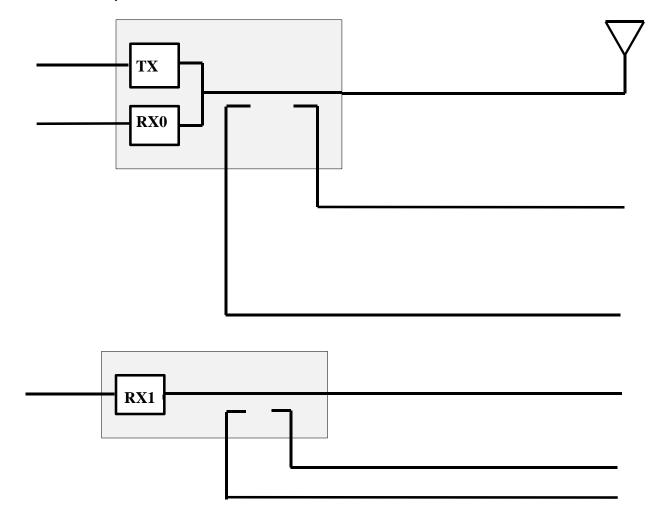
#### Section 2.1033 (c)(10): Description of circuitry and devices for suppression of spurious radiation.

Spurious emissions radiated from the FLEXENT<sup>TM</sup> PCS-TDMA Microcell J41698A-1 are suppressed by implementing sound Electromagnetic Compatibility (EMC) design practices extending from the circuit board level to the system level: 1) RF shielding on coaxial cables, 2) RF shielding "cans" mounted on the circuit packs, 3) effective grounding, 4) effective RF gasket mounted to the equipment door frame, 4) EMI filter on the AC power leads, and 5) effective 60 MHz duplex transmit and receive (TxDx or TxRx0) bandpass filter plus one 60 MHz simplex receive (Rx1) bandpass filter for diversity receive as described below. The filter characteristic plots are attached to this exhibit.

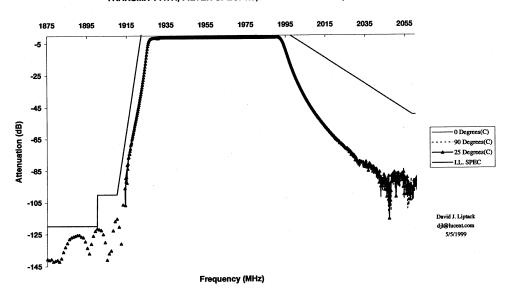
A filter panel in a duplex configuration supports a single antenna for both reception and transmission as shown in the figure below. Since there is no physical separation of the antennas in simplex configurations, the transmit path's receive band attenuation must be at least 20 dB greater than the simplex path. Each duplex panel also supports diversity receive, so each panel has two independent paths- one duplexed transmit/receive path and separate receive path. Additionally, each of the two antenna ports contains a  $30.0 \, \text{dB}$  bi-directional coupler for diagnostics. The 60 MHz bandpass filters are passive devices and are realized by tuned cavities.



#### FILTER CHARACTERISTIC PLOTS:

## Duplex 60 MHz Transmit Bandpass Filter

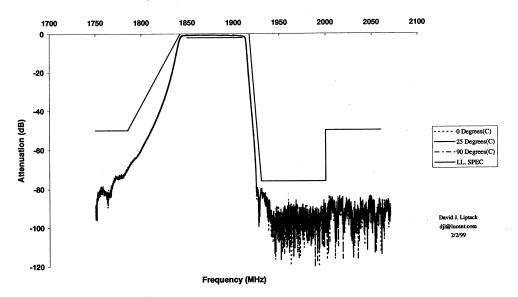
# THERMAL TEST, FILTRONIC COMTEK, S/N:2, FLEXENT MICROCELL TDMA 1900 60 MHz. DUPLEX, TRANSMIT PATH, FILTER SPEC. 1.9, FILE: D15T6DTTF20, DIN



#### FILTER CHARACTERISTIC PLOTS:

## Duplex 60 MHz Receive Bandpass Filter

# THERMAL TEST, FILTRONIC COMTEK, S/N:2, FLEXENT MICROCELL TDMA 1900 MHz. 60 MHz. DUPLEX, RXDX, FILTER SPEC. 1.9, FILE: D18T6DDTF20, DIN



#### FILTER CHARACTERISTIC PLOTS:

## Simplex 60 MHz Receive Bandpass Filter

# THERMAL TEST, FILTRONIC COMTEK, S/N:2, FLEXENT MICROCELL TDMA 1900 MHz. 60 MHz. DUPLEX, RXSX, FILTER SPEC. 1.9, FILE: D18T6DSTF20, DIN

