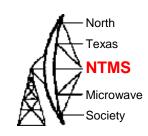


### ADF4351 Phase Noise Results

Al Ward W5LUA May 6, 2017

#### ADF4351 & Arduino & LCD Shield

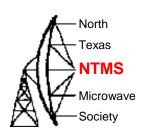


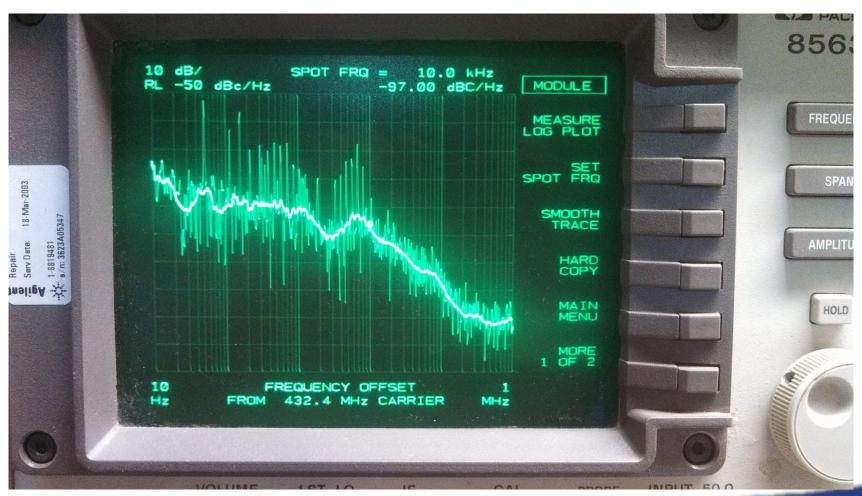


Output 35 MHz to 4.4 GHz
Using F1CJN software and Arduino to drive ADF4351
Internal 20 MHz reference or external reference
ADF4351 demo board approximately 30 USD from China
The following slides showing phase noise were taken with an external 10 MHz reference at +10 dBm.

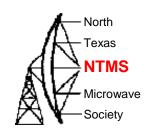
WWW.NTMS.ORG 2

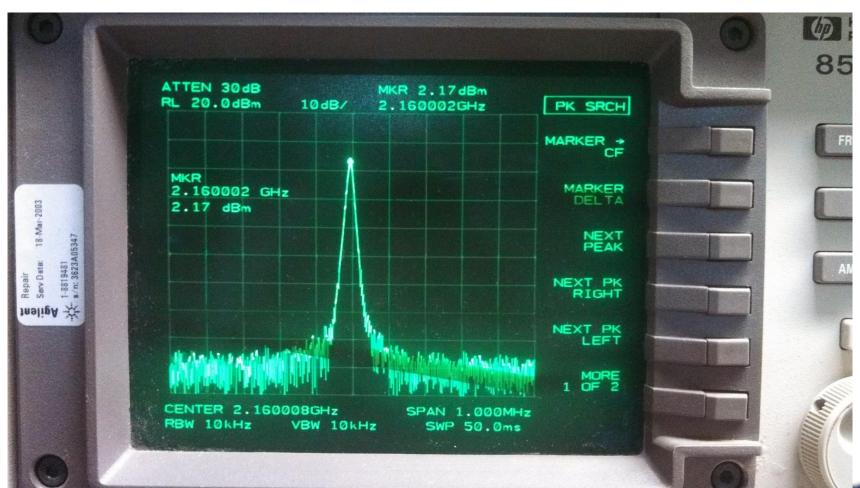
# 432.380 MHz Phase Noise power by computer USB port



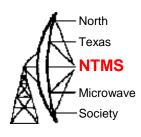


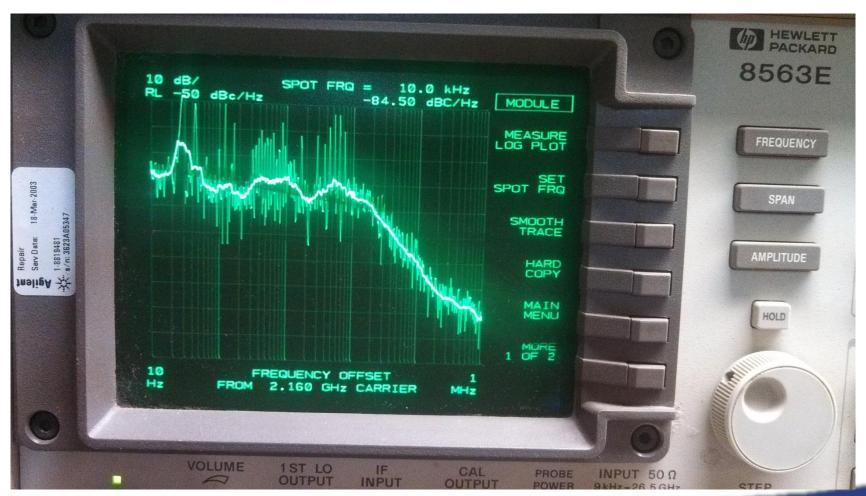
### 2160 MHz Spectral Display





# 2160 MHz Phase Noise powered by USB port





### 2160 MHz Phase Noise powered by HP 6255A P/S

