

Amendment to the Results of FCC Testing for the SX1127 UNII Head End Transceiver Additional Testing of Peak Power as a Function of Resolution Bandwidth

December 18, 2000

Jay Kruse

WJ Communications

Tom Cokenias

Consultant

This document is an amendment to the document dated August 7, 2000 describing the FCC test results on the WJ Communications SX1127 UNII Head End Transceiver. The data illustrates the affect of reducing the resolution bandwidth of the spectrum analyzer to determine the peak transmit power output of the transceiver. It should be noted that the peak transmit power used in the original submittal was determined by the following criteria developed by Greg Czumak at the FCC (11/5/99):

1. Resolution Bandwidth ~ 1% Emission Bandwidth
2. Video Bandwidth = Resolution Bandwidth
3. Set Channel Bandwidth = Emission Bandwidth
4. View Trace
5. Measure Power in Channel Bandwidth

The data shown below uses the following method:

1. Resolution Bandwidth ~ Emission Bandwidth
2. Video Bandwidth (VB) = Resolution Bandwidth (RB)
3. Trace was averaged using a Max Peak Detector
4. View Trace
5. Resolution Bandwidth = Video Bandwidth = 1 MHz
6. Trace was averaged using a Max Peak Detector
7. View Trace
8. Compare maximum values (Delta not to be greater than 13 dB.)

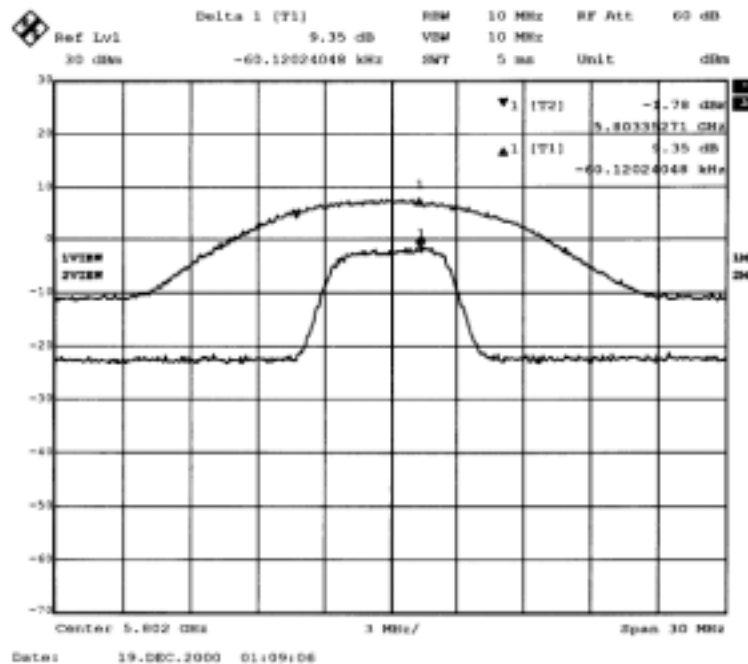


Figure 1. Bandwidth = 6 MHz, Pout = 15 dBm

Top Trace: RB = VB = 10 MHz

Bottom Trace: RB = VB = 1 MHz

Delta = 9.4 dB

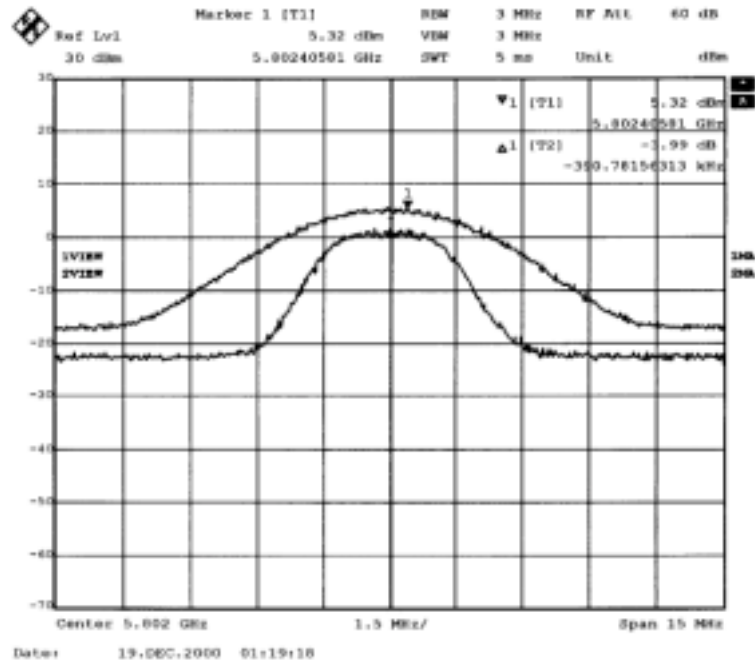


Figure 2. Bandwidth = 3 MHz, Pout = 15 dBm
 Top Trace: RB = VB = 3 MHz
 Bottom Trace: RB = VB = 1 MHz
 Delta = 4.0 dB

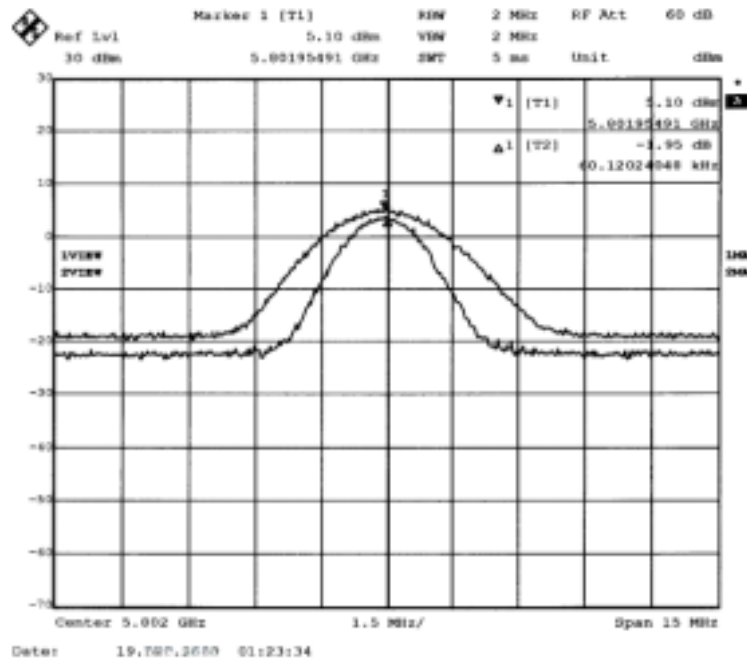


Figure 3. Bandwidth = 1.5 MHz, Pout = 15 dBm
 Top Trace: RB = VB = 2 MHz
 Bottom Trace: RB = VB = 1 MHz
 Delta = 2.0 dB