Exhibit 14

SECTION 2.1049 MEASUREMENT OF OCCUPIED BANDWIDTH

Because of the Multi Carrier application of the **ULAM,** occupied bandwidth measurements were performed for all three of the **MCA** configurations. This documents the typical performance of the **ULAM** while supplied with single, dual and three CDMA carriers. Since the **ULAM** is a fixed gain device all power adjustments were performed via the **CBR/ FCC ID: AS5CMP-26.**

The occupied bandwidth of the **ULAM/ FCC ID: AS5CMP-36** was measured using a Rohde & Schwarz ESMI EMI Test Receiver a PC based instrumentation controller using TILE™ software and the equipment . The RF power level was measured and adjusted via the test setup in Figure 14A. The calibrated RF output from the transmitter was reduced (to an amplitude usable by the spectrum analyzer) by using a calibrated attenuator. This attenuation was offset on the display and the signal adjusted to the -16.2 dBc level corresponding to the corrected RF power level for a 30 kHz resolution bandwidth (RBW). This set-point was performed as follows:

> The power calibration was individually verified at each carrier using a power meter in the Figure 14A setup. Additionally a power calibration was performed to calibrate the setting of the measured 30 kHz Occupied Bandwidth signal at the –16.2 dBc line and a 3 MHz RBW measurement against the "Top of Mask" limit which corresponds to the output power at an RBW setting of $\geq$ 1.25 MHz. These measurements were performed prior to each Occupied Bandwidth measurement. The signals measured at RBW's of 3 MHz and 30 kHz were plotted and a digital attenuation was adjusted to place the 3 MHz RBW signal at the "Top of Mask". The carrier was measured with a 30 kHz RBW and used the same attenuation. These two graphs are co-plotted and shown in Figure 14C Typical Power Calibration.

This test procedure above calibrates the carrier power to the "Top of Mask" and accurately places the 30 kHz RBW measured carrier at the –16.2 dBc line. This process also documents the carrier power at the specified power level of 24 watts per carrier / 43.8 dBm. All of the plots are presented with a 7.5 MHz span and the center frequency of the specific Sub-Block of interest. This allows for ease of comparison of the single, dual and three carrier performance. This data was electronically recorded using the TILE™ software and electronically placed in the Occupied Bandwidth Data Sheets. These sheets contain data for "Left Edge of Block", and "Right Edge of Block" for each PCS frequency Block in the application.

Block Organization and Tests Performed

For PCS Block C, the Sub-Block filter C1, C2 and C3 are each designed for three carriers, The Sub-Block filter C1 is specifically designed for PCS channels 925, 950 and 975. Sub-Block Filter C2 is for PCS channels 1000, 1025 and 1050. The other filters follow suit. The Sub-Block filter C4 is for the "Right Edge of Block" and will accommodate a maximum of two carriers at PCS channels 1150 and 1175.
The previously Granted 15 MHz PCS Blocks, A and B, were identically organized. Block Filters for PCS Blocks D, E and F are 5 MHz wide and are each designed for the appropriate three carriers without division.

All of the C Block filters were tested including the center channels. Tests were performed for the one, two and three carrier operational configurations of the **ULAM**. When a second source manufacturers is to be qualified for a Granted Block, the tests are performed and the source approved via a Class I change to the filing.

Block Filters for PCS Blocks D, E and F were tested as described above.

Exhibit 14 *continued*

Applied Signal

The applied signal, from a CBR FCC ID: AS5CMP-26, met the recommended characteristics per ANSI J-STD-008 section 3.1.4 as defined below.

Type	Number of Channels	Fraction of Power (Linear)	Fraction of Power (dB)	Comments
Pilot	1	0.1490	-8.3	Walsh 0
Sync	1	0.015/p	-18.3	Walsh 32, always 1/8 rate
Paging	1	0.054	-12.7	Walsh 1, full rate only
Traffic	6	0.13 each	-8.8 each	Variable Walsh Assignments, full rate only

TABLE 14.1 Base Station Test Model, Nominal

Measurement Offset

The spectrum analysis output plots shows the peak of the CDMA channel signal 16.19 dB below the Mask reference / "zero dBc line" of the spectrum analyzer for the following reason: For the CDMA system there is no carrier without modulation. Since the CDMA signal is Broadband and 1.25 MHz wide, all measurements performed at narrower resolution bandwidths need be adjusted for the reduction in signal energy. The following relationship was used to provide the correct level for an unmodulated carrier vs. the modulated signal.

$$10*\log(\text{Resolution Bandwidth}/\text{Transmit Bandwidth}) = \text{Signal Offset} \quad (1)$$

For the peak of the 1.25 MHz CDMA signal measured with a RBW of 30 kHz the signal offset is:

$$\text{Signal Offset} = 10*\log(30\text{ kHz}/1.25\text{ MHz}) = -16.19\text{ dB}$$

Limits which are specified as appropriate at a given RBW can be measured and evaluated at other RBW's if the limit is adjusted per equation (1)

Require Levels

The minimum standard presented in ANSI-J-STD-008 Section 4.5.1.3.1 was followed for Suppression Inside the Licensee's Frequency Block(s)

> Signals that are within the base station transmit band of 1930.000 to 1990.000 MHz and are within the specific block(s) allocated to the operator's system, the total conducted spurious emissions in any 30 kHz band greater than 885 kHz from the CDMA channel center frequency shall not exceed a level of -45 dBc….

The Limit in 47 CFR 24.238(a)(b) for emissions in the 1 MHz band immediately outside and adjacent to a licensees frequency block is:

> Emissions $\leq$1 MHz outside the Block *when measured with a RBW of 1%* of the emissions Bandwidth shall be attenuated by :
>
> $-\{43+10\log(\text{mean power output in watts})\} = -13$ dBm

The Limit in 47 CFR 24.238(a) for emissions outside a licensees frequency block is:

> Emissions >1 MHz outside the Block, *when measured with a RBW of 1 MHz*, shall be attenuated by :
>
> $-\{43+10\log(\text{mean power output in watts})\} = -13$ dBm.

Measurement at a Resolution Bandwidth of 30 kHz is based on our experience with 47 CFR 24.238 and lacking other guidance.

Exhibit 14 *continued*

Adjusted Levels

The following levels apply when measurements of the above limits are performed with an RBW of 30 kHz. Measurement at a Resolution Bandwidth of 30 kHz is based on our experience with 47 CFR 24.238 and lacking other guidance.

1. On any frequency removed from the carrier center frequency by greater than 885 kHz up to 1.25 MHz - at least 45 decibels below the carrier; and

2. On any frequency removed from the carrier center frequency by greater than 1.25 MHz to 2.25 MHz the level shall not exceed -9.2 dBm/-53 dBc when measured in a 30 kHz resolution bandwidth (Note 2 below); and

3. From the edge of the Block to the 10th harmonic of the carrier at least
   -{43+10log (mean power output in watts)} dBm,
   whichever is the lesser attenuation. For 24 Watts the required level is -72 dBc / -28.2 dBm as measured with a 30 kHz resolution bandwidth (see Note 3). This is equal to -13 dBm measured with a 1 MHz resolution bandwidth

Note 2: The -9.2 dBm/-53 dBc level was computed as follows: The limit is specified as
-{43+10log (mean power output in watts) } dB = -13 dBm
When measured in a resolution bandwidth not less than 1% of the signal bandwidth.
Since the carrier is a 1.25 MHz bandwidth signal, the limit is adjusted to
-13 + 10LOG(30kHz/12.5 kHz) dBm = -9.2 dBm / -53.0 dBc

Note 3: The -28.2 dBm / -72 dBc level is computed from -13 dBm measured with a 1 MHz resolution bandwidth adjusted by :
-13 + 10LOG(30kHz/1.25 MHz) dBm = -28.2 dBm / -72 dBc

Mask Description for Single Carrier

The Mask limits are identical for the left and right side of the PCS Blocks and are as follows.
Figure 14B shows the Mask limit for PCS channel 925 which is the left block edge for Block C and shows limits identical for the band edge of the PCS band. The Spectrum Analyzer reference level is set above the Signal Reference to allow for the necessary dynamic range of a three CDMA carrier presentation. The top of a typical 43.8 dBm single carrier CDMA signal viewed at a resolution bandwidth of 30 kHz is shown at the 27.6 dBm/ -16.2 dBc line. This line is based on equation 1, and the ratio of the 1.25 MHz bandwidth and the 30 kHz resolution bandwidth of the spectrum analyzer. The vertical line from a to b (i.e. a-b) is at 885 kHz from the center of channel 925 (i.e. Fc), per ANSI J-STD-008. The horizontal line b-c is 45 dB below the 43.8 dBm/ 0 dBc reference level. The vertical line c-d is at 1.25 MHz from the center of the channel. The placement of line d-e is derived from evaluation of the signal and 12.5 kHz (1%)resolution bandwidth, using the suggested value in section 24.238 of the rules. The ratio of 30 kHz to 12.5 kHz in equation (1) gives 3.8 dB. Adjusting the tolerance line to reflect this difference puts the -13 dBm limit line at -9.2 dBm or –53.0 dBc below the reference line. The vertical line, e-f is at 2.25 MHz from the center of channel 925. The horizontal line f-g is drawn at –72.0 dBc below the 0 dBc / 43.8 dBm reference because the rules require a 1 MHz resolution bandwidth for measurements 1 MHz or greater outside the PCS band. Again, equation (1) and the ratio of 1 MHz to 1.25 MHz provides this value. The same logic was used in determining the other block and band edge tolerances.

Exhibit 14 *continued*

Mask Description for Multiple Carrier

The mask for multiple carriers only adjusts the width of the carrier portion of the mask.
For the example given above...with multiple carriers there would be no adjustments made to the "Left Edge of Block" requirements. The specified "Right Edge Limit" is treated as an expansion of the non Block edge corner **bb** to be the required + 885 kHz from the center of the "right most" channel. The "Right Edge of Block" limits were derived consistently.

Measurement

All of the tolerance lines for the output are referenced to the top of the Occupied Bandwidth mask, which is defined as 43.8 dBm/ zero dBc. For all measurements of the **ULAM / MCA's** Occupied Bandwidth, the output power was measured / adjusted individually to the 24 W level for each carrier and this is the 43.8 dBm value at the 0 dBc reference line.

In order to depict the tolerance lines that are required by Sec 24.238 of the FCC Rules and ANSI J-STD-008, all measurements were made with a resolution bandwidth of 30 kHz and the limits were adjusted using equation (1). An average detector was employed using minimum of 25 sweeps per trace.

Presented Results

The Block designation, PCS channels, frequencies and Measured RF Power are tabulated on each plot. Input and output signals are plotted for each frequency/ channel of interest. Plots are provided for Left Edge and Right Edge of each PCS Block evaluated. These frequencies were chosen to show the occupied bandwidth in the channels in each of the PCS Blocks in which this product can be operated, in compliance with Section 24.229 and 24.238 (c) of the Commission code. There are no SAT or Wide band data signals associated with CDMA. The signal used to show the occupied bandwidth is defined in table 14.1. This is the signal recommended in ANSI-J-STD-008 Section 3.1.4. The power output level was adjusted to provide the documented value on each chart.

RESULTS: The following exhibits illustrate the spectrums investigated and document compliance.

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Exhibit 14 *continued* Test Equipment and Results

Table 14-2
Equipment used for Measurement of RF Transmit Power, Occupied Bandwidth and Conducted Spurious Emissions

PCS Modular Cell:	Fully Populated PCS Modular Cell
OM 1&2 :	Oscillator Module, 15 MHz Rubidium and Crystal types
CBR: 1-9:	CDMA Baseband Radio (FCC ID: AS5CMP-26)
ULAM: 1-9:	Ultra Linear Amplifier Module (FCC ID: AS5CMP-36)
Transmit Filter:	PCS Block Transmit Filter appropriate for the investigated Block
Directional Coupler:	HP 778D and 772D Dual Directional Coupler
Power Meter:	HP E4419A Power Meter with EPC-E18A Power Head
Test Cables:	W.L. Gore; Low loss test cables custom mfg. for Lucent FCC Laboratory
Plotter:	HP Model 7470A Plotter
Printer:	HP Model 4500DN Printer
Attenuators, Variable	HP 8494B and 8495B DC-18 GHz digital attenuators
Attenuators, Fixed	Weinschel Corp DC-18 GHz, various values
Spectrum Analyzer:	Rohde & Schwarz ESMI EMI Test Receiver
Band Pass Filters:	Trialithic, 1-18 GHz, Custom manufactured for Lucent FCC Laboratory
Computer Controller:	EG Technology, Custom Mfg for FCC Laboratory Intel™ Pentium II& III, 450 and 550 MHz controllers With TILE ™ software

Figure 14A Test Setup for Antenna Port Measurement of Transmit Power, Occupied Bandwidth and Conducted Spurious Emissions

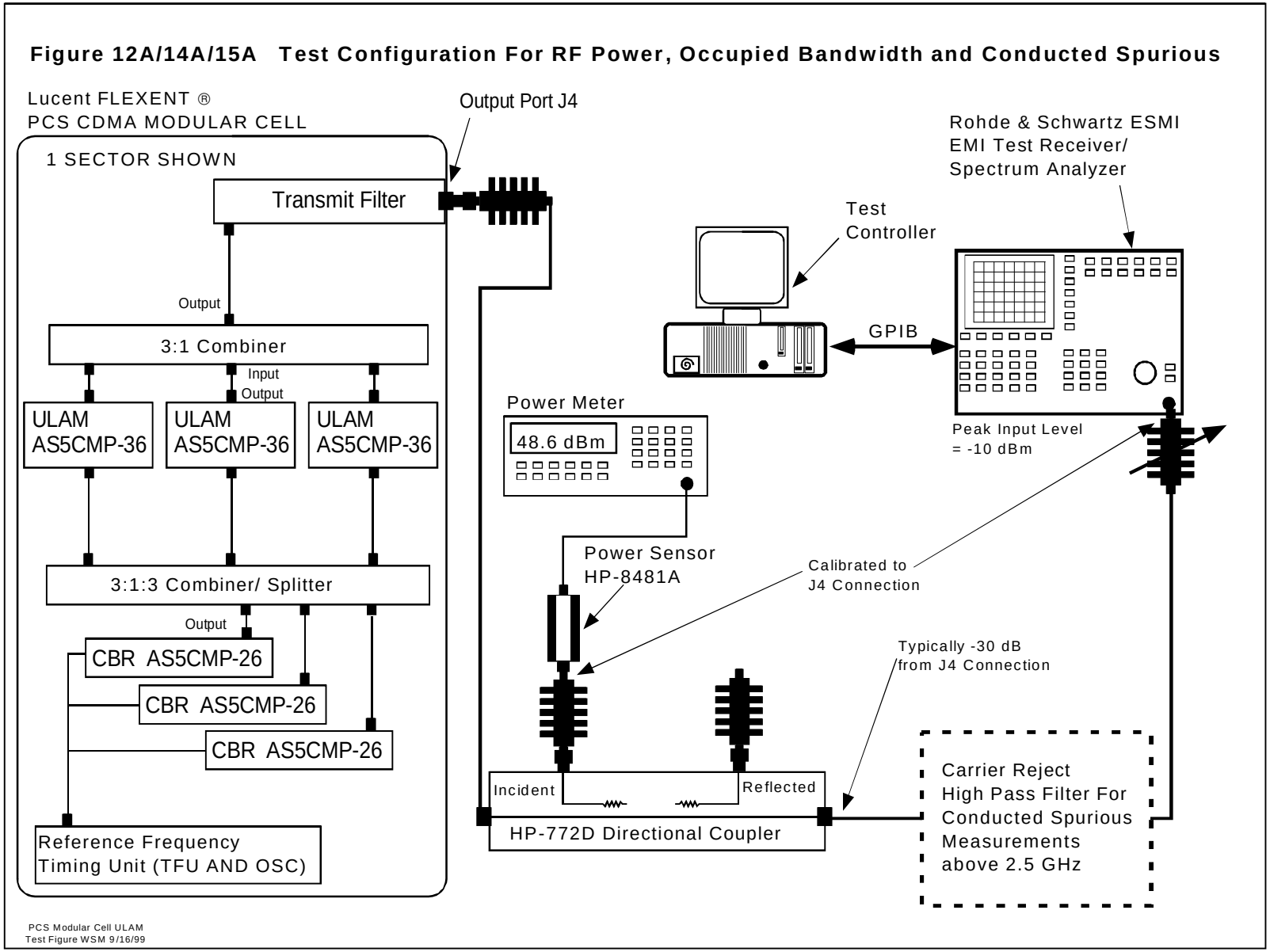

Figure 14B Occupied Bandwidth Mask

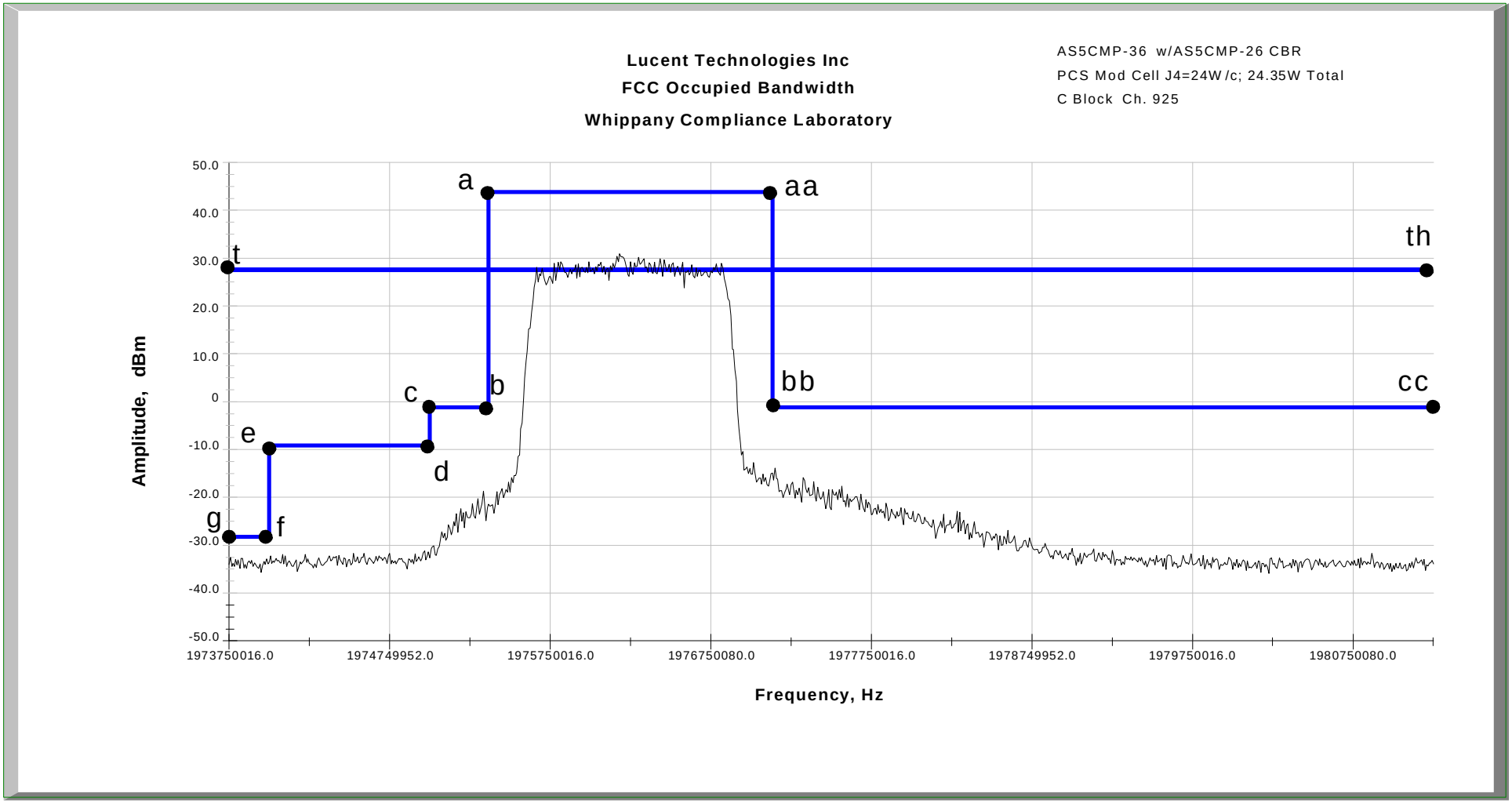

Figure 14C Typical Power Calibration