

**FREQUENCY STABILITY vs. VOLTAGE**

Instruments Used:

HP 500 MHz universal Counter  
Model 5328A

10 MHz Rubidium Frequency Standard  
EFRATOM Model FRK-L

Fluke digital voltmeter  
Model 8050A

Variable DC Power Supply  
BK Precision-1660

Assigned frequency 460.000 MHz

<b><u>Battery voltage</u></b>	<b><u>Frequency [MHz]</u></b>	<b><u>Variance [PPM]</u></b>
3.60	459.999 992	-0.02
3.50	459.999.995	-0.02
3.40	49.999 999	0.00
3.30	460.000 010	+0.02
3.20	460.000 033	+0.07
3.10	460.000 040	+0.09
3.00	460.000 061	+0.13
2.90	460.000 085	+0.18
2.80	459.999 946	-0.17
2.70	459.999 898	-0.22

Imbedded microcontroller disables MTU operation below 2.70 Volts.

Measured and Recorded on November 4, 2002

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