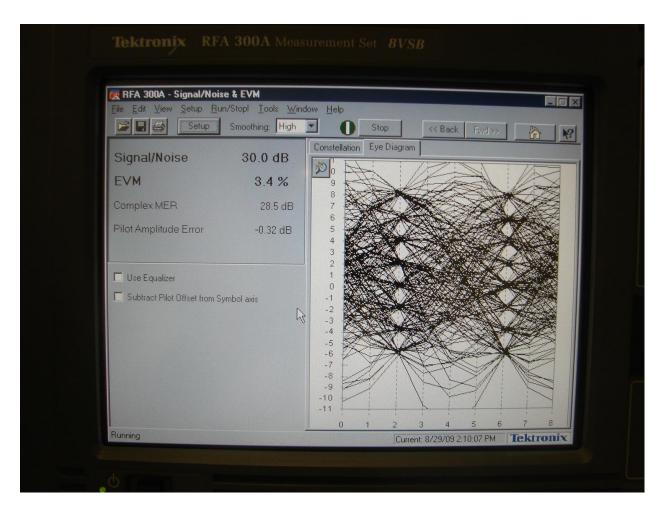


# Measurements on 50 Watt VHF Digital DTV Transmitter Model AT650P

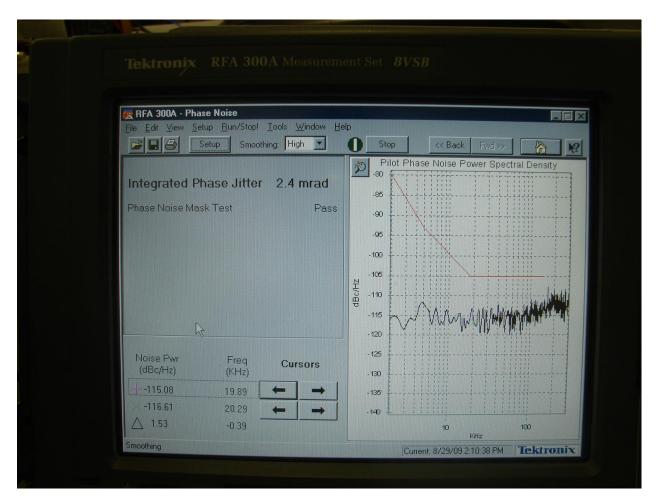


**RF Power Output Measurement** 

# In Channel Signal Characterization

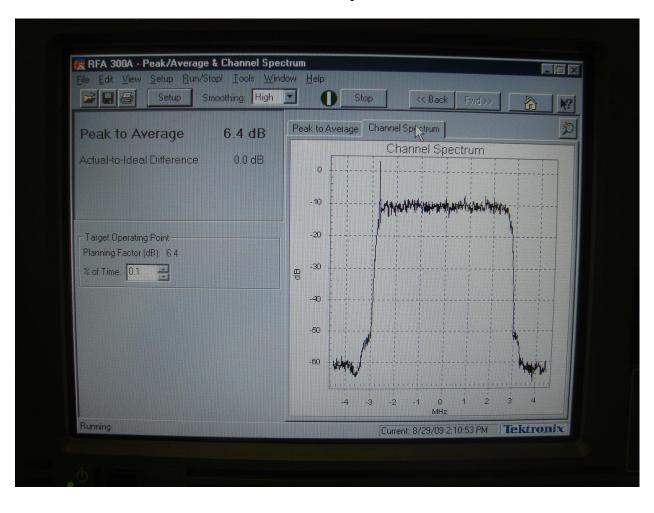


Eye Diagram

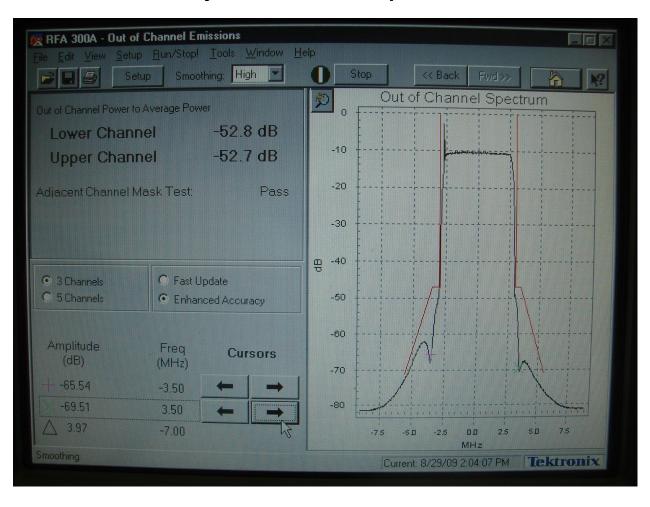


**Phase Noise** 

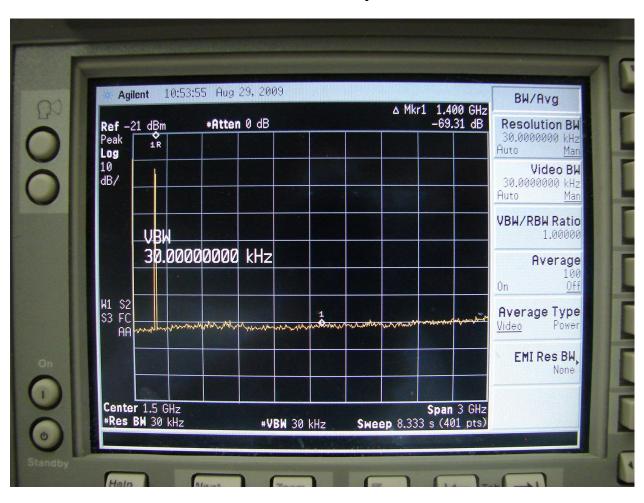
# **In Channel Spectrum**



#### **Adjacents Channel Spectrum**



### **Harmonic and Spurious**



# **Frequency Stability**

Ref.: CH11 - Pilot Carrier: 217,142,830 Hz

Temperature [°C]	Frequency [Hz]	Offset [Hz]
-5	217,143,327	497
0	217,143,158	328
+10	217,143,114	284
+20	217,142,996	166
+30	217,142,947	117
+40	217,142,900	70
+50	217,142,884	54

#### **Frequency Stability versus Temperature**

Ref.: CH11 - Pilot Carrier: 217,142,830 Hz

Line Voltage [Vac]	Frequency [Hz]	Offset [Hz]
171	217,142,829	-1
208	217,142,829	-1
245	217,142,829	-1

Frequency Stability versus Line Voltage

#### **Test Equipment**

Model	Manufacturer	Description	Serial #
E4402B	Agilent	Spectrum Analyzer	US40241297
E4418B	Agilent	Power Meter	US38470909
RFA300A	Tektronix	Signal Analyzer	B020427
E5061A	Agilent	Network Analyzer	MY44100591