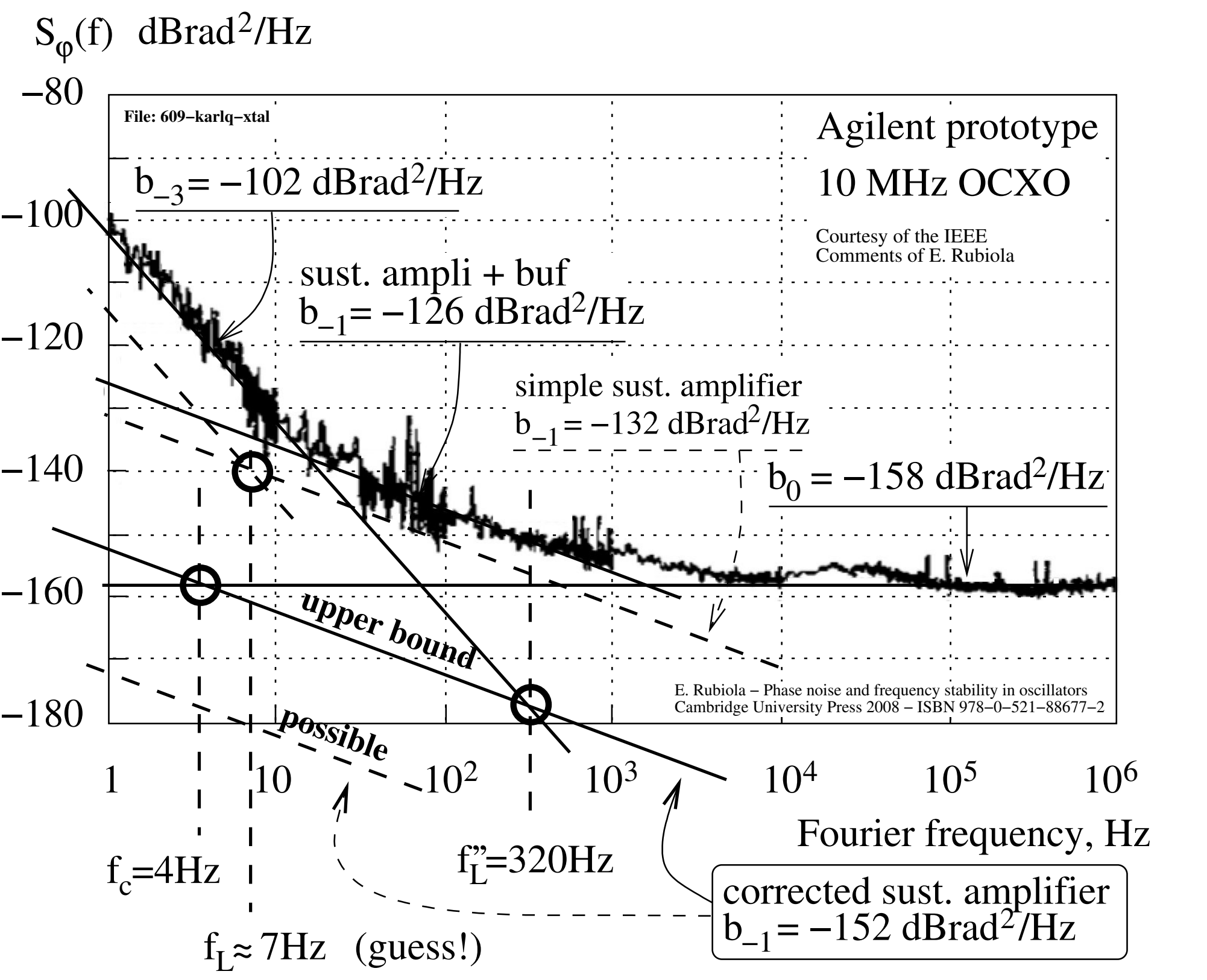
$S_\varphi(f)$ dBrad^2/Hz
−80
−100
−120
−140
−160
−180
File: 609−karlq−xtal
Agilent prototype
10 MHz OCXO
Courtesy of the IEEE
Comments of E. Rubiola
b_{-3}= −102 dBrad^2/Hz
sust. ampli + buf
b_{-1}= −126 dBrad^2/Hz
simple sust. amplifier
b_{-1} = −132 dBrad^2/Hz
b_0 = −158 dBrad^2/Hz
upper bound
possible
E. Rubiola − Phase noise and frequency stability in oscillators
Cambridge University Press 2008 − ISBN 978−0−521−88677−2
1
10
10^2
10^3
10^4
10^5
10^6
Fourier frequency, Hz
f_c=4Hz
f_L”=320Hz
$f_L \approx$ 7Hz (guess!)
corrected sust. amplifier
b_{-1}= −152 dBrad^2/Hz