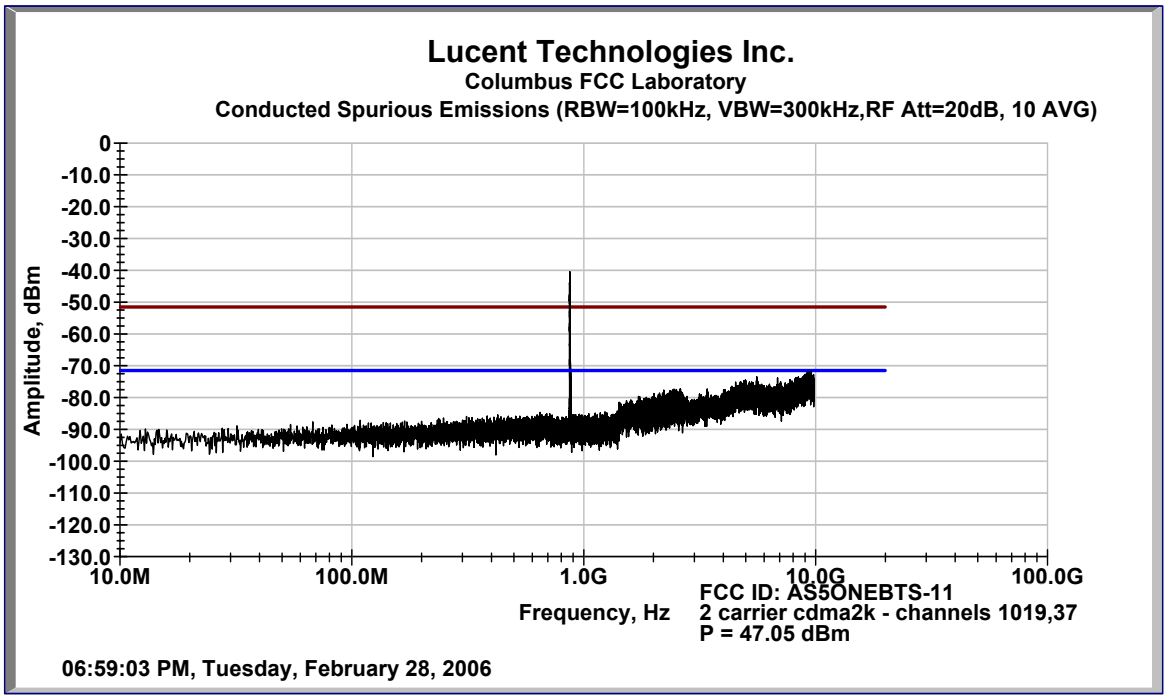
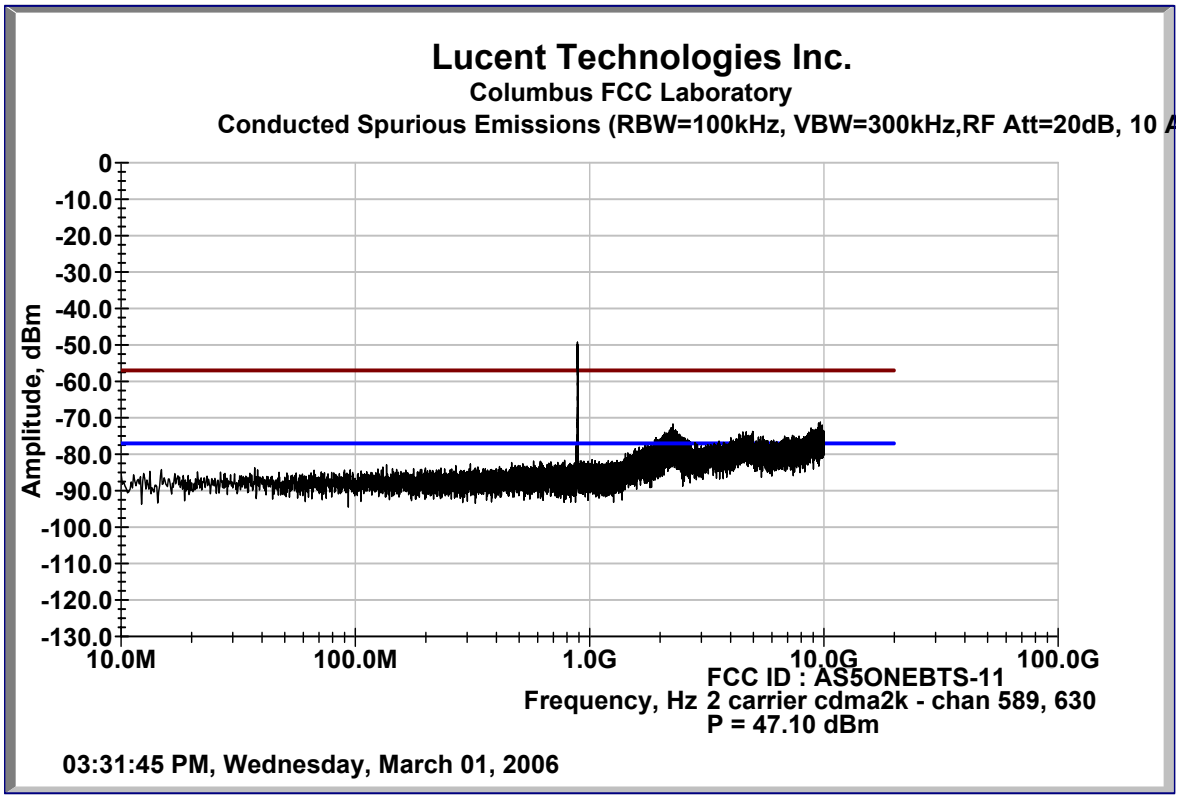
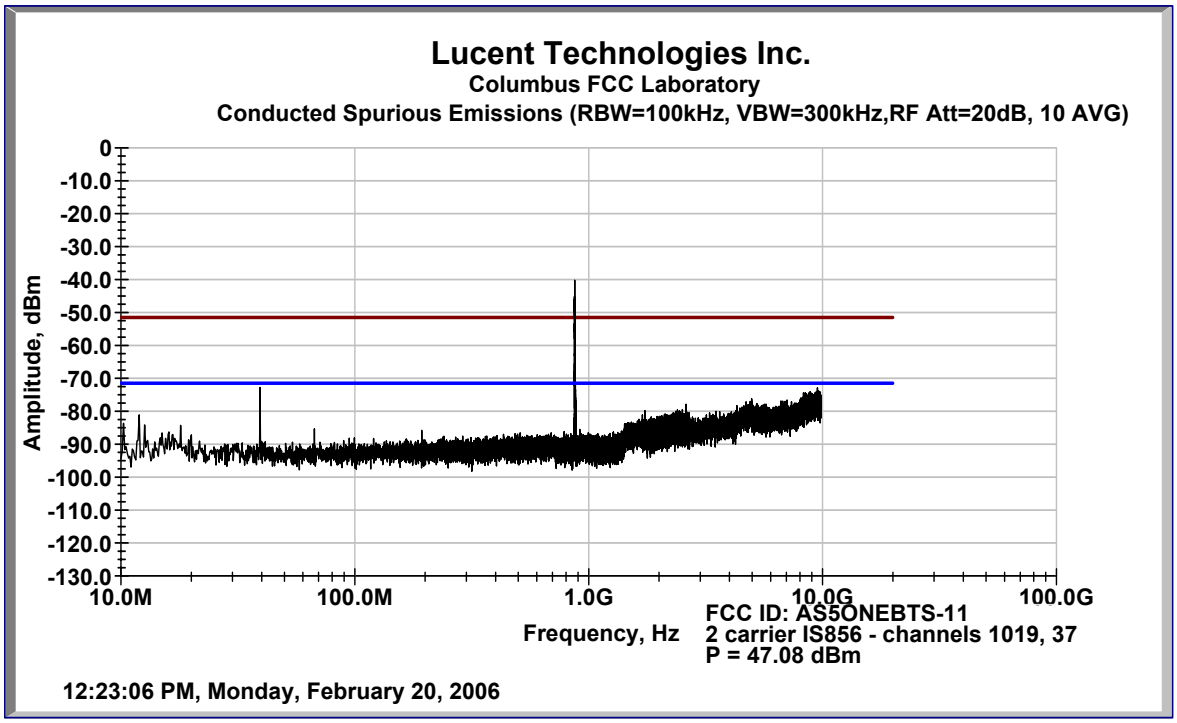
**A"/A3 Band – Left Edge 2-carrier cdma2000 (3G-1x)**



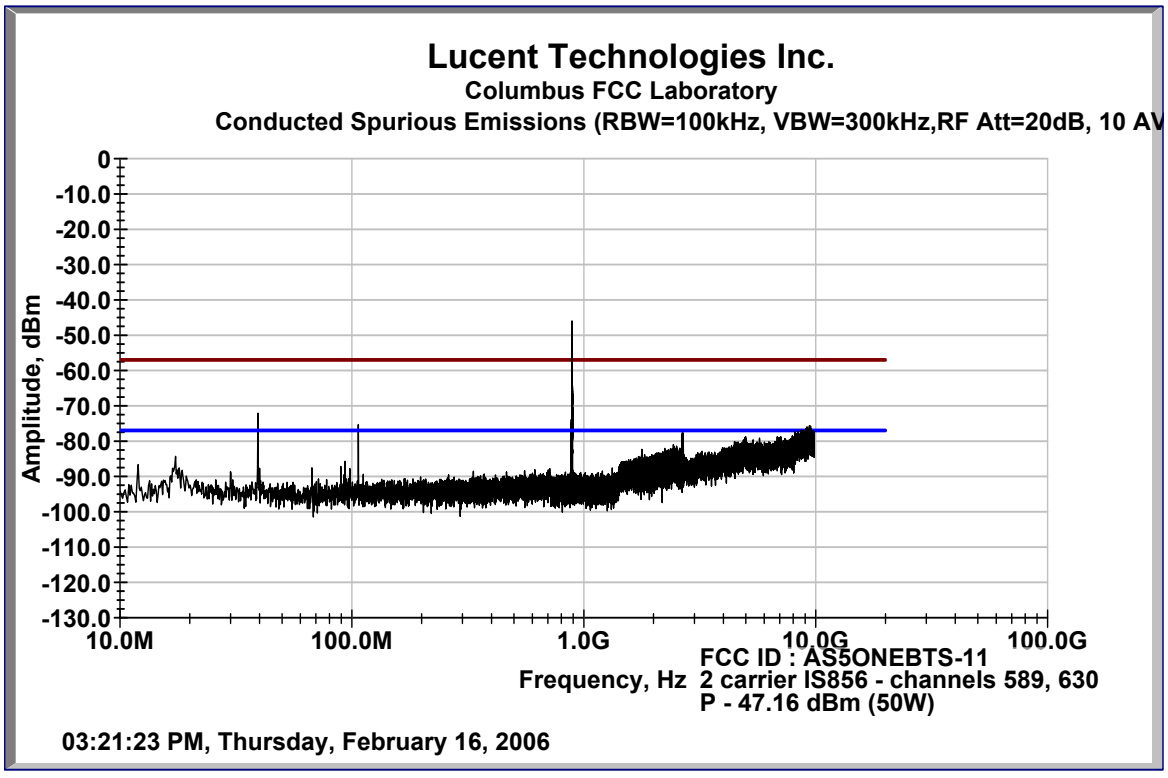

**B3/B2 Band – Right Edge 2-carrier cdma2000 (3G-1x)**



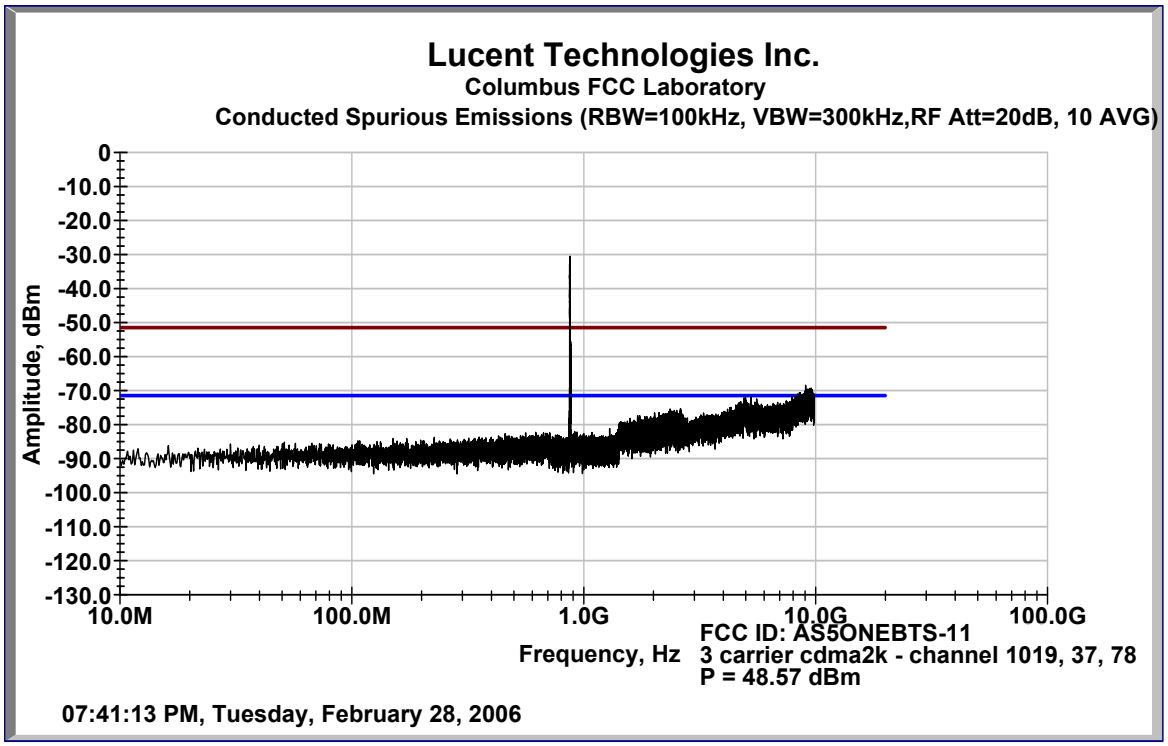
**A"/A3 Band – Left Edge 2-carrier IS-856 (3G-1xEV)**



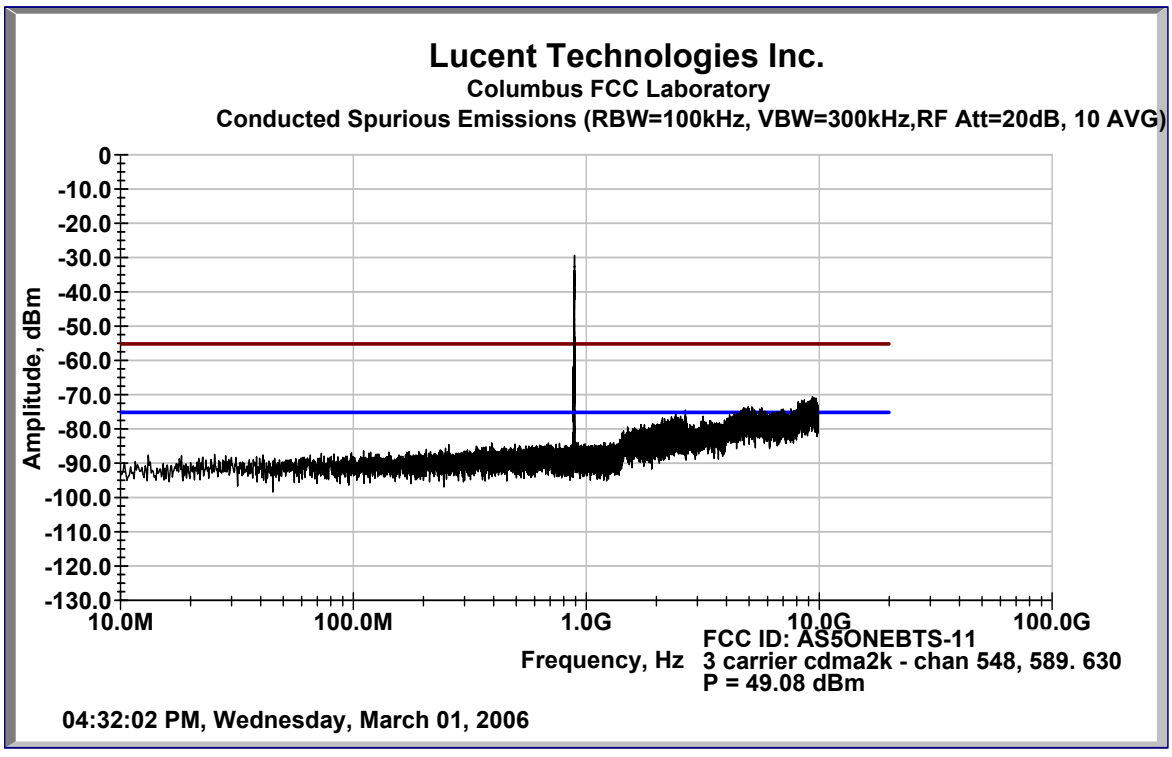

**B3/B2 Band – Right Edge 2-carrier IS-856 (3G-1xEV)**



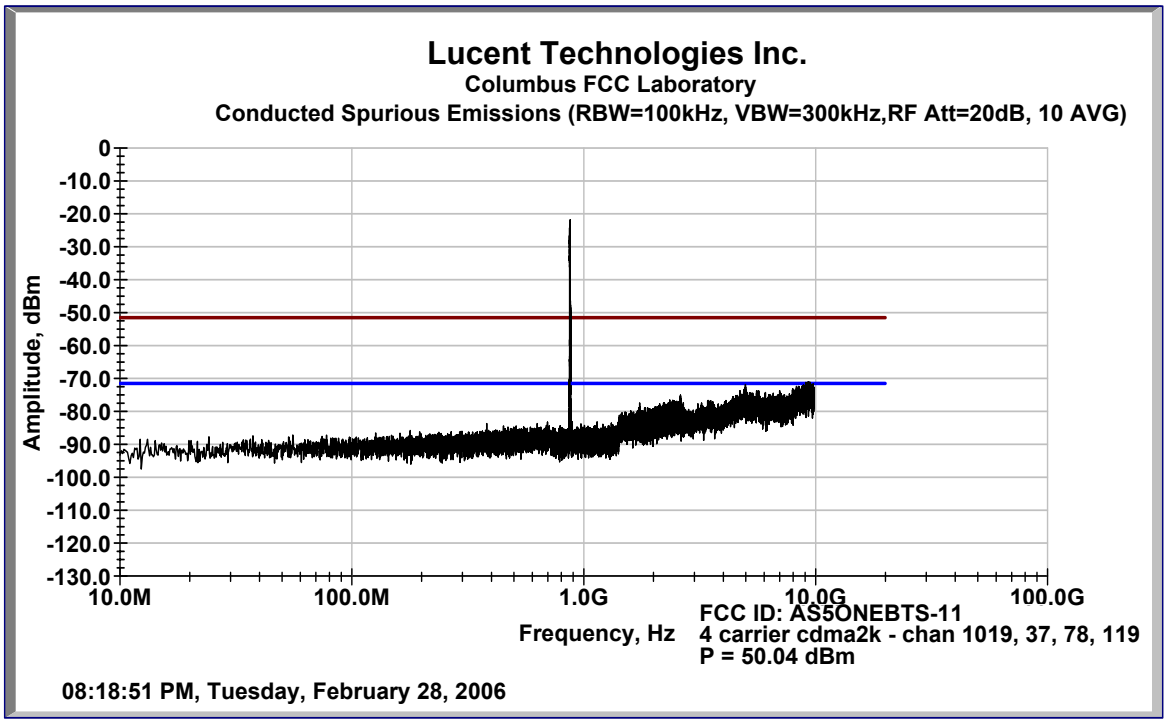
**A"/A3/A2 Band – Left Edge 3-carrier cdma2000 (3G-1x)**



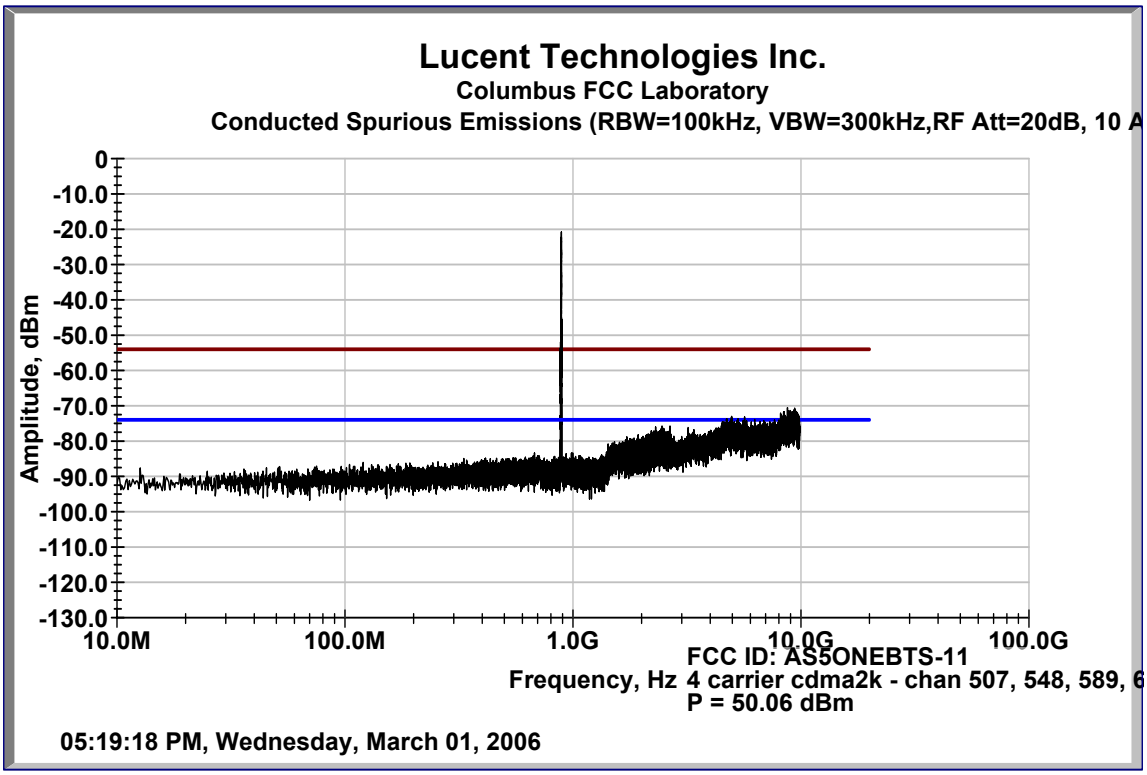

**B3/B2 Band – Right Edge 3-carrier cdma2000 (3G-1x)**



**A"/A3/A2 Band – Left Edge 4-carrier cdma2000 (3G-1x)**




**B3/B2 Band – Right Edge 4-carrier cdma2000 (3G-1x)**



**SUBEXHIBIT 10.6**

**Section 2.1053 MEASUREMENT REQUIRED: FIELD STREGTH OF SPURIOUS RADIATION**

The field strength measurements were made in the FCC registered three-meter semi-anechoic chamber which is maintained by Lucent Technologies Bell Laboratories in Columbus, Ohio, USA (FCC # 92731).

The AS5ONEBTS-11 UMTS CDMA transceiver was configured in both cdma2000 (3G-1x) mode with pilot, page, sync and traffic channels per 3GPP2 cdma2000 standards and IS-856 (3G-1xEV) mode with pilot, MAC and data channels per 3GPP2 High Rate Packet Data standards. The system was configured as a "six-sector" base transceiver station, with three sectors cdma2000 (3G-1X) modulation (four cdma2000 carriers per transmit port, 12 cdma2000 carriers total) and three sectors IS-856 (3G-1xEV) modulation (two IS-856 carriers per transmit port, six IS-856 carriers total). The carrier power level at each transmit port end antenna connector (EAC) of the AS5ONEBTS-11 UMTS CDMA transceiver Base Transceiver Station (BTS) was transmitting to the maximum rated mean power (25 watts per carrier, maximum 100 watts with four carriers).

The AS5ONEBTS-11 UMTS CDMA transceiver was investigated from 10 MHz to the 10th harmonic of the carrier or 10 GHz, per Section 21057(a)(1). The equipment under test (EUT) was configured in the normal mode of installation and operation. The recommendations of ANSI C63.4 were followed for EUT testing setup and cabling.

Measurements were made using both horizontally and vertically polarized broadband antennas. Per FCC regulations, the comparison of out of band spurious emissions directly to the limit is appropriately made using the substitution method. However, when the emissions are more than 20 dB below the specification limit, the use of field strength measurements for compliance determination is acceptable and those emissions are considered not reportable (Section 2.1053 and the FCC Interpretive database for 2.1053). For this case the evaluation of acceptable radiated field strength is as follows.

The calculated emission levels were found by:

$$E(\text{dBuV/m}) = V\text{meas(dBuV)} + \text{Amplifier Gain / Cable Loss (dB)} + \text{Antenna Factor}$$

Section 2.1053 contains the requirements for the levels of spurious radiation as a function of the EIRP of the unmodulated carrier. The reference level for the unmodulated carrier is calculated as the field produced by an isotropic radiator excited by the transmitter output power using the relation between the electric field strength of an ideal dipole and the power given in Reference Data for Radio Engineers, 6 4th edition, ITT Corp. The emission limit calculated equals the following:

$$E = (120\pi P)^{1/2} = [(30*P)^{1/2}] / R$$

$$20 \log (E*10^6) - (43 + 10 \log P) = 84.1 \text{ dB } \mu\text{V/meter}$$

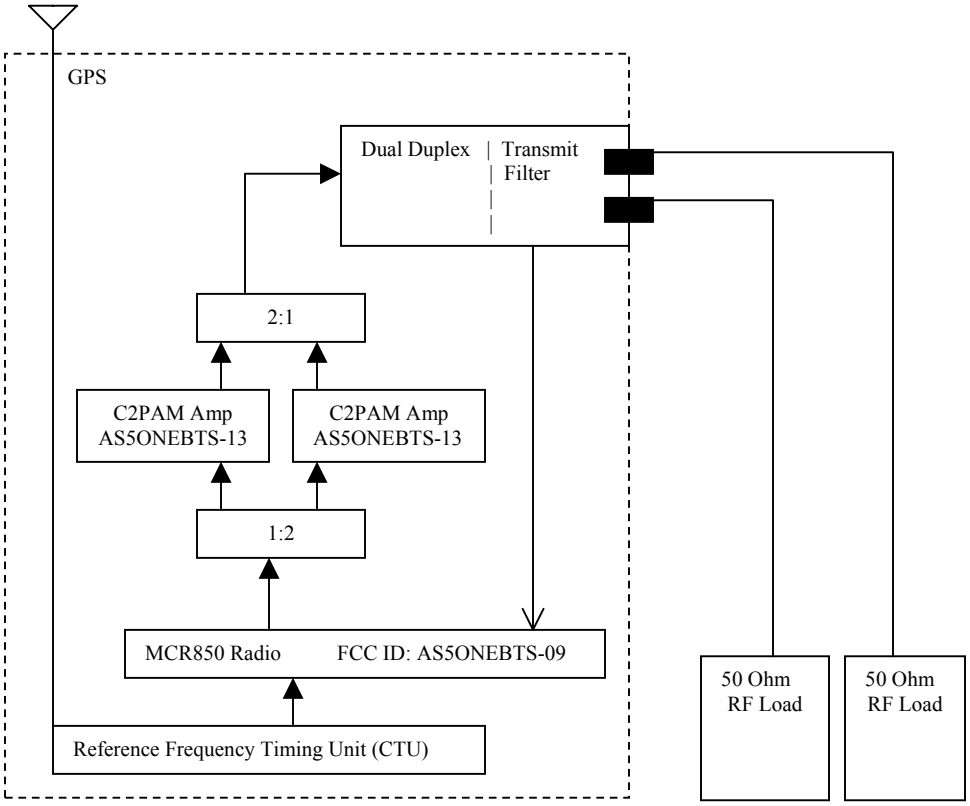
Where: E = Field Intensity in Volts/ meter R = Distance in meters = 3 m
P = Transmitted Power in watts = 25 W/ Carrier

| Frequency of Emission (MHz) | Distance (m) | E (dBuV/m) | E (dBm) | RBW |
|---|---|---|---|---|
| 10-10,000 | 3 | 84.1 | -22.9 | 100 kHz |

Sections 2.1051 and 2.1057 (c) specify that the spurious emissions attenuated more than 20 dB below the permissible value need note be reported. Therefore, the reportable limit at 3 meters is 64.1 dBuV/m (-42.9 dBm).

All measurement equipment used was calibrated in accordance with ISO9000 processes. The EUT configuration diagram is given in the following Figure 10.6.1.

**Figure 10.6.1 EUT for Measurements of FIELD STREGTH OF SPURIOUS RADIATION**



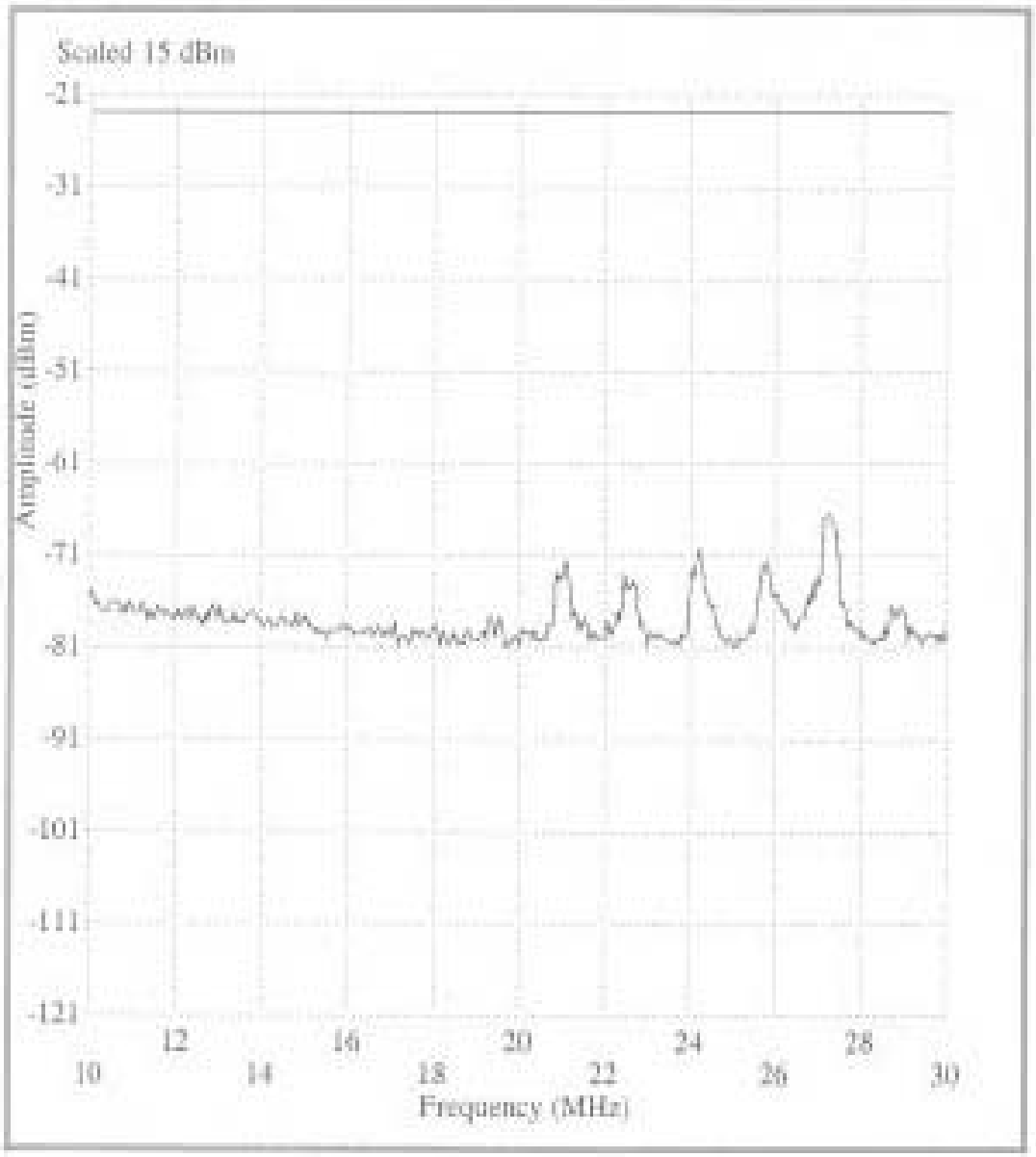
**Results**

The measurement results over the frequency spectrum investigated (10 MHz to 10 GHz) demonstrate full compliance with the Rules of the Commission.

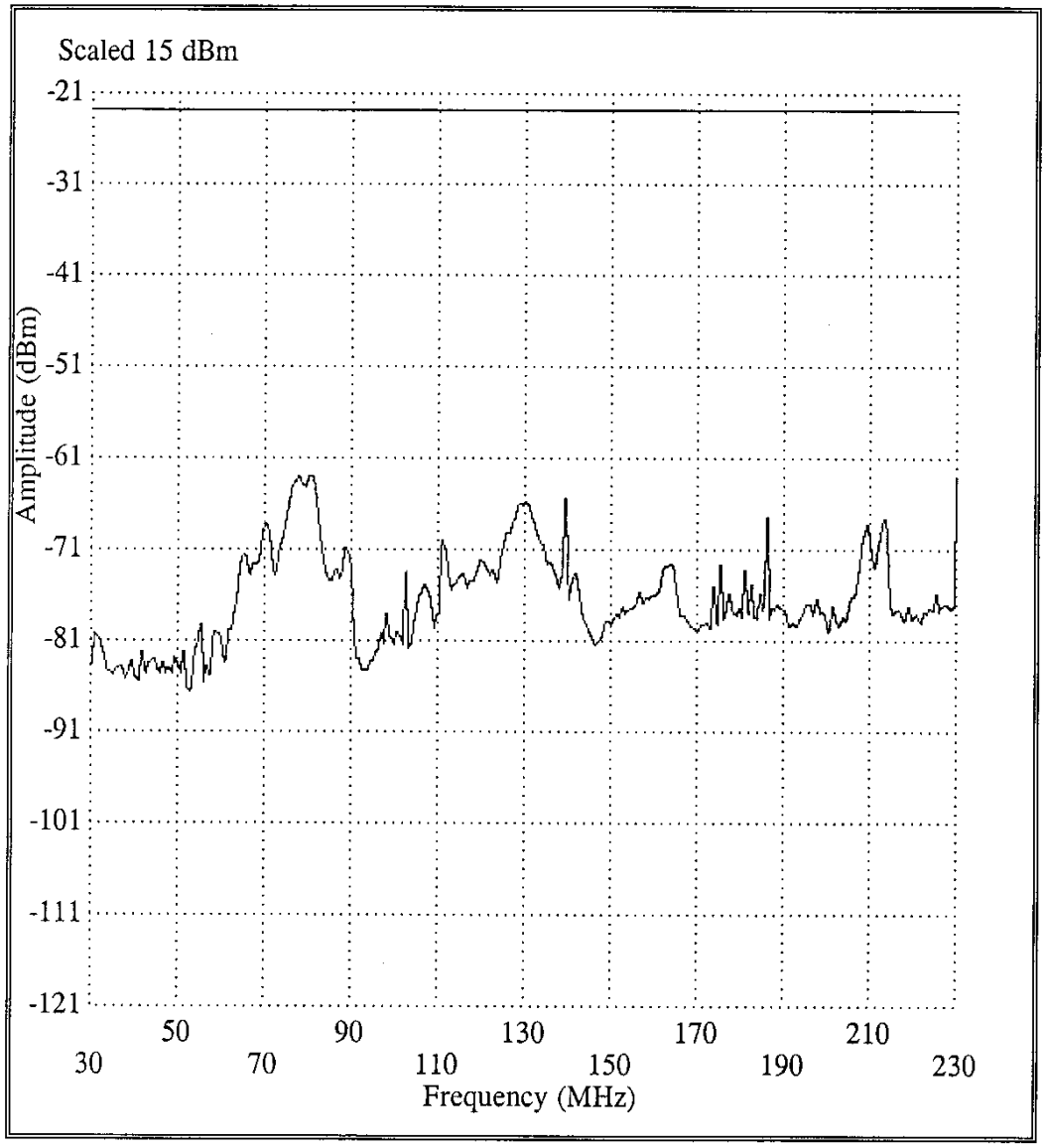
**Worst Case FIELD STREGTH OF SPURIOUS RADIATION**

| Frequency (MHz) | Antenna Polarity | Measured Radiated Field Strength (dBm) | Measure Radiated Field Strength (dBuV/m | Path Gain Amp/ Cable (dB) | Antenna Factor (dB) | Equivalent Transmit Power (dBm) | Equivalen Field Strength (dBuV/m) | Pass / Fail |
|---|---|---|---|---|---|---|---|---|
| 27.2 | H | -51.0 | 56.0 | 24.34 | 8.89 | -66.46 | 40.54 | Pass |
| 77.6 | H | -48.90 | 58.1 | 23.48 | 9.53 | -62.85 | 44.15 | Pass |
| 978.0 | H | -65.6 | 41.4 | 16.73 | 24.04 | -58.29 | 48.71 | Pass |
| 1769 | V | -54.3 | 52.7 | 36.2 | 28.38 | -62.12 | 44.88 | Pass |
| 3049 | H | -57.0 | 50.0 | 35.25 | 32.31 | -59.94 | 47.06 | Pass |
| 7637 | V | -67.2 | 39.8 | 34.97 | 39.74 | -62.34 | 44.66 | Pass |

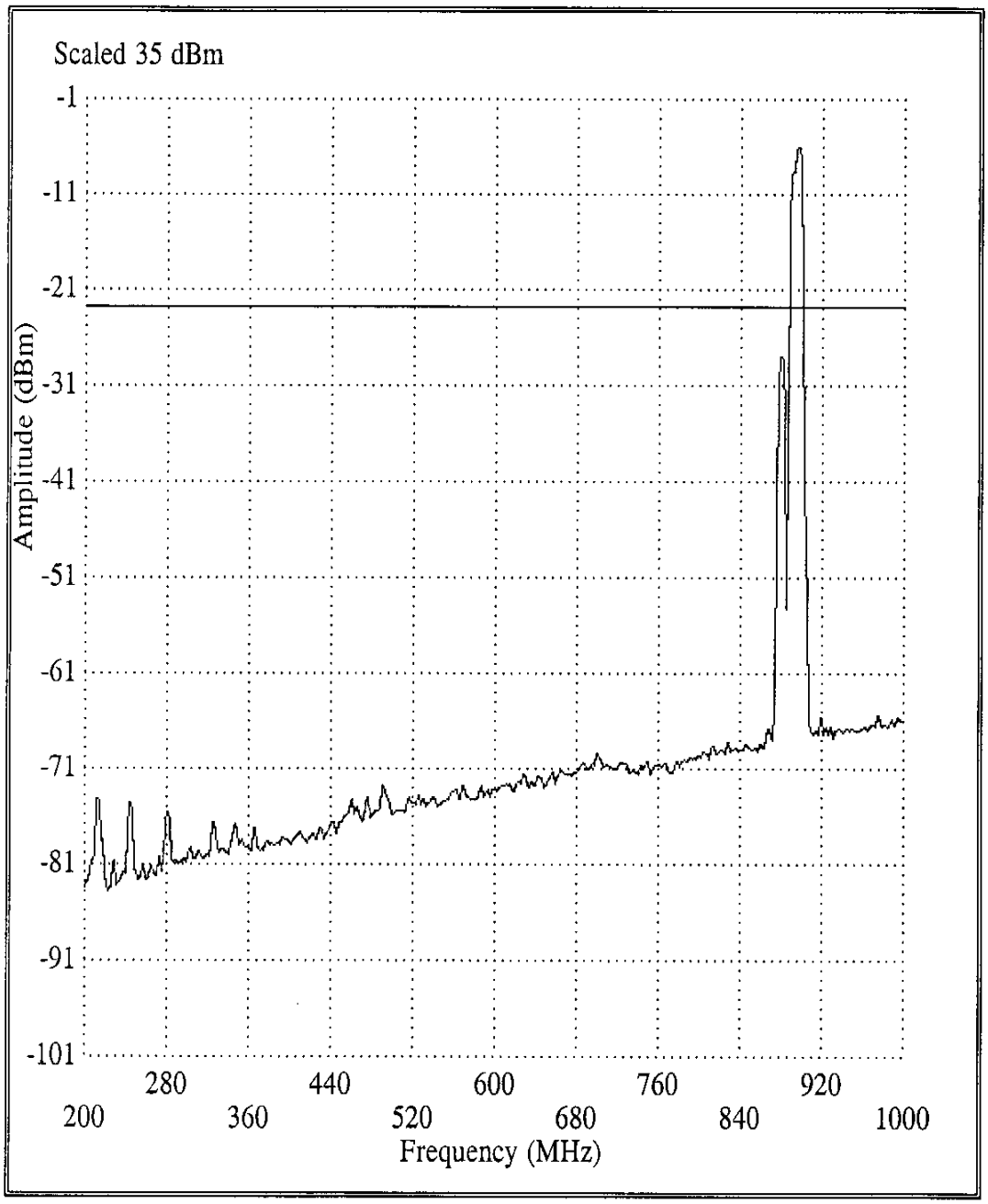
**FIELD STREGTH OF SPURIOUS RADIATION Plots – 10 to 30 MHz**



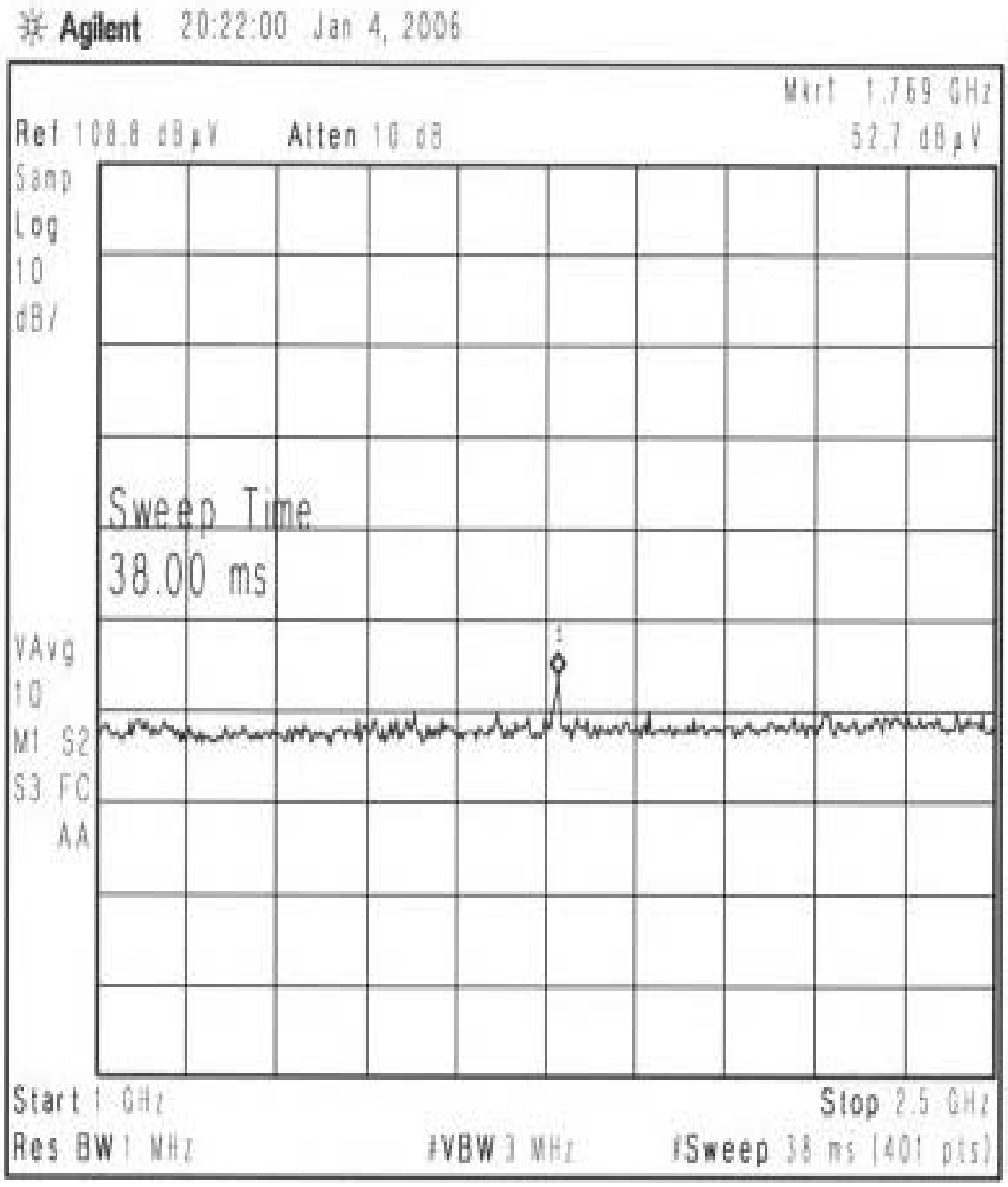

**FIELD STREGTH OF SPURIOUS RADIATION Plots – 30 to 230 MHz**



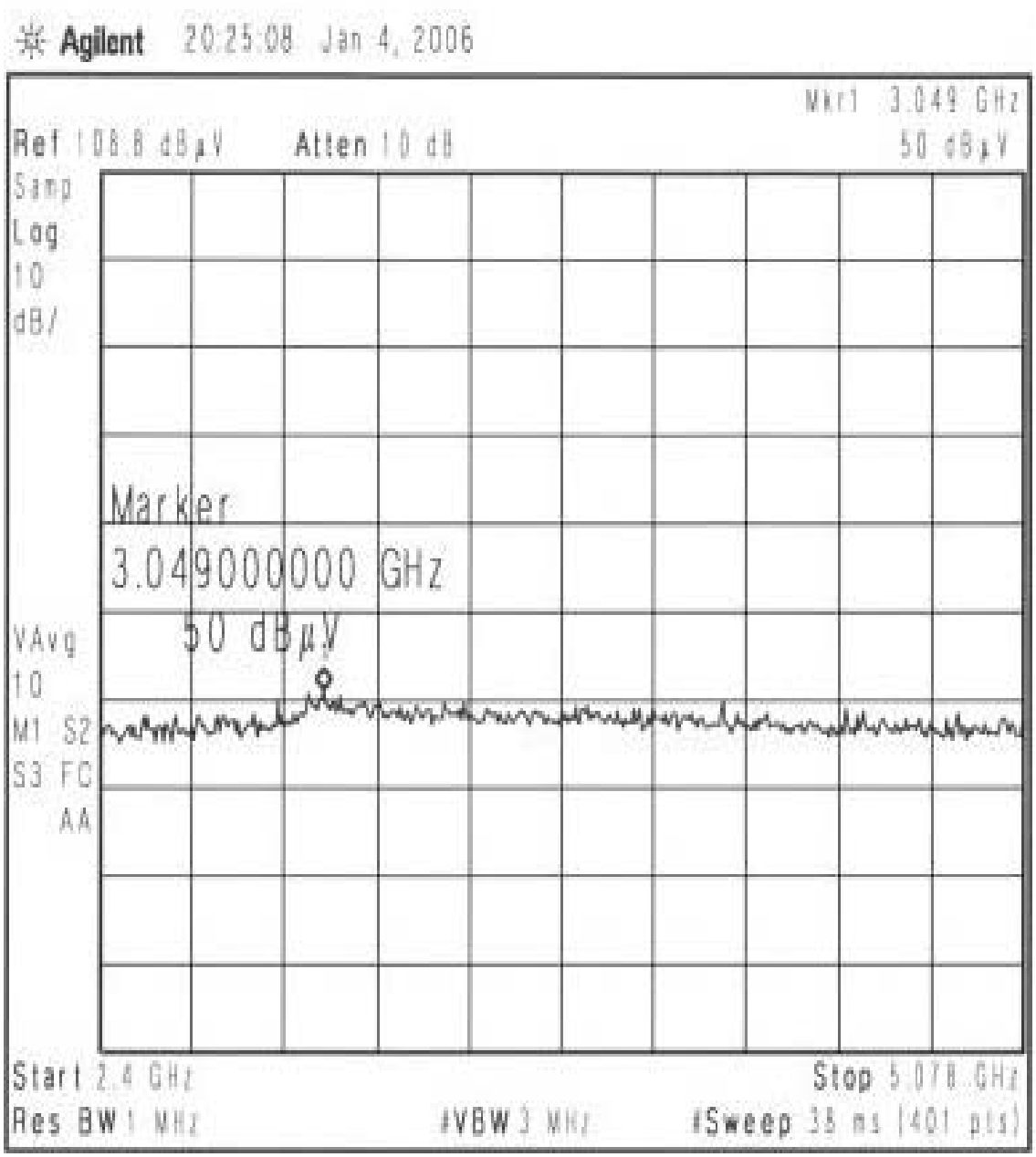
**FIELD STREGTH OF SPURIOUS RADIATION Plots – 200 to 1000 MHz**



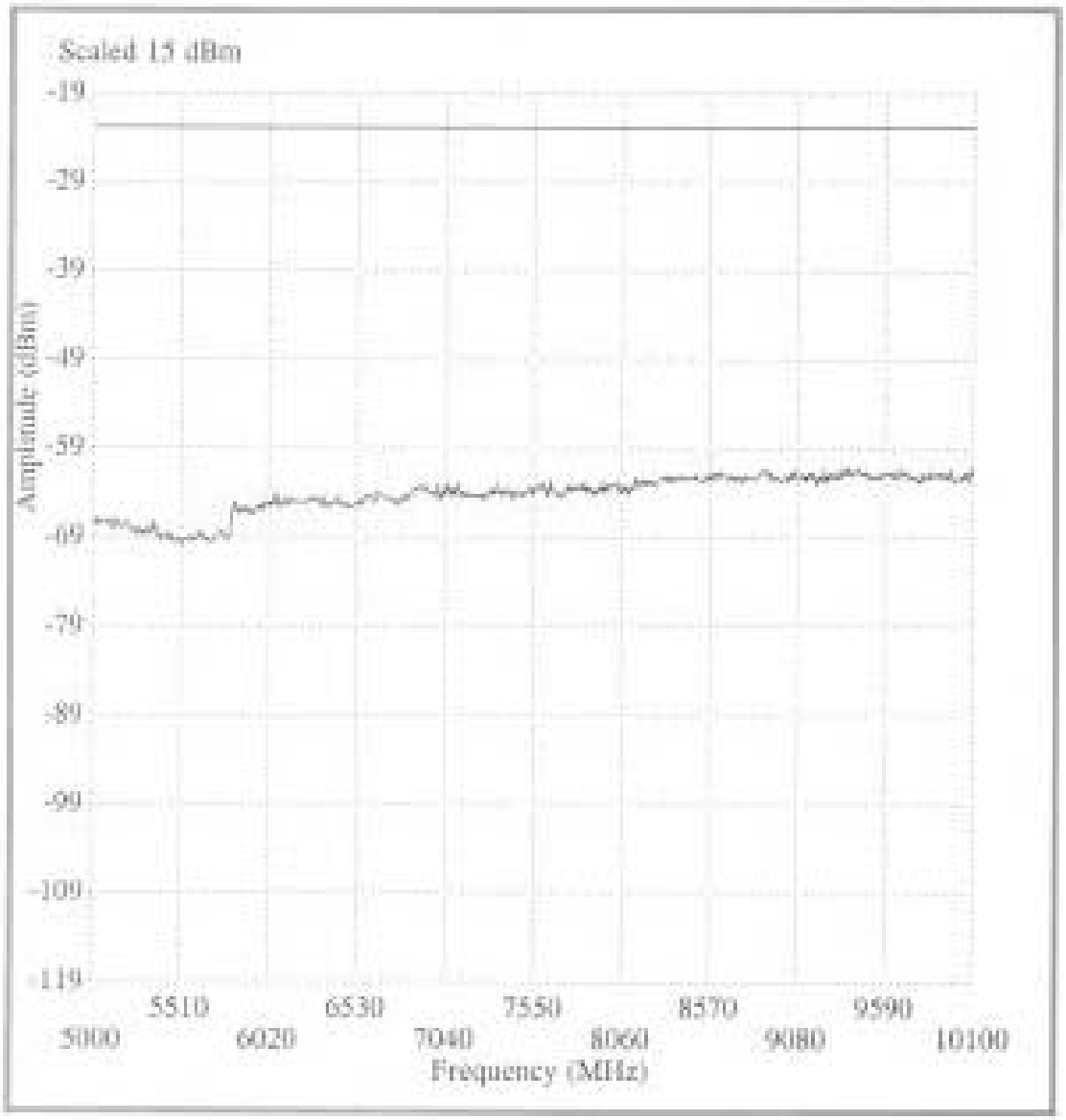
**FIELD STREGTH OF SPURIOUS RADIATION Plots –1 to 2.5 GHz**



**FIELD STREGTH OF SPURIOUS RADIATION Plots – 2.5 to 5 GHz**



**FIELD STREGTH OF SPURIOUS RADIATION Plots –5 to 10 GHz**



**Section 2.1055 MEASUREMENT REQUIRED: FREQUENCY STABILITY**

The output frequency of the AS5ONEBTS-11 UMTS CDMA transceiver is determined by the internal transmit synthesizer and the external OM. The 15 MHz output frequency of OM is disciplined by the CTU using Bell Laboratories proprietary phase lock loop (PLL) software and GPS reference.

The stability of the AS5ONEBTS-11 UMTS CDMA transceiver output frequency was measured at the transmit port end antenna connector (EAC) from –40 °C to +50 °C in 10 °C steps and with a variation of primary supply voltage from 85% to 115% of the nominal value per Section 2.1055. The nominal supply voltage is +24 VDC. The 85% of 24 VDC is 20.4 V and 115% is 27.6 V. The AS5ONEBTS-11 UMTS CDMA transceiver was set to transmit at CDMA Cellular Channel 425, 882.75 MHz. The frequency was measured at the radio output every 30 seconds at each temperature and each supply voltage. Seven data were collected at each temperature and each supply voltage.

At each temperature and each supply voltage, the AS5ONEBTS-11 UMTS CDMA transceiver was given sufficient time for its thermal stabilization. Thermal-couplers were attached to the MCR faceplate, CTU faceplate and the exterior surface of the Modular Cell. The primary OM was used for providing 15MHz reference frequency to the CTU. The temperature was recorded during the testing to ensure that the thermal stability was achieved at each temperature prior to frequency measurement.

The minimum requirement specified in Section 22.355 for CDMA Cellular transmitter is ±1.50 ppm (i.e. maximum frequency error of 1303 Hz ~ 1341 Hz). TIA/EIA specifies the minimum requirement is ±0.050 ppm (i.e. maximum frequency error of 44 Hz).

The maximum measured frequency derivations ($\Delta f$) from 882.75MHz at each temperature and supply voltage are summarized in the following table.

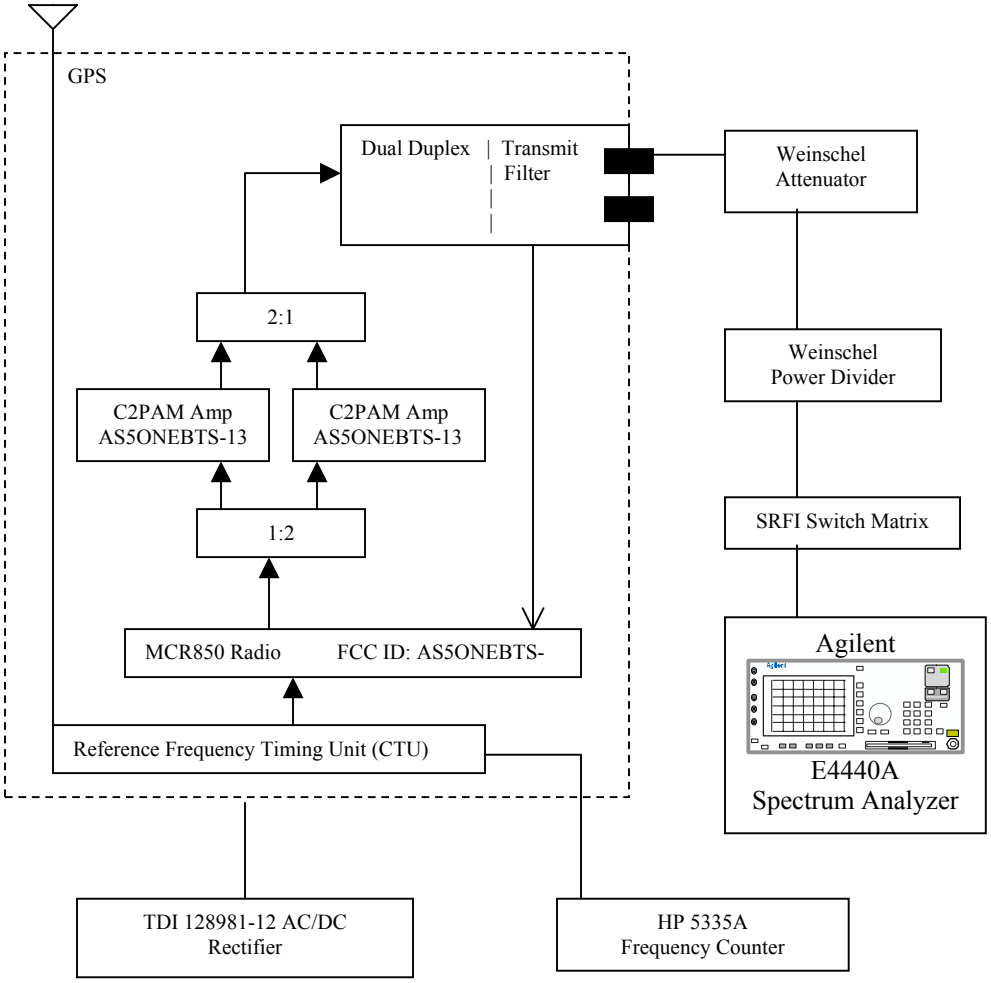
| **Stabilized Temp. (°C)** | **$\Delta f$ 85% $V_{norm}$ (Hz)** | **$\Delta f$ 100% $V_{norm}$ (Hz)** | **$\Delta f$ 115% $V_{norm}$ (Hz)** |
|---|---|---|---|
| -40 | 2.656 | 1.278 | 1.342 |
| -30 | 1.235 | 1.839 | 1.081 |
| -20 | 2.459 | 1.237 | 1.042 |
| -10 | 0.766 | 0.956 | 3.470 |
| 0 | 1.698 | 1.254 | 1.184 |
| +10 | 1.336 | 1.776 | 0.947 |
| +20 | 2.026 | 1.941 | 3.092 |
| +30 | 2.440 | 1.340 | 0.623 |
| +40 | 1.087 | 2.335 | 2.339 |
| +50 | 1.617 | 2.146 | 0.821 |

All the measurement equipment was calibrated in accordance with ISO 9001 process. The EUT configuration diagram is given in the following.

**Results:**

The output frequency of the 850 MCR at the Channel 425 deviated from the 882.75 MHz by a maximum error of 6.04E-3 ppm. The AS5ONEBTS-11 UMTS CDMA transceiver, subject of this application, demonstrate full compliance with the Rules of the Commission.

## SET-UP FOR MEASUREMENT OF FREQUENCY STABILITY



**SUBEXHIBIT 11.6**

**Section 2.947 LISTING OF TEST EQUIPMENT USED**

| Equipment | Manufacturer | Model | Serial No. | Calibrated Date | Due Cal. Date |
|---|---|---|---|---|---|
| 1.5 GHz Filter | Agilent | | 84300-80037 | N/A | N/A |
| 3.5 GHz Filter | Agilent | | 84300-80038 | N/A | N/A |
| 8.2 GHz Filter | Agilent | | 84300-80039 | N/A | N/A |
| Spectrum Analyzer | Agilent | E4440A | US42221614 | 10/20/05 | 10/20/06 |
| Coaxial Resistor | Bird | 8201 | 4252 | N/A | N/A |
| Coaxial Resistor | Bird | 8329 | 204506 | N/A | N/A |
| Coaxial Resistor | Bird | 8890-300 | 2289 | N/A | N/A |
| Antenna Positioning System | EMCO | 1051 | 1321 | N/A | N/A |
| Bore Sight Antenna Mast | EMCO | 2071-2 | 2239 | N/A | N/A |
| Antenna Mast | EMCO | 2075-2 | 2388 | N/A | N/A |
| Biconical Antenna | EMCO | 3110B | 3127 | 3/16/04 | 4/16/06 |
| Biconical Antenna | EMCO | 3110B | 3128 | 3/16/04 | 4/16/06 |
| Horn Antenna | EMCO | 3115 | 3324 | 4/20/05 | 5/20/07 |
| Horn Antenna | EMCO | 3115 | 5638 | 3/8/04 | 4/8/06 |
| Log Periodic Antenna | EMCO | 3148 | 1030 | 3/12/04 | 4/12/06 |
| Log Periodic Antenna | EMCO | 3148 | 1029 | 3/12/04 | 4/12/06 |
| Active Rod Antenna | EMCO | 3301B | 9312-3477 | 7/21/05 | 7/21/07 |
| Active Loop Antenna | EMCO | 6502 | 3441 | 7/15/05 | 7/16/06 |
| Active Loop Antenna | EMCO | 6502 | 3442 | 4/20/05 | 4/20/06 |
| Near Filed Probe Set | EMCO | 7405 | 1385 | N/A | N/A |
| Multi-Device Controller | ETS | 2090 | 9804-1319 | N/A | N/A |
| Multi-Device Controller | ETS | 2090 | 9912-1477 | N/A | N/A |
| Current Probe | Fisher Comm Co | F-2000 | 68 | 11/11/05 | 11/11/06 |
| Current Probe | Fisher Comm Co | F-2000 | 67 | 11/11/05 | 11/11/06 |
| Current Probe | Fisher Comm Co | F-51 | 283 | 11/11/05 | 11/11/06 |
| Current Probe | Fisher Comm Co | F-51 | 284 | 11/11/05 | 11/11/06 |
| Balance Voltage Probe | Fisher Comm Co | FCC-BCP-1 | 62 | 11/11/05 | 11/11/06 |
| Multimeter | Fluke | 23 | 49330331 | 1/13/06 | 1/13/07 |
| AC/DC Current Multimeter | FWB | C-600 | 94040227 | 1/13/06 | 1/13/07 |
| Microwave Synthesizer | Giga-tronics | 12520A | 0032007 | 4/15/05 | 4/15/06 |
| Microwave Synthesizer | Giga-tronics | 12520A | 0214004 | 4/15/05 | 4/15/06 |
| Power Sensor | Giga-tronics | 80421A | 1830056 | 7/15/05 | 7/15/06 |
| Power Sensor | Giga-tronics | 80621A | 1950053 | 10/11/05 | 10/11/06 |
| High Power Sensor | Giga-tronics | 80621A | 1950054 | 1/17/06 | 1/17/07 |
| Power Meter | Giga-tronics | 8542C | 1834318 | 1/17/06 | 1/17/07 |
| Power Meter | Giga-tronics | 8542C | 1834280 | 10/11/05 | 10/11/06 |
| Power Meter | Hewlett-Packard | 437B | 312SU11066 | 1/05/06 | 1/05/07 |
| Power Sensor | Hewlett-Packard | 8482A | 2652A22587 | 1/05/06 | 1/05/07 |
| Power Supply 0-36 V,0-25A | HL | 520A | 1754 | NA | NA |
| Power Supply 0-36 V,0-25A | HL | 520A | 1755 | NA | NA |
| Power Supply 0-36 V,0-25A | HL | 520A | 4L1919 | NA | NA |
| Power Supply 0-36 V,100A | HL | 6456B | 5H0646 | NA | NA |

| | | | | | |
|---|---|---|---|---|---|
| Power Supply 0-36 V,100A | HL | 6456B | 5H0232 | NA | NA |
| Power Supply 0-36 V,100A | HL | 6472A | 5M0107 | NA | NA |
| Power Supply 0-36 V,100A | HL | 6472A | | NA | NA |
| RF Limiter | HP | 11693A | 03532 | NA | NA |
| Spectrum Analyzer | Agilent | E4440A | US41421393 | 7/27/05 | 7/27/06 |
| Spectrum analyzer, RF Sec | Hewlett-Packard | 8566B | 3026A19151 | 4/6/05 | 4/6/06 |
| Spectrum analyzer, Disp Sec | Hewlett-Packard | 8566B | 3014A06682 | 4/6/05 | 4/6/06 |
| EMI Test Receiver, Disp Sec | Rohde & Schwarz | ESA1-D | DE25102 | 12/06/05 | 12/06/06 |
| EMI Test Receiver, RF Sec | Rohde & Schwarz | EMS1-RF | DE25102 | 12/06/05 | 12/06/06 |
| Attenuator | Weinschel | 6dB | AV9010 | N/A | N/A |
| RF Limiter | Hewlett-Packard | 11867A | 03533 | N/A | N/A |
| Loop Antenna | EMCO | 6502 | 3441 | 7/15/2005 | 8/15/06 |
| Biconical Antenna | EMCO | 3110B | 9807-3128 | 2/2/2006 | 2/2/07 |
| Log-periodic Antenna | EMCO | 3148 | 9707-1029 | 1/31/06 | 1/31/07 |
| Double Ridged Horn Ant. | EMCO | 3115 | 9812-5638 | 1/27/06 | 1/27/07 |
| Pre-amplifier | Hewlett-Packard | 8449B | 3008A01355 | 1/18/06 | 1/18/07 |
| Pre-amplifier | Sonoma - HP | 310 | 185704 | 1/18/06 | 1/18/07 |
| Multi-device Controller | EMCO | 2090 | 9912-147-7 | N/A | N/A |
| Thermal Coupler | Omega | T | N/A | N/A | N/A |
| Directional Coupler | MECA | 715-40-3.5 | N/A | N/A | N/A |
| 50Ω Resistive Load | Bird Electronic | 8166 | 9349 | N/A | N/A |
| 50Ω Resistive Load | Bird Electronic | 8166 | 8283 | N/A | N/A |
| 50Ω Resistive Load | Bird Electronic | 8166 | 8276 | N/A | N/A |
| 28V Power Supply | Hewlett-Packard | 6684A | US36410429 | N/A | N/A |
| 28V Power Supply | Hewlett-Packard | 6684A | US36410433 | N/A | N/A |
| DC Power Supply | Hewlett-Packard | 6683A | 36420289 | N/A | N/A |
| DC Power Supply | Hewlett-Packard | 6038A | 3025A-09939 | N/A | N/A |
| Multi-meter | Fluke | 23 | 49330331 | 1/13/06 | 1/13/07 |
| RF Switch | Hewlett-Packard | 11713A | 2223A01767 | N/A | N/A |
| RF Switch | Hewlett-Packard | 44477A | MY42000146 | N/A | N/A |
| RF Switch | Hewlett-Packard | 44477A | MY42000147 | N/A | N/A |
| RF Switch | Hewlett-Packard | 8764C | 3241A00605 | N/A | N/A |
| RF Switch | Hewlett-Packard | 8764C | 3241A00622 | N/A | N/A |
| RF Switch | Agilent | 8761B | 74304 | N/A | N/A |
| RF Switch | Agilent | 8761B | 74261 | N/A | N/A |
| RF Switch | Agilent | 8761B | 74305 | N/A | N/A |
| RF Switch | Agilent | 8761B | 74263 | N/A | N/A |
| Switch Control Unit | Hewlett-Packard | 3488A | 204925 | N/A | N/A |
| Switch Control Unit | Hewlett-Packard | 3488A | 14202 | N/A | N/A |
| Tunable Bandreject Filter | K&L | 3TNF-500/1000-N/N | 1 | N/A | N/A |
| Low Pass Filter | Trilithic | 10LC800-3-AA | 200201001 | N/A | N/A |
| High Pass Filter | Hewlett-Packard | 84300-80037 | 015 | N/A | N/A |
| E4440A PSA | Agilent | E4440A | US42221740 | 10/13/05 | 10/13/06 |
| Switch | SRFI | 184 | 150 | NA | NA |
| Power Divider | Weinschel | 1506A | | NA | NA |
| Attenuator | Weinschel | 48-20-33 | | NA | NA |
| Universal Counter | Hp | 5335A | 2934A14399 | 7/11/05 | 7/11/06 |
| Rectifier | TDI | AC-DC | 128981-12 | NA | NA |