#### **EXHIBIT 16**

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Spurious emissions conducted to the transmit antenna terminal were investigated from the lowest RF frequency, 15 MHz, to the 10<sup>th</sup> harmonic of the carrier, 10 GHz, as required by Part 2.1057(a)(1). Part 2.1057(c) specifies that spurious emissions attenuated more than 20 dB below the required limitation do not need to be reported. The power level of a single unmodulated carrier was set to provide +30.8 dBm (1.2 Watts) at the transmit antenna terminal. Conducted emission measurements were first made with the Cellular A-Band simplex transmit bandpass filter at 1) the lowest settable channel Ch 991 (869.04 MHz) and 2) at mid-band Ch 400 (882.00 MHz). A third measurement was made with the Cellular B-Band simplex transmit bandpass filter at 3) the highest settable B-Band channel Ch 799 (893.97 MHz).

In compliance with Part 22.917(h), measurements were made with the instrumentation resolution bandwidth set to 30 kHz. The limitation for the Cellular Frequency Band is specified in Part 22.917(e) as: "The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P in Watts) ..... by at least 43 + 10 log (P) dBc." For the CMCLA output power at the antenna terminal set to +30.8 dBm (1.2 Watt), the required emission attenuation below the carrier is then 43.8 dBc. Two plots were made for each channel listed above: 15 MHz – 1 GHz and 1–10 GHz. A variable attenuator was used to adjust the carrier peak to the 0 dBm reticle line as a reference line to facilitate reading the *attenuation below the carrier* direct from the vertical display grid. Part 2.1051 also states that: "The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified."

#### **RESULTS:**

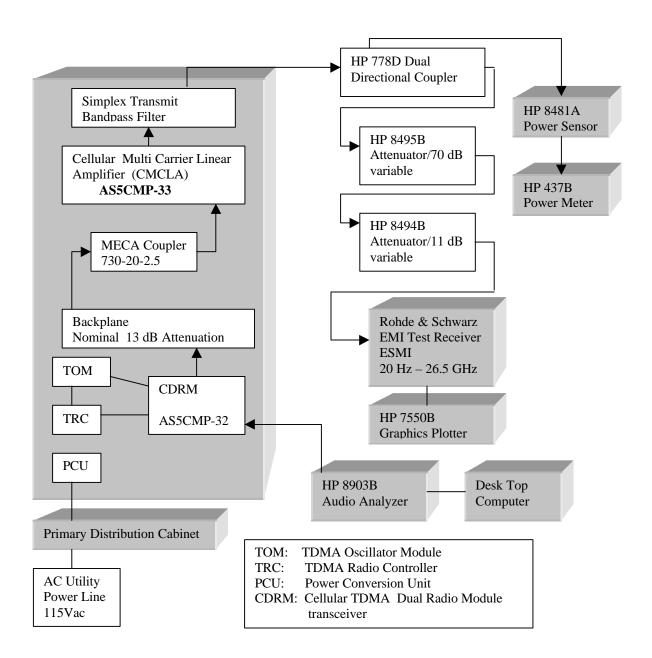
In each of the attached data plots, the instrumentation noise floor exceededs the 43.8 dBc limitaion by much greater than 20 dB. The Cellular TDMA/Analog Multi Carrier Linear Amplifier (CMCLA), 44WA29, subject of this Class II Permissive Change request under AS5CMP-33, in combination with the Cellular TDMA/Analog Dual Radio Module (CDRM), 44WR54, which was previously authorized under AS5CMP-32, demonstrated full compliance with the requirements of Part 2.1051 and Part 22.917. A block diagram of the test set-up and all data plots are attached to this exhibit.

#### **EXHIBIT 16**

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

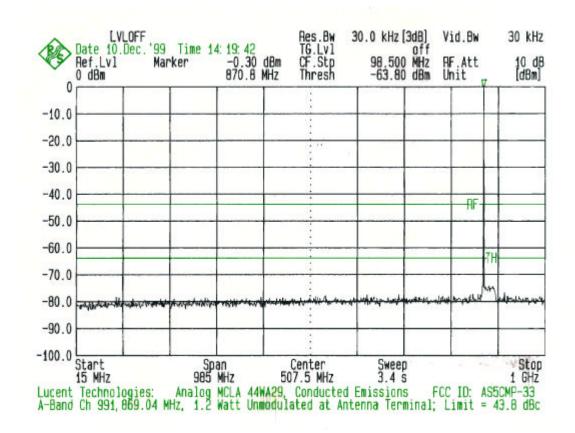
**Test Set-Up Block Diagram:** 

# FLEXENT™ Cellular TDMA/Analog Microcell J41698B-1



#### **EXHIBIT 16**

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal Data Plots of Conducted Spurious Emissions:

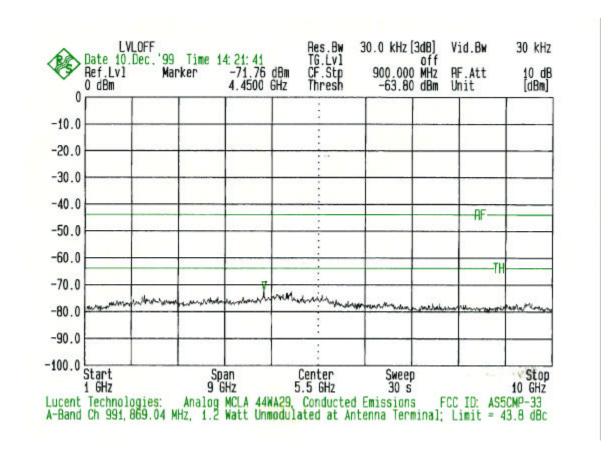


Cellular A-Band Channel 991 869.04 MHz Cellular TDMA/Analog Multi Carrier Linear Amplifier, 44WA29 Output at transmit antenna terminal Plot 1 of 2

#### **EXHIBIT 16**

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

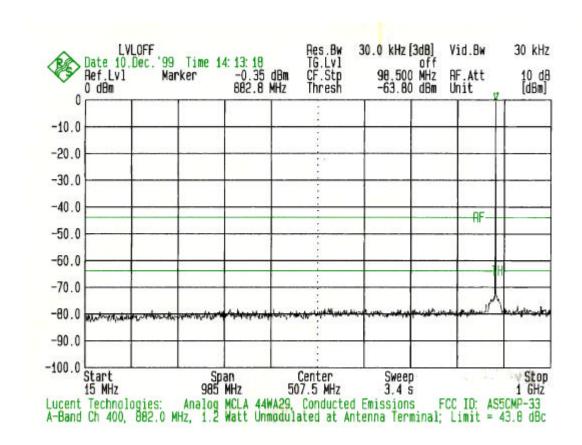
**Data Plots of Conducted Spurious Emissions:** 



Cellular A-Band Channel 991 869.04 MHz Cellular TDMA/Analog Multi Carrier Linear Amplifier, 44WA29 Output at transmit antenna terminal Plot 2 of 2

#### **EXHIBIT 16**

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal Data Plots of Conducted Spurious Emissions:

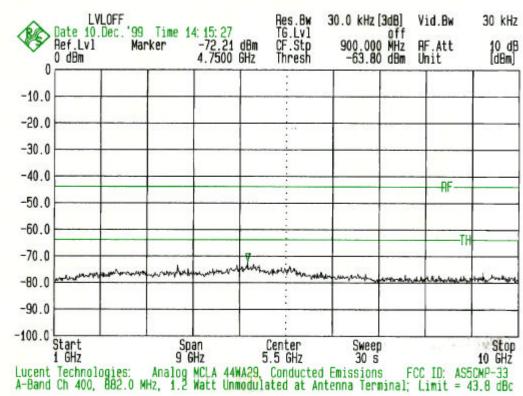


Cellular A-Band Channel 400, 882.00 MHz Cellular TDMA/Analog Multi Carrier Linear Amplifier, 44WA29 Output at transmit antenna terminal Plot 1 of 2

#### **EXHIBIT 16**

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

**Data Plots of Conducted Spurious Emissions:** 



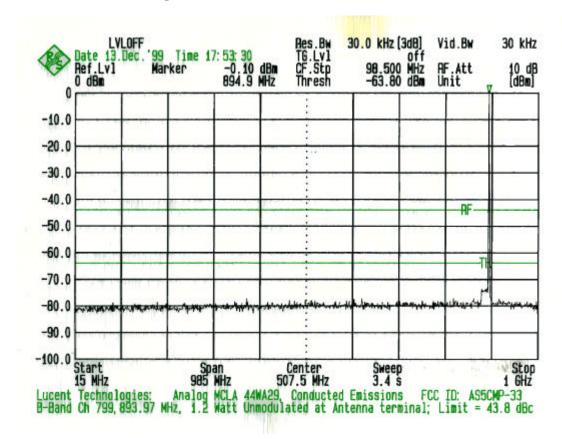
Cellular A-Band Channel 400, 882.00 MHz Cellular TDMA/Analog Multi Carrier Linear Amplifier, 44WA29 Output at transmit antenna terminal

Plot 2 of 2

### **EXHIBIT 16**

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

**Data Plots of Conducted Spurious Emissions:** 



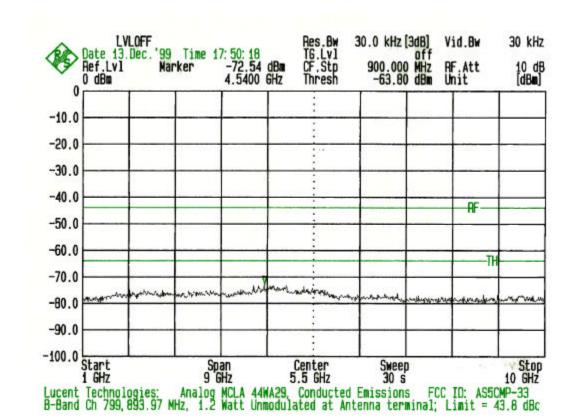
Cellular B-Band Channel 799, 893.97 MHz Cellular TDMA/Analog Multi Carrier Linear Amplifier, 44WA29 Output at transmit antenna terminal

Plot 1of 2

#### **EXHIBIT 16**

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

**Data Plots of Conducted Spurious Emissions:** 



Cellular B-Band Channel 799, 893.97 MHz Cellular TDMA/Analog Multi Carrier Linear Amplifier, 44WA29 Output at transmit antenna terminal

Plot 2 of 2