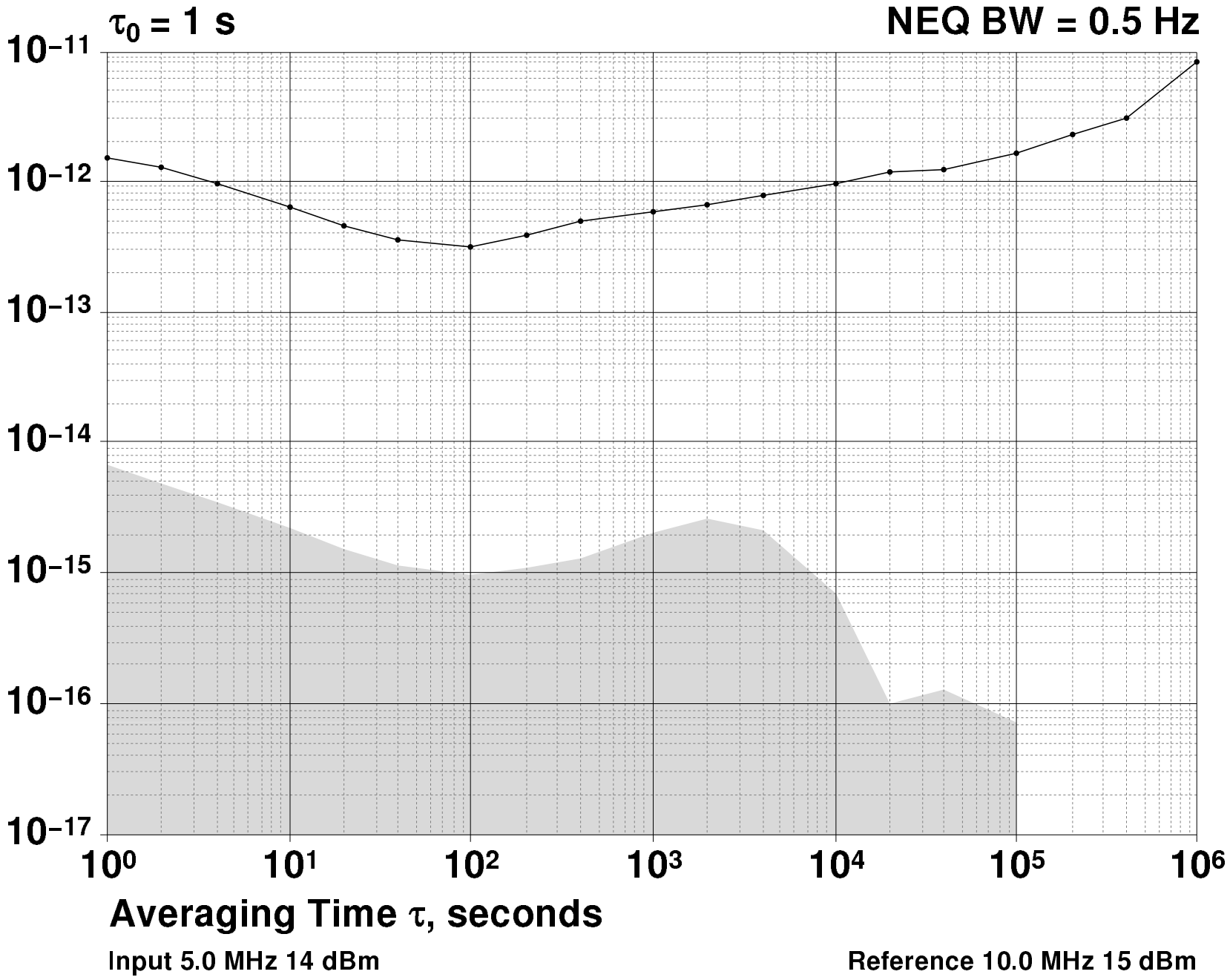
10/09/2011 13:52:41
28d 0h

TSC 5120A

Allan Deviation $\sigma_y(\tau)$



Input 5.0 MHz 14 dBm

Reference 10.0 MHz 15 dBm

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28d 0h

TSC 5120A

Allan Deviation $\sigma_y(\tau)$

Avg. Time (s)	Allan Deviation $\sigma_y(\tau)$	Noise Floor
1	1.4985×10^{-12}	6.89851×10^{-15}
2	1.2813×10^{-12}	4.84184×10^{-15}
4	9.424×10^{-13}	3.49348×10^{-15}
10	6.192×10^{-13}	2.18329×10^{-15}
20	4.534×10^{-13}	1.53351×10^{-15}
40	3.498×10^{-13}	1.14139×10^{-15}
100	3.160×10^{-13}	9.87393×10^{-16}
200	3.892×10^{-13}	1.08051×10^{-15}
400	4.98×10^{-13}	1.29834×10^{-15}
1000	5.88×10^{-13}	2.07028×10^{-15}
2000	6.62×10^{-13}	2.64417×10^{-15}
4000	7.69×10^{-13}	2.09714×10^{-15}
10000	9.7×10^{-13}	7.13252×10^{-16}
20000	1.16×10^{-12}	9.90258×10^{-17}
40000	1.21×10^{-12}	1.27842×10^{-16}
100000	1.60×10^{-12}	7.30357×10^{-17}
200000	2.3×10^{-12}	
400000	3.1×10^{-12}	
1000000	8.2×10^{-12}	

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

Input 5.0 MHz 14 dBm

Reference 10.0 MHz 15 dBm

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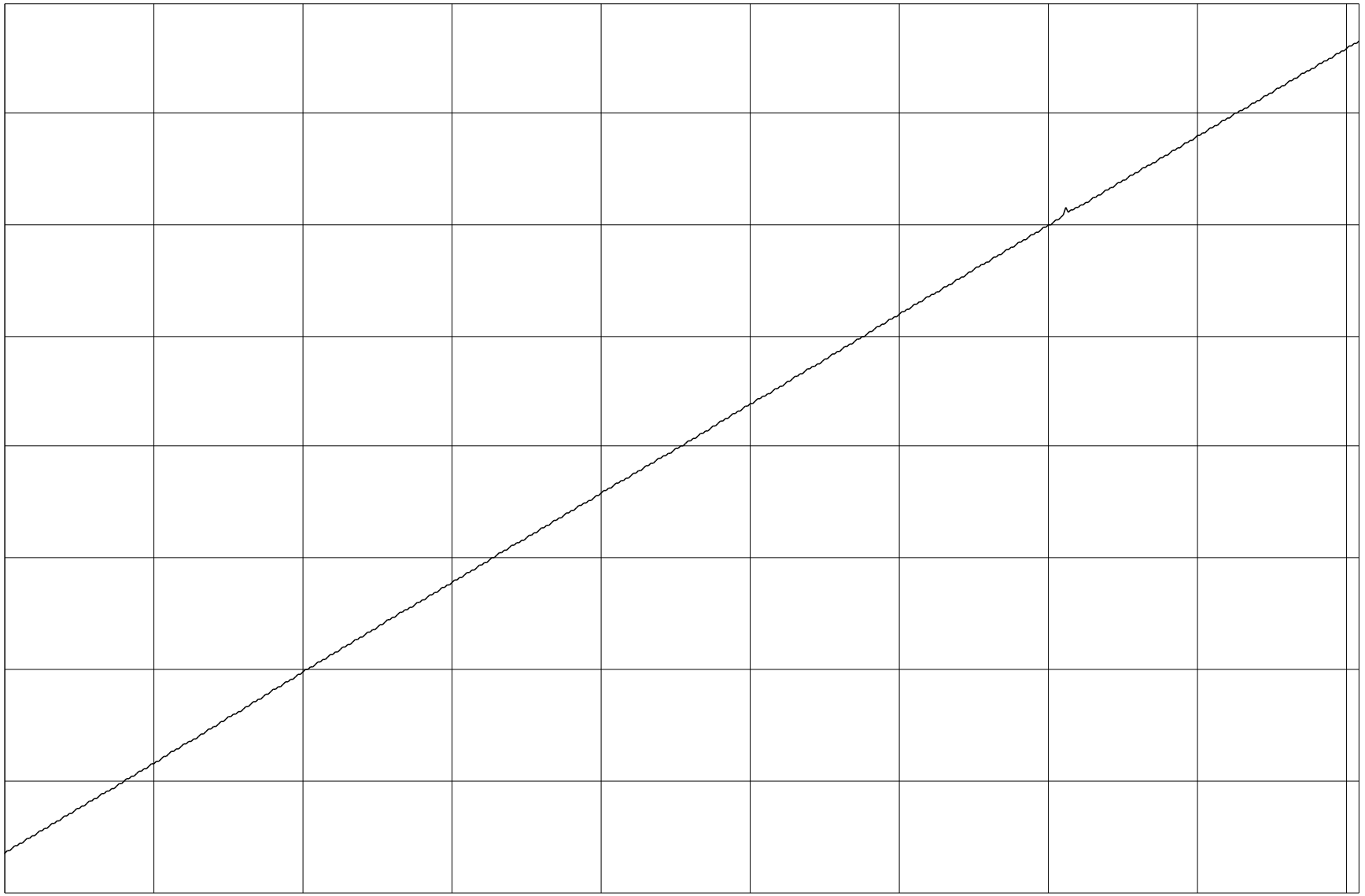
Phase Difference

3.0x10^{-09} s/div

Center: 6.937572x10^{-05} s



60s/div

Input 5.0 MHz 14 dBm

Reference 10.0 MHz 15 dBm

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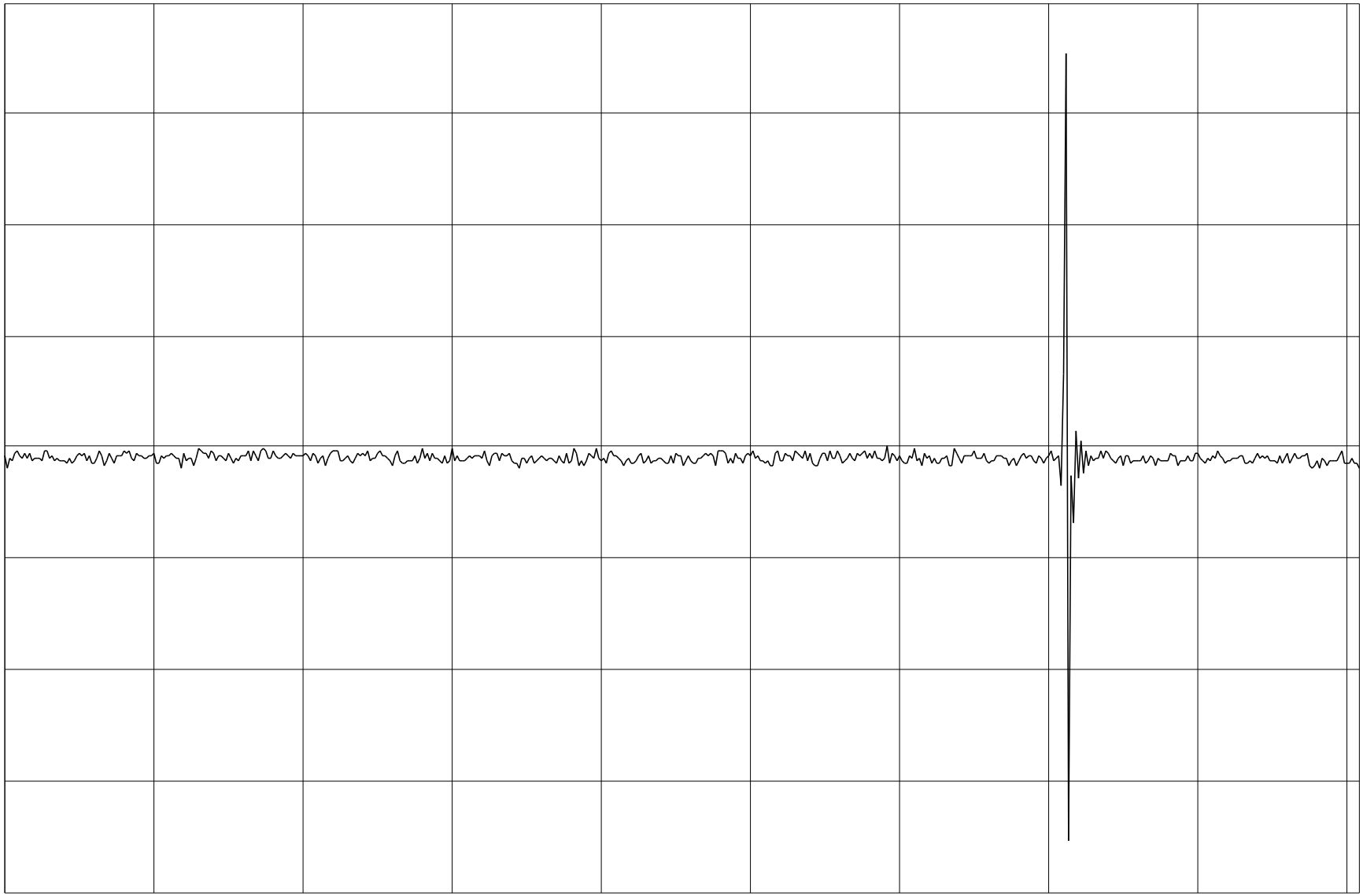
28d 0h

TSC 5120A

Frequency Difference

5.0x10^{-11} /div

Center: 4.495x10^{-11}



60s/div

Input 5.0 MHz 14 dBm

Reference 10.0 MHz 15 dBm

Frequency Counter

Sample Time (s)	Frequency (MHz)
1	5.0000000077489
10	5.00000000774185
100	5.000000007739440
1000	5.000000007736537

Reference Frequency: 10.0 MHz (auto)

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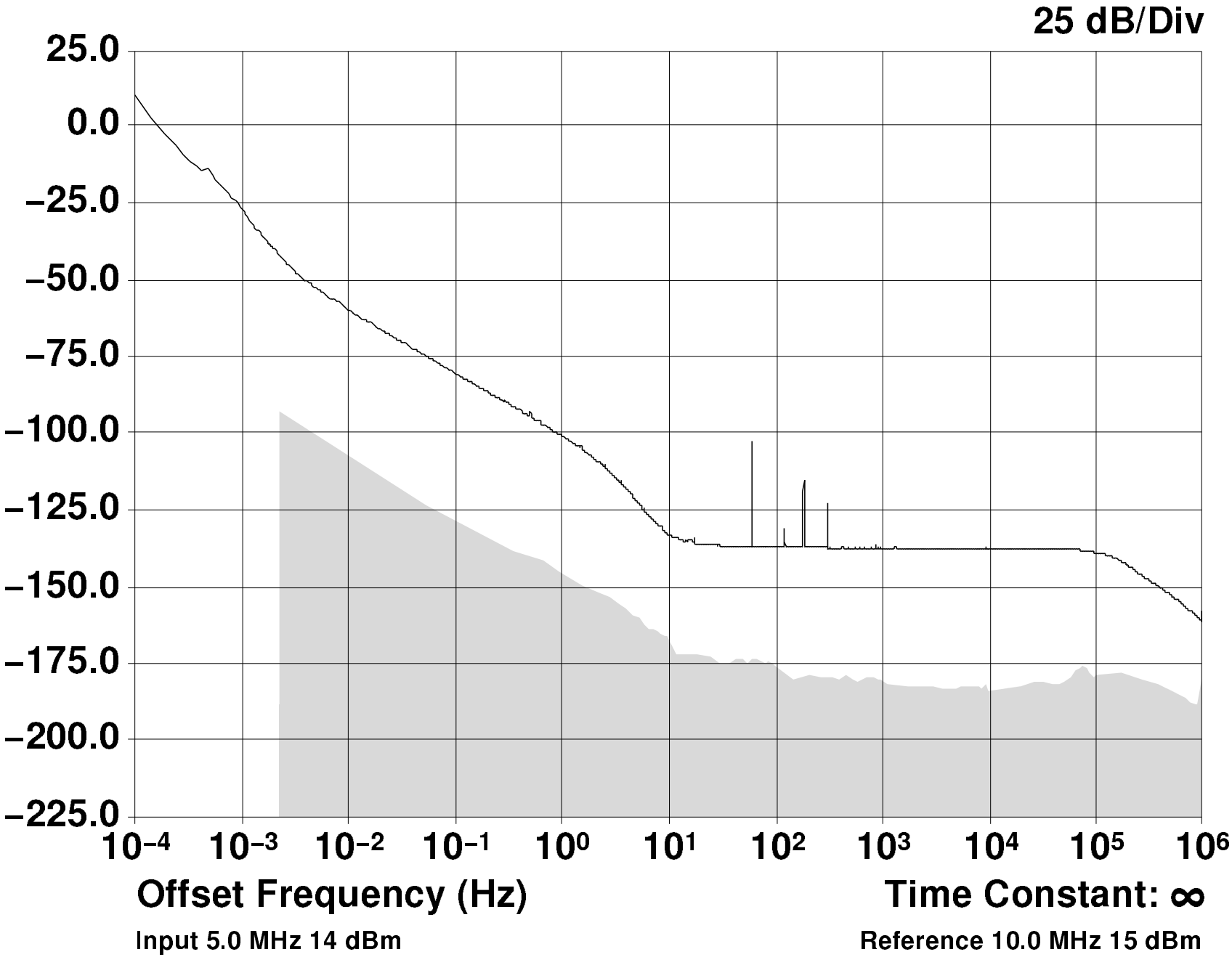
ℒ(f) Phase Noise at 5.0 MHz (dBc/Hz)



Input 5.0 MHz 14 dBm

Reference 10.0 MHz 15 dBm