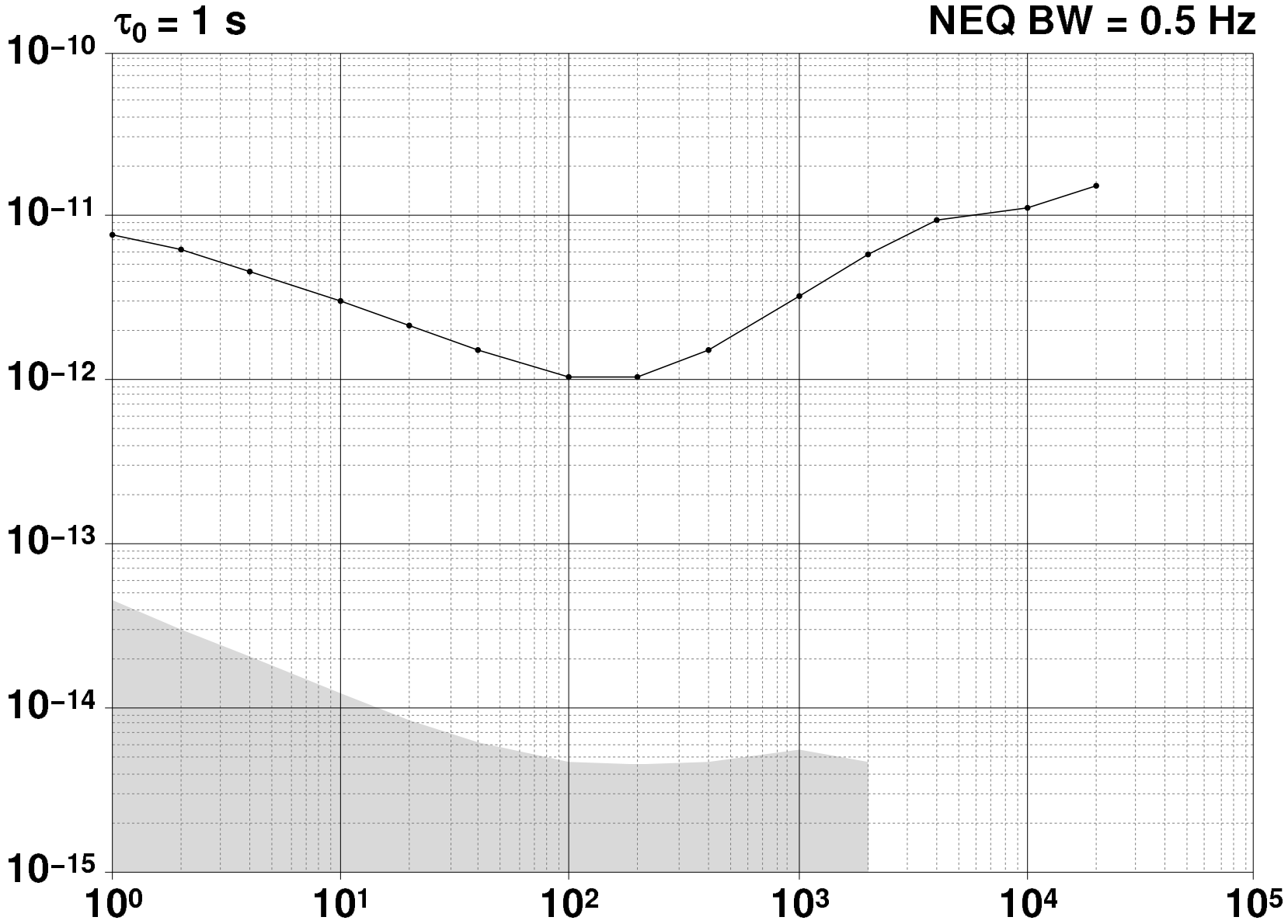
04/02/2012 17:34:48
15h 0m

TSC 5120A

Allan Deviation $\sigma_y(\tau)$



Input 10.0 MHz 15 dBm

Reference 5.0 MHz 14 dBm

04/02/2012 17:34:48
15h 0m

TSC 5120A

Allan Deviation $\sigma_y(\tau)$

Avg. Time (s)	Allan Deviation $\sigma_y(\tau)$	Noise Floor
1	7.703×10^{-12}	4.47224×10^{-14}
2	6.262×10^{-12}	2.95708×10^{-14}
4	4.586×10^{-12}	2.05635×10^{-14}
10	3.021×10^{-12}	1.24923×10^{-14}
20	2.156×10^{-12}	8.52673×10^{-15}
40	1.517×10^{-12}	6.15025×10^{-15}
100	1.047×10^{-12}	4.72212×10^{-15}
200	1.04×10^{-12}	4.52604×10^{-15}
400	1.51×10^{-12}	4.68647×10^{-15}
1000	3.18×10^{-12}	5.60622×10^{-15}
2000	5.7×10^{-12}	4.62684×10^{-15}
4000	9.4×10^{-12}	
10000	1.10×10^{-11}	
20000	1.5×10^{-11}	

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

Input 10.0 MHz 15 dBm

Reference 5.0 MHz 14 dBm

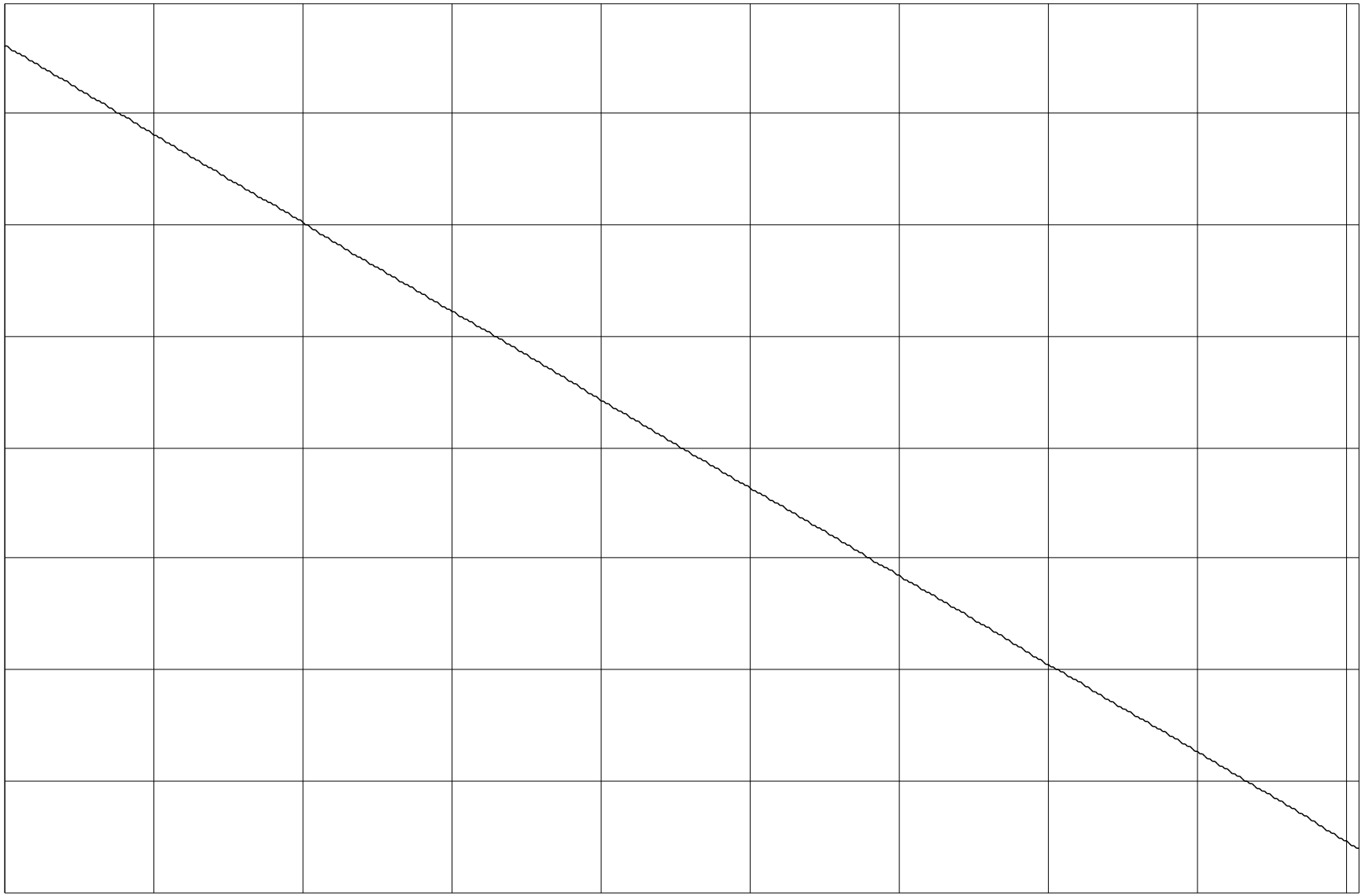
04/02/2012 17:34:48
15h 0m

TSC 5120A

Phase Difference

8.0x10^{-09} s/div

Center: –5.50245x10^{-06} s



60s/div

Input 10.0 MHz 15 dBm

Reference 5.0 MHz 14 dBm

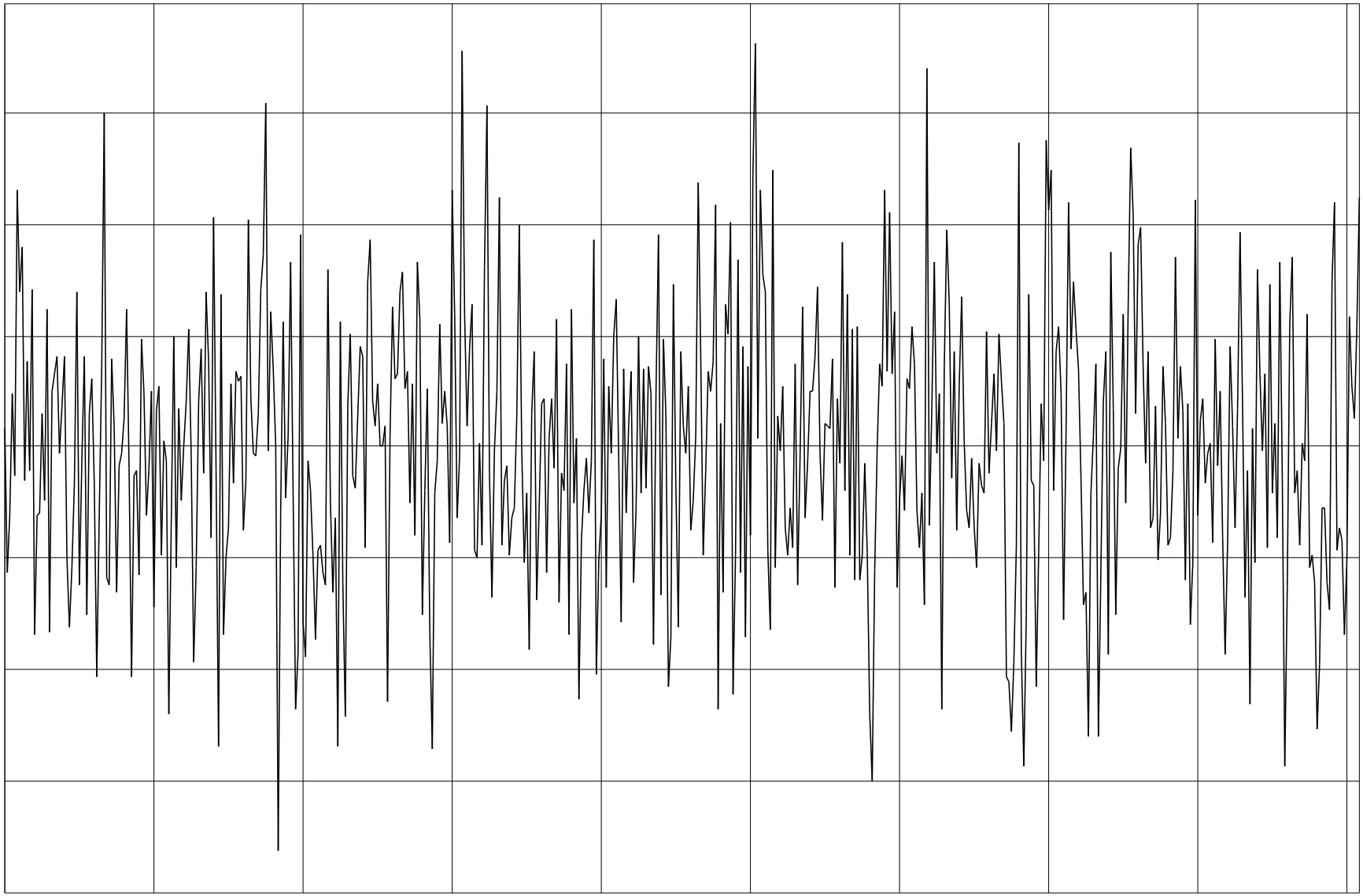
04/02/2012 17:34:48
15h 0m

TSC 5120A

Frequency Difference

7.0x10^{-12} /div

Center: –1.0578x10^{-10}



60s/div

Input 10.0 MHz 15 dBm

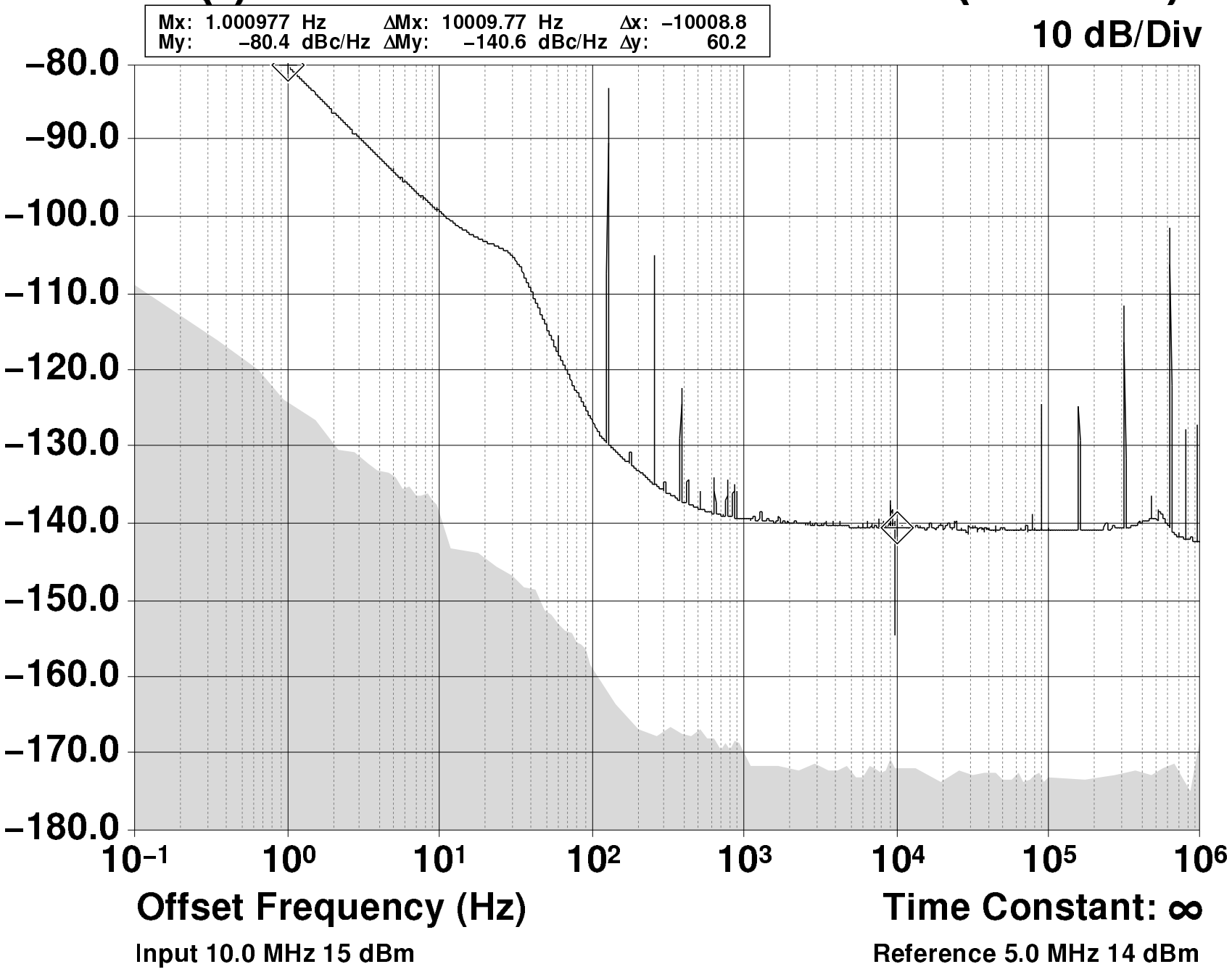
Reference 5.0 MHz 14 dBm

Frequency Counter

Sample Time (s)	Frequency (MHz)
1	10.0000000075121
10	10.00000000758164
100	10.000000007591531
1000	10.000000007585572

Reference Frequency: 5.0 MHz (auto)

04/02/2012 17:34:48
15h 0m

TSC 5120A

ℒ(f) Phase Noise at 10.0 MHz (dBc/Hz)