

Appendix B

E-UTRA Band 12



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1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.25	25.47	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.47	25.69	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.36	25.58	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.38	25.60	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.30	25.52	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.52	25.74	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.50	24.72	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.17	25.39	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.48	25.70	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.19	25.41	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.41	25.63	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.33	25.55	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.35	25.57	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.56	24.78	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.27	25.49	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.36	25.58	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.23	25.45	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.34	25.56	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.41	25.63	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.33	25.55	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.46	24.68	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.35	24.57	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.76	24.98	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.21	24.43	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.40	24.62	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.49	24.71	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.37	24.59	34.77	PASS



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Band12	1.4MHz	16QAM	23017	6RB#0	21.42	23.64	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.14	24.36	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.84	25.06	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.36	24.58	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.18	24.40	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.32	24.54	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.12	24.34	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.43	23.65	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.27	24.49	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.79	25.01	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.20	24.42	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.30	24.52	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.39	24.61	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.20	24.42	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.40	23.62	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.29	25.51	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.38	25.60	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.38	25.60	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.27	24.49	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.41	24.63	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.40	24.62	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.33	24.55	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.25	25.47	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.29	25.51	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.26	25.48	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.26	24.48	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.47	24.69	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.36	24.58	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.38	24.60	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.30	25.52	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.37	25.59	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.32	25.54	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.42	24.64	34.77	PASS



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Band12	3MHz	QPSK	23165	8RB#7	22.39	24.61	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.40	24.62	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.37	24.59	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.29	24.51	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.39	24.61	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.21	24.43	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.47	23.69	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.52	23.74	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.56	23.78	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.34	23.56	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.69	24.91	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.70	24.92	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.71	24.93	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.45	23.67	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.45	23.67	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.42	23.64	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.34	23.56	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.36	24.58	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.30	24.52	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.56	24.78	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.52	23.74	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.32	23.54	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.30	23.52	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.36	23.58	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.12	25.34	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.26	25.48	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.20	25.42	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.35	24.57	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.42	24.64	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.48	24.70	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.44	24.66	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.21	25.43	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.27	25.49	34.77	PASS



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Band12	5MHz	QPSK	23095	1RB#12	23.17	25.39	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.25	24.47	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.36	24.58	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.29	24.51	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.42	24.64	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.11	25.33	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.36	25.58	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.20	25.42	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.41	24.63	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.46	24.68	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.32	24.54	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.42	24.64	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.64	24.86	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.65	24.87	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.61	24.83	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.32	23.54	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.35	23.57	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.38	23.60	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.32	23.54	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.27	24.49	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.39	24.61	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.53	24.75	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.26	23.48	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.27	23.49	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.25	23.47	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.39	23.61	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.34	24.56	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.60	24.82	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.36	24.58	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.36	23.58	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.43	23.65	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.40	23.62	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.49	23.71	34.77	PASS



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Band12	10MHz	QPSK	23060	1RB#49	23.32	25.54	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.33	25.55	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.32	25.54	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.31	24.53	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.41	24.63	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.56	24.78	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.53	24.75	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.26	25.48	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.35	25.57	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.38	25.60	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.36	24.58	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.48	24.70	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.49	24.71	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.34	24.56	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.16	25.38	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.27	25.49	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.35	25.57	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.39	24.61	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.36	24.58	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.40	24.62	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.48	24.70	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.68	24.90	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.82	25.04	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.72	24.94	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.33	23.55	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.41	23.63	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.47	23.69	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.40	23.62	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.40	24.62	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.52	24.74	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.85	25.07	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.27	23.49	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.38	23.60	34.77	PASS



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Band12	10MHz	16QAM	23095	25RB#12	21.41	23.63	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.32	23.54	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.65	24.87	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.63	24.85	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.69	24.91	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.28	23.50	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.46	23.68	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.26	23.48	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.39	23.61	34.77	PASS

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



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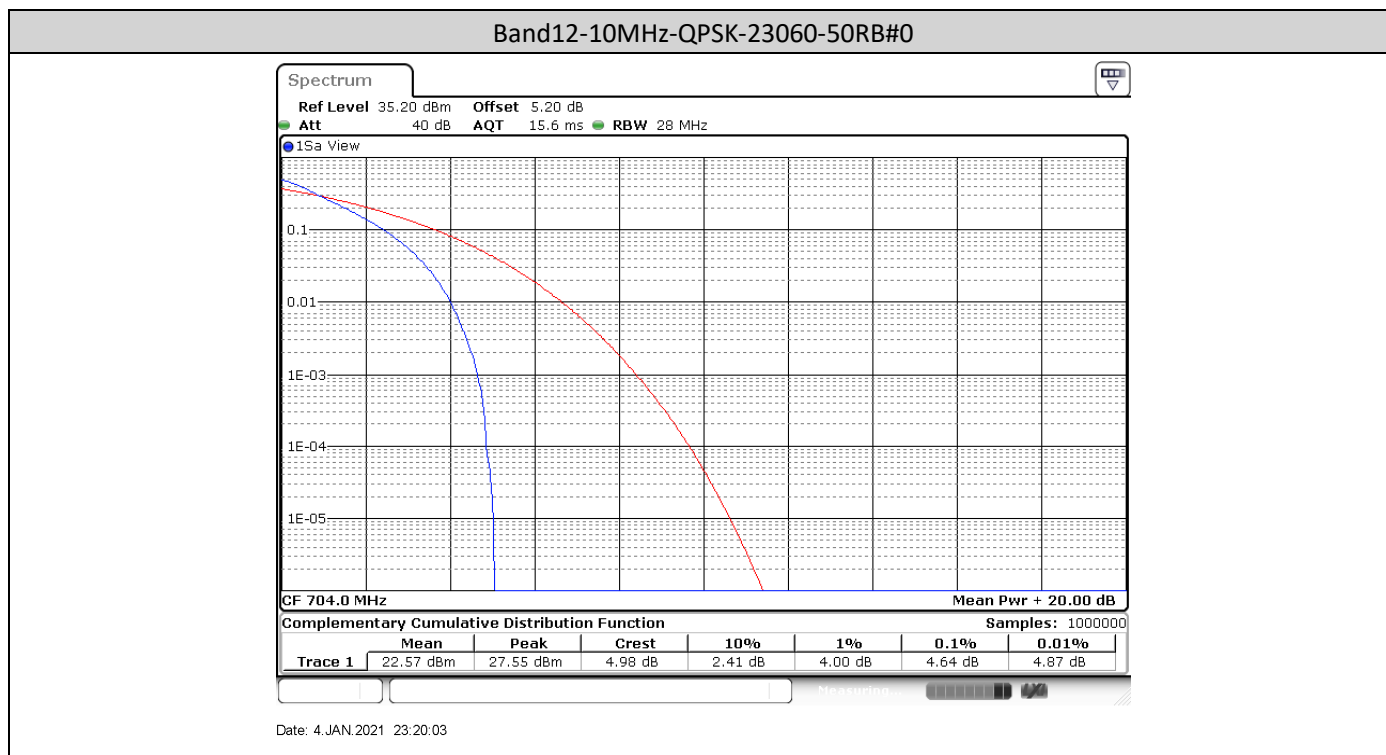


2. Peak-to-Average Ratio (CCDF)

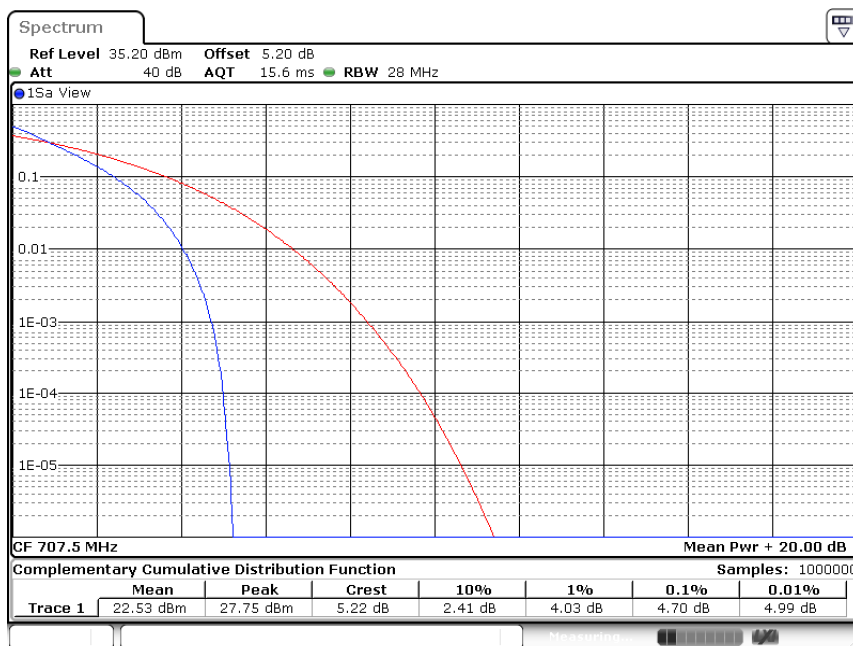
2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	4.64	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.70	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.78	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.42	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.54	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	5.62	13	PASS

2.2. Test Plots

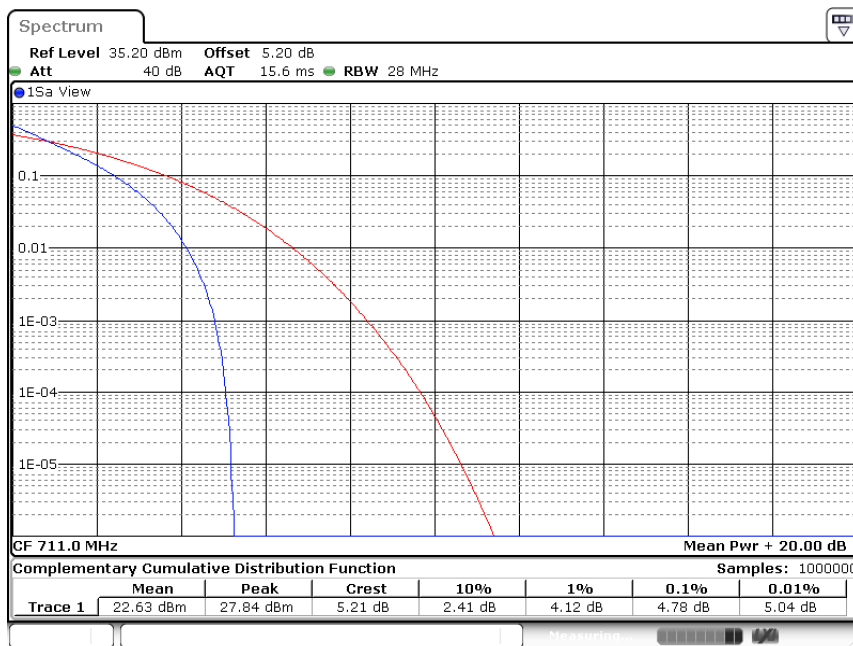


Band12-10MHz-QPSK-23095-50RB#0



Date: 4.JAN.2021 23:20:26

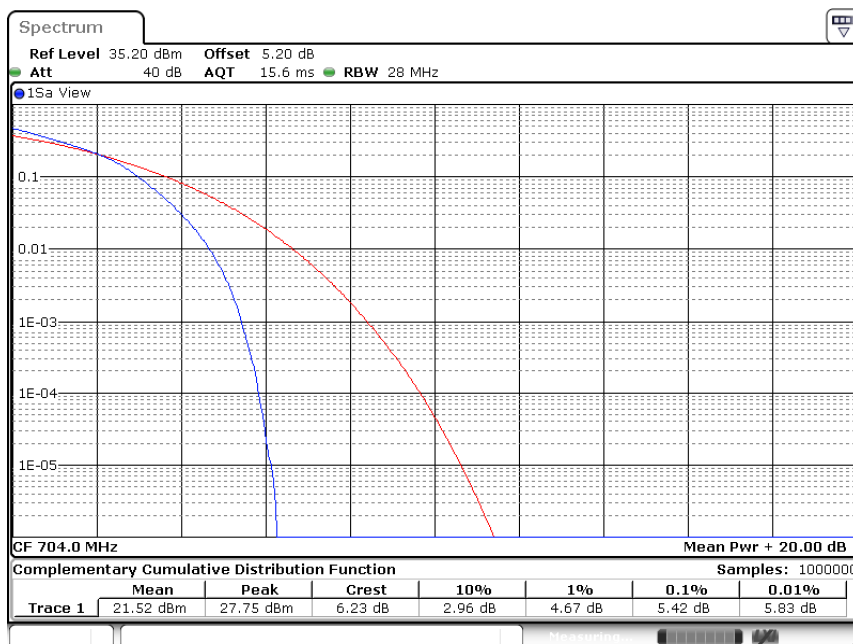
Band12-10MHz-QPSK-23130-50RB#0



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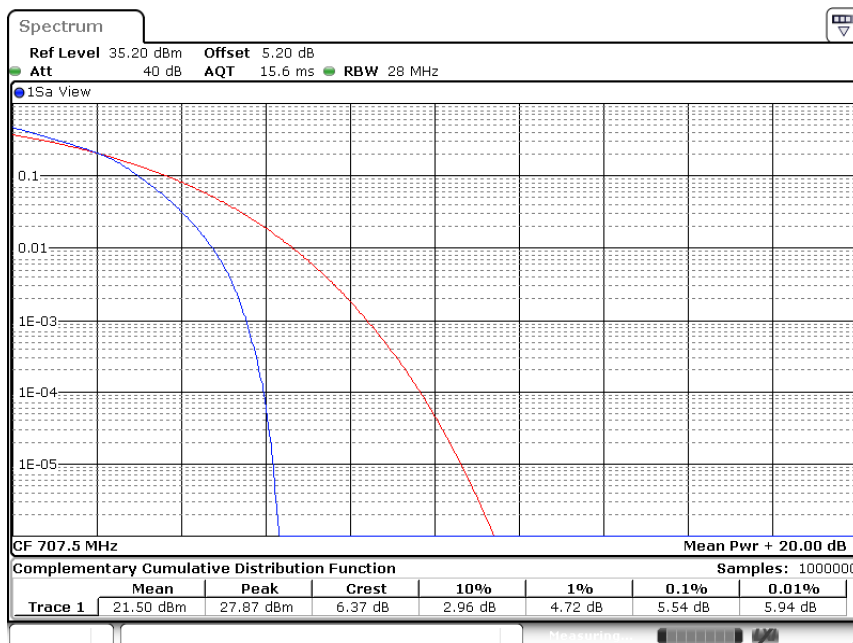


Band12-10MHz-16QAM-23060-50RB#0



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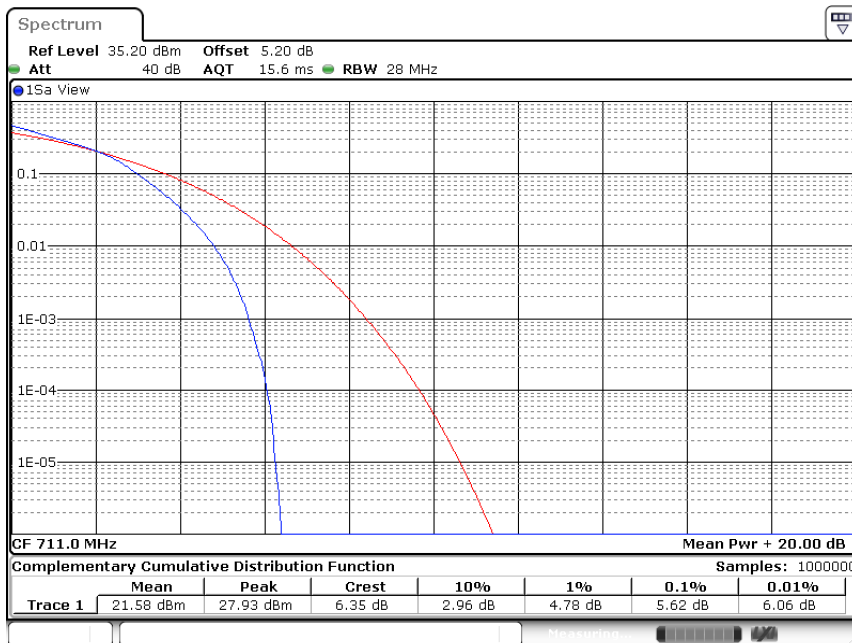
Band12-10MHz-16QAM-23095-50RB#0



Date: 4.JAN.2021 23:20:37



Band12-10MHz-16QAM-23130-50RB#0



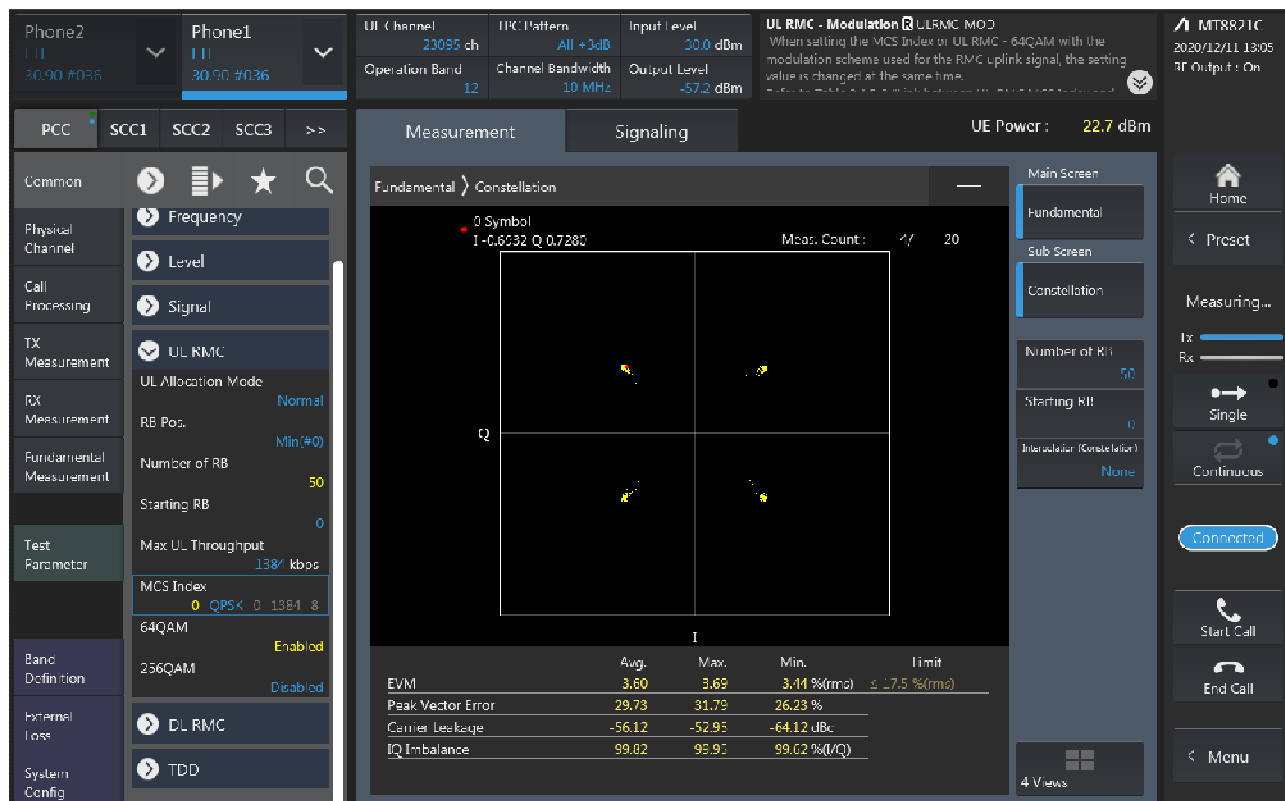
Date: 4.JAN.2021 23:21:00



3. Modulation Characteristics

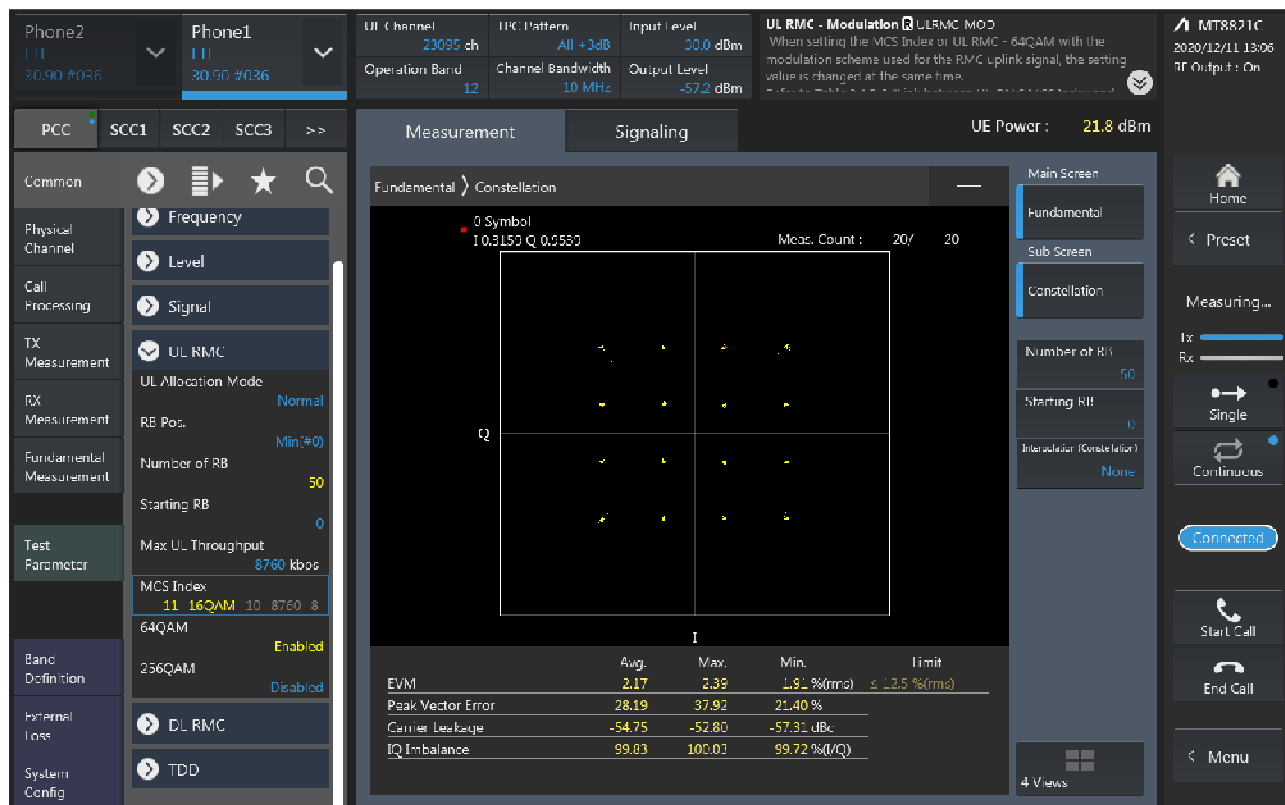
3.1. Test Mode = LTE /TM1 10MHz

3.1.1. Test Channel = MCH



3.2. Test Mode = LTE /TM2 10MHz

3.2.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

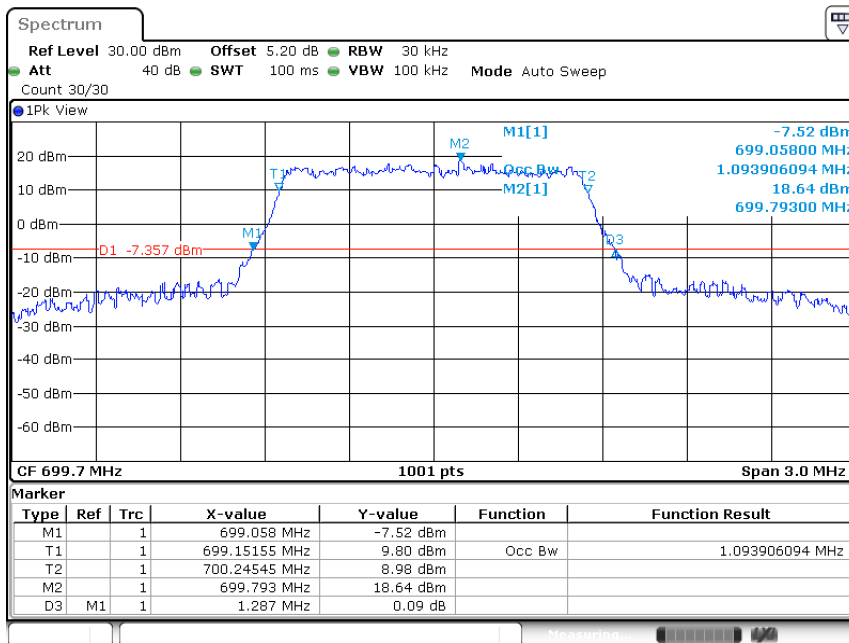
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.094	1.287	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.088	1.287	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.094	1.296	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.091	1.281	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.088	1.290	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.094	1.290	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.691	2.928	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.691	2.922	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.691	2.934	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.679	2.904	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.679	2.904	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.679	2.898	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.486	5.100	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.476	5.200	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.486	5.090	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.496	5.110	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.496	5.090	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.496	5.110	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.931	9.860	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.931	9.860	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.951	9.920	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.951	9.880	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.931	9.860	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.971	9.860	PASS





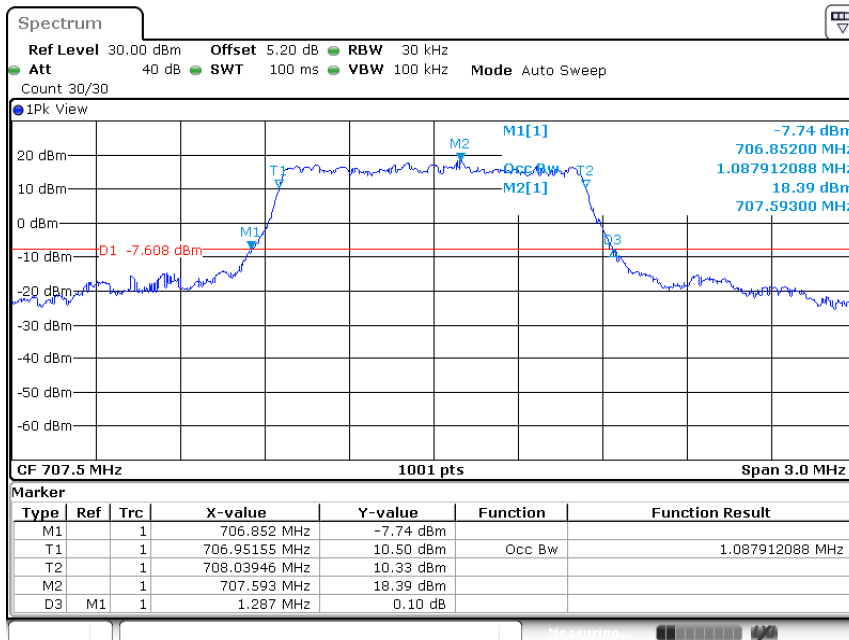
4.2. Test Plots

Band12-1.4MHz-QPSK-23017-6RB#0-1.094



Date: 4.JAN.2021 22:53:31

Band12-1.4MHz-QPSK-23095-6RB#0-1.088



Date: 4.JAN.2021 22:53:57

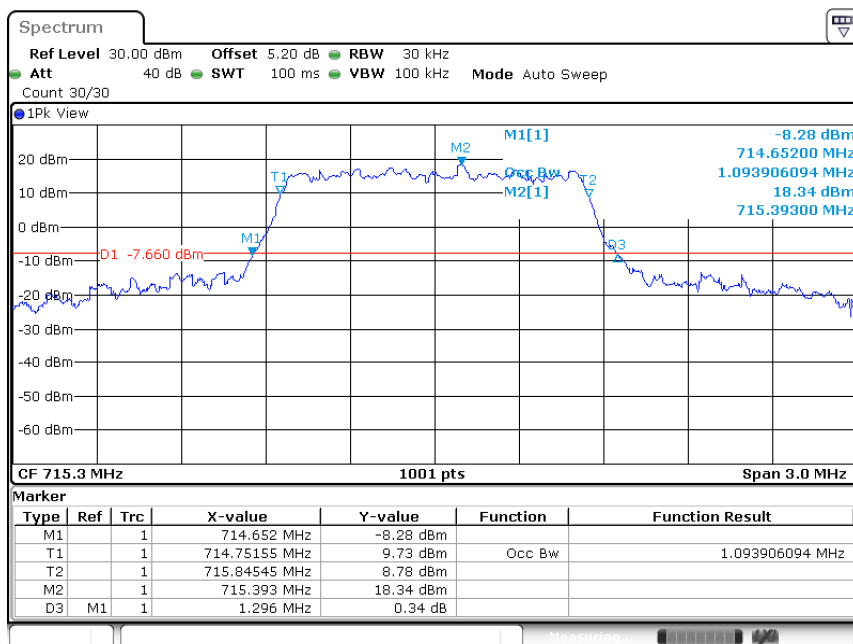


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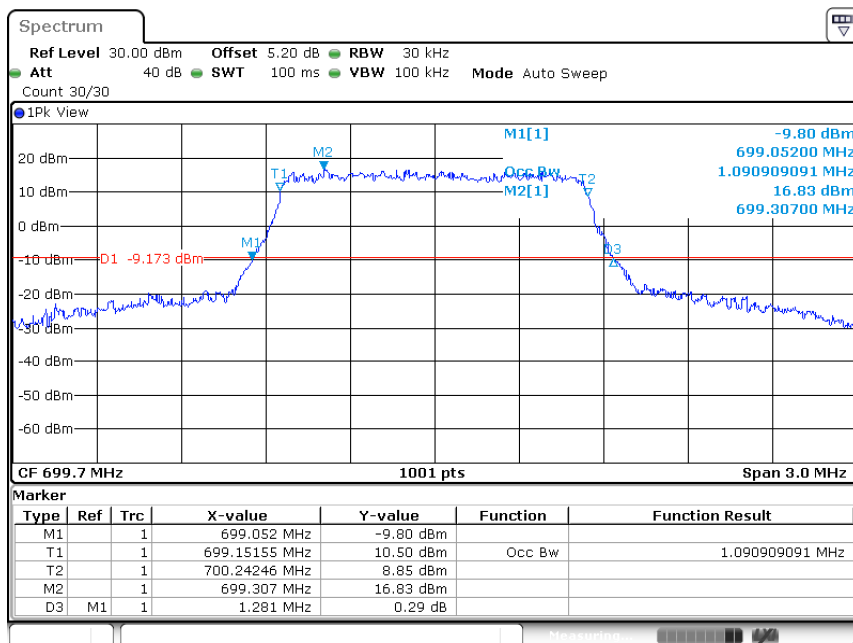
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Band12-1.4MHz-QPSK-23173-6RB#0-1.094



Date: 4.JAN.2021 22:54:23

Band12-1.4MHz-16QAM-23017-6RB#0-1.091

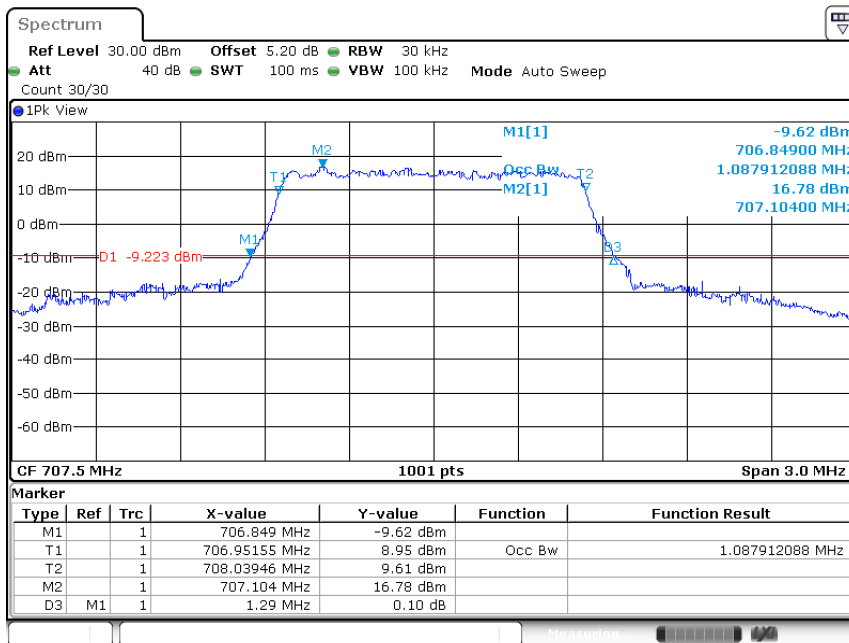


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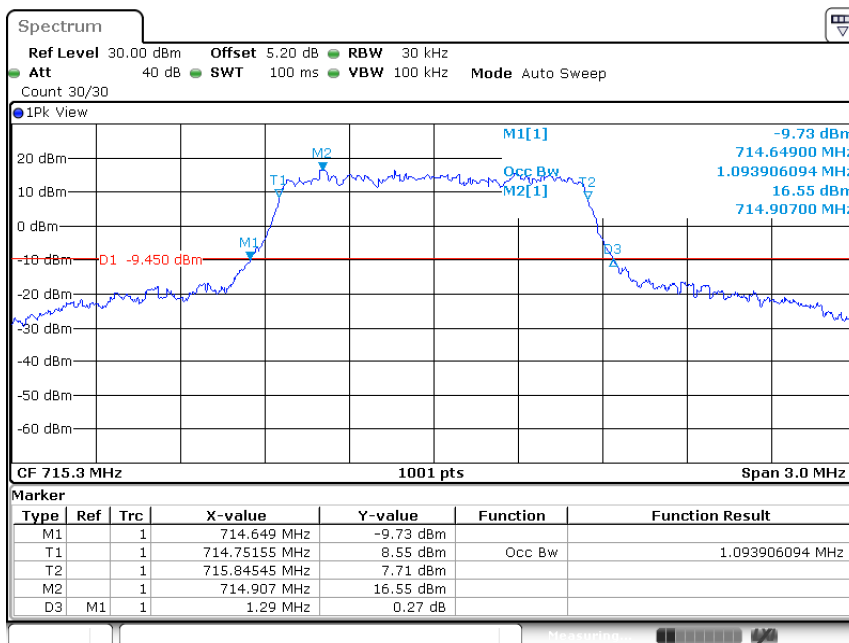


Band12-1.4MHz-16QAM-23095-6RB#0-1.088



Date: 4.JAN.2021 22:54:10

Band12-1.4MHz-16QAM-23173-6RB#0-1.094



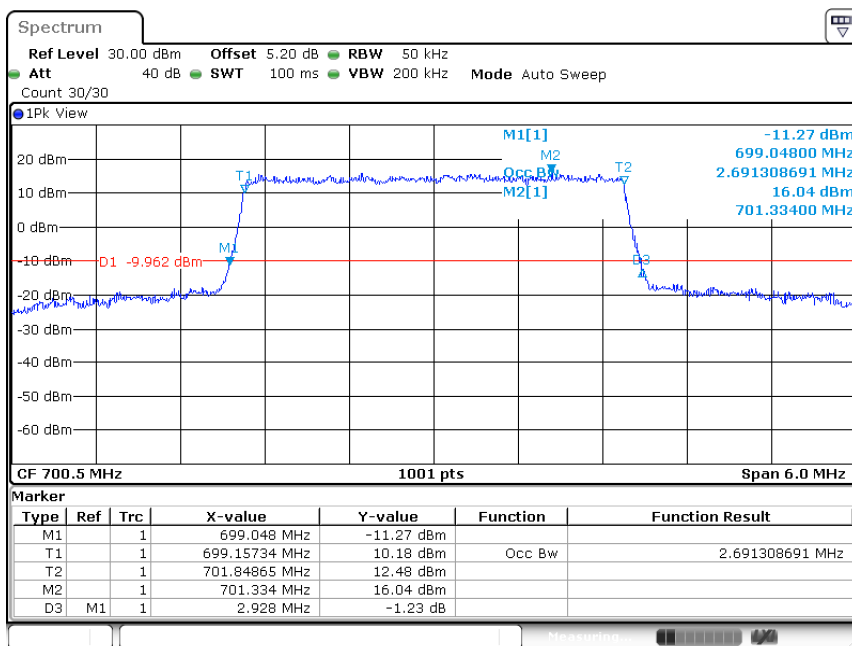
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Shenzhen Branch

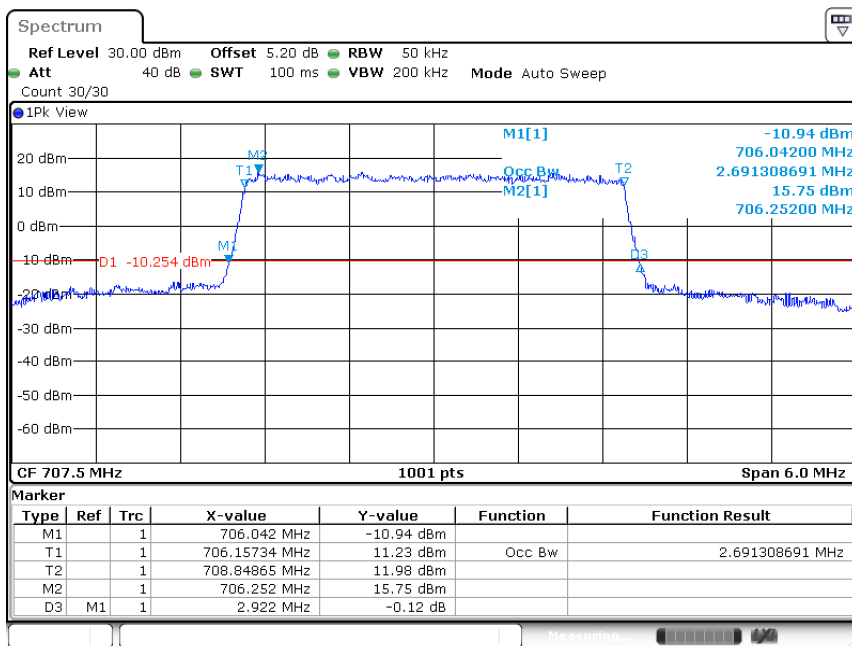
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Band12-3MHz-QPSK-23025-15RB#0-2.691



Date: 4.JAN.2021 22:54:53

Band12-3MHz-QPSK-23095-15RB#0-2.691

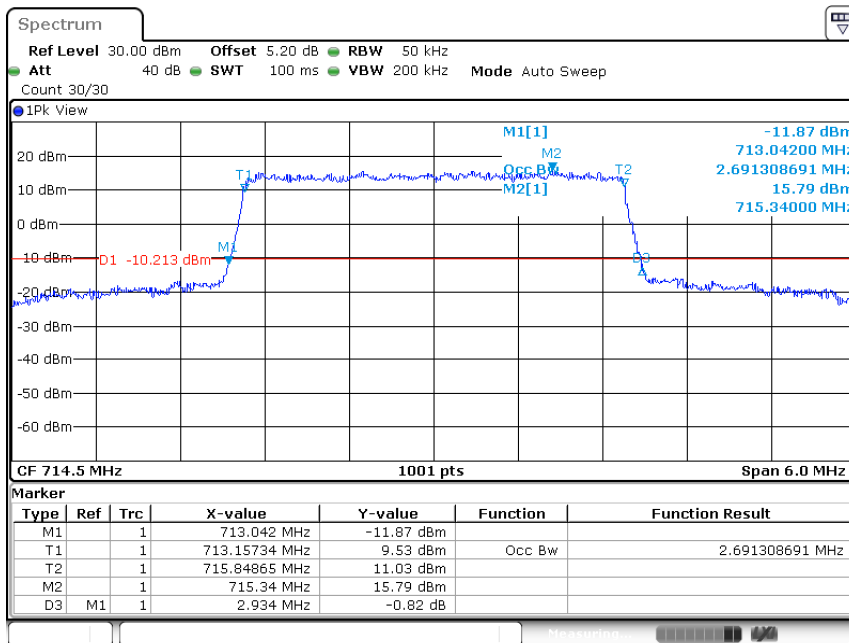


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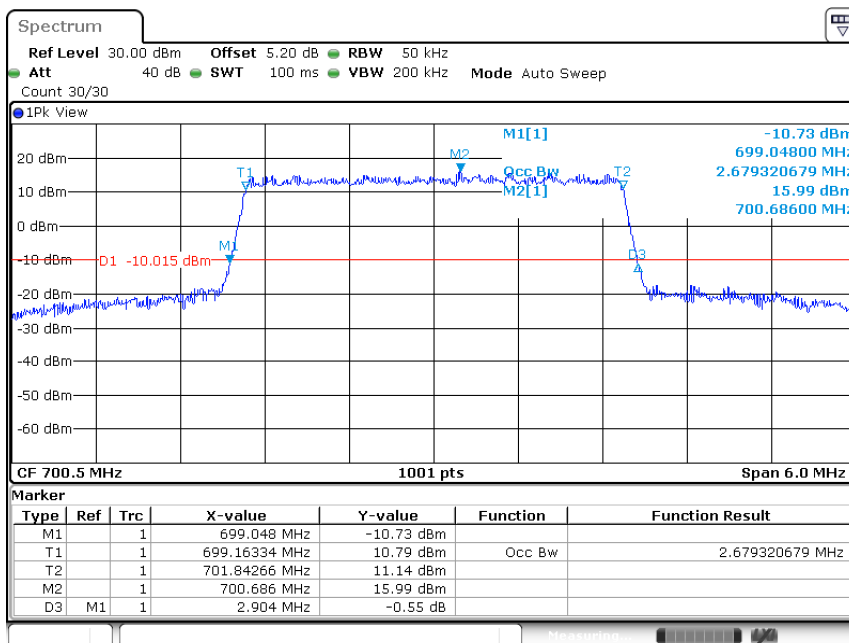


Band12-3MHz-QPSK-23165-15RB#0-2.691



Date: 4.JAN.2021 22:55:44

Band12-3MHz-16QAM-23025-15RB#0-2.679



Date: 4.JAN.2021 22:55:06



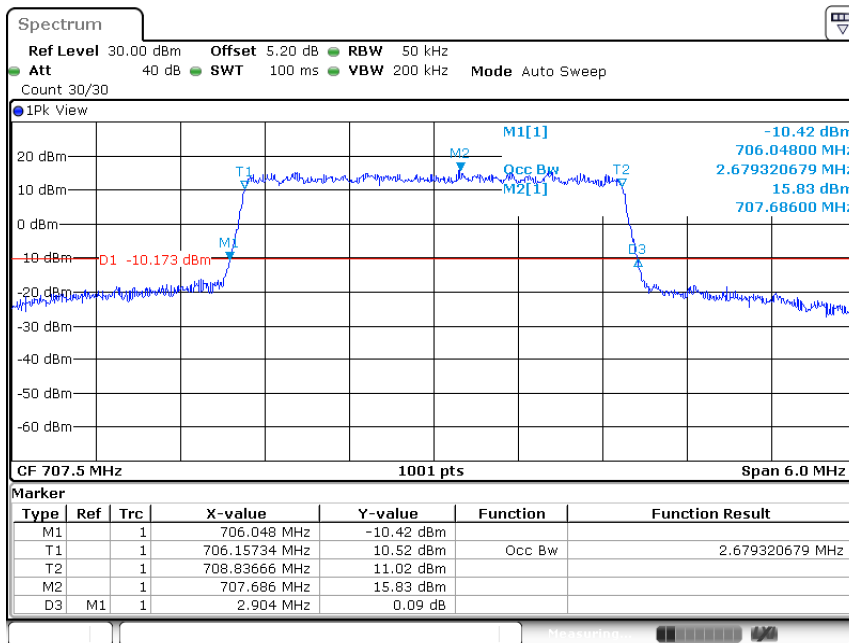
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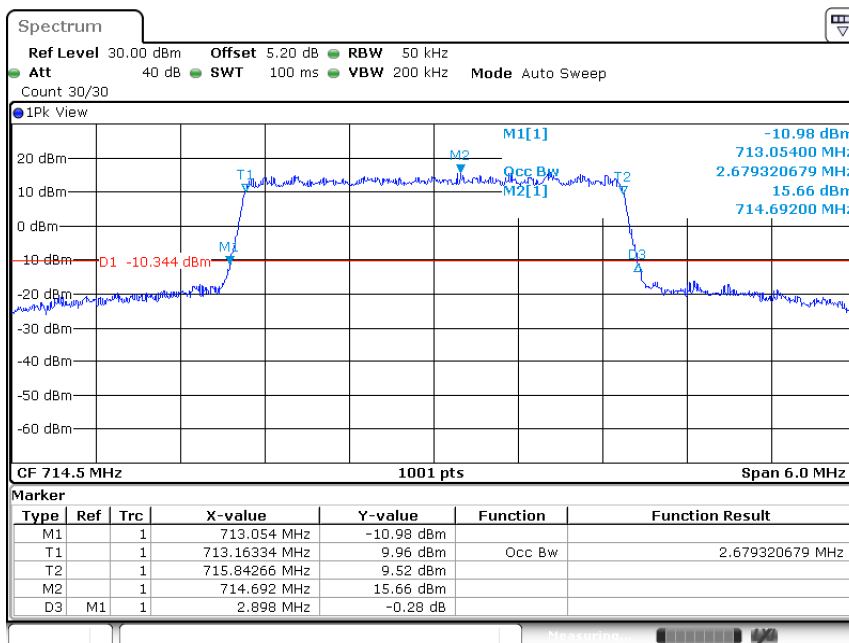
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Band12-3MHz-16QAM-23095-15RB#0-2.679



Date: 4.JAN.2021 22:55:31

Band12-3MHz-16QAM-23165-15RB#0-2.679



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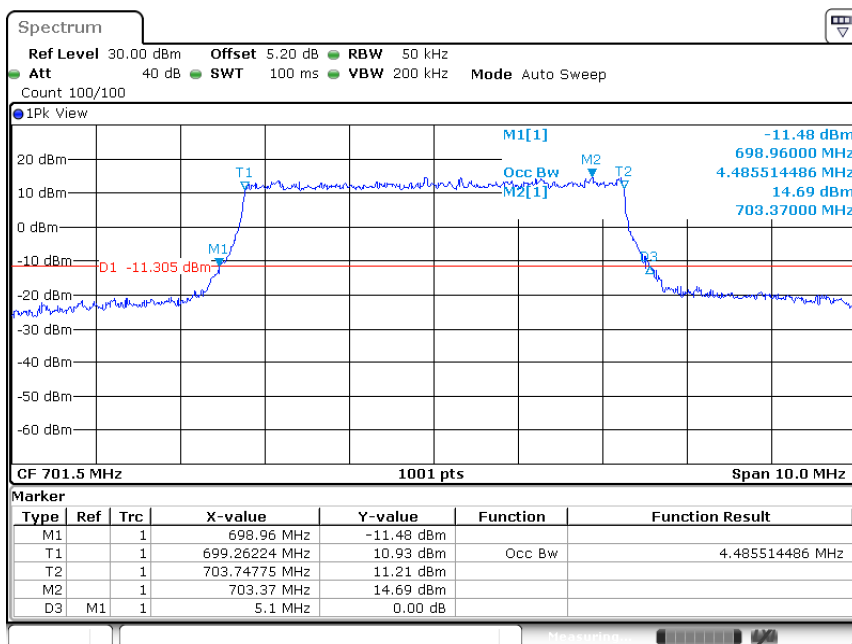


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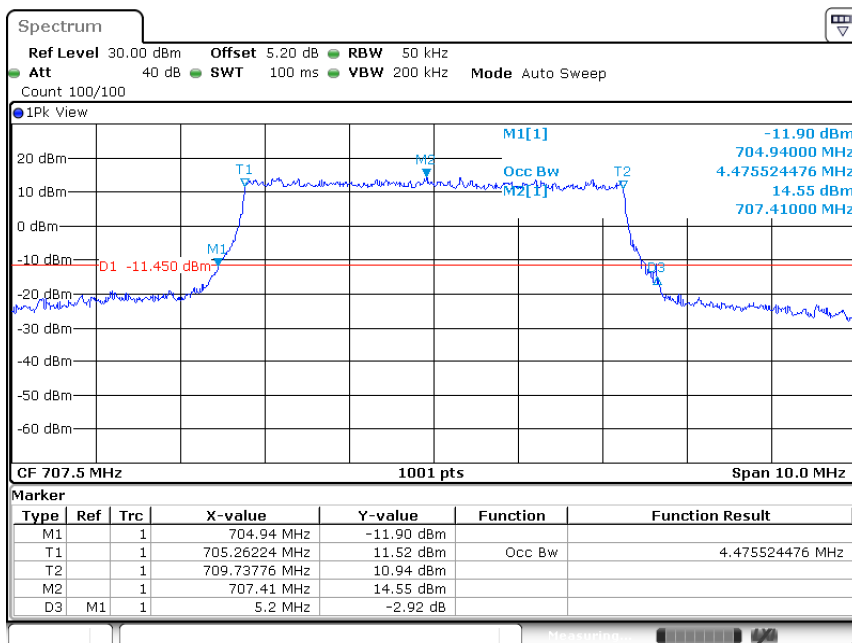
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Band12-5MHz-QPSK-23035-25RB#0-4.486



Date: 4.JAN.2021 22:56:21

Band12-5MHz-QPSK-23095-25RB#0-4.476

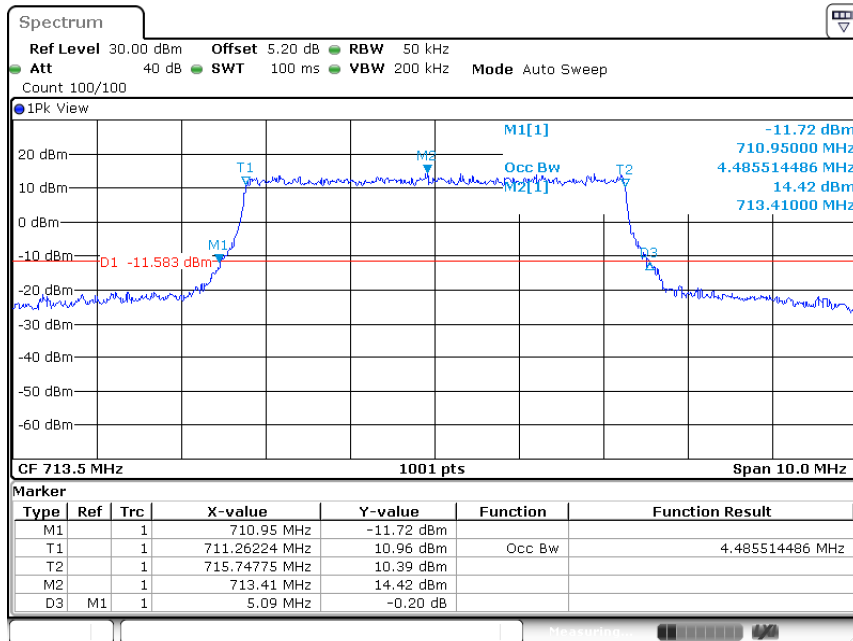


Date: 4.JAN.2021 22:57:02



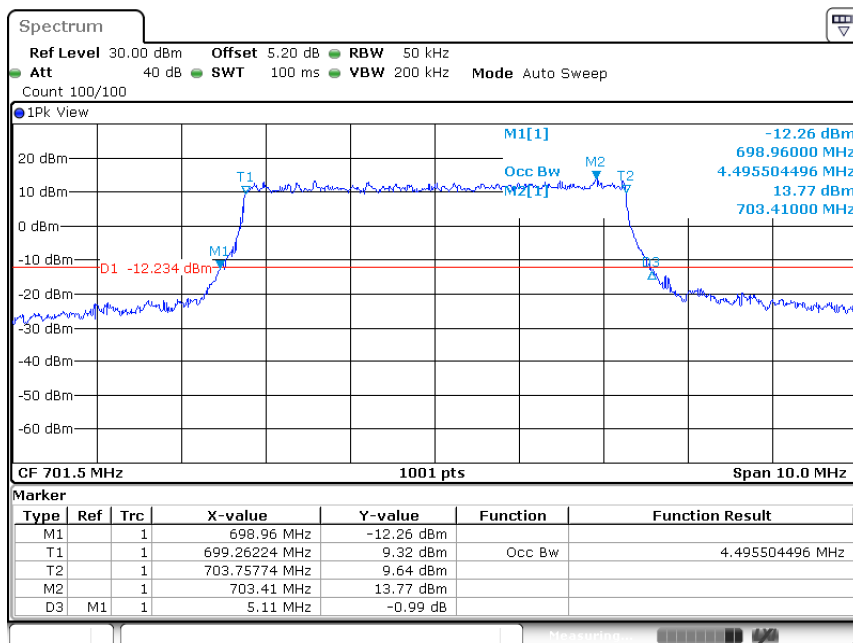


Band12-5MHz-QPSK-23155-25RB#0-4.486



Date: 4.JAN.2021 22:57:42

Band12-5MHz-16QAM-23035-25RB#0-4.496



Date: 4.JAN.2021 22:56:41



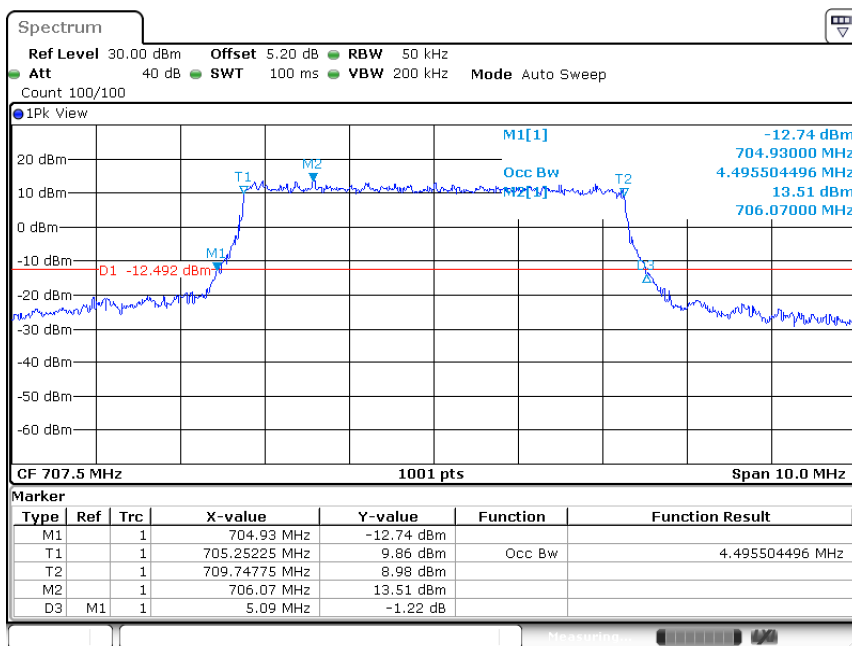
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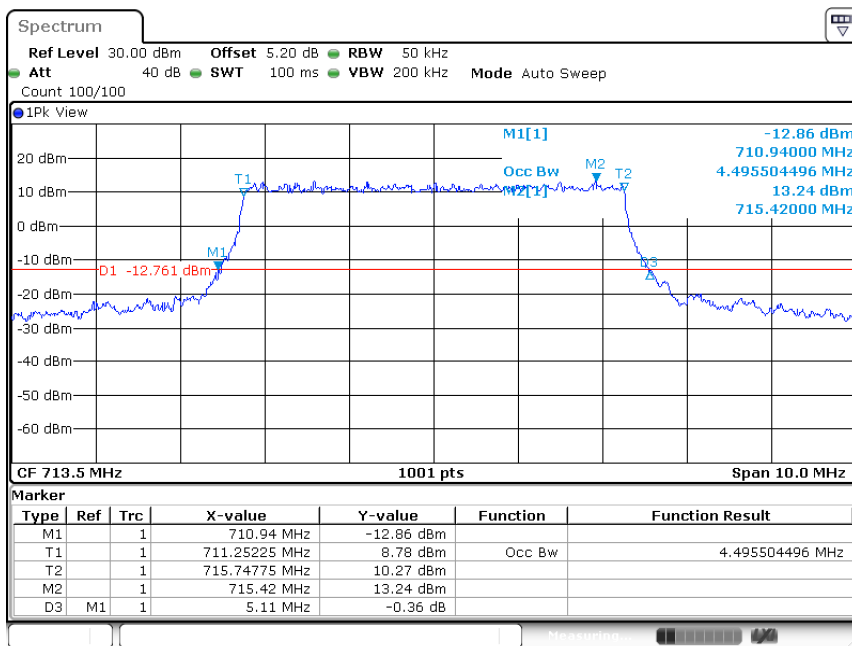
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Band12-5MHz-16QAM-23095-25RB#0-4.496



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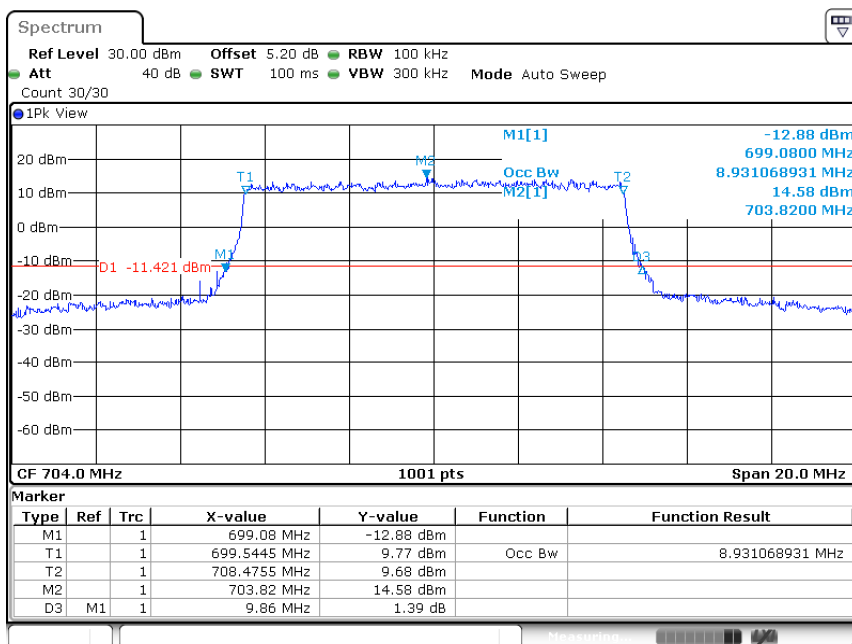
Band12-5MHz-16QAM-23155-25RB#0-4.496



Date: 4.JAN.2021 22:58:02

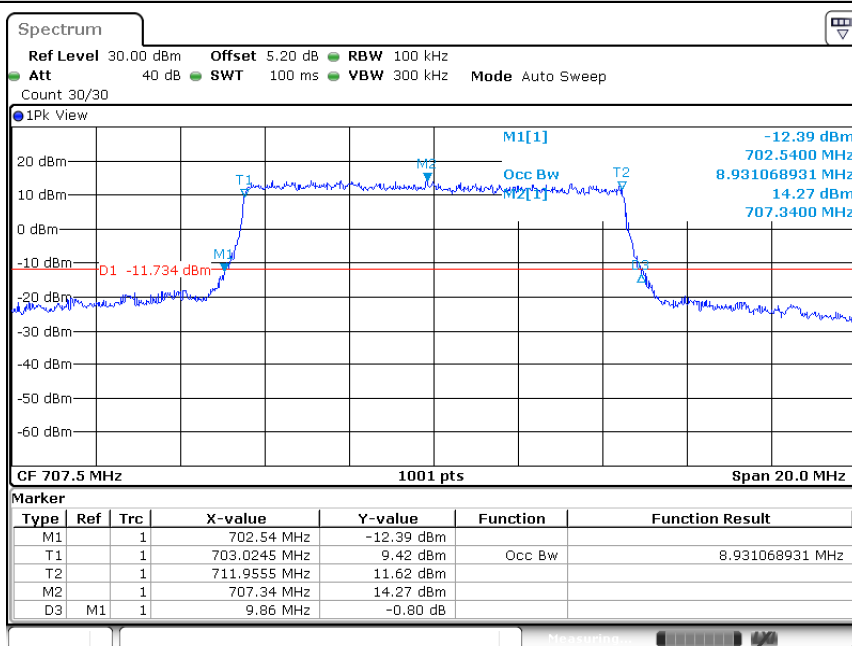


Band12-10MHz-QPSK-23060-50RB#0-8.931



Date: 4.JAN.2021 22:58:19

Band12-10MHz-QPSK-23095-50RB#0-8.931

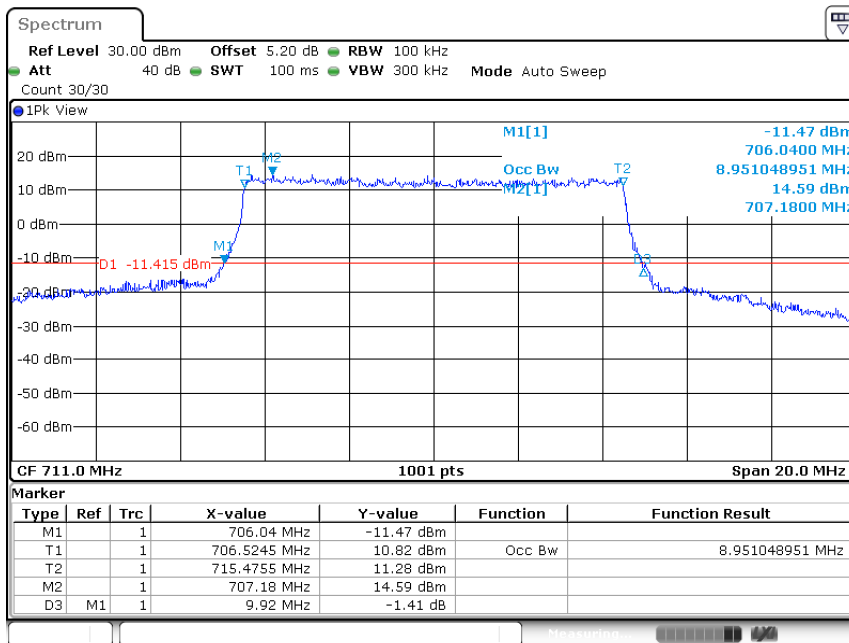


Date: 4.JAN.2021 22:58:45



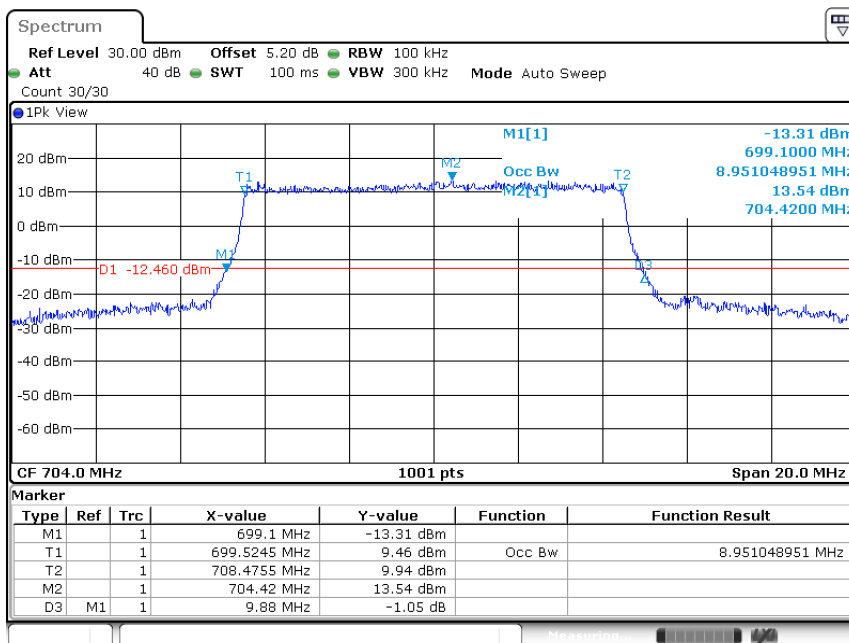


Band12-10MHz-QPSK-23130-50RB#0-8.951



Date: 4.JAN.2021 22:59:11

Band12-10MHz-16QAM-23060-50RB#0-8.951



Date: 4.JAN.2021 22:58:32



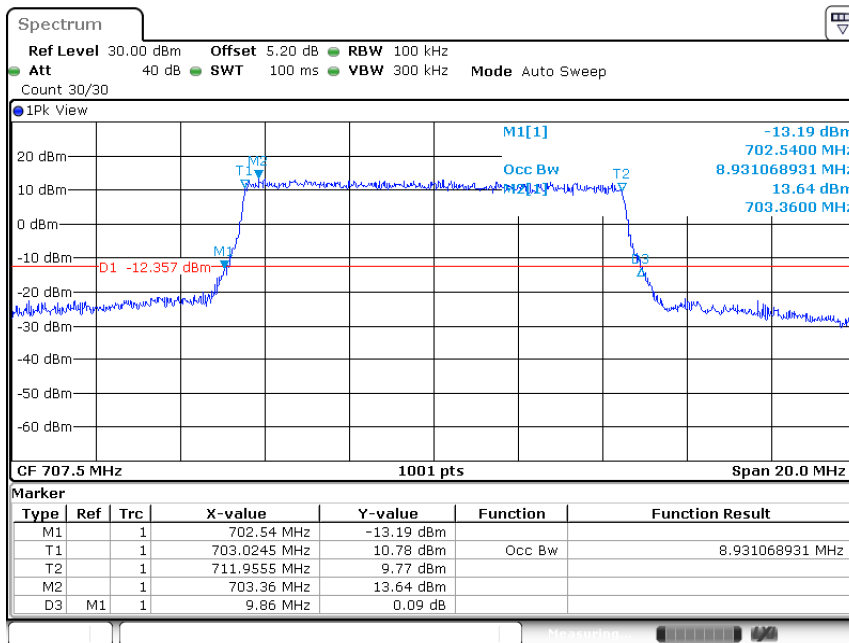
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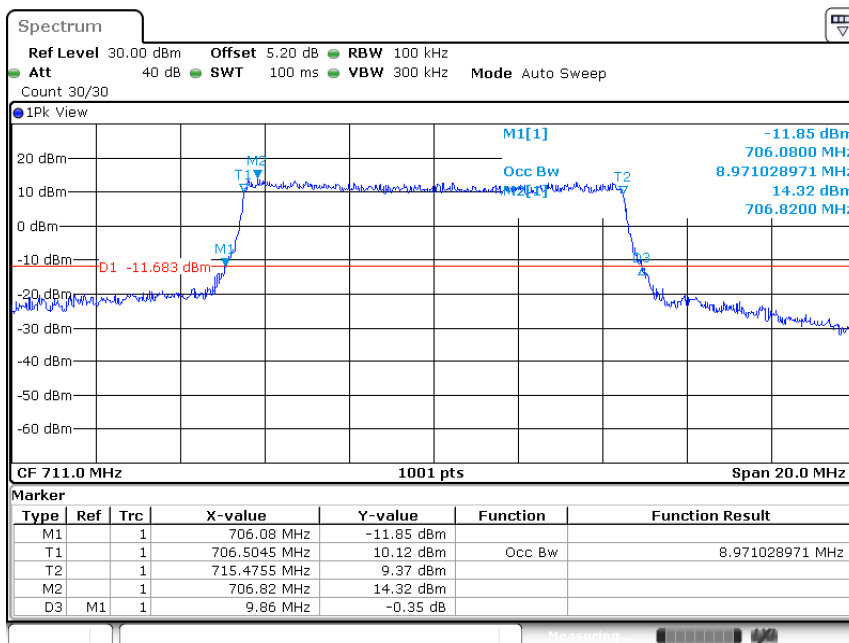


Band12-10MHz-16QAM-23095-50RB#0-8.931



Date: 4.JAN.2021 22:58:58

Band12-10MHz-16QAM-23130-50RB#0-8.971



Date: 4.JAN.2021 22:59:24



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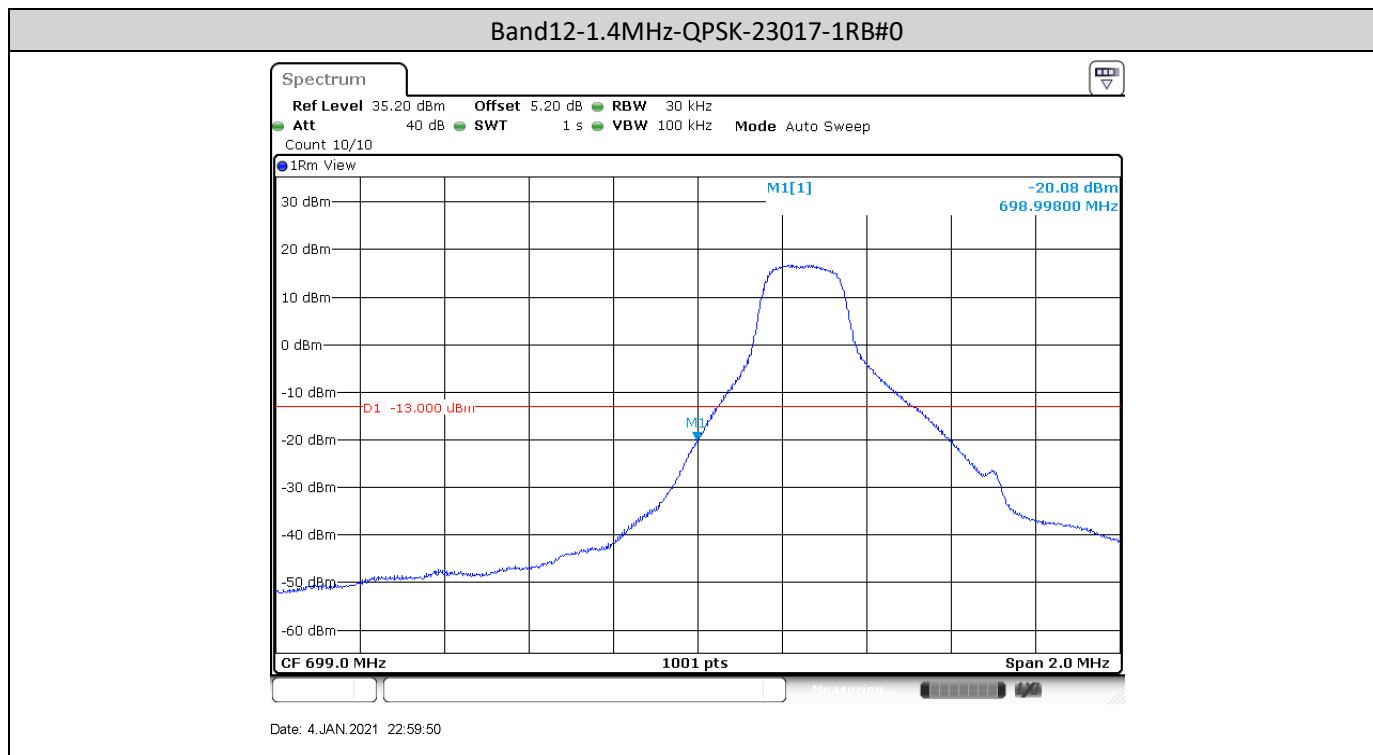
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5. Band Edge Compliance

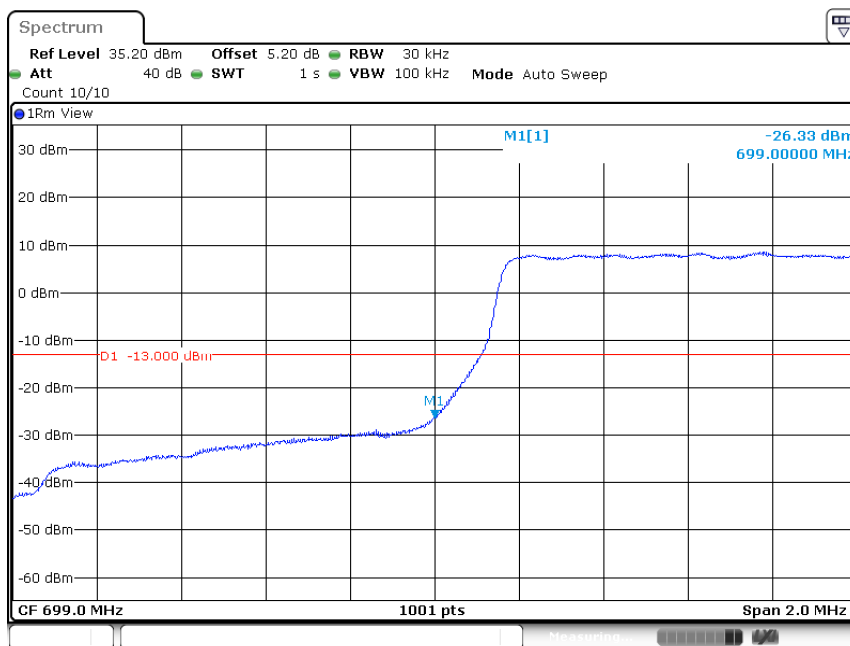
5.1. Test Plots



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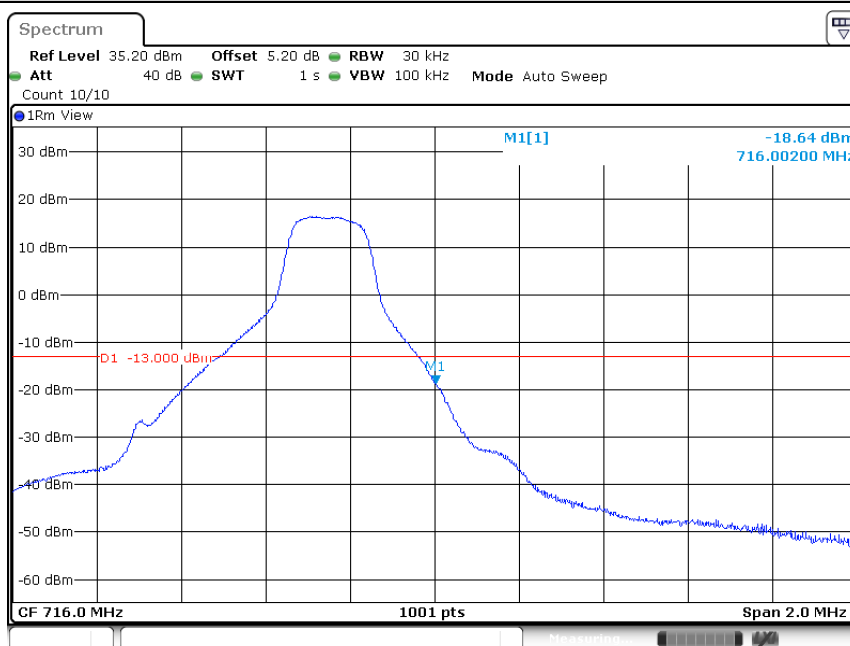
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Band12-1.4MHz-QPSK-23017-6RB#0



Date: 4.JAN.2021 23:00:31

Band12-1.4MHz-QPSK-23173-1RB#5



Date: 4.JAN.2021 23:01:17



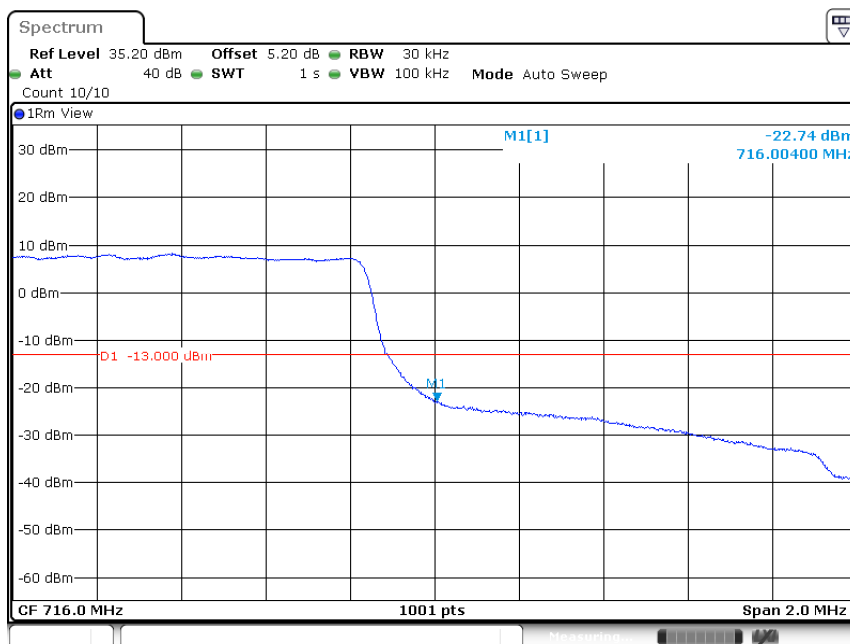
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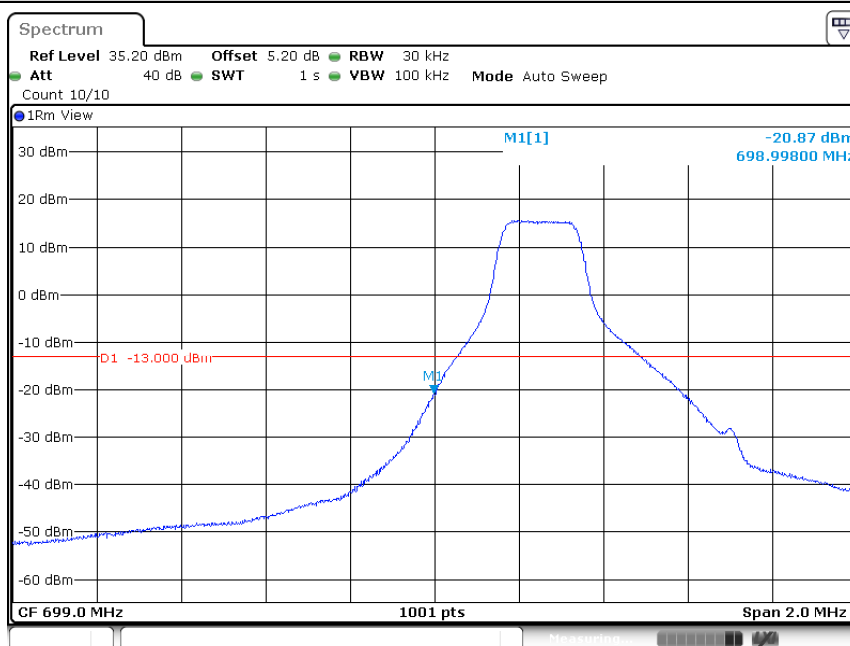


Band12-1.4MHz-QPSK-23173-6RB#0



Date: 4.JAN.2021 23:01:58

Band12-1.4MHz-16QAM-23017-1RB#0



Date: 4.JAN.2021 23:00:10

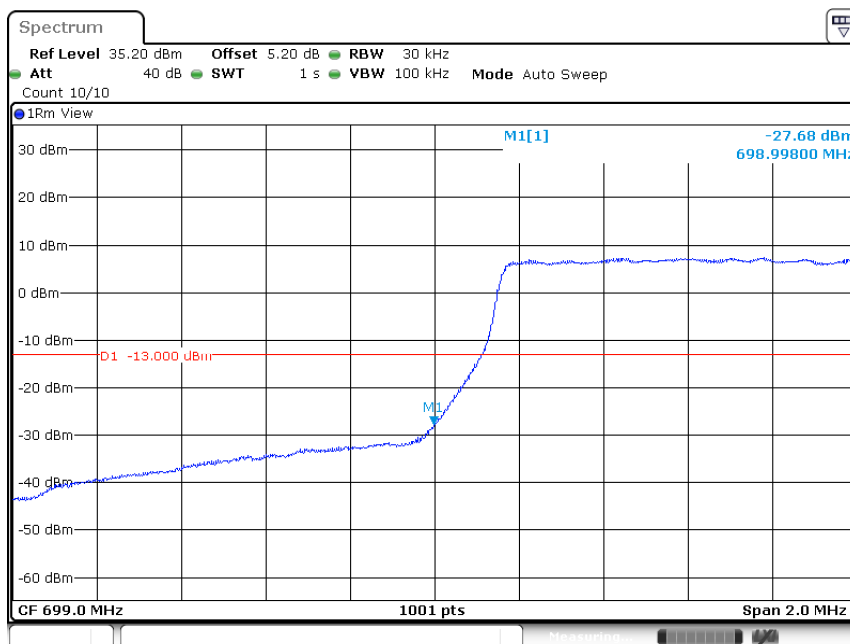


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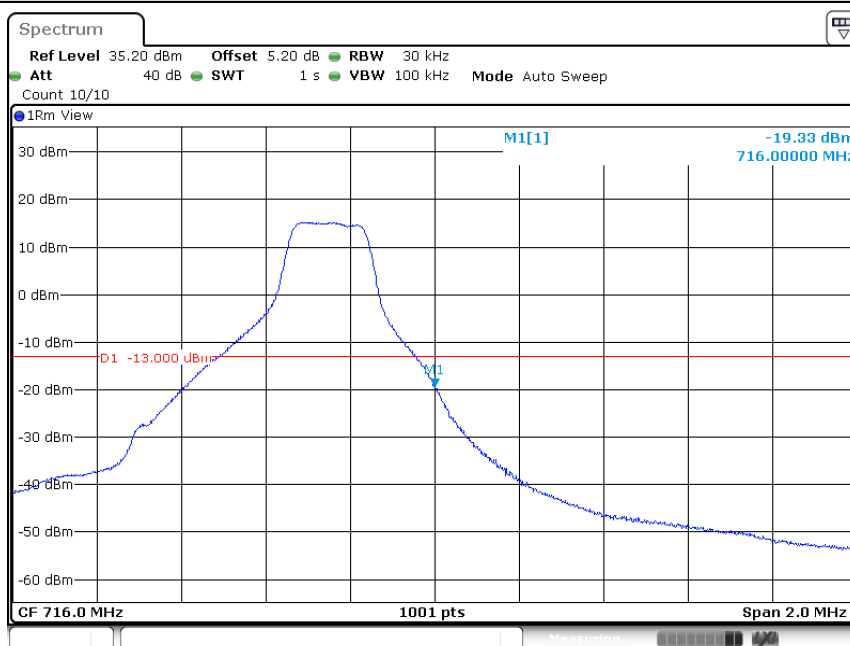


Band12-1.4MHz-16QAM-23017-6RB#0



Date: 4.JAN.2021 23:00:52

Band12-1.4MHz-16QAM-23173-1RB#5



Date: 4.JAN.2021 23:01:37

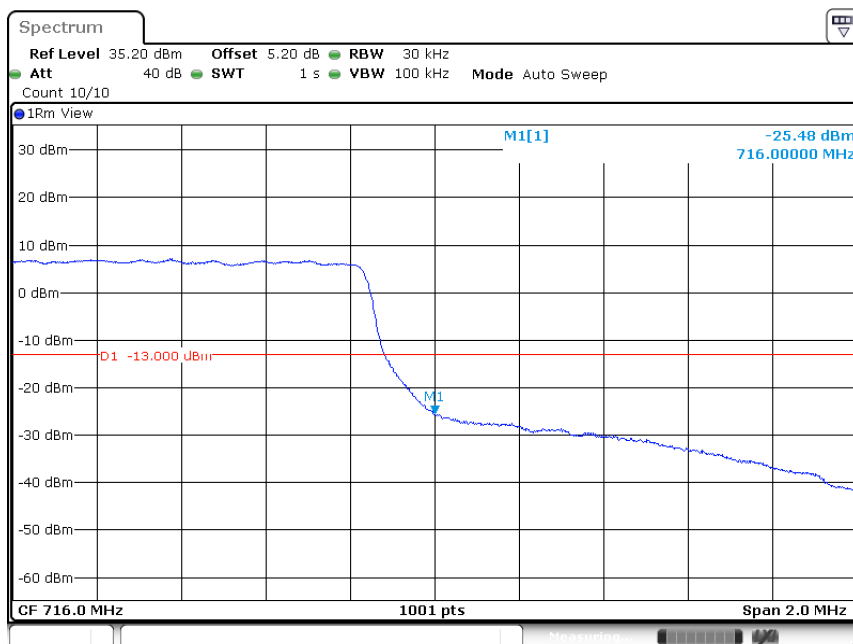


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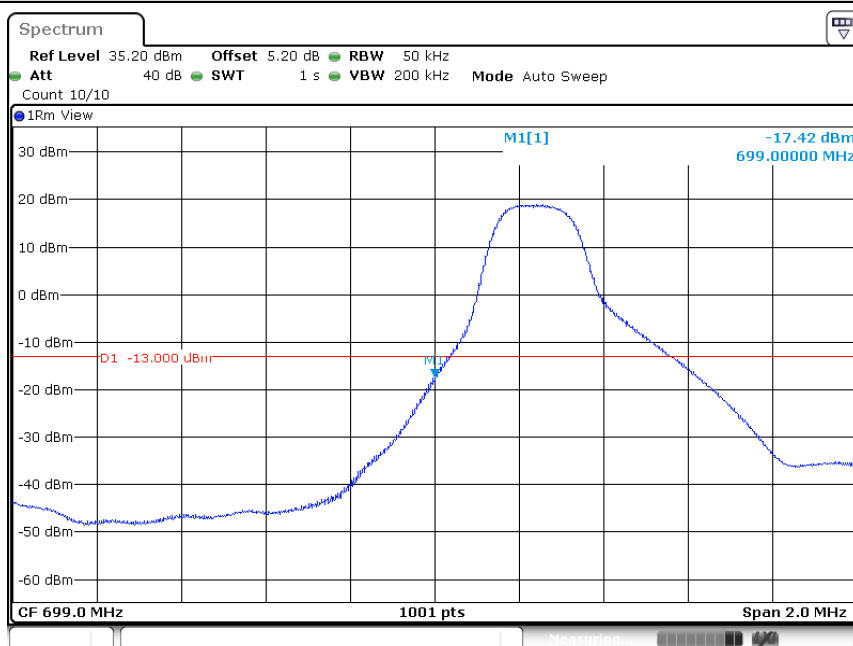
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Band12-1.4MHz-16QAM-23173-6RB#0



Date: 4.JAN.2021 23:02:18

Band12-3MHz-QPSK-23025-1RB#0



Date: 4.JAN.2021 23:02:44



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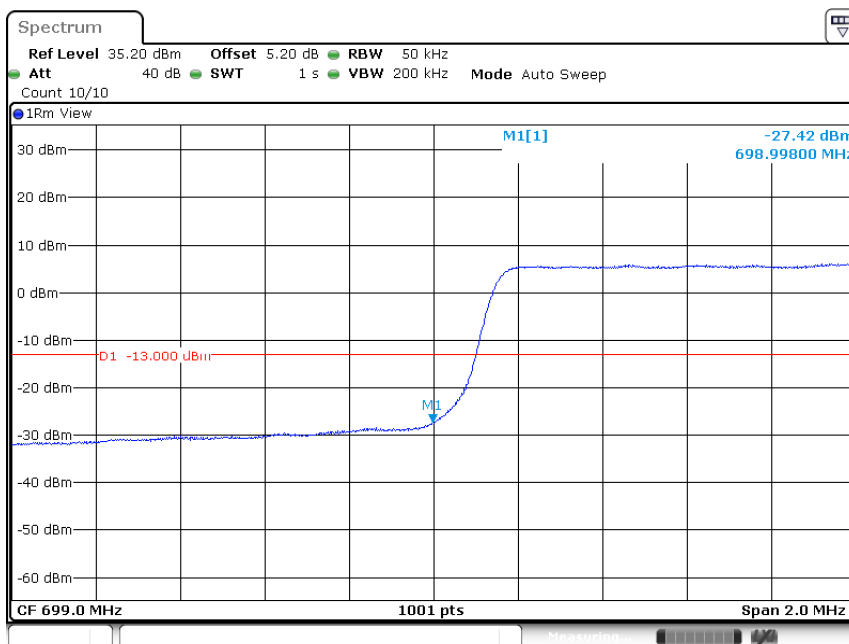
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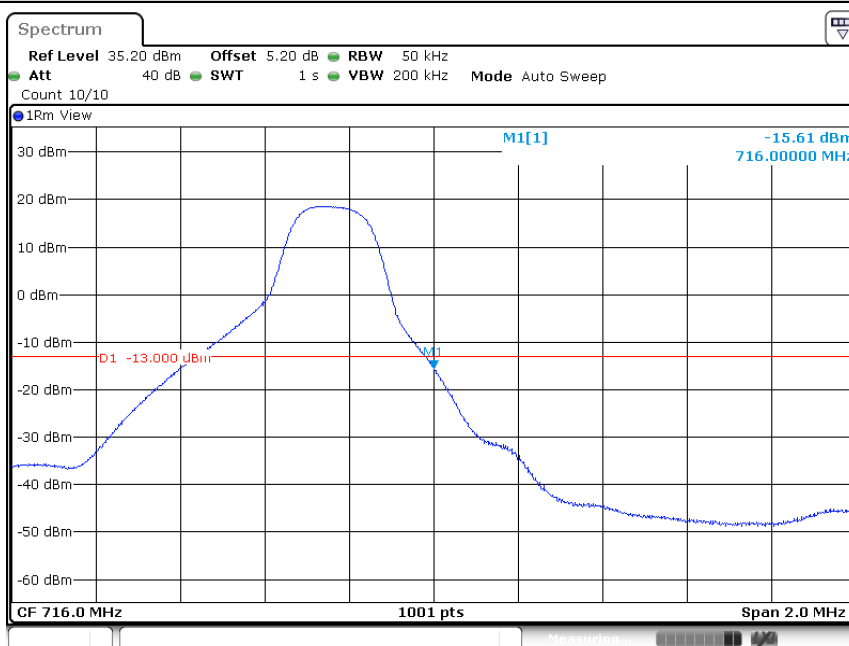


Band12-3MHz-QPSK-23025-15RB#0



Date: 4.JAN.2021 23:03:26

Band12-3MHz-QPSK-23165-1RB#14



Date: 4.JAN.2021 23:04:11



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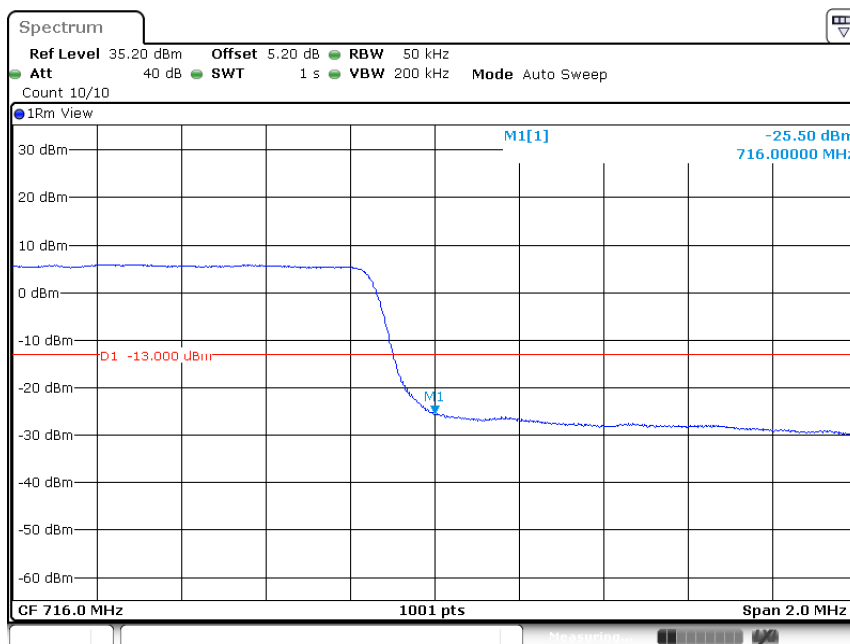
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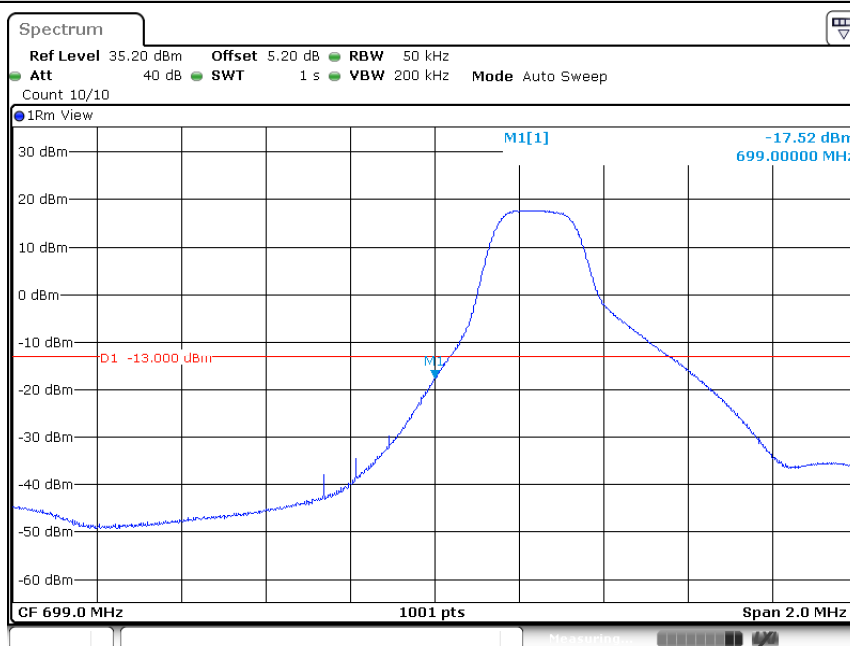


Band12-3MHz-QPSK-23165-15RB#0



Date: 4.JAN.2021 23:04:52

Band12-3MHz-16QAM-23025-1RB#0



Date: 4.JAN.2021 23:03:05

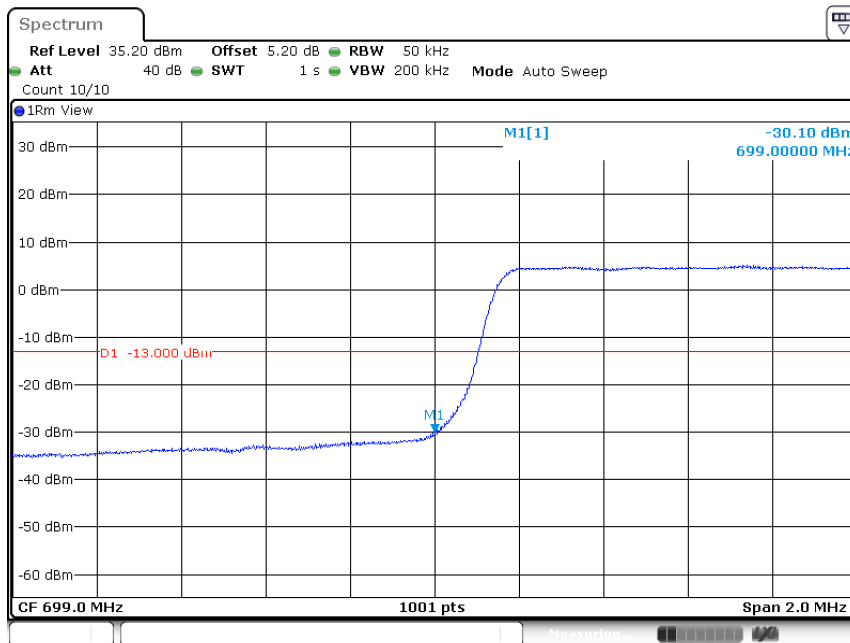


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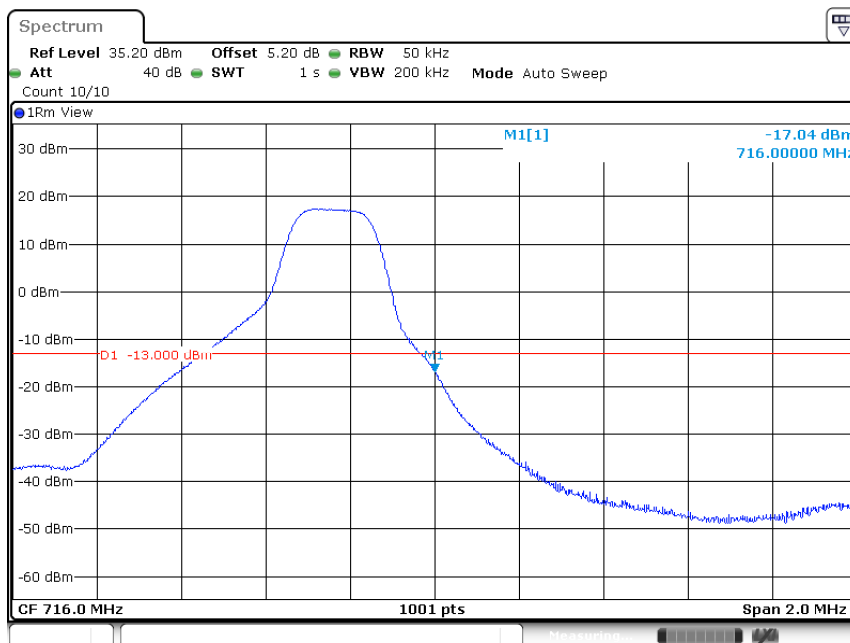


Band12-3MHz-16QAM-23025-15RB#0



Date: 4.JAN.2021 23:03:46

Band12-3MHz-16QAM-23165-1RB#14



Date: 4.JAN.2021 23:04:32



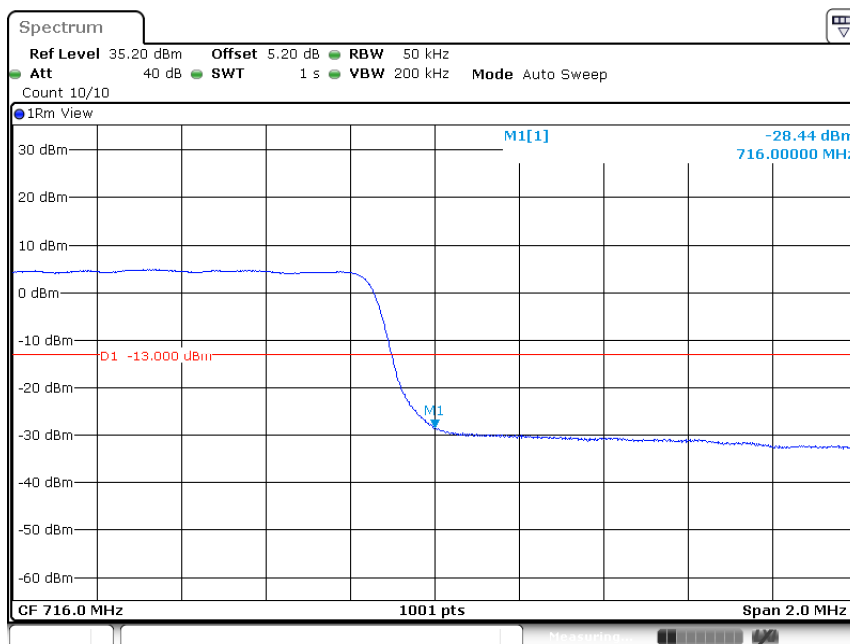
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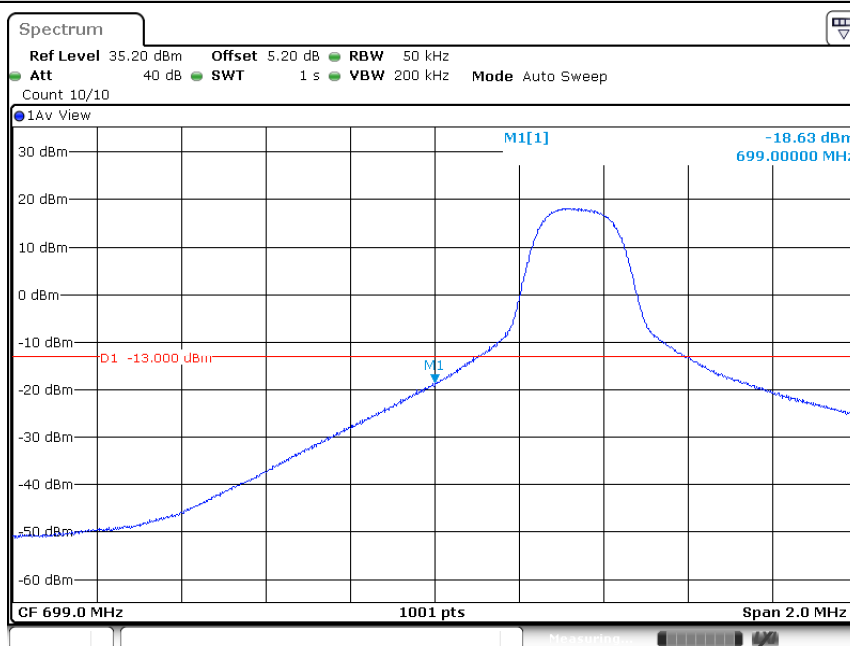


Band12-3MHz-16QAM-23165-15RB#0



Date: 4.JAN.2021 23:05:13

Band12-5MHz-QPSK-23035-1RB#0

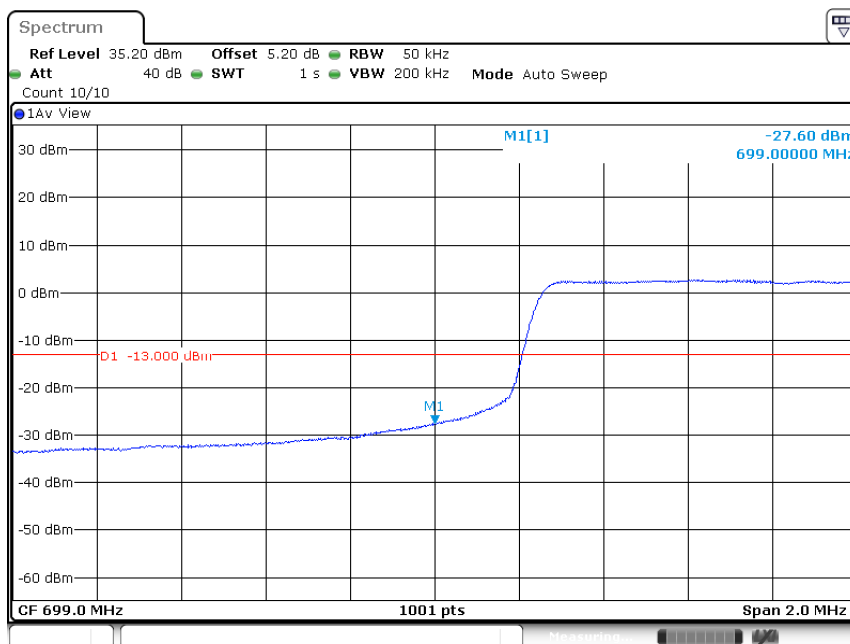


Date: 5.JAN.2021 09:05:48



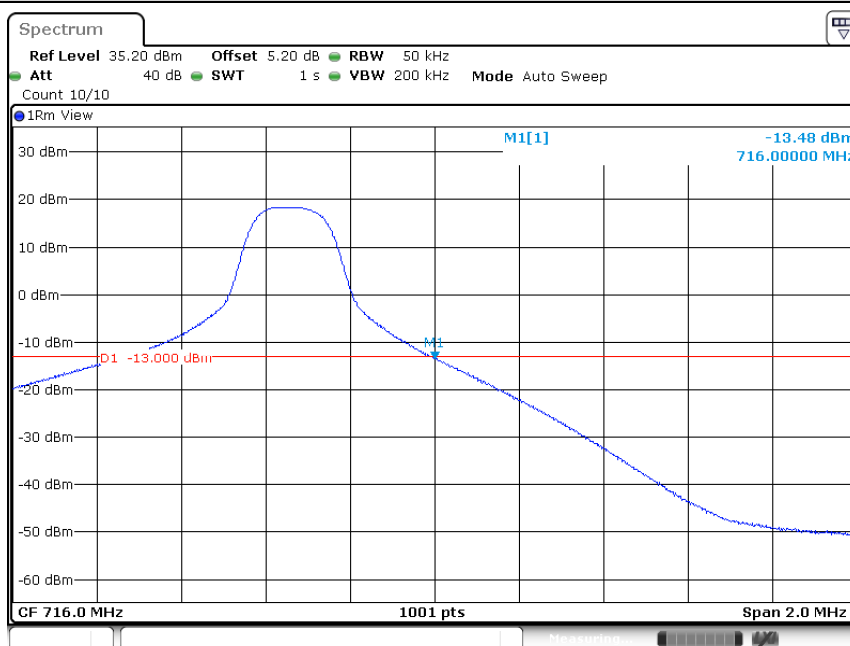


Band12-5MHz-QPSK-23035-25RB#0



Date: 5.JAN.2021 09:06:29

Band12-5MHz-QPSK-23155-1RB#24

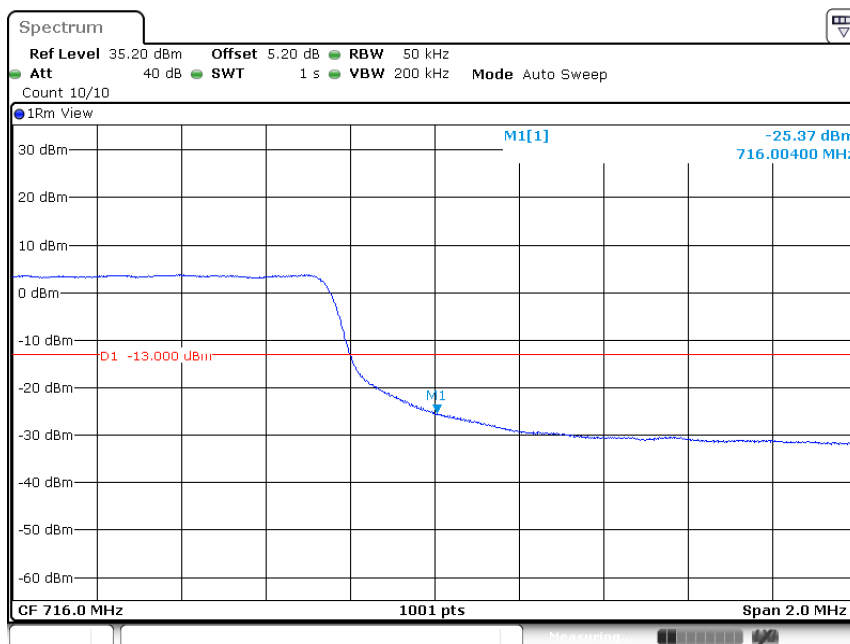


Date: 4.JAN.2021 23:07:05



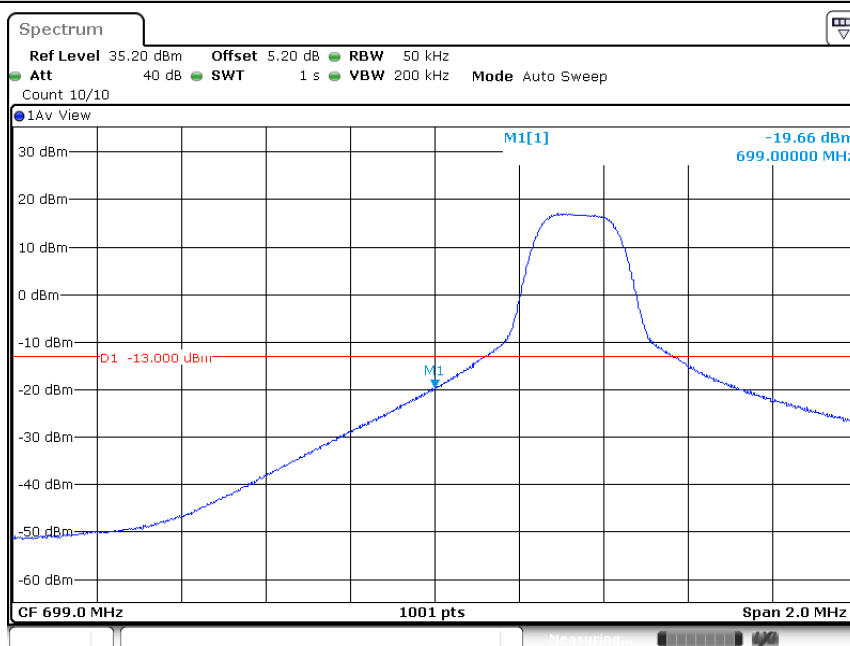


Band12-5MHz-QPSK-23155-25RB#0



Date: 4.JAN.2021 23:07:46

Band12-5MHz-16QAM-23035-1RB#0



Date: 5.JAN.2021 09:06:09

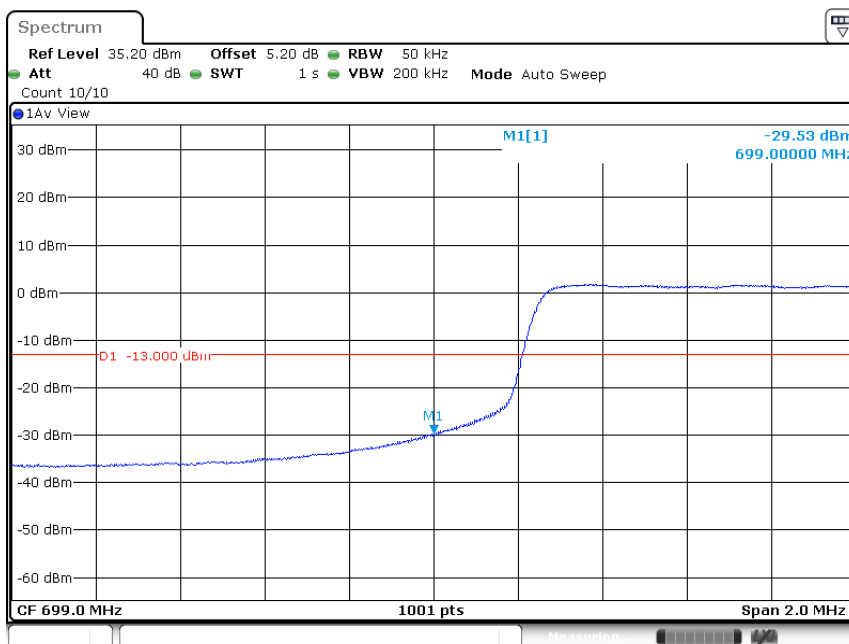


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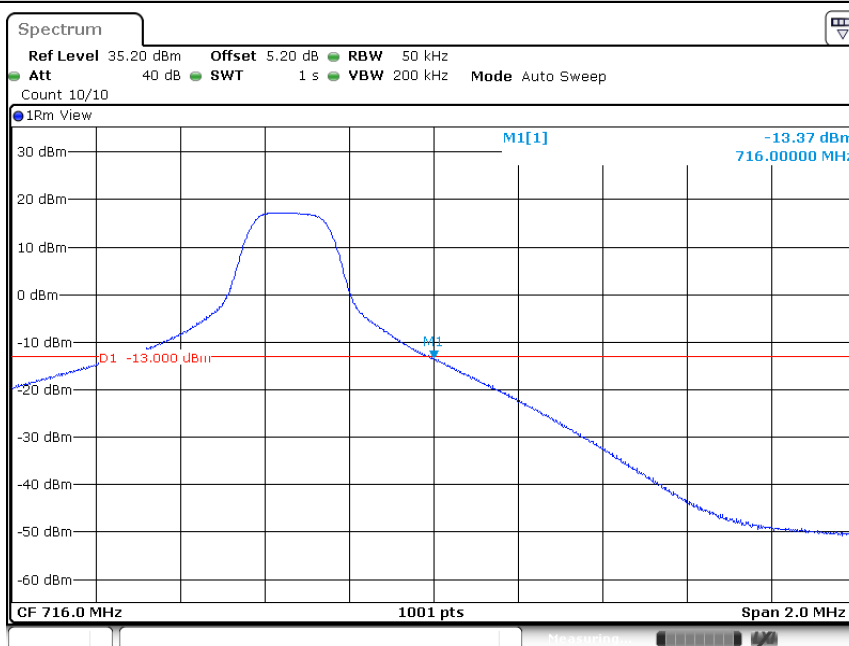


Band12-5MHz-16QAM-23035-25RB#0



Date: 5.JAN.2021 09:06:50

Band12-5MHz-16QAM-23155-1RB#24



Date: 4.JAN.2021 23:07:26



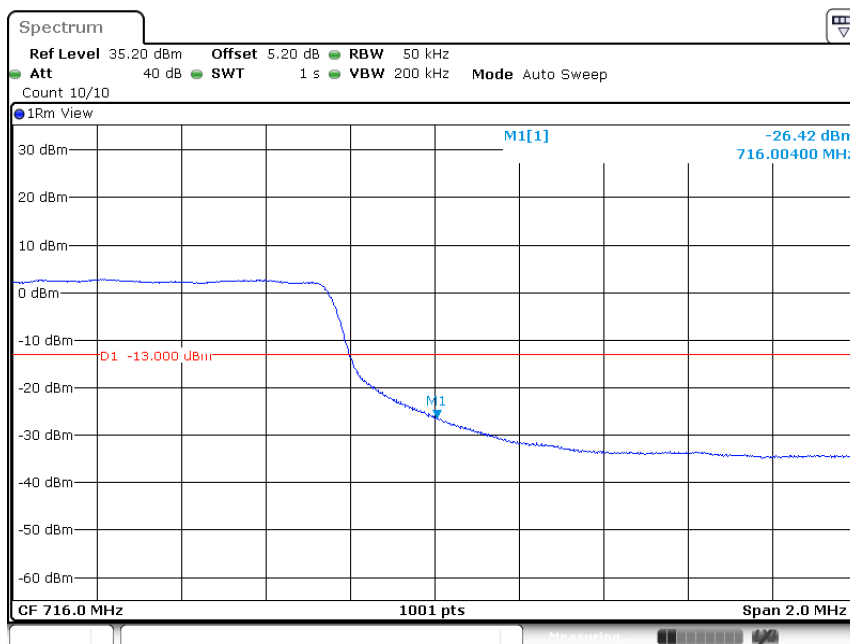
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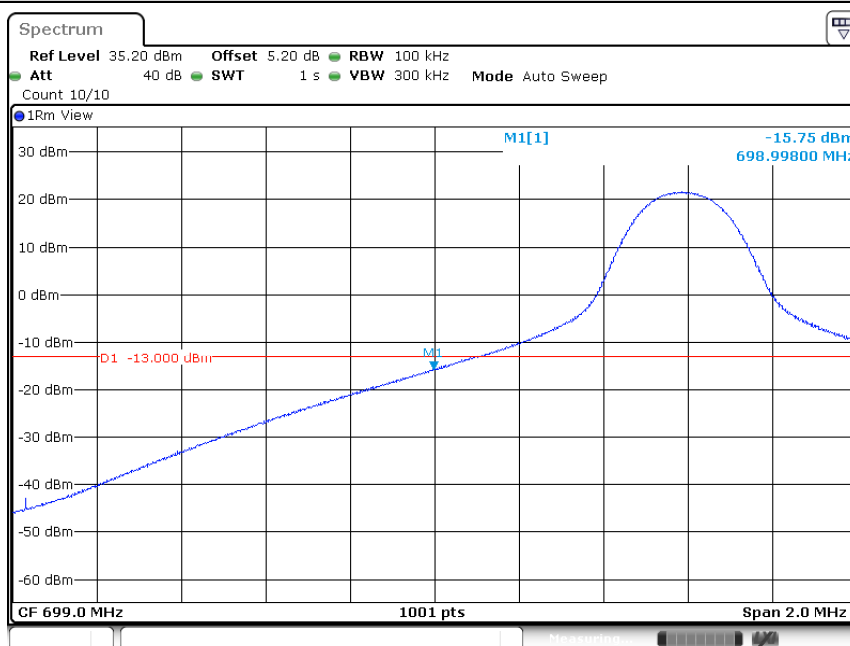


Band12-5MHz-16QAM-23155-25RB#0



Date: 4.JAN.2021 23:08:07

Band12-10MHz-QPSK-23060-1RB#0



Date: 4.JAN.2021 23:08:32



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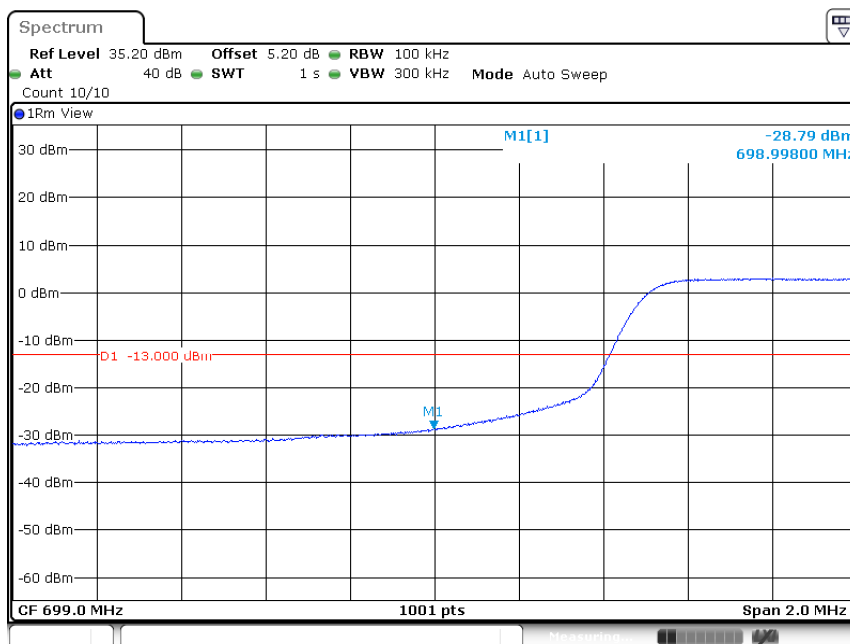
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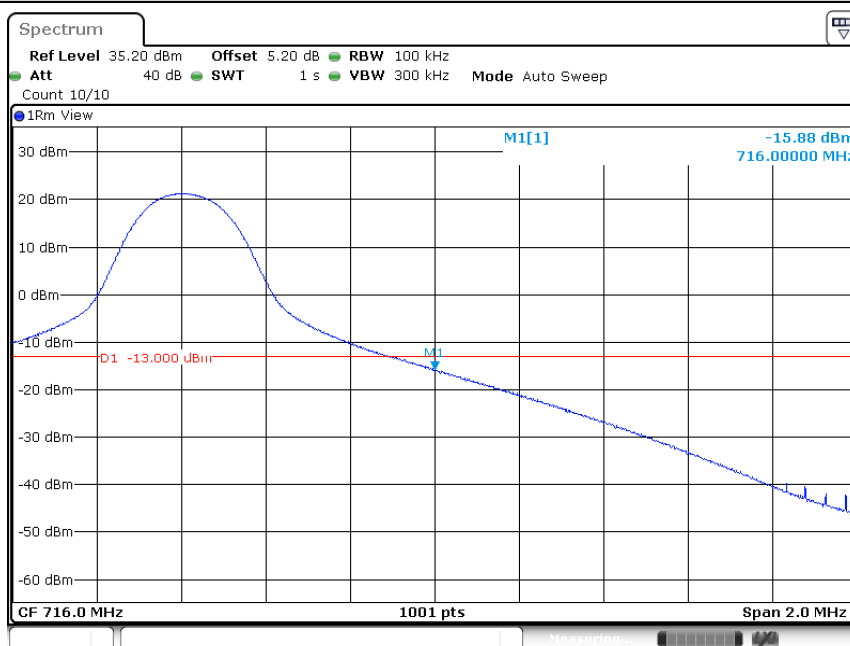


Band12-10MHz-QPSK-23060-50RB#0



Date: 4.JAN.2021 23:09:13

Band12-10MHz-QPSK-23130-1RB#49



Date: 4.JAN.2021 23:09:59



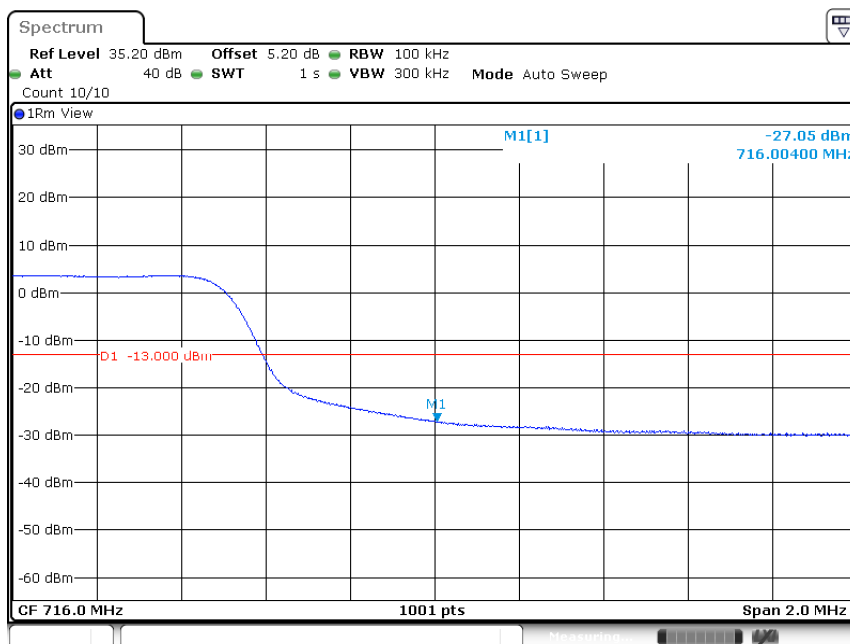
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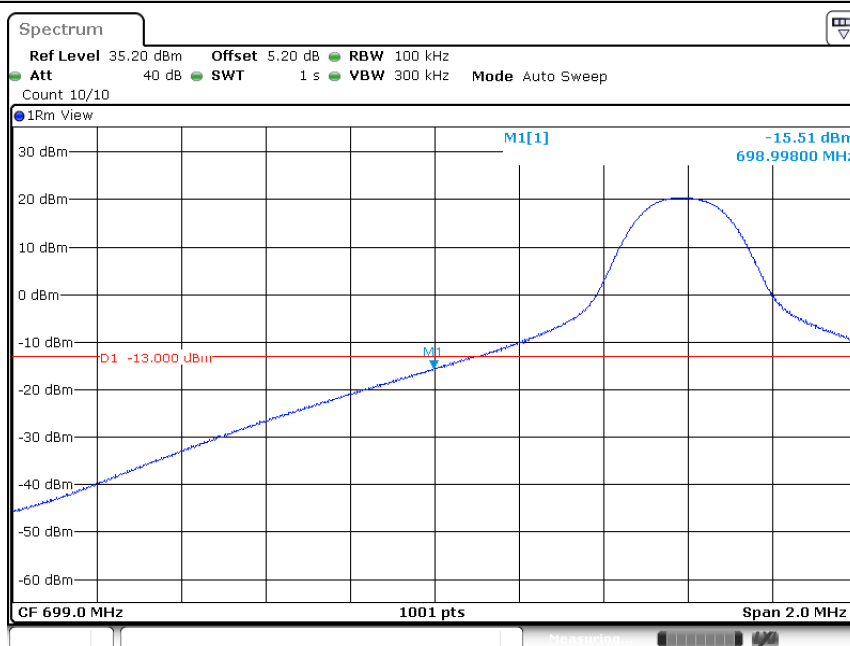


Band12-10MHz-QPSK-23130-50RB#0



Date: 4.JAN.2021 23:10:40

Band12-10MHz-16QAM-23060-1RB#0

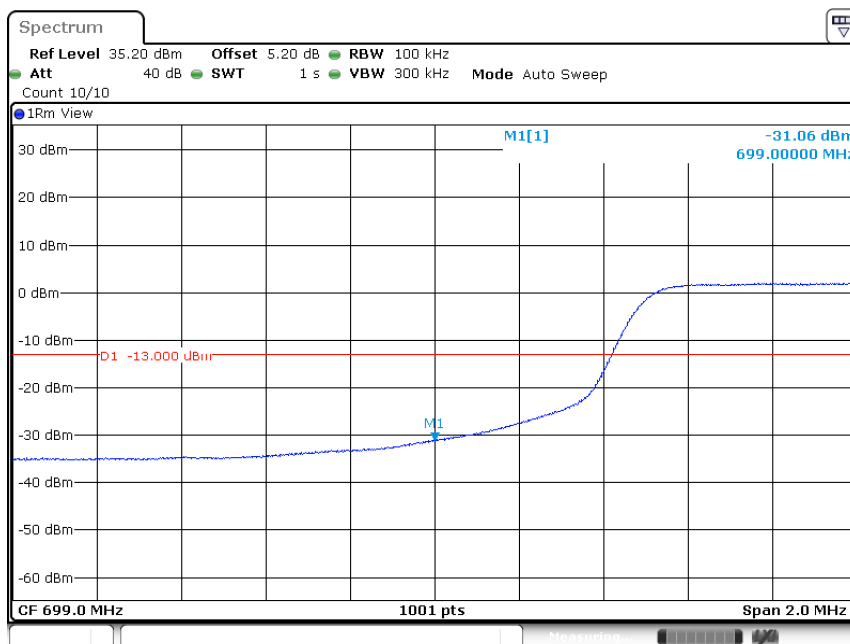


Date: 4.JAN.2021 23:08:53



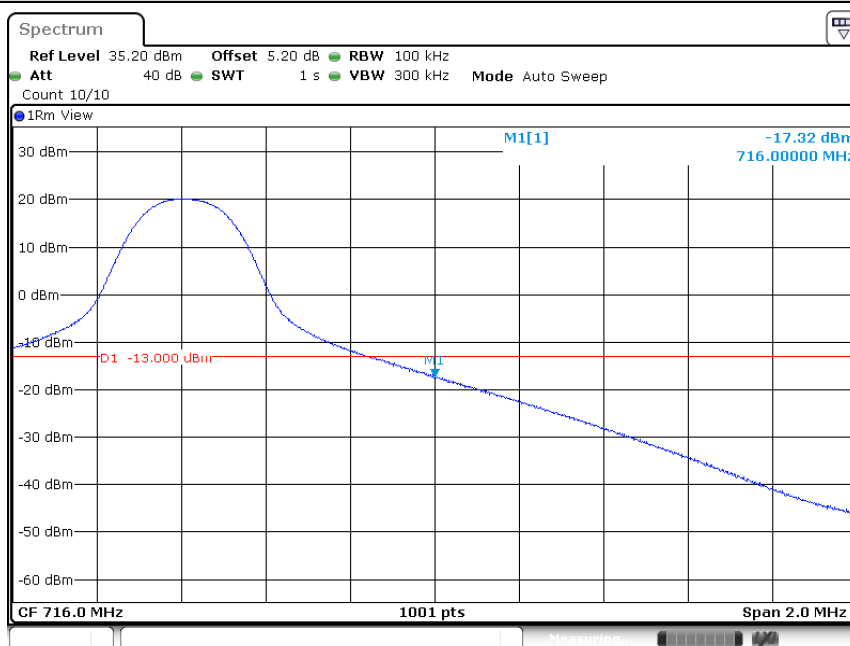


Band12-10MHz-16QAM-23060-50RB#0



Date: 4.JAN.2021 23:09:34

Band12-10MHz-16QAM-23130-1RB#49



Date: 4.JAN.2021 23:10:20

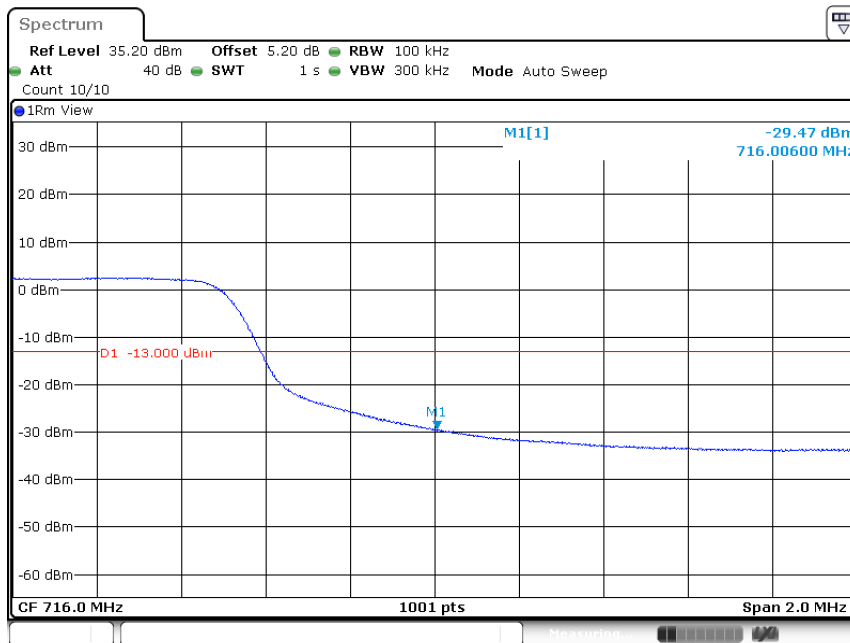


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Band12-10MHz-16QAM-23130-50RB#0



Date: 4 JAN 2021 23:11:01



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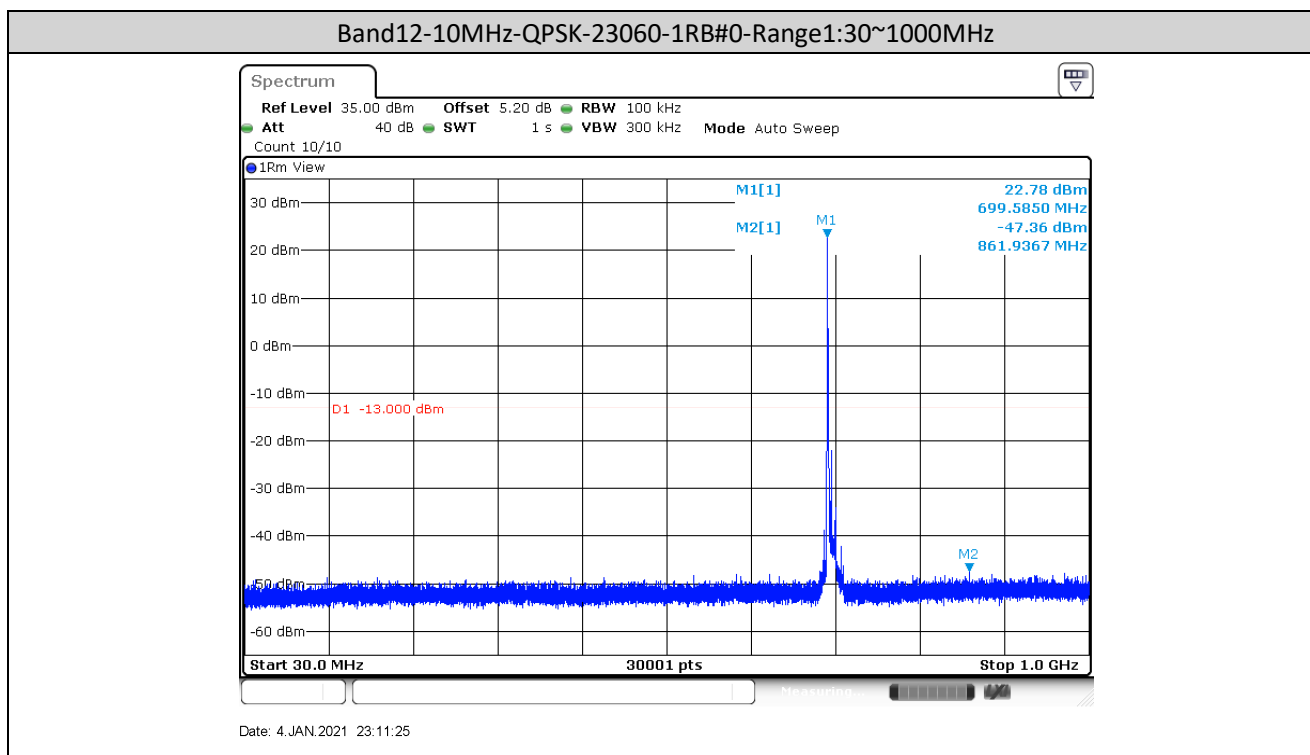
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6. Spurious Emission at Antenna Terminal

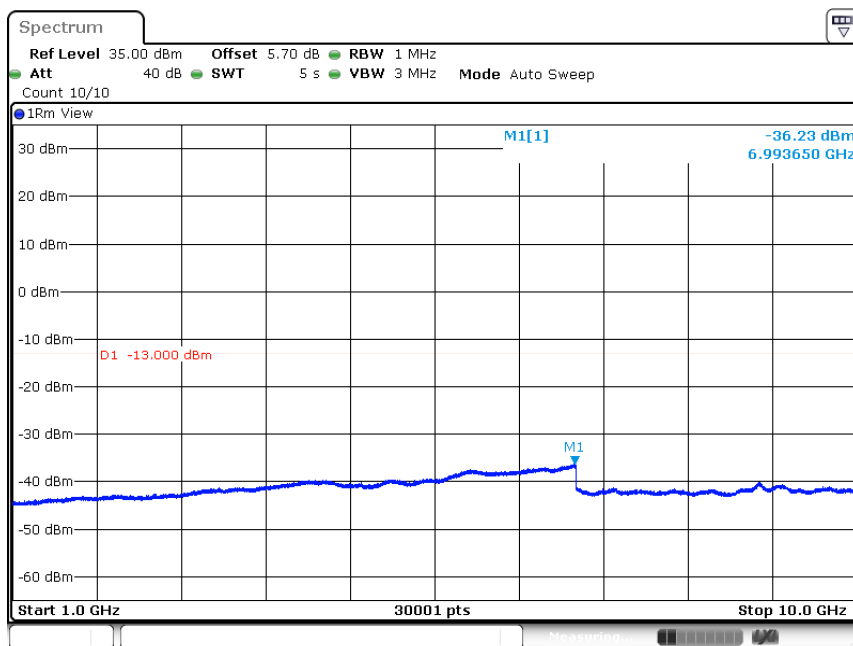
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

6.1. Test Plots

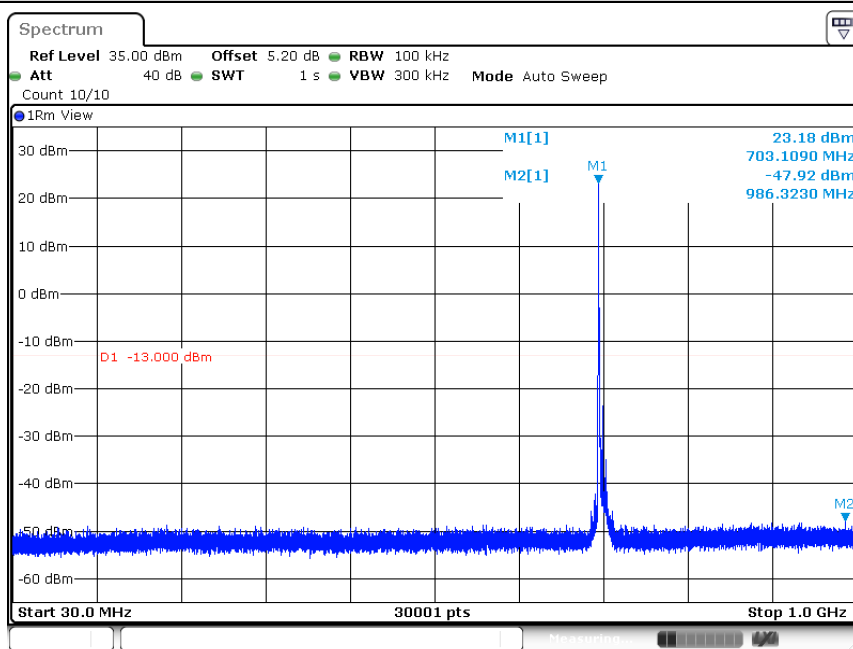


Band12-10MHz-QPSK-23060-1RB#0-Range2:1000~10000MHz



Date: 4.JAN.2021 23:12:33

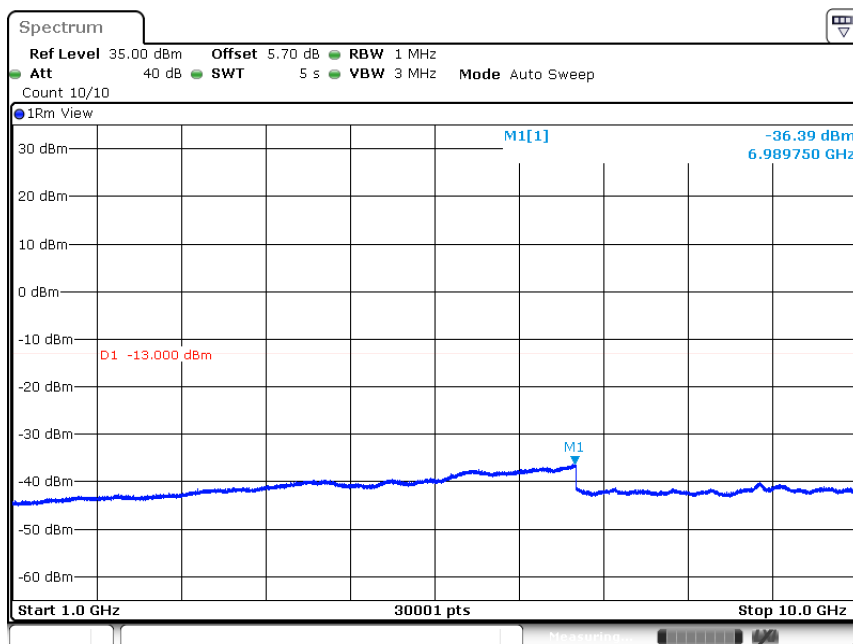
Band12-10MHz-QPSK-23095-1RB#0-Range1:30~1000MHz



Date: 4.JAN.2021 23:14:19

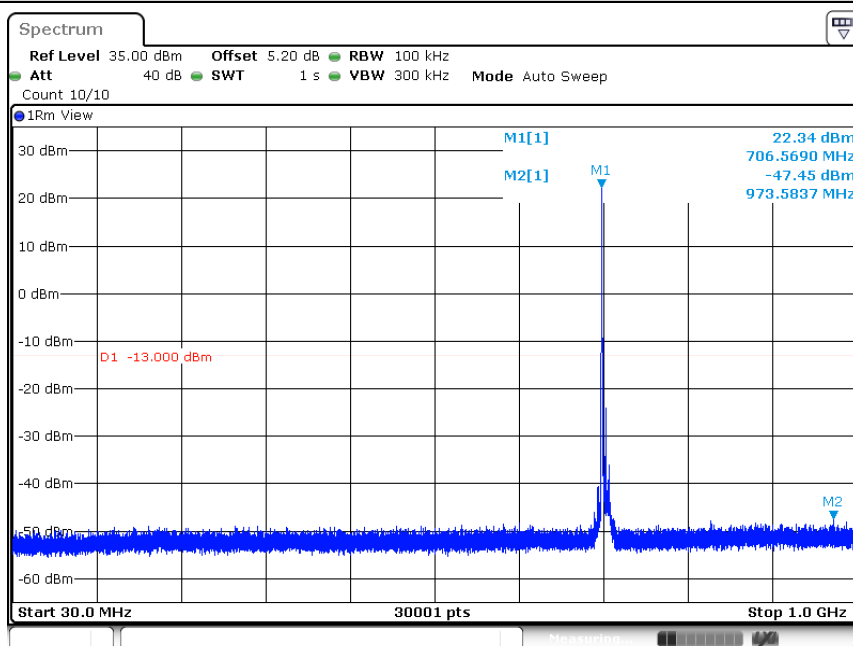


Band12-10MHz-QPSK-23095-1RB#0-Range2:1000~10000MHz



Date: 4.JAN.2021 23:15:27

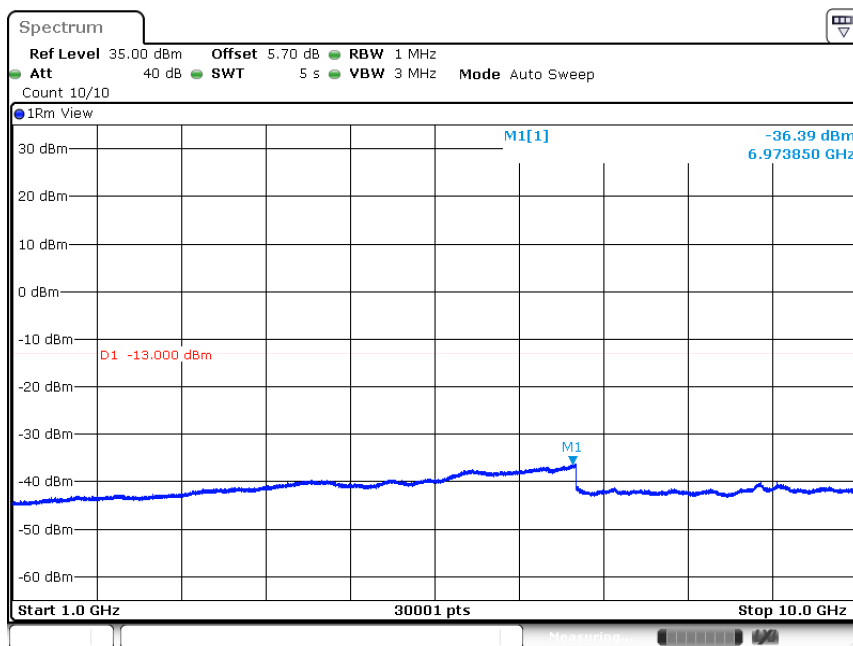
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Date: 4.JAN.2021 23:17:13

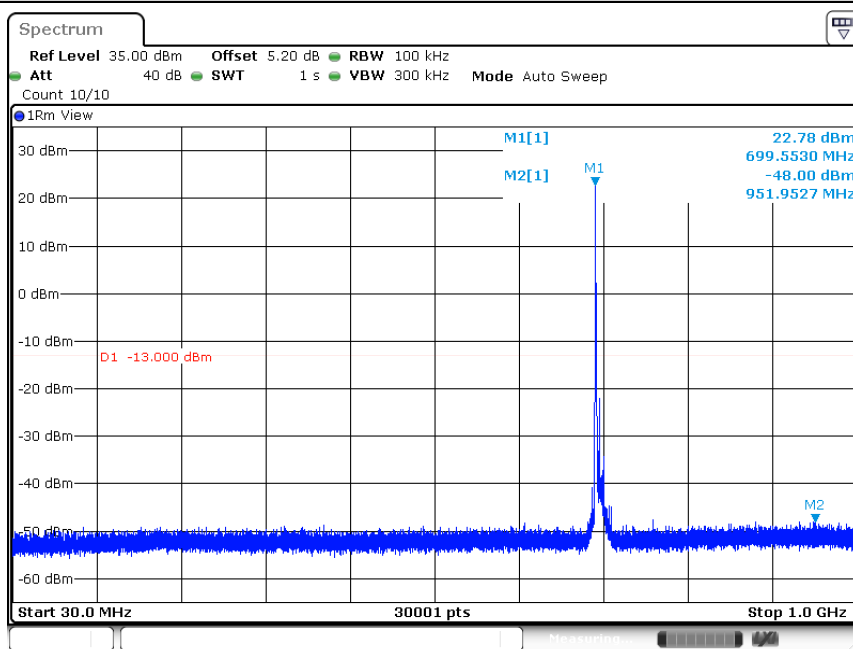


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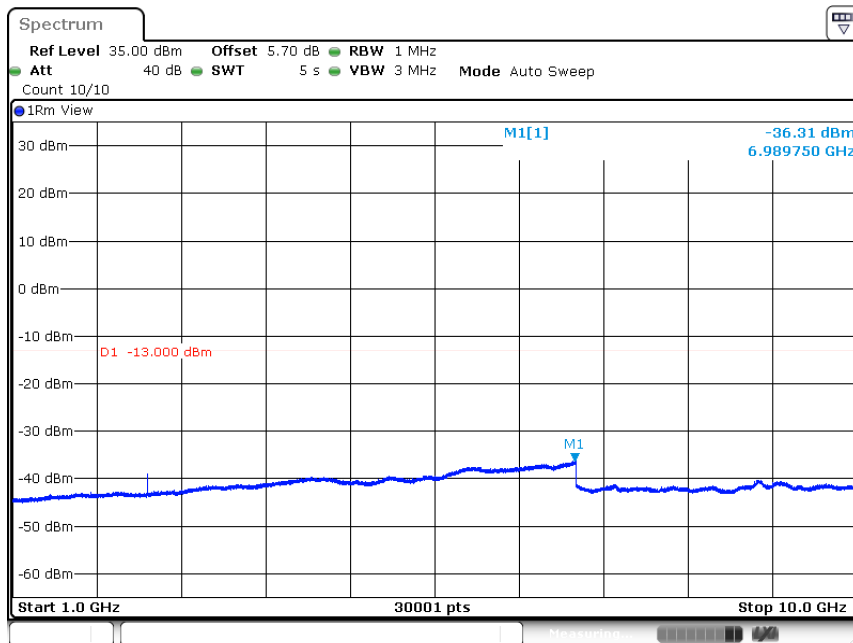
Band12-10MHz-16QAM-23060-1RB#0-Range1:30~1000MHz



Date: 4.JAN.2021 23:12:52

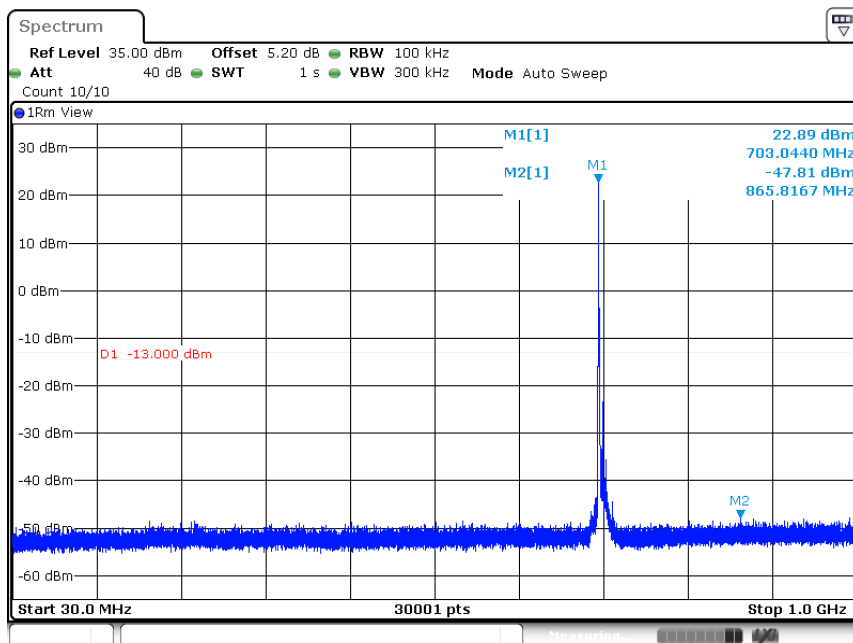


Band12-10MHz-16QAM-23060-1RB#0-Range2:1000~10000MHz



Date: 4.JAN.2021 23:13:59

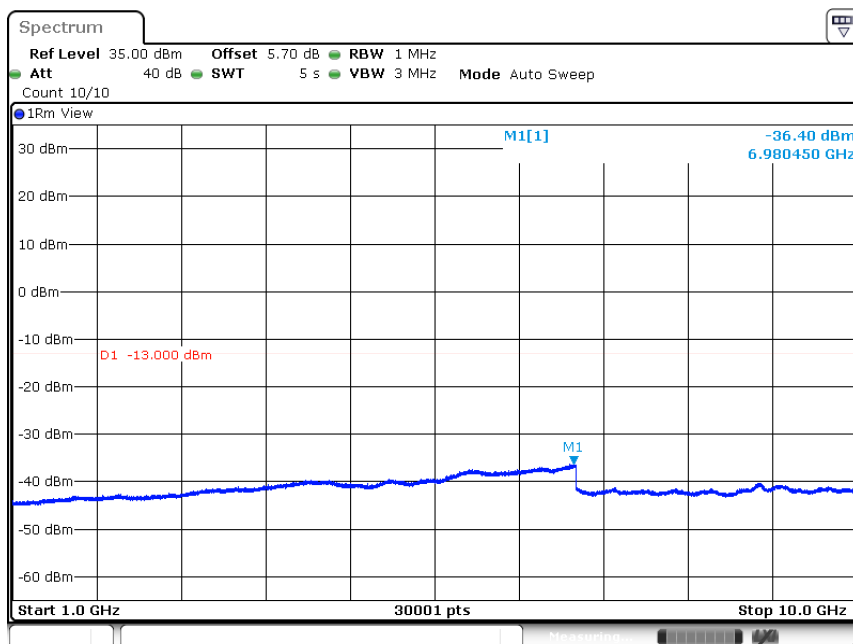
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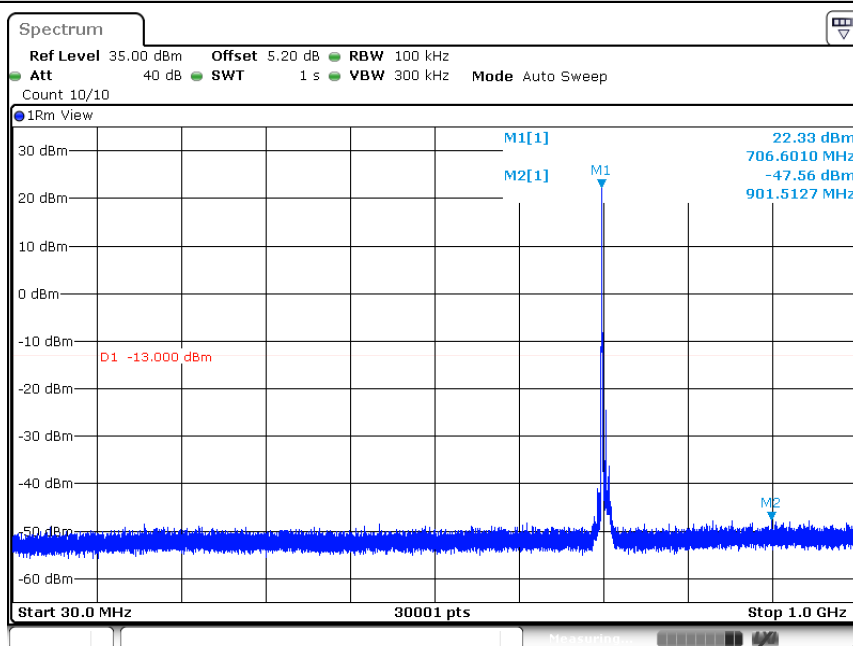


Band12-10MHz-16QAM-23095-1RB#0-Range2:1000~10000MHz



Date: 4.JAN.2021 23:16:54

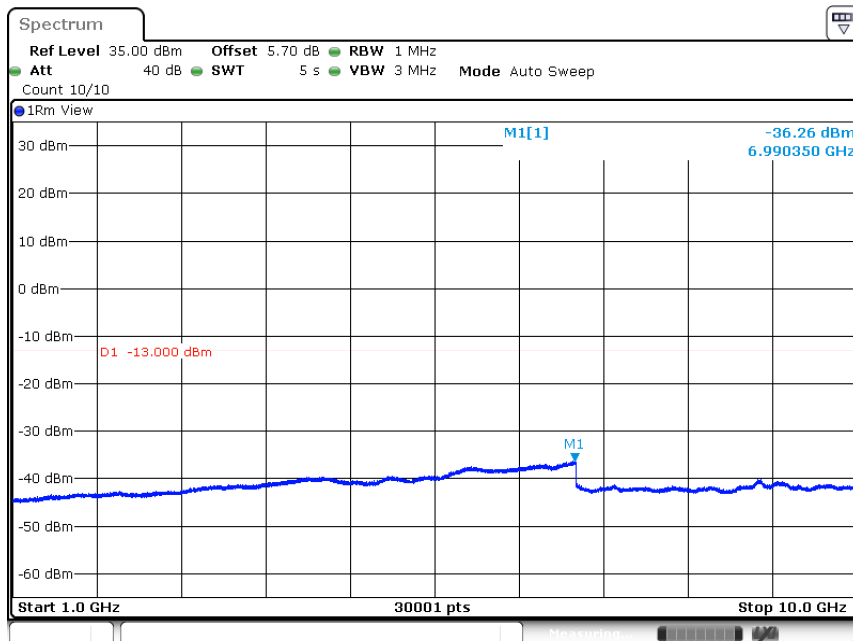
Band12-10MHz-16QAM-23130-1RB#0-Range1:30~1000MHz



Date: 4.JAN.2021 23:18:40



Band12-10MHz-16QAM-23130-1RB#0-Range2:1000~10000MHz



Date: 4.JAN.2021 23:19:48



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7. Field Strength of Spurious Radiation

7.1. Test Band = LTE_12_TM1

7.1.1. Test Channel = Low Channel

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	43.3382	-63.51	-13.00	50.51	Horizontal
2	238.7544	-67.71	-13.00	54.71	Horizontal
3	598.8364	-63.01	-13.00	50.01	Horizontal
4	1399.2799	-50.46	-13.00	37.46	Horizontal
5	2698.3397	-54.65	-13.00	41.65	Horizontal
6	9270.8508	-53.79	-13.00	40.79	Horizontal



7.2. Test Band = LTE_12_TM1

7.2.1. Test Channel = Low Channel

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	51.3411	-71.06	-13.00	58.06	Vertical
2	110.1745	-64.18	-13.00	51.18	Vertical
3	467.5889	-65.86	-13.00	52.86	Vertical
4	1398.8798	-52.95	-13.00	39.95	Vertical
5	2710.3421	-55.97	-13.00	42.97	Vertical
6	9300.2520	-53.64	-13.00	40.64	Vertical



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7.3. Test Band = LTE_12_TM1**7.3.1. Test Channel = Mid Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	44.6477	-62.72	-13.00	49.72	Horizontal
2	241.4221	-67.83	-13.00	54.83	Horizontal
3	587.6809	-63.39	-13.00	50.39	Horizontal
4	1406.0812	-50.96	-13.00	37.96	Horizontal
5	2700.3401	-54.66	-13.00	41.66	Horizontal
6	9301.0920	-53.66	-13.00	40.66	Horizontal



7.4. Test Band = LTE_12_TM1**7.4.1. Test Channel = Mid Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	51.1956	-71.31	-13.00	58.31	Vertical
2	112.7936	-64.22	-13.00	51.22	Vertical
3	519.5350	-65.60	-13.00	52.60	Vertical
4	1406.0812	-53.41	-13.00	40.41	Vertical
5	2701.9404	-55.99	-13.00	42.99	Vertical
6	7377.9751	-56.62	-13.00	43.62	Vertical



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7.5. Test Band = LTE_12_TM1**7.5.1. Test Channel = High Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	41.2041	-63.90	-13.00	50.90	Horizontal
2	235.4078	-68.12	-13.00	55.12	Horizontal
3	582.0061	-63.40	-13.00	50.40	Horizontal
4	1412.8826	-52.07	-13.00	39.07	Horizontal
5	2703.1406	-54.75	-13.00	41.75	Horizontal
6	9536.5815	-53.75	-13.00	40.75	Horizontal



7.6. Test Band = LTE_12_TM1**7.6.1. Test Channel = High Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	109.2045	-64.24	-13.00	51.24	Vertical
2	575.3128	-63.00	-13.00	50.00	Vertical
3	1412.8826	-53.60	-13.00	40.60	Vertical
4	2696.3393	-55.99	-13.00	42.99	Vertical
5	7434.5374	-56.89	-13.00	43.89	Vertical
6	9543.8618	-53.38	-13.00	40.38	Vertical

Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.
- 3 all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.





8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	VL	NT	-5.50	-0.007813	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	-5.90	-0.008381	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	-4.90	-0.006960	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	-4.20	-0.005936	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	-7.00	-0.009894	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	-4.30	-0.006078	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	-2.90	-0.004079	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VN	NT	-1.70	-0.002391	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VH	NT	-5.50	-0.007736	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	-3.60	-0.005114	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	-6.60	-0.009375	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	-6.40	-0.009091	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	-10.40	-0.014700	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	-10.40	-0.014700	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	-6.80	-0.009611	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	-7.20	-0.010127	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	-4.20	-0.005907	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VH	NT	-4.40	-0.006188	±2.5	PASS

8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	NV	-30	-8.40	-0.011932	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	-0.80	-0.001136	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-10	-8.10	-0.011506	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	0	-8.20	-0.011648	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	10	-8.50	-0.012074	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	20	-10.70	-0.015199	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	30	-5.40	-0.007670	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	40	-2.50	-0.003551	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	50	1.90	0.002699	±2.5	PASS



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Band12	10MHz	QPSK	23095	50RB#0	NV	-30	-4.00	-0.005654	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	-0.20	-0.000283	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-10	-4.10	-0.005795	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	-4.90	-0.006926	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-8.10	-0.011449	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	-8.80	-0.012438	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	-4.60	-0.006502	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	-3.90	-0.005512	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	-5.30	-0.007491	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-9.40	-0.013221	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	-8.90	-0.012518	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-10	-6.30	-0.008861	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	0.00	0.000000	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	-6.10	-0.008579	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	20	-6.90	-0.009705	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-7.10	-0.009986	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	40	-4.10	-0.005767	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	50	-3.50	-0.004923	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	-7.50	-0.010653	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	-7.60	-0.010795	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-10	-4.90	-0.006960	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	-4.70	-0.006676	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	-7.10	-0.010085	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	-7.90	-0.011222	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	30	-4.10	-0.005824	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	40	-5.10	-0.007244	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	50	-5.70	-0.008097	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-30	-5.30	-0.007491	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	-3.30	-0.004664	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-10	-6.00	-0.008481	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	-9.10	-0.012862	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	-6.00	-0.008481	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	-2.10	-0.002968	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	30	-6.00	-0.008481	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	40	-6.20	-0.008763	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	50	-10.20	-0.014417	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	-4.40	-0.006188	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-20	-2.60	-0.003657	±2.5	PASS



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Band12	10MHz	16QAM	23130	50RB#0	NV	-10	-5.30	-0.007454	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	-1.60	-0.002250	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	-5.10	-0.007173	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	-1.10	-0.001547	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	30	-7.40	-0.010408	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	40	-4.30	-0.006048	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	50	-1.60	-0.002250	±2.5	PASS

