

Exhibit 9 – Measured Data Index

Motorola Customer Premise Equipment (CPE)

FCC ID: MIJMILCPE-USA-01

Millitech Part No. 9031295602

9.0 Measured Data Index

9.1 *RF Output Measured Data*

9.1.1 Transmitter Output Power

The CPE Data transmitter output power is +17dBm typical at room temperature. The specified minimum output power is +16dBm minimum from @ +50° C. The CPE Data transmitter was operated at an output power of +18dBm.

9.1.2 Effective Isotropic Radiated Power (EIRP)

The calculated EIRP based on the saturated output power of the CPE is:

Power (sat.) = +18dBm = -12 dBw

Antenna Gain = 34 dBi

EIRP = -12 + 34 = 22 dBw

9.2 Occupied Bandwidth Graphs

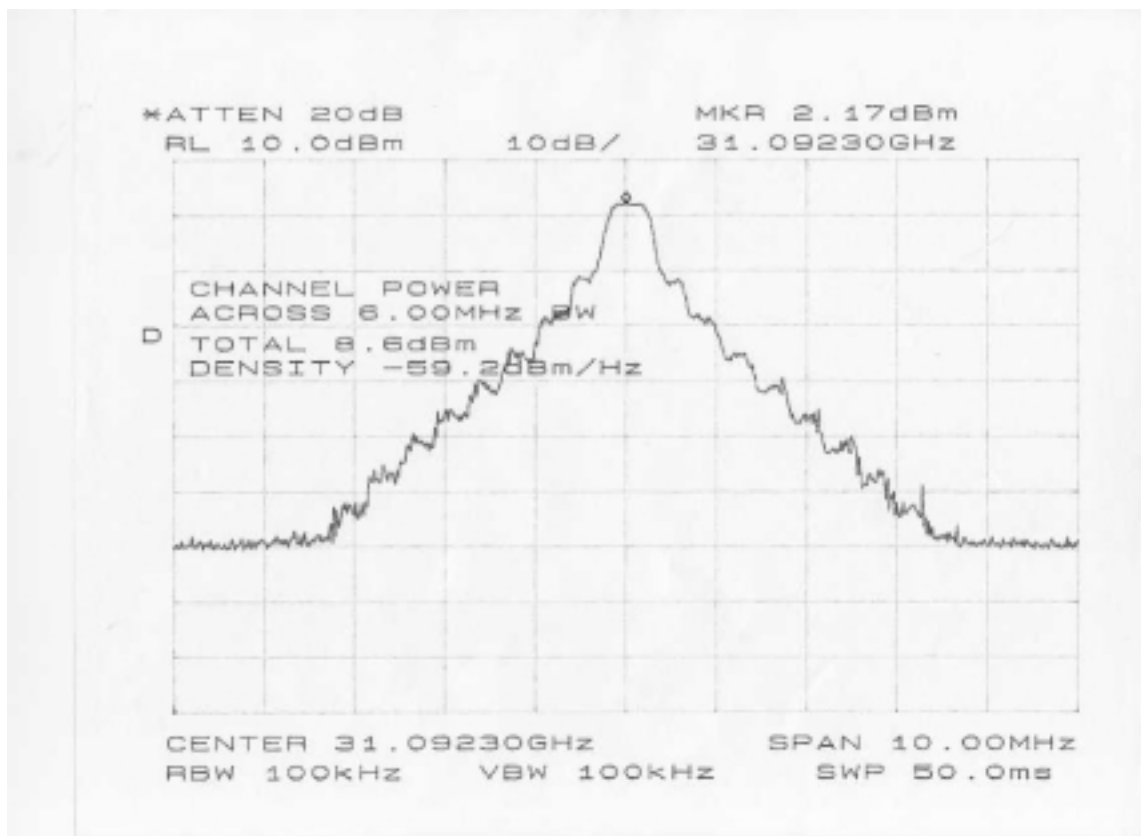


Figure 9.2-1 CPE Data Occupied Bandwidth Graph

9.3 FCC Radiated Spurious Emissions Graphs

Emission Frequency (GHz)	Received Power Level (dBm)	Measurement Bandwidth	Cable Loss * (dB)	Antenna Factor (dB)	Radiated Emission Level (dBμV/m)	Limit Level (dBμV/m)	Comments	dB above the limit
31.0923	111.5	1 MHz	6	35.9	153.4	n/a	CPE Data Carrier	
30.865	51.5	1 MHz	7	35.9	94.4	97.4	Spurious Emission	Pass
62.1846	40.3	4 kHz	1	43.2	84.5	122.4	2nd Harmonic	Pass

* Cable loss above 40 GHz is for external mixer IF (221MHz) cable loss.

** All other emissions greater than 20 dB below the specification were not reported

*** Spectrum search performed from 30 MHz to 100 GHz

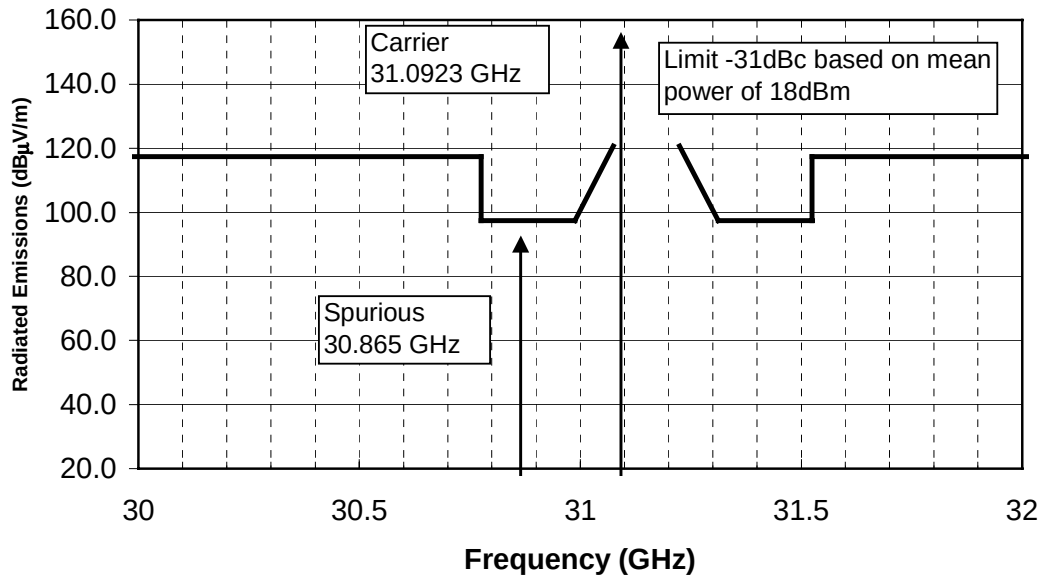


Figure 9.3-1 CPE Data radiated spurious emissions

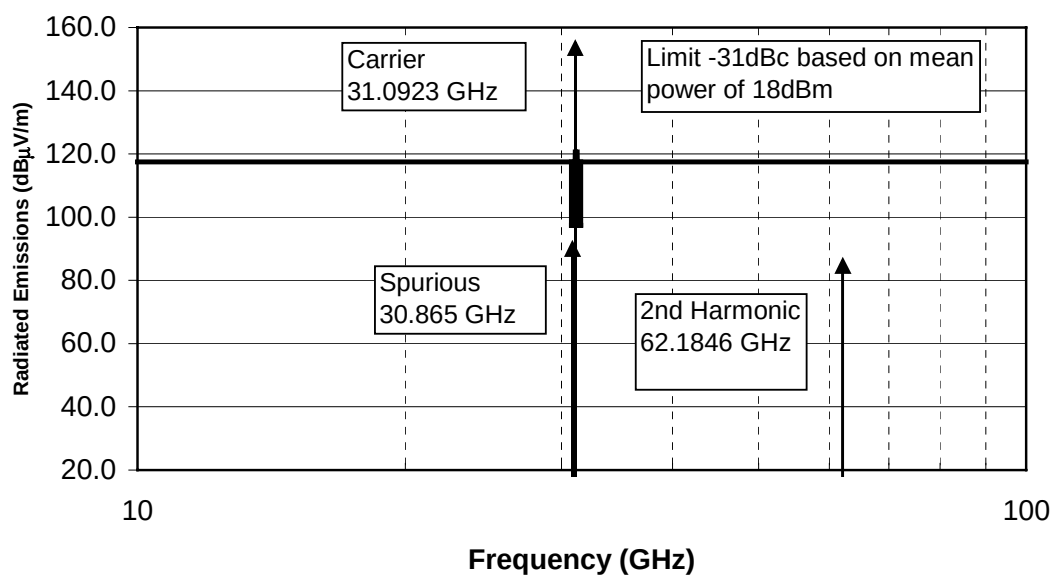
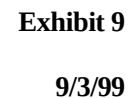


Figure 9.3-2 CPE Data radiated harmonic emissions

9.4 Frequency Stability vs Temperature

The frequency stability of the CPE relies on the received HUB Pilot tone. The following is description of HUB frequency stability:

The crystal oscillator manufacturer (Wenzel) did supply frequency error data for 20 sample oscillators tested at -40C and +65C. Their test spec is +/-1ppm (See Figure 9.4-1). The worst unit had an error of only .218ppm at -40C. The frequency error allowed is .001%, or 275kHz for a carrier at 27.5GHz and 313kHz for a carrier at 31.3GHz. The frequency error from the Hub will be proportional to the reference oscillator error and the total frequency conversion from IF to RF. Worst case conversion would be 31.065 GHz (11MHz to 31076MHz). At that point if there was a total error of 2ppm, we would see a carrier frequency error of only 62kHz



9.5 *Frequency Stability vs Voltage*

The frequency stability of the CPE relies on the received HUB Pilot tone. The following is description of HUB frequency stability:

The DC/DC Regulators (JW series) within the Hub are guaranteed from 36 to 75 Vdc input. This is well within the +/-20% spec on the Hub input power . The output regulation on these power supplies is guaranteed to be better than 0.4% as load varies from min to max, and an additional 1% over the operating temperature range of -40C to +100C. So the worst case variation on the voltage to the 100MHz oscillator is about 1.4%. This compares to the voltage input required for the 100MHz oscillator which is specified as +/-10% (According to Wenzel, the oscillator manufacturer). From this information it appears there will be very little frequency error due to voltage variation.