## **Appendix B RF Capture Information**

This appendix provides detailed information regarding the twelve DTV signal RF captures used in the sensitivity threshold measurements. Section B.1 provides general information for each of the capture signals. Section B.2 provides spectrum traces of each of the signals. Section B.3 provides temporal plots of each signal over its 24.5-second playback period.

## **B.1** Summary of RF Capture Information

Table B-1 provides general information regarding the twelve captured waveforms utilized in this effort.

Table B-1. RF Capture Information.<sup>1</sup>

Waveform	Type of Capture	Lower Adjacent Channel	Upper Adjacent Channel	Close-in Echo(es)	Multiple Echo(es)	Deep Notch(es)	Wide Notches	Flat Fading	Band Edge Distortion	Pilot Notch
WAS_06_34	Outdoor - 30'	None	ATSC	-	-	-	-	-	-	-
WAS_03_27	Outdoor - 30'	NTSC	None	-	Y	Y	-	-	-	Y
WAS_311-35	Outdoor - 30'	ATSC	ATSC	-	Y	-	-	Y	-	-
WAS-311-36	Outdoor - 30'	ATSC	None	-	Y	Y	Y	-	-	-
WAS_311_48	Outdoor - 30'	None	None	-	Y	Y	Y	-	-	-
WAS_32_48	In-home	None	None	-	Y	Y	Y	-	-	-
WAS_47_48	In-home	None	None	-	Y	-	-	Y	-	-
WAS_49_34	In-home	None	ATSC	-	Y	Y	-	Y	Y	-
WAS_49_39	In-home	None	None	-	Y	Y	-	-	-	-
WAS_51_35	Outdoor - 30'	ATSC	ATSC	-	-	-	-	Y	-	-
WAS_68_36	Outdoor - 30'	ATSC	None	-	-	-	-	Y	-	-
WAS_86_48	Outdoor - 30'	None	None	-	-	-	-	-	-	-

Advanced Television Systems Committee, ATSC Recommended Practice: Receiver Performance Guidelines (with Corrigendum No. 1), Doc A/74, Annex A, July, 2007.

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## **B.2** Frequency Domain Representations.

The following spectrum analyzer traces demonstrate the frequency domain characteristics of each of the RF capture waveforms utilized in this effort.

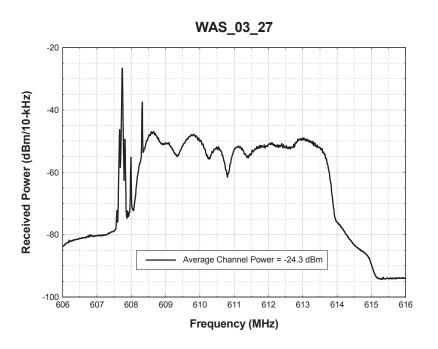


Figure B-1. WAS\_03\_27 RF Capture

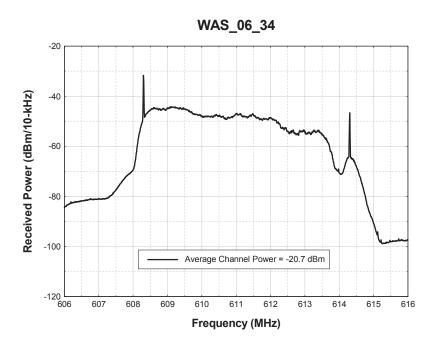
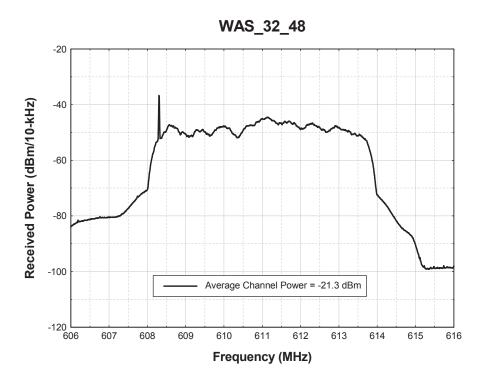
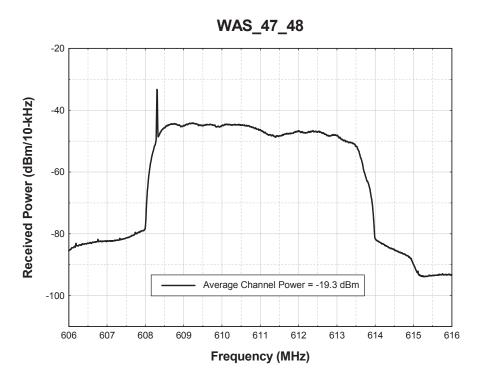


Figure B-2. WAS\_06\_34 RF Capture



**Figure B-3.** WAS\_32\_48 RF Capture



**Figure B-4.** WAS\_47\_48 RF Capture

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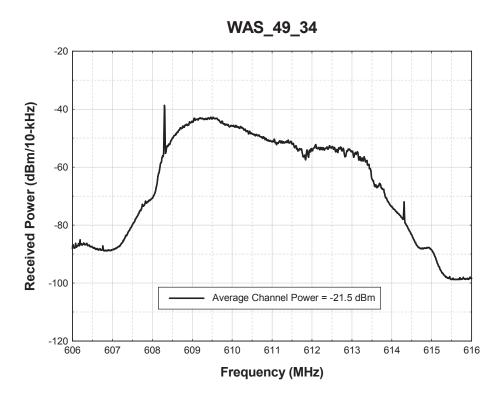
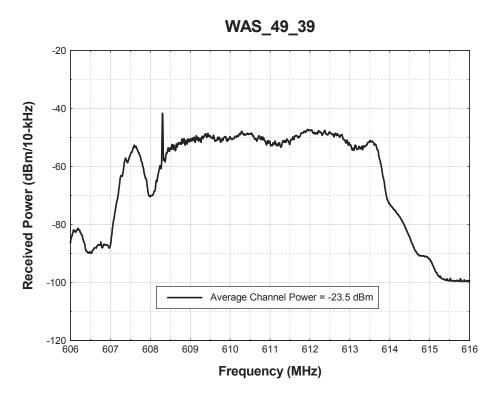


Figure B-5. WAS\_49\_34 RF Capture



**Figure B-6.** WAS\_49\_39 RF Capture

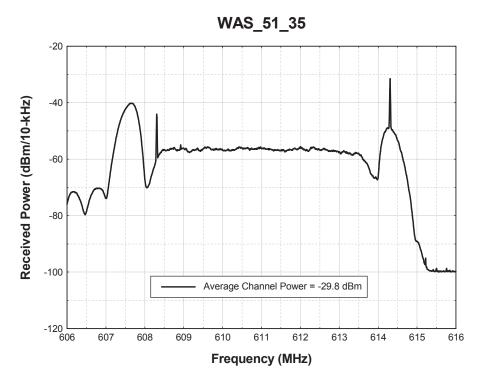


Figure B-7. WAS\_51\_35 RF Capture

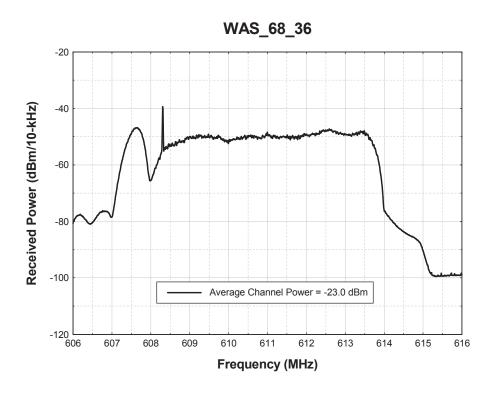
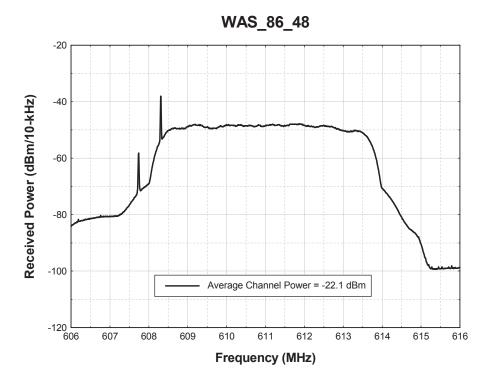
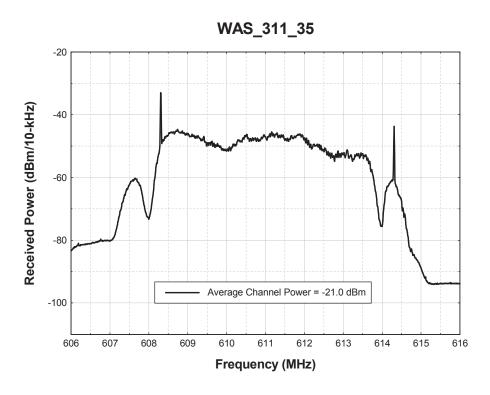


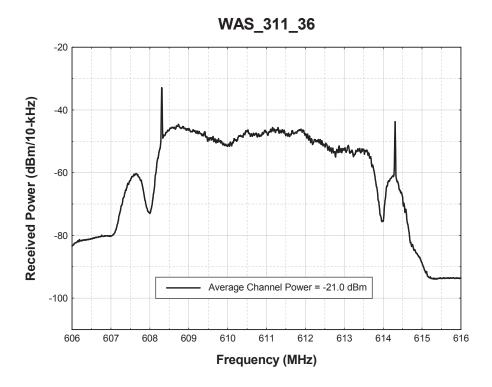
Figure B-8. WAS\_68\_36 RF Capture



**Figure B-9.** WAS\_86\_48



**Figure B-10.** WAS\_31\_35



**Figure B-11.** WAS\_311\_36

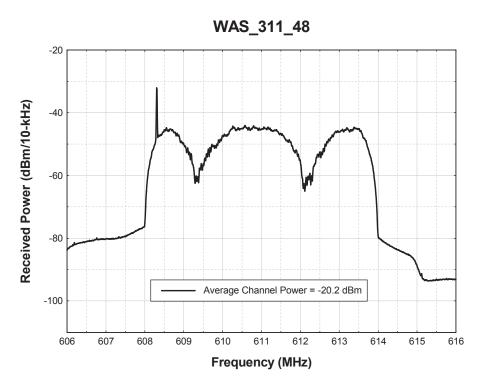
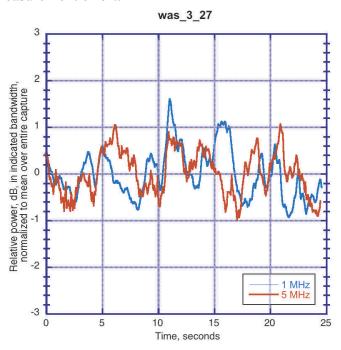


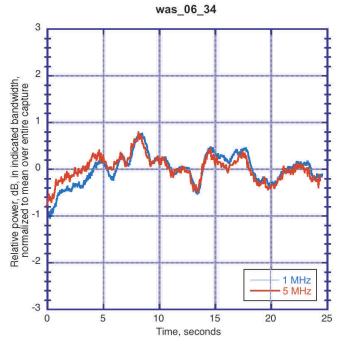
Figure B-12. WAS\_311\_48 RF Capture

## **B.3.** Temporal Representations.

The following temporal plots, acquired using a vector signal analyzer (VSA), illustrate the time-domain characteristics associated with each of the RF capture waveforms utilized in this measurement effort.

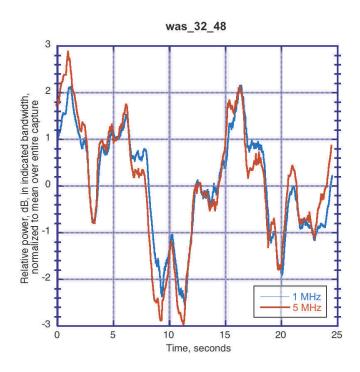


**Figure B-13.** WAS\_3\_27 Temporal Representation

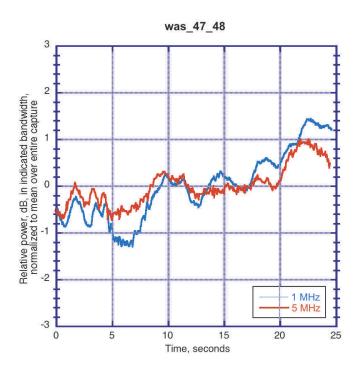


**Figure B-14.** WAS\_06\_34 Temporal Representation

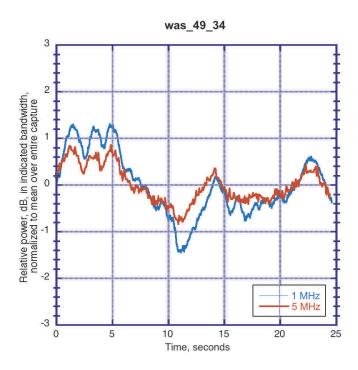
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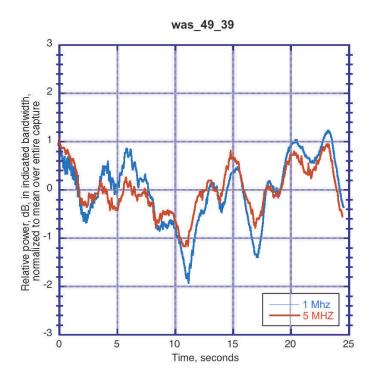
**Figure B-15.** WAS\_32\_48 Temporal Representation



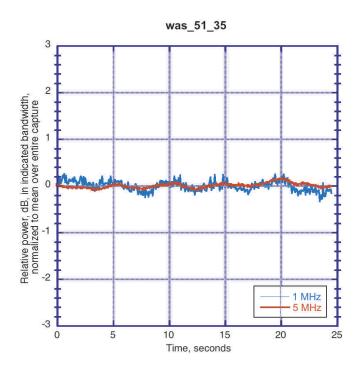
**Figure 16.** WAS\_32\_48 Temporal Representation



**Figure B-17.** WAS\_49\_34 Temporal Representation



**Figure B-18.** WAS\_49\_39 Temporal Representation



**Figure B-19.** WAS\_51\_35 Temporal Representation

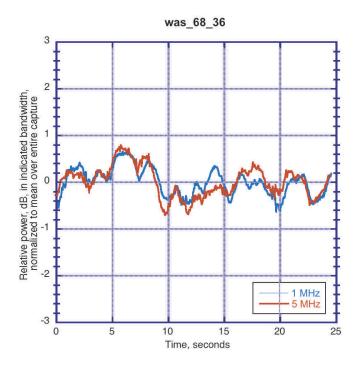
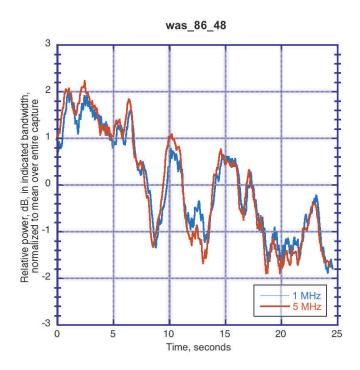


Figure B-20. WAS\_68\_36 Temporal Representation



**Figure B-21.** WAS\_86\_48 Temporal Representation

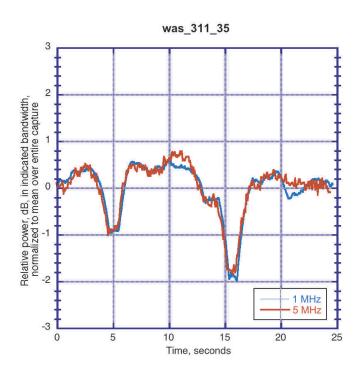
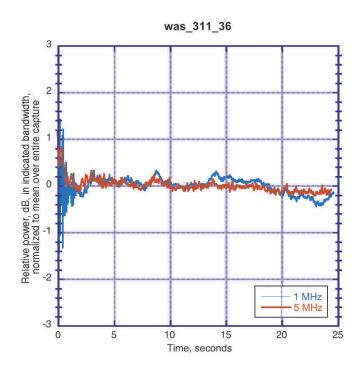


Figure B-22. WAS\_311\_35 Temporal Representation



**Figure B-23.** WAS\_311\_36 Temporal Representation

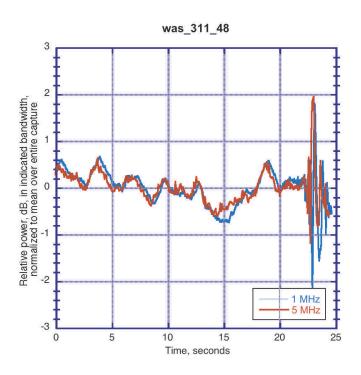


Figure B-24. WAS\_311\_48 Temporal Representation