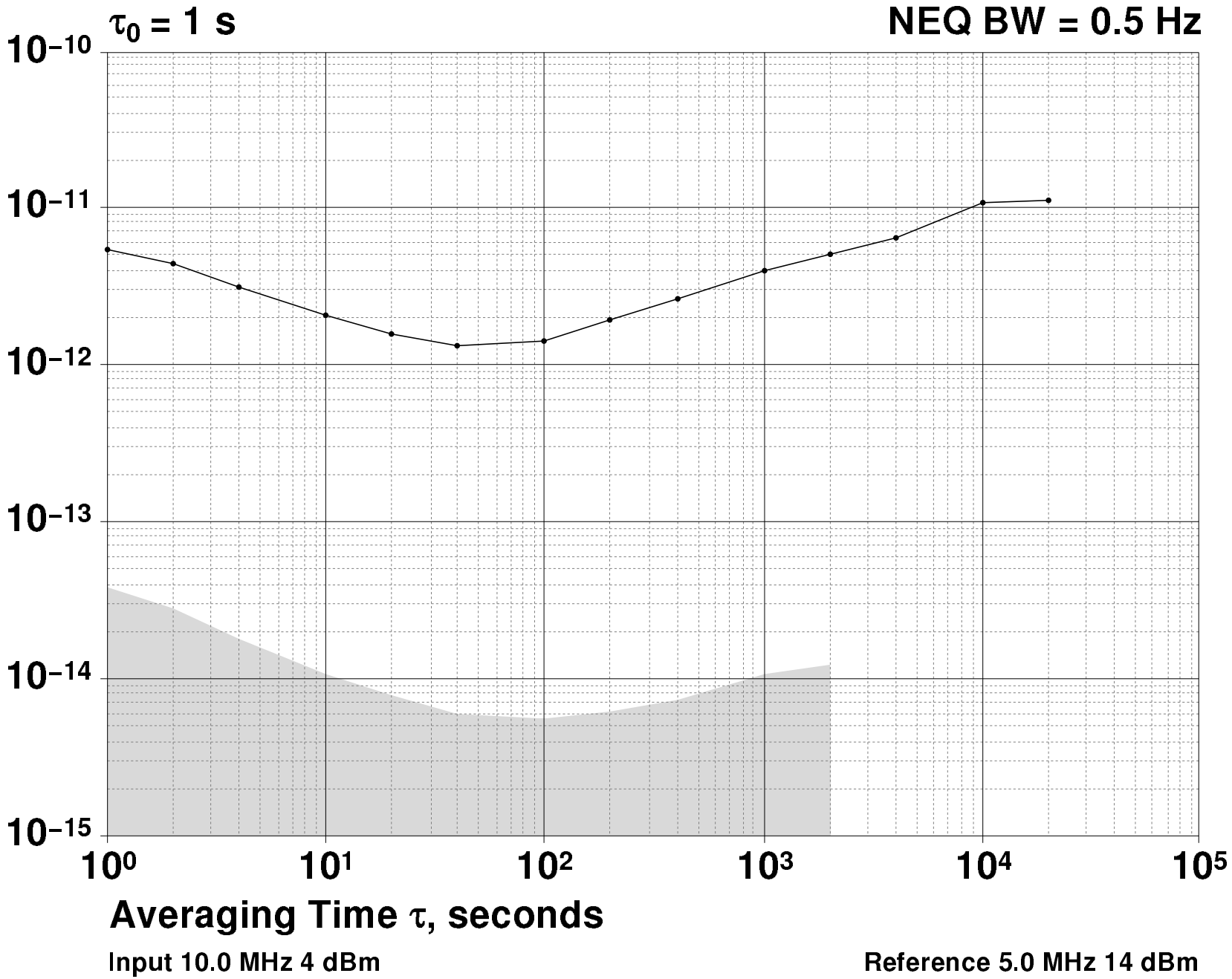
07/02/2012 17:20:17
15h 0m

TSC 5120A

Allan Deviation $\sigma_y(\tau)$



Input 10.0 MHz 4 dBm

Reference 5.0 MHz 14 dBm

07/02/2012 17:20:17
15h 0m

TSC 5120A

Allan Deviation $\sigma_y(\tau)$

Avg. Time (s)	Allan Deviation $\sigma_y(\tau)$	Noise Floor
1	5.378×10^{-12}	3.88331×10^{-14}
2	4.317×10^{-12}	2.81513×10^{-14}
4	3.127×10^{-12}	1.76953×10^{-14}
10	2.047×10^{-12}	1.07541×10^{-14}
20	1.557×10^{-12}	7.88155×10^{-15}
40	1.305×10^{-12}	6.05611×10^{-15}
100	1.43×10^{-12}	5.63330×10^{-15}
200	1.90×10^{-12}	6.17122×10^{-15}
400	2.65×10^{-12}	7.40167×10^{-15}
1000	4.0×10^{-12}	1.06547×10^{-14}
2000	5.0×10^{-12}	1.23485×10^{-14}
4000	6.4×10^{-12}	
10000	1.07×10^{-11}	
20000	1.1×10^{-11}	

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

Input 10.0 MHz 4 dBm

Reference 5.0 MHz 14 dBm

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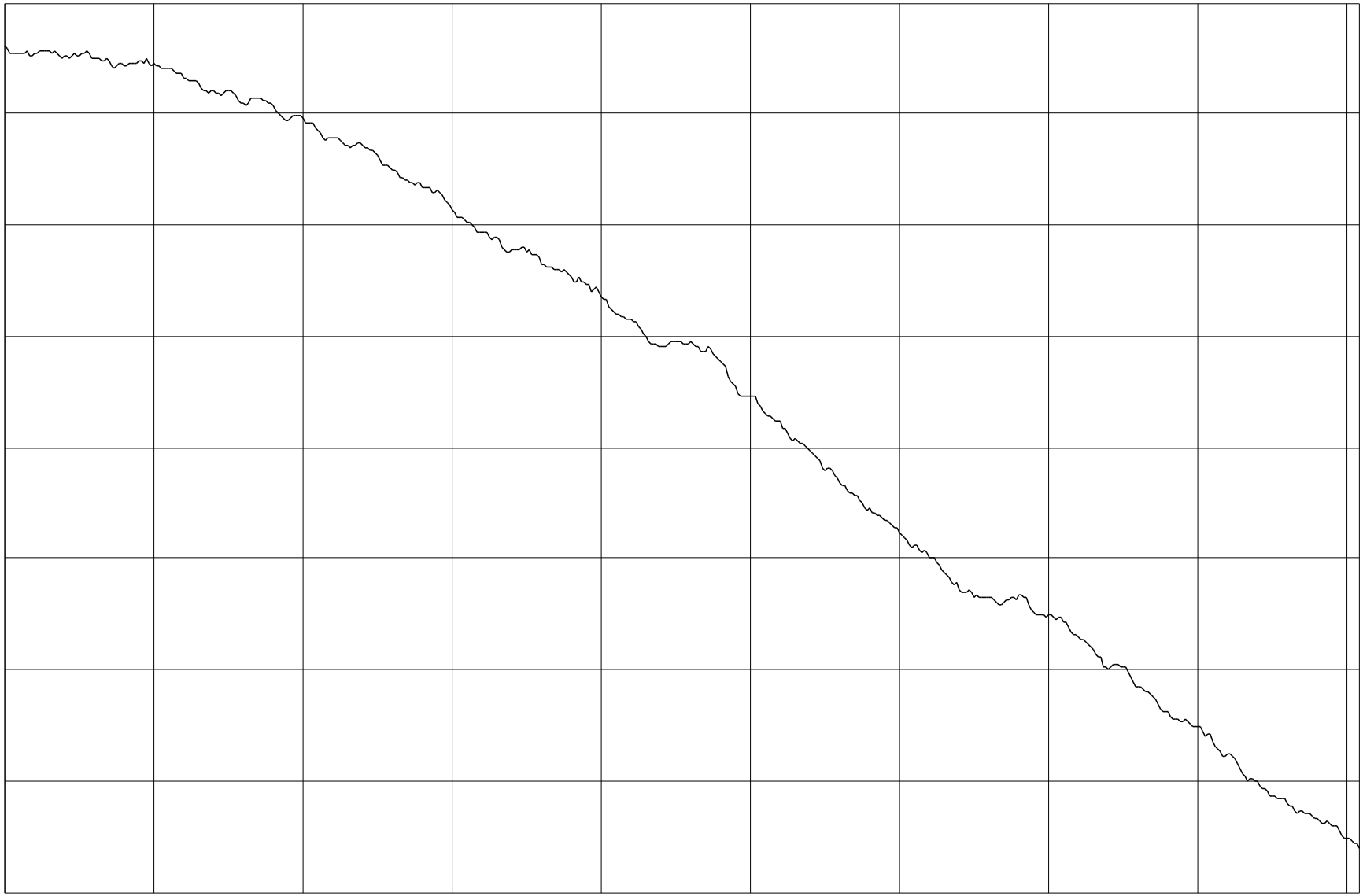
15h 0m

TSC 5120A

Phase Difference

3.0x10^{-10} s/div

Center: 6.3178x10^{-08} s



60s/div

Input 10.0 MHz 4 dBm

Reference 5.0 MHz 14 dBm

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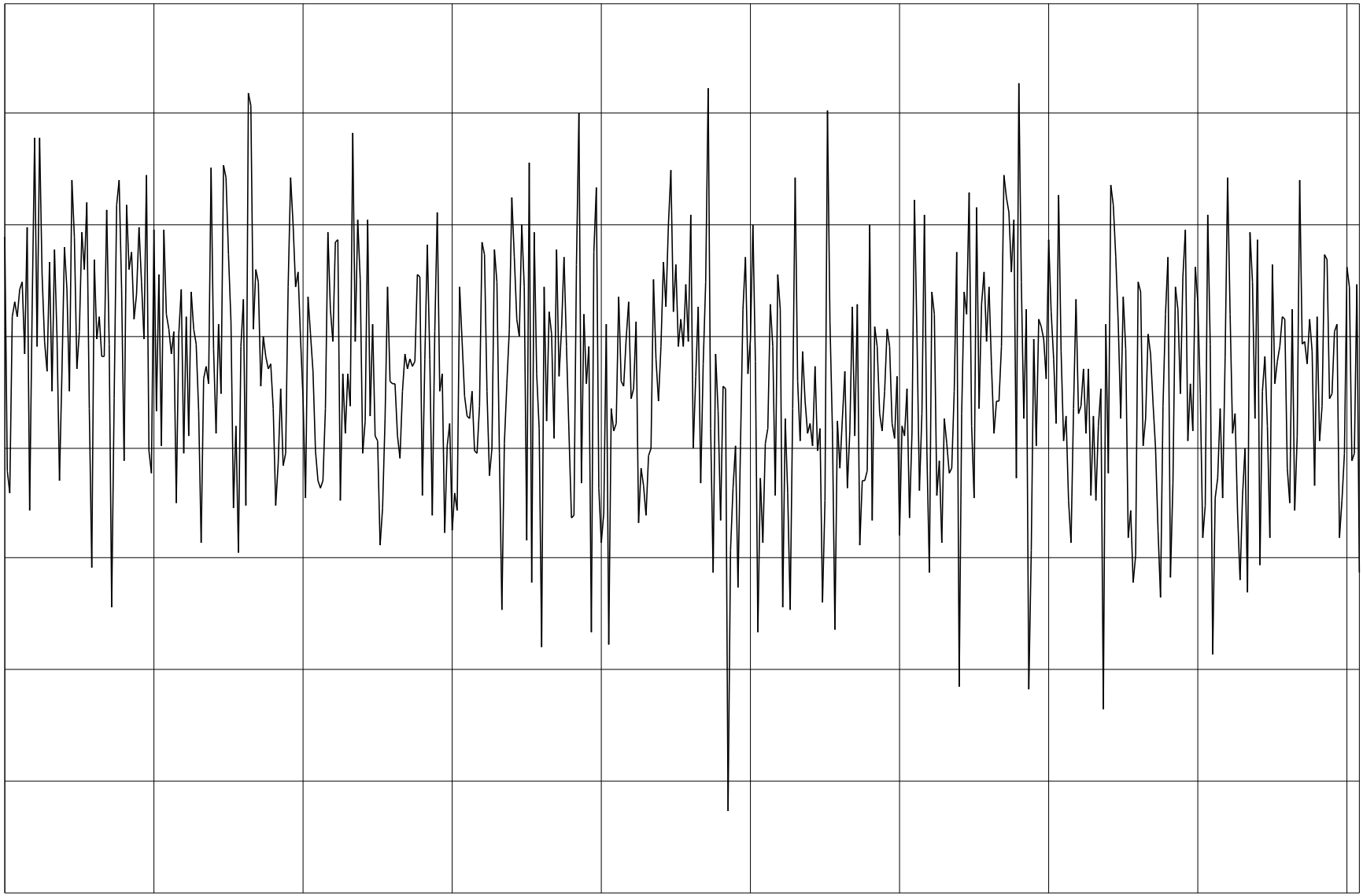
15h 0m

TSC 5120A

Frequency Difference

6.0x10^{-12} /div

Center: –7.755x10^{-12}



60s/div

Input 10.0 MHz 4 dBm

Reference 5.0 MHz 14 dBm

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15h 0m

Frequency Counter

TSC 5120A

Sample Time (s)	Frequency (MHz)
1	10.0000000005883
10	10.00000000079804
100	10.000000000794164
1000	10.000000000772646

Reference Frequency: 5.0 MHz (auto)

Input 10.0 MHz 4 dBm

Reference 5.0 MHz 14 dBm

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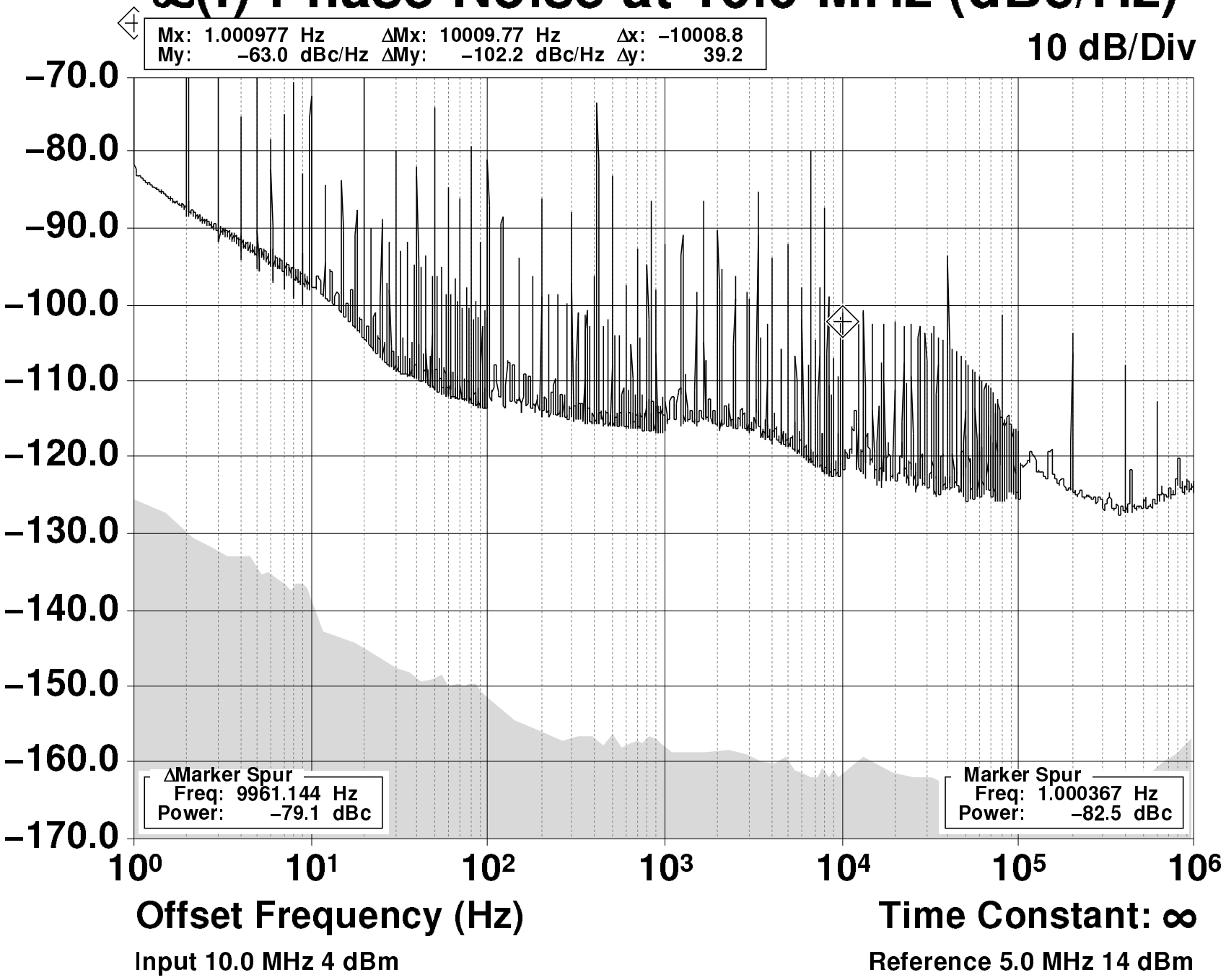
15h 0m

TSC 5120A

ℒ(f) Phase Noise at 10.0 MHz (dBc/Hz)



Input 10.0 MHz 4 dBm

Reference 5.0 MHz 14 dBm