EXHIBIT 11

TEST REPORT

This test report presents the measurement data required by the Commission for certifying the Class II Permissive Change of the Alcatel-Lucent 9234 AWS Distributed Base Station, subject of this application, for CDMA application under AS5ONEBTS-19.

The Distributed Base Station is comprised of two separate modules 1) the digital BBU and 2) the RRH. These two modules are interconnected by CPRI though optic fiber or metallic coax cables when the separation is less than 3m. The RRH contains all RF functionality, including transceiver, power amplifier and transmitting and receiving filters. Therefore, all critical RF components are enclosed in the RRH. The BBU provides the digital I and Q baseband signals, plus the 15MHz reference frequency to the RRH. The BBU can be a unit specially designed for the distributed application or utilize the digital baseband shelf of a non-distributed base station system. The RRH is a full-feature remote-able transceiver. Each BBU can support multiple RRH units. A one-sector distributed base station consists of two boxes, one BBU and one RRH. A three-sector distributed base station results in four boxes, one BBU and three RRHs. This architecture provides the flexibility in the deployment. The BBU and RRH units can be co-located or remotely located. The communication between the RRH and the BBU is accomplished by the OCM card, which is situated in any of the radio slots of the BBU shelf of a non-distributed base station system or is built in a BBU specially designed for the distributed application.

The AWS distributed base station supports multiple carriers and multiple sectors (up to 6) configuration. The CDMA distributed base station can provide up to 40 Watts (46dBm) per carrier, 40 Watts (46dBm) per port for multi-carriers and 80 Watts (49dBm) per sector at the base station transmitting antenna terminals, the same as the certified 9341 AWS UMTS distributed base station. There are no modifications in the transmitting and receiving frequency ranges, the basic frequency determining circuitry, the basic modulator circuit, the network interface circuitry and the major RF components (transmitter and power amplifier in the RRH) certified under AS5ONEBTS-19. In addition, the physical frames of the 9234 CDMA distributed base station are identical to that of the 9341 UMTS distributed base station.

As with the 9341 UMTS distributed base station, the 9234 CDMA distributed base station is available in indoor, outdoor, slim frame, regular frame, AC (with external power box), +24V and –48V versions. The BBU of the distributed base station can be the LP BBU, which was specially designed for the distributed application, or can be the digital shelf from various previously authorized base stations, such as: 9222 Micro Base Station (former BTS-2430) and 9228 Macro Low Power Base Station (former BTS-8430), where a radio board is replaced by an OCM card for facilitating the communication between the RRH and the BBU.

The critical RF components are all contained in the RRH. The RF path of various versions of AWS CDMA distributed base station is identical. Therefore, the testing data of one version were submitted in this exhibit. All testing results submitted in this report were performed on the +24VDC AWS 9234 CDMA RRH with the LP BBU during the period of October 16~November 13, 2008, except the plot of the 7 mixed carriers conducted out-of-band emissions where the BBU of 9222 micro base station was used in the testing due to the testing schedule and model availability. The above +24VDC AWS CDMA distributed base station, subject of this application, passed FCC Part 15 Class A radiated emissions requirements. The performance of other versions of the AWS base stations will be evaluated and authorized through FCC Class I permissive change procedure.

The measurement results have demonstrated that Alcatel-Lucent 9234 AWS CDMA 40W Distributed Base Station is in full compliance with the Rules of the Commission.

SUBEXHIBIT 11.1

Section 2.1033 (c)(14) REQUIRED MEASUREMENT DATA

The required measurement data is presented in the following exhibits as follows:

SUBEXHIBIT 11.2	Section 2.1046	Measurements Required: RF Power Output
SUBEXHIBIT 11.3	Section 2.1047	Modulation Characteristics
SUBEXHIBIT 11.4	Section 2.1049, 27.53(g)	Measurements Required: Occupied Bandwidth and Out-of-Band Emissions
SUBEXHIBIT 11.5	Sections 2.1051, 27.53(g)	Measurements Required: Spurious Emissions at Antenna Terminals
SUBEXHIBIT 11.6	Sections 2.1053, 27.53(g)	Measurements Required: Field Strength of Spurious Radiation
SUBEXHIBIT 11.7	Sections 2.1055, 27.54	Measurements Required: Frequency Stability
SUBEXHIBIT 11.8	Section 2.947	List of Test Equipment Used

SUBEXHIBIT 11.2

Section 2.1046 MEASUREMENT REQUIRED: RF POWER OUTPUT

This test is a measurement of the total RF power level transmitted at the antenna-transmitting terminal (J4), as shown in the accompanying test set-up diagram. The radio was first tuned to a channel, which is transmitting in the 2110-2155MHz frequency band. The power level of the base station was calibrated to allow the base station to operate at the manufacturer's maximum rated mean power level, i.e., +46dBm (40W) per carrier at the antenna-transmitting terminal. Then the carrier was tuned to other channels in the same frequency band without adjusting the power level and recalibrating, and the corresponding mean RF output power level was measured. For CDMA2000 voice application, all the carriers were configured with a combination of the Pilot, Sync, Paging and Traffic channels. The Pilot/Sync/Page channels were set up according to the recommended test model for base stations given in 3GPP2 C.S0010-C v 2.0 (Section 6) with 37 traffic channels, as shown in the following tables.

Table 11.2.1. Base Station Test Model

Type	Number of Channels	Fraction of Power (linear)	Fraction of Power (dB)	Comments
Pilot	1	0.2000	-7.0	Walsh 0
Sync	1	0.0471	-13.3	Walsh 32, always 1/8 rate
Paging	1	0.1882	-7.3	Walsh 1, full rate only
Traffic	M	0.5647/M	-2.48 - 10 log M	Variable Walsh assignments, full rate only

For CDMA2000 high rate packet data application, the modulation accuracy measurements were performed with a carrier configured with time-division multiplexed Pilot Channel, the MAC Channel, and the Forward Traffic Channels with full data rate.

Power measurements were made with a Giga-tronics 8542C Universal Power Meter with 80621A Power Sensor (0.01 – 18 GHz) in the average mode. The test set-up for conducting the RF power output measurement is shown in the following figure. Before the testing was started, the Base Station was given a sufficient "warm-up" period as required.

For a single carrier operation in the band 2110-2155 MHz, the maximum mean power at the antenna transmitting terminal measured is +46dBm (40W). The channels that were measured are tabulated in the Table 11.2.2.

The power derivation across the AWS frequency band of 2110-2155 MHz is less than ±0.3dB.

For multiple carrier operation, each RRH can support up to 7 carriers in each AWS sub-band with a total power of 40 Watts (46dBm) per port. For the CDMA RRH distributed base station system, the maximum rated mean power measured is 40W per carrier at each antenna transmitting terminal, 40W per port and 80W per sector.

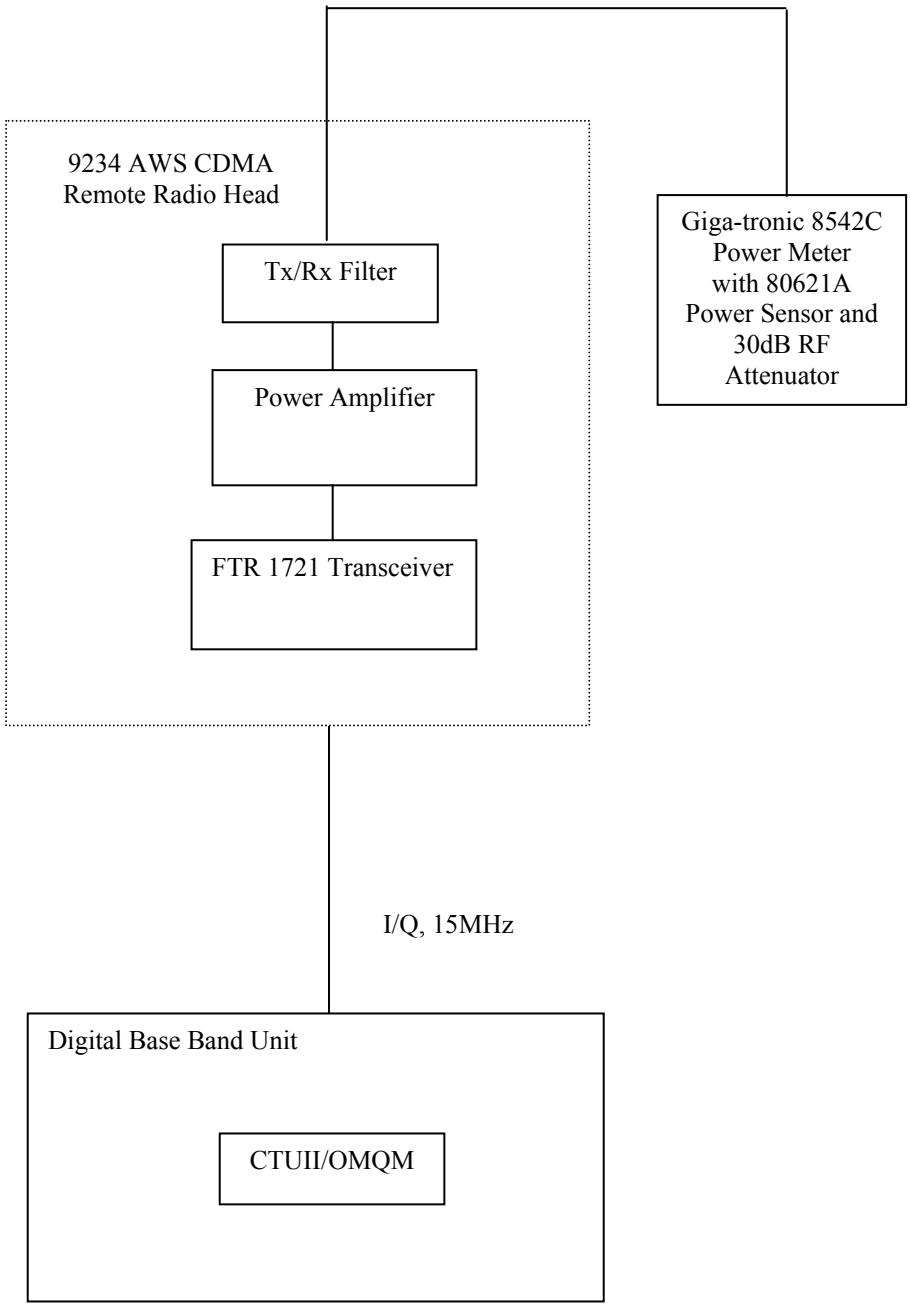
Table 11.2.2. Channels of RF Power Output Measurement

AWS Channel Number	AWS Frequency (MHz)	AWS Frequency Block
25	2111.25	A (Low)
175	2118.75	A (High)
225	2121.25	B (Low)
375	2128.75	B (High)
425	2131.25	C (Low)
475	2133.75	C (High)
525	2136.25	D (Low)
575	2138.75	D (High)
625	2141.25	E (Low)
675	2143.75	E (High)
725	2146.25	F (Low)
875	2153.75	F (High)

Results:

The maximum RF power outputs of the Alcatel-Lucent 9234 RRH 40W AWS CDMA Distributed Base Station at the antenna transmitting terminal across the AWS frequency band 2110 – 2155 MHz is 40W per carrier and are in full compliance with the Rules of the Commission.

FIGURE 11.2.1 TEST SET-UP FOR MEASUREMENT OF RADIO FREQUENCY POWER OUTPUT



CTU: Common Timing Unit;
OMQM: Oscillator Module, Quartz, Mezzanine.

SUBEXHIBIT 11.3

Section 2.1047 MEASUREMENT REQUIRED: MODULATION CHARACTERISTICS

The 9234 AWS Distributed base station utilizes CDMA technology with digital Phase Shift Keying (PSK) and Quadrature Amplitude Modulation (QAM) scheme. The modulation accuracy measures the ability of the transmitter to generate the ideal signal that is defined by the waveform quality. The waveform quality is measured by determining the normalized correlated power between the actual waveform and the ideal waveform. For CDMA 2000 voice application, the normalized cross correlation coefficient, ρ, shall be greater than 0.912 (excess power < 0.4 dB), as specified in 3GPP2 C.S0010-C, Section 4.2.2.3. For 1xEV-DO application, the normalized cross correlation coefficient, $\rho_{overall-1}$, $\rho_{overall-2}$, ρ_{pilot}, shall be greater than 0.912 (excess power < 0.4 dB) and shall be greater than 0.97 (excess power < 0.13dB), as specified in 3GPP2 C.S.0032, Section 3.1.2.2.2. The definitions of $\rho_{overall-1}$ and $\rho_{overall-2}$ are given in 3GPP2 C.S.0032 Section 11.4.2,

For CDMA2000 voice application, the radio was configured to transmit the Forward Pilot Channel only. For EVDO application, the modulation accuracy measurements were performed with a carrier configured with time-division multiplexed Pilot Channel, the MAC Channel, and the Forward Traffic Channels with full data rate. The measurements were made at the antenna transmitting terminal of the base station system at Ch 25(A), 225(B), 425(C), 525(D), 625(E) and 875(F). The carrier power level was adjusted to the rated maximum mean power +46 dBm at the output terminal.

The measurements were performed with an Agilent E4440 PSA Spectrum Analyzer which was calibrated in accordance with ISO 9001 process.

The test set-up diagram is given in the Figure 11.3.1, where the Agilent E4440A PSA used the external signals from the base station as its trigger source and time reference.

Results:

The wave quality factors measured at the above channels are all > 0.912. Figure 11.3.2 shows four representative screen plots of the modulation accuracy measurement at 2111.25MHz in both CDMA2000 voice and data modes. The modulation accuracy of the 9234 AWS CDMA Distributed base station is in full compliance with the Rules of the Commission across the Frequency Band 2110 – 2155 MHz.

FIGURE 11.3.1 TEST SET-UP FOR MEASUREMENT OF MODULATION ACCURACY, OCCUPIED BANDWIDTH AND OUT-OF-BAND EMISSIONS

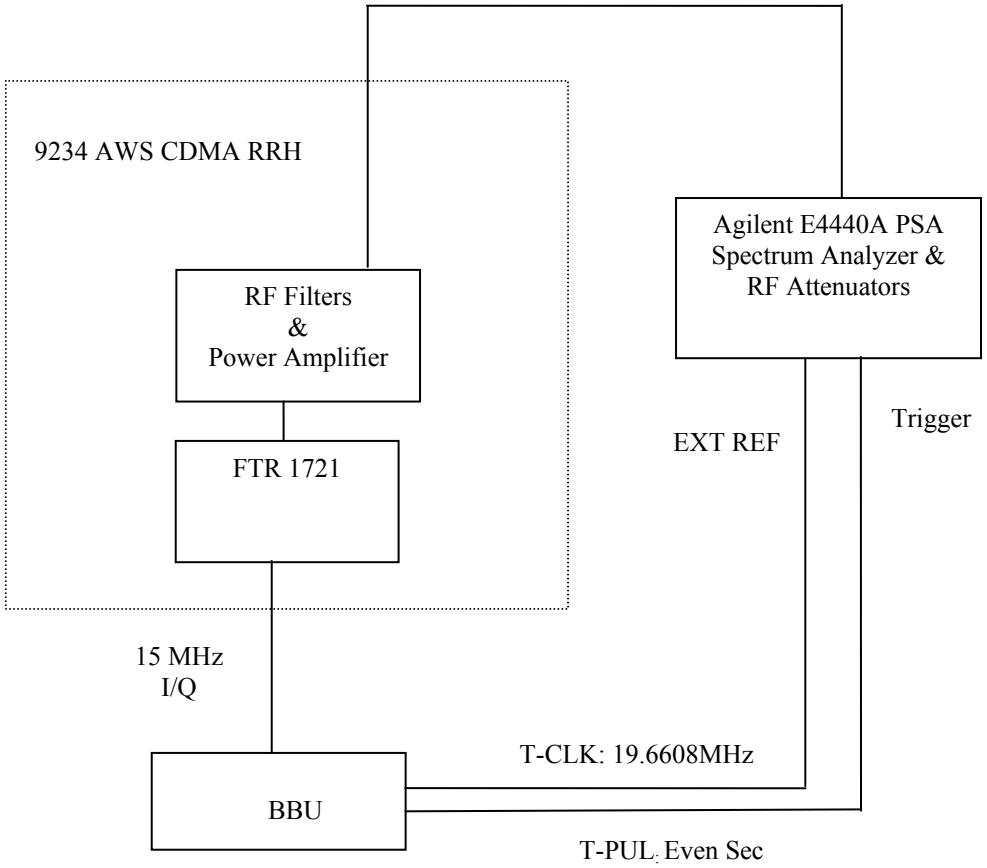
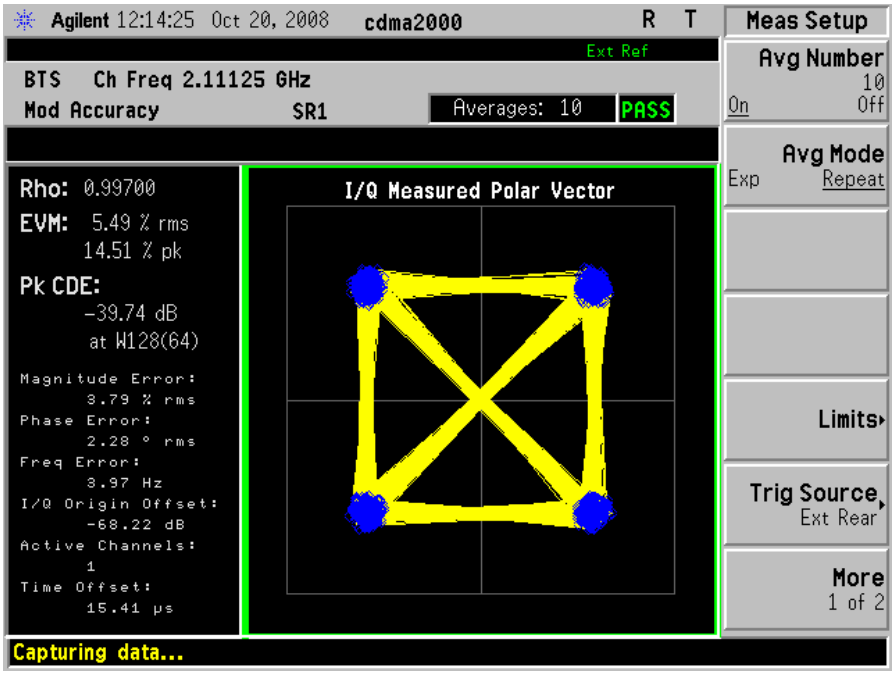
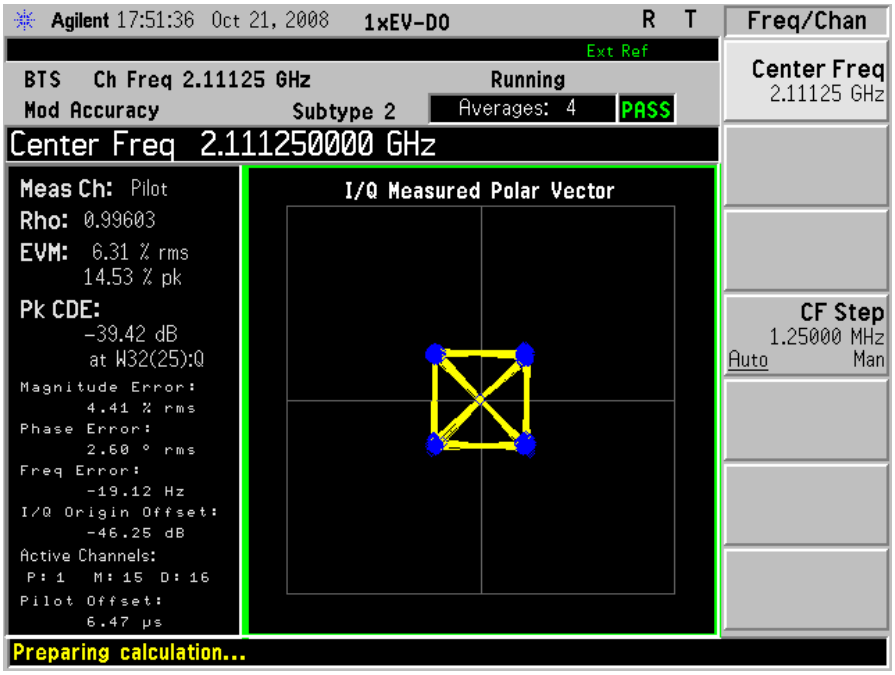
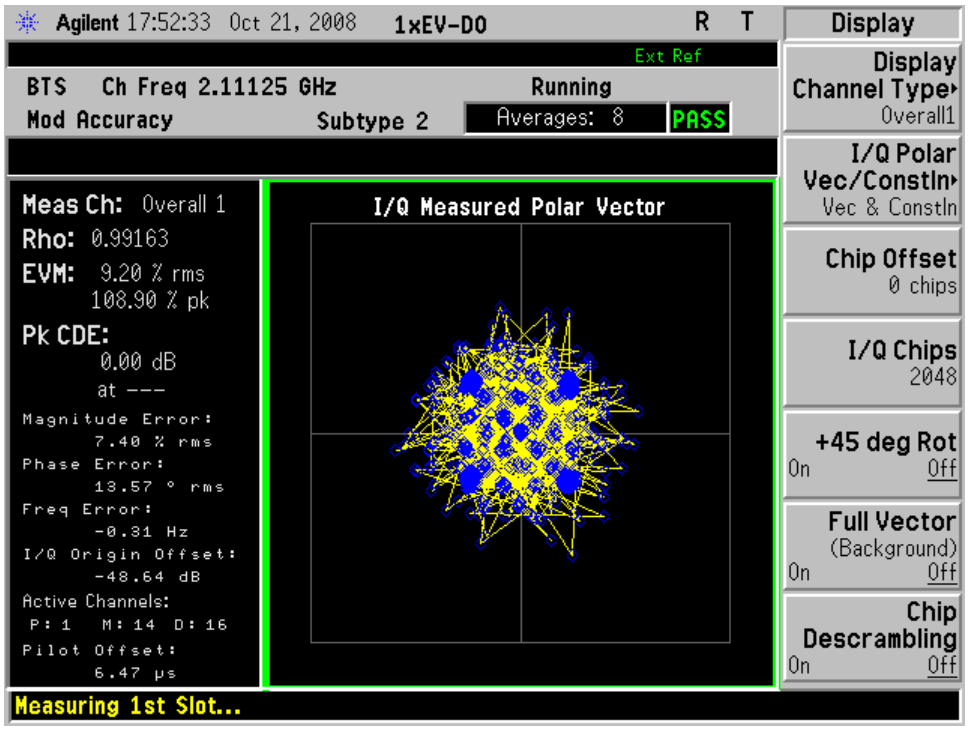
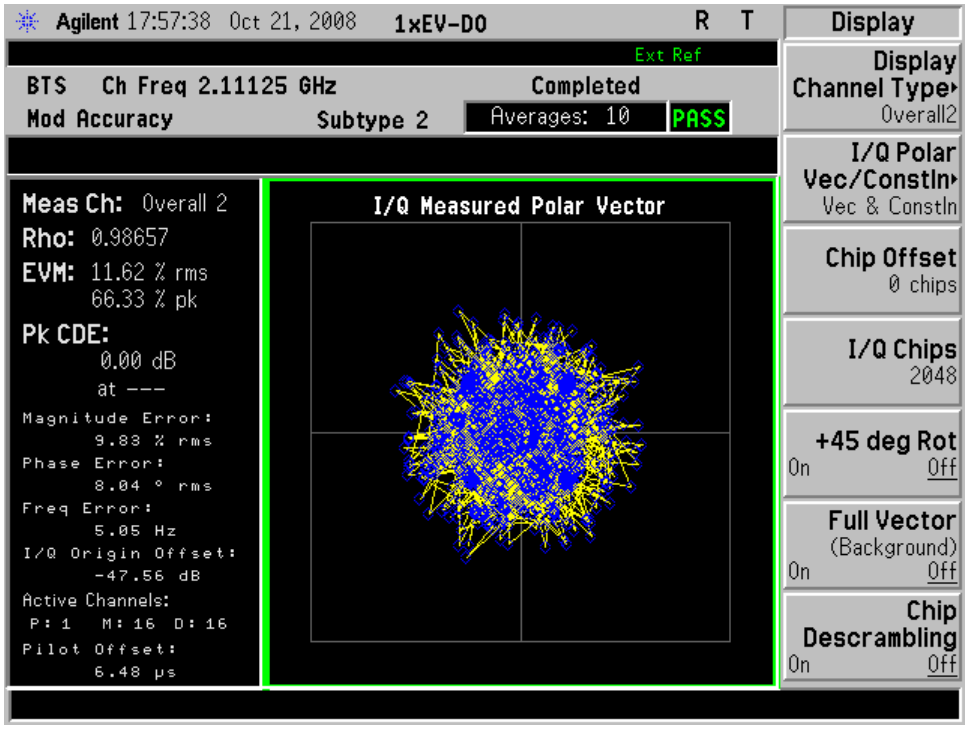


FIGURE 11.3.2 SCREEN PLOT OF MODULATION ACCURACY MEASUREMENT AT CHANNEL 25, 2111.25 MHz, FOR CDMA2000 VOICE AND 1xEVDO






Agilent 17:52:33 Oct 21, 2008
1xEV-DO
R T
Ext Ref
BTS Ch Freq 2.11125 GHz
Running
Mod Accuracy
Subtype 2
Averages: 8
PASS
Meas Ch: Overall 1
Rho: 0.99163
EVM: 9.20 % rms
108.90 % pk
Pk CDE:
0.00 dB
at ---
Magnitude Error:
7.40 % rms
Phase Error:
13.57 ° rms
Freq Error:
-0.81 Hz
I/Q Origin Offset:
-48.64 dB
Active Channels:
P: 1 M: 14 D: 16
Pilot Offset:
6.47 µs
I/Q Measured Polar Vector
Measuring 1st Slot...
Display
Display Channel Type
Overall1
I/Q Polar Vec/Constln
Vec & Constln
Chip Offset
0 chips
I/Q Chips
2048
+45 deg Rot
On Off
Full Vector (Background)
On Off
Chip Descrambling
On Off


Agilent 17:57:38 Oct 21, 2008
1xEV-DO
R T
Ext Ref
BTS Ch Freq 2.11125 GHz
Completed
Mod Accuracy
Subtype 2
Averages: 10
PASS
Meas Ch: Overall 2
Rho: 0.98657
EVM: 11.62 % rms
66.33 % pk
Pk CDE:
0.00 dB
at ---
Magnitude Error:
9.83 % rms
Phase Error:
8.04 ° rms
Freq Error:
5.05 Hz
I/Q Origin Offset:
-47.56 dB
Active Channels:
P: 1 M: 16 D: 16
Pilot Offset:
6.48 µs
I/Q Measured Polar Vector
Display
Display Channel Type
Overall2
I/Q Polar Vec/Constln
Vec & Constln
Chip Offset
0 chips
I/Q Chips
2048
+45 deg Rot
On Off
Full Vector (Background)
On Off
Chip Descrambling
On Off

SUBEXHIBIT 11.4

Section 2.1049 MEASUREMENT REQUIRED: OCCUPIED BANDWIDTH AND OUT-OF-BAND EMISSIONS

In compliance with Section 2.1049, all the voice carriers were configured with a combination of the Pilot, Sync, Paging and Traffic channels. The Pilot/Sync/Page channels were set up according to the recommended test model for base stations given in 3GPP2 C.S0010-C v 2.0 (Section 6), as shown in Table 11.2.1 with 37 traffic channels for 1C-6C configuration and 32 traffic channels for 7C configuration. All CDMA2000 data carriers were configured with time-division multiplexed Pilot Channel, the MAC Channel, and the Forward Traffic Channels at full data rate. The Pilot/MAC/Traffic/Control channels were setup according to the recommended test model for base stations given in 3GPP2 C.S.0032.

The two 45MHz bandwidth AWS spectrum is divided into 6 blocks (A, B, C, D, E and F) as shown in the following table.

AWS Blocks	Tx Frequency (MHz)	Rx Frequency (MHz)	Bandwidth (MHz)
A	2110 - 2120	1710 - 1720	10
B	2120 - 2130	1720 - 1730	10
C	2130 - 2135	1730 - 1735	5
D	2135 - 2140	1735 - 1740	5
E	2140 - 2145	1740 - 1745	5
F	2145 - 2155	1745 - 1755	10

The AWS CDMA Distributed Base station supports one-carrier and multiple-carrier configurations. For one-carrier configuration, the occupied bandwidth and out-of-band emissions measurements were made at the antenna transmitting terminal (J4) on two channels which correspond to the lowest and highest available CDMA channels in each of the AWS frequency blocks (A, B, C, D, E and F). At each of the carrier frequencies, the carrier power level at the antenna terminal was adjusted to the maximum rated mean power +46 dBm (40W). For the multiple-carrier configuration, the carrier placements which potentially give the worst emissions were evaluated for each block. The maximum rated power at each transmitting antenna port is 40W. Both the CDMA2000 voice and data applications were evaluated. The maximum three EVDO carriers will be supported at each transmitting antenna port.

For one-carrier configuration, only two emission plots were submitted. These two plots correspond to the lower and higher edge channels which have the least margin among all AWS blocks evaluated for both CDMA2000 voice and data applications. Similarly, for the two-carrier, three-carrier and four-carrier configurations, only one emission plot was submitted for each configuration which has the least margin, for both CDMA2000 voice and data applications, among all AWS blocks applicable for each configuration. The masks displayed in the plots are the combined requirement of FCC Part 27.53(g) and 3GPP2 C.S0010-C which is tougher than the FCC Part 27.53(g) out-of-band requirement.

The minimum emission requirements and the setting of measurement equipment for the occupied bandwidth measurement of a 1.25MHz AWS carrier were specified in FCC Part 27. The FCC's requirements are tabulated in the following table:

Table 11.4.1 FCC Part 27.53(g) Transmitter Unwanted Emission Limits

Frequency	Required Minimum Attenuation below the Mean Carrier Power *P*	Minimum Resolution Bandwidth of Spectrum Analyzer
1MHz Bands Immediately Outside the Transmitting Frequency Band	(43 + *P* dBW) dBc	12.5kHz
Outside the Above Frequency Band	(43 + *P* dBW) dBc	1MHz

The requirements specified in 3GPP2 C.S0010-C Section 4.4 for Band Class 15 are tabulated in the following table:

Table 11.4.2(a) 3GPP2 C.S0010-C Transmitter Spurious Emission Limits for Single Carrier Configuration

Displacement from the Carrier Center Frequency f_c	Required Minimum Attenuation below the Mean Carrier Power P	Resolution Bandwidth of Spectrum Analyzer
885 kHz < $\|f - f_c\|$ ≤ 1.25 MHz	-45 dBc	30 kHz
1.25 MHz < $\|f - f_c\|$ ≤ 1.98 MHz	Min{-45dBc, -9dBm}	30 kHz
1.98 MHz < $\|f - f_c\|$ ≤ 2.25 MHz	-55dBc if P ≥ 33dBm; -22dBc if 28dBm ≤ P < 33dBm; -50 dBc if P < 28dBm	30 kHz
2.25 MHz < $\|f - f_c\|$ ≤ 4.0 MHz	-13dBm	1MHz

Table 11.4.2(b) 3GPP2 C.S0010-C Transmitter Spurious Emission Limits for Multiple Carrier Configuration

Displacement from the Carrier Center Frequency f_c	Required Minimum Attenuation* below the Mean Carrier Power P	Resolution Bandwidth of Spectrum Analyzer
1.25 MHz < $\|f - f_c\|$ ≤ 2.25 MHz	-9dBm	30 kHz
2.25 MHz < $\|f - f_c\|$ ≤ 4.0 MHz	-13dBm	1MHz

A combined requirement of FCC Part 27.53(g) and 3GPP2 C.S0010-C was used as the required emission limit mask in the measurement.

For the mean output power of +46 dBm (40 W) at J4, the required spurious emissions attenuation per (43 + *P* dBW) dBc, is 59dBc. FCC CFR 47, Sections 2.1051 and 2.1057(c) specify that the spurious emissions attenuated more than 20 dB below the permissible value need not be reported. So the reportable limit is –79 dBc.

The measurements were performed with an Agilent E4440A PSA Spectrum Analyzer, which was calibrated in accordance with ISO 9001 process. The test set-up diagram is same as the one shown in the Figure 11.3.1.

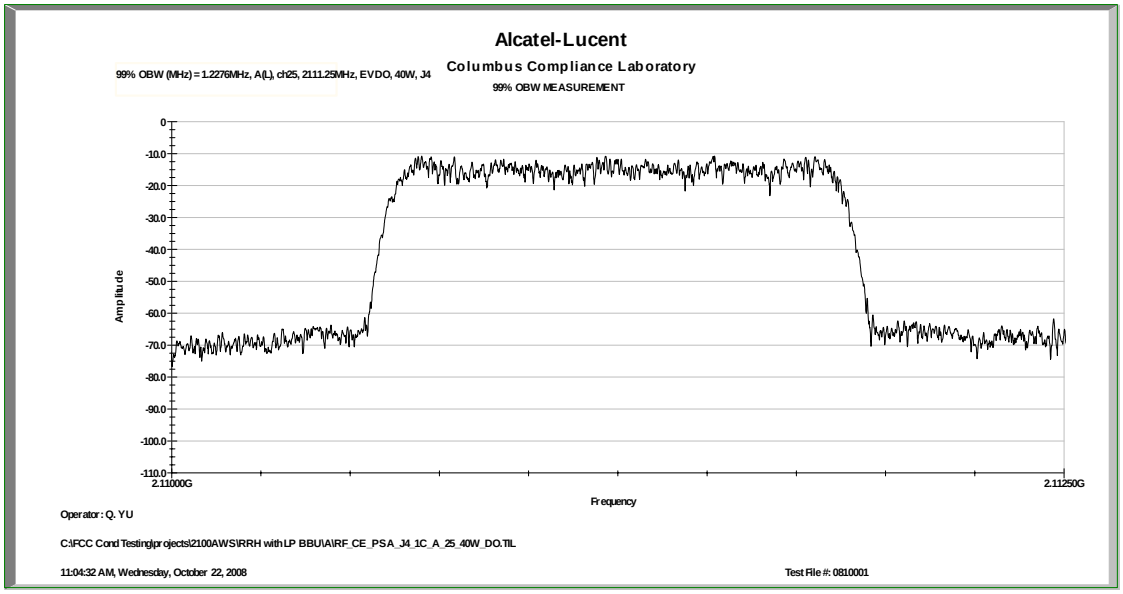
The spectrum analyzer was set with a 30 kHz resolution bandwidth and 8 MHz span, as shown in the plots of the occupied bandwidth measurement attached in the following pages. The emissions outside the 8MHz-

span were evaluated in Measurement Required: Out-of-block Spurious Conducted Emissions. The maximum mean output power of the CDMA carrier, measured with a 3 MHz resolution bandwidth, aligns with the top of the spectrum analyzer display reticule, i.e., 0 dBm, by adjusting the REF LEVEL OFFSET of the spectrum analyzer. The top of the carrier measured with a 30 kHz resolution bandwidth, thus, was 16.2 dB below the carrier power measured with a resolution bandwidth greater than the carrier bandwidth 1.25 MHz. This 16.2dB offset was due to the fact that 10 log (1250kHz/30kHz) = 16.2 dB.

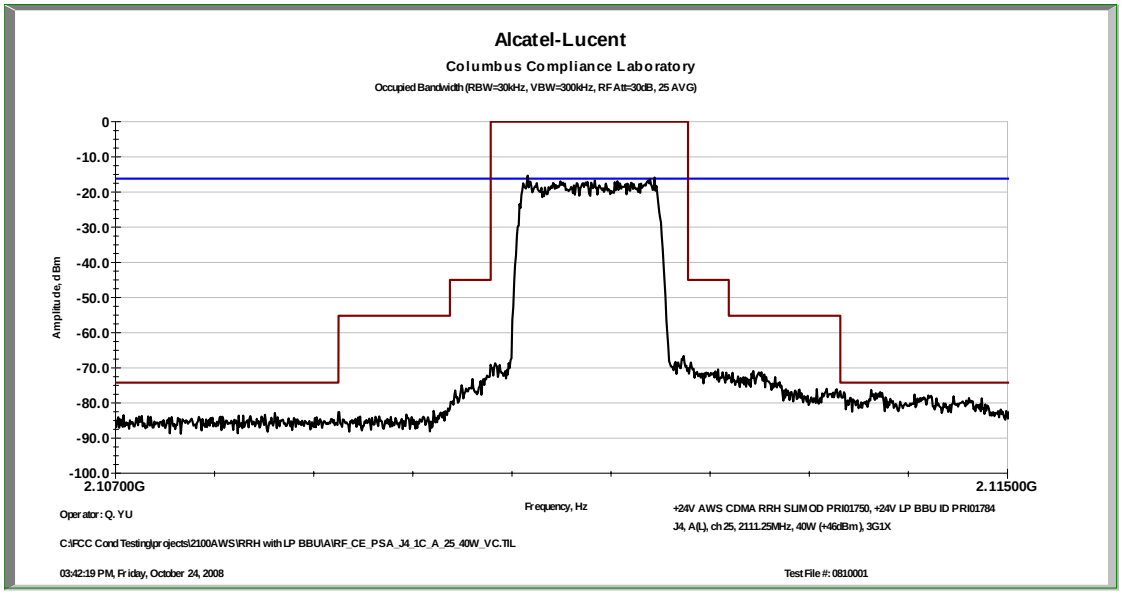
Results:

From the occupied bandwidth and out-of-band plots attached in the following, it can be seen that all the waveforms are under the required emission mask with margins. The measurement results demonstrate the full compliance with the Rules of the Commission at the lowest and highest settable channels of the AWS bands.

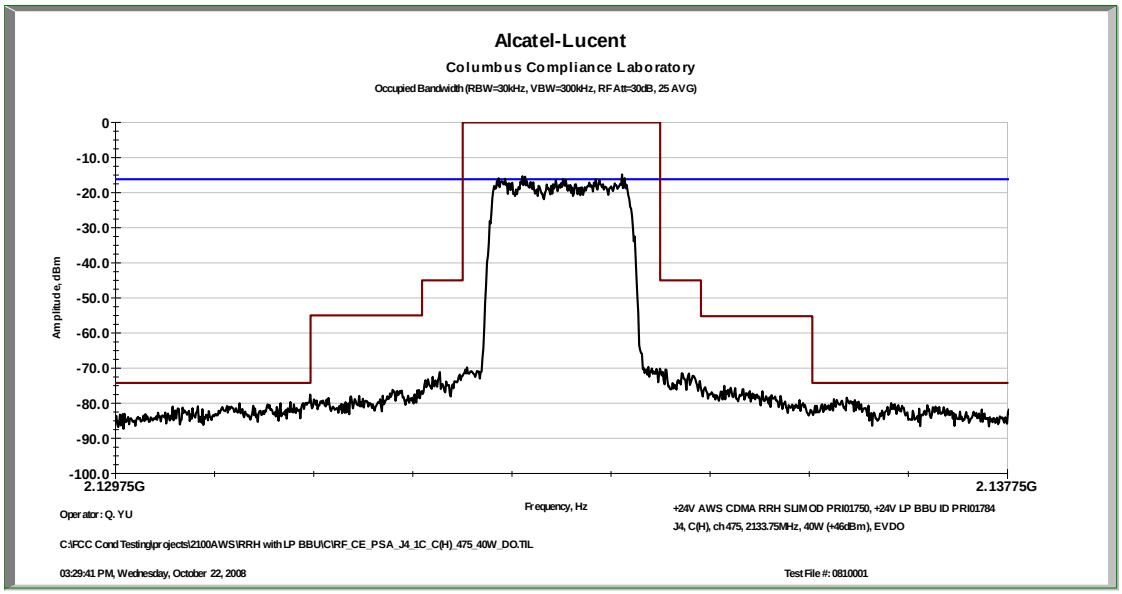
FIGURE 11.4.1 99% OCCUPIED BANDWIDTH MEASUREMENT FOR CHANNEL 25 2111.25 MHz



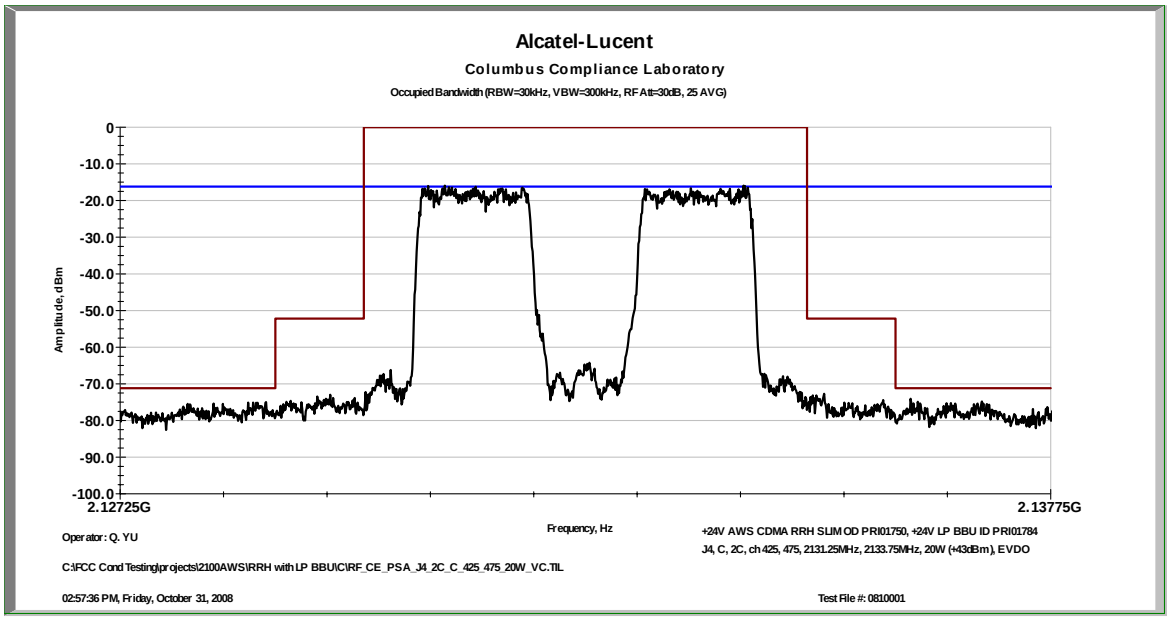
Occupied Bandwidth and Out-of-Band Emissions Plots:



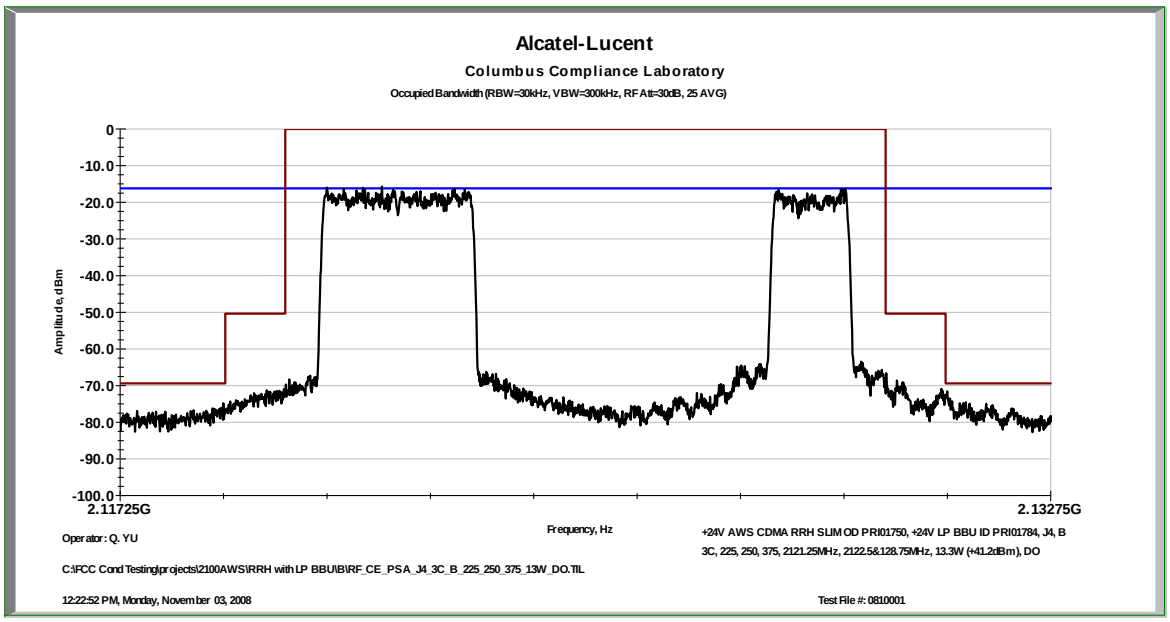
AWS A Band, Lower Edge Channel
Ch 25, 2111.25 MHz, 40W/C, Voice
Measured at the antenna transmitting terminal



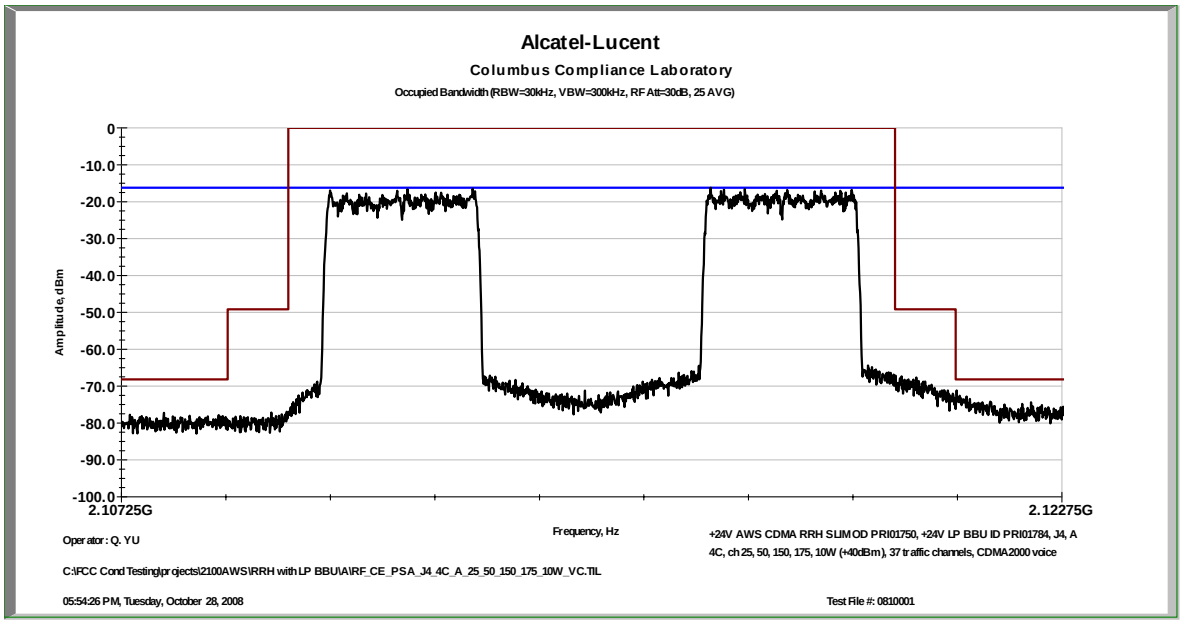
AWS C Band, Higher Edge Channel
Ch 475, 2133.75 MHz, 40W/C, EVDO
Measured at the antenna transmitting terminal



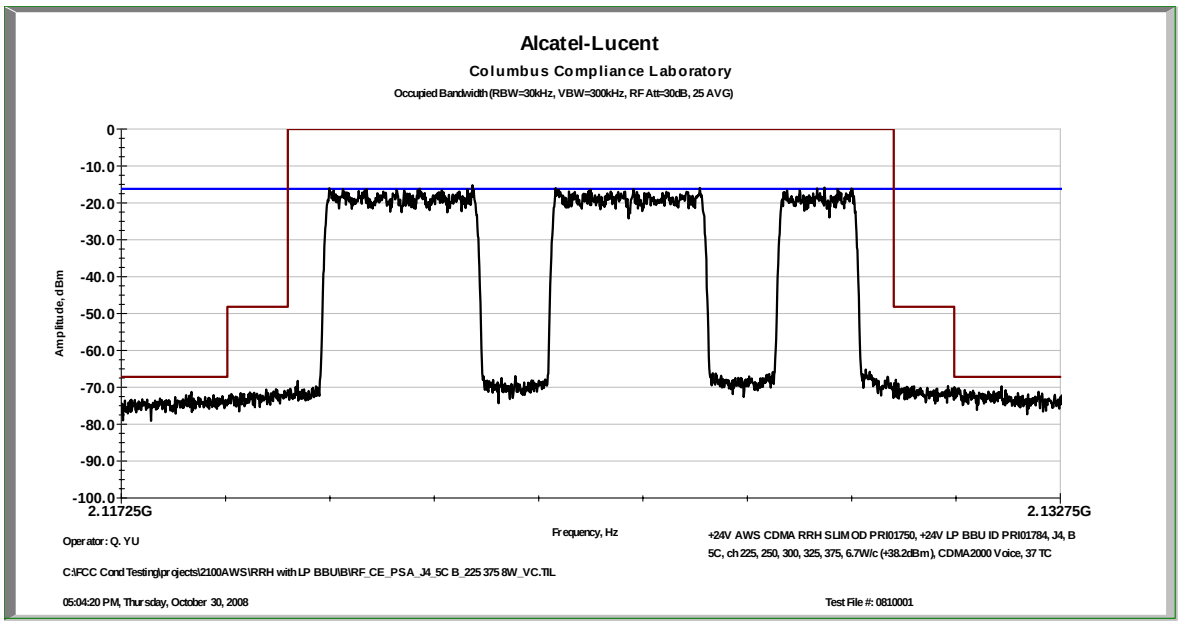
AWS C Band, 2C
Ch 425, 475, 20W/C, EVDO
Measured at the antenna transmitting terminal



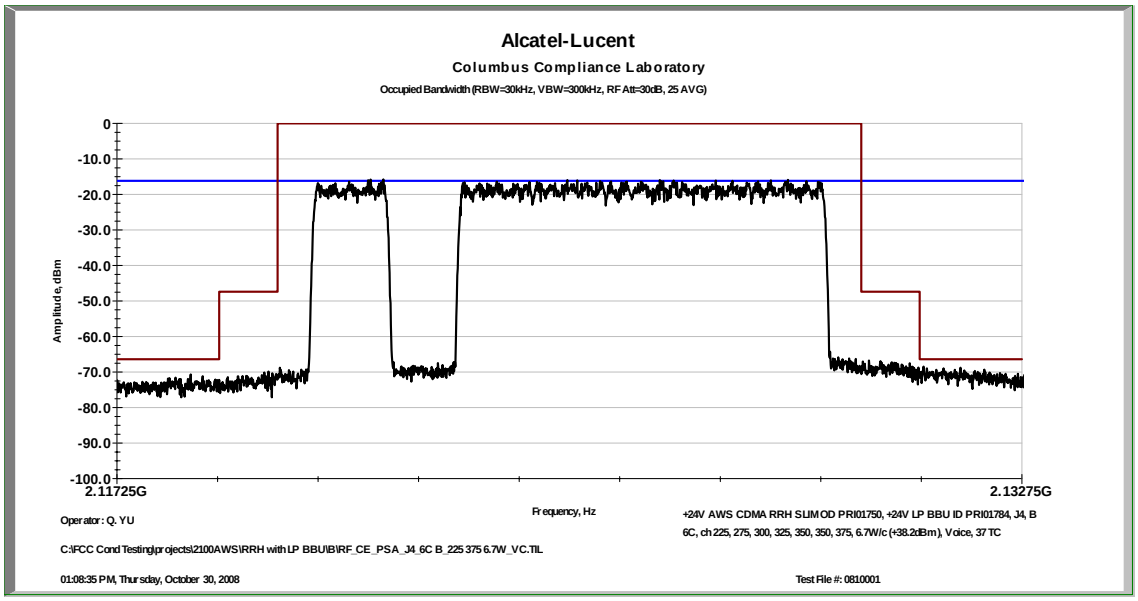
AWS B Band, 3C
Ch 225, 250, 375, 13.3W/C, EVDO
Measured at the antenna transmitting terminal



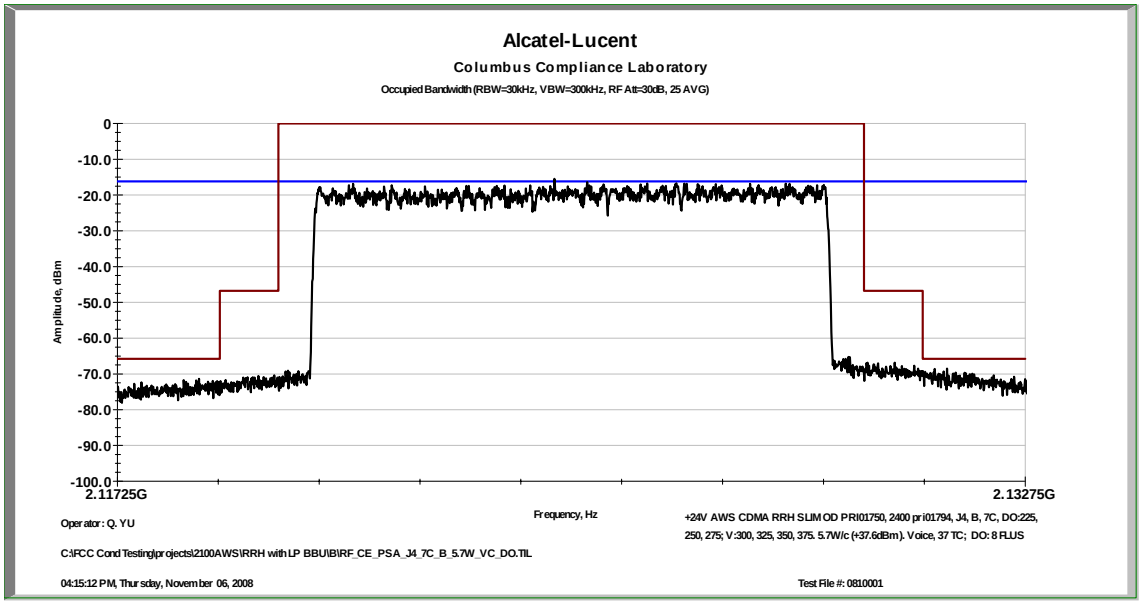
AWS A Band, 4C, Voice
Ch 25, 50, 150, 175, 10W/C
Measured at the antenna transmitting terminal



AWS B Band, 5C, Voice
Ch 225, 250, 300, 325, 375, 6.7W/C
Measured at the antenna transmitting terminal



AWS B Band, 6C, Voice
Ch 225, 250, 300, 325, 375, 6.7W/C
Measured at the antenna transmitting terminal



AWS B Band, 7C
Ch 225 (EVDO), 250 (EVDO), 275 (EVDO), 300 (V), 325 (V), 350 (V), 375 (V), 5.7W/C
Measured at the antenna transmitting terminal

SUBEXHIBIT 11.5

Section 2.1051 MEASUREMENT REQUIRED: SPURIOUS EMISSIONS AT THE ANTENNA TERMINALS

The out-of-block spurious emissions at the antenna transmitting terminal were investigated from 10 MHz to the 10th harmonic of the carrier or 21.55 GHz, per Section 2.1057(a)(1). All the voice carriers were configured with a combination of the Pilot, Sync, Paging and Traffic channels. The Pilot/Sync/Page channels were set up according to the recommended test model for base stations given in 3GPP2 C.S0010-C v 2.0 (Section 6), as shown in Table 11.2.1 with 37 traffic channels for 1C-6C configuration and 32 traffic channels for 7C configuration. All CDMA2000 EVDO carriers were configured with time-division multiplexed Pilot Channel, the MAC Channel, and the Forward Traffic Channels. The Pilot/MAC/Traffic/Control channels were setup according to the recommended test model for base stations given in 3GPP2 C.S.0032.

The AWS CDMA Distributed Base station supports one-carrier and multiple-carrier configurations. For one-carrier configuration, the out-of-block spurious emission measurements were made at the antenna transmitting terminal (J4) on two channels which correspond to the lowest and highest available CDMA channels in each of the AWS frequency blocks (2110-2155 MHz). At each of the carrier frequencies, the carrier power level at the antenna terminal was adjusted to the maximum rated mean power +46 dBm (40W). For the multiple-carrier configuration, the carrier placements which may give the worst emissions were evaluated for each block. The maximum rated composite power at each transmitting antenna port is 40W. Both the CDMA2000 voice and EVDO applications were evaluated.

The emission limitations and the setting of measurement equipment for the unwanted emissions measurement of a 1.25MHz CDMA AWS carrier were specified in 27.53(g) and shown in Subexhibit 11.4.

For the mean output power at +46 dBm per carrier, the required attenuation is 59dBc. The required attenuation is reduced accordingly with the output power per carrier reduced.

The measurements were performed with an Agilent E4440A PSA Spectrum Analyzer, which was calibrated in accordance with ISO 9001 process. The test set-up diagram is given in the Figure 11.3.1.

The carrier power level at the antenna transmitting terminal was calibrated before the conducted spurious emissions testing at each frequency. The limited line is 59 dB below the carrier power (40W/c) and the FCC reportable limit is -79 dBc.

The spectrum analyzer was set to a 1MHz resolution bandwidth. The maximum mean output power of the carrier, measured with a 3 MHz resolution bandwidth, aligns with the top of the spectrum analyzer display reticule, i.e., 0 dBm, by adjusting the REF LEVEL OFFSET of the spectrum analyzer. The sampling average was used.

Results:

The out-of-block spurious emissions of the Alcatel-Lucent 9234 AWS CDMA Distributed Base Station in the entire spectrum investigated (10MHz to 21.55GHz) are well under the required emission limit with adequate margins (≥20dB). Therefore, there is no reportable spurious emission to FCC. The measurement results demonstrate that the Alcatel-Lucent 9234 AWS CDMA Distributed Base Station is in full compliance with the Rules of the Commission.

SUBEXHIBIT 11.6

Section 2.1053 MEASUREMENT REQUIRED: FIELD STRENGTH OF SPURIOUS RADIATION

The field strength measurements of radiated spurious emissions were made in a FCC registered five meter semi-anechoic chamber which is maintained by Alcatel-Lucent in Columbus, Ohio.

The +24VDC 9234 AWS CDMA Distributed Base Station, consisting of one AWS CDMA RRH and one LP BBU in co-located configuration, was investigated from 10 MHz to the 10th harmonic of the carrier or 21.55 GHz, per Section 2.1057(a)(1). The equipment under test (EUT) was configured as in the normal mode of the installation and operation. The recommendations of ANSI C63.4–2004 were followed for EUT testing setup and cabling. The base station was configured to transmit 3 carriers (1 EVDO carriers and 2 voice carriers) in A band with the maximum mean power of 40W at the antenna port. All the voice carriers were configured with a combination of the Pilot, Sync, Paging and 37 Traffic channels. The Pilot/Sync/Page channels were set up according to the recommended test model for base stations given in 3GPP2 C.S0010-C v 2.0 (Section 6), as shown in Table 11.2.1. All EVDO carriers were configured with time-division multiplexed Pilot Channel, the MAC Channel, and the Forward Traffic Channels with full data rate. The Pilot/MAC/Traffic/Control channels were setup according to the recommended test model for base stations given in 3GPP2 C.S.0032. All carriers were transmitting to non-radiating 50 Ω resistive loads.

The emission limitations and the setting of measurement equipment for the conducted spurious emissions measurement of a 1.25MHz CDMA2000 AWS carrier were specified in 27.53(g) and shown in Sub-Exhibit 11.4.

By using the relation between the electric field strength of an ideal dipole and its excitation power given in Reference Data for Radio Engineers, page 676, 4th edition, ITT Corp., the emission limit calculated equals

Frequency of Emission (MHz)	Separation Distance (m)	E (dBμV/m)	Detector/RBW
10-21,550	3	84.1	Average/1MHz

The field strength of radiated spurious emissions measured was determined by

$$E\ (\text{dB}\mu\text{V/m}) = V_{meas}\ (\text{dB}\mu\text{V}) + \text{Cable Loss (dB)} + \text{Antenna Factor (dB1/m)}.$$

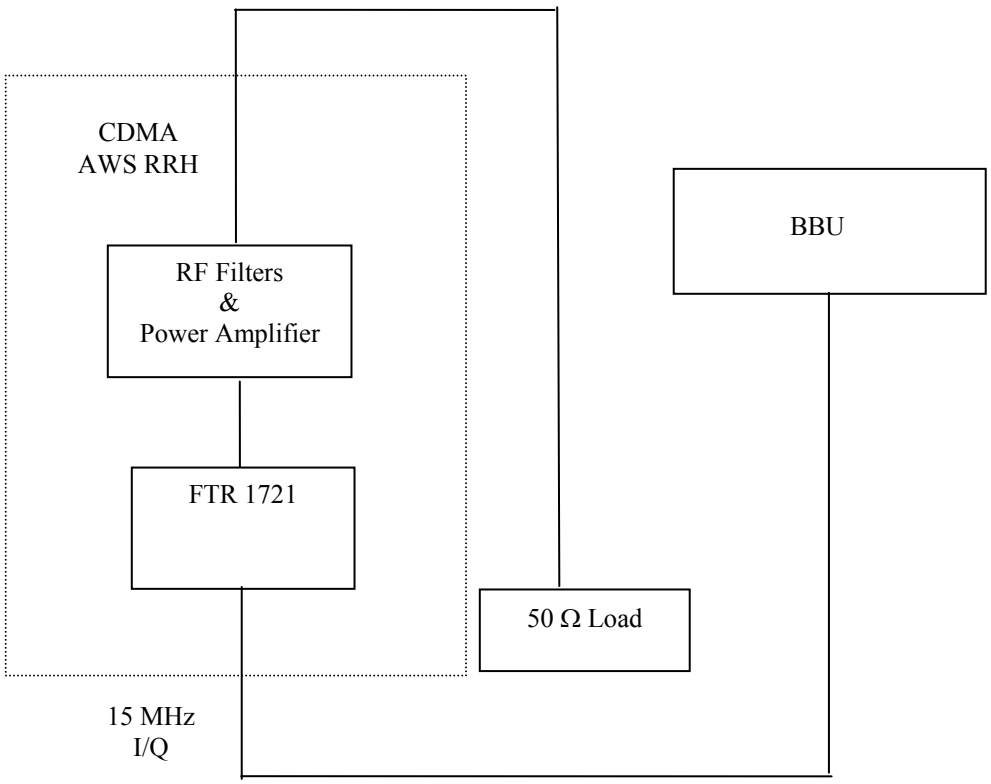
Sections 2.1051 and 2.1057(c) specify that the spurious emissions attenuated more than 20 dB below the permissible value need not be reported. Therefore, the reportable limit at 3 meter is 64.1 dBμV/m.

All the measurement equipment used, including antennas, was calibrated in accordance with ISO 9001 process. The EUT setup diagram is given in the Figure 11.6.1.

Results:

Over the frequency spectrum investigated (10MHz to 21.55GHz), no reportable radiated spurious emissions were detected. The measurement results of the Alcatel-Lucent 9234 AWS CDMA 40W Distributed Base Station System, subject of this application, demonstrate the full compliance with the Rules of the Commission.

FIGURE 11.6.1 EUT FOR MEASUREMENT OF RECEIVER CONDUCTED SPURIOUS EMISSIONS



SUBEXHIBIT 11.7

Section 2.1055 MEASUREMENT REQUIRED: FREQUENCY STABILITY

The Alcatel-Lucent 9234 AWS CDMA Distributed Base Station System is comprised of two separate RRH and BBU modules. It was designed to transmit in the frequency spectrum 2110-2155MHz with a 1.25 MHz carrier emission bandwidth. The BBU provides the time and frequency reference to the RRH which incorporates AWS Future Technology Radio (FTR 1721). The carrier frequency is determined by the up-conversion of digital baseband signals to IF frequencies.

The frequency stabilization of the carrier frequency is achieved by the highly stable 15 MHz reference frequency generated by an accurate Oscillator Module (OM) plus proprietary phase locked loop (PLL) circuitry and GPS reference.

The frequency stability testing was conducted on the +24VDC AWS CDMA Distributed Base Station Outdoor System which consists of an AWS CDMA Outdoor Slim RRH and an Outdoor LP BBU. The outdoor frame was designed for a wider temperature range than the indoor frame. The primary power supplier can be either AC or +24VDC or -48VDC. For AC power supplier, an external power box converts the AC to either +24VDC or -48VDC voltage which provides the power to all circuit boards equipped in the AWS distributed base station. The stability of the output frequency of the AWS CDMA Distributed Base Station system was measured at its antenna transmitting terminal 1) from –40 °C to +55 °C in 10 °C steps at the rated supply voltage; and 2) at 85% and 115% of the nominal supply voltage, per Section 2.1055. The primary supply voltage, +24 VDC, was varied from 85% to 115%. The 85% of +24 VDC is 20.4 V and 115% is 27.6 V. The RRH was set to transmit one voice carrier at Channel 25 (2111.25MHz) with Pilot only and one EVDO carrier at Channel 75 (2113.75MHz). The carrier frequency at 2111.25MHz was measured at the antenna terminal at each temperature and each supply voltage by an Agilent VSA Series Transmitter Tester. The 15MHz Output from the BBU was also monitored and measured with a high precision HP Frequency Counter.

The AWS CDMA Distributed Outdoor Base Station System was installed in an environmental chamber. At each temperature and each supply voltage, the EUT was given sufficient time for its thermal stabilization. The testing was performed during the period of October 31~November 3, 2008.

FCC Section 27.54 specifies that the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation. The 3GPP2 C.S0032 and 3GPP2 C.S0010-C specify the minimum standard is ±0.050 ppm.

The maximum frequency derivations (Δf) at the antenna terminal from the assigned carrier frequency and rated supply voltage at each temperature and at the rated supply voltage are summarized in the following table.

Stabilized Temp. (°C)	**Δ*f* 85% V_{norm} (Hz)**	**Δ*f* 100% V_{norm} (Hz)**	**Δ*f* 115% V_{norm} (Hz)**
-40	-8.62	5.93	-14.10
-30	-17.02	6.18	-6.22
-20	16.62	-4.73	4.28
-10	-6.09	-6.75	5.17
0	-3.53	-5.12	10.38
+10	-7.64	4.83	3.58
+20	-9.38	1.71	5.96
+30	6.80	5.79	6.95
+40	-4.16	-7.42	-3.12
+50	-4.16	6.04	10.29
+55	-5.43	3.91	3.21

The maximum frequency derivations (Δ*f*) at +20°C and 85% and 115% of the supply voltage from the carrier frequency at +20°C and rated supply voltage are summarized in the following table.

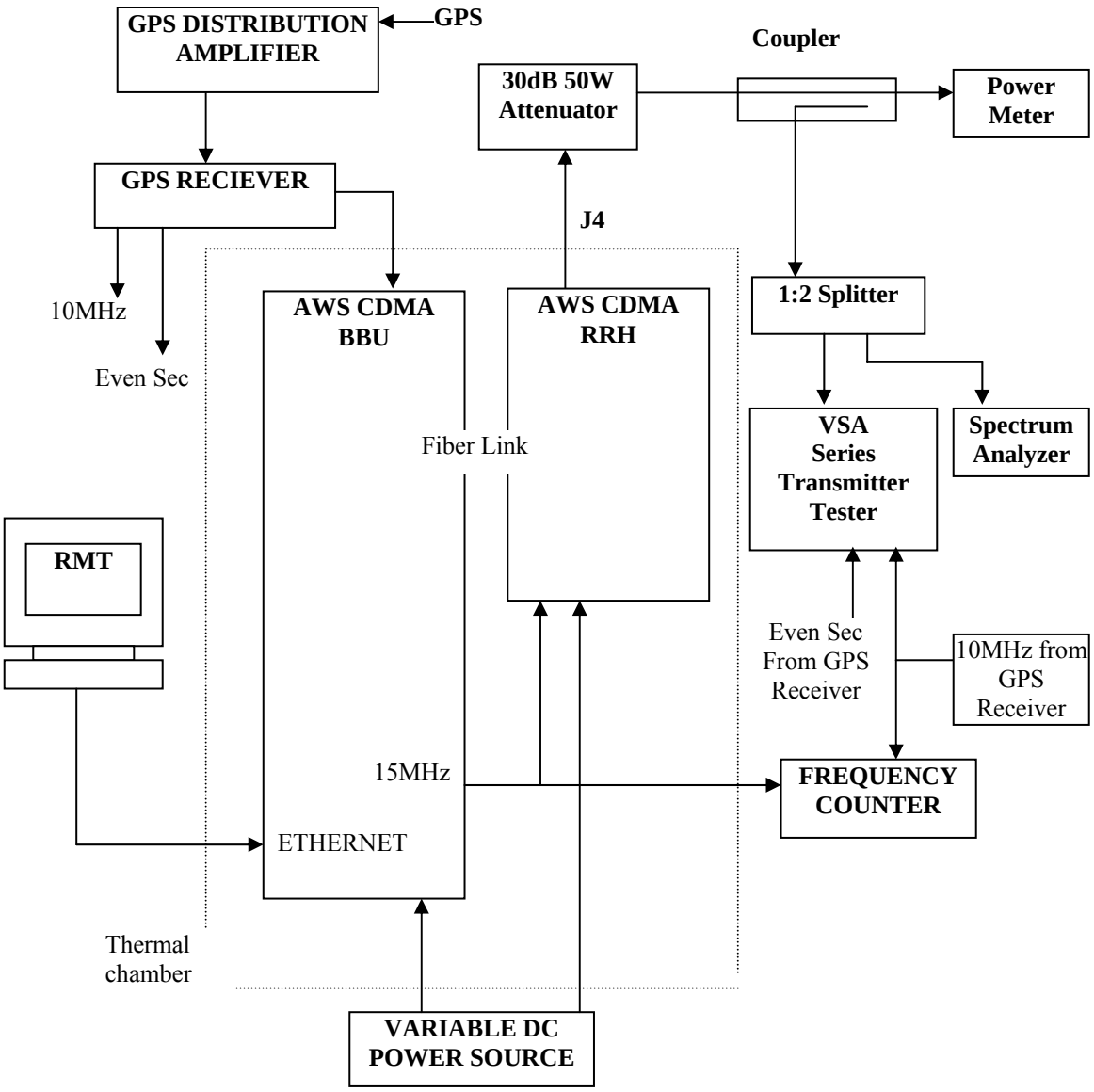
Stabilized Temp. (°C)	**Δ*f* 85% V_{norm} (Hz)**	**Δ*f* 115% V_{norm} (Hz)**
20	-11.1	4.25

All the measurement equipment was calibrated in accordance with ISO 9001 process. The test set-up diagram is given in the Figure 11.7.1

Results:

The maximum frequency drift at the antenna terminal of the 9234 AWS CDMA Distributed Base Station System at the 2111.25MHz due to temperature and supply voltage is 8.1E-3 ppm which is below 3GPP2 ±0.05ppm requirement. The Alcatel-Lucent 9234 AWS CDMA Distributed Base Station system demonstrated full compliance with the Rules of the Commission.

FIGURE 11.7.1 SET-UP FOR MEASUREMENT OF FREQUENCY STABILITY



SUBEXHIBIT 11.8

Section 2.947 LISTING OF TEST EQUIPMENT USED

Equipment	Manufacturer	Model	Serial No.	Calibrated Date	Due Cal. Date
Power Meter	Giga-tronics	8542C	1834280	10/07/08	10/31/09
Power Sensor	Giga-tronics	80621A	1950053	10/07/08	10/31/09
Power Meter	Agilent	E4419A	US38260791	11/6/07	11/6/08
Power Sensor	HP	8481A	3318A95611	1/14/08	1/14/09
Spectrum Analyzer	Agilent	E4440A	US42221614	7/14/08	7/31/09
Spectrum Analyzer	Agilent	E4440A	MY46185576	4/11/08	4/30/09
VSA Series Transmitter Tester	Agilent	E4406A	US40061191	3/31/08	3/31/09
Spectrum analyzer, Disp Sec	Hewlett-Packard	8566B	3014A06682	4/11/08	4/31/09
Quasi-Peak Adapter	Hewlett-Packard	85650A	2521A00987	4/14/08	4/31/09
Spectrum analyzer, RF Sec	Hewlett-Packard	8566B	2504A01322	8/7/08	8/31/09
Spectrum analyzer, Disp Sec	Hewlett-Packard	8566B	2403A07048	8/7/08	8/31/09
Spectrum Analyzer	Hewlett-Packard	E7405A	US39440174	10/8/08	10/31/09
Attenuator	Weinschel	6dB	AV9010	N/A	N/A
Attenuator	Weinschel	6dB	BB0790	N/A	N/A
Attenuator	Weinschel	6dB	BS6545	N/A	N/A
Attenuator	Weinschel	66-30-34	BT0226	N/A	N/A
Attenuator	Weinschel	10dB	BU3922	N/A	N/A
Attenuator	Weinschel	20dB	BJ6277	N/A	N/A
RF Limiter	Hewlett-Packard	11867A	03533	N/A	N/A
Loop Antenna	EMCO	6502	3441	7/23/08	7/31/10
Biconical Antenna	EMCO	3110B	9807-3128	2/2/08	2/2/10
Log-periodic Antenna	EMCO	3148	9707-1030	1/30/08	1/31/10
Double Ridged Horn Ant.	EMCO	3115	3324	4/26/07	4/26/09
Horn Antenna	EMCO	RA42-K-F-4B-C	981982-002	N/A	N/A
Pre-amplifier	Hewlett-Packard	8449B	3008A01353	1/17/08	1/17/09
Pre-amplifier	SON-HP	310	185661	1/20/08	1/20/09
Multi-device Controller	EMCO	2090	9912-147-7	N/A	N/A
Bore Sight Antenna Mast	EMCO	2071-2	2239	N/A	N/A
Frequency Counter	Hewlett-Packard	53181A	3418A00309	1/21/08	1/21/09
GPS Time and Frequency Reference Receiver	Symmetricon	58503B	KS93200773	N/A	N/A
Switch Control Unit	Hewlett-Packard	3488A	14202	N/A	N/A
50Ω Resistive Load	WA	1434-3	NH925	N/A	N/A
50Ω Resistive Load	WA	1434-3	NH927	N/A	N/A
50Ω Resistive Load	WA	1434-3	NH928	N/A	N/A
50Ω Resistive Load	WA	1434-3	NJ558	N/A	N/A
50Ω Resistive Load	WA	1434-3	NH926	N/A	N/A
50Ω Resistive Load	WA	1434-3	NH924	N/A	N/A
Multi-meter	Fluke	23	49330331	1/17/08	1/31/09
AC/DC Current/Multimeter	FWB	C-600	94040227	1/17/08	1/31/09
Microwave Synthesizer	Gigatronics	12520A	0214004	10/8/08	10/31/09
RF Switch (4)	Advanced Technical	S6810-20/561/L	2223A01767	N/A	N/A

	Material				
Switch Control Unit	Agilent	34980A	260239	N/A	N/A
Tunable Bandreject Filter	K&L	3TNF-500/1000-N/N	2	N/A	N/A
Tunable Bandreject Filter	K&L	3TNF-1000/2000-N/N	2	N/A	N/A
Low Pass Filter	TriliThic	10LC800-3-AA	200201001	N/A	N/A
Low Pass Filter	TriliThic	10LC790-3-AA	200201040	N/A	N/A
High Pass Filter	Trilithic	4HC1350/9000-1-kk	200646061	N/A	N/A
High Pass Filter	Trilithic	5HC2850/18050-1.8-kk	200352136	N/A	N/A
RF Limiter (0.1-12.4GHz, 5mW/1W)	Agilent	11693A	08159	N/A	N/A
RF Attenuator	Weinschel	49-30-33	LX567	N/A	N/A
DC Power Supply	Kikusui	PAD 35-100L	BC 153178	N/A	N/A
Galaxy Power System	Lucent Technologies	T-83314-30	00DJ05437661	N/A	N/A