

Figure 77: Occupied Bandwidth, Low Channel, Modulation Profile 3

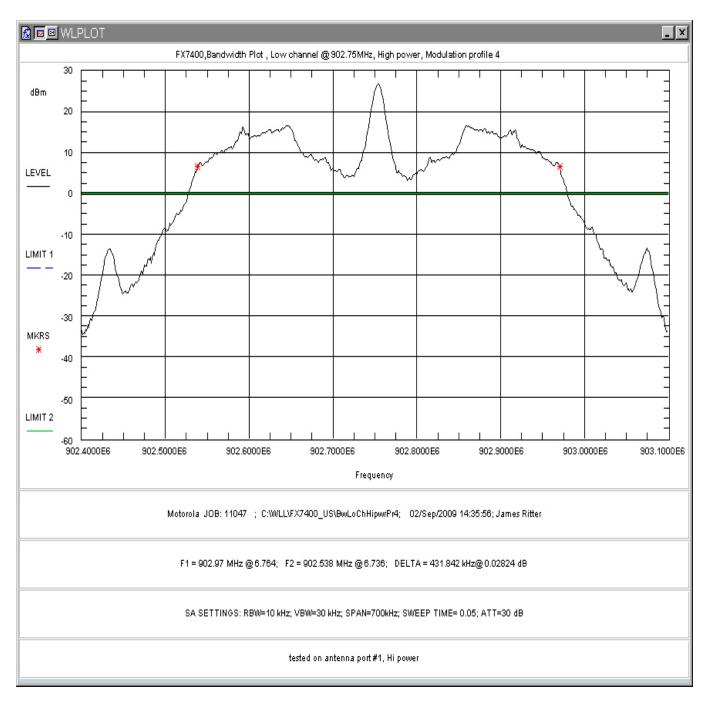


Figure 78: Occupied Bandwidth, Low Channel, Modulation Profile 4

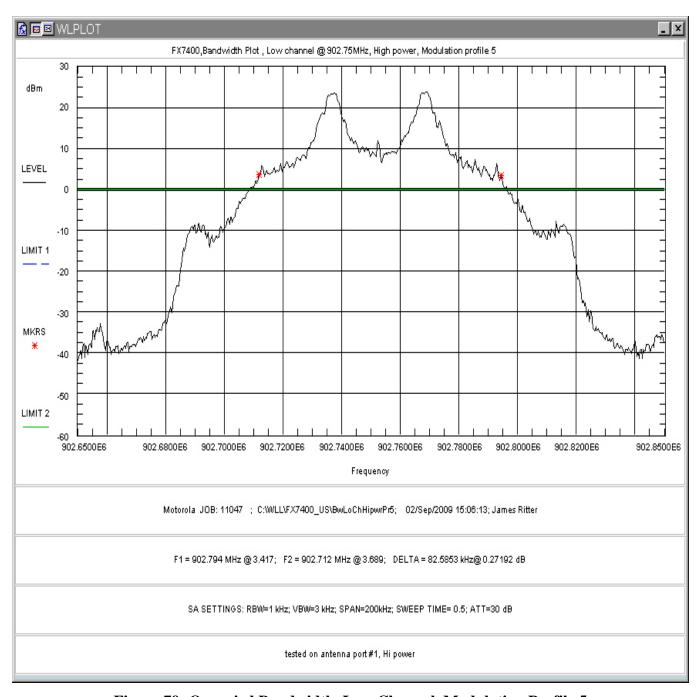


Figure 79: Occupied Bandwidth, Low Channel, Modulation Profile 5

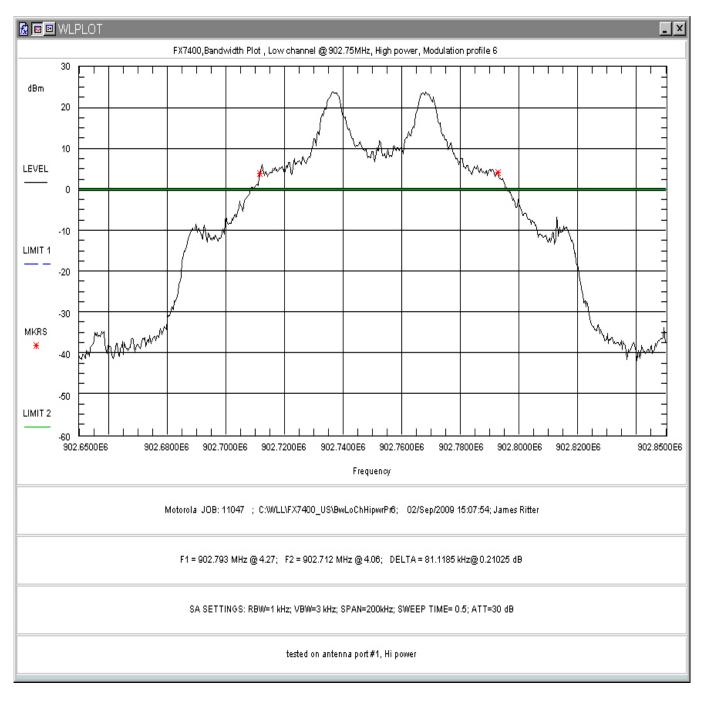


Figure 80: Occupied Bandwidth, Low Channel, Modulation Profile 6

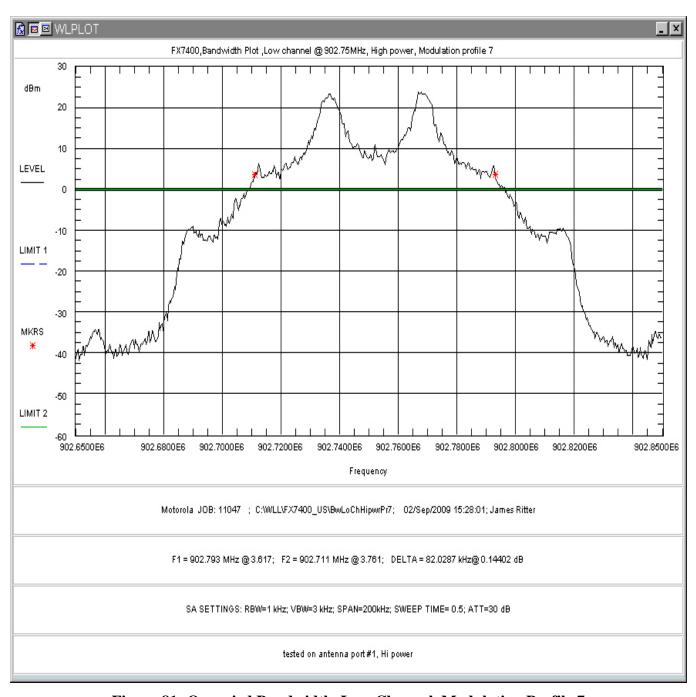


Figure 81: Occupied Bandwidth, Low Channel, Modulation Profile 7

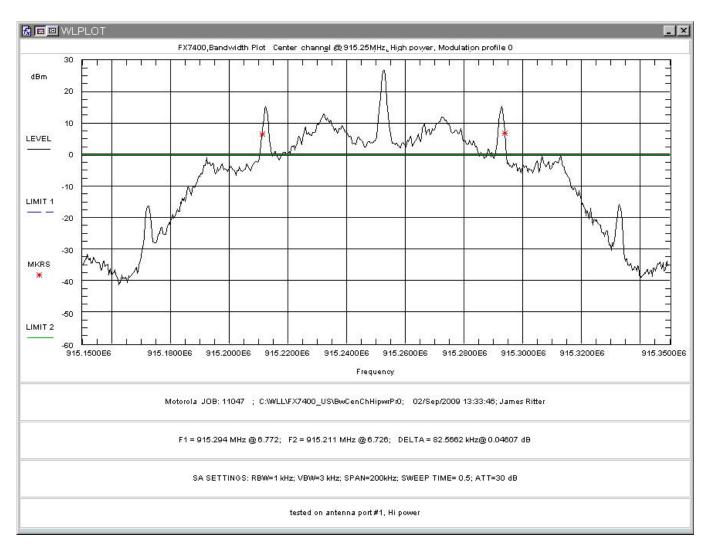


Figure 82: Occupied Bandwidth, Center Channel, Modulation Profile 0

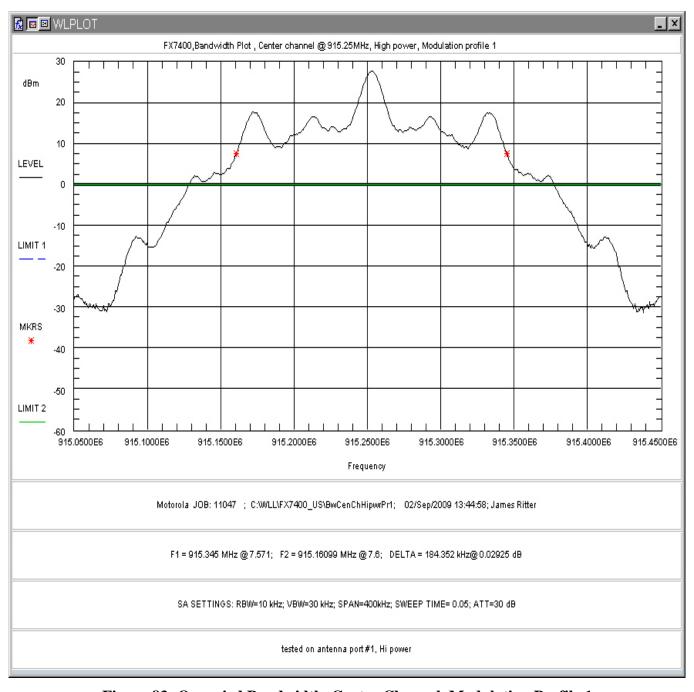


Figure 83: Occupied Bandwidth, Center Channel, Modulation Profile 1

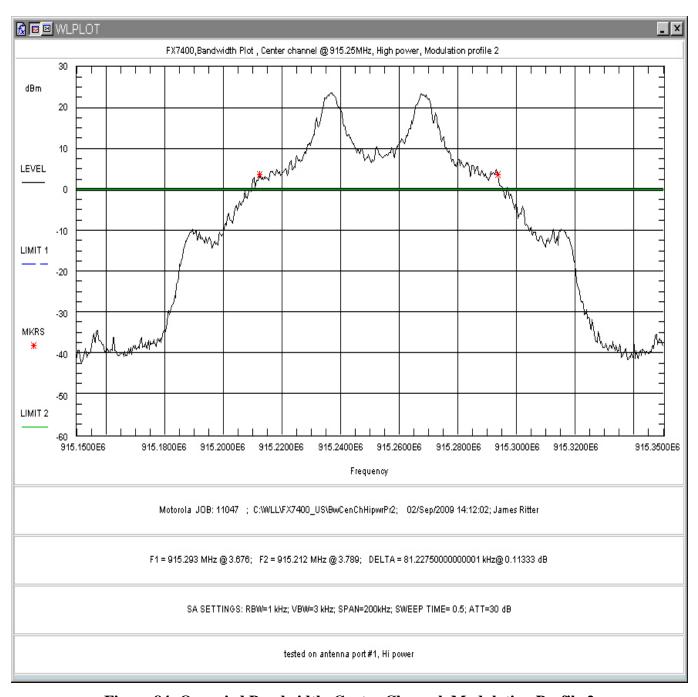


Figure 84: Occupied Bandwidth, Center Channel, Modulation Profile 2

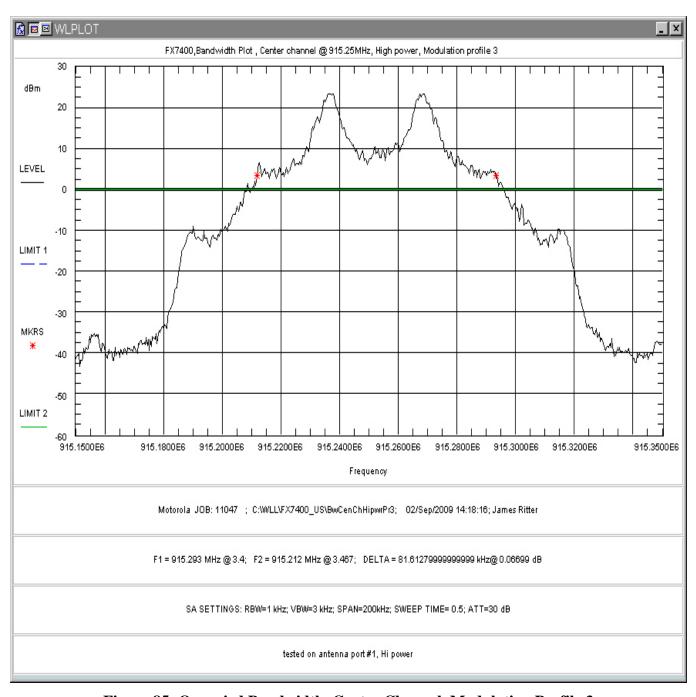


Figure 85: Occupied Bandwidth, Center Channel, Modulation Profile 3

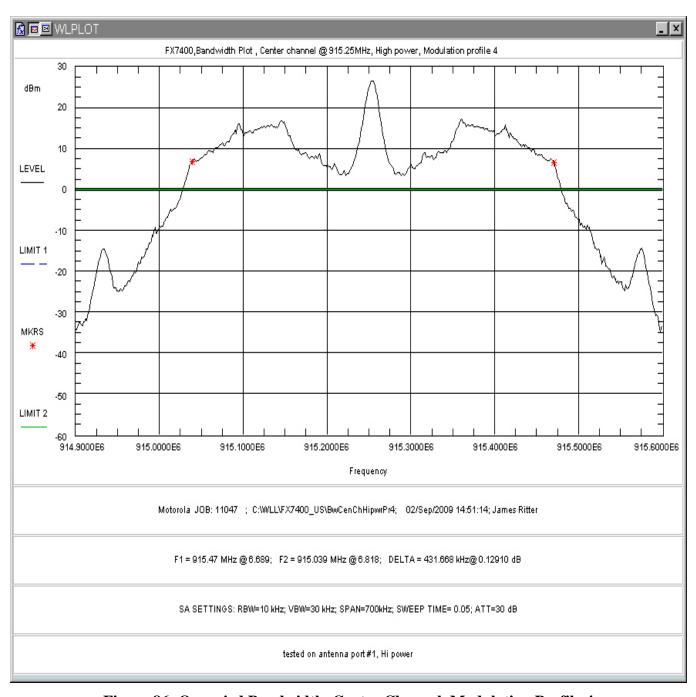


Figure 86: Occupied Bandwidth, Center Channel, Modulation Profile 4

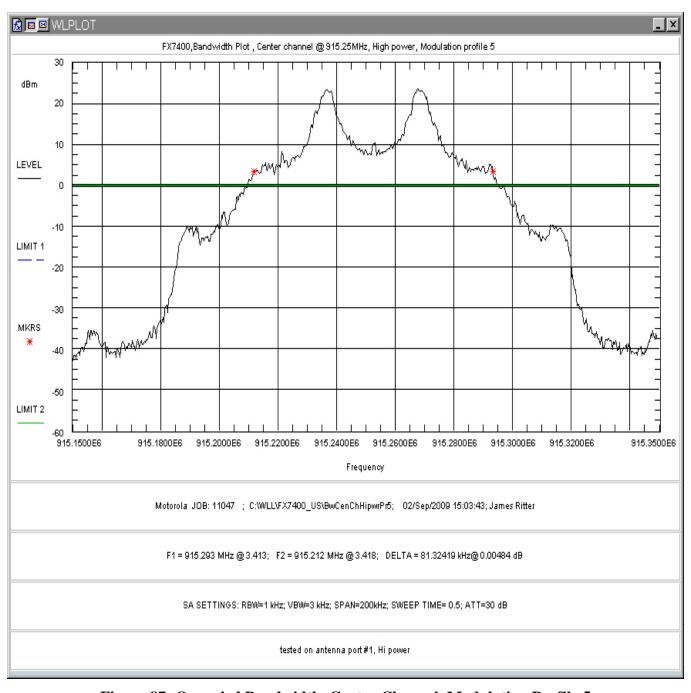


Figure 87: Occupied Bandwidth, Center Channel, Modulation Profile 5

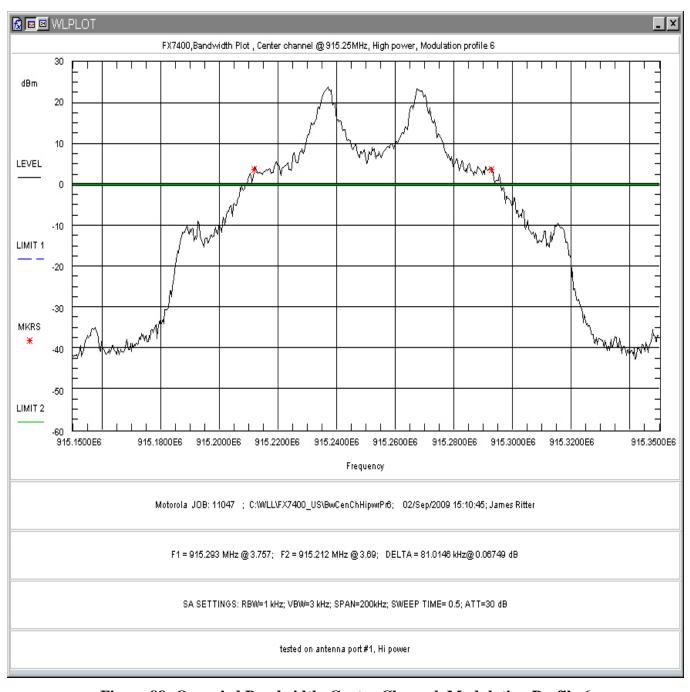


Figure 88: Occupied Bandwidth, Center Channel, Modulation Profile 6

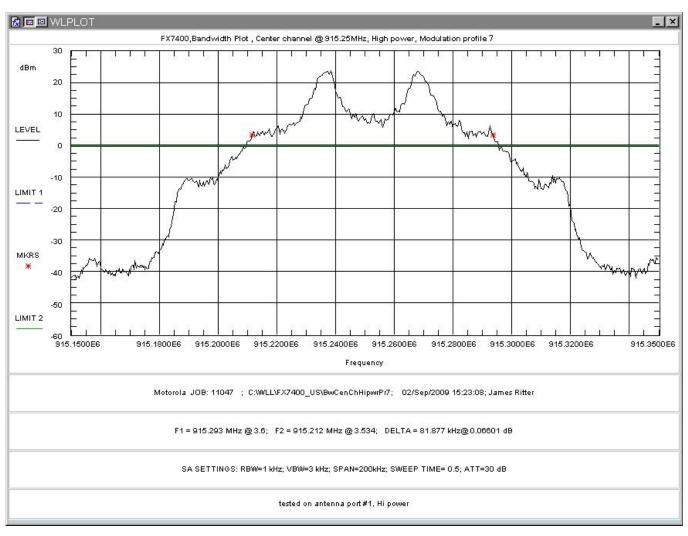


Figure 89: Occupied Bandwidth, Center Channel, Modulation Profile 7

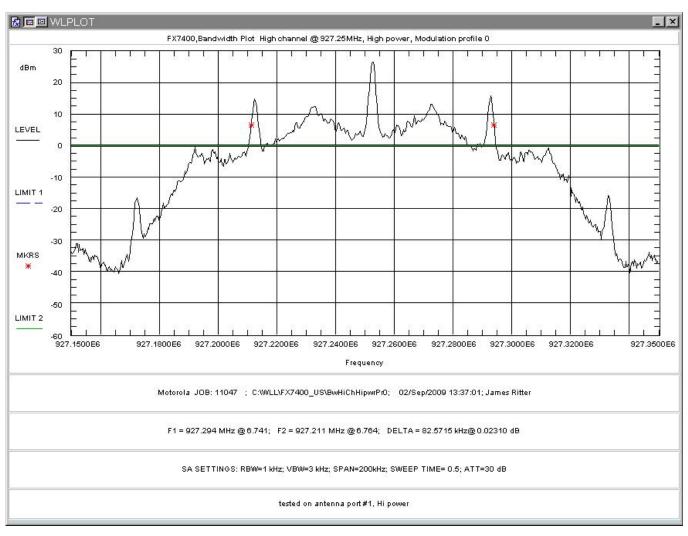


Figure 90: Occupied Bandwidth, High Channel, Modulation Profile 0

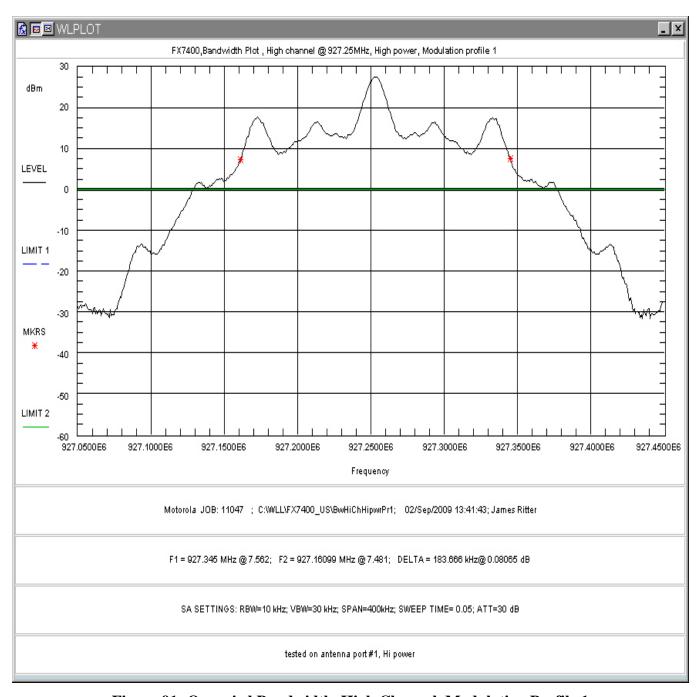


Figure 91: Occupied Bandwidth, High Channel, Modulation Profile 1

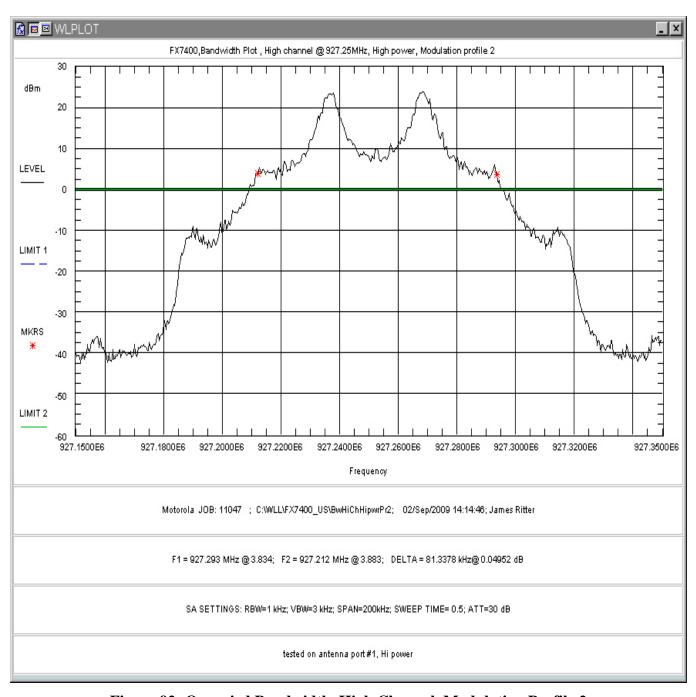


Figure 92: Occupied Bandwidth, High Channel, Modulation Profile 2

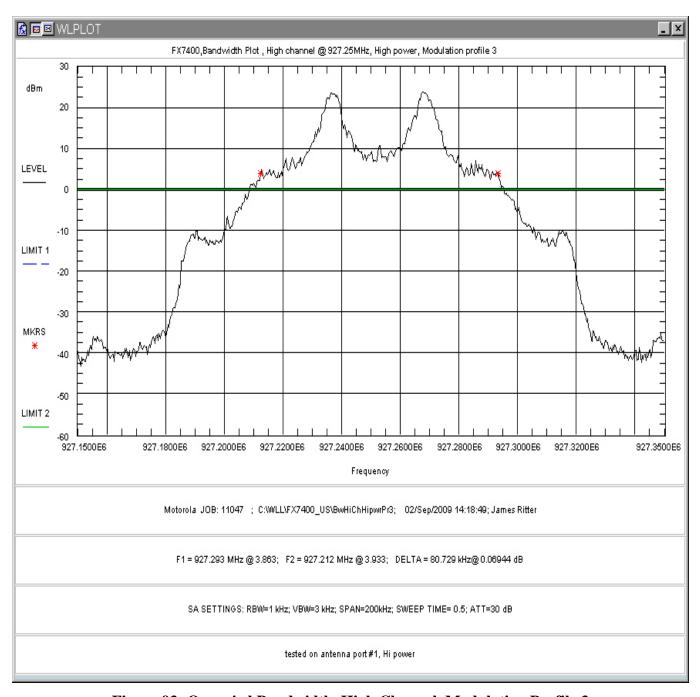


Figure 93: Occupied Bandwidth, High Channel, Modulation Profile 3

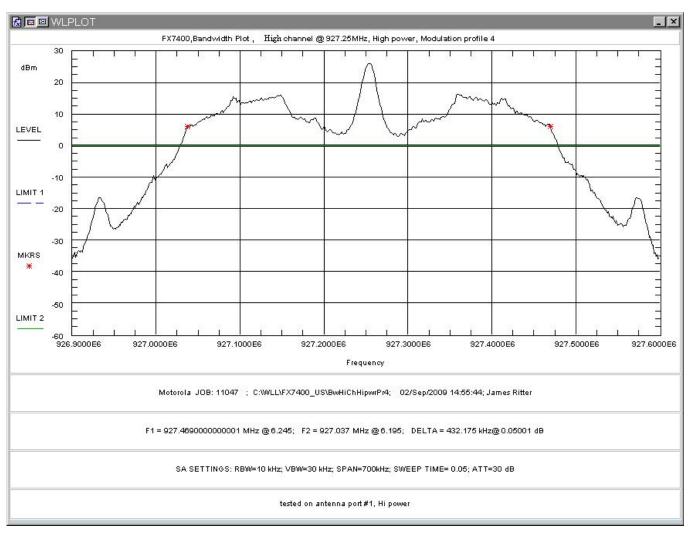


Figure 94: Occupied Bandwidth, High Channel, Modulation Profile 4

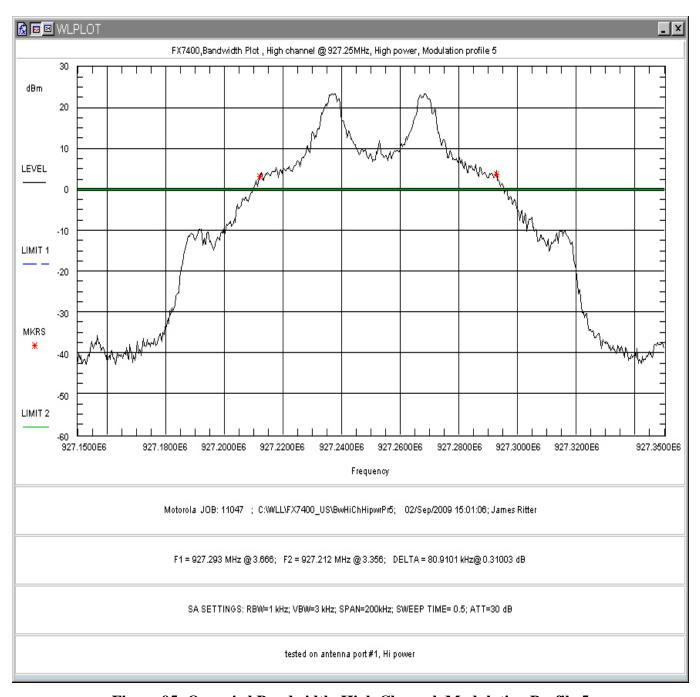


Figure 95: Occupied Bandwidth, High Channel, Modulation Profile 5

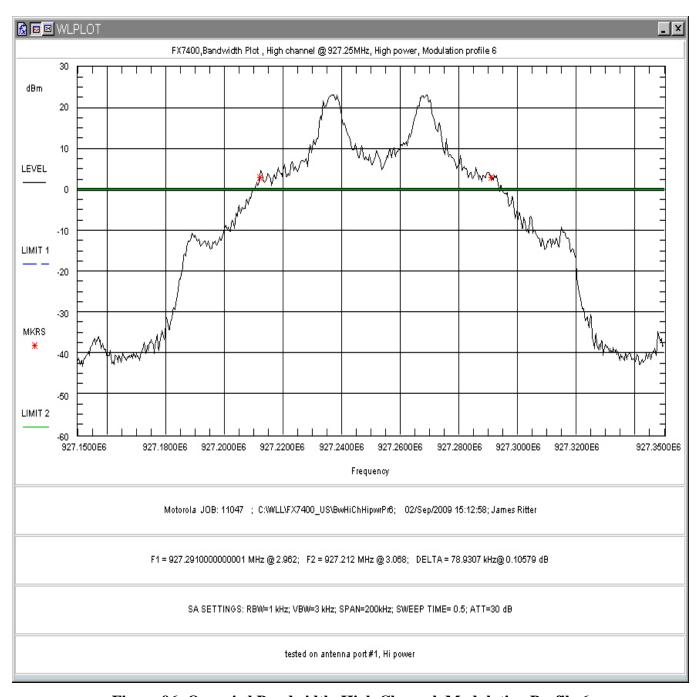


Figure 96: Occupied Bandwidth, High Channel, Modulation Profile 6

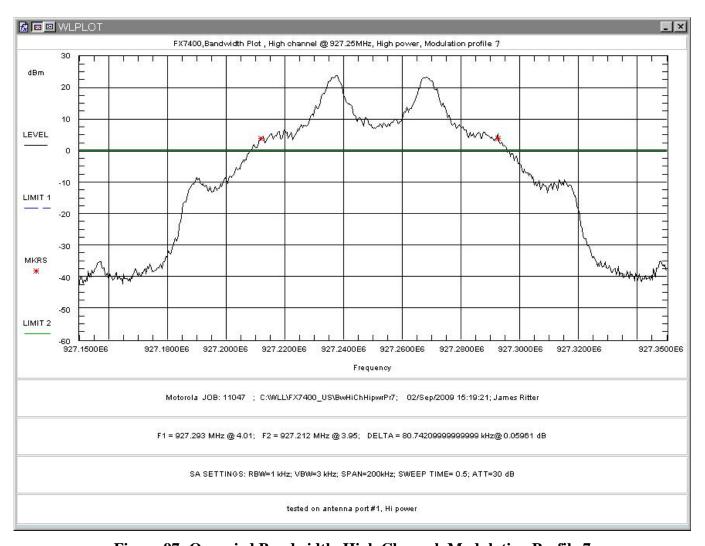


Figure 97: Occupied Bandwidth, High Channel, Modulation Profile 7

Appendix A3 Number of Hoppers and Channel Spacing Plots

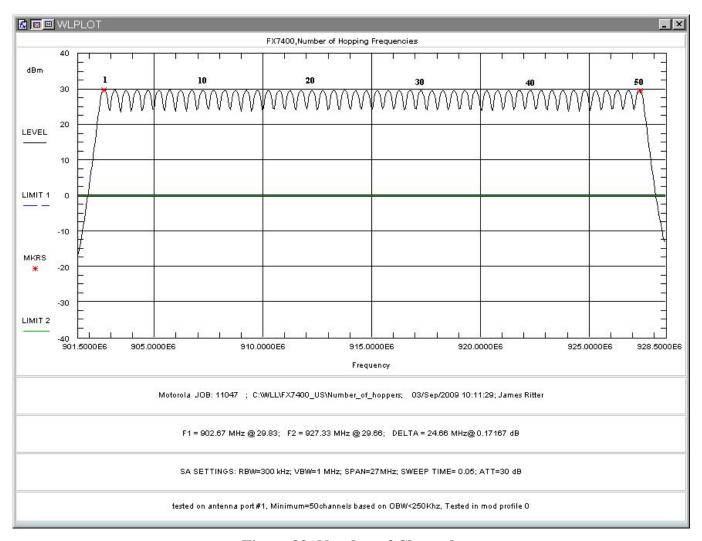


Figure 98: Number of Channels

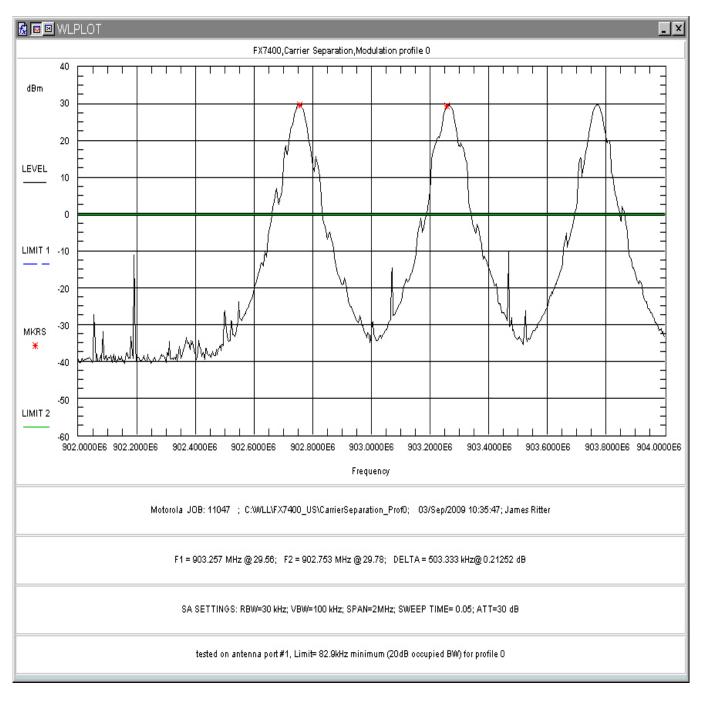


Figure 99: Channel Spacing, Modulation Profile 0

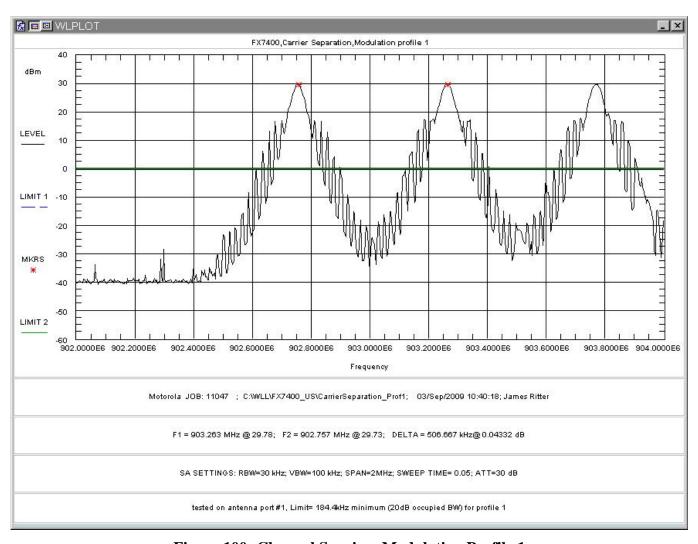


Figure 100: Channel Spacing, Modulation Profile 1

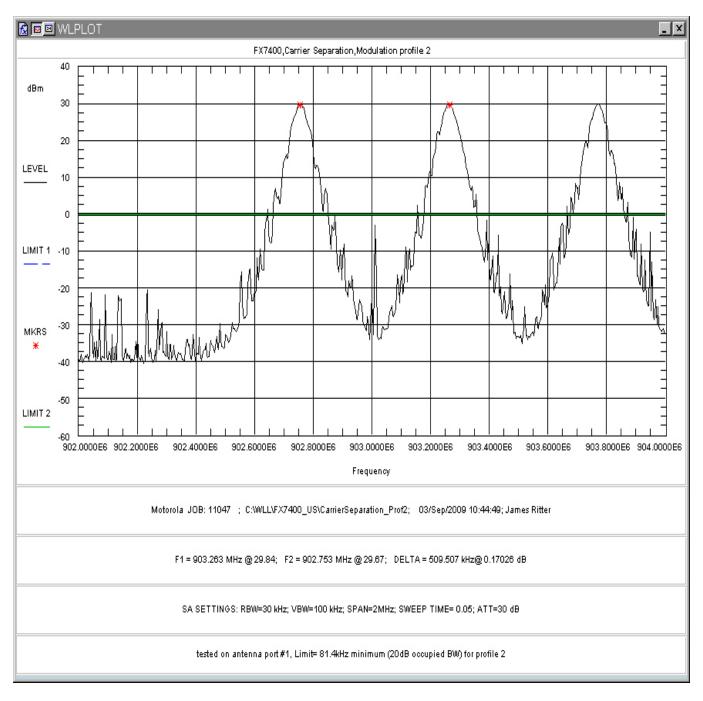


Figure 101: Channel Spacing, Modulation Profile 2

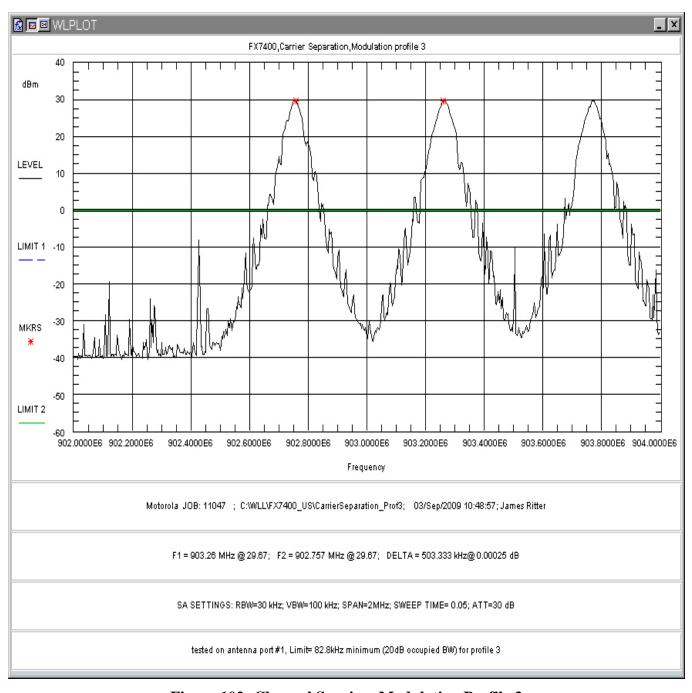


Figure 102: Channel Spacing, Modulation Profile 3

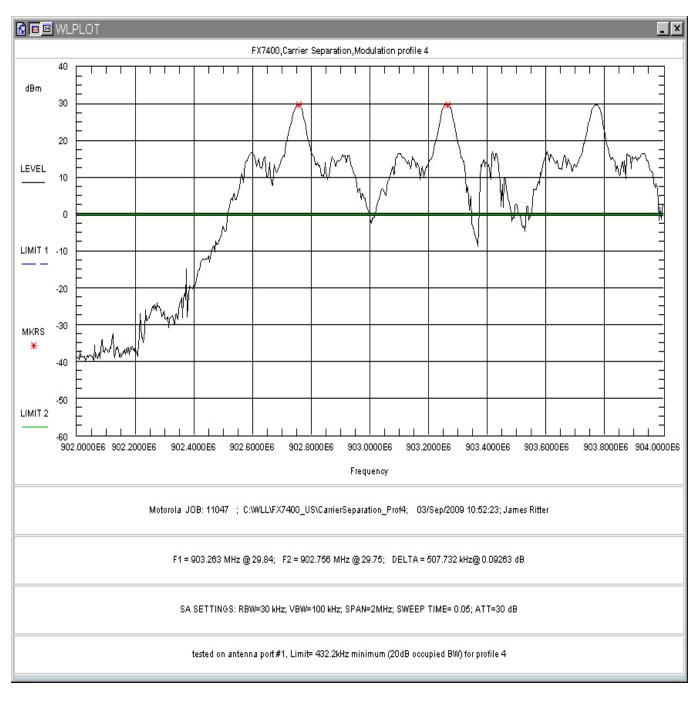


Figure 103: Channel Spacing, Modulation Profile 4

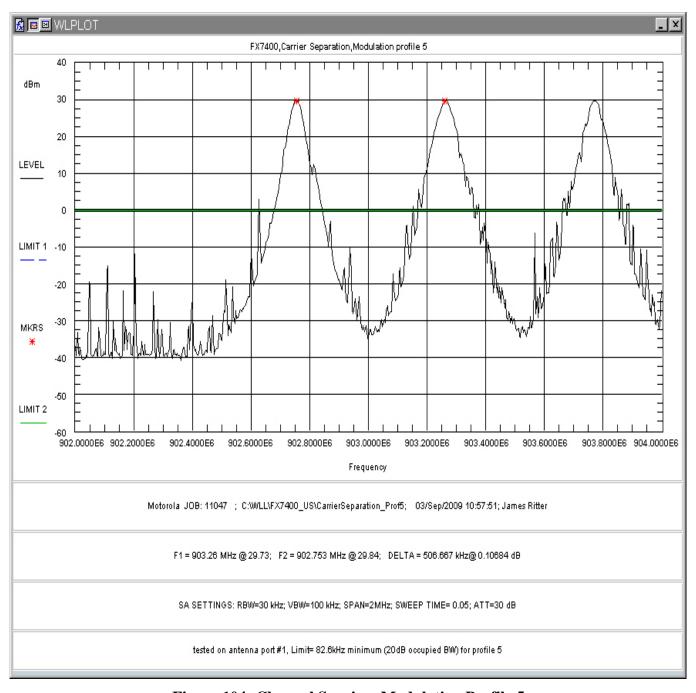


Figure 104: Channel Spacing, Modulation Profile 5

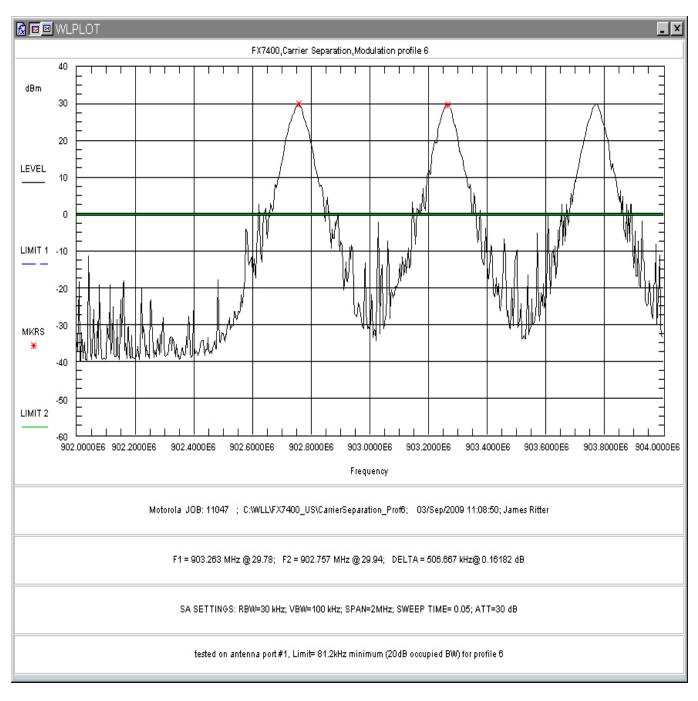


Figure 105: Channel Spacing, Modulation Profile 6

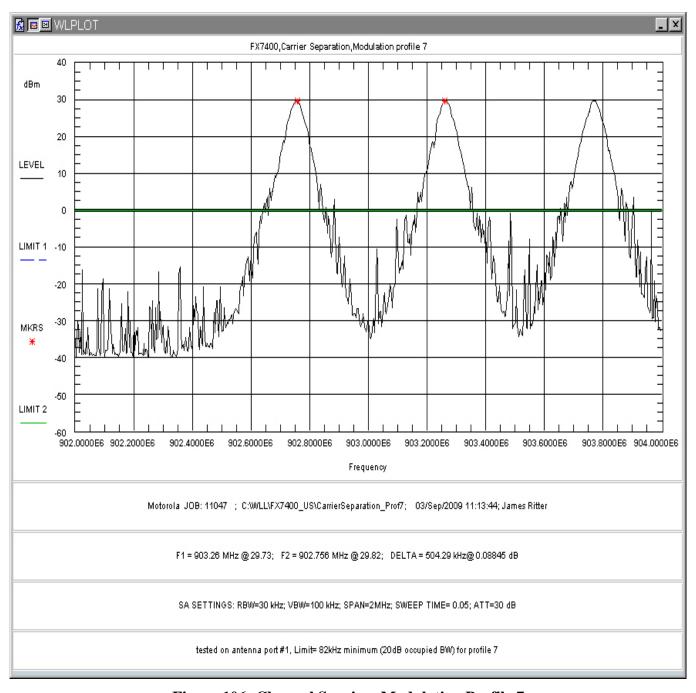


Figure 106: Channel Spacing, Modulation Profile 7

Appendix A4 Time of Occupancy Plots

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Off time between pulses in transmit pulse train =8.3ms Profile 0

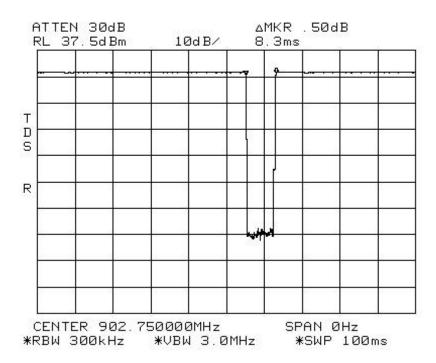


Figure 107: Time of Occupancy, Off Time between data Bits, data Profile 0

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Pulse train =400ms (off time included) Duration, Off time between pulses =8.3ms (from off time plot) x 6=49.8ms Total on time per transmission =400ms - 49.8ms =350.2ms Profile $_{0}$

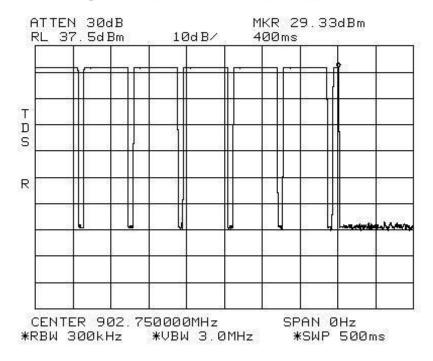


Figure 108: Time of Occupancy, On time per pulse train, data Profile 0

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping,

Total on time per transmission =350.2ms

Limit=400ms per 20 Sec., Measured = 1 pulse per 20 Sec@350.2ms = 350.2ms total Profile 0

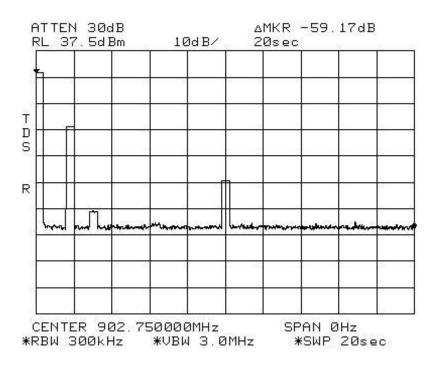


Figure 109: Time of Occupancy, On Time Per 20 Sec., data Profile 0

$\label{thm:motorola} Motorola\,FX7400\,\,Jobl\,1047, Ptl\,5.247\,\,Time\,\,of\,occupancy,\,l\,\,transmit\,train\,\,hopping,\\ Off\,time\,\,between\,pulses\,\,in\,\,transmit\,pulse\,\,train\,\,=\,10ms\,\,Profile\,\,l$

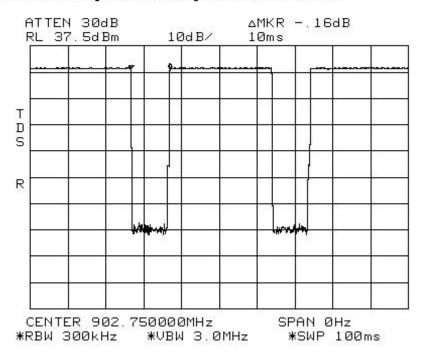


Figure 110: Time of Occupancy, Off Time between data Bits, data Profile 1

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Pulse train =400ms (off time included) Duration.

Off time between pulses =10ms (from off time plot) x 11 = 110msTotal on time per transmission = 400ms - 110ms = 290ms, Profile 1

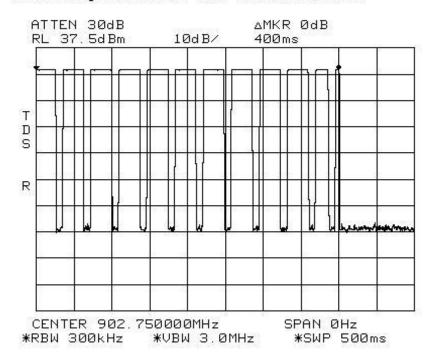


Figure 111: Time of Occupancy, On time per pulse train, data Profile 1

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping,

Total on time per transmission = 290_{ms}

Limit=400ms per 205ec., Measured = lpulse per 20sec@ 290ms=290ms total, Profile 1

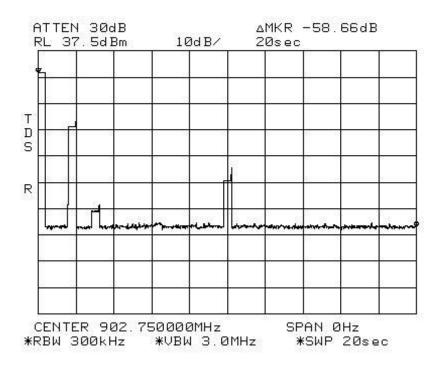


Figure 112: Time of Occupancy, On Time Per 20 Sec., data Profile 1

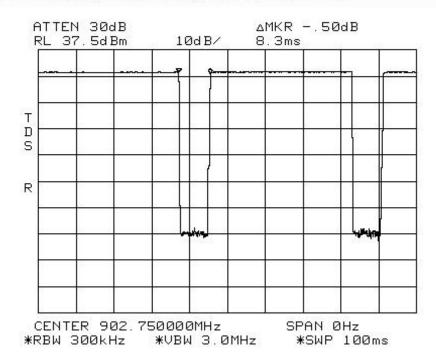


Figure 113: Time of Occupancy, Off Time between data Bits, data Profile 2

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Pulse train =400ms (off time included) Duration, Off time between pulses =8.3ms (from off time plot) \times 9 =74.7ms Total on time per transmission = 400ms - 74.7ms = 325.3ms Profile 2

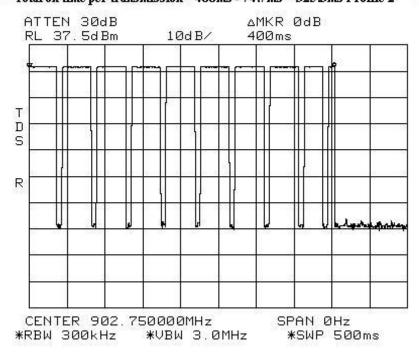


Figure 114: Time of Occupancy, On time per pulse train, data Profile 2

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping,
__Total on time per transmission = 325.3ms
Limit=400ms per 20Sec., Measured = 1 pulse per 20Sec@325.3ms = 325ms total Profile 2

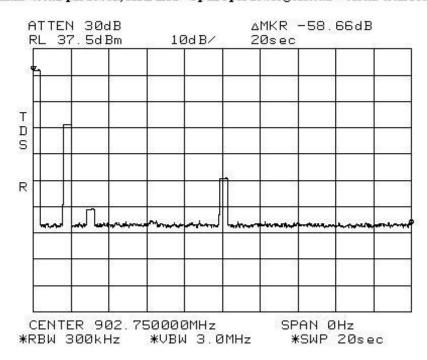


Figure 115: Time of Occupancy, On Time Per 20 Sec., data Profile 2

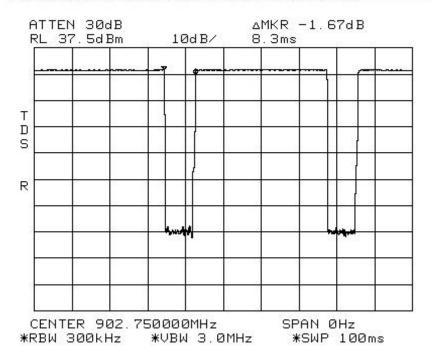


Figure 116: Time of Occupancy, Off Time between data Bits, data Profile 3

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Pulse train = 390ms Duration,

Off time between pulses = 8.3ms (from off time plot) x 9 = 74.7ms

Total on time per transmission = 390ms - 74.7ms = 315.3ms Profile 3

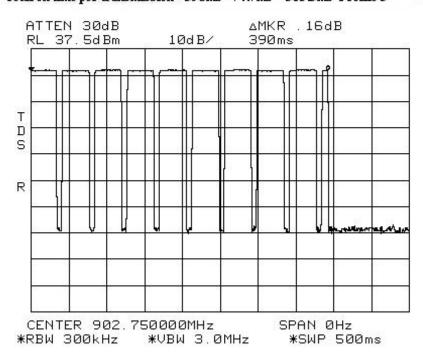


Figure 117: Time of Occupancy, On time per pulse train, data Profile 3

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping,

Total on time per transmission = 315.3ms

Limit=400ms per 20 Sec., Measured = 1 pulse per 20 Sec@ 315.3ms = 315.3ms total Profile 3

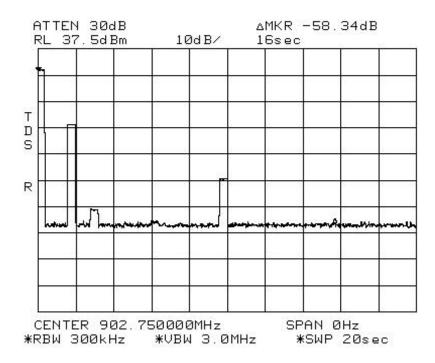


Figure 118: Time of Occupancy, On Time Per 20 Sec., data Profile 3

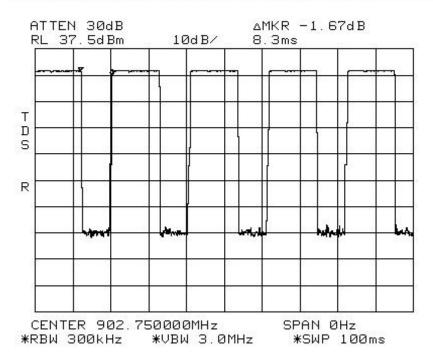


Figure 119: Time of Occupancy, Off Time between data Bits, data Profile 4

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Pulse train = $400 \, \text{ms}$ Duration Off time between pulses = $8.3 \, \text{ms}$ (from off time plot) x19 = $157.7 \, \text{ms}$ Total on time per transmission = $400 \, \text{ms} \cdot 157.7 \, \text{ms} = 242.3 \, \text{ms}$ Profile 4

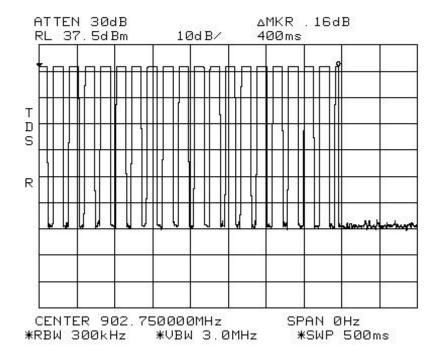


Figure 120: Time of Occupancy, On time per pulse train, data Profile 4

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Total on time per transmission = 242.3ms Limit =400ms per 10 sec(as this profile is >250kHz BW)

Measured = 1 pulse per 10 Sec@242.3ms = 243.3ms total profile 4

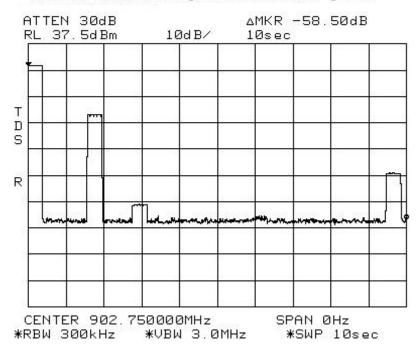


Figure 121: Time of Occupancy, On Time Per 10 Sec., data Profile 4

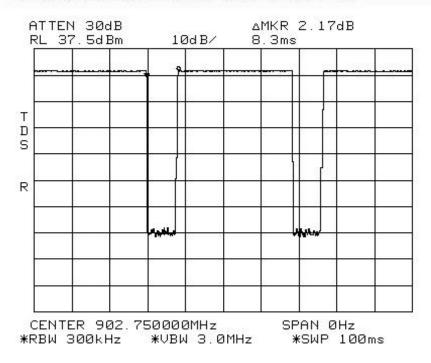


Figure 122: Time of Occupancy, Off Time between data Bits, data Profile 5

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Pulse train = 390ms Duration, Off time between pulses =8.3ms (from off time plot) \times 10 = 83ms

Total on time per transmission = 390ms - 83ms = 307ms Profile 5

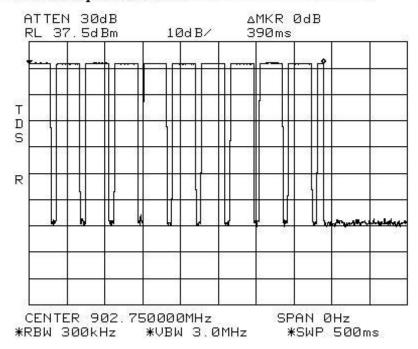


Figure 123: Time of Occupancy, On time per pulse train, data Profile 5

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping,

Total on time per transmission = 390ms - 83ms = 307ms

Limit=400ms per 20Sec., Measured = 1 pulse per 20Sec@ 307ms = 307ms total Profile 5

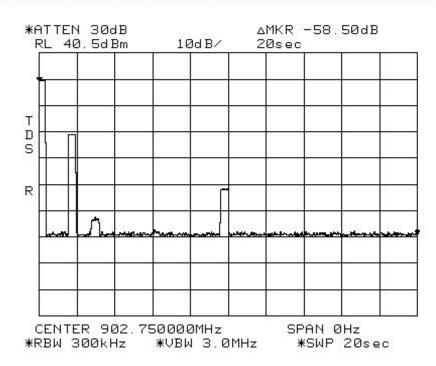


Figure 124: Time of Occupancy, On Time Per 20 Sec., data Profile 5

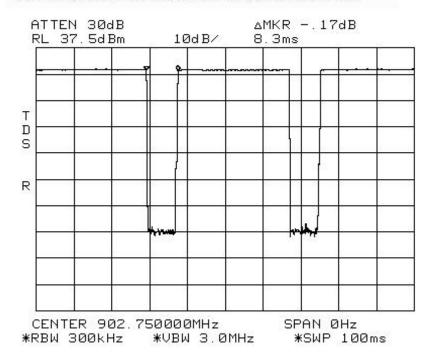


Figure 125: Time of Occupancy, Off Time between data Bits, data Profile 6

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Pulse train = 390ms Duration, Off time between pulses = 8.3ms (from off time plot) x 10 = 83ms Total on time per transmission = 390ms - 83ms-307ms Profile 6

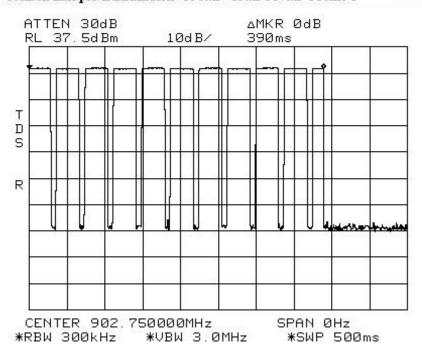


Figure 126: Time of Occupancy, On time per pulse train, data Profile 6

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping,

Total on time per transmission = 307ms

Limit=400ms per 205ec., Measured = 1 pulse per 205ec@ 307ms = 307ms total Profile 6

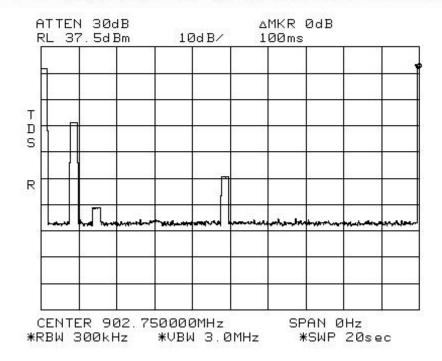


Figure 127: Time of Occupancy, On Time Per 20 Sec., data Profile 6

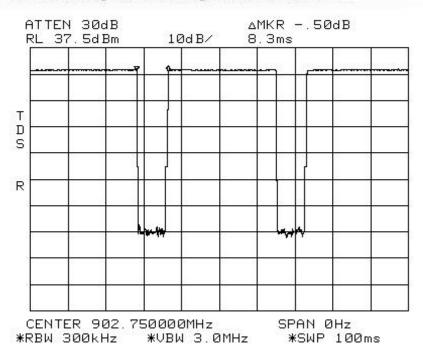


Figure 128: Time of Occupancy, Off Time between data Bits, data Profile 7

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping, Pulse train =400ms (off time included) Duration, Off time between pulses =8.3ms (from off time plot) x11=91.3ms

*VBW 3.0MHz

CENTER 902.750000MHz

*RBW 300kHz

Figure 129: Time of Occupancy, On time per pulse train, data Profile 7

SPAN ØHz

*SWP 500ms

Motorola FX7400 Job11047, Pt15.247 Time of occupancy, 1 transmit train hopping,

Total on time per transmission = 308.7ms

Limit=400ms per 20 Sec., Measured = 1 pulse per 20 Sec@ 308.7ms = 308.7ms total Profile 7

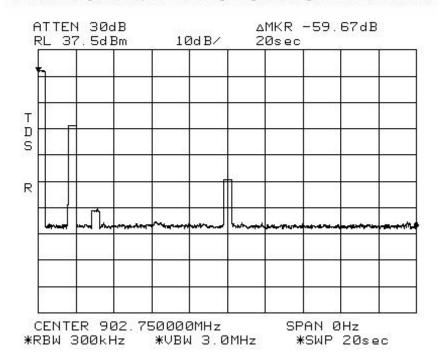


Figure 130: Time of Occupancy, On Time Per 20 Sec., data Profile 7

Appendix A5 Band-edge Plots

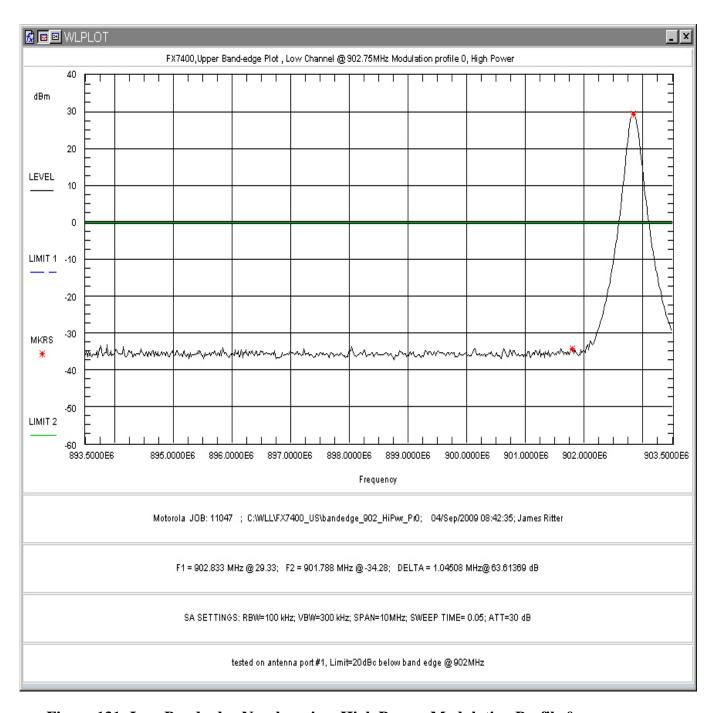


Figure 131: Low Band-edge Non-hopping, High Power, Modulation Profile 0

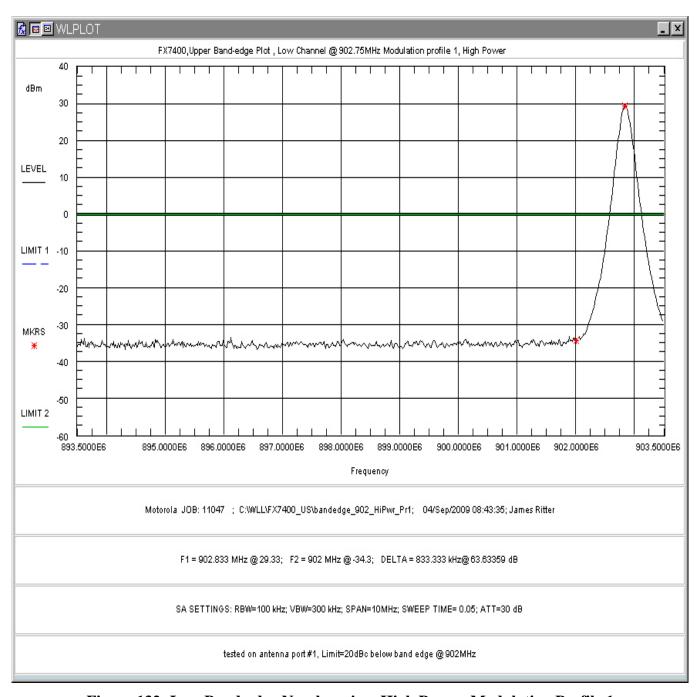


Figure 132: Low Band-edge Non-hopping, High Power, Modulation Profile 1

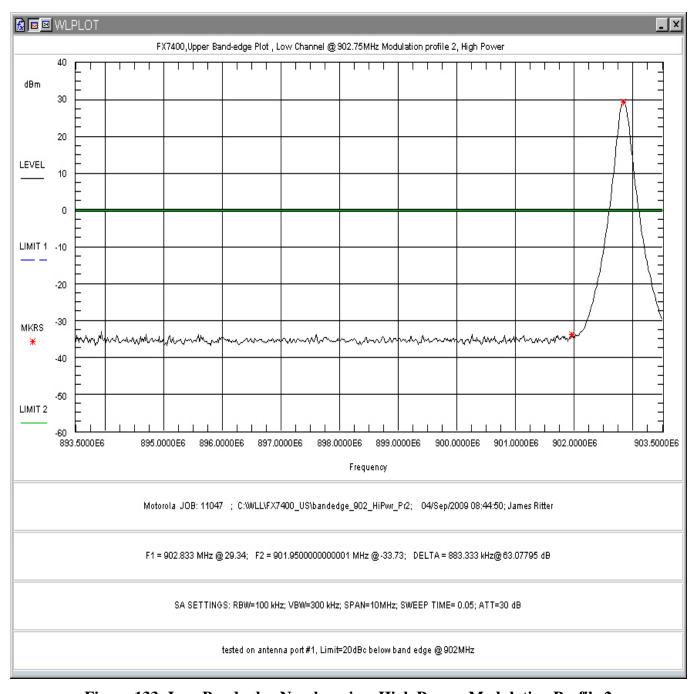


Figure 133: Low Band-edge Non-hopping, High Power, Modulation Profile 2

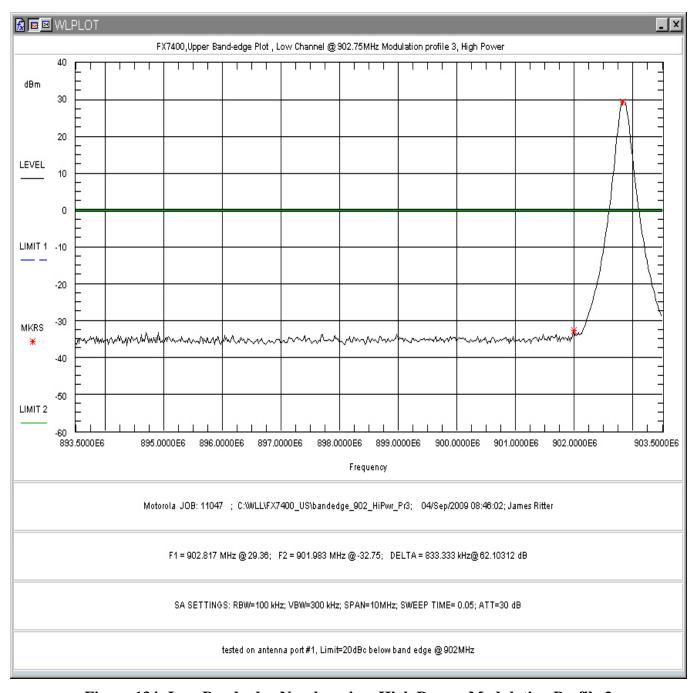


Figure 134: Low Band-edge Non-hopping, High Power, Modulation Profile 3

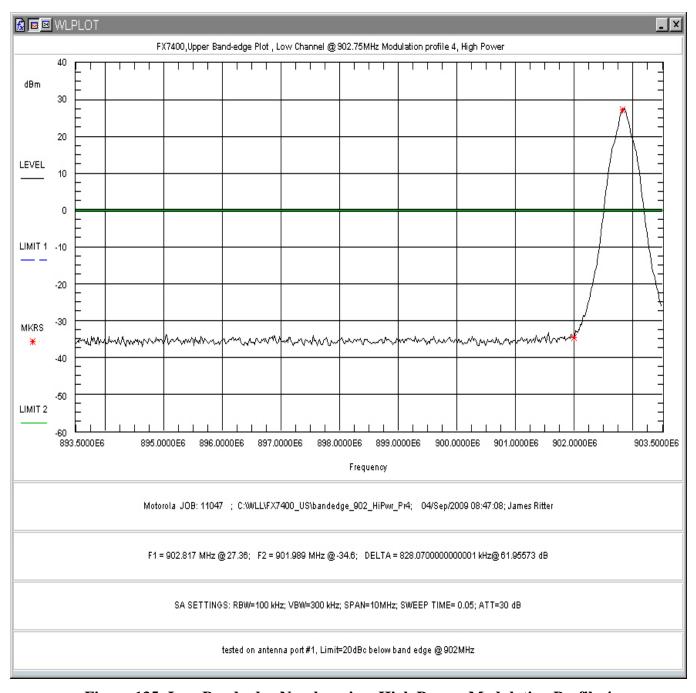


Figure 135: Low Band-edge Non-hopping, High Power, Modulation Profile 4

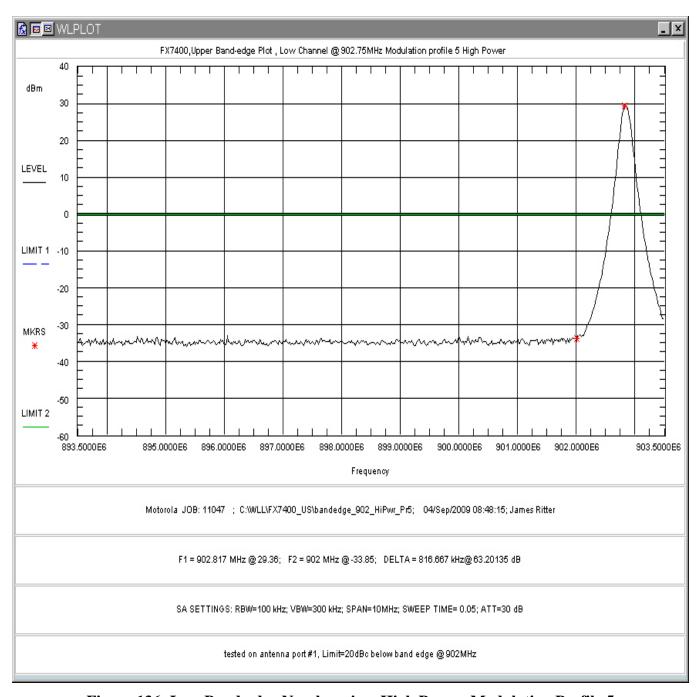


Figure 136: Low Band-edge Non-hopping, High Power, Modulation Profile 5

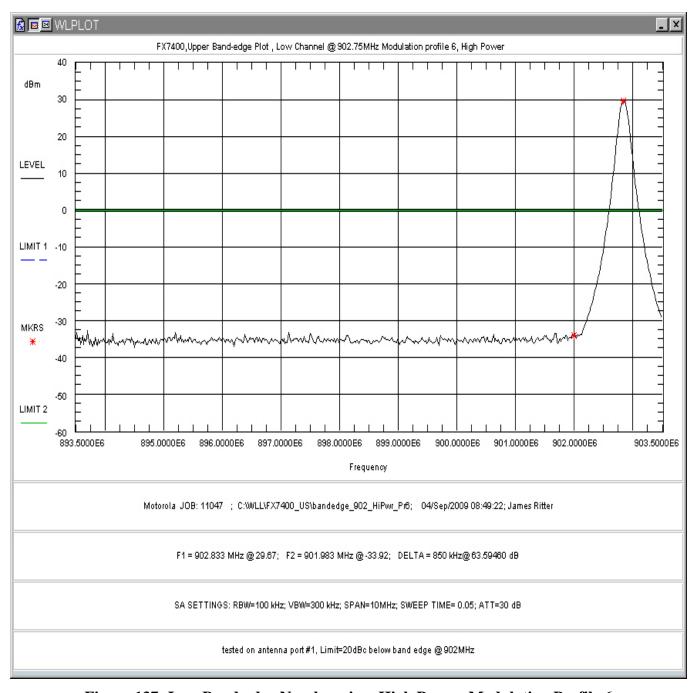


Figure 137: Low Band-edge Non-hopping, High Power, Modulation Profile 6