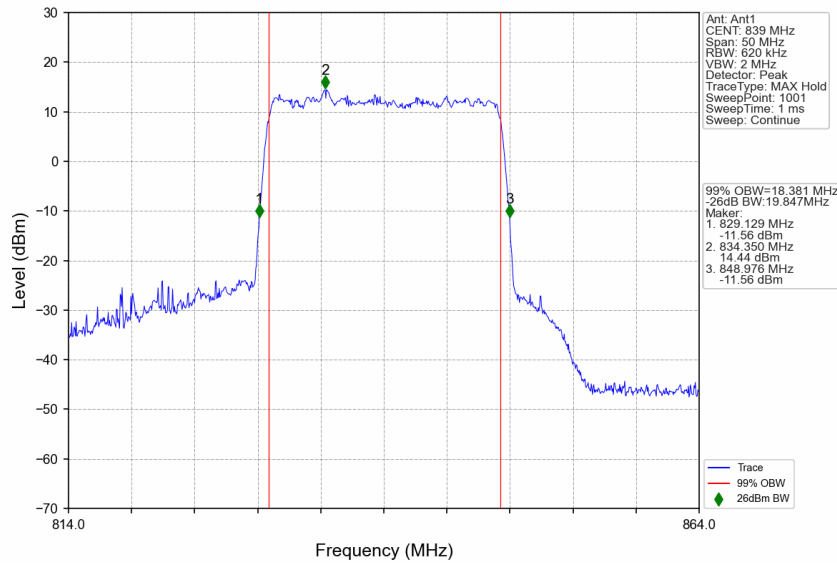


n5_30kHz_SISO_NTNV_20MHz_CP-OFDM 256 QAM_839MHz_Outer_Full



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5. Peak-Average Ratio

5.1 15k_SISO_5MHz_NTNV

5.1.1 Test Result

5G NR n5 SCS=15kHz SISO 5MHz NTNv							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dB)				Verdict
			Ant1	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	826.5	Outer_Full	4.46	/	/	<=13	Pass
	836.5	Outer_Full	4.37	/	/	<=13	Pass
	846.5	Outer_Full	4.29	/	/	<=13	Pass
DFT-s-OFDM QPSK	826.5	Outer_Full	5.61	/	/	<=13	Pass
	836.5	Outer_Full	5.52	/	/	<=13	Pass
	846.5	Outer_Full	5.36	/	/	<=13	Pass
DFT-s-OFDM 16 QAM	826.5	Outer_Full	6.30	/	/	<=13	Pass
	836.5	Outer_Full	6.21	/	/	<=13	Pass
	846.5	Outer_Full	6.09	/	/	<=13	Pass
DFT-s-OFDM 64 QAM	826.5	Outer_Full	6.46	/	/	<=13	Pass
	836.5	Outer_Full	6.37	/	/	<=13	Pass
	846.5	Outer_Full	6.29	/	/	<=13	Pass
DFT-s-OFDM 256 QAM	826.5	Outer_Full	6.96	/	/	<=13	Pass
	836.5	Outer_Full	6.90	/	/	<=13	Pass
	846.5	Outer_Full	6.89	/	/	<=13	Pass
CP-OFDM QPSK	826.5	Outer_Full	7.81	/	/	<=13	Pass
	836.5	Outer_Full	7.74	/	/	<=13	Pass
	846.5	Outer_Full	7.54	/	/	<=13	Pass
CP-OFDM 16 QAM	826.5	Outer_Full	7.72	/	/	<=13	Pass
	836.5	Outer_Full	7.63	/	/	<=13	Pass
	846.5	Outer_Full	7.44	/	/	<=13	Pass
CP-OFDM 64 QAM	826.5	Outer_Full	8.09	/	/	<=13	Pass
	836.5	Outer_Full	8.06	/	/	<=13	Pass
	846.5	Outer_Full	7.85	/	/	<=13	Pass
CP-OFDM 256 QAM	826.5	Outer_Full	8.60	/	/	<=13	Pass
	836.5	Outer_Full	8.57	/	/	<=13	Pass
	846.5	Outer_Full	8.52	/	/	<=13	Pass

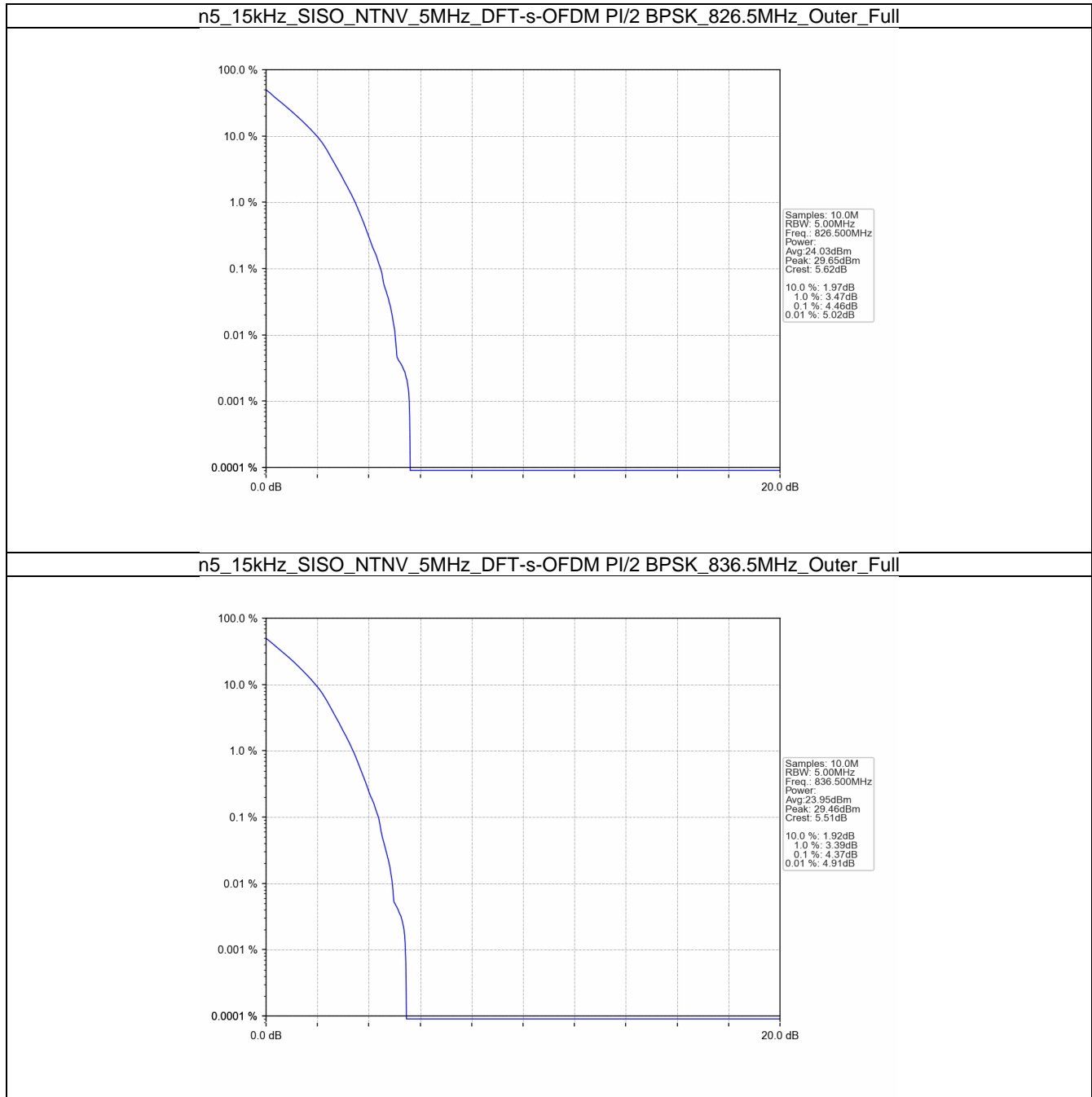


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5.1.2 Test Graph

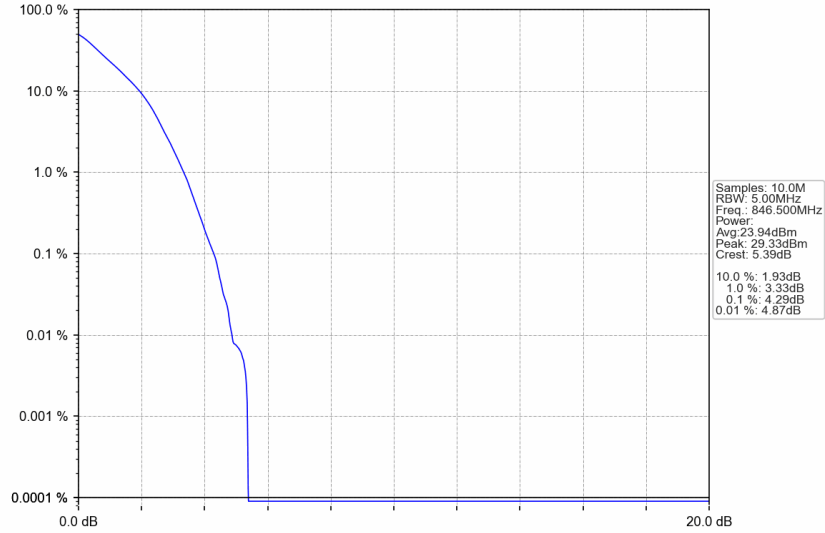


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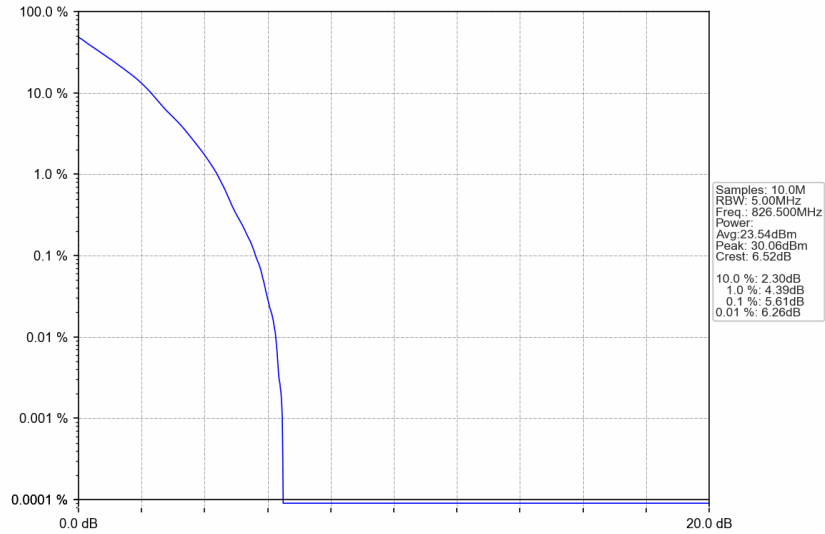
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n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM PI/2 BPSK_846.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM QPSK_826.5MHz_Outer_Full

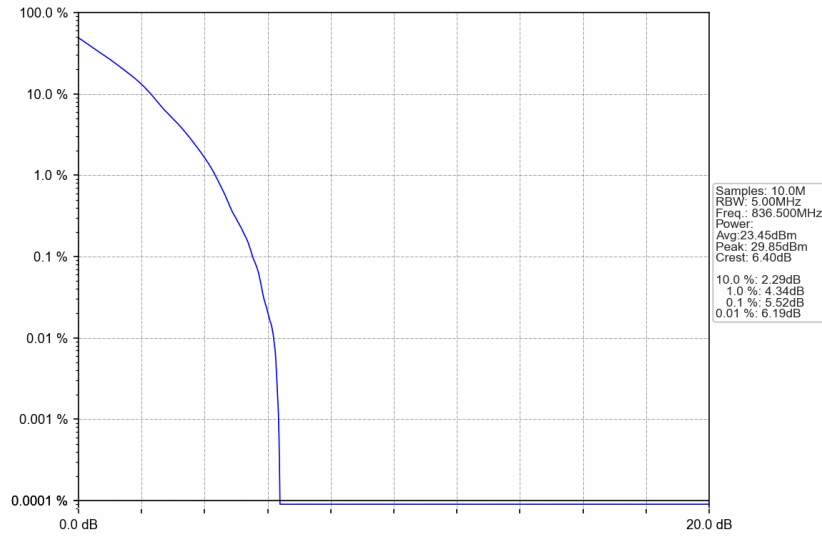


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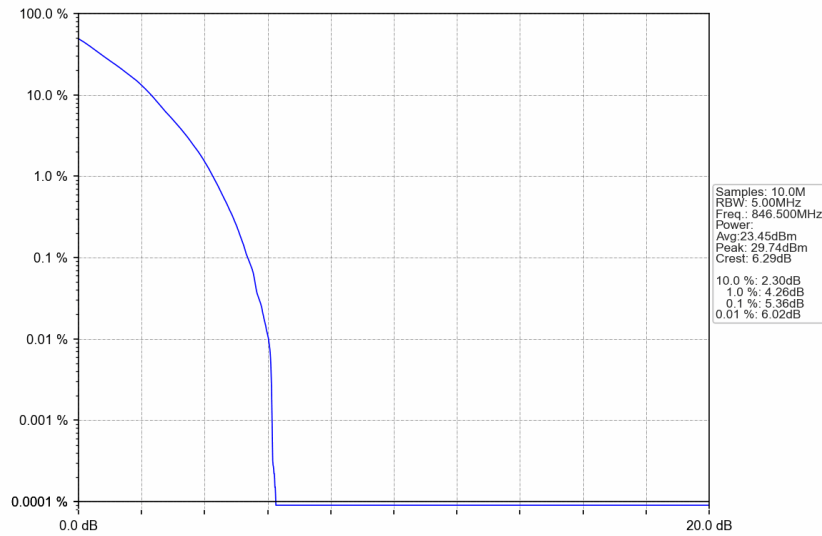
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n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM QPSK_836.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM QPSK_846.5MHz_Outer_Full



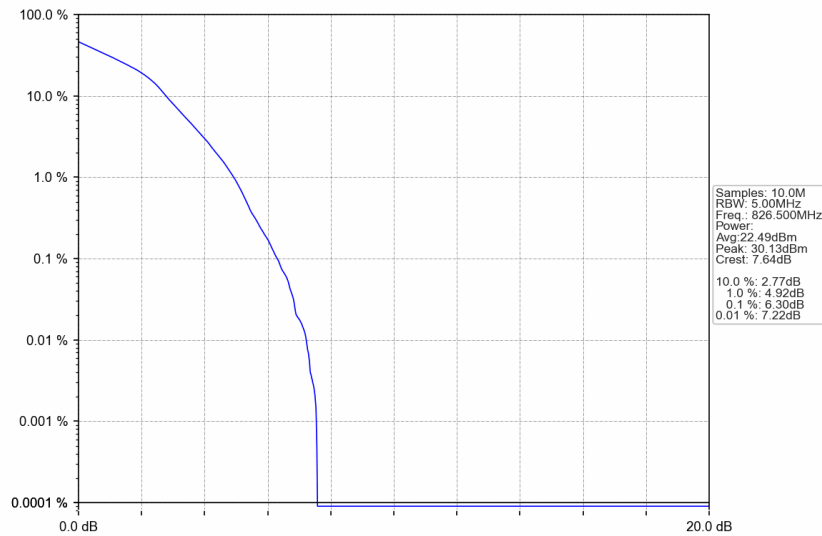
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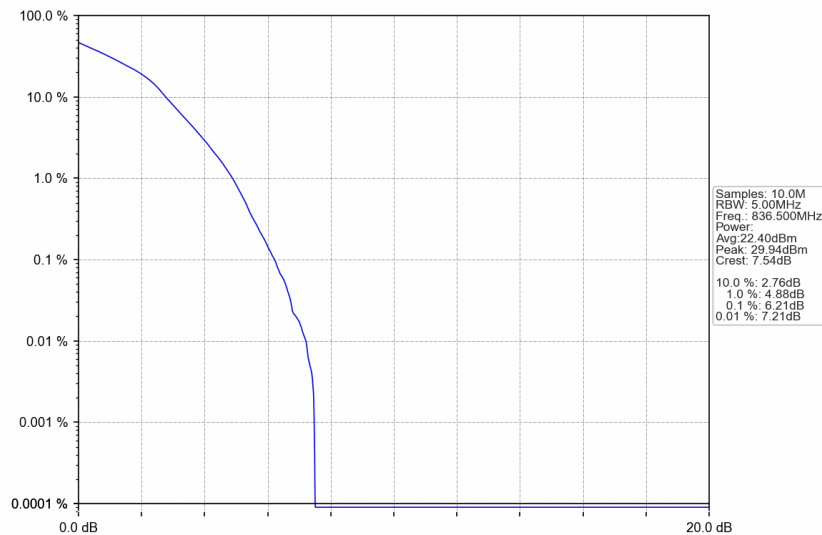
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n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 16 QAM_826.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 16 QAM_836.5MHz_Outer_Full

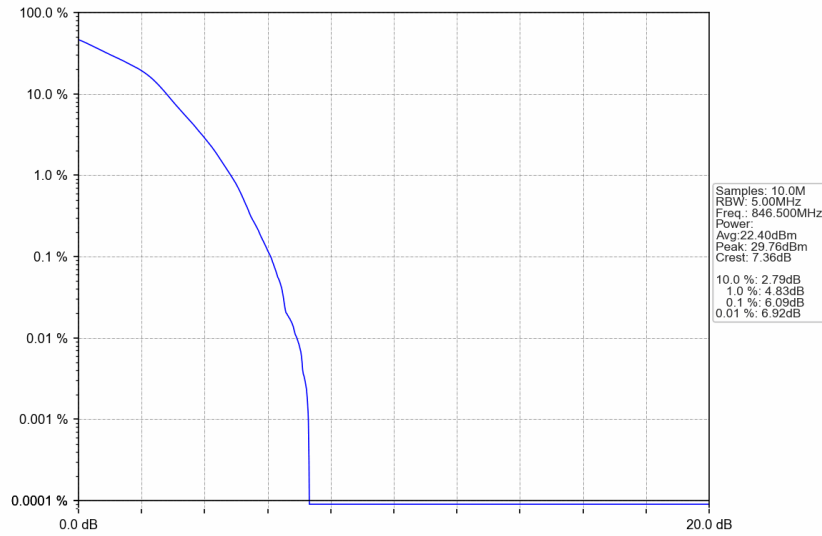


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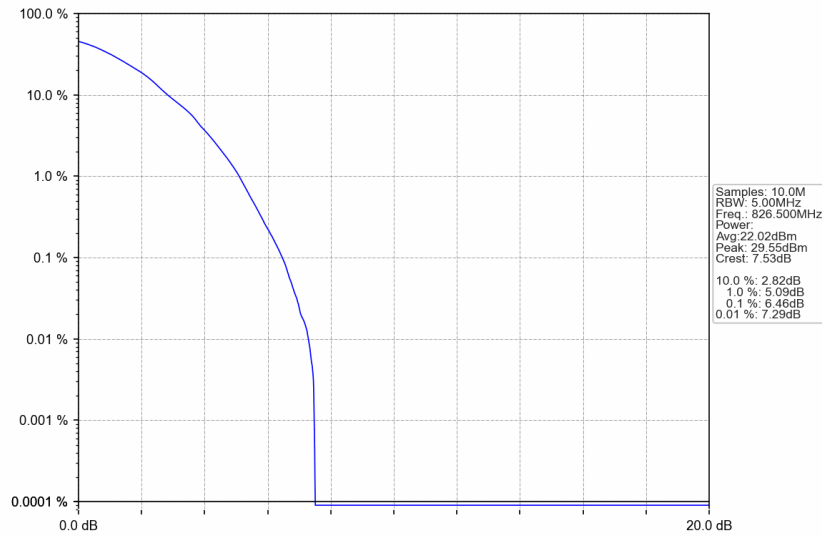
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n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 16 QAM_846.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 64 QAM_826.5MHz_Outer_Full

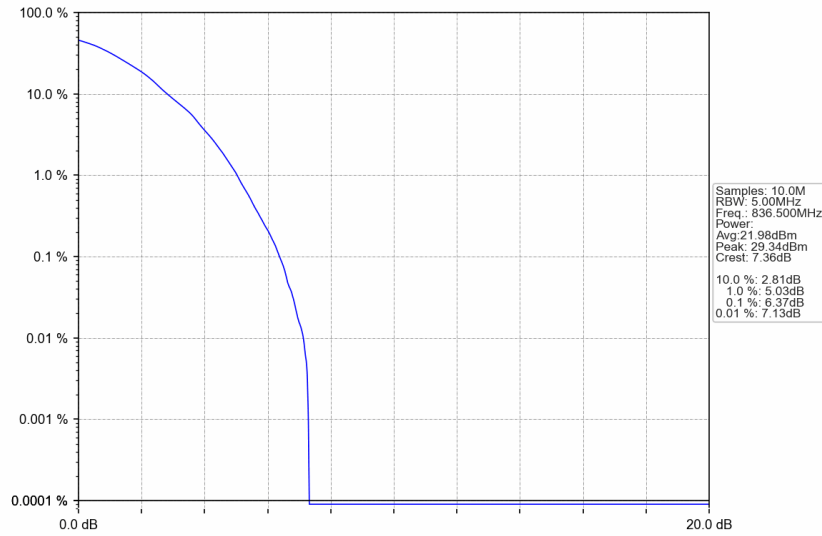


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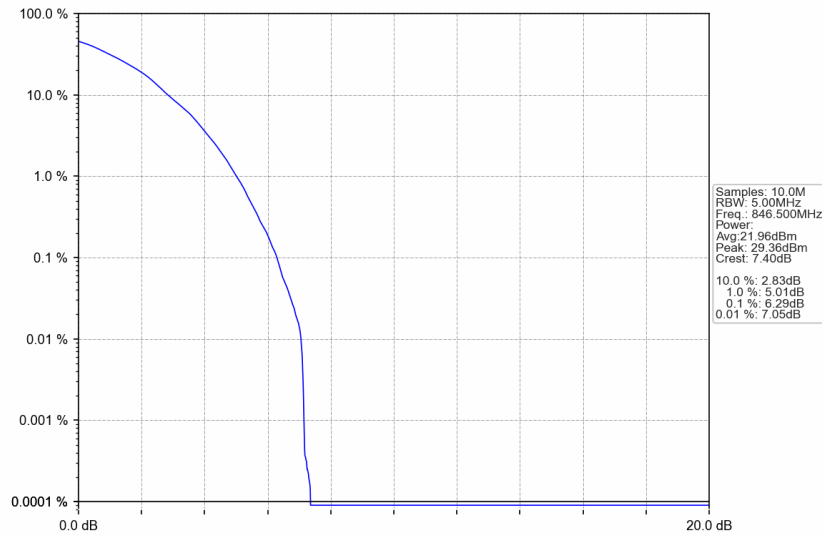
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n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 64 QAM_836.5MHz_Outer_Full

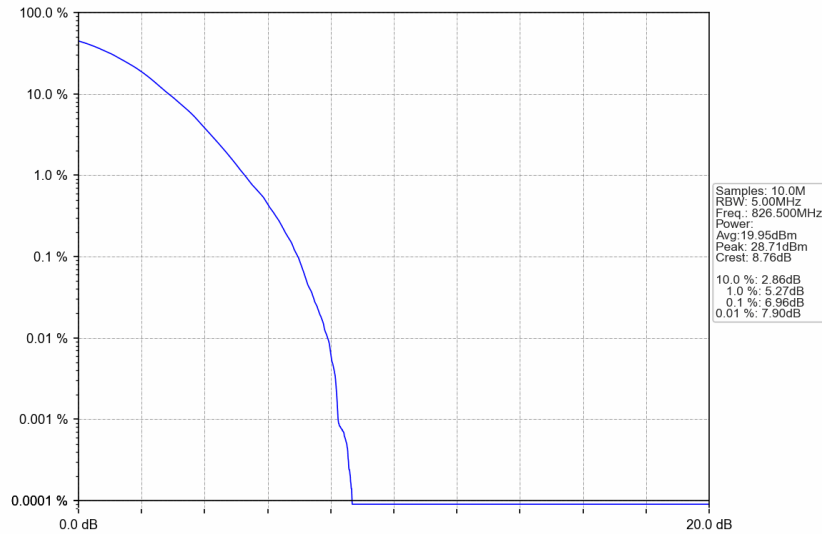


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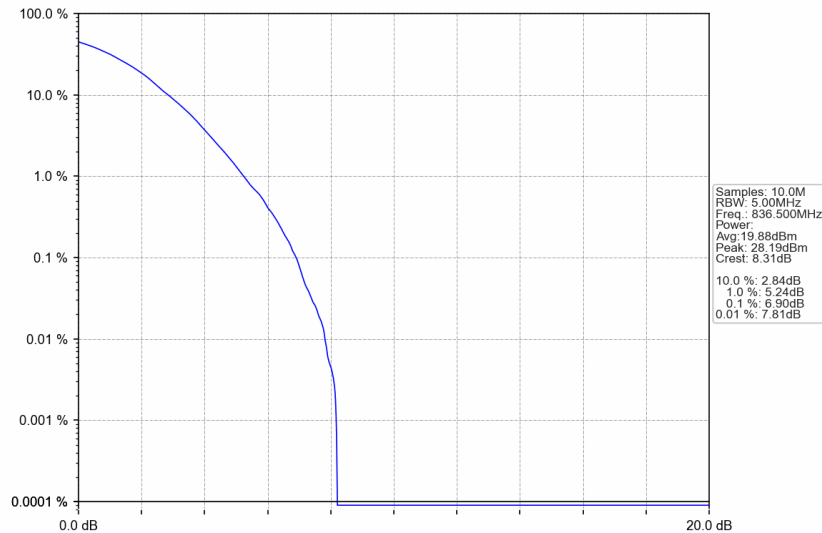


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n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 256 QAM_836.5MHz_Outer_Full

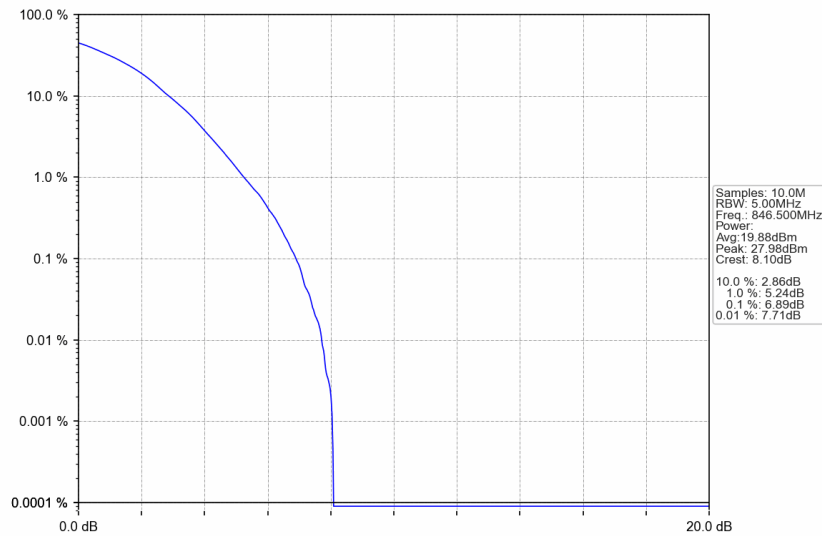


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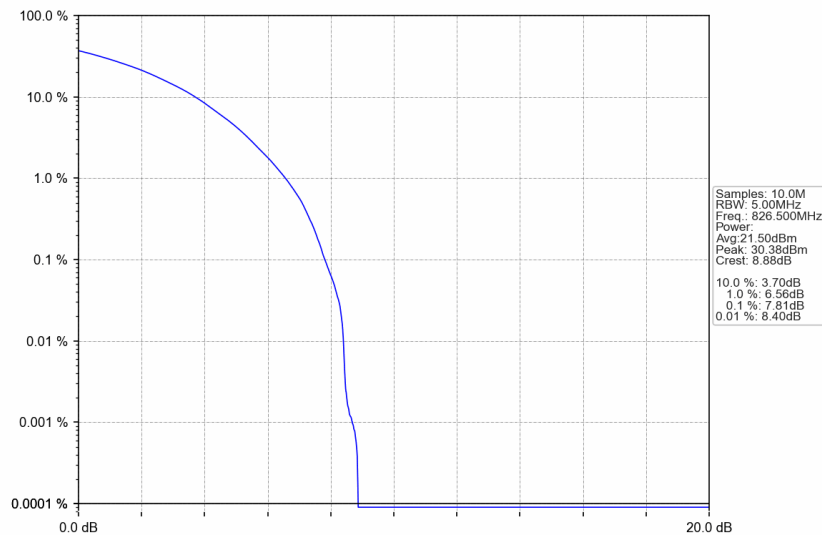
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n5_15kHz_SISO_NTNV_5MHz_CP-OFDM QPSK_826.5MHz_Outer_Full



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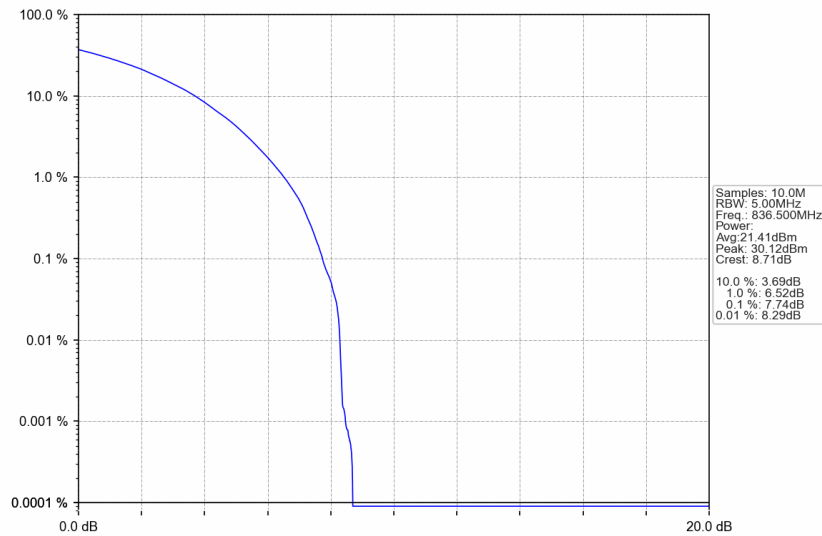
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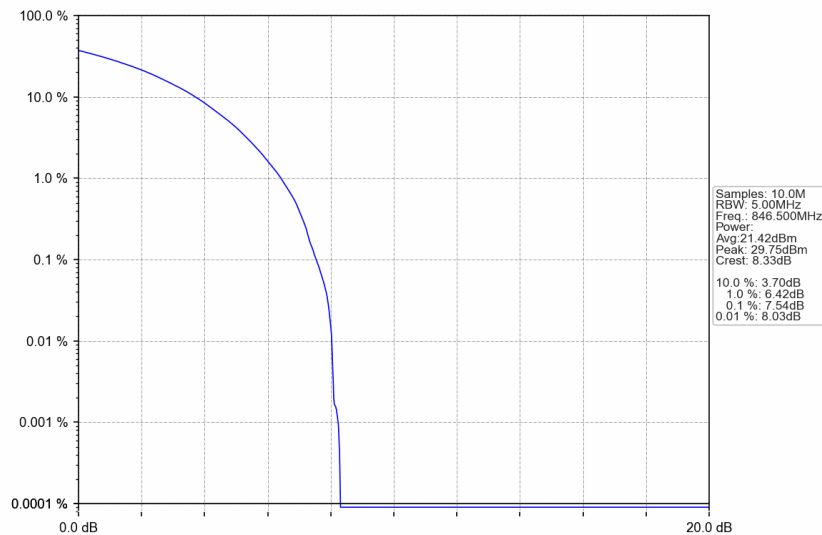
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n5_15kHz_SISO_NTNV_5MHz_CP-OFDM QPSK_846.5MHz_Outer_Full

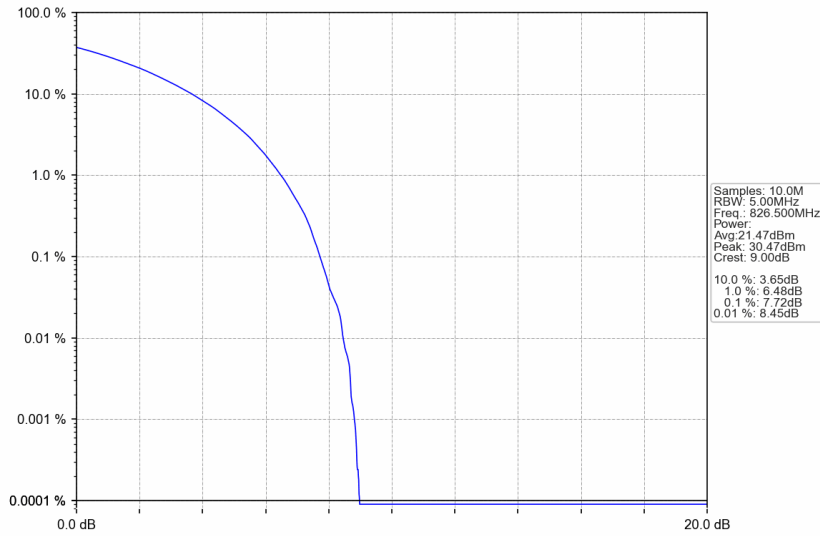


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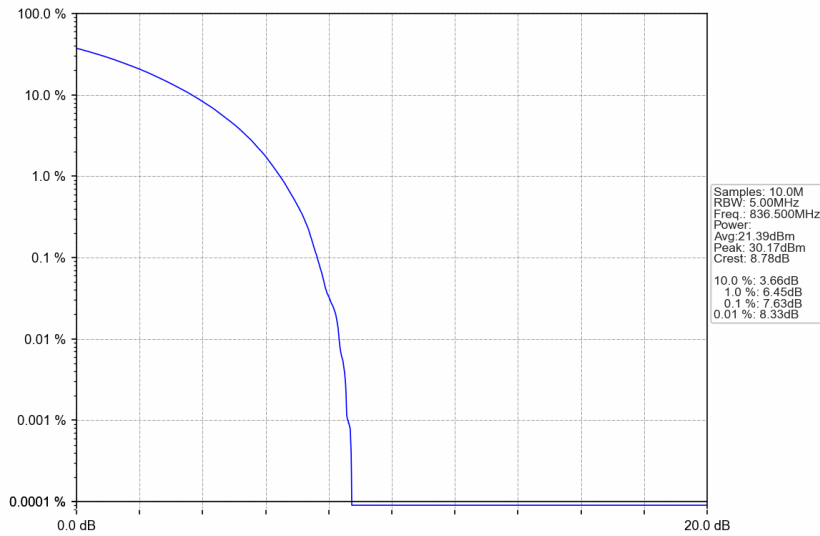
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n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 16 QAM_826.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 16 QAM_836.5MHz_Outer_Full

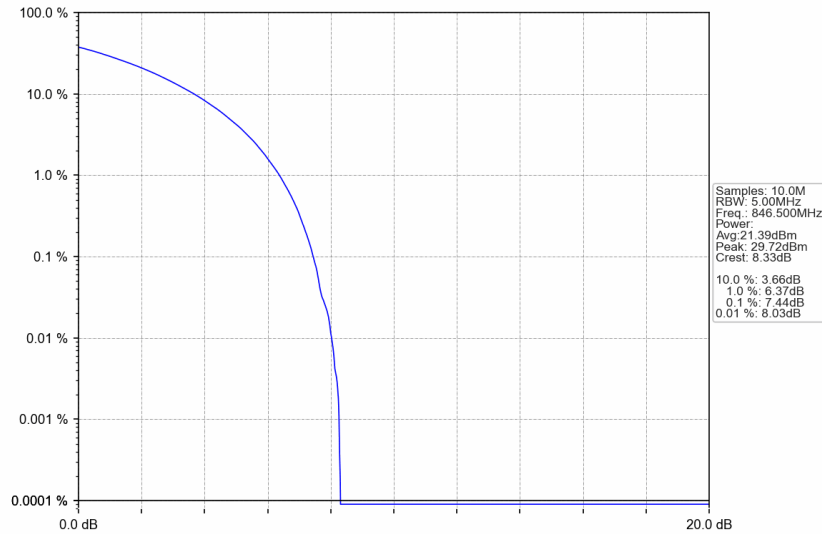


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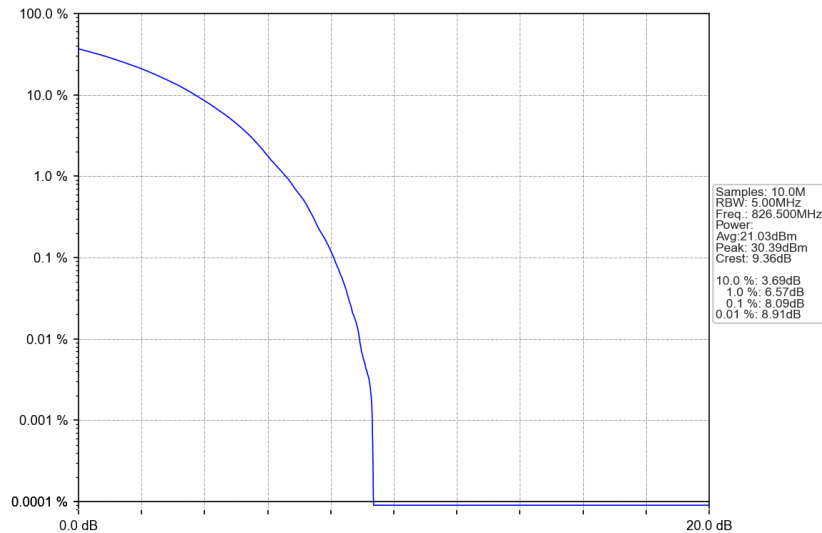
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n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 16 QAM_846.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 64 QAM_826.5MHz_Outer_Full



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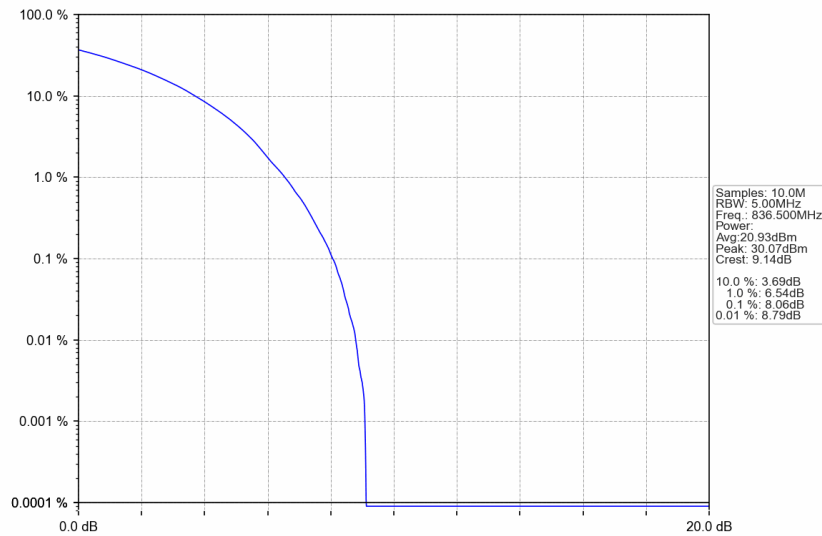
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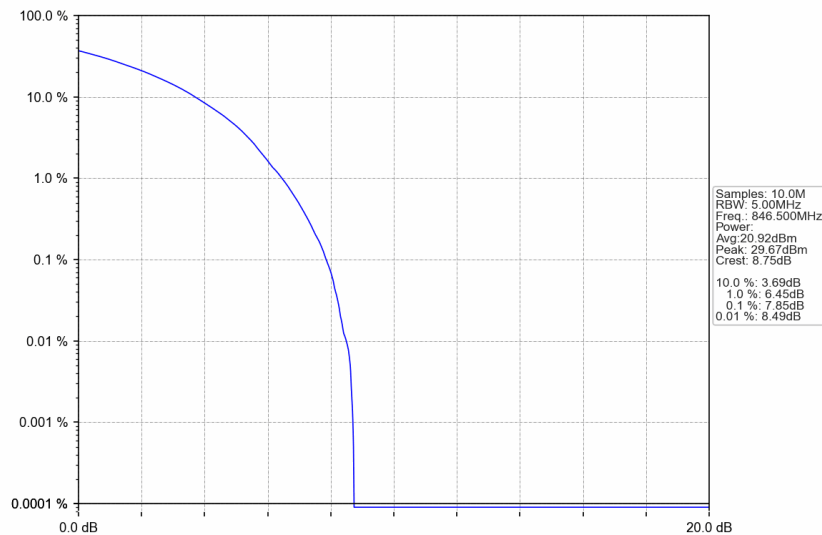
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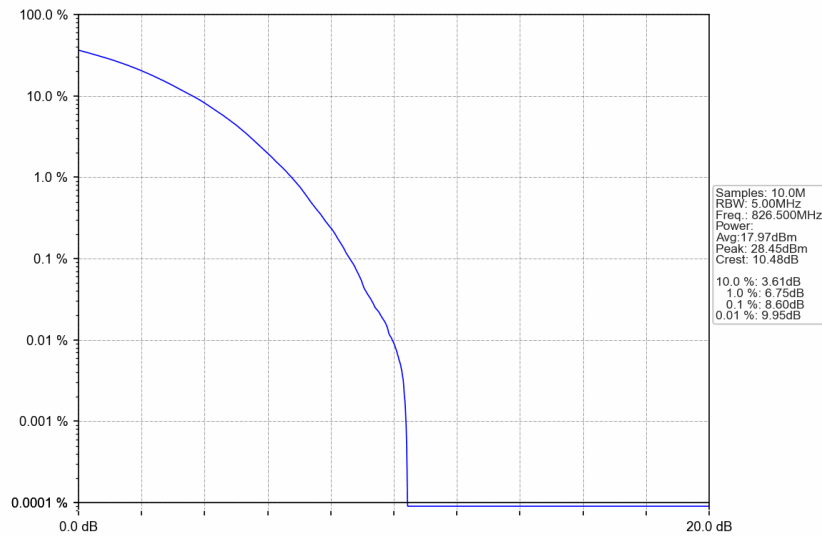
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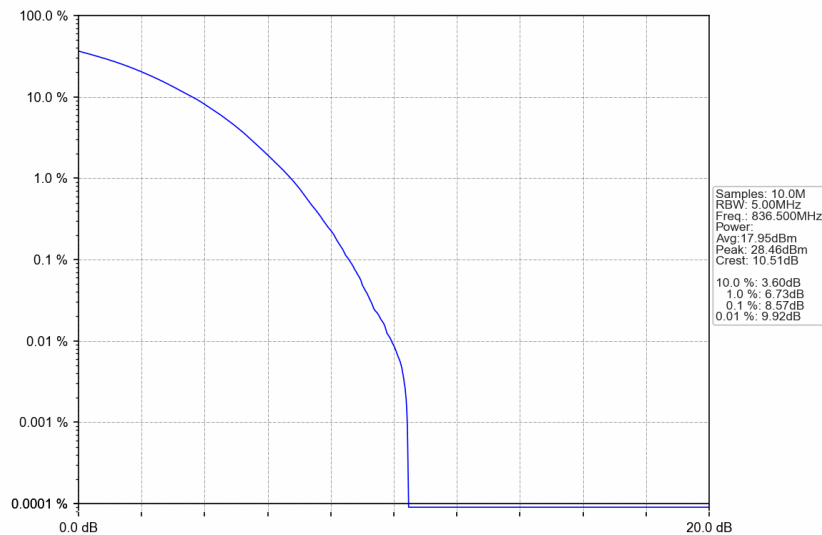
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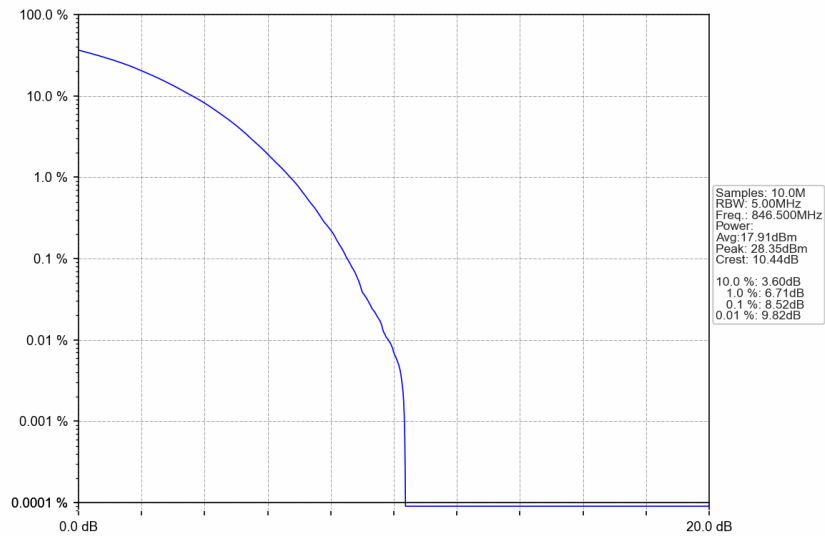


Report No.: SEWM2311000456RG02

Rev.: 01

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n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 256 QAM_846.5MHz_Outer_Full



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5.2 15k_SISO_10MHz_NTNV

5.2.1 Test Result

5G NR n5 SCS=15kHz SISO 10MHz NTNv							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dB)				Verdict
			Ant1	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	829	Outer_Full	4.36	/	/	<=13	Pass
	836.5	Outer_Full	4.35	/	/	<=13	Pass
	844	Outer_Full	4.40	/	/	<=13	Pass
DFT-s-OFDM QPSK	829	Outer_Full	5.38	/	/	<=13	Pass
	836.5	Outer_Full	5.38	/	/	<=13	Pass
	844	Outer_Full	5.39	/	/	<=13	Pass
DFT-s-OFDM 16 QAM	829	Outer_Full	6.18	/	/	<=13	Pass
	836.5	Outer_Full	6.20	/	/	<=13	Pass
	844	Outer_Full	6.17	/	/	<=13	Pass
DFT-s-OFDM 64 QAM	829	Outer_Full	6.38	/	/	<=13	Pass
	836.5	Outer_Full	6.37	/	/	<=13	Pass
	844	Outer_Full	6.39	/	/	<=13	Pass
DFT-s-OFDM 256 QAM	829	Outer_Full	6.62	/	/	<=13	Pass
	836.5	Outer_Full	6.59	/	/	<=13	Pass
	844	Outer_Full	6.59	/	/	<=13	Pass
CP-OFDM QPSK	829	Outer_Full	7.77	/	/	<=13	Pass
	836.5	Outer_Full	7.79	/	/	<=13	Pass
	844	Outer_Full	7.75	/	/	<=13	Pass
CP-OFDM 16 QAM	829	Outer_Full	7.95	/	/	<=13	Pass
	836.5	Outer_Full	7.95	/	/	<=13	Pass
	844	Outer_Full	7.91	/	/	<=13	Pass
CP-OFDM 64 QAM	829	Outer_Full	8.04	/	/	<=13	Pass
	836.5	Outer_Full	8.04	/	/	<=13	Pass
	844	Outer_Full	7.98	/	/	<=13	Pass
CP-OFDM 256 QAM	829	Outer_Full	8.45	/	/	<=13	Pass
	836.5	Outer_Full	8.44	/	/	<=13	Pass
	844	Outer_Full	8.45	/	/	<=13	Pass

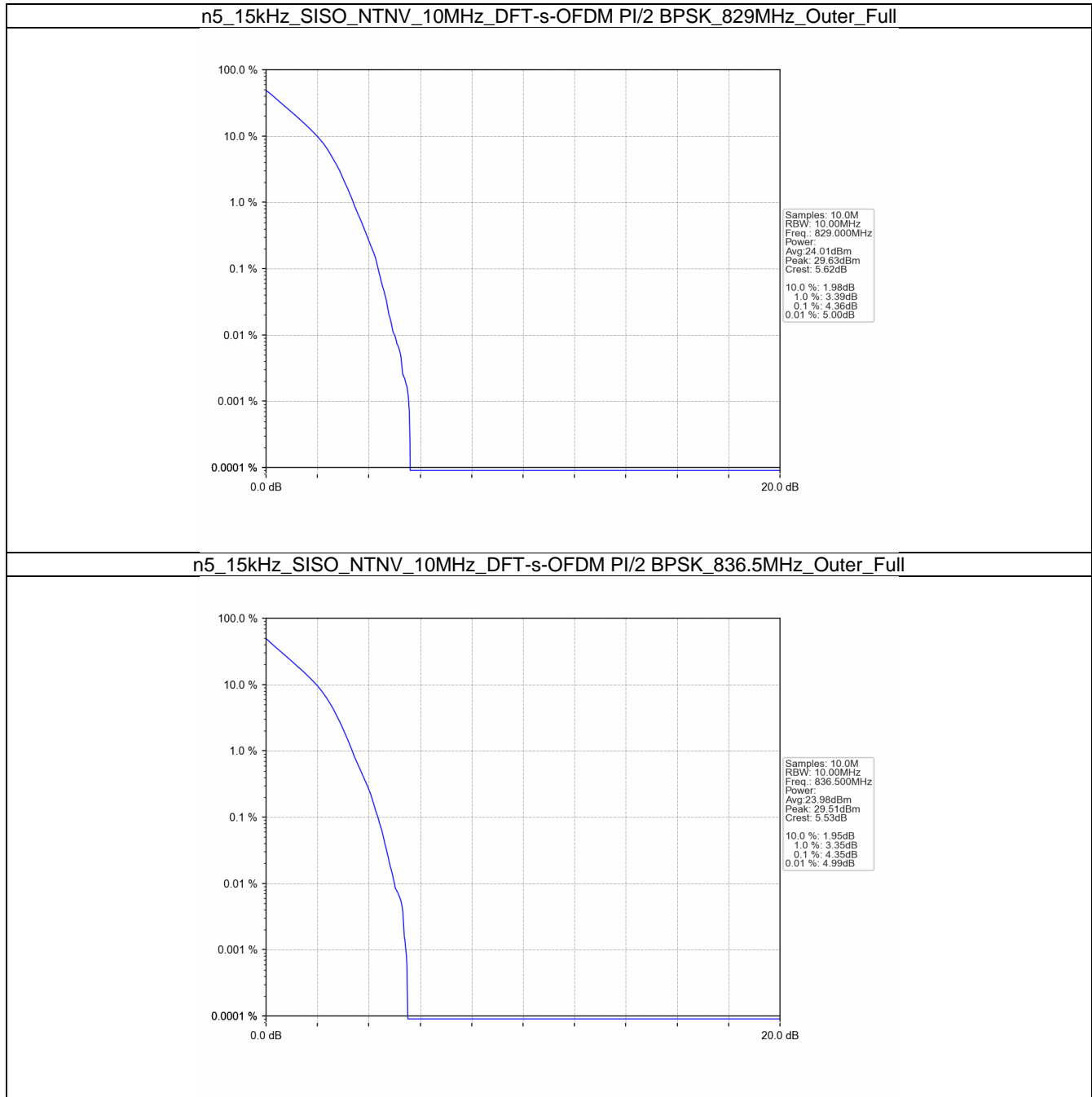


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5.2.2 Test Graph



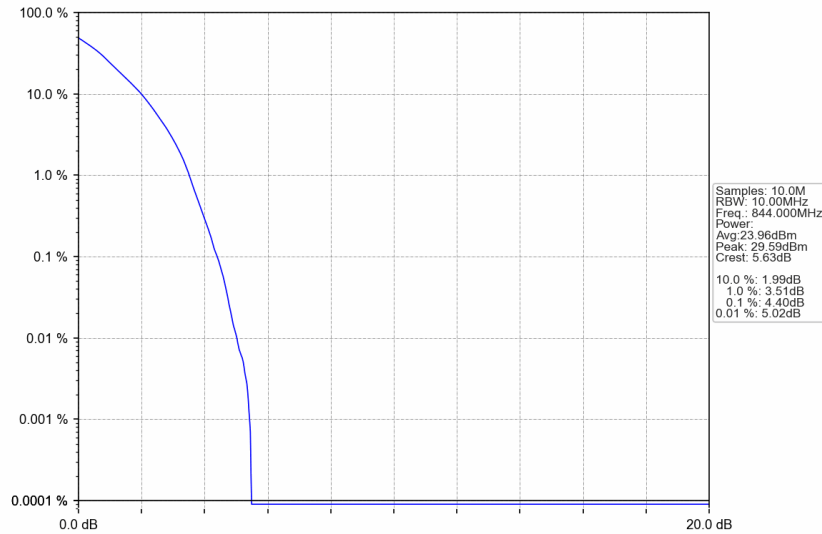
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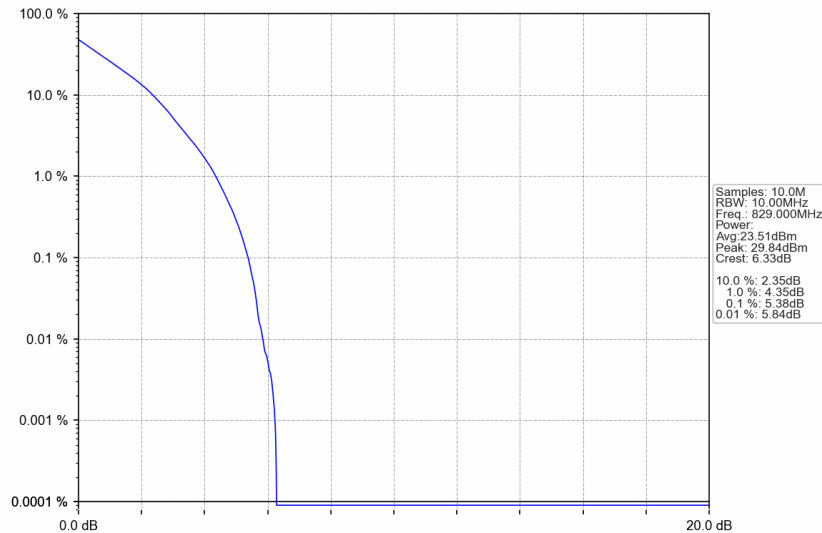
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n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM PI/2 BPSK_844MHz_Outer_Full



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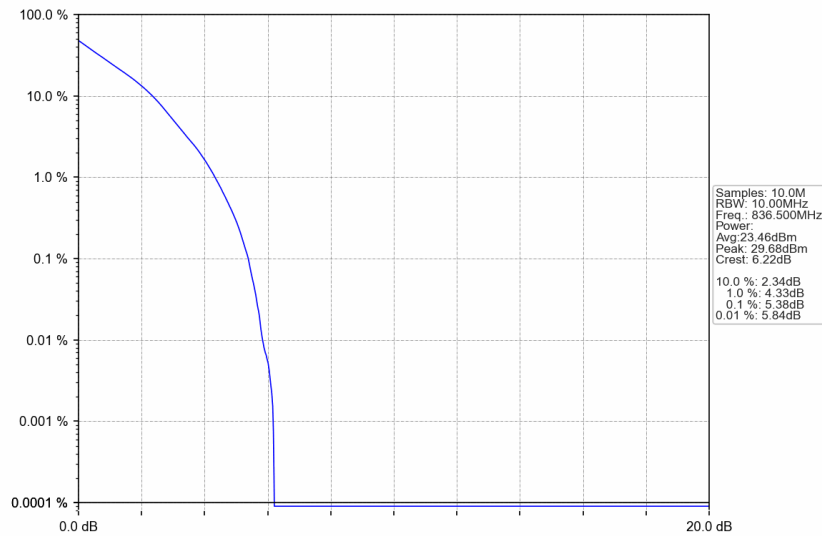
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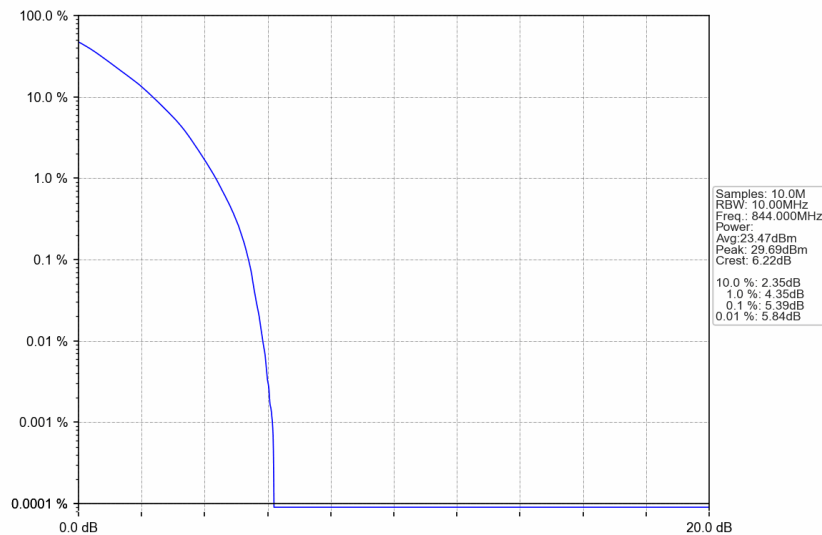
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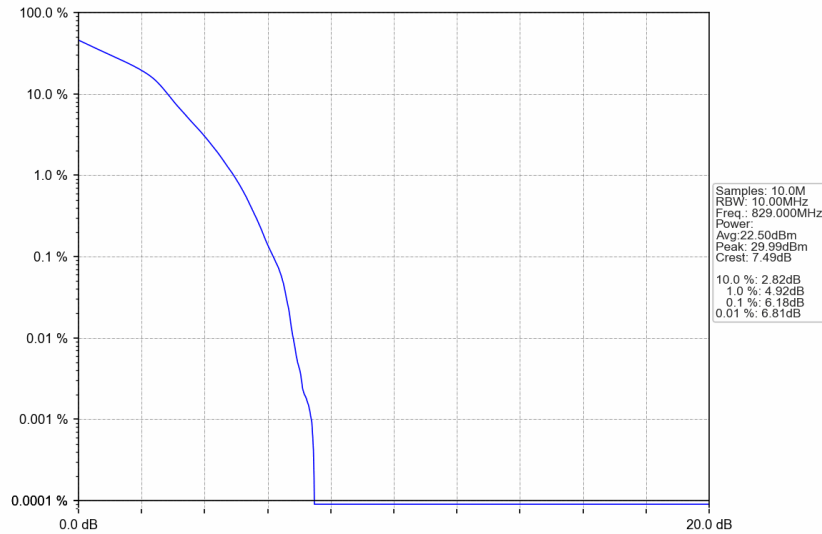


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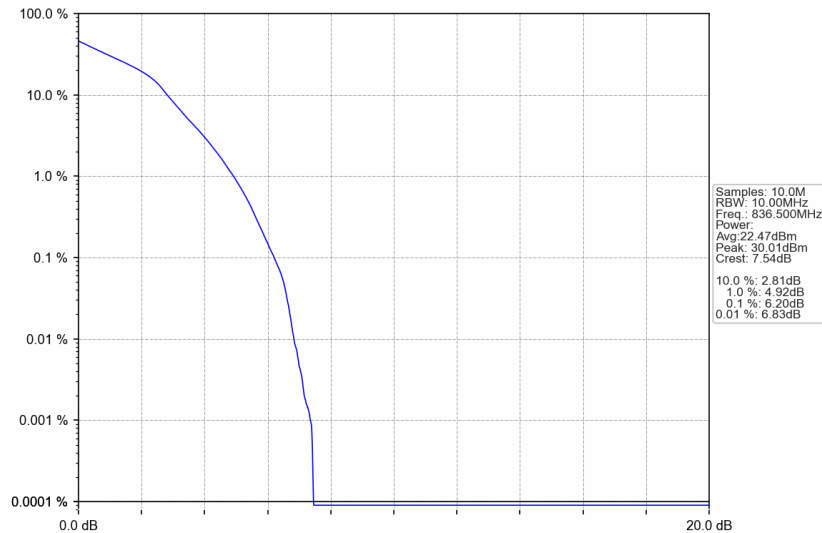
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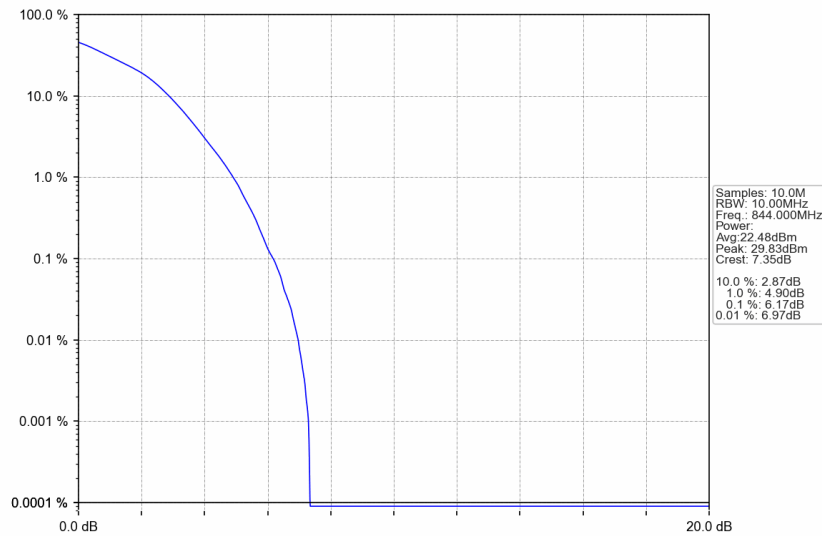
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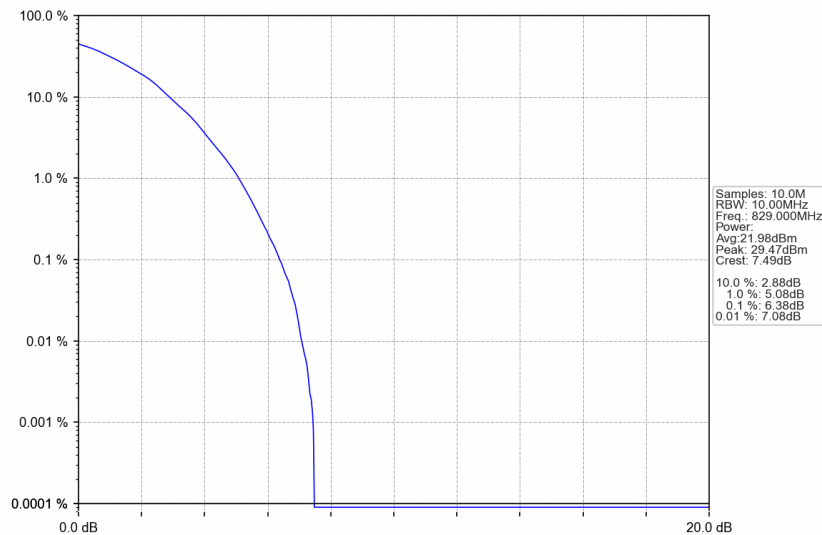
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n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_829MHz_Outer_Full

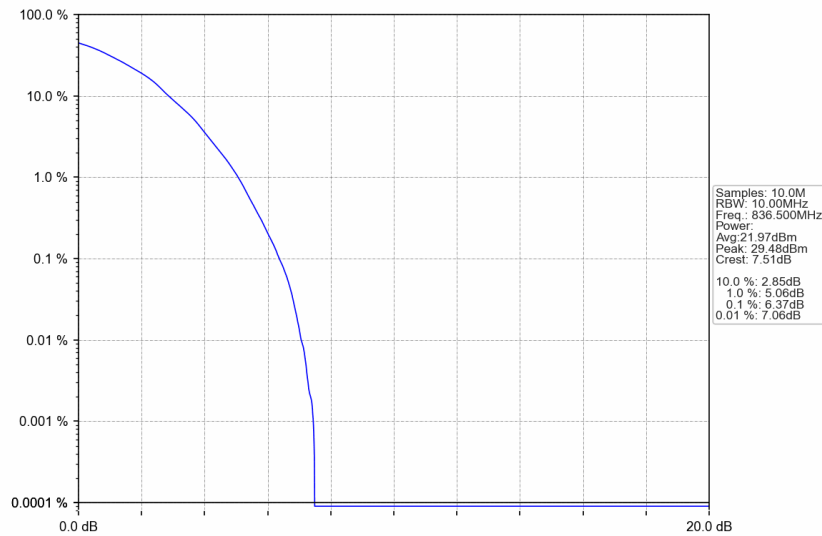


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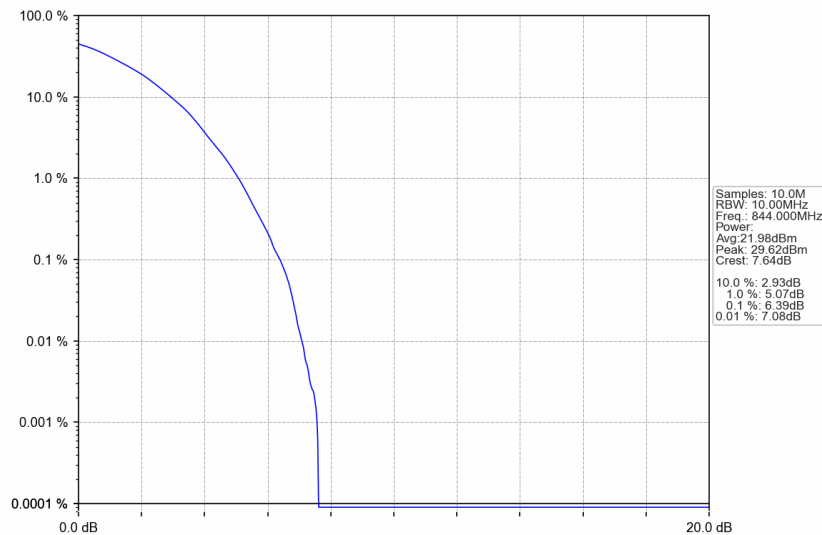
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n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_836.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_844MHz_Outer_Full



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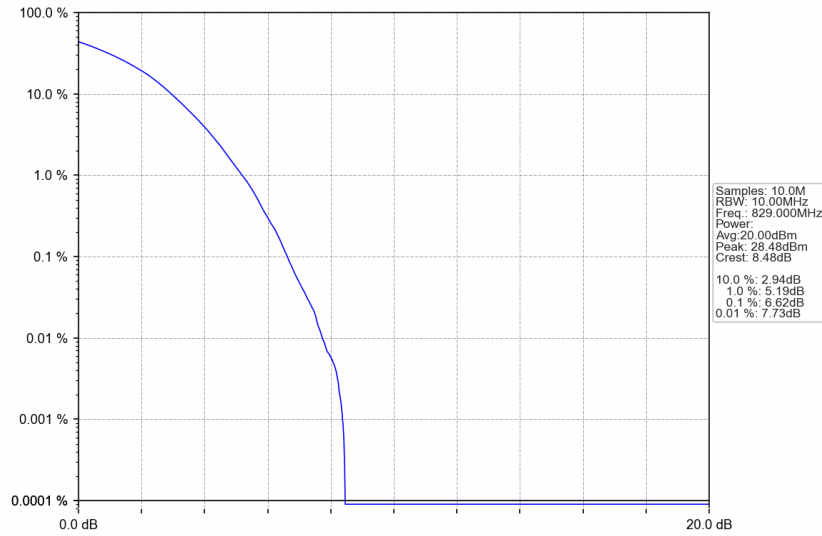
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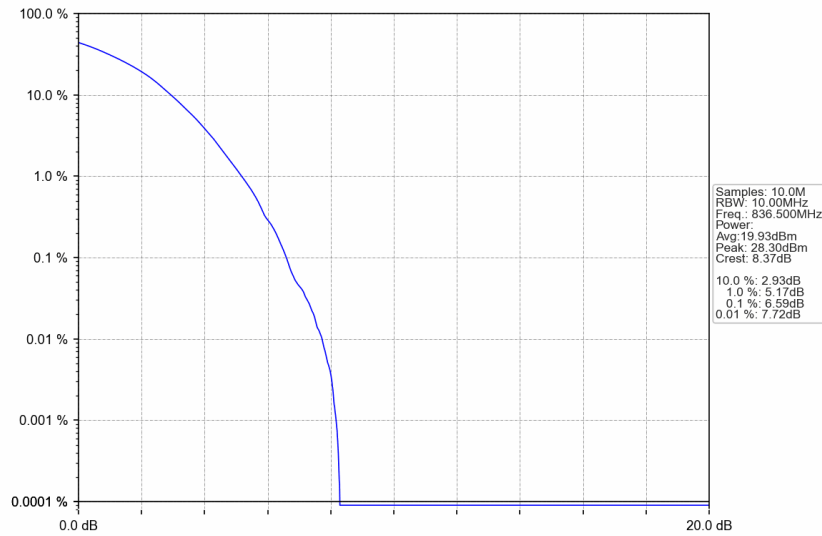
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n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 256 QAM_829MHz_Outer_Full



n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 256 QAM_836.5MHz_Outer_Full

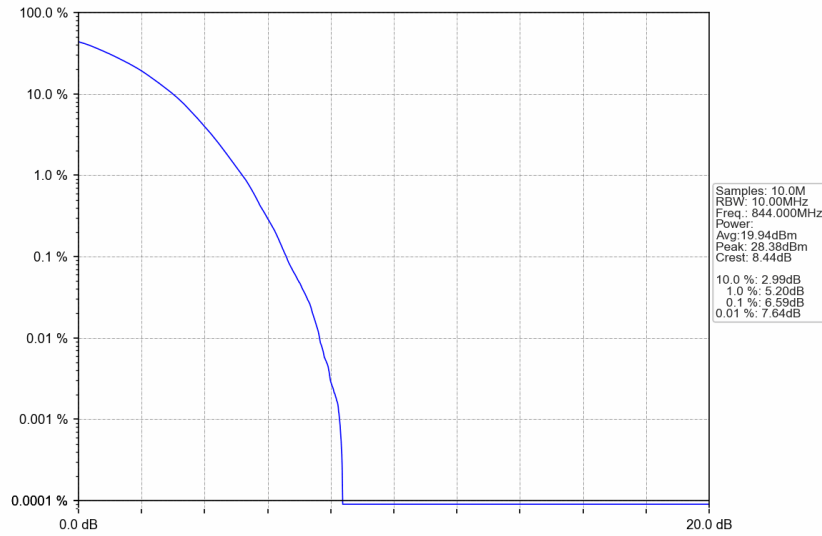


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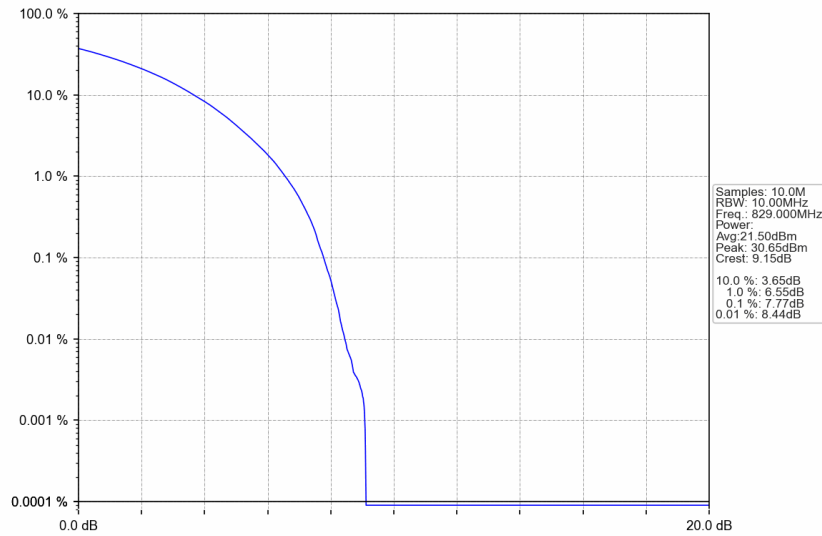
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n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 256 QAM_844MHz_Outer_Full



n5_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_829MHz_Outer_Full



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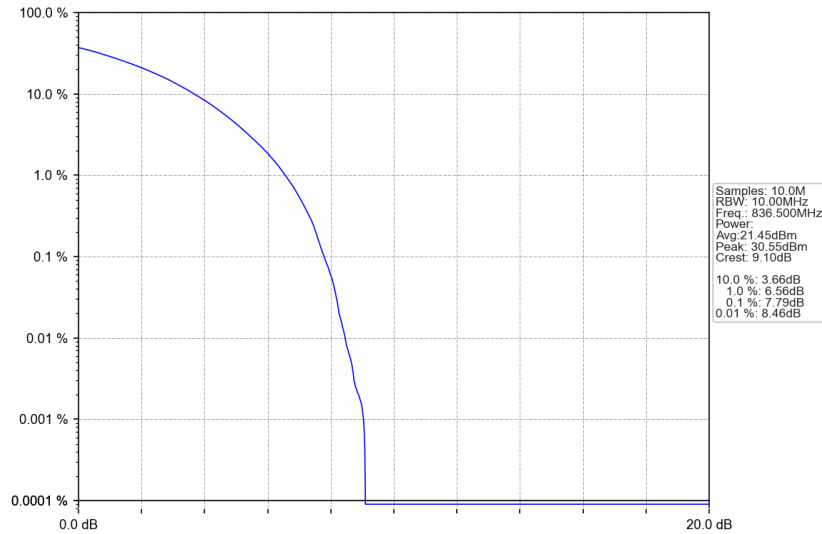
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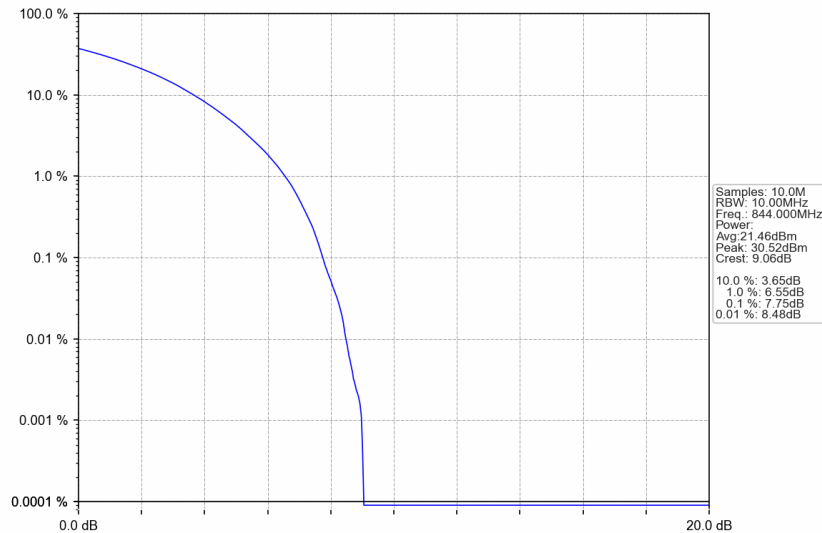
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n5_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_836.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_844MHz_Outer_Full



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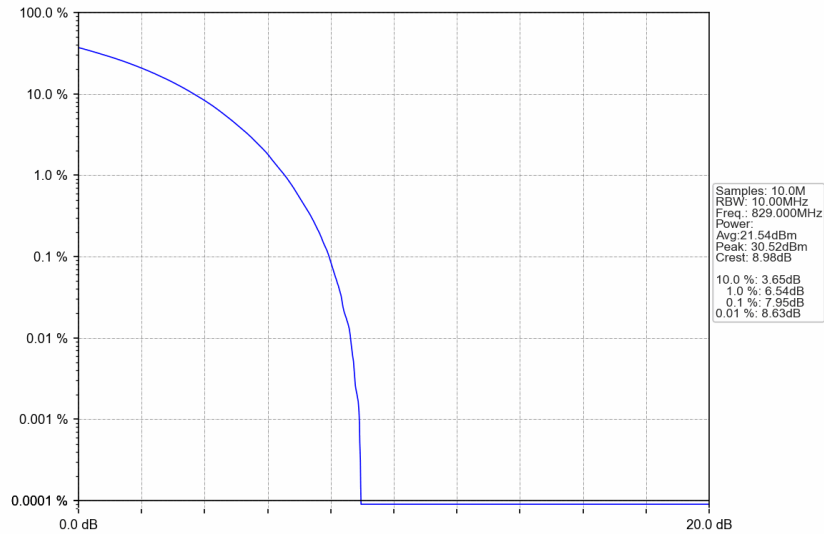
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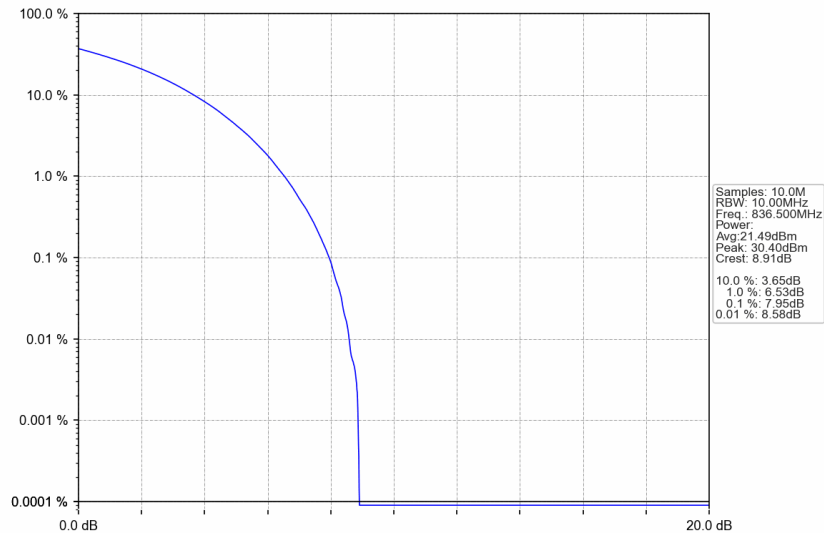
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n5_15kHz_SISO_NTNV_10MHz_CP-OFDM 16 QAM_829MHz_Outer_Full



n5_15kHz_SISO_NTNV_10MHz_CP-OFDM 16 QAM_836.5MHz_Outer_Full

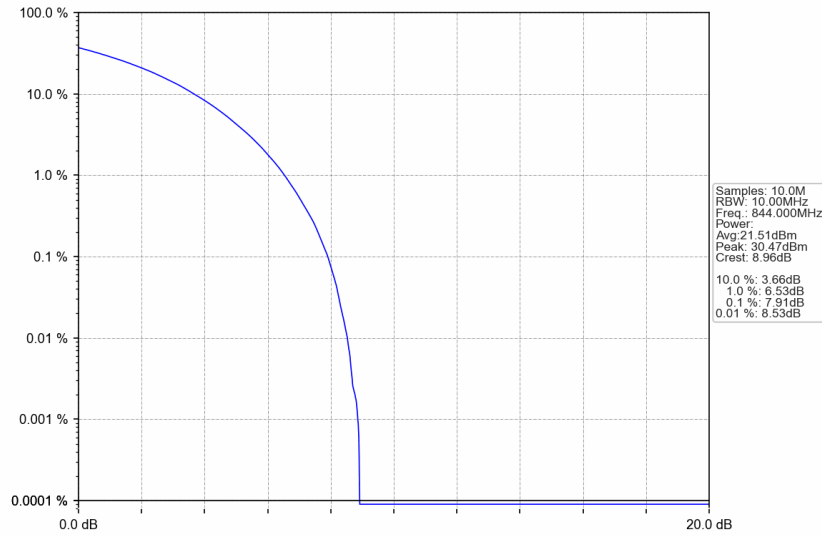


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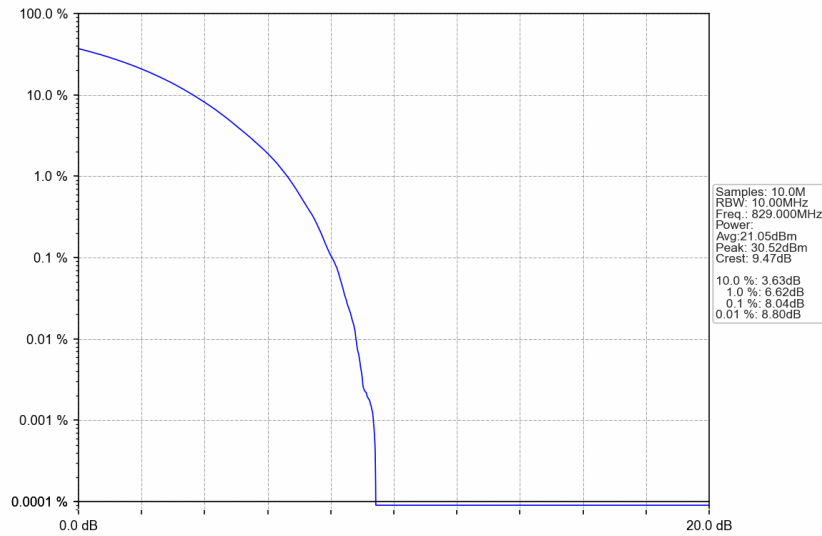
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n5_15kHz_SISO_NTNV_10MHz_CP-OFDM 16 QAM_844MHz_Outer_Full



n5_15kHz_SISO_NTNV_10MHz_CP-OFDM 64 QAM_829MHz_Outer_Full



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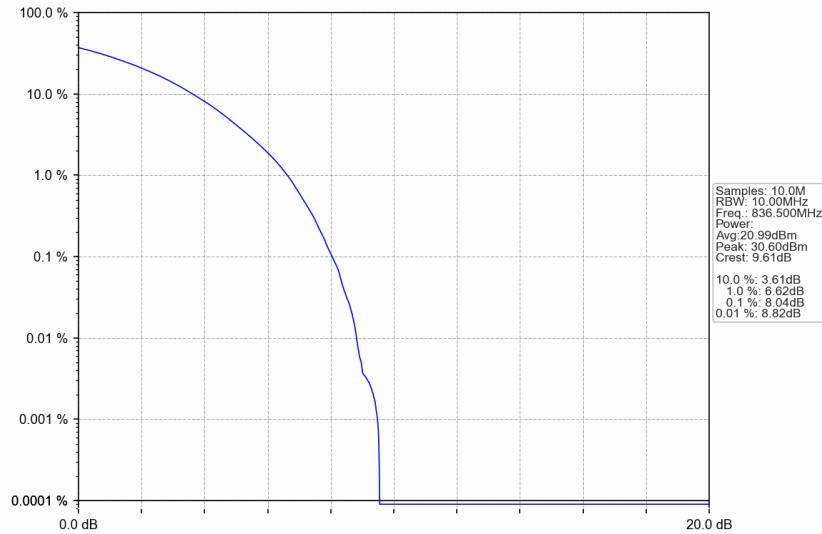
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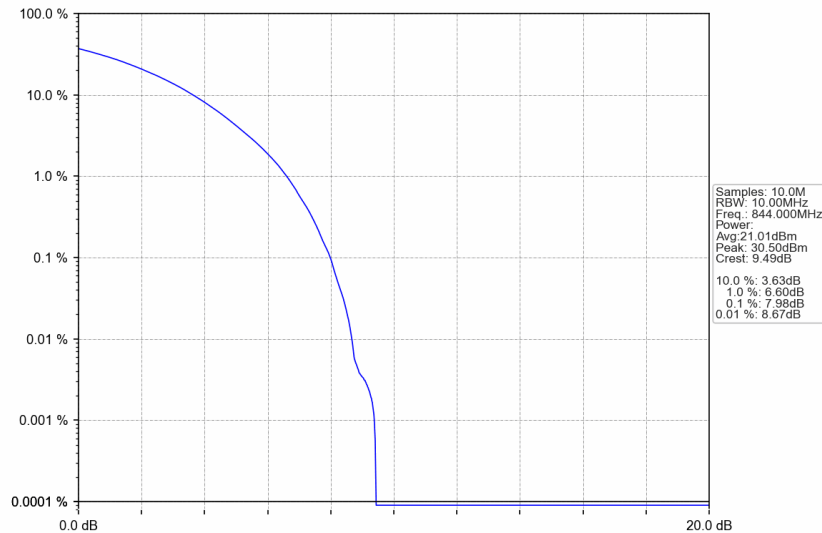
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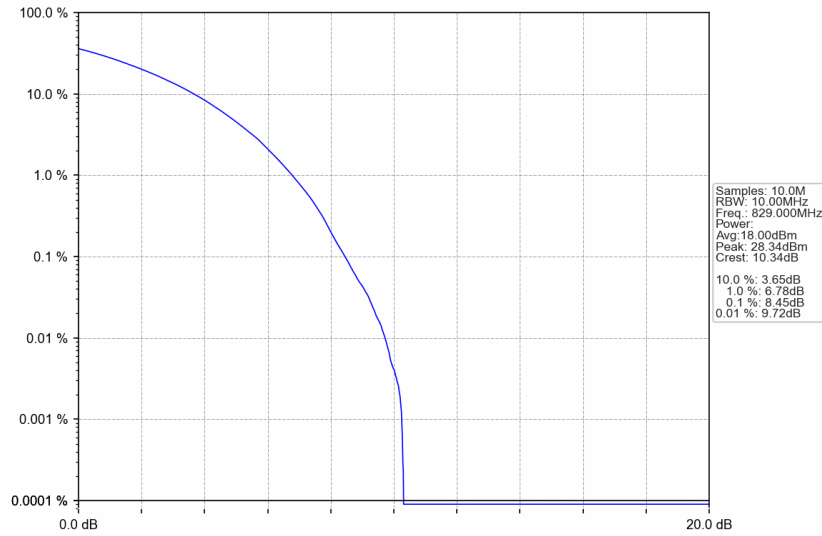
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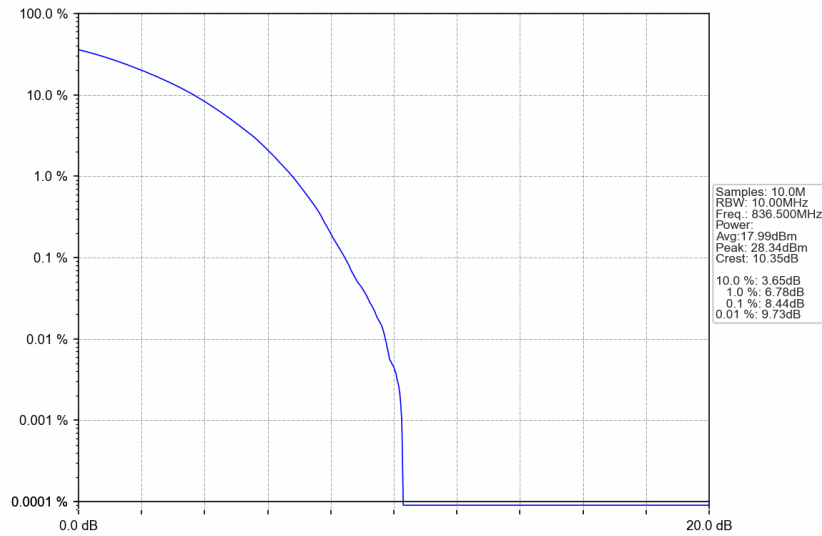
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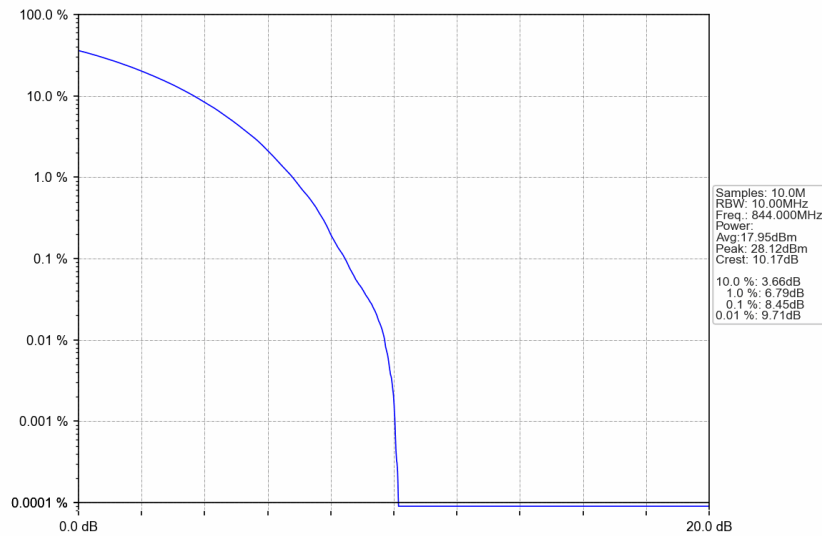
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Report No.: SEWM2311000456RG02

Rev.: 01

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5.3 15k_SISO_15MHz_NTNV

5.3.1 Test Result

5G NR n5 SCS=15kHz SISO 15MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dB)				Verdict
			Ant1	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	831.5	Outer_Full	4.33	/	/	<=13	Pass
	836.5	Outer_Full	4.37	/	/	<=13	Pass
	841.5	Outer_Full	4.37	/	/	<=13	Pass
DFT-s-OFDM QPSK	831.5	Outer_Full	5.31	/	/	<=13	Pass
	836.5	Outer_Full	5.32	/	/	<=13	Pass
	841.5	Outer_Full	5.31	/	/	<=13	Pass
DFT-s-OFDM 16 QAM	831.5	Outer_Full	6.10	/	/	<=13	Pass
	836.5	Outer_Full	6.12	/	/	<=13	Pass
	841.5	Outer_Full	6.12	/	/	<=13	Pass
DFT-s-OFDM 64 QAM	831.5	Outer_Full	6.40	/	/	<=13	Pass
	836.5	Outer_Full	6.41	/	/	<=13	Pass
	841.5	Outer_Full	6.41	/	/	<=13	Pass
DFT-s-OFDM 256 QAM	831.5	Outer_Full	6.55	/	/	<=13	Pass
	836.5	Outer_Full	6.55	/	/	<=13	Pass
	841.5	Outer_Full	6.56	/	/	<=13	Pass
CP-OFDM QPSK	831.5	Outer_Full	7.78	/	/	<=13	Pass
	836.5	Outer_Full	7.88	/	/	<=13	Pass
	841.5	Outer_Full	7.84	/	/	<=13	Pass
CP-OFDM 16 QAM	831.5	Outer_Full	7.87	/	/	<=13	Pass
	836.5	Outer_Full	7.94	/	/	<=13	Pass
	841.5	Outer_Full	7.91	/	/	<=13	Pass
CP-OFDM 64 QAM	831.5	Outer_Full	7.91	/	/	<=13	Pass
	836.5	Outer_Full	7.95	/	/	<=13	Pass
	841.5	Outer_Full	7.93	/	/	<=13	Pass
CP-OFDM 256 QAM	831.5	Outer_Full	8.53	/	/	<=13	Pass
	836.5	Outer_Full	8.54	/	/	<=13	Pass
	841.5	Outer_Full	8.57	/	/	<=13	Pass

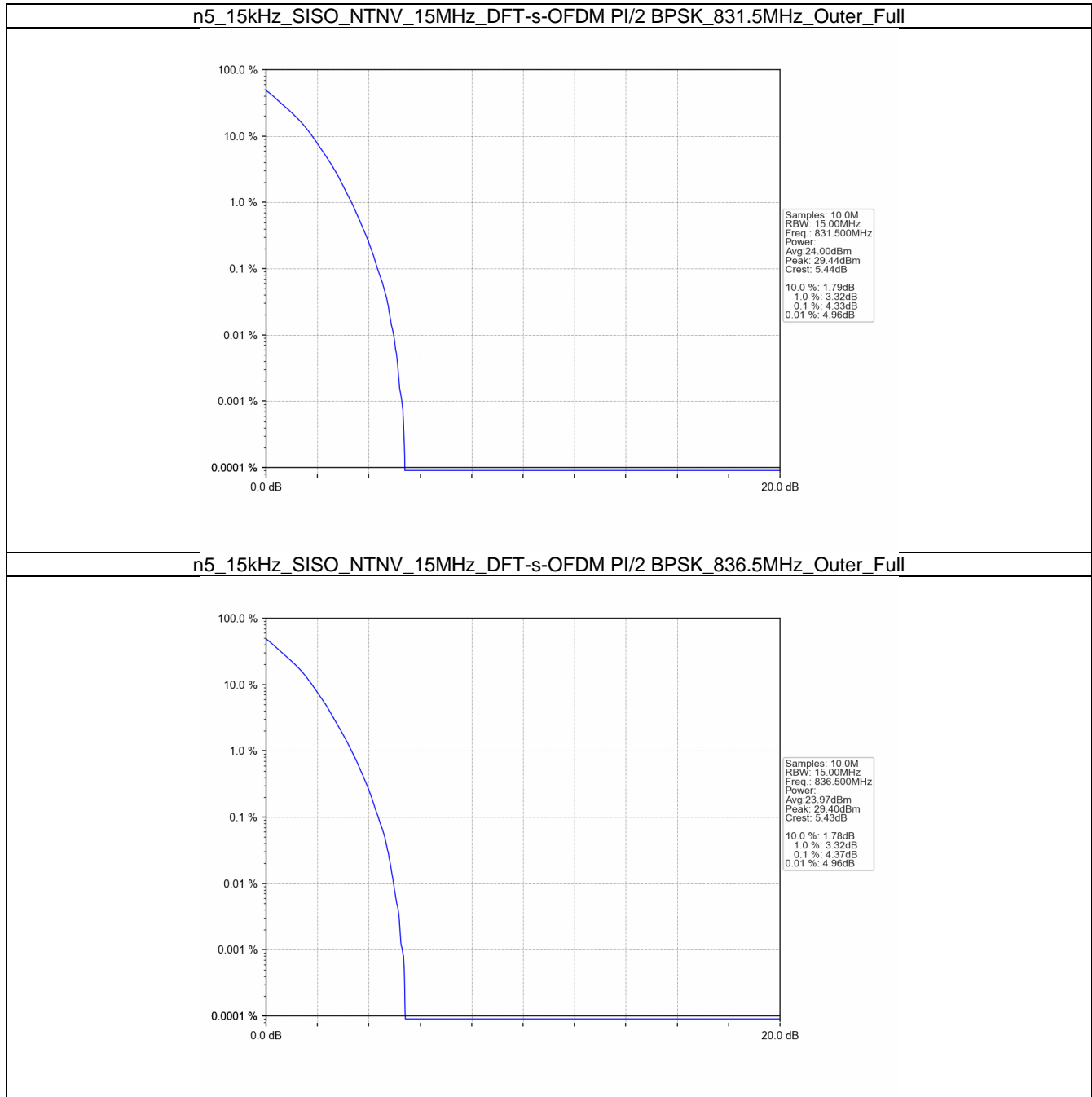


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5.3.2 Test Graph

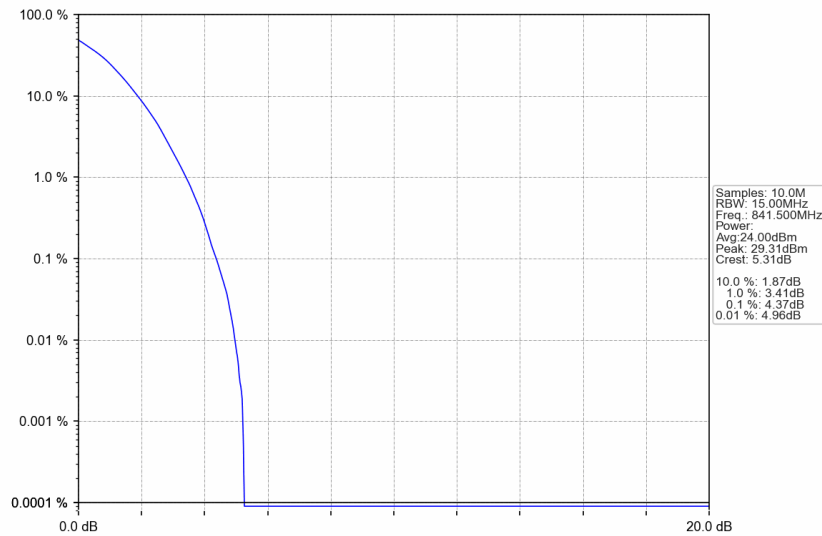


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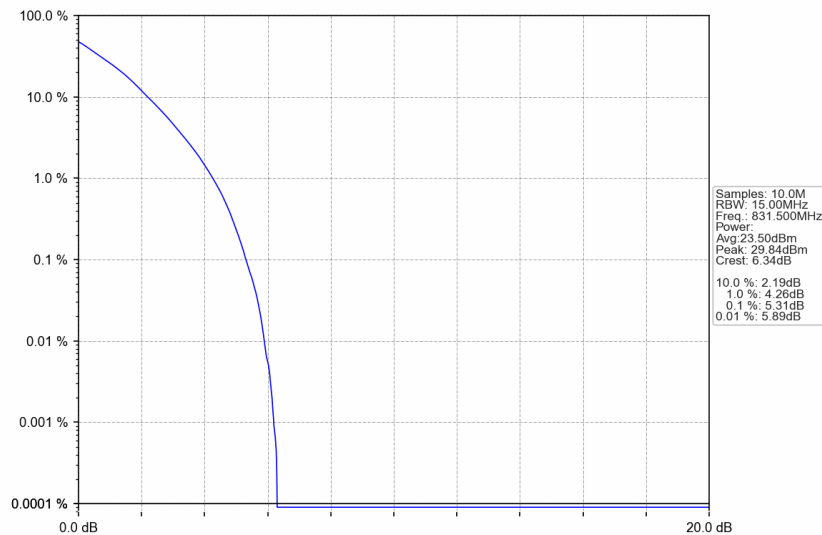
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n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM PI/2 BPSK_841.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM QPSK_831.5MHz_Outer_Full



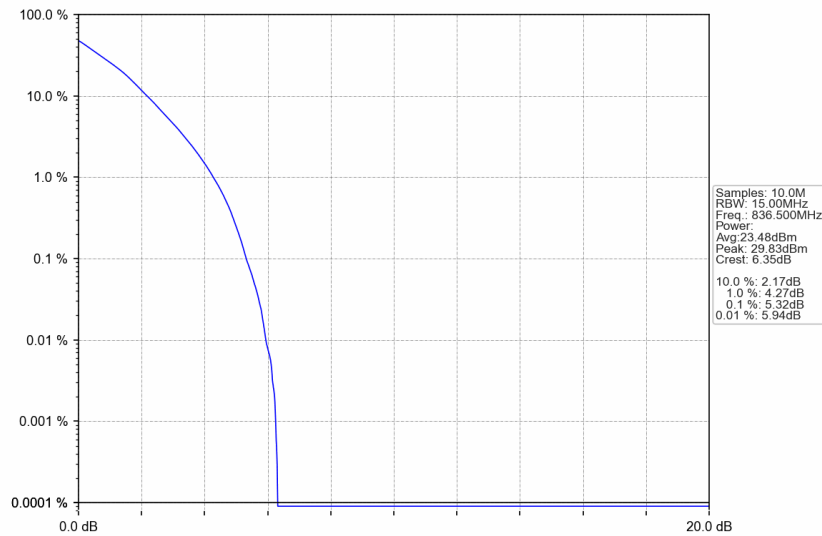
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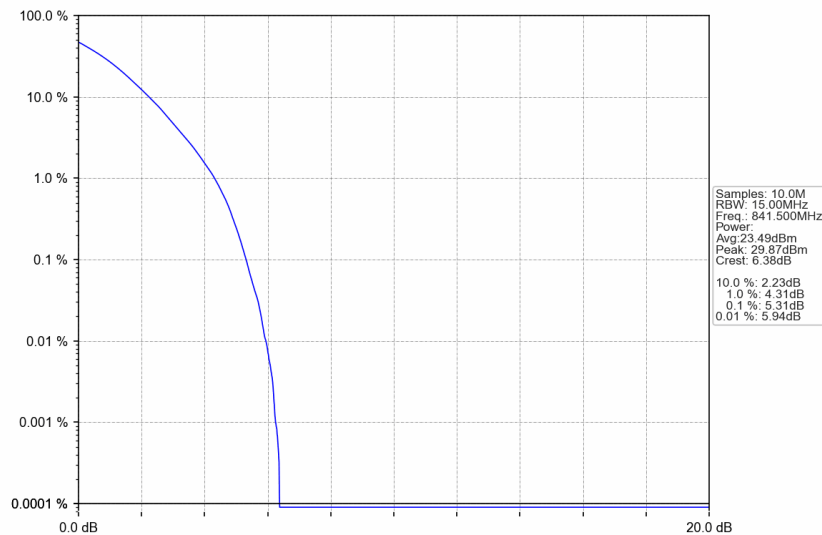
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n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM QPSK_836.5MHz_Outer_Full



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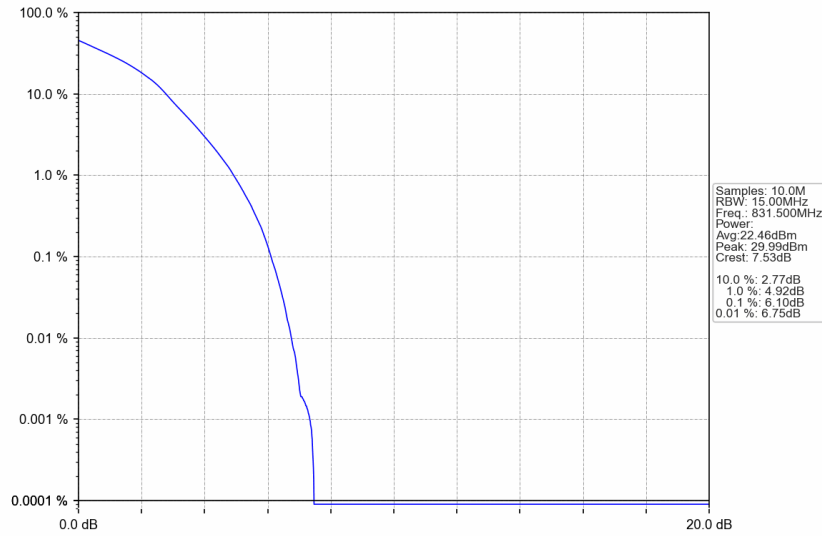
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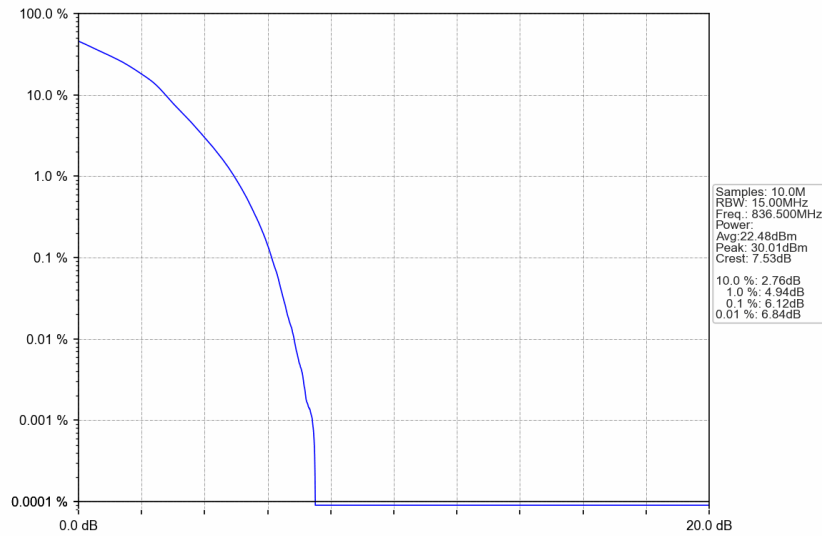
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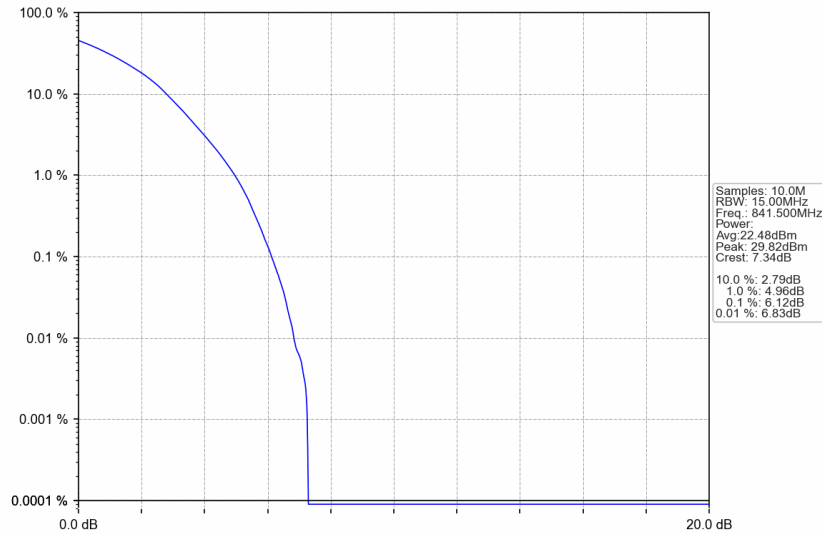
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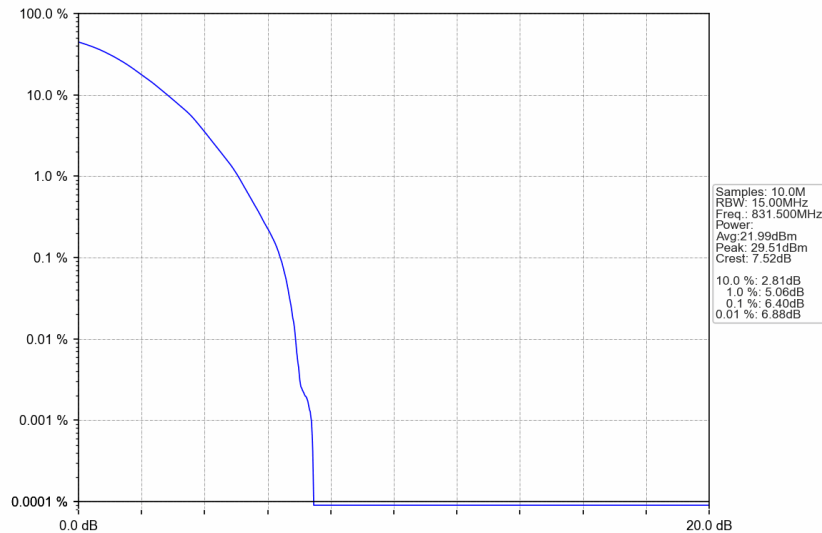
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n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 64 QAM_831.5MHz_Outer_Full

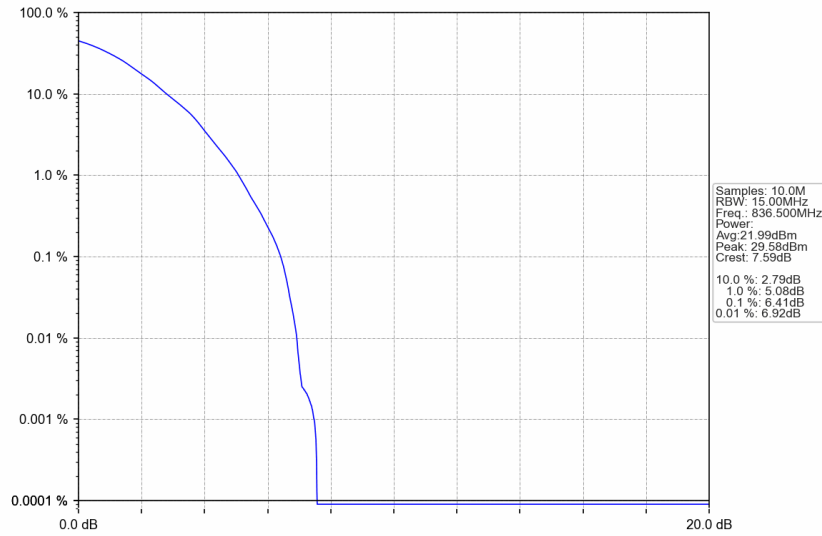


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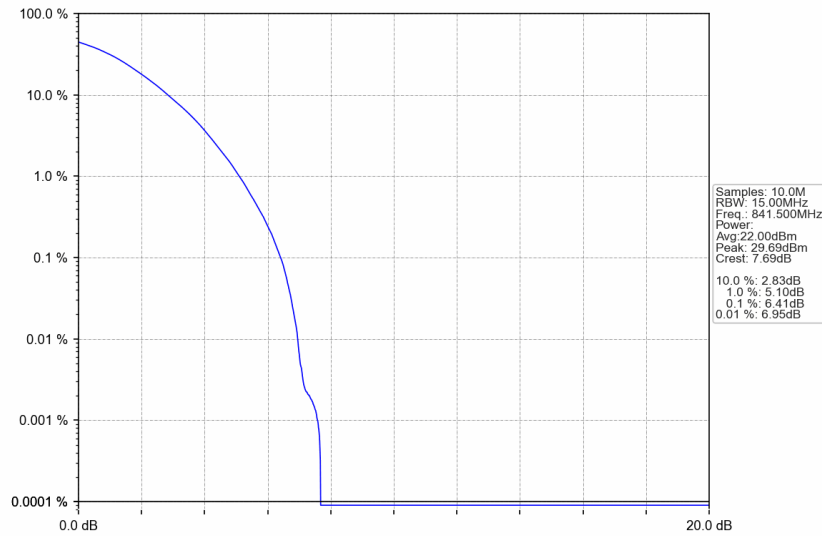
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n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 64 QAM_836.5MHz_Outer_Full



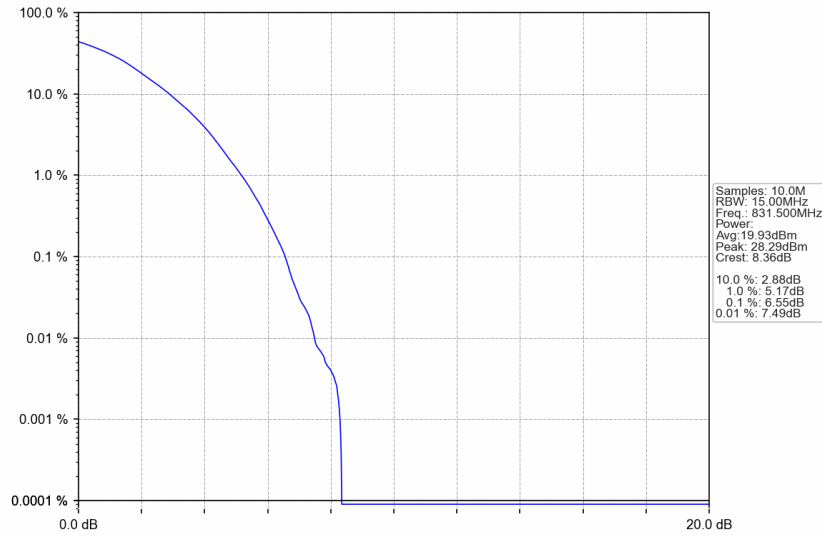
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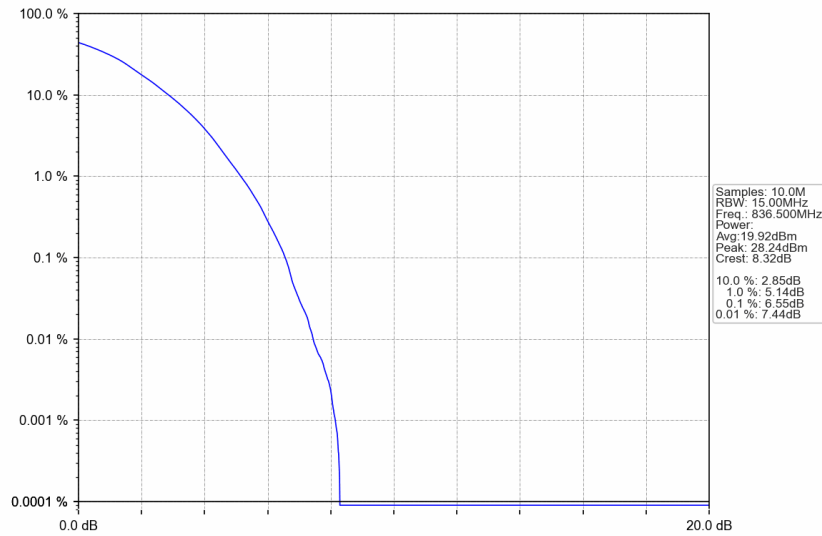
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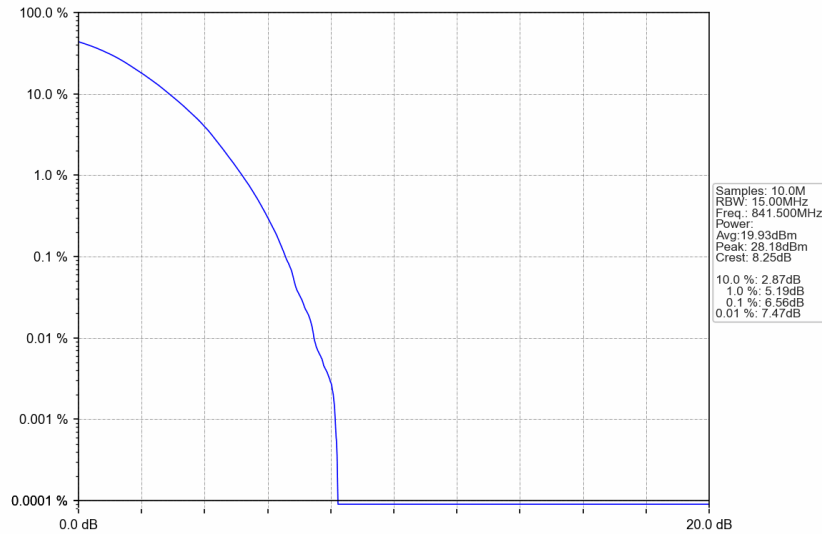


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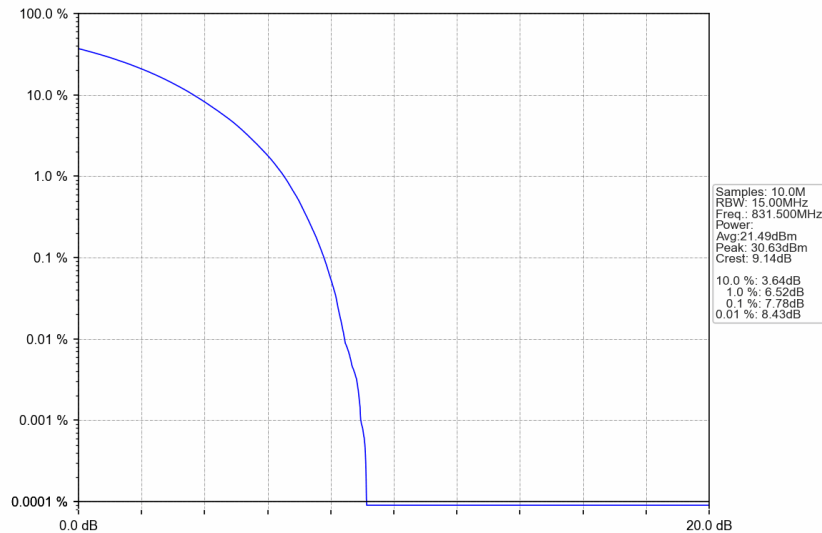
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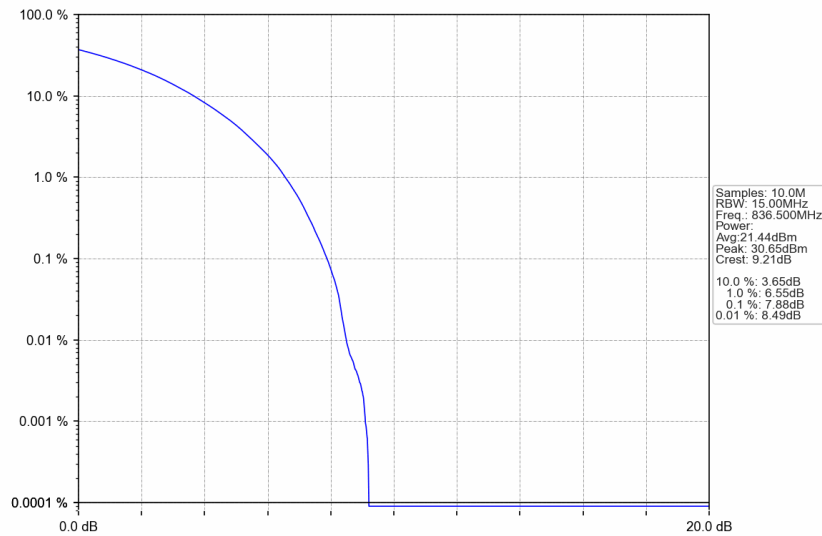
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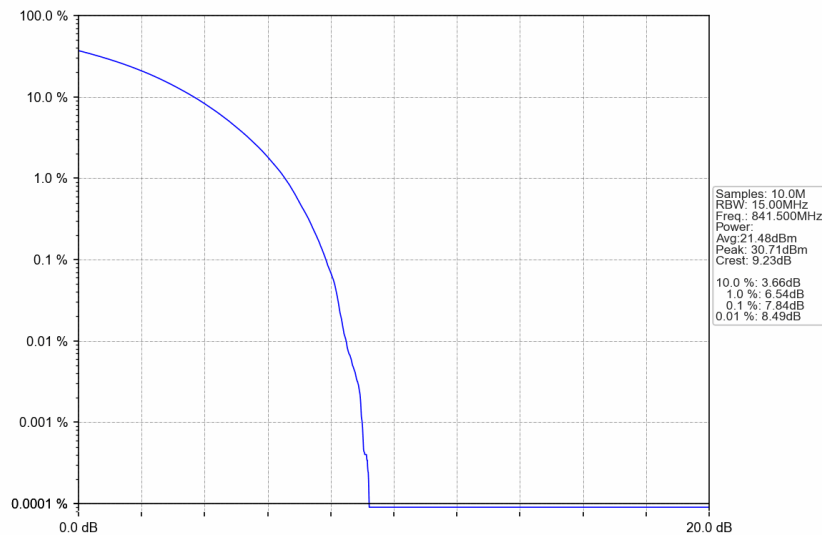
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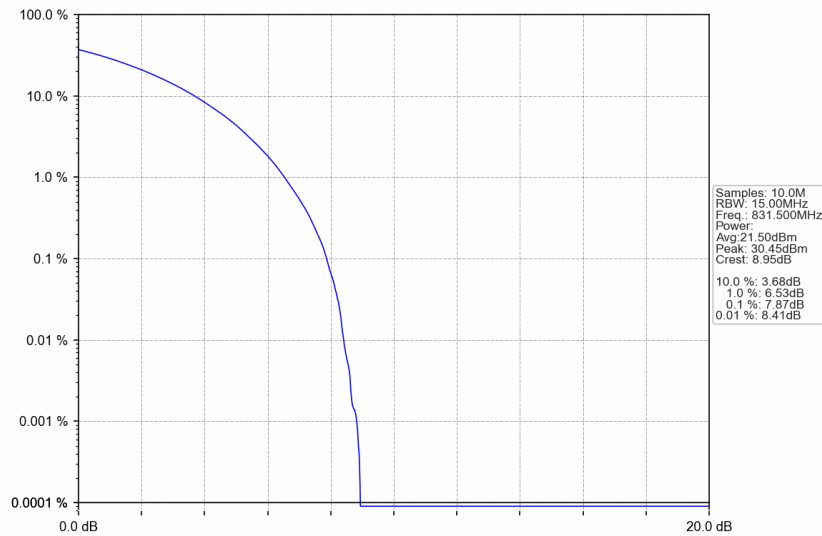
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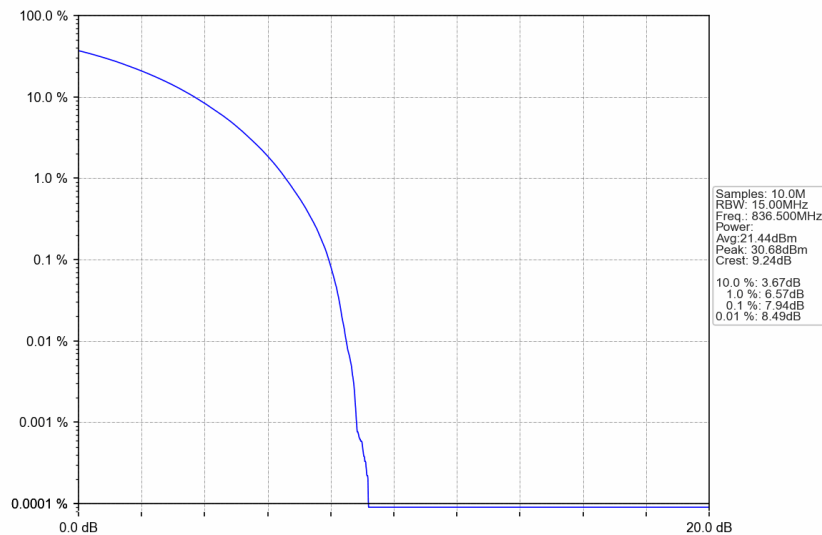
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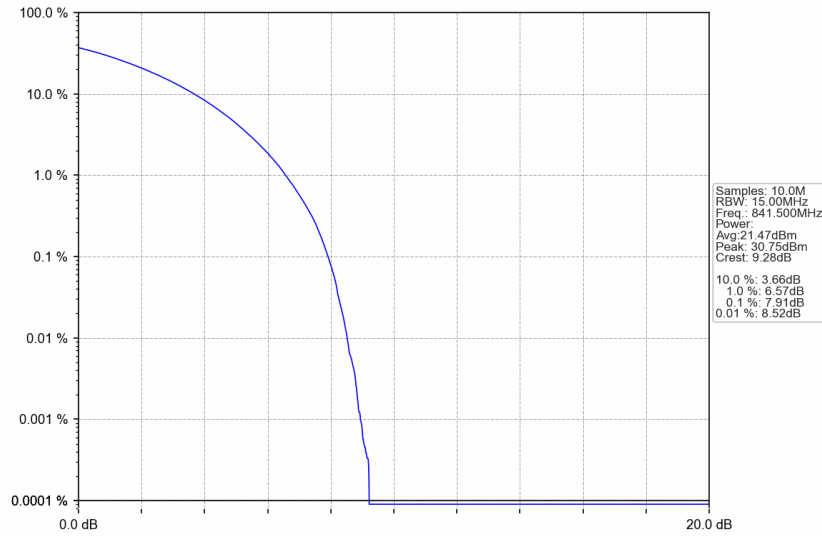
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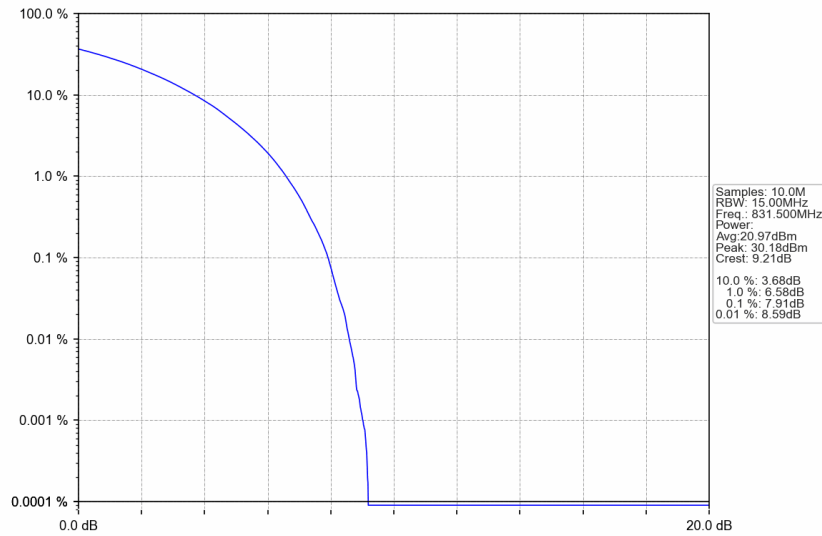
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n5_15kHz_SISO_NTNV_15MHz_CP-OFDM 64 QAM_831.5MHz_Outer_Full

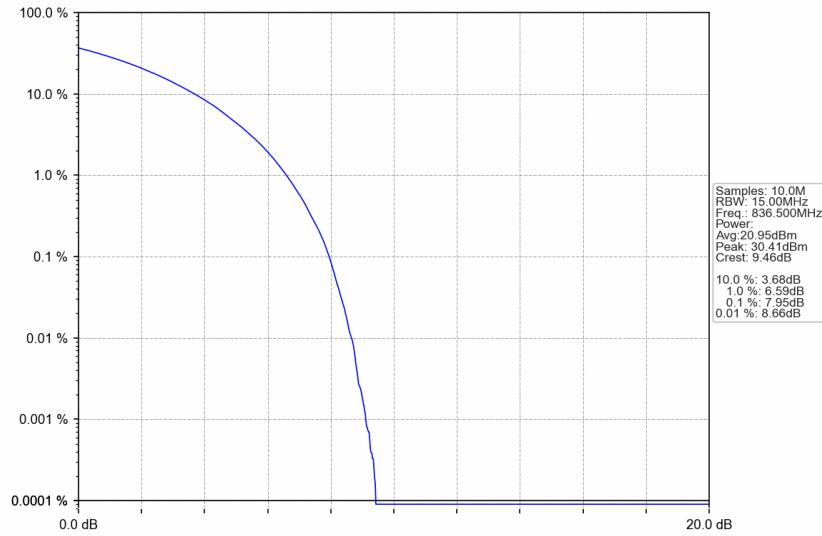


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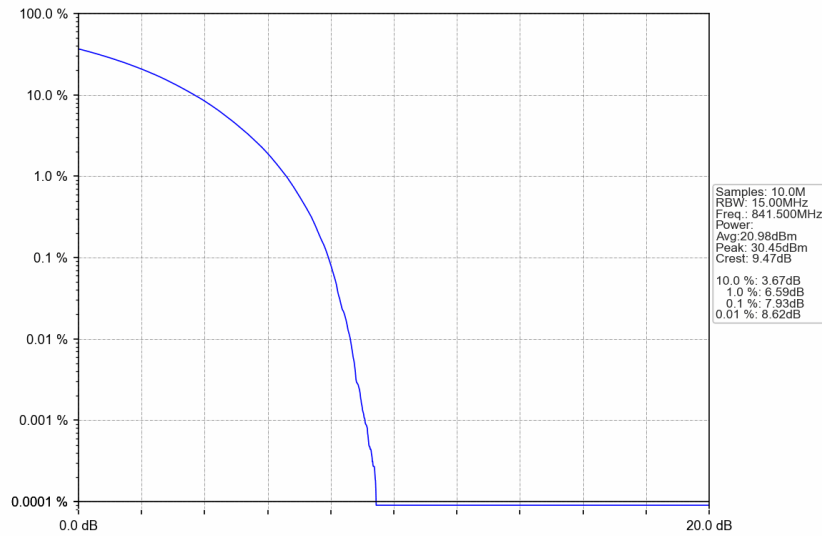
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n5_15kHz_SISO_NTNV_15MHz_CP-OFDM 64 QAM_836.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_15MHz_CP-OFDM 64 QAM_841.5MHz_Outer_Full



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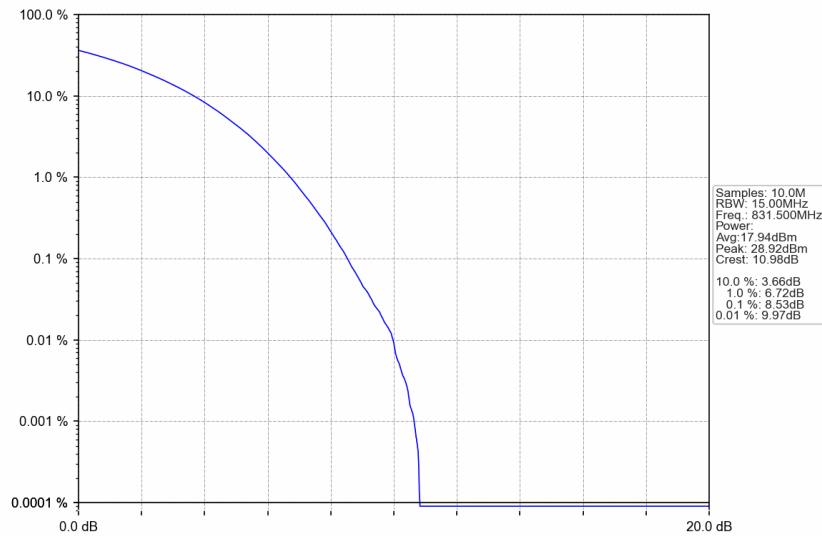


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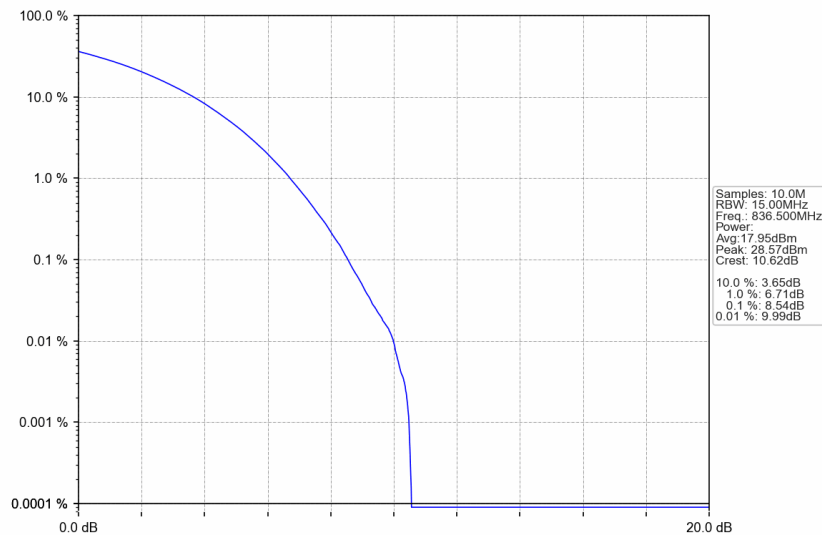
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n5_15kHz_SISO_NTNV_15MHz_CP-OFDM 256 QAM_831.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_15MHz_CP-OFDM 256 QAM_836.5MHz_Outer_Full



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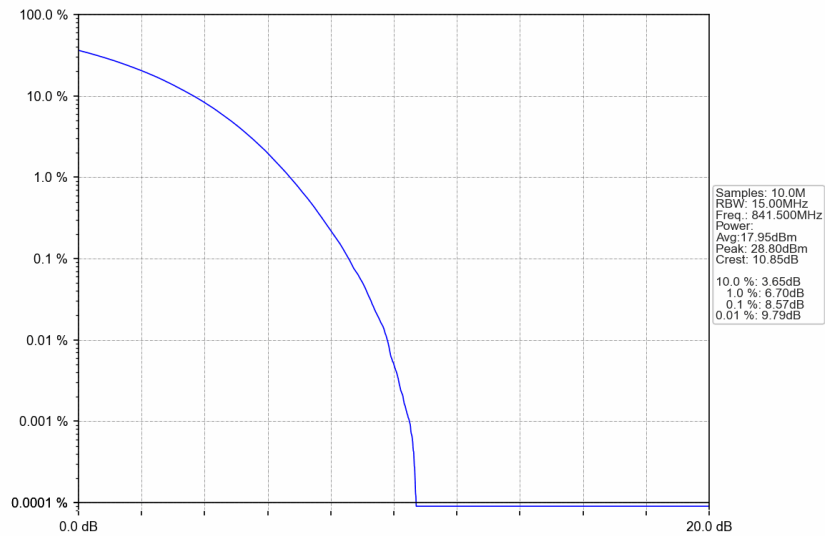


Report No.: SEWM2311000456RG02

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n5_15kHz_SISO_NTNV_15MHz_CP-OFDM 256 QAM_841.5MHz_Outer_Full



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5.4 15k_SISO_20MHz_NTNV

5.4.1 Test Result

5G NR n5 SCS=15kHz SISO 20MHz NTNv							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dB)				Verdict
			Ant1	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	834	Outer_Full	4.24	/	/	<=13	Pass
	836.5	Outer_Full	4.23	/	/	<=13	Pass
	839	Outer_Full	4.27	/	/	<=13	Pass
DFT-s-OFDM QPSK	834	Outer_Full	5.29	/	/	<=13	Pass
	836.5	Outer_Full	5.28	/	/	<=13	Pass
	839	Outer_Full	5.34	/	/	<=13	Pass
DFT-s-OFDM 16 QAM	834	Outer_Full	6.07	/	/	<=13	Pass
	836.5	Outer_Full	6.07	/	/	<=13	Pass
	839	Outer_Full	6.07	/	/	<=13	Pass
DFT-s-OFDM 64 QAM	834	Outer_Full	6.37	/	/	<=13	Pass
	836.5	Outer_Full	6.36	/	/	<=13	Pass
	839	Outer_Full	6.36	/	/	<=13	Pass
DFT-s-OFDM 256 QAM	834	Outer_Full	6.54	/	/	<=13	Pass
	836.5	Outer_Full	6.57	/	/	<=13	Pass
	839	Outer_Full	6.57	/	/	<=13	Pass
CP-OFDM QPSK	834	Outer_Full	7.84	/	/	<=13	Pass
	836.5	Outer_Full	7.83	/	/	<=13	Pass
	839	Outer_Full	7.79	/	/	<=13	Pass
CP-OFDM 16 QAM	834	Outer_Full	7.88	/	/	<=13	Pass
	836.5	Outer_Full	7.88	/	/	<=13	Pass
	839	Outer_Full	7.86	/	/	<=13	Pass
CP-OFDM 64 QAM	834	Outer_Full	8.15	/	/	<=13	Pass
	836.5	Outer_Full	8.13	/	/	<=13	Pass
	839	Outer_Full	8.08	/	/	<=13	Pass
CP-OFDM 256 QAM	834	Outer_Full	8.42	/	/	<=13	Pass
	836.5	Outer_Full	8.44	/	/	<=13	Pass
	839	Outer_Full	8.43	/	/	<=13	Pass

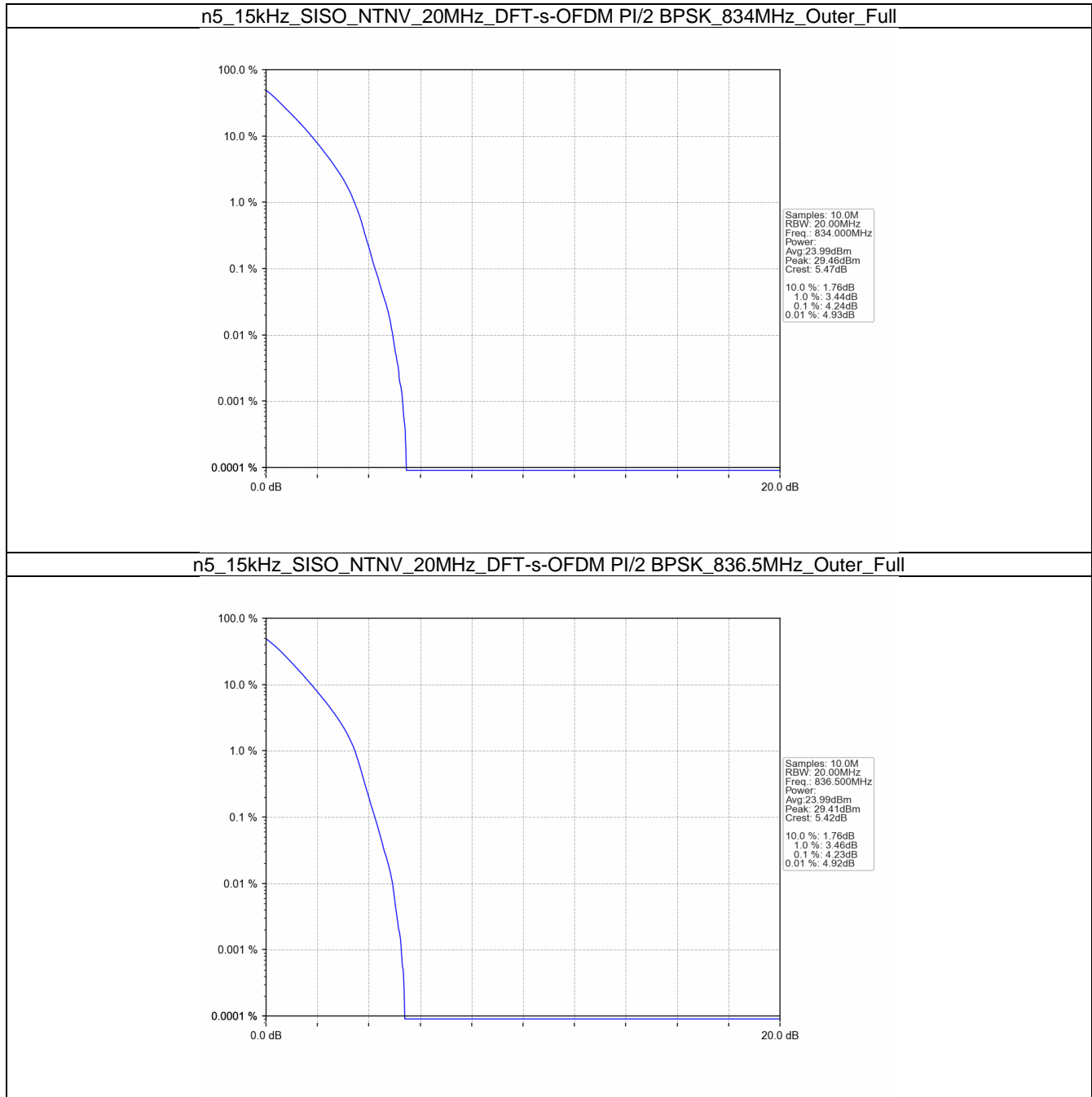


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5.4.2 Test Graph

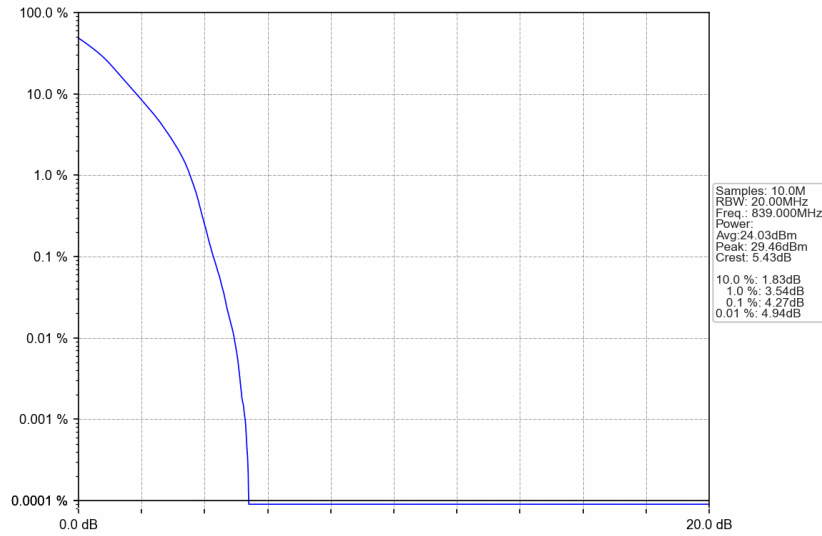


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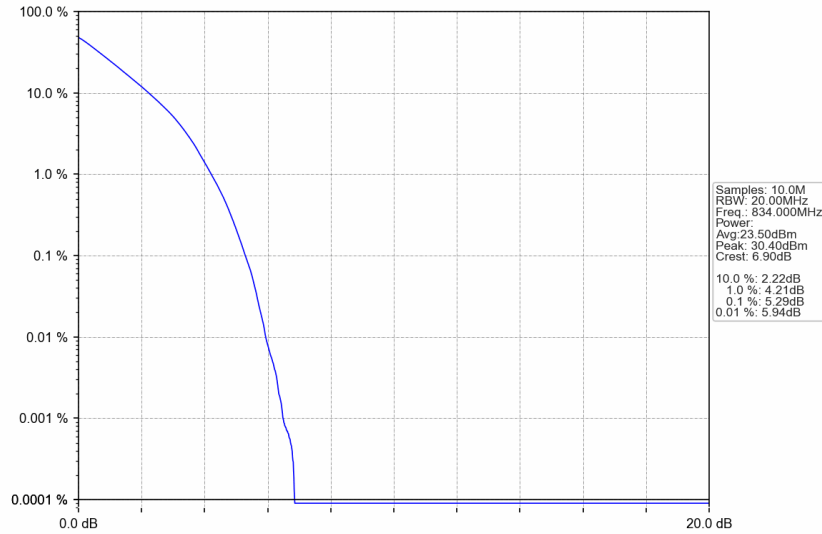
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n5_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM PI/2 BPSK_839MHz_Outer_Full



n5_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM QPSK_834MHz_Outer_Full

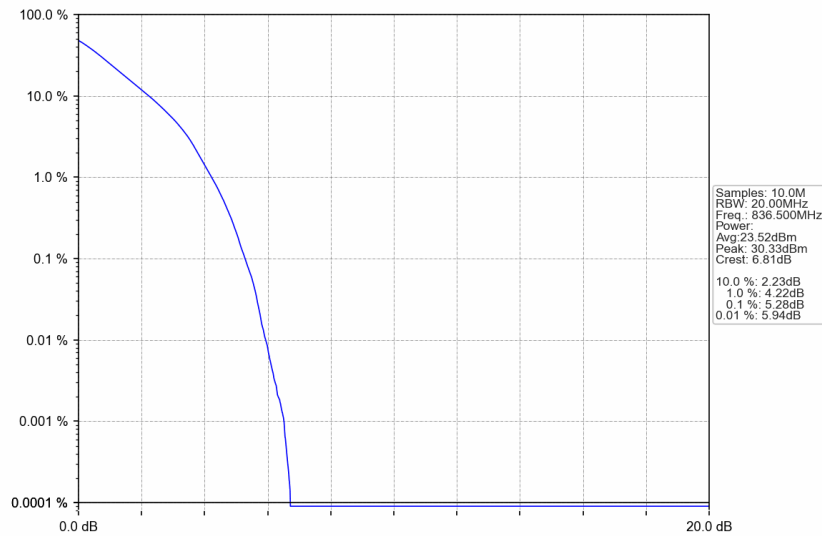


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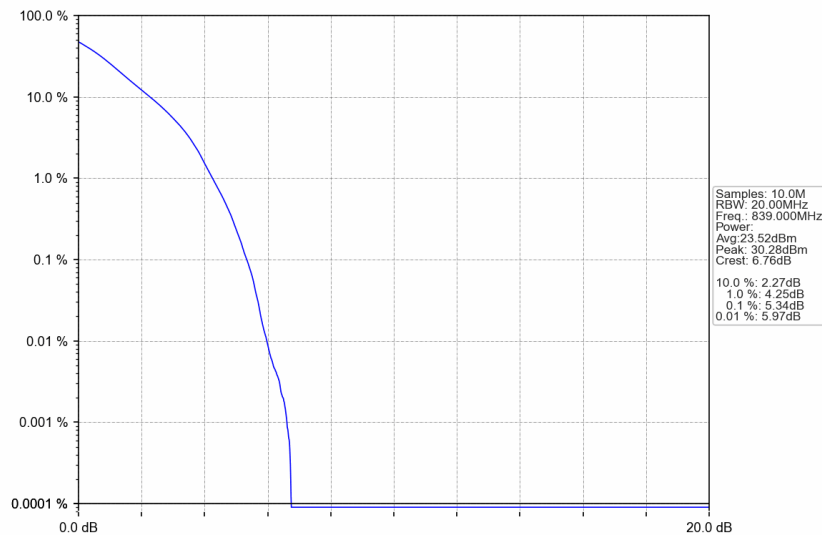
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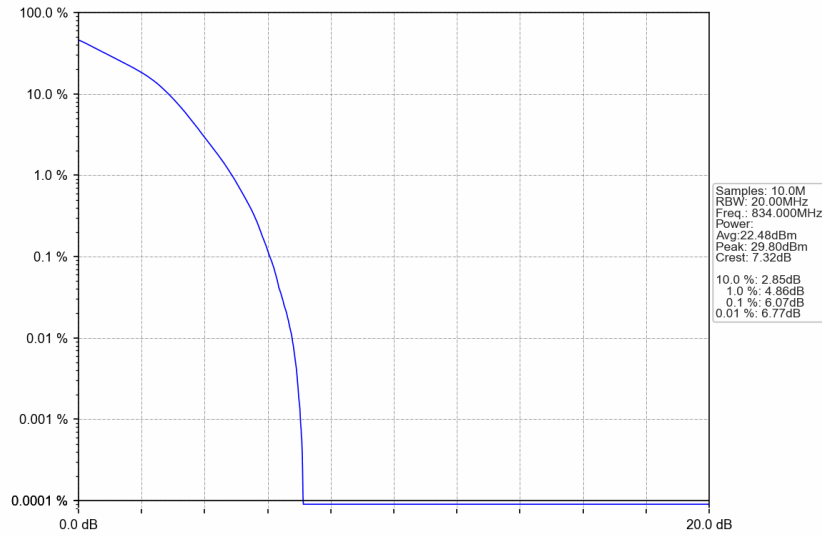


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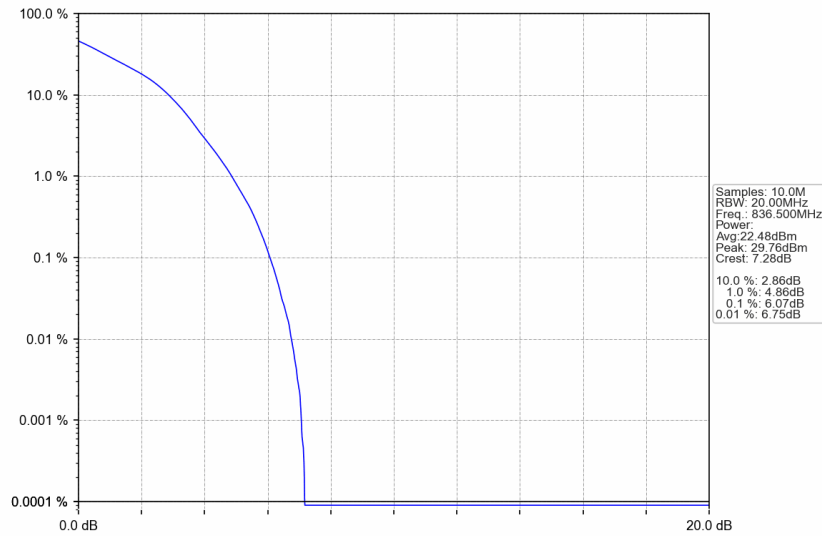
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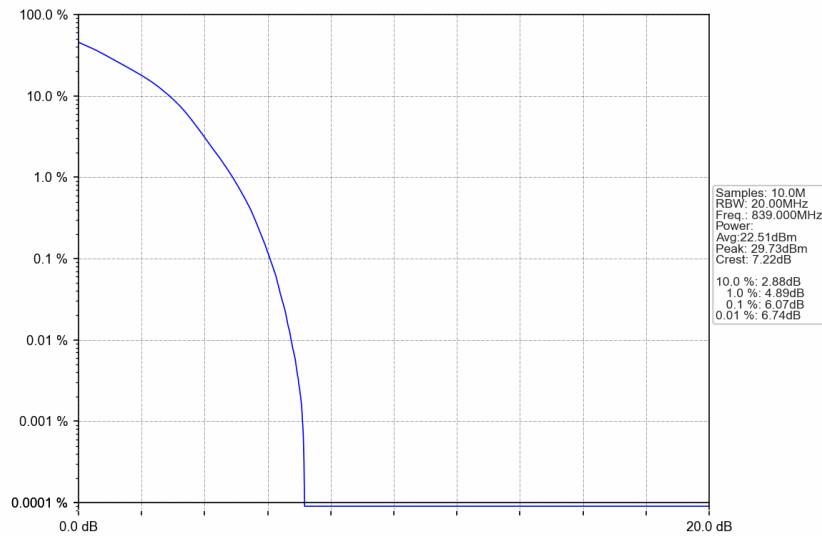


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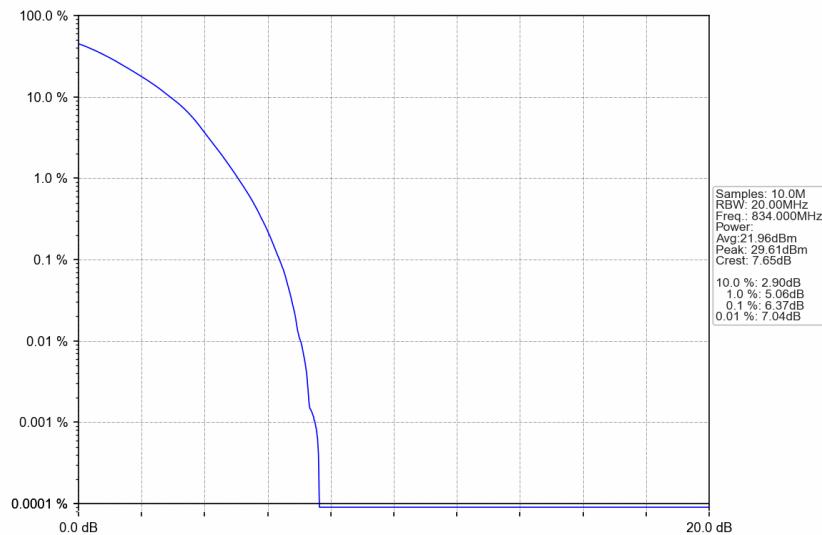
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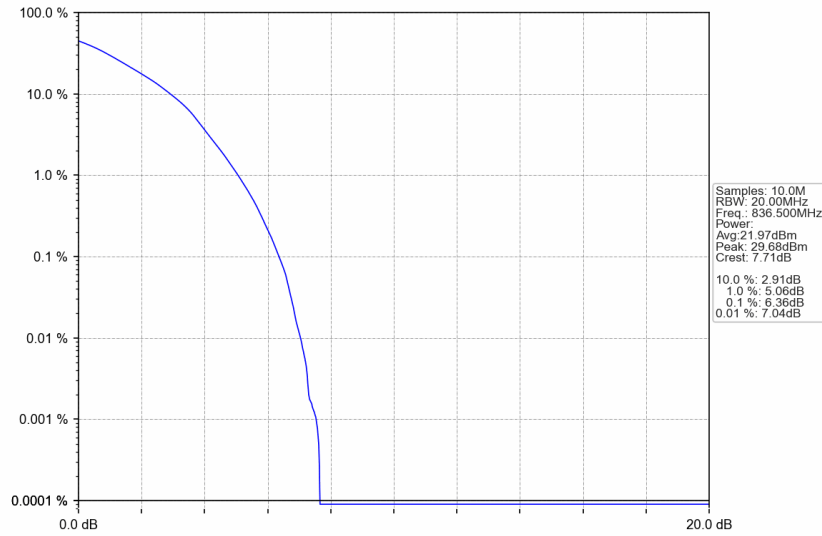
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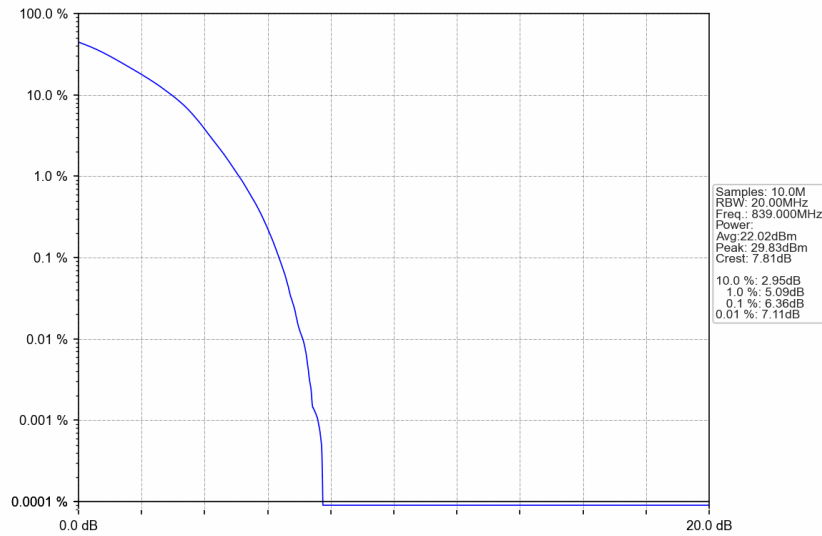
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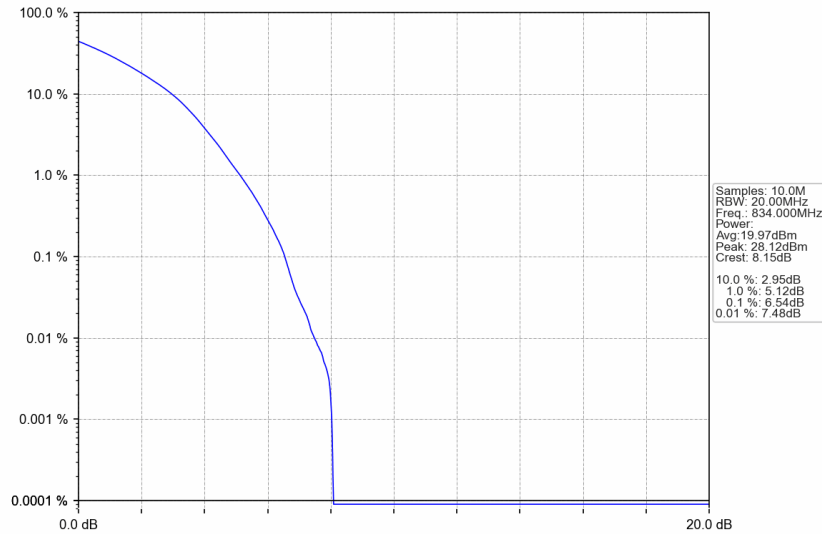
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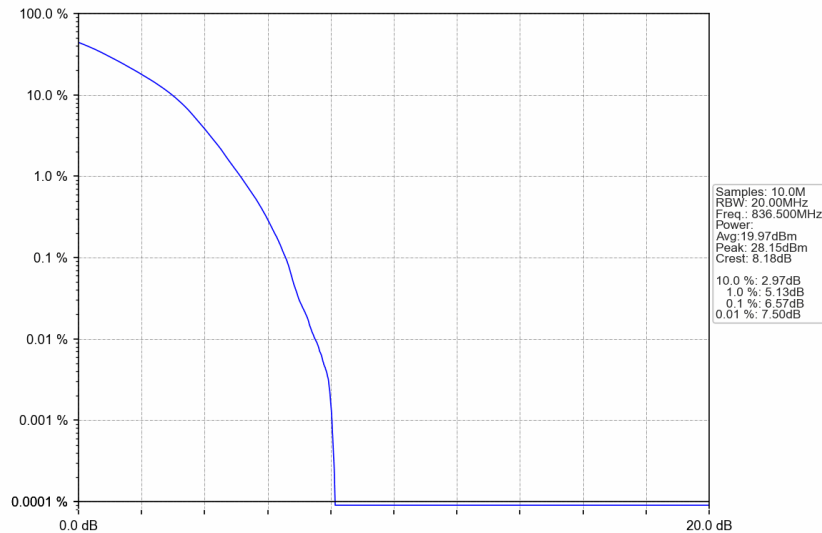
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n5_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 256 QAM_834MHz_Outer_Full



n5_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 256 QAM_836.5MHz_Outer_Full

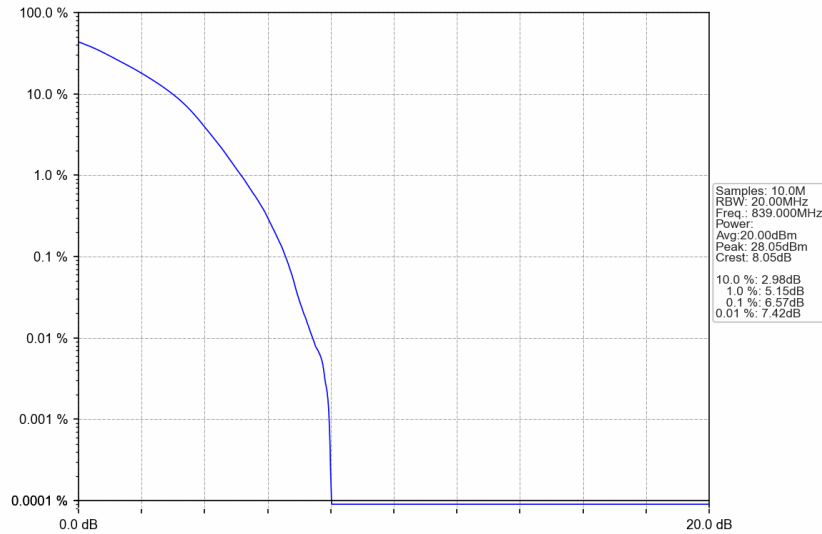


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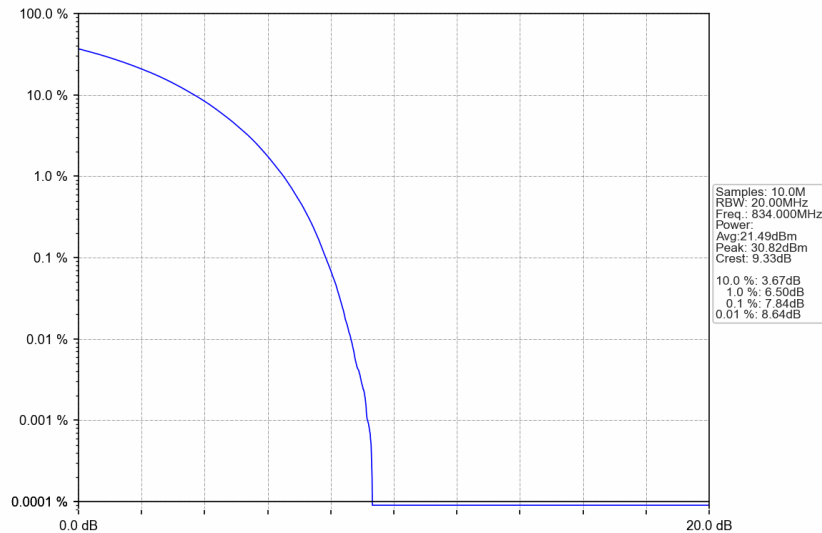
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n5_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 256 QAM_839MHz_Outer_Full



n5_15kHz_SISO_NTNV_20MHz_CP-OFDM QPSK_834MHz_Outer_Full



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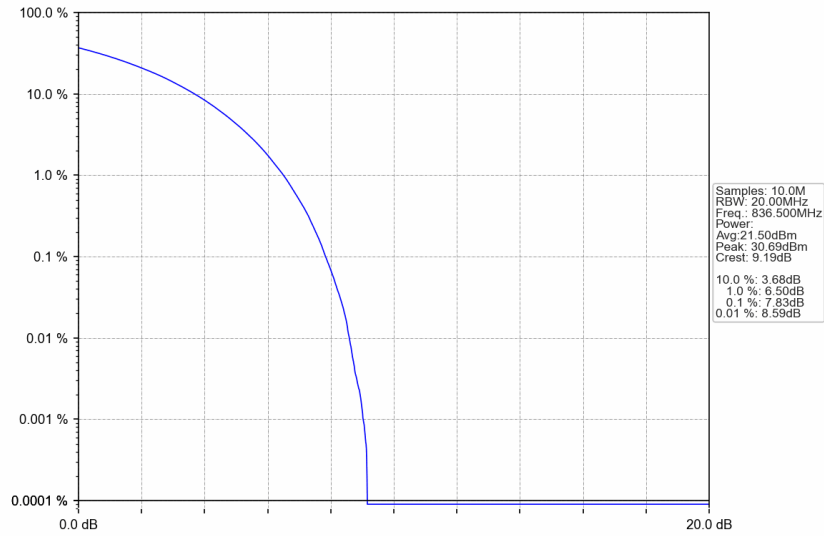
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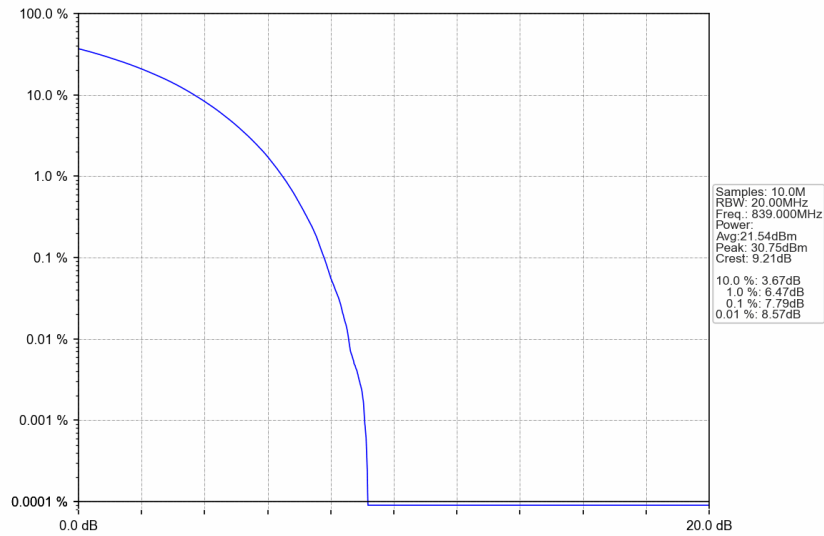
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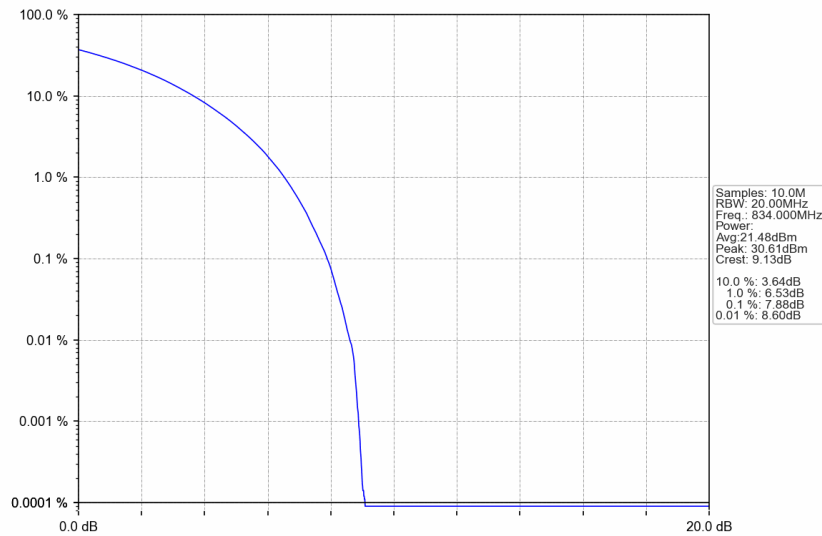


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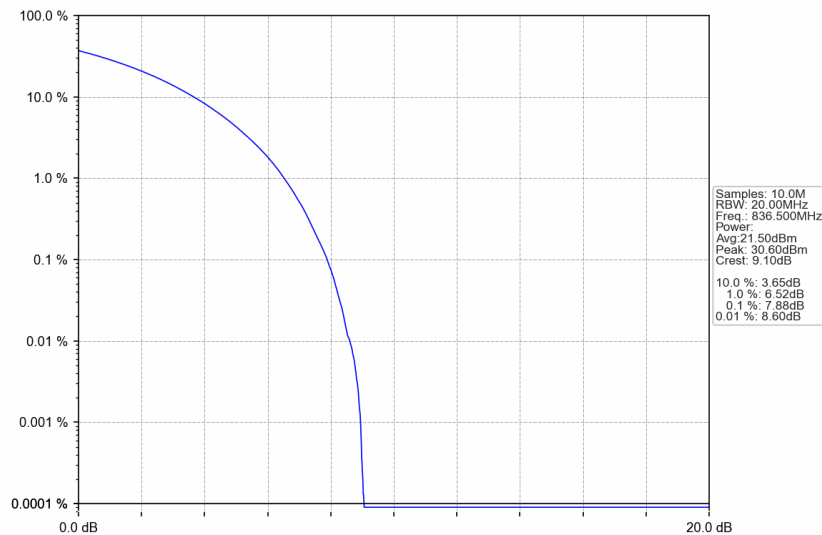
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n5_15kHz_SISO_NTNV_20MHz_CP-OFDM 16 QAM_834MHz_Outer_Full



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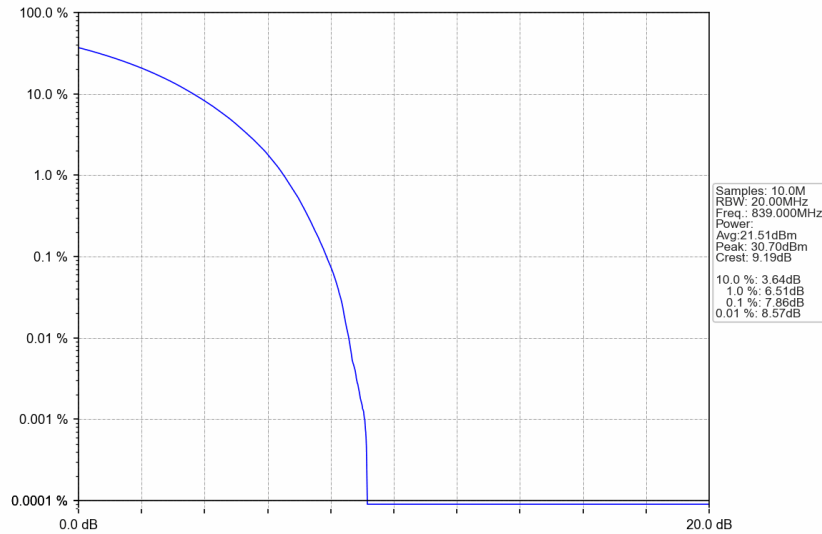


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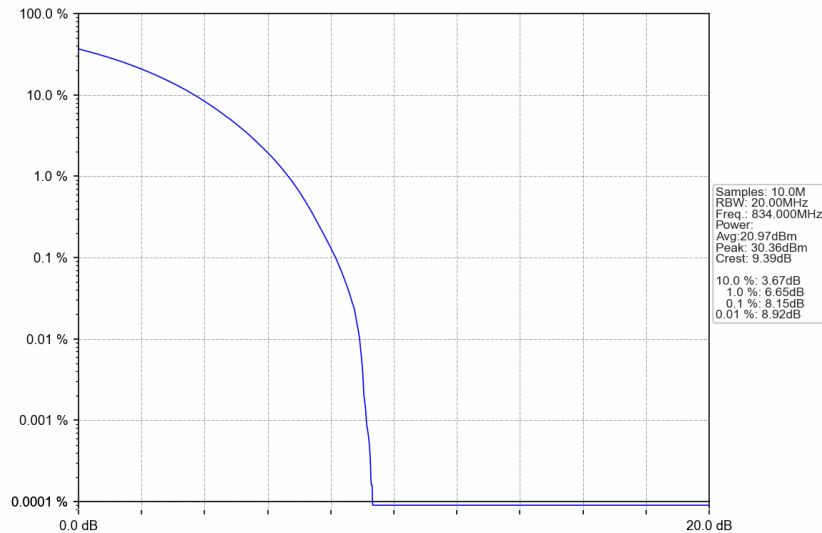
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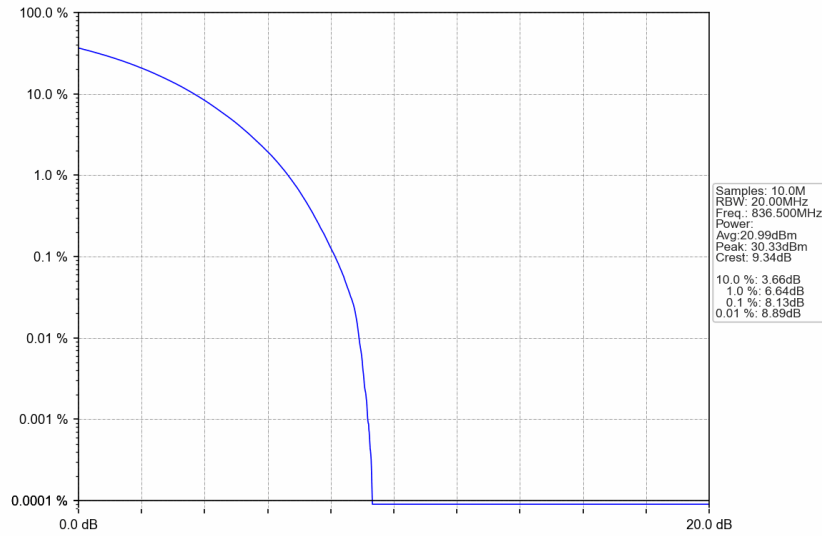


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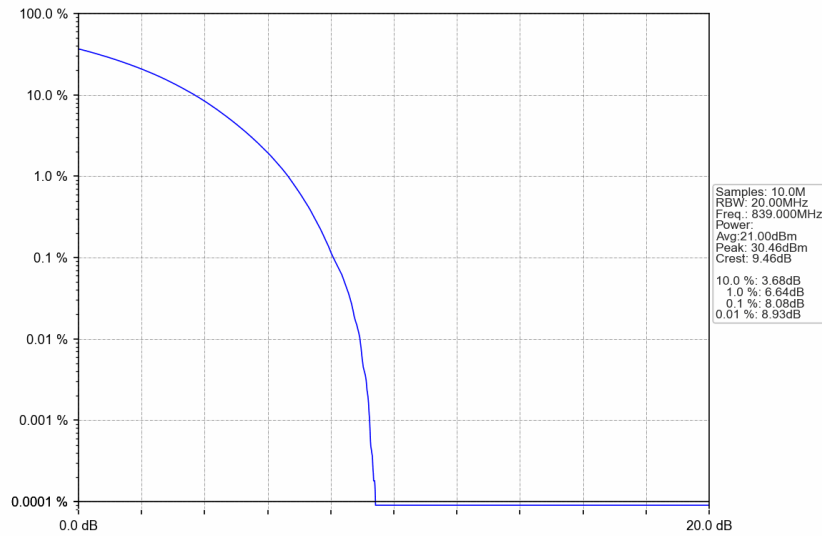
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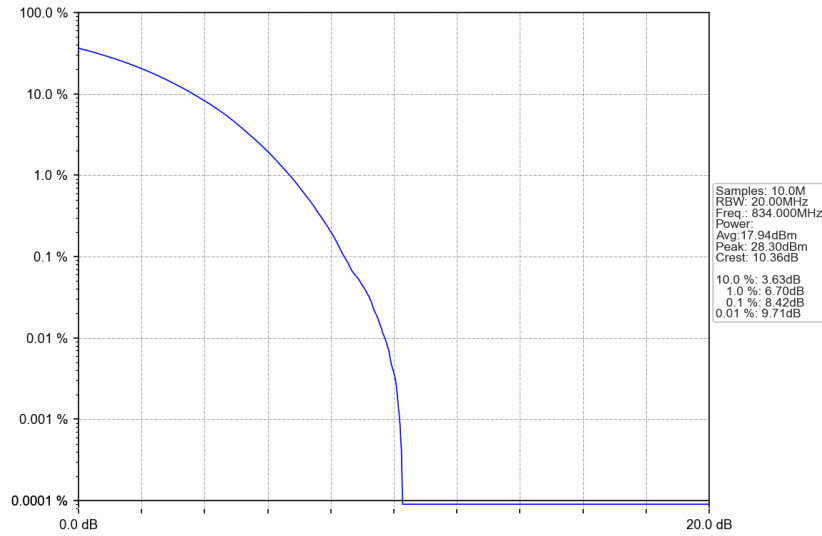


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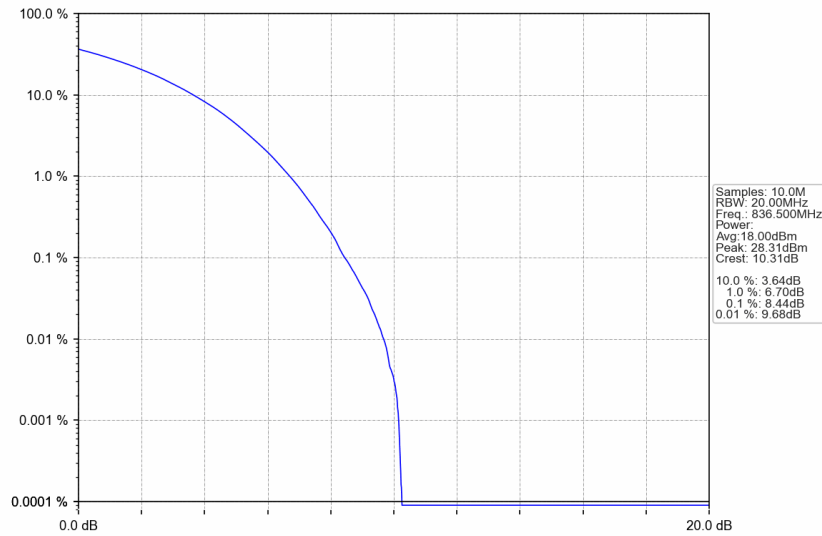
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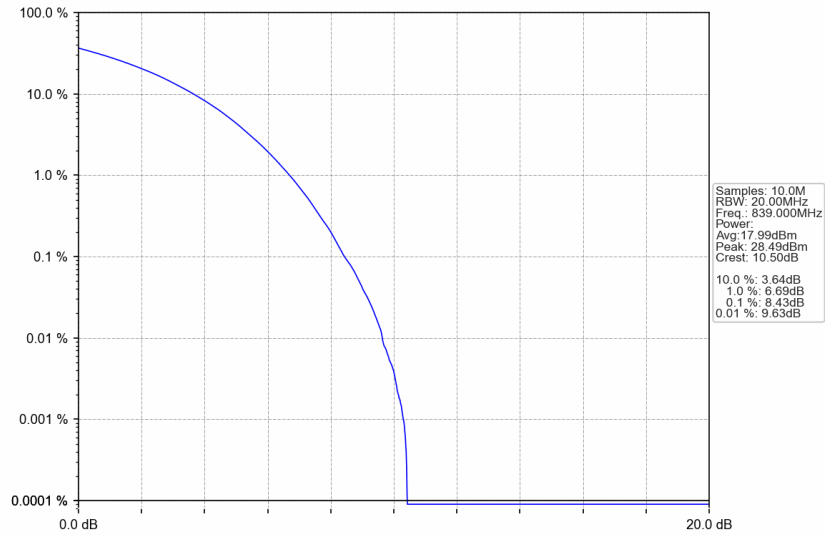


Report No.: SEWM2311000456RG02

Rev.: 01

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5.5 30k_SISO_10MHz_NTNV

5.5.1 Test Result

5G NR n5 SCS=30kHz SISO 10MHz NTV							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dB)				Verdict
			Ant1	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	829	Outer_Full	4.34	/	/	<=13	Pass
	836.5	Outer_Full	4.38	/	/	<=13	Pass
	844	Outer_Full	4.38	/	/	<=13	Pass
DFT-s-OFDM QPSK	829	Outer_Full	5.46	/	/	<=13	Pass
	836.5	Outer_Full	5.46	/	/	<=13	Pass
	844	Outer_Full	5.46	/	/	<=13	Pass
DFT-s-OFDM 16 QAM	829	Outer_Full	6.29	/	/	<=13	Pass
	836.5	Outer_Full	6.33	/	/	<=13	Pass
	844	Outer_Full	6.27	/	/	<=13	Pass
DFT-s-OFDM 64 QAM	829	Outer_Full	6.47	/	/	<=13	Pass
	836.5	Outer_Full	6.48	/	/	<=13	Pass
	844	Outer_Full	6.50	/	/	<=13	Pass
DFT-s-OFDM 256 QAM	829	Outer_Full	6.87	/	/	<=13	Pass
	836.5	Outer_Full	6.88	/	/	<=13	Pass
	844	Outer_Full	6.87	/	/	<=13	Pass
CP-OFDM QPSK	829	Outer_Full	7.90	/	/	<=13	Pass
	836.5	Outer_Full	7.92	/	/	<=13	Pass
	844	Outer_Full	7.86	/	/	<=13	Pass
CP-OFDM 16 QAM	829	Outer_Full	7.78	/	/	<=13	Pass
	836.5	Outer_Full	7.77	/	/	<=13	Pass
	844	Outer_Full	7.71	/	/	<=13	Pass
CP-OFDM 64 QAM	829	Outer_Full	7.96	/	/	<=13	Pass
	836.5	Outer_Full	7.94	/	/	<=13	Pass
	844	Outer_Full	7.92	/	/	<=13	Pass
CP-OFDM 256 QAM	829	Outer_Full	8.47	/	/	<=13	Pass
	836.5	Outer_Full	8.42	/	/	<=13	Pass
	844	Outer_Full	8.49	/	/	<=13	Pass

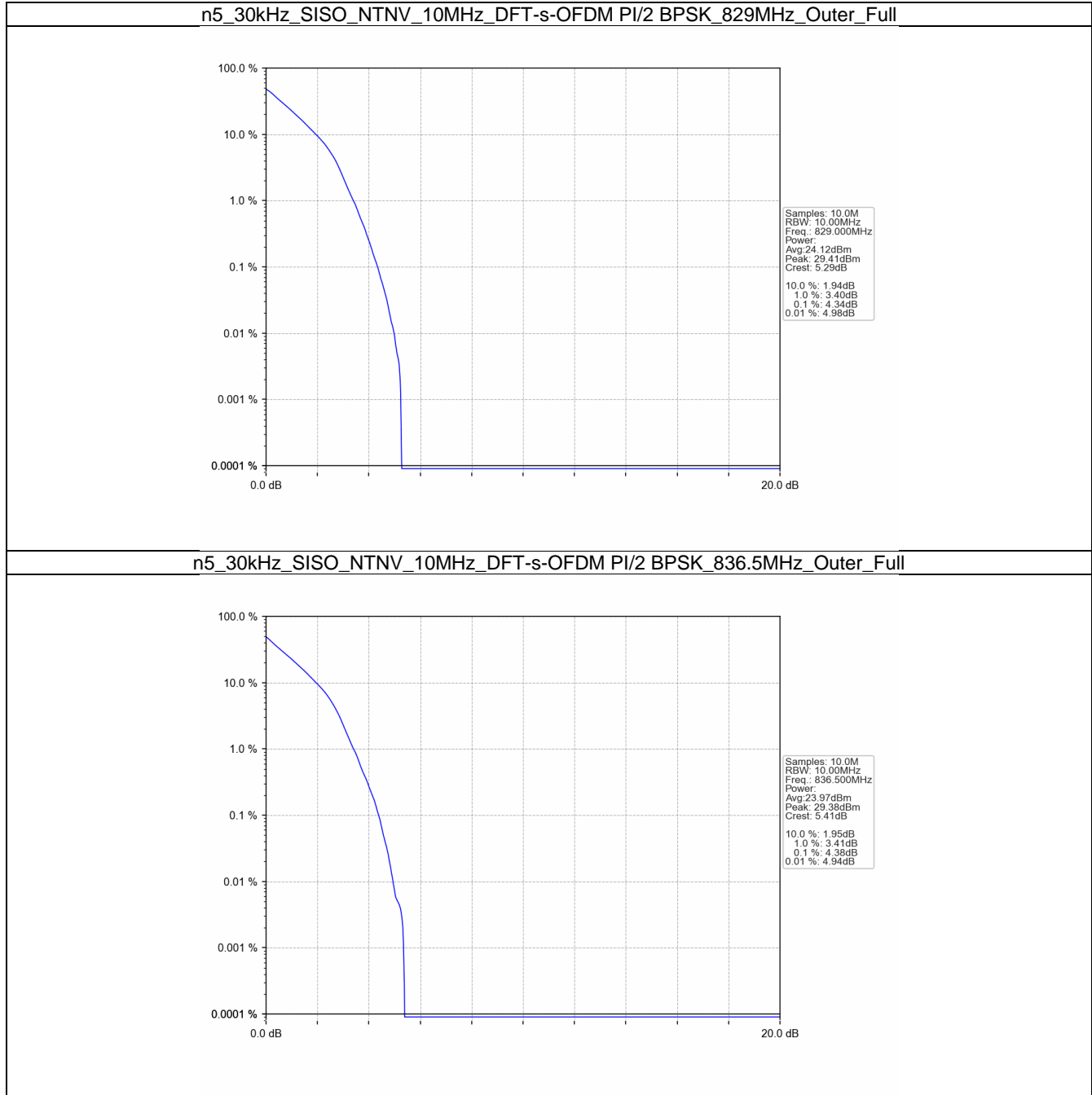


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5.5.2 Test Graph

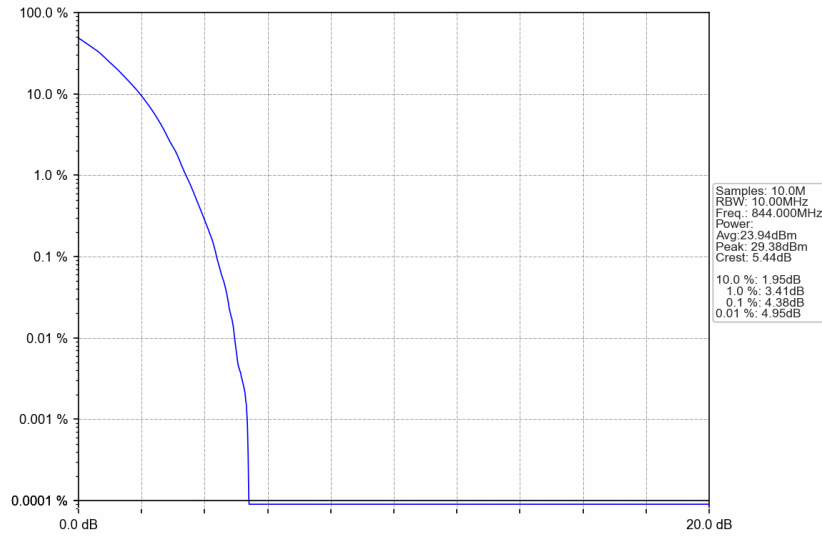


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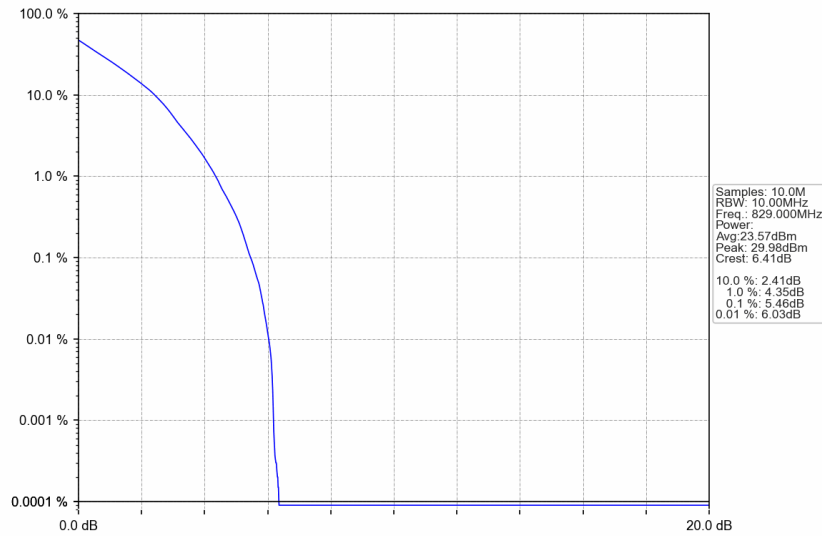
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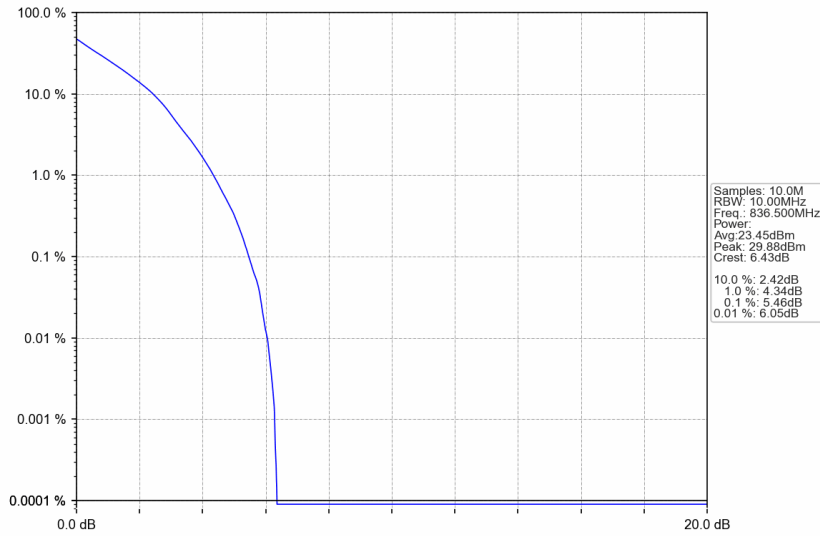
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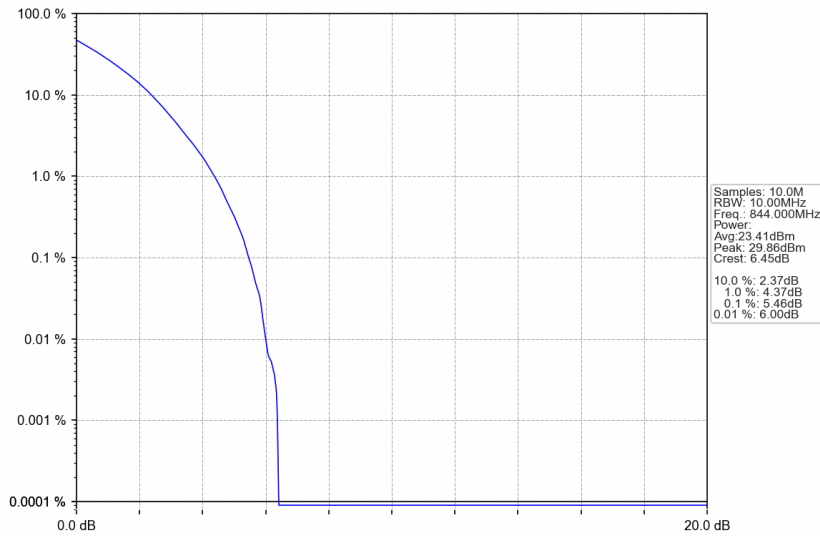
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n5_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_836.5MHz_Outer_Full



n5_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_844MHz_Outer_Full

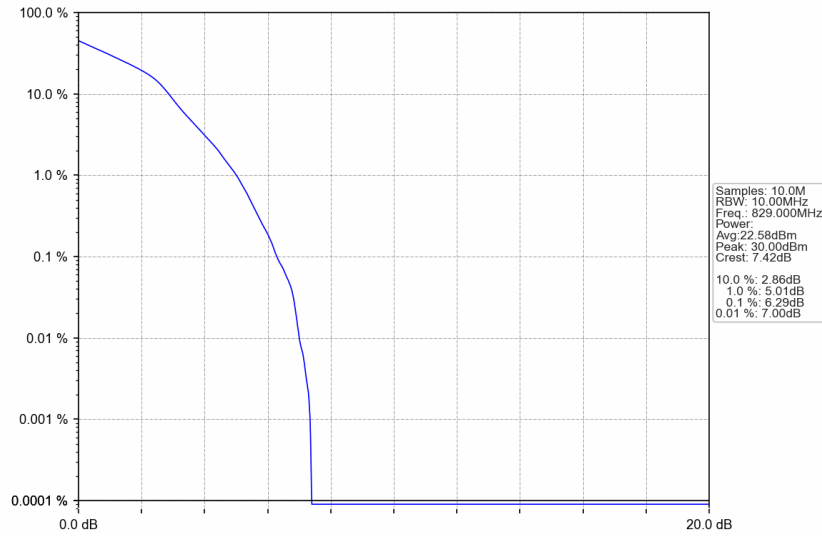


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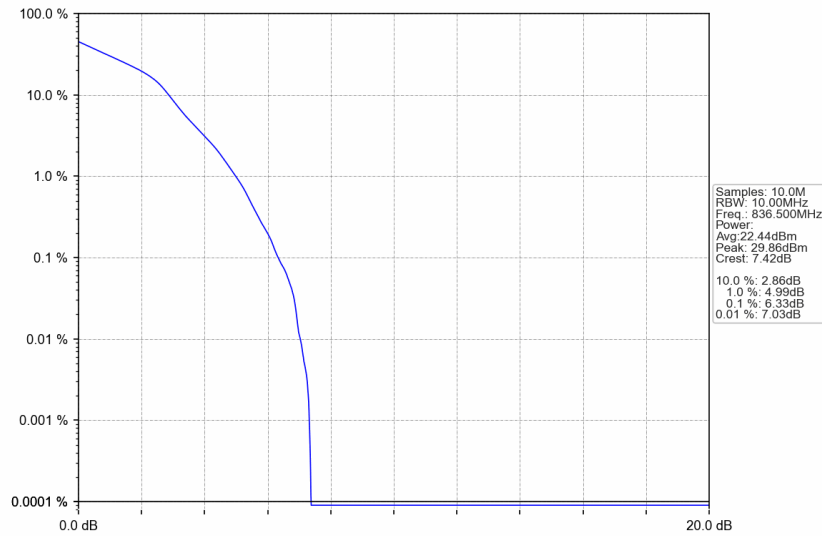
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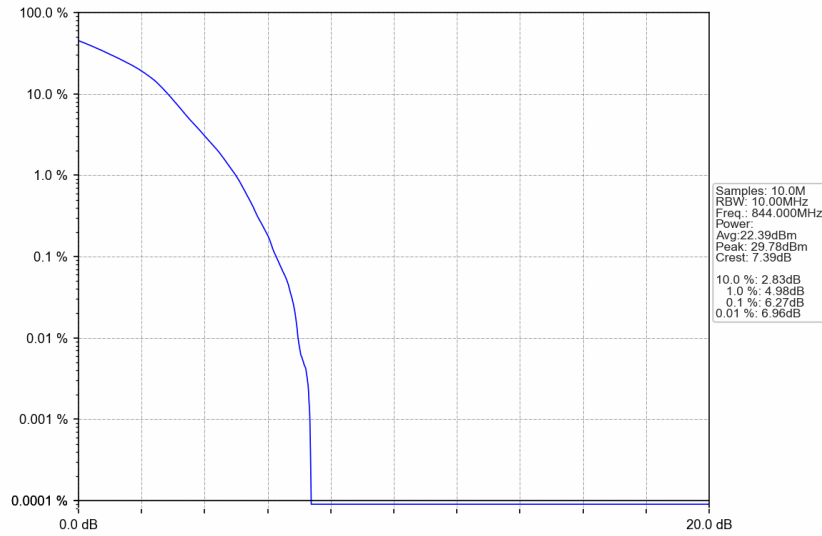
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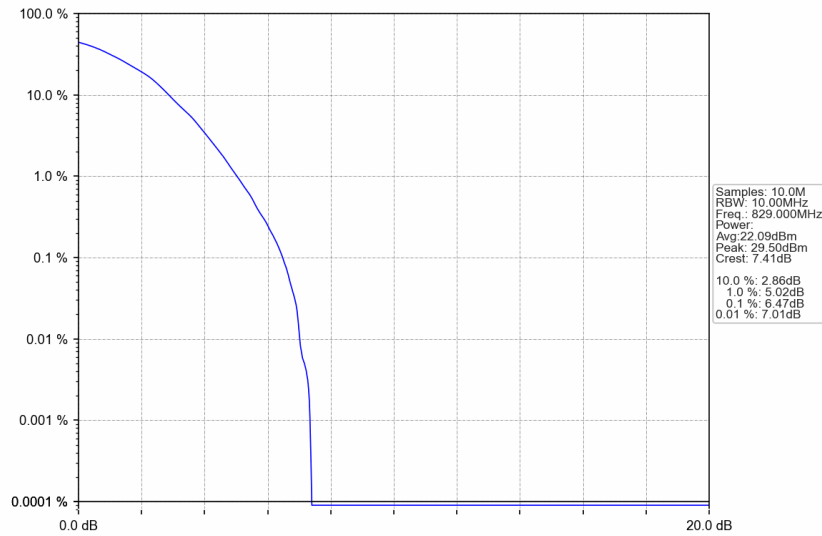
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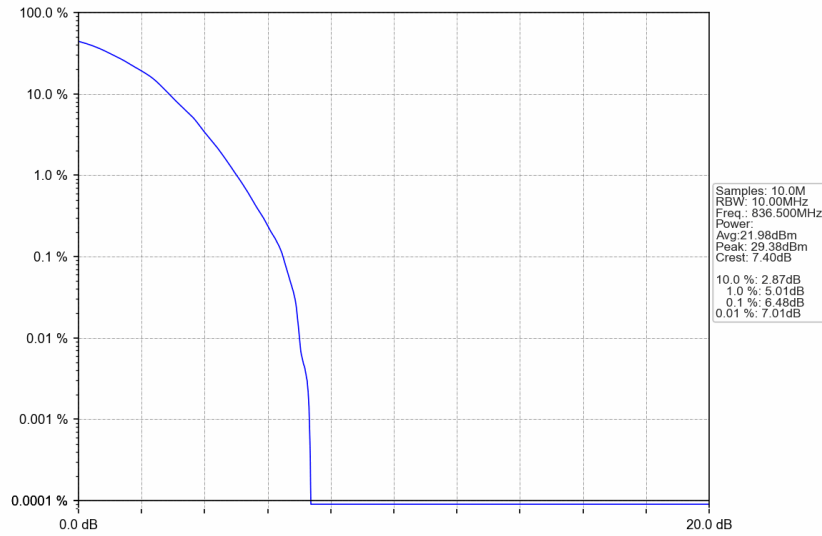


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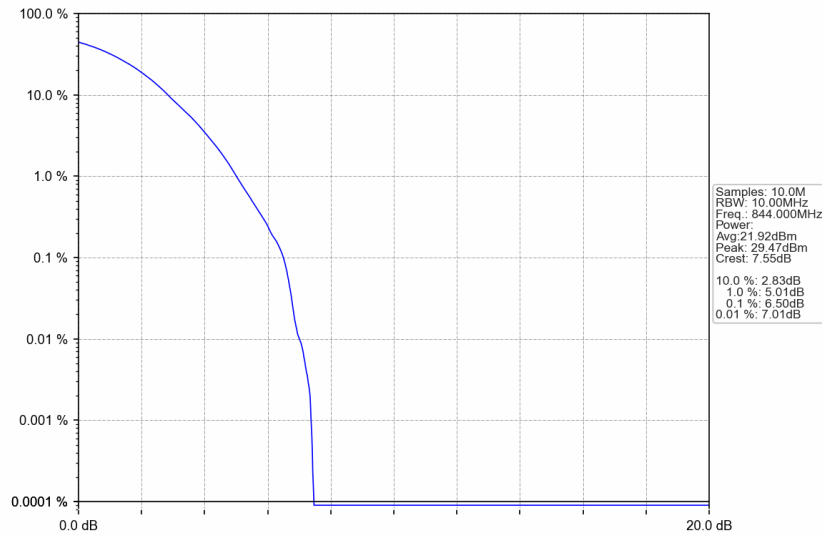
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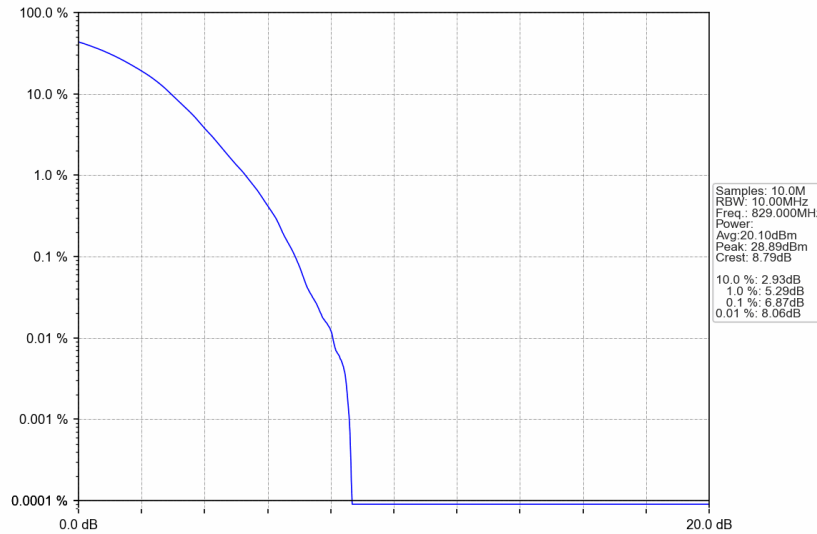
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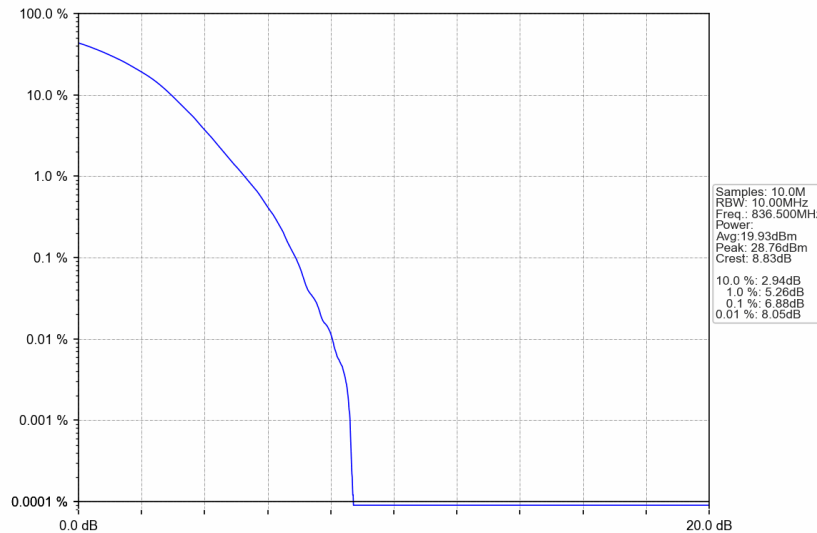
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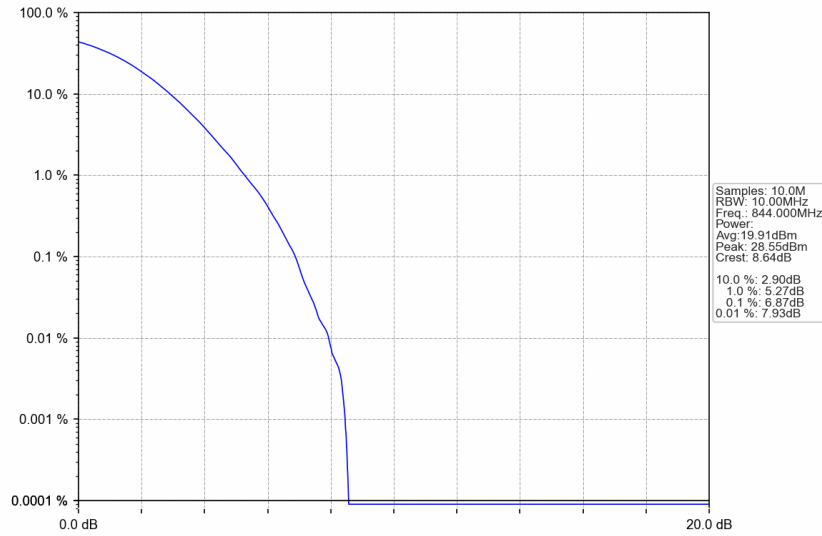


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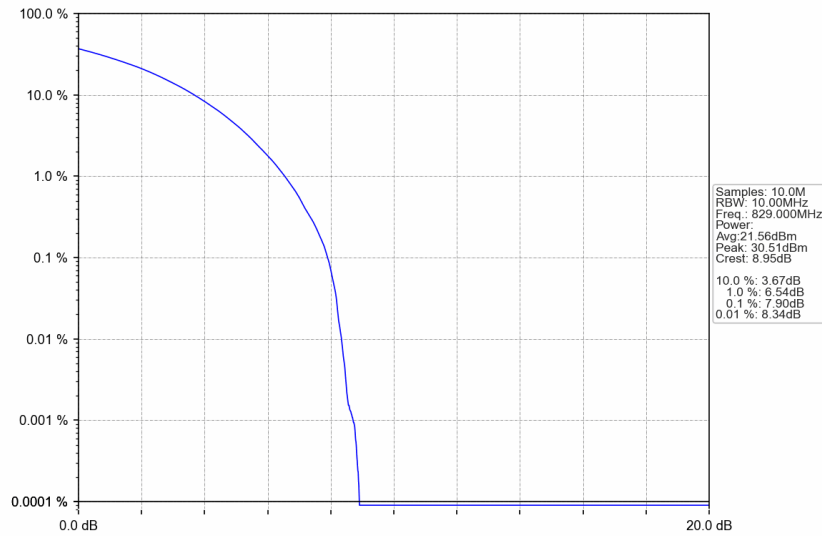
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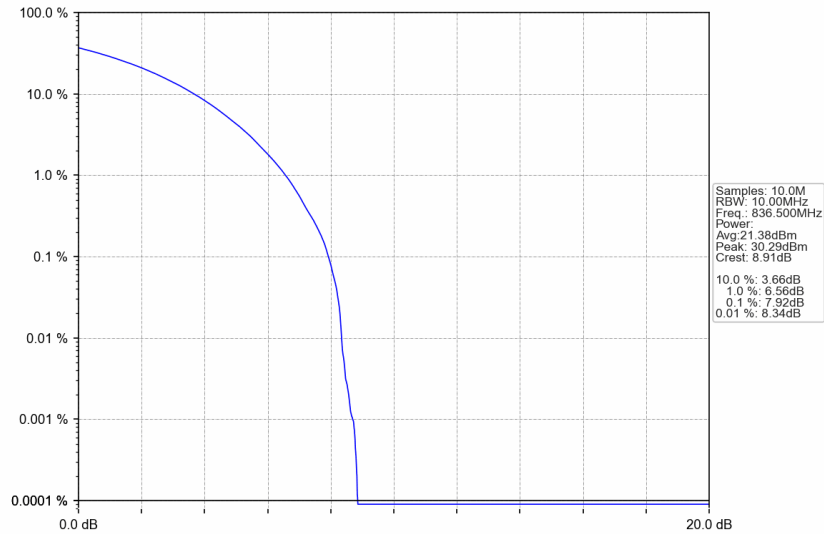


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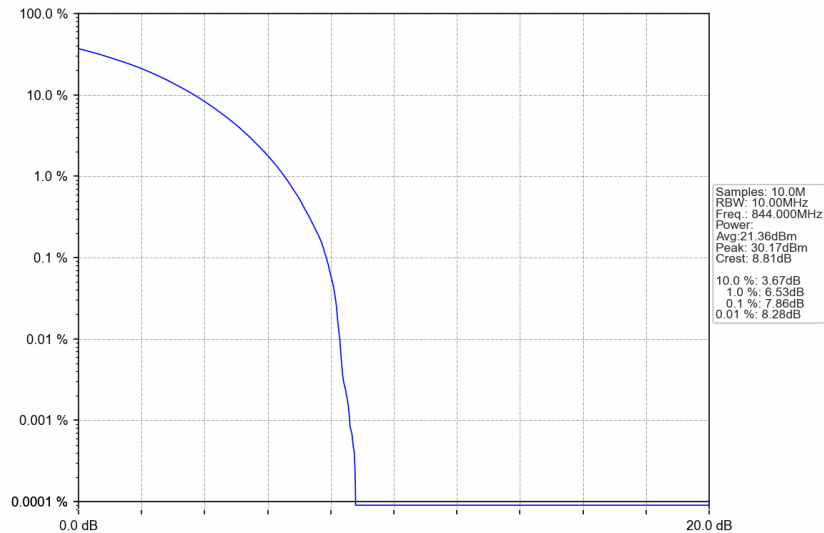
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