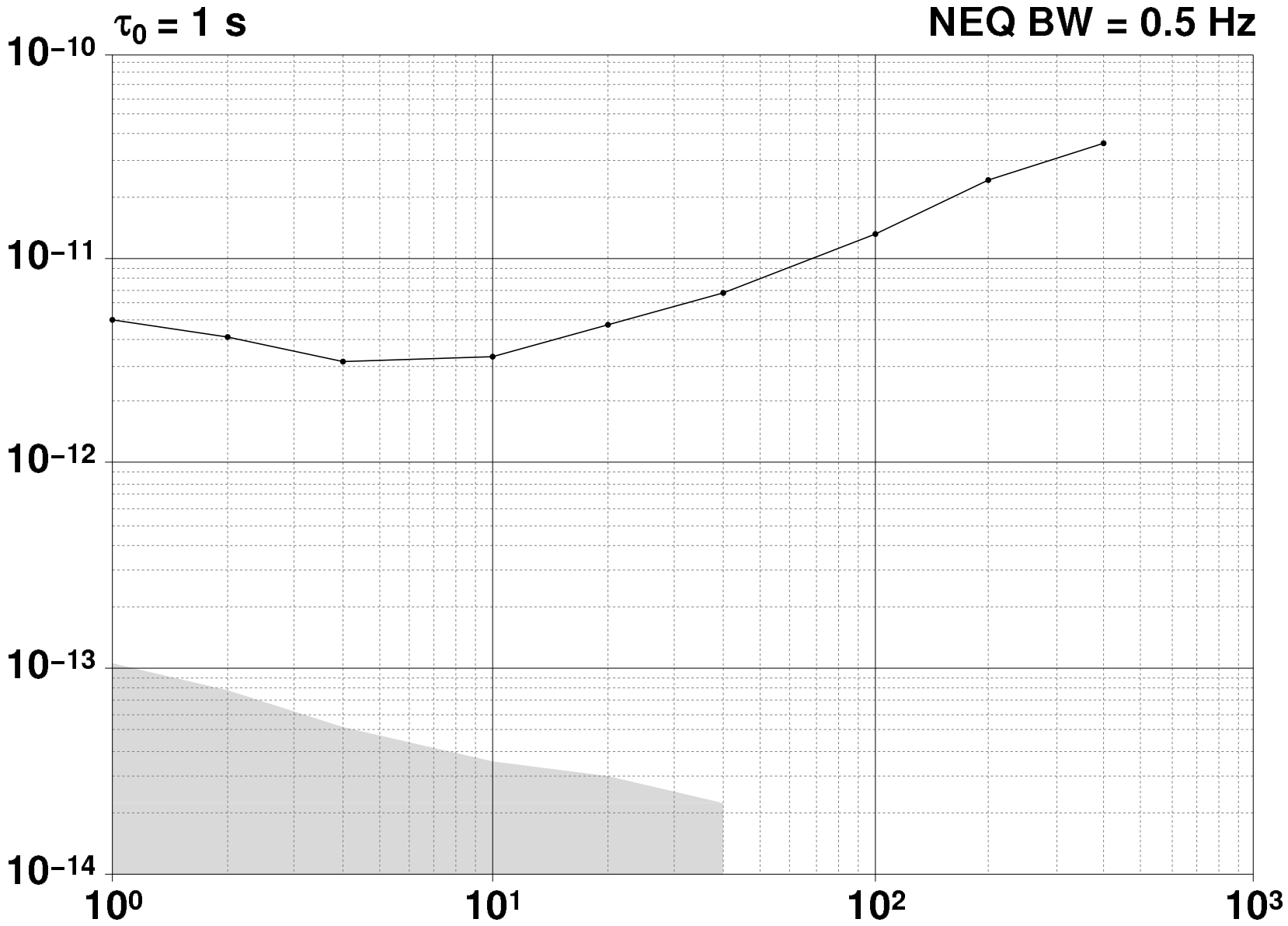
07/02/2012 02:04:25
15m

TSC 5120A

Allan Deviation $\sigma_y(\tau)$



Input 10.0 MHz 4 dBm

Reference 5.0 MHz 12 dBm

07/02/2012 02:04:25
15m

TSC 5120A

Allan Deviation $\sigma_y(\tau)$

Avg. Time (s)	Allan Deviation $\sigma_y(\tau)$	Noise Floor
1	4.99×10^{-12}	1.07046×10^{-13}
2	4.11×10^{-12}	7.88859×10^{-14}
4	3.12×10^{-12}	5.26829×10^{-14}
10	3.27×10^{-12}	3.53004×10^{-14}
20	4.7×10^{-12}	2.97729×10^{-14}
40	6.8×10^{-12}	2.24336×10^{-14}
100	1.32×10^{-11}	
200	2.4×10^{-11}	
400	3.6×10^{-11}	

$\tau_0 = 1$ s NEQ BW = 0.5 Hz

Input 10.0 MHz 4 dBm

Reference 5.0 MHz 12 dBm

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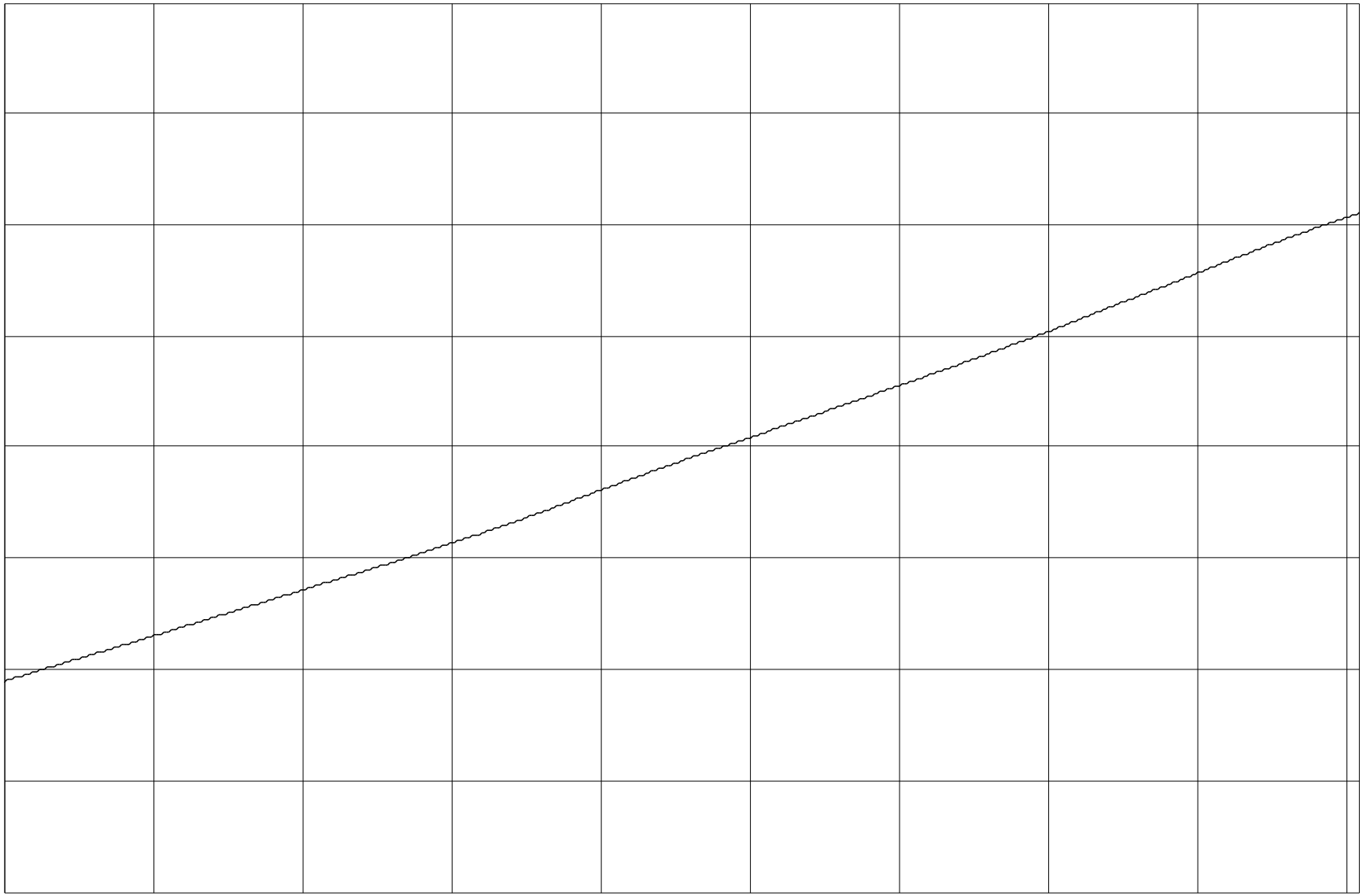
15m

TSC 5120A

Phase Difference

2.0x10^{-08} s/div

Center: 7.713x10^{-08} s



60s/div

Input 10.0 MHz 4 dBm

Reference 5.0 MHz 12 dBm

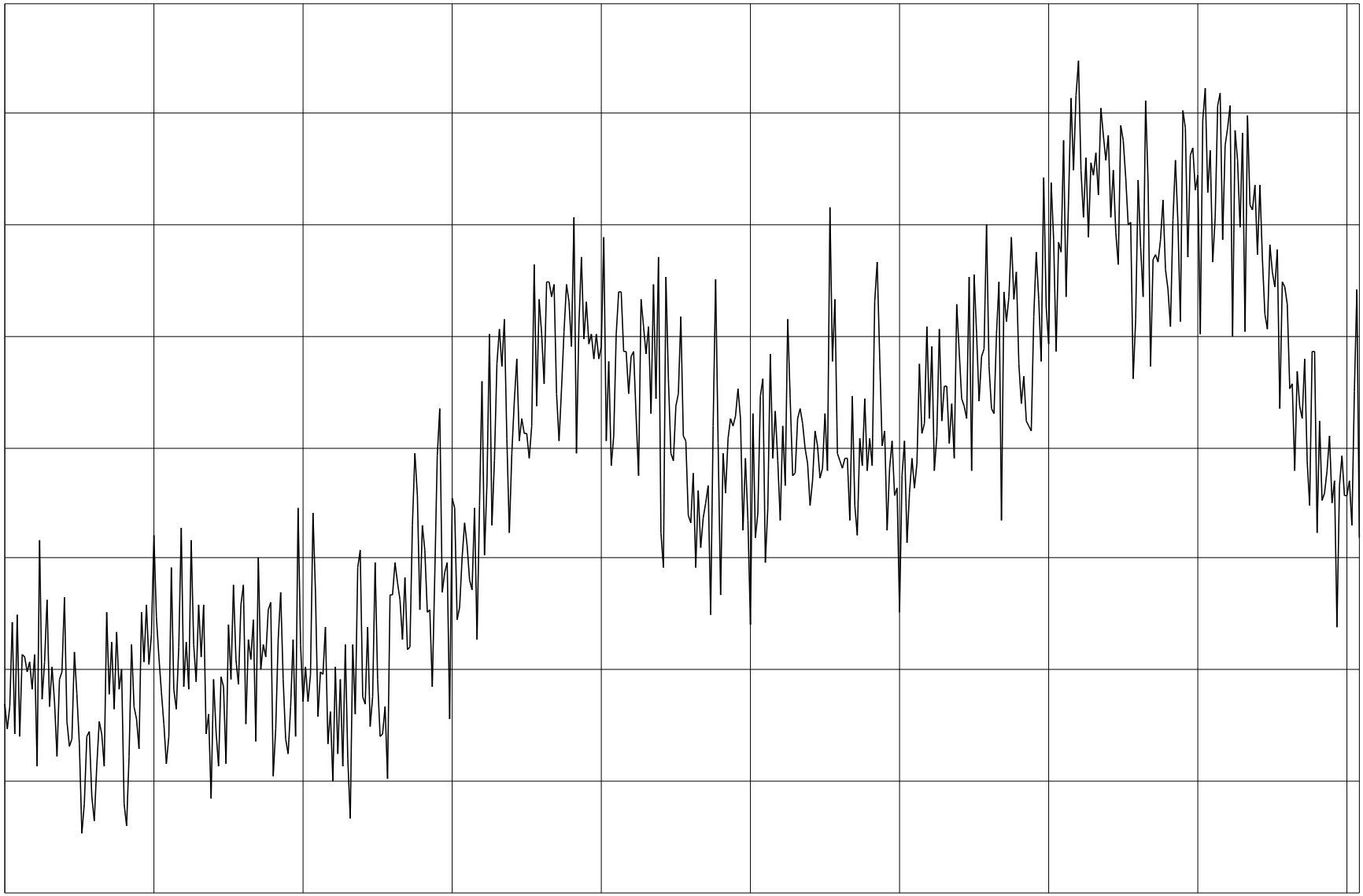
07/02/2012 02:04:25
15m

TSC 5120A

Frequency Difference

9.0x10^{-12} /div

Center: 1.5530x10^{-10}



60s/div

Input 10.0 MHz 4 dBm

Reference 5.0 MHz 12 dBm

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15m

Frequency Counter

TSC 5120A

Sample Time (s)	Frequency (MHz)
1	9.9999998375476
10	9.99999983750271
100	9.999999837339049

Reference Frequency: 5.0 MHz (auto)

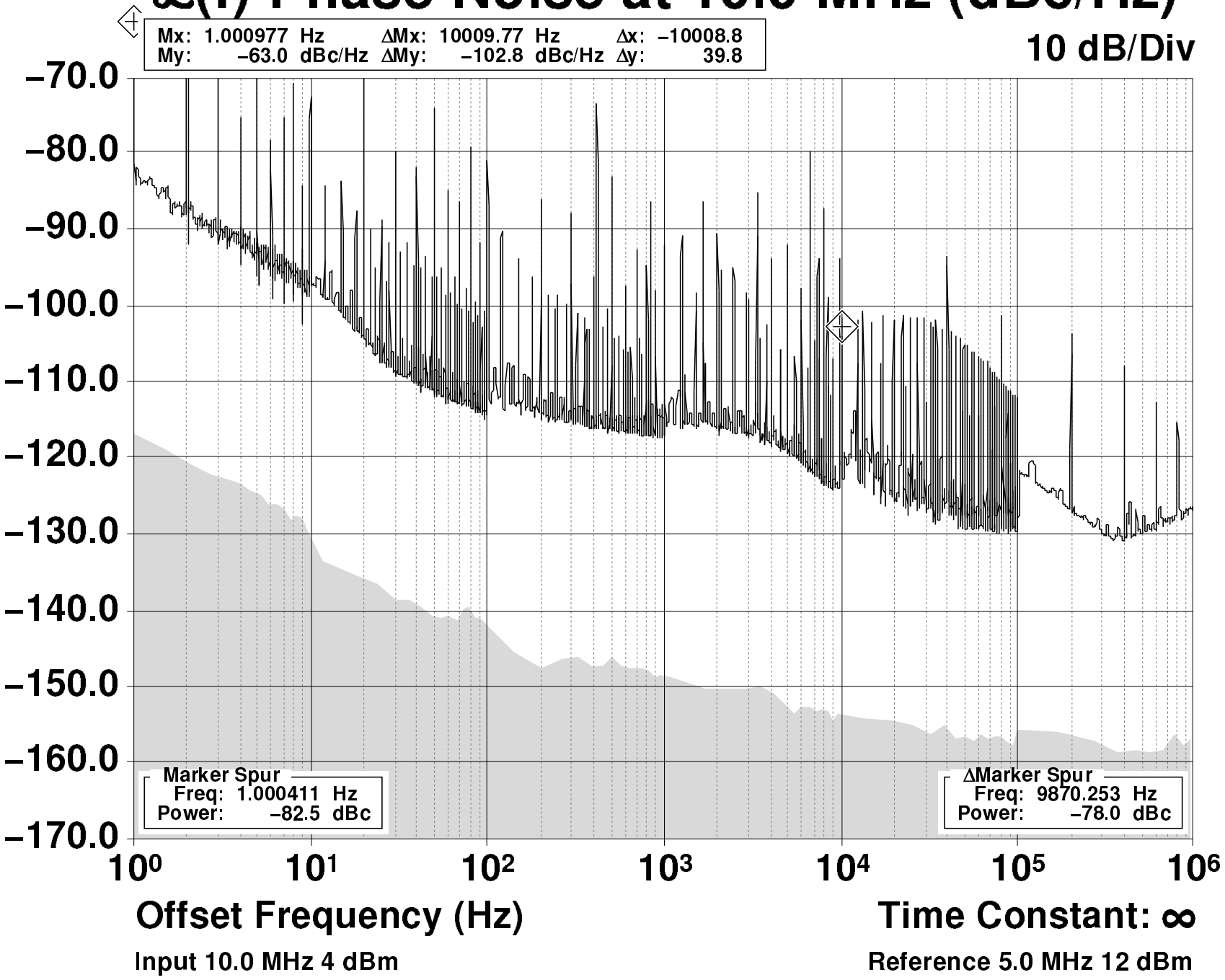
Input 10.0 MHz 4 dBm

Reference 5.0 MHz 12 dBm

07/02/2012 02:04:25
15m

TSC 5120A

ℒ(f) Phase Noise at 10.0 MHz (dBc/Hz)



Offset Frequency (Hz)

Time Constant: ∞

Input 10.0 MHz 4 dBm

Reference 5.0 MHz 12 dBm